

Form C-141

Page 6

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2225953832
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Addison Guelker

Title: Environmental Analyst

Signature: 

Date: 4/24/23

email: addisong@forl.com

Telephone: 432-687-1777

OCD Only

Received by: Robert Hamlet

Date: 9/11/2023

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

Closure Approved by: Robert Hamlet

Date: 9/11/2023

Printed Name: Robert Hamlet

Title: Environmental Specialist - Advanced



SITE INFORMATION

**Closure Report
El Paso Federal No.3
Eddy County, New Mexico
Unit A Sec 01 T21S R26E
32.517615°, -104.239504°**

**Condensate Release
Point of Release: Frozen 2" Valve on Storage Tank
Release Date: 03/03/2002
Volume Released: 90 barrels of Condensate
Volume Recovered: 0 barrels of Condensate**

CARMONA RESOURCES



**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**



TABLE OF CONTENTS

1.0 SITE INFORMATION AND BACKGROUND

2.0 SITE CHARACTERIZATION AND GROUNDWATER

3.0 NMAC REGULATORY CRITERIA

4.0 SITE ASSESSMENT ACTIVITIES

5.0 CONCLUSIONS

FIGURES

FIGURE 1 OVERVIEW FIGURE 2 TOPOGRAPHIC

FIGURE 3 SAMPLE LOCATION

APPENDICES

APPENDIX A TABLE

APPENDIX B INITIAL AND FINAL C-141

APPENDIX C SITE CHARACTERIZATION AND GROUNDWATER

APPENDIX D LABORATORY REPORTS



April 24, 2023

Mike Bratcher
District Supervisor
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

**Re: Closure Report
El Paso Federal No.3
Fasken Oil and Ranch, Ltd
Site Location: Unit A, S01, T21S, R26E
(Lat 32.517615°, Long -104.239504°)
Eddy County, New Mexico**

Mr. Bratcher:

On behalf of Fasken Oil and Ranch, Ltd (Fasken), Carmona Resources, LLC has prepared this letter to document site activities for El Paso Federal No.3. The site is located at 32.517615°, -104.239504° within Unit A, S01, T21S, R26E, in Eddy County, New Mexico (Figures 1 and 2).

1.0 Site Information and Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on March 3, 2002, due to a frozen 2" valve on the condensate storage tank. It resulted in the release of approximately ninety (90) barrels of condensate, and zero (0) barrels of condensate were recovered. See Figure 3 for the area of concern located on the pad. The initial C-141 form is attached in Appendix B.

2.0 Site Characterization and Groundwater

The site is located within a medium karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, no known water source is located within a 0.50-mile radius of the location. The closest well is approximately 0.73 miles Southwest of the site in S01, T21S, R26E and was drilled in 2000. The well has a reported depth to groundwater of 89.0' feet below the ground surface (ft bgs). A copy of the associated Summary report is attached in Appendix C.

3.0 Site Characterization and Groundwater

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: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600mg/kg.

4.0 Site Assessment Activities

On September 6, 2022, Fasken performed site assessment activities to evaluate soil impacts stemming from the release. A total of one (1) sample point (S-1) and four (4) horizontal sample points (North, South, East, and West) were installed to depths ranging from the surface – 0.5' 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 D. Refer to Table 1.

On March 3, 2023, Fasken performed additional site assessment activities as requested by the NMOCD. A total of ten (10) sample points (S-1 through S-10) and four (4) horizontal sample points (North, South, East, and West) were installed to depths ranging from the surface – 0.5' bgs inside and surrounding the release area to reevaluate 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 D. Refer to Table 1.

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

5.0 Conclusions

Based on the assessment results and the analytical data, no further actions are required at the site. The final C-141 is attached, and Fasken formally requests the closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,

Carmona Resources, LLC

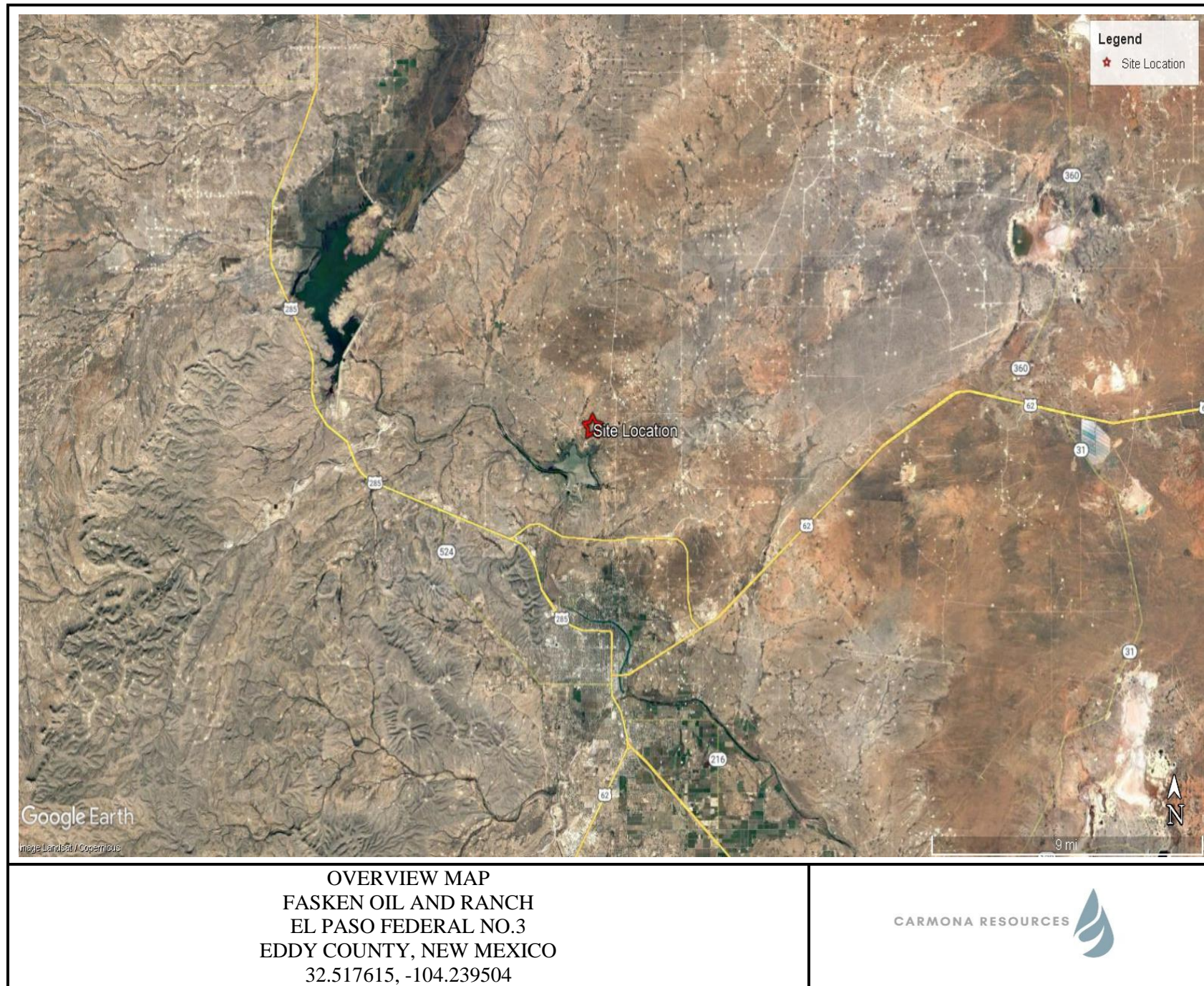
Mike Carmona
Environmental Manager

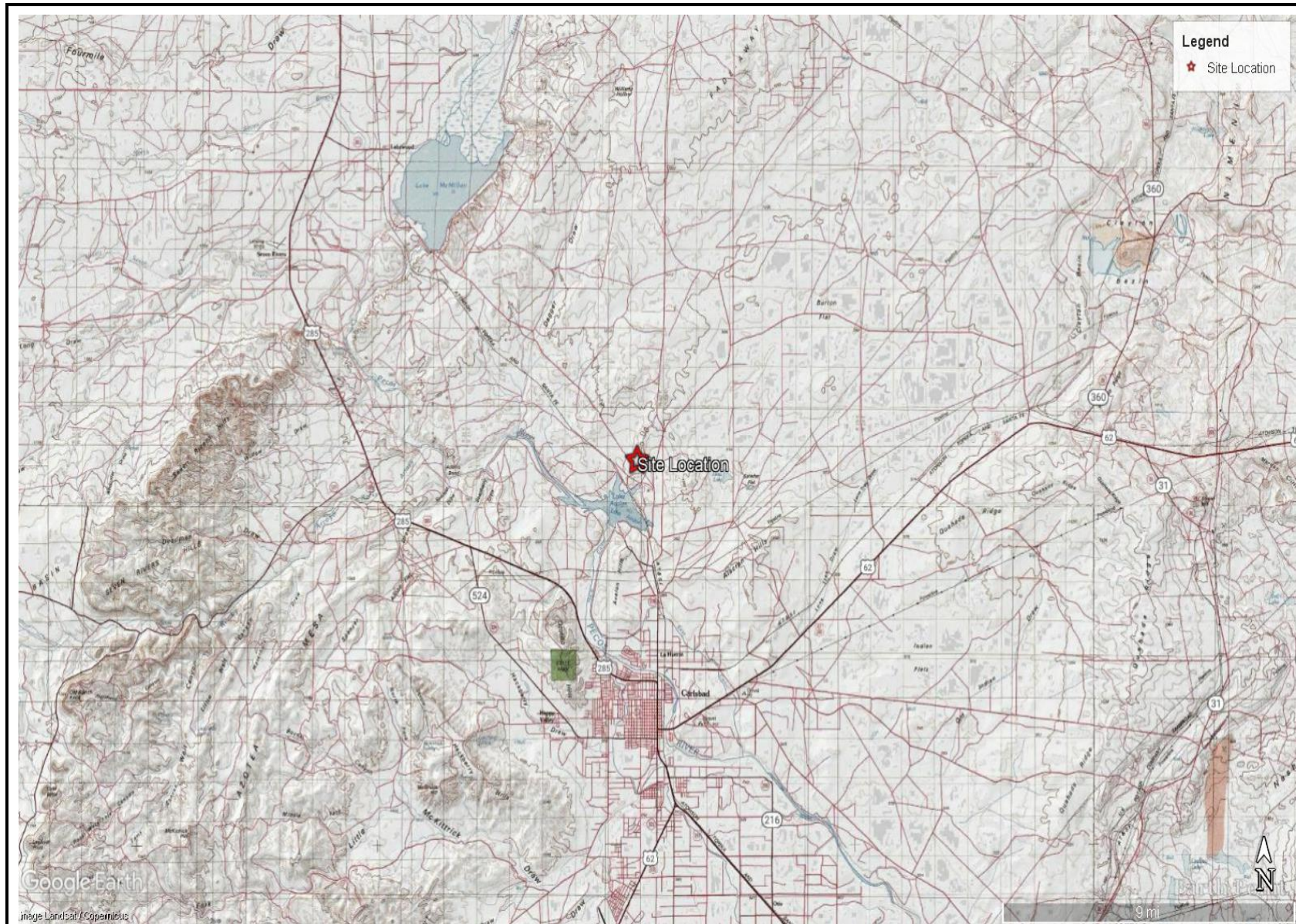
Clinton Merritt
Sr Project Manager

FIGURES

CARMONA RESOURCES







TOPOGRAPHIC MAP
FASKEN OIL AND RANCH
EL PASO FEDERAL NO.3
EDDY COUNTY, NEW MEXICO
32.517615, -104.239504





APPENDIX A

CARMONA RESOURCES



Table 1
Fasken Oil and Ranch
El Paso Federal No.3
Eddy County, New Mexico

Sample ID	Date	Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
S-1	9/6/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	138
	3/13/2023	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	12.7
S-2	3/13/2023	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	17.9
S-3	3/13/2023	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	98.6
S-4	3/13/2023	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	5.51
S-5	3/13/2023	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	18.1
S-6	3/13/2023	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	289
S-7	3/13/2023	0-0.5	<50.0	52.7	<50.0	52.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	36.8
S-8	3/13/2023	0-0.5	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	47.2
S-9	3/13/2023	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	12.2
S-10	3/13/2023	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	6.23
North	9/6/2022	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	19.7
	3/13/2023	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<4.99
East	9/6/2022	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	10.6
	3/13/2023	0-0.5	<49.9	87.1	<49.9	87.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	56.4
South	9/6/2022	0-0.5	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	10.4
	3/13/2023	0-0.5	<49.9	56.4	<49.9	56.4	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	12.6
West	9/6/2022	0-0.5	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	16.0
	3/13/2023	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	6.20
Regulatory Criteria^A							100 mg/kg	10 mg/kg			50 mg/kg	600 mg/kg

(-) Not Analyzed

^A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

(S) Sample Point

APPENDIX B

CARMONA RESOURCES



OCD Permitting

Home Searches Incidents Incident Details

NMCS0207251045 2002 MAJOR A OS @ 30-015-21307

General Incident Information

Site Name:
Well: [\[30-015-21307\]](#) EL PASO FEDERAL #003
Facility:
Operator: [\[151416\]](#) FASKEN OIL & RANCH LTD
Status: Closure Not Approved
Type: Oil Release
District: Artesia

Incident Location: A-01-21S-26E Lot: 24 1664 FNL 660 FWL
Lat/Long: 32.5179825,-104.2525024 NAD83
Directions:

Severity: Major
Surface Owner: Federal
County: Eddy (15)

Quick Links

- [General Incident Information](#)
- [Materials](#)
- [Events](#)
- [Orders](#)

Associated Images

- Incident Files (0)
- [Well Files \(47\)](#)

New Searches

- [New Facility Search](#)
- [New Incident Search](#)
- [New Operator Search](#)
- [New Pit Search](#)
- [New Spill Search](#)
- [New Tank Search](#)
- [New Well Search](#)

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: 03/03/2002
Extension Date: 11/15/2018
Initial C-141 Received:
Characterization Report Received:
Remediation Plan Received:

Closure Report Received:

OCD Notified of Release:

Cancelled Date:
Characterization Report Approved:
Remediation Plan Approved:
Remediation Due:
Closure Report Approved:

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incidents Materials

Cause	Source	Material	Volume				Units
			Unk.	Released	Recovered	Lost	
Freeze	Valve	Condensate		90	0	90	BBL

Incident Events

Date	Detail
07/16/2004	A 2" VALVE ON THE CONDENSATE STORAGE TANK FROZE AND CRACKED. THE VALVE WAS REPLACED. THE SPILL WAS CONTAINED WITHIN 22'X40' DIKED AREA WITH THE EXCEPTION OF A SMALL AREA ON PAD 2'X8'.

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141

State of New Mexico
Oil Conservation Division

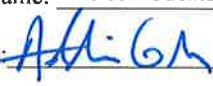
Page 4

Incident ID	nAPP2225953832
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 Analyst

Signature: 

Date: 04/24/23

email: addisong@forl.com

Telephone: 432-687-1777

OCD Only

Received by: _____

Date: _____

Form C-141

Page 6

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2225953832
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Addison Guelker

Title: Environmental Analyst

Signature: 

Date: 4/24/23

email: addisong@forl.com

Telephone: 432-687-1777

OCD Only

Received by: _____

Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____

Title: _____

The Oil Conservation Division (OCD) has rejected the application, Application ID: 144412



OCDOnline@state.nm.us <OCDOnline@state.nm.us>

3/7/2023 3:55 PM

To: Addison Guelker

To whom it may concern (c/o Addison Long for FASKEN OIL & RANCH LTD),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2225953832, for the following reasons:

- **The Remediation Plan is denied: Please collect confirmation samples, representing no more than 200 ft2. The closure report includes an inadequate number of floor samples. Site map dimensions are roughly 40 ft wide 50 ft, which gives a rough estimate of 2,000 ft2. Roughly 10 floor confirmation samples (200 ft2) would be required for the release area. The work will need to occur in 90 days after the work plan has been approved.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 144412.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,

Robert Hamlet

575-748-1283

Robert.Hamlet@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

APPENDIX C

CARMONA RESOURCES



Nearest water well

Fasken Oil and Ranch

Legend

- 0.50 Mile Radius
- 0.73 Miles
- NMSEO Water Well
- El Paso Federal No.3



3000 ft

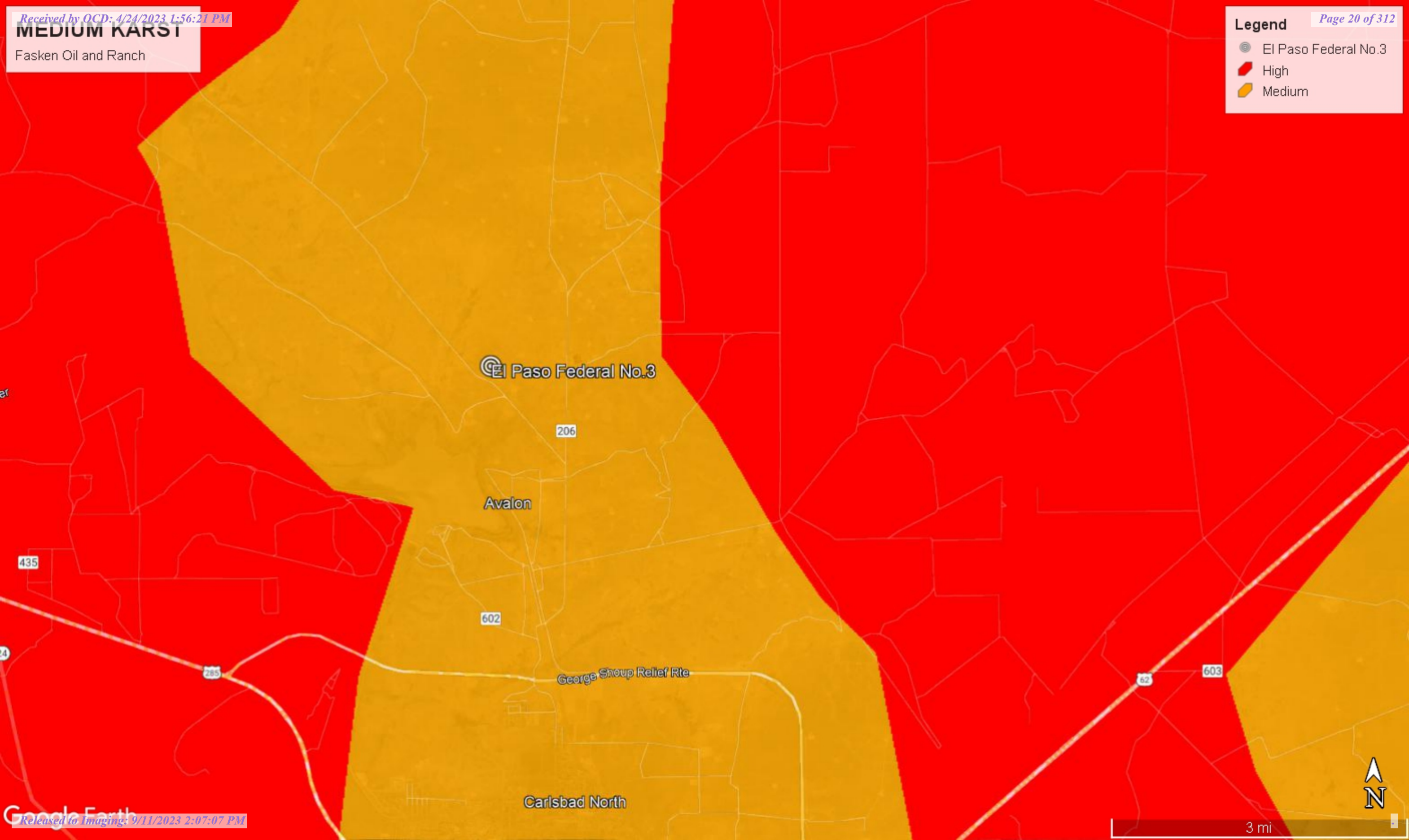
N

MEDIUM KARST

Fasken Oil and Ranch

Legend

- El Paso Federal No.3
- High
- Medium





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00051	C	ED					36	21S	26E	570880	3589008*	184		
C 00060	C	ED		4	4	4	25	21S	26E	571575	3589922*	200		
C 00076 S-12	CUB	ED		3	1	3	28	21S	26E	565310	3590334*	210	190	20
C 00120	CUB	ED		3	3	1	23	21S	26E	568530	3592380*	440	45	395
C 00121	C	ED					36	21S	26E	570880	3589008*	74	55	19
C 00159	C	ED		1	4		35	21S	26E	569473	3588814*	120		
C 00161 POD2	CUB	ED		3	1	3	25	21S	26E	570208	3590377	150	30	120
C 00165	CUB	ED		3	2	4	24	21S	26E	571361	3591952*	320		
C 00166	CUB	ED		1	4	4	24	21S	26E	571364	3591748*	214		
C 00200 POD1	C	ED		2	4	2	31	21S	26E	563470	3589298	618		
C 00203	C	ED					36	21S	26E	570880	3589008*	350	30	320
C 00217	R C	ED		4	2	2	36	21S	26E	571577	3589520*	140		
C 00217 POD2	C	ED		4	2	2	36	21S	26E	571559	3589506	45	19	26
C 00248 CLW195309	O	ED		4	4	4	36	21S	26E	571582	3588307*	24	18	6
C 00250	C	ED					36	21S	26E	570880	3589008*	148	25	123
C 00266	C	ED		1	1	4	35	21S	26E	569372	3588913*	100		
C 00275	C	ED		3	4	4	25	21S	26E	571375	3589922*	211	15	196
C 00345	C	ED		4	3	4	25	21S	26E	571177	3589934*	50		
C 00359	C	ED		4	3	1	35	21S	26E	568762	3589123*	155	135	20
C 00427	C	ED		2	1	2	36	21S	26E	571178	3589728*	32	21	11
C 00458	C	ED		2	1	2	36	21S	26E	571178	3589728*	50		
C 00470	C	ED			4	2	24	21S	26E	571459	3592458*	3205		
C 00471	C	ED		1	2	2	36	21S	26E	571377	3589720*	44	14	30
C 00483	C	ED		4	4	2	36	21S	26E	571578	3589117*	100	40	60
C 00524	C	ED		1	4	4	08	21S	26E	564833	3594964*	175		
C 00536	C CUB	ED		2	2	24	21S	26E	571457	3592861*	2664			

*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- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00543	C	ED					36	21S	26E	570880	3589008*	150		
C 00603	C	ED					35	21S	26E	569254	3588988*	72	57	15
C 00604	C	ED					35	21S	26E	569254	3588988*	90	69	21
C 00610	C	CUB	ED	4	3	2	13	21S	26E	571143	3593989*			
C 00615	C	ED		1	1	3	23	21S	26E	568533	3592175*	53	36	17
C 00617	C	ED		1	3	2	35	21S	26E	569372	3589327*	103	85	18
C 00622	C	CUB	ED	4	2	13	21S	26E	571448	3594073*		318		
C 00646	C	ED		2	3	2	35	21S	26E	569572	3589327*	84	60	24
C 00656	C	CUB	ED	4	2	24	21S	26E	571459	3592458*				
C 00670	C	ED		1	4	2	35	21S	26E	569775	3589329*	100	65	35
C 00674	C	CUB	ED	2	4	24	21S	26E	571462	3592053*		2709		
C 00689	C	ED		3	4	2	22	21S	26E	568123	3592375*	93	55	38
C 00705	C	ED		1	4	2	35	21S	26E	569775	3589329*	78	62	16
C 00713	C	ED		4	4	2	24	21S	26E	571558	3592357*	180	43	137
C 00769	C	ED					35	21S	26E	569254	3588988*	65	51	14
C 00786	C	ED		4	4	2	25	21S	26E	571569	3590735*	58	41	17
C 00787	C	ED		3	4	35	21S	26E	569473	3588399*		84	24	60
C 00794	C	ED		3	2	35	21S	26E	569473	3589228*		105	70	35
C 00801	C	ED					35	21S	26E	569254	3588988*	130	90	40
C 00842	CUB	ED		4	2	4	25	21S	26E	571572	3590329*	120		
C 00858 A	CUB	ED		4	4	3	25	21S	26E	570779	3589946*	140		
C 00858 B	CUB	ED		3	4	3	25	21S	26E	570579	3589946*	100	26	74
C 00858 C	CUB	ED		4	4	3	25	21S	26E	570779	3589946*	106	24	82
C 00882	C	ED				1	36	21S	26E	570480	3589433*	90	45	45
C 00886	CUB	ED		2	1	2	35	21S	26E	569572	3589756*	100		
C 00895	C	ED		1	1	26	21S	26E	568645	3591270*		121	40	81
C 00915	CUB	ED					25	21S	26E	570885	3590662*	124	77	47
C 00930	C	ED		2	4	2	25	21S	26E	571569	3590935*	300		
C 00939	C	ED		3	4	2	35	21S	26E	569775	3589129*	110	50	60

*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		Q Q Q							X	Y	Depth Well	Depth Water	Water Column	
	Sub-Code	basin	County	64	16	4	Sec	Tws	Rng						
C 00951	C	ED	1	4	35	21S	26E	569473	3588814*		68	56	12		
C 00952	C	ED	1	4	35	21S	26E	569473	3588814*		89	68	21		
C 00955	C	ED	4	2	3	35	21S	26E	569164	3588708*		100	68	32	
C 00970	C	ED	2	2	1	35	21S	26E	569170	3589749*		90	70	20	
C 00995	C	ED	2	4	2	25	21S	26E	571569	3590935*		240			
C 01014	C	ED	4	4	4	35	21S	26E	569974	3588301*		110	49	61	
C 01020	C	ED	4	2	25	21S	26E	571470	3590836*		230				
C 01023	C	ED	2	1	03	21S	26E	567363	3597716*		175				
C 01034	C	ED	4	3	4	25	21S	26E	571177	3589934*		70			
C 01042	C	ED	4	2	25	21S	26E	571470	3590836*		240				
C 01043	C	ED	4	2	25	21S	26E	571470	3590836*		240				
C 01081	C	ED	2	35	21S	26E	569674	3589429*		160	60	100			
C 01094	C	ED	4	2	25	21S	26E	571470	3590836*		235				
C 01095	C	ED	4	2	25	21S	26E	571470	3590836*		240				
C 01177	C	ED	4	2	25	21S	26E	571470	3590836*		144	32	112		
C 01191	R	C	ED	3	1	4	17	21S	26E	564440	3593549*		190	175	15
C 01201	C	ED	3	2	35	21S	26E	569473	3589228*		105	65	40		
C 01220	C	ED	1	4	2	25	21S	26E	571369	3590935*		165	16	149	
C 01233	C	ED	1	2	35	21S	26E	569473	3589657*		58				
C 01234	C	ED	1	2	35	21S	26E	569473	3589657*		57				
C 01284	C	ED	4	2	25	21S	26E	571470	3590836*		165				
C 01295	C	ED	4	2	35	21S	26E	569876	3589230*		120				
C 01308	C	ED	2	4	2	25	21S	26E	571569	3590935*		180			
C 01380	C	ED	1	1	3	33	21S	26E	565280	3588902*		230			
C 01382	C	ED	4	4	24	21S	26E	571465	3591649*		180				
C 01422	CUB	ED	4	1	25	21S	26E	570674	3590864*		464	49	415		
C 01434	C	ED	4	4	1	35	21S	26E	569167	3589125*		102	75	27	
C 01440	C	ED	1	4	2	35	21S	26E	569775	3589329*		68	51	17	
C 01481	C	ED	3	3	29	21S	26E	563797	3590008*		655	220	435		

*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		Q Q Q							X	Y	Depth Well	Depth Water	Water Column
	Sub-Code	basin	County	64	16	4	Sec	Tws	Rng					
C 01482	C	ED	2	3	2	35	21S	26E	569572	3589327*		95	75	20
C 01496	C	ED	2	3	2	35	21S	26E	569572	3589327*		70	52	18
C 01500	C	ED	2	2	4	25	21S	26E	571572	3590529*		40	15	25
C 01501	C	ED	2	3	03	21S	26E	567355	3596917*		270	140	130	
C 01529	C	ED	2	4	2	21	21S	26E	566689	3592556*		130	70	60
C 01543	C	ED	4	4	1	09	21S	26E	565837	3595576*		225	150	75
C 01549	C	ED	3	1	3	28	21S	26E	565310	3590334*		210	190	20
C 01567	C	ED	3	3	2	35	21S	26E	569372	3589127*		106	106	0
C 01579	C	ED	2	1	1	33	21S	26E	565506	3589720*		292		
C 01584	C	ED	1	2	35	21S	26E	569473	3589657*			20		
C 01594	C	ED	2	1	1	33	21S	26E	565506	3589720*		308	97	211
C 01596	C	ED	2	3	13	21S	26E	570647	3593702*		325	170	155	
C 01601	C	ED	2	3	2	35	21S	26E	569572	3589327*		94	57	37
C 01622	C	ED	2	3	2	35	21S	26E	569572	3589327*		95	58	37
C 01629	C	ED	2	3	2	35	21S	26E	569572	3589327*		75	50	25
C 01643	C	ED	2	3	2	17	21S	26E	564637	3594153*		330	310	20
C 01645	C	ED	4	2	25	21S	26E	571470	3590836*		103	30	73	
C 01680	C	ED	2	32	21S	26E	564808	3589394*		209	209	0		
C 01726	C	ED	2	17	21S	26E	564739	3594255*		211	180	31		
C 01734	C	ED	2	3	2	17	21S	26E	564637	3594153*		216	182	34
C 01736	C	ED	4	2	3	17	21S	26E	564237	3593547*		212	178	34
C 01807	C	ED	1	3	2	17	21S	26E	564437	3594153*		300	180	120
C 01817	C	ED	4	2	17	21S	26E	564942	3594056*		215	195	20	
C 01821	C	ED	2	2	17	21S	26E	564938	3594460*		207			
C 01821 POD2	C	ED	2	2	17	21S	26E	564938	3594460*		305	190	115	
C 01840	C	ED	1	4	2	17	21S	26E	564841	3594155*		360	201	159
C 01845	C	ED	2	1	17	21S	26E	564131	3594455*		219	180	39	
C 01858	C	ED	3	3	3	18	21S	26E	562029	3593099*		360	240	120
C 01859	C	ED	3	4	08	21S	26E	564531	3594862*		201	165	36	

*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- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 01878	C	ED					08	21S	26E	564327	3595459*	245	165	80
C 01925	C	ED		1	1	33		21S	26E	565407	3589621*	184	164	20
C 01927	C	ED		3	4	3	08	21S	26E	564026	3594758*	270	165	105
C 01935	C	ED			2	22		21S	26E	568017	3592672*	98	76	22
C 01935 POD2	C	ED			2	22		21S	26E	568017	3592672*	101	76	25
C 01937	C	ED			4	08		21S	26E	564732	3595063*	256	190	66
C 01940	C	ED		4	2	17		21S	26E	564942	3594056*	212	182	30
C 01955	C	ED		2	2	30		21S	26E	563375	3591206*	465	348	117
C 01958	C	ED		4	4	08		21S	26E	564934	3594865*	180	155	25
C 01972	C	ED		2	1	32		21S	26E	564205	3589598*	220	190	30
C 01978	C	ED		3	1	2	17	21S	26E	564433	3594357*	215	150	65
C 01991	C	ED		2	2	3	08	21S	26E	564226	3595362*	235	160	75
C 01995	C	ED			1	17		21S	26E	563931	3594250*	280	250	30
C 02046	C	ED			4	08		21S	26E	564732	3595063*	220	160	60
C 02051	C	ED				35		21S	26E	569254	3588988*	86	65	21
C 02077	C	ED		3	4	3	08	21S	26E	564026	3594758*	227	185	42
C 02093	C	ED		1	2	1	17	21S	26E	564030	3594554*	210	179	31
C 02130	C	ED		2	2	1	17	21S	26E	564230	3594554*	245	225	20
C 02137	C	ED		4	2	17		21S	26E	564942	3594056*	217	178	39
C 02140	C	ED		2	2	1	17	21S	26E	564230	3594554*	235	203	32
C 02144	R	C	ED		2	3	12	21S	26E	570625	3595317*	170		
C 02157	C	ED			4	08		21S	26E	564732	3595063*	218	150	68
C 02159	CUB	ED		2	2	1	17	21S	26E	564230	3594554*	205	168	37
C 02162	C	ED		4	4	08		21S	26E	564934	3594865*	202	150	52
C 02172	C	ED		4	4	08		21S	26E	564934	3594865*	200	150	50
C 02188	C	ED			3	08		21S	26E	563925	3595057*	182	155	27
C 02211	CUB	ED		4	4	3	25	21S	26E	570779	3589946*		25	
C 02214	C	ED		2	1	2	36	21S	26E	571178	3589728*	75	27	48
C 02228	C	ED			3	08		21S	26E	563925	3595057*	250	168	82

*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- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02237	C	ED		4	08	21S	26E			564732	3595063*	232		
C 02301	C	ED		1	3	08	21S	26E		563724	3595260*	240	160	80
C 02304	C	ED		4	1	2	22	21S	26E	567908	3592774*	105	80	25
C 02340	C	ED		3	4	3	22	21S	26E	567326	3591560*	397	250	147
C 02361	C	ED		2	4	3	08	21S	26E	564226	3594958*	250	150	100
C 02396	C	ED		1	3	4	08	21S	26E	564430	3594961*	207	80	127
C 02404	C	ED		4	2	25	21S	26E		571470	3590836*	176	25	151
C 02427	C	ED		2	2	4	08	21S	26E	565031	3595367*	250	200	50
C 02427 POD2	C	ED		2	2	4	08	21S	26E	565031	3595367*	252	225	27
C 02427 POD3	C	ED		2	2	4	08	21S	26E	565031	3595367*	200	160	40
C 02437	C	ED		4	1	33	21S	26E		565802	3589214*	220	163	57
C 02443	C	ED		1	4	3	08	21S	26E	564026	3594958*	278	178	100
C 02468	C	ED		3	3	24	21S	26E		570270	3591698*	160	125	35
C 02490	C	ED		3	1	4	08	21S	26E	564430	3595164*	235	160	75
C 02498	C	ED				08	21S	26E		564327	3595459*	274	184	90
C 02562	C	ED		4	2	3	15	21S	26E	567485	3593575*	160	65	95
C 02577	C	ED		3	2	4	08	21S	26E	564831	3595167*	196	160	36
C 02595	C	ED			2	26	21S	26E		569664	3591075*	55	26	29
C 02601	C	ED			1	17	21S	26E		563931	3594250*	340	210	130
C 02611	C	ED		2	2	3	08	21S	26E	564226	3595362*	250	215	35
C 02615	C	ED			2	3	10	21S	26E	567367	3595290*	404	115	289
C 02616	C	ED		4	3	08	21S	26E		564127	3594859*	250	180	70
C 02620	C	ED		4	3	2	08	21S	26E	564630	3595567*	203	152	51
C 02621	C	ED				30	21S	26E		562761	3590536*	404	115	289
C 02626	C	ED		2	2	32	21S	26E		565009	3589613*	202	164	38
C 02632	C	ED		1	3	07	21S	26E		562113	3595242*	247	66	181
C 02634	C	ED		4	2	25	21S	26E		571470	3590836*	130	40	90
C 02650	C	ED		4	3	4	08	21S	26E	564630	3594761*	260	190	70
C 02659	C	ED		1	2	4	08	21S	26E	564831	3595367*	250	170	80

*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- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02681	C	ED		3	2	08	21S	26E		564531	3595668*	200	160	40
C 02692	C	ED		4	4	33	21S	26E		566682	3588307*	200	85	115
C 02699	C	ED		1	1	01	21S	26E		570918	3597016*	320	89	231
C 02730	C	ED		1	4	33	21S	26E		565782	3589232	265	52	213
C 02889	CUB	ED		2	1	35	21S	26E		569572	3588913*	76		
C 02893	C	ED		3	3	08	21S	26E		563623	3595563*	225	175	50
C 02906	C	ED		2	4	33	21S	26E		566682	3588507*	300		
C 02933	C	ED		4	2	32	21S	26E		565108	3589512*	212	144	68
C 02994	C	ED		4	1	23	21S	26E		568733	3591975*	337	34	303
C 03042	C	ED		1	2	08	21S	26E		564831	3595367*	215	170	45
C 03069	C	ED		3	4	09	21S	26E		566452	3595583*	250	165	85
C 03077	C	ED				08	21S	26E		564327	3595459*	300	100	200
C 03134	C	ED		4	3	33	21S	26E		566308	3589117*	317	120	197
C 03229	C	ED		1	2	08	21S	26E		564531	3596074*	200	180	20
C 03317	C	ED		2	2	08	21S	26E		563973	3595048	216	149	67
C 03329	C	ED		1	1	08	21S	26E		563570	3594641	277	196	81
C 03342	C	ED		4	2	08	21S	26E		564197	3595295	211	161	50
C 03343	C	ED		4	3	08	21S	26E		564412	3594797	219	171	48
C 03357	C	ED		1	3	08	21S	26E		564456	3595703	204	161	43
C 03393 POD1	C	ED		2	2	17	21S	26E		564259	3594655	198	178	20
C 03407 POD1	C	ED		4	4	08	21S	26E		564274	3594682	198	179	19
C 03408 POD1	C	ED		4	3	08	21S	26E		564684	3594765	253	242	11
C 03421 POD1	C	ED		2	2	32	21S	26E		565156	3589654	199	156	43
C 03430 POD1	C	ED		1	1	35	21S	26E		569445	3588996	120	82	38
C 03438 POD1	C	ED		4	2	08	21S	26E		564184	3595132	250	178	72
C 03465 POD1	C	ED		4	1	08	21S	26E		563912	3595898	158	125	33
C 03538 POD1	C	ED		1	4	08	21S	26E		564025	3594884	300		
C 03584 POD1	C	ED		4	4	22	21S	26E		568417	3592320	154	50	104
C 03663 POD1	C	ED		3	1	17	21S	26E		563527	3594400	280	162	118

*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-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 03739 POD1	C	ED		4	3	4	08	21S	26E	564644	3594836	300	110	190
C 03745 POD1	C	ED		1	4	3	08	21S	26E	564023	3594875	280	162	118
C 03752 POD1	C	ED		2	2	1	17	21S	26E	564176	3594485	300	242	58
C 03931 POD1	C	ED		2	3	3	23	21S	26E	568741	3591857	56	25	31
C 03973 POD1	C	ED		3	4	4	33	21S	26E	566540	3588320	250	26	224
C 04120 POD1	C	ED		2	4	1	17	21S	26E	564255	3594181	340	323	17
C 04186 POD1	C	ED		1	3	1	17	21S	26E	563669	3594244	250	180	70
C 04238 POD1	C	ED		2	1	1	17	21S	26E	563867	3594590	240	230	10
C 04261 POD1	C	ED		1	2	1	08	21S	26E	563936	3596108	200	78	122
C 04274 POD1	CUB	ED		4	3	1	07	21S	26E	562828	3595013	65	50	15
C 04280 POD1	C	ED		3	2	1	08	21S	26E	563943	3595881	158	130	28
C 04305 POD1	C	ED		4	1	4	08	21S	26E	564606	3595092	220	180	40
C 04319 POD1	C	ED		4	2	1	08	21S	26E	564292	3596062	217	210	7
C 04323 POD1	CUB	ED		3	4	3	36	21S	26E	570589	3588222	50	38	12
C 04323 POD2	CUB	ED		3	4	3	36	21S	26E	570586	3588248	49	39	10
C 04323 POD3	CUB	ED		3	4	3	36	21S	26E	570533	3588226	49	39	10
C 04334 POD1	C	ED		2	2	4	33	21S	26E	566160	3588886	295	290	5
C 04342 POD1	C	ED		4	1	1	08	21S	26E	563896	3595887	160	120	40
C 04343 POD1	C	ED		3	3	2	08	21S	26E	564423	3595505	220	125	95
C 04347 POD1	C	ED		4	1	1	08	21S	26E	563888	3595915	160	120	40
C 04359 POD1	C	ED		4	2	4	17	21S	26E	565057	3593597	256	230	26
C 04370 POD1	C	ED		1	2	2	32	21S	26E	564781	3589786	210	80	130
C 04409 POD1	C	ED		4	2	3	17	21S	26E	564229	3594371	415	50	365
C 04424 POD1	C	ED		3	4	4	33	21S	26E	566532	3588301	336	300	36
C 04439 POD1	CUB	ED		4	3	4	07	21S	26E	563108	3594653	250	121	129
C 04439 POD2	CUB	ED		1	3	4	07	21S	26E	562890	3594858	250	120	130
C 04440 POD1	CUB	ED		4	2	3	17	21S	26E	564318	3593589	250	200	50
C 04450 POD1	C	ED		3	4	4	33	21S	26E	566514	3588286	360	280	80
C 04482 POD1	C	ED		2	2	4	08	21S	26E	565032	3595454	200	40	160








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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 04488 POD1	C	ED	2	4	1	33	21S	26E	565916	3589321		255	90	165
C 04535 POD1	C	ED	2	2	4	17	21S	26E	565042	3593853		300	260	40
C 04543 POD1	CUB	ED	2	4	2	35	21S	26E	570005	3589326		75	68	7
C 04543 POD2	CUB	ED	2	4	2	35	21S	26E	570016	3589309		74	68	6
C 04543 POD3	CUB	ED	2	4	2	35	21S	26E	570026	3589325		74	68	6
C 04543 POD4	CUB	ED	2	4	2	35	21S	26E	570037	3589305		74	68	6
C 04543 POD5	CUB	ED	2	4	2	35	21S	26E	570052	3589322		74	68	6

Average Depth to Water: **121 feet**

Minimum Depth: **14 feet**

Maximum Depth: **348 feet**

Record Count: 236

PLSS Search:

Township: 21S

Range: 26E

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

9/14/22 9:02 AM

Page 9 of 9

WATER COLUMN/ AVERAGE
DEPTH TO WATER



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	Tws	Rng	X	Y
C	02699	1	1	4	01	21S	26E	570918	3597016*

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CORKY .

Drill Start Date: 05/19/2000 **Drill Finish Date:** 05/19/2000 **Plug Date:**

Log File Date: 05/31/2000 **PCW Rev Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 200 GPM

Casing Size: 6.63 **Depth Well:** 320 feet **Depth Water:** 89 feet

Water Bearing Stratifications:

Top	Bottom	Description
270	295	Shallow Alluvium/Basin Fill

Casing Perforations:

Top	Bottom
244	320

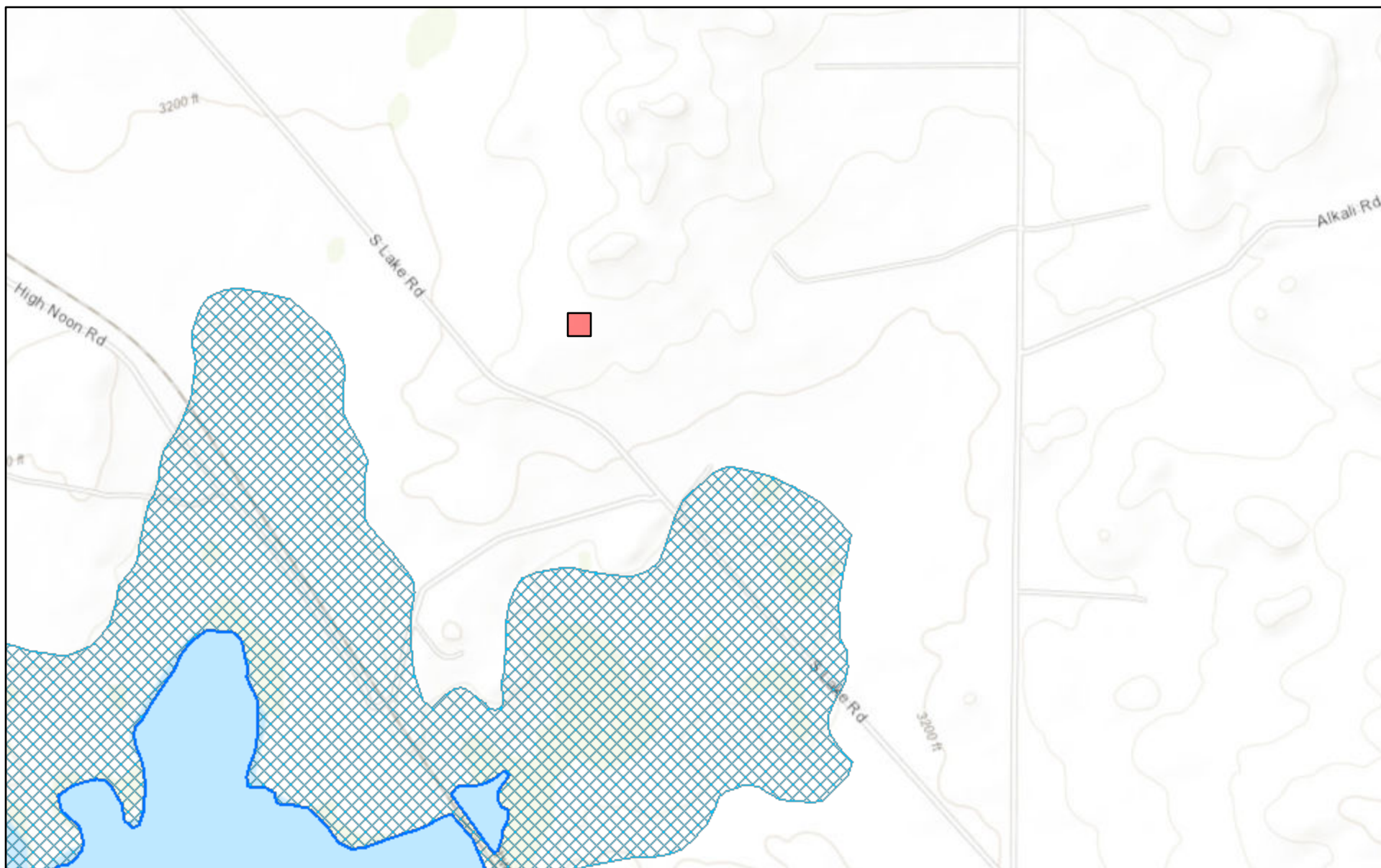
*UTM location was derived from PLSS - see Help

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

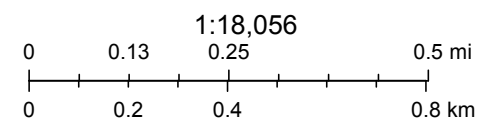
9/14/22 9:03 AM

POINT OF DIVERSION SUMMARY

New Mexico NFHL Data



September 14, 2022



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

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

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

APPENDIX D

CARMONA RESOURCES





Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-18878-1

Laboratory Sample Delivery Group: Eddy Co. NM
Client Project/Site: El Paso Fed #3

For:

Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Attn: Grant Huckabay

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

Authorized for release by:

9/12/2022 12:43:17 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Laboratory Job ID: 880-18878-1
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	16
Lab Chronicle	18
Certification Summary	20
Method Summary	21
Sample Summary	22
Chain of Custody	23
Receipt Checklists	24

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Qualifiers

GC VOA

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

GC Semi VOA

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Job ID: 880-18878-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-18878-1****Receipt**

The samples were received on 9/7/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-33944 and analytical batch 880-33982 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 8021B: Surrogate recovery for the following sample was outside control limits: SI (880-18878-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: West (880-18878-5). 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: (LCS 880-33979/2-A) and (LCSD 880-33979/3-A). 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.

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-33932 and analytical batch 880-34092 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: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Client Sample ID: SI

Lab Sample ID: 880-18878-1

Date Collected: 09/06/22 10:30

Matrix: Solid

Date Received: 09/07/22 08:00

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		09/07/22 16:02	09/09/22 09:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 09:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 09:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/07/22 16:02	09/09/22 09:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 09:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/22 16:02	09/09/22 09:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	09/07/22 16:02	09/09/22 09:40	1
1,4-Difluorobenzene (Surr)	132	S1+	70 - 130	09/07/22 16:02	09/09/22 09:40	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/09/22 14:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 10:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 10:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 10:46	1
Total TPH	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 10:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/08/22 08:45	09/08/22 10:46	1
o-Terphenyl	107		70 - 130	09/08/22 08:45	09/08/22 10:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	138	F1	4.99		mg/Kg			09/11/22 02:19	1

Client Sample ID: North

Lab Sample ID: 880-18878-2

Date Collected: 09/06/22 10:35

Matrix: Solid

Date Received: 09/07/22 08:00

Sample Depth: 0-6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 16:02	09/09/22 10:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 16:02	09/09/22 10:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 16:02	09/09/22 10:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/07/22 16:02	09/09/22 10:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 16:02	09/09/22 10:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/07/22 16:02	09/09/22 10:06	1

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Client Sample ID: North

Lab Sample ID: 880-18878-2

Date Collected: 09/06/22 10:35

Matrix: Solid

Date Received: 09/07/22 08:00

Sample Depth: 0-6"

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/07/22 16:02	09/09/22 10:06	1
1,4-Difluorobenzene (Surr)	114		70 - 130	09/07/22 16:02	09/09/22 10:06	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/09/22 14:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/08/22 08:45	09/08/22 11:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/08/22 08:45	09/08/22 11:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/08/22 08:45	09/08/22 11:50	1
Total TPH	<49.9	U	49.9		mg/Kg		09/08/22 08:45	09/08/22 11:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	09/08/22 08:45	09/08/22 11:50	1
o-Terphenyl	94		70 - 130	09/08/22 08:45	09/08/22 11:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.7		5.02		mg/Kg			09/11/22 02:33	1

Client Sample ID: East

Lab Sample ID: 880-18878-3

Date Collected: 09/06/22 10:40

Matrix: Solid

Date Received: 09/07/22 08:00

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		09/07/22 16:02	09/09/22 10:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 10:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 10:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/07/22 16:02	09/09/22 10:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 10:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/22 16:02	09/09/22 10:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	09/07/22 16:02	09/09/22 10:32	1
1,4-Difluorobenzene (Surr)	99		70 - 130	09/07/22 16:02	09/09/22 10:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/09/22 14:38	1

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Client Sample ID: East

Lab Sample ID: 880-18878-3

Date Collected: 09/06/22 10:40

Matrix: Solid

Date Received: 09/07/22 08:00

Sample Depth: 0-6"

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 12:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 12:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 12:12	1
Total TPH	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	09/08/22 08:45	09/08/22 12:12	1
o-Terphenyl	92		70 - 130	09/08/22 08:45	09/08/22 12:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.6		5.03		mg/Kg			09/11/22 02:39	1

Client Sample ID: South

Lab Sample ID: 880-18878-4

Date Collected: 09/06/22 10:45

Matrix: Solid

Date Received: 09/07/22 08:00

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		09/07/22 16:02	09/09/22 10:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 10:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 10:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/07/22 16:02	09/09/22 10:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/22 16:02	09/09/22 10:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/22 16:02	09/09/22 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	09/07/22 16:02	09/09/22 10:58	1
1,4-Difluorobenzene (Surr)	117		70 - 130	09/07/22 16:02	09/09/22 10:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/09/22 14:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/08/22 08:45	09/08/22 12:33	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/08/22 08:45	09/08/22 12:33	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/08/22 08:45	09/08/22 12:33	1

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Client Sample ID: South

Lab Sample ID: 880-18878-4

Date Collected: 09/06/22 10:45

Matrix: Solid

Date Received: 09/07/22 08:00

Sample Depth: 0-6"

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg		09/08/22 08:45	09/08/22 12:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				09/08/22 08:45	09/08/22 12:33	1
o-Terphenyl	88		70 - 130				09/08/22 08:45	09/08/22 12:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.4		5.00		mg/Kg			09/11/22 02:44	1

Client Sample ID: West

Lab Sample ID: 880-18878-5

Date Collected: 09/06/22 10:50

Matrix: Solid

Date Received: 09/07/22 08:00

Sample Depth: 0-6"

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		09/07/22 16:02	09/09/22 11:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/07/22 16:02	09/09/22 11:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/07/22 16:02	09/09/22 11:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/07/22 16:02	09/09/22 11:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/07/22 16:02	09/09/22 11:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/07/22 16:02	09/09/22 11:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130				09/07/22 16:02	09/09/22 11:24	1
1,4-Difluorobenzene (Surr)	105		70 - 130				09/07/22 16:02	09/09/22 11:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/09/22 14:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/08/22 08:45	09/08/22 12:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/08/22 08:45	09/08/22 12:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/08/22 08:45	09/08/22 12:55	1
Total TPH	<49.8	U	49.8		mg/Kg		09/08/22 08:45	09/08/22 12:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				09/08/22 08:45	09/08/22 12:55	1
o-Terphenyl	89		70 - 130				09/08/22 08:45	09/08/22 12:55	1

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Client Sample ID: West
Date Collected: 09/06/22 10:50
Date Received: 09/07/22 08:00
Sample Depth: 0-6"

Lab Sample ID: 880-18878-5
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.0		4.99		mg/Kg			09/11/22 02:48	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy 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)
880-18878-1	SI	75	132 S1+
880-18878-2	North	125	114
880-18878-3	East	118	99
880-18878-4	South	119	117
880-18878-5	West	132 S1+	105
890-2858-A-1-F MS	Matrix Spike	89	115
890-2858-A-1-G MSD	Matrix Spike Duplicate	127	83
LCS 880-33944/1-A	Lab Control Sample	91	78
LCSD 880-33944/2-A	Lab Control Sample Dup	111	76
MB 880-33944/5-A	Method Blank	80	74
MB 880-33982/8	Method Blank	70	81
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)
880-18878-1	SI	108	107
880-18878-1 MS	SI	104	89
880-18878-1 MSD	SI	99	86
880-18878-2	North	96	94
880-18878-3	East	93	92
880-18878-4	South	90	88
880-18878-5	West	90	89
LCS 880-33979/2-A	Lab Control Sample	162 S1+	156 S1+
LCSD 880-33979/3-A	Lab Control Sample Dup	140 S1+	137 S1+
MB 880-33979/1-A	Method Blank	101	100
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33944/5-A

Matrix: Solid

Analysis Batch: 33982

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33944

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 16:02	09/09/22 01:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 16:02	09/09/22 01:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 16:02	09/09/22 01:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/07/22 16:02	09/09/22 01:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 16:02	09/09/22 01:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/07/22 16:02	09/09/22 01:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	09/07/22 16:02	09/09/22 01:49	1
1,4-Difluorobenzene (Surr)	74		70 - 130	09/07/22 16:02	09/09/22 01:49	1

Lab Sample ID: LCS 880-33944/1-A

Matrix: Solid

Analysis Batch: 33982

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08825		mg/Kg		88	70 - 130
Toluene	0.100	0.1024		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1040		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2047		mg/Kg		102	70 - 130
o-Xylene	0.100	0.09568		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	78		70 - 130

Lab Sample ID: LCSD 880-33944/2-A

Matrix: Solid

Analysis Batch: 33982

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33944

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1046		mg/Kg		105	70 - 130	17	35
Toluene	0.100	0.1068		mg/Kg		107	70 - 130	4	35
Ethylbenzene	0.100	0.1050		mg/Kg		105	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2095		mg/Kg		105	70 - 130	2	35
o-Xylene	0.100	0.1027		mg/Kg		103	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-2858-A-1-F MS

Matrix: Solid

Analysis Batch: 33982

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33944

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F2 F1	0.0998	0.03455	F1	mg/Kg		35	70 - 130
Toluene	<0.00200	U F2 F1	0.0998	0.03528	F1	mg/Kg		35	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

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

Lab Sample ID: 890-2858-A-1-F MS

Matrix: Solid

Analysis Batch: 33982

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33944

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U F2 F1	0.0998	0.03343	F1	mg/Kg		33	70 - 130
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.200	0.07001	F1	mg/Kg		35	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0998	0.03721	F1	mg/Kg		37	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: 890-2858-A-1-G MSD

Matrix: Solid

Analysis Batch: 33982

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33944

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.100	0.09876	F2	mg/Kg		99	70 - 130	96	35
Toluene	<0.00200	U F2 F1	0.100	0.1023	F2	mg/Kg		102	70 - 130	97	35
Ethylbenzene	<0.00200	U F2 F1	0.100	0.09731	F2	mg/Kg		97	70 - 130	98	35
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.200	0.1927	F2	mg/Kg		96	70 - 130	93	35
o-Xylene	<0.00200	U F2 F1	0.100	0.09421	F2	mg/Kg		94	70 - 130	87	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

Lab Sample ID: MB 880-33982/8

Matrix: Solid

Analysis Batch: 33982

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			09/08/22 11:40	1
Toluene	<0.00200	U	0.00200		mg/Kg			09/08/22 11:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			09/08/22 11:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			09/08/22 11:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			09/08/22 11:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			09/08/22 11:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130		09/08/22 11:40	1
1,4-Difluorobenzene (Surr)	81		70 - 130		09/08/22 11:40	1

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

Lab Sample ID: MB 880-33979/1-A

Matrix: Solid

Analysis Batch: 33970

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33979

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		09/08/22 08:45	09/08/22 09:42	1

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

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

Lab Sample ID: MB 880-33979/1-A

Matrix: Solid

Analysis Batch: 33970

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33979

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 09:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 09:42	1
Total TPH	<50.0	U	50.0		mg/Kg		09/08/22 08:45	09/08/22 09:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/08/22 08:45	09/08/22 09:42	1
o-Terphenyl	100		70 - 130	09/08/22 08:45	09/08/22 09:42	1

Lab Sample ID: LCS 880-33979/2-A

Matrix: Solid

Analysis Batch: 33970

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	907.0		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1076		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	162	S1+	70 - 130
o-Terphenyl	156	S1+	70 - 130

Lab Sample ID: LCSD 880-33979/3-A

Matrix: Solid

Analysis Batch: 33970

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33979

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	869.4		mg/Kg		87	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	989.2		mg/Kg		99	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	140	S1+	70 - 130
o-Terphenyl	137	S1+	70 - 130

Lab Sample ID: 880-18878-1 MS

Matrix: Solid

Analysis Batch: 33970

Client Sample ID: SI

Prep Type: Total/NA

Prep Batch: 33979

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	999	778.4		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1112		mg/Kg		109	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	104		70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

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

Lab Sample ID: 880-18878-1 MS

Matrix: Solid

Analysis Batch: 33970

Client Sample ID: SI

Prep Type: Total/NA

Prep Batch: 33979

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	89		70 - 130

Lab Sample ID: 880-18878-1 MSD

Matrix: Solid

Analysis Batch: 33970

Client Sample ID: SI

Prep Type: Total/NA

Prep Batch: 33979

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	739.8		mg/Kg		72	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	1068		mg/Kg		105	70 - 130	4	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	99		70 - 130								
<i>o</i> -Terphenyl	86		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33932/1-A

Matrix: Solid

Analysis Batch: 34092

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			09/11/22 02:04	1	

Lab Sample ID: LCS 880-33932/2-A

Matrix: Solid

Analysis Batch: 34092

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	261.6		mg/Kg		105	90 - 110			

Lab Sample ID: LCSD 880-33932/3-A

Matrix: Solid

Analysis Batch: 34092

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	262.6		mg/Kg		105	90 - 110	0	20	

Lab Sample ID: 880-18878-1 MS

Matrix: Solid

Analysis Batch: 34092

Client Sample ID: SI

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	138	F1	250	427.3	F1	mg/Kg		116	90 - 110		

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-18878-1 MSD										Client Sample ID: SI		
Matrix: Solid										Prep Type: Soluble		
Analysis Batch: 34092												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	138	F1	250	427.8	F1	mg/Kg		116	90 - 110	0	20	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

GC VOA

Prep Batch: 33944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-1	SI	Total/NA	Solid	5035	
880-18878-2	North	Total/NA	Solid	5035	
880-18878-3	East	Total/NA	Solid	5035	
880-18878-4	South	Total/NA	Solid	5035	
880-18878-5	West	Total/NA	Solid	5035	
MB 880-33944/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33944/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33944/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2858-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-2858-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 33982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-1	SI	Total/NA	Solid	8021B	33944
880-18878-2	North	Total/NA	Solid	8021B	33944
880-18878-3	East	Total/NA	Solid	8021B	33944
880-18878-4	South	Total/NA	Solid	8021B	33944
880-18878-5	West	Total/NA	Solid	8021B	33944
MB 880-33944/5-A	Method Blank	Total/NA	Solid	8021B	33944
MB 880-33982/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-33944/1-A	Lab Control Sample	Total/NA	Solid	8021B	33944
LCSD 880-33944/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33944
890-2858-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	33944
890-2858-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33944

Analysis Batch: 34119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-1	SI	Total/NA	Solid	Total BTEX	
880-18878-2	North	Total/NA	Solid	Total BTEX	
880-18878-3	East	Total/NA	Solid	Total BTEX	
880-18878-4	South	Total/NA	Solid	Total BTEX	
880-18878-5	West	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 33970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-1	SI	Total/NA	Solid	8015B NM	33979
880-18878-2	North	Total/NA	Solid	8015B NM	33979
880-18878-3	East	Total/NA	Solid	8015B NM	33979
880-18878-4	South	Total/NA	Solid	8015B NM	33979
880-18878-5	West	Total/NA	Solid	8015B NM	33979
MB 880-33979/1-A	Method Blank	Total/NA	Solid	8015B NM	33979
LCS 880-33979/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33979
LCSD 880-33979/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33979
880-18878-1 MS	SI	Total/NA	Solid	8015B NM	33979
880-18878-1 MSD	SI	Total/NA	Solid	8015B NM	33979

Prep Batch: 33979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-1	SI	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

GC Semi VOA (Continued)

Prep Batch: 33979 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-2	North	Total/NA	Solid	8015NM Prep	
880-18878-3	East	Total/NA	Solid	8015NM Prep	
880-18878-4	South	Total/NA	Solid	8015NM Prep	
880-18878-5	West	Total/NA	Solid	8015NM Prep	
MB 880-33979/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33979/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33979/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-18878-1 MS	SI	Total/NA	Solid	8015NM Prep	
880-18878-1 MSD	SI	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-1	SI	Total/NA	Solid	8015 NM	
880-18878-2	North	Total/NA	Solid	8015 NM	
880-18878-3	East	Total/NA	Solid	8015 NM	
880-18878-4	South	Total/NA	Solid	8015 NM	
880-18878-5	West	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-1	SI	Soluble	Solid	DI Leach	
880-18878-2	North	Soluble	Solid	DI Leach	
880-18878-3	East	Soluble	Solid	DI Leach	
880-18878-4	South	Soluble	Solid	DI Leach	
880-18878-5	West	Soluble	Solid	DI Leach	
MB 880-33932/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33932/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33932/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18878-1 MS	SI	Soluble	Solid	DI Leach	
880-18878-1 MSD	SI	Soluble	Solid	DI Leach	

Analysis Batch: 34092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18878-1	SI	Soluble	Solid	300.0	33932
880-18878-2	North	Soluble	Solid	300.0	33932
880-18878-3	East	Soluble	Solid	300.0	33932
880-18878-4	South	Soluble	Solid	300.0	33932
880-18878-5	West	Soluble	Solid	300.0	33932
MB 880-33932/1-A	Method Blank	Soluble	Solid	300.0	33932
LCS 880-33932/2-A	Lab Control Sample	Soluble	Solid	300.0	33932
LCSD 880-33932/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33932
880-18878-1 MS	SI	Soluble	Solid	300.0	33932
880-18878-1 MSD	SI	Soluble	Solid	300.0	33932

Eurofins Midland

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Client Sample ID: SI

Lab Sample ID: 880-18878-1

Date Collected: 09/06/22 10:30

Matrix: Solid

Date Received: 09/07/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33944	09/07/22 16:02	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33982	09/09/22 09:40	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34119	09/09/22 14:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			34070	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33979	09/08/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 10:46	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33932	09/07/22 13:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34092	09/11/22 02:19	CH	EET MID

Client Sample ID: North

Lab Sample ID: 880-18878-2

Date Collected: 09/06/22 10:35

Matrix: Solid

Date Received: 09/07/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33944	09/07/22 16:02	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33982	09/09/22 10:06	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34119	09/09/22 14:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			34070	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33979	09/08/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 11:50	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33932	09/07/22 13:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34092	09/11/22 02:33	CH	EET MID

Client Sample ID: East

Lab Sample ID: 880-18878-3

Date Collected: 09/06/22 10:40

Matrix: Solid

Date Received: 09/07/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	33944	09/07/22 16:02	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33982	09/09/22 10:32	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34119	09/09/22 14:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			34070	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33979	09/08/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 12:12	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33932	09/07/22 13:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34092	09/11/22 02:39	CH	EET MID

Client Sample ID: South

Lab Sample ID: 880-18878-4

Date Collected: 09/06/22 10:45

Matrix: Solid

Date Received: 09/07/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33944	09/07/22 16:02	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33982	09/09/22 10:58	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34119	09/09/22 14:38	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Client Sample ID: South

Lab Sample ID: 880-18878-4

Date Collected: 09/06/22 10:45

Matrix: Solid

Date Received: 09/07/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34070	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	33979	09/08/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 12:33	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33932	09/07/22 13:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34092	09/11/22 02:44	CH	EET MID

Client Sample ID: West

Lab Sample ID: 880-18878-5

Date Collected: 09/06/22 10:50

Matrix: Solid

Date Received: 09/07/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33944	09/07/22 16:02	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33982	09/09/22 11:24	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34119	09/09/22 14:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			34070	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	33979	09/08/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 12:55	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33932	09/07/22 13:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34092	09/11/22 02:48	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: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy 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
8015B NM	8015NM Prep	Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy 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: El Paso Fed #3

Job ID: 880-18878-1
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-18878-1	SI	Solid	09/06/22 10:30	09/07/22 08:00	0-6"
880-18878-2	North	Solid	09/06/22 10:35	09/07/22 08:00	0-6"
880-18878-3	East	Solid	09/06/22 10:40	09/07/22 08:00	0-6"
880-18878-4	South	Solid	09/06/22 10:45	09/07/22 08:00	0-6"
880-18878-5	West	Solid	09/06/22 10:50	09/07/22 08:00	0-6"

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

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



Environment Testing
Xenco

Work Order No: 188719

www.xenco.com Page 1 of 1

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	

Project Name: EL PASO FEP #3		Turn Around	
Project Number:		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush Due Date: 3 DAY TAT starts the day received by the lab if received by 4:30pm	
Project Location: EDDY Co NM		Due Date: 3 DAY	
Sampler's Name: Addison Guelker		TAT starts the day received by the lab if received by 4:30pm	
PO #:			

SAMPLE RECEIPT		Temp Blank		Yes No		Wet Ice		Yes No		Thermometer ID		Correction Factor		Temperature Reading		Corrected Temperature		Total Containers	
Samples Received Intact:		Yes		No		Yes		No		Yes		No		Yes		No		Yes	
Cooler Custody Seals:		Yes		No		Yes		No		Yes		No		Yes		No		Yes	
Sample Custody Seals:		Yes		No		Yes		No		Yes		No		Yes		No		Yes	
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Grab/Comp		# of Cont		Parameters		Pres Code		ANALYSIS REQUEST	
S1		S		9/6/22		10:30		0-6"		G		1		TPH 8015M		X		None NO	
NORTH		S		9/6/22		10:35		0-6"		G		1		BTEX 8021B		X		Cool Cool	
EAST		S		9/6/22		10:40		0-6"		G		1				X		HCL HC	
SOUTH		S		9/6/22		10:45		0-6"		G		1				X		H ₂ SO ₄ H ₂	
WEST		S		9/6/22		10:50		0-6"		G		1				X		H ₃ PO ₄ HP	
		S																NaHSO ₄ NABIS	
		S																Na ₂ S ₂ O ₃ NaSO ₃	
		S																Zn Acetate+NaOH Zn	
		S																NaOH+Ascorbic Acid SAPC	



880-18878 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 SiO₂ Na Sr Ti 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 Ti 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)	Relinquished by (Signature)	Received by (Signature)	Date/Time
Addison Guelker	Addison Guelker	Addison Guelker	Addison Guelker	9/6/22

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-18878-1

SDG Number: Eddy Co. NM

Login Number: 18878

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707
Generated 3/20/2023 11:39:49 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25935-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/20/2023 11:39:49 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25935-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	13
Lab Chronicle	15
Certification Summary	16
Method Summary	17
Sample Summary	18
Chain of Custody	19
Receipt Checklists	20

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

Job ID: 880-25935-2**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-25935-2****Receipt**

The sample was received on 3/14/2023 4:40 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 5.1°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S1 (880-25935-1).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48726 and analytical batch 880-48707 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: S1 (880-25935-1). 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: The surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-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: S1 (880-25935-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S1 (880-25935-1), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

Client Sample ID: S1

Lab Sample ID: 880-25935-1

Date Collected: 03/13/23 09:40

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/16/23 09:45	03/17/23 06:26	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/16/23 09:45	03/17/23 06:26	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/16/23 09:45	03/17/23 06:26	1
m-Xylene & p-Xylene	<0.00396	U *	0.00396		mg/Kg		03/16/23 09:45	03/17/23 06:26	1
o-Xylene	<0.00198	U *	0.00198		mg/Kg		03/16/23 09:45	03/17/23 06:26	1
Xylenes, Total	<0.00396	U *	0.00396		mg/Kg		03/16/23 09:45	03/17/23 06:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	03/16/23 09:45	03/17/23 06:26	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130	03/16/23 09:45	03/17/23 06:26	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			03/20/23 12:23	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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 00:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 00:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	03/15/23 11:41	03/16/23 00:01	1
o-Terphenyl	137	S1+	70 - 130	03/15/23 11:41	03/16/23 00:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.7	F1	5.04		mg/Kg			03/17/23 02:04	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy 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)
880-25935-1	S1	83	68 S1-
890-4249-A-46-C MS	Matrix Spike	105	98
890-4249-A-46-D MSD	Matrix Spike Duplicate	70	78
LCS 880-48726/1-A	Lab Control Sample	117	112
LCSD 880-48726/2-A	Lab Control Sample Dup	114	89
MB 880-48712/5-A	Method Blank	70	89
MB 880-48726/5-A	Method Blank	76	83
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)
880-25935-1	S1	117	137 S1+
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48712/5-A

Matrix: Solid

Analysis Batch: 48707

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:01	03/16/23 11:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:01	03/16/23 11:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:01	03/16/23 11:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/23 09:01	03/16/23 11:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:01	03/16/23 11:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/23 09:01	03/16/23 11:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	03/16/23 09:01	03/16/23 11:55	1
1,4-Difluorobenzene (Surr)	89		70 - 130	03/16/23 09:01	03/16/23 11:55	1

Lab Sample ID: MB 880-48726/5-A

Matrix: Solid

Analysis Batch: 48707

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48726

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:45	03/16/23 22:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:45	03/16/23 22:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:45	03/16/23 22:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/23 09:45	03/16/23 22:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:45	03/16/23 22:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/23 09:45	03/16/23 22:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	03/16/23 09:45	03/16/23 22:54	1
1,4-Difluorobenzene (Surr)	83		70 - 130	03/16/23 09:45	03/16/23 22:54	1

Lab Sample ID: LCS 880-48726/1-A

Matrix: Solid

Analysis Batch: 48707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09778		mg/Kg		98	70 - 130
Toluene	0.100	0.1049		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1164		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	0.200	0.2626	*+	mg/Kg		131	70 - 130
o-Xylene	0.100	0.1308	*+	mg/Kg		131	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-48726/2-A

Matrix: Solid

Analysis Batch: 48707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48726

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1038		mg/Kg		104	70 - 130	6	35

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

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

Lab Sample ID: LCSD 880-48726/2-A

Matrix: Solid

Analysis Batch: 48707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48726

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1066		mg/Kg		107	70 - 130	2	35
Ethylbenzene	0.100	0.1119		mg/Kg		112	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2490		mg/Kg		124	70 - 130	5	35
o-Xylene	0.100	0.1238		mg/Kg		124	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: 890-4249-A-46-C MS

Matrix: Solid

Analysis Batch: 48707

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48726

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1 F2	0.0996	0.06219	F1	mg/Kg		62	70 - 130		
Toluene	<0.00202	U F1 F2	0.0996	0.06361	F1	mg/Kg		64	70 - 130		
Ethylbenzene	<0.00202	U F1 F2	0.0996	0.06783	F1	mg/Kg		68	70 - 130		
m-Xylene & p-Xylene	<0.00403	U *+ F1 F2	0.199	0.1376	F1	mg/Kg		69	70 - 130		
o-Xylene	<0.00202	U *+ F1 F2	0.0996	0.06896	F1	mg/Kg		69	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-4249-A-46-D MSD

Matrix: Solid

Analysis Batch: 48707

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48726

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1 F2	0.0990	0.01740	F1 F2	mg/Kg		18	70 - 130	113	35
Toluene	<0.00202	U F1 F2	0.0990	0.02519	F1 F2	mg/Kg		25	70 - 130	87	35
Ethylbenzene	<0.00202	U F1 F2	0.0990	0.02310	F1 F2	mg/Kg		23	70 - 130	98	35
m-Xylene & p-Xylene	<0.00403	U *+ F1 F2	0.198	0.04442	F1 F2	mg/Kg		22	70 - 130	102	35
o-Xylene	<0.00202	U *+ F1 F2	0.0990	0.02433	F1 F2	mg/Kg		25	70 - 130	96	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	70		70 - 130
1,4-Difluorobenzene (Surr)	78		70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	128		70 - 130				

Lab Sample ID: LCSD 880-48660/3-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	127		70 - 130						

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48660

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	138	S1+	70 - 130								
o-Terphenyl	151	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			03/17/23 01:50	1	

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	272.8		mg/Kg		109	90 - 110			

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	273.5		mg/Kg		109	90 - 110	0	20	

Lab Sample ID: 880-25935-1 MS

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: S1

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110		

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-25935-1 MSD							Client Sample ID: S1					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 48689												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

GC VOA

Analysis Batch: 48707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-1	S1	Total/NA	Solid	8021B	48726
MB 880-48712/5-A	Method Blank	Total/NA	Solid	8021B	48712
MB 880-48726/5-A	Method Blank	Total/NA	Solid	8021B	48726
LCS 880-48726/1-A	Lab Control Sample	Total/NA	Solid	8021B	48726
LCSD 880-48726/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48726
890-4249-A-46-C MS	Matrix Spike	Total/NA	Solid	8021B	48726
890-4249-A-46-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48726

Prep Batch: 48712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-48712/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 48726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-1	S1	Total/NA	Solid	5035	
MB 880-48726/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48726/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48726/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4249-A-46-C MS	Matrix Spike	Total/NA	Solid	5035	
890-4249-A-46-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 48998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-1	S1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-1	S1	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-1	S1	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-1	S1	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-1	S1	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-25935-1 MS	S1	Soluble	Solid	DI Leach	
880-25935-1 MSD	S1	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-1	S1	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-1 MS	S1	Soluble	Solid	300.0	48645
880-25935-1 MSD	S1	Soluble	Solid	300.0	48645

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

Client Sample ID: S1
Date Collected: 03/13/23 09:40
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25935-1
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	48726	03/16/23 09:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48707	03/17/23 06:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48998	03/20/23 12:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48769	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 00:01	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 02:04	SMC	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: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy 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	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25935-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25935-1	S1	Solid	03/13/23 09:40	03/14/23 16:40	0-6"

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



Xenoco

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 Carsbad NM (575) 988-3199

Chain of Custody

Work Order No.:

25935

Page _____ of _____




Project Manager	Grant Huckabee	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	432-288-5529	Email	granth@fort.com, Addisong@fort.com

Work Order Comments	
Program UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Project Name	EL PASO FEB #3		Turn Around		ANALYSIS REQUEST										Preservative Codes				
Project Number			<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Rush	Pres. Code											None NO	DI Water H ₂ O		
Project Location	FEBY Co NM		Due Date		24 HR												Cool Cool	MeOH Me	
Sampler's Name	Addison Gueltner		TAT starts the day received by the lab. If received by 4:30pm												HCL HC	HNO ₃ HN			
PO #															H ₂ SO ₄ H ₂	NaOH Na			
SAMPLE RECEIPT			Temp Blank	Yes <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Well Ice	Yes <input checked="" type="checkbox"/> NO <input type="checkbox"/>												H ₃ PO ₄ HP	
Samples Received Intact.			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	1128												NaHSO ₄ NABIS		
Cooler Custody Seals			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor	-30												Na ₂ S ₂ O ₃ NaSO ₃		
Sample Custody Seals			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature Reading	5.4												Zn Acetate+NaOH Zn		
Total Containers				Corrected Temperature	5.1												NaOH+Ascorbic Acid SAPC		

[illegible]

880-25935 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 Ti 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 Ti U Hg 1631 / 245 1 / 7470 / 7471															
<p>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.</p>																	
Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time												
1 		3/14/23	2														
3 		10/4/20	4														
5			6														

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25935-2

SDG Number: Eddy Co. NM

Login Number: 25935

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	



Environment Testing

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 3/20/2023 3:44:01 PM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25936-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/20/2023 3:44:01 PM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25936-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy 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, 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

Job ID: 880-25936-2**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-25936-2****Receipt**

The sample was received on 3/14/2023 4:40 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 5.1°C

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 surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S2 (880-25936-1), (880-25935-A-1-A), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

Client Sample ID: S2

Lab Sample ID: 880-25936-1

Date Collected: 03/13/23 09:50

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/20/23 08:52	03/20/23 14:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/20/23 08:52	03/20/23 14:36	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/20/23 08:52	03/20/23 14:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/20/23 08:52	03/20/23 14:36	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/20/23 08:52	03/20/23 14:36	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/20/23 08:52	03/20/23 14:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	03/20/23 08:52	03/20/23 14:36	1
1,4-Difluorobenzene (Surr)	73		70 - 130	03/20/23 08:52	03/20/23 14:36	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/20/23 16:30	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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 00:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 00:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 00:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	03/15/23 11:41	03/16/23 00:22	1
o-Terphenyl	126		70 - 130	03/15/23 11:41	03/16/23 00:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.9		4.97		mg/Kg			03/17/23 02:19	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy 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)
880-25738-A-3-F MS	Matrix Spike	109	94
880-25738-A-3-G MSD	Matrix Spike Duplicate	115	82
880-25936-1	S2	77	73
LCS 880-48951/1-A	Lab Control Sample	85	91
LCSD 880-48951/2-A	Lab Control Sample Dup	83	109
MB 880-48951/5-A	Method Blank	72	86
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)
880-25936-1	S2	104	126
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48951/5-A

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/20/23 08:52	03/20/23 12:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	03/20/23 08:52	03/20/23 12:12	1
1,4-Difluorobenzene (Surr)	86		70 - 130	03/20/23 08:52	03/20/23 12:12	1

Lab Sample ID: LCS 880-48951/1-A

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1036		mg/Kg		104	70 - 130
Toluene	0.100	0.1035		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.09340		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1942		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09432		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: LCSD 880-48951/2-A

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1160		mg/Kg		116	70 - 130	11	35
Toluene	0.100	0.09918		mg/Kg		99	70 - 130	4	35
Ethylbenzene	0.100	0.08763		mg/Kg		88	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1829		mg/Kg		91	70 - 130	6	35
o-Xylene	0.100	0.08907		mg/Kg		89	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	83		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-25738-A-3-F MS

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0998	0.08500		mg/Kg		85	70 - 130
Toluene	<0.00198	U	0.0998	0.08669		mg/Kg		87	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25738-A-3-F MS

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.0998	0.08637		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1844		mg/Kg		92	70 - 130
o-Xylene	<0.00198	U	0.0998	0.08950		mg/Kg		89	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-25738-A-3-G MSD

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.100	0.09692		mg/Kg		97	70 - 130	13	35
Toluene	<0.00198	U	0.100	0.09739		mg/Kg		97	70 - 130	12	35
Ethylbenzene	<0.00198	U	0.100	0.09262		mg/Kg		92	70 - 130	7	35
m-Xylene & p-Xylene	<0.00396	U	0.201	0.2046		mg/Kg		102	70 - 130	10	35
o-Xylene	<0.00198	U	0.100	0.1048		mg/Kg		104	70 - 130	16	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	82		70 - 130

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130	03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130	03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

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

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	128		70 - 130

Lab Sample ID: LCSD 880-48660/3-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

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			03/17/23 01:50	1

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	272.8		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

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	273.5		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-25935-A-1-B MS

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110

Lab Sample ID: 880-25935-A-1-C MSD

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

GC VOA

Analysis Batch: 48949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25936-1	S2	Total/NA	Solid	8021B	48951
MB 880-48951/5-A	Method Blank	Total/NA	Solid	8021B	48951
LCS 880-48951/1-A	Lab Control Sample	Total/NA	Solid	8021B	48951
LCSD 880-48951/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48951
880-25738-A-3-F MS	Matrix Spike	Total/NA	Solid	8021B	48951
880-25738-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48951

Prep Batch: 48951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25936-1	S2	Total/NA	Solid	5035	
MB 880-48951/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48951/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48951/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25738-A-3-F MS	Matrix Spike	Total/NA	Solid	5035	
880-25738-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25936-1	S2	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25936-1	S2	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25936-1	S2	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25936-1	S2	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25936-1	S2	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

HPLC/IC (Continued)

Leach Batch: 48645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25936-1	S2	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	48645
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48645

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

Client Sample ID: S2
Date Collected: 03/13/23 09:50
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25936-1
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			4.98 g	5 mL	48951	03/20/23 08:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48949	03/20/23 14:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49042	03/20/23 16:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48770	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 00:22	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 02:19	SMC	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: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy 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	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25936-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25936-1	S2	Solid	03/13/23 09:50	03/14/23 16:40	0-6"

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



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) 986-3199

Chain of Custody

Work Order No: 25934

Page _____ of _____

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	432-288-5529	Email	granth@forl.com, Addisong@forl.com



Work Order Comments	
Program UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>	

ANALYSIS REQUEST						Preservative Codes									
Project Name		Turn Around	Pre-Code												
Project Number		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush													None NO DI Water H ₂ O
Project Location	EVDY Co. de NM	Due Date	24 hr												Cool Cool MeOH Me
Sampler's Name	Addison Guelker	TAT starts the day received by the lab if received by 4 30pm													HCL HC HNO ₃ HN H ₂ SO ₄ H ₂
P.O.#:															H ₃ PO ₄ HP NaHSO ₄ NABIS Na ₂ S ₂ O ₃ NaSO ₃ Zn Acetate+NaOH Zn NaOH+Ascorbic Acid SAPC
SAMPLE RECEIPT		Temp Blank.	Yes No	Thermometer ID	Yes No	Wet Ice	Yes No								
Samples Received Intact:	Yes Yes	No No	N/A	Correction Factor.											
Cooler Custody Seals.	Yes No	No N/A		Temperature Reading											
Sample Custody Seals.	Yes No	N/A		Corrected Temperature											
Total Containers															

[illegible]

880-25936 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	Ti	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	Ti	U					Hg	1631 / 245	1 / 7470	7 / 7471					

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		3/14/23			
		1:00			

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25936-2

SDG Number: Eddy Co. NM

Login Number: 25936

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	



Environment Testing

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 3/20/2023 3:44:34 PM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25937-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/20/2023 3:44:34 PM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25937-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, 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: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

Job ID: 880-25937-2**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-25937-2****Receipt**

The sample was received on 3/14/2023 4:40 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 5.1°C

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 surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S3 (880-25937-1), (880-25935-A-1-A), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

Client Sample ID: S3

Lab Sample ID: 880-25937-1

Date Collected: 03/13/23 10:00

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/20/23 08:52	03/20/23 13:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 13:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 13:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/20/23 08:52	03/20/23 13:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 13:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/20/23 08:52	03/20/23 13:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130	03/20/23 08:52	03/20/23 13:55	1
1,4-Difluorobenzene (Surr)	88		70 - 130	03/20/23 08:52	03/20/23 13:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/20/23 16:30	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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 00:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 00:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/15/23 11:41	03/16/23 00:44	1
o-Terphenyl	121		70 - 130	03/15/23 11:41	03/16/23 00:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.6		5.00		mg/Kg			03/17/23 02:24	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy 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)
880-25738-A-3-F MS	Matrix Spike	109	94
880-25738-A-3-G MSD	Matrix Spike Duplicate	115	82
880-25937-1	S3	64 S1-	88
LCS 880-48951/1-A	Lab Control Sample	85	91
LCSD 880-48951/2-A	Lab Control Sample Dup	83	109
MB 880-48951/5-A	Method Blank	72	86
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)
880-25937-1	S3	100	121
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48951/5-A

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/20/23 08:52	03/20/23 12:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	03/20/23 08:52	03/20/23 12:12	1
1,4-Difluorobenzene (Surr)	86		70 - 130	03/20/23 08:52	03/20/23 12:12	1

Lab Sample ID: LCS 880-48951/1-A

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1036		mg/Kg		104	70 - 130
Toluene	0.100	0.1035		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.09340		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1942		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09432		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: LCSD 880-48951/2-A

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1160		mg/Kg		116	70 - 130	11	35
Toluene	0.100	0.09918		mg/Kg		99	70 - 130	4	35
Ethylbenzene	0.100	0.08763		mg/Kg		88	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1829		mg/Kg		91	70 - 130	6	35
o-Xylene	0.100	0.08907		mg/Kg		89	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	83		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-25738-A-3-F MS

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0998	0.08500		mg/Kg		85	70 - 130
Toluene	<0.00198	U	0.0998	0.08669		mg/Kg		87	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25738-A-3-F MS

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.0998	0.08637		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1844		mg/Kg		92	70 - 130
o-Xylene	<0.00198	U	0.0998	0.08950		mg/Kg		89	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-25738-A-3-G MSD

Matrix: Solid

Analysis Batch: 48949

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.100	0.09692		mg/Kg		97	70 - 130	13	35
Toluene	<0.00198	U	0.100	0.09739		mg/Kg		97	70 - 130	12	35
Ethylbenzene	<0.00198	U	0.100	0.09262		mg/Kg		92	70 - 130	7	35
m-Xylene & p-Xylene	<0.00396	U	0.201	0.2046		mg/Kg		102	70 - 130	10	35
o-Xylene	<0.00198	U	0.100	0.1048		mg/Kg		104	70 - 130	16	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	82		70 - 130

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130	03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130	03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

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

Lab Sample ID: LCS 880-48660/2-A
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48660

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	128		70 - 130

Lab Sample ID: LCSD 880-48660/3-A
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-25961-A-21-C MS
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

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			03/17/23 01:50	1

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	272.8		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

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	273.5		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-25935-A-1-B MS

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110

Lab Sample ID: 880-25935-A-1-C MSD

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

GC VOA

Analysis Batch: 48949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25937-1	S3	Total/NA	Solid	8021B	48951
MB 880-48951/5-A	Method Blank	Total/NA	Solid	8021B	48951
LCS 880-48951/1-A	Lab Control Sample	Total/NA	Solid	8021B	48951
LCSD 880-48951/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48951
880-25738-A-3-F MS	Matrix Spike	Total/NA	Solid	8021B	48951
880-25738-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48951

Prep Batch: 48951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25937-1	S3	Total/NA	Solid	5035	
MB 880-48951/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48951/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48951/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25738-A-3-F MS	Matrix Spike	Total/NA	Solid	5035	
880-25738-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25937-1	S3	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25937-1	S3	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25937-1	S3	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25937-1	S3	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25937-1	S3	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

HPLC/IC (Continued)

Leach Batch: 48645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25937-1	S3	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	48645
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48645

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

Client Sample ID: S3
Date Collected: 03/13/23 10:00
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25937-1
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			5.00 g	5 mL	48951	03/20/23 08:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48949	03/20/23 13:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49040	03/20/23 16:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48771	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 00:44	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 02:24	SMC	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: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy 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	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25937-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25937-1	S3	Solid	03/13/23 10:00	03/14/23 16:40	0-6"

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



The following
 persons were
 present at the
 meeting:

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

Chain of Custody

Work Order No: 2510

www.xenco.com Page of

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	432-288-5529	Email	grant.h@forl.com, Addisong@forl.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name	EL PASO FGD #3	Turn Around		ANALYSIS REQUEST										Preservative Codes			
Project Number		<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Rush	Press. Code												None NO	DI Water H ₂ O
Project Location	FGD 1 Co. NM	Due Date	24 HR													Cool Cool	MeOH Me
Sampler's Name	Addison Guetker	TAT starts the day received by the lab if received by 4:30pm														HCL HC	HNO ₃ HN
PO #																H ₂ SO ₄ H ₂	NaOH Na
SAMPLE RECEIPT	Temp Blank	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>												H ₃ PO ₄ HP	
	Samples Received Intact.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID													NaHSO ₄ NABIS	
	Cooler Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor													Na ₂ S ₂ O ₃ NaSO ₃	
	Sample Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature Reading													Zn Acetate+NaOH Zn	
	Total Containers.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Corrected Temperature													NaOH+Ascorbic Acid SAPC	

[illegible]

880-25937 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 Ti Sn U V Zn
TCLP / SPLP	6010	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document is required for reimbursement of samples constitutes a valid purchase order from client company to Eurofins Xencro, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xencro will be liable only for the cost of samples and shall not assume any responsibility for the client if such losses are due to circumstances beyond the control of Eurofins Xencro. A minimum charge of \$35.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xencro, 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		3/14/23	2		
3		3/16/23	4		
5			6		

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25937-2

SDG Number: Eddy Co. NM

Login Number: 25937

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 3/21/2023 8:28:37 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25938-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/21/2023 8:28:37 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25938-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
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.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

Job ID: 880-25938-2**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-25938-2****Receipt**

The sample was received on 3/14/2023 4:40 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 5.1°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S4 (880-25938-1).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48845 and analytical batch 880-49009 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The LCSD was biased low due to a poor injection. The method requires only and LCS or LCSD be acceptable; therefore the data was qualified and reported.(LCSD 880-48845/2-A)

Method 8021B: Surrogate recovery for the following sample was outside control limits: S4 (880-25938-1). 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: The surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-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: S4 (880-25938-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S4 (880-25938-1), (880-25935-A-1-A), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

Client Sample ID: S4

Lab Sample ID: 880-25938-1

Date Collected: 03/13/23 10:10

Matrix: Solid

Date Received: 03/14/23 16:40

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 F1	0.00202		mg/Kg		03/17/23 13:21	03/20/23 16:05	1
Toluene	<0.00202	U F1	0.00202		mg/Kg		03/17/23 13:21	03/20/23 16:05	1
Ethylbenzene	<0.00202	U *- *1	0.00202		mg/Kg		03/17/23 13:21	03/20/23 16:05	1
m-Xylene & p-Xylene	<0.00403	U *- *1	0.00403		mg/Kg		03/17/23 13:21	03/20/23 16:05	1
o-Xylene	<0.00202	U *- *1	0.00202		mg/Kg		03/17/23 13:21	03/20/23 16:05	1
Xylenes, Total	<0.00403	U *- *1	0.00403		mg/Kg		03/17/23 13:21	03/20/23 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	50	S1-	70 - 130	03/17/23 13:21	03/20/23 16:05	1
1,4-Difluorobenzene (Surr)	81		70 - 130	03/17/23 13:21	03/20/23 16:05	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			03/21/23 09:02	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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 01:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 01:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 01:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	03/15/23 11:41	03/16/23 01:05	1
o-Terphenyl	141	S1+	70 - 130	03/15/23 11:41	03/16/23 01:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.51		5.02		mg/Kg			03/17/23 02:29	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy 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)
880-25938-1	S4	50 S1-	81
880-25938-1 MS	S4	119	79
880-25938-1 MSD	S4	120	80
LCS 880-48845/1-A	Lab Control Sample	102	96
LCSD 880-48845/2-A	Lab Control Sample Dup	56 S1-	103
MB 880-48845/5-A	Method Blank	94	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-25938-1	S4	120	141 S1+
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48845/5-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/23 13:21	03/20/23 15:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/17/23 13:21	03/20/23 15:43	1
1,4-Difluorobenzene (Surr)	87		70 - 130	03/17/23 13:21	03/20/23 15:43	1

Lab Sample ID: LCS 880-48845/1-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09326		mg/Kg		93	70 - 130
Toluene	0.100	0.09579		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09204		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09522		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-48845/2-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07547		mg/Kg		75	70 - 130	21	35
Toluene	0.100	0.07825		mg/Kg		78	70 - 130	20	35
Ethylbenzene	0.100	0.06345	*- *1	mg/Kg		63	70 - 130	37	35
m-Xylene & p-Xylene	0.200	0.1122	*- *1	mg/Kg		56	70 - 130	51	35
o-Xylene	0.100	0.05505	*- *1	mg/Kg		55	70 - 130	53	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-25938-1 MS

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: S4

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U F1	0.101	0.05943	F1	mg/Kg		58	70 - 130
Toluene	<0.00202	U F1	0.101	0.08445		mg/Kg		84	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25938-1 MS

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: S4

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U *- *1	0.101	0.09502		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00403	U *- *1	0.201	0.1933		mg/Kg		96	70 - 130
o-Xylene	<0.00202	U *- *1	0.101	0.09751		mg/Kg		97	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	79		70 - 130

Lab Sample ID: 880-25938-1 MSD

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: S4

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.101	0.04959	F1	mg/Kg		49	70 - 130	18	35
Toluene	<0.00202	U F1	0.101	0.06820	F1	mg/Kg		68	70 - 130	21	35
Ethylbenzene	<0.00202	U *- *1	0.101	0.07637		mg/Kg		76	70 - 130	22	35
m-Xylene & p-Xylene	<0.00403	U *- *1	0.202	0.1548		mg/Kg		77	70 - 130	22	35
o-Xylene	<0.00202	U *- *1	0.101	0.07970		mg/Kg		79	70 - 130	20	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130	03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130	03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

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

Lab Sample ID: LCS 880-48660/2-A
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48660

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	128		70 - 130

Lab Sample ID: LCSD 880-48660/3-A
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-25961-A-21-C MS
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

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			03/17/23 01:50	1

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	272.8		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

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	273.5		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-25935-A-1-B MS

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110

Lab Sample ID: 880-25935-A-1-C MSD

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

GC VOA

Prep Batch: 48845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25938-1	S4	Total/NA	Solid	5035	
MB 880-48845/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48845/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48845/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25938-1 MS	S4	Total/NA	Solid	5035	
880-25938-1 MSD	S4	Total/NA	Solid	5035	

Analysis Batch: 49009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25938-1	S4	Total/NA	Solid	8021B	48845
MB 880-48845/5-A	Method Blank	Total/NA	Solid	8021B	48845
LCS 880-48845/1-A	Lab Control Sample	Total/NA	Solid	8021B	48845
LCSD 880-48845/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48845
880-25938-1 MS	S4	Total/NA	Solid	8021B	48845
880-25938-1 MSD	S4	Total/NA	Solid	8021B	48845

Analysis Batch: 49078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25938-1	S4	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25938-1	S4	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25938-1	S4	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25938-1	S4	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25938-1	S4	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

HPLC/IC (Continued)

Leach Batch: 48645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25938-1	S4	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	48645
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48645

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

Client Sample ID: S4
Date Collected: 03/13/23 10:10
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25938-1
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			4.96 g	5 mL	48845	03/17/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49009	03/20/23 16:05	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			49078	03/21/23 09:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48772	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 01:05	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 02:29	SMC	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: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy 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	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25938-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25938-1	S4	Solid	03/13/23 10:10	03/14/23 16:40	0-6"

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



X
C

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

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.:

25938

www.xenco.com Page _____ of _____

Project Manager	Grant Huckabee	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	432-288-5529	Email	grantth@forl.com, Addisong@forl.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>



Project Name:		EL Paso Fed #3		Turn Around	
Project Number:				<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	
Project Location:		EDDY Co NM		Due Date 24 Hr	
Sampler's Name:		Addison Guelker		TAT starts the day received by the lab if received by 4:30pm	
PO #:					
SAMPLE RECEIPT		Temp Blank.		Yes No Yes No	
Samples Received Intact:		Yes No		Thermometer ID Yes No	
Cooler Custody Seals		Yes No		Correction Factor Yes No	
Sample Custody Seals		Yes No		Temperature Reading Yes No	
Total Containers.				Corrected Temperature Yes No	
Parameters					
5M					
221B					
DE					
ANALYSIS REQUEST					
Preservative Codes					
None NO DI Water H ₂ O					
Cool Cool MeOH Me					
HCL HC HNO ₃ HN					
H ₂ SO ₄ H ₂ NaOH Na					
H ₃ PO ₄ HP					
NaHSO ₄ NABIS					
Na ₂ S ₂ O ₃ NaSO ₃					
Zn Acetate+NaOH Zn					
NaOH+Ascorbic Acid SAPC					

[illegible]

880-25938 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	1 / 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
		3/14/23			

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25938-2

SDG Number: Eddy Co. NM

Login Number: 25938

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 3/21/2023 8:29:09 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25939-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/21/2023 8:29:09 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25939-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
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.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

Job ID: 880-25939-2**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-25939-2****Receipt**

The sample was received on 3/14/2023 4:40 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 5.1°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48845 and analytical batch 880-49009 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The LCSD was biased low due to a poor injection. The method requires only and LCS or LCSD be acceptable; therefore the data was qualified and reported.(LCSD 880-48845/2-A)

Method 8021B: Surrogate recovery for the following samples were outside control limits: S5 (880-25939-1) and (880-25938-A-1-G). 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: The surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S5 (880-25939-1), (880-25935-A-1-A), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

Client Sample ID: S5

Lab Sample ID: 880-25939-1

Date Collected: 03/13/23 10:20

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/17/23 13:21	03/20/23 16:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 16:26	1
Ethylbenzene	<0.00200	U *- *1	0.00200		mg/Kg		03/17/23 13:21	03/20/23 16:26	1
m-Xylene & p-Xylene	<0.00401	U *- *1	0.00401		mg/Kg		03/17/23 13:21	03/20/23 16:26	1
o-Xylene	<0.00200	U *- *1	0.00200		mg/Kg		03/17/23 13:21	03/20/23 16:26	1
Xylenes, Total	<0.00401	U *- *1	0.00401		mg/Kg		03/17/23 13:21	03/20/23 16:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	57	S1-	70 - 130	03/17/23 13:21	03/20/23 16:26	1
1,4-Difluorobenzene (Surr)	74		70 - 130	03/17/23 13:21	03/20/23 16:26	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			03/21/23 09:02	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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 01:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 01:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	03/15/23 11:41	03/16/23 01:48	1
o-Terphenyl	127		70 - 130	03/15/23 11:41	03/16/23 01:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.1		5.04		mg/Kg			03/17/23 02:33	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy 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)
880-25938-A-1-E MS	Matrix Spike	119	79
880-25938-A-1-F MSD	Matrix Spike Duplicate	120	80
880-25939-1	S5	57 S1-	74
LCS 880-48845/1-A	Lab Control Sample	102	96
LCSD 880-48845/2-A	Lab Control Sample Dup	56 S1-	103
MB 880-48845/5-A	Method Blank	94	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-25939-1	S5	106	127
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48845/5-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/23 13:21	03/20/23 15:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/17/23 13:21	03/20/23 15:43	1
1,4-Difluorobenzene (Surr)	87		70 - 130	03/17/23 13:21	03/20/23 15:43	1

Lab Sample ID: LCS 880-48845/1-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09326		mg/Kg		93	70 - 130
Toluene	0.100	0.09579		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09204		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09522		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-48845/2-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07547		mg/Kg		75	70 - 130	21	35
Toluene	0.100	0.07825		mg/Kg		78	70 - 130	20	35
Ethylbenzene	0.100	0.06345	*- *1	mg/Kg		63	70 - 130	37	35
m-Xylene & p-Xylene	0.200	0.1122	*- *1	mg/Kg		56	70 - 130	51	35
o-Xylene	0.100	0.05505	*- *1	mg/Kg		55	70 - 130	53	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-25938-A-1-E MS

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U F1	0.101	0.05943	F1	mg/Kg		58	70 - 130
Toluene	<0.00202	U F1	0.101	0.08445		mg/Kg		84	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25938-A-1-E MS

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U *- *1	0.101	0.09502		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00403	U *- *1	0.201	0.1933		mg/Kg		96	70 - 130
o-Xylene	<0.00202	U *- *1	0.101	0.09751		mg/Kg		97	70 - 130
Surrogate	%Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	119		70 - 130						
1,4-Difluorobenzene (Surr)	79		70 - 130						

Lab Sample ID: 880-25938-A-1-F MSD

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.101	0.04959	F1	mg/Kg		49	70 - 130	18	35
Toluene	<0.00202	U F1	0.101	0.06820	F1	mg/Kg		68	70 - 130	21	35
Ethylbenzene	<0.00202	U *- *1	0.101	0.07637		mg/Kg		76	70 - 130	22	35
m-Xylene & p-Xylene	<0.00403	U *- *1	0.202	0.1548		mg/Kg		77	70 - 130	22	35
o-Xylene	<0.00202	U *- *1	0.101	0.07970		mg/Kg		79	70 - 130	20	35
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	120		70 - 130								
1,4-Difluorobenzene (Surr)	80		70 - 130								

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Surrogate	%Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

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

Lab Sample ID: LCS 880-48660/2-A
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48660

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	128		70 - 130

Lab Sample ID: LCSD 880-48660/3-A
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-25961-A-21-C MS
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD
Matrix: Solid
Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

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			03/17/23 01:50	1

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	272.8		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

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	273.5		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-25935-A-1-B MS

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110

Lab Sample ID: 880-25935-A-1-C MSD

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

GC VOA

Prep Batch: 48845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25939-1	S5	Total/NA	Solid	5035	
MB 880-48845/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48845/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48845/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25938-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-25938-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25939-1	S5	Total/NA	Solid	8021B	48845
MB 880-48845/5-A	Method Blank	Total/NA	Solid	8021B	48845
LCS 880-48845/1-A	Lab Control Sample	Total/NA	Solid	8021B	48845
LCSD 880-48845/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48845
880-25938-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	48845
880-25938-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48845

Analysis Batch: 49079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25939-1	S5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25939-1	S5	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25939-1	S5	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25939-1	S5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25939-1	S5	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

HPLC/IC (Continued)

Leach Batch: 48645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25939-1	S5	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	48645
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48645

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

Client Sample ID: S5
Date Collected: 03/13/23 10:20
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25939-1
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			4.99 g	5 mL	48845	03/17/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49009	03/20/23 16:26	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			49079	03/21/23 09:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48773	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 01:48	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 02:33	SMC	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: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy 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	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25939-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25939-1	S5	Solid	03/13/23 10:20	03/14/23 16:40	0-6"

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



XEROX

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

Chain of Custody

Work Order No.:

25939

www.xenco.com Page _____ of _____

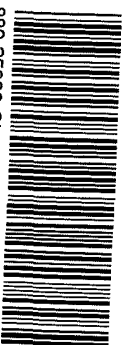
Project Manager	Grant Huckabay	Bill to (if different)	
Company Name	Fasken Oil and Ranch	Company Name	
Address	6101 Holiday Hill Road	Address	
City State ZIP	Midland TX 79707	City State ZIP	
Phone	432-288-5529	Email	granth@foil.com, Addisong@foil.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name	EL Phase FEO #3	Tum Around		ANALYSIS REQUEST								Preservative Codes					
Project Number		<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Rush	Pass.												None NO	DI Water H ₂ O
Project Location	EBOY Co N/A															Cool Cool	MeOH Me
Sampler's Name	Addison Guetker			Due Date	24 Apr											HCL HC	HNO ₃ HN
PO #				TAT starts the day received by the lab if received by 4:30pm												H ₂ SO ₄ H ₂	NaOH Na
SAMPLE RECEIPT		Temp Blank	Yes <input type="radio"/> No <input checked="" type="radio"/>	Wet Ice	Yes <input type="radio"/> No <input checked="" type="radio"/>											H ₃ PO ₄ HP	
Samples Received Intact:	Yes <input checked="" type="radio"/> No <input type="radio"/>	Thermometer ID	F198													NaHSO ₄ NABIS	
Cooler Custody Seals	Yes <input type="radio"/> No <input checked="" type="radio"/>	Correction Factor	-1.38													Na ₂ S ₂ O ₃ NASO ₃	
Sample Custody Seals	Yes <input type="radio"/> No <input checked="" type="radio"/>	Temperature Reading	5.4													Zn Acetate+NaOH Zn	
Total Containers		Corrected Temperature	5.1													NaOH+Ascorbic Acid SAPC	



[illegible]

880-25939 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 Ti Sn U V Zn
TCLP / SPLP 6010			8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 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 		3/14/23	2		
3		1040	4		
5			6		

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25939-2

SDG Number: Eddy Co. NM

Login Number: 25939

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 3/21/2023 8:29:41 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25940-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/21/2023 8:29:41 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25940-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
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.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

Job ID: 880-25940-2

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-25940-2**

Receipt

The sample was received on 3/14/2023 4:40 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 5.1°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48845 and analytical batch 880-49009 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The LCSD was biased low due to a poor injection. The method requires only and LCS or LCSD be acceptable; therefore the data was qualified and reported.(LCSD 880-48845/2-A)

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-25938-A-1-G). 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: The surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-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: S6 (880-25940-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S6 (880-25940-1), (880-25935-A-1-A), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

Client Sample ID: S6

Lab Sample ID: 880-25940-1

Date Collected: 03/13/23 10:30

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/17/23 13:21	03/20/23 16:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/17/23 13:21	03/20/23 16:46	1
Ethylbenzene	<0.00199	U *- *1	0.00199		mg/Kg		03/17/23 13:21	03/20/23 16:46	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398		mg/Kg		03/17/23 13:21	03/20/23 16:46	1
o-Xylene	<0.00199	U *- *1	0.00199		mg/Kg		03/17/23 13:21	03/20/23 16:46	1
Xylenes, Total	<0.00398	U *- *1	0.00398		mg/Kg		03/17/23 13:21	03/20/23 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	03/17/23 13:21	03/20/23 16:46	1
1,4-Difluorobenzene (Surr)	86		70 - 130	03/17/23 13:21	03/20/23 16:46	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			03/21/23 09:02	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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 02:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 02:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 02:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	03/15/23 11:41	03/16/23 02:10	1
o-Terphenyl	135	S1+	70 - 130	03/15/23 11:41	03/16/23 02:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	289		5.01		mg/Kg			03/17/23 02:48	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy 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)
880-25938-A-1-E MS	Matrix Spike	119	79
880-25938-A-1-F MSD	Matrix Spike Duplicate	120	80
880-25940-1	S6	107	86
LCS 880-48845/1-A	Lab Control Sample	102	96
LCSD 880-48845/2-A	Lab Control Sample Dup	56 S1-	103
MB 880-48845/5-A	Method Blank	94	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-25940-1	S6	117	135 S1+
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48845/5-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/23 13:21	03/20/23 15:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/17/23 13:21	03/20/23 15:43	1
1,4-Difluorobenzene (Surr)	87		70 - 130	03/17/23 13:21	03/20/23 15:43	1

Lab Sample ID: LCS 880-48845/1-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09326		mg/Kg		93	70 - 130
Toluene	0.100	0.09579		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09204		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09522		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-48845/2-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07547		mg/Kg		75	70 - 130	21	35
Toluene	0.100	0.07825		mg/Kg		78	70 - 130	20	35
Ethylbenzene	0.100	0.06345	*- *1	mg/Kg		63	70 - 130	37	35
m-Xylene & p-Xylene	0.200	0.1122	*- *1	mg/Kg		56	70 - 130	51	35
o-Xylene	0.100	0.05505	*- *1	mg/Kg		55	70 - 130	53	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-25938-A-1-E MS

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U F1	0.101	0.05943	F1	mg/Kg		58	70 - 130
Toluene	<0.00202	U F1	0.101	0.08445		mg/Kg		84	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25938-A-1-E MS

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U *- *1	0.101	0.09502		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00403	U *- *1	0.201	0.1933		mg/Kg		96	70 - 130
o-Xylene	<0.00202	U *- *1	0.101	0.09751		mg/Kg		97	70 - 130
Surrogate	%Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	119		70 - 130						
1,4-Difluorobenzene (Surr)	79		70 - 130						

Lab Sample ID: 880-25938-A-1-F MSD

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.101	0.04959	F1	mg/Kg		49	70 - 130	18	35
Toluene	<0.00202	U F1	0.101	0.06820	F1	mg/Kg		68	70 - 130	21	35
Ethylbenzene	<0.00202	U *- *1	0.101	0.07637		mg/Kg		76	70 - 130	22	35
m-Xylene & p-Xylene	<0.00403	U *- *1	0.202	0.1548		mg/Kg		77	70 - 130	22	35
o-Xylene	<0.00202	U *- *1	0.101	0.07970		mg/Kg		79	70 - 130	20	35
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	120		70 - 130								
1,4-Difluorobenzene (Surr)	80		70 - 130								

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Surrogate	%Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

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

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	128		70 - 130

Lab Sample ID: LCSD 880-48660/3-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

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			03/17/23 01:50	1

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	272.8		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

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	273.5		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-25935-A-1-B MS

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110

Lab Sample ID: 880-25935-A-1-C MSD

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

GC VOA

Prep Batch: 48845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25940-1	S6	Total/NA	Solid	5035	
MB 880-48845/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48845/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48845/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25938-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-25938-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25940-1	S6	Total/NA	Solid	8021B	48845
MB 880-48845/5-A	Method Blank	Total/NA	Solid	8021B	48845
LCS 880-48845/1-A	Lab Control Sample	Total/NA	Solid	8021B	48845
LCSD 880-48845/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48845
880-25938-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	48845
880-25938-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48845

Analysis Batch: 49080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25940-1	S6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25940-1	S6	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25940-1	S6	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25940-1	S6	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25940-1	S6	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

HPLC/IC (Continued)

Leach Batch: 48645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25940-1	S6	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	48645
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48645

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

Client Sample ID: S6
Date Collected: 03/13/23 10:30
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25940-1
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	48845	03/17/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49009	03/20/23 16:46	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			49080	03/21/23 09:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48774	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 02:10	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 02:48	SMC	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: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy 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	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25940-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25940-1	S6	Solid	03/13/23 10:30	03/14/23 16:40	0-6"

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



Exercice

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

Chain of Custody

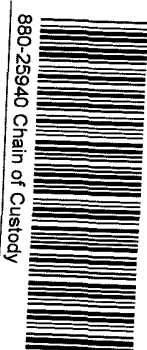
Work Order No: 25990

Page _____ of _____
www.xenco.com

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	432-288-5529	Email	grantn@ford.com, Addisong@ford.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>



Project Name		EL PASO FED #3		Turn Around			
Project Number				<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush			
Project Location		Eddy Co NM		Due Date		24 HR	
Sampler's Name		Addison Guetler		TAT starts the day received by the lab if received by 4:30pm			
PO #							
SAMPLE RECEIPT		Temp Blank		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Wet Ice	
Samples Received Intact:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Thermometer ID		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Cooler Custody Seals		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		N/A Correction Factor		N/A	
Sample Custody Seals		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		N/A		Temperature Reading	
Total Containers				Corrected Temperature		5.1	
Parameters							
5M				Press. Code			
021B							
DE							
ANALYSIS REQUEST							
Preservative Codes							
None NO				DI Water H ₂ O			
Cool Cool				MeOH Me			
HCL HC				HNO ₃ HN			
H ₂ SO ₄ H ₂				NaOH Na			
H ₃ PO ₄ HP							
NaHSO ₄ NABIS							
Na ₂ S ₂ O ₃ NASO ₃							
Zn Acetate+NaOH Zn							
NaOH+Ascorbic Acid S APC							

[illegible]

880-25940 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	Ti	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	Ti	U												

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
		3/14/23			
		1040			

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25940-2

SDG Number: Eddy Co. NM

Login Number: 25940

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 3/21/2023 8:29:41 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25941-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

Authorization



Generated
3/21/2023 8:29:41 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25941-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
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.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

Job ID: 880-25941-2**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-25941-2****Receipt**

The sample was received on 3/14/2023 4:40 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 5.1°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S7 (880-25941-1).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48845 and analytical batch 880-49009 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The LCSD was biased low due to a poor injection. The method requires only and LCS or LCSD be acceptable; therefore the data was qualified and reported.(LCSD 880-48845/2-A)

Method 8021B: Surrogate recovery for the following samples were outside control limits: S7 (880-25941-1) and (880-25938-A-1-G). 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: The surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S7 (880-25941-1), (880-25935-A-1-A), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

Client Sample ID: S7

Lab Sample ID: 880-25941-1

Date Collected: 03/13/23 10:40

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/17/23 13:21	03/20/23 17:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/17/23 13:21	03/20/23 17:07	1
Ethylbenzene	<0.00199	U *- *1	0.00199		mg/Kg		03/17/23 13:21	03/20/23 17:07	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398		mg/Kg		03/17/23 13:21	03/20/23 17:07	1
o-Xylene	<0.00199	U *- *1	0.00199		mg/Kg		03/17/23 13:21	03/20/23 17:07	1
Xylenes, Total	<0.00398	U *- *1	0.00398		mg/Kg		03/17/23 13:21	03/20/23 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62	S1-	70 - 130	03/17/23 13:21	03/20/23 17:07	1
1,4-Difluorobenzene (Surr)	75		70 - 130	03/17/23 13:21	03/20/23 17:07	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			03/21/23 09:02	1

Method: SW846 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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 02:32	1
Diesel Range Organics (Over C10-C28)	52.7		50.0		mg/Kg		03/15/23 11:41	03/16/23 02:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 02:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/15/23 11:41	03/16/23 02:32	1
o-Terphenyl	121		70 - 130	03/15/23 11:41	03/16/23 02:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.8		4.98		mg/Kg			03/17/23 02:53	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy 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)
880-25938-A-1-E MS	Matrix Spike	119	79
880-25938-A-1-F MSD	Matrix Spike Duplicate	120	80
880-25941-1	S7	62 S1-	75
LCS 880-48845/1-A	Lab Control Sample	102	96
LCSD 880-48845/2-A	Lab Control Sample Dup	56 S1-	103
MB 880-48845/5-A	Method Blank	94	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-25941-1	S7	100	121
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48845/5-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/23 13:21	03/20/23 15:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/23 13:21	03/20/23 15:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/17/23 13:21	03/20/23 15:43	1
1,4-Difluorobenzene (Surr)	87		70 - 130	03/17/23 13:21	03/20/23 15:43	1

Lab Sample ID: LCS 880-48845/1-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09326		mg/Kg		93	70 - 130
Toluene	0.100	0.09579		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09204		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09522		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-48845/2-A

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07547		mg/Kg		75	70 - 130	21	35
Toluene	0.100	0.07825		mg/Kg		78	70 - 130	20	35
Ethylbenzene	0.100	0.06345	*- *1	mg/Kg		63	70 - 130	37	35
m-Xylene & p-Xylene	0.200	0.1122	*- *1	mg/Kg		56	70 - 130	51	35
o-Xylene	0.100	0.05505	*- *1	mg/Kg		55	70 - 130	53	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-25938-A-1-E MS

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U F1	0.101	0.05943	F1	mg/Kg		58	70 - 130
Toluene	<0.00202	U F1	0.101	0.08445		mg/Kg		84	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25938-A-1-E MS

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U *- *1	0.101	0.09502		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00403	U *- *1	0.201	0.1933		mg/Kg		96	70 - 130
o-Xylene	<0.00202	U *- *1	0.101	0.09751		mg/Kg		97	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	119		70 - 130						
1,4-Difluorobenzene (Surr)	79		70 - 130						

Lab Sample ID: 880-25938-A-1-F MSD

Matrix: Solid

Analysis Batch: 49009

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48845

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.101	0.04959	F1	mg/Kg		49	70 - 130	18	35
Toluene	<0.00202	U F1	0.101	0.06820	F1	mg/Kg		68	70 - 130	21	35
Ethylbenzene	<0.00202	U *- *1	0.101	0.07637		mg/Kg		76	70 - 130	22	35
m-Xylene & p-Xylene	<0.00403	U *- *1	0.202	0.1548		mg/Kg		77	70 - 130	22	35
o-Xylene	<0.00202	U *- *1	0.101	0.07970		mg/Kg		79	70 - 130	20	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	120		70 - 130								
1,4-Difluorobenzene (Surr)	80		70 - 130								

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

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

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	128		70 - 130

Lab Sample ID: LCSD 880-48660/3-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

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			03/17/23 01:50	1

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	272.8		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

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	273.5		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-25935-A-1-B MS

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110

Lab Sample ID: 880-25935-A-1-C MSD

Matrix: Solid

Analysis Batch: 48689

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	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

GC VOA

Prep Batch: 48845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25941-1	S7	Total/NA	Solid	5035	
MB 880-48845/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48845/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48845/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25938-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-25938-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25941-1	S7	Total/NA	Solid	8021B	48845
MB 880-48845/5-A	Method Blank	Total/NA	Solid	8021B	48845
LCS 880-48845/1-A	Lab Control Sample	Total/NA	Solid	8021B	48845
LCSD 880-48845/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48845
880-25938-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	48845
880-25938-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48845

Analysis Batch: 49081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25941-1	S7	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25941-1	S7	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25941-1	S7	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25941-1	S7	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25941-1	S7	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

HPLC/IC (Continued)

Leach Batch: 48645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25941-1	S7	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	48645
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48645

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

Client Sample ID: S7
Date Collected: 03/13/23 10:40
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25941-1
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			5.03 g	5 mL	48845	03/17/23 13:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49009	03/20/23 17:07	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			49081	03/21/23 09:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48775	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 02:32	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 02:53	SMC	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: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy 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	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25941-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25941-1	S7	Solid	03/13/23 10:40	03/14/23 16:40	0-6"

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



Revised

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

Chain of Custody

Work Order No.:

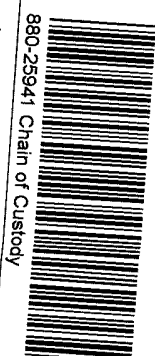
14652

www.xenco.com Page _____ of _____

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.	432-288-5529	Email	granth@foil.com, Addisong@foil.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name	EL PASO FED #3	Turn Around	
Project Number		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	
Project Location	Eddy Co NM	Due Date	24 APR
Sampler's Name	Addison Guetler	TAT starts the day received by the lab if received by 4:30pm	
PO #			
SAMPLE RECEIPT	Temp Blank	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Thermometer ID	378
Cooler Custody Seals	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor	-0.9
Sample Custody Seals	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	N/A Temperature Reading	5.4
Total Containers		Corrected Temperature	6.1
Parameters			
Pass. Code			
ANALYSIS REQUEST			
Preservative Codes			
None NO			DI Water H ₂ O
Cool Cool			MEOH Me
HCL HC			HNO ₃ HN
H ₂ SO ₄ H ₂			NaOH Na
H ₃ PO ₄ HP			
NaHSO ₄ NABIS			
Na ₂ S ₂ O ₃ NaSO ₃			
Zn Acetate+NaOH Zn			
NaOH+Ascorbic Acid SAPC			

[illegible]

880-25941 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 SiO₂ Na Sr Ti 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 Ti U Hg 1631 / 245 1 / 7470 / 7471

Notice: Signature of this document is relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xencro, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xencro 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 Xencro. A minimum charge of \$35.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xencro, 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
		3/14/23			
		1040			

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25941-2

SDG Number: Eddy Co. NM

Login Number: 25941

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 4/3/2023 4:22:50 PM

JOB DESCRIPTION

El Paso Federal #3
SDG NUMBER Eddy, NM

JOB NUMBER

880-26413-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
4/3/2023 4:22:50 PM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Laboratory Job ID: 880-26413-1
SDG: Eddy, NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

Job ID: 880-26413-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-26413-1**

Receipt

The sample was received on 3/27/2023 4:37 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 2.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S8 (880-26413-1).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: S8 (880-26413-1). 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: (LCS 880-49807/2-A) and (LCSD 880-49807/3-A). 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.

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: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

Client Sample ID: S8

Lab Sample ID: 880-26413-1

Date Collected: 03/27/23 10:00

Matrix: Solid

Date Received: 03/27/23 16:37

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		03/29/23 10:15	03/30/23 11:09	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/29/23 10:15	03/30/23 11:09	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/29/23 10:15	03/30/23 11:09	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/29/23 10:15	03/30/23 11:09	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/29/23 10:15	03/30/23 11:09	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/29/23 10:15	03/30/23 11:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	57	S1-	70 - 130	03/29/23 10:15	03/30/23 11:09	1
1,4-Difluorobenzene (Surr)	75		70 - 130	03/29/23 10:15	03/30/23 11:09	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			03/30/23 13:37	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			03/30/23 12:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/29/23 10:16	03/30/23 02:17	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/29/23 10:16	03/30/23 02:17	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/29/23 10:16	03/30/23 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	03/29/23 10:16	03/30/23 02:17	1
o-Terphenyl	106		70 - 130	03/29/23 10:16	03/30/23 02:17	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.2		5.00		mg/Kg			04/03/23 14:22	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, 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)
880-26413-1	S8	57 S1-	75
880-26413-1 MS	S8	95	112
880-26413-1 MSD	S8	107	103
LCS 880-49806/1-A	Lab Control Sample	90	114
LCSD 880-49806/2-A	Lab Control Sample Dup	92	114
MB 880-49806/5-A	Method Blank	72	97
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)
880-26292-A-41-B MS	Matrix Spike	110	110
880-26292-A-41-C MSD	Matrix Spike Duplicate	105	108
880-26413-1	S8	95	106
LCS 880-49807/2-A	Lab Control Sample	127	138 S1+
LCSD 880-49807/3-A	Lab Control Sample Dup	126	136 S1+
MB 880-49807/1-A	Method Blank	115	129
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49806/5-A

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/29/23 10:15	03/30/23 10:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/29/23 10:15	03/30/23 10:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/29/23 10:15	03/30/23 10:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/29/23 10:15	03/30/23 10:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/29/23 10:15	03/30/23 10:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/29/23 10:15	03/30/23 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	03/29/23 10:15	03/30/23 10:47	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/29/23 10:15	03/30/23 10:47	1

Lab Sample ID: LCS 880-49806/1-A

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1279		mg/Kg		128	70 - 130
Toluene	0.100	0.1063		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.09803		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2012		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1006		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: LCSD 880-49806/2-A

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1170		mg/Kg		117	70 - 130	9	35
Toluene	0.100	0.09934		mg/Kg		99	70 - 130	7	35
Ethylbenzene	0.100	0.09051		mg/Kg		91	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1833		mg/Kg		92	70 - 130	9	35
o-Xylene	0.100	0.09201		mg/Kg		92	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: 880-26413-1 MS

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: S8

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0998	0.1080		mg/Kg		108	70 - 130
Toluene	<0.00198	U	0.0998	0.09466		mg/Kg		95	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

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

Lab Sample ID: 880-26413-1 MS

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: S8

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.0998	0.08655		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1762		mg/Kg		88	70 - 130
o-Xylene	<0.00198	U	0.0998	0.08842		mg/Kg		88	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-26413-1 MSD

Matrix: Solid

Analysis Batch: 49916

Client Sample ID: S8

Prep Type: Total/NA

Prep Batch: 49806

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.101	0.1012		mg/Kg		100	70 - 130	6	35
Toluene	<0.00198	U	0.101	0.1004		mg/Kg		100	70 - 130	6	35
Ethylbenzene	<0.00198	U	0.101	0.09804		mg/Kg		97	70 - 130	12	35
m-Xylene & p-Xylene	<0.00396	U	0.202	0.2080		mg/Kg		103	70 - 130	17	35
o-Xylene	<0.00198	U	0.101	0.1049		mg/Kg		104	70 - 130	17	35

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

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

Lab Sample ID: MB 880-49807/1-A

Matrix: Solid

Analysis Batch: 49779

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49807

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		03/29/23 10:16	03/29/23 20:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/29/23 10:16	03/29/23 20:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/29/23 10:16	03/29/23 20:09	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	03/29/23 10:16	03/29/23 20:09	1
o-Terphenyl	129		70 - 130	03/29/23 10:16	03/29/23 20:09	1

Lab Sample ID: LCS 880-49807/2-A

Matrix: Solid

Analysis Batch: 49779

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49807

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	889.0		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	872.5		mg/Kg		87	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

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

Lab Sample ID: LCS 880-49807/2-A
Matrix: Solid
Analysis Batch: 49779

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49807

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	138	S1+	70 - 130

Lab Sample ID: LCSD 880-49807/3-A
Matrix: Solid
Analysis Batch: 49779

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 49807

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	887.1		mg/Kg		89	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	886.9		mg/Kg		89	70 - 130	2	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-26292-A-41-B MS
Matrix: Solid
Analysis Batch: 49779

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 49807

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	959.7		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1116		mg/Kg		112	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 880-26292-A-41-C MSD
Matrix: Solid
Analysis Batch: 49779

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 49807

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	913.6		mg/Kg		90	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1086		mg/Kg		109	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	108		70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50107/1-A

Matrix: Solid

Analysis Batch: 50198

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			04/03/23 11:52	1

Lab Sample ID: LCS 880-50107/2-A

Matrix: Solid

Analysis Batch: 50198

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-50107/3-A

Matrix: Solid

Analysis Batch: 50198

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	250.2		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-4448-A-1-C MS

Matrix: Solid

Analysis Batch: 50198

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	568		1260	1939		mg/Kg		109	90 - 110

Lab Sample ID: 890-4448-A-1-D MSD

Matrix: Solid

Analysis Batch: 50198

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	568		1260	1935		mg/Kg		109	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

GC VOA

Prep Batch: 49806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26413-1	S8	Total/NA	Solid	5035	
MB 880-49806/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49806/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49806/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26413-1 MS	S8	Total/NA	Solid	5035	
880-26413-1 MSD	S8	Total/NA	Solid	5035	

Analysis Batch: 49916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26413-1	S8	Total/NA	Solid	8021B	49806
MB 880-49806/5-A	Method Blank	Total/NA	Solid	8021B	49806
LCS 880-49806/1-A	Lab Control Sample	Total/NA	Solid	8021B	49806
LCSD 880-49806/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49806
880-26413-1 MS	S8	Total/NA	Solid	8021B	49806
880-26413-1 MSD	S8	Total/NA	Solid	8021B	49806

Analysis Batch: 49968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26413-1	S8	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 49779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26413-1	S8	Total/NA	Solid	8015B NM	49807
MB 880-49807/1-A	Method Blank	Total/NA	Solid	8015B NM	49807
LCS 880-49807/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49807
LCSD 880-49807/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49807
880-26292-A-41-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49807
880-26292-A-41-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49807

Prep Batch: 49807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26413-1	S8	Total/NA	Solid	8015NM Prep	
MB 880-49807/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49807/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49807/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26292-A-41-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26292-A-41-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26413-1	S8	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 50107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26413-1	S8	Soluble	Solid	DI Leach	
MB 880-50107/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50107/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50107/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

HPLC/IC (Continued)

Leach Batch: 50107 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4448-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4448-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 50198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26413-1	S8	Soluble	Solid	300.0	50107
MB 880-50107/1-A	Method Blank	Soluble	Solid	300.0	50107
LCS 880-50107/2-A	Lab Control Sample	Soluble	Solid	300.0	50107
LCSD 880-50107/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50107
890-4448-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	50107
890-4448-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	50107

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

Client Sample ID: S8
Date Collected: 03/27/23 10:00
Date Received: 03/27/23 16:37

Lab Sample ID: 880-26413-1
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	49806	03/29/23 10:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49916	03/30/23 11:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49968	03/30/23 13:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			49927	03/30/23 12:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	49807	03/29/23 10:16	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49779	03/30/23 02:17	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	50107	04/03/23 06:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50198	04/03/23 14:22	SMC	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: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

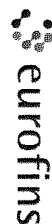
Sample Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso Federal #3

Job ID: 880-26413-1
SDG: Eddy, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-26413-1	S8	Solid	03/27/23 10:00	03/27/23 16:37	0-6"

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



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.:

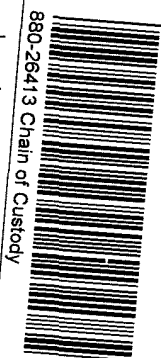
26413

www.xenco.com Page _____ of _____

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	432-288-5529	Email	grant@foil.com, Addisong@foil.com

Work Order Comments	
Program State of Project	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
Reporting Level II	<input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables EDD	<input type="checkbox"/> ADAPT <input type="checkbox"/> Other



Project Name		EL PASO FEDERAL #3		Turn Around	
Project Number				<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location		EDDY NM		Due Date	
Sample's Name		Addison Guetker		3 APR	
PO #:		TAT starts the day received by the lab if received by 4:30pm			
SAMPLE RECEIPT		Temp Blank	Yes	No	Yes
Samples Received Intact		(Yes) No			No
Cooler Custody Seals	Yes	No	N/A	Correction Factor	-1.30
Sample Custody Seals	Yes	No	N/A	Temperature Reading	7.3
Total Containers.				Corrected Temperature	7.0
Parameters					
Press. Code					
5M					
021B					
DE					
ANALYSIS REQUEST					
Preservative Codes					
None	NO	DI Water	H ₂ O		
Cool	Cool	MeOH	Me		
HCL	HC	HNO ₃	HN		
H ₂ SO ₄	H ₂	NaOH	Na		
H ₃ PO ₄	HP				
NaHSO ₄	NABIS				
Na ₂ S ₂ O ₃	NaSO ₃				
Zn Acetate	+NaOH	Zn			
NaOH+Ascorbic Acid	SAPC				

[illegible]

880-26413 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	Ti	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	Ti	U	Hg	1631 / 2451 / 7470 / 7471											

Notice: Signature of this document and reimbursement of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of services. 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 \$35.00 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
		3/21/03			
		1037			

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-26413-1

SDG Number: Eddy, NM

Login Number: 26413

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707
Generated 3/17/2023 10:25:53 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25943-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/17/2023 10:25:53 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25943-1
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	11
Lab Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

Qualifiers

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

Job ID: 880-25943-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-25943-1****Receipt**

The sample was received on 3/14/2023 4:40 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 5.1°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S9 (880-25943-1).

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S9 (880-25943-1), (880-25935-A-1-A), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

Client Sample ID: S9

Lab Sample ID: 880-25943-1

Date Collected: 03/13/23 11:00

Matrix: Solid

Date Received: 03/14/23 16:40

Sample Depth: 0-6"

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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 03:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 03:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 03:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				03/15/23 11:41	03/16/23 03:15	1
o-Terphenyl	122		70 - 130				03/15/23 11:41	03/16/23 03:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.2		5.03		mg/Kg			03/17/23 03:02	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

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)
880-25943-1	S9	99	122
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	128		70 - 130				

Lab Sample ID: LCSD 880-48660/3-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	127		70 - 130						

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48660

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	138	S1+	70 - 130								
o-Terphenyl	151	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			03/17/23 01:50	1	

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	272.8		mg/Kg		109	90 - 110			

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	273.5		mg/Kg		109	90 - 110	0	20	

Lab Sample ID: 880-25935-A-1-B MS

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Matrix Spike

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110		

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-25935-A-1-C MSD					Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 48689												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25943-1	S9	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25943-1	S9	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25943-1	S9	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25943-1	S9	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25943-1	S9	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	48645
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48645

Eurofins Midland

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

Client Sample ID: S9
Date Collected: 03/13/23 11:00
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25943-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			48777	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 03:15	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 03:02	SMC	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: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy 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	T104704400-22-25	06-30-23

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

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: El Paso FED #3

Job ID: 880-25943-1
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25943-1	S9	Solid	03/13/23 11:00	03/14/23 16:40	0-6"

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



XEROX

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

Chain of Custody

Work Order No: 250192

www.xenco.com Page _____ of _____

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	432-288-5529	Email	grant@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	EL R150 FEB #3	Turn Around	
Project Number		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	
Project Location	FDDY Co. N/M	Due Date	24 Feb
Sampler's Name	Addison Guelker	TAT starts the day received by the lab if received by 4:30pm	
PO #			
SAMPLE RECEIPT		Temp Blank.	Yes No
Samples Received Intact:	Yes	Thermometer ID	(Yes) No
Cooler Custody Seals:	Yes No	Correction Factor	-1.00
Sample Custody Seals	Yes No	Temperature Reading	6.9
Total Containers		Corrected Temperature	5.7

ANALYSIS REQUEST								Perservative Codes	
Parameters	Pres. Code								
15M									None NO DI Water H ₂ O
221B									Cool Cool MeOH Me
DE									HCL HC HNO ₃ HN
									H ₂ SO ₄ H ₂ NaOH Na
									H ₃ PO ₄ HP
									NaHSO ₄ NABIS
									Na ₂ S ₂ O ₃ NaSO ₃
									Zn Acetate+NaOH Zn
									NaOH+Ascorbic Acid SAPC

[illegible]

88U-25943 Chain of Custody

Total	200.7 / 6010	200.8 / 6020.	
Circle Method(s) and Metal(s) to be analyzed			
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 Ti Sn U V Zn
TCLP / SPLP 6010	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Ha 1631 / 245 1 / 7470 / 7471

Notice: Signature on this document as a 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
<i>[Signature]</i>	<i>[Signature]</i>	3/14/23 1640			



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 3/19/2023 5:02:25 PM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25943-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/19/2023 5:02:25 PM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25943-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	10
Lab Chronicle	11
Certification Summary	12
Method Summary	13
Sample Summary	14
Chain of Custody	15
Receipt Checklists	16

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

Job ID: 880-25943-2

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-25943-2

Receipt

The sample was received on 3/14/2023 4:40 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 5.1°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S9 (880-25943-1).

GC VOA

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

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

Client Sample ID: S9

Lab Sample ID: 880-25943-1

Date Collected: 03/13/23 11:00

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/16/23 13:48	03/18/23 02:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/16/23 13:48	03/18/23 02:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/16/23 13:48	03/18/23 02:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/16/23 13:48	03/18/23 02:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/16/23 13:48	03/18/23 02:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/16/23 13:48	03/18/23 02:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	03/16/23 13:48	03/18/23 02:48	1
1,4-Difluorobenzene (Surr)	93		70 - 130	03/16/23 13:48	03/18/23 02:48	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			03/19/23 17:21	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy 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	DFBZ1				
		(70-130)	(70-130)				
880-25886-A-1-I MS	Matrix Spike	129	119				
880-25886-A-1-J MSD	Matrix Spike Duplicate	114	99				
880-25943-1	S9	122	93				
LCS 880-48761/1-A	Lab Control Sample	120	101				
LCSD 880-48761/2-A	Lab Control Sample Dup	116	102				
MB 880-48761/5-A	Method Blank	71	85				
Surrogate Legend							
BFB = 4-Bromofluorobenzene (Surr)							
DFBZ = 1,4-Difluorobenzene (Surr)							

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48761/5-A

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48761

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/23 13:48	03/17/23 17:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130	03/16/23 13:48	03/17/23 17:03	1
1,4-Difluorobenzene (Surr)	85		70 - 130	03/16/23 13:48	03/17/23 17:03	1

Lab Sample ID: LCS 880-48761/1-A

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09986		mg/Kg		100	70 - 130
Toluene	0.100	0.08751		mg/Kg		88	70 - 130
Ethylbenzene	0.100	0.09805		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2033		mg/Kg		102	70 - 130
o-Xylene	0.100	0.09759		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-48761/2-A

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48761

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1054		mg/Kg		105	70 - 130	5	35
Toluene	0.100	0.09177		mg/Kg		92	70 - 130	5	35
Ethylbenzene	0.100	0.1022		mg/Kg		102	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2142		mg/Kg		107	70 - 130	5	35
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-25886-A-1-I MS

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.1101		mg/Kg		110	70 - 130
Toluene	<0.00200	U	0.0998	0.09842		mg/Kg		99	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25886-A-1-I MS

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.1033		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2180		mg/Kg		109	70 - 130
o-Xylene	<0.00200	U	0.0998	0.1060		mg/Kg		106	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	119		70 - 130

Lab Sample ID: 880-25886-A-1-J MSD

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48761

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	0.08450		mg/Kg		85	70 - 130	26	35
Toluene	<0.00200	U	0.0990	0.07617		mg/Kg		77	70 - 130	25	35
Ethylbenzene	<0.00200	U	0.0990	0.07817		mg/Kg		79	70 - 130	28	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1628		mg/Kg		82	70 - 130	29	35
o-Xylene	<0.00200	U	0.0990	0.07793		mg/Kg		79	70 - 130	31	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

GC VOA

Prep Batch: 48761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25943-1	S9	Total/NA	Solid	5035	
MB 880-48761/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48761/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48761/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25886-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
880-25886-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 48846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25943-1	S9	Total/NA	Solid	8021B	48761
MB 880-48761/5-A	Method Blank	Total/NA	Solid	8021B	48761
LCS 880-48761/1-A	Lab Control Sample	Total/NA	Solid	8021B	48761
LCSD 880-48761/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48761
880-25886-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	48761
880-25886-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48761

Analysis Batch: 48934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25943-1	S9	Total/NA	Solid	Total BTEX	

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

Client Sample ID: S9
Date Collected: 03/13/23 11:00
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25943-1
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	48761	03/16/23 13:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48846	03/18/23 02:48	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			48934	03/19/23 17:21	AJ	EET MID

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

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Solid	Total BTEX

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
5035	Closed System Purge and Trap	SW846	EET MID

Protocol References:

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: El Paso FED #3

Job ID: 880-25943-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25943-1	S9	Solid	03/13/23 11:00	03/14/23 16:40	0-6"

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



XEROX

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

Chain of Custody

Work Order No: 250192

www.xenco.com Page _____ of _____

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	432-288-5529	Email	grant@forl.com, Addisong@forl.com

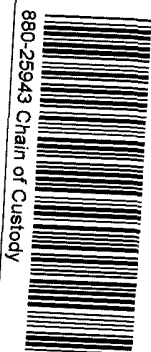
Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables EDD ☐ ADAPT ☐ Other: _____

[illegible]

88U-25943 Chain of Custody

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25943-2

SDG Number: Eddy Co. NM

Login Number: 25943

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	

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25943-1

SDG Number: Eddy Co. NM

Login Number: 25943

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707

Generated 3/19/2023 5:02:42 PM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25944-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

Authorization



Generated
3/19/2023 5:02:42 PM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25944-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	10
Lab Chronicle	11
Certification Summary	12
Method Summary	13
Sample Summary	14
Chain of Custody	15
Receipt Checklists	16

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

Job ID: 880-25944-2

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-25944-2

Receipt

The sample was received on 3/14/2023 4:40 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 5.1°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S10 (880-25944-1).

GC VOA

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

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

Client Sample ID: S10

Lab Sample ID: 880-25944-1

Date Collected: 03/13/23 11:10

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/16/23 13:48	03/18/23 03:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/18/23 03:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/18/23 03:14	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/16/23 13:48	03/18/23 03:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/18/23 03:14	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/16/23 13:48	03/18/23 03:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	03/16/23 13:48	03/18/23 03:14	1
1,4-Difluorobenzene (Surr)	92		70 - 130	03/16/23 13:48	03/18/23 03:14	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/19/23 17:21	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy 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	DFBZ1
		(70-130)	(70-130)
880-25886-A-1-I MS	Matrix Spike	129	119
880-25886-A-1-J MSD	Matrix Spike Duplicate	114	99
880-25944-1	S10	126	92
LCS 880-48761/1-A	Lab Control Sample	120	101
LCSD 880-48761/2-A	Lab Control Sample Dup	116	102
MB 880-48761/5-A	Method Blank	71	85
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48761/5-A

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48761

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:48	03/17/23 17:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/23 13:48	03/17/23 17:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130	03/16/23 13:48	03/17/23 17:03	1
1,4-Difluorobenzene (Surr)	85		70 - 130	03/16/23 13:48	03/17/23 17:03	1

Lab Sample ID: LCS 880-48761/1-A

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09986		mg/Kg		100	70 - 130
Toluene	0.100	0.08751		mg/Kg		88	70 - 130
Ethylbenzene	0.100	0.09805		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2033		mg/Kg		102	70 - 130
o-Xylene	0.100	0.09759		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-48761/2-A

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48761

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1054		mg/Kg		105	70 - 130	5	35
Toluene	0.100	0.09177		mg/Kg		92	70 - 130	5	35
Ethylbenzene	0.100	0.1022		mg/Kg		102	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2142		mg/Kg		107	70 - 130	5	35
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-25886-A-1-I MS

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.1101		mg/Kg		110	70 - 130
Toluene	<0.00200	U	0.0998	0.09842		mg/Kg		99	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25886-A-1-I MS

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0998	0.1033		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2180		mg/Kg		109	70 - 130
o-Xylene	<0.00200	U	0.0998	0.1060		mg/Kg		106	70 - 130
	MS %Recovery	MS Qualifier	MS Limits						
Surrogate									
4-Bromofluorobenzene (Surr)	129		70 - 130						
1,4-Difluorobenzene (Surr)	119		70 - 130						

Lab Sample ID: 880-25886-A-1-J MSD

Matrix: Solid

Analysis Batch: 48846

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48761

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	0.08450		mg/Kg		85	70 - 130	26	35
Toluene	<0.00200	U	0.0990	0.07617		mg/Kg		77	70 - 130	25	35
Ethylbenzene	<0.00200	U	0.0990	0.07817		mg/Kg		79	70 - 130	28	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1628		mg/Kg		82	70 - 130	29	35
o-Xylene	<0.00200	U	0.0990	0.07793		mg/Kg		79	70 - 130	31	35
	MSD %Recovery	MSD Qualifier	MSD Limits								
Surrogate											
4-Bromofluorobenzene (Surr)	114		70 - 130								
1,4-Difluorobenzene (Surr)	99		70 - 130								

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

GC VOA

Prep Batch: 48761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25944-1	S10	Total/NA	Solid	5035	
MB 880-48761/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48761/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48761/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25886-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
880-25886-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 48846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25944-1	S10	Total/NA	Solid	8021B	48761
MB 880-48761/5-A	Method Blank	Total/NA	Solid	8021B	48761
LCS 880-48761/1-A	Lab Control Sample	Total/NA	Solid	8021B	48761
LCSD 880-48761/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48761
880-25886-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	48761
880-25886-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48761

Analysis Batch: 48935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25944-1	S10	Total/NA	Solid	Total BTEX	

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

Client Sample ID: S10
Date Collected: 03/13/23 11:10
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25944-1
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			4.99 g	5 mL	48761	03/16/23 13:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48846	03/18/23 03:14	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			48935	03/19/23 17:21	AJ	EET MID

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

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

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
5035	Closed System Purge and Trap	SW846	EET MID

Protocol References:

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: El Paso FED #3

Job ID: 880-25944-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25944-1	S10	Solid	03/13/23 11:10	03/14/23 16:40	0-6"

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



Figure 1 shows a series of 12 line drawings of a larva, labeled 1 through 12, illustrating its development and movement. The larva is depicted as a segmented worm-like creature with a distinct head and tail. The drawings show the larva in various poses, including crawling and turning, demonstrating its flexibility and movement capabilities.

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

Chain of Custody

Work Order No:

25944

www.xenco.com Page _____ of _____

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	432-288-5529	Email	granth@foil.com, Addisong@foil.com

Work Order Comments	
Program	USTR/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	I <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name		EL PASO FED #3		Turn Around			
Project Number				<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush			
Project Location		Eddy Co. NM		Due Date		24 Feb	
Sampler's Name		Addison Guelker		TAT starts the day received by the lab if received by 4:30pm			
PO #:							
SAMPLE RECEIPT		Temp Blank		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Wet Ice	
Samples Received Intact		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Thermometer ID		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Cooler Custody Seals		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Correction Factor		-3.30	
Sample Custody Seals		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Temperature Reading		5.4	
Total Containers				Corrected Temperature		5.1	
Parameters				Preservative Codes			
15M				DI Water H ₂ O			
021B				MeOH Me			
DE				HNO ₃ HN			
				H ₂ SO ₄ H ₂			
				H ₃ PO ₄ HP			
				NaHSO ₄ NABIS			
				Na ₂ S ₂ O ₃ NaSO ₃			
				Zn Acetate+NaOH Zn			
				NaOH+Ascorbic Acid SAPC			

[illegible]

000-23944 Chain of Custody

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PEM	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	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed			TCPLP / SPLP	6010	8RCRA		Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U		Hg	1631 / 245	1 / 7470	1 / 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 \$35.00 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 <i>Adrian</i>	<i>[Signature]</i>	3/14/23	2		
3		3/16/23	4		
5			6		

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25944-2

SDG Number: Eddy Co. NM

Login Number: 25944

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707
Generated 3/17/2023 10:26:10 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25944-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/17/2023 10:26:10 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25944-1
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	11
Lab Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

Qualifiers

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

Job ID: 880-25944-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-25944-1****Receipt**

The sample was received on 3/14/2023 4:40 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 5.1°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: S10 (880-25944-1).

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: S10 (880-25944-1), (880-25935-A-1-A), (880-25935-A-1-B MS) and (880-25935-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

Client Sample ID: S10

Lab Sample ID: 880-25944-1

Date Collected: 03/13/23 11:10

Matrix: Solid

Date Received: 03/14/23 16:40

Sample Depth: 0-6"

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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 03:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 03:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 03:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				03/15/23 11:41	03/16/23 03:36	1
o-Terphenyl	113		70 - 130				03/15/23 11:41	03/16/23 03:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.23		5.01		mg/Kg			03/17/23 03:07	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

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)
880-25944-1	S10	97	113
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	128		70 - 130				

Lab Sample ID: LCSD 880-48660/3-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	127		70 - 130						

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48660

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	138	S1+	70 - 130								
o-Terphenyl	151	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			03/17/23 01:50	1	

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	272.8		mg/Kg		109	90 - 110			

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	273.5		mg/Kg		109	90 - 110	0	20	

Lab Sample ID: 880-25935-A-1-B MS

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Matrix Spike

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	12.7	F1	252	325.2	F1	mg/Kg		124	90 - 110		

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-25935-A-1-C MSD					Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 48689												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	12.7	F1	252	327.1	F1	mg/Kg		125	90 - 110	1	20	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25944-1	S10	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25944-1	S10	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25944-1	S10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25944-1	S10	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25944-1	S10	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25935-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	48645
880-25935-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48645

Eurofins Midland

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

Client Sample ID: S10
Date Collected: 03/13/23 11:10
Date Received: 03/14/23 16:40

Lab Sample ID: 880-25944-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			48778	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 03:36	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 03:07	SMC	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: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy 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	T104704400-22-25	06-30-23

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

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: El Paso FED #3

Job ID: 880-25944-1
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25944-1	S10	Solid	03/13/23 11:10	03/14/23 16:40	0-6"

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



Figure 1 illustrates the developmental stages of an embryo, showing a progression from a single cell to a fully formed larva. The stages are arranged in two rows of six drawings each. The top row shows the early stages: a single cell, a cell with a nucleus, a cell with a nucleus and a small vacuole, a cell with a nucleus and a large vacuole, a cell with a nucleus and a large vacuole and a small tail, and a cell with a nucleus and a large vacuole and a small tail. The bottom row shows the later stages: a cell with a nucleus and a large vacuole and a small tail, a cell with a nucleus and a large vacuole and a small tail, a cell with a nucleus and a large vacuole and a small tail, a cell with a nucleus and a large vacuole and a small tail, a cell with a nucleus and a large vacuole and a small tail, and a fully formed larva with a large head, a large body, and a long tail.

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3333
El Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Chain of Custody

Work Order No.:

25944

www.xenco.com Page _____ of _____

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	432-288-5529	Email	grant@foil.com, Addisong@foil.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

[illegible][illegible]

880-25944 Chain of Custody

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PEM	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	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed			TCPLP	SPLP	6010	8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U			Hg	1631 / 245	1 / 7470	1 / 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 \$35.00 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 <i>Adrian</i>	<i>[Signature]</i>	3/14/23	2		
3		3/16/23	4		
5			6		

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25944-1

SDG Number: Eddy Co. NM

Login Number: 25944

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	



Environment Testing

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707
Generated 3/20/2023 11:39:49 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25945-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/20/2023 11:39:49 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25945-2
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	11
Lab Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD 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: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

Job ID: 880-25945-2

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-25945-2
-----------	------------------------------

Receipt

The samples were received on 3/14/2023 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.1°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: North (880-25945-1), East (880-25945-2), South (880-25945-3) and West (880-25945-4).

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-48790 and analytical batch 880-48915 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

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

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

Client Sample ID: North

Lab Sample ID: 880-25945-1

Date Collected: 03/13/23 09:00

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/16/23 16:15	03/20/23 08:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 16:15	03/20/23 08:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 16:15	03/20/23 08:15	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399		mg/Kg		03/16/23 16:15	03/20/23 08:15	1
o-Xylene	0.00267	** *	0.00200		mg/Kg		03/16/23 16:15	03/20/23 08:15	1
Xylenes, Total	<0.00399	U **	0.00399		mg/Kg		03/16/23 16:15	03/20/23 08:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	03/16/23 16:15	03/20/23 08:15	1
1,4-Difluorobenzene (Surr)	93		70 - 130	03/16/23 16:15	03/20/23 08:15	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/20/23 12:25	1

Client Sample ID: East

Lab Sample ID: 880-25945-2

Date Collected: 03/13/23 09:10

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/16/23 16:15	03/20/23 08:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/16/23 16:15	03/20/23 08:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/16/23 16:15	03/20/23 08:35	1
m-Xylene & p-Xylene	<0.00398	U **	0.00398		mg/Kg		03/16/23 16:15	03/20/23 08:35	1
o-Xylene	<0.00199	U ** *	0.00199		mg/Kg		03/16/23 16:15	03/20/23 08:35	1
Xylenes, Total	<0.00398	U **	0.00398		mg/Kg		03/16/23 16:15	03/20/23 08:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	03/16/23 16:15	03/20/23 08:35	1
1,4-Difluorobenzene (Surr)	92		70 - 130	03/16/23 16:15	03/20/23 08:35	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			03/20/23 12:25	1

Client Sample ID: South

Lab Sample ID: 880-25945-3

Date Collected: 03/13/23 09:20

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/16/23 16:15	03/20/23 08:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/16/23 16:15	03/20/23 08:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/16/23 16:15	03/20/23 08:56	1
m-Xylene & p-Xylene	<0.00402	U **	0.00402		mg/Kg		03/16/23 16:15	03/20/23 08:56	1
o-Xylene	<0.00201	U ** *	0.00201		mg/Kg		03/16/23 16:15	03/20/23 08:56	1
Xylenes, Total	<0.00402	U **	0.00402		mg/Kg		03/16/23 16:15	03/20/23 08:56	1

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

Client Sample ID: South

Lab Sample ID: 880-25945-3

Date Collected: 03/13/23 09:20

Matrix: Solid

Date Received: 03/14/23 16:40

Sample Depth: 0-6"

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	03/16/23 16:15	03/20/23 08:56	1
1,4-Difluorobenzene (Surr)	89		70 - 130	03/16/23 16:15	03/20/23 08:56	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			03/20/23 12:25	1

Client Sample ID: West

Lab Sample ID: 880-25945-4

Date Collected: 03/13/23 09:30

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/16/23 16:15	03/20/23 09:16	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/16/23 16:15	03/20/23 09:16	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/16/23 16:15	03/20/23 09:16	1
m-Xylene & p-Xylene	<0.00403	U **	0.00403		mg/Kg		03/16/23 16:15	03/20/23 09:16	1
o-Xylene	<0.00202	U ** *1	0.00202		mg/Kg		03/16/23 16:15	03/20/23 09:16	1
Xylenes, Total	<0.00403	U **	0.00403		mg/Kg		03/16/23 16:15	03/20/23 09:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	03/16/23 16:15	03/20/23 09:16	1
1,4-Difluorobenzene (Surr)	74		70 - 130	03/16/23 16:15	03/20/23 09:16	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			03/20/23 12:25	1

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy 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	DFBZ1
		(70-130)	(70-130)
880-25945-1	North	83	93
880-25945-2	East	81	92
880-25945-3	South	89	89
880-25945-4	West	89	74
890-4267-A-61-E MS	Matrix Spike	115	85
890-4267-A-61-F MSD	Matrix Spike Duplicate	129	102
LCS 880-48790/1-A	Lab Control Sample	89	106
LCSD 880-48790/2-A	Lab Control Sample Dup	127	76
MB 880-48751/5-A	Method Blank	72	86
MB 880-48790/5-A	Method Blank	74	71

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48751/5-A

Matrix: Solid

Analysis Batch: 48915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48751

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:03	03/19/23 14:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:03	03/19/23 14:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:03	03/19/23 14:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/23 13:03	03/19/23 14:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:03	03/19/23 14:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/23 13:03	03/19/23 14:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	03/16/23 13:03	03/19/23 14:51	1
1,4-Difluorobenzene (Surr)	86		70 - 130	03/16/23 13:03	03/19/23 14:51	1

Lab Sample ID: MB 880-48790/5-A

Matrix: Solid

Analysis Batch: 48915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 16:15	03/20/23 01:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 16:15	03/20/23 01:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 16:15	03/20/23 01:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/23 16:15	03/20/23 01:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 16:15	03/20/23 01:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/23 16:15	03/20/23 01:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	03/16/23 16:15	03/20/23 01:24	1
1,4-Difluorobenzene (Surr)	71		70 - 130	03/16/23 16:15	03/20/23 01:24	1

Lab Sample ID: LCS 880-48790/1-A

Matrix: Solid

Analysis Batch: 48915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48790

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1206		mg/Kg		121	70 - 130
Toluene	0.100	0.1047		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.09644		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.2047		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1013		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-48790/2-A

Matrix: Solid

Analysis Batch: 48915

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48790

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1068		mg/Kg		107	70 - 130	12	35

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

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

Lab Sample ID: LCSD 880-48790/2-A

Matrix: Solid

Analysis Batch: 48915

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48790

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1173		mg/Kg		117	70 - 130	11	35
Ethylbenzene	0.100	0.1273		mg/Kg		127	70 - 130	28	35
m-Xylene & p-Xylene	0.200	0.2913	*+	mg/Kg		146	70 - 130	35	35
o-Xylene	0.100	0.1457	*+ *1	mg/Kg		146	70 - 130	36	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	127		70 - 130						
1,4-Difluorobenzene (Surr)	76		70 - 130						

Lab Sample ID: 890-4267-A-61-E MS

Matrix: Solid

Analysis Batch: 48915

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48790

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0998	0.1090		mg/Kg		109	70 - 130		
Toluene	<0.00200	U	0.0998	0.1062		mg/Kg		106	70 - 130		
Ethylbenzene	<0.00200	U	0.0998	0.1101		mg/Kg		110	70 - 130		
m-Xylene & p-Xylene	<0.00401	U *+	0.200	0.2438		mg/Kg		122	70 - 130		
o-Xylene	<0.00200	U *+ *1	0.0998	0.1199		mg/Kg		120	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
4-Bromofluorobenzene (Surr)	115		70 - 130								
1,4-Difluorobenzene (Surr)	85		70 - 130								

Lab Sample ID: 890-4267-A-61-F MSD

Matrix: Solid

Analysis Batch: 48915

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48790

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	0.08183		mg/Kg		83	70 - 130	28	35
Toluene	<0.00200	U	0.0990	0.08895		mg/Kg		90	70 - 130	18	35
Ethylbenzene	<0.00200	U	0.0990	0.09940		mg/Kg		100	70 - 130	10	35
m-Xylene & p-Xylene	<0.00401	U *+	0.198	0.2263		mg/Kg		114	70 - 130	7	35
o-Xylene	<0.00200	U *+ *1	0.0990	0.1140		mg/Kg		115	70 - 130	5	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	129		70 - 130								
1,4-Difluorobenzene (Surr)	102		70 - 130								

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

GC VOA

Prep Batch: 48751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-48751/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 48790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25945-1	North	Total/NA	Solid	5035	
880-25945-2	East	Total/NA	Solid	5035	
880-25945-3	South	Total/NA	Solid	5035	
880-25945-4	West	Total/NA	Solid	5035	
MB 880-48790/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48790/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48790/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4267-A-61-E MS	Matrix Spike	Total/NA	Solid	5035	
890-4267-A-61-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 48915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25945-1	North	Total/NA	Solid	8021B	48790
880-25945-2	East	Total/NA	Solid	8021B	48790
880-25945-3	South	Total/NA	Solid	8021B	48790
880-25945-4	West	Total/NA	Solid	8021B	48790
MB 880-48751/5-A	Method Blank	Total/NA	Solid	8021B	48751
MB 880-48790/5-A	Method Blank	Total/NA	Solid	8021B	48790
LCS 880-48790/1-A	Lab Control Sample	Total/NA	Solid	8021B	48790
LCSD 880-48790/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48790
890-4267-A-61-E MS	Matrix Spike	Total/NA	Solid	8021B	48790
890-4267-A-61-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48790

Analysis Batch: 49004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25945-1	North	Total/NA	Solid	Total BTEX	
880-25945-2	East	Total/NA	Solid	Total BTEX	
880-25945-3	South	Total/NA	Solid	Total BTEX	
880-25945-4	West	Total/NA	Solid	Total BTEX	

Eurofins Midland

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

Client Sample ID: North

Date Collected: 03/13/23 09:00

Date Received: 03/14/23 16:40

Lab Sample ID: 880-25945-1

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	48790	03/16/23 16:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48915	03/20/23 08:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49004	03/20/23 12:25	AJ	EET MID

Client Sample ID: East

Date Collected: 03/13/23 09:10

Date Received: 03/14/23 16:40

Lab Sample ID: 880-25945-2

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	48790	03/16/23 16:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48915	03/20/23 08:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49004	03/20/23 12:25	AJ	EET MID

Client Sample ID: South

Date Collected: 03/13/23 09:20

Date Received: 03/14/23 16:40

Lab Sample ID: 880-25945-3

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			4.97 g	5 mL	48790	03/16/23 16:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48915	03/20/23 08:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49004	03/20/23 12:25	AJ	EET MID

Client Sample ID: West

Date Collected: 03/13/23 09:30

Date Received: 03/14/23 16:40

Lab Sample ID: 880-25945-4

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			4.96 g	5 mL	48790	03/16/23 16:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48915	03/20/23 09:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49004	03/20/23 12:25	AJ	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: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy 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	T104704400-22-25	06-30-23

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

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
5035	Closed System Purge and Trap	SW846	EET MID

Protocol References:

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: El Paso FED #3

Job ID: 880-25945-2
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25945-1	North	Solid	03/13/23 09:00	03/14/23 16:40	0-6"
880-25945-2	East	Solid	03/13/23 09:10	03/14/23 16:40	0-6"
880-25945-3	South	Solid	03/13/23 09:20	03/14/23 16:40	0-6"
880-25945-4	West	Solid	03/13/23 09:30	03/14/23 16:40	0-6"

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



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

Chain of Custody

Work Order No: 25945

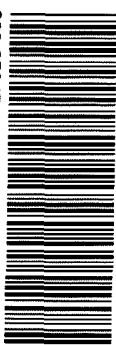
www.xenco.com Page 1 of 1

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	432-286-5529	Email	granth@forl.com, Addisong@forl.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level II	<input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

[illegible][illegible]

880-25945 Chain of Custody



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

Notice: Signature of this document is required for the reimbursement 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 <i>Atkinson</i>	<i>[Signature]</i>	3/14/23	2		
3		1640	4		
5			6		

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25945-2

SDG Number: Eddy Co. NM

Login Number: 25945

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	



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Grant Huckabay
Fasken Oil and Ranch
6101 Holiday Hill Road
Midland, Texas 79707
Generated 3/17/2023 10:26:44 AM

JOB DESCRIPTION

El Paso FED #3
SDG NUMBER Eddy Co. NM

JOB NUMBER

880-25945-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

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

Authorization

Generated
3/17/2023 10:26:44 AM

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

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Laboratory Job ID: 880-25945-1
SDG: Eddy Co. NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

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

Definitions/Glossary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

Qualifiers

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

Job ID: 880-25945-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-25945-1**

Receipt

The samples were received on 3/14/2023 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.1°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: North (880-25945-1), East (880-25945-2), South (880-25945-3) and West (880-25945-4).

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-48660 and analytical batch 880-48633 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-25961-A-21-C MS) and (880-25961-A-21-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: West (880-25945-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48660 and analytical batch 880-48633 were outside control limits. Non-homogeneity is 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 for preparation batch 880-48645 and analytical batch 880-48689 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The associated samples are: North (880-25945-1), East (880-25945-2), South (880-25945-3), West (880-25945-4), (880-25945-A-1-B MS) and (880-25945-A-1-C MSD).

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: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

Client Sample ID: North

Lab Sample ID: 880-25945-1

Date Collected: 03/13/23 09:00

Matrix: Solid

Date Received: 03/14/23 16:40

Sample Depth: 0-6"

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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 03:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 03:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/16/23 03:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				03/15/23 11:41	03/16/23 03:58	1
o-Terphenyl	120		70 - 130				03/15/23 11:41	03/16/23 03:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U F1	4.99		mg/Kg			03/17/23 03:12	1

Client Sample ID: East

Lab Sample ID: 880-25945-2

Date Collected: 03/13/23 09:10

Matrix: Solid

Date Received: 03/14/23 16:40

Sample Depth: 0-6"

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	87.1		49.9		mg/Kg			03/16/23 14:26	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		03/15/23 11:41	03/16/23 04:19	1
Diesel Range Organics (Over C10-C28)	87.1		49.9		mg/Kg		03/15/23 11:41	03/16/23 04:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 04:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				03/15/23 11:41	03/16/23 04:19	1
o-Terphenyl	127		70 - 130				03/15/23 11:41	03/16/23 04:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			03/17/23 03:27	1

Client Sample ID: South

Lab Sample ID: 880-25945-3

Date Collected: 03/13/23 09:20

Matrix: Solid

Date Received: 03/14/23 16:40

Sample Depth: 0-6"

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.4		49.9		mg/Kg			03/16/23 14:26	1

Eurofins Midland

Client Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

Client Sample ID: South

Lab Sample ID: 880-25945-3

Date Collected: 03/13/23 09:20

Matrix: Solid

Date Received: 03/14/23 16:40

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		03/15/23 11:41	03/16/23 04:41	1
Diesel Range Organics (Over C10-C28)	56.4		49.9		mg/Kg		03/15/23 11:41	03/16/23 04:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 04:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				03/15/23 11:41	03/16/23 04:41	1
o-Terphenyl	130		70 - 130				03/15/23 11:41	03/16/23 04:41	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.6		5.03		mg/Kg			03/17/23 03:31	1

Client Sample ID: West

Lab Sample ID: 880-25945-4

Date Collected: 03/13/23 09:30

Matrix: Solid

Date Received: 03/14/23 16:40

Sample Depth: 0-6"

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			03/16/23 14:26	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		03/15/23 11:41	03/16/23 05:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 05:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/23 11:41	03/16/23 05:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				03/15/23 11:41	03/16/23 05:03	1
o-Terphenyl	135	S1+	70 - 130				03/15/23 11:41	03/16/23 05:03	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.20		5.05		mg/Kg			03/17/23 03:46	1

Eurofins Midland

Surrogate Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

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)
880-25945-1	North	100	120
880-25945-2	East	104	127
880-25945-3	South	115	130
880-25945-4	West	113	135 S1+
880-25961-A-21-C MS	Matrix Spike	122	136 S1+
880-25961-A-21-D MSD	Matrix Spike Duplicate	138 S1+	151 S1+
LCS 880-48660/2-A	Lab Control Sample	104	128
LCSD 880-48660/3-A	Lab Control Sample Dup	104	127
MB 880-48660/1-A	Method Blank	157 S1+	190 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

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

Lab Sample ID: MB 880-48660/1-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 48660

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		03/15/23 11:41	03/15/23 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/23 11:41	03/15/23 19:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1
o-Terphenyl	190	S1+	70 - 130				03/15/23 11:41	03/15/23 19:59	1

Lab Sample ID: LCS 880-48660/2-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	936.4		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	128		70 - 130				

Lab Sample ID: LCSD 880-48660/3-A

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	939.1		mg/Kg		94	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	905.2		mg/Kg		91	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	127		70 - 130						

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1145		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1327		mg/Kg		130	70 - 130

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

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

Lab Sample ID: 880-25961-A-21-C MS

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 48660

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 880-25961-A-21-D MSD

Matrix: Solid

Analysis Batch: 48633

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 48660

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1219		mg/Kg		117	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1487	F1	mg/Kg		146	70 - 130	11	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	138	S1+	70 - 130								
o-Terphenyl	151	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48645/1-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			03/17/23 01:50	1	

Lab Sample ID: LCS 880-48645/2-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	272.8		mg/Kg		109	90 - 110			

Lab Sample ID: LCSD 880-48645/3-A

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	273.5		mg/Kg		109	90 - 110	0	20	

Lab Sample ID: 880-25945-1 MS

Matrix: Solid

Analysis Batch: 48689

Client Sample ID: North

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	<4.99	U F1	250	303.1	F1	mg/Kg		119	90 - 110		

Eurofins Midland

QC Sample Results

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-25945-1 MSD							Client Sample ID: North					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 48689												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	<4.99	U F1	250	303.6	F1	mg/Kg		120	90 - 110	0	20	

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

GC Semi VOA

Analysis Batch: 48633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25945-1	North	Total/NA	Solid	8015B NM	48660
880-25945-2	East	Total/NA	Solid	8015B NM	48660
880-25945-3	South	Total/NA	Solid	8015B NM	48660
880-25945-4	West	Total/NA	Solid	8015B NM	48660
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015B NM	48660
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48660
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48660
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	48660
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48660

Prep Batch: 48660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25945-1	North	Total/NA	Solid	8015NM Prep	
880-25945-2	East	Total/NA	Solid	8015NM Prep	
880-25945-3	South	Total/NA	Solid	8015NM Prep	
880-25945-4	West	Total/NA	Solid	8015NM Prep	
MB 880-48660/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48660/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48660/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25961-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25961-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25945-1	North	Total/NA	Solid	8015 NM	
880-25945-2	East	Total/NA	Solid	8015 NM	
880-25945-3	South	Total/NA	Solid	8015 NM	
880-25945-4	West	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25945-1	North	Soluble	Solid	DI Leach	
880-25945-2	East	Soluble	Solid	DI Leach	
880-25945-3	South	Soluble	Solid	DI Leach	
880-25945-4	West	Soluble	Solid	DI Leach	
MB 880-48645/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-25945-1 MS	North	Soluble	Solid	DI Leach	
880-25945-1 MSD	North	Soluble	Solid	DI Leach	

Analysis Batch: 48689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-25945-1	North	Soluble	Solid	300.0	48645
880-25945-2	East	Soluble	Solid	300.0	48645
880-25945-3	South	Soluble	Solid	300.0	48645
880-25945-4	West	Soluble	Solid	300.0	48645
MB 880-48645/1-A	Method Blank	Soluble	Solid	300.0	48645
LCS 880-48645/2-A	Lab Control Sample	Soluble	Solid	300.0	48645

Eurofins Midland

QC Association Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

HPLC/IC (Continued)

Analysis Batch: 48689 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-48645/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48645
880-25945-1 MS	North	Soluble	Solid	300.0	48645
880-25945-1 MSD	North	Soluble	Solid	300.0	48645

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

Lab Chronicle

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

Client Sample ID: North

Lab Sample ID: 880-25945-1

Date Collected: 03/13/23 09:00

Matrix: Solid

Date Received: 03/14/23 16:40

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			48779	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 03:58	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 03:12	SMC	EET MID

Client Sample ID: East

Lab Sample ID: 880-25945-2

Date Collected: 03/13/23 09:10

Matrix: Solid

Date Received: 03/14/23 16:40

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			48779	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 04:19	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 03:27	SMC	EET MID

Client Sample ID: South

Lab Sample ID: 880-25945-3

Date Collected: 03/13/23 09:20

Matrix: Solid

Date Received: 03/14/23 16:40

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			48779	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 04:41	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 03:31	SMC	EET MID

Client Sample ID: West

Lab Sample ID: 880-25945-4

Date Collected: 03/13/23 09:30

Matrix: Solid

Date Received: 03/14/23 16:40

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			48779	03/16/23 14:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48660	03/15/23 11:41	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48633	03/16/23 05:03	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	48645	03/15/23 09:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48689	03/17/23 03:46	SMC	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy 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	T104704400-22-25	06-30-23

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

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

Method Summary

Client: Fasken Oil and Ranch
Project/Site: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

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: El Paso FED #3

Job ID: 880-25945-1
SDG: Eddy Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-25945-1	North	Solid	03/13/23 09:00	03/14/23 16:40	0-6"
880-25945-2	East	Solid	03/13/23 09:10	03/14/23 16:40	0-6"
880-25945-3	South	Solid	03/13/23 09:20	03/14/23 16:40	0-6"
880-25945-4	West	Solid	03/13/23 09:30	03/14/23 16:40	0-6"

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



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

Chain of Custody

Work Order No: 25945

www.xenco.com Page 1 of 1

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	432-286-5529	Email	granth@forl.com, Addisong@forl.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level II	<input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

[illegible]

Login Sample Receipt Checklist

Client: Fasken Oil and Ranch

Job Number: 880-25945-1

SDG Number: Eddy Co. NM

Login Number: 25945

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 210245

CONDITIONS

Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707	OGRID: 151416
	Action Number: 210245
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2225953832 EL PASO FEDERAL #3 BATTERY, thank you. This closure is approved.	9/11/2023