

Pima Environmental Services 5614 N. Lovington Highway Hobbs, NM 88240 575-964-7740

June 22, 2022

NMOCD District 2 811 S. First Street Artesia, NM 88210

Bureau of Land Management 620 East Green Street Carlsbad, NM 88220

Re: Remediation and Closure Report Ross Ranch 22 #014H API No. 30-015-45695 GPS: Latitude 32.636384 Longitude -104.478333 ULSTR - D-27-T19S-R25E Eddy County, NM NMOCD Ref. No. <u>NRM2023854921</u>

Spur Energy Partners (Spur) has contracted Pima Environmental Services, LLC (Pima) to perform a remediation and submit this closure report for a produced water release that occurred at the Ross Ranch 22 #014H (Ross). The initial C-141 was submitted on August 25, 2020 (Appendix C). This incident was assigned Incident ID NRM2023854921, by the New Mexico Oil Conservation Division (NMOCD).

#### Site Characterization

The Ross is located approximately fourteen and half (14.5) miles south and west of Artesia, NM. This spill site is in Unit D, Section 27, Township 19S, Range 25E, Latitude 32.636384 Longitude -104.478333, Eddy County, NM. Figure 1 references a Location Map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is made up of Piedmont alluvial deposits. Includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include uppermost Pliocene deposits. The soil in this area is made up of Reagan loam, 0 to 3 percent slopes according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well-drained. There is a medium potential for karst geology to be present around the Ross (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 60 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is 364 feet BGS. The closest waterway is Brantley Lake located approximately 6.32 miles to the southeast of this location. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29									
Depth to Groundwater	Constituent & Limits								
(Appendix A)	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene				
<50' (Lack of GW data)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg				
51-100'	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg				
>100'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg				

Reference Figure 2 for a Topographic Map.

#### **Release Information**

**NRM2023854921:** On August 22, 2020, A welded 4" line developed a pin hole from corrosion, causing a release of mixed oil and water. All fluid remained inside the containment. The volume of the release was calculated to be approximately 6 barrels (bbls) of fluid. A hydro vac truck was dispatched and recovered approximately 3 bbsl of fluid.

#### Site Assessment and Soil Sampling Results

#### Site Assessment

On October 7, 2020, Talon mobilized personnel to begin the site assessment and soil sampling activities for the construction of a work plan. Discrete surface soil samples were collected within and around the impacted area utilizing a hand auger. Further vertical delineation could not take place due to auger refusal as well as the proximity of infrastructure. Results from our sampling event are presented in the following data table. A complete laboratory report can be found in Appendix V.

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Total TPH (mg/kg)	Cl (mg/kg)
1.5	losure Cr 15.29.12		50 mg/kg	10 mg/kg	1,000	mg/kg		2,500 mg/kg	10,000 mg/kg
S-1	0 R	10/7/2020	ND	ND	63.6	13900	3390	17353.6	24000
S-2	0 R	10/7/2020	ND	ND	ND	9730	3350	13080.0	1920
S-3	0 R	10/7/2020	ND	ND	ND	17200	5410	22610.0	13600
S-4	0 R	10/7/2020	ND	ND	ND	42400	11300	53700.0	65600
S-5	0 R	10/7/2020	ND	ND	ND	13600	4750	18350.0	4480
S-6	0 R	10/7/2020	ND	ND	ND	53800	16900	70700.0	39600
S-7	0 R	10/7/2020	ND	ND	ND	34400	9770	44170.0	39600
S-8	0 R	10/7/2020	0.572	ND	103	36800	9800	46703.0	44800
BG-1	0	10/7/2020	ND	ND	ND	ND	ND	-	16
BG-2	0	10/7/2020	ND	ND	ND	ND	ND	-	80
BG-3	0	10/7/2020	ND	ND	ND	ND	ND		80
BG-4	0	10/7/2020	ND	ND	ND	ND	ND	-	48

Table 1: Soil Sample Analysis	Table	1: S	oil Sa	mple	Anal	vsis
-------------------------------	-------	------	--------	------	------	------

ND= Analyte Not Detected R= Hand Auger Refusal

On February 4, 2021, Talon submitted a remediation plan to the NMOCD. This plan was approved by the NMOCD on April 1, 2021. The approved plan can be found in Appendix F.

#### **Remediation Activities**

On May 31, 2022, Pima mobilized personnel and equipment to the site to remediate the area by executing the remediation plan. A total of approximately 75 cubic yards of contaminated material was removed by hands with hand tools. See Appendix D for Photographic Documentation.

On June 9, 2022, after sending a 48-hour notification, Pima returned to collect confirmation samples of the excavated area. The laboratory results of this sampling event can be found in the following table. A Confirmation Sample Map can be found in Figure 5.

NMC	CD Table	1 Closure	Criteria 19.1	5.29 NMA	C - DTGW	is <50' (H	ligh Karst)				
		Spu	r Energy - Re	oss Ranch	22 #14H						
Date: 6-9-2022 NM Approved Laboratory Results											
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg			
CS-1	1'	ND	ND	ND	ND	ND	0	ND			
CS-2	1'	ND	ND	ND	ND	ND	0	ND			
CS-3	1'	ND	ND	ND	ND	ND	0	ND			
CS-4	1'	ND	ND	ND	ND	ND	0	ND			
CS-5	1'	ND	ND	ND	ND	ND	0	ND			
CS-6	1'	ND	ND	ND	ND	ND	0	ND			
CS-7	1'	ND	ND	ND	ND	ND	0	21.5			
CS-8	1'	ND	ND	ND	ND	ND	0	ND			
CS-9	1'	ND	ND	ND	ND	ND	0	ND			
CS-10	1'	ND	ND	ND	ND	ND	0	ND			
CSW-1	1'	ND	ND	ND	ND	ND	0	ND			
CSW-2	1'	ND	ND	ND	ND	ND	0	ND			
CSW-3	1'	ND	ND	ND	ND	ND	0	ND			
CSW-4	1'	ND	ND	ND	ND	ND	0	ND			

#### 6-9-2022 Confirmation Soil Sample Results

ND - Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

Based on the sample results, the bottom and sidewalls were below NMOCD Closure Criteria 19.15.29 NMAC. The contaminated material was transported to Lea Land, a NMOCD approved disposal site. The excavation was then backfilled with clean like material, machine compacted and contoured to match the surrounding terrain.

#### **Closure Request**

After careful review, Pima requests that this incident, NRM2023854921 be closed. Spur has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

Should you have any questions or need additional information, please feel free to contact Gio Gomez at 806-782-1151 or gio@pimaoil.com.

Respectfully, Gio Gomez

Gio Gomez Environmental Project Ma

Environmental Project Manager Pima Environmental Services, LLC

#### **Attachments**

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Talon Site Map
- 5- Confirmation Sample Map

Appendices:

- Appendix A Referenced Water Surveys
- Appendix B Soil Survey and Geological Data
- Appendix C C-141 Form & 48-Hour Notification
- Appendix D Photographic Documentation
- Appendix E Laboratory Reports
- Appendix F NMOCD Approved Remediation Plan



#### Figures:

1 - Location Map

2 - Topographic Map

3 - Karst Map

4 - Site Map

5 – Confirmation Sample Map

#### Received by OCD: 7/8/2022 10:49:14 AM ROSS Ranch 22 #14

Spur Energy API# 30-015-45695 Eddy County, NM Location Map 
 Legend
 Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page 5 of 108

 Image: Page 5 of 108
 Image: Page

285

Ross Ranch 22 #14

THE DE PLAN

Seven Rivers

LES BED SHERE

GRoleased to Imaging: 7/18/2022 2:26:29 PM

3 mi

ංගි



#### Received by OCD: 7/8/2022 10:49:14 AM ROSS Ranch 22 #14

Spur Energy API# 30-015-45695 Eddy County, NM Karst Map

Ross Ranch 22 #14 Z

Seven Rivers

Google Earth Released to Imaging: 7/18/2022 2:26:29 PM 4 mi Propotlov

Legend<sup>Page 7</sup> of 108

High Karst

Low Karst

Medium Karst

0

Dayto

285



# Ross Ranch 22 #14H

Spur Energy API #30-015-45695 Eddy County, NM Confirmation Sample Map





# Appendix A

Water Surveys: OSE USGS Surface Water Map



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

(A CLW###### in the POD suffix indicates the POD has been replaced & no longer serves a	(R=POD been repl O=orpha C=the fil	laced, ned,		(0	11121	rters	s are	1=NW	/ 2=NE	3=SW 4=S	F)				
water right file.)	closed)	C 18							est to lar		NAD83 UTM in m	eters)	(In fee	t)	
		POD Sub-		0	0	0								Wa	ater
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	DistanceDepth	WellDepth	Water Col	umn
<u>RA 03304</u>		RA	ED			1	27	19S	25E	549081	3610973* 🌍	222	130	60	70
<u>RA 08986</u>		RA	ED	1	3	3	22	19S	25E	548825	3611507 🌍	454	320	220	100
<u>RA 02909</u>		RA	ED		1	3	22	19S	25E	548864	3611989* 🌍	933	188	130	58
<u>RA 13122 POD2</u>		RA	ED	3	3	2	21	19S	25E	547996	3612385 🌍	1594	108	102	6
<u>RA 13122 POD1</u>		RA	ED	1	3	2	21	19S	25E	547935	3612424 🌍	1660			
<u>RA 02958</u>		RA	ED		1	4	34	19S	25E	549681	3608740* 🌍	2451	450		
<u>RA 03018</u>		RA	ED	3	2	4	34	19S	25E	549987	3608639* 🌍	2660	530		
											Averag	ge Depth to Water:		128 feet	
												Minimum Depth:		60 feet	
												Maximum Depth:		220 feet	
Record Count: 7															
UTMNAD83 Radius	<u>Search (ir</u>	1 meters	<u>):</u>												
Easting (X): 548	874.59		North	hing	(Y)	:	3611	055.41			<b>Radius:</b> 3000				
*UTM location was derived	from PLSS	- see Helj	)												
The data is furnished by the N accuracy, completeness, reliab										derstanding t	hat the OSE/ISC ma	ke no warranties, exp	essed or impl	ied, concernii	ng the

6/22/22 10:08 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



**USGS Home Contact USGS** Search USGS

#### National Water Information System: Web Interface

USGS	Water	Resources

Data Category:		Geographic Area:	
Groundwater	~	United States	

GO

V

## Click to hideNews Bulletins

- Explore the NEW USGS National Water Dashboard interactive map to access realtime water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

# Search Results -- 1 sites found

site\_no list =

323755104352701

## Minimum number of levels = 1

Save file of selected sites to local disk for future upload

# USGS 323755104352701 19S.24E.28.322412

Available data for this site Groundwater: Field measurements  $\mathbf{v}$ GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°37'55", Longitude 104°35'27" NAD27

Land-surface elevation 3,707 feet above NAVD88

The depth of the well is 600 feet below land surface.

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the San Andres Limestone (313SADR) local aquifer.

## **Output formats**

Table of data	
Tab-separated data	
Graph of data	
Reselect period	



Breaks in the plot represent a gap of at least one year between field measurements. Download a presentation-quality graph

Questions about sites/data? Feedback on this web site Automated retrievals Help Data Tips Explanation of terms Subscribe for system changes News

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2022-04-27 12:21:41 EDT 0.56 0.49 nadww01



#### Received by OCD: 7/8/2022 10:49:14 AM ROSS Ranch 22 #14

Spur Energy API# 30-015-45695 Eddy County, NM Surface Water Map Legend<sup>Page 14</sup> of 108

Brantley Lake

6.32 miles

Pecos River

Brantley Lake Atate

3 mi

Ross Ranch 22 #14

Seven Rivers

A BEEFE

Reased to Imiging: 7/18/2022 2:26:29 PM

NEL NE LE PE LE

Fort



# Appendix B

Soil Survey & Geological Data FEMA Flood Map

# Eddy Area, New Mexico

#### RA-Reagan loam, 0 to 3 percent slopes

#### Map Unit Setting

National map unit symbol: 1w5c Elevation: 1,100 to 4,400 feet Mean annual precipitation: 7 to 14 inches Mean annual air temperature: 60 to 70 degrees F Frost-free period: 200 to 240 days Farmland classification: Farmland of statewide importance

#### Map Unit Composition

Reagan and similar soils: 98 percent Minor components: 2 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Reagan**

#### Setting

Landform: Fan remnants, alluvial fans Landform position (three-dimensional): Rise Down-slope shape: Convex, linear Across-slope shape: Linear Parent material: Alluvium and/or eolian deposits

#### **Typical profile**

*H1 - 0 to 8 inches:* loam *H2 - 8 to 60 inches:* loam

#### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water
 (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

#### Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: B *Ecological site:* R042XC007NM - Loamy *Hydric soil rating:* No

#### **Minor Components**

#### Upton

Percent of map unit: 1 percent Ecological site: R042XC025NM - Shallow Hydric soil rating: No

#### Atoka

*Percent of map unit:* 1 percent *Ecological site:* R042XC007NM - Loamy *Hydric soil rating:* No

# **Data Source Information**

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 17, Sep 12, 2021



# Received by OCD: 7/8/2022 10:49:14 AM National Flood Hazard Layer FIRMette



## Legend

Page 18 of 108



Release a Imaging: 7/18/2022 2926:29 PM 1,500 2.000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



# Appendix C

C-141 Form 48-Hour Notification District 1 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	NRM2023854921
District RP	
Facility ID	
Application ID	

# **Release Notification**

#### **Responsible Party**

Responsible Party: Spur Energy Partners LLC	OGRID: 328947						
Contact Name: Kenny Kidd	Contact Telephone: 575-616-5400	*******					
Contact email: kkidd@spurepllc.com	Incident # (assigned by OCD):						
Contact mailing address: 920 Memorial City Way Suite 1000							
Houston, TX 77024							

#### Location of Release Source

Latitude <u>32.636384</u> (NAD 83 in deci	Longitude -104.478333 (location of source)
Site Name: Ross Ranch 22 #014H	Site Type: Oil Production Battery
Date Release Discovered: August 22, 2020	API# (if applicable) 30-015-45695

Unit Letter	Section	Township	Range	County
D	27	19S	25E	Eddy

Surface Owner: State Federal Tribal Private (Name: \_\_\_\_\_

### Nature and Volume of Release

Crude Oil	rial(s) Released (Select all that apply and attach calculations or speci Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 6 bbls	Volume Recovered (bbls) 3bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes X No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
🗌 Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

A welded 4" line developed a pin hole from corrosion, causing a release of mixed oil and water. All fluid remained inside the containment. A hydro vac truck was dispatched and recovered approximately 3 bbls of fluid.

Page 2 of 50

	State of New Me	XICO	Incident ID	NRM202385
age 2	Oil Conservation D	ivision	District-RP	INKW20236.
			Facility ID	
			Application ID	
Was this a major	If YES, for what reason(s) does	the responsible party co	nsider this a major releas	e?
release as defined by 19.15.29.7(A) NMAC?				
🗌 Yes 🖾 No				
	notice given to the OCD? By who ovided by Kenny Kidd of Spur Er			
L	In	itial Response		
The responsible	party must undertake the following action	s immediately unless they could	create a safety hazard that wo	uld result in injury
$\boxtimes$ The source of the relation	ease has been stopped.			
	as been secured to protect human l	nealth and the environment	ıt.	
	ave been contained via the use of			ent devices.
	ecoverable materials have been re			
	d above have not been undertaken			
has begun, please attach	AC the responsible party may con a narrative of actions to date. If	remedial efforts have bee	en successfully complete	d or if the release c
has begun, please attach within a lined containmer I hereby certify that the info	a narrative of actions to date. If at area (see 19.15.29.11(A)(5)(a) P rmation given above is true and comp	remedial efforts have bee NMAC), please attach all lete to the best of my knowl	en successfully complete information needed for c edge and understand that pu	d or if the release of closure evaluation.
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environr failed to adequately investig	a narrative of actions to date. If at area (see 19.15.29.11(A)(5)(a) N	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf ort by the OCD does not relie pose a threat to groundwater	en successfully complete information needed for c edge and understand that pu orm corrective actions for n eve the operator of liability , surface water, human heal	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Rebea</u>	a narrative of actions to date. If that area (see 19.15.29.11(A)(5)(a) P rmation given above is true and comp required to report and/or file certain r ment. The acceptance of a C-141 report ate and remediate contamination that f a C-141 report does not relieve the of cca Pons Title: Project M	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf ort by the OCD does not relie pose a threat to groundwater perator of responsibility for anager	en successfully complete information needed for c edge and understand that pu orm corrective actions for n eve the operator of liability , surface water, human heal	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Rebea</u>	a narrative of actions to date. If at area (see $19.15.29.11(A)(5)(a)$ ) required to report and/or file certain r nent. The acceptance of a C-141 report ate and remediate contamination that f a C-141 report does not relieve the o	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf ort by the OCD does not relie pose a threat to groundwater perator of responsibility for anager	en successfully complete information needed for c edge and understand that pu orm corrective actions for n eve the operator of liability , surface water, human heal compliance with any other	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environm failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Rebect</u> Signature: <u>Rebect</u>	a narrative of actions to date. If that area (see 19.15.29.11(A)(5)(a) P rmation given above is true and comp required to report and/or file certain r ment. The acceptance of a C-141 report ate and remediate contamination that f a C-141 report does not relieve the of cca Pons Title: Project M	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf rt by the OCD does not reli- pose a threat to groundwater perator of responsibility for anager	en successfully complete information needed for c edge and understand that pu orm corrective actions for n eve the operator of liability , surface water, human heal compliance with any other	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Rebect</u> Signature: <u>Rebect</u> email: <u>Rebect</u>	a narrative of actions to date. If the area (see 19.15.29.11(A)(5)(a) P rmation given above is true and comp required to report and/or file certain r nent. The acceptance of a C-141 report ate and remediate contamination that f a C-141 report does not relieve the con- cca Pons Title: Project M	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf rt by the OCD does not reli- pose a threat to groundwater perator of responsibility for anager	en successfully complete information needed for c edge and understand that pu orm corrective actions for n eve the operator of liability , surface water, human heal compliance with any other	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Rebect</u> Signature: <u>Rebect</u> email: <u>COCD Only</u>	a narrative of actions to date. If the area (see 19.15.29.11(A)(5)(a) P rmation given above is true and comp required to report and/or file certain r nent. The acceptance of a C-141 report ate and remediate contamination that f a C-141 report does not relieve the con- cca Pons Title: Project M Cca Pons Destruction for the acceptance of the acce	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf rt by the OCD does not reli- pose a threat to groundwater perator of responsibility for anager Date: Telephone:	en successfully complete information needed for c edge and understand that pu- orm corrective actions for n eve the operator of liability , surface water, human heal compliance with any other 5/2020 575-441-0980	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Rebect</u> Signature: <u>Rebect</u> email: <u>Rebect</u>	a narrative of actions to date. If the area (see 19.15.29.11(A)(5)(a) P rmation given above is true and comp required to report and/or file certain r nent. The acceptance of a C-141 report ate and remediate contamination that f a C-141 report does not relieve the con- cca Pons Title: Project M Cca Pons Destruction for the acceptance of the acce	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf rt by the OCD does not reli- pose a threat to groundwater perator of responsibility for anager	en successfully complete information needed for c edge and understand that pu- orm corrective actions for n eve the operator of liability , surface water, human heal compliance with any other 5/2020 575-441-0980	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Rebect</u> Signature: <u>Rebect</u> email: <u>COCD Only</u>	a narrative of actions to date. If the area (see 19.15.29.11(A)(5)(a) P rmation given above is true and comp required to report and/or file certain r nent. The acceptance of a C-141 report ate and remediate contamination that f a C-141 report does not relieve the con- cca Pons Title: Project M Cca Pons Destruction for the acceptance of the acce	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf rt by the OCD does not reli- pose a threat to groundwater perator of responsibility for anager Date: Telephone:	en successfully complete information needed for c edge and understand that pu- orm corrective actions for n eve the operator of liability , surface water, human heal compliance with any other 5/2020 575-441-0980	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment
has begun, please attach within a lined containmer I hereby certify that the infor regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Rebect</u> Signature: <u>Rebect</u> email: <u>COCD Only</u>	a narrative of actions to date. If the area (see 19.15.29.11(A)(5)(a) P rmation given above is true and comp required to report and/or file certain r nent. The acceptance of a C-141 report ate and remediate contamination that f a C-141 report does not relieve the con- cca Pons Title: Project M Cca Pons Destruction for the acceptance of the acce	remedial efforts have bee NMAC), please attach all lete to the best of my knowl elease notifications and perf rt by the OCD does not reli- pose a threat to groundwater perator of responsibility for anager Date: Telephone:	en successfully complete information needed for c edge and understand that pu- orm corrective actions for n eve the operator of liability , surface water, human heal compliance with any other 5/2020 575-441-0980	d or if the release of closure evaluation. arsuant to OCD rules a eleases which may end should their operation lth or the environment

Page 3

Page 3 of 50

Oil Conservation Division

Incident ID NRM2023854921 **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?	60(ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🖾 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🖾 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🛛 No

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

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

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

- 🛛 Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- $\boxtimes$ Photographs including date and GIS information
- $\boxtimes$ 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.

	22 10:49:14 AM					Page 23 o
Received by OCD: 3/15 Form C-141		to of No	NA antia a			Page 4 of
ronn C-141					Incident ID	NRM2023854921
Page 4	Oil C	Conservat	tion Division		District RP	
					Facility ID	
					Application ID	
failed to adequately inve addition, OCD acceptan	estigate and remediate	contaminat	ion that pose a thi	reat to groundwater, sur	face water, human health	
and/or regulations. Printed Name: Brando Signature:	Si	randon inclair	Deputy separation contacts and an DN sci Bordan structure and an UR construction and an UR construction much science construction of the and	Title: Environmenta Date: 2-4-2021	l Project Manager	deral, state, or iocal raws
Printed Name: Brand	Si	randon	Digitally signed by condants in Car DN sis Bar dan Sin Lay, Jahn DP, aust Francorrents, er al-ba, indianotalenipe can, exits	Title: Environmenta	l Project Manager	deral, state, or iocal raws

Received by OCD: 3/15/2021 10:23:11 .1.M Form C-141 State of New Mexico Page 5 of 50

Page 5

Oil Conservation Division

Incident ID	NRM2023854921
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be	e included in the plan.
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation point</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.1</li> <li>Proposed schedule for remediation (note if remediation plan time)</li> </ul>	12(C)(4) NMAC
<b>Deferral Requests Only:</b> Each of the following items must be con	nfirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around predeconstruction.	roduction equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health	n, the environment, or groundwater.
	e and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of
Printed Name: Brandon Sinclair Brandon District Brandon District Sincle in the Index Sincle in the Since Sin	Title: Environmental Project Manager
Signature: Sinclair	Date: 2-4-2021
email: bsinclair@talonlpe.com	Telephone: 575-746-8768
OCD Only	04/01/2021
Chad Hensley Received by:	Date:
Approved	Approval 🗌 Denied 🗌 Deferral Approved
Signature:	Date: 04/01/2021

Page 6

Oil Conservation Division

Incident ID	NRM2023854921
District RP	
Facility ID	
Application ID	

# Closure

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

Closure Report Attachment Checklist: Each of the following items must be included in the closure report. A scaled site and sampling diagram as described in 19.15.29.11 NMAC R Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Chad Hensley Title: HSE Coordinator Signature: Child Hendy Date: 6/22/2022 email: chensley@spurenergy.com Telephone: 346-339-1494 **OCD Only** Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Title: Environmental Specialist A

From:	<u>Gio PimaOil</u>
То:	ocdonline@state.nm.us; Tom Pima Oil; Ned Pima Oil
Subject:	Ross Ranch 22 #14H Sampling Confirmation
Date:	Monday, June 6, 2022 9:02:39 AM

Good Morning,

Pima Environmental would like to notify you that we will be collecting confirmation samples at the Ross Ranch 22 #14H for incident NRM2023854921. Pima personnel are scheduled to be on site for this sampling event at approximately 6:00 a.m. on Thursday, June 9, 2022. If you have any questions or concerns, please let me know. Thank you.

--

Gio Gomez Environmental Project Manager cell-806-782-1151 Office- 575-964-7740 **Pima Environmental Services, LLC.** 



# Appendix D

Photographic Documentation



# SITE PHOTOGRAPHS SPUR ENERGY PARTNERS

## ROSS RANCH 22 #14H







## Page 29 of 108







# Appendix E

Laboratory Reports



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

**Practical Solutions for a Better Tomorrow** 

# **Analytical Report**

# Pima Environmental Services-Carlsbad

Project Name:

Ross Ranch 22 14H

Work Order: E206077

Job Number: 21068-0001

Received: 6/14/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 6/20/22

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted 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 NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979) Date Reported: 6/20/22

Tom Bynum PO Box 247 Plains, TX 79355-0247

Project Name: Ross Ranch 22 14H Workorder: E206077 Date Received: 6/14/2022 11:39:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/14/2022 11:39:00AM, under the Project Name: Ross Ranch 22 14H.

The analytical test results summarized in this report with the Project Name: Ross Ranch 22 14H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman Laboratory Director Office: 505-632-1881 Cell: 775-287-1762 whinchman@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com

Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com Alexa Michaels Sample Custody Officer Office: 505-632-1881 labadmin@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



Page 32 of 108

•

# Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
CS-1	6
CS-2	7
CS-3	8
CS-4	9
CS-5	10
CS-6	11
CS-7	12
CS-8	13
CS-9	14
CS-10	15
CSW-1	16
CSW-2	17
CSW-3	18
CSW-4	19
QC Summary Data	20
QC - Volatile Organics by EPA 8021B	20
QC - Nonhalogenated Organics by EPA 8015D - GRO	21
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	22
QC - Anions by EPA 300.0/9056A	23
Definitions and Notes	24

# Table of Contents (continued)

Chain of Custody etc.

25

•

#### Sample Summarv

		Sample Sum				
Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247		Project Name: Project Number: Project Manager:	Ross Ranch 22 14H 21068-0001 Tom Bynum		<b>Reported:</b> 06/20/22 16:38	
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container	
CS-1	E206077-01A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-2	E206077-02A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-3	E206077-03A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-4	E206077-04A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-5	E206077-05A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-6	E206077-06A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-7	E206077-07A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-8	E206077-08A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-9	E206077-09A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CS-10	E206077-10A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CSW-1	E206077-11A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CSW-2	E206077-12A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
CSW-3	E206077-13A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	
SW-4	E206077-14A	Soil	06/09/22	06/14/22	Glass Jar, 4 oz.	



.

		impic D				
Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Project Numbe Project Manag	er: 2100	s Ranch 22 14H 58-0001 Bynum	I		<b>Reported:</b> 6/20/2022 4:38:51PM
		CS-1				
	-	E206077-01				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2225030
Benzene	ND	0.0250	1	06/15/22	06/18/22	
Ethylbenzene	ND	0.0250	1	06/15/22	06/18/22	
Toluene	ND	0.0250	1	06/15/22	06/18/22	
p-Xylene	ND	0.0250	1	06/15/22	06/18/22	
o,m-Xylene	ND	0.0500	1	06/15/22	06/18/22	
Fotal Xylenes	ND	0.0250	1	06/15/22	06/18/22	
Surrogate: 4-Bromochlorobenzene-PID		83.4 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2225030
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/18/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
Oil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
Surrogate: n-Nonane		108 %	50-200	06/15/22	06/15/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: KL		Batch: 2225036
Chloride	ND	20.0	1	06/15/22	06/16/22	

# Sample Data



.
	25	ample D	ลเล			
Pima Environmental Services-Carlsbad	Project Name:		s Ranch 22 14H			
PO Box 247	Project Numbe	er: 210	58-0001			Reported:
Plains TX, 79355-0247	Project Manag	ger: Tom	Bynum			6/20/2022 4:38:51PM
		CS-2				
		E206077-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: IY		Batch: 2225030
Benzene	ND	0.0250	1	06/15/22	06/18/22	
Ethylbenzene	ND	0.0250	1	06/15/22	06/18/22	
Toluene	ND	0.0250	1	06/15/22	06/18/22	
p-Xylene	ND	0.0250	1	06/15/22	06/18/22	
o,m-Xylene	ND	0.0500	1	06/15/22	06/18/22	
Fotal Xylenes	ND	0.0250	1	06/15/22	06/18/22	
Surrogate: 4-Bromochlorobenzene-PID		82.7 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	st: IY		Batch: 2225030
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/18/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.6 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
Surrogate: n-Nonane		108 %	50-200	06/15/22	06/15/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: KL		Batch: 2225036
Chloride	ND	20.0	1	06/15/22	06/16/22	



	Di	ample D	ลเล			
Pima Environmental Services-Carlsbad	Project Name:	Ros	Ranch 22 14H			
PO Box 247	Project Number	er: 2100	58-0001			Reported:
Plains TX, 79355-0247	Project Manag	er: Tom	Bynum			6/20/2022 4:38:51PM
		CS-3				
		E206077-03				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
olatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
enzene	ND	0.0250	1	06/15/22	06/18/22	
thylbenzene	ND	0.0250	1	06/15/22	06/18/22	
oluene	ND	0.0250	1	06/15/22	06/18/22	
-Xylene	ND	0.0250	1	06/15/22	06/18/22	
,m-Xylene	ND	0.0500	1	06/15/22	06/18/22	
otal Xylenes	ND	0.0250	1	06/15/22	06/18/22	
urrogate: 4-Bromochlorobenzene-PID		81.6 %	70-130	06/15/22	06/18/22	
onhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
asoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/18/22	
urrogate: 1-Chloro-4-fluorobenzene-FID		92.1 %	70-130	06/15/22	06/18/22	
onhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
urrogate: n-Nonane		108 %	50-200	06/15/22	06/15/22	
anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: KL		Batch: 2225036
Thloride	ND	20.0	1	06/15/22	06/16/22	



	25	ample D	ลเล			
Pima Environmental Services-Carlsbad	Project Name:	Ros	s Ranch 22 14H			
PO Box 247	Project Numbe	er: 210	58-0001			Reported:
Plains TX, 79355-0247	Project Manage	er: Tom	Bynum			6/20/2022 4:38:51PM
		CS-4				
	]	E206077-04				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
Benzene	ND	0.0250	1	06/15/22	06/18/22	
Ethylbenzene	ND	0.0250	1	06/15/22	06/18/22	
Toluene	ND	0.0250	1	06/15/22	06/18/22	
p-Xylene	ND	0.0250	1	06/15/22	06/18/22	
o,m-Xylene	ND	0.0500	1	06/15/22	06/18/22	
Fotal Xylenes	ND	0.0250	1	06/15/22	06/18/22	
Surrogate: 4-Bromochlorobenzene-PID		82.5 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/18/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.7 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
Surrogate: n-Nonane		106 %	50-200	06/15/22	06/15/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: KL		Batch: 2225036
Chloride	ND	20.0	1	06/15/22	06/16/22	



	25	ample D	ลเล			
Pima Environmental Services-Carlsbad	Project Name:	Ros	s Ranch 22 14H			
PO Box 247	Project Numbe	er: 2100	58-0001			Reported:
Plains TX, 79355-0247	Project Manage	er: Tom	Bynum			6/20/2022 4:38:51PM
		CS-5				
	]	E206077-05				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
olatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	vst: IY		Batch: 2225030
enzene	ND	0.0250	1	06/15/22	06/18/22	
thylbenzene	ND	0.0250	1	06/15/22	06/18/22	
bluene	ND	0.0250	1	06/15/22	06/18/22	
Xylene	ND	0.0250	1	06/15/22	06/18/22	
m-Xylene	ND	0.0500	1	06/15/22	06/18/22	
otal Xylenes	ND	0.0250	1	06/15/22	06/18/22	
urrogate: 4-Bromochlorobenzene-PID		82.8 %	70-130	06/15/22	06/18/22	
onhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	/st: IY		Batch: 2225030
asoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/18/22	
urrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	06/15/22	06/18/22	
onhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	/st: JL		Batch: 2225040
iesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
il Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
urrogate: n-Nonane		112 %	50-200	06/15/22	06/15/22	
nions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	/st: KL		Batch: 2225036
hloride	ND	20.0	1	06/15/22	06/16/22	



	25	ample D	ลเล			
Pima Environmental Services-Carlsbad	Project Name:	Ros	s Ranch 22 14H			
PO Box 247	Project Numbe	er: 2100	58-0001			Reported:
Plains TX, 79355-0247	Project Manag	er: Tom	Bynum			6/20/2022 4:38:51PM
		CS-6				
		E206077-06				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
Benzene	ND	0.0250	1	06/15/22	06/18/22	
Ethylbenzene	ND	0.0250	1	06/15/22	06/18/22	
Toluene	ND	0.0250	1	06/15/22	06/18/22	
p-Xylene	ND	0.0250	1	06/15/22	06/18/22	
p,m-Xylene	ND	0.0500	1	06/15/22	06/18/22	
Total Xylenes	ND	0.0250	1	06/15/22	06/18/22	
Surrogate: 4-Bromochlorobenzene-PID		83.2 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/18/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.3 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
Surrogate: n-Nonane		109 %	50-200	06/15/22	06/15/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: KL		Batch: 2225036
Chloride	ND	20.0	1	06/15/22	06/16/22	



29	imple D	ลเล			
Project Name:	Ros	Ranch 22 14H			
Project Number	r: 2100	58-0001			Reported:
Project Manage	er: Tom	Bynum			6/20/2022 4:38:51PM
	<b>CS-7</b>				
]	E206077-07				
	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
ND	0.0250	1	06/15/22	06/18/22	
ND	0.0250	1	06/15/22	06/18/22	
ND	0.0250	1	06/15/22	06/18/22	
ND	0.0250	1	06/15/22	06/18/22	
ND	0.0500	1	06/15/22	06/18/22	
ND	0.0250	1	06/15/22	06/18/22	
	84.6 %	70-130	06/15/22	06/18/22	
mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
ND	20.0	1	06/15/22	06/18/22	
	91.8 %	70-130	06/15/22	06/18/22	
mg/kg	mg/kg	Analy	st: JL		Batch: 2225040
ND	25.0	1	06/15/22	06/15/22	
ND	50.0	1	06/15/22	06/15/22	
	109 %	50-200	06/15/22	06/15/22	
mg/kg	mg/kg	Analy	st: KL		Batch: 2225036
21.5	20.0	1	06/15/22	06/16/22	
_	Project Name: Project Numbe Project Manago Result Mg/kg ND ND ND ND ND ND ND ND ND ND ND ND ND	Project Name:         Ross           Project Number:         2100           Project Manager:         Tom           Project Manager:         Tom           E206077-07         Resout           E206077-07         Imit           Mg/kg         Mg/kg           Mg/kg         Mg/kg           ND         0.0250           ND         20.0           Mg/kg         mg/kg           Mg/kg         Mg/kg           MD         25.0           ND         50.0           ND         50.0           ND         50.0           ND         50.0           ND         50.0	Project Number:       21068-0001         Project Manager:       Tom Bynum         CS-7         E206077-07         E206077-07         Te206077-07         Te206077-07         Result       Limit         Dilution         mg/kg       mg/kg       Analy         ND       0.0250       1         Mg/kg       mg/kg       Analy         ND       20.0       1         mg/kg       mg/kg       Analy         ND       25.0       1         ND       50.0       1         ND       50.0       1         ND       50.200       1 <td< td=""><td>I         Project Name:       Ross Ranch 22 14H         Project Number:       21068-0001         Project Manager:       Tom Bynum         CS-7       Tom Bynum         E206077-07       Prepared         Result       Limit       Dilution       Prepared         MD       0.0250       1       06/15/22         ND       0.0250       1       06/15/22         MD       20.0       1       06/15/22         MD       20.0       1       06/15/22         MD       20.0       1       06/15/22         MD       25.0       1       06/15/22         MD       25.0       1       06/15/22</td><td>Image: Ross Ranch 22 14H         Project Namee: 21068-0001       21068-0001         Project Manager: Tom Bynum       Tom Bynum         CS-7         E206077-07         Result       Limit       Dilution       Prepared       Analyzed         Mp/g       mg/kg       Analyst: IY       V       V         ND       0.0250       1       06/15/22       06/18/22         ND       20.0       0       06/15/22       06/18/22         ND       20.0       0       06/15/22       06/18/22         ND       20.0       0       06/15/22       06/18/22         ND       25.0</td></td<>	I         Project Name:       Ross Ranch 22 14H         Project Number:       21068-0001         Project Manager:       Tom Bynum         CS-7       Tom Bynum         E206077-07       Prepared         Result       Limit       Dilution       Prepared         MD       0.0250       1       06/15/22         ND       0.0250       1       06/15/22         MD       20.0       1       06/15/22         MD       20.0       1       06/15/22         MD       20.0       1       06/15/22         MD       25.0       1       06/15/22         MD       25.0       1       06/15/22	Image: Ross Ranch 22 14H         Project Namee: 21068-0001       21068-0001         Project Manager: Tom Bynum       Tom Bynum         CS-7         E206077-07         Result       Limit       Dilution       Prepared       Analyzed         Mp/g       mg/kg       Analyst: IY       V       V         ND       0.0250       1       06/15/22       06/18/22         ND       20.0       0       06/15/22       06/18/22         ND       20.0       0       06/15/22       06/18/22         ND       20.0       0       06/15/22       06/18/22         ND       25.0



	Da	ample D	ata			
Pima Environmental Services-Carlsbad	Project Name:	Ross	s Ranch 22 14H			
PO Box 247	Project Numbe	er: 2100	58-0001			Reported:
Plains TX, 79355-0247	Project Manag	ger: Tom	Bynum			6/20/2022 4:38:51PM
		CS-8				
		E206077-08				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: IY		Batch: 2225030
Benzene	ND	0.0250	1	06/15/22	06/18/22	
Ethylbenzene	ND	0.0250	1	06/15/22	06/18/22	
Toluene	ND	0.0250	1	06/15/22	06/18/22	
p-Xylene	ND	0.0250	1	06/15/22	06/18/22	
o,m-Xylene	ND	0.0500	1	06/15/22	06/18/22	
Fotal Xylenes	ND	0.0250	1	06/15/22	06/18/22	
Surrogate: 4-Bromochlorobenzene-PID		84.0 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	st: IY		Batch: 2225030
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/18/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.2 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
Surrogate: n-Nonane		113 %	50-200	06/15/22	06/15/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: KL		Batch: 2225036
Chloride	ND	20.0	1	06/15/22	06/16/22	



	Di	ample D	ata			
Pima Environmental Services-Carlsbad	Project Name:	Ross	s Ranch 22 14H			
PO Box 247	Project Numbe	er: 2100	58-0001			Reported:
Plains TX, 79355-0247	Project Manag	ger: Tom	Bynum			6/20/2022 4:38:51PM
		CS-9				
		E206077-09				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2225030
Benzene	ND	0.0250	1	06/15/22	06/18/22	
Ethylbenzene	ND	0.0250	1	06/15/22	06/18/22	
Toluene	ND	0.0250	1	06/15/22	06/18/22	
p-Xylene	ND	0.0250	1	06/15/22	06/18/22	
p,m-Xylene	ND	0.0500	1	06/15/22	06/18/22	
Total Xylenes	ND	0.0250	1	06/15/22	06/18/22	
Surrogate: 4-Bromochlorobenzene-PID		83.2 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2225030
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/18/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.8 %	70-130	06/15/22	06/18/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
Surrogate: n-Nonane		112 %	50-200	06/15/22	06/15/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: KL		Batch: 2225036
Chloride	ND	20.0	1	06/15/22	06/16/22	



	5	ample D	ata			
Pima Environmental Services-Carlsbad	Project Name:	: Ros	s Ranch 22 14H			
PO Box 247	Project Numb	er: 2100	58-0001			Reported:
Plains TX, 79355-0247	Project Manag	ger: Tom	Bynum			6/20/2022 4:38:51PM
		CS-10				
		E206077-10				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
Benzene	ND	0.0250	1	06/15/22	06/19/22	
Ethylbenzene	ND	0.0250	1	06/15/22	06/19/22	
Toluene	ND	0.0250	1	06/15/22	06/19/22	
p-Xylene	ND	0.0250	1	06/15/22	06/19/22	
o,m-Xylene	ND	0.0500	1	06/15/22	06/19/22	
Fotal Xylenes	ND	0.0250	1	06/15/22	06/19/22	
Surrogate: 4-Bromochlorobenzene-PID		84.4 %	70-130	06/15/22	06/19/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/19/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.5 %	70-130	06/15/22	06/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/15/22	
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/15/22	
Surrogate: n-Nonane		107 %	50-200	06/15/22	06/15/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: KL		Batch: 2225036
Chloride	ND	20.0	1	06/15/22	06/16/22	



Reported:
20/2022 4:38:51PM
Notes
atch: 2225030
atch: 2225030
atch: 2225040
atch: 2225036



3	ample D	ลเล			
Project Name	: Ros	s Ranch 22 14H			
Project Numb	er: 2100	58-0001			Reported:
Project Manag	ger: Tom	Bynum			6/20/2022 4:38:51PM
	CSW-2				
	E206077-12				
	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
ND	0.0250	1	06/15/22	06/19/22	
ND	0.0250	1	06/15/22	06/19/22	
ND	0.0250	1	06/15/22	06/19/22	
ND	0.0250	1	06/15/22	06/19/22	
ND	0.0500	1	06/15/22	06/19/22	
ND	0.0250	1	06/15/22	06/19/22	
	85.9 %	70-130	06/15/22	06/19/22	
mg/kg	mg/kg	Analy	st: IY		Batch: 2225030
ND	20.0	1	06/15/22	06/19/22	
	91.7 %	70-130	06/15/22	06/19/22	
mg/kg	mg/kg	Analy	st: JL		Batch: 2225040
ND	25.0	1	06/15/22	06/16/22	
ND	50.0	1	06/15/22	06/16/22	
	114 %	50-200	06/15/22	06/16/22	
mg/kg	mg/kg	Analy	st: KL		Batch: 2225036
ND	20.0	-		06/17/22	
	Project Name Project Numb Project Manag Result Mg/kg ND ND ND ND ND ND ND ND ND ND ND ND ND	Project Name:         Rose           Project Number:         2100           Project Manager:         Tom           Project Manager:         Tom           CSW-2         E206077-12           Result         Limit           mg/kg         mg/kg           MD         0.0250           ND         20.0           Mg/kg         mg/kg           mg/kg         mg/kg           ND         25.0           ND         50.0           ND         50.0           ND         50.0           ND         50.0           ND         50.0           ND         50.0<	Project Number: $21068-0001$ Project Manager: $Tom Bynum$ CSW-2         E206077-12         Result       Limit       Dilution         Mg/kg       mg/kg       Analys         MD       0.0250       1         ND       20.0       1         mg/kg       mg/kg       Malys         MD       20.0       1      ND       20.0       1         MD       20.0       1         MD       25.0       1         ND       25.0       1         ND       50.200       1         Mg/kg       Mg/kg       50-200	I         Project Name:       Ross Ranch 22 14H         Project Number:       21068-0001         Project Manager:       Tom Bynum         CSW-2       E         E206077-12       F         Result       Limit       Dilution       Prepared         MD       0.0250       1       06/15/22         ND       20.0       1       06/15/22         MD       20.0       1       06/15/22         MD       25.0       1       06/15/22         MD       25.0       1       06/15/22         MD       25.0       1       06/15/22         MD	Very jeet Name:       Ross Ranch 22 14H         Project Number:       21068-0001         Project Manager:       Tom Bynum         CSW-2         E206077-12         Result       Dilution       Prepared       Analyzed         Result       Limit       Dilution       Prepared       Analyzed         MD       0.0250       1       06/15/22       06/19/22         ND       20.0       1       06/15/22       06/19/22         MD       20.0       1       06/15/22       06/19/22         ND       20.0       1       06/15/22       06/19/22         MD       20.0       1       06/15/22       06/19/22         MD       25.0



	5	ample D	ata			
Pima Environmental Services-Carlsbad	Project Name	: Ros	s Ranch 22 14	4H		
PO Box 247	Project Numb	er: 2100	58-0001			Reported:
Plains TX, 79355-0247	Project Manag	ger: Tom	Bynum			6/20/2022 4:38:51PM
		CSW-3				
		E206077-13				
		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	A	nalyst: IY		Batch: 2225030
Benzene	ND	0.0250	1	06/15/22	06/19/22	
Ethylbenzene	ND	0.0250	1	06/15/22	06/19/22	
oluene	ND	0.0250	1	06/15/22	06/19/22	
o-Xylene	ND	0.0250	1	06/15/22	06/19/22	
o,m-Xylene	ND	0.0500	1	06/15/22	06/19/22	
Total Xylenes	ND	0.0250	1	06/15/22	06/19/22	
Surrogate: 4-Bromochlorobenzene-PID		85.5 %	70-130	06/15/22	06/19/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	nalyst: IY		Batch: 2225030
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/19/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.9 %	70-130	06/15/22	06/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: JL		Batch: 2225040
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/16/22	
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/16/22	
Surrogate: n-Nonane		112 %	50-200	06/15/22	06/16/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: KL		Batch: 2225036
Chloride	ND	20.0	1	06/15/22	06/17/22	



	25	ample D	ลเล					
Pima Environmental Services-Carlsbad	Project Name:		s Ranch 22 14I	H				
PO Box 247	Project Numbe		58-0001			Reported:		
Plains TX, 79355-0247	Project Manag	ger: Tom	Bynum			6/20/2022 4:38:51PM		
		CSW-4						
		E206077-14						
		Reporting						
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes		
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2225030		
Benzene	ND	0.0250	1	06/15/22	06/19/22			
Ethylbenzene	ND	0.0250	1	06/15/22	06/19/22			
Toluene	ND	0.0250	1	06/15/22	06/19/22			
p-Xylene	ND	0.0250	1	06/15/22	06/19/22			
o,m-Xylene	ND	0.0500	1	06/15/22	06/19/22			
Total Xylenes	ND	0.0250	1	06/15/22	06/19/22			
Surrogate: 4-Bromochlorobenzene-PID		84.8 %	70-130	06/15/22	06/19/22			
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2225030		
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/15/22	06/19/22			
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.5 %	70-130	06/15/22	06/19/22			
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: JL		Batch: 2225040		
Diesel Range Organics (C10-C28)	ND	25.0	1	06/15/22	06/16/22			
Dil Range Organics (C28-C36)	ND	50.0	1	06/15/22	06/16/22			
Surrogate: n-Nonane		106 %	50-200	06/15/22	06/16/22			
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: KL		Batch: 2225036		
Chloride	ND	20.0	1	06/15/22	06/17/22			

# **QC Summary Data**

		<b>L</b> = 10 .		ary Date	-				
Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247		Project Name: Project Number: Project Manager:	2	Ross Ranch 22 1 21068-0001 Tom Bynum	14H				<b>Reported:</b> 6/20/2022 4:38:51PM
		Volatile Or	rganics	by EPA 802	1B				Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2225030-BLK1)							Prepared: 0	6/15/22 A	nalyzed: 06/20/22
Benzene	ND	0.0250					-		
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	6.85		8.00		85.7	70-130			
LCS (2225030-BS1)							Prepared: 0	6/15/22 A	analyzed: 06/16/22
Benzene	4.87	0.0250	5.00		97.3	70-130			
Ethylbenzene	4.97	0.0250	5.00		99.4	70-130			
Toluene	5.27	0.0250	5.00		105	70-130			
o-Xylene	4.89	0.0250	5.00		97.7	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	6.89		8.00		86.2	70-130			
LCS Dup (2225030-BSD1)							Prepared: 0	6/15/22 A	nalyzed: 06/16/22
Benzene	4.94	0.0250	5.00		98.7	70-130	1.42	20	
Ethylbenzene	5.06	0.0250	5.00		101	70-130	1.80	20	
Toluene	5.31	0.0250	5.00		106	70-130	0.857	20	
p-Xylene	5.00	0.0250	5.00		99.9	70-130	2.24	20	
p,m-Xylene	10.2	0.0500	10.0		102	70-130	1.78	20	
Total Xylenes	15.2	0.0250	15.0		102	70-130	1.93	20	
Surrogate: 4-Bromochlorobenzene-PID	7.04		8.00		88.0	70-130			



# **QC Summary Data**

		QU N	u	ary Date					
Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247		Project Name: Project Number: Project Manager		Ross Ranch 22 21068-0001 Tom Bynum	14H				<b>Reported:</b> 6/20/2022 4:38:51PM
	No	onhalogenated (	Organic	s by EPA 80	15D - G	RO			Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec %	Rec Limits %	RPD %	RPD Limit %	N .
	mg/kg	mg/kg	mg/kg	mg/kg	/0	/0	70	70	Notes
Blank (2225030-BLK1)							Prepared: 0	6/15/22	Analyzed: 06/20/22
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.17		8.00		89.6	70-130			
LCS (2225030-BS2)							Prepared: 0	6/15/22	Analyzed: 06/20/22
Gasoline Range Organics (C6-C10)	42.8	20.0	50.0		85.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.09		8.00		88.6	70-130			
LCS Dup (2225030-BSD2)							Prepared: 0	6/15/22	Analyzed: 06/20/22
Gasoline Range Organics (C6-C10)	44.1	20.0	50.0		88.3	70-130	3.14	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.3	70-130			



# QC Summary Data

		QC D	u 11111	lary Data	u.				
Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247		Project Name: Project Number: Project Manager:		Ross Ranch 22 21068-0001 Tom Bynum	14H				<b>Reported:</b> 6/20/2022 4:38:51PM
	Nonh	alogenated Org	anics b	y EPA 8015I	) - DRO	/ORO			Analyst: JL
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2225040-BLK1)							Prepared: 0	6/15/22 A	Analyzed: 06/15/22
Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36)	ND ND	25.0 50.0							
Surrogate: n-Nonane	53.6		50.0		107	50-200			
LCS (2225040-BS1)							Prepared: 0	6/15/22 A	Analyzed: 06/15/22
Diesel Range Organics (C10-C28)	474	25.0	500		94.8	38-132			
Surrogate: n-Nonane	55.4		50.0		111	50-200			
Matrix Spike (2225040-MS1)				Source:	E206077-	11	Prepared: 0	6/15/22 A	Analyzed: 06/15/22
Diesel Range Organics (C10-C28)	472	25.0	500	ND	94.5	38-132			
Surrogate: n-Nonane	54.5		50.0		109	50-200			
Matrix Spike Dup (2225040-MSD1)				Source:	E206077-	11	Prepared: 0	6/15/22 A	Analyzed: 06/15/22
Diesel Range Organics (C10-C28)	477	25.0	500	ND	95.3	38-132	0.935	20	
Surrogate: n-Nonane	55.5		50.0		111	50-200			



# **QC Summary Data**

		QU N	<b>MIIII</b>	ary Dau	•				
Pima Environmental Services-Carlsbac PO Box 247 Plains TX, 79355-0247	1	Project Name: Project Number: Project Manager:		Ross Ranch 22 1 21068-0001 Tom Bynum	l4H				<b>Reported:</b> 6/20/2022 4:38:51PM
		Anions	by EPA	300.0/9056A	<b>`</b>				Analyst: KL
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2225036-BLK1)							Prepared: 0	6/15/22 A	nalyzed: 06/16/22
Chloride	ND	20.0							
LCS (2225036-BS1)							Prepared: 0	6/15/22 A	analyzed: 06/16/22
Chloride	245	20.0	250		97.9	90-110			
Matrix Spike (2225036-MS1)				Source:	E206077-0	)1	Prepared: 0	6/15/22 A	analyzed: 06/16/22
Chloride	265	20.0	250	ND	106	80-120			
Matrix Spike Dup (2225036-MSD1)				Source:	E206077-0	)1	Prepared: 0	6/15/22 A	analyzed: 06/16/22
Chloride	265	20.0	250	ND	106	80-120	0.113	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.



Pima Environmental Services-Carlsbad	Project Name:	Ross Ranch 22 14H	
PO Box 247	Project Number:	21068-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	06/20/22 16:38

ND	Analyte NOT DETECTED at or above the reporting limit
1.2	maryte no i bbilbe ibb at of acove are reporting initi

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Pro	iect	Information
	Jecc	mormacion

Client: P	ima Envi	ronmen	tal Serv	ices	Attention: Sput Energy	4			_		se On				1	TAT		EPA Program		
Project: Project N	Ross R Nanager:	Tom By	22 14 num	H	Attention: Due Energy Address:	γ	Lab WO# Job Number E 200077 21008-0001			1D	2D	3D	Standard	CWA	SDWA					
Address:	5614 N.	Loving	on Hwy		<u>City, State, Zip</u> Phone:								Metho		_		$\neg$		RCRA	
hone:	e, Zip Ho 580-748-	1613		0	Email:		8015	15										State		
Email: Report d	tom@pin	naoil.coi	m		Pima Project # 6-63		) by 80	) by 80	3021	260	110	300.0		MN	X		NM CO	UT AZ	TX	
Time	Date	Matrix	No. of Containers	Sample ID		Lab	DRO/ORO by	GRO/DRO by 8015	BTEX by 802.	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC	BGDOC			Remarks		
Sampled	Sampled	-	Containers			Number	DR	GR	BT	NO	Me	c	-	1	BG					
6:00	6/9/22	5		CS-1		1				_			_	X						
6:05	1	1		CS=2		2								1						
6:10				CS-3		3														
6:15				CS-4		4														
6:20				CS-5		5														
6:25				CS-6		6														
6:30				CS-7		7														
6:35				CS-8		8														
6:40				CS-9		9														
6:45	1	1	1.00	CS-10		10								1						
Addition	al Instruc	tions:	R-11	To So	D Emprove															
, (field sam	oler), attest to	the validity	and authen	nticity of this sample. 1	an aware that tampening with or intentionally migal action. Sampled by: Neo	slabelling the sample	e locatio	on,	-	1							ived on ice the day t	Carlo	ed or receiver	
date or time Relinquish	of collection	is considere	d fraud and Date	may be grounds for leg e Time	gal action. Sampled by: VCA Received by: (Signature)	Date A		Time		-	packed	in ice at	an avg tem	L		e Only	C on subsequent da	ys.	-	
1140	1 74	LID	6	-10-22 3:	OZP ROUGHIN	Date Date	02	4	P. /	2	Rece	eived o	on ice:	Q	) N					
Relinguish	ed by: King	M (	Date	5-10 000	4: GReceived by: (Signature)	A 1/14	22	11	:39	9	Т1			Т2			Т3			
Relinquish	ed by: (Signa	ature)	Date	e Time	Received by: (Signature)	Date		Time			AVG	Temp	·~ (	+						
Samole Mat	rix <mark>: S - Soil, So</mark>	- Solid, Sg -	Sludge, A -	Aqueous, <b>O</b> - Other		Containe	r Type	: g - g	lass,					er gla	SS. V -	VOA				

Page 25 of 27

Released to Imaging: 7/18/2022 2:26:29 PM

Client: Pima Environmental	Services	Bill To		1		La	b Us	e Onl	ly	1	T	AT	EPA P	rogram
lient: Pima Environmental roject: Ress Kanch	22 14 4	Attention: Spor Energy Address:		Lab	NO#				Number	1D	2D 3D	Standard	CWA	SDWA
Project Manager: Tom Bynu Address: 5614 N. Lovington		Address: City, State, Zip		Ed	00	OŦ			sis and Method				-	RCRA
City, State, Zip Hobbs, NM,		Phone:												1
hone: 580-748-1613 mail: tom@pimaoil.com		Email:		8015	8015							NM CC	State	TX
Report due by:		Pima Project # .6-63		O by	O by	8021	3260	010	300.0	NN	¥1	X	UT AL	
Time Date Matrix	No. of ontainers Sample ID		Lab	DRO/ORO by	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC	BGDOC		Remarks	
Jampieu Jampieu	Untainers		Number	ä	5	81	×	Σ	5	8	00			-
6:50 6/9/22 S	CSW-1		11					-		X				
6:55	CSW-Z		12							1				
			13							Ħ				
7:00	CSW-3					-	_	-		$\mathbb{H}$				
7:05 1 1	CSW-4		14							T				
			-			-	-	-		-				
									_	-				_
			-		_		-	_		-				
									1.10.101					
Additional Instructions:	10			-	-		-	_		-				-
B.	11 To Spui	am aware that tagpering with or intentionally mislabe			_									
, (field sampler), attest to the validity and date or time of collection is considered fr			lling the sample	e locatio	n,							eceived on ice the day 6 °C on subsequent d		ed or received
Relinquished by: (Signature)	Date Time	Receiver by: (Signature)	Date	1.00	Time	1.0	1	7	ived on ice:	L	ab Use Or	nly		
Vied Kalers	6-10-22 3:		6-10	jor	-//	0	R	Rece	ived on ice:	C	Y N			
Relinquished by (Signature)	and and and	7'. (GReceived by: (Signature)	10/14	22	11	:3	91	Т1		T2		ТЗ		
Relinquished by: (Signature)	Date Time	Received by: (Signature)	Date	_	Time				(	I	-			
				-		_			Temp °C	T				
Sample Matrix S - Soil Sd - Solid, Sg - Slu		unless other arrangements are made. Hazardou:							astic, ag - ambe					

## **Envirotech Analytical Laboratory**

#### Sample Receipt Checklist (SRC)

Client:	Pima Environmental Services-Carlsbad	Date Received:	06/14/22	11:39	Work Order ID:	E206077
Phone:	(575) 631-6977	Date Logged In:	06/14/22	11:37	Logged In By:	Alexa Michaels
Email:	tom@pimaoil.com	Due Date:	06/17/22	17:00 (3 day TAT)		
Chain o	f Custody (COC)					
1. Does 1	the sample ID match the COC?		Yes			
2. Does t	the number of samples per sampling site location mate	ch the COC	Yes			
3. Were	samples dropped off by client or carrier?		Yes	Carrier: UPS		
4. Was th	he COC complete, i.e., signatures, dates/times, reques	ted analyses?	Yes			
5. Were	all samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssio		Yes		Comment	ts/Resolution
Sample '	<u>Turn Around Time (TAT)</u>					
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample	Cooler					
7. Was a	sample cooler received?		Yes			
8. If yes,	, was cooler received in good condition?		Yes			
9. Was th	he sample(s) received intact, i.e., not broken?		Yes			
10. Were	e custody/security seals present?		No			
11. If yes	s, were custody/security seals intact?		NA			
12. Was t	he sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples are minutes of sampling		Yes			
13. If no	visible ice, record the temperature. Actual sample	temperature: 4°	с			
	Container	1				
	aqueous VOC samples present?		No			
	VOC samples collected in VOA Vials?		NA			
	e head space less than 6-8 mm (pea sized or less)?		NA			
	a trip blank (TB) included for VOC analyses?		NA			
	non-VOC samples collected in the correct containers?		Yes			
19. Is the	appropriate volume/weight or number of sample contain	ers collected?	Yes			
Field La	lbel					
20. Were	e field sample labels filled out with the minimum info	rmation:				
	Sample ID?		Yes			
	Date/Time Collected?		Yes			
	Collectors name?		Yes			
	<u>Preservation</u> s the COC or field labels indicate the samples were pro-	ecerticad?	Na			
	sample(s) correctly preserved?		No NA			
	b filteration required and/or requested for dissolved m	etals?	NA			
		•••••••••	TAO			
	ase Sample Matrix	2	<b>.</b>			
	s the sample have more than one phase, i.e., multiphas s, does the COC specify which phase(s) is to be analy		No			
-		2007	NA			
	ract Laboratory	9	• •			
	samples required to get sent to a subcontract laborator		No	0.1		
∠9. Was	a subcontract laboratory specified by the client and if	so who?	NA	Subcontract Lab: NA		

Signature of client authorizing changes to the COC or sample disposition.



envirotech Inc.

•



# Appendix F

NMOCD Approved Remediation Plan

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

Page 59 bf 108

Incident ID	NRM2023854921
District RP	
Facility ID	
Application ID	

# **Release Notification**

### **Responsible Party**

Responsible Party: Spur Energy Partners LLC	OGRID: 328947
Contact Name: Kenny Kidd	Contact Telephone: 575-616-5400
Contact email: kkidd@spurepllc.com	Incident # (assigned by OCD):
Contact mailing address: 920 Memorial City Way Suite 1000 Houston, TX 77024	

### **Location of Release Source**

Latitude 32.636384	Longitude <u>-104.478333</u> (location of source)	
(NAD 83 in decimal degrees to 5 decimal places)		
Site Name: Ross Ranch 22 #014H	Site Type: Oil Production Battery	
Date Release Discovered: August 22, 2020	API# (if applicable) 30-015-45695	
	Country	

Unit Letter	Section	Township	Range	County
D	27	19S	25E	Eddy

Surface Owner: State Federal Tribal Private (Name: \_

## Nature and Volume of Release

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

Produced Water  Condensate	Volume Released (bbls) 6 bbls Is the concentration of dissolved chloride in the produced water >10,000 mg/l? Volume Released (bbls)	Volume Recovered (bbls) 3bbls
	produced water >10,000 mg/l?	Tyes X No
	Volume Released (hbls)	
	volume Released (DDIS)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
	c truck was dispatched and recovered approximately	
		×
sed to Imaging: 7/18/202		

Form C-141State of New MexicoIncident IDNRM2023854921Page 2Oil Conservation DivisionDistrict-RPFacility IDFacility IDApplication IDApplication ID

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?	
Yes No		
If YES, was immediate no	ptice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Immediate notice was provided by Kenny Kidd of Spur Energy via email to the BLM, and Victoria Venegas with the NMOCD

### **Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 $\boxtimes$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: <u>Rebecca Pons</u> Title: <u>Project Manager</u>	
Signature:	Date: <u>8/25/2020</u>
email:Rpons@talonlpe.com	Telephone:575-441-0980
OCD Only	
Received by: <u>Ramona Marcus</u>	Date: 8/25/2020

R	eceive
0	
202	For
and a	Page

I ------

Received by OCD: 7/8/2022 10:49314 MMI Form C-141 State of New Mexico

Page 3

Oil Conservation Division

	Page 61 0f10
Incident ID	NRM2023854921
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?	<u>60</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🛛 No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\boxtimes$  Depth to water determination
- $\boxtimes$  Determination of water sources and significant watercourses within  $\frac{1}{2}$ -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.

Received by OCD: 7/8/2022 10:49314 IAM Form C-141 State of New Mexico		Page 62 0f 10		
			Incident ID	NRM2023854921
Page 4	il Conservation Division		District RP	
			Facility ID	
			Application ID	
I hereby certify that the information giv regulations all operators are required to public health or the environment. The a failed to adequately investigate and rem addition, OCD acceptance of a C-141 re and/or regulations. Printed Name: Brandon Sinclair Signature: email: bsinclair@talonlpe.com	report and/or file certain release no acceptance of a C-141 report by the nediate contamination that pose a th	otifications and perform co e OCD does not relieve the meat to groundwater, surfa	prrective actions for rele operator of liability sho ce water, human health iance with any other feo Project Manager	eases which may endanger ould their operations have or the environment. In
OCD Only				
Received by:		Date:		

Received by OCD: 3/8/2022 10:49:314 IAMI State of New Mexico

Oil Conservation Division

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

Incident ID	NRM2023854921
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points  $\boxtimes$ 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: Brandon Sinclair Title: Environmental Project Manager Brandon Sinclair c=US Date: 2021.03.12 12:08:22 -07'00' Signature: Date: 2-4-2021 email: bsinclair@talonlpe.com Telephone: 575-746-8768 OCD Only 04/01/2021 Chad Hensley Received by: Date: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Chad Heno 04/01/2021 Signature: Date:

Page 5



# Soil Assessment and Remediation Work Plan

Ross Ranch 22 #014H Eddy County, New Mexico API # 30-015-45695, NRM2023854921

# **Prepared For:**

Spur Energy Partners LLC 920 Memorial City Way Suite 1000 Houston, TX 77024

# **Prepared By:**

TALON/LPE 408 West Texas Avenue Artesia, NM 88210

March 12, 2021

Page | 1

Mr. Jim Amos Bureau of Land Management 620 East Green Street Carlsbad, NM 88220

Mr. Mike Bratcher **NMOCD District 2** 811 S. 1<sup>st</sup> Street Artesia, NM 88210

Subject: Soil Assessment and Remediation Work Plan Ross Ranch 22 #014H Eddy County, New Mexico API # 30-015-45695, NRM2023854921

Dear Mr. Amos & Mr. Bratcher,

Spur Energy Partners LLC (Spur) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above-referenced location. The results of our soil assessment and proposed remediation activities are contained herein.

### Site Information

The Ross Ranch 22 #014H is located approximately fifteen (15) miles southwest of Artesia, New Mexico. The legal location for this release is Unit Letter D, Section 27, Township 19 South and Range 25 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.636389 North and -104.478333 West. A site plan is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Reagan loam, 0 to 3 percent slopes. See Appendix II for referenced soil data. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to lower Pleistocene in age and is comprised of loam derived from alluvium and/or eolian deposits. Drainage courses in this area are typically dry.

### **Ground Water and Site Characterization**

The New Mexico Office of the State Engineer web site indicates that the nearest reported depth to groundwater is 60-feet below ground surface (BGS). See Appendix II for the referenced groundwater data.

Pursuant to Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 of the New Mexico Administrative Code (NMAC), if a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater.

Approximate Depth to Groundwater 60 Feet/BGS						
□Yes ⊠No	Within 300 feet of any continuously flowing watercours any other significant watercourse	e or				
□Yes ⊠No	Within 200 feet of any lakebed, sinkhole or playa lake					
□Yes ⊠No	Within 300 feet from an occupied permanent residence school, hospital, institution or church	<u>,</u>				
∐Yes ⊠No	Within 500 feet of a spring or a private, domestic fresh well used by less than five households for domestic or watering purposes					
□Yes ⊠No □Yes ⊠No	Within 1000 feet of any fresh water well or spring Within incorporated municipal boundaries or within a d Municipal fresh water well field covered under a munic ordinance adopted pursuant to Section 3-2703 NMSA	ipal				
□Yes ⊠No □Yes ⊠No □Yes ⊠No □Yes ⊠No	Within 300 feet of a wetland Within the area overlying a subsurface mine Within an unstable area Within a 100-year floodplain					

As this release does not meet any of the above criteria, the closure criteria for this incident are as follows:

Table I Closure Criteria for Soils Impacted by a Release							
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**				
51 feet-100 feet	Chloride***	EPA 300.0 or SM4500 CI B	10,000 mg/kg				
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	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				

#### **Incident Description**

On August 22, 2020, a mixture of crude oil (unknown volume) and produced water (6 barrels (bbls)) was released into the unlined, earthen containment surrounding the separator battery area. This occurred due to a breach in the welded 4-inch line which had corroded. The initial C-141 is attached in Appendix III. A site map illustrating the affected area is presented in Appendix I.

#### Site Assessment

On October 7, 2020, Talon mobilized personnel to begin the site assessment and soil sampling activities for the construction of a work plan. Discrete surface soil samples were collected within and around the impacted area utilizing a hand auger. Further vertical delineation could not take place due to auger refusal as well as the proximity of infrastructure. Results from our sampling event are presented in the following data table. A complete laboratory report can be found in Appendix V.

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Total TPH (mg/kg)	Cl (mg/kg)	
Closure Criteria 19.15.29.12 NMAC		50 mg/kg	10 mg/kg	1,000 mg/kg			2,500 mg/kg	10,000 mg/kg		
S-1	0 R	10/7/2020	ND	ND	63.6	13900	3390	17353.6	24000	
S-2	0 R	10/7/2020	ND	ND	ND	9730	3350	13080.0	1920	
S-3	0 R	10/7/2020	ND	ND	ND	17200	5410	22610.0	13600	
S-4	0 R	10/7/2020	ND	ND	ND	42400	11300	53700.0	65600	
S-5	0 R	10/7/2020	ND	ND	ND	13600	4750	18350.0	4480	
S-6	0 R	10/7/2020	ND	ND	ND	53800	16900	70700.0	39600	
S-7	0 R	10/7/2020	ND	ND	ND	34400	9770	44170.0	39600	
S-8	0 R	10/7/2020	0.572	ND	103	36800	9800	46703.0	44800	
BG-1	0	10/7/2020	ND	ND	ND	ND	ND	-	16	
BG-2	0	10/7/2020	ND	ND	ND	ND	ND	-	80	
BG-3	0	10/7/2020	ND	ND	ND	ND	ND	-	80	
BG-4	0	10/7/2020	ND	ND	ND	ND	ND	-	48	

#### Table 1: Soil Sample Analysis

ND= Analyte Not Detected

R= Hand Auger Refusal

#### Proposed Remedial Actions

- Excavation activities within the separator battery will be hand-excavated to a depth of 1.0-foot BGS in order to avoid compromising structural integrity.
- Vertical delineation of the impacted area will be addressed during remediation activities.
- Microblaze, a bioremediation agent, will then be spray-applied to the impacted area.
- Confirmation samples will be collected from the bottom and sidewalls of the excavation 90-days after the microblaze application in order to determine whether contaminant concentration is at that point below NMOCD closure criteria. Should it be determined that concentrations are still in excess of NMOCD closure criteria, we will be requesting a deferral of remediation due to contamination being directly under and around production equipment, the remediation of which would necessitate a major facility deconstruction.
- The excavated area will be backfilled with new caliche.
- The excavated material (approximately 75 yards) will be transported to Lea Land, LLC, a NMOCD approved solid waste disposal facility.
- Remedial actions will commence within 14-days of client authorization to proceed.
- A final closure report documenting the remedial actions performed and a Final C-141 will be provided to the NMOCD District II Office.

Page | 5

#### Closure

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

Respectfully submitted,

TALON/LPE

Brandon Sinclair Project Manager David J. Adkins Regional Manager

Attachments: Appendix I Site Maps Appendix II Soil Boring Log, Groundwater & Soil Data, FEMA Flood Map Appendix III C-141 Forms Appendix IV Photographic Documentation Appendix V Laboratory Data



# <u>APPENDIX I</u>

# SITE MAPS



# Ross Ranch 22 # 014H

Spur Energy Partners LLC API # 30-015-45695 Eddy County, NM Karst Map







N


#### Received by OCD: 7/8/2022 10:49:14 AM1

## **Ross Ranch 22 # 014H**

The second states of the

Spur Energy Partners LLC API # 30-015-45695 Eddy County, NM Locator Map

Ross Ranch 22 14H

21 Rocking R Red-Rd

Page 74 of 108

Lakewood

2 m

285

N

Google Earth

Released to Imaging: 7/18/2022 2:26:29 PM



## <u>APPENDIX II</u>

## **GROUNDWATER DATA**

## **SOIL SURVEY**

## FEMA FLOOD MAP

Released to Imaging: 7/18/2022/21:26:29PPM



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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced, O=orphaned, C=the file is closed)	(0						2=NE 3 st to lar	3=SW 4=SE gest) (NA	) AD83 UTM in m	eters)	(	n feet)	
POD Number	POD Sub- Code basin Co	ounty	Q 64			Sec	Tws	Rng	Х	Y	Distance	-	-	Water Column
RA 03304	RA	ED			1	27	19S	25E	549081	3610973* 🌍	195	130	60	70
RA 08986	RA	ED	1	3	3	22	19S	25E	548825	3611507 🌍	422	320	220	100
RA 02909	RA	ED		1	3	22	19S	25E	548864	3611989* 🌍	893	188	130	58
RA 02958	RA	ED		1	4	34	19S	25E	549681	3608740* 🌍	2474	450		
RA 03018	RA	ED	3	2	4	34	19S	25E	549987	3608639* 🌍	2676	530		
										Avera	ige Depth to	Water:	136	feet
											Minimum	Depth:	60	feet
											Maximum	Depth:	220	feet
Record Count: 5					_									

UTMNAD83 Radius Search (in meters):

Easting (X): 548931.12

Northing (Y): 3611098.29

Radius: 3000

\*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.

### Eddy Area, New Mexico

#### RA-Reagan loam, 0 to 3 percent slopes

#### Map Unit Setting

National map unit symbol: 1w5c Elevation: 1,100 to 4,400 feet Mean annual precipitation: 7 to 14 inches Mean annual air temperature: 60 to 70 degrees F Frost-free period: 200 to 240 days Farmland classification: Farmland of statewide importance

#### Map Unit Composition

Reagan and similar soils: 98 percent Minor components: 2 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Reagan**

#### Setting

Landform: Alluvial fans, fan remnants Landform position (three-dimensional): Rise Down-slope shape: Linear, convex Across-slope shape: Linear Parent material: Alluvium and/or eolian deposits

#### **Typical profile**

*H1 - 0 to 8 inches:* loam *H2 - 8 to 60 inches:* loam

#### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Moderate (about 8.2 inches)

#### Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: B Ecological site: R042XC007NM - Loamy Map Unit Description: Reagan loam, 0 to 3 percent slopes---Eddy Area, New Mexico

Hydric soil rating: No

#### **Minor Components**

#### Upton

Percent of map unit: 1 percent Ecological site: R042XC025NM - Shallow Hydric soil rating: No

#### Atoka

Percent of map unit: 1 percent Ecological site: R042XC007NM - Loamy Hydric soil rating: No

### **Data Source Information**

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 16, Jun 8, 2020



## Received by OCD: 7/8/2022 10:49:14 AMI INational Flood Hazard Layer FIRMette



### Legend

regulatory purposes.

Page 79 lof 108



1,500 Released to Imaging: 7/18/2022 2826:29 PM

2.000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



## **APPENDIX III**

## C-141 FORMS

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

Page &130f 108

Incident ID	NRM2023854921
District RP	
Facility ID	
Application ID	

### **Release Notification**

#### **Responsible Party**

Responsible Party: Spur Energy Partners LLC	OGRID: 328947
Contact Name: Kenny Kidd	Contact Telephone: 575-616-5400
Contact email: kkidd@spurepllc.com	Incident # (assigned by OCD):
Contact mailing address: 920 Memorial City Way Suite 1000 Houston, TX 77024	

#### **Location of Release Source**

Latitude <u>32.636384</u>	Longitude <u>-104.478333</u>	(location of source)
(NAD 83 i	in decimal degrees to 5 decimal places)	
Site Name: Ross Ranch 22 #014H	Site Type: Oil Production Battery	
Date Release Discovered: August 22, 2020	API# (if applicable) 30-015-45695	

Unit Letter	Section	Township	Range	County
D	27	19S	25E	Eddy

Surface Owner: State Federal Tribal Private (Name: \_\_\_\_\_

#### Nature and Volume of Release

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

Produced Water	Volume Released (bbls) 6 bbls Is the concentration of dissolved chloride in the	Volume Recovered (bbls) 3bbls
		Vec No
	produced water >10,000 mg/l?	
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
🗌 Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
	c truck was dispatched and recovered approximately	
		×

Form C-141State of New MexicoIncident IDNRM2023854921Page 2Oil Conservation DivisionDistrict-RPFacility IDFacility IDApplication IDApplication ID

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	
19.15.29.7(A) NMAC?	
🗌 Yes 🖾 No	
	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Immediate notice was pro	vided by Kenny Kidd of Spur Energy via email to the BLM, and Victoria Venegas with the NMOCD

#### **Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 $\square$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: <u>Rebecca Pons</u> Title: <u>Project Manager</u>	
Signature:	Date: <u>8/25/2020</u>
email:Rpons@talonlpe.com	Telephone:575-441-0980
OCD Only	
Received by: <u>Ramona Marcus</u>	Date: 8/25/2020

Received by OCD: 3/8/2022 10:49314 MMI Form C-141 State of New Mexico

Page 3

Oil Conservation Division

	Page 83 of 10
Incident ID	NRM2023854921
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?	<u>60</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🖂 No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\boxtimes$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-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.

eceived by OCD: 7/8/2022	State of New Mexico			Page 84 (of
			Incident ID	NRM2023854921
age 4	Oil Conservation Division		District RP	
			Facility ID	
			Application ID	
public health or the environm failed to adequately investiga	required to report and/or file certain release notif nent. The acceptance of a C-141 report by the O ate and remediate contamination that pose a threa f a C-141 report does not relieve the operator of n inclair	CD does not relieve the at to groundwater, surfa	operator of liability sh ce water, human health iance with any other fe	ould their operations have or the environment. In
Signature:	·	Date: 2-4-2021		
email: bsinclair@talonlpe	.com	Telephone: 575-746-8	3768	
OCD Only Received by:		Date:		

Received by OCD: 3/8/2022 10:49314 IAMI State of New Mexico

Oil Conservation Division

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

Incident ID	NRM2023854921
District RP	
Facility ID	
Application ID	

### **Remediation 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: Brandon Sinclair Title: Environmental Project Manager Signature: \_\_\_\_\_ Date: 2-4-2021 email: bsinclair@talonlpe.com Telephone: 575-746-8768 OCD Only Received by: Date: Approved with Attached Conditions of Approval Approved Denied Deferral Approved Signature: Date:

Page 5



## <u>APPENDIX IV</u>

## PHOTOGRAPHIC DOCUMENTATION

Released to Imaging: 7/18/2022 2:26229PM











## <u>APPENDIX V</u>

## LABORATORY DATA



October 13, 2020

BRANDON SINCLAIR TALON LPE 408 W. TEXAS AVE. ARTESIA, NM 88210

RE: ROSS RANCH 22 #014H

Enclosed are the results of analyses for samples received by the laboratory on 10/08/20 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: S - 1 0' R (H002684-01)

BTEX 8021B	mg/	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.16	108	2.00	7.60	
Toluene*	<0.050	0.050	10/12/2020	ND	2.15	108	2.00	7.16	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	7.79	
Total Xylenes*	0.259	0.150	10/12/2020	ND	6.08	101	6.00	7.87	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	73.3-12	9						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	24000	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	63.6	50.0	10/09/2020	ND	227	113	200	2.09	
DRO >C10-C28*	13900	50.0	10/09/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	3390	50.0	10/09/2020	ND					
Surrogate: 1-Chlorooctane	130 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	519 9	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: S - 2 0' R (H002684-02)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.16	108	2.00	7.60	
Toluene*	<0.050	0.050	10/12/2020	ND	2.15	108	2.00	7.16	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	7.79	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	6.08	101	6.00	7.87	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.9	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1920	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/09/2020	ND	227	113	200	2.09	
DRO >C10-C28*	9730	50.0	10/09/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	3350	50.0	10/09/2020	ND					
Surrogate: 1-Chlorooctane	118 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	454	% 42.2-15	6						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: S - 3 0' R (H002684-03)

BTEX 8021B	mg/	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.16	108	2.00	7.60	
Toluene*	<0.050	0.050	10/12/2020	ND	2.15	108	2.00	7.16	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	7.79	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	6.08	101	6.00	7.87	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.2	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13600	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<100	100	10/09/2020	ND	227	113	200	2.09	
DRO >C10-C28*	17200	100	10/09/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	5410	100	10/09/2020	ND					
Surrogate: 1-Chlorooctane	119 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	695 9	42.2-15	6						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: S - 4 0' R (H002684-04)

BTEX 8021B	mg/	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.16	108	2.00	7.60	
Toluene*	0.061	0.050	10/12/2020	ND	2.15	108	2.00	7.16	
Ethylbenzene*	0.064	0.050	10/12/2020	ND	2.12	106	2.00	7.79	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	6.08	101	6.00	7.87	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.7	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	65600	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<100	100	10/09/2020	ND	227	113	200	2.09	
DRO >C10-C28*	42400	100	10/09/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	11300	100	10/09/2020	ND					
Surrogate: 1-Chlorooctane	139 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	1520	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: S - 5 0' R (H002684-05)

BTEX 8021B	mg/	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.16	108	2.00	7.60	
Toluene*	<0.050	0.050	10/12/2020	ND	2.15	108	2.00	7.16	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	7.79	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	6.08	101	6.00	7.87	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.4	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4480	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/09/2020	ND	227	113	200	2.09	
DRO >C10-C28*	13600	50.0	10/09/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	4750	50.0	10/09/2020	ND					
Surrogate: 1-Chlorooctane	112 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	572 9	% 42.2-15	6						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: S - 6 0' R (H002684-06)

BTEX 8021B	mg/	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.16	108	2.00	7.60	
Toluene*	<0.050	0.050	10/12/2020	ND	2.15	108	2.00	7.16	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	7.79	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	6.08	101	6.00	7.87	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.4	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	39600	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<100	100	10/09/2020	ND	227	113	200	2.09	
DRO >C10-C28*	53800	100	10/09/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	16900	100	10/09/2020	ND					
Surrogate: 1-Chlorooctane	133 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	2080	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: S - 7 0' R (H002684-07)

BTEX 8021B	mg/	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.16	108	2.00	7.60	
Toluene*	<0.050	0.050	10/12/2020	ND	2.15	108	2.00	7.16	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	7.79	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	6.08	101	6.00	7.87	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.8	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	39600	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<100	100	10/09/2020	ND	227	113	200	2.09	
DRO >C10-C28*	34400	100	10/09/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	9770	100	10/09/2020	ND					
Surrogate: 1-Chlorooctane	125 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	1220	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: S - 8 0' R (H002684-08)

BTEX 8021B	mg/	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.16	108	2.00	7.60	
Toluene*	<0.050	0.050	10/12/2020	ND	2.15	108	2.00	7.16	
Ethylbenzene*	0.156	0.050	10/12/2020	ND	2.12	106	2.00	7.79	
Total Xylenes*	0.416	0.150	10/12/2020	ND	6.08	101	6.00	7.87	
Total BTEX	0.572	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	44800	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	103	100	10/09/2020	ND	227	113	200	2.09	
DRO >C10-C28*	36800	100	10/09/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	9800	100	10/09/2020	ND					
Surrogate: 1-Chlorooctane	157 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	1250	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: BG - 1 0' (H002684-09)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	3.21	
Toluene*	<0.050	0.050	10/12/2020	ND	2.13	106	2.00	3.23	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.07	103	2.00	2.82	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	5.89	98.1	6.00	2.51	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.2	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/12/2020	ND	227	113	200	2.09	
DRO >C10-C28*	<10.0	10.0	10/12/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	<10.0	10.0	10/12/2020	ND					
Surrogate: 1-Chlorooctane	121	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	135	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: BG - 2 0' (H002684-10)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	3.21	
Toluene*	<0.050	0.050	10/12/2020	ND	2.13	106	2.00	3.23	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.07	103	2.00	2.82	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	5.89	98.1	6.00	2.51	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.2	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/12/2020	ND	227	113	200	2.09	
DRO >C10-C28*	<10.0	10.0	10/12/2020	ND	231	115	200	4.23	
EXT DRO >C28-C36	<10.0	10.0	10/12/2020	ND					
Surrogate: 1-Chlorooctane	112 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	121	% 42.2-15	6						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: BG - 3 (H002684-11)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	3.21	
Toluene*	<0.050	0.050	10/12/2020	ND	2.13	106	2.00	3.23	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.07	103	2.00	2.82	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	5.89	98.1	6.00	2.51	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.9	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/12/2020	ND	203	101	200	3.31	
DRO >C10-C28*	<10.0	10.0	10/12/2020	ND	211	106	200	5.55	
EXT DRO >C28-C36	<10.0	10.0	10/12/2020	ND					
Surrogate: 1-Chlorooctane	102	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	113 9	42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/13/2020	Sampling Type:	Soil
Project Name:	ROSS RANCH 22 #014H	Sampling Condition:	Cool & Intact
Project Number:	702604.040.01	Sample Received By:	Tamara Oldaker
Project Location:	SPUR ENERGY - EDDY CO NM		

#### Sample ID: BG - 4 (H002684-12)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/12/2020	ND	2.12	106	2.00	3.21	
Toluene*	<0.050	0.050	10/12/2020	ND	2.13	106	2.00	3.23	
Ethylbenzene*	<0.050	0.050	10/12/2020	ND	2.07	103	2.00	2.82	
Total Xylenes*	<0.150	0.150	10/12/2020	ND	5.89	98.1	6.00	2.51	
Total BTEX	<0.300	0.300	10/12/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.7	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/12/2020	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/12/2020	ND	203	101	200	3.31	
DRO >C10-C28*	<10.0	10.0	10/12/2020	ND	211	106	200	5.55	
EXT DRO >C28-C36	<10.0	10.0	10/12/2020	ND					
Surrogate: 1-Chlorooctane	116 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	130	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

# CARDINAL

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: TALON LPE										B	ILL 1	0	ha ye shiki ye s			-		Δ	MAI	Vel	0 0	EQU	1507			_
roject Manager: B.SINCLAIR	_						1	P.O.	#:	70	2604	.0	40.01	T	1	Г	T	f		101	J	EQU	ESI	-		-
ddress: 408 W. TEXAS AVE.		_	_				0	Com	npai	ny:	me t	A	N	1												
ity: ARTESIA State: No	A Zi	p: 2	38	210	,		1	Attn	: 3		NULA	P										1				
hone #: 575-746 - 8768 Fax #:								\dd				a co	-													
roject #: 702 604.040.01 Project Own	er: S	PW	RE	NE	2 y		0	ity:				_														
roject Name: KOSS RANCH 12 # DIL	H						s	tate	a:		Zip:	-														
oject Location: EDDY COUNTY NM							P	hor	ne #					1			~									
ampler Name: MICHAEL COLLER								ax	-	-		-					5									
OR LAB USE ONLY		Γ		1	ITAN	RIX	-	the second second	-	ERV	SAN	IPL	ING				CHUORIDES									
	No.		æ	-										1			3									
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	ER												1	Ę									
Lab I.D. Sample I.D.	S OR	LAIN	ND	WA.				SE	5					×												
602684	RAB	NO	no	WASTEWATER	-	SLIDGE	OTHER .	ACID/BASE	ICE / COOL	OTHER				BTEX	H		F									
IS-1 O'R		#	GR	WA	SOIL		E O	ACI	ICE	EO	DAT	E	TIME	3	TPH	÷	TRIAL									
ZS-20'R	G	Ļ		1	1	-			V	1	10-7-2	6	9:00	V	V	~	1	-	+	+	-	-	+	+	+	+
3 5-3 0 R	H	4		-		+	+	1	1				5:10	1	1	I			+	-		-	+	+	-	+
4 5- 4 0'R	++	H	-	-	1	-	-	1	1				9:20										1	+	-	+-
5 5- 5 0'R	H		-	-	-	+	+	⊢	-		_	1	9:30										1	+	+	+
6 5-6 0'R.	H	+	-	-		+	-	⊢	-		-		9:40										1		-	+
7 5-7 0'R	H		+		-	+	-	-	$\left  \right $		-	-	9:50											-	1	+
8 5-8 0'R	Hł	+	-		+	+		-			-	-	10:00		$\square$									1		+
9 36-101	H	Ħ	-		+	+			-	+	-	+	10:10	++	$\square$									1		+
10 B6-20'	H	tt	+		-	-		-	+	+	-		10:20	++												1
SE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for a ss. All claims including those for negligence and any other cause whatsoever shall be . In no event shall Cardinal be liable for incidental or consequental damages, including so r successors arking out for related to the negrot	ny claim	arising	wheth	er bas	ed in cr	ontract	or tor	, shall	be lin	nited to	the amount		V the client for the			1										
	without I	Imitatic	uniess on, bus	iness i	In writi nterrup	tions, l	d receit loss of	use, o	Cardi or loss	of prof	hin 30 days a its incurred b	after o v clie	completion of the	applicable												-
nguished By: Date: 10-8-20	Rec		and the second se		rsuch	ciaim i	s base	d upp	nany	of the a	bove stated	reasc	hone Rest	-	Yes		N									
Time:		1	6.		61	2	1		6	1/	1	F	ax Result:	E	Yes		No No	Add'	I Pho I Fax	ne #: #:	_					
iquished By: Date:	Rec	<u>/</u>	1		U	0	a	A)	(k	-9	e_	ľ	REMARKS:													
Time:	1100	0108	ud	y -						/																
ivered By: (Circle One)																										
(Gircle One)			Sa	mple	Cor	ditio	n	0	HE	CKE	DBY:	1														

our unital cannot accept verbal changes. Please fax written changes to (575) 393-2326

# CARDINAL

404 -

. . .

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ompany Nan	10: TALON LPE										37	LL TO						ANI	U VOI	0.01	-				_
Project wanager: B. SINCLAIR												604.04		ANALYSIS REQUEST											_
ddress: 40	B W. TEXAS AVE							c	omr	anv	Tr	ALON (	0.01	1											
ity: ARTES	A State: N	M ZI	ip:	38	LID							CLAIR													
hone #: 575	- 746-8768 Fax #:								ddre			CAR									Ľ				
roject #: 70	2604.040.01 Project Ow	ner: S	Ph	2	-			-	ty:	33,															
roject Name:	Ross RANCH 22 #014	H			NC	-9	-	-	ate:		-														
roject Locatio	IN: EDDY COUNTY, NM		-						_			Zip:					1							1	
ampler Name:	MICHAEL COLLER							1	ione							1	2	1							
OR LAB USE ONLY			T	T	N	ATR	IX	га	X #:	ESER	NV.	SAMPL	ING			ŝ	ň							1	
		MP.	1				T				1	SAMPL	ING			0	2								
		(G)RAB OR (C)OMP	RS	GROUNDWATER	Ш											Cui aproc									
Lab I.D.	Sample I.D.	OR	AINE	DVI	NAT		1		ä	Ы				×		C									
002684		RAB	# CONTAINERS	NNO	WASTEWATER		SLUDGE	OTHER :	D/BA	ICE / COOL	OTHER :			BTEX	TPH	THTM									
	21			GR	AN IO	SOIL	SLU	E	ACII	ICE	HO	DATE	TIME	3	F	4									
	B6-3	6	L		1	1				1	10	0-7-20	10:40	V	V	V	-	-		-	-	-	-	-	+
14	B6-4	(	1		1	1				1		1	10:50	1	1	1				-		-	-	-	+
		-			-	-				_														-	+
		-	$\vdash$	$\vdash$	-	+			-		+											-			+
		-	$\vdash$		-	-	-		-	-	1	18.1													t
			$\vdash$		+	+		-	-	+	+													-	t
	A	+	H	-	+	+		-	-	+	+			_								1			t
		-	-	-	+	+		+	-	+	+			-	_										T
		+		+	+	+		-	+	+	+			-	-			1							
E NOTE: Liability and es. All claims including	Damages. Cardinal's liability and client's exclusive remedy for those for negligence and any other cause whatsoever shall b	any claim	arisin	g whet	ier base	ed in ce	intract o	or tort,	shall b	e limited	d to the	e amount paid	by the client for th												
														applicable											
nquished By	out of or related to the performance of services hereunder by Date: D			ed B	and the second	r such a	aim is	based	upon	any of th	he abo	ove stated reas	ons or otherwise. Phone Rest	_	Mar	-									
MIV	10-0-00 Time: 1.0	-	1	h.			/	11	1	1	/		Fax Result:		Yes			Add'l P Add'l F	hone #:						
nouished By:	ALL fime: 415 Date:	-	1	la	al	20	X	la	a	K	XX		REMARKS:												
1	Date.	Rec	eive	ed B	y:					>															
lbue and the	Time:																								
	(Circle One)						ditio	n	CI	HECK															
pler - UPS -	Bus - Other: 4.9°	1		C	Yes No	Intac	rî 🛛			(Init	tials)														

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

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

Operator:	OGRID:
Spur Energy Partners LLC	328947
9655 Katy Freeway	Action Number:
Houston, TX 77024	123754
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Please note that the depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old. However, as site soils were remediated to the most stringent criteria closure can be granted. Note that remediation occurred 21 months after the initial release, much later than the allowed 90 days. The approved Remediation Plan stated Microblaze will be used at the site but its unclear if it was applied to site soils, causing a delay in remediation activities.	7/18/2022

Action 123754