Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-3543
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: James B Campanella Title: Member / Manager

Signature: Date: 8-6-2020

email: jbc@judahoil.com Telephone: 575-748-4230

OCD Only

Received by: Date:

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-3543
Facility ID	
Application ID	

(other than reclamation upon facility shut-down

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: James B Campanella Title: Member / Manager

Signature: [signature] Date: 8-6-2020

email: jbc@judahoil.com Telephone: 575-748-4230

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	
District RP	2RP-3543
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: James B Campanella Title: Member / Manager

Signature: Date: 8-6-2020

email: jbc@judahoil.com Telephone: 575-748-4230

OCD Only

Received by: Date:

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

Closure Approved by: Brittany Hall Date: 3/27/2023

Printed Name: Brittany Hall Title: Environmental Specialist

Souder, Miller & Associates♦201 S. Halagueno St.♦Carlsbad, NM 88220
(575) 689-8801

August 3, 2020

#5E26837-BG8

NMOCD Environmental Bureau
Mr. Bradley Billings
5200 Oakland Avenue, N.E. Suite 100
Albuquerque, NM 87113

SUBJECT: Remediation Closure Report for the Scottsdale Federal #1 Release (#nAB1604236407), Eddy County, New Mexico

Dear Mr. Bratcher:

On behalf of Judah Oil LLC (Judah), Souder, Miller & Associates (SMA) has prepared this Remediation Closure Report that describes the remediation of a release that occurred in 2015 at the Scottsdale Federal #1 site. The site is in Unit B, Section 27, Township 18S, Range 31E, Eddy County, New Mexico, on Federal land. Figure 1 illustrates the vicinity and site location on an USGS 7.5 minute quadrangle map.

Table 1 summarizes release information and closure criteria.

Table 1: Release Information and Closure Criteria			
Name	Scottsdale Federal #1	Company	Judah Oil LLC
API Number	30-015-25005	Location	32.432877°N, -103.512230°W
Incident Number	#nAB1604236407		
Estimated Date of Release	November 25, 2015	Date Reported to NMOCD	February 9, 2015
Land Owner	Federal	Reported To	NMOCD District 2
Source of Release	Tank overfill		
Released Volume	Approx. 23 barrels (bbls)	Released Material	Produced water (20 bbls), crude oil (3 bbls)
Recovered Volume	15 bbls produced water	Net Release	5 bbls produced water, 3 bbls crude oil
NMOCD Closure Criteria	>100 feet to groundwater		

1.0 Background and Prior Work

On November 25, 2015, a release was discovered at the Scottsdale Federal #1 site due to equipment failure causing a release of thirty (30) bbls crude oil from the stuffing box. The affected area covered the pad, the lease road, and a portion of a pasture located to the west of the location. Figure 1 illustrates the vicinity and site location, Figure 2 illustrates the release location. The final C-141 form is included in Appendix A.

The following table provides a summary of spill response activities to date. The activities are discussed in more detail in the Remediation Plan and Variance Request report submitted for this site on April 28, 2020. NMOCD approved the variance request, with Conditions of Approval on the same date.

Table 2: Timeline of Spill Response Activities
Scottsdale Federal #1 Tank Battery, 2RP-3543

Date	Activity	Notes
11/25/2015	Release occurs	
11/26/2015	Stripper well shut in	Compliance with 19.15.29.8.B.1-2 for source elimination and containment
12/9/2015	Owner notified of release	
12/14/2015	All recoverable fluids removed	Compliance with 19.15.29.8.B.3 for site stabilization
2/9/2016	C-141 submitted	
2/11/2016	C-141 approved by OCD	Condition for Approval of Remediation Proposal due 3/12/16.
3/9/2016	Remediation Work Plan produced (Talon/LPE)	Compliance with C-141 Condition for Approval. Discovered legacy drilling pit beneath tank battery (samples S1, S2); legacy pit location supported by BLM records; requested deferral of vertical delineation due to pit, proposed 4 ft bgs excavation topped with liner secured with gravel surface as part of the pad area.
8/23/2016	NMOCD site inspection, LOV-INC issued	Observation of standing water within tank battery
9/2016 - 2/2017	Judah disassembles / reconstructs tank battery in new location on west side of location. Also removes visibly impacted soil (to ~4 ft), replaces with clean topsoil. Constructs pad to prevent traffic and stormwater from collecting on excavated and backfilled area.	
2/17/2017	SMA prepares workplan using Talon data	Restates finding of legacy pit and again requests deferral and excavation and liner installation to 4 ft bgs, and revegetation plan
2/28 and 4/6/2020	SMA collects delineation samples from 11 locations from release area	Samples indicate horizontal delineation and impacted soil on west side of the former tank battery location to 9 ft bgs; penetration impeded by caliche

2.0 Site Information and Closure Criteria

The Scottsdale Federal #3 is located approximately 10 miles southeast of the Loco Hills, New Mexico on Federal (BLM) land. As summarized in Table 3 and illustrated in Figure 1, depth to groundwater in the area is estimated to be between 250 to 300 feet bgs. There are no water sources within ½-mile of the location, according to the New Mexico Office of the State Engineer (NMOSE) online water well database (https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed 9/19/2018). The nearest surface water is the Pecos River located approximately 26 miles to the west.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of greater than 100 feet bgs.

In the Remediation Plan and Variance Request report submitted to, and approved by, NMOCD on April 28, 2020, SMA and Judah proposed the following remediation steps, with NMOCD Conditions of Approval in red:

1. An additional excavation area of approximately 1977 square feet and four (4) feet deep. This excavation will remove approximately 293 yds^3 in situ, with an approximate ex situ volume of 351 yds^3. The actual amount excavated will be confirmed by field screening. The maximum depth will be fixed at four (4) feet. The immediate vicinity of samples points BS-5 and BS-6 should be excavated to six feet.
2. Confirmatory samples for side walls and bottom of excavation for laboratory analysis should be collected. Total TPH (MRO, GRO and DRO) only.
3. Use of chemical assistance for biodegradation of hydrocarbons
4. Line the excavation at the four-foot depth with 40-mil plastic
5. Backfill with clean soil
6. Transport excavated soil for disposal at an NMOCD permitted disposal facility
7. Replace the west to east trending berm on the northern edge of the former tank battery to divert storm water and prevent traffic from crossing the reclaimed area
8. Reseed in the appropriate season with a BLM approved seed mix

Along with the deferral conditions per 19.15.29.12.B.(2), the site has been restored to meet the standards of Table I of 19.15.29.12 NMAC. Table 3 demonstrates the Closure Criteria applicable to this location.

3.0 Release Characterization Activities and Findings

Between May 14-19, 2020, SMA oversaw excavation of contaminated soil, application of a bio-catalyst and placement of a plastic liner. The excavation was completed in the area and to depths described in the Remediation Plan. SMA collected soil samples from the base and sidewalls for field screening. Samples were screened for hydrocarbon impacts using a calibrated MiniRAE 3000 photoionization detector (PID) equipped with a 10.6 eV lamp. The walls were excavated until field screening results indicated that the NMOCD Closure Criteria would be met.

SMA conducted confirmation sampling of the walls and base of the excavation, which measured approximately 85 x 45 feet. The middle of the excavation (approximately 24 x 16 feet), represented by sample locations CS1 and CS2, was excavated to a depth of six (6) feet bgs, and the outer extents of the excavation, represented by sample locations CS3 and CS4 was excavated to a depth of four (4) feet bgs. Sidewall samples were collected from each of the excavation walls (SW-1N, SW-2E, SW-3S, SW-4W).

A total of eight (8) samples were collected for laboratory analysis for motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. Samples were placed into laboratory supplied

glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico.

After samples were collected, Catawater® HHO, RT, an organically-derived bio-catalyst product, was sprayed onto the entire excavation area. Following application, a 60-mil plastic liner was placed, and clean backfill was placed on top to restore the area to original contours. A photo log documenting all activities is included in Appendix C.

Figure 3 shows the extent of the excavation and sample locations. All field screening and laboratory results are summarized in Table 3. Laboratory reports are included in Appendix B.

As demonstrated in Table 4, all sidewall samples meet the Closure Criteria, and a liner has been placed to encapsulate and prevent downward migration of remaining hydrocarbon contamination, per the Variance Request.

Contaminated soils were removed and replaced with clean backfill material to return the surface to previous contours. The contaminated soil was transported and disposed of appropriately.

SMA recommends no further action (other than reclamation upon facility shut-down) and requests closure of Incident Number #nAB1604236407.

4.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation; and preparing this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Shawna Chubbuck
Senior Scientist

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map
Figure 2: Surface Water Radius Map
Figure 3: Site and Sample Location Map

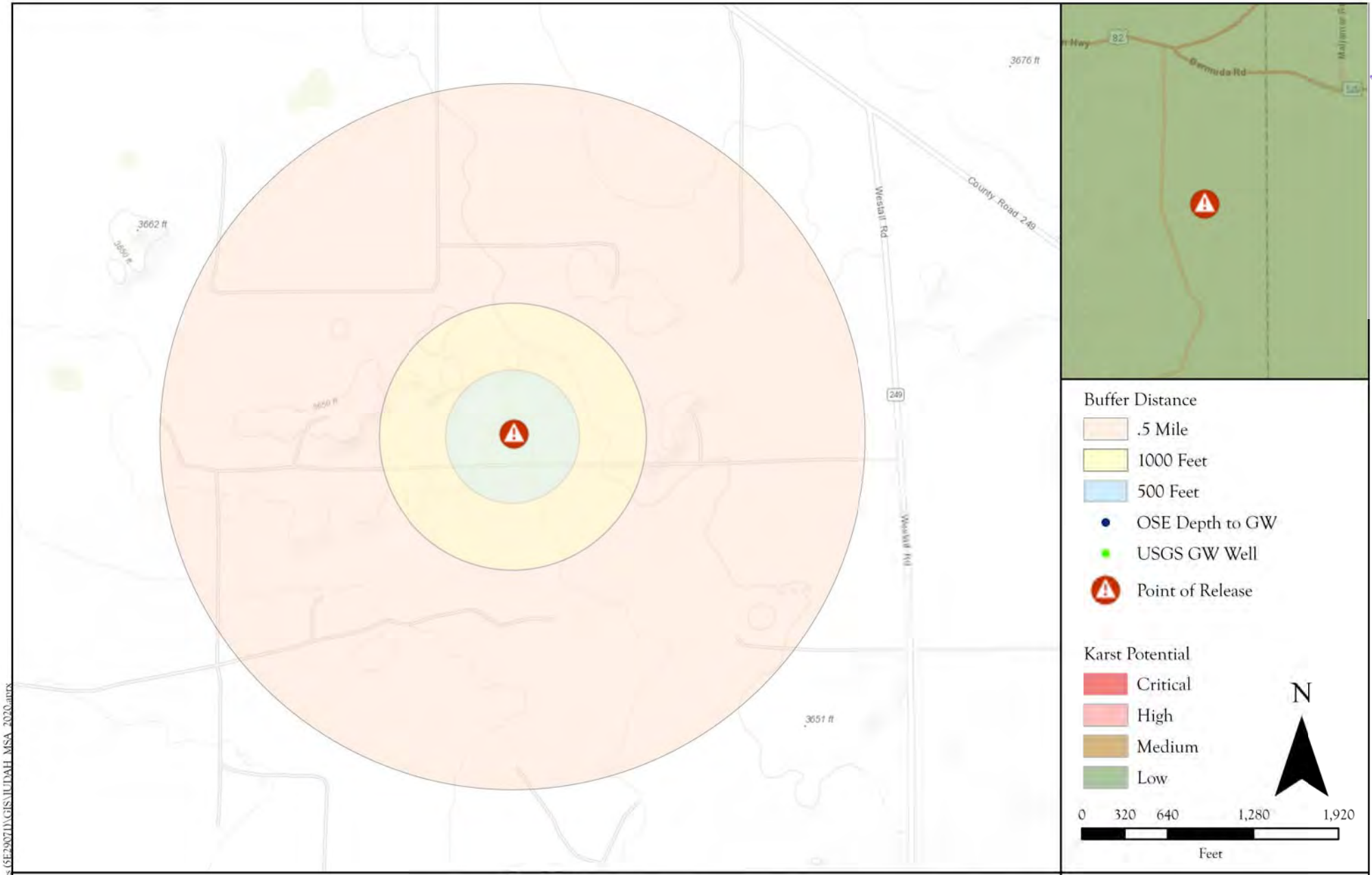
Tables:

Table 3: NMOCD Closure Criteria Justification
Table 4: Summary of Sample Results

Appendices:

Appendix A: Form C141 Final
Appendix B: Laboratory Analytical Reports
Appendix C: Photographs & Correspondence
copy of approved work plan

FIGURES



Site Map
Scottsdale Federal #001 - Judah Oil LLC
Eddy County, New Mexico

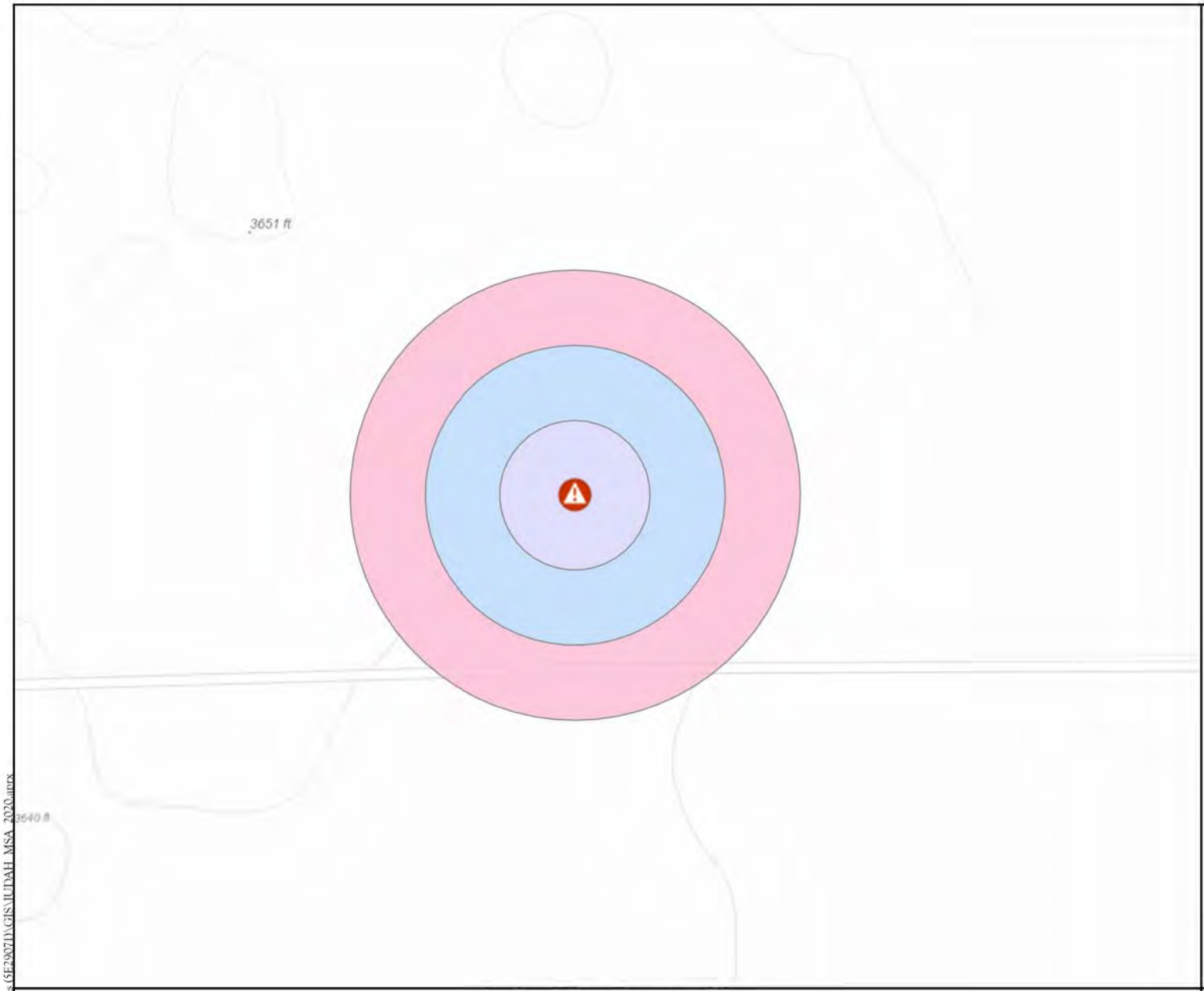
Figure 1

Revisions
By: _____ Date: _____ Descr: _____
By: _____ Date: _____ Descr: _____

Drawn Brent Jackson
Date 2/20/2020
Checked _____
Approved _____

201 South Halagueña Street
Carlsbad, New Mexico 88221
(575) 689.7040
Serving the Southwest & Rocky Mountains

P:\5-Judah 2020 MSA On Call Services (SE20071)\GIS\JUDAH_MSA_2020.aprx
Date Saved: 2/20/2020



Buffer Distance
- 300 Feet
- 200 Feet
- 100 Feet
- Springs & Seeps
- Streams & Canals
- Rivers
- Flowlines SENM
- NM Wetlands
- Lakes & Playas
- FEMA Flood Zones 2011
- Point of Release

N

0 65 130 260 390

Feet

Surface Water Protection Map
Scottsdale Federal #001 - Judah Oil LLC
Eddy County, New Mexico

Figure 2

P:\5-Judah 2020 MSA On Call Services (SF20071)\GIS\JUDAH_MSA_2020.aprx
Date Saved: 2/20/2020

Revisions
By:_____ Date:_____ Descr:_____
By:_____ Date:_____ Descr:_____

Drawn Brent Jackson
Date 2/20/2020
Checked
Approved

SMA

201 South Halagueno Street
Carlsbad, New Mexico 88221
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Base Closure Samples
Side Wall Closure Samples
Berm
4' Excavation
6' Excavation

N

0 5 10 20 30
Feet

Site and Sample Location Map
Scottsdale Federal #001 - Judah Oil LLC
UL: B S: 27 T: 18S R: 31E Eddy County, New Mexico

Figure 3

P:\5Judah 2020 MSA On Call Services (5E29071)\GIS\JUDAH_MSA_2020.aprx
Date Saved: 6/3/2020

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Sebastian Orozco
Date 6/25/2020
Checked
Approved

SMA

201 South Halagueno Street
Carlsbad, New Mexico 88220
(575) 689-7040
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APPENDIX B
FORM C141 INITIAL

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1604236407

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Judah Oil, LLC 245872	Contact James B Campanella
Address P.O. Box 568, Artesia NM 88211-0568	Telephone No. 575-748-4730
Facility Name Scottdale Federal	Facility Type Oil gathering

Surface Owner BLM	Mineral Owner BLM	API No. 30-015-25005

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	27	18S	31E					Eddy

Latitude 32.432877N **Longitude** 103.512230W

NATURE OF RELEASE

Type of Release Oi and Produced Water	Volume of Release 3 oil/20 water	Volume Recovered 15 water
Source of Release Open top water tank	Date and Hour of Occurrence 11-25-2015	Date and Hour of Discovery 11-26-2016
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour 12 -14-2015 8:00 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 09 2016
RECEIVED

Describe Cause of Problem and Remedial Action Taken.*
Water Hauling Company hauled wrong tank battery. Called water truck and picked up standing fluid.

Describe Area Affected and Cleanup Action Taken.*

Unlined tank containment. Taking core samples to determine extent of contamination. Will submit remediation plan once core sample data is received and assessed. No ground water from surface to 300'

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:

Printed Name: James B Campanella

Title: Member/Manager

E-mail Address: judahoil@yahoo.com

Date: February 8, 2016 Phone: 575-748-4730

OIL CONSERVATION DIVISION

Signed By

Approved by Environmental Specialist:

Approval Date: 2/11/16 Expiration Date: N/A

Conditions of Approval:
Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 3/12/16

Attached ☐

2RP-3543

* Attach Additional Sheets If Necessary

APPENDIX C
OSE WATER COLUMN DATA

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00849 POD1	CP	LE	3	1	3	35	18S	31E	608012	3618757*	2679	300		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 607177.66 **Northing (Y):** 3621303.43 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

TABLES

Table 3:
NMOCD Closure Criteria

Judah Oil
Scottsadale Federal #1 (#nAB1604236407)

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	250-300	NMOSE
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)	NA	
Hortizontal Distance to Nearest Significant Watercourse (ft)	26 miles	Pecos River

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		**Closure Criteria (units in mg/kg)**				
		Chloride *numerical limit or background, whichever is greater	**TPH**	**GRO + DRO**	**BTEX**	**Benzene**
< 50' BGS		600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'	X	20000	2500	1000	50	10
Surface Water	**yes or no**	**if yes, then**				
<300' from continuously flowing watercourse or other significant watercourse?	No	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No					
within area overlying a subsurface mine	No					
within an unstable area?	No					
within a 100-year floodplain?	No					

SMA #

Table 4:
Summary of Sample Results

Judah Oil LLC
Scottsdale Federal #001 (#nAB1604236407)

Sample ID	Sample Date	Depth (feet bgs)	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- mg/Kg	PID ppm
NMOCD Closure Criteria			**50**	**10**	**1000**			**2,500**	**20,000**	
CS1	5/14/2020	6	--	--	61	1700	990	2,751	--	61.2
CS2	5/14/2020	6	--	--	120	4300	2300	6,720	--	157
CS3	5/14/2020	4	--	--	<4.8	120	240	360	--	5.7
CS4	5/14/2020	4	--	--	<4.7	440	1200	1,640	--	8.5
SW-1 N	5/14/2020	0-4	--	--	<4.9	49	130	179	--	1.7
SW-2 E	5/14/2020	0-4	--	--	<4.8	<9.2	<46	<60	--	0.7
SW-3 S	5/14/2020	0-4	--	--	<4.9	<9.7	<49	<63.6	--	0.6
SW-4 W	5/14/2020	0-4	--	--	<4.8	28	57	85	--	0.9

"--" = Not Analyzed

APPENDIX A
FORM C141 FINAL

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1604236407

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Judah Oil, LLC 245872		Contact James B Campanella	
Address P.O. Box 568, Artesia NM 88211-0568		Telephone No. 575-748-4730	
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Surface Owner BLM	Mineral Owner BLM		API No. 30-015-25005

LOCATION OF RELEASE

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Source of Release Open top water tank	Date and Hour of Occurrence 11-25-2015	Date and Hour of Discovery 11-26-2016
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour 12 -14-2015 8:00 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 09 2016
RECEIVED

Describe Cause of Problem and Remedial Action Taken.*
Water Hauling Company hauled wrong tank battery. Called water truck and picked up standing fluid.

Describe Area Affected and Cleanup Action Taken.*

Unlined tank containment. Taking core samples to determine extent of contamination. Will submit remediation plan once core sample data is received and assessed. No ground water from surface to 300'

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:

Printed Name: James B Campanella

Title: Member/Manager

E-mail Address: judahoil@yahoo.com

Date: February 8, 2016 Phone: 575-748-4730

OIL CONSERVATION DIVISION

Signed By

Approved by Environmental Specialist:

Approval Date: 2/11/16 Expiration Date: N/A

Conditions of Approval:
Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 3/12/16

Attached ☐

2RP-3543

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	#nAB1604236407
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?	200-300 (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.

State of New Mexico
Oil Conservation Division

Incident ID	#nAB1604236407
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: _____ Title: _____

Signature:_____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	#nAB1604236407
District RP	
Facility ID	
Application ID	

(other than reclamation upon facility shut-down

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: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Incident ID	#nAB1604236407
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: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

APPENDIX B

LABORATORY ANALYTICAL REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 01, 2020

Ashley Maxwell
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL:
FAX:

RE: Judah Oil LLC Scottsdale Federal 1 OrderNo.: 2005736

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/16/2020 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued May 28, 2020.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2005736**
Date Reported: **6/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CS1-6'
Project: Judah Oil LLC Scottsdale Federal 1
Collection Date: 5/14/2020 10:52:00 AM
Lab ID: 2005736-001 **Matrix:** SOIL **Received Date:** 5/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	61	5.0		mg/Kg	1	5/19/2020 8:01:35 PM	52534
Surr: BFB	106	70-130		%Rec	1	5/19/2020 8:01:35 PM	52534
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	1700	93		mg/Kg	10	5/21/2020 6:04:24 AM	52538
Motor Oil Range Organics (MRO)	990	470		mg/Kg	10	5/21/2020 6:04:24 AM	52538
Surr: DNOP	0	55.1-146	S	%Rec	10	5/21/2020 6:04:24 AM	52538

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 **2005736**
Date Reported: **6/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CS2-6'
Project: Judah Oil LLC Scottsdale Federal 1
Collection Date: 5/14/2020 10:55:00 AM
Lab ID: 2005736-002 **Matrix:** SOIL **Received Date:** 5/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	120	9.6		mg/Kg	2	5/19/2020 8:30:04 PM	52534
Surr: BFB	105	70-130		%Rec	2	5/19/2020 8:30:04 PM	52534
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	4300	94		mg/Kg	10	5/21/2020 6:28:06 AM	52538
Motor Oil Range Organics (MRO)	2300	470		mg/Kg	10	5/21/2020 6:28:06 AM	52538
Surr: DNOP	0	55.1-146	S	%Rec	10	5/21/2020 6:28:06 AM	52538

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 **2005736**
Date Reported: **6/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates **Client Sample ID:** CS3-4'
Project: Judah Oil LLC Scottsdale Federal 1 **Collection Date:** 5/14/2020 11:01:00 AM
Lab ID: 2005736-003 **Matrix:** SOIL **Received Date:** 5/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/19/2020 8:58:35 PM	52534
Surr: BFB	96.1	70-130		%Rec	1	5/19/2020 8:58:35 PM	52534
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	120	9.6		mg/Kg	1	5/21/2020 6:51:41 AM	52538
Motor Oil Range Organics (MRO)	240	48		mg/Kg	1	5/21/2020 6:51:41 AM	52538
Surr: DNOP	111	55.1-146		%Rec	1	5/21/2020 6:51:41 AM	52538

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 **2005736**
Date Reported: **6/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CS4-4'
Project: Judah Oil LLC Scottsdale Federal 1
Collection Date: 5/14/2020 11:03:00 AM
Lab ID: 2005736-004 **Matrix:** SOIL
Received Date: 5/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/19/2020 9:27:33 PM	52534
Surr: BFB	99.9	70-130		%Rec	1	5/19/2020 9:27:33 PM	52534
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	440	90		mg/Kg	10	5/21/2020 7:15:28 AM	52538
Motor Oil Range Organics (MRO)	1200	450		mg/Kg	10	5/21/2020 7:15:28 AM	52538
Surr: DNOP	0	55.1-146	S	%Rec	10	5/21/2020 7:15:28 AM	52538

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 **2005736**
Date Reported: **6/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW-1 N
Project: Judah Oil LLC Scottsdale Federal 1
Collection Date: 5/14/2020 11:05:00 AM
Lab ID: 2005736-005 **Matrix:** SOIL **Received Date:** 5/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/19/2020 9:56:23 PM	52534
Surr: BFB	95.5	70-130		%Rec	1	5/19/2020 9:56:23 PM	52534
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	49	8.9		mg/Kg	1	5/21/2020 8:03:13 AM	52538
Motor Oil Range Organics (MRO)	130	44		mg/Kg	1	5/21/2020 8:03:13 AM	52538
Surr: DNOP	133	55.1-146		%Rec	1	5/21/2020 8:03:13 AM	52538

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 **2005736**
Date Reported: **6/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW-2 E
Project: Judah Oil LLC Scottsdale Federal 1
Collection Date: 5/14/2020 11:07:00 AM
Lab ID: 2005736-006 **Matrix:** SOIL **Received Date:** 5/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/19/2020 10:25:03 PM	52534
Surr: BFB	97.3	70-130		%Rec	1	5/19/2020 10:25:03 PM	52534
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/20/2020 4:01:40 AM	52538
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/20/2020 4:01:40 AM	52538
Surr: DNOP	109	55.1-146		%Rec	1	5/20/2020 4:01:40 AM	52538

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 **2005736**
Date Reported: **6/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW-3 S
Project: Judah Oil LLC Scottsdale Federal 1
Collection Date: 5/14/2020 11:09:00 AM
Lab ID: 2005736-007 **Matrix:** SOIL **Received Date:** 5/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/19/2020 10:53:52 PM	52534
Surr: BFB	95.0	70-130		%Rec	1	5/19/2020 10:53:52 PM	52534
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/21/2020 8:27:08 AM	52538
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/21/2020 8:27:08 AM	52538
Surr: DNOP	124	55.1-146		%Rec	1	5/21/2020 8:27:08 AM	52538

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 **2005736**
Date Reported: **6/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW-4 W
Project: Judah Oil LLC Scottsdale Federal 1
Collection Date: 5/14/2020 11:17:00 AM
Lab ID: 2005736-008 **Matrix:** SOIL **Received Date:** 5/16/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/20/2020 3:42:13 AM	52534
Surr: BFB	96.6	70-130		%Rec	1	5/20/2020 3:42:13 AM	52534
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	28	9.2		mg/Kg	1	5/27/2020 3:22:35 PM	52538
Motor Oil Range Organics (MRO)	57	46		mg/Kg	1	5/27/2020 3:22:35 PM	52538
Surr: DNOP	145	55.1-146		%Rec	1	5/27/2020 3:22:35 PM	52538

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#: **2005736**
01-Jun-20

Client: Souder, Miller & Associates
Project: Judah Oil LLC Scottsdale Federal 1

Sample ID: **MB-52538** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **52538** RunNo: **68994**
Prep Date: **5/18/2020** Analysis Date: **5/19/2020** SeqNo: **2390222** 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	55.1	146			

Sample ID: **LCS-52538** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **52538** RunNo: **68994**
Prep Date: **5/18/2020** Analysis Date: **5/19/2020** SeqNo: **2390223** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	105	70	130			
Surr: DNOP	5.0		5.000		99.0	55.1	146			

Sample ID: **MB-52630** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **52630** RunNo: **69011**
Prep Date: **5/21/2020** Analysis Date: **5/22/2020** SeqNo: **2395783** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		128	55.1	146			

Sample ID: **MB-52635** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **52635** RunNo: **69011**
Prep Date: **5/21/2020** Analysis Date: **5/22/2020** SeqNo: **2395784** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		115	55.1	146			

Sample ID: **LCS-52630** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **52630** RunNo: **69011**
Prep Date: **5/21/2020** Analysis Date: **5/23/2020** SeqNo: **2395786** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		103	55.1	146			

Sample ID: **LCS-52635** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **52635** RunNo: **69011**
Prep Date: **5/21/2020** Analysis Date: **5/22/2020** SeqNo: **2395787** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.7	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#: **2005736**

01-Jun-20

Client: Souder, Miller & Associates

Project: Judah Oil LLC Scottsdale Federal 1

Sample ID: **mb-52534**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **52534**	RunNo: **69037**
Prep Date: **5/18/2020**	Analysis Date: **5/19/2020**	SeqNo: **2390643** 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	480		500.0		95.3	70	130			

Sample ID: **lcs-52534**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **52534**	RunNo: **69037**
Prep Date: **5/18/2020**	Analysis Date: **5/19/2020**	SeqNo: **2390644** 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	82.0	70	130			
Surr: BFB	460		500.0		92.8	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: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **SMA-CARLSBAD** Work Order Number: **2005736** RcptNo: **1**

Received By: **Leah Baca** **5/16/2020 8:00:00 AM** Leah Baca

Completed By: **Leah Baca** **5/16/2020 8:51:40 AM** Leah Baca

Reviewed By: ~~DAD 5/16/20~~ DAD 5/16/20 LRB 5/16/20

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)?	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: DAD 5/16/20

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	0.5	Good				
2	1.6	Good				

Chain-of-Custody Record

Client: SMA

Mailing Address: 201 S. Halagueño Sto. Carlsbad, NM 88220

Phone #: (307) 660-7891

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: Judah Oil, LLC Scottsdale Federal #1

Project #: Variance - Closure

Project Manager: Robert Irwin or/& Ashley Maxwell

Sampler:

On Ice: ☑ Yes ☐ No

# of Coolers: (2)

Cooler Temp(including CF): 0.7-0.8 (-0.5) = 0.2-0.3 (°C) MS 5/16/20

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
Thurs. 5/14/20	aM 10:52	Soil	CS1-6'	4oz Glass Jar	Cool 1.8 =1.6 4°C	2005736-001
	10:55		CS2-6'			-002
	11:01		CS3-4'			-003
	11:03		CS4-4'			-004
	11:05		SW-1			-005
	11:07		SW-2			-006
	11:09		SW-3			-007
5/14/20	11:17	Soil	SW-4	4oz	4°C	-008

(Center 4 Feet) N E S W

Packed by AB

Date	Time	Relinquished by	Received by	Via	Date	Time
5/15/20	1342	Robert A. (Bob) Irwin				
5/15	1900		Leah Barra	Courier	5/14/20	0800

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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)	# of containers
	X									1
	X									2
	X									3
	X									4
	X									5
	X									6
	X									7
	X									8

2/14/2020

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.

APPENDIX C
PHOTOGRAPHS
CORRESPONDENCE
COPY OF APPROVED WORKPLAN

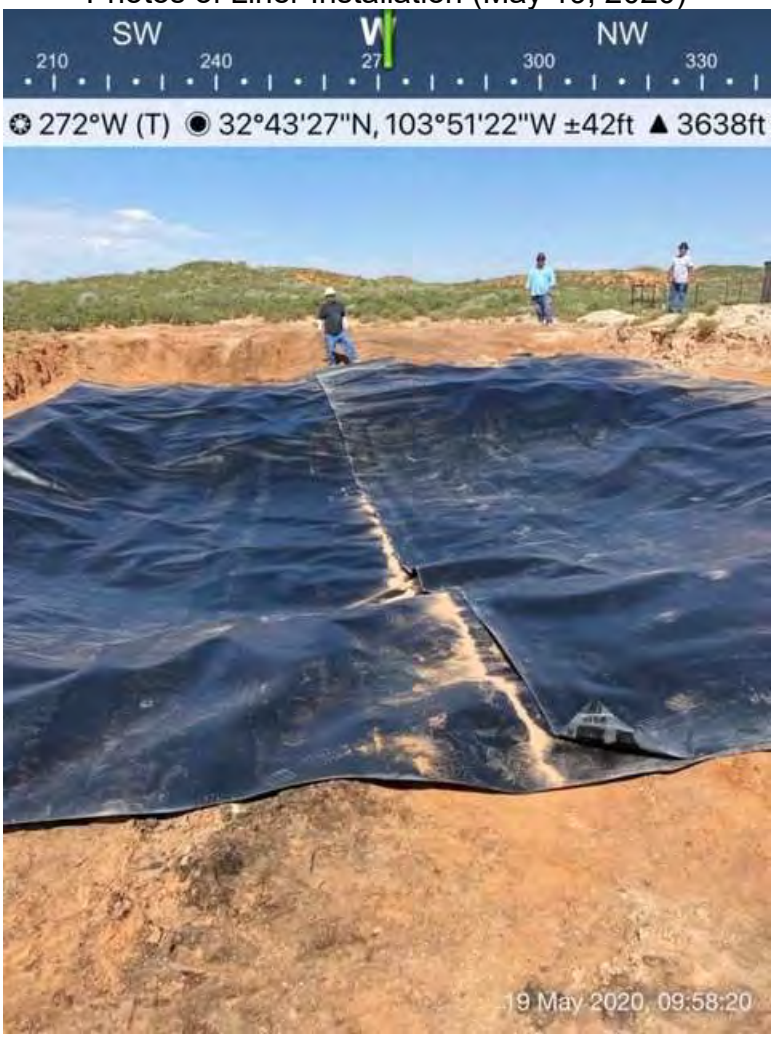
View of excavation, 4-foot and 6-foot depths

View of excavation, 4-foot and 6-foot depths

Label of bio-catalyst product applied to excavation area

Application of bio-catalyst

Photos of Liner Installation (May 19, 2020)




E
SE
S
60
90
120
150
180
129°SE (T) 32°43'27"N, 103°51'23"W ±13ft 3638ft
19 May 2020, 09:56:51


S
180
210
SW
240
W
270
226°SW (T) 32°43'27"N, 103°51'22"W ±13ft ▲3639ft
19 May 2020, 09:57:13

Sarahmay Schlea

From: Bob Irwin
Sent: Tuesday, April 28, 2020 3:56 PM
To: Reid Allan; Shawna Chubbuck
Subject: FW: Variance Request - for Judah Oil - Scottsdale Federal #1

FYI – I got it!!!
Must go 2 more feet in the center (not a big deal) and spray a biospray like CoolOX or something similar before placing the liner.

From: Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Sent: Tuesday, April 28, 2020 3:17 PM
To: Bob Irwin <Bob.Irwin@soudermiller.com>
Cc: james campanella <judahoil@yahoo.com>
Subject: RE: Variance Request - for Judah Oil - Scottsdale Federal #1

04/28/2020

Re: Assessment Report, Addendum to Previous Work Plan and Variance Request for 2RP-3543/nAB1604236407

James Campanella – Judah Oil
Bob Irwin – SMA

Following review of data and requests the following:

Variance for liner is APPROVED by the Oil Conservation Division (OCD) as indicated in in 04/28/2020 SMA Report.

Use of the chemical assistance for biodegradation of hydrocarbons as indicated is APPROVED by the OCD in this instance.

Conditions of APPROOVAL:

The areas for excavation in the immediate vicinity of samples points BS-5 and BS-6 should be excavated to six feet, and using field data perhaps between these two points. Please include these field data in closure report.

Confirmatory samples for side walls and bottom of excavation for laboratory analysis should be collected. Total TPH and MRO, GRO and DRO only.

OCD requests that the overall trend groundwater interpretation map by Chevron/Texaco should not be used in future as a determinative tool, as reference if you choose. Data is too old and too broad for site specific groundwater interpretation.

OCD appreciates your efforts and patience on this matter.

Sincerely,

Bradford Billings
EMNRD/OCD

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations

---

From: Bob Irwin <Bob.Irwin@soudermiller.com>
Sent: Tuesday, April 28, 2020 12:50 PM
To: Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Cc: james campanella <judahoil@yahoo.com>
Subject: [EXT] Variance Request - for Judah Oil - Scottsdale Federal #1

Hello Brad,

Thank you so much for taking a moment this past Thursday to hear me out on the urgency to have this Variance Request reviewed for Judah Oil, which has put forth good faith efforts and remains willing to do what's right for closure.
I had to get peer review / finalization edit clearance of my drafted Variance Request document prior to my sending it off to you.
You saw, during our call that…
The C-141 shows the late November 2015 relatively minor, human-error Spill prompted this incident's assessment. Further, it records 3 bbls of oil and 20 bbls of produced water spilled in total and that 15 bbs of the produced water were recovered.
At which point we proceeded to talk about…
The Judah Oil's first Work Plan, the March 2016 Talon reconnaissance, discovered the location resides over a legacy pit.
Subsequently spurred by an August LOV-INC the Tank Battery was dismantled from the south-flank of the pad and rebuilt on the west flank within a lined berm.
The former location had visibly stained surface soils excavated and replenished with fresh. The LOV-INC action must have been deemed complete because no further action orders were NMOCD forthcoming.
Yet there was no closure of the case, nor records-filed correspondences with or from NMOCD of any kind.
Therefore, Judah Oil had SMA in 2017 prepare a second Work Plan, which regurgitated much of Talon's findings and peppered it with Discipline nomenclature, to sauté the gaps so to speak – basically present the same findings with a different liner point setting.
the Source for any possibility of a repeat contamination tank spill occurring over this legacy pit is now removed, gone.
Depth to groundwater is regionally known to be well over 100 feet (~10 miles south of Loco Hills). Actual regional reality, it been proven to be < 250 feet to 300 feet.
However, there are no wells within a half mile radius; Nearest @ 1.67 miles away, water = 300 ft.
It too, is not of record – and Judah Oil desperately desires closure, so they hired SMA for a third attempt for NMOCD response.
Hence the need for Variance, because of the imposed new Spill Rule, the game has changed, unfairly for Judah – The Request is to not prove it with a new bore, nor is there any need to further probe to determine the maximum vertical depth of contamination.
Judah Oil has a now thrice prescribed remedy alternative:
By committing to remove and replace the top four (4) feet of the horizontally delineated area (1977 square feet, 237 cubic yards) of remnant contaminated soil.
Then, though it is not in the report, we can treat that 4' horizon level with CoolOx* (TM) to promote bacterial digestion, natural attenuation, of any remaining below 4 feet hydrocarbons.
Encapsulation is the key defense retarding all future migration with a 40-mil plastic impervious liner.

It would be topped with 4 feet of fresh soil that will be BLM-approved mix seeded ASAP for regrowth, which combined with the encapsulation will prevent future precipitated moisture from gravity percolation driving the in-situ contaminants further downward.

SMA and Judah Oil thanks you ahead for your review of the documents and historical record presented herein.

Respectfully,

Robert H. (Bob) Irwin, P.G.
Senior Scientist II

Professional Geologist WY 3461
Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), ID Engineering/Surveying Firm (C-3564), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX Surveying Firm (10162200), WY Engineering/Surveying Firm (S-1704)

Souder, Miller & Associates
Engineering ♦ Environmental ♦ Geomatics
201 South Halagueno Street
Carlsbad, NM 88220
www.soudermiller.com
(575) 689-8801; 2203 (direct)
(307) 660-7891 (mobile)

Souder, Miller & Associates ♦ 201 S. Halagueno ♦ Carlsbad, NM 88221
(575) 689-7040

February 17, 2017

#5B25501-BG2

NMOCD District II
Mike Bratcher
811 S. First St.
Eddy, NM 88210

SUBJECT: WORK PLAN FOR INCIDENT 2RP-3543, Scottsdale Federal #1, UNIT B SECTION 27-T18S-R31E NMPM, API# 30-015-25005, EDDY COUNTY, NEW MEXICO

Dear Mr. Bratcher:

On behalf of Judah Oil LLC, Souder Miller & Associates is pleased to submit a work plan summarizing the planned soil remediation for the release site located at the Scottsdale Federal #1 in Eddy County, New Mexico. The purpose of the work plan is to obtain approval from the New Mexico Oil Conservation Division (NMOCD) for the remediation of the release that occurred on Federal Lands on November 25, 2015.

Souder, Miller & Associates (SMA) responded at the request of Judah Oil, to assess and delineate the release of production fluids associated with the Scottsdale Federal #1 well location. The release was initially reported to Judah Oil by NMOCD, on December 9, 2015 and was a result of human error. The table below summarizes information regarding the release. Results of the assessment, delineation are described in the following report.

Table 1: Release information and Site Ranking

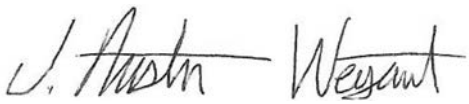
Name	Scottsdale Federal #1				
Location	Incident Number	API Number	Section, Township, Range		
	2RP-3543	30-15-25005	Unit Letter B	Section 27	T18 S, R31 E NMPM
Estimated Date of Release	November 25, 2015				
Date Reported to NMOCD	December 9, 2015				
Reported by	NMOCD				
Land Owner	BLM				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Human Error				
Released Material	Produced Water and Crude Oil				
Released Volume	20 bbls Produced Water 3 and bbls Crude Oil				
Recovered Volume	15 bbls Produced Water				
Net Release	5 bbls Produced Water and 3 bbls Crude Oil				
Nearest Waterway	Pecos River is 26 miles west of the location				

Depth to Groundwater	Estimated to be
Nearest Domestic Water Source	greater than 1,000 feet
NMOCD Ranking	0

Attached is a copy of the C-141 initial located in Appendix B. For questions or comments pertaining to the release or the attached work plan please feel free to contact either of us.

Submitted by:

SOUDER, MILLER & ASSOCIATES



Austin Weyant
Project Scientist

Reviewed by:

Cynthia Gray, CHMM
Senior Scientist

SOIL REMEDIATION WORK PLAN FOR INCIDENT 2RP-3543

JUDAH OIL LLC

SCOTTSDALE FEDERAL #1
UL B, SECTION 27, T18S R31E, NMPM
API #30-015-25005
EDDY COUNTY, NM

Prepared for:
Judah Oil LLC
PO Box 568,
Artesia, NM 88211

Prepared by:
Souder, Miller & Associates
201 S. Halagueno
Carlsbad, NM 88221
575-689-7040

February 17, 2017
SMA Reference
5B25501 BG5

Table of Contents

Figures:

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Appendices:

1.0 Introduction

On behalf of Judah Oil LLC, Souder, Miller & Associates (SMA) has prepared this report that describes the assessment, initial delineation and proposed remediation for a release associated with the Scottsdale Federal #1 location API# 30-015-25005. The site is located in Section 27, Township 18S, Range 31E NMPM, Eddy County, New Mexico, on federal lands. Figure 1 illustrates the vicinity and location of the site.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 10 miles southeast of the Loco Hills, with an elevation of approximately 3,640 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be 200 feet below ground surface (bgs).

SMA searched the New Mexico State Engineer's Office (NMOSE) online water well database for water wells in the vicinity of the release. Most wells in the area proved to have inconclusive data, but one well (CP00818), located 5 miles to the west of the Scottsdale Fed #1, has a depth of 240 feet. Figure 1 depicts the site vicinity and Figure 2 shows the site itself. The physical location of this release is within the jurisdiction of the New Mexico Oil Conservation Division (NMOCD).

Based on the NMOCD Guidelines Ranking Criteria, this release location has been assigned a NMOCD ranking of 0 which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 5000 ppm total petroleum hydrocarbons (TPH). Table 1 illustrates site ranking rationale.

3.0 Assessment and Initial Results

On February 2, 2016 and again on February 15, 2016, Talon LPE field personnel assessed the release area on behalf of Judah Oil LLC. The results of this assessment are outlined in Table 2. The potentially affected area was found to be approximately 80 feet long and 40 feet wide. The site delineation samples were taken to depths of about 18 feet below ground surface (bgs). Location 1 (S1), Location 2 (S2), and Location 3 (S3) did not meet the recommended remediation action levels for TPH. Specific sample locations for all samples are depicted on Figure 2 (Sample Location Map) along with sampling details. The samples were sent to Cardinal Laboratory for analysis for Benzene and Total BTEX using EPA Method 8021B, DRO and GRO by EPA Method 8015D, and total Chlorides using EPA Method 300.0. Since this sampling event, Judah Oil LLC has deconstructed the tank battery and rebuilt it on the west side of the location.

4.0 Soil Remediation Work Plan

According to Bureau of Land Management (BLM) records, the affected battery was built on top of the legacy drilling pit. With approval from area utilities owners via 811, NMOCD, and the BLM, SMA proposes to excavate the areas of S1 and S2 to 6 feet, and S3 to 2 feet. Excavated soils at S1 will be further field screened for chlorides and bioremediated on location while all other excavated soils will be hauled to an NMOCD approved facility and the site will be backfilled. SMA will then reclaim the drilling pit by reseeding with a BLM approved seed mix.

5.0 Conclusions and Recommendations

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 10: 10 ppm (mg/kg) Benzene, 50 ppm total BTEX, and 5000 ppm TPH

Soil contaminant concentrations found during the initial delineation are illustrated in Figure 2. A summary of the laboratory analyses is included in Table 2. Laboratory reports are included in Appendix A.

After the soil remediation work plan is approved by NMOCD, SMA will begin soil remediation activities on site.

Photo documentation is available by request.

6.0 Re-vegetation Plan

Seeding of the location is recommended for June or July to coincide with the "rainy" season to achieve optimum results. Seed will be planted a quarter to half- inch deep using a disc type or similar rangeland drill sufficient to accommodate variations in seed sizes. If broadcast, seeding rates should be doubled. Seeding can be accomplished as early as May given all dirt work for the location is stabilized. Soil in this area will be tilled to reduce compaction.

Seed-bed preparation will be performed to provide a hospitable environment for germinating seed by breaking up impermeable soil layers that have formed and increasing void spaces for air and water. Ground shall be roughed-up prior to planting, by raking, harrowing or other methods.

Mulch wil be placed to prevent loss of moisture and seed to wind.
Mulching shall be accomplished using one of these following methods:
a. weed free straw (2 tons/ac;kg/ha)
b. wood residues-sawdust, wood chips, bark (2 tons/ac;kg/ha)
c. hydro-mulching (1,500 lb/ac;kg/ha)
d. composted manure (5 tons/ac;kg/ha)
e. excelsior blanket
f. straw jute
g. peanut hulls (2 tons/ac;kg/ha)

7.0 Closure and Limitations

The scope of our services consisted of the evaluation of previous spill mitigation assessment sampling, verification of release stabilization, regulatory liaison, and preparation of this work plan. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-7040 or Cindy Gray at 505-325-7535.

Submitted by:

SOUDER, MILLER & ASSOCIATES

Austin Weyant
Project Scientist

Reviewed by:

Cynthia Gray, CHMM
Senior Scientist

Figures:

Figure 1: Vicinity Map
Figure 2: Detailed Site and Sample Map

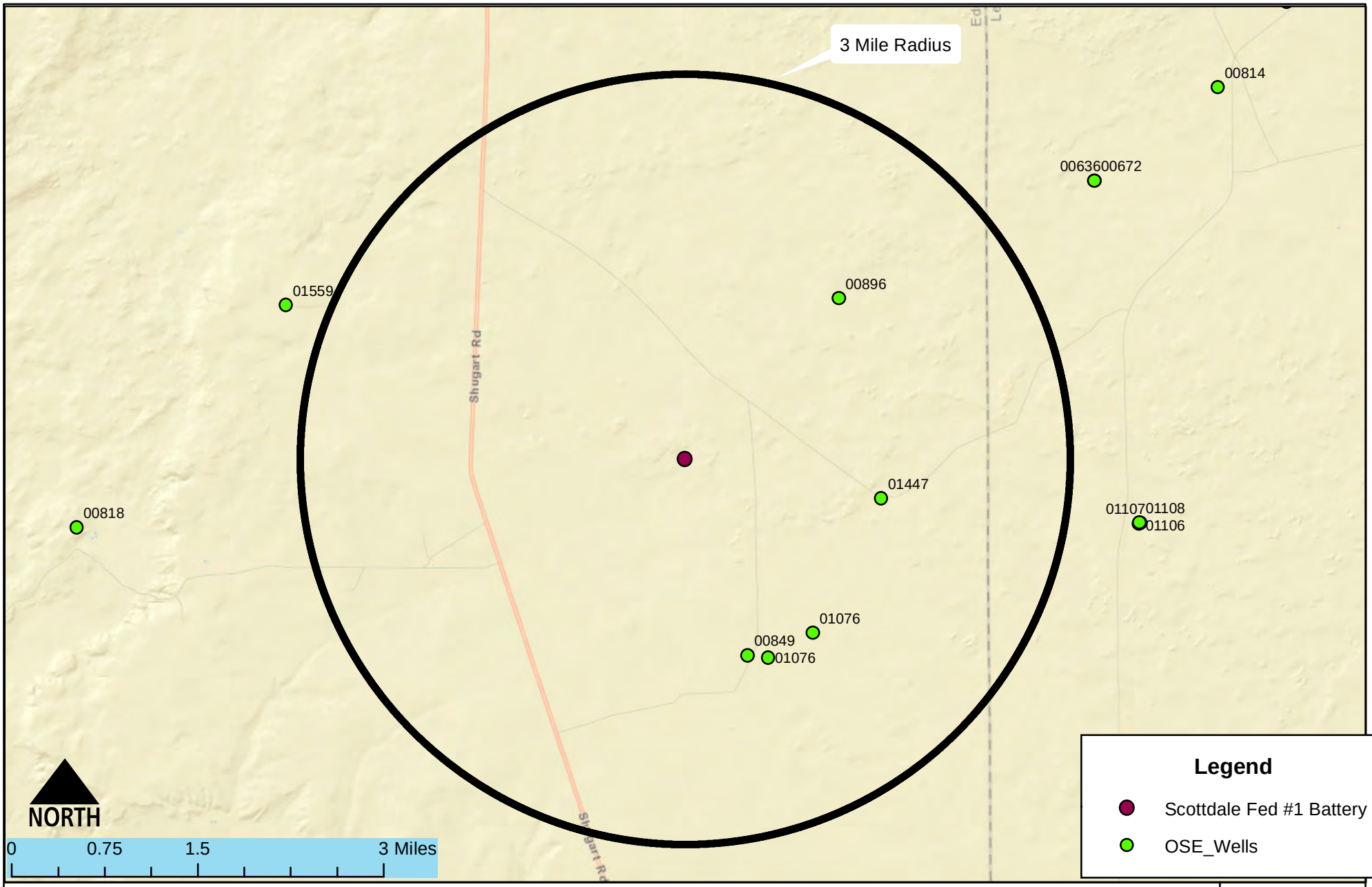
Tables:

Table 1: Release Information and Site Ranking
Table 2: Summary of Laboratory Analyses

Appendices:

Appendix A: Laboratory Analytical Reports
Appendix B: Form C141 Initial
Appendix C: NMOSE Water Column

FIGURE 1
VICINITY MAP



Detailed Site and Sample Map
Scottsdale Fed #1 - Judah Oil LLC
Loco Hills, New Mexico

Figure 1

Date Saved: 2/13/2017

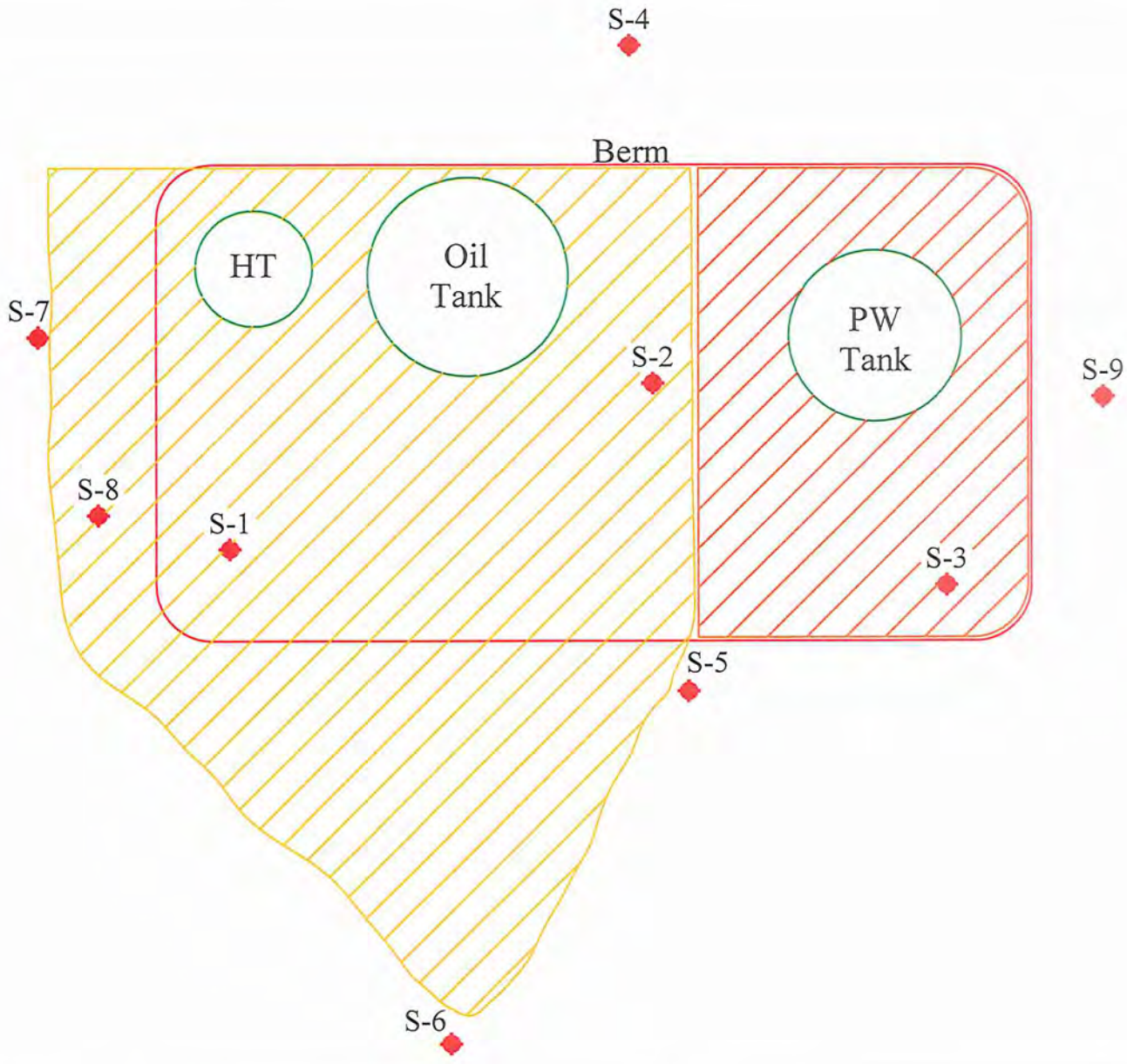
Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Heather Patterson
Checked
Approved

201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689-7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains

FIGURE 2

DETAILED SITE AND SAMPLE MAP



Legend
- Sample Location
- Old Pit Area
- PW Impacted Area

TALON LPE

Date:	02/19/2016
Scale:	NTS
Drawn By:	TJS

Scottsdale Fed #1 Battery
Judah Oil, LLC
Eddy County, New Mexico
Figure 2 - Site Plan

TABLE 1

RELEASE INFORMATION AND SITE RANKING

Judah Oil LLC
Table 1: Site Ranking

Scottsdale Federal #4
Tank Release
11/25/2015

Site Ranking Determination Table

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20		USGS Topo Maps; Google Earth , NMOSE database	average depth of ground water is 200 feet bgs
50' to 99' = 10			
>100' = 0	0		
Ranking Criteria for Horizontal Distance to Nearest Surface Water	**NMOCD Numeric Rank for this Site**	**Source for Ranking**	**Notes**
< 200' = 20		USGS Topo Maps; Google Earth ; ArcMap	26 Miles East of Pecos River
200' - 1000' = 10			
>1000' = 0	0		
Ranking Criteria for Horizontal Distance to a Water Well or Water Source	**NMOCD Numeric Rank for this Site**	**Source for Ranking**	**Notes**
<1000' from a water source? <200' from a private domestic water source? YES OR NO to BOTH. YES = 20, NO = 0	0	NM State Engineer Water Well Database	Nearest well greater than 1000 ft distance
Total Site Ranking	**0**		
Soil Remedation Standards	**0 to 9**	**10 to 19**	**>19**
Benzene	**10 PPM**	**10 PPM**	**10 PPM**
BTEX	**50 PPM**	**50 PPM**	**50 PPM**
TPH	**5000 PPM**	**1000 PPM**	**100 PPM**

SMA Project #5B25501 BG2

TABLE 2

SUMMARY OF LABORATORY ANALYSES

Table 2: Summary of Laboratory Analyses

Analytical Report-1609D37	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	Cl- mg/Kg
1609D37-001	S1	9/12/2016	0	22.7	N/A	1770	11700	176
1609D37-002	S1	9/12/2016	2'	BDL	BDL	BDL	BDL	N/A
1609D37-003	S1	9/12/2016	4'	83.1	BDL	2920	25900	N/A
1609D37-001	S1	9/12/2016	6'	17.7	N/A	921	8250	N/A
1609D37-002	S1	9/12/2016	8'	27.8	BDL	647	4340	N/A
1609D37-003	S2	9/12/2016	0'	1.82	BDL	238	14100	5280
1609D37-001	S2	9/12/2016	2'	BDL	N/A	BDL	BDL	2640
1609D37-002	S2	9/12/2016	4'	BDL	BDL	BDL	182	992
1609D37-003	S2	9/12/2016	6'	33.9	BDL	584	6050	1440
1609D37-001	S2	9/12/2016	8'	8.67	N/A	164	1080	1920
1609D37-002	S2	9/12/2016	9'	N/A	BDL	N/A	N/A	3080
1609D37-003	S2	9/12/2016	10'	N/A	BDL	N/A	N/A	5280
1609D37-001	S2	9/12/2016	12'	N/A	N/A	N/A	N/A	5280
1609D37-002	S2	9/12/2016	13'	N/A	N/A	N/A	N/A	3120
1609D37-003	S2	9/12/2016	15'	N/A	BDL	N/A	N/A	3600
1609D37-001	S2	9/12/2016	16'	N/A	N/A	N/A	N/A	2880
1609D37-002	S2	9/12/2016	18'	N/A	N/A	N/A	N/A	2240
1609D37-003	S3	9/12/2016	0'	23.1	BDL	871	30300	3080

1609D37-001	S3	9/12/2016	2'	BDL	N/A	BDL	BDL	288
1609D37-002	S3	9/12/2016	4'	BDL	BDL	BDL	43.4	1280
1609D37-003	S3	9/12/2016	6'	BDL	BDL	BDL	BDL	176
1609D37-001	S3	9/12/2016	8'	BDL	BDL	BDL	BDL	127
1609D37-002	S4	9/12/2016	0'	BDL	BDL	BDL	BDL	BDL
1609D37-003	S4	9/12/2016	2'	BDL	BDL	BDL	BDL	48
1609D37-001	S4	9/12/2016	4'	BDL	BDL	BDL	BDL	176
1609D37-002	S5	9/12/2016	0'	BDL	BDL	BDL	BDL	BDL
1609D37-003	S5	9/12/2016	2'	BDL	BDL	BDL	BDL	BDL
1609D37-001	S5	9/12/2016	4'	BDL	BDL	BDL	BDL	BDL
1609D37-002	S6	9/12/2016	0'	BDL	BDL	BDL	BDL	BDL
1609D37-003	S6	9/12/2016	2'	BDL	BDL	BDL	BDL	BDL
1609D37-003	S6	9/12/2016	4'	BDL	BDL	BDL	BDL	BDL
1609D37-001	S7	9/12/2016	0'	BDL	BDL	BDL	BDL	BDL
1609D37-002	S7	9/12/2016	2'	BDL	BDL	BDL	BDL	BDL
1609D37-003	S7	9/12/2016	4'	BDL	BDL	BDL	BDL	BDL
1609D37-001	S8	9/12/2016	0'	BDL	BDL	BDL	250	BDL
1609D37-002	S8	9/12/2016	1'	BDL	BDL	BDL	BDL	64
1609D37-003	S8	9/12/2016	2'	BDL	BDL	BDL	BDL	64
1609D37-003	S8	9/12/2016	3'	BDL	BDL	BDL	BDL	32
1609D37-001	S8	9/12/2016	4'	BDL	BDL	BDL	BDL	160
1609D37-002	S8	9/12/2016	5'	BDL	BDL	BDL	BDL	48

1609D37-003	S8	9/12/2016	6'	BDL	BDL	BDL	BDL	BDL
1609D37-001	S8	9/12/2016	7'	BDL	BDL	BDL	BDL	BDL
1609D37-002	S8	9/12/2016	8'	BDL	BDL	BDL	BDL	96
1609D37-003	S8	9/12/2016	9'	BDL	BDL	BDL	BDL	288
1609D37-001	S9	9/12/2016	0'	BDL	BDL	BDL	BDL	BDL
1609D37-002	S9	9/12/2016	2'	BDL	BDL	BDL	BDL	BDL
1609D37-003	S9	9/12/2016	4'	BDL	BDL	BDL	BDL	BDL

APPENDIX A

LABORATORY ANALYTICAL REPORTS

CARDINAL Laboratories

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

February 05, 2016

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: SCOTTSDALE FED #1 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/02/16 10:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-1 0' (H600235-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	02/04/2016	ND	1.99	99.5	2.00	4.25	
Toluene*	**2.52**	1.00	02/04/2016	ND	1.93	96.5	2.00	5.27	
Ethylbenzene*	**9.27**	1.00	02/04/2016	ND	1.75	87.3	2.00	5.31	
Total Xylenes*	**10.9**	3.00	02/04/2016	ND	5.35	89.1	6.00	5.27	
Total BTEX	**22.7**	6.00	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	02/03/2016	ND	448	112	400	7.41	

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	**1770**	500	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**11700**	500	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *183 %* *35-147*

Surrogate: 1-Chlorooctadecane *273 %* *28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-1 2' (H600235-02)

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	02/04/2016	ND	1.99	99.5	2.00	4.25	
Toluene*	<0.050	0.050	02/04/2016	ND	1.93	96.5	2.00	5.27	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.75	87.3	2.00	5.31	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.35	89.1	6.00	5.27	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *73.6-140*

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	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	<10.0	10.0	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *76.8 %* *35-147*

Surrogate: 1-Chlorooctadecane *79.8 %* *28-171*

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:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-1 4' (H600235-03)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	02/04/2016	ND	1.99	99.5	2.00	4.25	
Toluene*	**4.24**	2.00	02/04/2016	ND	1.93	96.5	2.00	5.27	
Ethylbenzene*	**45.1**	2.00	02/04/2016	ND	1.75	87.3	2.00	5.31	
Total Xylenes*	**33.8**	6.00	02/04/2016	ND	5.35	89.1	6.00	5.27	
Total BTEX	**83.1**	12.0	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *73.6-140*

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	**2920**	500	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**25900**	500	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *248 %* *35-147*

Surrogate: 1-Chlorooctadecane *658 %* *28-171*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-1 6' (H600235-04)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/04/2016	ND	1.99	99.5	2.00	4.25	
Toluene*	**1.24**	0.500	02/04/2016	ND	1.93	96.5	2.00	5.27	
Ethylbenzene*	**11.9**	0.500	02/04/2016	ND	1.75	87.3	2.00	5.31	
Total Xylenes*	**4.58**	1.50	02/04/2016	ND	5.35	89.1	6.00	5.27	
Total BTEX	**17.7**	3.00	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *73.6-140*

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	**921**	200	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**8250**	200	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *122 %* *35-147*

Surrogate: 1-Chlorooctadecane *181 %* *28-171*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-1 8' (H600235-05)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/04/2016	ND	1.99	99.5	2.00	4.25	
Toluene*	**2.94**	0.500	02/04/2016	ND	1.93	96.5	2.00	5.27	
Ethylbenzene*	**13.3**	0.500	02/04/2016	ND	1.75	87.3	2.00	5.31	
Total Xylenes*	**11.5**	1.50	02/04/2016	ND	5.35	89.1	6.00	5.27	
Total BTEX	**27.8**	3.00	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIL *110 %* *73.6-140*

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	**647**	200	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**4340**	200	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *107 %* *35-147*

Surrogate: 1-Chlorooctadecane *127 %* *28-171*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-2 0' (H600235-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	02/04/2016	ND	1.99	99.5	2.00	4.25	
Toluene*	<0.100	0.100	02/04/2016	ND	1.93	96.5	2.00	5.27	
Ethylbenzene*	**0.700**	0.100	02/04/2016	ND	1.75	87.3	2.00	5.31	
Total Xylenes*	**1.12**	0.300	02/04/2016	ND	5.35	89.1	6.00	5.27	
Total BTEX	**1.82**	0.600	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5280**	16.0	02/03/2016	ND	448	112	400	7.41	

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	**238**	100	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**14100**	100	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *138 %* *35-147*

Surrogate: 1-Chlorooctadecane *353 %* *28-171*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-2 2' (H600235-07)

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	02/04/2016	ND	1.99	99.5	2.00	4.25	
Toluene*	<0.050	0.050	02/04/2016	ND	1.93	96.5	2.00	5.27	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.75	87.3	2.00	5.31	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.35	89.1	6.00	5.27	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2640**	16.0	02/03/2016	ND	448	112	400	7.41	

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	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	<10.0	10.0	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *77.1 %* *35-147*

Surrogate: 1-Chlorooctadecane *76.4 %* *28-171*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-2 4' (H600235-08)

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	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	<0.050	0.050	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**992**	16.0	02/03/2016	ND	448	112	400	7.41	

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	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**182**	10.0	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *84.3 %* *35-147*

Surrogate: 1-Chlorooctadecane *88.3 %* *28-171*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-2 6' (H600235-09)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.748**	0.500	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	**0.687**	0.500	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	**19.6**	0.500	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	**12.9**	1.50	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	**33.9**	3.00	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIL *111 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1440**	16.0	02/03/2016	ND	448	112	400	7.41	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	**584**	200	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**6050**	200	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *100 %* *35-147*

Surrogate: 1-Chlorooctadecane *119 %* *28-171*

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*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-2 8' (H600235-10)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	**0.489**	0.100	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	**4.75**	0.100	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	**3.43**	0.300	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	**8.67**	0.600	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *117 %* *73.6-140*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1920**	16.0	02/03/2016	ND	448	112	400	7.41	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	**161**	50.0	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**1080**	50.0	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *88.4 %* *35-147*

Surrogate: 1-Chlorooctadecane *89.5 %* *28-171*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-3 0' (H600235-11)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	**2.64**	0.500	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	**10.3**	0.500	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	**10.2**	1.50	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	**23.1**	3.00	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *73.6-140*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3080**	16.0	02/03/2016	ND	448	112	400	7.41	

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	**871**	500	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**30300**	500	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *188 %* *35-147*

Surrogate: 1-Chlorooctadecane *779 %* *28-171*

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:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-3 2' (H600235-12)

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	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	<0.050	0.050	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	02/03/2016	ND	448	112	400	7.41	

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	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	<10.0	10.0	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *88.4 %* *35-147*

Surrogate: 1-Chlorooctadecane *92.3 %* *28-171*

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:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-3 4' (H600235-13)

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	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	<0.050	0.050	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *73.6-140*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1280**	16.0	02/03/2016	ND	448	112	400	7.41	

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	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	**43.4**	10.0	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *81.5 %* *35-147*

Surrogate: 1-Chlorooctadecane *86.4 %* *28-171*

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:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-3 6' (H600235-14)

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	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	<0.050	0.050	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	02/03/2016	ND	448	112	400	7.41	

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	02/03/2016	ND	211	105	200	2.58	
DRO >C10-C28	<10.0	10.0	02/03/2016	ND	202	101	200	4.11	

Surrogate: 1-Chlorooctane *77.9 %* *35-147*

Surrogate: 1-Chlorooctadecane *81.0 %* *28-171*

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:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/02/2016	Sampling Date:	02/01/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-3 8' (H600235-15)

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	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	<0.050	0.050	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *73.6-140*

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	02/03/2016	ND	199	99.4	200	4.39	
DRO >C10-C28	**127**	10.0	02/03/2016	ND	197	98.4	200	6.46	

Surrogate: 1-Chlorooctane *88.0 %* *35-147*

Surrogate: 1-Chlorooctadecane *90.5 %* *28-171*

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.
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: Talon/LPE	BILL TO
Project Manager: D. Adkins	P.O. #:
Address: 408 W. Texas Ave.	Company: Talon/LPE
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575-746-8768 Fax #: 575-746-8905	Address:
Project #: 701484.008.01 Project Owner: Judah Oil	City:
Project Name: Scottsdale Fed #1 Battery	State: Zip:
Project Location: B-27-18S-31E	Phone #:
Sampler Name: S. Hitchcock	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	TIME	ANALYSIS REQUEST: TPH	BTEX	Chloride
H600235																	
1	S-10'	G	1			✓					✓		2/1/16		✓	✓	✓
2	S-12'	G	1			✓					✓				✓	✓	✓
3	S-14'	G	1			✓					✓				✓	✓	✓
4	S-16'	G	1			✓					✓				✓	✓	✓
5	S-18'	G	1			✓					✓				✓	✓	✓
6	S-20'	G	1			✓					✓				✓	✓	✓
7	S-22'	G	1			✓					✓				✓	✓	✓
8	S-24'	G	1			✓					✓				✓	✓	✓
9	S-26'	G	1			✓					✓				✓	✓	✓
10	S-28'	G	1			✓					✓				✓	✓	✓

Relinquished By: Shelby Pearce	Date: 2/2/16 Time: 10:15	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 3.2	Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)	REMARKS: STOP Cl⁻ IF < 250 mg/kg

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

#54

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Talon/LPE	BILL TO
Project Manager:	P.O. #:
Address: 408 W. Texas Ave.	Company: Talon/LPE
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575-746-8768 Fax #: 575-746-8905	Address:
Project #: Project Owner:	City:
Project Name:	State: Zip:
Project Location:	Phone #:
Sampler Name:	Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	TPH	BTEX	Chloride
H600235																	
11	S-30'	G	1			✓					✓		2/1/16		✓	✓	✓
12	S-32'	G	1			✓					✓				✓	✓	✓
13	S-34'	G	1			✓					✓				✓	✓	✓
14	S-36'	G	1			✓					✓				✓	✓	✓
15	S-38'	G	1			✓					✓				✓	✓	✓

Relinquished By: Sheldon Plein	Date: 2/2/16 Time: 10:15	Received By: Jodi Henson	
Relinquished By:	Date: Time:	Received By:	

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: Stop Cl⁻ if < 250 mg/kg

Delivered By: (Circle One) Sampler - UPS - Bus - Other: 3.2°C

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials)

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

#54

CARDINAL Laboratories

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

February 19, 2016

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: SCOTTSDALE FED #1 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/15/16 16:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-2 9' (H600350-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3080**	16.0	02/17/2016	ND	416	104	400	8.00	

Sample ID: S-2 10' (H600350-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5280**	16.0	02/17/2016	ND	416	104	400	8.00	

Sample ID: S-2 12' (H600350-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4160**	16.0	02/17/2016	ND	416	104	400	8.00	

Sample ID: S-2 13' (H600350-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3120**	16.0	02/17/2016	ND	416	104	400	8.00	

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-2 15' (H600350-05)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3600**	16.0	02/17/2016	ND	416	104	400	8.00	

Sample ID: S-2 16' (H600350-06)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2880**	16.0	02/17/2016	ND	416	104	400	8.00	

Sample ID: S-2 18' (H600350-07)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2240**	16.0	02/17/2016	ND	416	104	400	8.00	

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-4 0' (H600350-08)

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	02/16/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/16/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/16/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/16/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/16/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/16/2016	ND	208	104	200	1.10	
DRO >C10-C28	<10.0	10.0	02/16/2016	ND	218	109	200	0.367	

Surrogate: 1-Chlorooctane *100 %* *35-147*

Surrogate: 1-Chlorooctadecane *106 %* *28-171*

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-4 2' (H600350-09)

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	02/16/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/16/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/16/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/16/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/16/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/16/2016	ND	208	104	200	1.10	
DRO >C10-C28	<10.0	10.0	02/16/2016	ND	218	109	200	0.367	

Surrogate: 1-Chlorooctane *102 %* *35-147*

Surrogate: 1-Chlorooctadecane *110 %* *28-171*

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-4 4' (H600350-10)

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	02/17/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/17/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/17/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/17/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/17/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *73.6-140*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/16/2016	ND	208	104	200	1.10	
DRO >C10-C28	<10.0	10.0	02/16/2016	ND	218	109	200	0.367	

Surrogate: 1-Chlorooctane *92.6 %* *35-147*

Surrogate: 1-Chlorooctadecane *97.9 %* *28-171*

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-5 0' (H600350-11)

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	02/17/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/17/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/17/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/17/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/17/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/16/2016	ND	208	104	200	1.10	
DRO >C10-C28	<10.0	10.0	02/16/2016	ND	218	109	200	0.367	

Surrogate: 1-Chlorooctane *92.7 %* *35-147*

Surrogate: 1-Chlorooctadecane *99.2 %* *28-171*

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-5 2' (H600350-12)

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	02/17/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/17/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/17/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/17/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/17/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/16/2016	ND	208	104	200	1.10	
DRO >C10-C28	<10.0	10.0	02/16/2016	ND	218	109	200	0.367	

Surrogate: 1-Chlorooctane *98.6 %* *35-147*

Surrogate: 1-Chlorooctadecane *106 %* *28-171*

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-5 4' (H600350-13)

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	02/17/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/17/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/17/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/17/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/17/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *73.6-140*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/16/2016	ND	208	104	200	1.10	
DRO >C10-C28	<10.0	10.0	02/16/2016	ND	218	109	200	0.367	

Surrogate: 1-Chlorooctane *96.5 %* *35-147*

Surrogate: 1-Chlorooctadecane *104 %* *28-171*

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-6 0' (H600350-14)

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	02/17/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/17/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/17/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/17/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/17/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *73.6-140*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/16/2016	ND	208	104	200	1.10	
DRO >C10-C28	<10.0	10.0	02/16/2016	ND	218	109	200	0.367	

Surrogate: 1-Chlorooctane *94.2 %* *35-147*

Surrogate: 1-Chlorooctadecane *101 %* *28-171*

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-6 2' (H600350-15)

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	02/17/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/17/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/17/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/17/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/17/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/17/2016	ND	217	109	200	1.22	
DRO >C10-C28	<10.0	10.0	02/17/2016	ND	229	114	200	1.12	

Surrogate: 1-Chlorooctane *87.6 %* *35-147*

Surrogate: 1-Chlorooctadecane *92.3 %* *28-171*

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:

TALON LPE
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	02/15/2016	Sampling Date:	02/15/2016
Reported:	02/19/2016	Sampling Type:	Soil
Project Name:	SCOTTSDALE FED #1 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	701484.008.01	Sample Received By:	Jodi Henson
Project Location:	B-27-18S-31E		

Sample ID: S-6 4' (H600350-16)

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	02/17/2016	ND	1.99	99.4	2.00	6.93	
Toluene*	<0.050	0.050	02/17/2016	ND	1.96	97.9	2.00	6.53	
Ethylbenzene*	<0.050	0.050	02/17/2016	ND	1.79	89.4	2.00	6.11	
Total Xylenes*	<0.150	0.150	02/17/2016	ND	5.51	91.9	6.00	5.87	
Total BTEX	<0.300	0.300	02/17/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *73.6-140*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/17/2016	ND	416	104	400	8.00	

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	02/17/2016	ND	217	109	200	1.22	
DRO >C10-C28	<10.0	10.0	02/17/2016	ND	229	114	200	1.12	

Surrogate: 1-Chlorooctane *85.5 %* *35-147*

Surrogate: 1-Chlorooctadecane *92.3 %* *28-171*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

talonlpe.com • 866.742.0742

TALON LPE

Work Plan
Judah Oil, LLC: Scottsdale Federal #001
|30-015-25005|2RP-3543|

March 9, 2016

Prepared By:

TALON/LPE
408 W. Texas Avenue
Artesia, New Mexico 88210

Prepared For:

Judah Oil, LLC

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM 88210

Subject: **Soil Assessment and Remediation Work Plan**
Judah Oil, LLC
Scottsdale Federal #001 (30-015-25005) *2RP-3543*

Dear Mr. Bratcher,

Judah Oil, LLC (Judah Oil) has contracted Talon/LPE (Talon) to perform soil sampling and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities consist of the following.

Site Information

The Judah Oil Scottsdale Federal #001 is located approximately forty (40) miles southeast of Artesia, New Mexico. The legal location for this facility is Unit Letter B, Section 27, Township 18 South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude are 32.7248955 North and -103.8519821 West. A site plan is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service (NRCS), the soil in this area is made up of Kermit-Berino fine sands with 0 to 3 percent slopes. Drainage courses in this area are normally dry.

Ground Water and Site Ranking

According to the Chevron Texaco ground water trend map, the ground water in this area is between 250 and 300 feet below ground surface (BGS). Therefore the ranking for this site is a **0** based on the following:

Depth to ground water	>100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

Based upon the site ranking of **0**, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 1,000 mg/kg for TPH and 1,000 mg/kg for total chlorides.

Incident Description and Initial Remedial Actions

On November 25, 2015 logistical errors made by the water hauling company the produced water tank at this location overfilled resulting in the release of approximately 3bbls of oil and 20bbls of produced water. A vacuum truck was able to recover approximately 15bbls of produced water.

Talon mobilized personnel to conduct a site assessment and perform soil sampling within the impacted unlined battery. A visual assessment of the surrounding area indicated that there may have been an unlined production water pit at this location. Test pits were advanced utilizing an excavator to horizontally delineate the extent of the old pit area. A test pit was also excavated (sample location S-8) in the "worst case" area of the pit to vertically assess the potential impacts. The laboratory results from the soil sampling events are summarized in the table below. See Appendix IV for complete report of laboratory results.

Laboratory Results

See Appendix IV for complete report of laboratory results.

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0	22.7	176	1770	11700
S-1	2	ND	--	ND	ND
S-1	4	83.1	--	2920	25900
S-1	6	17.7	--	921	8250
S-1	8	27.8	--	647	4340
S-2	0	1.82	5280	238	14100
S-2	2	ND	2640	ND	ND
S-2	4	ND	992	ND	182
S-2	6	33.9	1440	584	6050
S-2	8	8.67	1920	164	1080
S-2	9	--	3080	--	--
S-2	10	--	5280	--	--
S-2	12	--	5280	--	--
S-2	13	--	3120	--	--
S-2	15	--	3600	--	--
S-2	16	--	2880	--	--
S-2	18	--	2240	--	--
S-3	0	23.1	3080	871	30300
S-3	2	ND	288	ND	ND
S-3	4	ND	1280	ND	43.4
S-3	6	ND	176	ND	ND

S-3	8	ND	--	ND	127
S-4	0	ND	ND	ND	ND
S-4	2	ND	48	ND	ND
S-4	4	ND	176	ND	ND
S-5	0	ND	ND	ND	ND
S-5	2	ND	ND	ND	ND
S-5	4	ND	ND	ND	ND
S-6	0	ND	ND	ND	ND
S-6	2	ND	ND	ND	ND
S-6	4	ND	ND	ND	ND
S-7	0	ND	ND	ND	ND
S-7	2	ND	ND	ND	ND
S-7	4	ND	ND	ND	ND
S-8	0	ND	ND	ND	250
S-8	1	ND	64	ND	ND
S-8	2	ND	64	ND	ND
S-8	3	ND	32	ND	ND
S-8	4	ND	160	ND	ND
S-8	5	ND	48	ND	ND
S-8	6	ND	ND	ND	ND
S-8	7	ND	ND	ND	ND
S-8	8	ND	96	ND	ND
S-8	9	ND	288	ND	ND
S-9	0	ND	ND	ND	ND
S-9	2	ND	ND	ND	ND
S-9	4	ND	ND	ND	ND

(--) Analyte Not Tested
(ND) Analyte Not Detected

Conclusions and Proposed Remedial Actions

- On behalf of Judah Oil, we request that due to the extreme depth to ground water and the infrastructure surrounding sample location S-2 that no further vertical delineation be required.
- Laboratory results have indicated that the historical impacts in the pasture have naturally attenuated to a concentration less than NMOCD RRAL's.
- The historically impacted area outside of the battery will be ripped and seeded with BLM #2 seed mixture.
- The area within the vicinity of sample locations S-1 and S-2 will be excavated to a depth of 4-feet BGS.
- The area in the vicinity of sample location S-3 will be excavated to a depth of 2-feet BGS.
- All of the excavated material will be hauled to an NMOCD approved disposal facility.
- The excavation will be backfilled to grade with caliche and a 40-mil liner will be installed at surface in order to perform two simultaneous actions; encapsulate the remaining chloride impacts and provide containment of future releases.

Should you have any questions or if further information is required, please do not hesitate to contact our office at (575)-746-8768

Respectfully submitted,

TALON/LPE

Sheldon L. Hitchcock
Project Manager

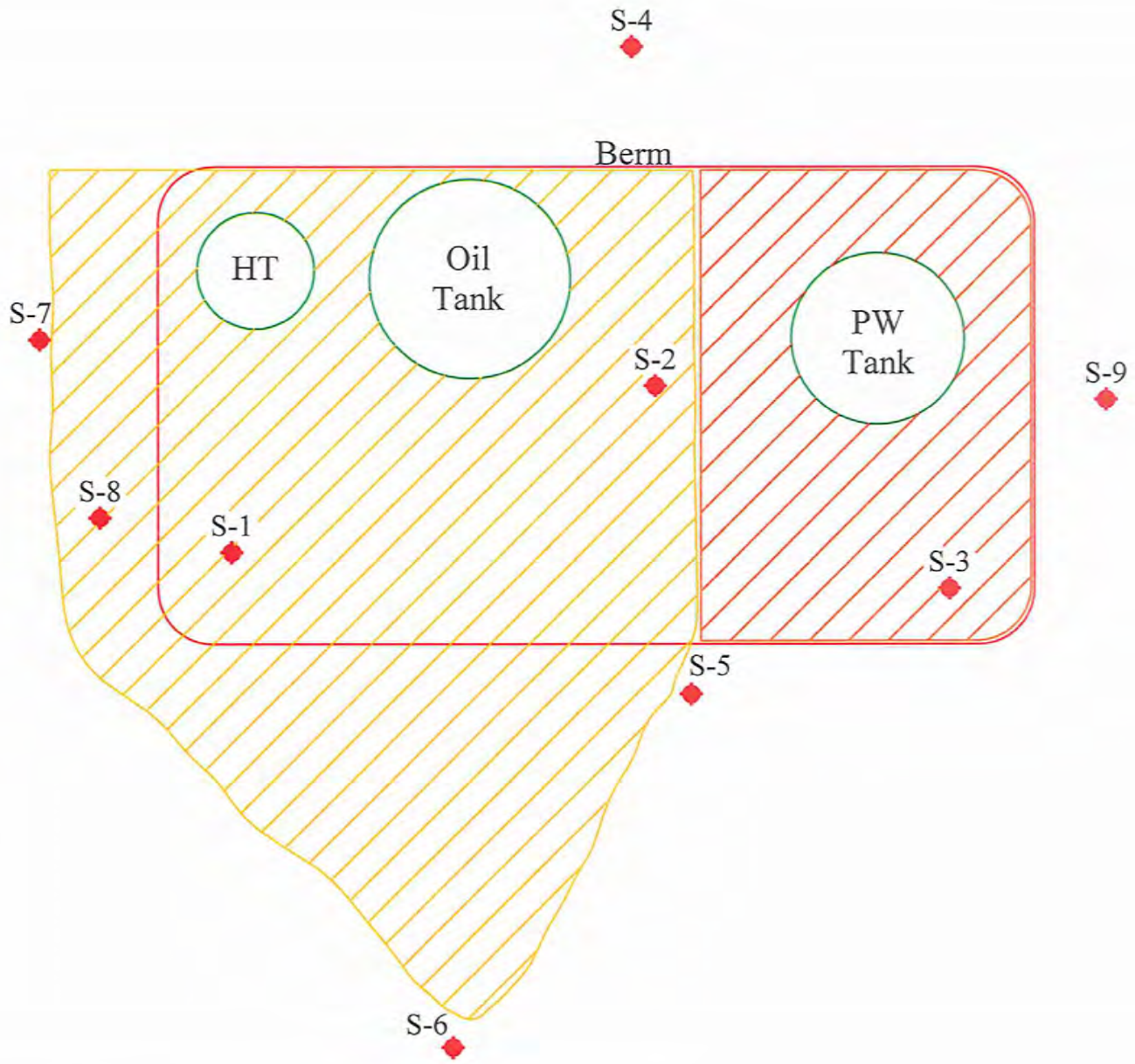
David J. Adkins
District Manager

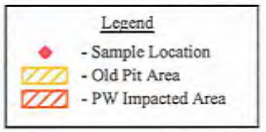
Attachments

Appendix I	Site Plan
Appendix II	Groundwater Data
Appendix III	Initial C-141
Appendix IV	Laboratory Results

APPENDIX I

SITE PLAN



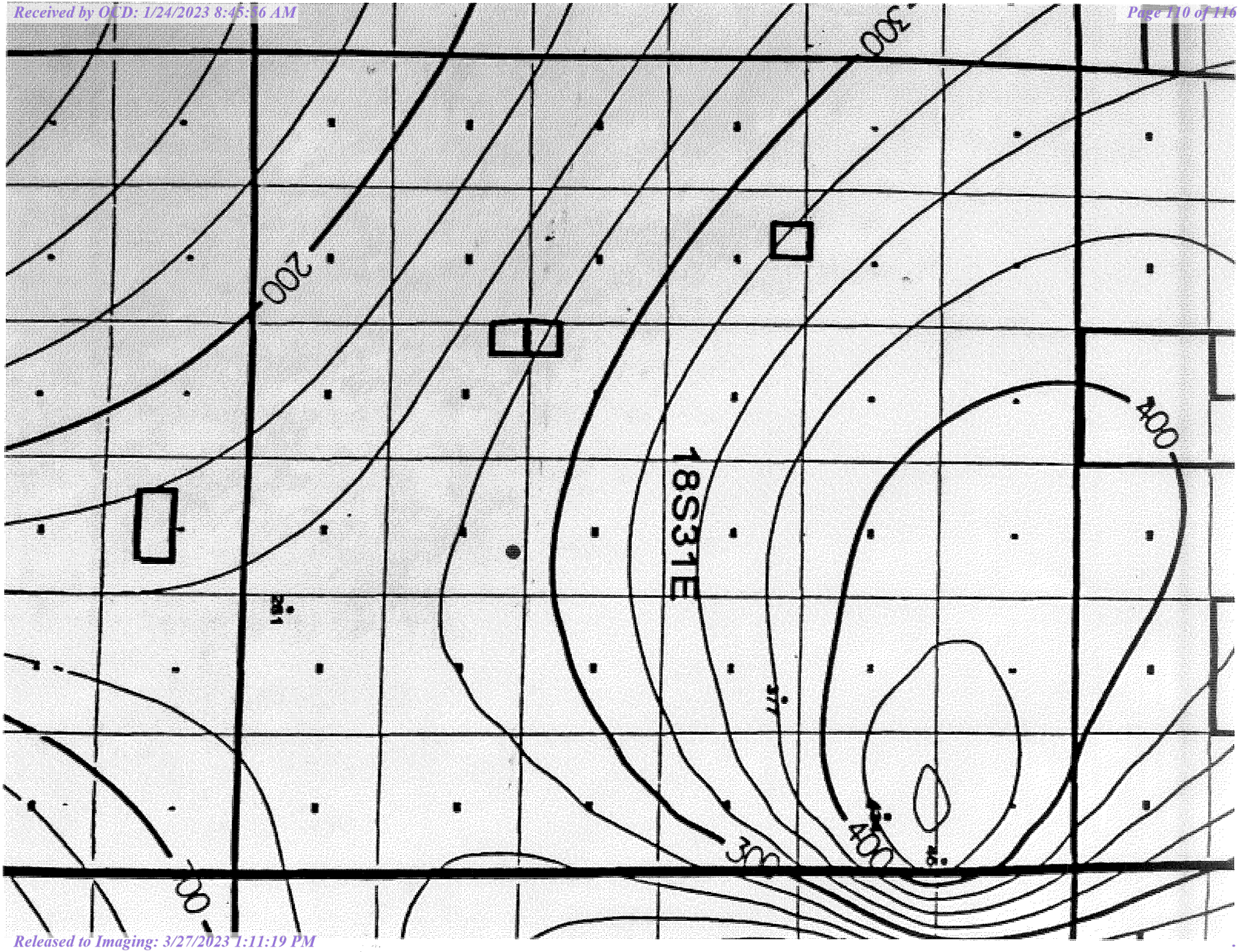


Date:	02/19/2016
Scale:	NTS
Drawn By:	TJS

Scottsdale Fed #1 Battery
Judah Oil, LLC
Eddy County, New Mexico
Figure 1 - Site Plan

APPENDIX II

GROUNDWATER DATA


300
200
18S31E
400
300
400
200

APPENDIX III

INITIAL C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1604236407

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Judah Oil, LLC 245873	Contact James B Campanella
Address P.O. Box 568, Artesia NM 88211-0568	Telephone No. 575-748-4730
Facility Name Scottdale Federal	Facility Type Oil gathering

Surface Owner BLM	Mineral Owner BLM	API No. 30-015-25005

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	27	18S	31E					Eddy

Latitude 32.432877N Longitude 103.512230W

NATURE OF RELEASE

Type of Release Oi and Produced Water	Volume of Release 3 oil/20 water	Volume Recovered 15 water
Source of Release Open top water tank	Date and Hour of Occurrence 11-25-2015	Date and Hour of Discovery 11-26-2016
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour 12 -14-2015 8:00 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 09 2016
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Describe Cause of Problem and Remedial Action Taken.*
Water Hauling Company hauled wrong tank battery. Called water truck and picked up standing fluid.

Describe Area Affected and Cleanup Action Taken.*

Unlined tank containment. Taking core samples to determine extent of contamination. Will submit remediation plan once core sample data is received and assessed. No ground water from surface to 300'

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:

Printed Name: James B Campanella

Title: Member/Manager

E-mail Address: judahoil@yahoo.com

Date: February 8, 2016 Phone: 575-748-4730

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By

Approval Date: 2/11/16 Expiration Date: N/A

Conditions of Approval: Attached ☐

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 3/12/16

2RP-3543

* Attach Additional Sheets If Necessary

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-3543
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: James B Campanella Title: Member / Manager

Signature: Date: 8-6-2020

email: jbc@judahoil.com Telephone: 575-748-4230

OCD Only

Received by: Jocelyn Harimon Date: 01/25/2023

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-3543
Facility ID	
Application ID	

(other than reclamation upon facility shut-down

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: James B Campanella Title: Member / Manager

Signature: [signature] Date: 8-6-2020

email: jbc@judahoil.com Telephone: 575-748-4230

OCD Only

Received by: Jocelyn Harimon Date: 01/25/2023

☐ 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	
District RP	2RP-3543
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: James B Campanella Title: Member / Manager

Signature: Date: 8-6-2020

email: jbc@judahoil.com Telephone: 575-748-4230

OCD Only

Received by: Jocelyn Harimon Date: 01/25/2023

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

Closure Approved by: Date:

Printed Name: Title:

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 170560

CONDITIONS

Operator: JUDAH OIL LLC PO Box 568 Artesia, NM 88211	OGRID: 245872
	Action Number: 170560
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	3/27/2023