Final Closure Report

December 1, 2022

Blinebry Satellite #1 Crude Oil and Produced Water Release

Incident No.: nCE2026733719

Prepared For:

Southwest Royalties, Inc.
P.O. Box 53570
Midland, Texas 79710

Prepared By:

Crain Environmental
2925 East 17th Street
Odessa, Texas 79761

Cynthia K. Crain, P.G.

Grain Environmental

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APPENDICES

1.0 Introduction

Crain Environmental (CE), on behalf of Southwest Royalties, Inc. (SWR), has prepared this *Final Closure Report* for the crude oil and produced water release at the Blineby Satellite #1 (Site) located in Unit C (NE/4, NW/4), Section 29, Township 22 South, Range 38 East in Lea County, New Mexico. The geodetic position is North 32.36805° and West 103.08540°. Figure 1 presents a Site Location map.

2.0 Background

On May 17, 2022, a *Remediation Report with Variance and Deferral Request (Remediation Plan)* for Southwest Royalties, Inc. (SWR) Incident ID (n#) nCE2026733719 was submitted to the New Mexico Oil Conservation Division (OCD) fee portal.

The Remediation Plan proposed a variance to install a 20-mil polyethylene liner in the bottom of the excavation at approximately 8 feet bgs over an area measuring approximately 950 square feet encompassing sample locations C-72, EXP-C-72 and C-69, backfilling of the excavation(s) to ground surface, and deferral of remediation in the lease road until excavation(s) were backfilled. Figure 2 shows the area of liner placement, and Figures 2, 3, and 4 show the areas of sample collection and/or soil remediation in the lease road.

On June 2, 2022, the Remediation Plan was approved with the following conditions:

- "OCD approves backfilling excavations and approves request for a variance for a liner. OCD also approves Deferral Request to address impact in service road after excavations have been backfilled. OCD requests the deferral be in place for 90 days to address impacts in service road from date of backfill."

The purpose of this Final Closure Report is to provide data associated with the completion of all requested activities listed above, and to respectfully request final closure of Incident # nCE2026733719 (Application ID 107769).

3.0 Remediation Activities

Liner Placement and Backfill of Excavations

On September 1, 2022, approval to proceed with liner placement and excavation backfill was approved by the landowner. The 20-mil polyethylene liner was installed (as approved) on September 21, 2022, and backfilling of the excavations began. Backfilling (as approved) continued through September 30, 2022. Appendix A provides a photo log that shows installation of the liner and the backfilled excavations.

Remediation of Soil in Lease Road

On October 3, 2022, soil samples (B-4 at 1' [Figure 2], B-8 at 1', and B-8 at 3' [Figure 4]) were collected from the areas in the lease road where total petroleum hydrocarbon (TPH) and/or chloride concentrations were previously reported above the OCD Closure Criteria. The laboratory report is included in Appendix B.

Concentrations of TPH at B-4 (54.5 mg/kg) were reported below the Closure Criteria at a depth of 1' below ground surface (bgs). Concentrations of TPH at B-8 were reported above the Closure Criteria at depths of 1' bgs (2,876 mg/kg) and 3' bgs (1,010.6 mg/kg), and concentrations of chloride at B-8 were reported below the Closure Criteria at depths of 1' bgs (460 mg/kg) and 3' bgs (113 mg/kg).

On October 31, 2022, a 13' x 14' x 3.5' area was excavated in the area of sample point B-8. Confirmation samples were collected from the east and west sidewalls (B-8E and B-8W), and from the bottom (B-8 [3.5']) of the excavation and submitted to Eurofins Environment Testing (Eurofins) in Midland, Texas for analysis of TPH, BTEX, and chlorides. Table 1 provides a summary of the laboratory results. Figure 4 shows the excavation dimensions and sample point locations. Results of confirmation samples to the north and south of the excvation were provided in the Remediation Plan. The laboratory report is included in Appendix B.

As concentrations of TPH, BTEX, and chlorides were reported below the Closure Criteria in each sample, the excavation was backfilled with clean soil on November 11, 2022. Photographic documentation is provided in Appendix A.

4.0 Request for Closure

As all conditions of the Remediation Plan have been completed to OCD specifications, SWR respectfully requests that Incident # nCE2026733719 be closed. A copy of the Final C-141 is included in Appendix C.

5.0 Distribution

Copy 1: Mike Bratcher
New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Copy 2: Tim Culp
Southwest Royalties, Inc.
P.O. Box 53570
Midland, Texas 79710

Copy 3: M.Y. Merchant
Southwest Royalties, Inc.
2401 Avenue O
Eunice, New Mexico 88240

Grain Environmental

TABLE

Table 1
Confirmation Soil Sample Analytical Data Summary
Blinebry Sat #1 - Lease Road
Lea County, New Mexico
North 32 22' 4.98" West 103 5' 7.32"W

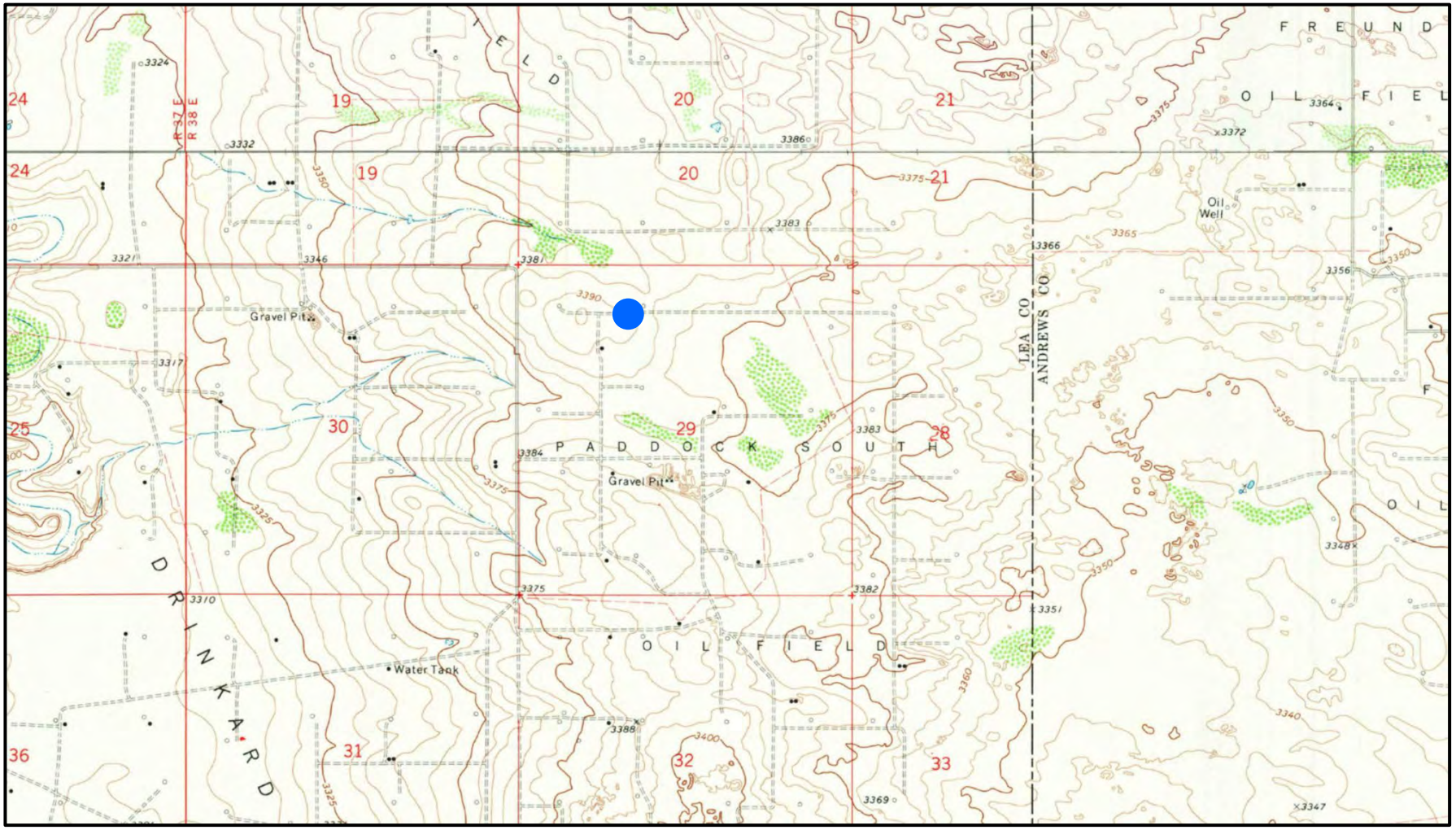
Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg	BTEX (mg/Kg)	C6 - C10 (mg/Kg)	C10 - C28 (mg/Kg)	C28 - C36 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100 / 2,500**	**600 / 10,000**
B-1	1	8/16/2021	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	13.2
	3	8/16/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	68.5
	5	8/16/2021	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	84.8
	10	8/16/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	107
B-2	1	8/16/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	339
	3	8/16/2021	In-Situ	<0.00200	0.00453	<49.9	<49.9	<49.9	<49.9	360
	5	8/16/2021	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	178
	10	8/16/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	83.5
B-3	1	8/16/2021	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	43.2
	3	8/16/2021	In-Situ	0.00254	0.00599	<49.8	<49.8	<49.8	<49.8	83.1
	5	8/16/2021	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	108
	10	8/16/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	114
B-4	*1*	*8/16/2021*	*In-Situ*	*<0.00200*	*<0.00401*	*<49.9*	*364*	*<49.9*	***364***	*249*
	1	10/3/2022	In-Situ	--	--	<15.0	54.5	<15.0	54.5	--
	3	8/16/2021	In-Situ	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	575
	5	8/16/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	320
	10	8/16/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	153
B-5	1	8/16/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	38.4
	3	8/16/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	85.3
	5	8/16/2021	In-Situ	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	99.6
	10	8/16/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	98.8
B-6	1	8/16/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	278
	3	8/16/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	582
	5	8/16/2021	In-Situ	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	542
	10	8/16/2021	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	448
B-7	1	8/16/2021	In-Situ	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	42.3
	3	8/16/2021	In-Situ	0.0000373	<0.000040	<49.9	<49.9	<49.9	<49.9	38.8

Table 1
Confirmation Soil Sample Analytical Data Summary
Blinebry Sat #1 - Lease Road
Lea County, New Mexico
North 32 22' 4.98" West 103 5' 7.32"W

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg	BTEX (mg/Kg)	C6 - C10 (mg/Kg)	C10 - C28 (mg/Kg)	C28 - C36 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100 / 2,500**	**600 / 10,000**
B-7	5	8/16/2021	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	25.9
B-8	*1*	*8/16/2021*	*Excavated*	*<0.00200*	*<0.00400*	*<49.9*	*387*	*<49.9*	***387***	***625***
	1	*10/3/2022*	*Excavated*	*--*	*--*	*<15.0*	*2,370*	*506*	***2,876***	*460*
	3	*8/16/2021*	*Excavated*	*<0.00199*	*<0.00398*	*<49.9*	*<49.9*	*<49.9*	*<49.9*	***998***
	3	*10/3/2022*	*Excavated*	*--*	*--*	*18.6*	*306*	*686*	***1,010.6***	*113*
	3.5	10/31/2022	In-Situ	0.000922	<0.00101	21.9	<15.0	<15.0	21.9	139
	5	8/16/2021	In-Situ	<0.00202	0.0101	<49.8	<49.8	<49.8	<49.8	471
	10	8/16/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	312
B-8E	0 - 3.5	10/31/2022	In-Situ	0.00119	0.00119	29.5	18.7	<14.9	48.2	97.7
B-8W	0 - 3.5	10/31/2022	In-Situ	0.00113	0.00113	23.4	20.7	<15.0	44.1	43.9

Notes: Analysis performed by Eurofins/Xenco Laboratories by EPA SW-846 Methods 8021B (BTEX), 8015M (TPH), and M300 (chloride)
Depth in feet below ground surface (bgs)
mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)
<: denotes concentration less than analytical method reporting limit
Bold and Highlighted exceeds OCD remediation levels
Italic and Highlighted indicates soil was excavated and disposed

FIGURES



LEGEND: Site Location Base Map from GAIA GPS	N W E S	**Figure 1** Site Location Map Southwest Royalties, Inc, Blinebry Satellite #1 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: May 14, 2022 GPS: 32.36805° -103.08540°

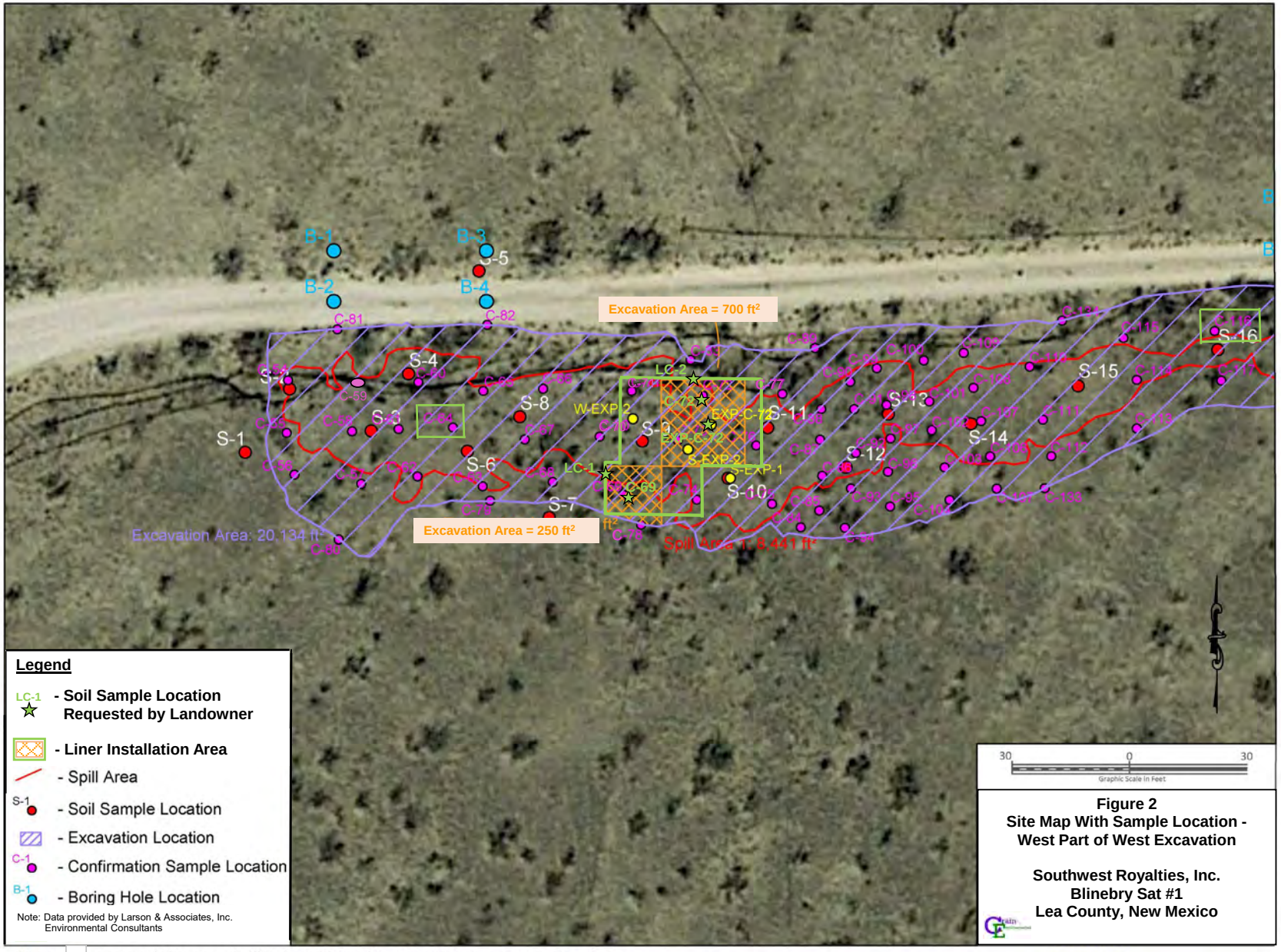


Figure 2
Site Map With Sample Location - West Part of West Excavation

Southwest Royalties, Inc.
Blinebry Sat #1
Lea County, New Mexico

Figure 2 -Focused Western Spill 1 Aerial Map Showing Western Excavation Area

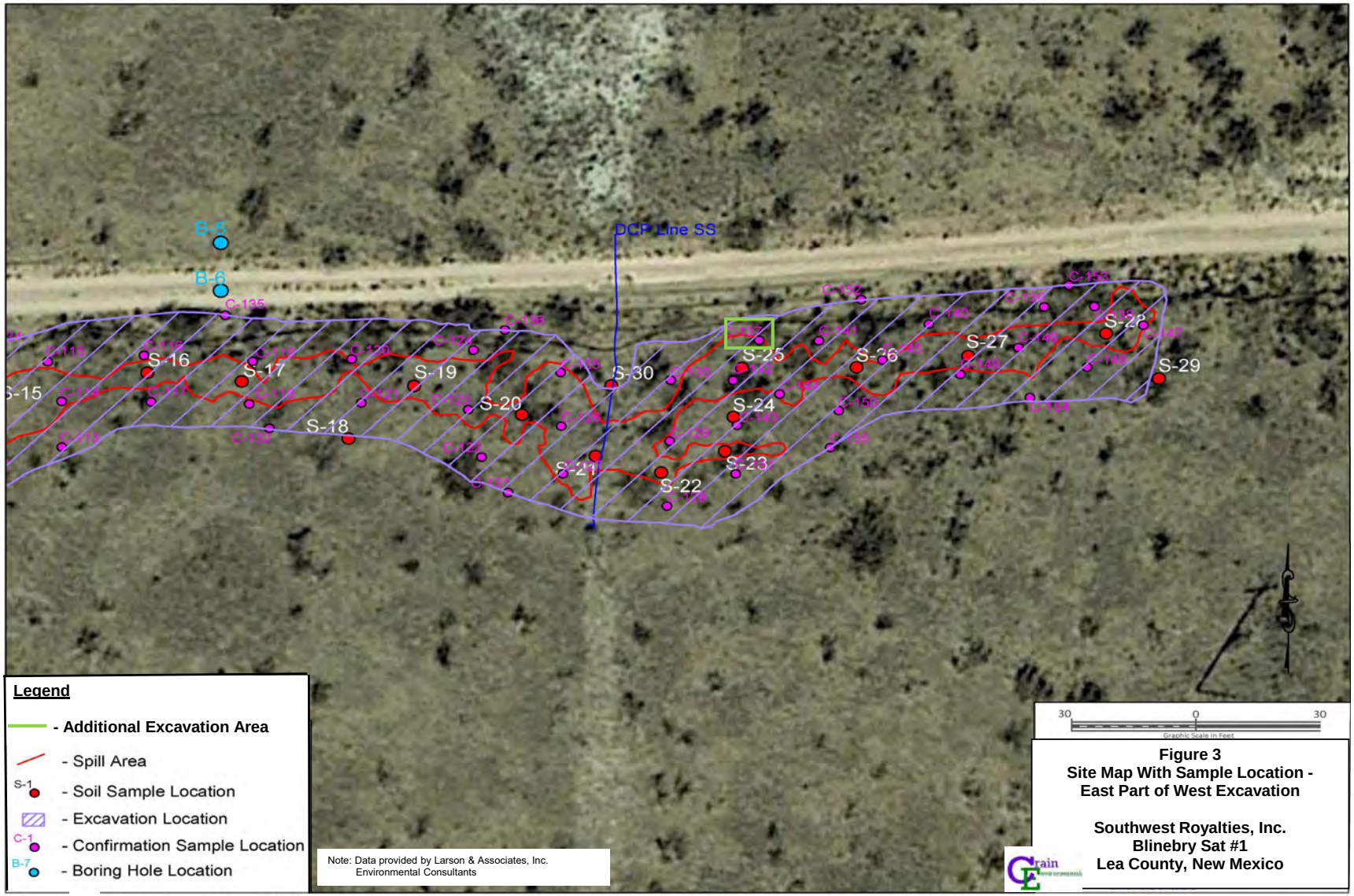


Figure 3 ·Focused Eastern Spill 1 Aerial Map Showing Eastern Excavation Area

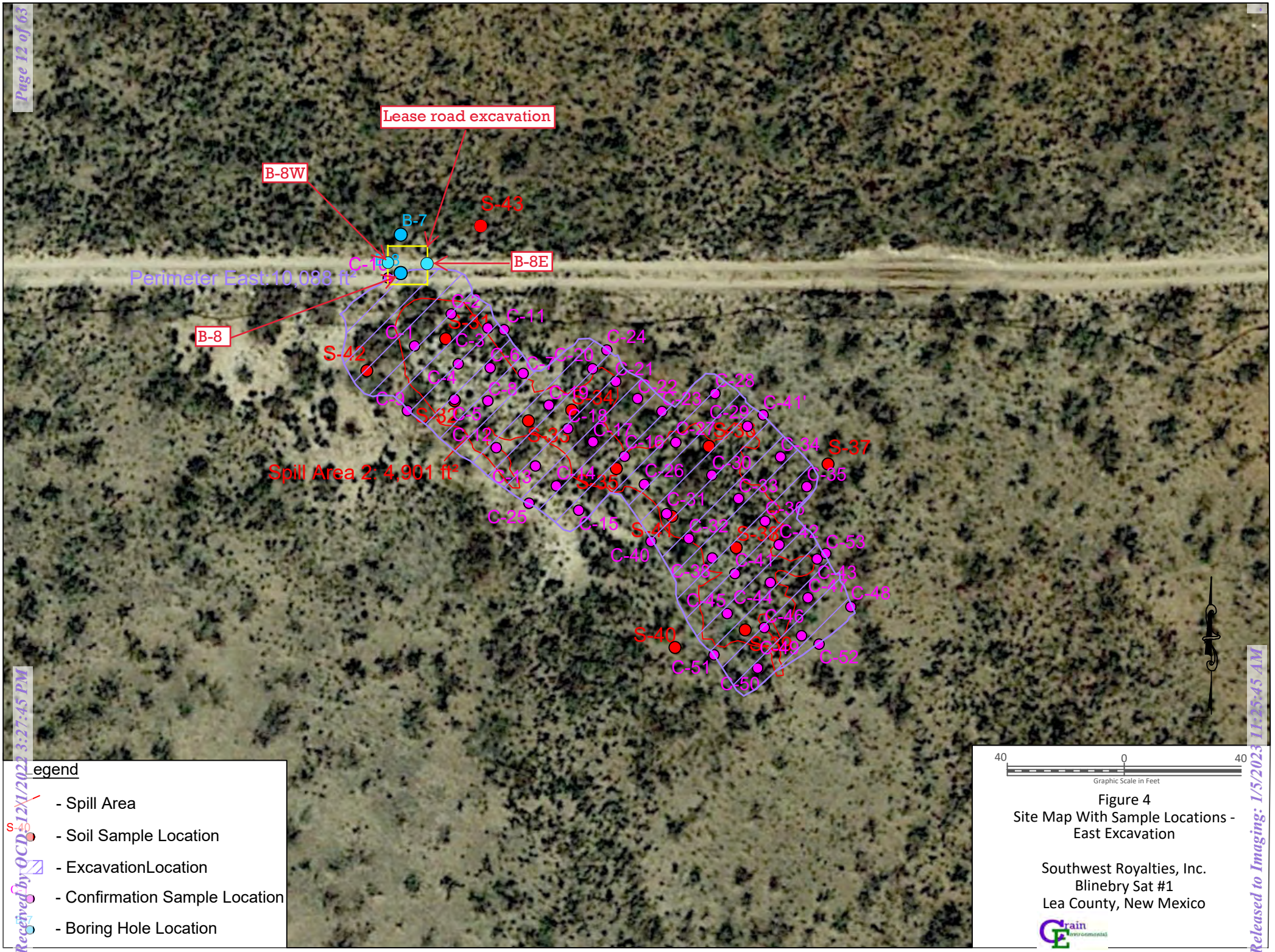


Figure 4
Site Map With Sample Locations - East Excavation

Southwest Royalties, Inc.
Blinebry Sat #1
Lea County, New Mexico

Figure 4 -Focused Eastern Spill 2 Aerial Map Showing Excavation Area. Data provided by Larson and Associates, Inc.

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Appendix A: Photographic Documentation

Southwest Royalties, Inc.
Blinebry Satellite #1


Area to be covered with liner (9/21/22).


Liner installed (9/21/22).


Liner installed and backfill started (9/21/22).


Liner installed and backfill started (9/21/22).


View to E of backfilled W excavation (10/3/22).


View to W of backfilled E excavation (10/3/22).


View to W of backfilled W excavation (10/3/22).


View to NE of backfilled E excavation (10/3/22).


View to N of excavation in road (10/31/22).


View to S of excavation in road (10/31/22).


View to W of excavation in road (10/31/22).


View to E of backfilled road excavation (11/11/22).

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Appendix B: Laboratory Analytical Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-19976-1
Laboratory Sample Delivery Group: Lea Co., NM
Client Project/Site: Blinebry Sat #1
Revision: 1

For:
Crain Environmental
2925 E. 17th St.
Odessa, Texas 79761

Attn: Cindy Crain

JKramer

Authorized for release by:
10/13/2022 1:02:58 PM

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

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

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

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Laboratory Job ID: 880-19976-1
SDG: Lea Co., NM

Table of Contents

Definitions/Glossary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Job ID: 880-19976-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-19976-1

REVISION

The report being provided is a revision of the original report sent on 10/10/2022. The report (revision 1) is being revised due to Per client email requesting TPH on B-8 (3').

Report revision history

Receipt
The samples were received on 10/4/2022 4:08 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: B-8 (1') (880-19976-1), B-8 (3') (880-19976-2) and B-4 (1') (880-19976-3).

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-36186 and analytical batch 880-36113 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-20138-A-4-E MS) and (880-20138-A-4-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Client Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Client Sample ID: B-8 (1')
Date Collected: 10/03/22 10:50
Date Received: 10/04/22 16:08
Sample Depth: 1'

Lab Sample ID: 880-19976-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2880		49.9	15.0	mg/Kg			10/06/22 11:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		10/05/22 14:06	10/06/22 06:06	1
Diesel Range Organics (Over C10-C28)	2370		49.9	15.0	mg/Kg		10/05/22 14:06	10/06/22 06:06	1
Oil Range Organics (Over C28-C36)	506		49.9	15.0	mg/Kg		10/05/22 14:06	10/06/22 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*10/05/22 14:06*	*10/06/22 06:06*	*1*
o-Terphenyl	*117*		*70 - 130*	*10/05/22 14:06*	*10/06/22 06:06*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	460		4.98	0.393	mg/Kg			10/08/22 08:46	1

Client Sample ID: B-8 (3')
Date Collected: 10/03/22 11:05
Date Received: 10/04/22 16:08
Sample Depth: 3'

Lab Sample ID: 880-19976-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1010		49.8	14.9	mg/Kg			10/06/22 11:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.6	J	49.8	14.9	mg/Kg		10/12/22 08:44	10/12/22 17:49	1
Diesel Range Organics (Over C10-C28)	306		49.8	14.9	mg/Kg		10/12/22 08:44	10/12/22 17:49	1
Oil Range Organics (Over C28-C36)	686		49.8	14.9	mg/Kg		10/12/22 08:44	10/12/22 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*10/12/22 08:44*	*10/12/22 17:49*	*1*
o-Terphenyl	*85*		*70 - 130*	*10/12/22 08:44*	*10/12/22 17:49*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113		5.00	0.395	mg/Kg			10/08/22 09:09	1

Client Sample ID: B-4 (1')
Date Collected: 10/03/22 11:20
Date Received: 10/04/22 16:08
Sample Depth: 1'

Lab Sample ID: 880-19976-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	54.5		49.9	15.0	mg/Kg			10/06/22 11:00	1

Client Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Client Sample ID: B-4 (1')

Date Collected: 10/03/22 11:20
Date Received: 10/04/22 16:08
Sample Depth: 1'

Lab Sample ID: 880-19976-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		10/05/22 14:06	10/06/22 05:44	1
Diesel Range Organics (Over C10-C28)	**54.5**		49.9	15.0	mg/Kg		10/05/22 14:06	10/06/22 05:44	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/05/22 14:06	10/06/22 05:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*10/05/22 14:06*	*10/06/22 05:44*	*1*
o-Terphenyl	*113*		*70 - 130*	*10/05/22 14:06*	*10/06/22 05:44*	*1*

Surrogate Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
880-19973-A-46-C MS	Matrix Spike	71	73										
880-19973-A-46-D MSD	Matrix Spike Duplicate	84	85										
880-19976-1	B-8 (1')	106	117										
880-19976-2	B-8 (3')	88	85										
880-19976-3	B-4 (1')	105	113										
880-20138-A-4-E MS	Matrix Spike	74	67 S1-										
880-20138-A-4-F MSD	Matrix Spike Duplicate	75	66 S1-										
LCS 880-36186/2-A	Lab Control Sample	91	108										
LCS 880-36718/2-A	Lab Control Sample	99	107										
LCSD 880-36186/3-A	Lab Control Sample Dup	92	108										
LCSD 880-36718/3-A	Lab Control Sample Dup	88	94										
MB 880-36186/1-A	Method Blank	6 S1-	7 S1-										
MB 880-36718/1-A	Method Blank	83	92										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-36186/1-A
Matrix: Solid
Analysis Batch: 36113

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36186

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		10/05/22 14:06	10/05/22 20:28	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/05/22 14:06	10/05/22 20:28	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/05/22 14:06	10/05/22 20:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*6*	*S1-*	*70 - 130*	*10/05/22 14:06*	*10/05/22 20:28*	*1*
o-Terphenyl	*7*	*S1-*	*70 - 130*	*10/05/22 14:06*	*10/05/22 20:28*	*1*

Lab Sample ID: LCS 880-36186/2-A
Matrix: Solid
Analysis Batch: 36113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36186

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	777.3		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	1000	872.8		mg/Kg		87	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: LCSD 880-36186/3-A
Matrix: Solid
Analysis Batch: 36113

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 36186

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	841.3		mg/Kg		84	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	878.3		mg/Kg		88	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: 880-19973-A-46-C MS
Matrix: Solid
Analysis Batch: 36113

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 36186

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	15.6	J	998	926.9		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<15.0	U	998	818.6		mg/Kg		82	70 - 130

QC Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

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

Lab Sample ID: 880-19973-A-46-C MS
Matrix: Solid
Analysis Batch: 36113

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 36186

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	73		70 - 130

Lab Sample ID: 880-19973-A-46-D MSD
Matrix: Solid
Analysis Batch: 36113

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 36186

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	15.6	J	999	1119		mg/Kg		110	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<15.0	U	999	975.0		mg/Kg		98	70 - 130	17	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	85		70 - 130

Lab Sample ID: MB 880-36718/1-A
Matrix: Solid
Analysis Batch: 36713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		10/12/22 08:44	10/12/22 11:04	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/12/22 08:44	10/12/22 11:04	1
Oll Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/12/22 08:44	10/12/22 11:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	10/12/22 08:44	10/12/22 11:04	1
o-Terphenyl	92		70 - 130	10/12/22 08:44	10/12/22 11:04	1

Lab Sample ID: LCS 880-36718/2-A
Matrix: Solid
Analysis Batch: 36713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1007		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	903.1		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	107		70 - 130

QC Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

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

Lab Sample ID: LCSD 880-36718/3-A
Matrix: Solid
Analysis Batch: 36713

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 36718

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	824.6		mg/Kg		82	70 - 130	20	20
Diesel Range Organics (Over C10-C28)			1000	942.9		mg/Kg		94	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Lab Sample ID: 880-20138-A-4-E MS
Matrix: Solid
Analysis Batch: 36713

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 36718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	15.7	J	998	1005		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	<14.9	U	998	700.9		mg/Kg		70	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*74*		*70 - 130*
o-Terphenyl	*67*	*S1-*	*70 - 130*

Lab Sample ID: 880-20138-A-4-F MSD
Matrix: Solid
Analysis Batch: 36713

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 36718

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	15.7	J	998	1021		mg/Kg		101	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<14.9	U	998	713.6		mg/Kg		72	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*75*		*70 - 130*
o-Terphenyl	*66*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36234/1-A
Matrix: Solid
Analysis Batch: 36484

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			10/08/22 08:23	1

QC Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-36234/2-A
Matrix: Solid
Analysis Batch: 36484

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	274.4		mg/Kg		110	90 - 110		

Lab Sample ID: LCSD 880-36234/3-A
Matrix: Solid
Analysis Batch: 36484

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	266.3		mg/Kg		107	90 - 110	3	20

Lab Sample ID: 880-19976-1 MS
Matrix: Solid
Analysis Batch: 36484

Client Sample ID: B-8 (1')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	460		249	706.4		mg/Kg		99	90 - 110		

Lab Sample ID: 880-19976-1 MSD
Matrix: Solid
Analysis Batch: 36484

Client Sample ID: B-8 (1')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	460		249	707.4		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

GC Semi VOA

Analysis Batch: 36113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19976-1	B-8 (1')	Total/NA	Solid	8015B NM	36186
880-19976-3	B-4 (1')	Total/NA	Solid	8015B NM	36186
MB 880-36186/1-A	Method Blank	Total/NA	Solid	8015B NM	36186
LCS 880-36186/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	36186
LCSD 880-36186/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	36186
880-19973-A-46-C MS	Matrix Spike	Total/NA	Solid	8015B NM	36186
880-19973-A-46-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	36186

Prep Batch: 36186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19976-1	B-8 (1')	Total/NA	Solid	8015NM Prep	
880-19976-3	B-4 (1')	Total/NA	Solid	8015NM Prep	
MB 880-36186/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-36186/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-36186/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19973-A-46-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19973-A-46-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 36263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19976-1	B-8 (1')	Total/NA	Solid	8015 NM	
880-19976-2	B-8 (3')	Total/NA	Solid	8015 NM	
880-19976-3	B-4 (1')	Total/NA	Solid	8015 NM	

Analysis Batch: 36713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19976-2	B-8 (3')	Total/NA	Solid	8015B NM	36718
MB 880-36718/1-A	Method Blank	Total/NA	Solid	8015B NM	36718
LCS 880-36718/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	36718
LCSD 880-36718/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	36718
880-20138-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	36718
880-20138-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	36718

Prep Batch: 36718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19976-2	B-8 (3')	Total/NA	Solid	8015NM Prep	
MB 880-36718/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-36718/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-36718/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-20138-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-20138-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 36234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19976-1	B-8 (1')	Soluble	Solid	DI Leach	
880-19976-2	B-8 (3')	Soluble	Solid	DI Leach	
MB 880-36234/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36234/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36234/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

HPLC/IC (Continued)

Leach Batch: 36234 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19976-1 MS	B-8 (1')	Soluble	Solid	DI Leach	
880-19976-1 MSD	B-8 (1')	Soluble	Solid	DI Leach	

Analysis Batch: 36484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19976-1	B-8 (1')	Soluble	Solid	300.0	36234
880-19976-2	B-8 (3')	Soluble	Solid	300.0	36234
MB 880-36234/1-A	Method Blank	Soluble	Solid	300.0	36234
LCS 880-36234/2-A	Lab Control Sample	Soluble	Solid	300.0	36234
LCSD 880-36234/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36234
880-19976-1 MS	B-8 (1')	Soluble	Solid	300.0	36234
880-19976-1 MSD	B-8 (1')	Soluble	Solid	300.0	36234

Lab Chronicle

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Client Sample ID: B-8 (1')
Date Collected: 10/03/22 10:50
Date Received: 10/04/22 16:08

Lab Sample ID: 880-19976-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			36263	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	36186	10/05/22 14:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36113	10/06/22 06:06	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	36234	10/06/22 09:45	CH	EET MID
Soluble	Analysis	300.0		1			36484	10/08/22 08:46	CH	EET MID

Client Sample ID: B-8 (3')
Date Collected: 10/03/22 11:05
Date Received: 10/04/22 16:08

Lab Sample ID: 880-19976-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			36263	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	36718	10/12/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36713	10/12/22 17:49	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	36234	10/06/22 09:45	CH	EET MID
Soluble	Analysis	300.0		1			36484	10/08/22 09:09	CH	EET MID

Client Sample ID: B-4 (1')
Date Collected: 10/03/22 11:20
Date Received: 10/04/22 16:08

Lab Sample ID: 880-19976-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			36263	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	36186	10/05/22 14:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36113	10/06/22 05:44	SM	EET MID

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

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Laboratory: Eurofins Midland

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	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.

Laboratory References:

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

Sample Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-19976-1
SDG: Lea Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-19976-1	B-8 (1')	Solid	10/03/22 10:50	10/04/22 16:08	1'
880-19976-2	B-8 (3')	Solid	10/03/22 11:05	10/04/22 16:08	3'
880-19976-3	B-4 (1')	Solid	10/03/22 11:20	10/04/22 16:08	1'

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Chain of Custody

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

Work Order No: 19976

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Project Manager:	Cindy Crain	Bill to: (if different)	Leasa Hale
Company Name:	Crain Environmental	Company Name:	SWR
Address:	2925 E. 17th St.	Address:	P.O. Box 53570
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Midland, TX 79710
Phone	(575) 441-7244 Email	Email	Cindy.crain@gmail.com

Work Order Comments

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

Project Name:	Blinebry Sat #1	Turn Around	
Project Number:	-	☒ Routine ☐ Rush	
Project Location:	Lea Co., NM	Due Date	
Sampler's Name:	Cindy Crain	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:	IR4
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	.20
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.5
Total Containers:		Corrected Temperature:	5.7

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: TPH 8015M	Parameters: Chlorides
B-8 (1')	S	10/3/22	1050	1'	C	1		X	X
B-8 (3')	S	10/3/22	1105	3'	C	1			X
B-4 (1')	S	10/3/22	1120	1'	C	1		X	

Sample Comments

880-19976 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 Cindy Crain		10/4/22 1608	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-19976-1
SDG Number: Lea Co., NM

Login Number: 19976
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
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Laboratory Job ID: 880-21018-1
Laboratory Sample Delivery Group: Lea Co. NM
Client Project/Site: Blinebry Sat #1

For:
Crain Environmental
2925 E. 17th St.
Odessa, Texas 79761

Attn: Cindy Crain

Jkramer

Authorized for release by:
11/8/2022 11:29:57 AM

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

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

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Laboratory Job ID: 880-21018-1
SDG: Lea Co. NM

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Definitions/Glossary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Job ID: 880-21018-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-21018-1

Receipt
The samples were received on 11/1/2022 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.2°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: B-8 (3.5') (880-21018-1), B-8E (0-3.5') (880-21018-2) and B-8W (0-3.5') (880-21018-3).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38465 and analytical batch 880-38581 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-20981-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The method blank for preparation batch 880-38587 and analytical batch 880-38572 contained Gasoline Range Organics (GRO)-C6-C10, Diesel Range Organics (Over C10-C28) and OII Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-38587 and analytical batch 880-38572 was outside control limits. Sample non-homogeneity is suspected.

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: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Client Sample ID: B-8 (3.5')

Lab Sample ID: 880-21018-1
Matrix: Solid
Date Collected: 10/31/22 09:15
Date Received: 11/01/22 15:00
Sample Depth: 3.5'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000922**	**J**	0.00200	0.000384	mg/Kg		11/02/22 15:00	11/03/22 11:38	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		11/02/22 15:00	11/03/22 11:38	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		11/02/22 15:00	11/03/22 11:38	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		11/02/22 15:00	11/03/22 11:38	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		11/02/22 15:00	11/03/22 11:38	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		11/02/22 15:00	11/03/22 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*11/02/22 15:00*	*11/03/22 11:38*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*11/02/22 15:00*	*11/03/22 11:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			11/03/22 16:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**21.9**	**J**	50.0	15.0	mg/Kg			11/04/22 11:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**21.9**	**J F2 B**	50.0	15.0	mg/Kg		11/03/22 08:39	11/03/22 23:47	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		11/03/22 08:39	11/03/22 23:47	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		11/03/22 08:39	11/03/22 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*11/03/22 08:39*	*11/03/22 23:47*	*1*
o-Terphenyl	*83*		*70 - 130*	*11/03/22 08:39*	*11/03/22 23:47*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**139**		5.00	0.395	mg/Kg			11/05/22 20:53	1

Client Sample ID: B-8E (0-3.5')

Lab Sample ID: 880-21018-2
Matrix: Solid
Date Collected: 10/31/22 09:30
Date Received: 11/01/22 15:00
Sample Depth: 0-3.5'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00119**	**J**	0.00201	0.000387	mg/Kg		11/02/22 15:00	11/03/22 11:59	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		11/02/22 15:00	11/03/22 11:59	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		11/02/22 15:00	11/03/22 11:59	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		11/02/22 15:00	11/03/22 11:59	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		11/02/22 15:00	11/03/22 11:59	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		11/02/22 15:00	11/03/22 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*11/02/22 15:00*	*11/03/22 11:59*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Client Sample ID: B-8E (0-3.5')

Lab Sample ID: 880-21018-2
Matrix: Solid
Date Collected: 10/31/22 09:30
Date Received: 11/01/22 15:00
Sample Depth: 0-3.5'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*11/02/22 15:00*	*11/03/22 11:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00119**	**J**	0.00402	0.00101	mg/Kg			11/03/22 16:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**48.2**	**J**	49.8	14.9	mg/Kg			11/04/22 11:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**29.5**	**J B**	49.8	14.9	mg/Kg		11/03/22 08:39	11/04/22 00:52	1
Diesel Range Organics (Over C10-C28)	**18.7**	**J B**	49.8	14.9	mg/Kg		11/03/22 08:39	11/04/22 00:52	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		11/03/22 08:39	11/04/22 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*11/03/22 08:39*	*11/04/22 00:52*	*1*
o-Terphenyl	*86*		*70 - 130*	*11/03/22 08:39*	*11/04/22 00:52*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**97.7**		4.98	0.393	mg/Kg			11/05/22 21:00	1

Client Sample ID: B-8W (0-3.5')

Lab Sample ID: 880-21018-3
Matrix: Solid
Date Collected: 10/31/22 09:50
Date Received: 11/01/22 15:00
Sample Depth: 0-3.5'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00113**	**J**	0.00200	0.000384	mg/Kg		11/02/22 15:00	11/03/22 12:20	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		11/02/22 15:00	11/03/22 12:20	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		11/02/22 15:00	11/03/22 12:20	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		11/02/22 15:00	11/03/22 12:20	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		11/02/22 15:00	11/03/22 12:20	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		11/02/22 15:00	11/03/22 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*11/02/22 15:00*	*11/03/22 12:20*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/02/22 15:00*	*11/03/22 12:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00113**	**J**	0.00399	0.00101	mg/Kg			11/03/22 16:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**44.1**	**J**	49.9	15.0	mg/Kg			11/04/22 11:23	1

Client Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Client Sample ID: B-8W (0-3.5')

Lab Sample ID: 880-21018-3

Date Collected: 10/31/22 09:50
Matrix: Solid
Date Received: 11/01/22 15:00
Sample Depth: 0-3.5'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	23.4	J B	49.9	15.0	mg/Kg		11/03/22 08:39	11/04/22 01:14	1
Diesel Range Organics (Over C10-C28)	20.7	J B	49.9	15.0	mg/Kg		11/03/22 08:39	11/04/22 01:14	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/03/22 08:39	11/04/22 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*11/03/22 08:39*	*11/04/22 01:14*	*1*
o-Terphenyl	*93*		*70 - 130*	*11/03/22 08:39*	*11/04/22 01:14*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.9		4.98	0.393	mg/Kg			11/05/22 21:21	1

Surrogate Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20981-A-1-B MS	Matrix Spike	91	93
880-20981-A-1-C MSD	Matrix Spike Duplicate	46 S1-	71
880-21018-1	B-8 (3.5')	110	106
880-21018-2	B-8E (0-3.5')	121	119
880-21018-3	B-8W (0-3.5')	120	109
LCS 880-38465/1-A	Lab Control Sample	95	99
LCSD 880-38465/2-A	Lab Control Sample Dup	98	94
MB 880-38465/5-A	Method Blank	98	91

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)
880-21018-1	B-8 (3.5')	77	83
880-21018-1 MS	B-8 (3.5')	80	82
880-21018-1 MSD	B-8 (3.5')	80	78
880-21018-2	B-8E (0-3.5')	76	86
880-21018-3	B-8W (0-3.5')	81	93
LCS 880-38587/2-A	Lab Control Sample	82	96
LCSD 880-38587/3-A	Lab Control Sample Dup	81	92
MB 880-38587/1-A	Method Blank	88	105

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38465/5-A
Matrix: Solid
Analysis Batch: 38581

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38465

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/02/22 15:00	11/03/22 10:56	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/02/22 15:00	11/03/22 10:56	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/02/22 15:00	11/03/22 10:56	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		11/02/22 15:00	11/03/22 10:56	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/02/22 15:00	11/03/22 10:56	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		11/02/22 15:00	11/03/22 10:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*11/02/22 15:00*	*11/03/22 10:56*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*11/02/22 15:00*	*11/03/22 10:56*	*1*

Lab Sample ID: LCS 880-38465/1-A
Matrix: Solid
Analysis Batch: 38581

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07921		mg/Kg		79	70 - 130
Toluene	0.100	0.08140		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.08324		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1632		mg/Kg		82	70 - 130
o-Xylene	0.100	0.09295		mg/Kg		93	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 880-38465/2-A
Matrix: Solid
Analysis Batch: 38581

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38465

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08528		mg/Kg		85	70 - 130	7	35
Toluene	0.100	0.08804		mg/Kg		88	70 - 130	8	35
Ethylbenzene	0.100	0.09032		mg/Kg		90	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1781		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.1002		mg/Kg		100	70 - 130	8	35

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

Lab Sample ID: 880-20981-A-1-B MS
Matrix: Solid
Analysis Batch: 38581

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.000966	J F2 F1	0.0990	0.07448		mg/Kg		74	70 - 130
Toluene	<0.000460	U F1	0.0990	0.07129		mg/Kg		72	70 - 130

Eurofins Midland

QC Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

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

Lab Sample ID: 880-20981-A-1-B MS
Matrix: Solid
Analysis Batch: 38581

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.000570	U F2 F1	0.0990	0.06359	F1	mg/Kg		64	70 - 130
m-Xylene & p-Xylene	0.00417	F2 F1	0.198	0.1265	F1	mg/Kg		62	70 - 130
o-Xylene	<0.000347	U F2 F1	0.0990	0.06683	F1	mg/Kg		67	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-20981-A-1-C MSD
Matrix: Solid
Analysis Batch: 38581

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.000966	J F2 F1	0.0994	0.03522	F2 F1	mg/Kg		34	70 - 130	72	35
Toluene	<0.000460	U F1	0.0994	0.05260	F1	mg/Kg		53	70 - 130	30	35
Ethylbenzene	<0.000570	U F2 F1	0.0994	0.03748	F2 F1	mg/Kg		38	70 - 130	52	35
m-Xylene & p-Xylene	0.00417	F2 F1	0.199	0.06178	F2 F1	mg/Kg		29	70 - 130	69	35
o-Xylene	<0.000347	U F2 F1	0.0994	0.03257	F2 F1	mg/Kg		33	70 - 130	69	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*46*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*

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

Lab Sample ID: MB 880-38587/1-A
Matrix: Solid
Analysis Batch: 38572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.32	J	50.0	15.0	mg/Kg		11/03/22 08:39	11/03/22 22:42	1
Diesel Range Organics (Over C10-C28)	15.05	J	50.0	15.0	mg/Kg		11/03/22 08:39	11/03/22 22:42	1
OII Range Organics (Over C28-C36)	15.30	J	50.0	15.0	mg/Kg		11/03/22 08:39	11/03/22 22:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*11/03/22 08:39*	*11/03/22 22:42*	*1*
o-Terphenyl	*105*		*70 - 130*	*11/03/22 08:39*	*11/03/22 22:42*	*1*

Lab Sample ID: LCS 880-38587/2-A
Matrix: Solid
Analysis Batch: 38572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1017		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	946.9		mg/Kg		95	70 - 130

Eurofins Midland

QC Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

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

Lab Sample ID: LCS 880-38587/2-A
Matrix: Solid
Analysis Batch: 38572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38587

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: LCSD 880-38587/3-A
Matrix: Solid
Analysis Batch: 38572

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38587

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1113		mg/Kg		111	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1149		mg/Kg		115	70 - 130	19	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-21018-1 MS
Matrix: Solid
Analysis Batch: 38572

Client Sample ID: B-8 (3.5')
Prep Type: Total/NA
Prep Batch: 38587

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	21.9	J F2 B	997	1234		mg/Kg		122	70 - 130		
Diesel Range Organics (Over C10-C28)	<15.0	U	997	975.4		mg/Kg		98	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	80		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: 880-21018-1 MSD
Matrix: Solid
Analysis Batch: 38572

Client Sample ID: B-8 (3.5')
Prep Type: Total/NA
Prep Batch: 38587

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	21.9	J F2 B	999	867.6	F2	mg/Kg		85	70 - 130	35	20
Diesel Range Organics (Over C10-C28)	<15.0	U	999	954.1		mg/Kg		96	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	80		70 - 130
o-Terphenyl	78		70 - 130

QC Sample Results

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38521/1-A
Matrix: Solid
Analysis Batch: 38782

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			11/05/22 18:57	1

Lab Sample ID: LCS 880-38521/2-A
Matrix: Solid
Analysis Batch: 38782

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	260.8		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38521/3-A
Matrix: Solid
Analysis Batch: 38782

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	263.3		mg/Kg		105	90 - 110	1	20

Lab Sample ID: 880-21018-2 MS
Matrix: Solid
Analysis Batch: 38782

Client Sample ID: B-8E (0-3.5')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	97.7		249	343.7		mg/Kg		99	90 - 110		

Lab Sample ID: 880-21018-2 MSD
Matrix: Solid
Analysis Batch: 38782

Client Sample ID: B-8E (0-3.5')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	97.7		249	340.4		mg/Kg		97	90 - 110	1	20

QC Association Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

GC VOA

Prep Batch: 38465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21018-1	B-8 (3.5')	Total/NA	Solid	5035	
880-21018-2	B-8E (0-3.5')	Total/NA	Solid	5035	
880-21018-3	B-8W (0-3.5')	Total/NA	Solid	5035	
MB 880-38465/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38465/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38465/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20981-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-20981-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21018-1	B-8 (3.5')	Total/NA	Solid	8021B	38465
880-21018-2	B-8E (0-3.5')	Total/NA	Solid	8021B	38465
880-21018-3	B-8W (0-3.5')	Total/NA	Solid	8021B	38465
MB 880-38465/5-A	Method Blank	Total/NA	Solid	8021B	38465
LCS 880-38465/1-A	Lab Control Sample	Total/NA	Solid	8021B	38465
LCSD 880-38465/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38465
880-20981-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	38465
880-20981-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38465

Analysis Batch: 38668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21018-1	B-8 (3.5')	Total/NA	Solid	Total BTEX	
880-21018-2	B-8E (0-3.5')	Total/NA	Solid	Total BTEX	
880-21018-3	B-8W (0-3.5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21018-1	B-8 (3.5')	Total/NA	Solid	8015B NM	38587
880-21018-2	B-8E (0-3.5')	Total/NA	Solid	8015B NM	38587
880-21018-3	B-8W (0-3.5')	Total/NA	Solid	8015B NM	38587
MB 880-38587/1-A	Method Blank	Total/NA	Solid	8015B NM	38587
LCS 880-38587/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38587
LCSD 880-38587/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38587
880-21018-1 MS	B-8 (3.5')	Total/NA	Solid	8015B NM	38587
880-21018-1 MSD	B-8 (3.5')	Total/NA	Solid	8015B NM	38587

Prep Batch: 38587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21018-1	B-8 (3.5')	Total/NA	Solid	8015NM Prep	
880-21018-2	B-8E (0-3.5')	Total/NA	Solid	8015NM Prep	
880-21018-3	B-8W (0-3.5')	Total/NA	Solid	8015NM Prep	
MB 880-38587/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38587/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38587/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21018-1 MS	B-8 (3.5')	Total/NA	Solid	8015NM Prep	
880-21018-1 MSD	B-8 (3.5')	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

GC Semi VOA

Analysis Batch: 38731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21018-1	B-8 (3.5')	Total/NA	Solid	8015 NM	
880-21018-2	B-8E (0-3.5')	Total/NA	Solid	8015 NM	
880-21018-3	B-8W (0-3.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21018-1	B-8 (3.5')	Soluble	Solid	DI Leach	
880-21018-2	B-8E (0-3.5')	Soluble	Solid	DI Leach	
880-21018-3	B-8W (0-3.5')	Soluble	Solid	DI Leach	
MB 880-38521/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38521/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38521/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-21018-2 MS	B-8E (0-3.5')	Soluble	Solid	DI Leach	
880-21018-2 MSD	B-8E (0-3.5')	Soluble	Solid	DI Leach	

Analysis Batch: 38782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21018-1	B-8 (3.5')	Soluble	Solid	300.0	38521
880-21018-2	B-8E (0-3.5')	Soluble	Solid	300.0	38521
880-21018-3	B-8W (0-3.5')	Soluble	Solid	300.0	38521
MB 880-38521/1-A	Method Blank	Soluble	Solid	300.0	38521
LCS 880-38521/2-A	Lab Control Sample	Soluble	Solid	300.0	38521
LCSD 880-38521/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38521
880-21018-2 MS	B-8E (0-3.5')	Soluble	Solid	300.0	38521
880-21018-2 MSD	B-8E (0-3.5')	Soluble	Solid	300.0	38521

Lab Chronicle

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Client Sample ID: B-8 (3.5')

Lab Sample ID: 880-21018-1
Matrix: Solid
Date Collected: 10/31/22 09:15
Date Received: 11/01/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38465	11/02/22 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38581	11/03/22 11:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38668	11/03/22 16:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			38731	11/04/22 11:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38587	11/03/22 08:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38572	11/03/22 23:47	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38521	11/02/22 14:40	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38782	11/05/22 20:53	CH	EET MID

Client Sample ID: B-8E (0-3.5')

Lab Sample ID: 880-21018-2
Matrix: Solid
Date Collected: 10/31/22 09:30
Date Received: 11/01/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	38465	11/02/22 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38581	11/03/22 11:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38668	11/03/22 16:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			38731	11/04/22 11:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38587	11/03/22 08:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38572	11/04/22 00:52	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38521	11/02/22 14:40	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38782	11/05/22 21:00	CH	EET MID

Client Sample ID: B-8W (0-3.5')

Lab Sample ID: 880-21018-3
Matrix: Solid
Date Collected: 10/31/22 09:50
Date Received: 11/01/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38465	11/02/22 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38581	11/03/22 12:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38668	11/03/22 16:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			38731	11/04/22 11:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38587	11/03/22 08:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38572	11/04/22 01:14	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38521	11/02/22 14:40	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38782	11/05/22 21:21	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Crain Environmental
Project/Site: Blinebry Sat #1

Job ID: 880-21018-1
SDG: Lea Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-21018-1	B-8 (3.5')	Solid	10/31/22 09:15	11/01/22 15:00	3.5'
880-21018-2	B-8E (0-3.5')	Solid	10/31/22 09:30	11/01/22 15:00	0-3.5'
880-21018-3	B-8W (0-3.5')	Solid	10/31/22 09:50	11/01/22 15:00	0-3.5'

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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: 21018

www.xenco.com Page 1 of 1

Project Manager:	Cindy Crain	Bill to: (if different)	Leasa Hale
Company Name:	Crain Environmental	Company Name:	Southwest Royalties
Address:	2925 E. 17th St.	Address:	P.O. Box 53570
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Midland, TX 79710
Phone:	(575) 441-7244	Email:	Cindy.crain@gmail.com

Work Order Comments

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

Project Name:	Blinebry Sat #1	Turn Around	
Project Number:	-	☒ Routine ☐ Rush	
Project Location:	Lea Co. NM	Due Date	
Sampler's Name:	Cindy Crain	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:	-.36
Sample Custody Seals.	Yes No (N/A)	Temperature Reading	0.5
Total Containers.		Corrected Temperature:	0.2

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: TPH 8015M	BTEX	Chlorides	Sample Comments
B-8 (3.5')	S	10/31/22	0915	3.5'	C	1		X	X	X	40L
B-8E (0-3.5')	S	10/31/22	0930	0-3.5'	C	1		X	X	X	
B-8W (0-3.5')	S	10/31/22	0950	0-3.5'	C	1		X	X	X	

880-21018 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 Cindy Crain		11/1/22 1500	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-21018-1
SDG Number: Lea Co. NM

Login Number: 21018
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	

Grain Environmental

Appendix C: Final 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: Chevron USA, Inc.	OGRID: 4323
Contact Name: Josepha DeLeon	Contact Telephone: 432-425-1528
Contact email: jdxd@chevron.com	Incident # *(assigned by OCD)*
Contact mailing address: 1616 E. Bender Blvd., Hobbs, NM 88240	

Location of Release Source

Latitude 32.360 **Longitude** -103.0865

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Blinebry Sat #1	Site Type: Battery
Date Release Discovered: 11/21/2019	API# *(if applicable): NA*

Unit Letter	Section	Township	Range	County
F	29	22S	38E	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): 4.78 BO	Volume Recovered (bbls): 2 BO
☒ Produced Water	Volume Released (bbls): 79.8 BW	Volume Recovered (bbls): 10.99 BW
	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:

3” poly line split due to external corrosion resulting in spill. Well isolated, vacuum truck to pick up water and haul to disposal.

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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? Greater than 25 bbls

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
By Josepha DeLeon to Jim Griswold (NMOCD) and Jim Amos (BLM), voicemail and email 11/22/2019 as initially estimated volume would exceed 25 barrels.

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.

Signature: JdeLeon

Date: November 28, 2019

Printed Name: Josepha DeLeon

Title: Environmental Compliance Specialist

email: jdxd@chevron.com

Telephone: 432-425-1528

OCD Only

Received by: _____ Date: _____

Incident ID	nPAC0613753668
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>104.5 (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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Printed Name: Amy Barnhill Title: Waste and Water Specialist

Signature: Date: 3/19/2020

email: ABarnhill@chevron.com Telephone: 432-687-7108

OCD Only

Received by: Cristina Eads Date: 01/19/2021

State of New Mexico
Oil Conservation Division

Incident ID	nCE2026733719
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- [X] Detailed description of proposed remediation technique
- [X] Scaled sitemap with GPS coordinates showing delineation points
- [X] Estimated volume of material to be remediated
- [X] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [X] 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.***

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

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Printed Name: Cynthia K. Crain Title: Agent for Southwest Royalties, Inc.

Signature: Cynthia K. Crain Date: 6/1/22

email: cindy.crain@gmail.com Telephone: (575) 441-7244

OCD Only

Received by: _____ Date: _____

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [X] Deferral Approved

Signature: Jennifer Nobui Date: 06/02/2022

State of New Mexico
Oil Conservation Division

Incident ID	nCE2026733719
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Cynthia K. Crain Title: Agent for Southwest Royalties, Inc.

Signature: Cynthia K. Crain Date: 6/1/22

email: cindy.crain@gmail.com Telephone: (575) 441-7244

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: 01/05/2023

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 107769

CONDITIONS

Operator: SOUTHWEST ROYALTIES INC P O BOX 53570 Midland, TX 79710	OGRID: 21355
	Action Number: 107769
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. OCD approves backfilling excavations and approves request for a variance for a liner. OCD also approves Deferral Request to address impact in service road after excavations have been backfilled. OCD requests the deferral be in place for 90 days to address impacts in service road from date of backfill.	6/2/2022

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

CONDITIONS

Action 163123

CONDITIONS

Operator: SOUTHWEST ROYALTIES INC P O BOX 53570 Midland, TX 79710	OGRID: 21355
	Action Number: 163123
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Approved.	1/5/2023