Hagberry 9 STATE COM 502H/ 503H Soil Reclamation Report

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CDEV ID# 18210974828

NM OCD Incident # Napp2129339302

November 3, 2022

ENVIRONMENTAL OILFIELD SOLUTIONS, L.L.C.

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Main: 832.646.3107

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Hagberry 9 STATE COM 502H/ 503H Soil Reclamation Report

Contamination Levels and New Mexico Oil Conservation Commission Requirements

To comply with regulations set by the *New Mexico Oil Conservation Commission* and all state environmental regulatory agencies, a request for cleanup of contaminated soil to *Environmental Oilfield Services* was made in October 2021. Contaminated soil was to be removed from the location Hagberry 9H. Because water depth was not determined within one-half mile, soil was to be tested until chloride levels were near background levels or with the State's most stringent standard threshold of 600PPM as the benchmark for chlorides. Soil was to be tested also for TPH (Hydrocarbons), until TPH levels were in compliance with the State's most stringent standard threshold of 100PPM as the benchmark for hydrocarbons. Soil was also to be tested for BTEX until levels were in compliance with the State's most stringent standard threshold of 50PPM and Benzene not to exceed 10PPM.

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 29 RELEASES

19.15.29.1 ISSUING AGENCY: Oil Conservation Commission.
[19.15.29.1 NMAC - Rp, 19.15.29.1 NMAC, 8/14/2018]

Initial Assessment

For the delineation of the site, grab soil samples were taken from visibly contaminated areas and marked (**Figure 1**[pg.4]). These soil samples were taken to a third-party laboratory (*Eurofins Xenco Laboratories*) for analysis. *Technical Analysis ID:880-7556 (pgs.31-57)* provided the data of initial levels of contamination where the release had occurred, as well as background levels of the surrounding area. These Chloride and TPH levels were considered pre-reclamation (*preliminary*) to determine the concentrations of chlorides and TPH in the soil. These are summarized in **Table:1** below (pgs. 9-10).

Hagberry 9 STATE COM 502H/ 503H Preliminary Release Diagram

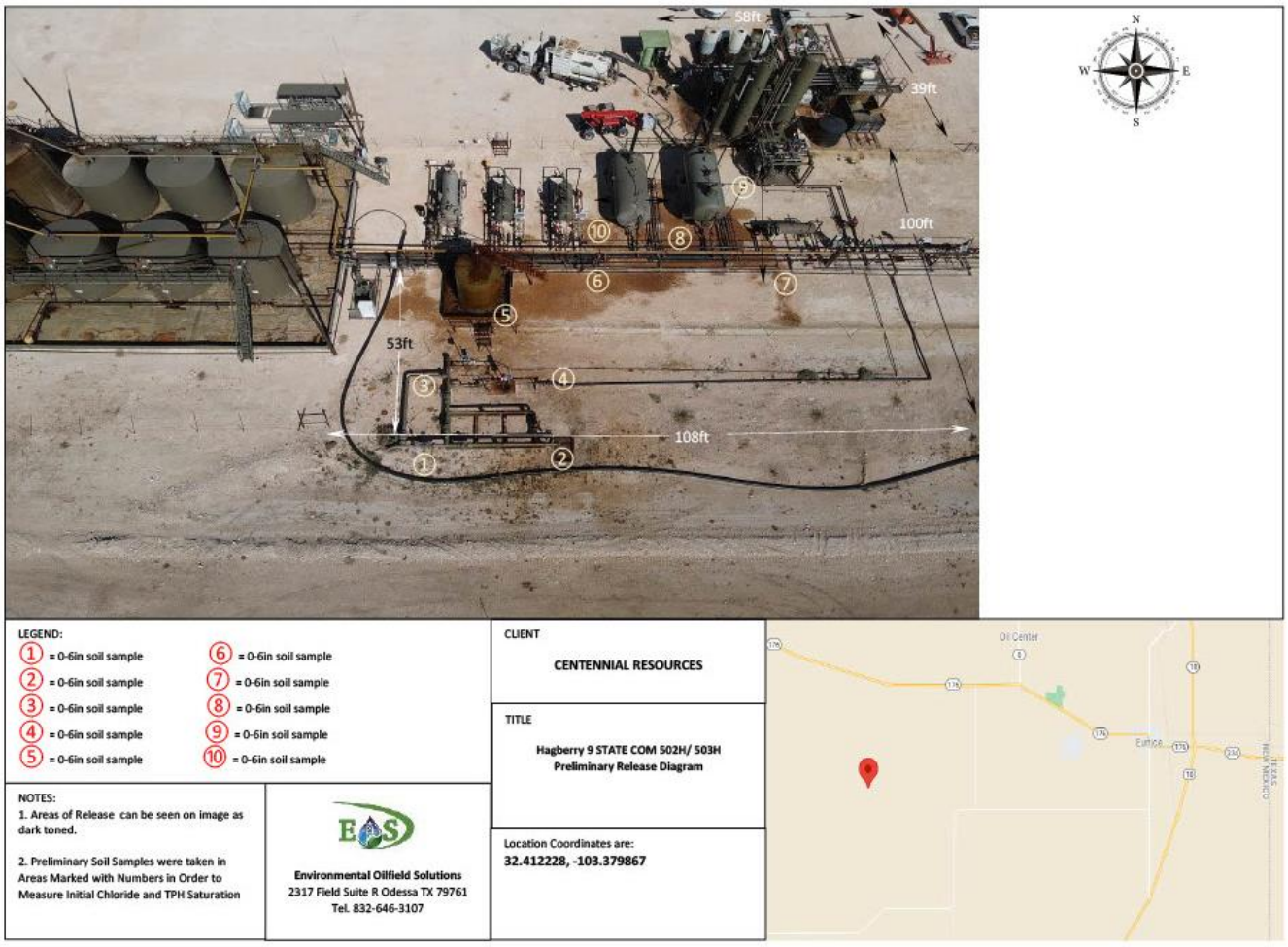
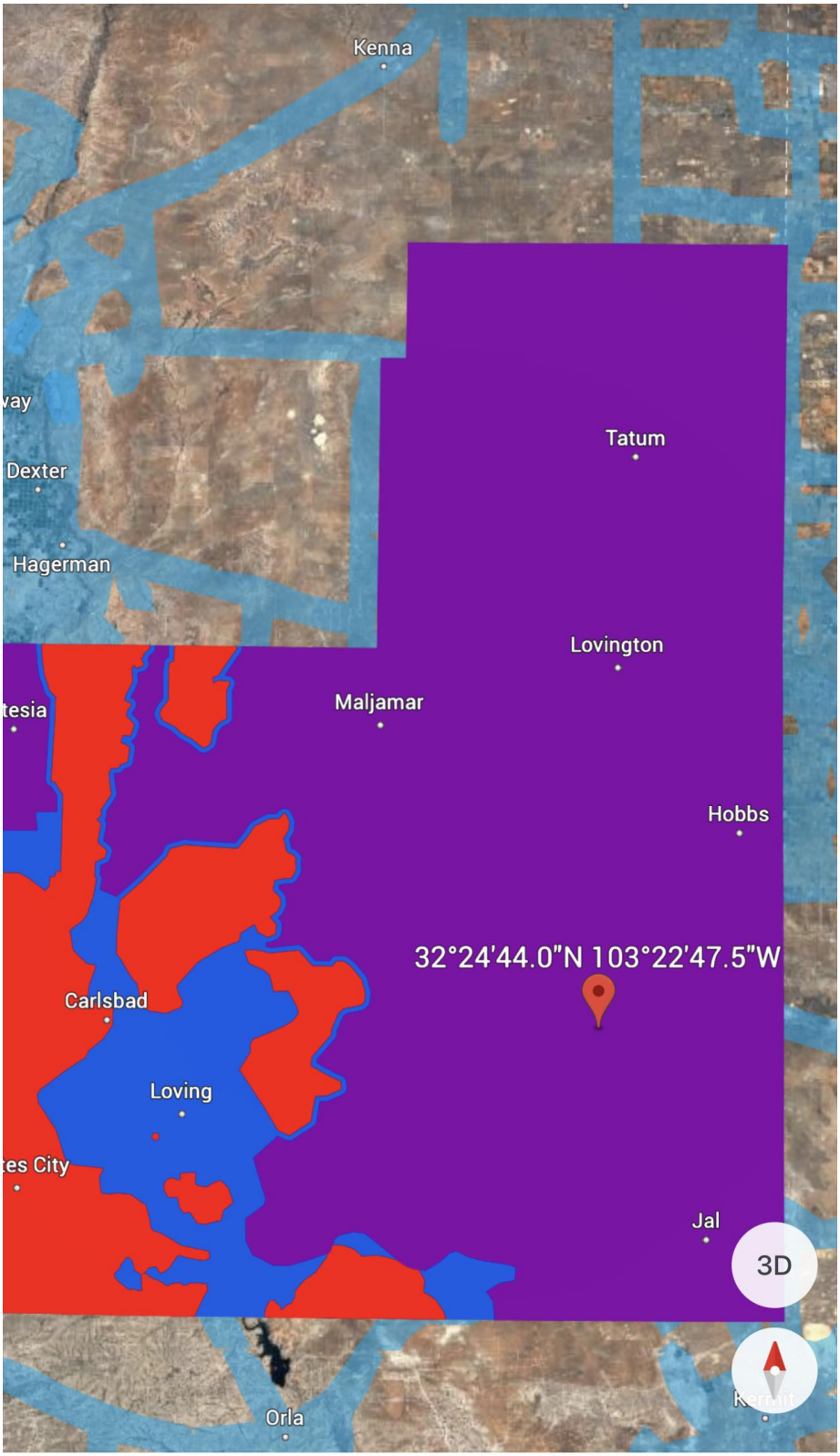


Figure 1: *Hagberry 9 STATE COM 502H/ 503H Preliminary Release Diagram*

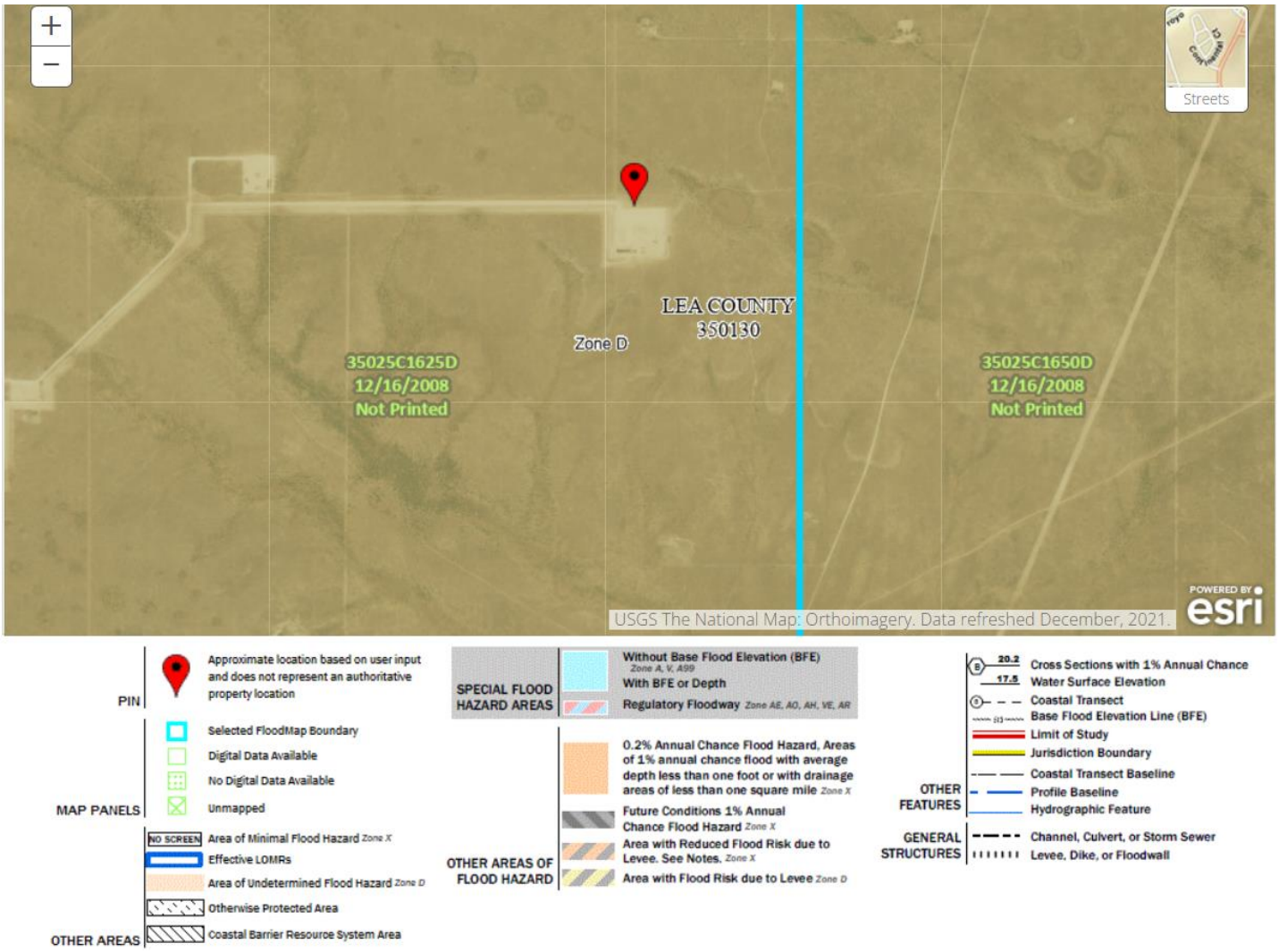
Karst Evaluation



32°24'44.0"N 103°22'47.5"W

Karst Evaluation Map shows low Karst potential at location *Hagberry 9 STATE COM 502H/ 503H*

FEMA National Flood Map



FEMA national flood map showed no flood hazard in area where *Hagberry 9 STATE COM 502H/ 503H* is located.

Excavation Proposal and Further Assessment of Affected Area

The Excavation Proposal was as follows: The location was divided initially into 10 quadrants (*Quadrants 1-10* **Figure 2** below), where contamination could be observed and just outside those areas as well. Excavation was to be performed in all quadrants at a depth of 6 inches. Following this, on-site soil analysis of each quadrant was to be made to determine where additional excavation was required to meet OCD standards. Excavation of quadrants would continue until all quadrants met contamination thresholds of Table I of 19.15.29.12 NMAC: i.e., Chlorides of 600mg/kg, TPH of 100mg/kg, BTEX of 50mg/kg, and Benzene of 10mg/kg. Grab soil samples would then be taken to a Third-Party Laboratory *(Eurofins Xenco Laboratories*) for analysis to ensure on-site soil analysis estimates were infact accurate. Quadrants where lab analysis that showed over threshold contamination levels were to be further excavated. For closure, final composite samples were then to be taken and sent to *Eurofins Xenco Laboratories* for analysis. Finally, backfill of all excavated areas was to be performed. Results from the preliminary samples taken at the Hagberry 9 STATE COM 502H/ 503H suggest that chloride contamination levels were too high in only two quadrants (over 600ppm). Results from the preliminary samples taken at the Hagberry 9 STATE COM 502H/ 503H suggest that TPH contamination levels were over threshold (over 600ppm) where visible dark surface coloration was present.

The actual sequence of events for the reclaimed area was as follows: Throughout the time period of January 24, 2022, to May 2, 2022, the soil of contaminated areas of the location was dug out and disposed of using a skid-steer and a Hydro-vac. Areas that were difficult to reach because of pipping were dug out using hand tools a Hydro-Vac and a mini excavator. On-site soil sampling and analysis was periodically taken from the bottom hole to ensure acceptable chloride levels. In areas where chloride levels were above threshold levels, further disposal of soil was performed until acceptable levels were achieved. For verification of contaminant levels, bottom hole grab samples were taken to a Third-Party Laboratory (Eurofins Xenco Laboratories) for analysis. Lab Analysis *ID: 880-12263 (pg.30-45)* show the soil analysis results of samples taken to the lab which record the progress made. These levels of chlorides, TPH, and BTEX of the different areas in the location *Hagberry 9 STATE COM 502H/ 503H* are summarized in **Table: 1** below (pgs. 9- 10).

Based on the analysis done on 3/8/2022 on the **bottom hole of the release areas** for TPH, BTEX, and Chlorides, it was concluded that quadrants 1-4, and 8-9 were reclaimed of TPH, Chlorides and BTEX. All other quadrants, however, (5-7, and 10) required further excavation to meet the OCD requirements for soil reclamation. **Further excavation of contaminated quadrants was performed to an additional depth of 2ft. Therefore, total depth excavated for quadrants 5, 6, 7, and 10 was approximately 2.5ft while all other quadrants were excavated to a total depth of approximately 6-12in. Following excavation, closure five-point composite samples were taken from the bottom hole using a soil auger. These samples were taken from a 6in bgs depth (quadrants 1-4 and 8-9), a 2.5ft bgs depth (quadrants 5, 6, 7, and 10) and a 4ft bgs depth (all quadrants). The samples were then sent to *Eurofins Xenco Laboratories* for analysis. These contamination levels are summarized in Table:2 below (pgs. 10- 11).**

Hagberry 9 STATE COM 502H/ 503H Reclamation Diagram

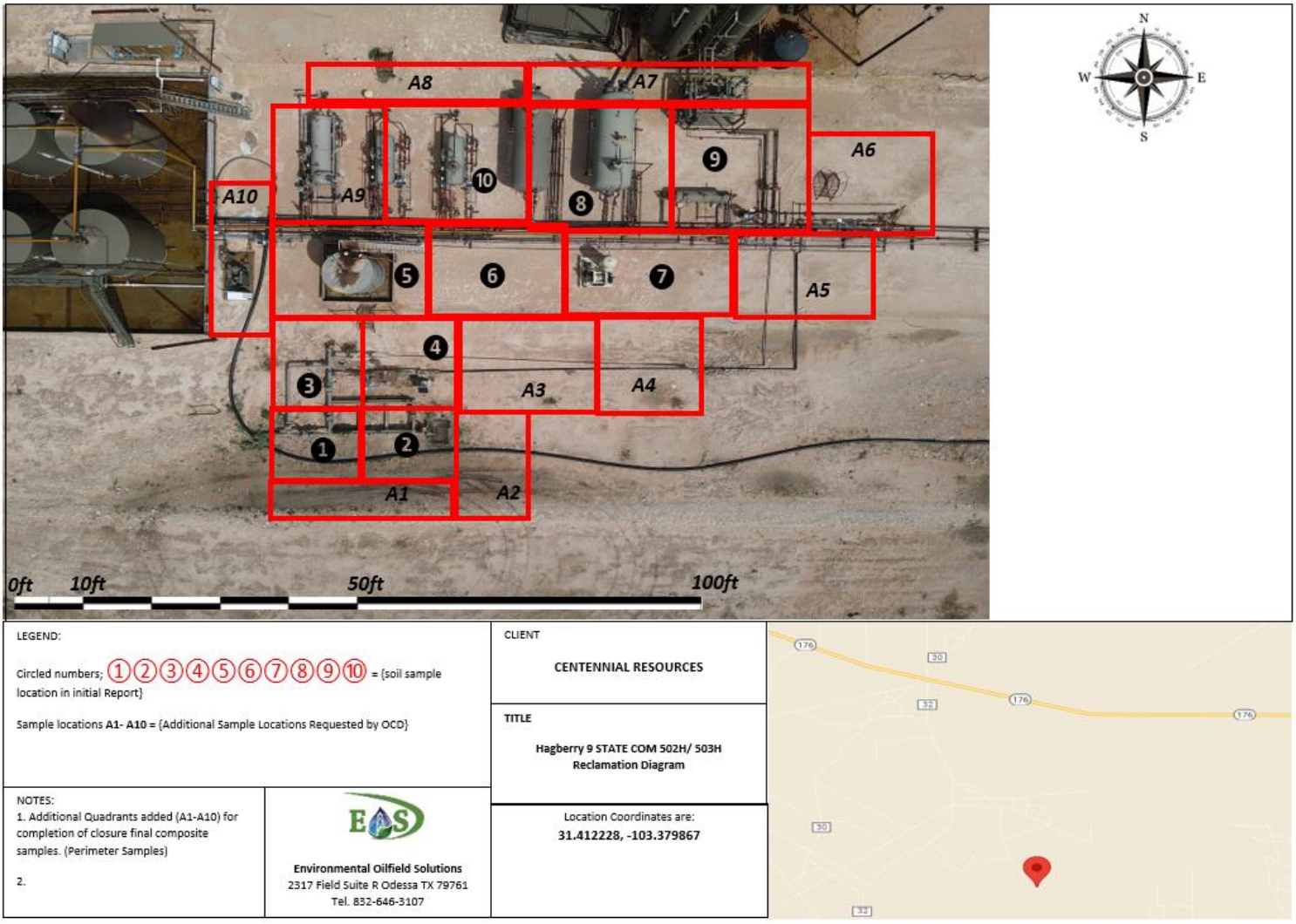


Figure 2: *Areal Image of Hagberry 9 STATE COM 502H/ 503H* Showing *Delineation Locations as quadrants, with 10 added perimeter quadrants (A1- A10).*

Summary of Chloride and TPH Levels of Areas at Hagberry 9 STATE COM 502H/ 503H Before During, and After Soil Reclamation

Table:1 Hagberry 9 Grab Samples (*Technical Analysis ID: 880-7556 and 880-12263)*						
Sample ID/ Quadrant #	Date	Sample Coordinates	Sample Depth (bgs)	TPH Level	Chloride Level	BTEX Level
1	10/21/2021	32.41176, -103.38048	6in	<50.0	167	N/A
1	3/8/2022	32.41176, -103.38048	6in	<49.8	20.6	<0.00398
1	3/8/2022	32.41176, -103.38048	1ft	<50.0	39.4	<0.00400
2	10/21/2021	32.41176, -103.38040	6in	<50.0	51	N/A
2	3/8/2022	32.41176, -103.38040	6in	<49.9	50.6	<0.00399
2	3/8/2022	32.41176, -103.38040	1ft	<49.8	48.6	<0.00398
3	10/21/2021	32.41182, -103.38049	6in	637	777	N/A
3	3/8/2022	32.41182, -103.38049	6in	<50.0	46.3	<0.00399
3	3/8/2022	32.41182, -103.38049	1ft	<50.0	27.7	<0.00398
4	10/21/2021	32.41182, -103.38040	6in	<49.9	33	N/A
4	3/8/2022	32.41182, -103.38040	6in	71.4	96.2	0.0371
4	3/8/2022	32.41182, -103.38040	1ft	<50.0	62.1	<0.00399
5	10/21/2021	32.41189, -103.38044	6in	10200	66	N/A
5	3/8/2022	32.41189, -103.38044	6in	8090	267	<0.00398
5	3/8/2022	32.41189, -103.38044	1ft	2050	139	0.0470
6	10/21/2021	32.41190, -103.38042	6in	1130	314	N/A
6	3/8/2022	32.41190, -103.38042	6in	5550	110	117

6	3/8/2022	32.41190, -103.38042	1ft	5770	111	64.6
7	10/21/2021	32.41189, -103.38024	6in	<49.9	122	N/A
7	3/8/2022	32.41189, -103.38024	6in	1620	250	8.87
7	3/8/2022	32.41189, -103.38024	1ft	666	216	0.0858
8	10/21/2021	32.41195, -103.38034	6in	235	85.3	N/A
8	3/8/2022	32.41195, -103.38034	6in	156	261	0.453
8	3/8/2022	32.41195, -103.38034	1ft	<49.9	429	0.0383
9	10/21/2021	32.41198, -103.38031	6in	14700	60.3	N/A
9	3/8/2022	32.41198, -103.38031	6in	51.7	244	<0.0401
9	3/8/2022	32.41198, -103.38031	1ft	54.9	192	0.00398
10	10/21/2021	32.41196, -103.38042	6in	<49.9	4050	N/A
10	3/8/2022	32.41196, -103.38042	6in	4950	118	71.0
10	3/8/2022	32.41196, -103.38042	1ft	3600	46.3	341

Table:2 Hagberry 9 Composite Samples (*Technical Analysis ID:880-14529)*						
Sample ID/ Quadrant #	Date	Sample Coordinates (Center of Quadrant)	Sample Depth (bgs)	TPH Level (ppm)	Chloride Level (ppm)	Total BTEX (ppm)
1	5/6/2022	32.41176, -103.38048	**6in**	51.6	198	0.0191
1	5/6/2022	32.41176, -103.38048	**4ft**	<49.9	90.7	<0.00399
2	5/6/2022	32.41176, -103.38040	**6in**	<50.0	161	0.0755
2	5/6/2022	32.41176, -103.38040	**4ft**	130	69.5	0.0245

3	5/6/2022	32.41182, -103.38049	**6in**	<49.9	66.7	0.00523
3	5/6/2022	32.41182, -103.38049	**4ft**	<49.9	60.2	0.0209
4	5/6/2022	32.41182, -103.38040	**6in**	87	66.0	0.0261
4	5/6/2022	32.41182, -103.38040	**4ft**	<50.0	74.1	0.00398
5	5/6/2022	32.41189, -103.38044	**2.5ft**	57.7	55.4	<0.00397
5	5/6/2022	32.41189, -103.38044	**4ft**	<50.0	73.9	<0.00398
6	5/6/2022	32.41190, -103.38042	**2.5ft**	<49.9	58.8	<0.00398
6	5/6/2022	32.41190, -103.38042	**4ft**	<49.9	56.2	<0.00401
7	5/6/2022	32.41189, -103.38024	**2.5ft**	<49.9	57.8	<0.00399
7	5/6/2022	32.41189, -103.38024	**4ft**	102	57.7	0.0172
8	5/6/2022	32.41195, -103.38034	**6in**	<50.0	59.6	<0.00400
8	5/6/2022	32.41195, -103.38034	**4ft**	<49.8	94.2	<0.00398
9	5/6/2022	32.41198, -103.38031	**6in**	<49.9	60.7	<0.00397
9	5/6/2022	32.41198, -103.38031	**4ft**	<50.0	54.8	<0.00401
10	5/6/2022	32.41196, -103.38042	**2.5ft**	<49.9	55.5	0.00899
10	5/6/2022	32.41196, -103.38042	**4ft**	55.1	62.1	0.0204

Due to the rejection of the "Initial Closure Report" and by request of the OCD with regards to the 200 square feet parameters (19.15.29.12.D(1)(c) NMAC), **additional composite wall samples were collected from the wall to ensure that concentrations of TPH, chlorides and BTEX in remaining soil are below threshold levels.** For the purpose of tracking additional soil samples A1-A10 ***Figure 2*** below was used. These samples were then taken to a third-party laboratory (*Eurofins Xenco Laboratories*) for TPH, Chloride, and BTEX analyses.

Further excavation required and subsequently performed on sections A-1 and A-10 for the removal of remaining contaminants. This excavation was done to a depth of approximately 18in.

After excavation, soil sample analysis was done for these two areas. **Table 3** below summarizes the results of this analysis.

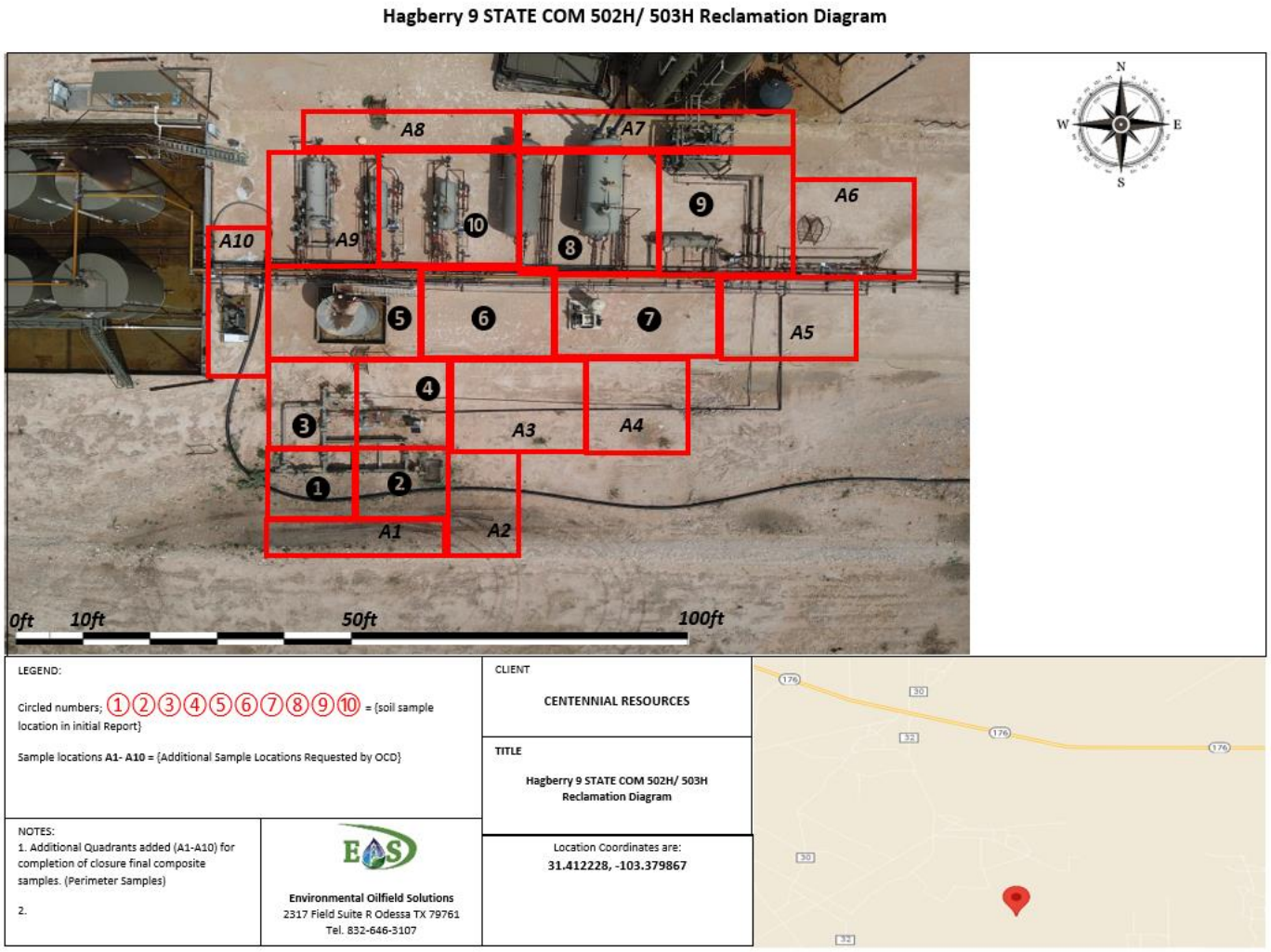


Figure 2: *Areal Image of Hagberry 9 STATE COM 502H/ 503H* Showing *Delineation Locations as quadrants, with 10 added perimeter quadrants (A1- A10).*

Table:3 Hagberry 9 Final Wall Composite Samples (*Technical Analysis ID:880-18964 and 880-20709)*						
Sample ID/ Quadrant #	Date	Sample Coordinates (Center of Quadrant)	Sample Depth (bgs)	TPH Level (ppm)	Chloride Level (ppm)	Total BTEX (ppm)
A1	9/06/2022	32.41173, -103.38049	**1ft**	133	46.0	<0.00403
A1	**10/24/2022**	32.41173, -103.38049	**1.5ft**	<50.0	43.9	<0.00398
A2	9/06/2022	32.41176, -103.38035	**1ft**	<49.9	94.1	<0.00396
A3	9/06/2022	32.41182, -103.38036	**1ft**	<50.0	106	<0.00399
A4	9/06/2022	32.41182, -103.38029	**1ft**	<49.8	40.8	<0.00402
A5	9/06/2022	32.41189, -103.38020	**1ft**	85.6	55.5	<0.00401
A6	9/06/2022	32.41198, -103.38027	**1ft**	76.2	91.1	<0.00399
A7	9/06/2022	32.41202, -103.38031	**1ft**	<50.0	106	<0.00398
A8	9/06/2022	32.41199, -103.38042	**1ft**	<49.9	104	<0.00402
A9	9/06/2022	32.41196, -103.38045	**1ft**	<49.9	120	<0.00401
A10	9/06/2022	32.41189, -103.38040	**1ft**	117	49.4	<0.00399
A10	**10/24/2022**	32.41189, -103.38040	**1.5ft**	<49.9	44.9	<0.00402

Soil Reclamation Process of Hagberry 9 STATE COM 502H/ 503H

Image of location Hagberry 9 STATE COM 502H/ 503H prior to the removal of chlorides, TPH, and contaminants in the soil is shown below (**Image 1**). After *One-Call* was completed (*ticket 22JA190540 and 22AP260753 for WBO*) along with preliminary soil analysis (Analysis ID: 880-7556), soil reclamation process began on Monday January 24, 2022. This was done by removing the top layer (approximately 6in) of visibly contaminated areas of the location and soil was disposed of. Second, areas where *on-site* chloride and TPH analysis showed contamination at 4ft depth, were dug out and soil was taken to disposal. Following this, areas were re-sampled, and lab analyzed to check for new chloride and TPH levels. Areas still containing unacceptable levels of chlorides/ TPH, or *Hot-Spots*, were further dug and soil was removed. To conclude, final soil samples were taken to ensure acceptable levels of chlorides and acceptable TPH levels. Additional composite samples were taken on the perimeter of the release area, to ensure these areas also contained below threshold contaminants. **Images 2-17** (pgs.15-30) below show a summary of the steps taken in the soil reclamation process of the location.

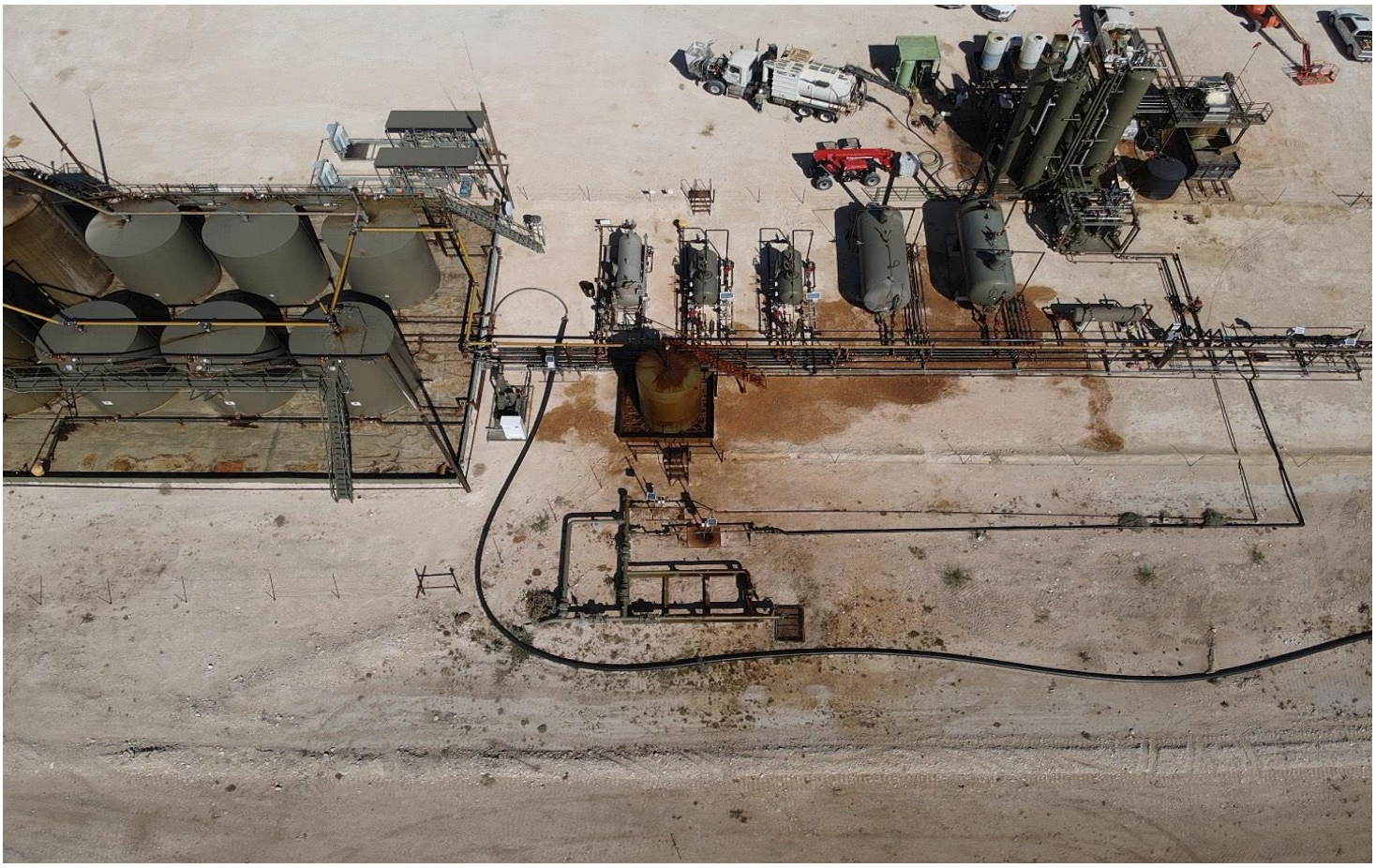


Image 1: *Areal Image of Hagberry 9 STATE COM 502H/ 503H Showing the Location Before Soil Reclamation.*

Image 2: *Removal of Top Layer of Contaminated Soil Using Hydro-Vac and Hand Tools in hard-to-reach areas such as Quadrant 6 shown here*

Image 3: *Removal of Top Layers of Contaminated Soil Using Skid Steer and Hand Tools in Quadrant 8*

Image 4: *Image of Excavation Done on Quadrant 8 Around Pipes using hydro-vac.*

Image 5: *Continuing of Removal of Contaminated Soil using Mini Excavator.*

Image 6: *Collection of Final Composite Samples*

Image 7: *Backfilling with Clean Soil Using Skid Steer in Quadrant 8*

Image 8: *Image of Quadrant 10 after the Completion of the Reclamation.*

Image 9: *Image of Quadrant 8 after the Completion of the Reclamation Process*

Image 10: *Image of Quadrant 6 after the Completion of the Reclamation Process*

Image 11: *Collection of Composite Samples in Quadrant A2. Quadrants A1 and A3-A10 were Collected in Similar Fashion*

Image 12: *Removal of Soil from Surrounding Areas of the Release in Quadrant A1*

Image 13: *Soil removed for Disposal was piled upon plastic sheeting as seen for Quadrants A1 and A10 here*

Image 14: Additional *Removal of Soil from Quadrant A1*

Image 15: Backfill of Surrounding Quadrants with clean soil.

Image 16: Condition of Surrounding Areas of the Release after Reclamation such as in Quadrant A10 here

Image 17: *Condition of the South Side Perimeter of the Release after Reclamation Quadrant A1*

Appendix A: Certificates of Analysis

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-7556-1
Client Project/Site: Hayberry 9 State Com 502 H

For:
Environmental Oilfield Solutions, LLC
2317 Field St.
Unit R
Odessa, Texas 79761

Attn: Steve Hoffman

Holly Taylor

Authorized for release by:
11/1/2021 12:07:49 PM

Holly Taylor, Project Manager
(806)794-1296
holly.taylor@eurofinset.com

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

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

Table of Contents

Definitions/Glossary

Client: Environmental Oilfield Solutions, LLC Job ID: 880-7556-1
Project/Site: Hayberry 9 State Com 502 H

Qualifiers

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: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Job ID: 880-7556-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-7556-1

Receipt
The samples were received on 10/26/2021 9:59 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 18.7°C

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: #1 6in Hayberry (880-7556-1), #2 6in Hayberry (880-7556-2), #3 6in Hayberry (880-7556-3), #4 6in Hayberry (880-7556-4), #5 6in Hayberry (880-7556-5), #6 6in Hayberry (880-7556-6), #6B 6in Hayberry (880-7556-7), #7 6in Hayberry (880-7556-8), #8 6in Hayberry (880-7556-9), #9 6in Hayberry (880-7556-10), #9B 6in Hayberry (880-7556-11), #10 6in Hayberry (880-7556-12) and #11 6in Hayberry (880-7556-13). There was no cooling media present in the cooler.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: #5 6in Hayberry (880-7556-5) and #9 6in Hayberry (880-7556-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #1 6in Hayberry

Lab Sample ID: 880-7556-1
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			11/01/21 12:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/29/21 11:22	10/30/21 14:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/29/21 11:22	10/30/21 14:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/29/21 11:22	10/30/21 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*10/29/21 11:22*	*10/30/21 14:40*	*1*
o-Terphenyl	*106*		*70 - 130*	*10/29/21 11:22*	*10/30/21 14:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	167		4.97	mg/Kg			10/28/21 02:21	1

Client Sample ID: #2 6in Hayberry

Lab Sample ID: 880-7556-2
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/01/21 12:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/29/21 11:22	10/30/21 15:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/29/21 11:22	10/30/21 15:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/29/21 11:22	10/30/21 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*10/29/21 11:22*	*10/30/21 15:01*	*1*
o-Terphenyl	*111*		*70 - 130*	*10/29/21 11:22*	*10/30/21 15:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.0		4.99	mg/Kg			10/28/21 02:43	1

Client Sample ID: #3 6in Hayberry

Lab Sample ID: 880-7556-3
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	637		49.9	mg/Kg			11/01/21 12:32	1

Eurofins Xenco, Midland

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #3 6in Hayberry

Lab Sample ID: 880-7556-3
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 15:22	1
Diesel Range Organics (Over C10-C28)	548		49.9	mg/Kg		10/29/21 11:22	10/30/21 15:22	1
Oil Range Organics (Over C28-C36)	89.3		49.9	mg/Kg		10/29/21 11:22	10/30/21 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*10/29/21 11:22*	*10/30/21 15:22*	*1*
o-Terphenyl	*98*		*70 - 130*	*10/29/21 11:22*	*10/30/21 15:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	777		4.98	mg/Kg			10/28/21 02:50	1

Client Sample ID: #4 6in Hayberry

Lab Sample ID: 880-7556-4
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/01/21 12:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 15:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 15:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*10/29/21 11:22*	*10/30/21 15:44*	*1*
o-Terphenyl	*115*		*70 - 130*	*10/29/21 11:22*	*10/30/21 15:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.0		4.95	mg/Kg			10/28/21 02:57	1

Client Sample ID: #5 6in Hayberry

Lab Sample ID: 880-7556-5
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	10200		249	mg/Kg			11/01/21 12:32	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #5 6in Hayberry

Lab Sample ID: 880-7556-5
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	3500		249	mg/Kg		10/29/21 11:22	10/30/21 16:26	5
Diesel Range Organics (Over C10-C28)	6030		249	mg/Kg		10/29/21 11:22	10/30/21 16:26	5
Oil Range Organics (Over C28-C36)	696		249	mg/Kg		10/29/21 11:22	10/30/21 16:26	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*134*	*S1+*	*70 - 130*	*10/29/21 11:22*	*10/30/21 16:26*	*5*
o-Terphenyl	*113*		*70 - 130*	*10/29/21 11:22*	*10/30/21 16:26*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.0		24.8	mg/Kg			10/28/21 03:04	5

Client Sample ID: #6 6in Hayberry

Lab Sample ID: 880-7556-6
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1130		49.9	mg/Kg			11/01/21 12:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 16:48	1
Diesel Range Organics (Over C10-C28)	987		49.9	mg/Kg		10/29/21 11:22	10/30/21 16:48	1
Oil Range Organics (Over C28-C36)	147		49.9	mg/Kg		10/29/21 11:22	10/30/21 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*10/29/21 11:22*	*10/30/21 16:48*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/29/21 11:22*	*10/30/21 16:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	314		25.2	mg/Kg			10/28/21 03:11	5

Client Sample ID: #6B 6in Hayberry

Lab Sample ID: 880-7556-7
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	853		49.9	mg/Kg			11/01/21 12:32	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #6B 6in Hayberry

Lab Sample ID: 880-7556-7
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 17:09	1
Diesel Range Organics (Over C10-C28)	741		49.9	mg/Kg		10/29/21 11:22	10/30/21 17:09	1
Oil Range Organics (Over C28-C36)	112		49.9	mg/Kg		10/29/21 11:22	10/30/21 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	10/29/21 11:22	10/30/21 17:09	1
o-Terphenyl	96		70 - 130	10/29/21 11:22	10/30/21 17:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	274		4.95	mg/Kg			10/28/21 03:18	1

Client Sample ID: #7 6in Hayberry

Lab Sample ID: 880-7556-8
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/01/21 12:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 17:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 17:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	10/29/21 11:22	10/30/21 17:30	1
o-Terphenyl	97		70 - 130	10/29/21 11:22	10/30/21 17:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		4.99	mg/Kg			10/28/21 03:40	1

Client Sample ID: #8 6in Hayberry

Lab Sample ID: 880-7556-9
Matrix: Solid

Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	235		50.0	mg/Kg			11/01/21 12:32	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #8 6in Hayberry

Lab Sample ID: 880-7556-9
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/29/21 11:22	10/30/21 17:52	1
Diesel Range Organics (Over C10-C28)	235		50.0	mg/Kg		10/29/21 11:22	10/30/21 17:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/29/21 11:22	10/30/21 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*10/29/21 11:22*	*10/30/21 17:52*	*1*
o-Terphenyl	*109*		*70 - 130*	*10/29/21 11:22*	*10/30/21 17:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.3		4.97	mg/Kg			10/28/21 03:47	1

Client Sample ID: #9 6in Hayberry

Lab Sample ID: 880-7556-10
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	14700		249	mg/Kg			11/01/21 12:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	5510		249	mg/Kg		10/29/21 11:22	10/30/21 18:13	5
Diesel Range Organics (Over C10-C28)	8250		249	mg/Kg		10/29/21 11:22	10/30/21 18:13	5
Oil Range Organics (Over C28-C36)	971		249	mg/Kg		10/29/21 11:22	10/30/21 18:13	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*10/29/21 11:22*	*10/30/21 18:13*	*5*
o-Terphenyl	*97*		*70 - 130*	*10/29/21 11:22*	*10/30/21 18:13*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.3		5.01	mg/Kg			10/28/21 04:08	1

Client Sample ID: #9B 6in Hayberry

Lab Sample ID: 880-7556-11
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	9040		250	mg/Kg			11/01/21 12:32	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #9B 6in Hayberry

Lab Sample ID: 880-7556-11
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	4790		250	mg/Kg		10/29/21 11:22	10/30/21 18:34	5
Diesel Range Organics (Over C10-C28)	3810		250	mg/Kg		10/29/21 11:22	10/30/21 18:34	5
Oil Range Organics (Over C28-C36)	435		250	mg/Kg		10/29/21 11:22	10/30/21 18:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*10/29/21 11:22*	*10/30/21 18:34*	*5*
o-Terphenyl	*104*		*70 - 130*	*10/29/21 11:22*	*10/30/21 18:34*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.8		4.98	mg/Kg			10/28/21 04:16	1

Client Sample ID: #10 6in Hayberry

Lab Sample ID: 880-7556-12
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/01/21 12:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 18:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 18:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/29/21 11:22	10/30/21 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*10/29/21 11:22*	*10/30/21 18:56*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/29/21 11:22*	*10/30/21 18:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4050		50.4	mg/Kg			10/28/21 04:23	10

Client Sample ID: #11 6in Hayberry

Lab Sample ID: 880-7556-13
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/01/21 12:32	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #11 6in Hayberry
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59
Sample Depth: 6"

Lab Sample ID: 880-7556-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/29/21 11:22	10/30/21 19:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/29/21 11:22	10/30/21 19:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/29/21 11:22	10/30/21 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*10/29/21 11:22*	*10/30/21 19:17*	*1*
o-Terphenyl	*120*		*70 - 130*	*10/29/21 11:22*	*10/30/21 19:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	219		4.98		mg/Kg			10/28/21 04:30	1

Surrogate Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

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)
880-7518-A-21-E MS	Matrix Spike	101	95
880-7518-A-21-F MSD	Matrix Spike Duplicate	103	97
880-7556-1	#1 6in Hayberry	99	106
880-7556-2	#2 6in Hayberry	104	111
880-7556-3	#3 6in Hayberry	94	98
880-7556-4	#4 6in Hayberry	110	115
880-7556-5	#5 6in Hayberry	134 S1+	113
880-7556-6	#6 6in Hayberry	109	104
880-7556-7	#6B 6in Hayberry	94	96
880-7556-8	#7 6in Hayberry	90	97
880-7556-9	#8 6in Hayberry	106	109
880-7556-10	#9 6in Hayberry	143 S1+	97
880-7556-11	#9B 6in Hayberry	120	104
880-7556-12	#10 6in Hayberry	96	104
880-7556-13	#11 6in Hayberry	113	120
LCS 880-10924/2-A	Lab Control Sample	93	93
LCSD 880-10924/3-A	Lab Control Sample Dup	87	88
MB 880-10924/1-A	Method Blank	109	121

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

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

Lab Sample ID: MB 880-10924/1-A
Matrix: Solid
Analysis Batch: 10998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10924

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/29/21 11:22	10/30/21 10:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/29/21 11:22	10/30/21 10:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/29/21 11:22	10/30/21 10:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*10/29/21 11:22*	*10/30/21 10:43*	*1*
o-Terphenyl	*121*		*70 - 130*	*10/29/21 11:22*	*10/30/21 10:43*	*1*

Lab Sample ID: LCS 880-10924/2-A
Matrix: Solid
Analysis Batch: 10998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	793.0		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1086		mg/Kg		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Lab Sample ID: LCSD 880-10924/3-A
Matrix: Solid
Analysis Batch: 10998

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	755.4		mg/Kg		76	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	1090		mg/Kg		109	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Lab Sample ID: 880-7518-A-21-E MS
Matrix: Solid
Analysis Batch: 10998

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 10924

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	997	996.7		mg/Kg		100	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1035		mg/Kg		102	70 - 130

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

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

Lab Sample ID: 880-7518-A-21-E MS
Matrix: Solid
Analysis Batch: 10998

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 10924

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: 880-7518-A-21-F MSD
Matrix: Solid
Analysis Batch: 10998

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 10924

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	1000	1011		mg/Kg		101	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1091		mg/Kg		108	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-10622/1-A
Matrix: Solid
Analysis Batch: 10788

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/28/21 01:17	1

Lab Sample ID: LCS 880-10622/2-A
Matrix: Solid
Analysis Batch: 10788

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	255.3		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-10622/3-A
Matrix: Solid
Analysis Batch: 10788

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	257.7		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 880-7556-7 MS
Matrix: Solid
Analysis Batch: 10788

Client Sample ID: #6B 6in Hayberry
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	274		248	502.4		mg/Kg		92	90 - 110

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-7556-7 MSD
Matrix: Solid
Analysis Batch: 10788

Client Sample ID: #6B 6in Hayberry
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	274		248	509.7		mg/Kg		95	90 - 110	1	20

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

GC Semi VOA

Prep Batch: 10924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7556-1	#1 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-2	#2 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-3	#3 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-4	#4 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-5	#5 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-6	#6 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-7	#6B 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-8	#7 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-9	#8 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-10	#9 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-11	#9B 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-12	#10 6in Hayberry	Total/NA	Solid	8015NM Prep	
880-7556-13	#11 6in Hayberry	Total/NA	Solid	8015NM Prep	
MB 880-10924/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10924/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10924/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7518-A-21-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7518-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7556-1	#1 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-2	#2 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-3	#3 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-4	#4 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-5	#5 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-6	#6 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-7	#6B 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-8	#7 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-9	#8 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-10	#9 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-11	#9B 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-12	#10 6in Hayberry	Total/NA	Solid	8015B NM	10924
880-7556-13	#11 6in Hayberry	Total/NA	Solid	8015B NM	10924
MB 880-10924/1-A	Method Blank	Total/NA	Solid	8015B NM	10924
LCS 880-10924/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10924
LCSD 880-10924/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10924
880-7518-A-21-E MS	Matrix Spike	Total/NA	Solid	8015B NM	10924
880-7518-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10924

Analysis Batch: 11118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7556-1	#1 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-2	#2 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-3	#3 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-4	#4 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-5	#5 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-6	#6 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-7	#6B 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-8	#7 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-9	#8 6in Hayberry	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

GC Semi VOA (Continued)

Analysis Batch: 11118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7556-10	#9 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-11	#9B 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-12	#10 6in Hayberry	Total/NA	Solid	8015 NM	
880-7556-13	#11 6in Hayberry	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 10622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7556-1	#1 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-2	#2 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-3	#3 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-4	#4 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-5	#5 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-6	#6 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-7	#6B 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-8	#7 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-9	#8 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-10	#9 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-11	#9B 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-12	#10 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-13	#11 6in Hayberry	Soluble	Solid	DI Leach	
MB 880-10622/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-10622/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-10622/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7556-7 MS	#6B 6in Hayberry	Soluble	Solid	DI Leach	
880-7556-7 MSD	#6B 6in Hayberry	Soluble	Solid	DI Leach	

Analysis Batch: 10788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7556-1	#1 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-2	#2 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-3	#3 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-4	#4 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-5	#5 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-6	#6 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-7	#6B 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-8	#7 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-9	#8 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-10	#9 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-11	#9B 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-12	#10 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-13	#11 6in Hayberry	Soluble	Solid	300.0	10622
MB 880-10622/1-A	Method Blank	Soluble	Solid	300.0	10622
LCS 880-10622/2-A	Lab Control Sample	Soluble	Solid	300.0	10622
LCSD 880-10622/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	10622
880-7556-7 MS	#6B 6in Hayberry	Soluble	Solid	300.0	10622
880-7556-7 MSD	#6B 6in Hayberry	Soluble	Solid	300.0	10622

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #1 6in Hayberry

Lab Sample ID: 880-7556-1
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 14:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 02:21	CH	XEN MID

Client Sample ID: #2 6in Hayberry

Lab Sample ID: 880-7556-2
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 15:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 02:43	CH	XEN MID

Client Sample ID: #3 6in Hayberry

Lab Sample ID: 880-7556-3
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 15:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 02:50	CH	XEN MID

Client Sample ID: #4 6in Hayberry

Lab Sample ID: 880-7556-4
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 15:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 02:57	CH	XEN MID

Client Sample ID: #5 6in Hayberry

Lab Sample ID: 880-7556-5
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #5 6in Hayberry

Lab Sample ID: 880-7556-5
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		5			10998	10/30/21 16:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		5			10788	10/28/21 03:04	CH	XEN MID

Client Sample ID: #6 6in Hayberry

Lab Sample ID: 880-7556-6
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 16:48	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		5			10788	10/28/21 03:11	CH	XEN MID

Client Sample ID: #6B 6in Hayberry

Lab Sample ID: 880-7556-7
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 17:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 03:18	CH	XEN MID

Client Sample ID: #7 6in Hayberry

Lab Sample ID: 880-7556-8
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 17:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 03:40	CH	XEN MID

Client Sample ID: #8 6in Hayberry

Lab Sample ID: 880-7556-9
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #8 6in Hayberry

Lab Sample ID: 880-7556-9
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 17:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 03:47	CH	XEN MID

Client Sample ID: #9 6in Hayberry

Lab Sample ID: 880-7556-10
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		5			10998	10/30/21 18:13	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 04:08	CH	XEN MID

Client Sample ID: #9B 6in Hayberry

Lab Sample ID: 880-7556-11
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		5			10998	10/30/21 18:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 04:16	CH	XEN MID

Client Sample ID: #10 6in Hayberry

Lab Sample ID: 880-7556-12
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 18:56	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		10			10788	10/28/21 04:23	CH	XEN MID

Client Sample ID: #11 6in Hayberry

Lab Sample ID: 880-7556-13
Matrix: Solid
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

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			11118	11/01/21 12:32	AJ	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Client Sample ID: #11 6in Hayberry
Date Collected: 10/21/21 13:00
Date Received: 10/26/21 09:59

Lab Sample ID: 880-7556-13
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	8015NM Prep			10.03 g	10 mL	10924	10/29/21 11:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10998	10/30/21 19:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	10622	10/26/21 12:11	SC	XEN MID
Soluble	Analysis	300.0		1			10788	10/28/21 04:30	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Environmental Oilfield Solutions, LLC
Job ID: 880-7556-1
Project/Site: Hayberry 9 State Com 502 H

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

Method Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN 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.

Laboratory References:

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

Sample Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com 502 H

Job ID: 880-7556-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7556-1	#1 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-2	#2 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-3	#3 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-4	#4 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-5	#5 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-6	#6 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-7	#6B 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	1'
880-7556-8	#7 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-9	#8 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-10	#9 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-11	#9B 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	1'
880-7556-12	#10 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"
880-7556-13	#11 6in Hayberry	Solid	10/21/21 13:00	10/26/21 09:59	6"

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Chain of Custody

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

Wor 880-7556 Chain of Custody

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Project Manager	Steve Hoffman	Bill to (if different)	
Company Name	Environmental Oilfield Sol. LLC	Company Name	
Address	2317 Field, Suite R	Address	
City State ZIP	Odessa, TX 79761	City State ZIP	
Phone	832-646-3107 Email	SHoffman.eos@gmail.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	Haybarn 9 State Com 502H	Turn Around	☒ Routine ☐ Rush
Project Number		Due Date	
Project Location		TAT starts the day received by the lab, if received by 4.30pm	
Sampler's Name	Gustavo Somano		
PO #			

SAMPLE RECEIPT			
Temp Blank.	Yes (No)	Wet Ice	Yes (No)
Samples Received Intact:	(Yes) No	Thermometer ID	IR9
Cooler Custody Seals.	Yes No (N/A)	Correction Factor	0.1
Sample Custody Seals.	Yes No (N/A)	Temperature Reading	18.6
Total Containers.		Corrected Temperature	18.7

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	(grab) Comp	# of Cont	Parameters: TPH NM	Parameters: Chlorides
#1 6in Haybarn	S	10-21-21	1pm	6in				
#2 6in	"	"	"	"				
#3 6in	"	"	"	"				
#4 6in	"	"	"	"				
#5 6in	"	"	"	"				
#6 6in	"	"	"	↓				
#6B 1ft	"	"	"	1ft				
#7 6in	"	"	"	6in				
#8 6in	"	"	"	6in				
#9 6in	"	"	"	6in				

Preservative Codes

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

Sample Comments

4oz

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 Gustavo Somano		10.26.21 959	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Loc. 880
7556

Work Order No: ___

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Project Manager	Steve Hoffman	Bill to (if different)	
Company Name	Environmental Oilfield Solutions	Company Name	
Address	2317 Field, Suite R	Address	
City State ZIP	Odessa, Tx 79761	City State ZIP	
Phone	832-646-3107 Email	SHoffman.eosp@gmail.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	Hagberg 9 State Com 501H	Turn Around	
Project Number		☒ Routine ☐ Rush	
Project Location		Due Date	
Sampler's Name	Gustavo Samano	TAT starts the day received by the lab, if received by 4.30pm	
PO #			

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

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: TPH	Parameters: Chlorides
#9B 1ft Hagberry	S	10-21-21	1pm	1ft				
#10 6in Hagberry	↓	↓	↓	6in				
#11 6in Hagberry	↓	↓	↓	6in				

Preservative Codes

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 Gustavo Samano	J MAMOR	10.26.21 959	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

11/1/2021

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Login Sample Receipt Checklist

Client: Environmental Oilfield Solutions, LLC

Job Number: 880-7556-1

Login Number: 7556
List Number: 1
Creator: Teel, Brianna

List Source: Eurofins Xenco, 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.	False	Refer to Job Narrative for details.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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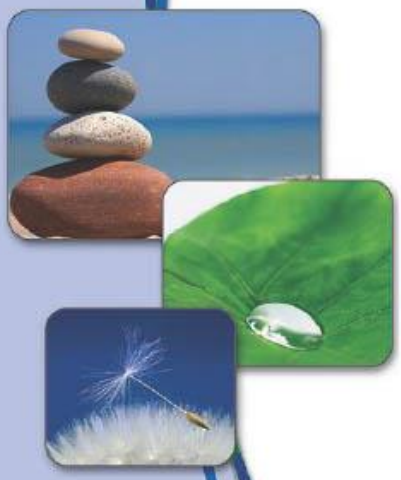

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12263-1
Laboratory Sample Delivery Group: Lea County, NM
Client Project/Site: Hagberry 9 State COM 502Ht

For:
Environmental Oilfield Solutions, LLC
2317 Field St.
Unit R
Odessa, Texas 79761

Attn: Steve Hoffman

Holly Taylor

Authorized for release by:
3/22/2022 1:07:48 PM

Holly Taylor, Project Manager
(806)794-1296
holly.taylor@eurofinset.com

LINKS

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

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

Table of Contents

Definitions/Glossary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
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: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Job ID: 880-12263-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12263-1

Comments
No additional comments.

Receipt
The samples were received on 3/9/2022 4:56 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 was 5.1° C.

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21146 and analytical batch 880-21440 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: The following samples were diluted due to the nature of the sample matrix: 9A (880-12263-17), 10A (880-12263-19) and 10B (880-12263-20) at 10.0, 10.0 and 10.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: 7B (880-12263-14) and 8A (880-12263-15) at 10.0 and 100.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: 6A (880-12263-11), 6B (880-12263-12), 7A (880-12263-13) and 10A (880-12263-19) at 100.0, 100.0, 100.0 and 100.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: 10B (880-12263-20) at 100.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: 6B (880-12263-12) at 250.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: 7B (880-12263-14) at 20.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: 10B (880-12263-20) at 500.0. Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method 8015B NM: Surrogate recovery for the following sample was outside control limits: 9A (880-12263-17). Evidence of matrix interferences is not obvious.

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: 2B (880-12263-4). 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.

General Chemistry
Method 300.0: The following samples required confirmation (CON) due to the continuing calibration blank (CCB) for analytical batch 880-21949 contained Chloride above the reporting limit (RL).: 10A (880-12263-19) and 10B (880-12263-20).

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-21310 and analytical batch 880-21970 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.

Case Narrative

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Job ID: 880-12263-1 (Continued)

Laboratory: Eurofins Midland (Continued)

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

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

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

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 1A

Date Collected: 03/08/22 11:00
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199	mg/Kg		03/13/22 12:58	03/13/22 19:30	1
Toluene	<0.00199	U F2 F1	0.00199	mg/Kg		03/13/22 12:58	03/13/22 19:30	1
Ethylbenzene	<0.00199	U F2 F1	0.00199	mg/Kg		03/13/22 12:58	03/13/22 19:30	1
m,p-Xylenes	<0.00398	U F2 F1	0.00398	mg/Kg		03/13/22 12:58	03/13/22 19:30	1
o-Xylene	<0.00199	U F2 F1	0.00199	mg/Kg		03/13/22 12:58	03/13/22 19:30	1
Xylenes, Total	<0.00398	U F2 F1	0.00398	mg/Kg		03/13/22 12:58	03/13/22 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/13/22 12:58*	*03/13/22 19:30*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/13/22 12:58*	*03/13/22 19:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/11/22 13:33	03/13/22 12:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/11/22 13:33	03/13/22 12:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/11/22 13:33	03/13/22 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*98*		*70 - 130*	*03/11/22 13:33*	*03/13/22 12:41*	*1*
o-Terphenyl (Surr)	*106*		*70 - 130*	*03/11/22 13:33*	*03/13/22 12:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.6		4.96	mg/Kg			03/13/22 00:06	1

Client Sample ID: 1B

Date Collected: 03/08/22 11:00
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/13/22 12:58	03/13/22 19:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/13/22 12:58	03/13/22 19:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/13/22 12:58	03/13/22 19:50	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/13/22 12:58	03/13/22 19:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/13/22 12:58	03/13/22 19:50	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/13/22 12:58	03/13/22 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/13/22 12:58*	*03/13/22 19:50*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 1B
Date Collected: 03/08/22 11:00
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-2
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/13/22 12:58*	*03/13/22 19:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 13:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 13:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 13:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	*75*		*70 - 130*	*03/11/22 13:33*	*03/13/22 13:46*	*1*
o-Terphenyl (Surr)	*81*		*70 - 130*	*03/11/22 13:33*	*03/13/22 13:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.4		5.04	mg/Kg			03/13/22 00:15	1

Client Sample ID: 2A
Date Collected: 03/08/22 11:15
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/15/22 06:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/15/22 06:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/15/22 06:34	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		03/14/22 09:09	03/15/22 06:34	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/15/22 06:34	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/14/22 09:09	03/15/22 06:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/14/22 09:09*	*03/15/22 06:34*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/14/22 09:09*	*03/15/22 06:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/14/22 12:26	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 2A
Date Collected: 03/08/22 11:15
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 14:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 14:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*72*		*70 - 130*	*03/11/22 13:33*	*03/13/22 14:08*	*1*
o-Terphenyl (Surr)	*77*		*70 - 130*	*03/11/22 13:33*	*03/13/22 14:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50.6		4.97	mg/Kg			03/13/22 00:24	1

Client Sample ID: 2B
Date Collected: 03/08/22 11:15
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/14/22 09:09	03/15/22 06:54	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/14/22 09:09	03/15/22 06:54	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/14/22 09:09	03/15/22 06:54	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		03/14/22 09:09	03/15/22 06:54	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/14/22 09:09	03/15/22 06:54	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/14/22 09:09	03/15/22 06:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/14/22 09:09*	*03/15/22 06:54*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/14/22 09:09*	*03/15/22 06:54*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/11/22 13:33	03/13/22 14:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/11/22 13:33	03/13/22 14:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/11/22 13:33	03/13/22 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*68*	*S1-*	*70 - 130*	*03/11/22 13:33*	*03/13/22 14:29*	*1*
o-Terphenyl (Surr)	*71*		*70 - 130*	*03/11/22 13:33*	*03/13/22 14:29*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 2B

Date Collected: 03/08/22 11:15
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.6		4.98	mg/Kg			03/13/22 00:33	1

Client Sample ID: 3A

Date Collected: 03/08/22 11:20
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-5
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/15/22 07:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/15/22 07:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/15/22 07:15	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		03/14/22 09:09	03/15/22 07:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/15/22 07:15	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/14/22 09:09	03/15/22 07:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/14/22 09:09*	*03/15/22 07:15*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/14/22 09:09*	*03/15/22 07:15*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 14:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 14:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*82*		*70 - 130*	*03/11/22 13:33*	*03/13/22 14:51*	*1*
o-Terphenyl (Surr)	*88*		*70 - 130*	*03/11/22 13:33*	*03/13/22 14:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.3		5.00	mg/Kg			03/13/22 00:42	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 3B

Date Collected: 03/08/22 11:20
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/14/22 09:09	03/15/22 07:35	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/14/22 09:09	03/15/22 07:35	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/14/22 09:09	03/15/22 07:35	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		03/14/22 09:09	03/15/22 07:35	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/14/22 09:09	03/15/22 07:35	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/14/22 09:09	03/15/22 07:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*03/14/22 09:09*	*03/15/22 07:35*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/14/22 09:09*	*03/15/22 07:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 15:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 15:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*79*		*70 - 130*	*03/11/22 13:33*	*03/13/22 15:12*	*1*
o-Terphenyl (Surr)	*87*		*70 - 130*	*03/11/22 13:33*	*03/13/22 15:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.7		4.96	mg/Kg			03/13/22 00:51	1

Client Sample ID: 4A

Date Collected: 03/08/22 11:30
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-7
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/10/22 17:00	03/15/22 17:26	1
Toluene	0.00611		0.00202	mg/Kg		03/10/22 17:00	03/15/22 17:26	1
Ethylbenzene	0.0122		0.00202	mg/Kg		03/10/22 17:00	03/15/22 17:26	1
m,p-Xylenes	0.0112		0.00403	mg/Kg		03/10/22 17:00	03/15/22 17:26	1
o-Xylene	0.00755		0.00202	mg/Kg		03/10/22 17:00	03/15/22 17:26	1
Xylenes, Total	0.0188		0.00403	mg/Kg		03/10/22 17:00	03/15/22 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*	*03/10/22 17:00*	*03/15/22 17:26*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 4A

Date Collected: 03/08/22 11:30
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-7
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/10/22 17:00*	*03/15/22 17:26*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0371		0.00403	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	71.4		49.9	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 15:33	1
Diesel Range Organics (Over C10-C28)	71.4		49.9	mg/Kg		03/11/22 13:33	03/13/22 15:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	*79*		*70 - 130*	*03/11/22 13:33*	*03/13/22 15:33*	*1*
o-Terphenyl (Surr)	*88*		*70 - 130*	*03/11/22 13:33*	*03/13/22 15:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.2		5.04	mg/Kg			03/13/22 03:00	1

Client Sample ID: 4B

Date Collected: 03/08/22 11:30
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-8
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/14/22 17:00	03/15/22 17:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/14/22 17:00	03/15/22 17:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/14/22 17:00	03/15/22 17:46	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		03/14/22 17:00	03/15/22 17:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/14/22 17:00	03/15/22 17:46	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/14/22 17:00	03/15/22 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/14/22 17:00*	*03/15/22 17:46*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*03/14/22 17:00*	*03/15/22 17:46*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/14/22 12:26	1

Eurofins Midland

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 4B

Date Collected: 03/08/22 11:30
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 15:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 15:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*104*		*70 - 130*	*03/11/22 13:33*	*03/13/22 15:54*	*1*
o-Terphenyl (Surr)	*111*		*70 - 130*	*03/11/22 13:33*	*03/13/22 15:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.1	F1	5.00	mg/Kg			03/21/22 17:35	1

Client Sample ID: 5A

Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-9
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/14/22 17:00	03/15/22 18:07	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/14/22 17:00	03/15/22 18:07	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/14/22 17:00	03/15/22 18:07	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		03/14/22 17:00	03/15/22 18:07	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/14/22 17:00	03/15/22 18:07	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/14/22 17:00	03/15/22 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/14/22 17:00*	*03/15/22 18:07*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*03/14/22 17:00*	*03/15/22 18:07*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	8090		250	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	669		250	mg/Kg		03/11/22 13:33	03/14/22 07:10	5
Diesel Range Organics (Over C10-C28)	6760		250	mg/Kg		03/11/22 13:33	03/14/22 07:10	5
Oil Range Organics (Over C28-C36)	661		250	mg/Kg		03/11/22 13:33	03/14/22 07:10	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*128*		*70 - 130*	*03/11/22 13:33*	*03/14/22 07:10*	*5*
o-Terphenyl (Surr)	*121*		*70 - 130*	*03/11/22 13:33*	*03/14/22 07:10*	*5*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 5A
Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	267		24.8	mg/Kg			03/21/22 18:01	5

Client Sample ID: 5B
Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-10
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00659		0.00200	mg/Kg		03/14/22 17:00	03/15/22 18:27	1
Toluene	0.00218		0.00200	mg/Kg		03/14/22 17:00	03/15/22 18:27	1
Ethylbenzene	0.0237		0.00200	mg/Kg		03/14/22 17:00	03/15/22 18:27	1
m,p-Xylenes	0.0125		0.00400	mg/Kg		03/14/22 17:00	03/15/22 18:27	1
o-Xylene	0.00204		0.00200	mg/Kg		03/14/22 17:00	03/15/22 18:27	1
Xylenes, Total	0.0145		0.00400	mg/Kg		03/14/22 17:00	03/15/22 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*03/14/22 17:00*	*03/15/22 18:27*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/14/22 17:00*	*03/15/22 18:27*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0470		0.00400	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2050		49.9	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	635		49.9	mg/Kg		03/11/22 13:33	03/13/22 16:37	1
Diesel Range Organics (Over C10-C28)	1280		49.9	mg/Kg		03/11/22 13:33	03/13/22 16:37	1
Oil Range Organics (Over C28-C36)	137		49.9	mg/Kg		03/11/22 13:33	03/13/22 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*103*		*70 - 130*	*03/11/22 13:33*	*03/13/22 16:37*	*1*
o-Terphenyl (Surr)	*89*		*70 - 130*	*03/11/22 13:33*	*03/13/22 16:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	139		4.97	mg/Kg			03/21/22 18:10	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 6A

Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-11
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00583		0.00200	mg/Kg		03/14/22 17:00	03/15/22 18:47	1
Toluene	0.167		0.00200	mg/Kg		03/14/22 17:00	03/15/22 18:47	1
Ethylbenzene	25.4		0.201	mg/Kg		03/16/22 08:30	03/16/22 20:11	100
m,p-Xylenes	61.7		0.402	mg/Kg		03/16/22 08:30	03/16/22 20:11	100
o-Xylene	30.0		0.201	mg/Kg		03/16/22 08:30	03/16/22 20:11	100
Xylenes, Total	91.7		0.402	mg/Kg		03/16/22 08:30	03/16/22 20:11	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*378*	*S1+*	*70 - 130*	*03/14/22 17:00*	*03/15/22 18:47*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/14/22 17:00*	*03/15/22 18:47*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	117		0.402	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5550		50.0	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	2040		50.0	mg/Kg		03/11/22 13:33	03/13/22 17:19	1
Diesel Range Organics (Over C10-C28)	3190		50.0	mg/Kg		03/11/22 13:33	03/13/22 17:19	1
Oil Range Organics (Over C28-C36)	320		50.0	mg/Kg		03/11/22 13:33	03/13/22 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*127*		*70 - 130*	*03/11/22 13:33*	*03/13/22 17:19*	*1*
o-Terphenyl (Surr)	*70*		*70 - 130*	*03/11/22 13:33*	*03/13/22 17:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		5.00	mg/Kg			03/21/22 18:19	1

Client Sample ID: 6B

Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-12
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00495		0.00200	mg/Kg		03/14/22 17:00	03/15/22 19:08	1
Toluene	0.0656		0.00200	mg/Kg		03/14/22 17:00	03/15/22 19:08	1
Ethylbenzene	26.2		0.199	mg/Kg		03/16/22 08:30	03/16/22 20:31	100
m,p-Xylenes	0.0223		0.00399	mg/Kg		03/14/22 17:00	03/15/22 19:08	1
o-Xylene	38.3		0.199	mg/Kg		03/16/22 08:30	03/16/22 20:31	100
Xylenes, Total	116		0.398	mg/Kg		03/16/22 08:30	03/16/22 20:31	100

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 6B
Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-12
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	649	S1+	70 - 130	03/14/22 17:00	03/15/22 19:08	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/14/22 17:00	03/15/22 19:08	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	64.6		0.199	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5770		50.0	mg/Kg			03/14/22 12:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1730		50.0	mg/Kg		03/11/22 13:33	03/13/22 17:40	1
Diesel Range Organics (Over C10-C28)	3690		50.0	mg/Kg		03/11/22 13:33	03/13/22 17:40	1
Oil Range Organics (Over C28-C36)	354		50.0	mg/Kg		03/11/22 13:33	03/13/22 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	125		70 - 130	03/11/22 13:33	03/13/22 17:40	1
o-Terphenyl (Surr)	80		70 - 130	03/11/22 13:33	03/13/22 17:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		4.98	mg/Kg			03/21/22 18:28	1

Client Sample ID: 7A
Date Collected: 03/08/22 12:15
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-13
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200	mg/Kg		03/16/22 08:30	03/16/22 20:52	100
Toluene	2.44		0.200	mg/Kg		03/16/22 08:30	03/16/22 20:52	100
Ethylbenzene	1.41		0.200	mg/Kg		03/16/22 08:30	03/16/22 20:52	100
m,p-Xylenes	3.24		0.401	mg/Kg		03/16/22 08:30	03/16/22 20:52	100
o-Xylene	1.78		0.200	mg/Kg		03/16/22 08:30	03/16/22 20:52	100
Xylenes, Total	5.02		0.401	mg/Kg		03/16/22 08:30	03/16/22 20:52	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/16/22 08:30	03/16/22 20:52	100
1,4-Difluorobenzene (Surr)	90		70 - 130	03/16/22 08:30	03/16/22 20:52	100

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	8.87		0.401	mg/Kg			03/14/22 14:33	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 7A

Date Collected: 03/08/22 12:15
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1620		49.9	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 18:01	1
Diesel Range Organics (Over C10-C28)	1480		49.9	mg/Kg		03/11/22 13:33	03/13/22 18:01	1
Oil Range Organics (Over C28-C36)	141		49.9	mg/Kg		03/11/22 13:33	03/13/22 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*100*		*70 - 130*	*03/11/22 13:33*	*03/13/22 18:01*	*1*
o-Terphenyl (Surr)	*92*		*70 - 130*	*03/11/22 13:33*	*03/13/22 18:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		4.96	mg/Kg			03/21/22 18:54	1

Client Sample ID: 7B

Date Collected: 03/08/22 12:15
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-14
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0198	U	0.0198	mg/Kg		03/15/22 12:43	03/16/22 02:17	10
Toluene	<0.0198	U	0.0198	mg/Kg		03/15/22 12:43	03/16/22 02:17	10
Ethylbenzene	<0.0198	U	0.0198	mg/Kg		03/15/22 12:43	03/16/22 02:17	10
m,p-Xylenes	0.0858		0.0797	mg/Kg		03/17/22 10:00	03/17/22 17:20	20
o-Xylene	<0.0198	U	0.0198	mg/Kg		03/15/22 12:43	03/16/22 02:17	10
Xylenes, Total	<0.0397	U	0.0397	mg/Kg		03/15/22 12:43	03/16/22 02:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*53*	*S1-*	*70 - 130*	*03/15/22 12:43*	*03/16/22 02:17*	*10*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/15/22 12:43*	*03/16/22 02:17*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0858		0.0797	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	666		49.9	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 18:22	1
Diesel Range Organics (Over C10-C28)	610		49.9	mg/Kg		03/11/22 13:33	03/13/22 18:22	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 7B
Date Collected: 03/08/22 12:15
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-14
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	56.1		49.9	mg/Kg		03/11/22 13:33	03/13/22 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*101*		*70 - 130*	*03/11/22 13:33*	*03/13/22 18:22*	*1*
o-Terphenyl (Surr)	*103*		*70 - 130*	*03/11/22 13:33*	*03/13/22 18:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	216		5.04	mg/Kg			03/21/22 19:03	1

Client Sample ID: 8A
Date Collected: 03/08/22 13:00
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-15
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.233		0.200	mg/Kg		03/15/22 12:43	03/16/22 02:38	100
Toluene	0.220		0.200	mg/Kg		03/15/22 12:43	03/16/22 02:38	100
Ethylbenzene	<0.200	U	0.200	mg/Kg		03/15/22 12:43	03/16/22 02:38	100
m,p-Xylenes	<0.400	U	0.400	mg/Kg		03/15/22 12:43	03/16/22 02:38	100
o-Xylene	<0.200	U	0.200	mg/Kg		03/15/22 12:43	03/16/22 02:38	100
Xylenes, Total	<0.400	U	0.400	mg/Kg		03/15/22 12:43	03/16/22 02:38	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*03/15/22 12:43*	*03/16/22 02:38*	*100*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/15/22 12:43*	*03/16/22 02:38*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.453		0.400	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	156		50.0	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 18:43	1
Diesel Range Organics (Over C10-C28)	156		50.0	mg/Kg		03/11/22 13:33	03/13/22 18:43	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*97*		*70 - 130*	*03/11/22 13:33*	*03/13/22 18:43*	*1*
o-Terphenyl (Surr)	*109*		*70 - 130*	*03/11/22 13:33*	*03/13/22 18:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	261		24.9	mg/Kg			03/21/22 19:12	5

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 8B

Date Collected: 03/08/22 13:00
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-16
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/15/22 12:43	03/16/22 07:39	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/15/22 12:43	03/16/22 07:39	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/15/22 12:43	03/16/22 07:39	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		03/15/22 12:43	03/16/22 07:39	1
o-Xylene	0.0383		0.00201	mg/Kg		03/15/22 12:43	03/16/22 07:39	1
Xylenes, Total	0.0383		0.00402	mg/Kg		03/15/22 12:43	03/16/22 07:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/15/22 12:43*	*03/16/22 07:39*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/15/22 12:43*	*03/16/22 07:39*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0383		0.00402	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 19:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 19:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*101*		*70 - 130*	*03/11/22 13:33*	*03/13/22 19:04*	*1*
o-Terphenyl (Surr)	*116*		*70 - 130*	*03/11/22 13:33*	*03/13/22 19:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	429		4.99	mg/Kg			03/21/22 19:21	1

Client Sample ID: 9A

Date Collected: 03/08/22 13:10
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-17
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200	mg/Kg		03/11/22 11:16	03/16/22 06:19	10
Toluene	<0.0200	U	0.0200	mg/Kg		03/11/22 11:16	03/16/22 06:19	10
Ethylbenzene	<0.0200	U	0.0200	mg/Kg		03/11/22 11:16	03/16/22 06:19	10
m,p-Xylenes	<0.0401	U	0.0401	mg/Kg		03/11/22 11:16	03/16/22 06:19	10
o-Xylene	<0.0200	U	0.0200	mg/Kg		03/11/22 11:16	03/16/22 06:19	10
Xylenes, Total	<0.0401	U	0.0401	mg/Kg		03/11/22 11:16	03/16/22 06:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*53*	*S1-*	*70 - 130*	*03/11/22 11:16*	*03/16/22 06:19*	*10*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 9A

Date Collected: 03/08/22 13:10
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-17
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/11/22 11:16*	*03/16/22 06:19*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0401	U	0.0401	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.7		50.0	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 19:25	1
Diesel Range Organics (Over C10-C28)	51.7		50.0	mg/Kg		03/11/22 13:33	03/13/22 19:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	*124*		*70 - 130*	*03/11/22 13:33*	*03/13/22 19:25*	*1*
o-Terphenyl (Surr)	*135*	*S1+*	*70 - 130*	*03/11/22 13:33*	*03/13/22 19:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	244		5.00	mg/Kg			03/21/22 19:30	1

Client Sample ID: 9B

Date Collected: 03/08/22 13:10
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-18
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/11/22 11:16	03/16/22 06:40	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/11/22 11:16	03/16/22 06:40	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/11/22 11:16	03/16/22 06:40	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		03/11/22 11:16	03/16/22 06:40	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/11/22 11:16	03/16/22 06:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/11/22 11:16	03/16/22 06:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*03/11/22 11:16*	*03/16/22 06:40*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/11/22 11:16*	*03/16/22 06:40*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	54.9		49.9	mg/Kg			03/14/22 12:26	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 9B

Date Collected: 03/08/22 13:10
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-18
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 19:46	1
Diesel Range Organics (Over C10-C28)	54.9		49.9	mg/Kg		03/11/22 13:33	03/13/22 19:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/11/22 13:33	03/13/22 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*89*		*70 - 130*	*03/11/22 13:33*	*03/13/22 19:46*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*03/11/22 13:33*	*03/13/22 19:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	192		4.95	mg/Kg			03/21/22 19:39	1

Client Sample ID: 10A

Date Collected: 03/08/22 13:30
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-19
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201	mg/Kg		03/16/22 08:30	03/16/22 21:12	100
Toluene	9.50		0.201	mg/Kg		03/16/22 08:30	03/16/22 21:12	100
Ethylbenzene	11.5		0.201	mg/Kg		03/16/22 08:30	03/16/22 21:12	100
m,p-Xylenes	34.6		0.402	mg/Kg		03/16/22 08:30	03/16/22 21:12	100
o-Xylene	15.4		0.201	mg/Kg		03/16/22 08:30	03/16/22 21:12	100
Xylenes, Total	50.0		0.402	mg/Kg		03/16/22 08:30	03/16/22 21:12	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*03/16/22 08:30*	*03/16/22 21:12*	*100*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*03/16/22 08:30*	*03/16/22 21:12*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	71.0		0.402	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4950		49.9	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	788		49.9	mg/Kg		03/11/22 13:33	03/13/22 20:07	1
Diesel Range Organics (Over C10-C28)	3760		49.9	mg/Kg		03/11/22 13:33	03/13/22 20:07	1
Oil Range Organics (Over C28-C36)	397		49.9	mg/Kg		03/11/22 13:33	03/13/22 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*125*		*70 - 130*	*03/11/22 13:33*	*03/13/22 20:07*	*1*
o-Terphenyl (Surr)	*84*		*70 - 130*	*03/11/22 13:33*	*03/13/22 20:07*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 10A
Date Collected: 03/08/22 13:30
Date Received: 03/09/22 16:56
Sample Depth: 0-6in

Lab Sample ID: 880-12263-19
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	118		4.98	mg/Kg			03/20/22 11:42	1

Client Sample ID: 10B
Date Collected: 03/08/22 13:30
Date Received: 03/09/22 16:56
Sample Depth: 1 ft

Lab Sample ID: 880-12263-20
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.198	U	0.198	mg/Kg		03/16/22 09:01	03/16/22 18:15	100
Toluene	110		1.00	mg/Kg		03/17/22 08:30	03/17/22 16:23	500
Ethylbenzene	67.7		1.00	mg/Kg		03/17/22 08:30	03/17/22 16:23	500
m,p-Xylenes	128		2.00	mg/Kg		03/17/22 08:30	03/17/22 16:23	500
o-Xylene	34.8		0.198	mg/Kg		03/16/22 09:01	03/16/22 18:15	100
Xylenes, Total	189		2.00	mg/Kg		03/17/22 08:30	03/17/22 16:23	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*241*	*S1+*	*70 - 130*	*03/16/22 09:01*	*03/16/22 18:15*	*100*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/16/22 09:01*	*03/16/22 18:15*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	341		2.00	mg/Kg			03/14/22 14:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3600		50.0	mg/Kg			03/14/22 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1460		50.0	mg/Kg		03/11/22 13:33	03/13/22 20:28	1
Diesel Range Organics (Over C10-C28)	1950		50.0	mg/Kg		03/11/22 13:33	03/13/22 20:28	1
Oil Range Organics (Over C28-C36)	192		50.0	mg/Kg		03/11/22 13:33	03/13/22 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*116*		*70 - 130*	*03/11/22 13:33*	*03/13/22 20:28*	*1*
o-Terphenyl (Surr)	*95*		*70 - 130*	*03/11/22 13:33*	*03/13/22 20:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.3		5.00	mg/Kg			03/20/22 11:53	1

Surrogate Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-12263-1	1A	112	96
880-12263-1 MS	1A	112	95
880-12263-1 MSD	1A	2911 S1+	176 S1+
880-12263-2	1B	107	93
880-12263-3	2A	104	93
880-12263-4	2B	102	95
880-12263-5	3A	104	95
880-12263-6	3B	94	96
880-12263-7	4A	143 S1+	90
880-12263-8	4B	105	112
880-12263-9	5A	107	112
880-12263-10	5B	121	97
880-12263-11	6A	378 S1+	95
880-12263-12	6B	649 S1+	97
880-12263-13	7A	94	90
880-12263-14	7B	53 S1-	92
880-12263-15	8A	122	107
880-12263-16	8B	106	106
880-12263-17	9A	53 S1-	102
880-12263-18	9B	120	96
880-12263-19	10A	79	77
880-12263-20	10B	241 S1+	103
LCS 880-21146/1-A	Lab Control Sample	94	98
LCS 880-21290/1-A	Lab Control Sample	95	99
LCS 880-21301/1-A	Lab Control Sample	105	113
LCS 880-21489/1-A	Lab Control Sample	91	100
LCS 880-21653/1-A	Lab Control Sample	106	113
LCS 880-21671/1-A	Lab Control Sample	96	100
LCS 880-21696/1-A	Lab Control Sample	101	111
LCS 880-21697/1-A	Lab Control Sample	98	100
LCS 880-21705/1-A	Lab Control Sample	102	112
LCSD 880-21146/2-A	Lab Control Sample Dup	97	101
LCSD 880-21290/2-A	Lab Control Sample Dup	99	98
LCSD 880-21301/2-A	Lab Control Sample Dup	105	113
LCSD 880-21489/2-A	Lab Control Sample Dup	94	101
LCSD 880-21653/2-A	Lab Control Sample Dup	103	112
LCSD 880-21671/2-A	Lab Control Sample Dup	117	94
LCSD 880-21696/2-A	Lab Control Sample Dup	103	112
LCSD 880-21697/2-A	Lab Control Sample Dup	99	100
LCSD 880-21705/2-A	Lab Control Sample Dup	105	107
MB 880-21012/5-A	Method Blank	95	100
MB 880-21146/5-A	Method Blank	97	99
MB 880-21215/5-B	Method Blank	97	102
MB 880-21290/5-A	Method Blank	95	98
MB 880-21301/5-A	Method Blank	101	104
MB 880-21477/5-B	Method Blank	97	100
MB 880-21489/5-B	Method Blank	96	100
MB 880-21653/5-A	Method Blank	100	103
MB 880-21671/5-A	Method Blank	97	99

Surrogate Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
MB 880-21696/5-A	Method Blank	101	104
MB 880-21697/5-A	Method Blank	97	100
MB 880-21705/5-A	Method Blank	101	103

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12263-1	1A	98	106
880-12263-1 MS	1A	96	83
880-12263-1 MSD	1A	85	77
880-12263-2	1B	75	81
880-12263-3	2A	72	77
880-12263-4	2B	68 S1-	71
880-12263-5	3A	82	88
880-12263-6	3B	79	87
880-12263-7	4A	79	88
880-12263-8	4B	104	111
880-12263-9	5A	128	121
880-12263-10	5B	103	89
880-12263-11	6A	127	70
880-12263-12	6B	125	80
880-12263-13	7A	100	92
880-12263-14	7B	101	103
880-12263-15	8A	97	109
880-12263-16	8B	101	116
880-12263-17	9A	124	135 S1+
880-12263-18	9B	89	100
880-12263-19	10A	125	84
880-12263-20	10B	116	95
LCS 880-21393/2-A	Lab Control Sample	116	118
LCSD 880-21393/3-A	Lab Control Sample Dup	114	116
MB 880-21393/1-A	Method Blank	109	139 S1+

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21012/5-A
Matrix: Solid
Analysis Batch: 21440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21012

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/11/22 16:00	03/13/22 07:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/11/22 16:00	03/13/22 07:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/11/22 16:00	03/13/22 07:08	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/11/22 16:00	03/13/22 07:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/11/22 16:00	03/13/22 07:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/11/22 16:00	03/13/22 07:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*03/11/22 16:00*	*03/13/22 07:08*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/11/22 16:00*	*03/13/22 07:08*	*1*

Lab Sample ID: MB 880-21146/5-A
Matrix: Solid
Analysis Batch: 21440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21146

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/13/22 12:58	03/13/22 19:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/13/22 12:58	03/13/22 19:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/13/22 12:58	03/13/22 19:01	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/13/22 12:58	03/13/22 19:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/13/22 12:58	03/13/22 19:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/13/22 12:58	03/13/22 19:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/13/22 12:58*	*03/13/22 19:01*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/13/22 12:58*	*03/13/22 19:01*	*1*

Lab Sample ID: LCS 880-21146/1-A
Matrix: Solid
Analysis Batch: 21440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09993		mg/Kg		100	70 - 130
Toluene	0.100	0.09490		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09416		mg/Kg		94	70 - 130
m,p-Xylenes	0.200	0.2203		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1080		mg/Kg		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-21146/2-A
Matrix: Solid
Analysis Batch: 21440

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21146

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1051		mg/Kg		105	70 - 130	5	35

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-21146/2-A
Matrix: Solid
Analysis Batch: 21440

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21146

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.1004		mg/Kg		100	70 - 130	6	35
Ethylbenzene			0.100	0.09886		mg/Kg		99	70 - 130	5	35
m,p-Xylenes			0.200	0.2316		mg/Kg		116	70 - 130	5	35
o-Xylene			0.100	0.1131		mg/Kg		113	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-12263-1 MS
Matrix: Solid
Analysis Batch: 21440

Client Sample ID: 1A
Prep Type: Total/NA
Prep Batch: 21146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.100	0.04828	F1	mg/Kg		48	70 - 130
Toluene	<0.00199	U F2 F1	0.100	0.05479	F1	mg/Kg		54	70 - 130
Ethylbenzene	<0.00199	U F2 F1	0.100	0.06147	F1	mg/Kg		61	70 - 130
m,p-Xylenes	<0.00398	U F2 F1	0.200	0.1430		mg/Kg		71	70 - 130
o-Xylene	<0.00199	U F2 F1	0.100	0.07492		mg/Kg		75	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-12263-1 MSD
Matrix: Solid
Analysis Batch: 21440

Client Sample ID: 1A
Prep Type: Total/NA
Prep Batch: 21146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0996	0.04152	F1	mg/Kg		42	70 - 130	15	35
Toluene	<0.00199	U F2 F1	0.0996	0.002562	F2 F1	mg/Kg		2	70 - 130	182	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*2911*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*176*	*S1+*	*70 - 130*

Lab Sample ID: MB 880-21215/5-B
Matrix: Solid
Analysis Batch: 21615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21215

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/14/22 16:00	03/15/22 11:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/14/22 16:00	03/15/22 11:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/14/22 16:00	03/15/22 11:59	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/14/22 16:00	03/15/22 11:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/14/22 16:00	03/15/22 11:59	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/14/22 16:00	03/15/22 11:59	1

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-21215/5-B
Matrix: Solid
Analysis Batch: 21615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21215

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/14/22 16:00	03/15/22 11:59	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/14/22 16:00	03/15/22 11:59	1

Lab Sample ID: MB 880-21290/5-A
Matrix: Solid
Analysis Batch: 21615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21290

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/11/22 11:16	03/15/22 23:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/11/22 11:16	03/15/22 23:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/11/22 11:16	03/15/22 23:34	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/11/22 11:16	03/15/22 23:34	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/11/22 11:16	03/15/22 23:34	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/11/22 11:16	03/15/22 23:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/11/22 11:16	03/15/22 23:34	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/11/22 11:16	03/15/22 23:34	1

Lab Sample ID: LCS 880-21290/1-A
Matrix: Solid
Analysis Batch: 21615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09296		mg/Kg		93	70 - 130
Toluene	0.100	0.09412		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09181		mg/Kg		92	70 - 130
m,p-Xylenes	0.200	0.2221		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1078		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-21290/2-A
Matrix: Solid
Analysis Batch: 21615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21290

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09821		mg/Kg		98	70 - 130	5	35
Toluene	0.100	0.09710		mg/Kg		97	70 - 130	3	35
Ethylbenzene	0.100	0.09525		mg/Kg		95	70 - 130	4	35
m,p-Xylenes	0.200	0.2293		mg/Kg		115	70 - 130	3	35
o-Xylene	0.100	0.1116		mg/Kg		112	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-21290/2-A
Matrix: Solid
Analysis Batch: 21615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21290

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

Lab Sample ID: MB 880-21301/5-A
Matrix: Solid
Analysis Batch: 21616

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21301

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/14/22 17:00	03/15/22 12:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/14/22 17:00	03/15/22 12:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/14/22 17:00	03/15/22 12:00	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/14/22 17:00	03/15/22 12:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/14/22 17:00	03/15/22 12:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/14/22 17:00	03/15/22 12:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/14/22 17:00	03/15/22 12:00	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/14/22 17:00	03/15/22 12:00	1

Lab Sample ID: LCS 880-21301/1-A
Matrix: Solid
Analysis Batch: 21616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1156		mg/Kg		116	70 - 130
Toluene	0.100	0.1138		mg/Kg		114	70 - 130
Ethylbenzene	0.100	0.1135		mg/Kg		113	70 - 130
m,p-Xylenes	0.200	0.2358		mg/Kg		118	70 - 130
o-Xylene	0.100	0.1139		mg/Kg		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: LCSD 880-21301/2-A
Matrix: Solid
Analysis Batch: 21616

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21301

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1199		mg/Kg		120	70 - 130	4	35
Toluene	0.100	0.1164		mg/Kg		116	70 - 130	2	35
Ethylbenzene	0.100	0.1167		mg/Kg		117	70 - 130	3	35
m,p-Xylenes	0.200	0.2424		mg/Kg		121	70 - 130	3	35
o-Xylene	0.100	0.1168		mg/Kg		117	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-21477/5-B
Matrix: Solid
Analysis Batch: 21466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21477

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/14/22 08:50	03/14/22 11:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/14/22 08:50	03/14/22 11:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/14/22 08:50	03/14/22 11:34	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/14/22 08:50	03/14/22 11:34	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/14/22 08:50	03/14/22 11:34	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/14/22 08:50	03/14/22 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/14/22 08:50*	*03/14/22 11:34*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/14/22 08:50*	*03/14/22 11:34*	*1*

Lab Sample ID: MB 880-21489/5-B
Matrix: Solid
Analysis Batch: 21466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21489

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/14/22 23:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/14/22 23:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/14/22 23:09	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/14/22 09:09	03/14/22 23:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/14/22 09:09	03/14/22 23:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/14/22 09:09	03/14/22 23:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/14/22 09:09*	*03/14/22 23:09*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/14/22 09:09*	*03/14/22 23:09*	*1*

Lab Sample ID: LCS 880-21489/1-A
Matrix: Solid
Analysis Batch: 21466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21489

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09616		mg/Kg		96	70 - 130
Toluene	0.100	0.09326		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09241		mg/Kg		92	70 - 130
m,p-Xylenes	0.200	0.2160		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1045		mg/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-21489/2-A
Matrix: Solid
Analysis Batch: 21466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21489

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09887		mg/Kg		99	70 - 130	3	35

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-21489/2-A
Matrix: Solid
Analysis Batch: 21466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21489

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.09533		mg/Kg		95	70 - 130	2	35
Ethylbenzene	0.100	0.09407		mg/Kg		94	70 - 130	2	35
m,p-Xylenes	0.200	0.2204		mg/Kg		110	70 - 130	2	35
o-Xylene	0.100	0.1079		mg/Kg		108	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-21653/5-A
Matrix: Solid
Analysis Batch: 21616

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21653

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/15/22 12:43	03/15/22 23:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/15/22 12:43	03/15/22 23:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/15/22 12:43	03/15/22 23:10	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/15/22 12:43	03/15/22 23:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/15/22 12:43	03/15/22 23:10	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/15/22 12:43	03/15/22 23:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/15/22 12:43*	*03/15/22 23:10*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/15/22 12:43*	*03/15/22 23:10*	*1*

Lab Sample ID: LCS 880-21653/1-A
Matrix: Solid
Analysis Batch: 21616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21653

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1041		mg/Kg		104	70 - 130
Toluene	0.100	0.1017		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1007		mg/Kg		101	70 - 130
m,p-Xylenes	0.200	0.2097		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1097		mg/Kg		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 880-21653/2-A
Matrix: Solid
Analysis Batch: 21616

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1037		mg/Kg		104	70 - 130	0	35
Toluene	0.100	0.1021		mg/Kg		102	70 - 130	0	35
Ethylbenzene	0.100	0.1005		mg/Kg		100	70 - 130	0	35

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-21653/2-A
Matrix: Solid
Analysis Batch: 21616

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m,p-Xylenes	0.200	0.2095		mg/Kg		105	70 - 130	0	35
o-Xylene	0.100	0.1067		mg/Kg		107	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: MB 880-21671/5-A
Matrix: Solid
Analysis Batch: 21692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21671

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/16/22 08:30	03/16/22 12:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/16/22 08:30	03/16/22 12:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/16/22 08:30	03/16/22 12:46	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/16/22 08:30	03/16/22 12:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/16/22 08:30	03/16/22 12:46	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/16/22 08:30	03/16/22 12:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/16/22 08:30*	*03/16/22 12:46*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/16/22 08:30*	*03/16/22 12:46*	*1*

Lab Sample ID: LCS 880-21671/1-A
Matrix: Solid
Analysis Batch: 21692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09790		mg/Kg		98	70 - 130
Toluene	0.100	0.09802		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09868		mg/Kg		99	70 - 130
m,p-Xylenes	0.200	0.2326		mg/Kg		116	70 - 130
o-Xylene	0.100	0.1127		mg/Kg		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-21671/2-A
Matrix: Solid
Analysis Batch: 21692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21671

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08406		mg/Kg		84	70 - 130	15	35
Toluene	0.100	0.09580		mg/Kg		96	70 - 130	2	35
Ethylbenzene	0.100	0.09954		mg/Kg		100	70 - 130	1	35
m,p-Xylenes	0.200	0.2456		mg/Kg		123	70 - 130	5	35
o-Xylene	0.100	0.1229		mg/Kg		123	70 - 130	9	35

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: MB 880-21696/5-A
Matrix: Solid
Analysis Batch: 21704

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21696

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/16/22 09:01	03/16/22 15:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/16/22 09:01	03/16/22 15:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/16/22 09:01	03/16/22 15:09	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/16/22 09:01	03/16/22 15:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/16/22 09:01	03/16/22 15:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/16/22 09:01	03/16/22 15:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/16/22 09:01	03/16/22 15:09	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/16/22 09:01	03/16/22 15:09	1

Lab Sample ID: LCS 880-21696/1-A
Matrix: Solid
Analysis Batch: 21704

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1007		mg/Kg		101	70 - 130
Toluene	0.100	0.1005		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.1012		mg/Kg		101	70 - 130
m,p-Xylenes	0.200	0.2099		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1033		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-21696/2-A
Matrix: Solid
Analysis Batch: 21704

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21696

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1008		mg/Kg		101	70 - 130	0	35
Toluene	0.100	0.09932		mg/Kg		99	70 - 130	1	35
Ethylbenzene	0.100	0.1013		mg/Kg		101	70 - 130	0	35
m,p-Xylenes	0.200	0.2104		mg/Kg		105	70 - 130	0	35
o-Xylene	0.100	0.1037		mg/Kg		104	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-21697/5-A
Matrix: Solid
Analysis Batch: 21774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21697

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/17/22 08:30	03/17/22 12:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/17/22 08:30	03/17/22 12:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/17/22 08:30	03/17/22 12:07	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		03/17/22 08:30	03/17/22 12:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/17/22 08:30	03/17/22 12:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/17/22 08:30	03/17/22 12:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/17/22 08:30*	*03/17/22 12:07*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/17/22 08:30*	*03/17/22 12:07*	*1*

Lab Sample ID: LCS 880-21697/1-A
Matrix: Solid
Analysis Batch: 21774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21697

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08591		mg/Kg		86	70 - 130
Toluene	0.100	0.08605		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.08745		mg/Kg		87	70 - 130
m,p-Xylenes	0.200	0.2003		mg/Kg		100	70 - 130
o-Xylene	0.100	0.1012		mg/Kg		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-21697/2-A
Matrix: Solid
Analysis Batch: 21774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21697

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1022		mg/Kg		102	70 - 130	17	35
Toluene	0.100	0.09993		mg/Kg		100	70 - 130	15	35
Ethylbenzene	0.100	0.09959		mg/Kg		100	70 - 130	13	35
m,p-Xylenes	0.200	0.2354		mg/Kg		118	70 - 130	16	35
o-Xylene	0.100	0.1145		mg/Kg		115	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 880-21705/5-A
Matrix: Solid
Analysis Batch: 21801

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21705

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/17/22 10:00	03/17/22 13:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/17/22 10:00	03/17/22 13:53	1

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-21705/5-A
Matrix: Solid
Analysis Batch: 21801

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21705

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 10:00	03/17/22 13:53	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/17/22 10:00	03/17/22 13:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 10:00	03/17/22 13:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 10:00	03/17/22 13:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/17/22 10:00*	*03/17/22 13:53*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 10:00*	*03/17/22 13:53*	*1*

Lab Sample ID: LCS 880-21705/1-A
Matrix: Solid
Analysis Batch: 21801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21705

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1040		mg/Kg		104	70 - 130		
Toluene			0.100	0.1011		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.1015		mg/Kg		101	70 - 130		
m,p-Xylenes			0.200	0.2106		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1015		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: LCSD 880-21705/2-A
Matrix: Solid
Analysis Batch: 21801

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21705

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09656		mg/Kg		97	70 - 130	7	35
Toluene			0.100	0.09843		mg/Kg		98	70 - 130	3	35
Ethylbenzene			0.100	0.1045		mg/Kg		105	70 - 130	3	35
m,p-Xylenes			0.200	0.2192		mg/Kg		110	70 - 130	4	35
o-Xylene			0.100	0.1062		mg/Kg		106	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: MB 880-21393/1-A
Matrix: Solid
Analysis Batch: 21442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21393

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/11/22 13:33	03/13/22 11:37	1

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-21393/1-A
Matrix: Solid
Analysis Batch: 21442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21393

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 11:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 13:33	03/13/22 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*109*		*70 - 130*	*03/11/22 13:33*	*03/13/22 11:37*	*1*
o-Terphenyl (Surr)	*139*	*S1+*	*70 - 130*	*03/11/22 13:33*	*03/13/22 11:37*	*1*

Lab Sample ID: LCS 880-21393/2-A
Matrix: Solid
Analysis Batch: 21442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	812.2		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	890.1		mg/Kg		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*116*		*70 - 130*
o-Terphenyl (Surr)	*118*		*70 - 130*

Lab Sample ID: LCSD 880-21393/3-A
Matrix: Solid
Analysis Batch: 21442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	831.3		mg/Kg		83	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	917.1		mg/Kg		92	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*114*		*70 - 130*
o-Terphenyl (Surr)	*116*		*70 - 130*

Lab Sample ID: 880-12263-1 MS
Matrix: Solid
Analysis Batch: 21442

Client Sample ID: 1A
Prep Type: Total/NA
Prep Batch: 21393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1295		mg/Kg		130	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1204		mg/Kg		121	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*96*		*70 - 130*
o-Terphenyl (Surr)	*83*		*70 - 130*

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

Lab Sample ID: 880-12263-1 MSD
Matrix: Solid
Analysis Batch: 21442

Client Sample ID: 1A
Prep Type: Total/NA
Prep Batch: 21393

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	<49.8	U	998	1165		mg/Kg		117	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1062		mg/Kg		106	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*85*		*70 - 130*
o-Terphenyl (Surr)	*77*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21309/1-A
Matrix: Solid
Analysis Batch: 21542

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/12/22 20:34	1

Lab Sample ID: LCS 880-21309/2-A
Matrix: Solid
Analysis Batch: 21542

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	259.6		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-21309/3-A
Matrix: Solid
Analysis Batch: 21542

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	260.6		mg/Kg		104	90 - 110	0	20

Lab Sample ID: MB 880-21308/1-A
Matrix: Solid
Analysis Batch: 21949

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/19/22 11:23	1

Lab Sample ID: LCS 880-21308/2-A
Matrix: Solid
Analysis Batch: 21949

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	257.8		mg/Kg		103	90 - 110

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-21308/3-A
Matrix: Solid
Analysis Batch: 21949

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	257.9		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 880-12263-19 MS
Matrix: Solid
Analysis Batch: 21949

Client Sample ID: 10A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	118		249	382.7		mg/Kg		106	90 - 110

Lab Sample ID: 880-12263-19 MSD
Matrix: Solid
Analysis Batch: 21949

Client Sample ID: 10A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	118		249	375.6		mg/Kg		104	90 - 110	2	20

Lab Sample ID: MB 880-21310/1-A
Matrix: Solid
Analysis Batch: 21970

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/21/22 17:08	1

Lab Sample ID: LCS 880-21310/2-A
Matrix: Solid
Analysis Batch: 21970

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	273.1		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-21310/3-A
Matrix: Solid
Analysis Batch: 21970

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	274.8		mg/Kg		110	90 - 110	1	20

Lab Sample ID: 880-12263-8 MS
Matrix: Solid
Analysis Batch: 21970

Client Sample ID: 4B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	62.1	F1	250	340.7	F1	mg/Kg		111	90 - 110

Lab Sample ID: 880-12263-8 MSD
Matrix: Solid
Analysis Batch: 21970

Client Sample ID: 4B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	62.1	F1	250	336.7		mg/Kg		110	90 - 110	1	20

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-12263-18 MS
Matrix: Solid
Analysis Batch: 21970

Client Sample ID: 9B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	192		248	457.4		mg/Kg		107	90 - 110

Lab Sample ID: 880-12263-18 MSD
Matrix: Solid
Analysis Batch: 21970

Client Sample ID: 9B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	192		248	454.9		mg/Kg		106	90 - 110	1	20

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

GC VOA

Prep Batch: 21012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21012/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 21146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-1	1A	Total/NA	Solid	5035	
880-12263-2	1B	Total/NA	Solid	5035	
MB 880-21146/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21146/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21146/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12263-1 MS	1A	Total/NA	Solid	5035	
880-12263-1 MSD	1A	Total/NA	Solid	5035	

Prep Batch: 21215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21215/5-B	Method Blank	Total/NA	Solid	5035	

Prep Batch: 21290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-17	9A	Total/NA	Solid	5035	
880-12263-18	9B	Total/NA	Solid	5035	
MB 880-21290/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21290/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21290/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 21301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-7	4A	Total/NA	Solid	5035	
880-12263-8	4B	Total/NA	Solid	5035	
880-12263-9	5A	Total/NA	Solid	5035	
880-12263-10	5B	Total/NA	Solid	5035	
880-12263-11	6A	Total/NA	Solid	5035	
880-12263-12	6B	Total/NA	Solid	5035	
MB 880-21301/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21301/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21301/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 21440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-1	1A	Total/NA	Solid	8021B	21146
880-12263-2	1B	Total/NA	Solid	8021B	21146
MB 880-21012/5-A	Method Blank	Total/NA	Solid	8021B	21012
MB 880-21146/5-A	Method Blank	Total/NA	Solid	8021B	21146
LCS 880-21146/1-A	Lab Control Sample	Total/NA	Solid	8021B	21146
LCSD 880-21146/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21146
880-12263-1 MS	1A	Total/NA	Solid	8021B	21146
880-12263-1 MSD	1A	Total/NA	Solid	8021B	21146

Analysis Batch: 21466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-3	2A	Total/NA	Solid	8021B	21489
880-12263-4	2B	Total/NA	Solid	8021B	21489

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

GC VOA (Continued)

Analysis Batch: 21466 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-5	3A	Total/NA	Solid	8021B	21489
880-12263-6	3B	Total/NA	Solid	8021B	21489
MB 880-21477/5-B	Method Blank	Total/NA	Solid	8021B	21477
MB 880-21489/5-B	Method Blank	Total/NA	Solid	8021B	21489
LCS 880-21489/1-A	Lab Control Sample	Total/NA	Solid	8021B	21489
LCSD 880-21489/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21489

Prep Batch: 21477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21477/5-B	Method Blank	Total/NA	Solid	5035	

Prep Batch: 21489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-3	2A	Total/NA	Solid	5035	
880-12263-4	2B	Total/NA	Solid	5035	
880-12263-5	3A	Total/NA	Solid	5035	
880-12263-6	3B	Total/NA	Solid	5035	
MB 880-21489/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-21489/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21489/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 21552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-1	1A	Total/NA	Solid	Total BTEX	
880-12263-2	1B	Total/NA	Solid	Total BTEX	
880-12263-3	2A	Total/NA	Solid	Total BTEX	
880-12263-4	2B	Total/NA	Solid	Total BTEX	
880-12263-5	3A	Total/NA	Solid	Total BTEX	
880-12263-6	3B	Total/NA	Solid	Total BTEX	
880-12263-7	4A	Total/NA	Solid	Total BTEX	
880-12263-8	4B	Total/NA	Solid	Total BTEX	
880-12263-9	5A	Total/NA	Solid	Total BTEX	
880-12263-10	5B	Total/NA	Solid	Total BTEX	
880-12263-11	6A	Total/NA	Solid	Total BTEX	
880-12263-12	6B	Total/NA	Solid	Total BTEX	
880-12263-13	7A	Total/NA	Solid	Total BTEX	
880-12263-14	7B	Total/NA	Solid	Total BTEX	
880-12263-15	8A	Total/NA	Solid	Total BTEX	
880-12263-16	8B	Total/NA	Solid	Total BTEX	
880-12263-17	9A	Total/NA	Solid	Total BTEX	
880-12263-18	9B	Total/NA	Solid	Total BTEX	
880-12263-19	10A	Total/NA	Solid	Total BTEX	
880-12263-20	10B	Total/NA	Solid	Total BTEX	

Analysis Batch: 21615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-17	9A	Total/NA	Solid	8021B	21290
880-12263-18	9B	Total/NA	Solid	8021B	21290
MB 880-21215/5-B	Method Blank	Total/NA	Solid	8021B	21215
MB 880-21290/5-A	Method Blank	Total/NA	Solid	8021B	21290
LCS 880-21290/1-A	Lab Control Sample	Total/NA	Solid	8021B	21290

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

GC VOA (Continued)

Analysis Batch: 21615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-21290/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21290

Analysis Batch: 21616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-7	4A	Total/NA	Solid	8021B	21301
880-12263-8	4B	Total/NA	Solid	8021B	21301
880-12263-9	5A	Total/NA	Solid	8021B	21301
880-12263-10	5B	Total/NA	Solid	8021B	21301
880-12263-11	6A	Total/NA	Solid	8021B	21301
880-12263-12	6B	Total/NA	Solid	8021B	21301
880-12263-14	7B	Total/NA	Solid	8021B	21653
880-12263-15	8A	Total/NA	Solid	8021B	21653
880-12263-16	8B	Total/NA	Solid	8021B	21653
MB 880-21301/5-A	Method Blank	Total/NA	Solid	8021B	21301
MB 880-21653/5-A	Method Blank	Total/NA	Solid	8021B	21653
LCS 880-21301/1-A	Lab Control Sample	Total/NA	Solid	8021B	21301
LCS 880-21653/1-A	Lab Control Sample	Total/NA	Solid	8021B	21653
LCSD 880-21301/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21301
LCSD 880-21653/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21653

Prep Batch: 21653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-14	7B	Total/NA	Solid	5035	
880-12263-15	8A	Total/NA	Solid	5035	
880-12263-16	8B	Total/NA	Solid	5035	
MB 880-21653/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21653/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21653/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 21671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-11	6A	Total/NA	Solid	5035	
880-12263-12	6B	Total/NA	Solid	5035	
880-12263-13	7A	Total/NA	Solid	5035	
880-12263-19	10A	Total/NA	Solid	5035	
MB 880-21671/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21671/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21671/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 21692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-11	6A	Total/NA	Solid	8021B	21671
880-12263-12	6B	Total/NA	Solid	8021B	21671
880-12263-13	7A	Total/NA	Solid	8021B	21671
880-12263-19	10A	Total/NA	Solid	8021B	21671
MB 880-21671/5-A	Method Blank	Total/NA	Solid	8021B	21671
LCS 880-21671/1-A	Lab Control Sample	Total/NA	Solid	8021B	21671
LCSD 880-21671/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21671

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

GC VOA

Prep Batch: 21696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-20	10B	Total/NA	Solid	5035	
MB 880-21696/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21696/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21696/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 21697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-20	10B	Total/NA	Solid	5035	
MB 880-21697/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21697/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21697/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 21704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-20	10B	Total/NA	Solid	8021B	21696
MB 880-21696/5-A	Method Blank	Total/NA	Solid	8021B	21696
LCS 880-21696/1-A	Lab Control Sample	Total/NA	Solid	8021B	21696
LCSD 880-21696/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21696

Prep Batch: 21705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-14	7B	Total/NA	Solid	5035	
MB 880-21705/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21705/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21705/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 21774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-20	10B	Total/NA	Solid	8021B	21697
MB 880-21697/5-A	Method Blank	Total/NA	Solid	8021B	21697
LCS 880-21697/1-A	Lab Control Sample	Total/NA	Solid	8021B	21697
LCSD 880-21697/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21697

Analysis Batch: 21801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-14	7B	Total/NA	Solid	8021B	21705
MB 880-21705/5-A	Method Blank	Total/NA	Solid	8021B	21705
LCS 880-21705/1-A	Lab Control Sample	Total/NA	Solid	8021B	21705
LCSD 880-21705/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21705

GC Semi VOA

Prep Batch: 21393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-1	1A	Total/NA	Solid	8015NM Prep	
880-12263-2	1B	Total/NA	Solid	8015NM Prep	
880-12263-3	2A	Total/NA	Solid	8015NM Prep	
880-12263-4	2B	Total/NA	Solid	8015NM Prep	
880-12263-5	3A	Total/NA	Solid	8015NM Prep	
880-12263-6	3B	Total/NA	Solid	8015NM Prep	
880-12263-7	4A	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 21393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-8	4B	Total/NA	Solid	8015NM Prep	
880-12263-9	5A	Total/NA	Solid	8015NM Prep	
880-12263-10	5B	Total/NA	Solid	8015NM Prep	
880-12263-11	6A	Total/NA	Solid	8015NM Prep	
880-12263-12	6B	Total/NA	Solid	8015NM Prep	
880-12263-13	7A	Total/NA	Solid	8015NM Prep	
880-12263-14	7B	Total/NA	Solid	8015NM Prep	
880-12263-15	8A	Total/NA	Solid	8015NM Prep	
880-12263-16	8B	Total/NA	Solid	8015NM Prep	
880-12263-17	9A	Total/NA	Solid	8015NM Prep	
880-12263-18	9B	Total/NA	Solid	8015NM Prep	
880-12263-19	10A	Total/NA	Solid	8015NM Prep	
880-12263-20	10B	Total/NA	Solid	8015NM Prep	
MB 880-21393/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21393/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21393/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12263-1 MS	1A	Total/NA	Solid	8015NM Prep	
880-12263-1 MSD	1A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-1	1A	Total/NA	Solid	8015B NM	21393
880-12263-2	1B	Total/NA	Solid	8015B NM	21393
880-12263-3	2A	Total/NA	Solid	8015B NM	21393
880-12263-4	2B	Total/NA	Solid	8015B NM	21393
880-12263-5	3A	Total/NA	Solid	8015B NM	21393
880-12263-6	3B	Total/NA	Solid	8015B NM	21393
880-12263-7	4A	Total/NA	Solid	8015B NM	21393
880-12263-8	4B	Total/NA	Solid	8015B NM	21393
880-12263-9	5A	Total/NA	Solid	8015B NM	21393
880-12263-10	5B	Total/NA	Solid	8015B NM	21393
880-12263-11	6A	Total/NA	Solid	8015B NM	21393
880-12263-12	6B	Total/NA	Solid	8015B NM	21393
880-12263-13	7A	Total/NA	Solid	8015B NM	21393
880-12263-14	7B	Total/NA	Solid	8015B NM	21393
880-12263-15	8A	Total/NA	Solid	8015B NM	21393
880-12263-16	8B	Total/NA	Solid	8015B NM	21393
880-12263-17	9A	Total/NA	Solid	8015B NM	21393
880-12263-18	9B	Total/NA	Solid	8015B NM	21393
880-12263-19	10A	Total/NA	Solid	8015B NM	21393
880-12263-20	10B	Total/NA	Solid	8015B NM	21393
MB 880-21393/1-A	Method Blank	Total/NA	Solid	8015B NM	21393
LCS 880-21393/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21393
LCSD 880-21393/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21393
880-12263-1 MS	1A	Total/NA	Solid	8015B NM	21393
880-12263-1 MSD	1A	Total/NA	Solid	8015B NM	21393

Analysis Batch: 21532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-1	1A	Total/NA	Solid	8015 NM	
880-12263-2	1B	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 21532 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-3	2A	Total/NA	Solid	8015 NM	
880-12263-4	2B	Total/NA	Solid	8015 NM	
880-12263-5	3A	Total/NA	Solid	8015 NM	
880-12263-6	3B	Total/NA	Solid	8015 NM	
880-12263-7	4A	Total/NA	Solid	8015 NM	
880-12263-8	4B	Total/NA	Solid	8015 NM	
880-12263-9	5A	Total/NA	Solid	8015 NM	
880-12263-10	5B	Total/NA	Solid	8015 NM	
880-12263-11	6A	Total/NA	Solid	8015 NM	
880-12263-12	6B	Total/NA	Solid	8015 NM	
880-12263-13	7A	Total/NA	Solid	8015 NM	
880-12263-14	7B	Total/NA	Solid	8015 NM	
880-12263-15	8A	Total/NA	Solid	8015 NM	
880-12263-16	8B	Total/NA	Solid	8015 NM	
880-12263-17	9A	Total/NA	Solid	8015 NM	
880-12263-18	9B	Total/NA	Solid	8015 NM	
880-12263-19	10A	Total/NA	Solid	8015 NM	
880-12263-20	10B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-19	10A	Soluble	Solid	DI Leach	
880-12263-20	10B	Soluble	Solid	DI Leach	
MB 880-21308/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21308/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21308/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12263-19 MS	10A	Soluble	Solid	DI Leach	
880-12263-19 MSD	10A	Soluble	Solid	DI Leach	

Leach Batch: 21309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-1	1A	Soluble	Solid	DI Leach	
880-12263-2	1B	Soluble	Solid	DI Leach	
880-12263-3	2A	Soluble	Solid	DI Leach	
880-12263-4	2B	Soluble	Solid	DI Leach	
880-12263-5	3A	Soluble	Solid	DI Leach	
880-12263-6	3B	Soluble	Solid	DI Leach	
880-12263-7	4A	Soluble	Solid	DI Leach	
MB 880-21309/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21309/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21309/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 21310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-8	4B	Soluble	Solid	DI Leach	
880-12263-9	5A	Soluble	Solid	DI Leach	
880-12263-10	5B	Soluble	Solid	DI Leach	
880-12263-11	6A	Soluble	Solid	DI Leach	
880-12263-12	6B	Soluble	Solid	DI Leach	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 21310 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-13	7A	Soluble	Solid	DI Leach	
880-12263-14	7B	Soluble	Solid	DI Leach	
880-12263-15	8A	Soluble	Solid	DI Leach	
880-12263-16	8B	Soluble	Solid	DI Leach	
880-12263-17	9A	Soluble	Solid	DI Leach	
880-12263-18	9B	Soluble	Solid	DI Leach	
MB 880-21310/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21310/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21310/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12263-8 MS	4B	Soluble	Solid	DI Leach	
880-12263-8 MSD	4B	Soluble	Solid	DI Leach	
880-12263-18 MS	9B	Soluble	Solid	DI Leach	
880-12263-18 MSD	9B	Soluble	Solid	DI Leach	

Analysis Batch: 21542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-1	1A	Soluble	Solid	300.0	21309
880-12263-2	1B	Soluble	Solid	300.0	21309
880-12263-3	2A	Soluble	Solid	300.0	21309
880-12263-4	2B	Soluble	Solid	300.0	21309
880-12263-5	3A	Soluble	Solid	300.0	21309
880-12263-6	3B	Soluble	Solid	300.0	21309
880-12263-7	4A	Soluble	Solid	300.0	21309
MB 880-21309/1-A	Method Blank	Soluble	Solid	300.0	21309
LCS 880-21309/2-A	Lab Control Sample	Soluble	Solid	300.0	21309
LCSD 880-21309/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21309

Analysis Batch: 21949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-19	10A	Soluble	Solid	300.0	21308
880-12263-20	10B	Soluble	Solid	300.0	21308
MB 880-21308/1-A	Method Blank	Soluble	Solid	300.0	21308
LCS 880-21308/2-A	Lab Control Sample	Soluble	Solid	300.0	21308
LCSD 880-21308/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21308
880-12263-19 MS	10A	Soluble	Solid	300.0	21308
880-12263-19 MSD	10A	Soluble	Solid	300.0	21308

Analysis Batch: 21970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12263-8	4B	Soluble	Solid	300.0	21310
880-12263-9	5A	Soluble	Solid	300.0	21310
880-12263-10	5B	Soluble	Solid	300.0	21310
880-12263-11	6A	Soluble	Solid	300.0	21310
880-12263-12	6B	Soluble	Solid	300.0	21310
880-12263-13	7A	Soluble	Solid	300.0	21310
880-12263-14	7B	Soluble	Solid	300.0	21310
880-12263-15	8A	Soluble	Solid	300.0	21310
880-12263-16	8B	Soluble	Solid	300.0	21310
880-12263-17	9A	Soluble	Solid	300.0	21310
880-12263-18	9B	Soluble	Solid	300.0	21310
MB 880-21310/1-A	Method Blank	Soluble	Solid	300.0	21310

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

HPLC/IC (Continued)

Analysis Batch: 21970 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-21310/2-A	Lab Control Sample	Soluble	Solid	300.0	21310
LCSD 880-21310/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21310
880-12263-8 MS	4B	Soluble	Solid	300.0	21310
880-12263-8 MSD	4B	Soluble	Solid	300.0	21310
880-12263-18 MS	9B	Soluble	Solid	300.0	21310
880-12263-18 MSD	9B	Soluble	Solid	300.0	21310

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 1A

Date Collected: 03/08/22 11:00
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-1
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	21146	03/13/22 12:58	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21440	03/13/22 19:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 12:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21309	03/10/22 12:12	CH	XEN MID
Soluble	Analysis	300.0		1			21542	03/13/22 00:06	CH	XEN MID

Client Sample ID: 1B

Date Collected: 03/08/22 11:00
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-2
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			5.00 g	5 mL	21146	03/13/22 12:58	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21440	03/13/22 19:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 13:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21309	03/10/22 12:12	CH	XEN MID
Soluble	Analysis	300.0		1			21542	03/13/22 00:15	CH	XEN MID

Client Sample ID: 2A

Date Collected: 03/08/22 11:15
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21489	03/14/22 09:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21466	03/15/22 06:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 14:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21309	03/10/22 12:12	CH	XEN MID
Soluble	Analysis	300.0		1			21542	03/13/22 00:24	CH	XEN MID

Client Sample ID: 2B

Date Collected: 03/08/22 11:15
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21489	03/14/22 09:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21466	03/15/22 06:54	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 2B

Date Collected: 03/08/22 11:15
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 14:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21309	03/10/22 12:12	CH	XEN MID
Soluble	Analysis	300.0		1			21542	03/13/22 00:33	CH	XEN MID

Client Sample ID: 3A

Date Collected: 03/08/22 11:20
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21489	03/14/22 09:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21466	03/15/22 07:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 14:51	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21309	03/10/22 12:12	CH	XEN MID
Soluble	Analysis	300.0		1			21542	03/13/22 00:42	CH	XEN MID

Client Sample ID: 3B

Date Collected: 03/08/22 11:20
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21489	03/14/22 09:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21466	03/15/22 07:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 15:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21309	03/10/22 12:12	CH	XEN MID
Soluble	Analysis	300.0		1			21542	03/13/22 00:51	CH	XEN MID

Client Sample ID: 4A

Date Collected: 03/08/22 11:30
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-7
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	21301	03/10/22 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21616	03/15/22 17:26	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 15:33	AJ	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 4A
Date Collected: 03/08/22 11:30
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	21309	03/10/22 12:12	CH	XEN MID
Soluble	Analysis	300.0		1			21542	03/13/22 03:00	CH	XEN MID

Client Sample ID: 4B
Date Collected: 03/08/22 11:30
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-8
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	21301	03/14/22 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21616	03/15/22 17:46	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 15:54	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 17:35	CH	XEN MID

Client Sample ID: 5A
Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-9
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	21301	03/14/22 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21616	03/15/22 18:07	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21442	03/14/22 07:10	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		5			21970	03/21/22 18:01	CH	XEN MID

Client Sample ID: 5B
Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-10
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	21301	03/14/22 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21616	03/15/22 18:27	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 16:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 18:10	CH	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 6A

Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-11
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	21671	03/16/22 08:30	MR	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	21692	03/16/22 20:11	KL	XEN MID
Total/NA	Prep	5035			4.99 g	5 mL	21301	03/14/22 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21616	03/15/22 18:47	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 17:19	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 18:19	CH	XEN MID

Client Sample ID: 6B

Date Collected: 03/08/22 12:00
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-12
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	21671	03/16/22 08:30	MR	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	21692	03/16/22 20:31	KL	XEN MID
Total/NA	Prep	5035			5.01 g	5 mL	21301	03/14/22 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21616	03/15/22 19:08	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 17:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 18:28	CH	XEN MID

Client Sample ID: 7A

Date Collected: 03/08/22 12:15
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-13
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	21671	03/16/22 08:30	MR	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	21692	03/16/22 20:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 18:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 18:54	CH	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 7B
Date Collected: 03/08/22 12:15
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-14
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			5.04 g	5 mL	21653	03/15/22 12:43	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21616	03/16/22 02:17	AJ	XEN MID
Total/NA	Prep	5035			5.02 g	5 mL	21705	03/17/22 10:00	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	21801	03/17/22 17:20	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 18:22	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 19:03	CH	XEN MID

Client Sample ID: 8A
Date Collected: 03/08/22 13:00
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-15
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	21653	03/15/22 12:43	MR	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	21616	03/16/22 02:38	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 18:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		5			21970	03/21/22 19:12	CH	XEN MID

Client Sample ID: 8B
Date Collected: 03/08/22 13:00
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-16
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	21653	03/15/22 12:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21616	03/16/22 07:39	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 19:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 19:21	CH	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 9A
Date Collected: 03/08/22 13:10
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-17
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	21290	03/11/22 11:16	KL	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21615	03/16/22 06:19	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 19:25	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 19:30	CH	XEN MID

Client Sample ID: 9B
Date Collected: 03/08/22 13:10
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-18
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	21290	03/11/22 11:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21615	03/16/22 06:40	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 19:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21310	03/10/22 12:21	CH	XEN MID
Soluble	Analysis	300.0		1			21970	03/21/22 19:39	CH	XEN MID

Client Sample ID: 10A
Date Collected: 03/08/22 13:30
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-19
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	21671	03/16/22 08:30	MR	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	21692	03/16/22 21:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 20:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21308	03/10/22 12:10	CH	XEN MID
Soluble	Analysis	300.0		1			21949	03/20/22 11:42	SC	XEN MID

Client Sample ID: 10B
Date Collected: 03/08/22 13:30
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-20
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	21697	03/17/22 08:30	MR	XEN MID
Total/NA	Analysis	8021B		500	5 mL	5 mL	21774	03/17/22 16:23	KL	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Client Sample ID: 10B
Date Collected: 03/08/22 13:30
Date Received: 03/09/22 16:56

Lab Sample ID: 880-12263-20
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			5.04 g	5 mL	21696	03/16/22 09:01	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	21704	03/16/22 18:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21552	03/14/22 14:33	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21532	03/14/22 12:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21393	03/11/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21442	03/13/22 20:28	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21308	03/10/22 12:10	CH	XEN MID
Soluble	Analysis	300.0		1			21949	03/20/22 11:53	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

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

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

Sample Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hagberry 9 State COM 502Ht

Job ID: 880-12263-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12263-1	1A	Solid	03/08/22 11:00	03/09/22 16:56	0-6in
880-12263-2	1B	Solid	03/08/22 11:00	03/09/22 16:56	1 ft
880-12263-3	2A	Solid	03/08/22 11:15	03/09/22 16:56	0-6in
880-12263-4	2B	Solid	03/08/22 11:15	03/09/22 16:56	1 ft
880-12263-5	3A	Solid	03/08/22 11:20	03/09/22 16:56	0-6in
880-12263-6	3B	Solid	03/08/22 11:20	03/09/22 16:56	1 ft
880-12263-7	4A	Solid	03/08/22 11:30	03/09/22 16:56	0-6in
880-12263-8	4B	Solid	03/08/22 11:30	03/09/22 16:56	1 ft
880-12263-9	5A	Solid	03/08/22 12:00	03/09/22 16:56	0-6in
880-12263-10	5B	Solid	03/08/22 12:00	03/09/22 16:56	1 ft
880-12263-11	6A	Solid	03/08/22 12:00	03/09/22 16:56	0-6in
880-12263-12	6B	Solid	03/08/22 12:00	03/09/22 16:56	1 ft
880-12263-13	7A	Solid	03/08/22 12:15	03/09/22 16:56	0-6in
880-12263-14	7B	Solid	03/08/22 12:15	03/09/22 16:56	1 ft
880-12263-15	8A	Solid	03/08/22 13:00	03/09/22 16:56	0-6in
880-12263-16	8B	Solid	03/08/22 13:00	03/09/22 16:56	1 ft
880-12263-17	9A	Solid	03/08/22 13:10	03/09/22 16:56	0-6in
880-12263-18	9B	Solid	03/08/22 13:10	03/09/22 16:56	1 ft
880-12263-19	10A	Solid	03/08/22 13:30	03/09/22 16:56	0-6in
880-12263-20	10B	Solid	03/08/22 13:30	03/09/22 16:56	1 ft

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Chain of Custody

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

Work Order No: 12263

www.xenco.com Page 1 of 2

Steve Hoffman

Project Manager:	~~Hoffman 9 State Com 503H/503H~~	Bill to: (if different)	Centennial Resources
Company Name:	Environmental Oilfield Solutions	Company Name:	
Address:	2317 Field St Unit R	Address:	
City, State ZIP:	Odessa, TX. 79761	City, State ZIP:	
Phone:	832-646-3107 Email:	SHoffman.eos@gmail.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:	Hoffman 9 State Com 503H	Turn Around	
Project Number:		☒ Routine ☐ Rush	
Project Location:	Lea County NM	Due Date:	
Sampler's Name:	Gustavo Serrano	TAT starts the day received by the lab, if received by 4.30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	IR8	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-.1	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.1	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH	Chlorides	BTEX
1A	S	3-8-22	11:00am	0-6in	Comp			↓	↓	↓
1B			11:00am	1ft						
2A			11:15am	0-6in						
2B			11:15am	1ft						
3A			11:20am	0-6in						
3B			11:20am	1ft						
4A			11:30am	0-6in						
4B			11:30am	1ft						
5A			12:00pm	0-6in						
5B	↓	↓	12pm	1ft	↓			↓	↓	↓

880-12263 Chain of Custody

Preservative Codes

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Gustavo Serrano		3/9/22 16:56	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

3/22/2022

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Chain of Custody

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

Work Order No: 12263

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Project Manager:	Steve Hoffman	Bill to: (if different)	Centennial Resources
Company Name:	Environmental Oilfield Solutions	Company Name:	
Address:	2317 Field St. Unit R	Address:	
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	
Phone:	832-444-3107	Email:	SHoffman.eos@gmail.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:	Highberry 9 State Com 502H	Turn Around	
Project Number:		☒ Routine ☐ Rush	
Project Location:	LE County NM.	Due Date:	
Sampler's Name:	Gustavo Serrano	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	IR8	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.3	
Total Containers:		Corrected Temperature:	5.1	

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: T PH	Chlorides	BTEX	Sample Comments
6A	S	12pm	3-8-22	0-6in	Comp						
6B		12pm		1ft							
7A		12:15pm		0-6in							
7B		12:15pm		1ft							
8A		1pm		0-6in							
8B		1pm		1ft							
9A		1:10pm		0-6in							
9B		1:10pm		1ft							
10A		1:30pm		0-6in							
10B	↓	1:30pm	↓	1ft	↓			↓	↓	↓	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Gustavo Serrano		3/9/22 16:50	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Login Sample Receipt Checklist

Client: Environmental Oilfield Solutions, LLC

Job Number: 880-12263-1
SDG Number: Lea County, NM

Login Number: 12263
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-14529-1
Client Project/Site: Hayberry

For:
Environmental Oilfield Solutions, LLC
2317 Field St.
Unit R
Odessa, Texas 79761

Attn: Steve Hoffman

Authorized for release by:
5/18/2022 5:55:23 PM
John Builes, Project Manager
(561)558-4549
John.Builes@et.eurofinsus.com

Designee for

Holly Taylor, Project Manager
(806)794-1296
Holly.Taylor@et.eurofinsus.com

LINKS

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

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

Table of Contents

Definitions/Glossary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Job ID: 880-14529-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-14529-1

Receipt
The samples were received on 5/9/2022 10:50 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 5.3°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
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: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 1 6in

Lab Sample ID: 880-14529-1
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 17:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 17:53	1
Ethylbenzene	0.00376		0.00199	mg/Kg		05/14/22 12:45	05/14/22 17:53	1
m,p-Xylenes	0.00724		0.00398	mg/Kg		05/14/22 12:45	05/14/22 17:53	1
o-Xylene	0.00806		0.00199	mg/Kg		05/14/22 12:45	05/14/22 17:53	1
Xylenes, Total	0.0153		0.00398	mg/Kg		05/14/22 12:45	05/14/22 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*05/14/22 12:45*	*05/14/22 17:53*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/14/22 12:45*	*05/14/22 17:53*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0191		0.00398	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.6		50.0	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 13:54	1
Diesel Range Organics (Over C10-C28)	51.6		50.0	mg/Kg		05/10/22 08:21	05/10/22 13:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*05/10/22 08:21*	*05/10/22 13:54*	*1*
o-Terphenyl (Surr)	*99*		*70 - 130*	*05/10/22 08:21*	*05/10/22 13:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	198		24.9	mg/Kg			05/12/22 23:25	5

Client Sample ID: 1 4ft

Lab Sample ID: 880-14529-2
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 18:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 18:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 18:14	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		05/14/22 12:45	05/14/22 18:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 18:14	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/14/22 12:45	05/14/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*05/14/22 12:45*	*05/14/22 18:14*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 1 4ft

Lab Sample ID: 880-14529-2
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	05/14/22 12:45	05/14/22 18:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 12:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 12:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	95		70 - 130	05/10/22 08:21	05/10/22 12:49	1
o-Terphenyl (Surr)	95		70 - 130	05/10/22 08:21	05/10/22 12:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.7		4.99	mg/Kg			05/12/22 23:33	1

Client Sample ID: 2 6in

Lab Sample ID: 880-14529-3
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/14/22 18:34	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/14/22 18:34	1
Ethylbenzene	0.0147		0.00198	mg/Kg		05/14/22 12:45	05/14/22 18:34	1
m,p-Xylenes	0.0298		0.00397	mg/Kg		05/14/22 12:45	05/14/22 18:34	1
o-Xylene	0.0310		0.00198	mg/Kg		05/14/22 12:45	05/14/22 18:34	1
Xylenes, Total	0.0608		0.00397	mg/Kg		05/14/22 12:45	05/14/22 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	05/14/22 12:45	05/14/22 18:34	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/14/22 12:45	05/14/22 18:34	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0755		0.00397	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	565		50.0	mg/Kg			05/11/22 11:43	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 2 6in

Lab Sample ID: 880-14529-3
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 14:16	1
Diesel Range Organics (Over C10-C28)	565		50.0	mg/Kg		05/10/22 08:21	05/10/22 14:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 14:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130	05/10/22 08:21	05/10/22 14:16	1
o-Terphenyl (Surr)	104		70 - 130	05/10/22 08:21	05/10/22 14:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	161		4.95	mg/Kg			05/12/22 23:58	1

Client Sample ID: 2 4ft

Lab Sample ID: 880-14529-4
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:45	05/14/22 18:55	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:45	05/14/22 18:55	1
Ethylbenzene	0.00452		0.00201	mg/Kg		05/14/22 12:45	05/14/22 18:55	1
m,p-Xylenes	0.00896		0.00402	mg/Kg		05/14/22 12:45	05/14/22 18:55	1
o-Xylene	0.0110		0.00201	mg/Kg		05/14/22 12:45	05/14/22 18:55	1
Xylenes, Total	0.0200		0.00402	mg/Kg		05/14/22 12:45	05/14/22 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/14/22 12:45	05/14/22 18:55	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/14/22 12:45	05/14/22 18:55	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0245		0.00402	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	130		50.0	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 14:37	1
Diesel Range Organics (Over C10-C28)	130		50.0	mg/Kg		05/10/22 08:21	05/10/22 14:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 14:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	112		70 - 130	05/10/22 08:21	05/10/22 14:37	1
o-Terphenyl (Surr)	109		70 - 130	05/10/22 08:21	05/10/22 14:37	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 2 4ft

Lab Sample ID: 880-14529-4
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69.5		4.97	mg/Kg			05/13/22 00:06	1

Client Sample ID: 3 6in

Lab Sample ID: 880-14529-5
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:45	05/14/22 19:15	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:45	05/14/22 19:15	1
Ethylbenzene	0.00218		0.00202	mg/Kg		05/14/22 12:45	05/14/22 19:15	1
m,p-Xylenes	<0.00403	U	0.00403	mg/Kg		05/14/22 12:45	05/14/22 19:15	1
o-Xylene	0.00305		0.00202	mg/Kg		05/14/22 12:45	05/14/22 19:15	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/14/22 12:45	05/14/22 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*05/14/22 12:45*	*05/14/22 19:15*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/14/22 12:45*	*05/14/22 19:15*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00523		0.00403	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 14:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 14:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*105*		*70 - 130*	*05/10/22 08:21*	*05/10/22 14:59*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*05/10/22 08:21*	*05/10/22 14:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.7		4.95	mg/Kg			05/13/22 00:14	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 3 4ft

Lab Sample ID: 880-14529-6
Matrix: Solid
Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:45	05/14/22 19:36	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:45	05/14/22 19:36	1
Ethylbenzene	0.00365		0.00201	mg/Kg		05/14/22 12:45	05/14/22 19:36	1
m,p-Xylenes	0.00807		0.00402	mg/Kg		05/14/22 12:45	05/14/22 19:36	1
o-Xylene	0.00916		0.00201	mg/Kg		05/14/22 12:45	05/14/22 19:36	1
Xylenes, Total	0.0172		0.00402	mg/Kg		05/14/22 12:45	05/14/22 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*05/14/22 12:45*	*05/14/22 19:36*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/14/22 12:45*	*05/14/22 19:36*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0209		0.00402	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 15:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 15:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*106*		*70 - 130*	*05/10/22 08:21*	*05/10/22 15:21*	*1*
o-Terphenyl (Surr)	*105*		*70 - 130*	*05/10/22 08:21*	*05/10/22 15:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.2		5.00	mg/Kg			05/13/22 00:22	1

Client Sample ID: 4 6in

Lab Sample ID: 880-14529-7
Matrix: Solid
Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 19:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 19:56	1
Ethylbenzene	0.00454		0.00200	mg/Kg		05/14/22 12:45	05/14/22 19:56	1
m,p-Xylenes	0.00992		0.00400	mg/Kg		05/14/22 12:45	05/14/22 19:56	1
o-Xylene	0.0116		0.00200	mg/Kg		05/14/22 12:45	05/14/22 19:56	1
Xylenes, Total	0.0215		0.00400	mg/Kg		05/14/22 12:45	05/14/22 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*05/14/22 12:45*	*05/14/22 19:56*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 4 6in

Lab Sample ID: 880-14529-7
Matrix: Solid

Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50
Sample Depth: 6"

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/14/22 12:45*	*05/14/22 19:56*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0261		0.00400	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	87.0		49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 15:43	1
Diesel Range Organics (Over C10-C28)	87.0		49.9	mg/Kg		05/10/22 08:21	05/10/22 15:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 15:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	*99*		*70 - 130*	*05/10/22 08:21*	*05/10/22 15:43*	*1*
o-Terphenyl (Surr)	*98*		*70 - 130*	*05/10/22 08:21*	*05/10/22 15:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.0		4.99	mg/Kg			05/13/22 00:31	1

Client Sample ID: 4 4ft

Lab Sample ID: 880-14529-8
Matrix: Solid

Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 20:17	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 20:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 20:17	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/14/22 12:45	05/14/22 20:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 20:17	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:45	05/14/22 20:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*05/14/22 12:45*	*05/14/22 20:17*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/14/22 12:45*	*05/14/22 20:17*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			05/11/22 11:43	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 4 4ft

Lab Sample ID: 880-14529-8
Matrix: Solid

Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 16:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 16:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*93*		*70 - 130*	*05/10/22 08:21*	*05/10/22 16:05*	*1*
o-Terphenyl (Surr)	*89*		*70 - 130*	*05/10/22 08:21*	*05/10/22 16:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.1		4.96	mg/Kg			05/13/22 00:39	1

Client Sample ID: 5 6in

Lab Sample ID: 880-14529-9
Matrix: Solid

Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/14/22 20:37	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/14/22 20:37	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/14/22 20:37	1
m,p-Xylenes	<0.00397	U	0.00397	mg/Kg		05/14/22 12:45	05/14/22 20:37	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/14/22 20:37	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/14/22 12:45	05/14/22 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*05/14/22 12:45*	*05/14/22 20:37*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/14/22 12:45*	*05/14/22 20:37*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	57.7		49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 16:26	1
Diesel Range Organics (Over C10-C28)	57.7		49.9	mg/Kg		05/10/22 08:21	05/10/22 16:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*100*		*70 - 130*	*05/10/22 08:21*	*05/10/22 16:26*	*1*
o-Terphenyl (Surr)	*98*		*70 - 130*	*05/10/22 08:21*	*05/10/22 16:26*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 5 6in

Lab Sample ID: 880-14529-9
Matrix: Solid

Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.4		5.00	mg/Kg			05/13/22 01:03	1

Client Sample ID: 5 4ft

Lab Sample ID: 880-14529-10
Matrix: Solid

Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 20:57	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 20:57	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 20:57	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/14/22 12:45	05/14/22 20:57	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 20:57	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:45	05/14/22 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*05/14/22 12:45*	*05/14/22 20:57*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/14/22 12:45*	*05/14/22 20:57*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 16:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 16:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*105*		*70 - 130*	*05/10/22 08:21*	*05/10/22 16:49*	*1*
o-Terphenyl (Surr)	*104*		*70 - 130*	*05/10/22 08:21*	*05/10/22 16:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.9		4.95	mg/Kg			05/13/22 01:11	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 6 6in

Lab Sample ID: 880-14529-11
Matrix: Solid
Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 22:48	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 22:48	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 22:48	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/14/22 12:45	05/14/22 22:48	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/14/22 22:48	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:45	05/14/22 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*05/14/22 12:45*	*05/14/22 22:48*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/14/22 12:45*	*05/14/22 22:48*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 17:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 17:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*108*		*70 - 130*	*05/10/22 08:21*	*05/10/22 17:32*	*1*
o-Terphenyl (Surr)	*112*		*70 - 130*	*05/10/22 08:21*	*05/10/22 17:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.8		4.97	mg/Kg			05/13/22 01:36	1

Client Sample ID: 6 4ft

Lab Sample ID: 880-14529-12
Matrix: Solid
Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 23:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 23:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 23:09	1
m,p-Xylenes	<0.00401	U	0.00401	mg/Kg		05/14/22 12:45	05/14/22 23:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 23:09	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/14/22 12:45	05/14/22 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*05/14/22 12:45*	*05/14/22 23:09*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 6 4ft

Lab Sample ID: 880-14529-12
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/14/22 12:45*	*05/14/22 23:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 17:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 17:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	*110*		*70 - 130*	*05/10/22 08:21*	*05/10/22 17:54*	*1*
o-Terphenyl (Surr)	*112*		*70 - 130*	*05/10/22 08:21*	*05/10/22 17:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.2		5.01	mg/Kg			05/13/22 01:44	1

Client Sample ID: 7 6in

Lab Sample ID: 880-14529-13
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 23:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 23:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 23:29	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		05/14/22 12:45	05/14/22 23:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 23:29	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/14/22 12:45	05/14/22 23:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*05/14/22 12:45*	*05/14/22 23:29*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*05/14/22 12:45*	*05/14/22 23:29*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 11:43	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 7 6in

Lab Sample ID: 880-14529-13
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 18:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 18:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*109*		*70 - 130*	*05/10/22 08:21*	*05/10/22 18:15*	*1*
o-Terphenyl (Surr)	*104*		*70 - 130*	*05/10/22 08:21*	*05/10/22 18:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.8		4.99	mg/Kg			05/13/22 08:13	1

Client Sample ID: 7 4ft

Lab Sample ID: 880-14529-14
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:45	05/14/22 23:50	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:45	05/14/22 23:50	1
Ethylbenzene	0.00245		0.00201	mg/Kg		05/14/22 12:45	05/14/22 23:50	1
m,p-Xylenes	0.00598		0.00402	mg/Kg		05/14/22 12:45	05/14/22 23:50	1
o-Xylene	0.00881		0.00201	mg/Kg		05/14/22 12:45	05/14/22 23:50	1
Xylenes, Total	0.0148		0.00402	mg/Kg		05/14/22 12:45	05/14/22 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*05/14/22 12:45*	*05/14/22 23:50*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*05/14/22 12:45*	*05/14/22 23:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0172		0.00402	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	102		49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 18:37	1
Diesel Range Organics (Over C10-C28)	102		49.9	mg/Kg		05/10/22 08:21	05/10/22 18:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*107*		*70 - 130*	*05/10/22 08:21*	*05/10/22 18:37*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*05/10/22 08:21*	*05/10/22 18:37*	*1*

Eurofins Midland

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 7 4ft

Lab Sample ID: 880-14529-14
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.7		5.05	mg/Kg			05/13/22 08:21	1

Client Sample ID: 8 6in

Lab Sample ID: 880-14529-15
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/15/22 00:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/15/22 00:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/15/22 00:10	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		05/14/22 12:45	05/15/22 00:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/15/22 00:10	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/14/22 12:45	05/15/22 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*05/14/22 12:45*	*05/15/22 00:10*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*05/14/22 12:45*	*05/15/22 00:10*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 18:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 18:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*104*		*70 - 130*	*05/10/22 08:21*	*05/10/22 18:58*	*1*
o-Terphenyl (Surr)	*101*		*70 - 130*	*05/10/22 08:21*	*05/10/22 18:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.6		4.97	mg/Kg			05/13/22 01:55	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 8 4ft

Lab Sample ID: 880-14529-16
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/15/22 00:30	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/15/22 00:30	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/15/22 00:30	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/14/22 12:45	05/15/22 00:30	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:45	05/15/22 00:30	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:45	05/15/22 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*05/14/22 12:45*	*05/15/22 00:30*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/14/22 12:45*	*05/15/22 00:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		05/10/22 08:21	05/10/22 19:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/10/22 08:21	05/10/22 19:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/10/22 08:21	05/10/22 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*77*		*70 - 130*	*05/10/22 08:21*	*05/10/22 19:20*	*1*
o-Terphenyl (Surr)	*74*		*70 - 130*	*05/10/22 08:21*	*05/10/22 19:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.2		4.95	mg/Kg			05/13/22 02:03	1

Client Sample ID: 9 6in

Lab Sample ID: 880-14529-17
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/15/22 00:51	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/15/22 00:51	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/15/22 00:51	1
m,p-Xylenes	<0.00397	U	0.00397	mg/Kg		05/14/22 12:45	05/15/22 00:51	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:45	05/15/22 00:51	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/14/22 12:45	05/15/22 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*05/14/22 12:45*	*05/15/22 00:51*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 9 6in

Lab Sample ID: 880-14529-17
Matrix: Solid

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50
Sample Depth: 6"

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/14/22 12:45*	*05/15/22 00:51*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 19:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 19:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	*104*		*70 - 130*	*05/10/22 08:21*	*05/10/22 19:41*	*1*
o-Terphenyl (Surr)	*103*		*70 - 130*	*05/10/22 08:21*	*05/10/22 19:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.7		4.99	mg/Kg			05/13/22 02:11	1

Client Sample ID: 9 4ft

Lab Sample ID: 880-14529-18
Matrix: Solid

Date Collected: 05/06/22 17:00
Date Received: 05/09/22 10:50
Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/15/22 01:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/15/22 01:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/15/22 01:11	1
m,p-Xylenes	<0.00401	U	0.00401	mg/Kg		05/14/22 12:45	05/15/22 01:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/15/22 01:11	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/14/22 12:45	05/15/22 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*05/14/22 12:45*	*05/15/22 01:11*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/14/22 12:45*	*05/15/22 01:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			05/11/22 11:43	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 9 4ft

Lab Sample ID: 880-14529-18
Matrix: Solid

Date Collected: 05/06/22 17:00
Date Received: 05/09/22 10:50
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 20:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 20:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*05/10/22 08:21*	*05/10/22 20:02*	*1*
o-Terphenyl (Surr)	*97*		*70 - 130*	*05/10/22 08:21*	*05/10/22 20:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.8		4.98	mg/Kg			05/17/22 16:46	1

Client Sample ID: 10 6in

Lab Sample ID: 880-14529-19
Matrix: Solid

Date Collected: 05/06/22 17:00
Date Received: 05/09/22 10:50
Sample Depth: 6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:45	05/15/22 01:32	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:45	05/15/22 01:32	1
Ethylbenzene	0.00209		0.00202	mg/Kg		05/14/22 12:45	05/15/22 01:32	1
m,p-Xylenes	<0.00403	U	0.00403	mg/Kg		05/14/22 12:45	05/15/22 01:32	1
o-Xylene	0.00690		0.00202	mg/Kg		05/14/22 12:45	05/15/22 01:32	1
Xylenes, Total	0.00690		0.00403	mg/Kg		05/14/22 12:45	05/15/22 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*05/14/22 12:45*	*05/15/22 01:32*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/14/22 12:45*	*05/15/22 01:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00899		0.00403	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 20:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 20:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:21	05/10/22 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*98*		*70 - 130*	*05/10/22 08:21*	*05/10/22 20:24*	*1*
o-Terphenyl (Surr)	*96*		*70 - 130*	*05/10/22 08:21*	*05/10/22 20:24*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 10 6in

Date Collected: 05/06/22 17:00
Date Received: 05/09/22 10:50
Sample Depth: 6"

Lab Sample ID: 880-14529-19
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.5		4.95	mg/Kg			05/17/22 16:55	1

Client Sample ID: 10 4ft

Date Collected: 05/06/22 17:00
Date Received: 05/09/22 10:50
Sample Depth: 4'

Lab Sample ID: 880-14529-20
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:45	05/15/22 01:52	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:45	05/15/22 01:52	1
Ethylbenzene	0.00327		0.00201	mg/Kg		05/14/22 12:45	05/15/22 01:52	1
m,p-Xylenes	0.00650		0.00402	mg/Kg		05/14/22 12:45	05/15/22 01:52	1
o-Xylene	0.0106		0.00201	mg/Kg		05/14/22 12:45	05/15/22 01:52	1
Xylenes, Total	0.0171		0.00402	mg/Kg		05/14/22 12:45	05/15/22 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*05/14/22 12:45*	*05/15/22 01:52*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/14/22 12:45*	*05/15/22 01:52*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0204		0.00402	mg/Kg			05/16/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.1		50.0	mg/Kg			05/11/22 11:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 20:45	1
Diesel Range Organics (Over C10-C28)	55.1		50.0	mg/Kg		05/10/22 08:21	05/10/22 20:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*103*		*70 - 130*	*05/10/22 08:21*	*05/10/22 20:45*	*1*
o-Terphenyl (Surr)	*102*		*70 - 130*	*05/10/22 08:21*	*05/10/22 20:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.1		4.97	mg/Kg			05/17/22 17:04	1

Surrogate Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Method: 8021B - Volatile Organic Compounds (GC)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
880-14529-1	1 6in	112	99
880-14529-1 MS	1 6in	104	100
880-14529-1 MSD	1 6in	104	99
880-14529-2	1 4ft	111	92
880-14529-3	2 6in	112	94
880-14529-4	2 4ft	113	100
880-14529-5	3 6in	115	94
880-14529-6	3 4ft	110	97
880-14529-7	4 6in	112	98
880-14529-8	4 4ft	111	99
880-14529-9	5 6in	109	97
880-14529-10	5 4ft	113	99
880-14529-11	6 6in	110	99
880-14529-12	6 4ft	104	96
880-14529-13	7 6in	114	91
880-14529-14	7 4ft	106	92
880-14529-15	8 6in	111	92
880-14529-16	8 4ft	108	96
880-14529-17	9 6in	115	94
880-14529-18	9 4ft	110	96
880-14529-19	10 6in	108	94
880-14529-20	10 4ft	105	93
LCS 880-25565/1-A	Lab Control Sample	104	99
LCSD 880-25565/2-A	Lab Control Sample Dup	107	101
MB 880-25565/5-A	Method Blank	98	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**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
880-14529-1	1 6in	102	99
880-14529-2	1 4ft	95	95
880-14529-2 MS	1 4ft	101	86
880-14529-2 MSD	1 4ft	110	98
880-14529-3	2 6in	108	104
880-14529-4	2 4ft	112	109
880-14529-5	3 6in	105	100
880-14529-6	3 4ft	106	105
880-14529-7	4 6in	99	98
880-14529-8	4 4ft	93	89
880-14529-9	5 6in	100	98
880-14529-10	5 4ft	105	104
880-14529-11	6 6in	108	112
880-14529-12	6 4ft	110	112

Surrogate Summary

Client: Environmental Oilfield Solutions, LLC Job ID: 880-14529-1
Project/Site: Hayberry

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-14529-13	7 6in	109	104
880-14529-14	7 4ft	107	100
880-14529-15	8 6in	104	101
880-14529-16	8 4ft	77	74
880-14529-17	9 6in	104	103
880-14529-18	9 4ft	99	97
880-14529-19	10 6in	98	96
880-14529-20	10 4ft	103	102
LCS 880-25222/2-A	Lab Control Sample	109	92
LCSD 880-25222/3-A	Lab Control Sample Dup	109	93
MB 880-25222/1-A	Method Blank	100	102

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25565/5-A
Matrix: Solid
Analysis Batch: 25560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 25565

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 17:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 17:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 17:24	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		05/14/22 12:45	05/14/22 17:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:45	05/14/22 17:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/14/22 12:45	05/14/22 17:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/14/22 12:45*	*05/14/22 17:24*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/14/22 12:45*	*05/14/22 17:24*	*1*

Lab Sample ID: LCS 880-25565/1-A
Matrix: Solid
Analysis Batch: 25560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 25565

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08034		mg/Kg		80	70 - 130
Toluene	0.100	0.08030		mg/Kg		80	70 - 130
Ethylbenzene	0.100	0.08350		mg/Kg		84	70 - 130
m,p-Xylenes	0.200	0.1723		mg/Kg		86	70 - 130
o-Xylene	0.100	0.09506		mg/Kg		95	70 - 130

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

Lab Sample ID: LCSD 880-25565/2-A
Matrix: Solid
Analysis Batch: 25560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 25565

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08575		mg/Kg		86	70 - 130	7	35
Toluene	0.100	0.08529		mg/Kg		85	70 - 130	6	35
Ethylbenzene	0.100	0.08749		mg/Kg		87	70 - 130	5	35
m,p-Xylenes	0.200	0.1815		mg/Kg		91	70 - 130	5	35
o-Xylene	0.100	0.1018		mg/Kg		102	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-14529-1 MS
Matrix: Solid
Analysis Batch: 25560

Client Sample ID: 1 6in
Prep Type: Total/NA
Prep Batch: 25565

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0992	0.1006		mg/Kg		101	70 - 130
Toluene	<0.00199	U	0.0992	0.09827		mg/Kg		99	70 - 130

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

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

Lab Sample ID: 880-14529-1 MS
Matrix: Solid
Analysis Batch: 25560

Client Sample ID: 1 6in
Prep Type: Total/NA
Prep Batch: 25565

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.00376		0.0992	0.1007		mg/Kg		98	70 - 130
m,p-Xylenes	0.00724		0.198	0.2082		mg/Kg		101	70 - 130
o-Xylene	0.00806		0.0992	0.1116		mg/Kg		104	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-14529-1 MSD
Matrix: Solid
Analysis Batch: 25560

Client Sample ID: 1 6in
Prep Type: Total/NA
Prep Batch: 25565

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1001		mg/Kg		100	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.09753		mg/Kg		97	70 - 130	1	35
Ethylbenzene	0.00376		0.100	0.1005		mg/Kg		97	70 - 130	0	35
m,p-Xylenes	0.00724		0.200	0.2053		mg/Kg		99	70 - 130	1	35
o-Xylene	0.00806		0.100	0.1104		mg/Kg		102	70 - 130	1	35

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

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

Lab Sample ID: MB 880-25222/1-A
Matrix: Solid
Analysis Batch: 25233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 25222

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 11:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 11:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:21	05/10/22 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*100*		*70 - 130*	*05/10/22 08:21*	*05/10/22 11:44*	*1*
o-Terphenyl (Surr)	*102*		*70 - 130*	*05/10/22 08:21*	*05/10/22 11:44*	*1*

Lab Sample ID: LCS 880-25222/2-A
Matrix: Solid
Analysis Batch: 25233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 25222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	969.3		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	980.1		mg/Kg		98	70 - 130

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

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

Lab Sample ID: LCS 880-25222/2-A
Matrix: Solid
Analysis Batch: 25233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 25222

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	109		70 - 130
o-Terphenyl (Surr)	92		70 - 130

Lab Sample ID: LCSD 880-25222/3-A
Matrix: Solid
Analysis Batch: 25233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 25222

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	947.5		mg/Kg		95	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	980.1		mg/Kg		98	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	109		70 - 130
o-Terphenyl (Surr)	93		70 - 130

Lab Sample ID: 880-14529-2 MS
Matrix: Solid
Analysis Batch: 25233

Client Sample ID: 1 4ft
Prep Type: Total/NA
Prep Batch: 25222

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	1000	849.0		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	980.8		mg/Kg		95	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	101		70 - 130
o-Terphenyl (Surr)	86		70 - 130

Lab Sample ID: 880-14529-2 MSD
Matrix: Solid
Analysis Batch: 25233

Client Sample ID: 1 4ft
Prep Type: Total/NA
Prep Batch: 25222

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	998	1030		mg/Kg		101	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1147		mg/Kg		112	70 - 130	16	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	110		70 - 130
o-Terphenyl (Surr)	98		70 - 130

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25208/1-A
Matrix: Solid
Analysis Batch: 25485

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/12/22 22:19	1

Lab Sample ID: LCS 880-25208/2-A
Matrix: Solid
Analysis Batch: 25485

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	262.0		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-25208/3-A
Matrix: Solid
Analysis Batch: 25485

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	262.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 880-14529-8 MS
Matrix: Solid
Analysis Batch: 25485

Client Sample ID: 4 4ft
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	74.1		248	324.7		mg/Kg		101	90 - 110

Lab Sample ID: 880-14529-8 MSD
Matrix: Solid
Analysis Batch: 25485

Client Sample ID: 4 4ft
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	74.1		248	324.2		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-25469/1-A
Matrix: Solid
Analysis Batch: 25677

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/17/22 11:54	1

Lab Sample ID: LCS 880-25469/2-A
Matrix: Solid
Analysis Batch: 25677

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	239.4		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-25469/3-A
Matrix: Solid
Analysis Batch: 25677

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	239.4		mg/Kg		96	90 - 110	0	20

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

GC VOA

Analysis Batch: 25560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1	1 6in	Total/NA	Solid	8021B	25565
880-14529-2	1 4ft	Total/NA	Solid	8021B	25565
880-14529-3	2 6in	Total/NA	Solid	8021B	25565
880-14529-4	2 4ft	Total/NA	Solid	8021B	25565
880-14529-5	3 6in	Total/NA	Solid	8021B	25565
880-14529-6	3 4ft	Total/NA	Solid	8021B	25565
880-14529-7	4 6in	Total/NA	Solid	8021B	25565
880-14529-8	4 4ft	Total/NA	Solid	8021B	25565
880-14529-9	5 6in	Total/NA	Solid	8021B	25565
880-14529-10	5 4ft	Total/NA	Solid	8021B	25565
880-14529-11	6 6in	Total/NA	Solid	8021B	25565
880-14529-12	6 4ft	Total/NA	Solid	8021B	25565
880-14529-13	7 6in	Total/NA	Solid	8021B	25565
880-14529-14	7 4ft	Total/NA	Solid	8021B	25565
880-14529-15	8 6in	Total/NA	Solid	8021B	25565
880-14529-16	8 4ft	Total/NA	Solid	8021B	25565
880-14529-17	9 6in	Total/NA	Solid	8021B	25565
880-14529-18	9 4ft	Total/NA	Solid	8021B	25565
880-14529-19	10 6in	Total/NA	Solid	8021B	25565
880-14529-20	10 4ft	Total/NA	Solid	8021B	25565
MB 880-25565/5-A	Method Blank	Total/NA	Solid	8021B	25565
LCS 880-25565/1-A	Lab Control Sample	Total/NA	Solid	8021B	25565
LCSD 880-25565/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25565
880-14529-1 MS	1 6in	Total/NA	Solid	8021B	25565
880-14529-1 MSD	1 6in	Total/NA	Solid	8021B	25565

Prep Batch: 25565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1	1 6in	Total/NA	Solid	5035	
880-14529-2	1 4ft	Total/NA	Solid	5035	
880-14529-3	2 6in	Total/NA	Solid	5035	
880-14529-4	2 4ft	Total/NA	Solid	5035	
880-14529-5	3 6in	Total/NA	Solid	5035	
880-14529-6	3 4ft	Total/NA	Solid	5035	
880-14529-7	4 6in	Total/NA	Solid	5035	
880-14529-8	4 4ft	Total/NA	Solid	5035	
880-14529-9	5 6in	Total/NA	Solid	5035	
880-14529-10	5 4ft	Total/NA	Solid	5035	
880-14529-11	6 6in	Total/NA	Solid	5035	
880-14529-12	6 4ft	Total/NA	Solid	5035	
880-14529-13	7 6in	Total/NA	Solid	5035	
880-14529-14	7 4ft	Total/NA	Solid	5035	
880-14529-15	8 6in	Total/NA	Solid	5035	
880-14529-16	8 4ft	Total/NA	Solid	5035	
880-14529-17	9 6in	Total/NA	Solid	5035	
880-14529-18	9 4ft	Total/NA	Solid	5035	
880-14529-19	10 6in	Total/NA	Solid	5035	
880-14529-20	10 4ft	Total/NA	Solid	5035	
MB 880-25565/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25565/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25565/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

GC VOA (Continued)

Prep Batch: 25565 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1 MS	1 6in	Total/NA	Solid	5035	
880-14529-1 MSD	1 6in	Total/NA	Solid	5035	

Analysis Batch: 25596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1	1 6in	Total/NA	Solid	Total BTEX	
880-14529-2	1 4ft	Total/NA	Solid	Total BTEX	
880-14529-3	2 6in	Total/NA	Solid	Total BTEX	
880-14529-4	2 4ft	Total/NA	Solid	Total BTEX	
880-14529-5	3 6in	Total/NA	Solid	Total BTEX	
880-14529-6	3 4ft	Total/NA	Solid	Total BTEX	
880-14529-7	4 6in	Total/NA	Solid	Total BTEX	
880-14529-8	4 4ft	Total/NA	Solid	Total BTEX	
880-14529-9	5 6in	Total/NA	Solid	Total BTEX	
880-14529-10	5 4ft	Total/NA	Solid	Total BTEX	
880-14529-11	6 6in	Total/NA	Solid	Total BTEX	
880-14529-12	6 4ft	Total/NA	Solid	Total BTEX	
880-14529-13	7 6in	Total/NA	Solid	Total BTEX	
880-14529-14	7 4ft	Total/NA	Solid	Total BTEX	
880-14529-15	8 6in	Total/NA	Solid	Total BTEX	
880-14529-16	8 4ft	Total/NA	Solid	Total BTEX	
880-14529-17	9 6in	Total/NA	Solid	Total BTEX	
880-14529-18	9 4ft	Total/NA	Solid	Total BTEX	
880-14529-19	10 6in	Total/NA	Solid	Total BTEX	
880-14529-20	10 4ft	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 25222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1	1 6in	Total/NA	Solid	8015NM Prep	
880-14529-2	1 4ft	Total/NA	Solid	8015NM Prep	
880-14529-3	2 6in	Total/NA	Solid	8015NM Prep	
880-14529-4	2 4ft	Total/NA	Solid	8015NM Prep	
880-14529-5	3 6in	Total/NA	Solid	8015NM Prep	
880-14529-6	3 4ft	Total/NA	Solid	8015NM Prep	
880-14529-7	4 6in	Total/NA	Solid	8015NM Prep	
880-14529-8	4 4ft	Total/NA	Solid	8015NM Prep	
880-14529-9	5 6in	Total/NA	Solid	8015NM Prep	
880-14529-10	5 4ft	Total/NA	Solid	8015NM Prep	
880-14529-11	6 6in	Total/NA	Solid	8015NM Prep	
880-14529-12	6 4ft	Total/NA	Solid	8015NM Prep	
880-14529-13	7 6in	Total/NA	Solid	8015NM Prep	
880-14529-14	7 4ft	Total/NA	Solid	8015NM Prep	
880-14529-15	8 6in	Total/NA	Solid	8015NM Prep	
880-14529-16	8 4ft	Total/NA	Solid	8015NM Prep	
880-14529-17	9 6in	Total/NA	Solid	8015NM Prep	
880-14529-18	9 4ft	Total/NA	Solid	8015NM Prep	
880-14529-19	10 6in	Total/NA	Solid	8015NM Prep	
880-14529-20	10 4ft	Total/NA	Solid	8015NM Prep	
MB 880-25222/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

GC Semi VOA (Continued)

Prep Batch: 25222 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-25222/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25222/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14529-2 MS	1 4ft	Total/NA	Solid	8015NM Prep	
880-14529-2 MSD	1 4ft	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1	1 6in	Total/NA	Solid	8015B NM	25222
880-14529-2	1 4ft	Total/NA	Solid	8015B NM	25222
880-14529-3	2 6in	Total/NA	Solid	8015B NM	25222
880-14529-4	2 4ft	Total/NA	Solid	8015B NM	25222
880-14529-5	3 6in	Total/NA	Solid	8015B NM	25222
880-14529-6	3 4ft	Total/NA	Solid	8015B NM	25222
880-14529-7	4 6in	Total/NA	Solid	8015B NM	25222
880-14529-8	4 4ft	Total/NA	Solid	8015B NM	25222
880-14529-9	5 6in	Total/NA	Solid	8015B NM	25222
880-14529-10	5 4ft	Total/NA	Solid	8015B NM	25222
880-14529-11	6 6in	Total/NA	Solid	8015B NM	25222
880-14529-12	6 4ft	Total/NA	Solid	8015B NM	25222
880-14529-13	7 6in	Total/NA	Solid	8015B NM	25222
880-14529-14	7 4ft	Total/NA	Solid	8015B NM	25222
880-14529-15	8 6in	Total/NA	Solid	8015B NM	25222
880-14529-16	8 4ft	Total/NA	Solid	8015B NM	25222
880-14529-17	9 6in	Total/NA	Solid	8015B NM	25222
880-14529-18	9 4ft	Total/NA	Solid	8015B NM	25222
880-14529-19	10 6in	Total/NA	Solid	8015B NM	25222
880-14529-20	10 4ft	Total/NA	Solid	8015B NM	25222
MB 880-25222/1-A	Method Blank	Total/NA	Solid	8015B NM	25222
LCS 880-25222/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25222
LCSD 880-25222/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25222
880-14529-2 MS	1 4ft	Total/NA	Solid	8015B NM	25222
880-14529-2 MSD	1 4ft	Total/NA	Solid	8015B NM	25222

Analysis Batch: 25352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1	1 6in	Total/NA	Solid	8015 NM	
880-14529-2	1 4ft	Total/NA	Solid	8015 NM	
880-14529-3	2 6in	Total/NA	Solid	8015 NM	
880-14529-4	2 4ft	Total/NA	Solid	8015 NM	
880-14529-5	3 6in	Total/NA	Solid	8015 NM	
880-14529-6	3 4ft	Total/NA	Solid	8015 NM	
880-14529-7	4 6in	Total/NA	Solid	8015 NM	
880-14529-8	4 4ft	Total/NA	Solid	8015 NM	
880-14529-9	5 6in	Total/NA	Solid	8015 NM	
880-14529-10	5 4ft	Total/NA	Solid	8015 NM	
880-14529-11	6 6in	Total/NA	Solid	8015 NM	
880-14529-12	6 4ft	Total/NA	Solid	8015 NM	
880-14529-13	7 6in	Total/NA	Solid	8015 NM	
880-14529-14	7 4ft	Total/NA	Solid	8015 NM	
880-14529-15	8 6in	Total/NA	Solid	8015 NM	
880-14529-16	8 4ft	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

GC Semi VOA (Continued)

Analysis Batch: 25352 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-17	9 6in	Total/NA	Solid	8015 NM	
880-14529-18	9 4ft	Total/NA	Solid	8015 NM	
880-14529-19	10 6in	Total/NA	Solid	8015 NM	
880-14529-20	10 4ft	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1	1 6in	Soluble	Solid	DI Leach	
880-14529-2	1 4ft	Soluble	Solid	DI Leach	
880-14529-3	2 6in	Soluble	Solid	DI Leach	
880-14529-4	2 4ft	Soluble	Solid	DI Leach	
880-14529-5	3 6in	Soluble	Solid	DI Leach	
880-14529-6	3 4ft	Soluble	Solid	DI Leach	
880-14529-7	4 6in	Soluble	Solid	DI Leach	
880-14529-8	4 4ft	Soluble	Solid	DI Leach	
880-14529-9	5 6in	Soluble	Solid	DI Leach	
880-14529-10	5 4ft	Soluble	Solid	DI Leach	
880-14529-11	6 6in	Soluble	Solid	DI Leach	
880-14529-12	6 4ft	Soluble	Solid	DI Leach	
880-14529-13	7 6in	Soluble	Solid	DI Leach	
880-14529-14	7 4ft	Soluble	Solid	DI Leach	
880-14529-15	8 6in	Soluble	Solid	DI Leach	
880-14529-16	8 4ft	Soluble	Solid	DI Leach	
880-14529-17	9 6in	Soluble	Solid	DI Leach	
MB 880-25208/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25208/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25208/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14529-8 MS	4 4ft	Soluble	Solid	DI Leach	
880-14529-8 MSD	4 4ft	Soluble	Solid	DI Leach	

Leach Batch: 25469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-18	9 4ft	Soluble	Solid	DI Leach	
880-14529-19	10 6in	Soluble	Solid	DI Leach	
880-14529-20	10 4ft	Soluble	Solid	DI Leach	
MB 880-25469/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25469/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25469/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 25485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-1	1 6in	Soluble	Solid	300.0	25208
880-14529-2	1 4ft	Soluble	Solid	300.0	25208
880-14529-3	2 6in	Soluble	Solid	300.0	25208
880-14529-4	2 4ft	Soluble	Solid	300.0	25208
880-14529-5	3 6in	Soluble	Solid	300.0	25208
880-14529-6	3 4ft	Soluble	Solid	300.0	25208
880-14529-7	4 6in	Soluble	Solid	300.0	25208
880-14529-8	4 4ft	Soluble	Solid	300.0	25208

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

HPLC/IC (Continued)

Analysis Batch: 25485 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-9	5 6in	Soluble	Solid	300.0	25208
880-14529-10	5 4ft	Soluble	Solid	300.0	25208
880-14529-11	6 6in	Soluble	Solid	300.0	25208
880-14529-12	6 4ft	Soluble	Solid	300.0	25208
880-14529-13	7 6in	Soluble	Solid	300.0	25208
880-14529-14	7 4ft	Soluble	Solid	300.0	25208
880-14529-15	8 6in	Soluble	Solid	300.0	25208
880-14529-16	8 4ft	Soluble	Solid	300.0	25208
880-14529-17	9 6in	Soluble	Solid	300.0	25208
MB 880-25208/1-A	Method Blank	Soluble	Solid	300.0	25208
LCS 880-25208/2-A	Lab Control Sample	Soluble	Solid	300.0	25208
LCSD 880-25208/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25208
880-14529-8 MS	4 4ft	Soluble	Solid	300.0	25208
880-14529-8 MSD	4 4ft	Soluble	Solid	300.0	25208

Analysis Batch: 25677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14529-18	9 4ft	Soluble	Solid	300.0	25469
880-14529-19	10 6in	Soluble	Solid	300.0	25469
880-14529-20	10 4ft	Soluble	Solid	300.0	25469
MB 880-25469/1-A	Method Blank	Soluble	Solid	300.0	25469
LCS 880-25469/2-A	Lab Control Sample	Soluble	Solid	300.0	25469
LCSD 880-25469/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25469

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 1 6in

Lab Sample ID: 880-14529-1
Matrix: Solid
Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 17:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 13:54	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		5			25485	05/12/22 23:25	CH	XEN MID

Client Sample ID: 1 4ft

Lab Sample ID: 880-14529-2
Matrix: Solid
Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 18:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 12:49	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/12/22 23:33	CH	XEN MID

Client Sample ID: 2 6in

Lab Sample ID: 880-14529-3
Matrix: Solid
Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 18:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 14:16	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/12/22 23:58	CH	XEN MID

Client Sample ID: 2 4ft

Lab Sample ID: 880-14529-4
Matrix: Solid
Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 18:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 2 4ft

Lab Sample ID: 880-14529-4
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50

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			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 14:37	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 00:06	CH	XEN MID

Client Sample ID: 3 6in

Lab Sample ID: 880-14529-5
Matrix: Solid

Date Collected: 05/06/22 15:30
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 19:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 14:59	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 00:14	CH	XEN MID

Client Sample ID: 3 4ft

Lab Sample ID: 880-14529-6
Matrix: Solid

Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 19:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 15:21	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 00:22	CH	XEN MID

Client Sample ID: 4 6in

Lab Sample ID: 880-14529-7
Matrix: Solid

Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 19:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 15:43	SM	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 4 6in

Lab Sample ID: 880-14529-7
Matrix: Solid
Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 00:31	CH	XEN MID

Client Sample ID: 4 4ft

Lab Sample ID: 880-14529-8
Matrix: Solid
Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 20:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 16:05	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 00:39	CH	XEN MID

Client Sample ID: 5 6in

Lab Sample ID: 880-14529-9
Matrix: Solid
Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 20:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 16:26	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 01:03	CH	XEN MID

Client Sample ID: 5 4ft

Lab Sample ID: 880-14529-10
Matrix: Solid
Date Collected: 05/06/22 16:00
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 20:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 16:49	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 01:11	CH	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 6 6in

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

Lab Sample ID: 880-14529-11
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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 22:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 17:32	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 01:36	CH	XEN MID

Client Sample ID: 6 4ft

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

Lab Sample ID: 880-14529-12
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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 23:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 17:54	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 01:44	CH	XEN MID

Client Sample ID: 7 6in

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

Lab Sample ID: 880-14529-13
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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 23:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 18:15	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 08:13	CH	XEN MID

Client Sample ID: 7 4ft

Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

Lab Sample ID: 880-14529-14
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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/14/22 23:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 7 4ft

Lab Sample ID: 880-14529-14
Matrix: Solid
Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

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			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 18:37	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 08:21	CH	XEN MID

Client Sample ID: 8 6in

Lab Sample ID: 880-14529-15
Matrix: Solid
Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/15/22 00:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 18:58	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 01:55	CH	XEN MID

Client Sample ID: 8 4ft

Lab Sample ID: 880-14529-16
Matrix: Solid
Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/15/22 00:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 19:20	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 02:03	CH	XEN MID

Client Sample ID: 9 6in

Lab Sample ID: 880-14529-17
Matrix: Solid
Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/15/22 00:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 19:41	SM	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Client Sample ID: 9 6in

Lab Sample ID: 880-14529-17
Matrix: Solid
Date Collected: 05/06/22 16:30
Date Received: 05/09/22 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	25208	05/09/22 16:48	SC	XEN MID
Soluble	Analysis	300.0		1			25485	05/13/22 02:11	CH	XEN MID

Client Sample ID: 9 4ft

Lab Sample ID: 880-14529-18
Matrix: Solid
Date Collected: 05/06/22 17:00
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/15/22 01:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 20:02	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25469	05/12/22 16:08	CH	XEN MID
Soluble	Analysis	300.0		1			25677	05/17/22 16:46	CH	XEN MID

Client Sample ID: 10 6in

Lab Sample ID: 880-14529-19
Matrix: Solid
Date Collected: 05/06/22 17:00
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/15/22 01:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 20:24	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25469	05/12/22 16:08	CH	XEN MID
Soluble	Analysis	300.0		1			25677	05/17/22 16:55	CH	XEN MID

Client Sample ID: 10 4ft

Lab Sample ID: 880-14529-20
Matrix: Solid
Date Collected: 05/06/22 17:00
Date Received: 05/09/22 10:50

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	25565	05/14/22 12:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25560	05/15/22 01:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25596	05/16/22 09:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25352	05/11/22 11:43	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25222	05/10/22 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25233	05/10/22 20:45	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25469	05/12/22 16:08	CH	XEN MID
Soluble	Analysis	300.0		1			25677	05/17/22 17:04	CH	XEN MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Laboratory References:

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

Accreditation/Certification Summary

Client: Environmental Oilfield Solutions, LLC Job ID: 880-14529-1
Project/Site: Hayberry

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	T104704400-21-22	06-30-22

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

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

Method Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

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

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

Sample Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry

Job ID: 880-14529-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-14529-1	1 6in	Solid	05/06/22 15:30	05/09/22 10:50	6"
880-14529-2	1 4ft	Solid	05/06/22 15:30	05/09/22 10:50	4'
880-14529-3	2 6in	Solid	05/06/22 15:30	05/09/22 10:50	6"
880-14529-4	2 4ft	Solid	05/06/22 15:30	05/09/22 10:50	4'
880-14529-5	3 6in	Solid	05/06/22 15:30	05/09/22 10:50	6"
880-14529-6	3 4ft	Solid	05/06/22 16:00	05/09/22 10:50	4'
880-14529-7	4 6in	Solid	05/06/22 16:00	05/09/22 10:50	6"
880-14529-8	4 4ft	Solid	05/06/22 16:00	05/09/22 10:50	4'
880-14529-9	5 6in	Solid	05/06/22 16:00	05/09/22 10:50	6"
880-14529-10	5 4ft	Solid	05/06/22 16:00	05/09/22 10:50	4'
880-14529-11	6 6in	Solid	05/06/22 16:30	05/09/22 10:50	6"
880-14529-12	6 4ft	Solid	05/06/22 16:30	05/09/22 10:50	4'
880-14529-13	7 6in	Solid	05/06/22 16:30	05/09/22 10:50	6"
880-14529-14	7 4ft	Solid	05/06/22 16:30	05/09/22 10:50	4'
880-14529-15	8 6in	Solid	05/06/22 16:30	05/09/22 10:50	6"
880-14529-16	8 4ft	Solid	05/06/22 16:30	05/09/22 10:50	4'
880-14529-17	9 6in	Solid	05/06/22 16:30	05/09/22 10:50	6"
880-14529-18	9 4ft	Solid	05/06/22 17:00	05/09/22 10:50	4'
880-14529-19	10 6in	Solid	05/06/22 17:00	05/09/22 10:50	6"
880-14529-20	10 4ft	Solid	05/06/22 17:00	05/09/22 10:50	4'

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Chain of Custody

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

Work Order No: 14529

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Project Manager:	Steven G. Hoffman	Bill to: (if different)	Centennial Resources
Company Name:	Environmental Oilfield Solutions	Company Name	
Address:	2317 Fuld St Unit R	Address:	
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	
Phone:	832.642.3107	Email	Shoffman.eos@gmail.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:	Hayberry	Turn Around	
Project Number:		☒ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:		TAT starts the day received by the lab, if received by 4.30pm	
PO #			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR9
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.5
Total Containers:		Corrected Temperature:	5.3

ANALYSIS REQUEST

Parameters: Chlorides; BTEX; TPH 8015

Preservative Codes

None NO; DI Water H_2O; Cool Cool; MeOH Me; HCL HC; HNO_3 HN; H_2SO_4 H_2; NaOH Na; H_3PO_4 HP; $NaHSO_4$ NABIS; $Na_2S_2O_3$ NaSO$_3$; Zn Acetate+NaOH Zn; NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont
1 6in	S	5-6-22	3:30pm	6in		
1 4ft				4ft		
2 6in				6in		
2 4ft				4ft		
3 6in			↓	6in		
3 4ft			4pm	4ft		
4 6in				6in		
4 4ft				4ft		
5 6in				6in		
5 4ft	↓	↓	↓	4ft		

Sample Comments

880-14529 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		5/9/22	2		
3			4		
5		1050	6		

Revised Date 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: 145791

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Project Manager:	Steven G. Hoffman	Bill to: (if different)	Centennial Resources
Company Name:	Environmental Drilling Solutions	Company Name:	
Address:	237 Fish St Unit R	Address:	
City, State ZIP:	Odessa TX 79761	City, State ZIP:	
Phone:	832-946-3107	Email:	shoffman.cos@gmail.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:	Hagberry	Turn Around	☒ Routine ☐ Rush
Project Number:		Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:			
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	218
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-.1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.5
Total Containers:		Corrected Temperature:	5.3

ANALYSIS REQUEST

Parameters: Chlorides; BTEX; TPH Ext

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont
6 6in	S	5-6-22	4:30pm			
6 4ft						
7 6in						
7 4ft						
8 6in						
8 4ft						
9 6in						
9 4ft			5pm			
10 6in						
10 4ft	↓	↓	↓			

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Shellin	Boyd	5/9/22	2		
3		1050	4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Login Sample Receipt Checklist

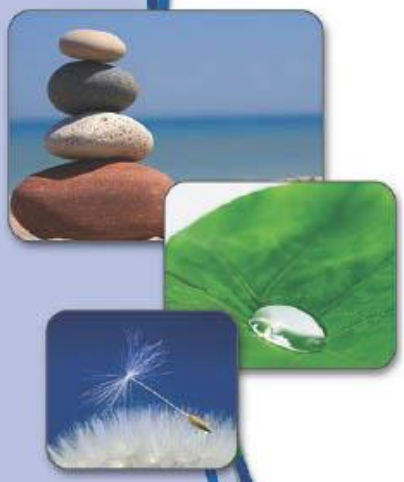
Client: Environmental Oilfield Solutions, LLC

Job Number: 880-14529-1

Login Number: 14529
List Number: 1
Creator: Teel, Brianna

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	



eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-18964-1
Laboratory Sample Delivery Group: Lea County, NM
Client Project/Site: Hag Berry 9 State COM

For:
Environmental Oilfield Solutions, LLC
2317 Field St.
Unit R
Odessa, Texas 79761

Attn: Steve Hoffman

Holly Taylor

Authorized for release by:
9/19/2022 12:26:34 PM

Holly Taylor, Project Manager
(806)794-1296
Holly.Taylor@et.eurofinsus.com

LINKS

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Table of Contents

Definitions/Glossary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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.

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: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Job ID: 880-18964-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-18964-1

Receipt
The samples were received on 9/7/2022 3:52 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 was 5.9° C.

GC VOA
Method 8021B: The CCV was biased low for ethylbenzene and toluene. Another CCV was acceptable within the 12 hour window so it was determined that this was a poor injection rather than the instrument being out of calibration and the data was qualified and reported. (CCV 880-34644/33)

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34413 and analytical batch 880-34644 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-34021/3-A). Evidence of matrix interferences is not obvious.

Method 8015B NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-34021 and analytical batch 880-33970 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28).

Method 8015B NM: The matrix spike (MS) recoveries for preparation batch 880-34021 and analytical batch 880-33970 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015B NM: Spike compounds were inadvertently omitted during the extraction process for the matrix spike duplicate (MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-34021 and analytical batch 880-33970. The associated laboratory control sample (LCS) met acceptance criteria.

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

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

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

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

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A1

Date Collected: 09/06/22 13:00
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F1 F2	0.00202	mg/Kg		09/13/22 14:26	09/17/22 14:14	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		09/13/22 14:26	09/17/22 14:14	1
Ethylbenzene	<0.00202	U F1	0.00202	mg/Kg		09/13/22 14:26	09/17/22 14:14	1
m,p-Xylenes	<0.00403	U F1	0.00403	mg/Kg		09/13/22 14:26	09/17/22 14:14	1
o-Xylene	<0.00202	U F1	0.00202	mg/Kg		09/13/22 14:26	09/17/22 14:14	1
Xylenes, Total	<0.00403	U F1	0.00403	mg/Kg		09/13/22 14:26	09/17/22 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*09/13/22 14:26*	*09/17/22 14:14*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*09/13/22 14:26*	*09/17/22 14:14*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			09/19/22 09:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	133		50.0	mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1 F1 F2	50.0	mg/Kg		09/08/22 14:28	09/08/22 20:27	1
Diesel Range Organics (Over C10-C28)	133	*1 F1 F2	50.0	mg/Kg		09/08/22 14:28	09/08/22 20:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:28	09/08/22 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*108*		*70 - 130*	*09/08/22 14:28*	*09/08/22 20:27*	*1*
o-Terphenyl (Surr)	*103*		*70 - 130*	*09/08/22 14:28*	*09/08/22 20:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.0		4.99	mg/Kg			09/10/22 18:47	1

Client Sample ID: A2

Date Collected: 09/06/22 13:30
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/13/22 14:26	09/17/22 15:05	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/13/22 14:26	09/17/22 15:05	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/13/22 14:26	09/17/22 15:05	1
m,p-Xylenes	<0.00396	U	0.00396	mg/Kg		09/13/22 14:26	09/17/22 15:05	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/13/22 14:26	09/17/22 15:05	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/13/22 14:26	09/17/22 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/13/22 14:26*	*09/17/22 15:05*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A2
Date Collected: 09/06/22 13:30
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-2
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/13/22 14:26*	*09/17/22 15:05*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			09/19/22 09:18	1

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

Analyte	Result	Qualifier	RL	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	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		09/08/22 14:28	09/08/22 21:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		09/08/22 14:28	09/08/22 21:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:28	09/08/22 21:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	*104*		*70 - 130*	*09/08/22 14:28*	*09/08/22 21:31*	*1*
o-Terphenyl (Surr)	*103*		*70 - 130*	*09/08/22 14:28*	*09/08/22 21:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.1		5.01	mg/Kg			09/10/22 19:01	1

Client Sample ID: A3
Date Collected: 09/06/22 14:00
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 15:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 15:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 15:26	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		09/13/22 14:26	09/17/22 15:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 15:26	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/13/22 14:26	09/17/22 15:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/13/22 14:26*	*09/17/22 15:26*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*09/13/22 14:26*	*09/17/22 15:26*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/19/22 09:18	1

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

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

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A3
Date Collected: 09/06/22 14:00
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	mg/Kg		09/08/22 14:28	09/08/22 21:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		09/08/22 14:28	09/08/22 21:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:28	09/08/22 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*129*		*70 - 130*	*09/08/22 14:28*	*09/08/22 21:53*	*1*
o-Terphenyl (Surr)	*125*		*70 - 130*	*09/08/22 14:28*	*09/08/22 21:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		4.97	mg/Kg			09/10/22 19:06	1

Client Sample ID: A4
Date Collected: 09/06/22 14:15
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/13/22 14:26	09/17/22 15:46	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/13/22 14:26	09/17/22 15:46	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/13/22 14:26	09/17/22 15:46	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		09/13/22 14:26	09/17/22 15:46	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/13/22 14:26	09/17/22 15:46	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/13/22 14:26	09/17/22 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*09/13/22 14:26*	*09/17/22 15:46*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*09/13/22 14:26*	*09/17/22 15:46*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/19/22 09:18	1

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

Analyte	Result	Qualifier	RL	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	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8	mg/Kg		09/08/22 14:28	09/08/22 22:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8	mg/Kg		09/08/22 14:28	09/08/22 22:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/08/22 14:28	09/08/22 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*09/08/22 14:28*	*09/08/22 22:14*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*09/08/22 14:28*	*09/08/22 22:14*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A4
Date Collected: 09/06/22 14:15
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.8		5.03	mg/Kg			09/10/22 19:11	1

Client Sample ID: A5
Date Collected: 09/06/22 14:30
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-5
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 16:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 16:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 16:06	1
m,p-Xylenes	<0.00401	U	0.00401	mg/Kg		09/13/22 14:26	09/17/22 16:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 16:06	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/13/22 14:26	09/17/22 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/13/22 14:26*	*09/17/22 16:06*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/13/22 14:26*	*09/17/22 16:06*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			09/19/22 09:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	85.6		49.8	mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8	mg/Kg		09/08/22 14:28	09/08/22 22:36	1
Diesel Range Organics (Over C10-C28)	85.6	*1	49.8	mg/Kg		09/08/22 14:28	09/08/22 22:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/08/22 14:28	09/08/22 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*09/08/22 14:28*	*09/08/22 22:36*	*1*
o-Terphenyl (Surr)	*96*		*70 - 130*	*09/08/22 14:28*	*09/08/22 22:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.5		4.98	mg/Kg			09/10/22 19:16	1

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A6

Lab Sample ID: 880-18964-6
Matrix: Solid

Date Collected: 09/06/22 14:45
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 16:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 16:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 16:27	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		09/13/22 14:26	09/17/22 16:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 16:27	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/13/22 14:26	09/17/22 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*09/13/22 14:26*	*09/17/22 16:27*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/13/22 14:26*	*09/17/22 16:27*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/19/22 09:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	76.2		49.9	mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		09/08/22 14:28	09/08/22 22:57	1
Diesel Range Organics (Over C10-C28)	76.2	*1	49.9	mg/Kg		09/08/22 14:28	09/08/22 22:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:28	09/08/22 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*117*		*70 - 130*	*09/08/22 14:28*	*09/08/22 22:57*	*1*
o-Terphenyl (Surr)	*112*		*70 - 130*	*09/08/22 14:28*	*09/08/22 22:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91.1		5.02	mg/Kg			09/10/22 19:30	1

Client Sample ID: A7

Lab Sample ID: 880-18964-7
Matrix: Solid

Date Collected: 09/06/22 15:00
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/13/22 14:26	09/17/22 16:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/13/22 14:26	09/17/22 16:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/13/22 14:26	09/17/22 16:47	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		09/13/22 14:26	09/17/22 16:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/13/22 14:26	09/17/22 16:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/13/22 14:26	09/17/22 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*09/13/22 14:26*	*09/17/22 16:47*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A7
Date Collected: 09/06/22 15:00
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-7
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	09/13/22 14:26	09/17/22 16:47	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/19/22 09:18	1

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

Analyte	Result	Qualifier	RL	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	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	mg/Kg		09/08/22 14:28	09/08/22 23:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		09/08/22 14:28	09/08/22 23:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:28	09/08/22 23:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	117		70 - 130	09/08/22 14:28	09/08/22 23:18	1
o-Terphenyl (Surr)	111		70 - 130	09/08/22 14:28	09/08/22 23:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		4.97	mg/Kg			09/10/22 19:35	1

Client Sample ID: A8
Date Collected: 09/06/22 15:45
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-8
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/13/22 14:26	09/17/22 17:08	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/13/22 14:26	09/17/22 17:08	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/13/22 14:26	09/17/22 17:08	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		09/13/22 14:26	09/17/22 17:08	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/13/22 14:26	09/17/22 17:08	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/13/22 14:26	09/17/22 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	09/13/22 14:26	09/17/22 17:08	1
1,4-Difluorobenzene (Surr)	104		70 - 130	09/13/22 14:26	09/17/22 17:08	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/19/22 09:18	1

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

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

Eurofins Midland

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A8
Date Collected: 09/06/22 15:45
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		09/08/22 14:28	09/08/22 23:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		09/08/22 14:28	09/08/22 23:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:28	09/08/22 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*104*		*70 - 130*	*09/08/22 14:28*	*09/08/22 23:40*	*1*
o-Terphenyl (Surr)	*102*		*70 - 130*	*09/08/22 14:28*	*09/08/22 23:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		5.03	mg/Kg			09/10/22 19:40	1

Client Sample ID: A9
Date Collected: 09/06/22 16:00
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-9
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 17:28	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 17:28	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 17:28	1
m,p-Xylenes	<0.00401	U	0.00401	mg/Kg		09/13/22 14:26	09/17/22 17:28	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 17:28	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/13/22 14:26	09/17/22 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/13/22 14:26*	*09/17/22 17:28*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/13/22 14:26*	*09/17/22 17:28*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			09/19/22 09:18	1

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

Analyte	Result	Qualifier	RL	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	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		09/08/22 14:28	09/09/22 00:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		09/08/22 14:28	09/09/22 00:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:28	09/09/22 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*103*		*70 - 130*	*09/08/22 14:28*	*09/09/22 00:02*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*09/08/22 14:28*	*09/09/22 00:02*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A9
Date Collected: 09/06/22 16:00
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.00	mg/Kg			09/10/22 19:45	1

Client Sample ID: A10
Date Collected: 09/06/22 16:00
Date Received: 09/07/22 15:52
Sample Depth: 1 ft

Lab Sample ID: 880-18964-10
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 17:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 17:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 17:49	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		09/13/22 14:26	09/17/22 17:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 17:49	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/13/22 14:26	09/17/22 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/13/22 14:26*	*09/17/22 17:49*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/13/22 14:26*	*09/17/22 17:49*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/19/22 09:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	117		50.0	mg/Kg			09/09/22 10:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	mg/Kg		09/08/22 14:28	09/09/22 00:23	1
Diesel Range Organics (Over C10-C28)	117	*1	50.0	mg/Kg		09/08/22 14:28	09/09/22 00:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:28	09/09/22 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*101*		*70 - 130*	*09/08/22 14:28*	*09/09/22 00:23*	*1*
o-Terphenyl (Surr)	*99*		*70 - 130*	*09/08/22 14:28*	*09/09/22 00:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.4		4.96	mg/Kg			09/10/22 19:50	1

Surrogate Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-18964-1	A1	93	116
880-18964-1 MS	A1	106	110
880-18964-1 MSD	A1	112	102
880-18964-2	A2	108	103
880-18964-3	A3	103	119
880-18964-4	A4	97	117
880-18964-5	A5	101	108
880-18964-6	A6	109	112
880-18964-7	A7	106	111
880-18964-8	A8	110	104
880-18964-9	A9	108	109
880-18964-10	A10	112	108
LCS 880-34413/1-A	Lab Control Sample	102	100
LCSD 880-34413/2-A	Lab Control Sample Dup	102	105
MB 880-34413/5-A	Method Blank	103	113
MB 880-34555/5-A	Method Blank	105	110

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)
880-18964-1	A1	108	103
880-18964-1 MS	A1	95	79
880-18964-1 MSD	A1	120	116
880-18964-2	A2	104	103
880-18964-3	A3	129	125
880-18964-4	A4	102	100
880-18964-5	A5	99	96
880-18964-6	A6	117	112
880-18964-7	A7	117	111
880-18964-8	A8	104	102
880-18964-9	A9	103	100
880-18964-10	A10	101	99
LCS 880-34021/2-A	Lab Control Sample	129	125
LCSD 880-34021/3-A	Lab Control Sample Dup	159 S1+	153 S1+
MB 880-34021/1-A	Method Blank	103	105

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34413/5-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34413

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 13:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 13:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 13:45	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		09/13/22 14:26	09/17/22 13:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/13/22 14:26	09/17/22 13:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/13/22 14:26	09/17/22 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/13/22 14:26*	*09/17/22 13:45*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*09/13/22 14:26*	*09/17/22 13:45*	*1*

Lab Sample ID: LCS 880-34413/1-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34413

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07945		mg/Kg		79	70 - 130
Toluene	0.100	0.07766		mg/Kg		78	70 - 130
Ethylbenzene	0.100	0.07446		mg/Kg		74	70 - 130
m,p-Xylenes	0.200	0.1620		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08424		mg/Kg		84	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-34413/2-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34413

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09036		mg/Kg		90	70 - 130	13	35
Toluene	0.100	0.08143		mg/Kg		81	70 - 130	5	35
Ethylbenzene	0.100	0.07731		mg/Kg		77	70 - 130	4	35
m,p-Xylenes	0.200	0.1671		mg/Kg		84	70 - 130	3	35
o-Xylene	0.100	0.08710		mg/Kg		87	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-18964-1 MS
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: A1
Prep Type: Total/NA
Prep Batch: 34413

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U F1 F2	0.0998	0.08465		mg/Kg		84	70 - 130
Toluene	<0.00202	U F1	0.0998	0.05787	F1	mg/Kg		57	70 - 130

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

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

Lab Sample ID: 880-18964-1 MS
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: A1
Prep Type: Total/NA
Prep Batch: 34413

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U F1	0.0998	0.04926	F1	mg/Kg		49	70 - 130
m,p-Xylenes	<0.00403	U F1	0.200	0.07160	F1	mg/Kg		35	70 - 130
o-Xylene	<0.00202	U F1	0.0998	0.04672	F1	mg/Kg		45	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-18964-1 MSD
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: A1
Prep Type: Total/NA
Prep Batch: 34413

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	0.101	0.05385	F1 F2	mg/Kg		53	70 - 130	44	35
Toluene	<0.00202	U F1	0.101	0.04685	F1	mg/Kg		46	70 - 130	21	35
Ethylbenzene	<0.00202	U F1	0.101	0.04301	F1	mg/Kg		42	70 - 130	14	35
m,p-Xylenes	<0.00403	U F1	0.201	0.06289	F1	mg/Kg		30	70 - 130	13	35
o-Xylene	<0.00202	U F1	0.101	0.04204	F1	mg/Kg		40	70 - 130	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 880-34555/5-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34555

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/15/22 09:02	09/17/22 02:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/15/22 09:02	09/17/22 02:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/15/22 09:02	09/17/22 02:09	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		09/15/22 09:02	09/17/22 02:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/15/22 09:02	09/17/22 02:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/15/22 09:02	09/17/22 02:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/15/22 09:02*	*09/17/22 02:09*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/15/22 09:02*	*09/17/22 02:09*	*1*

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

Lab Sample ID: MB 880-34021/1-A
Matrix: Solid
Analysis Batch: 33970

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34021

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/08/22 14:28	09/08/22 19:23	1

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-34021/1-A
Matrix: Solid
Analysis Batch: 33970

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34021

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/08/22 14:28	09/08/22 19:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:28	09/08/22 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*103*		*70 - 130*	*09/08/22 14:28*	*09/08/22 19:23*	*1*
o-Terphenyl (Surr)	*105*		*70 - 130*	*09/08/22 14:28*	*09/08/22 19:23*	*1*

Lab Sample ID: LCS 880-34021/2-A
Matrix: Solid
Analysis Batch: 33970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34021

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	884.5		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	851.7		mg/Kg		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*129*		*70 - 130*
o-Terphenyl (Surr)	*125*		*70 - 130*

Lab Sample ID: LCSD 880-34021/3-A
Matrix: Solid
Analysis Batch: 33970

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34021

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1185	*1	mg/Kg		119	70 - 130	29	20
Diesel Range Organics (Over C10-C28)	1000	1097	*1	mg/Kg		110	70 - 130	25	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*159*	*S1+*	*70 - 130*
o-Terphenyl (Surr)	*153*	*S1+*	*70 - 130*

Lab Sample ID: 880-18964-1 MS
Matrix: Solid
Analysis Batch: 33970

Client Sample ID: A1
Prep Type: Total/NA
Prep Batch: 34021

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 *1 F1 F2	999	627.2	F1	mg/Kg		63	70 - 130
Diesel Range Organics (Over C10-C28)	133	*1 F1 F2	999	871.1		mg/Kg		74	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*95*		*70 - 130*
o-Terphenyl (Surr)	*79*		*70 - 130*

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

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

Lab Sample ID: 880-18964-1 MSD
Matrix: Solid
Analysis Batch: 33970

Client Sample ID: A1
Prep Type: Total/NA
Prep Batch: 34021

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 *1 F1 F2	996	<49.8	U F1 F2	mg/Kg		2	70 - 130	188	20
Diesel Range Organics (Over C10-C28)	133	*1 F1 F2	996	<49.8	U F1 F2	mg/Kg		-9	70 - 130	181	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*120*		*70 - 130*
o-Terphenyl (Surr)	*116*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33994/1-A
Matrix: Solid
Analysis Batch: 34158

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			09/10/22 18:32	1

Lab Sample ID: LCS 880-33994/2-A
Matrix: Solid
Analysis Batch: 34158

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	240.5		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-33994/3-A
Matrix: Solid
Analysis Batch: 34158

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	241.1		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 880-18964-1 MS
Matrix: Solid
Analysis Batch: 34158

Client Sample ID: A1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	46.0		250	313.0		mg/Kg		107	90 - 110

Lab Sample ID: 880-18964-1 MSD
Matrix: Solid
Analysis Batch: 34158

Client Sample ID: A1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	46.0		250	313.8		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

GC VOA

Prep Batch: 34413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18964-1	A1	Total/NA	Solid	5035	
880-18964-2	A2	Total/NA	Solid	5035	
880-18964-3	A3	Total/NA	Solid	5035	
880-18964-4	A4	Total/NA	Solid	5035	
880-18964-5	A5	Total/NA	Solid	5035	
880-18964-6	A6	Total/NA	Solid	5035	
880-18964-7	A7	Total/NA	Solid	5035	
880-18964-8	A8	Total/NA	Solid	5035	
880-18964-9	A9	Total/NA	Solid	5035	
880-18964-10	A10	Total/NA	Solid	5035	
MB 880-34413/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34413/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34413/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18964-1 MS	A1	Total/NA	Solid	5035	
880-18964-1 MSD	A1	Total/NA	Solid	5035	

Prep Batch: 34555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34555/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 34644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18964-1	A1	Total/NA	Solid	8021B	34413
880-18964-2	A2	Total/NA	Solid	8021B	34413
880-18964-3	A3	Total/NA	Solid	8021B	34413
880-18964-4	A4	Total/NA	Solid	8021B	34413
880-18964-5	A5	Total/NA	Solid	8021B	34413
880-18964-6	A6	Total/NA	Solid	8021B	34413
880-18964-7	A7	Total/NA	Solid	8021B	34413
880-18964-8	A8	Total/NA	Solid	8021B	34413
880-18964-9	A9	Total/NA	Solid	8021B	34413
880-18964-10	A10	Total/NA	Solid	8021B	34413
MB 880-34413/5-A	Method Blank	Total/NA	Solid	8021B	34413
MB 880-34555/5-A	Method Blank	Total/NA	Solid	8021B	34555
LCS 880-34413/1-A	Lab Control Sample	Total/NA	Solid	8021B	34413
LCSD 880-34413/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34413
880-18964-1 MS	A1	Total/NA	Solid	8021B	34413
880-18964-1 MSD	A1	Total/NA	Solid	8021B	34413

Analysis Batch: 34764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18964-1	A1	Total/NA	Solid	Total BTEX	
880-18964-2	A2	Total/NA	Solid	Total BTEX	
880-18964-3	A3	Total/NA	Solid	Total BTEX	
880-18964-4	A4	Total/NA	Solid	Total BTEX	
880-18964-5	A5	Total/NA	Solid	Total BTEX	
880-18964-6	A6	Total/NA	Solid	Total BTEX	
880-18964-7	A7	Total/NA	Solid	Total BTEX	
880-18964-8	A8	Total/NA	Solid	Total BTEX	
880-18964-9	A9	Total/NA	Solid	Total BTEX	
880-18964-10	A10	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

GC Semi VOA

Analysis Batch: 33970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18964-1	A1	Total/NA	Solid	8015B NM	34021
880-18964-2	A2	Total/NA	Solid	8015B NM	34021
880-18964-3	A3	Total/NA	Solid	8015B NM	34021
880-18964-4	A4	Total/NA	Solid	8015B NM	34021
880-18964-5	A5	Total/NA	Solid	8015B NM	34021
880-18964-6	A6	Total/NA	Solid	8015B NM	34021
880-18964-7	A7	Total/NA	Solid	8015B NM	34021
880-18964-8	A8	Total/NA	Solid	8015B NM	34021
880-18964-9	A9	Total/NA	Solid	8015B NM	34021
880-18964-10	A10	Total/NA	Solid	8015B NM	34021
MB 880-34021/1-A	Method Blank	Total/NA	Solid	8015B NM	34021
LCS 880-34021/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34021
LCSD 880-34021/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34021
880-18964-1 MS	A1	Total/NA	Solid	8015B NM	34021
880-18964-1 MSD	A1	Total/NA	Solid	8015B NM	34021

Prep Batch: 34021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18964-1	A1	Total/NA	Solid	8015NM Prep	
880-18964-2	A2	Total/NA	Solid	8015NM Prep	
880-18964-3	A3	Total/NA	Solid	8015NM Prep	
880-18964-4	A4	Total/NA	Solid	8015NM Prep	
880-18964-5	A5	Total/NA	Solid	8015NM Prep	
880-18964-6	A6	Total/NA	Solid	8015NM Prep	
880-18964-7	A7	Total/NA	Solid	8015NM Prep	
880-18964-8	A8	Total/NA	Solid	8015NM Prep	
880-18964-9	A9	Total/NA	Solid	8015NM Prep	
880-18964-10	A10	Total/NA	Solid	8015NM Prep	
MB 880-34021/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34021/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34021/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-18964-1 MS	A1	Total/NA	Solid	8015NM Prep	
880-18964-1 MSD	A1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18964-1	A1	Total/NA	Solid	8015 NM	
880-18964-2	A2	Total/NA	Solid	8015 NM	
880-18964-3	A3	Total/NA	Solid	8015 NM	
880-18964-4	A4	Total/NA	Solid	8015 NM	
880-18964-5	A5	Total/NA	Solid	8015 NM	
880-18964-6	A6	Total/NA	Solid	8015 NM	
880-18964-7	A7	Total/NA	Solid	8015 NM	
880-18964-8	A8	Total/NA	Solid	8015 NM	
880-18964-9	A9	Total/NA	Solid	8015 NM	
880-18964-10	A10	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

HPLC/IC

Leach Batch: 33994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18964-1	A1	Soluble	Solid	DI Leach	
880-18964-2	A2	Soluble	Solid	DI Leach	
880-18964-3	A3	Soluble	Solid	DI Leach	
880-18964-4	A4	Soluble	Solid	DI Leach	
880-18964-5	A5	Soluble	Solid	DI Leach	
880-18964-6	A6	Soluble	Solid	DI Leach	
880-18964-7	A7	Soluble	Solid	DI Leach	
880-18964-8	A8	Soluble	Solid	DI Leach	
880-18964-9	A9	Soluble	Solid	DI Leach	
880-18964-10	A10	Soluble	Solid	DI Leach	
MB 880-33994/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33994/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33994/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18964-1 MS	A1	Soluble	Solid	DI Leach	
880-18964-1 MSD	A1	Soluble	Solid	DI Leach	

Analysis Batch: 34158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18964-1	A1	Soluble	Solid	300.0	33994
880-18964-2	A2	Soluble	Solid	300.0	33994
880-18964-3	A3	Soluble	Solid	300.0	33994
880-18964-4	A4	Soluble	Solid	300.0	33994
880-18964-5	A5	Soluble	Solid	300.0	33994
880-18964-6	A6	Soluble	Solid	300.0	33994
880-18964-7	A7	Soluble	Solid	300.0	33994
880-18964-8	A8	Soluble	Solid	300.0	33994
880-18964-9	A9	Soluble	Solid	300.0	33994
880-18964-10	A10	Soluble	Solid	300.0	33994
MB 880-33994/1-A	Method Blank	Soluble	Solid	300.0	33994
LCS 880-33994/2-A	Lab Control Sample	Soluble	Solid	300.0	33994
LCSD 880-33994/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33994
880-18964-1 MS	A1	Soluble	Solid	300.0	33994
880-18964-1 MSD	A1	Soluble	Solid	300.0	33994

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A1

Date Collected: 09/06/22 13:00
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-1
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	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 14:14	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 20:27	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 18:47	CH	EET MID

Client Sample ID: A2

Date Collected: 09/06/22 13:30
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-2
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			5.05 g	5 mL	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 15:05	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 21:31	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:01	CH	EET MID

Client Sample ID: A3

Date Collected: 09/06/22 14:00
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 15:26	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 21:53	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:06	CH	EET MID

Client Sample ID: A4

Date Collected: 09/06/22 14:15
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-4
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			4.97 g	5 mL	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 15:46	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A4
Date Collected: 09/06/22 14:15
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 22:14	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:11	CH	EET MID

Client Sample ID: A5
Date Collected: 09/06/22 14:30
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 16:06	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 22:36	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:16	CH	EET MID

Client Sample ID: A6
Date Collected: 09/06/22 14:45
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 16:27	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 22:57	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:30	CH	EET MID

Client Sample ID: A7
Date Collected: 09/06/22 15:00
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-7
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	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 16:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 23:18	SM	EET MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Client Sample ID: A7
Date Collected: 09/06/22 15:00
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:35	CH	EET MID

Client Sample ID: A8
Date Collected: 09/06/22 15:45
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-8
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	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 17:08	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/08/22 23:40	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:40	CH	EET MID

Client Sample ID: A9
Date Collected: 09/06/22 16:00
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-9
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	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 17:28	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/09/22 00:02	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:45	CH	EET MID

Client Sample ID: A10
Date Collected: 09/06/22 16:00
Date Received: 09/07/22 15:52

Lab Sample ID: 880-18964-10
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	34413	09/13/22 14:26	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/17/22 17:49	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34764	09/19/22 09:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34072	09/09/22 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34021	09/08/22 14:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33970	09/09/22 00:23	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	33994	09/08/22 09:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34158	09/10/22 19:50	CH	EET MID

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Laboratory References:

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

Accreditation/Certification Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	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: Environmental Oilfield Solutions, LLC
Project/Site: Hag Berry 9 State COM

Job ID: 880-18964-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-18964-1	A1	Solid	09/06/22 13:00	09/07/22 15:52	1 ft
880-18964-2	A2	Solid	09/06/22 13:30	09/07/22 15:52	1 ft
880-18964-3	A3	Solid	09/06/22 14:00	09/07/22 15:52	1 ft
880-18964-4	A4	Solid	09/06/22 14:15	09/07/22 15:52	1 ft
880-18964-5	A5	Solid	09/06/22 14:30	09/07/22 15:52	1 ft
880-18964-6	A6	Solid	09/06/22 14:45	09/07/22 15:52	1 ft
880-18964-7	A7	Solid	09/06/22 15:00	09/07/22 15:52	1 ft
880-18964-8	A8	Solid	09/06/22 15:45	09/07/22 15:52	1 ft
880-18964-9	A9	Solid	09/06/22 16:00	09/07/22 15:52	1 ft
880-18964-10	A10	Solid	09/06/22 16:00	09/07/22 15:52	1 ft

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Chain of Custody

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

Work Order No: 18964

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9/19/2022

Project Manager:	Steve Huffman	Bill to: (if different)	Centennial Resources
Company Name:	Environmental Oilfield Solutions	Company Name:	
Address:	2317 Field St.	Address:	
City, State ZIP:	Odessa, TX	City, State ZIP:	
Phone	832-646-31-07 Email	SHoffman.005@Gmail.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:	Lea County, NM	Turn Around	
Project Number:	1821097482B	☒ Routine ☐ Rush	
Project Location	Highway 9 State COM	Due Date	
Sampler's Name:	Gustavo Serrano	TAT starts the day received by the lab, if received by 4.30pm	
PO #			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice.	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR6
Cooler Custody Seals:	Yes No N/A	Correction Factor:	0.0
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.7
Total Containers.		Corrected Temperature:	5.7

ANALYSIS REQUEST

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: TPH 8015	Chlorides	BTEX	Sample Comments
A1	S	9-6-22	1pm	1ft	Comp	1				
A2			1:30							
A3			2							
A4			2:15							
A5			2:30							
A6			2:45							
A7			3:00							
A8			3:45							
A9			4:00							
A10			4:00							

880-18964 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Gustavo Serrano		9/7/22	2		
3		855	4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Environmental Oilfield Solutions, LLC

Job Number: 880-18964-1
SDG Number: Lea County, NM

Login Number: 18964
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-20709-1
Laboratory Sample Delivery Group: Lea County, NM
Client Project/Site: Hayberry 9 State Com

For:
Environmental Oilfield Solutions, LLC
2317 Field St.
Unit R
Odessa, Texas 79761

Attn: Steve Hoffman

Holly Taylor

Authorized for release by:
11/1/2022 2:49:17 PM

Holly Taylor, Project Manager
(806)794-1296
Holly.Taylor@et.eurofinsus.com

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Table of Contents

Definitions/Glossary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Job ID: 880-20709-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-20709-1

Receipt
The samples were received on 10/25/2022 11:52 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 was 5.4° C.

Receipt Exceptions
The following samples were received and analyzed from a bulk soil jar: A-1 (880-20709-1) and A-10 (880-20709-2).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38099 and analytical batch 880-38214 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015B NM: The laboratory control sample (LCS) associated with preparation batch 880-37877 and analytical batch 880-37857 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.

Method 8015B NM: Surrogate recovery for the following samples were outside control limits: (LCSD 880-37877/3-A) and (MB 880-37877/1-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.

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

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

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

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Client Sample ID: A-1
Date Collected: 10/24/22 16:00
Date Received: 10/25/22 11:52
Sample Depth: 1 ft

Lab Sample ID: 880-20709-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/28/22 12:40	10/31/22 17:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/28/22 12:40	10/31/22 17:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/28/22 12:40	10/31/22 17:44	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		10/28/22 12:40	10/31/22 17:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/28/22 12:40	10/31/22 17:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/28/22 12:40	10/31/22 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*10/28/22 12:40*	*10/31/22 17:44*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*10/28/22 12:40*	*10/31/22 17:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/01/22 09:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/27/22 09:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *+ *1	50.0	mg/Kg		10/26/22 11:21	10/27/22 03:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/26/22 11:21	10/27/22 03:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/26/22 11:21	10/27/22 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*89*		*70 - 130*	*10/26/22 11:21*	*10/27/22 03:11*	*1*
o-Terphenyl (Surr)	*101*		*70 - 130*	*10/26/22 11:21*	*10/27/22 03:11*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.9		5.02	mg/Kg			10/30/22 07:20	1

Client Sample ID: A-10
Date Collected: 10/24/22 16:00
Date Received: 10/25/22 11:52
Sample Depth: 1 ft

Lab Sample ID: 880-20709-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/28/22 12:40	10/31/22 18:10	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/28/22 12:40	10/31/22 18:10	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/28/22 12:40	10/31/22 18:10	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		10/28/22 12:40	10/31/22 18:10	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/28/22 12:40	10/31/22 18:10	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/28/22 12:40	10/31/22 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*10/28/22 12:40*	*10/31/22 18:10*	*1*

Client Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Client Sample ID: A-10
Date Collected: 10/24/22 16:00
Date Received: 10/25/22 11:52
Sample Depth: 1 ft

Lab Sample ID: 880-20709-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*10/28/22 12:40*	*10/31/22 18:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/01/22 09:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/22 09:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+ *1	49.9	mg/Kg		10/26/22 11:21	10/27/22 03:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/26/22 11:21	10/27/22 03:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/26/22 11:21	10/27/22 03:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*10/26/22 11:21*	*10/27/22 03:32*	*1*
o-Terphenyl (Surr)	*116*		*70 - 130*	*10/26/22 11:21*	*10/27/22 03:32*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.9		5.03	mg/Kg			10/30/22 07:27	1

Surrogate Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20709-1	A-1	90	90
880-20709-2	A-10	113	84
LCS 880-38099/1-A	Lab Control Sample	118	90
LCSD 880-38099/2-A	Lab Control Sample Dup	120	99
MB 880-38099/5-A	Method Blank	79	90

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20709-1	A-1	89	101
880-20709-2	A-10	102	116
LCS 880-37877/2-A	Lab Control Sample	97	118
LCSD 880-37877/3-A	Lab Control Sample Dup	117	137 S1+
MB 880-37877/1-A	Method Blank	121	146 S1+

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38099/5-A
Matrix: Solid
Analysis Batch: 38214

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38099

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/28/22 12:40	10/31/22 11:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/28/22 12:40	10/31/22 11:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/28/22 12:40	10/31/22 11:40	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		10/28/22 12:40	10/31/22 11:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/28/22 12:40	10/31/22 11:40	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/28/22 12:40	10/31/22 11:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*10/28/22 12:40*	*10/31/22 11:40*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*10/28/22 12:40*	*10/31/22 11:40*	*1*

Lab Sample ID: LCS 880-38099/1-A
Matrix: Solid
Analysis Batch: 38214

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09267		mg/Kg		93	70 - 130
Toluene	0.100	0.08730		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.08721		mg/Kg		87	70 - 130
m,p-Xylenes	0.200	0.1768		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08756		mg/Kg		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 880-38099/2-A
Matrix: Solid
Analysis Batch: 38214

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38099

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09817		mg/Kg		98	70 - 130	6	35
Toluene	0.100	0.08916		mg/Kg		89	70 - 130	2	35
Ethylbenzene	0.100	0.08955		mg/Kg		90	70 - 130	3	35
m,p-Xylenes	0.200	0.1831		mg/Kg		92	70 - 130	3	35
o-Xylene	0.100	0.08959		mg/Kg		90	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-37877/1-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37877

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/26/22 11:21	10/26/22 20:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/26/22 11:21	10/26/22 20:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/26/22 11:21	10/26/22 20:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*121*		*70 - 130*	*10/26/22 11:21*	*10/26/22 20:49*	*1*
o-Terphenyl (Surr)	*146*	*S1+*	*70 - 130*	*10/26/22 11:21*	*10/26/22 20:49*	*1*

Lab Sample ID: LCS 880-37877/2-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1077		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1003		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*97*		*70 - 130*
o-Terphenyl (Surr)	*118*		*70 - 130*

Lab Sample ID: LCSD 880-37877/3-A
Matrix: Solid
Analysis Batch: 37857

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 37877

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1328	*+ *1	mg/Kg		133	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	1000	1159		mg/Kg		116	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*117*		*70 - 130*
o-Terphenyl (Surr)	*137*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37836/1-A
Matrix: Solid
Analysis Batch: 38165

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/30/22 04:27	1

QC Sample Results

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-37836/2-A
Matrix: Solid
Analysis Batch: 38165

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	263.2		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-37836/3-A
Matrix: Solid
Analysis Batch: 38165

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	263.8		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

GC VOA

Prep Batch: 38099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20709-1	A-1	Total/NA	Solid	5035	
880-20709-2	A-10	Total/NA	Solid	5035	
MB 880-38099/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38099/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38099/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 38214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20709-1	A-1	Total/NA	Solid	8021B	38099
880-20709-2	A-10	Total/NA	Solid	8021B	38099
MB 880-38099/5-A	Method Blank	Total/NA	Solid	8021B	38099
LCS 880-38099/1-A	Lab Control Sample	Total/NA	Solid	8021B	38099
LCSD 880-38099/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38099

Analysis Batch: 38335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20709-1	A-1	Total/NA	Solid	Total BTEX	
880-20709-2	A-10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 37857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20709-1	A-1	Total/NA	Solid	8015B NM	37877
880-20709-2	A-10	Total/NA	Solid	8015B NM	37877
MB 880-37877/1-A	Method Blank	Total/NA	Solid	8015B NM	37877
LCS 880-37877/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37877
LCSD 880-37877/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37877

Prep Batch: 37877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20709-1	A-1	Total/NA	Solid	8015NM Prep	
880-20709-2	A-10	Total/NA	Solid	8015NM Prep	
MB 880-37877/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37877/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37877/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20709-1	A-1	Total/NA	Solid	8015 NM	
880-20709-2	A-10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20709-1	A-1	Soluble	Solid	DI Leach	
880-20709-2	A-10	Soluble	Solid	DI Leach	
MB 880-37836/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37836/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37836/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

HPLC/IC

Analysis Batch: 38165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20709-1	A-1	Soluble	Solid	300.0	37836
880-20709-2	A-10	Soluble	Solid	300.0	37836
MB 880-37836/1-A	Method Blank	Soluble	Solid	300.0	37836
LCS 880-37836/2-A	Lab Control Sample	Soluble	Solid	300.0	37836
LCSD 880-37836/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37836

Lab Chronicle

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Client Sample ID: A-1

Date Collected: 10/24/22 16:00
Date Received: 10/25/22 11:52

Lab Sample ID: 880-20709-1
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	38099	10/28/22 12:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38214	10/31/22 17:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38335	11/01/22 09:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			37991	10/27/22 09:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37877	10/26/22 11:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/27/22 03:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	37836	10/25/22 15:49	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38165	10/30/22 07:20	CH	EET MID

Client Sample ID: A-10

Date Collected: 10/24/22 16:00
Date Received: 10/25/22 11:52

Lab Sample ID: 880-20709-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	38099	10/28/22 12:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38214	10/31/22 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38335	11/01/22 09:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			37991	10/27/22 09:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37877	10/26/22 11:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/27/22 03:32	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	37836	10/25/22 15:49	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38165	10/30/22 07:27	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	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: Environmental Oilfield Solutions, LLC
Project/Site: Hayberry 9 State Com

Job ID: 880-20709-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-20709-1	A-1	Solid	10/24/22 16:00	10/25/22 11:52	1 ft
880-20709-2	A-10	Solid	10/24/22 16:00	10/25/22 11:52	1 ft

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: 20709

www.xenco.com Page 1 of 1

Project Manager:	Stere Hoffman	Bill to: (if different)	
Company Name:	Environmental Drilling Solutions	Company Name:	
Address:	2317 Field St Unit B2	Address:	
City, State ZIP:	Odessa Tx 79761	City, State ZIP:	
Phone:	832-644-3107	Email:	Shoffman.eds@gmail.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:	Hagberry 9 State Com	Turn Around	☒ Routine ☐ Rush
Project Number:		Due Date:	
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Gustavo Sanmiguel		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR10
Cooler Custody Seals:	Yes No N/A	Correction Factor:	+0.3
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.7
Total Containers:		Corrected Temperature:	6.0

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: TPH 8015	Chlorides	BTEX	Sample Comments
A-1	S	10-24-22	4pm	1ft	Comp	1	X	X	X	402 gal
A-10	S	10-24-22	4pm	1ft	Comp	1	X	X	X	

880-20709 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10/25/22 1152	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Environmental Oilfield Solutions, LLC

Job Number: 880-20709-1
SDG Number: Lea County, NM

Login Number: 20709
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	

Appendix B: FORM C-141

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Centennial Resource Production, Inc	OGRID: 372165
Contact Name: Montgomery Floyd	Contact Telephone: 432-315-0123
Contact email: Montgomery.floyd@cdevinc.com	Incident # nAPP2129339302
Contact mailing address: 500 W. Illinois Ave, Suite 500, Midland Texas 79705	

Location of Release Source

Latitude 32.412426 Longitude -103.380131
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Hagberry 9 State Com CTB	Site Type: Production Facility
Date Release Discovered: 10-17-21	API# *(if applicable)* 30025484060000

Unit Letter	Section	Township	Range	County
C	09	22S	35E	Lea

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 34	Volume Recovered (bbls) 27.5
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
Production separator vessel dump controlled malfunctioned leading to spill over of storage tank causing fluid to impact surface.

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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Montgomery Floyd Title: Sr. Environmental Analyst

Signature: _____ Date: 11-2-21

email: Montgomery.floyd@cdevinc.com Telephone: 432-315-0123

OCD Only

Received by: _____ Date: _____

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

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

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

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

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

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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: Nikki Mishler Title: Sr. Environmental Representative

Signature: [signature] Date: 8/11/22

email: nikki.mishler@cdevinc.com Telephone: 432-634-8722

OCD Only

Received by: _____ Date: _____

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Remediation Plan

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

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

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

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

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

Printed Name: Nikki Mishler Title: Sr. Environmental Representative

Signature: Nikki Mishler Date: 8/11/22

email: nikki.mishler@eclevia.com Telephone: 432-634-8722

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

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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: Nikki Mishler Title: Sr. Environmental Representative

Signature: [signature] Date: 8/11/22

email: nikki.mishler@cdevinc.com Telephone: 432-634-8722

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: _____

Appendix C: Request for Approval of Extension of Reporting Date

From: Steven Hoffman
To: lpschnable@suddenlink.net
Subject: Fwd: FW: -EXTERNAL- RE: [EXTERNAL] nAPP2129339302 - Request for Extension - Hagberry 9
Date: Tuesday, November 22, 2022 10:49:18 AM

---------- Forwarded message ---------
From: **Nikki Mishler** <Nikki.Mishler@cdevinc.com>
Date: Thu, Sep 22, 2022, 3:19 PM
Subject: FW: -EXTERNAL- RE: [EXTERNAL] nAPP2129339302 - Request for Extension - Hagberry 9
To: Steven Hoffman <shoffman.eos@gmail.com>

60 day extension approved and moved to 11/23/22.

From: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Sent: Thursday, September 22, 2022 3:18 PM
To: Nikki Mishler <Nikki.Mishler@cdevinc.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>
Subject: -EXTERNAL- RE: [EXTERNAL] nAPP2129339302 - Request for Extension

WARNING: The sender of this email could not be validated and may not match the person in the "From" field.

Nikki

OCD approves your request for a 60-day extension to November 23, 2022 to submit a closure report. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,

Jennifer Nobui

From: Nikki Mishler <Nikki.Mishler@cdevinc.com>

Sent: Thursday, September 22, 2022 2:09 PM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Subject: [EXTERNAL] nAPP2129339302 - Request for Extension

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

Good Afternoon Ms. Nobui,

I would like to request a 60-day extension to complete remediation activities and submit the closure report for the release at the Hagberry 9 Battery referenced below. Issues with Xenco's laboratory equipment delayed sample turnaround time and delivery of the laboratory report associated with composite confirmation sampling activities. The laboratory report was delivered yesterday evening.

Thank you,

Nikki Mishler

432-634-8722

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, August 23, 2022 12:53 PM
To: Nikki Mishler <Nikki.Mishler@cdevinc.com>
Subject: -EXTERNAL- The Oil Conservation Division (OCD) has rejected the application, Application ID: 135332

WARNING: The sender of this email could not be validated and may not match the person in the "From" field.

To whom it may concern (c/o Nikki Mishler for CENTENNIAL RESOURCE PRODUCTION, LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2129339302, for the following reasons:

- **Closure Report Denied. Insufficient number of confirmation soil samples collected. Composite confirmation samples will be collected from the bottom and sidewalls of the excavation from areas representing no more than two hundred (200) square feet 19.15.29.12.D(1)(c) NMAC. Need to demonstrate boundaries meet the most stringent criteria - need to collect side wall samples. Site plan needs to contain a scale. Please resubmit a revised Closure Report by September 23, 2022 to OCD portal. If you have any questions regarding this denial, please contact OCD for clarification.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 135332.
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,
Jennifer Nobui
Environmental Specialist-Advanced
505-470-3407
Jennifer.Nobui@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

CAUTION: This email originated from outside of the organization. If it appears to be internal, check directly with assumed source

Appendix D: Revised Closure C-141

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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: Nikki Mishler Title: Senior Environmental Representative

Signature: Nikki Mishler Date: 11/21/22

email: Nikki.Mishler@cdevinc.com Telephone: 432-634-8722

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: Jennifer Nobui Date: 01/18/2023

Printed Name: Jennifer Nobui Title: Environmental Specialist 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 160850

CONDITIONS

Operator: CENTENNIAL RESOURCE PRODUCTION, LLC 1001 17th Street, Suite 1800 Denver, CO 80202	OGRID: 372165
	Action Number: 160850
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	1/18/2023