

**Breitburn Operating, LP  
AKA Maverick Natural Resources LLC  
State 647 AC 721 Tank Battery**

**Closure Report**

**Section 33, Township 18S, Range 28E  
Eddy County, New Mexico**

**2RP-4238**

**February 26, 2020**



**Prepared for:**

**Maverick Resources  
PO Box 678  
Andrews, TX**

**By:**

**Safety & Environmental Solutions, Inc.  
703 East Clinton  
Hobbs, New Mexico 88240  
(575) 397-0510**

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**Closure Report  
February 26, 2020****Maverick Resources  
Eddy County, New Mexico****I. Company Contacts**

<b>Representative</b>	<b>Company</b>	<b>Telephone</b>	<b>E-mail</b>
Thomas Haigood	Maverick Resources	432-701-7802	<a href="mailto:Thomas.haigood@mavresources.com">Thomas.haigood@mavresources.com</a>
Bob Allen	SESI	575-397-0510	<a href="mailto:ballen@sesi-nm.com">ballen@sesi-nm.com</a>

**II. Background**

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Maverick Resources to assess a spill area on the Breitburn State 647 AC 721 Tank Battery. This location is situated in Section 33, Township 18S, Range 28E in Eddy County New Mexico.

According the C-141 as it was filed with NMOCD: approximately One Hundred Fifty (150) barrels of oil and produced water were released due to internal corrosion in the bottom of tank #731. Most of the fluid was contained inside the lined containment. A vac truck was dispatched by Maverick personnel. Approximately Ninety (90) barrels of fluid were recovered from within the containment. Approximately 2 bbls of fluid leached over the berm, traversing the pad and lease road area. SESI was contacted to assess and remediate the site. A Trimble Juno 3B was used to map the spill and excavation area. The mapped spill area encompassed approximately 134 square yards of pad and lease road area.

**III. Surface and Ground Water**

According to research of the website for the New Mexico Office of the State Engineer records; there is no record of groundwater in the immediate vicinity of the site location. However, further research indicates the average depth to water to be 300' bgs. for Township 18S and Range 28E.

**IV. Work Performed**

On August 30, 2019 NMOCD personnel denied the proposed work plan based on TPH levels that were above the delineation guidelines for TPH. SESI requested permission to continue with remediation efforts, delineating the soil simultaneously during excavation and removal of impacted soils. Mr. Hamlet requested that the laboratory analyses confirming soil remediation levels for TPH be no higher than 2,500 mg/kg and be documented in the Closure Report.

On September 25, 2019 SESI personnel are onsite together with personnel and equipment from Custom Welding of Hobbs, NM. The SESI Field technician traversed the site assessing the release area with the equipment operator. The release area on the east side of the containment is excavated, a soil sample grabbed, and field tested for TPH. At 1ft. bgs. heavy hydrocarbon staining is encountered. The equipment operator is instructed to advance to 2 ft. bgs until the stained soil is removed. There were two (2) DCP pipelines that ran through the location along the edge of the release area. A Hydro-vac is utilized to daylight the pipeline area. The equipment continues to excavate the impacted area, while the field technician is simultaneously field testing the bottom and sidewalls of the excavation.

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**Maverick Resources**  
**Eddy County, New Mexico**

By permission of the current operator, the field technician sampled and delineated the release point (SP12 Release Point @3' bgs), located inside the lined containment, by hand auguring thru the liner. All confirmation samples are properly packaged, preserved, and transport via chain of custody to Hall Laboratories for analyses of Chlorides (CL EPA Method 300.0 ANIONS), Total Petroleum Hydrocarbons (DRO, GRO, MRO EPA Method 8015 M/D), as well as Benzene, Toluene, Ethylbenzene, and Xylenes (EPA Method 8021B). The results are tabulated below for ease of reference (Appendix C).

<b>Breitburn  State 647-721 Battery  Soil Sample Results: Hall Environmental Analysis 09-27-19</b>					
<b>Sample ID</b>	<b>Chlorides</b>	<b>DRO</b>	<b>MRO</b>	<b>GRO</b>	<b>BTEX</b>
SP1 @2' Bottom	3900	36	69	ND	ND
SP2 @2' Bottom	3100	36	75	ND	ND
SP3 @2' Bottom	190	14	64	ND	ND
SP4 @1.5' Bottom	97	18	82	ND	ND
SP5 South Wall	180	12	60	ND	ND
SP6 South Wall	270	11	53	ND	ND
SP7 South Wall	700	ND	ND	ND	ND
SP8 North Wall	280	9.7	52	ND	ND
SP9 North Wall	560	9.7	49	ND	ND
SP10 West Wall	620	9.9	49	ND	ND
SP11 East Wall	160	15	60	ND	ND
SP12 Release Point @ 3'	370	230	280	ND	ND

## VI. Conclusions

The spill area was excavated and remediated pursuant to NM Spill Rule 19.15.29 NMAC. Approximately 213 cubic yards of impacted soil was transported to Lea Landfill Disposal, an NMOCD approved facility for disposal (Appendix D). According to the disposal manifests a total of 1,540 yards of impacted soil were disposed of. The release point occurred inside the lined containment, which is a fully operational facility. The release point was delineated to 3', whereby the chlorides and total petroleum hydrocarbons were below the RL's. SESI requests a deferral of remediation for the interior of the battery, until such a point in time that the Battery is decommissioned. Fresh caliche was transported in for backfill material of the excavated pad and lease road area. The pad area and lease road were returned to grade. All remediation efforts were conducted and finalized with the approval of the current operator.

SESI, on behalf of Maverick Resources respectfully submits this closure report with a deferral request for the interior of the bermed area, for your consideration and conclusion of the associated remediation permit.

**VII. Figures & Appendices**

Figure 1 – Site Plan

Appendix A – Site Photographs

Appendix B – C-141

Appendix C – Analytical

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**Eddy County, New Mexico**

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## **Figure 1**

### **Site Map**



# Maverick Natural Resources, State 647 AC 721

2RP-4238  
Eddy County, NM

## Legend

- Confirmation Sample points Red X
- Remediation Area
- Spill Area



Google Earth



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Eddy County, New Mexico**

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## **Appendix A Site Photographs**



Completion  
Maverick Resources  
State 647-721 Battery







Excavation



Lease Road Area



Release Point



Completion



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Eddy County, New Mexico**

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## **Appendix B C-141**

Incident ID	
District RP	2RP-4238
Facility ID	
Application ID	NAB1715733412

## 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: Thomas Haigood Title: Permian HSE Specialist  
 Signature:  Date: 7/18/19  
 email: Thomas.haigood@mavresources.com Telephone: (432) 523-1807

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

Signature:  Date: 08/06/2021



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February 26, 2020**

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Eddy County, New Mexico**

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## **Appendix C Analytical Data**

## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-1 2' Bottom

Project: Maverick 647 731 Battery

Collection Date: 9/25/2019 9:15:00 AM

Lab ID: 1909G16-001

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	3900	150		mg/Kg	50	10/4/2019 12:00:00 PM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	36	8.8		mg/Kg	1	10/2/2019 6:25:29 PM	47816
Motor Oil Range Organics (MRO)	69	44		mg/Kg	1	10/2/2019 6:25:29 PM	47816
Surr: DNOP	101	70-130		%Rec	1	10/2/2019 6:25:29 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/1/2019 11:12:43 AM	47787
Surr: BFB	97.2	77.4-118		%Rec	1	10/1/2019 11:12:43 AM	47787
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	10/1/2019 11:12:43 AM	47787
Toluene	ND	0.048		mg/Kg	1	10/1/2019 11:12:43 AM	47787
Ethylbenzene	ND	0.048		mg/Kg	1	10/1/2019 11:12:43 AM	47787
Xylenes, Total	ND	0.096		mg/Kg	1	10/1/2019 11:12:43 AM	47787
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	10/1/2019 11:12:43 AM	47787

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-2 2' Bottom

Project: Maverick 647 731 Battery

Collection Date: 9/25/2019 9:30:00 AM

Lab ID: 1909G16-002

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CJS</b>
Chloride	3100	150		mg/Kg	50	10/4/2019 12:00:00 PM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	36	10		mg/Kg	1	10/2/2019 7:32:31 PM	47816
Motor Oil Range Organics (MRO)	75	50		mg/Kg	1	10/2/2019 7:32:31 PM	47816
Surr: DNOP	84.6	70-130		%Rec	1	10/2/2019 7:32:31 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/1/2019 1:06:48 AM	47787
Surr: BFB	93.5	77.4-118		%Rec	1	10/1/2019 1:06:48 AM	47787
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	10/1/2019 1:06:48 AM	47787
Toluene	ND	0.048		mg/Kg	1	10/1/2019 1:06:48 AM	47787
Ethylbenzene	ND	0.048		mg/Kg	1	10/1/2019 1:06:48 AM	47787
Xylenes, Total	ND	0.097		mg/Kg	1	10/1/2019 1:06:48 AM	47787
Surr: 4-Bromofluorobenzene	94.1	80-120		%Rec	1	10/1/2019 1:06:48 AM	47787

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-3 2' Bottom

Project: Maverick 647 731 Battery

Collection Date: 9/25/2019 9:55:00 AM

Lab ID: 1909G16-003

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	190	60		mg/Kg	20	10/3/2019 4:17:57 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	14	9.1		mg/Kg	1	10/2/2019 7:54:57 PM	47816
Motor Oil Range Organics (MRO)	64	45		mg/Kg	1	10/2/2019 7:54:57 PM	47816
Surr: DNOP	102	70-130		%Rec	1	10/2/2019 7:54:57 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/1/2019 1:29:54 AM	47787
Surr: BFB	95.9	77.4-118		%Rec	1	10/1/2019 1:29:54 AM	47787
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/1/2019 1:29:54 AM	47787
Toluene	ND	0.047		mg/Kg	1	10/1/2019 1:29:54 AM	47787
Ethylbenzene	ND	0.047		mg/Kg	1	10/1/2019 1:29:54 AM	47787
Xylenes, Total	ND	0.095		mg/Kg	1	10/1/2019 1:29:54 AM	47787
Surr: 4-Bromofluorobenzene	94.7	80-120		%Rec	1	10/1/2019 1:29:54 AM	47787

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-4 1.5' Bottom

Project: Maverick 647 731 Battery

Collection Date: 9/25/2019 10:15:00 AM

Lab ID: 1909G16-004

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	97	60		mg/Kg	20	10/3/2019 4:30:17 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	18	8.5		mg/Kg	1	10/2/2019 8:17:19 PM	47816
Motor Oil Range Organics (MRO)	82	42		mg/Kg	1	10/2/2019 8:17:19 PM	47816
Surr: DNOP	90.2	70-130		%Rec	1	10/2/2019 8:17:19 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/1/2019 1:52:58 AM	47787
Surr: BFB	97.5	77.4-118		%Rec	1	10/1/2019 1:52:58 AM	47787
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/1/2019 1:52:58 AM	47787
Toluene	ND	0.047		mg/Kg	1	10/1/2019 1:52:58 AM	47787
Ethylbenzene	ND	0.047		mg/Kg	1	10/1/2019 1:52:58 AM	47787
Xylenes, Total	ND	0.094		mg/Kg	1	10/1/2019 1:52:58 AM	47787
Surr: 4-Bromofluorobenzene	94.5	80-120		%Rec	1	10/1/2019 1:52:58 AM	47787

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-5 South Wall

Project: Maverick 647 731 Battery

Collection Date: 9/25/2019 11:25:00 AM

Lab ID: 1909G16-005

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	180	60		mg/Kg	20	10/3/2019 4:42:37 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	12	9.4		mg/Kg	1	10/2/2019 8:39:38 PM	47816
Motor Oil Range Organics (MRO)	60	47		mg/Kg	1	10/2/2019 8:39:38 PM	47816
Surr: DNOP	84.9	70-130		%Rec	1	10/2/2019 8:39:38 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/1/2019 2:16:05 AM	47787
Surr: BFB	93.7	77.4-118		%Rec	1	10/1/2019 2:16:05 AM	47787
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/1/2019 2:16:05 AM	47787
Toluene	ND	0.048		mg/Kg	1	10/1/2019 2:16:05 AM	47787
Ethylbenzene	ND	0.048		mg/Kg	1	10/1/2019 2:16:05 AM	47787
Xylenes, Total	ND	0.096		mg/Kg	1	10/1/2019 2:16:05 AM	47787
Surr: 4-Bromofluorobenzene	90.7	80-120		%Rec	1	10/1/2019 2:16:05 AM	47787

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-6 South Wall

Project: Maverick 647 731 Battery

Collection Date: 9/25/2019 12:10:00 PM

Lab ID: 1909G16-006

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	270	60		mg/Kg	20	10/3/2019 4:54:56 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	11	9.0		mg/Kg	1	10/2/2019 9:01:51 PM	47816
Motor Oil Range Organics (MRO)	53	45		mg/Kg	1	10/2/2019 9:01:51 PM	47816
Surr: DNOP	87.6	70-130		%Rec	1	10/2/2019 9:01:51 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/1/2019 2:39:14 AM	47787
Surr: BFB	95.3	77.4-118		%Rec	1	10/1/2019 2:39:14 AM	47787
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/1/2019 2:39:14 AM	47787
Toluene	ND	0.049		mg/Kg	1	10/1/2019 2:39:14 AM	47787
Ethylbenzene	ND	0.049		mg/Kg	1	10/1/2019 2:39:14 AM	47787
Xylenes, Total	ND	0.097		mg/Kg	1	10/1/2019 2:39:14 AM	47787
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	10/1/2019 2:39:14 AM	47787

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-7 South Wall

Project: Maverick 647 731 Battery

Collection Date: 9/25/2019 12:35:00 PM

Lab ID: 1909G16-007

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	700	60		mg/Kg	20	10/3/2019 5:07:17 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/2/2019 9:24:07 PM	47816
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/2/2019 9:24:07 PM	47816
Surr: DNOP	83.2	70-130		%Rec	1	10/2/2019 9:24:07 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/1/2019 1:33:45 PM	47808
Surr: BFB	96.0	77.4-118		%Rec	1	10/1/2019 1:33:45 PM	47808
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/1/2019 1:33:45 PM	47808
Toluene	ND	0.048		mg/Kg	1	10/1/2019 1:33:45 PM	47808
Ethylbenzene	ND	0.048		mg/Kg	1	10/1/2019 1:33:45 PM	47808
Xylenes, Total	ND	0.097		mg/Kg	1	10/1/2019 1:33:45 PM	47808
Surr: 4-Bromofluorobenzene	92.2	80-120		%Rec	1	10/1/2019 1:33:45 PM	47808

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-8 North Wall

Project: Maverick 647 731 Battery

Collection Date: 9/26/2019 10:15:00 AM

Lab ID: 1909G16-008

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	280	60		mg/Kg	20	10/3/2019 5:19:38 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	9.7	9.5		mg/Kg	1	10/2/2019 9:46:15 PM	47816
Motor Oil Range Organics (MRO)	52	48		mg/Kg	1	10/2/2019 9:46:15 PM	47816
Surr: DNOP	80.0	70-130		%Rec	1	10/2/2019 9:46:15 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/1/2019 2:44:12 PM	47808
Surr: BFB	98.0	77.4-118		%Rec	1	10/1/2019 2:44:12 PM	47808
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/1/2019 2:44:12 PM	47808
Toluene	ND	0.049		mg/Kg	1	10/1/2019 2:44:12 PM	47808
Ethylbenzene	ND	0.049		mg/Kg	1	10/1/2019 2:44:12 PM	47808
Xylenes, Total	ND	0.098		mg/Kg	1	10/1/2019 2:44:12 PM	47808
Surr: 4-Bromofluorobenzene	95.7	80-120		%Rec	1	10/1/2019 2:44:12 PM	47808

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-9 North Wall

Project: Maverick 647 731 Battery

Collection Date: 9/26/2019 10:55:00 AM

Lab ID: 1909G16-009

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	560	60		mg/Kg	20	10/3/2019 5:56:41 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	9.7	8.9		mg/Kg	1	10/2/2019 10:08:40 PM	47816
Motor Oil Range Organics (MRO)	49	45		mg/Kg	1	10/2/2019 10:08:40 PM	47816
Surr: DNOP	59.4	70-130	S	%Rec	1	10/2/2019 10:08:40 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/1/2019 3:54:30 PM	47808
Surr: BFB	98.4	77.4-118		%Rec	1	10/1/2019 3:54:30 PM	47808
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/1/2019 3:54:30 PM	47808
Toluene	ND	0.047		mg/Kg	1	10/1/2019 3:54:30 PM	47808
Ethylbenzene	ND	0.047		mg/Kg	1	10/1/2019 3:54:30 PM	47808
Xylenes, Total	ND	0.095		mg/Kg	1	10/1/2019 3:54:30 PM	47808
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	1	10/1/2019 3:54:30 PM	47808

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-10 West Wall

Project: Maverick 647 731 Battery

Collection Date: 9/26/2019 11:10:00 AM

Lab ID: 1909G16-010

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	620	60		mg/Kg	20	10/3/2019 6:09:01 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	9.9	8.5		mg/Kg	1	10/2/2019 10:30:52 PM	47816
Motor Oil Range Organics (MRO)	49	42		mg/Kg	1	10/2/2019 10:30:52 PM	47816
Surr: DNOP	65.5	70-130	S	%Rec	1	10/2/2019 10:30:52 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/1/2019 5:05:11 PM	47808
Surr: BFB	105	77.4-118		%Rec	1	10/1/2019 5:05:11 PM	47808
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/1/2019 5:05:11 PM	47808
Toluene	ND	0.050		mg/Kg	1	10/1/2019 5:05:11 PM	47808
Ethylbenzene	ND	0.050		mg/Kg	1	10/1/2019 5:05:11 PM	47808
Xylenes, Total	ND	0.10		mg/Kg	1	10/1/2019 5:05:11 PM	47808
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/1/2019 5:05:11 PM	47808

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-11 East Wall

Project: Maverick 647 731 Battery

Collection Date: 9/26/2019 11:30:00 AM

Lab ID: 1909G16-011

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	160	60		mg/Kg	20	10/3/2019 6:21:21 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	15	9.3		mg/Kg	1	10/2/2019 10:53:13 PM	47816
Motor Oil Range Organics (MRO)	60	46		mg/Kg	1	10/2/2019 10:53:13 PM	47816
Surr: DNOP	63.7	70-130	S	%Rec	1	10/2/2019 10:53:13 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/1/2019 5:28:38 PM	47808
Surr: BFB	94.0	77.4-118		%Rec	1	10/1/2019 5:28:38 PM	47808
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/1/2019 5:28:38 PM	47808
Toluene	ND	0.050		mg/Kg	1	10/1/2019 5:28:38 PM	47808
Ethylbenzene	ND	0.050		mg/Kg	1	10/1/2019 5:28:38 PM	47808
Xylenes, Total	ND	0.099		mg/Kg	1	10/1/2019 5:28:38 PM	47808
Surr: 4-Bromofluorobenzene	91.0	80-120		%Rec	1	10/1/2019 5:28:38 PM	47808

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 1909G16

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-12 Release Point 3'

Project: Maverick 647 731 Battery

Collection Date: 9/26/2019 1:45:00 PM

Lab ID: 1909G16-012

Matrix: SOIL

Received Date: 9/27/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	370	60		mg/Kg	20	10/3/2019 6:33:42 AM	47887
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	230	48		mg/Kg	5	10/2/2019 11:15:14 PM	47816
Motor Oil Range Organics (MRO)	280	240		mg/Kg	5	10/2/2019 11:15:14 PM	47816
Surr: DNOP	56.4	70-130	S	%Rec	5	10/2/2019 11:15:14 PM	47816
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/1/2019 5:52:06 PM	47808
Surr: BFB	98.2	77.4-118		%Rec	1	10/1/2019 5:52:06 PM	47808
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/1/2019 5:52:06 PM	47808
Toluene	ND	0.049		mg/Kg	1	10/1/2019 5:52:06 PM	47808
Ethylbenzene	ND	0.049		mg/Kg	1	10/1/2019 5:52:06 PM	47808
Xylenes, Total	ND	0.099		mg/Kg	1	10/1/2019 5:52:06 PM	47808
Surr: 4-Bromofluorobenzene	90.9	80-120		%Rec	1	10/1/2019 5:52:06 PM	47808

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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**District I**

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**District IV**

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

CONDITIONS

Action 4114

**CONDITIONS**

Operator: Safety & Environmental Solutions, Inc. PO Box 1613 Hobbs, NM 88240	OGRID: 329088
	Action Number: 4114
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
bbillings	Deferral request is approved. Not a Closure. At P&A depth to groundwater may need more definition.	8/6/2021