



## **REMEDIATION PLAN**

**Ross Ranch 22 Battery**

**(Closest Well: Ross Ranch 22 Well #002)**

---

**API NO. 30-015-27458**

**INCIDENT ID: NRH2002854238**

**DOR: 12/12/2019**

**U/L E, SECTION 22, TOWNSHIP 19S, RANGE 25E**

**EDDY COUNTY, NEW MEXICO**

---



**#7 COMPRESS ROAD  
ARTESIA, NM 88210**



September 30, 2020

State of New Mexico Energy Minerals and Natural Resources Department  
Oil Conservation Division – District II  
C/O Mike Bratcher, Robert Hamlet and Victoria Venegas  
811 S. First Street  
Artesia, NM 88210

Spur Energy Partners  
C/O Braidy Moulder  
919 Milam Street Suite 2475  
Houston, TX 77002

**Subject: Remediation Plan**  
**Ross Ranch 22 Battery**  
**Date of Release: December 12, 2019**  
**API No. 30-015-27458 (Ross Ranch 22 Well #002)**  
**U/L E, Section 22, Township 19 South, Range 25 East**

To Whom it May Concern:

Spur Energy Partners has retained ESS (Energy Staffing and Services), Environmental & Regulatory Division to address the environmental compliances needs concerning the release detailed herein. Below you will find site specific information concerning the delineation process that has taken place at the Ross Ranch 22 Battery

#### **SITE BACKGROUND**

The site is located in Eddy County, New Mexico, just east of Highway 285 south of Artesia, New Mexico. The incident occurred on December 12, 2019 due to a waterline that busted off of the FWKO due to corrosion. The line was immediately isolated and the leak was stopped and repaired. Approximately, 1bbl of crude oil and 20bbls of produced water was released. A vacuum truck was immediately dispatched to location to recover approximately 1bbls of crude oil and 19bbls of produced water from surface of the ground. The recovered fluid was then transported to a disposal.

The visually affected area of impacted soil is approximately 11,959 sq. ft., which was found inside the location pad, no fluid ran out to the pasture area.

### GENERAL SITE CHARACTERISTICS

ESS has conducted an extended groundwater study of the area and it has been determined that according to the New Mexico Office of the State Engineer, the depth of ground water is estimated located at 60' bgs (below ground surface). The closest well to the site is labelled RA 00304. Please see the list below for ground water wells found within a 1000' from the impacted area:

RA 00304: 308' (0.05) miles from the site, drilled in 1954 with groundwater of 60' bgs  
 RA 08986: 342' (0.06) miles from the site, drilled in 1995 with groundwater of 220' bgs  
 RA 02909: 823' (0.15) miles from the site, drilled in 1952 with groundwater of 130' bgs

All three wells are found to be down gradient of the Ross Ranch 22 Battery. Please see the attached groundwater map for well placements.

Using the Table I, Closure Criteria for Soils Impacted by a Release Dated 8/14/2018, this site falls under the site ranking of greater than 100' bgs as RA 00304 is outside the 25-year standard. Therefore, RA 08986 will be used to determine groundwater depth at this facility. RA 08986 is within the 25-year requirement and within a ½ mile. The Ross Ranch 22 Tank Battery release detailed herein was sampled using the following criteria:

Closure Criteria for Soil NMAC 19.15.29			
Depth	Constituent	Method	Limit
>100 feet	Chloride	EPA 300.0 OR SM4500 CL B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method	2,500 mg/kg
	GRO + DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

### KARST INFORMATION

After conducting the karst mapping investigation, it is determined that the Ross Ranch 22 Battery is located in the medium karst area indicated in blue on the attached Karst Map. With this determination the Closure Criteria for Soils Impacted by a Release Dated 8/14/2018, the site falls under the site ranking of less than 50' depth to ground water. The Ross Ranch 22 Tank Battery release detailed herein was sampled using the following criteria:

DGW	Constituent	Method	Limit
≤ 50'	Chloride	EPA 300.0 OR SM4500 CLB	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 METHOD 8015M	100 mg/kg
	GRO + DRO	EPA SW-846 METHOD 8015M	50 mg/kg
	BTEX	EPA SW-846 METHOD 8021B OR 8260B	10 mg/kg
	Benzene	EPA SW-846 METHOD 8021B OR 8260B	10 mg/kg

### DISTANCE TO NEAREST POTABLE WATER WELL

Based on the review of the NMOSE Database, registered potable water wells are present within ½ of the Ross Ranch 22 Battery. During the OSE POD search the three water wells listed above are found as well. RA-02909 shows to be the closed well and within ½ a mile from the site not the RA-003304.

RA-02909 shows to be 0.26 miles (1372.8') from the site (domestic Ross Ranch)

RA-08986 shows to be 0.56 miles (2956.8') from the site (developed for natural resources-Yates)

RA-03304 shows to be .9 miles (4752') from the site (domestic SW Stockton)

With the information provided, it is safe to say that groundwater will not be a factor for this site. Please see the OSE POD Map and information found above to be attached to this report. With the delineation and closure sample criteria being the most stringent due to the karst determination and water well data within the 25 years and ½ a mile protocol, the data provided supports the delineation process for this site.

### DISTANCE TO NEAREST SURFACE WATER

Brantley Lake near Lakewood is the closest surface water to the Ross Ranch 22 Battery and is found to be approximately 6.26 miles southeast of the site. It is registered under USGS as 08399500 Pecos River on the USGS. Gov website.

### SOIL CHARACTERISTICS

According to the USDA Resource Conservation Service, the soil survey indicates the following (please see the soil map and information attached):

100% Reagan-Upton Association with 0-9 percent slopes



## SOIL REMEDIAL ACTION LEVELS

ESS proposes to remediate this crude oil and produced water impacted soil for the Skelly Unit #940 Battery release consistent with the remediation/abatement goals and objectives set forth in the NMOCD (New Mexico Oil Conservation Division) Closure Criteria for Soils Impacted by a Release, dated August 14, 2018 and by BLM Guidelines.

The guidance document provides direction for Spur Energy's initial response actions, site assessment, sampling procedures conducted by ESS Staff, we would like to present to you the following information concerning the delineation process for the release detailed herein.

### Soil Sampling Procedures

Soil sampling for laboratory analysis was conducted according to the NMOCD – approved industry standards. Accepted NMOCD soil sampling procedures and laboratory analytical methods are as follows:

- Collect clean samples in air tight glass jars supplied by the laboratory to conduct the analysis
- Each sample jar was labelled with site and sample information
- Samples were kept in and stored in a cool place and packed on ice
- Promptly ship sample to the lab for analysis following the chain of custody procedures

The following lab analysis method was used for each bottom hole and side wall sample submitted to Envirotech Analytical Laboratory:

#### Volatile Organics by EPA 8021B

- Benzene, Toluene, Ethylbenzene, p.m. Xylene, o-Xylene and Total Xylenes

#### Nonhalogenated Organics by EPA 8015D – GRO

- Gasoline Range Organics (C6-C10)

#### Nonhalogenated Organics by EPA 8015D – DRO/ORO

- Diesel Range Organics (C10-C28)
- Oil Range Organics (C28-C40)

#### Anions by EPA 300.0/9056A

- Chloride

**DELINEATION INFORMATION**

On or around March 20<sup>th</sup> of 2020, Hungry Horse, LLC personnel-initiated the delineation of the site. Surface soil samples were collected and field tested for chloride and BTEX/TPH. The Titration Method was used to sample for chlorides and a PID Meter was used to indicate concentrations of TPH/BTEX found in the soil. Below you will find the Sample Data for the surface samples obtained from the impacted area:

SP ID	DEPTH	TITR	PID
SP1	SURF	1200	TPH
SP2	SURF	880	TPH
SP3	SURF	400	TPH
SP4	SURF	400	TPH
SP5	SURF	3280	TPH
SP6	SURF	1680	TPH
SP7	SURF	18,800	TPH
SP8	SURF	3200	TPH
SP9	SURF	1680	TPH
SP10	SURF	760	TPH
SP11	SURF	760	TPH
SP12	SURF	3250	TPH

The 200 sq. ft. sampling procedure was not used at this site due to the production equipment, surface and buried production lines in the area of impact.

After surface samples were tested in the field, crews began to fully delineate the site. Field samples were taken using a hand auger due to lines and production equipment in the impacted area, these samples were taken in 1' intervals. Both Hydrocarbon and Chloride contaminated soil was found during the delineation process. Rock was encountered in the area SP2 and further sampling could not be conducted. By having to use a hand auger to delineate with, the depth of 14'bgs was the deepest depth tested. Sample points that still had levels above the regulated concentrations for this site that could not be reached below the 12' and 14'bgs depth were, SP3 @ 14'bgs, SP8 @ 12'bgs and SP11 @ 12'bgs. No equipment could be used due to production lines and production equipment being in the area of impact. H2S was also a factor at this facility, therefore safety precautions were used to not cause a spark of any kind. Samples were jarred and sent to Envirotech Laboratories for confirmation. Below you will find bottom hole sample depths, with field data as well as lab analysis. (Please also see sample data log found inside this report for details.)

SP ID	DEPTH	TITR	L-CHL	L-BTEX	L-GRO	L- DRO	L-MRO	TTL TPH
SP1	7'	400	1000	ND	ND	30.1	ND	30.1
SP2	4'	800	1430	ND	ND	192	89.7	281.7
SP3	14'	80	83.6	0.101	ND	639	306	945
SP4	5'	320	1250	ND	ND	ND	ND	ND
SP5	8'	400	91	ND	ND	71.2	ND	71.2
SP6	7'	240	306	ND	ND	51.6	ND	51.6
SP7	4'	400	716	ND	ND	ND	ND	ND
SP8	12'	80	157	ND	ND	80.8	ND	80.8
SP9	12'	160	39.7	ND	ND	52.1	ND	ND
SP10	4'	240	52.3	ND	ND	44	ND	44
SP11	12'	80	213	0.733	ND	402	178	580
SP12	12'	240	410	ND	ND	39.2	ND	39.2

The site was then fully delineated for horizontal extent. The horizontal delineation was sampled in 1' intervals until field samples indicated that we had reached the end of the horizontal delineation investigation. In the area of SW1, several buried lines were found therefore testing ceased. The concentrations for TPH was extremely higher than the levels needed for closure for this site. Additional sidewall testing will be conducted during the remediation process. During the sampling event, the area had large rain storms which prohibited any further testing outside the lines that were buried. Sidewall samples were then jarred and delivered to Envirotech for confirmation. Below you will find the delineation and lab confirmation information (please also see sample data log attached to this report):

SP ID	DEPTH	TITR	PID	L-CHL	L-BTEX	L-GRO	L- DRO	L-MRO	TTL TPH
SW 1	SURF	560	TPH						
	1'	480	TPH						
	2'	400	TPH	1070	ND	ND	11,900	8510	20,410
SW 2	SURF	360	TPH						
	1'	240	TPH						
	2'	240	TPH	ND	ND	ND	641	429	1070
SW 3	SURF	560	TPH						
	1'	480	TPH						
	2'	480		331	ND	ND	125	203	328
SW 4	SURF	400	TPH						
	1'	160	TPH						
	2'	80		ND	ND	ND	147	91.2	238.2

SW 5	SURF	320	TPH						
	1'	160	TPH						
	2'	80		ND	ND	ND	326	422	748
SW 6	SURF	400	TPH						
	1'	320	TPH						
	2'	240		ND	ND	ND	96.2	103	199.2

## CONCLUSION, REMEDIATION WORK PLAN AND DEFERRAL REQUEST

Numerous restrictions were specified above such as buried lines, surface lines and production equipment that halted full delineation of the site. During delineation, we were unable to reach the chloride levels needed for full delineation of the site. The major issues found during the delineation process, were due to hydrocarbon impact. As you can see, with the active production at this site, numerous surface and buried lines, and the 19 separators in the area of impact, full remediation cannot be conducted until the site has been abandoned. At this time, Spur Energy as decided to remove the heater treaters to conduct the following remediation procedure.

- The entire impacted area of 11,959 sq. ft., will be excavated to 5'bgs
- Final closure samples will be obtained, with giving the OCD 48 hours' notice to attend the sampling event, the area of SW1 will be expanded when horizontal sampling can continue when production equipment is removed.
- Due to the rocky soil which was encountered during the delineation process, the bottom of the excavation will be padded with 1' of topsoil
- A 30mil polyurethane liner will be placed, then covered with 1' of topsoil
- The remaining 3' of fill will be backfilled with caliche and contoured to meet the existing pad area

Groundwater will not be a concerning factor at this site. Once the above remediation plan is completed, then Spur Energy will begin reconstruction of the facility.

On behalf of Spur Energy Partners, the remainder of the contamination will be fully delineated and remediated by rule, once the site has been abandoned. A final closure report along with a site deferral will be submitted to the NMOCD for this release herein, shortly after the remediation is completed. This remediation will be done immediately upon approval of this workplan and production will commence after reconstruction has taken place.

Thank you for allowing ESS to assist you in this matter. Please contact me if you have any issues or concerns. My contact information is listed below.

Sincerely,



Natalie Gladden

Director of Environmental and Regulatory

ESS

#7 Compress Road

Artesia, NM 88210

Cell: (575) 390-6397

Email: [natalie@energystaffingllc.com](mailto:natalie@energystaffingllc.com)

Attachments:

Initial C141

Ground Water Data and Map

OSE POD Map

Karst Map

Site Map

Soil Map and Information

Sample Data Log

Lab Analysis

Sample Map with GPS

Site Photos

C141 – Remediation/Deferral

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

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	NRH2002854238
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party <b>SPUR ENERGY PARTNERS</b>	OGRID <b>328947</b>
Contact Name <b>KENNY KIDD</b>	Contact Telephone <b>575-616-5400</b>
Contact email <b>kkidd@spurepllc.com</b>	Incident # <i>(assigned by OCD)</i>
Contact mailing address <b>919 MILAM STREET SUITE 2475 HOUSTON TEXAS 77002</b>	

### Location of Release Source

Latitude **32.6482239**

Longitude **-104.4789658**  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name <b>ROSS RANCH 22 BTY (CLOSEST WELL #002)</b>	Site Type <b>OIL &amp; GAS</b>
Date Release Discovered <b>12-12-19</b>	API# <b>30-015-27458</b>

Unit Letter	Section	Township	Range	County
<b>E</b>	<b>22</b>	<b>19S</b>	<b>25E</b>	<b>EDDY</b>

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) <b>1BBL</b>	Volume Recovered (bbls) <b>1BBL</b>
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) <b>20BBLS</b>	Volume Recovered (bbls) <b>19BBLS</b>
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

**WATER LINE BUSTED OFF OF THE FWKO.**







# New Mexico Office of the State Engineer

## Wells with Well Log Information

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

(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	Code	POD		Source	q q q				X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number			
		Subbasin	County		64	16	4	Sec											Tws	Rng	
<a href="#">RA 03304</a>		RA	ED	Shallow	1	27	19S	25E	549081	3610973*	<input type="checkbox"/>	308	10/13/1954	10/15/1954	11/22/1954	130	60	BEATTY, J.R.	62		
<a href="#">RA 08986</a>		RA	ED	Shallow	1	3	3	22	19S	25E	548825	3611507	<input type="checkbox"/>	342	05/15/1995	05/15/1995	05/17/1995	320	220	GLENN'S WATER WELL SERVICE	421
<a href="#">RA 02909</a>		RA	ED	Shallow	1	3	22	19S	25E	548864	3611989*	<input type="checkbox"/>	823	06/26/1952	07/05/1952	08/11/1952	188	130	A.F. SMITH		

Record Count: 3

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 548840.11

**Northing (Y):** 3611165.59

**Radius:** 1000

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/30/20 7:35 AM

WELLS WITH WELL LOG INFORMATION





# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	RA 03304				1	27	19S 25E	549081	3610973*

<b>Driller License:</b> 62	<b>Driller Company:</b> BEATTY, J.R.	
<b>Driller Name:</b> BEATTY, J.R.		
<b>Drill Start Date:</b> 10/13/1954	<b>Drill Finish Date:</b> 10/15/1954	<b>Plug Date:</b>
<b>Log File Date:</b> 11/22/1954	<b>PCW Rcv Date:</b>	<b>Source:</b> Shallow
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>	<b>Estimated Yield:</b>
<b>Casing Size:</b> 7.00	<b>Depth Well:</b> 130 feet	<b>Depth Water:</b> 60 feet

Water Bearing Stratifications:	Top	Bottom	Description
	90	100	Sandstone/Gravel/Conglomerate
	103	118	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	90	118

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/6/19 10:28 AM

Page 1 of 1

POD SUMMARY - RA 03304




# New Mexico Office of the State Engineer

## Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

<b>Well Tag</b>	<b>POD Number</b>	<b>Q64 Q16 Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
RA 08986		1 3 3	22	19S	25E	548825	3611507 

<b>Driller License:</b>	421	<b>Driller Company:</b>	GLENN'S WATER WELL SERVICE
<b>Driller Name:</b>	GLENN'S WATER WELL SERVICE		
<b>Drill Start Date:</b>	05/15/1995	<b>Drill Finish Date:</b>	05/15/1995
<b>Log File Date:</b>	05/17/1995	<b>PCW Rcv Date:</b>	
<b>Pump Type:</b>		<b>Source:</b>	Shallow
<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b>	
<b>Casing Size:</b>		<b>Depth Well:</b>	320 feet
		<b>Depth Water:</b>	220 feet

<b>Meter Number:</b>	4314	<b>Meter Make:</b>	HALLIBURTON
<b>Meter Serial Number:</b>	2ST23206	<b>Meter Multiplier:</b>	1.0000
<b>Number of Dials:</b>	6	<b>Meter Type:</b>	Diversion
<b>Unit of Measure:</b>	Barrels 42 gal.	<b>Return Flow Percent:</b>	
<b>Usage Multiplier:</b>		<b>Reading Frequency:</b>	Quarterly (No Reading Expected)

### Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount
01/01/2001	2000	160500	A	PRT		0
03/01/2001	2000	180000	A	RPT		2.513
12/31/2001	2001	180960	A	RPT		0.124
04/01/2002	2002	180960	A	RPT		0
06/30/2002	2002	180960	A	RPT		0
09/30/2002	2002	180960	A	RPT		0
04/01/2003	2003	180960	A	RPT		0
08/15/2003	2003	180960	A	tw		0
09/30/2003	2003	180960	A	tw		0
12/31/2003	2003	180960	A	tw		0
07/01/2004	2004	180960	A	sj		0
10/01/2004	2004	180960	A	sj		0
12/31/2004	2004	180960	A	sj		0
09/30/2005	2005	180960	A	RPT		0

<b>**YTD Meter Amounts:</b>	<b>Year</b>	<b>Amount</b>
	2000	2.513
	2001	0.124
	2002	0
	2003	0

**\*\*YTD Meter Amounts: Year Amount**

2004	0
2005	0

<b>Meter Number:</b>	8259	<b>Meter Make:</b>	HALIBURTON
<b>Meter Serial Number:</b>	2 ST 23206	<b>Meter Multiplier:</b>	1.0000
<b>Number of Dials:</b>	6	<b>Meter Type:</b>	Diversion
<b>Unit of Measure:</b>	Barrels 42 gal.	<b>Return Flow Percent:</b>	
<b>Usage Multiplier:</b>	0.00	<b>Reading Frequency:</b>	Quarterly (No Reading Expected)

-----

**Meter Readings (in Acre-Feet)**

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount
10/01/2004	2004	180960	A	sj		0

**\*\*YTD Meter Amounts: Year Amount**

2004	0
------	---



# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA 02909		1	3	22	19S	25E	548864	3611989*	

**Driller License:****Driller Company:****Driller Name:** A.F. SMITH**Drill Start Date:** 06/26/1952**Drill Finish Date:** 07/05/1952**Plug Date:****Log File Date:** 08/11/1952**PCW Rcv Date:****Source:** Shallow**Pump Type:****Pipe Discharge Size:****Estimated Yield:****Casing Size:** 8.63**Depth Well:** 188 feet**Depth Water:** 130 feet**Water Bearing Stratifications:****Top Bottom Description**

120 130 Sandstone/Gravel/Conglomerate

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/6/19 10:30 AM

Page 1 of 1

POD SUMMARY - RA 02909



# SPUR ENERGY PARTNERS

ROSS RANCH 22 BATTERY  
GROUND WATER MAP

## Legend



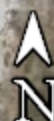
ROSS RANCH 22 BATTERY

ROSS RANCH 22 BATTERY

RA 02909 - 420' FROM SITE - 130' DGW

RA 08986 - 903' FROM SITE - 220' DGW

RA 03304 - 1453' FROM SITE - 60' DGW

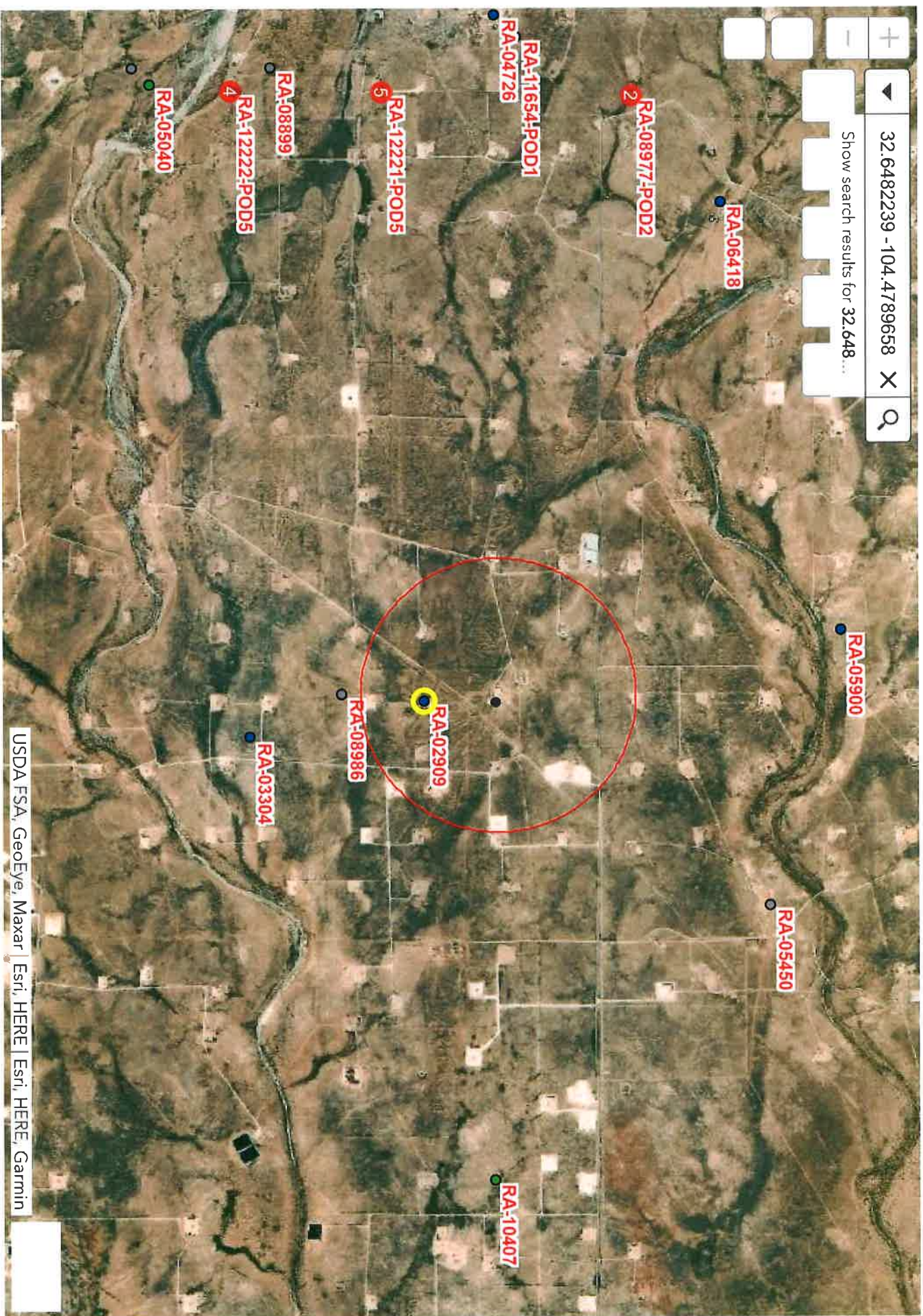




USE PUD Locations

Points of Diversion visible at 1:1Y, UUU with 1, UUU features per view

water rights look up



32.6482239 -104.4789658 X

Show search results for 32.648...



1:36111

0.6mi

-104.47032650 Degrees

USDA FSA, GeoEye, Maxar | Esri, HERE | Esri, HERE, Garmin



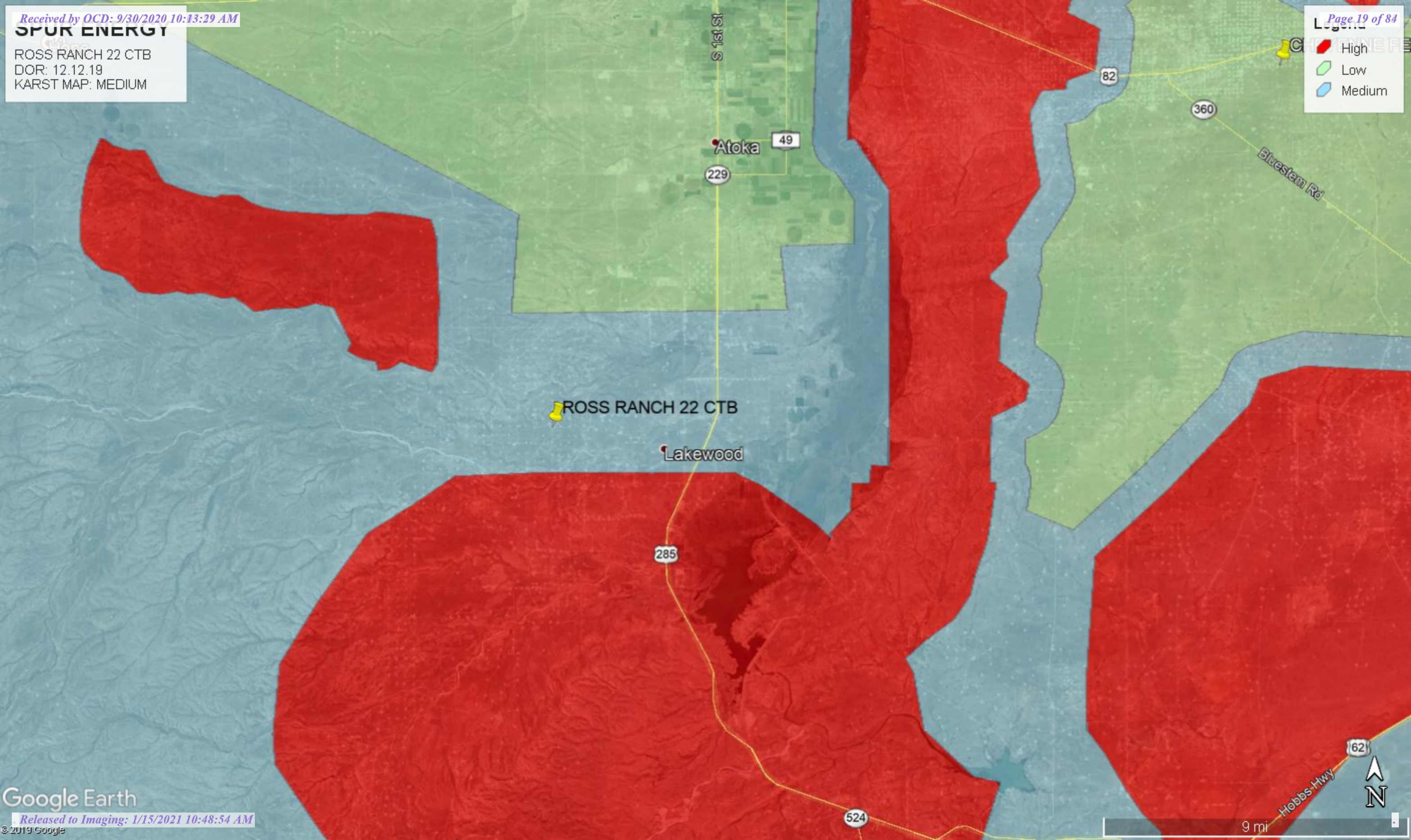
SPUR ENERGY

ROSS RANCH 22 CTB  
DOR: 12.12.19  
KARST MAP: MEDIUM

Page 19 of 84

Legend

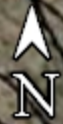
- High
- Low
- Medium





SPUR

ROSS RANCH 22 BATTERY



100 ft



Soil Map—Eddy Area, New Mexico  
(ROSS RANCH 22 BATTERY)

Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

9/30/2020  
Page 1 of 3

Soil Map—Eddy Area, New Mexico  
(ROSS RANCH 22 BATTERY)

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 16, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2020—Feb 28, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Soil Map—Eddy Area, New Mexico

ROSS RANCH 22 BATTERY

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RE	Reagan-Upton association, 0 to 9 percent slopes	7.1	100.0%
Totals for Area of Interest		7.1	100.0%



COMPANY - SPUR ENERGY PARTNERS LOCATION NAME ROSS RANCH 22 CTB RELEASE DATE 12/12/19

SP ID	DEPTH	TITR	PID	L-CHL	L-BTEX	L-GRO	L- DRO	L-MRO	TTL TPH	Soil Type	NOTES
SP1	SURF	1200	TPH								
	1'	1360	TPH								
	2'	2400	TPH								
	3'	2000	TPH								
	4'	1200	TPH								
	5'	1200	TPH								
	6'	480									
	7'	400		1000	ND	ND	30.1	ND	30.1		
SP2	SURF	880	TPH								
	1'	800	TPH								
	2'	800	TPH								
	3'	800									
	4'	800		1430	ND	ND	192	89.7	281.7		TOO ROCKY TO DIG FURTHER
SP3	SURF	400	TPH								
	1'	800	TPH								
	2'	400	TPH								
	3'	400	TPH								
	4'	160	TPH								
	5'	1680	TPH								
	6'	2400	TPH								
	7'	2000	TPH								
	8'	560	TPH								
	9'	400	TPH								
	10'	400	TPH								
	11'	320	TPH								
	12'	160	TPH								
	13'	80									
	14'	80		83.6	0.101	ND	639	306	945		COULDN'T GO DEEPER W/AUGER
SP4	SURF	400	TPH								

	1'	3600	TPH								
	2'	2400	TPH								
	3'	800	TPH								
	4'	560									
	5'	320		1250	ND	ND	ND	ND	ND		
SP5	SURF	3280	TPH								
	1'	4400	TPH								
	2'	2480	TPH								
	3'	1680	TPH								
	4'	1200	TPH								
	5'	1200	TPH								
	6'	800	TPH								
	7'	400									
	8'	400		91	ND	ND	71.2	ND	71.2		
SP6	SURF	1680	TPH								
	1'	800	TPH								
	2'	800	TPH								
	3'	800	TPH								
	4'	800	TPH								
	5'	680	TPH								
	6'	480									
	7'	240		306	ND	ND	51.6	ND	51.6		
SP7	SURF	18,800	TPH								
	1'	760	TPH								
	2'	400	TPH								
	3'	400									
	4'	400		716	ND	ND	ND	ND	ND		
SP8	SURF	3200	TPH								
	1'	880	TPH								
	2'	560	TPH								

	3'	420	TPH								
	4'	240	TPH								
	5'	160	TPH								
	6'	80	TPH								
	7'	80	TPH								
	8'	80	TPH								
	9'	80	TPH								
	10'	80	TPH								
	11'	80									
	12'	80		157	ND	ND	80.8	ND	80.8		CAN'T GO DEEPER
SP9	SURF	1680	TPH								
	1'	800	TPH								
	2'	760	TPH								
	3'	560	TPH								
	4'	240	TPH								
	5'	160	TPH								
	6'	160	TPH								
	7'	160	TPH								
	8'	160	TPH								
	9'	160	TPH								
	10'	160	TPH								
	11'	160									
	12'	160		39.7	ND	ND	52.1	ND	ND		
SP10	SURF	760	TPH								
	1'	400	TPH								
	2'	360	TPH								
	3'	240									
	4'	240		52.3	ND	ND	44	ND	44		
SP11	SURF	760	TPH								
	1'	1200	TPH								
	2'	1280	TPH								

	3'	960	TPH								
	4'	760	TPH								
	5'	480	TPH								
	6'	480	TPH								
	7'	400	TPH								
	8'	360	TPH								
	9'	360	TPH								
	10'	320	TPH								
	11'	160	TPH								
	12'	80		213	0.733	ND	402	178	580		Can't Go Deeper
SP12	SURF	3250	TPH								
	1'	2080	TPH								
	2'	4080	TPH								
	3'	880	TPH								
	4'	4000	TPH								
	5'	2960	TPH								
	6'	2000	TPH								
	7'	1680	TPH								
	8'	1480	TPH								
	9'	1200	TPH								
	10'	800	TPH								
	11'	7520									
	12'	240		410	ND	ND	39.2	ND	39.2		
SW 1	SURF	560	TPH								
	1'	480	TPH								
	2'	400	TPH	1070	ND	ND	11,900	8510	20,410		Buried Lines in Area
SW 2	SURF	360	TPH								
	1'	240	TPH								
	2'	240	TPH	ND	ND	ND	641	429	1070		
SW 3	SURF	560	TPH								

	1'	480	TPH								
	2'	480		331	ND	ND	125	203	328		
SW 4	SURF	400	TPH								
	1'	160	TPH								
	2'	80		ND	ND	ND	147	91.2	238.2		
SW 5	SURF	320	TPH								
	1'	160	TPH								
	2'	80		ND	ND	ND	326	422	748		
SW 6	SURF	400	TPH								
	1'	320	TPH								
	2'	240		ND	ND	ND	96.2	103	199.2		





## Analytical Report

### Report Summary

Client: Spur

Samples Received: 3/6/2020

Job Number: 19054-0003

Work Order: P003024

Project Name/Location: Ross Ranch Battery

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Walter Hinchman', is written over a light blue rectangular background.

Date: 3/10/20

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.  
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.  
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.  
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.



Spur	Project Name:	Ross Ranch Battery	<b>Reported:</b> 03/10/20 15:39
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sp3-14	P003024-01A	Soil	03/02/20	03/06/20	Glass Jar, 4 oz.
Sp1-7	P003024-02A	Soil	03/03/20	03/06/20	Glass Jar, 4 oz.
Sp2-4	P003024-03A	Soil	03/03/20	03/06/20	Glass Jar, 4 oz.
Sp4-5	P003024-04A	Soil	03/03/20	03/06/20	Glass Jar, 4 oz.
Sp5-8	P003024-05A	Soil	03/03/20	03/06/20	Glass Jar, 4 oz.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	<b>Reported:</b> 03/10/20 15:39
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	

**Sp3-14**  
**P003024-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
p,m-Xylene	<b>0.0692</b>	0.0500	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
o-Xylene	<b>0.0320</b>	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
Total Xylenes	<b>0.101</b>	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>107 %</i>		<i>50-150</i>	<i>2010030</i>	<i>03/06/20</i>	<i>03/06/20</i>	<i>EPA 8021B</i>	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	<b>639</b>	50.0	mg/kg	2	2010018	03/06/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	<b>306</b>	100	mg/kg	2	2010018	03/06/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		<i>113 %</i>		<i>50-200</i>	<i>2010018</i>	<i>03/06/20</i>	<i>03/10/20</i>	<i>EPA 8015D</i>	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		<i>94.2 %</i>		<i>50-150</i>	<i>2010030</i>	<i>03/06/20</i>	<i>03/06/20</i>	<i>EPA 8015D</i>	

**Anions by 300.0/9056A**

Chloride	<b>83.6</b>	20.0	mg/kg	1	2010036	03/06/20	03/09/20	EPA 300.0/9056A	
----------	-------------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/10/20 15:39

**Sp1-7**  
**P003024-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	2010030	03/06/20	03/06/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	30.1	25.0	mg/kg	1	2010018	03/06/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2010018	03/06/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		85.4 %		50-200	2010018	03/06/20	03/10/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2010030	03/06/20	03/06/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.2 %		50-150	2010030	03/06/20	03/06/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	1000	20.0	mg/kg	1	2010036	03/06/20	03/09/20	EPA 300.0/9056A	
----------	------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/10/20 15:39

**Sp2-4**  
**P003024-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	2010030	03/06/20	03/07/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	192	25.0	mg/kg	1	2010018	03/06/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	89.7	50.0	mg/kg	1	2010018	03/06/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		84.9 %		50-200	2010018	03/06/20	03/10/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.5 %		50-150	2010030	03/06/20	03/07/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	1430	20.0	mg/kg	1	2010036	03/06/20	03/09/20	EPA 300.0/9056A	
----------	------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/10/20 15:39

**Sp4-5**  
**P003024-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		106 %		50-150	2010030	03/06/20	03/07/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2010018	03/06/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2010018	03/06/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		87.0 %		50-200	2010018	03/06/20	03/10/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.0 %		50-150	2010030	03/06/20	03/07/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	1250	20.0	mg/kg	1	2010036	03/06/20	03/09/20	EPA 300.0/9056A	
----------	------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	<b>Reported:</b> 03/10/20 15:39
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	

**Sp5-8**  
**P003024-05 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	2010030	03/06/20	03/07/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	71.2	25.0	mg/kg	1	2010018	03/06/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2010018	03/06/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		93.2 %		50-200	2010018	03/06/20	03/10/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2010030	03/06/20	03/07/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.8 %		50-150	2010030	03/06/20	03/07/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	921	20.0	mg/kg	1	2010036	03/06/20	03/09/20	EPA 300.0/9056A	
----------	-----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/10/20 15:39

## Volatile Organics by EPA 8021 - Quality Control

## Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

## Batch 2010030 - Purge and Trap EPA 5030A

## Blank (2010030-BLK1)

Prepared: 03/06/20 0 Analyzed: 03/06/20 1

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	8.32		"	8.00		104	50-150			

## LCS (2010030-BS1)

Prepared: 03/06/20 0 Analyzed: 03/06/20 1

Benzene	4.74	0.0250	mg/kg	5.00		94.7	70-130			
Toluene	4.74	0.0250	"	5.00		94.9	70-130			
Ethylbenzene	4.72	0.0250	"	5.00		94.5	70-130			
p,m-Xylene	9.45	0.0500	"	10.0		94.5	70-130			
o-Xylene	4.78	0.0250	"	5.00		95.5	70-130			
Total Xylenes	14.2	0.0250	"	15.0		94.9	0-200			
Surrogate: 4-Bromochlorobenzene-PID	8.56		"	8.00		107	50-150			

## Matrix Spike (2010030-MS1)

Source: P003020-01

Prepared: 03/06/20 0 Analyzed: 03/06/20 1

Benzene	4.44	0.0250	mg/kg	5.00	0.0901	86.9	54.3-133			
Toluene	5.15	0.0250	"	5.00	0.373	95.4	61.4-130			
Ethylbenzene	6.13	0.0250	"	5.00	1.08	101	61.4-133			
p,m-Xylene	15.9	0.0500	"	10.0	4.96	110	63.3-131			
o-Xylene	7.66	0.0250	"	5.00	1.97	114	63.3-131			
Total Xylenes	23.6	0.0250	"	15.0	6.93	111	0-200			
Surrogate: 4-Bromochlorobenzene-PID	9.53		"	8.00		119	50-150			

## Matrix Spike Dup (2010030-MSD1)

Source: P003020-01

Prepared: 03/06/20 0 Analyzed: 03/06/20 1

Benzene	4.50	0.0250	mg/kg	5.00	0.0901	88.2	54.3-133	1.45	20	
Toluene	5.29	0.0250	"	5.00	0.373	98.4	61.4-130	2.80	20	
Ethylbenzene	6.39	0.0250	"	5.00	1.08	106	61.4-133	4.14	20	
p,m-Xylene	17.0	0.0500	"	10.0	4.96	121	63.3-131	6.65	20	
o-Xylene	8.18	0.0250	"	5.00	1.97	124	63.3-131	6.58	20	
Total Xylenes	25.2	0.0250	"	15.0	6.93	122	0-200	6.63	200	
Surrogate: 4-Bromochlorobenzene-PID	9.53		"	8.00		119	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/10/20 15:39

### Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch 2010018 - DRO Extraction EPA 3570

##### Blank (2010018-BLK1)

Prepared: 03/04/20 1 Analyzed: 03/10/20 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	48.0		"	50.0		96.0	50-200			

##### LCS (2010018-BS1)

Prepared: 03/04/20 1 Analyzed: 03/10/20 1

Diesel Range Organics (C10-C28)	429	25.0	mg/kg	500		85.8	38-132			
Surrogate: n-Nonane	48.2		"	50.0		96.4	50-200			

##### Matrix Spike (2010018-MS1)

Source: P003016-01

Prepared: 03/04/20 1 Analyzed: 03/10/20 1

Diesel Range Organics (C10-C28)	1670	250	mg/kg	500	1060	122	38-132			
Surrogate: n-Nonane	55.1		"	50.0		110	50-200			

##### Matrix Spike Dup (2010018-MSD1)

Source: P003016-01

Prepared: 03/04/20 1 Analyzed: 03/10/20 1

Diesel Range Organics (C10-C28)	1610	250	mg/kg	500	1060	111	38-132	3.43	20	
Surrogate: n-Nonane	54.9		"	50.0		110	50-200			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/10/20 15:39

## Nonhalogenated Organics by 8015 - GRO - Quality Control

## Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

## Batch 2010030 - Purge and Trap EPA 5030A

## Blank (2010030-BLK1)

Prepared: 03/06/20 0 Analyzed: 03/06/20 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.57		"	8.00		94.6	50-150			

## LCS (2010030-BS2)

Prepared: 03/06/20 0 Analyzed: 03/06/20 1

Gasoline Range Organics (C6-C10)	47.3	20.0	mg/kg	50.0		94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.58		"	8.00		94.7	50-150			

## Matrix Spike (2010030-MS2)

Source: P003020-01

Prepared: 03/06/20 0 Analyzed: 03/06/20 1

Gasoline Range Organics (C6-C10)	215	20.0	mg/kg	50.0	121	189	70-130			M2
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.85		"	8.00		111	50-150			

## Matrix Spike Dup (2010030-MSD2)

Source: P003020-01

Prepared: 03/06/20 0 Analyzed: 03/06/20 2

Gasoline Range Organics (C6-C10)	234	20.0	mg/kg	50.0	121	227	70-130	8.30	20	M2
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.88		"	8.00		111	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/10/20 15:39

**Anions by 300.0/9056A - Quality Control****Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2010036 - Anion Extraction EPA 300.0/9056A****Blank (2010036-BLK1)**

Prepared: 03/06/20 1 Analyzed: 03/09/20 1

Chloride	ND	20.0	mg/kg							
----------	----	------	-------	--	--	--	--	--	--	--

**LCS (2010036-BS1)**

Prepared: 03/06/20 1 Analyzed: 03/09/20 1

Chloride	251	20.0	mg/kg	250		100	90-110			
----------	-----	------	-------	-----	--	-----	--------	--	--	--

**Matrix Spike (2010036-MS1)****Source: P003021-01**

Prepared: 03/06/20 1 Analyzed: 03/09/20 1

Chloride	609	20.0	mg/kg	250	362	98.6	80-120			
----------	-----	------	-------	-----	-----	------	--------	--	--	--

**Matrix Spike Dup (2010036-MSD1)****Source: P003021-01**

Prepared: 03/06/20 1 Analyzed: 03/09/20 1

Chloride	627	20.0	mg/kg	250	362	106	80-120	2.88	20	
----------	-----	------	-------	-----	-----	-----	--------	------	----	--

**QC Summary Report****Comment:**

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/10/20 15:39

### Notes and Definitions

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

\*\* Methods marked with \*\* are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

## Project Information

## Chain of Custody

Page 1 of 1

Client: <u>SPUR</u>				Bill To				Lab Use Only				TAT		EPA Program							
Project: <u>ROSS Ranch Battery</u>				Attention: <u>Natalie Gladde</u>				Lab WO# <u>P003024</u>				Job Number <u>190540003</u>		1D	3D	RCRA	CWA	SDWA			
Project Manager: <u>Lindsey Salgado</u>				Address:				Analysis and Method										State			
Address:				City, State, Zip														NM CO UT AZ			
City, State, Zip				Phone:														TX OK			
Phone:				Email: <u>NJadde@shungry-horse.com</u>																	
Email: <u>Salgado@shungry-horse.com</u>				Report due by:																	
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC - NM	BGDOC - TX			Remarks				
3:21	3/2/20	S	1	Sp3-14	1												1.4oz glass jar				
10:27	3/3/20			Sp1-7	2												1				
9:07	3/3/20			Sp2-4	3																
11:51	3/3/20			Sp4-5	4																
2:35	3/2/20			Sp5-8	5																
Additional Instructions:																					
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.									
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only									
<u>[Signature]</u>		3/2/20		0630		<u>[Signature]</u>		3/2/20		0630		Received on ice: <u>Y</u> / N									
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 T2 T3									
<u>[Signature]</u>		3/5/20		1415		<u>[Signature]</u>		3.5.2020		1415											
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4.0°C</u>									
<u>[Signature]</u>		3.5.2020		1600		<u>[Signature]</u>		3.6.20		09:30											
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA									
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																					



## Analytical Report

### Report Summary

Client: Spur

Samples Received: 3/9/2020

Job Number: 19054-0003

Work Order: P003038

Project Name/Location: Ross Ranch

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Walter Hinchman', is placed over a light blue rectangular background.

Date: 3/11/20

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.  
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.  
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.  
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.



Spur	Project Name:	Ross Ranch	<b>Reported:</b> 03/11/20 16:02
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Natalie Gladden	

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sp7-4	P003038-01A	Soil	03/05/20	03/09/20	Glass Jar, 4 oz.
Sp8-12	P003038-02A	Soil	03/05/20	03/09/20	Glass Jar, 4 oz.
Sp9-12	P003038-03A	Soil	03/05/20	03/09/20	Glass Jar, 4 oz.
Sp10-4	P003038-04A	Soil	03/05/20	03/09/20	Glass Jar, 4 oz.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Spur	Project Name:	Ross Ranch	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/11/20 16:02

**Sp7-4**  
**P003038-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>105 %</i>		<i>50-150</i>	<i>2011005</i>	<i>03/09/20</i>	<i>03/10/20</i>	<i>EPA 8021B</i>	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2011008	03/09/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2011008	03/09/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		<i>101 %</i>		<i>50-200</i>	<i>2011008</i>	<i>03/09/20</i>	<i>03/10/20</i>	<i>EPA 8015D</i>	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		<i>94.5 %</i>		<i>50-150</i>	<i>2011005</i>	<i>03/09/20</i>	<i>03/10/20</i>	<i>EPA 8015D</i>	

**Anions by 300.0/9056A**

Chloride	<b>716</b>	40.0	mg/kg	2	2011012	03/10/20	03/10/20	EPA 300.0/9056A	
----------	------------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Spur	Project Name:	Ross Ranch	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/11/20 16:02

**Sp8-12**  
**P003038-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	2011005	03/09/20	03/10/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	80.8	25.0	mg/kg	1	2011008	03/09/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2011008	03/09/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		92.4 %		50-200	2011008	03/09/20	03/10/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.5 %		50-150	2011005	03/09/20	03/10/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	157	20.0	mg/kg	1	2011012	03/10/20	03/10/20	EPA 300.0/9056A	
----------	-----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/11/20 16:02

**Sp9-12**  
**P003038-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>105 %</i>		<i>50-150</i>	<i>2011005</i>	<i>03/09/20</i>	<i>03/10/20</i>	<i>EPA 8021B</i>	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	<b>52.1</b>	25.0	mg/kg	1	2011008	03/09/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2011008	03/09/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		<i>93.9 %</i>		<i>50-200</i>	<i>2011008</i>	<i>03/09/20</i>	<i>03/10/20</i>	<i>EPA 8015D</i>	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		<i>95.3 %</i>		<i>50-150</i>	<i>2011005</i>	<i>03/09/20</i>	<i>03/10/20</i>	<i>EPA 8015D</i>	

**Anions by 300.0/9056A**

Chloride	<b>39.7</b>	20.0	mg/kg	1	2011012	03/10/20	03/10/20	EPA 300.0/9056A	
----------	-------------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/11/20 16:02

**Sp10-4**  
**P003038-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		104 %		50-150	2011005	03/09/20	03/10/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	44.0	25.0	mg/kg	1	2011008	03/09/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2011008	03/09/20	03/10/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		81.3 %		50-200	2011008	03/09/20	03/10/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.2 %		50-150	2011005	03/09/20	03/10/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	52.3	20.0	mg/kg	1	2011012	03/10/20	03/10/20	EPA 300.0/9056A	
----------	------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch	<b>Reported:</b> 03/11/20 16:02
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Natalie Gladden	

**Volatile Organics by EPA 8021 - Quality Control****Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2011005 - Purge and Trap EPA 5030A****Blank (2011005-BLK1)**

Prepared: 03/09/20 1 Analyzed: 03/09/20 2

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	8.49		"	8.00		106	50-150			

**LCS (2011005-BS1)**

Prepared: 03/09/20 1 Analyzed: 03/09/20 2

Benzene	5.04	0.0250	mg/kg	5.00		101	70-130			
Toluene	5.12	0.0250	"	5.00		102	70-130			
Ethylbenzene	5.13	0.0250	"	5.00		103	70-130			
p,m-Xylene	10.2	0.0500	"	10.0		102	70-130			
o-Xylene	5.18	0.0250	"	5.00		104	70-130			
Total Xylenes	15.4	0.0250	"	15.0		103	0-200			
Surrogate: 4-Bromochlorobenzene-PID	8.57		"	8.00		107	50-150			

**Matrix Spike (2011005-MS1)**

Source: P003036-01

Prepared: 03/09/20 1 Analyzed: 03/10/20 0

Benzene	4.90	0.0250	mg/kg	5.00	ND	98.0	54.3-133			
Toluene	4.99	0.0250	"	5.00	ND	99.9	61.4-130			
Ethylbenzene	5.02	0.0250	"	5.00	ND	100	61.4-133			
p,m-Xylene	10.0	0.0500	"	10.0	0.0526	99.8	63.3-131			
o-Xylene	5.06	0.0250	"	5.00	ND	101	63.3-131			
Total Xylenes	15.1	0.0250	"	15.0	0.0526	100	0-200			
Surrogate: 4-Bromochlorobenzene-PID	8.61		"	8.00		108	50-150			

**Matrix Spike Dup (2011005-MSD1)**

Source: P003036-01

Prepared: 03/09/20 1 Analyzed: 03/10/20 0

Benzene	4.89	0.0250	mg/kg	5.00	ND	97.8	54.3-133	0.193	20	
Toluene	4.95	0.0250	"	5.00	ND	99.0	61.4-130	0.905	20	
Ethylbenzene	4.98	0.0250	"	5.00	ND	99.5	61.4-133	0.878	20	
p,m-Xylene	9.94	0.0500	"	10.0	0.0526	98.9	63.3-131	0.850	20	
o-Xylene	5.05	0.0250	"	5.00	ND	101	63.3-131	0.238	20	
Total Xylenes	15.0	0.0250	"	15.0	0.0526	99.6	0-200	0.645	200	
Surrogate: 4-Bromochlorobenzene-PID	8.57		"	8.00		107	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/11/20 16:02

## Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

## Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

## Batch 2011008 - DRO Extraction EPA 3570

## Blank (2011008-BLK1)

Prepared: 03/09/20 1 Analyzed: 03/10/20 0

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	45.1		"	50.0		90.3	50-200			

## LCS (2011008-BS1)

Prepared: 03/09/20 1 Analyzed: 03/10/20 0

Diesel Range Organics (C10-C28)	419	25.0	mg/kg	500		83.7	38-132			
Surrogate: n-Nonane	45.4		"	50.0		90.9	50-200			

## Matrix Spike (2011008-MS1)

Source: P003034-01

Prepared: 03/09/20 1 Analyzed: 03/10/20 0

Diesel Range Organics (C10-C28)	522	25.0	mg/kg	500	ND	104	38-132			
Surrogate: n-Nonane	47.6		"	50.0		95.2	50-200			

## Matrix Spike Dup (2011008-MSD1)

Source: P003034-01

Prepared: 03/09/20 1 Analyzed: 03/10/20 0

Diesel Range Organics (C10-C28)	513	25.0	mg/kg	500	ND	103	38-132	1.74	20	
Surrogate: n-Nonane	49.3		"	50.0		98.7	50-200			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/11/20 16:02

## Nonhalogenated Organics by 8015 - GRO - Quality Control

## Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

## Batch 2011005 - Purge and Trap EPA 5030A

## Blank (2011005-BLK1)

Prepared: 03/09/20 1 Analyzed: 03/09/20 2

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.39		"	8.00		92.4	50-150			

## LCS (2011005-BS2)

Prepared: 03/09/20 1 Analyzed: 03/09/20 2

Gasoline Range Organics (C6-C10)	46.5	20.0	mg/kg	50.0		93.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.59		"	8.00		94.9	50-150			

## Matrix Spike (2011005-MS2)

Source: P003036-01

Prepared: 03/09/20 1 Analyzed: 03/10/20 0

Gasoline Range Organics (C6-C10)	51.2	20.0	mg/kg	50.0	ND	102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		"	8.00		95.2	50-150			

## Matrix Spike Dup (2011005-MSD2)

Source: P003036-01

Prepared: 03/09/20 1 Analyzed: 03/10/20 0

Gasoline Range Organics (C6-C10)	50.0	20.0	mg/kg	50.0	ND	100	70-130	2.49	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.52		"	8.00		94.0	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/11/20 16:02

**Anions by 300.0/9056A - Quality Control****Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2011012 - Anion Extraction EPA 300.0/9056A****Blank (2011012-BLK1)**

Prepared: 03/10/20 0 Analyzed: 03/10/20 1

Chloride	ND	20.0	mg/kg							
----------	----	------	-------	--	--	--	--	--	--	--

**LCS (2011012-BS1)**

Prepared: 03/10/20 0 Analyzed: 03/10/20 1

Chloride	253	20.0	mg/kg	250		101	90-110			
----------	-----	------	-------	-----	--	-----	--------	--	--	--

**Matrix Spike (2011012-MS1)****Source: P003038-01**

Prepared: 03/10/20 0 Analyzed: 03/10/20 1

Chloride	981	40.0	mg/kg	250	716	106	80-120			
----------	-----	------	-------	-----	-----	-----	--------	--	--	--

**Matrix Spike Dup (2011012-MSD1)****Source: P003038-01**

Prepared: 03/10/20 0 Analyzed: 03/10/20 1

Chloride	985	40.0	mg/kg	250	716	108	80-120	0.435	20	
----------	-----	------	-------	-----	-----	-----	--------	-------	----	--

**QC Summary Report****Comment:**

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/11/20 16:02

### Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported


RPD Relative Percent Difference

\*\* Methods marked with \*\* are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.




 5796 US Highway 64, Farmington, NM 87401      Ph (505) 632-1881 Fx (505) 632-1865      [labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)  
 24 Hour Emergency Response Phone: (800) 362-1879



## Analytical Report

### Report Summary

Client: Spur

Samples Received: 3/11/2020

Job Number: 19054-0003

Work Order: P003056

Project Name/Location: Ross Ranch Battery

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Walter Hinchman', is placed over a light blue rectangular background.

Date: 3/13/20

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.  
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.  
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.  
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.



Spur	Project Name:	Ross Ranch Battery	<b>Reported:</b> 03/13/20 15:05
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sp11-12'	P003056-01A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.
Sp12-12	P003056-02A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.
SW1-2	P003056-03A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.
SW2-2'	P003056-04A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.
SW3-2'	P003056-05A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.
SW4-2	P003056-06A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.
SW5-2	P003056-07A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.
SW6-2	P003056-08A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.
SP6-7	P003056-09A	Soil	03/06/20	03/11/20	Glass Jar, 4 oz.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**Sp11-12'**  
**P003056-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	<b>0.0668</b>	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	<b>0.219</b>	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	<b>0.425</b>	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	<b>0.308</b>	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	<b>0.733</b>	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>107 %</i>		<i>50-150</i>	<i>2011027</i>	<i>03/11/20</i>	<i>03/13/20</i>	<i>EPA 8021B</i>	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	<b>402</b>	50.0	mg/kg	2	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	<b>178</b>	100	mg/kg	2	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		<i>104 %</i>		<i>50-200</i>	<i>2011035</i>	<i>03/12/20</i>	<i>03/13/20</i>	<i>EPA 8015D</i>	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		<i>87.0 %</i>		<i>50-150</i>	<i>2011027</i>	<i>03/11/20</i>	<i>03/13/20</i>	<i>EPA 8015D</i>	

**Anions by 300.0/9056A**

Chloride	<b>213</b>	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	------------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**Sp12-12**  
**P003056-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	2011027	03/11/20	03/13/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	39.2	25.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		87.6 %		50-200	2011035	03/12/20	03/13/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		85.9 %		50-150	2011027	03/11/20	03/13/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	410	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	-----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**SW1-2**  
**P003056-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		104 %		50-150	2011027	03/11/20	03/13/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	11900	2500	mg/kg	100	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	8510	5000	mg/kg	100	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		%		50-200	2011035	03/12/20	03/13/20	EPA 8015D	S6

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		84.7 %		50-150	2011027	03/11/20	03/13/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	1070	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	------	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**SW2-2'**  
**P003056-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		106 %		50-150	2011027	03/11/20	03/13/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	641	125	mg/kg	5	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	429	250	mg/kg	5	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		98.8 %		50-200	2011035	03/12/20	03/13/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		84.9 %		50-150	2011027	03/11/20	03/13/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**SW3-2'****P003056-05 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	2011027	03/11/20	03/13/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	125	25.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	203	50.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		94.9 %		50-200	2011035	03/12/20	03/13/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		85.0 %		50-150	2011027	03/11/20	03/13/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	331	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	-----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**SW4-2****P003056-06 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	2011027	03/11/20	03/13/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	147	25.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	91.2	50.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		86.3 %		50-200	2011035	03/12/20	03/13/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		85.5 %		50-150	2011027	03/11/20	03/13/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**SW5-2**  
**P003056-07 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	2011027	03/11/20	03/13/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	326	125	mg/kg	5	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	422	250	mg/kg	5	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		102 %		50-200	2011035	03/12/20	03/13/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.6 %		50-150	2011027	03/11/20	03/13/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**SW6-2**  
**P003056-08 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>104 %</i>		<i>50-150</i>	<i>2011027</i>	<i>03/11/20</i>	<i>03/13/20</i>	<i>EPA 8021B</i>	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	<b>96.2</b>	25.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	<b>103</b>	50.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		<i>100 %</i>		<i>50-200</i>	<i>2011035</i>	<i>03/12/20</i>	<i>03/13/20</i>	<i>EPA 8015D</i>	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		<i>86.7 %</i>		<i>50-150</i>	<i>2011027</i>	<i>03/11/20</i>	<i>03/13/20</i>	<i>EPA 8015D</i>	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**SP6-7**  
**P003056-09 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	2011027	03/11/20	03/13/20	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	51.6	25.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2011035	03/12/20	03/13/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		85.1 %		50-200	2011035	03/12/20	03/13/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011027	03/11/20	03/13/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.6 %		50-150	2011027	03/11/20	03/13/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	306	20.0	mg/kg	1	2011020	03/11/20	03/12/20	EPA 300.0/9056A	
----------	-----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	<b>Reported:</b> 03/13/20 15:05
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	

**Volatile Organics by EPA 8021 - Quality Control****Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2011027 - Purge and Trap EPA 5030A****Blank (2011027-BLK1)**

Prepared: 03/11/20 1 Analyzed: 03/12/20 1

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							

Surrogate: 4-Bromochlorobenzene-PID	8.37		"	8.00		105	50-150			
-------------------------------------	------	--	---	------	--	-----	--------	--	--	--

**LCS (2011027-BS1)**

Prepared: 03/11/20 1 Analyzed: 03/12/20 1

Benzene	4.23	0.0250	mg/kg	5.00		84.7	70-130			
Toluene	4.67	0.0250	"	5.00		93.4	70-130			
Ethylbenzene	4.76	0.0250	"	5.00		95.2	70-130			
p,m-Xylene	9.45	0.0500	"	10.0		94.5	70-130			
o-Xylene	4.74	0.0250	"	5.00		94.8	70-130			
Total Xylenes	14.2	0.0250	"	15.0		94.6	0-200			

Surrogate: 4-Bromochlorobenzene-PID	8.46		"	8.00		106	50-150			
-------------------------------------	------	--	---	------	--	-----	--------	--	--	--

**Matrix Spike (2011027-MS1)**

Source: P003055-01

Prepared: 03/11/20 1 Analyzed: 03/12/20 1

Benzene	4.27	0.0250	mg/kg	5.00	ND	85.3	54.3-133			
Toluene	4.82	0.0250	"	5.00	ND	96.5	61.4-130			
Ethylbenzene	4.95	0.0250	"	5.00	ND	99.0	61.4-133			
p,m-Xylene	9.83	0.0500	"	10.0	ND	98.3	63.3-131			
o-Xylene	4.94	0.0250	"	5.00	ND	98.7	63.3-131			
Total Xylenes	14.8	0.0250	"	15.0	ND	98.4	0-200			

Surrogate: 4-Bromochlorobenzene-PID	8.44		"	8.00		106	50-150			
-------------------------------------	------	--	---	------	--	-----	--------	--	--	--

**Matrix Spike Dup (2011027-MSD1)**

Source: P003055-01

Prepared: 03/11/20 1 Analyzed: 03/12/20 1

Benzene	4.22	0.0250	mg/kg	5.00	ND	84.4	54.3-133	1.07	20	
Toluene	4.77	0.0250	"	5.00	ND	95.4	61.4-130	1.10	20	
Ethylbenzene	4.92	0.0250	"	5.00	ND	98.4	61.4-133	0.545	20	
p,m-Xylene	9.78	0.0500	"	10.0	ND	97.8	63.3-131	0.562	20	
o-Xylene	4.90	0.0250	"	5.00	ND	98.0	63.3-131	0.707	20	
Total Xylenes	14.7	0.0250	"	15.0	ND	97.8	0-200	0.610	200	

Surrogate: 4-Bromochlorobenzene-PID	8.49		"	8.00		106	50-150			
-------------------------------------	------	--	---	------	--	-----	--------	--	--	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

## Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

## Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

## Batch 2011035 - DRO Extraction EPA 3570

## Blank (2011035-BLK1)

Prepared: 03/12/20 1 Analyzed: 03/12/20 2

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	50.9		"	50.0		102	50-200			

## LCS (2011035-BS1)

Prepared: 03/12/20 1 Analyzed: 03/13/20 0

Diesel Range Organics (C10-C28)	421	25.0	mg/kg	500		84.2	38-132			
Surrogate: n-Nonane	46.4		"	50.0		92.7	50-200			

## Matrix Spike (2011035-MS1)

Source: P003046-01

Prepared: 03/12/20 1 Analyzed: 03/13/20 0

Diesel Range Organics (C10-C28)	428	25.0	mg/kg	500	ND	85.6	38-132			
Surrogate: n-Nonane	47.0		"	50.0		94.0	50-200			

## Matrix Spike Dup (2011035-MSD1)

Source: P003046-01

Prepared: 03/12/20 1 Analyzed: 03/13/20 0

Diesel Range Organics (C10-C28)	428	25.0	mg/kg	500	ND	85.6	38-132	0.0736	20	
Surrogate: n-Nonane	47.2		"	50.0		94.3	50-200			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	<b>Reported:</b> 03/13/20 15:05
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	

## Nonhalogenated Organics by 8015 - GRO - Quality Control

## Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

## Batch 2011027 - Purge and Trap EPA 5030A

## Blank (2011027-BLK1)

Prepared: 03/11/20 1 Analyzed: 03/12/20 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.89		"	8.00		86.2	50-150			

## LCS (2011027-BS2)

Prepared: 03/11/20 1 Analyzed: 03/12/20 1

Gasoline Range Organics (C6-C10)	45.8	20.0	mg/kg	50.0		91.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.99		"	8.00		87.4	50-150			

## Matrix Spike (2011027-MS2)

Source: P003055-01

Prepared: 03/11/20 1 Analyzed: 03/12/20 1

Gasoline Range Organics (C6-C10)	48.3	20.0	mg/kg	50.0	ND	96.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.92		"	8.00		86.5	50-150			

## Matrix Spike Dup (2011027-MSD2)

Source: P003055-01

Prepared: 03/11/20 1 Analyzed: 03/12/20 1

Gasoline Range Organics (C6-C10)	47.4	20.0	mg/kg	50.0	ND	94.8	70-130	1.87	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.97		"	8.00		87.1	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

**Anions by 300.0/9056A - Quality Control****Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2011020 - Anion Extraction EPA 300.0/9056A****Blank (2011020-BLK1)**

Prepared: 03/11/20 0 Analyzed: 03/11/20 1

Chloride	ND	20.0	mg/kg							
----------	----	------	-------	--	--	--	--	--	--	--

**LCS (2011020-BS1)**

Prepared: 03/11/20 0 Analyzed: 03/11/20 1

Chloride	251	20.0	mg/kg	250		100	90-110			
----------	-----	------	-------	-----	--	-----	--------	--	--	--

**Matrix Spike (2011020-MS1)****Source: P003053-01**

Prepared: 03/11/20 0 Analyzed: 03/11/20 1

Chloride	446	20.0	mg/kg	250	171	110	80-120			
----------	-----	------	-------	-----	-----	-----	--------	--	--	--

**Matrix Spike Dup (2011020-MSD1)****Source: P003053-01**

Prepared: 03/11/20 0 Analyzed: 03/11/20 1

Chloride	445	20.0	mg/kg	250	171	110	80-120	0.153	20	
----------	-----	------	-------	-----	-----	-----	--------	-------	----	--

**QC Summary Report****Comment:**

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



Spur	Project Name:	Ross Ranch Battery	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Lindsey Salgado	03/13/20 15:05

### Notes and Definitions

- S6 Surrogate was diluted out due to high concentrations of target and/or non-target analytes and does not provide useful information. The associated LCS spike recovery was acceptable.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- \*\* Methods marked with \*\* are non-accredited methods.
- Soil data is reported on an "as received" weight basis, unless reported otherwise.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

## Project Information

## Chain of Custody

Page 1 of 1

Client: <u>SPUR</u>				Bill To				Lab Use Only						TAT		EPA Program					
Project: <u>Ross Ranch Battery</u>				Attention: <u>Natane Gladden</u>				Lab WO#		Job Number				1D	3D	RCRA	CWA	SDWA			
Project Manager: <u>Lindsay Salgado</u>				Address:				P003056		19054-0003					X						
Address:				City, State, Zip				Analysis and Method										State			
City, State, Zip				Phone:				DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0								
Phone:				Email: <u>Natane Gladden@hungry-horse.com</u>											BGDOC - NM	BGDOC - TX					
Email: <u>LSalgado@hungry-horse.com</u>				Report due by:																	
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number													Remarks			
11:27	3/6/20	S	1	Sp11-12'	1																
4:00	3/6/20			Sp12-12	2																
2:13	3/6/20			SW1-2	3																
2:31	3/6/20			SW2-2	4																
2:53	3/6/20			SW3-2	5																
1:54	3/6/20			SW4-2	6																
3:13	3/6/20			SW5-2	7																
3:36	3/6/20			SW6-2	8																

## Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <u>Y</u> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<u>[Signature]</u>	3-9-20	0630	<u>[Signature]</u>	3/6/20	0630	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<u>[Signature]</u>	3/10/20	1100	<u>[Signature]</u>	3-10-2020	1100	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<u>[Signature]</u>	3-10-2020	1515	<u>[Signature]</u>	3/10/20	9.40	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



5795 US Highway 64, Farmington, NM 87401  
24 Hour Emergency Response Phone: (800) 362-1879

Ph (505) 632-1881 Fx (505) 632-1865

envirotech-inc.com  
labadmin@envirotech-inc.com



Project Information

Chain of Custody

Page 1 of 1

Client: <u>SPUR</u> Project: <u>Ross Ranch Battery</u> Project Manager: <u>Lindsay Salgado</u> Address: _____ City, State, Zip: _____ Phone: _____ Email: <u>lsalgado@hungs-horse.com</u> Report due by: _____					Bill To Attention: <u>Natale Gladden</u> Address: _____ City, State, Zip: _____ Phone: _____ Email: <u>Nagadden@hungs-horse.com</u>					Lab Use Only Lab WO# <u>P003056</u> Job Number <u>19054-0003</u> Analysis and Method DRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGDOC - NM BGDOC - TX					TAT 1D 3D X		EPA Program RCRA CWA SDWA		
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC - NM	BGDOC - TX	Remarks					
11:27	3/6/20	S	1	Sp11-12'	1														
4:00	3/6/20			Sp12-12	2														
2:13	3/6/20			SW1-2	3														
2:31	3/6/20			SW2-2	4														
2:53	3/6/20			SW3-2	5														
1:52	3/6/20			SW4-2	6														
3:13	3/6/20			SW5-2	7														
3:36	3/6/20			SW6-2	8														
	3/6/20	S	1	SP6-7	9														
Per Client 3/11/20 RL																			

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: \_\_\_\_\_

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <u>Y</u> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<u>George Salgado</u>	3-9-20	0630	<u>Kathy Rina</u>	3/10/20	0630	
<u>Kathy Rina</u>	3/10/20	1100	<u>Raimon Lopez</u>	3-10-2020	1100	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<u>George Salgado</u>	3-10-2020	1515	<u>Raimon Lopez</u>	3/10/20	9.40	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



5795 US Highway 64, Farmington, NM 87401  
24 Hour Emergency Response Phone: (800) 362-1879

Ph (505) 632-1881 Fx (505) 632-1865

envirotech-inc.com  
labadmin@envirotech-inc.com



# SPUR ENERGY PARTNERS ROSS RANCH 22 BATTERY

11,959 SQ. FT OF  
IMPACT AREA

## SAMPLE POINT GPS:

SP1: 32.648455 -104.479032  
SP2: 32.648361 -104.479068  
SP3: 32.648241 -104.479048  
SP4: 32.648127 -104.479090  
SP5: 32.647985 -104.479095  
SP6: 32.647925 -104.479069  
SP7: 32.647911 -104.478953  
SP8: 32.648014 -104.478937  
SP9: 32.648080 -104.478992  
SP10: 32.648175 -104.478973  
SP11: 32.648285 -104.478970  
SP12: 32.648357 -104.478940

SW1: 32.648489 -104.479035  
SW2: 32.648297 -104.479115  
SW3: 32.648087 -104.479130  
SW4: 32.647879 -104.479042  
SW5: 32.648045 -104.478885  
SW6: 32.648321 -104.478845

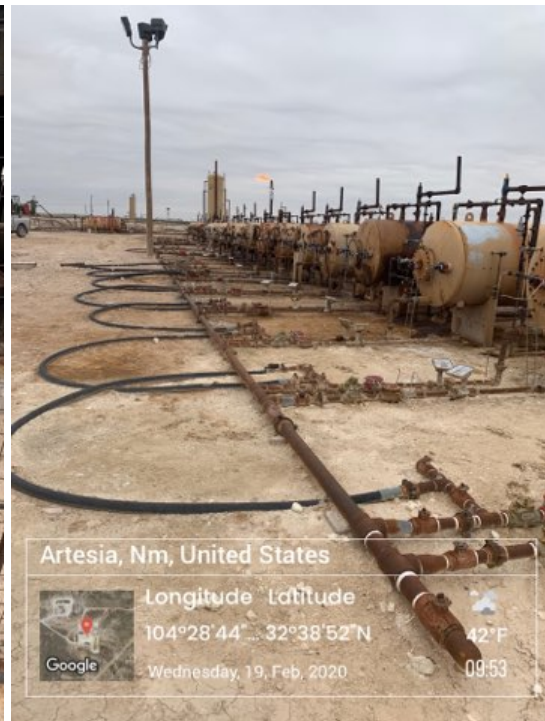




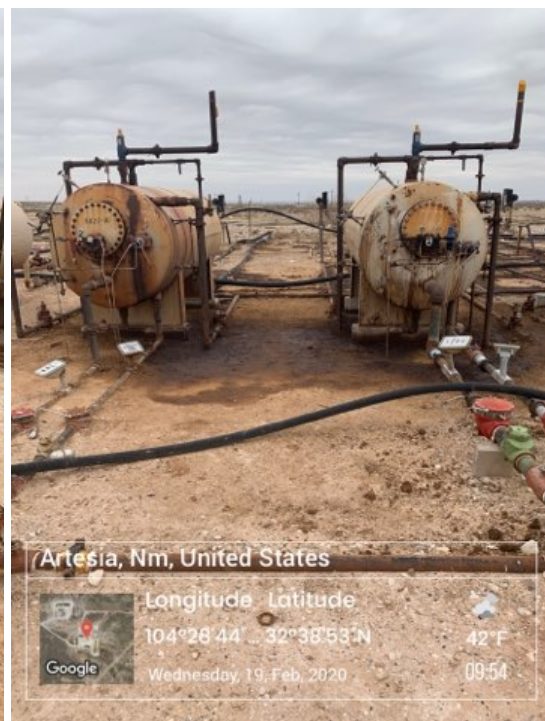
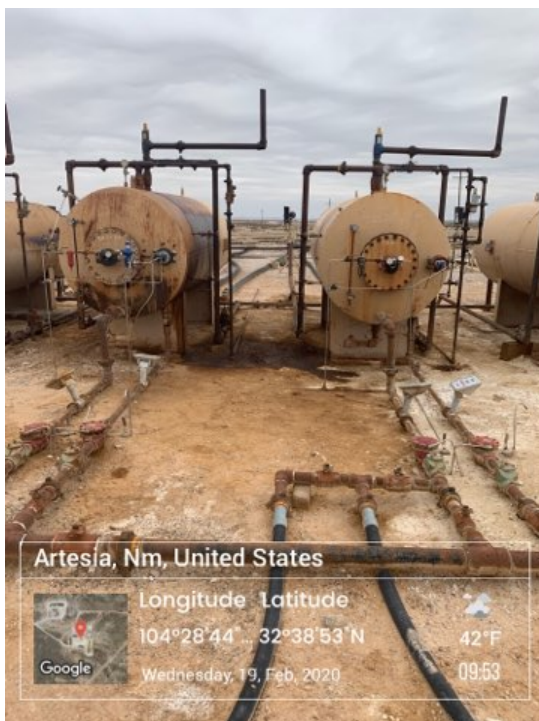
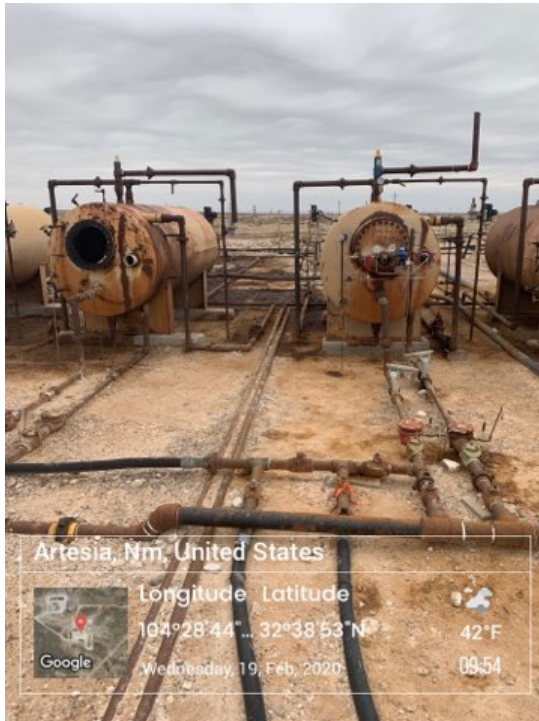
**SPUR ENERGY PARTNERS**

**ROSS RANCH 22 CTB – SPILL DATE 12/12/19**

**BEGINNING PHOTOS**

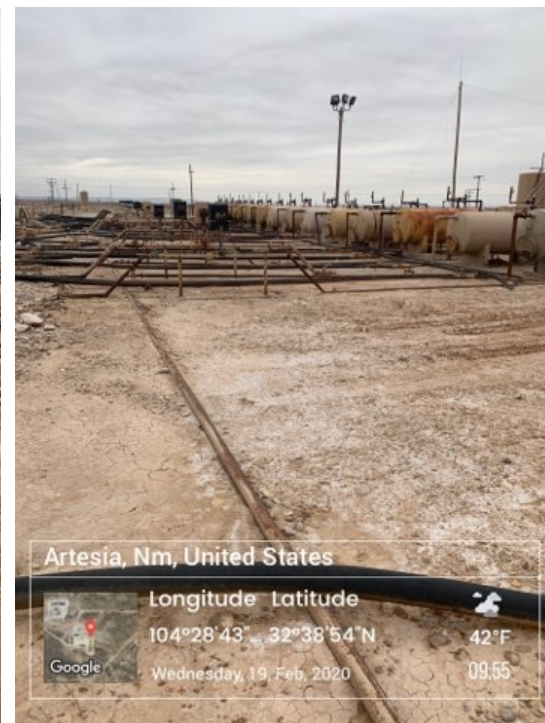
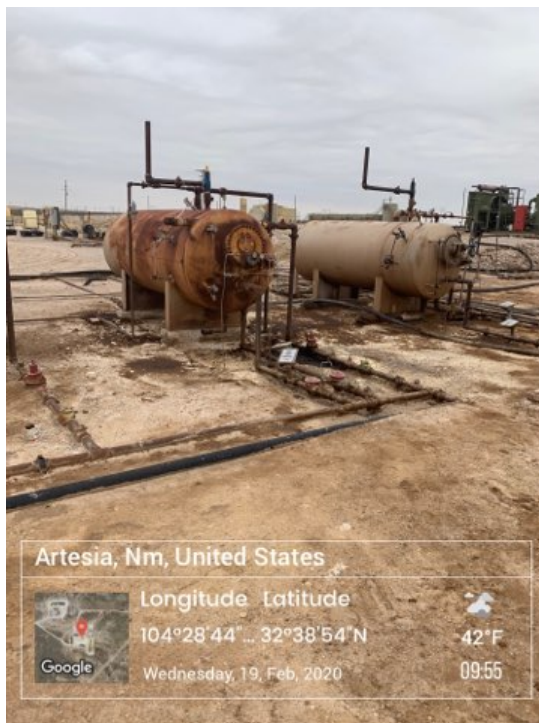
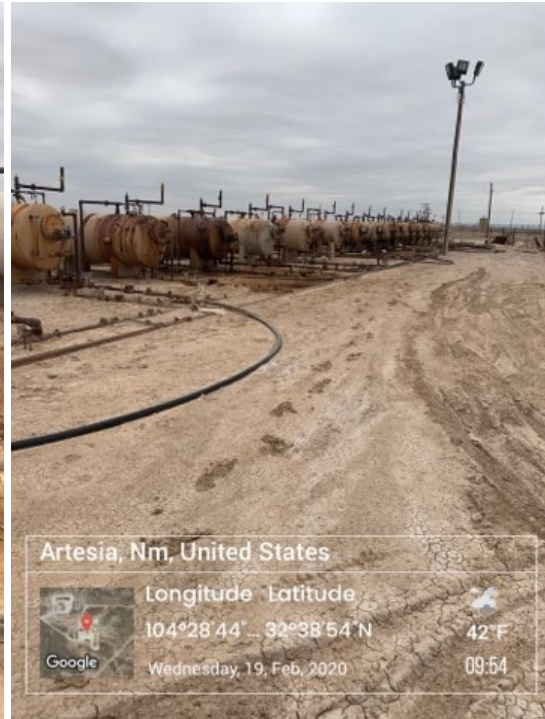


**SPUR ENERGY PARTNERS**  
**ROSS RANCH 22 CTB – SPILL DATE 12/12/19**  
**BEGINNING PHOTOS**



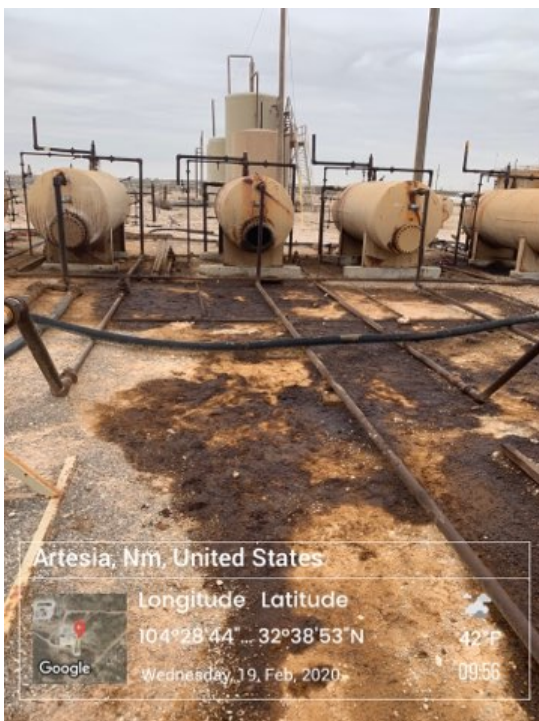
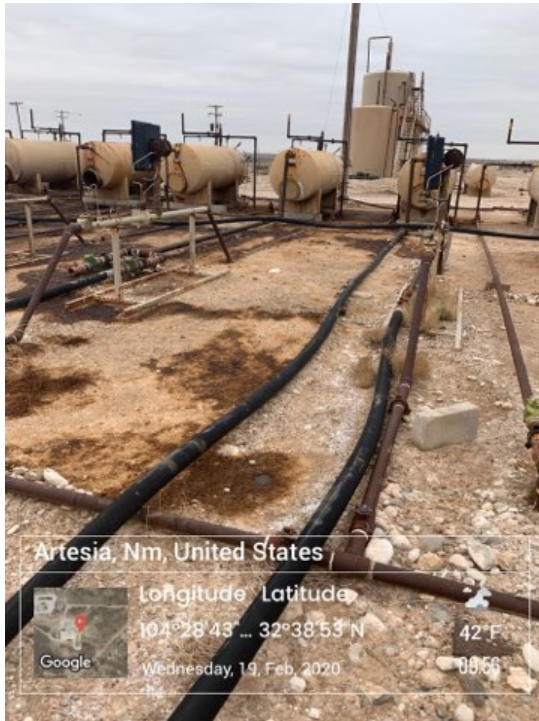


**SPUR ENERGY PARTNERS**  
**ROSS RANCH 22 CTB – SPILL DATE 12/12/19**  
**BEGINNING PHOTOS**





**SPUR ENERGY PARTNERS**  
**ROSS RANCH 22 CTB – SPILL DATE 12/12/19**  
**BEGINNING PHOTOS**











**SPUR ENERGY PARTNERS - ROSS RANCH 22 BATTERY DELINEATION PHOTOS**







Incident ID	
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?	130' (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	
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: Natalie Gladden Title: Director of Environmental and Regulatory

Signature: Natalie Gladden Date: 7/16/20

email: natalie@energystaffing.com Telephone: 575-390-6397

**OCD Only**

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

Incident ID	NRH2002854238
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

Printed Name: Natalie Gladden Title: Director of Environmental & Regulatory

Signature:  Date: 7/10/20

email: natalie@energystaffingllc.com Telephone: 575-390-6397

**OCD Only**

Received by: Cristina Eads Date: 01/15/2021

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

Signature:  Date: 01/15/2021

**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 10429

CONDITIONS OF APPROVAL

Operator:		OGRID:	Action Number:	Action Type:
SPUR ENERGY PARTNERS LLC		328947	10429	C-141
Suite 500 Houston, TX77024				
OCD Reviewer	Condition			
ceads	If a deferral request is to be made due to existing production equipment, areas unable to be remediated must be delineated as best as possible. For example, Further delineation is required at sample point SP-1. If access is limited to this area, continue delineation as near as possible to this point.			
ceads	Confirmation sampling must meet Table I requirements for incidents where depth to water is greater than 100 feet below ground surface.			