Frontier Field Services
Madurai Pipeline Leak

Closure Report
U/L K, Section 29, T19S, R33E
Lea County, New Mexico
NRM2006237844

December 1, 2020

Prepared for:

Frontier Field Services
4200 E. Skelly Drive
Tulsa, OK 74135

By:

Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240

Company Contacts

Representative	Company	Telephone	E-mail
Harley Everhart	Frontier Field Srvcs.	575-513-4922	heverhart@durangomidstream.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Frontier Field Services to perform a site assessment on the Smith Ranch at the Madurai pipeline leak concerning a 13 bbls release of oil and produced water. According to the C-141, a compromised fitting caused a 4" poly line to rupture. Eleven barrels of fluids were recovered. This site is situated in Lea County, Section 29, Township 19S, and Range 33E.

SESI personnel performed an assessment of the site in January of 2020 based on generator knowledge of the leak location. SESI personnel mapped the leak and performed a test trench in the middle of the spill. The largest part of the spill area is a light overspray.

Surface and Ground Water

Based on the NMOCD Oil and Gas map included in this report, surface water is not present within 3,000 feet of this release. The New Mexico Office of the State Engineer records indicates the average depth to groundwater for the area to be between 200' and 250' bgs; however, since no wells less than 25 years old and less than a half mile away are known to be present, SESI will delineate this release to the most stringent criteria established by NMOCD.

Characterization

On January 3, 2020, SESI personnel performed a test trench to determine the vertical extent of the most saturated area of the leak. Frontier Field Services requested this test trench because they intended to begin digging up the contaminated soil. SESI advanced 1 test trench to a depth of 13'. The samples were properly packaged and preserved and sent to Cardinal Laboratories for analyzation. The results of the testing are captured in the summary below:

Frontier Field Services
Madurai Pipeline Leak
Soil Sample Results: Cardinal Environmental Laboratories 1/3/20

SAMPLE ID	Chloride	GRO	DRO	EXT DRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
TT-1 @ 1'	**208**	**1560**	**57200**	**9320**	**9.46**	**6.57**	**3.51**	**32.3**	**51.8**
TT-1 @ 3'	<16.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300
TT-1 @ 5'	**448**	**2860**	**17500**	**2190**	**8.61**	**47.3**	**48.2**	**121**	**225**
TT-1 @ 13'	**80**	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300

During this time, SESI also discovered that the release occurred on BLM land.

Therefore, SESI personnel requested an ARCH survey to be completed by Lone Mountain Archaeological Services. The findings of the report can be found in the supplemental documentation of the of this report. No known arch areas were disturbed during the course of the delineation or remediation.

Remediation

Once Frontier received the test trench results, they decided at that time to go ahead and dig up via backhoe the heavily saturated portion of the leak. Photos are included in this report, as well as a map of the excavated area. The estimated amount of contaminated soil removed is 360 yards based on disposal tickets. The soil was hauled off to a NMOCD-approved facility.

SESI personnel was then contacted to take surface samples of the overspray area and bottom samples of the excavation area. SESI took twenty samples to establish horizontal and vertical extent had been achieved. The samples were properly preserved and packaged then sent to Hall Laboratories for analyzation. The results of the sampling are captured in the table below.

Frontier Field Services
Madurai Pipeline Leak
Soil Sample Results: Hall Environmental Laboratories 7/8/20-7/9/20 AND 7/30/20

SAMPLE ID	Chloride	GRO	DRO	EXT DRO	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
AH1 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH2 @ 6”	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH3 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH4 @ SURFACE	ND	ND	**12**	ND	ND	ND	ND	ND	ND
AH5 @ SURFACE	ND	ND	**22**	ND	ND	ND	ND	ND	ND
AH6 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH7 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH8 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH9 @ SURFACE	**280**	ND	ND	ND	ND	ND	ND	ND	ND
AH10 @ SURFACE	ND	ND	**9300**	**9100**	ND	ND	ND	ND	ND
AH10 @ 1’	ND	ND	**13**	ND	ND	ND	ND	ND	ND
AH11 @ SURFACE	ND	ND	**25**	ND	ND	ND	ND	ND	ND
AH12 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH13 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH14 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH15 @ SURFACE	ND	ND	**14**	ND	ND	ND	ND	ND	ND
AH16 @ 5’	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH17 @ 5’	**940**	ND	ND	ND	ND	ND	ND	ND	ND
AH17 @ 12’	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH18 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND
AH19 @ 1’	**1900**	**170**	**24000**	**15000**	ND	**1.5**	**3.4**	**12**	ND
AH19 @ 10’	**69**	ND	ND	ND	ND	ND	ND	ND	ND
AH20 @ SURFACE	ND	ND	ND	ND	ND	ND	ND	ND	ND

During the process of remediation, it was observed through field testing that several areas would need to be further excavated. Excavation was performed and bottom

samples were used to verify successful removal of the contaminated soil. These areas included at and near the samples of AH2, AH10, AH16, AH17, and AH19. Once confirmation sample results showed vertical extent had been achieved through remediation, further excavation ceased in that area. Pictures of the remediation are included in this report.

For good measure, SESI conducted final confirmation sampling of the excavation in October to ensure closure criteria had been met in the excavation area. A map is included in this report. The samples were properly packaged and sent to Hall Labs. The results are captured in the table below.

Frontier Field Services Madurai Pipeline Leak Soil Sample Results: Hall Environmental Laboratories 10/26/20									
SAMPLE ID	**Chloride**	**GRO**	**DRO**	**EXT DRO**	**Benzene**	**Toluene**	**Ethyl benzene**	**Total Xylenes**	**Total BTEX**
SP20 N WALL	**150**	ND	**11**	ND	ND	ND	ND	ND	ND
SP21 S WALL	**140**	ND	**11**	ND	ND	ND	ND	ND	ND
SP22 N WALL	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP23 S WAL	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP24 W WALL	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP25 E WALL	ND	ND	ND	ND	ND	ND	ND	ND	ND

Closure Request

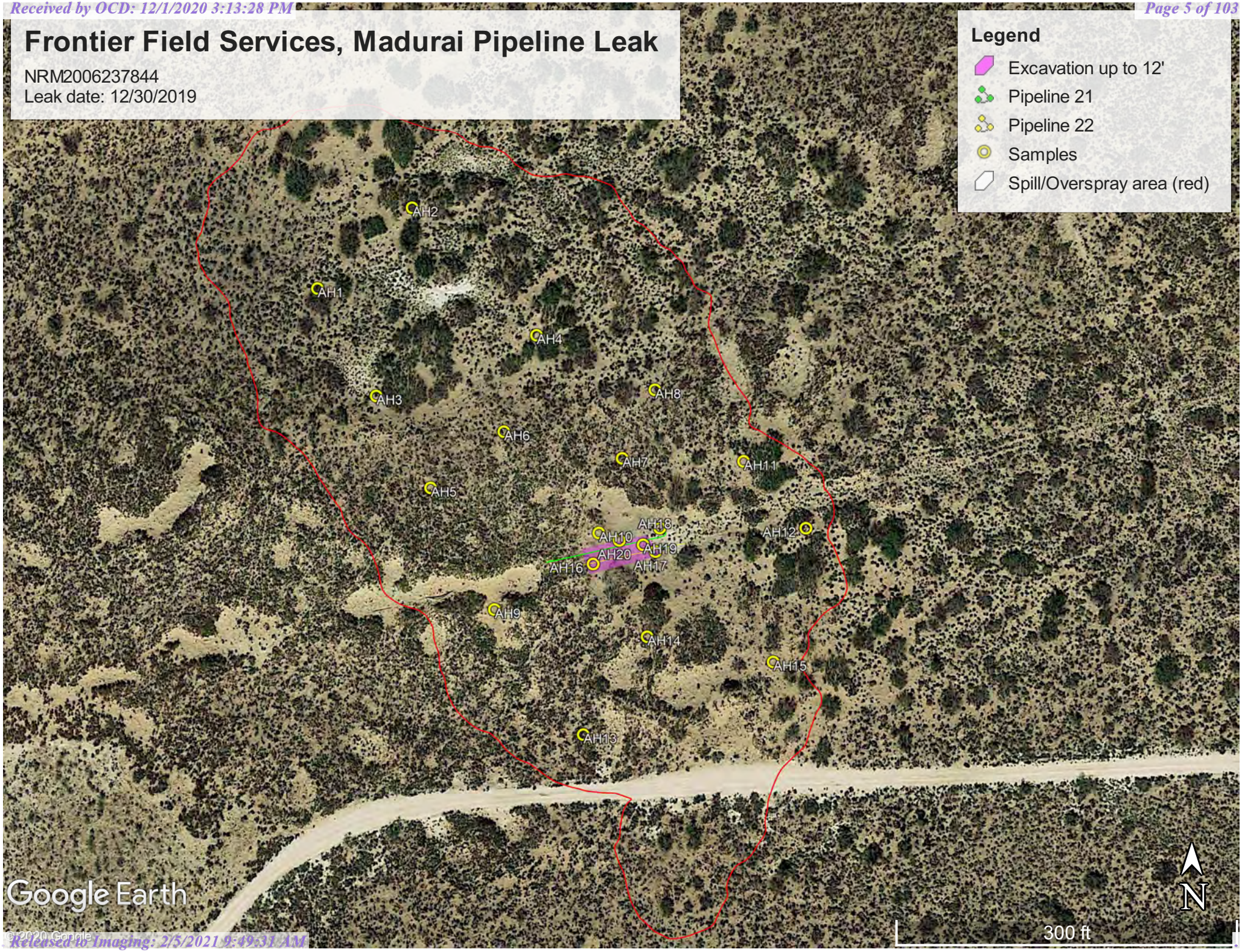
Based on the confirmation and horizontal sample results, SESI believes the release area to be properly remediated according to the closure criteria set forth in Table I of the Spill Rule 19.15.29 NMAC. Therefore, SESI, on behalf of Frontier Field Services respectfully requests closure of this release. Supplemental information has been included in this report to support our closure request.

Supplemental Documentation for Closure

Map of Release with sample locations
Photos of remediation
Excavation Map
Confirmation samples map
NMOCD Oil and Gas Map
BLM Cave Karst Map
FEMA Floodplain Map
Laboratory Analysis
Arch Survey
C-141, pages 3-6

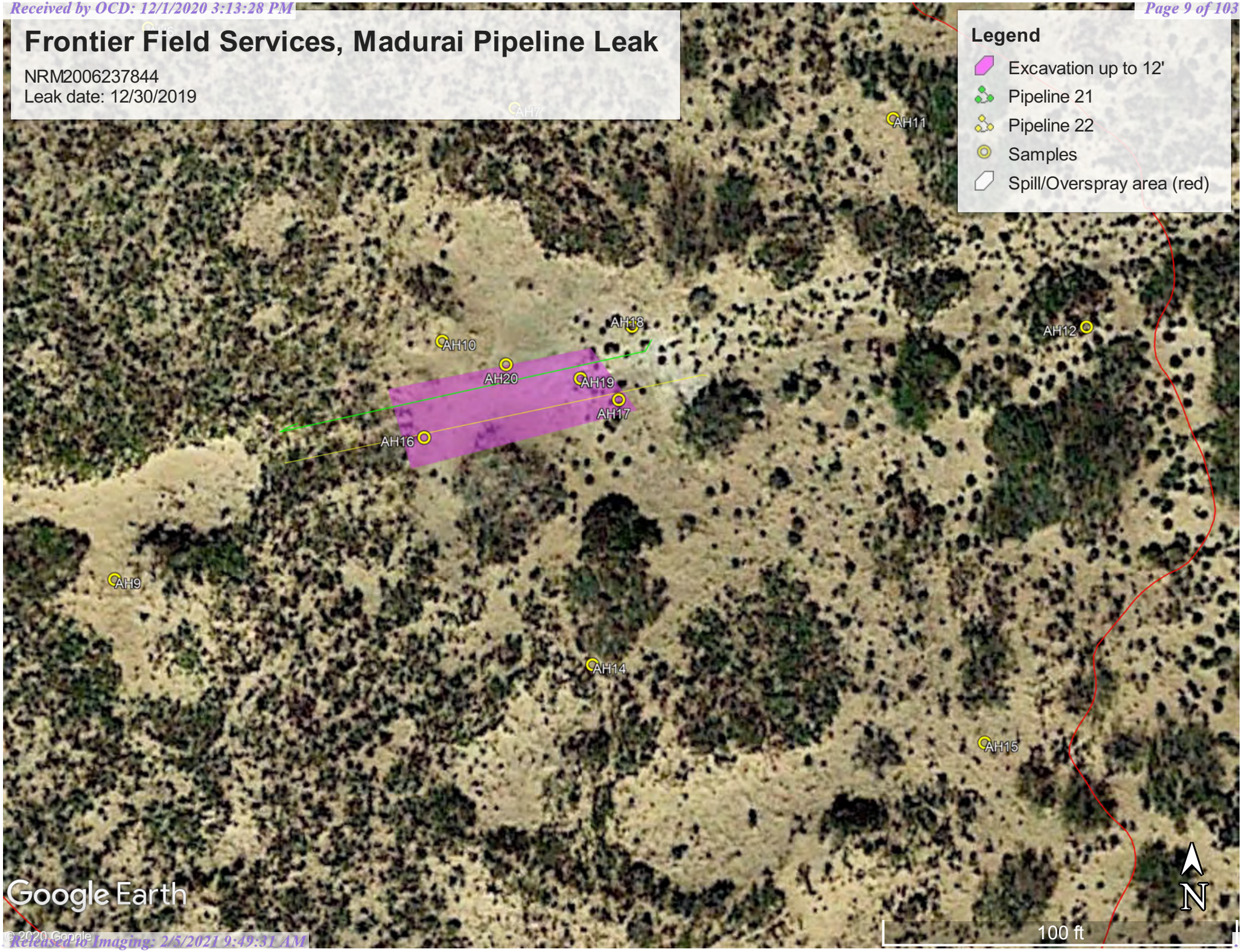
Frontier Field Services, Madurai Pipeline Leak

NRM2006237844
Leak date: 12/30/2019



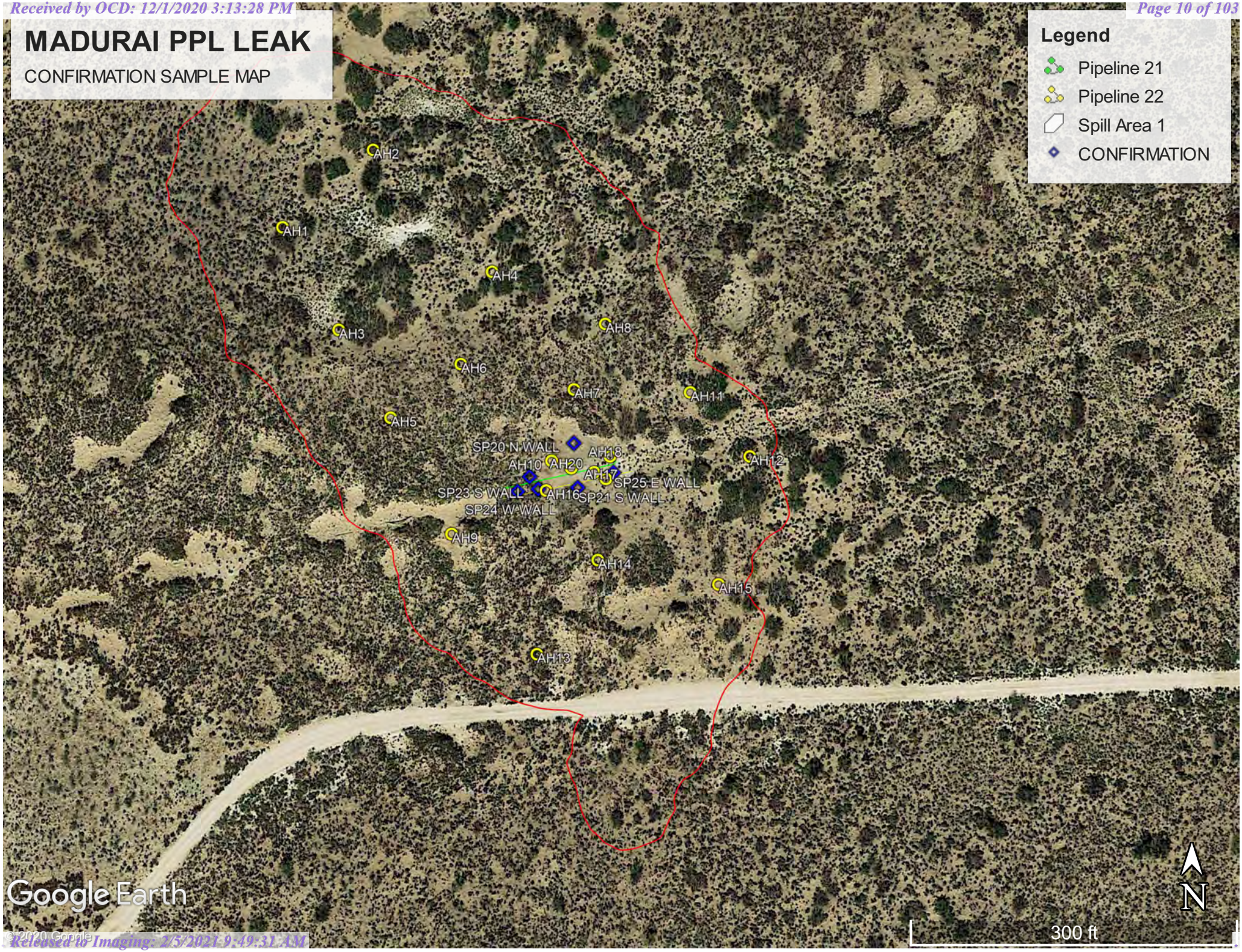
Frontier Field Services, Madurai Pipeline Leak

NRM2006237844
Leak date: 12/30/2019

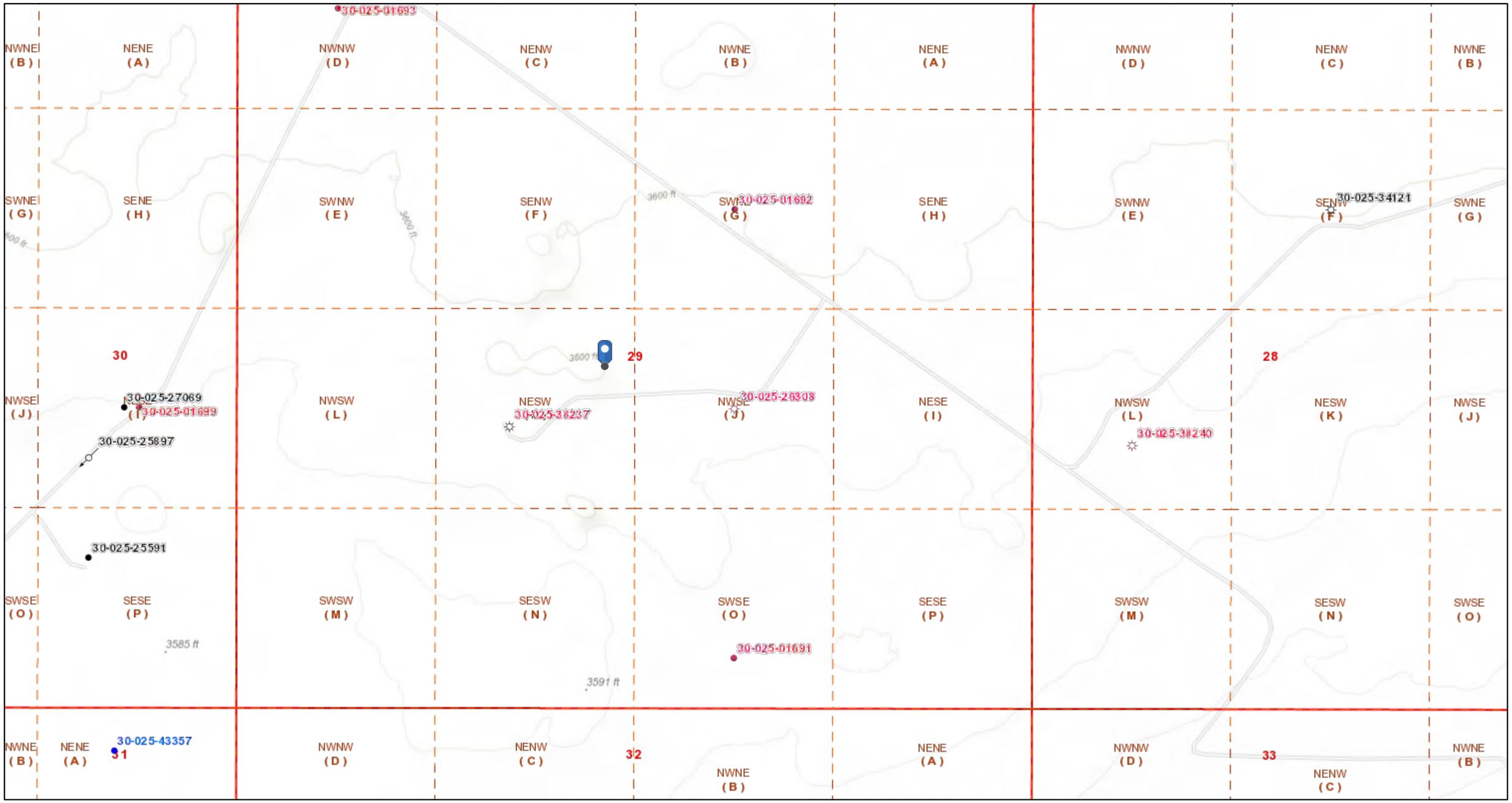


MADURAI PPL LEAK

CONFIRMATION SAMPLE MAP



Madurai Pipeline Leak, Smith Ranch



11/24/2020, 8:53:03 AM

1:9,028

0 0.07 0.15 0.3 mi

0 0.15 0.3 0.6 km

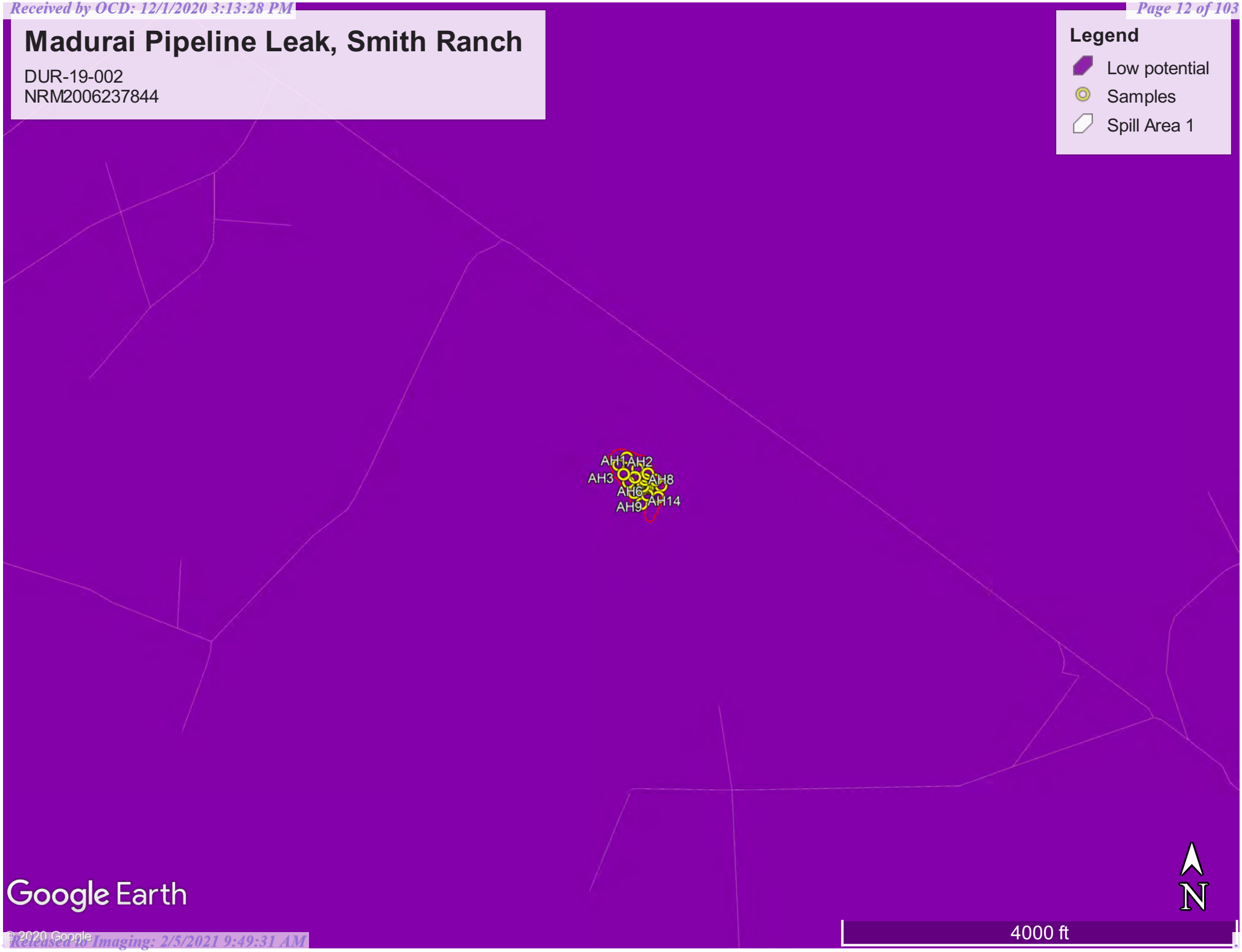
Wells - Large Scale

- undefined
- Miscellaneous
- CO2, Active
- CO2, Cancelled
- CO2, New
- CO2, Plugged
- CO2, Temporarily Abandoned
- Gas, Active
- Gas, Cancelled
- Gas, New
- Gas, Plugged
- Gas, Temporarily Abandoned
- Injection, Active
- Injection, Cancelled
- Injection, New
- Injection, Plugged
- Injection, Temporarily Abandoned
- Oil, Active
- Oil, Cancelled
- Oil, New
- Oil, Plugged
- Oil, Temporarily Abandoned
- Salt Water Injection, Active
- Salt Water Injection, Cancelled
- Salt Water Injection, New
- Salt Water Injection, Plugged
- Salt Water Injection, Temporarily Abandoned
- Water, Active
- Water, Cancelled
- Water, New

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA, Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., OCD, BLM

Madurai Pipeline Leak, Smith Ranch

DUR-19-002
NRM2006237844



National Flood Hazard Layer FIRMette

FEMA

103°41'28"W 32°38'4"N

103°40'51"W 32°37'34"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/24/2020 at 10:55 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 09, 2020

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: 6" POLY SMITH RANCH

Enclosed are the results of analyses for samples received by the laboratory on 01/03/20 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	01/03/2020	Sampling Date:	01/03/2020
Reported:	01/09/2020	Sampling Type:	Soil
Project Name:	6" POLY SMITH RANCH	Sampling Condition:	** (See Notes)
Project Number:	DUR - 20-001	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: TT - 1 1' (H000018-01)

BTEX 8021B mg/kg Analyzed By: ms S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**9.46**	1.00	01/08/2020	ND	1.92	96.0	2.00	1.86	
Toluene*	**6.57**	1.00	01/08/2020	ND	1.95	97.3	2.00	2.49	
Ethylbenzene*	**3.51**	1.00	01/08/2020	ND	2.03	101	2.00	2.90	
Total Xylenes*	**32.3**	3.00	01/08/2020	ND	6.09	102	6.00	2.76	
Total BTEX	**51.8**	6.00	01/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *130 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	01/06/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1560**	100	01/08/2020	ND	212	106	200	4.06	
DRO >C10-C28*	**57200**	100	01/08/2020	ND	231	115	200	1.74	
EXT DRO >C28-C36	**9320**	100	01/08/2020	ND					

Surrogate: 1-Chlorooctane *246 %* *41-142*

Surrogate: 1-Chlorooctadecane *1990 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	01/03/2020	Sampling Date:	01/03/2020
Reported:	01/09/2020	Sampling Type:	Soil
Project Name:	6" POLY SMITH RANCH	Sampling Condition:	** (See Notes)
Project Number:	DUR - 20-001	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: TT - 1 3' (H000018-02)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/08/2020	ND	1.92	96.0	2.00	1.86	
Toluene*	<0.050	0.050	01/08/2020	ND	1.95	97.3	2.00	2.49	
Ethylbenzene*	<0.050	0.050	01/08/2020	ND	2.03	101	2.00	2.90	
Total Xylenes*	<0.150	0.150	01/08/2020	ND	6.09	102	6.00	2.76	
Total BTEX	<0.300	0.300	01/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/06/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/08/2020	ND	191	95.4	200	6.89	
DRO >C10-C28*	<10.0	10.0	01/08/2020	ND	220	110	200	2.66	
EXT DRO >C28-C36	<10.0	10.0	01/08/2020	ND					

Surrogate: 1-Chlorooctane *77.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *79.4 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	01/03/2020	Sampling Date:	01/03/2020
Reported:	01/09/2020	Sampling Type:	Soil
Project Name:	6" POLY SMITH RANCH	Sampling Condition:	** (See Notes)
Project Number:	DUR - 20-001	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: TT - 1 5' (H000018-03)

BTEX 8021B mg/kg Analyzed By: ms S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**8.61**	0.500	01/08/2020	ND	1.92	96.0	2.00	1.86	
Toluene*	**47.3**	0.500	01/08/2020	ND	1.95	97.3	2.00	2.49	
Ethylbenzene*	**48.2**	0.500	01/08/2020	ND	2.03	101	2.00	2.90	
Total Xylenes*	**121**	1.50	01/08/2020	ND	6.09	102	6.00	2.76	
Total BTEX	**225**	3.00	01/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *164 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	01/06/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**2860**	50.0	01/08/2020	ND	212	106	200	4.06	
DRO >C10-C28*	**17500**	50.0	01/08/2020	ND	231	115	200	1.74	
EXT DRO >C28-C36	**2190**	50.0	01/08/2020	ND					

Surrogate: 1-Chlorooctane *286 %* *41-142*

Surrogate: 1-Chlorooctadecane *453 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	01/03/2020	Sampling Date:	01/03/2020
Reported:	01/09/2020	Sampling Type:	Soil
Project Name:	6" POLY SMITH RANCH	Sampling Condition:	** (See Notes)
Project Number:	DUR - 20-001	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: TT - 1 13' (H000018-04)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/08/2020	ND	1.92	96.0	2.00	1.86	
Toluene*	<0.050	0.050	01/08/2020	ND	1.95	97.3	2.00	2.49	
Ethylbenzene*	<0.050	0.050	01/08/2020	ND	2.03	101	2.00	2.90	
Total Xylenes*	<0.150	0.150	01/08/2020	ND	6.09	102	6.00	2.76	
Total BTEX	<0.300	0.300	01/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	01/06/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/08/2020	ND	191	95.4	200	6.89	
DRO >C10-C28*	<10.0	10.0	01/08/2020	ND	220	110	200	2.66	
EXT DRO >C28-C36	<10.0	10.0	01/08/2020	ND					

Surrogate: 1-Chlorooctane *71.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *73.8 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	Safety and Environmental Solutions	BILL TO	
Project Manager:	Bob Allen	P.O. #:	
Address:	703 East Clinton, PO Box 1613	Company:	Same
City:	Hobbs	State: NM Zip: 88240	Attn:
Phone #:	575 397-0510	Fax #: 575 393-4388	Address:
Project #:	DUR-20-001	Project Owner:	City:
Project Name:	6" Poly Smith Ranch		State: Zip:
Project Location:	Lea County		Phone #:
Sampler Name:	Sosa Jerry		Fax #:

FOR LAB USE ONLY					MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST												
Lab I.D.	Sample I.D.		(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	TPH	Chlorides												
H000018																													
1	TT-1	1 ft	G	1			X					X		01/03	1000	X	X	X											
2	TT-1	3 ft	G	1			X					X		01/03	1035	X	X	X											
3	TT-1	5 ft	G	1			X					X		01/03	1055	X	X	X											
4	TT-1	13 ft	G	1			X					X		01/03	1120	X	X	X											

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 01/03/20	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1330		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: #113 8.6°C

Sample Condition		CHECKED BY: (Initials)
Cool	Intact	
☐ Yes ☑ No	☑ Yes ☐ No	

Brought Straight from field to Lab.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

July 20, 2020

Bob Allen
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241
TEL: (575) 397-0510
FAX: (575) 393-4388

RE: Durango Maduro 6 inch Polylane OrderNo.: 2007553

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 21 sample(s) on 7/11/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-1 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 8:50:00 AM
Lab ID: 2007553-001 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 3:38:22 PM	53754
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/14/2020 5:48:51 PM	53669
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2020 5:48:51 PM	53669
Surr: DNOP	55.0	55.1-146	S	%Rec	1	7/14/2020 5:48:51 PM	53669
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/14/2020 10:45:52 PM	53657
Surr: BFB	92.0	66.6-105		%Rec	1	7/14/2020 10:45:52 PM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/14/2020 10:45:52 PM	53657
Toluene	ND	0.049		mg/Kg	1	7/14/2020 10:45:52 PM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/14/2020 10:45:52 PM	53657
Xylenes, Total	ND	0.098		mg/Kg	1	7/14/2020 10:45:52 PM	53657
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	7/14/2020 10:45:52 PM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-2 6"
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 9:15:00 AM
Lab ID: 2007553-002 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 4:15:37 PM	53754
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/14/2020 6:13:12 PM	53669
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/14/2020 6:13:12 PM	53669
Surr: DNOP	64.4	55.1-146		%Rec	1	7/14/2020 6:13:12 PM	53669
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/14/2020 11:09:27 PM	53657
Surr: BFB	89.4	66.6-105		%Rec	1	7/14/2020 11:09:27 PM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	7/14/2020 11:09:27 PM	53657
Toluene	ND	0.049		mg/Kg	1	7/14/2020 11:09:27 PM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/14/2020 11:09:27 PM	53657
Xylenes, Total	ND	0.098		mg/Kg	1	7/14/2020 11:09:27 PM	53657
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	7/14/2020 11:09:27 PM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-3 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 9:35:00 AM
Lab ID: 2007553-003 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 4:28:02 PM	53754
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/14/2020 6:37:37 PM	53669
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2020 6:37:37 PM	53669
Surr: DNOP	72.8	55.1-146		%Rec	1	7/14/2020 6:37:37 PM	53669
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/14/2020 11:32:54 PM	53657
Surr: BFB	90.6	66.6-105		%Rec	1	7/14/2020 11:32:54 PM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/14/2020 11:32:54 PM	53657
Toluene	ND	0.049		mg/Kg	1	7/14/2020 11:32:54 PM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/14/2020 11:32:54 PM	53657
Xylenes, Total	ND	0.098		mg/Kg	1	7/14/2020 11:32:54 PM	53657
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	7/14/2020 11:32:54 PM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-4 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 9:50:00 AM
Lab ID: 2007553-004 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 4:40:26 PM	53754
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	12	9.2		mg/Kg	1	7/14/2020 7:01:51 PM	53669
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/14/2020 7:01:51 PM	53669
Surr: DNOP	77.0	55.1-146		%Rec	1	7/14/2020 7:01:51 PM	53669
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/14/2020 11:56:17 PM	53657
Surr: BFB	91.6	66.6-105		%Rec	1	7/14/2020 11:56:17 PM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.023		mg/Kg	1	7/14/2020 11:56:17 PM	53657
Toluene	ND	0.046		mg/Kg	1	7/14/2020 11:56:17 PM	53657
Ethylbenzene	ND	0.046		mg/Kg	1	7/14/2020 11:56:17 PM	53657
Xylenes, Total	ND	0.092		mg/Kg	1	7/14/2020 11:56:17 PM	53657
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	7/14/2020 11:56:17 PM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-5 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 10:15:00 AM
Lab ID: 2007553-005 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 4:52:50 PM	53754
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	22	9.7		mg/Kg	1	7/14/2020 7:26:12 PM	53669
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2020 7:26:12 PM	53669
Surr: DNOP	90.6	55.1-146		%Rec	1	7/14/2020 7:26:12 PM	53669
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2020 12:19:46 AM	53657
Surr: BFB	91.5	66.6-105		%Rec	1	7/15/2020 12:19:46 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 12:19:46 AM	53657
Toluene	ND	0.049		mg/Kg	1	7/15/2020 12:19:46 AM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2020 12:19:46 AM	53657
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2020 12:19:46 AM	53657
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	7/15/2020 12:19:46 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-6 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 10:35:00 AM
Lab ID: 2007553-006 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 5:54:52 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/14/2020 8:40:39 AM	53683
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2020 8:40:39 AM	53683
Surr: DNOP	155	55.1-146	S	%Rec	1	7/14/2020 8:40:39 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2020 12:43:29 AM	53657
Surr: BFB	89.8	66.6-105		%Rec	1	7/15/2020 12:43:29 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	7/15/2020 12:43:29 AM	53657
Toluene	ND	0.049		mg/Kg	1	7/15/2020 12:43:29 AM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2020 12:43:29 AM	53657
Xylenes, Total	ND	0.098		mg/Kg	1	7/15/2020 12:43:29 AM	53657
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	7/15/2020 12:43:29 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-7 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 10:55:00 AM
Lab ID: 2007553-007 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 6:32:05 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/14/2020 9:12:11 AM	53683
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2020 9:12:11 AM	53683
Surr: DNOP	146	55.1-146	S	%Rec	1	7/14/2020 9:12:11 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/15/2020 1:07:04 AM	53657
Surr: BFB	90.6	66.6-105		%Rec	1	7/15/2020 1:07:04 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 1:07:04 AM	53657
Toluene	ND	0.050		mg/Kg	1	7/15/2020 1:07:04 AM	53657
Ethylbenzene	ND	0.050		mg/Kg	1	7/15/2020 1:07:04 AM	53657
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2020 1:07:04 AM	53657
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	7/15/2020 1:07:04 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-8 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 11:15:00 AM
Lab ID: 2007553-008 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 6:44:29 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/14/2020 9:22:00 AM	53683
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2020 9:22:00 AM	53683
Surr: DNOP	151	55.1-146	S	%Rec	1	7/14/2020 9:22:00 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2020 1:30:24 AM	53657
Surr: BFB	90.3	66.6-105		%Rec	1	7/15/2020 1:30:24 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 1:30:24 AM	53657
Toluene	ND	0.049		mg/Kg	1	7/15/2020 1:30:24 AM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2020 1:30:24 AM	53657
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2020 1:30:24 AM	53657
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	7/15/2020 1:30:24 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-9 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 11:40:00 AM
Lab ID: 2007553-009 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	280	60		mg/Kg	20	7/16/2020 6:56:54 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/14/2020 9:31:53 AM	53683
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2020 9:31:53 AM	53683
Surr: DNOP	134	55.1-146		%Rec	1	7/14/2020 9:31:53 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/15/2020 1:53:50 AM	53657
Surr: BFB	90.0	66.6-105		%Rec	1	7/15/2020 1:53:50 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 1:53:50 AM	53657
Toluene	ND	0.050		mg/Kg	1	7/15/2020 1:53:50 AM	53657
Ethylbenzene	ND	0.050		mg/Kg	1	7/15/2020 1:53:50 AM	53657
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2020 1:53:50 AM	53657
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	7/15/2020 1:53:50 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-10 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 11:45:00 AM
Lab ID: 2007553-010 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	59		mg/Kg	20	7/16/2020 7:09:19 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	9300	480		mg/Kg	50	7/14/2020 10:06:29 AM	53683
Motor Oil Range Organics (MRO)	9100	2400		mg/Kg	50	7/14/2020 10:06:29 AM	53683
Surr: DNOP	0	55.1-146	S	%Rec	50	7/14/2020 10:06:29 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	25	D	mg/Kg	5	7/15/2020 2:40:44 AM	53657
Surr: BFB	92.8	66.6-105	D	%Rec	5	7/15/2020 2:40:44 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.12	D	mg/Kg	5	7/15/2020 2:40:44 AM	53657
Toluene	ND	0.25	D	mg/Kg	5	7/15/2020 2:40:44 AM	53657
Ethylbenzene	ND	0.25	D	mg/Kg	5	7/15/2020 2:40:44 AM	53657
Xylenes, Total	ND	0.49	D	mg/Kg	5	7/15/2020 2:40:44 AM	53657
Surr: 4-Bromofluorobenzene	102	80-120	D	%Rec	5	7/15/2020 2:40:44 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-10 1ft
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 12:20:00 PM
Lab ID: 2007553-011 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 7:21:44 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	13	9.7		mg/Kg	1	7/14/2020 10:16:23 AM	53683
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2020 10:16:23 AM	53683
Surr: DNOP	121	55.1-146		%Rec	1	7/14/2020 10:16:23 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/15/2020 3:04:13 AM	53657
Surr: BFB	91.1	66.6-105		%Rec	1	7/15/2020 3:04:13 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 3:04:13 AM	53657
Toluene	ND	0.050		mg/Kg	1	7/15/2020 3:04:13 AM	53657
Ethylbenzene	ND	0.050		mg/Kg	1	7/15/2020 3:04:13 AM	53657
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2020 3:04:13 AM	53657
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	7/15/2020 3:04:13 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-11 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 12:45:00 PM
Lab ID: 2007553-012 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 7:58:57 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	25	10		mg/Kg	1	7/14/2020 10:26:18 AM	53683
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2020 10:26:18 AM	53683
Surr: DNOP	126	55.1-146		%Rec	1	7/14/2020 10:26:18 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2020 3:27:50 AM	53657
Surr: BFB	89.1	66.6-105		%Rec	1	7/15/2020 3:27:50 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	7/15/2020 3:27:50 AM	53657
Toluene	ND	0.049		mg/Kg	1	7/15/2020 3:27:50 AM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2020 3:27:50 AM	53657
Xylenes, Total	ND	0.098		mg/Kg	1	7/15/2020 3:27:50 AM	53657
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	7/15/2020 3:27:50 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-12 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 1:10:00 PM
Lab ID: 2007553-013 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 8:11:22 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	7/14/2020 10:36:15 AM	53683
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/14/2020 10:36:15 AM	53683
Surr: DNOP	145	55.1-146		%Rec	1	7/14/2020 10:36:15 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/15/2020 3:51:29 AM	53657
Surr: BFB	90.5	66.6-105		%Rec	1	7/15/2020 3:51:29 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 3:51:29 AM	53657
Toluene	ND	0.050		mg/Kg	1	7/15/2020 3:51:29 AM	53657
Ethylbenzene	ND	0.050		mg/Kg	1	7/15/2020 3:51:29 AM	53657
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2020 3:51:29 AM	53657
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	7/15/2020 3:51:29 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-13 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 1:30:00 PM
Lab ID: 2007553-014 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 8:23:46 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/14/2020 10:46:15 AM	53683
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2020 10:46:15 AM	53683
Surr: DNOP	113	55.1-146		%Rec	1	7/14/2020 10:46:15 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2020 4:15:10 AM	53657
Surr: BFB	90.9	66.6-105		%Rec	1	7/15/2020 4:15:10 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 4:15:10 AM	53657
Toluene	ND	0.049		mg/Kg	1	7/15/2020 4:15:10 AM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2020 4:15:10 AM	53657
Xylenes, Total	ND	0.098		mg/Kg	1	7/15/2020 4:15:10 AM	53657
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	7/15/2020 4:15:10 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-14 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 1:50:00 PM
Lab ID: 2007553-015 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 8:36:10 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/14/2020 10:56:16 AM	53683
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2020 10:56:16 AM	53683
Surr: DNOP	126	55.1-146		%Rec	1	7/14/2020 10:56:16 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/15/2020 4:38:49 AM	53657
Surr: BFB	91.8	66.6-105		%Rec	1	7/15/2020 4:38:49 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 4:38:49 AM	53657
Toluene	ND	0.050		mg/Kg	1	7/15/2020 4:38:49 AM	53657
Ethylbenzene	ND	0.050		mg/Kg	1	7/15/2020 4:38:49 AM	53657
Xylenes, Total	ND	0.10		mg/Kg	1	7/15/2020 4:38:49 AM	53657
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	7/15/2020 4:38:49 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-15 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/8/2020 2:20:00 PM
Lab ID: 2007553-016 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	59		mg/Kg	20	7/16/2020 8:48:34 PM	53761
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	14	9.9		mg/Kg	1	7/14/2020 11:06:19 AM	53683
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2020 11:06:19 AM	53683
Surr: DNOP	132	55.1-146		%Rec	1	7/14/2020 11:06:19 AM	53683
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2020 5:02:28 AM	53657
Surr: BFB	88.0	66.6-105		%Rec	1	7/15/2020 5:02:28 AM	53657
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	7/15/2020 5:02:28 AM	53657
Toluene	ND	0.049		mg/Kg	1	7/15/2020 5:02:28 AM	53657
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2020 5:02:28 AM	53657
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2020 5:02:28 AM	53657
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	7/15/2020 5:02:28 AM	53657

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-16 5ft
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/9/2020 9:30:00 AM
Lab ID: 2007553-017 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	7/16/2020 9:00:58 PM	53761
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/14/2020 8:58:04 PM	53676
Surr: BFB	97.2	70-130		%Rec	1	7/14/2020 8:58:04 PM	53676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/14/2020 11:16:24 AM	53683
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2020 11:16:24 AM	53683
Surr: DNOP	145	55.1-146		%Rec	1	7/14/2020 11:16:24 AM	53683
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	7/14/2020 8:58:04 PM	53676
Toluene	ND	0.049		mg/Kg	1	7/14/2020 8:58:04 PM	53676
Ethylbenzene	ND	0.049		mg/Kg	1	7/14/2020 8:58:04 PM	53676
Xylenes, Total	ND	0.098		mg/Kg	1	7/14/2020 8:58:04 PM	53676
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	7/14/2020 8:58:04 PM	53676
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	7/14/2020 8:58:04 PM	53676
Surr: Dibromofluoromethane	103	70-130		%Rec	1	7/14/2020 8:58:04 PM	53676
Surr: Toluene-d8	102	70-130		%Rec	1	7/14/2020 8:58:04 PM	53676

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-17 5ft
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/9/2020 10:15:00 AM
Lab ID: 2007553-018 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	940	60		mg/Kg	20	7/16/2020 9:13:23 PM	53761
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/14/2020 10:23:36 PM	53676
Surr: BFB	94.3	70-130		%Rec	1	7/14/2020 10:23:36 PM	53676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/14/2020 11:26:31 AM	53683
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2020 11:26:31 AM	53683
Surr: DNOP	119	55.1-146		%Rec	1	7/14/2020 11:26:31 AM	53683
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.025		mg/Kg	1	7/14/2020 10:23:36 PM	53676
Toluene	ND	0.050		mg/Kg	1	7/14/2020 10:23:36 PM	53676
Ethylbenzene	ND	0.050		mg/Kg	1	7/14/2020 10:23:36 PM	53676
Xylenes, Total	ND	0.10		mg/Kg	1	7/14/2020 10:23:36 PM	53676
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	7/14/2020 10:23:36 PM	53676
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	7/14/2020 10:23:36 PM	53676
Surr: Dibromofluoromethane	103	70-130		%Rec	1	7/14/2020 10:23:36 PM	53676
Surr: Toluene-d8	101	70-130		%Rec	1	7/14/2020 10:23:36 PM	53676

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-18 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/9/2020 11:25:00 AM
Lab ID: 2007553-019 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	7/16/2020 9:25:48 PM	53761
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2020 2:11:51 AM	53676
Surr: BFB	95.0	70-130		%Rec	1	7/15/2020 2:11:51 AM	53676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/14/2020 11:36:38 AM	53683
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2020 11:36:38 AM	53683
Surr: DNOP	97.1	55.1-146		%Rec	1	7/14/2020 11:36:38 AM	53683
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	7/15/2020 2:11:51 AM	53676
Toluene	ND	0.048		mg/Kg	1	7/15/2020 2:11:51 AM	53676
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2020 2:11:51 AM	53676
Xylenes, Total	ND	0.097		mg/Kg	1	7/15/2020 2:11:51 AM	53676
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	7/15/2020 2:11:51 AM	53676
Surr: 4-Bromofluorobenzene	93.1	70-130		%Rec	1	7/15/2020 2:11:51 AM	53676
Surr: Dibromofluoromethane	103	70-130		%Rec	1	7/15/2020 2:11:51 AM	53676
Surr: Toluene-d8	102	70-130		%Rec	1	7/15/2020 2:11:51 AM	53676

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-19 1ft
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/9/2020 12:50:00 PM
Lab ID: 2007553-020 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	1600	60		mg/Kg	20	7/16/2020 9:38:13 PM	53761
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**JMR**
Gasoline Range Organics (GRO)	170	25		mg/Kg	5	7/15/2020 2:40:27 AM	53676
Surr: BFB	97.7	70-130		%Rec	5	7/15/2020 2:40:27 AM	53676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	24000	500		mg/Kg	50	7/14/2020 11:46:59 AM	53683
Motor Oil Range Organics (MRO)	15000	2500		mg/Kg	50	7/14/2020 11:46:59 AM	53683
Surr: DNOP	0	55.1-146	S	%Rec	50	7/14/2020 11:46:59 AM	53683
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**JMR**
Benzene	ND	0.12		mg/Kg	5	7/15/2020 2:40:27 AM	53676
Toluene	1.5	0.25		mg/Kg	5	7/15/2020 2:40:27 AM	53676
Ethylbenzene	3.4	0.25		mg/Kg	5	7/15/2020 2:40:27 AM	53676
Xylenes, Total	12	0.50		mg/Kg	5	7/15/2020 2:40:27 AM	53676
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	5	7/15/2020 2:40:27 AM	53676
Surr: 4-Bromofluorobenzene	53.8	70-130	S	%Rec	5	7/15/2020 2:40:27 AM	53676
Surr: Dibromofluoromethane	101	70-130		%Rec	5	7/15/2020 2:40:27 AM	53676
Surr: Toluene-d8	104	70-130		%Rec	5	7/15/2020 2:40:27 AM	53676

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2007553**
Date Reported: **7/20/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: AH-20 Surface
Project: Durango Maduro 6 inch Polylane
Collection Date: 7/9/2020 1:40:00 PM
Lab ID: 2007553-021 **Matrix:** SOIL **Received Date:** 7/11/2020 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	60		mg/Kg	20	7/16/2020 9:50:38 PM	53761
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**JMR**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/15/2020 7:53:43 PM	53676
Surr: BFB	96.4	70-130		%Rec	1	7/15/2020 7:53:43 PM	53676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**JME**
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	7/14/2020 11:57:19 AM	53683
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/14/2020 11:57:19 AM	53683
Surr: DNOP	116	55.1-146		%Rec	1	7/14/2020 11:57:19 AM	53683
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**JMR**
Benzene	ND	0.024		mg/Kg	1	7/15/2020 3:08:56 AM	53676
Toluene	ND	0.047		mg/Kg	1	7/15/2020 3:08:56 AM	53676
Ethylbenzene	ND	0.047		mg/Kg	1	7/15/2020 3:08:56 AM	53676
Xylenes, Total	ND	0.095		mg/Kg	1	7/15/2020 3:08:56 AM	53676
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	7/15/2020 3:08:56 AM	53676
Surr: 4-Bromofluorobenzene	86.9	70-130		%Rec	1	7/15/2020 3:08:56 AM	53676
Surr: Dibromofluoromethane	103	70-130		%Rec	1	7/15/2020 3:08:56 AM	53676
Surr: Toluene-d8	107	70-130		%Rec	1	7/15/2020 3:08:56 AM	53676

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007553**

20-Jul-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6 inch Polylane

Sample ID: **MB-53754** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **53754** RunNo: **70388**

Prep Date: **7/16/2020** Analysis Date: **7/16/2020** SeqNo: **2447699** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-53754** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **53754** RunNo: **70388**

Prep Date: **7/16/2020** Analysis Date: **7/16/2020** SeqNo: **2447700** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	90	110			

Sample ID: **MB-53761** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **53761** RunNo: **70388**

Prep Date: **7/16/2020** Analysis Date: **7/16/2020** SeqNo: **2447734** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-53761** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **53761** RunNo: **70388**

Prep Date: **7/16/2020** Analysis Date: **7/16/2020** SeqNo: **2447735** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.4	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2007553**
20-Jul-20

Client: Safety & Environmental Solutions
Project: Durango Maduro 6 inch Polylane

Sample ID: **MB-53669**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **53669**	RunNo: **70308**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2443932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		124	55.1	146			

Sample ID: **MB-53683**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **53683**	RunNo: **70308**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2443933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		120	55.1	146			

Sample ID: **LCS-53669**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **53669**	RunNo: **70308**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2443934** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	119	70	130			
Surr: DNOP	5.5		5.000		110	55.1	146			

Sample ID: **2007553-006AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **AH-6 Surface**	Batch ID: **53683**	RunNo: **70309**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2443948** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	62	8.8	44.17	9.880	118	47.4	136			
Surr: DNOP	6.3		4.417		142	55.1	146			

Sample ID: **2007553-006AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **AH-6 Surface**	Batch ID: **53683**	RunNo: **70309**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2443949** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	64	10	49.80	9.880	109	47.4	136	3.01	43.4	
Surr: DNOP	6.5		4.980		131	55.1	146	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2007553**
20-Jul-20

Client: Safety & Environmental Solutions
Project: Durango Maduro 6 inch Polylane

Sample ID: **LCS-53683**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**	
Client ID: **LCSS**	Batch ID: **53683**	RunNo: **70308**	
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2444211**	Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.9	70	130			
Surr: DNOP	4.2		5.000		84.9	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007553**

20-Jul-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6 inch Polylane

Sample ID: **mb-53657**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **53657**	RunNo: **70338**
Prep Date: **7/12/2020**	Analysis Date: **7/14/2020**	SeqNo: **2444548** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.2	66.6	105			

Sample ID: **lcs-53657**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **53657**	RunNo: **70338**
Prep Date: **7/12/2020**	Analysis Date: **7/14/2020**	SeqNo: **2444549** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	80	120			
Surr: BFB	1000		1000		102	66.6	105			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2007553**
20-Jul-20

Client: Safety & Environmental Solutions
Project: Durango Maduro 6 inch Polylane

Sample ID: **mb-53657**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **53657**	RunNo: **70338**
Prep Date: **7/12/2020**	Analysis Date: **7/14/2020**	SeqNo: **2444596** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID: **LCS-53657**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **53657**	RunNo: **70338**
Prep Date: **7/12/2020**	Analysis Date: **7/14/2020**	SeqNo: **2444597** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.9	80	120			
Toluene	0.96	0.050	1.000	0	96.0	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.1	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2007553**
20-Jul-20

Client: Safety & Environmental Solutions
Project: Durango Maduro 6 inch Polylane

Sample ID: **mb-53676** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **53676** RunNo: **70347**
Prep Date: **7/13/2020** Analysis Date: **7/14/2020** SeqNo: **2444960** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.55		0.5000		110	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.6	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		108	70	130			
Surr: Toluene-d8	0.54		0.5000		107	70	130			

Sample ID: **lcs-53676** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **53676** RunNo: **70347**
Prep Date: **7/13/2020** Analysis Date: **7/14/2020** SeqNo: **2444961** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.6	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		101	70	130			
Surr: Toluene-d8	0.53		0.5000		107	70	130			

Sample ID: **2007553-017ams** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **AH-16 5ft** Batch ID: **53676** RunNo: **70347**
Prep Date: **7/13/2020** Analysis Date: **7/14/2020** SeqNo: **2445621** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.024	0.9737	0	121	70	130			
Toluene	1.1	0.049	0.9737	0	110	70	130			
Surr: 1,2-Dichloroethane-d4	0.52		0.4869		107	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4869		93.8	70	130			
Surr: Dibromofluoromethane	0.53		0.4869		109	70	130			
Surr: Toluene-d8	0.50		0.4869		102	70	130			

Sample ID: **2007553-017amsd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **AH-16 5ft** Batch ID: **53676** RunNo: **70347**
Prep Date: **7/13/2020** Analysis Date: **7/14/2020** SeqNo: **2445622** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007553**

20-Jul-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6 inch Polylane

Sample ID: **2007553-017amsd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **AH-16 5ft** Batch ID: **53676** RunNo: **70347**

Prep Date: **7/13/2020** Analysis Date: **7/14/2020** SeqNo: **2445622** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9709	0	115	70	130	5.89	20	
Toluene	1.0	0.049	0.9709	0	108	70	130	2.66	20	
Surr: 1,2-Dichloroethane-d4	0.51		0.4854		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.45		0.4854		91.9	70	130	0	0	
Surr: Dibromofluoromethane	0.53		0.4854		108	70	130	0	0	
Surr: Toluene-d8	0.50		0.4854		103	70	130	0	0	

Sample ID: **mb-53710** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **53710** RunNo: **70377**

Prep Date: **7/14/2020** Analysis Date: **7/15/2020** SeqNo: **2446234** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		107	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.1	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		105	70	130			
Surr: Toluene-d8	0.53		0.5000		107	70	130			

Sample ID: **lcs-53710** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **53710** RunNo: **70377**

Prep Date: **7/14/2020** Analysis Date: **7/15/2020** SeqNo: **2446235** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		105	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.4	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		105	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007553**

20-Jul-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6 inch Polylane

Sample ID: **mb-53676**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **53676**	RunNo: **70347**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2445114** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	500		500.0		99.7	70	130			

Sample ID: **lcs-53676**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **53676**	RunNo: **70347**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2445115** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	79.1	70	130			
Surr: BFB	470		500.0		94.6	70	130			

Sample ID: **2007553-018ams**	SampType: **MS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **AH-17 5ft**	Batch ID: **53676**	RunNo: **70347**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2445631** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.7	23.72	0	87.4	70	130			
Surr: BFB	450		474.4		94.0	70	130			

Sample ID: **2007553-018amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **AH-17 5ft**	Batch ID: **53676**	RunNo: **70347**
Prep Date: **7/13/2020**	Analysis Date: **7/14/2020**	SeqNo: **2445632** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	24.02	0	86.6	70	130	0.276	20	
Surr: BFB	450		480.3		93.0	70	130	0	0	

Sample ID: **mb-53710**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **53710**	RunNo: **70377**
Prep Date: **7/14/2020**	Analysis Date: **7/15/2020**	SeqNo: **2446257** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	500		500.0		100	70	130			

Sample ID: **lcs-53710**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **53710**	RunNo: **70377**
Prep Date: **7/14/2020**	Analysis Date: **7/15/2020**	SeqNo: **2446258** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	470		500.0		94.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Safety & Environmental S | Work Order Number: 2007553 | RcptNo: 1

Received By: Isaiah Ortiz 7/11/2020 7:10:00 AM

Completed By: Isaiah Ortiz 7/11/2020 8:17:21 AM

Reviewed By: TOM 7/11/2020

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: 7/11/20 (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good	Not Present			

Chain-of-Custody Record

Client: Safety & Environmental Solutions

Mailing Address: 703 E Clinton Hobbs N.M 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Day ☒ Standard ☐ Rush

Project Name: Durango Madero 6" Poly Line

Project #: DUR-20-001

Project Manager: Allen Bob

Sampler: Sam Gray

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0.4-0.1=0.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2007553	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
7/08	0850	S	AH-1 Surface	1	Ice	001	X	X		1							X
	0915	S	AH-2 6"	1		002											
	0935	S	AH-3 Surface	1		003											
	0950	S	AH-4 Surface	1		004											
	1015	S	AH-5 Surface	1		005											
	1035	S	AH-6 Surface	1		006											
	1055	S	AH-7 Surface	1		007											
	1115	S	AH-8 Surface	1		008											
	1140	S	AH-9 Surface	1		009											
	1145	S	AH-10 Surface	1		010											
	1220	S	AH-10 1 Ft	1		011											
7/08	1245	S	AH-11 Surface	1		012	X	X								X	

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
7/10	0800	Sam Gray			7/10/20	0830
7/10/20	1000		Jacqueline Courtney		7/11/20	0710

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Safety + Environmental Solutions

Mailing Address: 703 E Clinton Hobbs N.M 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Day
☑ Standard ☐ Rush

Project Name: Durango Medoro 6" Poly Line

Project #: DUR-20-001

Project Manager: Allen, Bob

Sampler: Son Jerry

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0.4-0=(0.4) (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2007553	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8032 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
7/08	1310	S	AH-12 Surface	1	Ice	013	X	X									X
"	1330	S	AH-13 Surface	1		014											
"	1350	S	AH-14 Surface	1		015											
7/08	1420	S	AH-15 Surface	1		016											
7/09	0930	S	AH-16 Surface	1		017											
"	1015	S	AH-17 Surface	1		018											
"	1125	S	AH-18 Surface	1		019											
"	1250	S	AH-19 Surface	1		020											
7/09	1340	S	AH-20 Surface	1		021	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
7/10	0800	Son Jerry			7/10/20	0830
7/10/20	1000		Ina Cowin		7/11/20	0710

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

August 11, 2020

Bob Allen
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241
TEL: (575) 397-0510
FAX: (575) 393-4388

RE: Durango Maduro 6 Polyline OrderNo.: 2007F87

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/31/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2007F87**
Date Reported: **8/11/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-17 12ft
Project: Durango Maduro 6 Polyline
Collection Date: 7/30/2020 10:15:00 AM
Lab ID: 2007F87-001 **Matrix:** SOIL
Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	ND	60		mg/Kg	20	8/5/2020 10:38:48 PM	54193
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**BRM**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/6/2020 12:22:56 PM	54150
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/6/2020 12:22:56 PM	54150
Surr: DNOP	90.7	30.4-154		%Rec	1	8/6/2020 12:22:56 PM	54150
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 5:33:43 PM	54104
Surr: BFB	101	75.3-105		%Rec	1	8/3/2020 5:33:43 PM	54104
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	8/3/2020 5:33:43 PM	54104
Toluene	ND	0.049		mg/Kg	1	8/3/2020 5:33:43 PM	54104
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 5:33:43 PM	54104
Xylenes, Total	ND	0.098		mg/Kg	1	8/3/2020 5:33:43 PM	54104
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	8/3/2020 5:33:43 PM	54104

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2007F87**
Date Reported: **8/11/2020**

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-19 10ft
Project: Durango Maduro 6 Polyline
Collection Date: 7/30/2020 11:30:00 AM
Lab ID: 2007F87-002 **Matrix:** SOIL
Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	69	60		mg/Kg	20	8/5/2020 10:51:09 PM	54193
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/6/2020 12:32:47 PM	54150
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/6/2020 12:32:47 PM	54150
Surr: DNOP	96.9	30.4-154		%Rec	1	8/6/2020 12:32:47 PM	54150
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 5:57:18 PM	54104
Surr: BFB	102	75.3-105		%Rec	1	8/3/2020 5:57:18 PM	54104
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/3/2020 5:57:18 PM	54104
Toluene	ND	0.049		mg/Kg	1	8/3/2020 5:57:18 PM	54104
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 5:57:18 PM	54104
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2020 5:57:18 PM	54104
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	8/3/2020 5:57:18 PM	54104

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007F87**

11-Aug-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6 Polyline

Sample ID: **MB-54193** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **54193** RunNo: **70844**

Prep Date: **8/5/2020** Analysis Date: **8/5/2020** SeqNo: **2467763** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-54193** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **54193** RunNo: **70844**

Prep Date: **8/5/2020** Analysis Date: **8/5/2020** SeqNo: **2467765** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007F87**

11-Aug-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6 Polyline

Sample ID: **LCS-54150** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54150** RunNo: **70894**

Prep Date: **8/4/2020** Analysis Date: **8/6/2020** SeqNo: **2469094** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.9	70	130			
Surr: DNOP	4.3		5.000		86.3	30.4	154			

Sample ID: **MB-54150** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54150** RunNo: **70894**

Prep Date: **8/4/2020** Analysis Date: **8/6/2020** SeqNo: **2469097** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	30.4	154			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007F87**

11-Aug-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6 Polyline

Sample ID: **mb-54104**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **54104**	RunNo: **70797**
Prep Date: **8/1/2020**	Analysis Date: **8/3/2020**	SeqNo: **2464423** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	75.3	105			

Sample ID: **lcs-54104**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **54104**	RunNo: **70797**
Prep Date: **8/1/2020**	Analysis Date: **8/3/2020**	SeqNo: **2464424** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	72.5	106			
Surr: BFB	1100		1000		112	75.3	105			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2007F87**

11-Aug-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6 Polyline

Sample ID: **mb-54104** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **54104** RunNo: **70797**

Prep Date: **8/1/2020** Analysis Date: **8/3/2020** SeqNo: **2464471** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID: **LCS-54104** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **54104** RunNo: **70797**

Prep Date: **8/1/2020** Analysis Date: **8/3/2020** SeqNo: **2464472** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.8	80	120			
Toluene	0.95	0.050	1.000	0	95.2	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Safety & Environmental Solutions** Work Order Number: **2007F87** RcptNo: 1

Received By: **Emily Mocho** **7/31/2020** 9:55 AM EM 7/31/20

Completed By: **Emily Mocho** **7/31/2020 10:41:03 AM**

Reviewed By: SPA 7.31.20 11:30

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered?

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: JR 7/31/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good				

Chain-of-Custody Record

Client: Safety & Environmental Solutions

Mailing Address: 703 E Clinton Hobbs NM 88260

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Days
☑ Standard ☐ Rush

Project Name: Durango Mesquite 6" Polyline

Project #: DUR-19-002

Project Manager: Allen, Bob

Sampler: Sosa, Jorge

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.4-0.1=3.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2007F87	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
7/30	1015	S	SR17 12"	1	Ice	-001	X	X									X
7/30	1130	S	SR19 10"	1		-002	X	X									X

Remarks:

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
7/30	1600					
7/30/20	1910		9km courier		7/31/20	955

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

November 02, 2020

Bob Allen
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241
TEL: (575) 397-0510
FAX: (575) 393-4388

RE: Durango Maduro 6" Polyline OrderNo.: 2010B90

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/27/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2010B90**
Date Reported: **11/2/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-20 North Wall
Project: Durango Maduro 6" Polyline
Collection Date: 10/26/2020 9:35:00 AM
Lab ID: 2010B90-001 **Matrix:** SOIL **Received Date:** 10/27/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	150	60		mg/Kg	20	10/30/2020 8:32:28 PM	56124
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	10/28/2020 3:47:53 PM	56068
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/28/2020 3:47:53 PM	56068
Surr: DNOP	101	30.4-154		%Rec	1	10/28/2020 3:47:53 PM	56068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/28/2020 10:13:42 AM	56063
Surr: BFB	97.1	75.3-105		%Rec	1	10/28/2020 10:13:42 AM	56063
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	10/28/2020 10:13:42 AM	56063
Toluene	ND	0.050		mg/Kg	1	10/28/2020 10:13:42 AM	56063
Ethylbenzene	ND	0.050		mg/Kg	1	10/28/2020 10:13:42 AM	56063
Xylenes, Total	ND	0.099		mg/Kg	1	10/28/2020 10:13:42 AM	56063
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	10/28/2020 10:13:42 AM	56063

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2010B90**
Date Reported: **11/2/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-21 South Wall
Project: Durango Maduro 6" Polyline
Collection Date: 10/26/2020 10:00:00 AM
Lab ID: 2010B90-002 **Matrix:** SOIL
Received Date: 10/27/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	140	60		mg/Kg	20	10/30/2020 9:09:43 PM	56124
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	11	9.8		mg/Kg	1	10/28/2020 4:11:48 PM	56068
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/28/2020 4:11:48 PM	56068
Surr: DNOP	88.5	30.4-154		%Rec	1	10/28/2020 4:11:48 PM	56068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/28/2020 11:24:47 AM	56063
Surr: BFB	98.8	75.3-105		%Rec	1	10/28/2020 11:24:47 AM	56063
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	10/28/2020 11:24:47 AM	56063
Toluene	ND	0.050		mg/Kg	1	10/28/2020 11:24:47 AM	56063
Ethylbenzene	ND	0.050		mg/Kg	1	10/28/2020 11:24:47 AM	56063
Xylenes, Total	ND	0.10		mg/Kg	1	10/28/2020 11:24:47 AM	56063
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	10/28/2020 11:24:47 AM	56063

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2010B90**
Date Reported: **11/2/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-22 North Wall
Project: Durango Maduro 6" Polyline
Collection Date: 10/26/2020 10:35:00 AM
Lab ID: 2010B90-003 **Matrix:** SOIL
Received Date: 10/27/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	59		mg/Kg	20	10/30/2020 9:46:56 PM	56124
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	10/28/2020 4:35:49 PM	56068
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	10/28/2020 4:35:49 PM	56068
Surr: DNOP	79.6	30.4-154		%Rec	1	10/28/2020 4:35:49 PM	56068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/28/2020 11:48:24 AM	56063
Surr: BFB	96.8	75.3-105		%Rec	1	10/28/2020 11:48:24 AM	56063
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	10/28/2020 11:48:24 AM	56063
Toluene	ND	0.049		mg/Kg	1	10/28/2020 11:48:24 AM	56063
Ethylbenzene	ND	0.049		mg/Kg	1	10/28/2020 11:48:24 AM	56063
Xylenes, Total	ND	0.099		mg/Kg	1	10/28/2020 11:48:24 AM	56063
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	10/28/2020 11:48:24 AM	56063

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2010B90**
Date Reported: **11/2/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-23 South Wall
Project: Durango Maduro 6" Polyline
Collection Date: 10/26/2020 11:05:00 AM
Lab ID: 2010B90-004 **Matrix:** SOIL **Received Date:** 10/27/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	10/30/2020 9:59:21 PM	56124
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/28/2020 4:59:49 PM	56068
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/28/2020 4:59:49 PM	56068
Surr: DNOP	80.9	30.4-154		%Rec	1	10/28/2020 4:59:49 PM	56068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/28/2020 12:12:10 PM	56063
Surr: BFB	98.1	75.3-105		%Rec	1	10/28/2020 12:12:10 PM	56063
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	10/28/2020 12:12:10 PM	56063
Toluene	ND	0.047		mg/Kg	1	10/28/2020 12:12:10 PM	56063
Ethylbenzene	ND	0.047		mg/Kg	1	10/28/2020 12:12:10 PM	56063
Xylenes, Total	ND	0.093		mg/Kg	1	10/28/2020 12:12:10 PM	56063
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	10/28/2020 12:12:10 PM	56063

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2010B90**
Date Reported: **11/2/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-24 West Wall
Project: Durango Maduro 6" Polyline
Collection Date: 10/26/2020 11:50:00 AM
Lab ID: 2010B90-005 **Matrix:** SOIL
Received Date: 10/27/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	59		mg/Kg	20	10/30/2020 10:11:45 PM	56124
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	10/28/2020 5:23:53 PM	56068
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/28/2020 5:23:53 PM	56068
Surr: DNOP	79.8	30.4-154		%Rec	1	10/28/2020 5:23:53 PM	56068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/28/2020 12:35:51 PM	56063
Surr: BFB	95.7	75.3-105		%Rec	1	10/28/2020 12:35:51 PM	56063
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	10/28/2020 12:35:51 PM	56063
Toluene	ND	0.047		mg/Kg	1	10/28/2020 12:35:51 PM	56063
Ethylbenzene	ND	0.047		mg/Kg	1	10/28/2020 12:35:51 PM	56063
Xylenes, Total	ND	0.093		mg/Kg	1	10/28/2020 12:35:51 PM	56063
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	10/28/2020 12:35:51 PM	56063

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2010B90**
Date Reported: **11/2/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions
Client Sample ID: SP-25 East Wall
Project: Durango Maduro 6" Polyline
Collection Date: 10/26/2020 12:35:00 PM
Lab ID: 2010B90-006 **Matrix:** SOIL
Received Date: 10/27/2020 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	59		mg/Kg	20	10/30/2020 10:24:10 PM	56124
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	10/28/2020 5:47:50 PM	56068
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/28/2020 5:47:50 PM	56068
Surr: DNOP	80.8	30.4-154		%Rec	1	10/28/2020 5:47:50 PM	56068
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/28/2020 12:59:30 PM	56063
Surr: BFB	96.0	75.3-105		%Rec	1	10/28/2020 12:59:30 PM	56063
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	10/28/2020 12:59:30 PM	56063
Toluene	ND	0.047		mg/Kg	1	10/28/2020 12:59:30 PM	56063
Ethylbenzene	ND	0.047		mg/Kg	1	10/28/2020 12:59:30 PM	56063
Xylenes, Total	ND	0.093		mg/Kg	1	10/28/2020 12:59:30 PM	56063
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	10/28/2020 12:59:30 PM	56063

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2010B90**

02-Nov-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6" Polyline

Sample ID: **MB-54124**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **56124**	RunNo: **73036**
Prep Date: **10/30/2020**	Analysis Date: **10/30/2020**	SeqNo: **2568678** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-54124**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **56124**	RunNo: **73036**
Prep Date: **10/30/2020**	Analysis Date: **10/30/2020**	SeqNo: **2568679** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2010B90**

02-Nov-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6" Polyline

Sample ID: **LCS-56068**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **56068**	RunNo: **72977**
Prep Date: **10/27/2020**	Analysis Date: **10/28/2020**	SeqNo: **2565618** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	119	70	130			
Surr: DNOP	5.5		5.000		110	30.4	154			

Sample ID: **MB-56068**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **56068**	RunNo: **72977**
Prep Date: **10/27/2020**	Analysis Date: **10/28/2020**	SeqNo: **2565619** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	30.4	154			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2010B90**

02-Nov-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6" Polyline

Sample ID: **mb-56063** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **56063** RunNo: **72986**

Prep Date: **10/27/2020** Analysis Date: **10/28/2020** SeqNo: **2565863** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.4	75.3	105			

Sample ID: **lcs-56063** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **56063** RunNo: **72986**

Prep Date: **10/27/2020** Analysis Date: **10/28/2020** SeqNo: **2565864** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.9	72.5	106			
Surr: BFB	1000		1000		103	75.3	105			

Sample ID: **2010b90-001ams** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **SP-20 North Wall** Batch ID: **56063** RunNo: **72986**

Prep Date: **10/27/2020** Analysis Date: **10/28/2020** SeqNo: **2565866** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	24.78	0	96.5	61.3	114			
Surr: BFB	1100		991.1		108	75.3	105			S

Sample ID: **2010b90-001amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **SP-20 North Wall** Batch ID: **56063** RunNo: **72986**

Prep Date: **10/27/2020** Analysis Date: **10/28/2020** SeqNo: **2565867** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	24.75	0	96.6	61.3	114	0.0252	20	
Surr: BFB	1000		990.1		106	75.3	105	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2010B90**

02-Nov-20

Client: Safety & Environmental Solutions

Project: Durango Maduro 6" Polyline

Sample ID: **mb-56063**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **56063**	RunNo: **72986**
Prep Date: **10/27/2020**	Analysis Date: **10/28/2020**	SeqNo: **2565886** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: **LCS-56063**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **56063**	RunNo: **72986**
Prep Date: **10/27/2020**	Analysis Date: **10/28/2020**	SeqNo: **2565887** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.0	80	120			
Toluene	0.92	0.050	1.000	0	92.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.2	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Safety & Environmental Solutions** Work Order Number: **2010B90** RcptNo: **1**

Received By: **Sean Livingston** **10/27/2020 11:40:00 AM** Sean Livingston

Completed By: **Emily Mocho** **10/27/2020 11:42:55 AM**

Reviewed By: ENM 10/27/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
5. Sample(s) in proper container(s)? Not frozen Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: (<2 or >12 unless noted)

Adjusted?

Checked by: SGL 10/27/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	-1.3	Good	Not Present			

Chain-of-Custody Record

Client: Safety & Environmental Solutions

Mailing Address: 703 E. Clinton Hobbs N.M 88240

Phone #: 575-397-0510

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day
☑ Standard ☐ Rush

Project Name: Durango Mexico 6" Pipeline

Project #: DUR-19-002

Project Manager: Abby Bob

Sampler: Son Jay

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): -1.3 ±0 = -1.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2010890	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10/26	0935	S	SP-20 North Wall	1	Ice	001	X	X								X Chloride
	1000	S	SP-21 South Wall	1		002										
	1035	S	SP-22 North Wall	1		003										
	1105	S	SP-23 South Wall	1		004										
	1150	S	SP-24 West Wall	1		005										
10/26	1235	S	SP-25 East Wall	1		006	X	X								X

Remarks:

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
10/26	1600	Son Jay			10/26/20	1600
10/26/20	1900		Sal	Courier	10/27/20	11:40

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.: 145123	2a. Lead (Sponsoring) Agency: BLM-CFO	2b. Other Permitting Agency(ies):	3. Lead Agency Report No.:

4. Title of Report: A Class III Cultural Resources Survey of an Oil Spill along the Madurai Pipeline, Lea County, New Mexico

Author(s) Weaver, Kobi, Stephanie Waldo, Douglas Boggess, Beth McCormack, Trevor McDermott

5. Type of Report ☐ Negative ☒ Positive

6. Investigation Type
☐ Research Design ☒ Survey/Inventory ☐ Test Excavation ☐ Excavation ☐ Collections/Non-Field Study
☐ Overview/Lit Review ☐ Monitoring ☐ Ethnographic study ☐ Site specific visit ☐ Other

7. Description of Undertaking (what does the project entail?):
At the behest of Durango Midstream, Lone Mountain performed a Class III survey of the area including and surrounding an oil spill originating from the Madurai Pipeline just to the north. According to aerial photographs, this pipeline was installed before 1996. During the survey it was discovered that the oil spill had affected the southwest corner of newly discovered site LA 196068.

This cultural resources inventory was conducted in order to ensure compliance with all applicable federal, state, and county legislation and procedures enacted to protect nonrenewable cultural resources, including the New Mexico Cultural Properties Act of 1978, Section 106 of the National Historic Preservation Act of 1966 as amended (PL 89-665), the National Environmental Policy Act of 1969 (PL 91-852), the Archaeological Resource Protection Act of 1979 (PL 96-95), Executive Order 11593.

8. Dates of Investigation: January 25, 2020

9. Report Date: February 14, 2020

10. Performing Agency/Consultant:
Lone Mountain Archaeological Services, Inc.
Principal Investigator: Douglas Boggess
Field Supervisor: Stephanie Waldo
Field Personnel Names: Stephanie Waldo

11. Performing Agency/Consultant Report No.: 3109

12. Applicable Cultural Resource Permit No(s):
BLM Permit: 122-2920-18-VVV

13. Client/Customer (project proponent): Durango Midstream
Contact: Harley Everhart
Address: 2002 Timberloch Place, Suite 110, The Woodlands, TX 77380
Phone: (575) 513-4922

14. Client/Customer Project No.:

15. Land Ownership Status ***(Must be indicated on project map):***

Land Owner	Acres Surveyed	Acres in APE
BLM	10.71	3.55
TOTALS	10.71	3.55

16 Records Search(es):

Date(s) of ARMS File Review	1-24-20	**Name of Reviewer(s)** C. Travis	
Date(s) of NR/SR File Review	1-24-20	**Name of Reviewer(s)** C. Travis	
Date(s) of Other Agency File Review	1-24-20	**Name of Reviewer(s)** C. Travis	**Agency** Aaron Whaley/BLM-CFO

17. Survey Data:

a. Source Graphics ☐ NAD 27 ☒ NAD 83
☒ USGS 7.5' (1:24,000) topo map ☐ Other topo map, Scale:
☒ GPS Unit Accuracy ☐ <1.0m ☒ 1-10m ☐ 10-100m ☐ >100m

b. USGS 7.5' Topographic Map Name | **USGS Quad Code**

Laguna Gatuna NW, NM (1984)	32103-F6

c. County(ies): Lea

17. Survey Data (continued):

d. Nearest City or Town: Hobbs

e. Legal Description:

Township (N/S)	Range (E/W)	Section
19S	33E	29

Projected legal description? Yes [ ], No [x] **Unplatted [ ]**

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):

18. Survey Field Methods:
Intensity: ☐ 100% coverage ☐ <100% coverage

Configuration: ☒ block survey units ☐ linear survey units (l x w): ☐ other survey units (specify):

Scope: ☒ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)

Coverage Method: ☒ systematic pedestrian coverage ☐ other method (describe)

Survey Interval (m): 15 **Crew Size:** 1 **Fieldwork Dates:** 1-15-20

Survey Person Hours: 5 **Recording Person Hours:** 2.5 **Total Hours:** 7.5

Additional Narrative: Lone Mountain surveyed a block measuring approximately 250 m by 255 m to encompass the 150-m by 165-m oil spill and the surrounding area. The innermost 60-m diameter of this spill contains a deep trench and large amount of oil. This area was therefore not surveyed during the current work.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The project area is situated within an undulating dune field with dunes up to 3 m tall. This part of New Mexico is on eolian and piedmont deposits, formed during the Holocene to middle Pleistocene and found along the eastern flank of the Pecos River Valley, primarily between Roswell and Carlsbad. This geological formation is comprised of interlayered eolian sands and piedmont-slope deposits. Elevation ranges between 3,590 ft and 3,610 ft amsl.

Soils in the survey include Kermit-Palomas fine sands, 0 to 12 percent slopes and Pyote and Maljamar fine sands. These soils are calcareous and sandy eolian deposits derived from sedimentary rock and are located on plains and dunes.

Brown (1994) characterizes the vegetation community as Semi-desert Grassland. Local vegetation includes mesquite, narrow-leaf yucca, shinnery oak, sand sage and various forbs and grasses.

20. a. Percent Ground Visibility: 60 **b. Condition of Survey Area (grazed, bladed, undisturbed, etc.):** The main disturbance to this survey area is a 60-m by 60-m oil spill with oil seepage outward to a 165-m by 150-m area. This broader area is covered by a thin film of oil. An open trench has been dug in the center of the oil spill. A caliche-capped road is to the south of the area.

21. CULTURAL RESOURCE FINDINGS ☒ **Yes, See Page 3** ☐ **No, Discuss Why:**

22. Required Attachments (check all appropriate boxes):
☒ **USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn**
☒ **Copy of NMCRIS Mapserver Map Check**
☒ **LA Site Forms - new sites (*with sketch map & topographic map*)**
☐ **LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)**
☐ **Historic Cultural Property Inventory Forms**
☒ **List and Description of isolates, if applicable**
☐ **List and Description of Collections, if applicable**

23. Other Attachments:
☐ **Photographs and Log**
☒ **Other Attachments**
***(Describe)*:** FAR form

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Douglas H.M. Boggess

Signature D.H.M. Boggess **Date** February 14, 2020 **Title (if not PI):**

25. Reviewing Agency:
Reviewer's Name/Date

Accepted ( ) Rejected ( )

Tribal Consultation (if applicable): ☐ **Yes** ☐ **No**

26. SHPO
Reviewer's Name/Date:

HPD Log #:
SHPO File Location:
Date sent to ARMS:

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

1. NMCRIS Activity No.: 145123	2. Lead (Sponsoring) Agency: BLM-CFO	3. Lead Agency Report No.:

SURVEY RESULTS:

Sites discovered and registered: 1
Sites discovered and NOT registered: 0
Previously recorded sites revisited (*site update form required*): **0**
Previously recorded sites not relocated ***(site update form required):*** **0**
TOTAL SITES VISITED: 1
Total isolates recorded: 2 **Non-selective isolate recording?** ☒
Total structures recorded (*new and previously recorded, including acequias*): **0**

MANAGEMENT SUMMARY: Lone Mountain encountered one archaeological site (LA 196068) and two isolated manifestations. LA 196068 is an artifact and fire-cracked rock scatter with one thermal feature and an Unspecified Jornada Mogollon (A.D. 200 to 1400) temporal and cultural affiliation. The small stain feature is near the western site boundary, which has been affected by the oil spill. It is therefore recommended that the feature be partially excavated, a profile drawn, and radiocarbon and flotation samples collected prior to spill mitigation and that archaeological monitoring take place during any mitigation activities within 100 ft of the site. No further work is recommended for the isolated manifestations.

SURVEY LA NUMBER LOG

Sites Discovered:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)
196068	3109-001	Y, D

A CLASS III CULTURAL RESOURCES SURVEY OF AN OIL SPILL ALONG THE MADURAI PIPELINE, LEA COUNTY, NEW MEXICO

Prepared by
Kobi Weaver, Stephanie Waldo, Douglas Boggess,
Beth McCormack, Trevor McDermott
Lone Mountain Archaeological Services, Inc.

Submitted by
Douglas H.M. Boggess, Principal Investigator
Lone Mountain Archaeological Services, Inc.
2625 Pennsylvania Street NE
Albuquerque, New Mexico 87110

Prepared for
Durango Midstream
2002 Timberloch Place, Suite 110
The Woodlands, Texas 77380

LONE MOUNTAIN ARCHAEOLOGICAL SERVICES, INC.

NMCRIS No. 14512
BLM Permit No. 122-2920-18-VVV
Lone Mountain 3109
February 14, 2020

ABSTRACT

At the behest of Durango Midstream, Lone Mountain performed a Class III survey of the area including and surrounding an oil spill originating from the Madurai Pipeline just to the north. According to aerial photographs, this pipeline was installed before 1996.

On January 25, 2020 Lone Mountain archaeologist Stephanie Waldo conducted an intensive survey of the area to identify any cultural resources affected by the spill. The spill is located on Bureau of Land Management (BLM) lands in Lea County, New Mexico, Township 19 South, Range 33 East, Section 29 and can be found on the Laguna Gatuna NW, NM USGS 7.5-minute quadrangle. The BLM-Carlsbad Field Office (BLM-CFO) is serving as lead agency. This survey was conducted under BLM Permit 122-2920-18-VVV, NMCRIS 145123.

Lone Mountain encountered one archaeological site (LA 196068) and two isolated manifestations. LA 196068 is an artifact and fire-cracked rock scatter with one thermal feature and an Unspecified Jornada Mogollon (A.D. 200 to 1400) temporal and cultural affiliation. The small stain feature is near the western site boundary, which has been affected by the oil spill. It is therefore recommended that the feature be partially excavated, a profile drawn, and radiocarbon and flotation samples collected prior to spill mitigation and that archaeological monitoring take place during any mitigation activities within 100 ft of the site. No further work is recommended for the isolated manifestations.

This cultural resources inventory was conducted in order to ensure compliance with all applicable federal, state, and county legislation and procedures enacted to protect nonrenewable cultural resources, including the New Mexico Cultural Properties Act of 1978, Section 106 of the National Historic Preservation Act of 1966 as amended (PL 89-665), the National Environmental Policy Act of 1969 (PL 91-852), the Archaeological Resource Protection Act of 1979 (PL 96-95), Executive Order 11593.

TABLE OF CONTENTS

On January 25, 2020 Lone Mountain archaeologist Stephanie Waldo conducted an intensive cultural resources inventory of the affected area.

DESCRIPTION OF UNDERTAKING

At the behest of Durango Midstream, Lone Mountain performed a Class III survey of the area including and surrounding an oil spill originating from the Madurai Pipeline just to the north. According to aerial photographs, this pipeline was installed before 1996.

PROJECT LOCATION

The spill is located on Bureau of Land Management (BLM) lands in Lea County, New Mexico, Township 19 South, Range 33 East, Section 29 and can be found on the Laguna Gatuna NW, NM USGS 7.5-minute quadrangle. The BLM-Carlsbad Field Office (BLM-CFO) is serving as lead agency. This survey was conducted under BLM Permit 122-2920-18-VVV, NMCRIS 145123 (Figures 1.1, 1.2, and A.1).

ENVIRONMENTAL SETTING

The project area is situated within an undulating dune field with dunes up to 3 m tall. This part of New Mexico is on eolian and piedmont deposits, formed during the Holocene to middle Pleistocene and found along the eastern flank of the Pecos River Valley, primarily between Roswell and Carlsbad. This geological formation is comprised of interlayered eolian sands and piedmont-slope deposits. Elevation ranges between 3,590 ft and 3,610 ft amsl.

Soils in the survey include Kermit-Palomas fine sands, 0 to 12 percent slopes and Pyote and Maljamar fine sands. These soils are calcareous and sandy eolian deposits derived from sedimentary rock and are located on plains and dunes.

Brown (1994) characterizes the vegetation community as Semi-desert Grassland. Local vegetation includes mesquite, narrow-leaf yucca, shinnery oak, sand sage and various forbs and grasses.

The main disturbance to this survey area is a 60-m by 60-m oil spill with oil seepage outward to a 165-m by 150-m area. This broader area is covered by a thin film of oil. An open trench has been dug in the center of the oil spill. A caliche-capped road is to the south of the area.

ARCHIVAL RESEARCH

Prior to entering the field, a site files review was conducted to locate any previously-recorded cultural resources and surveys in or within 0.25 mi of the project area. The review included records at the Archeological Records Management Section (ARMS) of the Museum of New Mexico, the National Register of Historic Places (NRHP), and the State Register of Cultural Properties. The BLM-General Land Office records were searched for any land patents (records available online at http://www.glorecords.blm.gov).

One site has been previously recorded within the file search area. LA 19997 is an artifact and fire-cracked rock scatter with a Late Pithouse to Early Pueblo Jornada Mogollon (A.D. 750 to 1200). The site was determined eligible for nomination to the NRHP in 1989 (HPD Log No.:20681). LA 19997 is located well outside the current project area and was not visited during this work.

A number of NMCRIS-registered surveys have taken place within the search radius, most related to oilfield development.

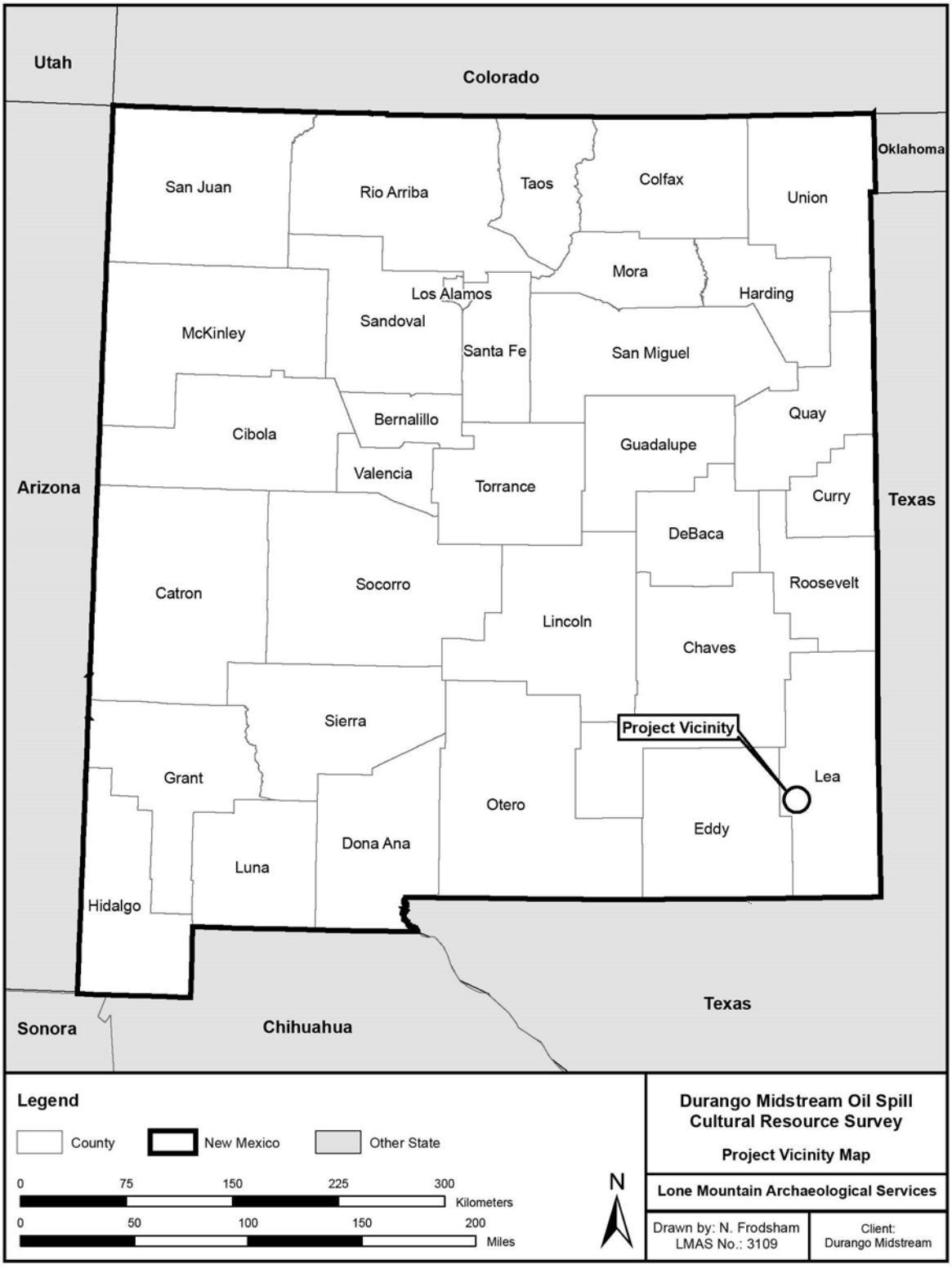


Figure 1.1: Project Vicinity.

Figure 1.1: Oil spill and pit, facing southwest (top); spill, facing southeast (center); spill facing east (below).

On January 25, 2020 Lone Mountain archaeologist Stephanie Waldo conducted an intensive cultural resources inventory of the affected area.

SURVEY METHODS

Lone Mountain surveyed a 660-ft by 620-ft block to encompass the proposed well pad surrounded by a 100-ft cultural buffer and a portion of the proposed access road. An 8,855.52-ft long by 200-ft wide linear corridor was surveyed to encompass the portion of the proposed access road falling outside the surveyed block (including a possible reroute around LA 178322) with a greater-than-50-ft cultural buffer on each side. Archaeologists conducted pedestrian survey in 15-m transects.

This survey was performed in accordance with the latest requirements for all archaeological survey projects conducted within lands managed by the BLM-CFO as set forth in *Standards for Survey Site Evaluation and Reporting for the CFO* (BLM-CFO 2012).

When cultural remains predating 1970 were encountered, a determination was made as to whether they constituted an isolated manifestation or a site. Especially intensive low-interval survey was conducted in areas where previously recorded sites were expected within or near the project area. These searches were conducted at both the previously recorded UTM coordinates and at the locations of hand-drawn map plots, which can be divergent in the case of sites recorded in pre-GPS years.

RECORDING METHODS

ISOLATE DEFINITION

Isolated manifestations are cultural remains that do not qualify as sites. They generally consist of single artifacts or artifact scatters that are of extremely low density and are widely dispersed, and are indicative of a single or unintentional activity. According to BLM guidelines (BLM 2005:1-10) isolated manifestations may consist of fewer than 10 artifacts or a single, undateable feature.

Isolated manifestations are often found in redeposited context (although sites can also be in redeposited context [BLM 2005:1-9]) and cannot be related to other nearby sites or isolated manifestations. In addition, isolated manifestations are generally 50 years old or older, although Lone Mountain may record more recent materials as isolates if there is a sound reason for documenting their presence. Isolated manifestations are recorded in the field on the Lone Mountain isolated manifestation form, a GPS reading is taken, and their locations are plotted on the USGS quadrangle.

SITE DEFINITION

As per BLM guidelines (BLM 2005), sites are defined as any physical location of past human activities or events. Cultural resource sites are extremely variable in size, and range from a cluster of several objects or materials to structures with associated objects and features. A site may consist of secondarily deposited cultural resource remains. Features such as hearths, cairns, rock alignments, masonry concentrations, burned adobe, fire-cracked rock concentrations, cists, corrals, and rock art are generally recorded as sites. Sites also include definite locations of traditional cultural or religious importance to specified social or cultural groups. Furthermore, sites are at least 50 years old, unless it can be demonstrated that a property has achieved exceptional importance within the past 50 years.

SITE RECORDING

When sites were encountered, boundaries were defined using BLM guidelines. Artifacts and features were marked and site boundaries were determined by the distribution of these marked cultural materials. Sites were recorded using a Laboratory of Anthropology Site Record form.

A sketch map was drawn of each site, and site locations were plotted on the appropriate USGS quadrangle. GPS readings were taken to verify the accuracy of the field plot and were taken from a datum located on each sketch map. Photographs were taken showing the setting of each site and any unique or representative features. Either all artifacts, or in the case of large assemblages a representative sample of artifacts, from each site was recorded using Lone Mountain artifact analysis forms. Drawings and photographs of diagnostic or representative formal tools were made. Examinations of rodent burrows, road cuts, drainages, and other disturbed locations were employed to determine if subsurface cultural deposits were present.

In keeping with the January 20, 2012 BLM-CFO standards for site evaluation and reporting, Lone Mountain also conducts limited testing on BLM lands and on private lands, when the BLM is serving as the lead agency. These testing methods are intended to locate buried cultural deposits if surface examinations prove inconclusive and may include trowel testing, shovel testing, or auger testing. Trowel testing is typically performed within features or to probe very shallow-appearing sediments. Shovel tests involve the excavation of 30-cm by 30-cm blocks, which were screened through a hand-held 1/8-inch screen. Shovel tests are performed in moderately deep sediments that are estimated to be less than 50 cm deep. On occasion, a shovel test may begin and end almost immediately on paleosol. These are termed "shovel probes." Auger tests involve the use of a 10-cm diameter bucket auger. Augered fill is likewise put through a hand-held 1/8-inch screen. Auger tests are typically used in sediments that were thought to be more than 50 cm in depth. All subsurface tests end, if possible, in the upper few centimeters of gypsum, bedrock, or caliche. Strata of this kind are known to be in excess of 100,000 years old, and are unlikely to contain archaeological remains. The locations of all shovel and auger tests are documented using a GPS. Buried charcoal, ash, or potentially cultural stained strata of any depth and artifacts and burned rock occurring at a depth of 10 cm or more constitute archaeologically significant subsurface cultural materials that may be counted as positive results achieved during testing.

FEATURES

The following feature definitions were used for recording purposes on archaeological sites encountered during this project. This list represents the most common feature types observed. It was understood that several feature types may also be defined as site types (e.g., Rock Alignment); this is a matter of context and was to be dealt with on a case by case basis. In the event that a feature was encountered that was not on this list, Lone Mountain was to contact BLM-CFO archaeologists for consultation and procedures on documentation.

- Large Stain: Defined by the presence of a charcoal or a carbonized ash stain greater than 1 m in diameter with fewer than five pieces of fire-cracked rock or burned caliche associated with the feature.
- Small Stain: Defined by the presence of a charcoal or carbonized ash stain less than 1 m in diameter with fewer than five pieces of fire-cracked rock or burned caliche associated with the feature.
- Fire-Cracked Rock Concentrations with Carbon Staining: A feature containing five or more pieces of fire-cracked rock or burned caliche greater than 5 cm in size, within a 1-m-by-1-m area. A charcoal or carbonized ash stain is present.
- Fire-Cracked Rock Concentrations: A feature containing 25 or more pieces of fire-cracked rock or burned caliche greater than 5 cm in size, within a 1-m-by-1-m area. No carbon staining is present.
- Special Concentration: Any unique or unusual concentration of artifacts, such as "pot drops" defined as a grouping of sherds of the same style or type that may have resulted from the breakage of a single vessel, a milling station, a knapping station, or a "cache" defined as a concentration of specialized artifacts (i.e. projectile points).
- Ring Midden: This category includes large, roughly circular, concentrations of fire-cracked rock, usually more than 250 pieces, and often with a mound-like appearance. These may have a small depression in the center, and may have charcoal or ash on the surface.
- Rock Alignment: Defined as a linear alignment of stones that can be associated with both prehistoric and historic cultural assemblages. Rock alignments can appear as straight lines, such as fences, wall segments, check dams, or erosion control; circular or oval, such as, wickiup, tipi, or other structurally related rings; and angular (square or rectangular) such as roomblocks, historic foundations, or military occupations (fighting positions).
- Bedrock Mortar: Defined as a groundstone mortar located on a fixed area of bedrock or a large boulder.

The following information is recorded for all encountered features:

- Dimensions using metric denominations. The length was to be measured along the north/south axis and the width along the east/west axis. Depth was to be determined by limited testing, such as a trowel test, soil probe, or bucket auger (where appropriate). Any mounding was to be presented as height above surface level;
- Any subsurface materials (such as carbon deposits, buried artifacts, buried fire-cracked rock);
- Number of fire-cracked rock associated with the feature (within the recorded feature dimensions);
- The feature is to be point plotted using a GPS; and
- Feature integrity.

ARTIFACTS

Artifact assemblages with more than 100 artifacts per class are recorded using a representative sampling method (e.g., percentage of artifacts, percentage of site area), with at least 100 artifacts per class recorded. The chosen methodology is documented in both the final report and site narratives in the LA form. Artifact assemblages with fewer than 100 artifacts per class are completely recorded.

The following attributes are recorded for each class of artifacts:

Flaked-Stone Artifacts

- Type (e.g., core-reduction flake, biface thinning flake, pressure flake, bifacial tool, unifacial tool, chopper, hammerstone, tested cobble, core, projectile point, etc.);
- Material type;
- Diagnostic artifacts are point plotted using a GPS, collected, and submitted to the BLM;
- Number of artifacts;
- Projectile Points are typed when possible using Justice (2002) and or Turner and others (2011) with proper citation. References are cited in the report and the LA form.

Ceramic Artifacts

- Ware (e.g., Undifferentiated brownware, Chupadero Black-on-white, El Paso Polychrome, Ochoa corrugated, Playas Red, Three Rivers Red-on-terracotta, Mimbres Black-on-white, Playas Red, Chihuahuan wares, such as Ramos Polychrome, Babicora, or Dublan, or other);
- Rim form (e.g., pinched, rounded, direct flattened, thickened and flattened or everted);
- Number of artifacts;
- Rim forms and exotic wares like Ramos Polychrome were to be point plotted using a GPS, collected, and submitted to the BLM;
- Any pot drops encountered were to be recorded as "Special Concentrations" and documented as a feature.

Ground-stone Artifacts

- Type (e.g., one-hand mano, two-hand mano, pestle, metate, metate fragment, mano fragment, indeterminate fragment);
- Material;
- Number of artifacts.

Fire-cracked Rock

While not considered an artifact class, an approximate count of all non-feature related fire-cracked rock observed on site was to be documented.

EVALUATION AND ELIGIBILITY

Sites are evaluated as to their NRHP eligibility status. The key criterion was the potential of the site to contain additional data relevant to future research. In the case of prehistoric sites, the potential for important additional data is dependent on the presence or absence of buried cultural deposits. On each site, the possibility of buried cultural deposits is assessed by a variety of means. Observations were noted regarding the likelihood of buried cultural deposits based on several characteristics. For example, indications of potential site depth include stratigraphic soil profiles exposed along road cuts and arroyos or cultural materials in the back-dirt piles of rodent burrows.

In the event that the NRHP eligibility of a site may not be ascertained with certainty based on surface observation, subsurface testing is performed as described above. Testing is to be used to determine the presence or absence of stained sediments of any depth and buried cultural deposits deeper than 10 cm or deeper than depths normally accessible through trowel testing. Any positive testing result is indicative that site has potential to yield additional significant data. Testing is done until a reasonable level of confidence concerning the depositional potential of the site is assessed. If, upon completion of testing, Lone Mountain is still not able to make a recommendation of eligibility, a BLM archaeologist is contacted and an on-site consultation is scheduled.

LOCATED RESOURCES

ISOLATED MANIFESTATIONS

Two isolated manifestation was encountered in the project area (Table 2.1). UTM locations were recorded using a Garmin Oregon 650t (plotted and listed in Appendix A).

Table 2.1: Isolated Manifestations Within the Project Area.

IM No.	Description
IM 001	Exhausted, white multidirectional silicified sandstone core measuring 50 mm x 37 mm x 31 mm.
IM 002	4 one-sided sandstone metate slab fragments that were resued as FCR; measuring 11 cm, 7 cm, 7 cm, and 17 cm.

LA 196068

Field No.: 3109-001
Affiliation: Unspecified Jornada Mogollon (A.D. 200 to 1400)
Eligibility: Eligible, D
Site Type: Campsite

DESCRIPTION

LA 196068 (Figures 2.1 and 2.2) is a ceramic and lithic artifact and fire-cracked rock scatter with one thermal feature. The site is located within a dunefield with vegetation including mesquite, yucca, sand sage, shinnery oak, and various forbs and grasses. Surface visibility ranges between 51 percent and 75 percent.

ASSEMBLAGE

The surface assemblage is comprised of 18 lithic artifacts and six sherds, including 15 pieces of flaked-stone debitage (four secondary reduction flakes, seven tertiary reduction flakes, and four pieces of angular debris); one multidirectional core; one uniface; one slab metate fragment; and six brownware sherds. Raw lithic materials are sandstone, opalite, chert, quartzite, chalcedony, and silicified sandstone.

Approximately 40 pieces of fire-cracked rock are scattered across the site outside feature contexts.

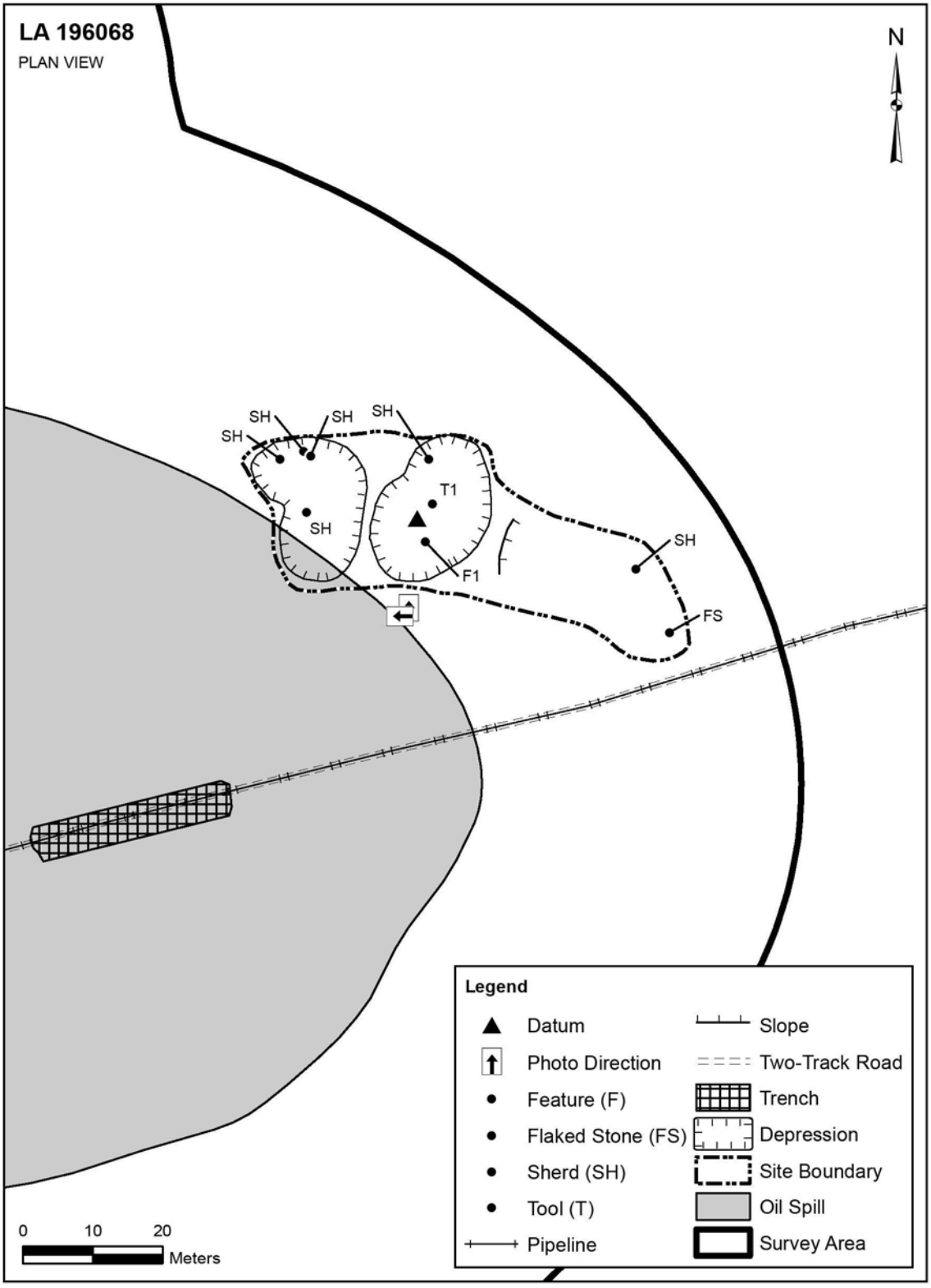


Figure 2.1: LA 196068 Site Plan Map.

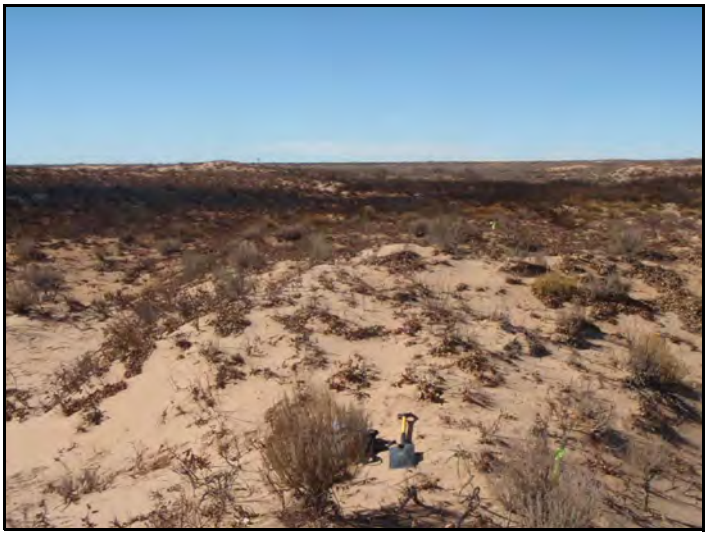


Figure 2.2: LA 196068 Overview, facing north (above); Overview, facing west (center); Feature 1, facing west (below).

FEATURE AND SITE STRUCTURE

Lone Mountain observed one thermal feature. Feature 1 is a small, irregular, diffuse carbon stain falling within an area 40 cm in diameter. The stain, where present, is very black and is located at the bottom of a dune slope and edge of a blowout. No testing was conducted in order to better preserve the feature. The stain has vegetation growing from it and is estimated to be no more than 35 percent intact.

Eolian sands are approximately 2 m in depth, based on dune height and blowout depth. Dark carbon staining is present to an unknown depth in Feature 1.

DISTURBANCES AND POTENTIAL IMPACTS

A buried pipeline is located 10 m south of the site. The western edge of the site is inside an oil spill. Wind erosion and sheetwash are the most evident causes of disturbance, with rodent burrowing and livestock grazing also apparent. This site remains between 26 percent and 50 percent intact.

CONCLUSION

LA 196068 has brownware sherds indicating an Unspecified Jornada Mogollon (A.D. 200 to 1400) temporal and cultural affiliation. LA 196068 has a small carbon stain feature that may yield radiocarbon dates and plant remains. These buried cultural deposits may therefore produce data capable of addressing both site-specific and regional research questions concerning chronology and subsistence, such as the questions posited in the PBRD (Railey 2016). LA 196068 is recommended eligible for nomination to the NRHP under Criterion D.

Given the proximity of a small stain feature to the western edge of the site (which has been affected by the spill), it is recommended that the feature be partially excavated, a profile drawn, and radiocarbon and flotation samples collected prior to spill mitigation and that archaeological monitoring take place during any mitigation of the spill within 100 ft. of the site.

EVALUATION OF PROPERTIES AND RECOMMENDATIONS

Lone Mountain encountered one archaeological site (LA 196068) and two isolated manifestations. LA 196068 is an artifact and fire-cracked rock scatter with one thermal feature and an Unspecified Jornada Mogollon (A.D. 200 to 1400) temporal and cultural affiliation. The small stain feature is near the western site boundary, which has been affected by the oil spill. It is therefore recommended that the feature be partially excavated, a profile drawn, and radiocarbon and flotation samples collected prior to spill mitigation and that archaeological monitoring take place during any mitigation activities within 100 ft of the site. No further work is recommended for the isolated manifestations.

This cultural resources inventory was conducted in order to ensure compliance with all applicable federal, state, and county legislation and procedures enacted to protect nonrenewable cultural resources, including the New Mexico Cultural Properties Act of 1978, Section 106 of the National Historic Preservation Act of 1966 as amended (PL 89-665), the National Environmental Policy Act of 1969 (PL 91-852), the Archaeological Resource Protection Act of 1979 (PL 96-95), Executive Order 11593.

Brown, David E.
1994 *Biotic Communities: Southwestern United States and Northwestern Mexico.* University of Utah Press.

Bureau of Land Management
2005 *Procedures for Performing Cultural Resource Fieldwork on Public Lands in the Area of New Mexico BLM Responsibilities.* BLM Manual Supplement H-8100-1, Rel. 8-21. Santa Fe.

Justice, Noel D.
2002 *Stone Age Spear and Arrow Points of the Southwestern United States.* Indiana University Press, Bloomington.

Railey, Jim A.
2016 *Permian Basin Research Design 2016-2026, Volume 1: Native American Archaeology and Cultural Resources.* NMCRIS 136616. SWCA Report No. 16-481. SWCA Environmental Consultants, Albuquerque.

Turner, Ellen Sue, Thomas R. Hester, and Richard L. McReynolds
2011 *Stone Artifacts of Texas Indians.* Taylor Trade Publishing, Lanham, MD.

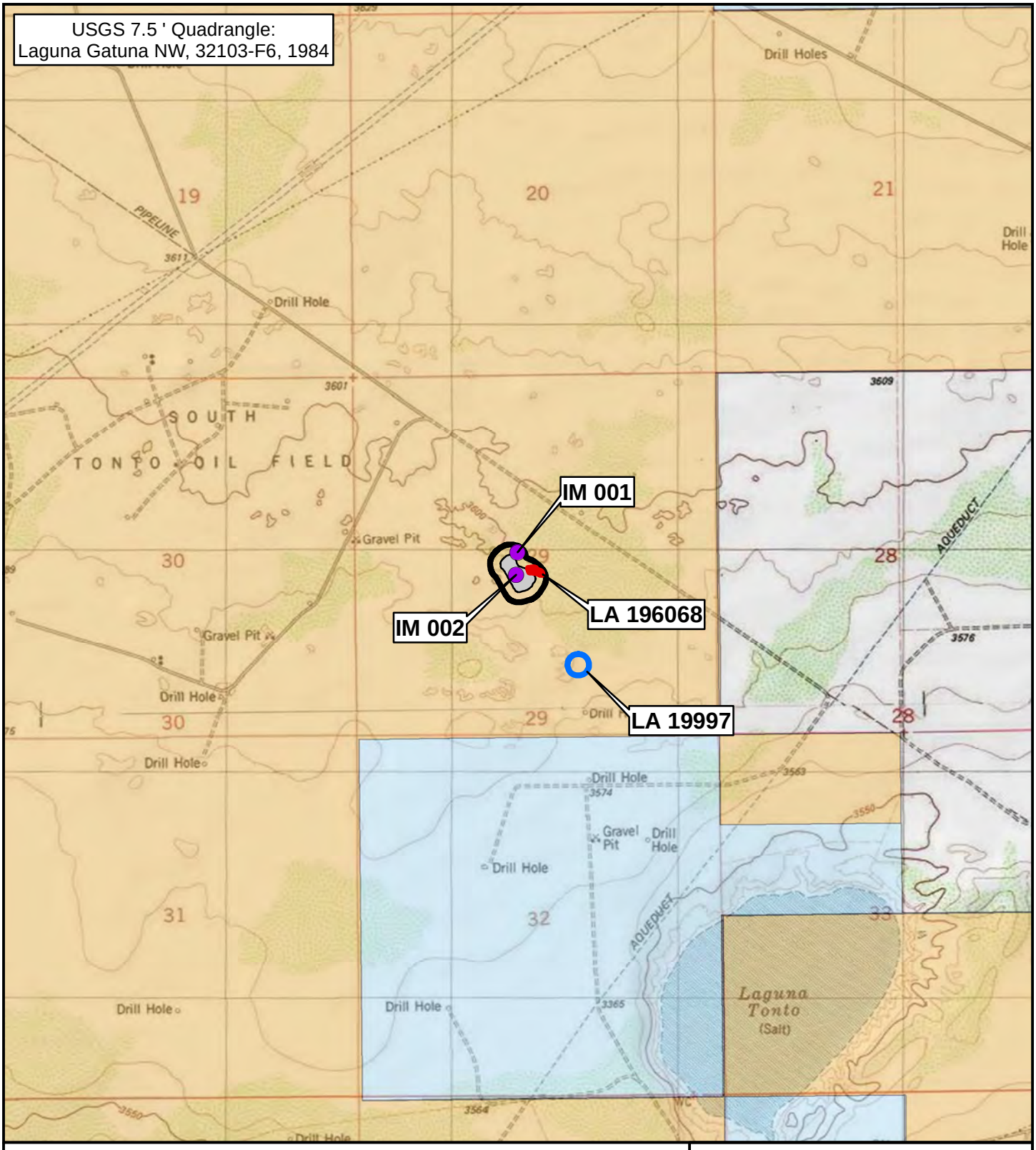
This appendix contains locational data.

THIS INFORMATION IS CONFIDENTIAL AND RESTRICTED FROM PUBLIC DISCLOSURE UNDER 36 CFR 296.18

APPENDIX A: CONFIDENTIAL LOCATIONAL DATA

Table A.1: Cultural Resource UTM Locations (NAD 83, Zone 13).

Resource Number	Northing	Easting
IM 001	3611183	623242
IM 002	3611083	623235
LA 196068	3611103	623312



Isolated Manifestation (IM)
Previous Site
LA 196068 Boundary
Spill
Survey Area

Land Ownership
BLM
Private
State

0 0.25 0.5 1 Kilometers
0 0.25 0.5 1 Miles

1:24,000

T19S, R33E,
Section 29
Lea County, NM

N

Durango Midstream Oil Spill Cultural Resource Survey Project Area

Lone Mountain Archaeological Services, Inc.

Drawn by: N. Frodsham
LMAS No.: 3109

Client:
Durango Midstream

Legend

Survey Area

1:5,000

0 0.05 0.1 0.2 Kilometers

0 0.05 0.1 0.2 Miles

T19S, R33E,
Section 29
Lea County, NM

N

Durango Midstream Oil Spill Cultural Resource Survey Project Area Aerial

Lone Mountain Archaeological Services, Inc.

Drawn by: N. Frodsham
LMAS No.: 3109

Client:
Durango Midstream

NMCRIS DCA
Core Spatial Application

CTA Training and Documentation
Web Mapping Application Help

Editor PLSS Quad IDs Quad Names Geog Names Surveys Sites Structs Bldgs Objects Linear Props Dists Print

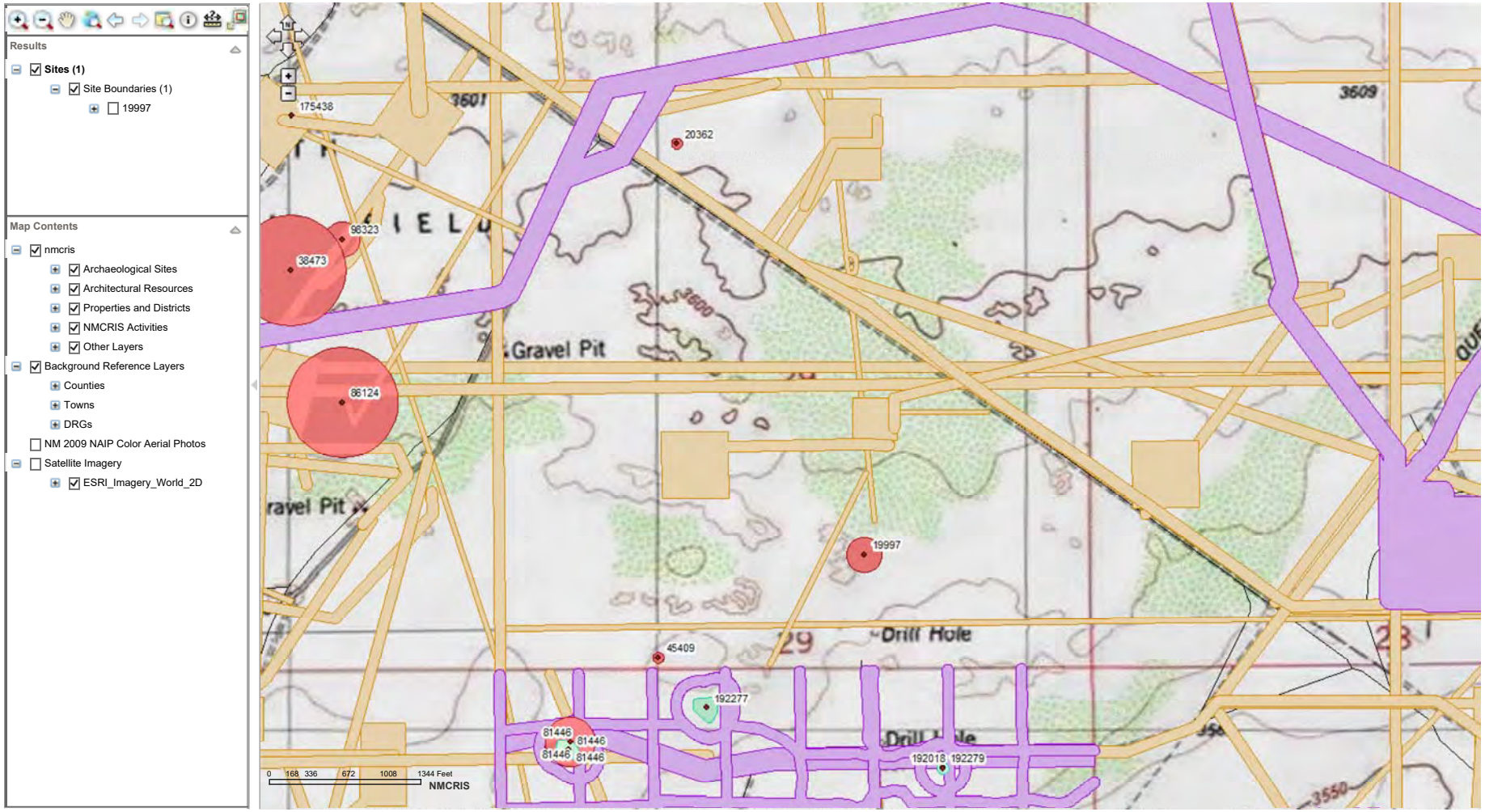


EXHIBIT NO. 1

Date of Issue: 2/26/2020

Bureau of Land Management, Carlsbad Field Office
620 E. Greene Street Carlsbad, NM 88220

Cultural and Archaeological Resources

20-0481/BLM Report

NOTICE OF STIPULATIONS

Historic properties in the vicinity of this project are protected by federal law. In order to ensure that they are not damaged or destroyed by construction activities, the project proponent and construction supervisors shall ensure that the following stipulations are implemented.

Project Name:	Oil Spill along the Madurai Pipeline
	1). A 3-day preconstruction call-in notification. Contact BLM Inspection and Enforcement at
Required	*2. Professional archaeological monitoring*. Contact your BLM project archaeologist at for assistance.
A. ☒	These stipulations must be given to your monitor at least 3 days prior to the start of construction.
B. ☒	No construction, including vegetation removal or other site prep may begin prior to the arrival of the monitor.
	3. Cultural site barrier fencing. (Your monitor will assist you).
A. ☐	A temporary site protection barrier(s) shall be erected prior to all ground-disturbing activities. The minimum barrier(s) shall consist of upright wooden survey lath spaced no more than ten (10) feet apart and marked with blue ribbon flagging or blue paint. There shall be no construction activities or vehicular traffic past the barrier(s) at any time.
B. ☐	A permanent, 4-strand barbed wire fence strung on standard "T-posts" shall be erected prior to all ground-disturbing activities. No construction activities or vehicle traffic are allowed past the fence.
Required	*4. The archaeological monitor shall:*
A. ☒	An archaeological monitor will be present during the ground clearing of the spill cleanup. Durango Midstream should contact the third-party archaeological monitor when they are 200' away from the eastern edge of the spill. This monitor will be present during cleanup within 100' of the boundary LA 196068.
B. ☒	A monitoring report will be turned in within 30 days of completing field work.
C. ☐	
D. ☐	
	If subsurface cultural resources are encountered during the monitoring, all activities shall cease and a BLM-CFO archaeologist shall be notified immediately.
Other:	IF THE CONTRACT ARCHAEOLOGIST DOES NOT KNOW WHERE THE SITE(S) ARE LOCATED AT PLEASE COME BY THE CARLSBAD BLM AND MAPS AND OTHER DATA WILL BE PROVIDED UPON REQUEST TO THE CONTRACT ARCHAEOLOGIST

Site Protection and Employee Education: It is the responsibility of the project proponent and his construction supervisor to inform all employees and subcontractors that cultural and archaeological sites are to be avoided by all personnel, vehicles, and equipment; and that it is illegal to collect, damage, or disturb cultural resources on Public Lands.

For assistance contact: Aaron Whaley (575) 234-5986 Brandon Gonia (575)-234-5945
Elia Perez (575)-234-6231 Trish Byers (575)-234-2239

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006237844
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?	UNDETERMINED _____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ■ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ■ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ■ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ■ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ■ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ■ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ■ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ■ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ■ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ■ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ■ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	■ Yes ☐ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006237844
District RP	
Facility ID	
Application ID	

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

Printed Name: Harley Everhart Title: EHS Analyst

Signature: Date: 11/24/2020

email: HEVERHART@DURANGOMIDSTREAM.COM Telephone: 575-513-4922

OCD Only

Received by: Cristina Eads Date: 12/01/2020

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006237844
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Harley Everhart Title: EHS Analyst

Signature: [signature] Date: 11/24/2020

email: HEVERHART@DURANGOMIDSTREAM.COM Telephone: 575-513-4922

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006237844
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: Harley Everhart Title: EHS Analyst

Signature: Date: 11/24/2020

email: HEVERHART@DURANGOMIDSTREAM.COM Telephone: 575-513-4922

OCD Only

Received by: Cristina Eads Date: 12/01/2020

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: 02/05/2021

Printed Name: Cristina Eads Title: Environmental Specialist

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 11378

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
SAFETY & ENVIRONMENTAL SOLUTIO PO Box 1613 703 E Clinton Hobbs, NM88240	329088	11378	C-141

OCD Reviewer	Condition
ceads	None