PRONGHORN SWD #001
CLOSURE REPORT

API NO. 30-025-32735
RELEASE DATE: 09/13/2019
INCIDENT ID: NRM1927460517
1RP-5723
U/L B, SECTION 24, TOWNSHIP 19S, RANGE 32E
LEA COUNTY, NEW MEXICO

08/28/2020

PREPARED BY:

#7 COMPRESS ROAD
ARTESIA, NM 88210

August 28, 2020

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

Bureau of Land Management
C/O Jim Amos
620 E. Green Street
Carlsbad, NM 88220

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

RE: Pronghorn SWD #001 – Closure Request
Date of Release: September 13, 2019
API No. 30-025-32735
U/L B, Section 24, Township 19S, Range 32E

To Whom it May Concern:

Spur Energy Partners has retained ESS (Energy Staffing and Services), Environmental & Regulatory Division to address the environmental compliance issues concerning the release detailed herein. Below you will find the site-specific information concerning the delineation and liner clean-up process that has taken place at the Pronghorn SWD #001

SITE BACKGROUND

This site is located in Lea County, New Mexico; 33.55 miles west of Hobbs, NM. This release was found by COG Operating, LLC on or before September 13, 2019. The release was caused by corrosion on the check valve resulting in the plug blowing out. The check valve was replaced.

Approximately 15bbls of produced water was released inside the lined containment. A vacuum truck was dispatched out to remove all of the freestanding fluids. No fluid was recovered. This site was purchased by Spur Energy, LLC on November 1, 2019, therefore assuming responsibility of the release that had yet to be closed out. The approved C141 was submitted and approved on 09/25/2019. No fluids left the lined containment area with an approximate 11,924 Sq. Ft. area.

GENERAL SITE CHARACTERISTICS

ESS conducted an extended groundwater study of the area, it has been determined that according to the New Mexico Office of the State Engineer, the depth of groundwater is estimated to be 185'bgs (below ground surface). The closest well to the site with viable groundwater data is labelled L 07023. Please see the list below for groundwater wells found within 7500' from the site.

L 07023 – 5033' (0.95 miles) from the site, drilled in 1970 with the depth of 185'bgs
CP 00317 – 6755' (1.27 miles) from the site, drilled in 1966 with the depth of 325'bgs
CP 01656 POD3 – 7011' (1.32 miles) from the site, drilled in 2017 with no groundwater data
CP 01656 POD1 – 7017' (1.328 miles) from the site, drilled in 2017 with no groundwater data
CP 01656 POD2 – 7021' (1.329 miles) from the site, drilled in 2017 with no groundwater data
CP 00639 POD1 – 7374' (1.39 miles) from the site, drilled in 1982 with 345'bgs

Using the Table I, Closure Criteria for Soils Impacted by a Release dated 8/14/2018, this site falls under the site ranking of >100'bgs. With that being said this is a Federal Site, therefore it will fall under the less than 0-51' to groundwater closure criteria. Please see the chart below for the sampling criteria for this site:

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

DISTANCE TO NEAREST POTABLE WATER WELL

Based on the review of the NMOSE Database, registered potable water wells are not present within .5 miles of the site. The closest well is listed to be L07023 showing .95 miles from the site. But upon review of the OSE POD Map (Attached), this water well shows to be 3.12 miles from the Pronghorn SWD. As seen on the OSE Map, there are several wells that have been

drilled overtime, not all have water and if water was found it has been noted as deep as 405'bgs (CP-00805-POD-1). This well shows to be used as a livestock well on the Smith Ranch. There is no documentation that the well has been plugged. This well is measured at .82 miles from the impacted site of the Pronghorn SWD. With the information available for review, it is safe to say that groundwater will not be an issue at this site. At this time due to this being a Federal Well and a low karst area (information below), the closure criteria is more stringent than what the groundwater criteria would be.

DISTANCE TO NEAREST SURFACE WATER

Laguna Tonto and Laguna Plata are found to be the closest surface water to the Pronghorn SWD #001. Both found to be within 3.5 and 3.8 miles from the site.

SOIL CHARACTERISTICS

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

96.9% Kermit-Palomas fine sands, 0 to 12 percent slopes
3.1% Pyote and Maljamar fine sands

KARST CHARACTERISTICS

ESS evaluated data from the NMOCD Share-Point for Karst Map Designations in reference to the Pronghorns SWD #001. This site appears to be in the Low Karst Risk Area. Based on the site observations with the extent of the release margins, the potential for Karst formations in this area is of "low potential". With the information provided in this report, Karst is not a factor in determining the site characterization. As mentioned above due to this site being on Federal Land, deep groundwater data and Low Karst, the site characteristics remain in the 0-51'bgs groundwater sampling and closure criteria.

SOIL REMEDIAL/LINER ACTION LEVELS

ESS has provided sufficient data that this produced water impacted soil for the Pronghorn SWD #001 release consistent with the remediation/abatement goals and objectives set forth in the NMOCD (New Mexico Oil Conservation Division) Closure Criteria for Soils Impacted by a Release, dated August 14, 2018 and by BLM Guidelines.

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

Soil Sampling Procedures

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

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

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

Volatile Organics by EPA 8021B

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

Nonhalogenated Organics by EPA 8015D – GRO

- Gasoline Range Organics (C6-C10)

Nonhalogenated Organics by EPA 8015D – DRO/ORO

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

Anions by EPA 300.0/9056A

- Chloride

RELEASE INVESTIGATION DATA EVALUATION

On March 23rd of 2020, Hungry-Horse LLC was dispatched out to the Pronghorn SWD #001 to hand shovel the area within the lined facility. The impacted area was excavated and stockpiled on plastic to be hauled to a disposal. Approximately 84 cu. yds. of impacted material were hauled to Lea Landfill for disposal. After the containment was excavated of all the impacted material, the liner was inspected. Multiple small areas of perforations were found. ESS could not obtain the emails, if any that were sent to the NMOCD for liner inspection. The liner was patched and then the containment area was then backfilled with 98 cu. yds. of pea gravel.

A closure report was submitted on June 12, 2020. On August 14th, 2020 the closure was denied due to the following reason:

- Soil samples were not collected and analyzed at a lab where perforations in the liner were found. Because the liner was found to be compromised in several locations, additional investigation needs to take place to ensure soils have not been impacted.

At this time ESS called in a one-call and began delineation of the liner area. Three different areas were field tested under the patched liner. On August 24th, ESS staff cut out a 1'x 1' area of the liner and delineated each of the three sample points to 4'bgs. No contamination was found during the delineation process. Immediately following the delineation crews patched and sprayed the liner, liner was able to dry before putting the pea gravel back in place. The soil samples were sampled using 1' intervals by use of hand auger. The field samples were also tested in the field using the Titration Method for chlorides and volatiles in the soil by using a PID Meter.

Below you will find the vertical delineation sample data along with the confirmed lab analysis (in yellow). Each bottom hole sample was jarred, labelled and sent to Envirotech Laboratory for confirmation:

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL
BG	SURFACE	20		ND	ND	ND	ND	ND	ND
SP1	SURFACE	400							
	1'	240							
	2'	240							
	3'	240							
	4'	240		ND	ND	ND	ND	ND	203
SP2	SURFACE	320							
	1'	320							
	2'	240							
	3'	160							
	4'	160		ND	ND	ND	ND	ND	68.8
SP3	SURFACE	400							
	1'	320							
	2'	240							
	3'	240							
	4'	60		ND	ND	ND	ND	ND	ND

As seen in the chart above, the integrity of the liner is intact and has not contaminated the soil beneath the liner.

SCOPE OF WORK AND LIMITATIONS

The scope of our services consisted of the review of Hungry Horse site assessment, liner remediation and liner inspection, sampling procedure conducted by ESS under the liner, as well as regulatory liaison and preparation of this closure report by ESS. All work has been performed in accordance with the NMOCD Rules and Regulations for Spills and Releases dated August 14th, 2008 (19.15.29 NMAC).

On behalf of Spur Energy Partners and Energy Staffing Services, we respectfully request closure of the release that occurred on the Pronghorn SWD #001. If you have any questions or concerns, please feel free to contact me at any time, you can find my contact information below.

Sincerely,

Natalie Gladden
Director of Environmental and Regulatory
#7 Compress Road
Artesia, NM 88210
Cell: 575-390-6397
Email: natalie@energystaffingllc.com

Attachments:

- Initial C141
- Groundwater Data & Map
- OSE POD Map
- Soil Map and Information
- Karst Map
- Delineation Sample Data & Sample Map
- Lab Analysis
- Site Photos
- Denial Email
- Final C141

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NRM1927460517
District RP	1RP-5723
Facility ID	fGRL1000759914
Application ID	pRM1927460612

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ 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		

State of New Mexico
Oil Conservation Division

Incident ID	NRM1927460517
District RP	1RP-5723
Facility ID	fGRL1000759914
Application ID	pRM1927460612

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

Initial Response

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

- ☐ 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: _____ Title: _____

Signature: DeAnn Grant _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Ramona Marcus _____ Date: 10/01/2019 _____

New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 620382.32 **Northing (Y):** 3613439.66 **Radius:** 1000

New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 620382.32 **Northing (Y):** 3613439.66 **Radius:** 5000

New Mexico Office of the State Engineer

Wells with Well Log Information

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

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

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

(NAD83 UTM in meters)

(in feet)

POD Number	Code	POD Subbasin	County	Source	q 64	q 16	q 4	Sec	Twn	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
L 07023		L	LE	Shallow	2	3	3	32	19S	33E	622840	3609047*	5033	11/12/1970	11/15/1970	11/19/1970	262	185	MURRELL ABBOTT	46
CP 00317		CP	LE	Shallow	3	4	3	05	20S	33E	623054	3607235*	6755	02/05/1966	02/17/1966	02/24/1966	680	325	ABBOTT, MURRIEL	46
CP 01656 POD3		CP	LE		3	4	3	17	19S	32E	613374	3613633	7011	03/28/2017	03/28/2017	05/05/2017	30		BRYAN, EDWARD	1711
CP 01656 POD1		CP	LE		3	4	3	17	19S	32E	613368	3613646	7017	03/28/2017	03/28/2017	05/05/2017	70		EDWARD BRYAN	1711
CP 01656 POD2		CP	LE		3	4	3	17	19S	32E	613364	3613648	7021	03/28/2017	03/28/2017	05/05/2017	70		BRYAN, EDWARD	1711
CP 00639 POD1		CP	LE	Shallow		3	1	20	19S	32E	613029	3612880*	7374	02/09/1982	02/10/1982	03/23/1982	350	345	FELKINS, LARRY	882
CP 00640 POD1		CP	LE	Shallow		2	2	19	19S	32E	612621	3613280*	7762	02/08/1982	02/09/1982	03/04/1982	260	102	FELKINS, LARRY	882
L 03454		L	LE	Shallow		2	2	30	18S	33E	622200	3621422*	8186	03/29/1957	03/30/1957	04/17/1957	100	35	MUSSELWHITE, O.R.	99
CP 00677		CP	LE			1	1	26	18S	32E	617750	3621373*	8358	05/09/1985	05/09/1985	05/15/1985	700		GLENN, CLARK A."CORKY" (LD)	421
CP 00642 POD1		CP	ED	Shallow		2	2	25	19S	31E	611025	3611657*	9525	02/10/1982	02/01/1982	02/23/1982	250		FELKINS, LARRY	882

Record Count: 10

UTMNAD83 Radius Search (in meters):

Easting (X): 620382.32 **Northing (Y):** 3613439.66 **Radius:** 10000

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

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	L 07023	2	3	3	32	19S	33E	622840	3609047*

Driller License:	46	**Driller Company:**	ABBOTT BROTHERS COMPANY		
Driller Name:	MURRELL ABBOTT				
Drill Start Date:	11/12/1970	**Drill Finish Date:**	11/15/1970	**Plug Date:**	
Log File Date:	11/19/1970	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	7.00	**Depth Well:**	262 feet	**Depth Water:**	185 feet

Water Bearing Stratifications:	Top	Bottom	Description
	185	214	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	200	260

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

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 00317	3	4	3	05	20S	33E	623054	3607235*

Driller License:	46	**Driller Company:**	ABBOTT BROTHERS COMPANY		
Driller Name:	ABBOTT, MURRIEL				
Drill Start Date:	02/05/1966	**Drill Finish Date:**	02/17/1966	**Plug Date:**	04/20/1967
Log File Date:	02/24/1966	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	7.00	**Depth Well:**	680 feet	**Depth Water:**	325 feet

Water Bearing Stratifications:	Top	Bottom	Description
	520	540	Sandstone/Gravel/Conglomerate
	625	645	Sandstone/Gravel/Conglomerate
	660	675	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	515	575

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

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 01656 POD3	3	4	3	17	19S	32E	613374	3613633

Driller License:	1711	**Driller Company:**	STRAUB CORPORATION		
Driller Name:	BRYAN, EDWARD				
Drill Start Date:	03/28/2017	**Drill Finish Date:**	03/28/2017	**Plug Date:**	03/28/2017
Log File Date:	05/05/2017	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	30 feet	**Depth Water:**	

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 01656 POD1	3	4	3	17	19S	32E	613368	3613646

Driller License:	1711	**Driller Company:**	STRAUB CORPORATION		
Driller Name:	EDWARD BRYAN				
Drill Start Date:	03/28/2017	**Drill Finish Date:**	03/28/2017	**Plug Date:**	03/28/2017
Log File Date:	05/05/2017	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	70 feet	**Depth Water:**	

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 01656 POD2	3	4	3	17	19S	32E	613364	3613648

Driller License:	1711	**Driller Company:**	STRAUB CORPORATION		
Driller Name:	BRYAN, EDWARD				
Drill Start Date:	03/28/2017	**Drill Finish Date:**	03/28/2017	**Plug Date:**	03/28/2017
Log File Date:	05/05/2017	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	70 feet	**Depth Water:**	

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 00639 POD1	3	1		20	19S	32E	613029	3612880*

Driller License:	882	**Driller Company:**	LARRY'S DRILLING & PUMP CO.		
Driller Name:	FELKINS, LARRY				
Drill Start Date:	02/09/1982	**Drill Finish Date:**	02/10/1982	**Plug Date:**	
Log File Date:	03/23/1982	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	350 feet	**Depth Water:**	345 feet

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

SPUR ENERGY PARTNERS

PRONGHORN SWD #001
DOR: 9.13.19
GROUND WATER MAP

Legend
DGW

PRONGHORN SWD #001

L 07023 5033' FR SITE, 185' DGW

CP 00317 6755' FR SITE 325' DGW

243

62

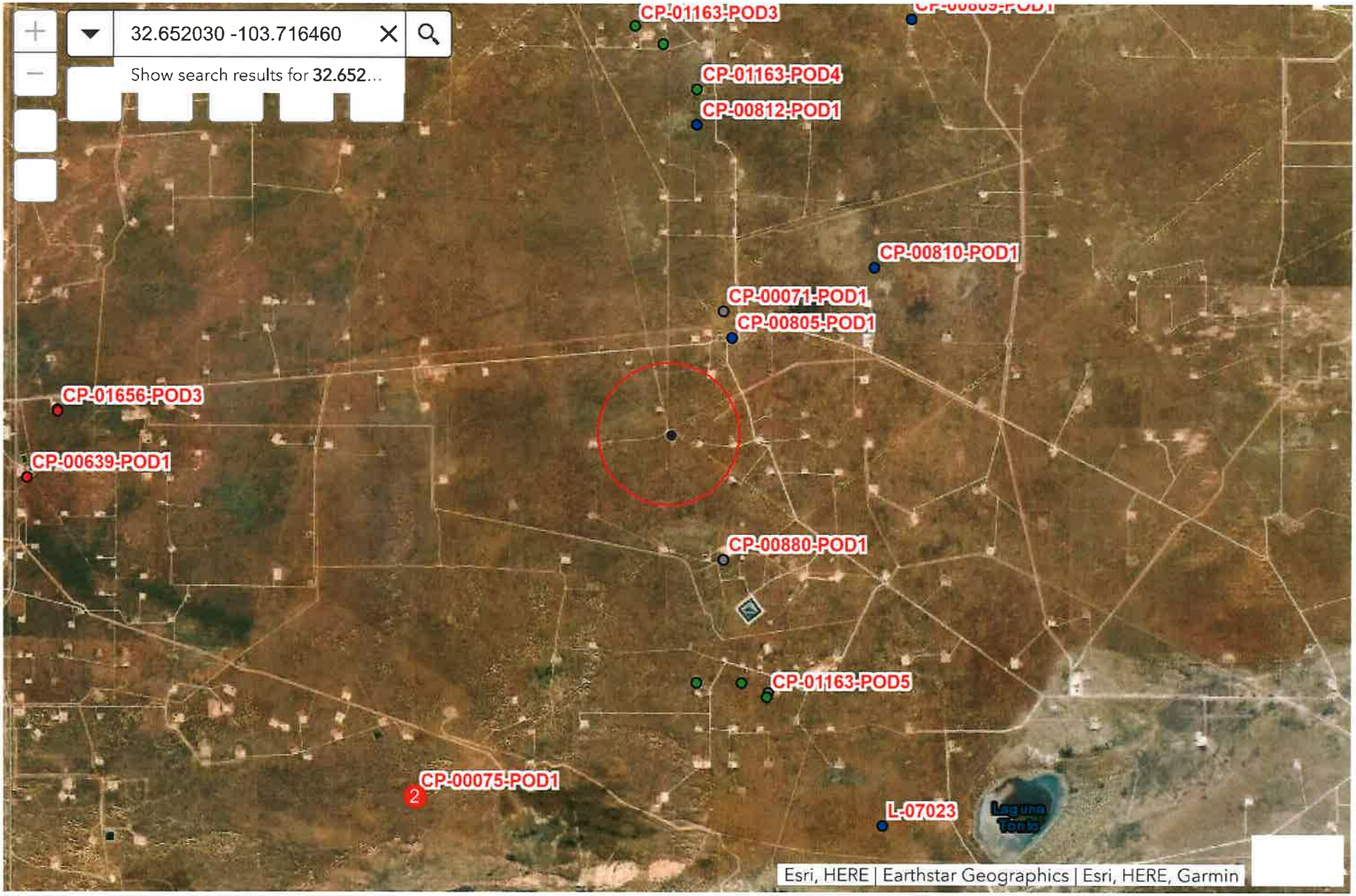
176

Google Earth

Image Landsat / Copernicus

N

4 mi

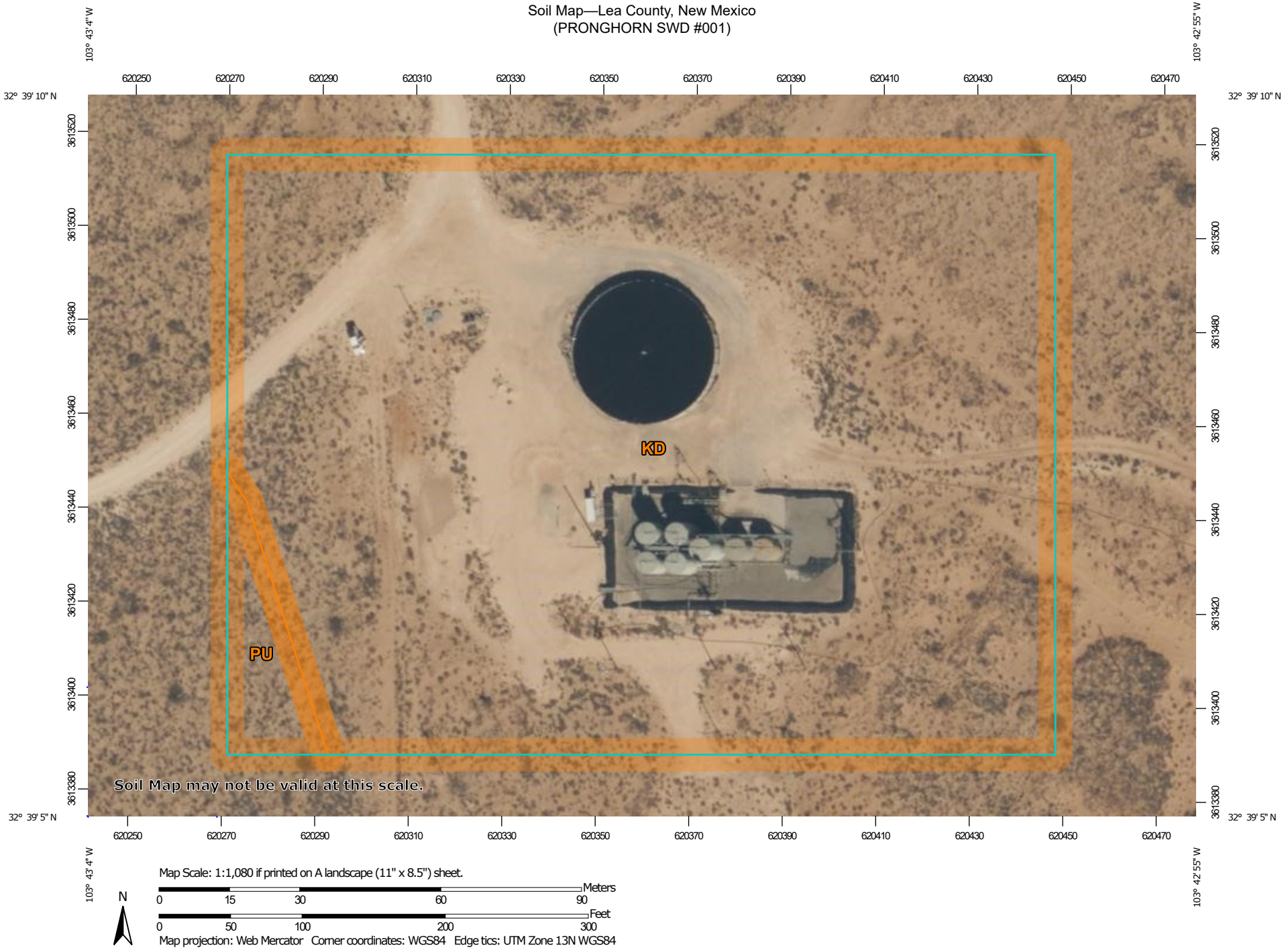


1:72223

1mi

-103.737 32.675 Degrees

Soil Map—Lea County, New Mexico
(PRONGHORN SWD #001)



Map Scale: 1:1,080 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

Soil Map—Lea County, New Mexico
(PRONGHORN SWD #001)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 17, Jun 8, 2020

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

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

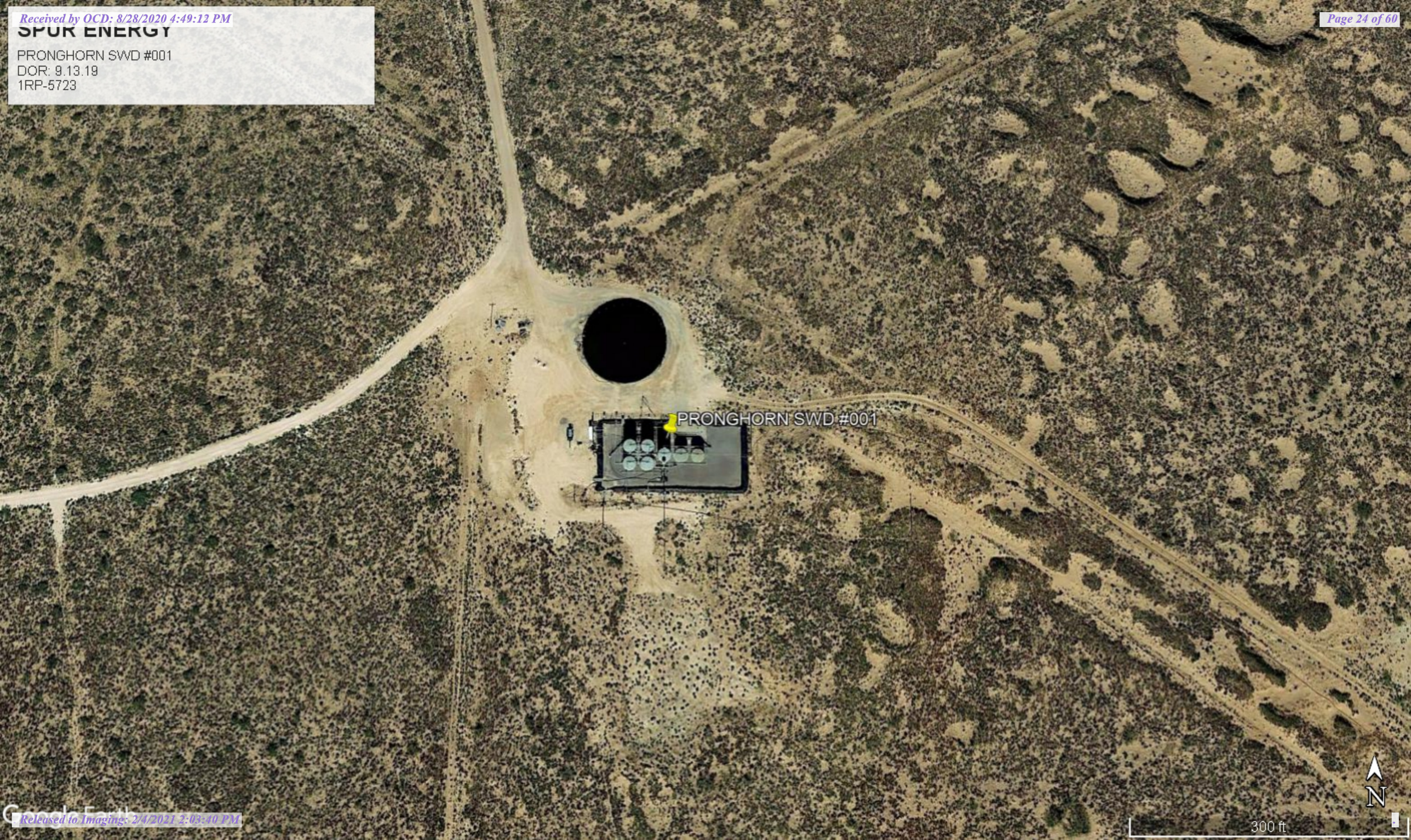
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KD	Kermit-Palomas fine sands, 0 to 12 percent slopes	5.4	96.9%
PU	Pyote and Maljamar fine sands	0.2	3.1%
Totals for Area of Interest		**5.6**	**100.0%**

SPUR ENERGY

PRONGHORN SWD #001
DOR: 9.13.19
1RP-5723



SPUR ENERGY PARTNERS

PRONGHORN SWD #001
DOR: 9.13.19
KARST MAP: LOW KARST

Legend
- High
- Low
- Medium
- PRONGHORN SWD #001

249
31
82
62
285
Lea
Carlsbad
PRONGHORN SWD #001
Google Earth
10 mi
N

Company Name: SPUR ENERGY **Location Name:** PRONGHORN SWD #001 **Release Date:** 9/13/2019

SP ID	Depth	Titr	PID	L-BTEX	L-GRO	L-DRO	L-ORO	L-TPH	L-CHL	Soil	Notes
BG	SURFACE	20		ND	ND	ND	ND	ND	ND		
SP1	SURFACE	400									
	1'	240									
	2'	240									
	3'	240									
	4'	240		ND	ND	ND	ND	ND	203		
SP2	SURFACE	320									
	1'	320									
	2'	240									
	3'	160									
	4'	160		ND	ND	ND	ND	ND	68.8		
SP3	SURFACE	400									
	1'	320									
	2'	240									
	3'	240									
	4'	60		ND	ND	ND	ND	ND	ND		

SPUR ENERGY PARTNERS

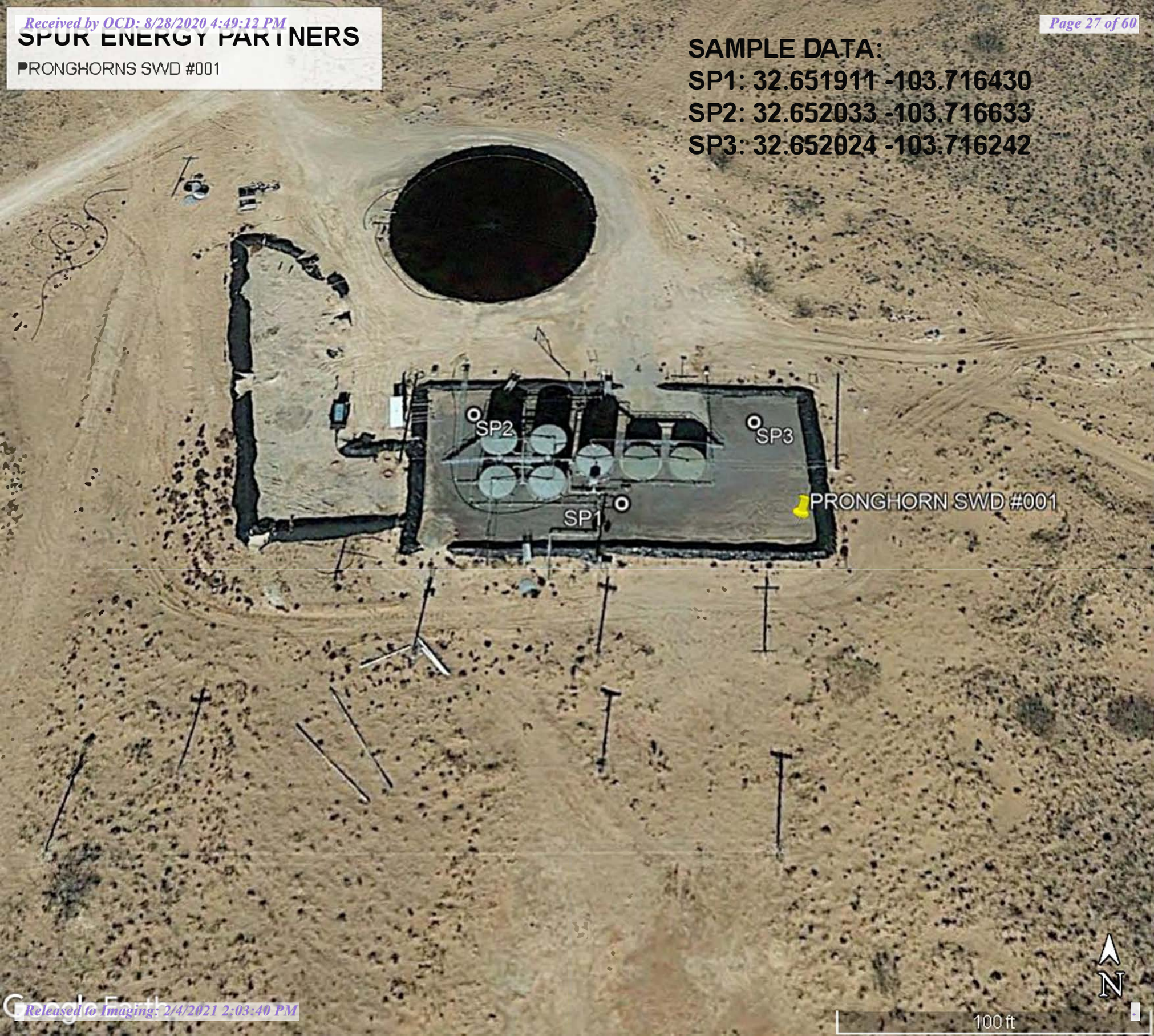
PRONGHORNS SWD #001

SAMPLE DATA:

SP1: 32.651911 -103.716430

SP2: 32.652033 -103.716633

SP3: 32.652024 -103.716242



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Analytical Report

Report Summary

Client: Spur

Samples Received: 8/25/2020

Job Number: 20046-0001

Work Order: P008078

Project Name/Location: Pronghorn SWD

Report Reviewed By: Date: 8/26/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

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

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Analytical Laboratory

Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

Sample Summary

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Background	P008078-01A	Soil	08/24/20	08/24/20	Glass Jar, 4 oz.
SP1 4'	P008078-02A	Soil	08/24/20	08/24/20	Glass Jar, 4 oz.
SP2 4'	P008078-03A	Soil	08/24/20	08/24/20	Glass Jar, 4 oz.
SP3 4'	P008078-04A	Soil	08/24/20	08/24/20	Glass Jar, 4 oz.

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Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

Background
P008078-01 (Solid)

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes	
Volatile Organics by EPA 8021B	mg/kg	mg/kg				Batch:	2035008
Benzene	ND	0.0250	1	08/25/20	08/25/20		
Toluene	ND	0.0250	1	08/25/20	08/25/20		
Ethylbenzene	ND	0.0250	1	08/25/20	08/25/20		
p,m-Xylene	ND	0.0500	1	08/25/20	08/25/20		
o-Xylene	ND	0.0250	1	08/25/20	08/25/20		
Total Xylenes	ND	0.0250	1	08/25/20	08/25/20		
Surrogate: 4-Bromochlorobenzene-PID		*103 %*	*50-150*	*08/25/20*	*08/25/20*		
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg				Batch:	2035008
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/25/20	08/25/20		
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.3 %*	*50-150*	*08/25/20*	*08/25/20*		
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg				Batch:	2035012
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/20	08/25/20		
Oil Range Organics (C28-C40)	ND	50.0	1	08/24/20	08/25/20		
Surrogate: n-Nonane		*99.2 %*	*50-200*	*08/24/20*	*08/25/20*		
Anions by EPA 300.0/9056A	mg/kg	mg/kg				Batch:	2035013
Chloride	ND	20.0	1	08/25/20	08/25/20		

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Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

SP1 4'
P008078-02 (Solid)

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes	
Volatile Organics by EPA 8021B	mg/kg	mg/kg				Batch:	2035008
Benzene	ND	0.0250	1	08/25/20	08/25/20		
Toluene	ND	0.0250	1	08/25/20	08/25/20		
Ethylbenzene	ND	0.0250	1	08/25/20	08/25/20		
p,m-Xylene	ND	0.0500	1	08/25/20	08/25/20		
o-Xylene	ND	0.0250	1	08/25/20	08/25/20		
Total Xylenes	ND	0.0250	1	08/25/20	08/25/20		
Surrogate: 4-Bromochlorobenzene-PID		*102 %*	*50-150*	*08/25/20*	*08/25/20*		
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg				Batch:	2035008
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/25/20	08/25/20		
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.8 %*	*50-150*	*08/25/20*	*08/25/20*		
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg				Batch:	2035012
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/20	08/25/20		
Oil Range Organics (C28-C40)	ND	50.0	1	08/24/20	08/25/20		
Surrogate: n-Nonane		*72.5 %*	*50-200*	*08/24/20*	*08/25/20*		
Anions by EPA 300.0/9056A	mg/kg	mg/kg				Batch:	2035013
Chloride	**203**	20.0	1	08/25/20	08/25/20		

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Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

SP2 4'
P008078-03 (Solid)

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes	
Volatile Organics by EPA 8021B	mg/kg	mg/kg				Batch:	2035008
Benzene	ND	0.0250	1	08/25/20	08/25/20		
Toluene	ND	0.0250	1	08/25/20	08/25/20		
Ethylbenzene	ND	0.0250	1	08/25/20	08/25/20		
p,m-Xylene	ND	0.0500	1	08/25/20	08/25/20		
o-Xylene	ND	0.0250	1	08/25/20	08/25/20		
Total Xylenes	ND	0.0250	1	08/25/20	08/25/20		
Surrogate: 4-Bromochlorobenzene-PID		*102 %*	*50-150*	*08/25/20*	*08/25/20*		
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg				Batch:	2035008
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/25/20	08/25/20		
Surrogate: 1-Chloro-4-fluorobenzene-FID		*89.2 %*	*50-150*	*08/25/20*	*08/25/20*		
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg				Batch:	2035012
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/20	08/25/20		
Oil Range Organics (C28-C40)	ND	50.0	1	08/24/20	08/25/20		
Surrogate: n-Nonane		*73.5 %*	*50-200*	*08/24/20*	*08/25/20*		
Anions by EPA 300.0/9056A	mg/kg	mg/kg				Batch:	2035013
Chloride	**68.8**	20.0	1	08/25/20	08/25/20		

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Analytical Laboratory

Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

SP3 4'
P008078-04 (Solid)

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes	
Volatile Organics by EPA 8021B	mg/kg	mg/kg				Batch:	2035008
Benzene	ND	0.0250	1	08/25/20	08/25/20		
Toluene	ND	0.0250	1	08/25/20	08/25/20		
Ethylbenzene	ND	0.0250	1	08/25/20	08/25/20		
p,m-Xylene	ND	0.0500	1	08/25/20	08/25/20		
o-Xylene	ND	0.0250	1	08/25/20	08/25/20		
Total Xylenes	ND	0.0250	1	08/25/20	08/25/20		
Surrogate: 4-Bromochlorobenzene-PID		*102 %*	*50-150*	*08/25/20*	*08/25/20*		
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg				Batch:	2035008
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/25/20	08/25/20		
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.7 %*	*50-150*	*08/25/20*	*08/25/20*		
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg				Batch:	2035012
Diesel Range Organics (C10-C28)	ND	25.0	1	08/24/20	08/25/20		
Oil Range Organics (C28-C40)	ND	50.0	1	08/24/20	08/25/20		
Surrogate: n-Nonane		*85.2 %*	*50-200*	*08/24/20*	*08/25/20*		
Anions by EPA 300.0/9056A	mg/kg	mg/kg				Batch:	2035013
Chloride	ND	20.0	1	08/25/20	08/25/20		

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Analytical Laboratory

Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

Volatile Organics by EPA 8021B - Quality Control

Analyte	Result	Reporting Limit	Spike Level	Source Result	REC	REC Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2035008-BLK1)									Prepared: 08/24/20 1 Analyzed: 08/25/20 1
Benzene	ND	0.0250							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
p,m-Xylene	ND	0.0500							
o-Xylene	ND	0.0250							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*8.21*		*8.00*		*103*	*50-150*			
LCS (2035008-BS1)									Prepared: 08/24/20 1 Analyzed: 08/25/20 1
Benzene	5.13	0.0250	5.00		103	70-130			
Toluene	5.13	0.0250	5.00		103	70-130			
Ethylbenzene	5.10	0.0250	5.00		102	70-130			
p,m-Xylene	10.2	0.0500	10.0		102	70-130			
o-Xylene	5.15	0.0250	5.00		103	70-130			
Total Xylenes	15.4	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*8.47*		*8.00*		*106*	*50-150*			
Matrix Spike (2035008-MS1)				**Source: P008061-21**					Prepared: 08/24/20 1 Analyzed: 08/25/20 1
Benzene	5.31	0.0250	5.00	ND	106	54-133			
Toluene	5.31	0.0250	5.00	ND	106	61-130			
Ethylbenzene	5.27	0.0250	5.00	ND	105	61-133			
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131			
o-Xylene	5.31	0.0250	5.00	ND	106	63-131			
Total Xylenes	15.9	0.0250	15.0	ND	106	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*8.43*		*8.00*		*105*	*50-150*			
Matrix Spike Dup (2035008-MSD1)				**Source: P008061-21**					Prepared: 08/24/20 1 Analyzed: 08/25/20 1
Benzene	5.16	0.0250	5.00	ND	103	54-133	2.89	20	
Toluene	5.14	0.0250	5.00	ND	103	61-130	3.22	20	
Ethylbenzene	5.11	0.0250	5.00	ND	102	61-133	3.16	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	3.16	20	
o-Xylene	5.14	0.0250	5.00	ND	103	63-131	3.28	20	
Total Xylenes	15.4	0.0250	15.0	ND	102	63-131	3.20	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.36*		*8.00*		*104*	*50-150*			

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Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

Nonhalogenated Organics by EPA 8015D - GRO - Quality Control

Analyte	Result	Reporting Limit	Spike Level	Source Result	REC	REC Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2035008-BLK1)									Prepared: 08/24/20 1 Analyzed: 08/25/20 1
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.21*		*8.00*		*90.1*	*50-150*			
LCS (2035008-BS2)									Prepared: 08/24/20 1 Analyzed: 08/25/20 1
Gasoline Range Organics (C6-C10)	43.8	20.0	50.0		87.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		*8.00*		*88.1*	*50-150*			
Matrix Spike (2035008-MS2)									**Source: P008061-21** Prepared: 08/24/20 1 Analyzed: 08/25/20 1
Gasoline Range Organics (C6-C10)	45.4	20.0	50.0	ND	90.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.03*		*8.00*		*87.9*	*50-150*			
Matrix Spike Dup (2035008-MSD2)									**Source: P008061-21** Prepared: 08/24/20 1 Analyzed: 08/25/20 1
Gasoline Range Organics (C6-C10)	43.0	20.0	50.0	ND	85.9	70-130	5.51	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.43*		*8.00*		*92.9*	*50-150*			

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Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

Nonhalogenated Organics by EPA 8015D - DRO/ORO - Quality Control

Analyte	Result	Reporting Limit	Spike Level	Source Result	REC	REC Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2035012-BLK1)									Prepared: 08/24/20 1 Analyzed: 08/25/20 0
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C40)	ND	50.0							
Surrogate: n-Nonane	*53.3*		*50.0*		*107*	*50-200*			
LCS (2035012-BS1)									Prepared: 08/24/20 1 Analyzed: 08/25/20 0
Diesel Range Organics (C10-C28)	476	25.0	500		95.2	38-132			
Surrogate: n-Nonane	*51.5*		*50.0*		*103*	*50-200*			
Matrix Spike (2035012-MS1)				**Source: P008061-23**					Prepared: 08/24/20 1 Analyzed: 08/25/20 0
Diesel Range Organics (C10-C28)	505	25.0	500	ND	101	38-132			
Surrogate: n-Nonane	*25.5*		*50.0*		*51.0*	*50-200*			
Matrix Spike Dup (2035012-MSD1)				**Source: P008061-23**					Prepared: 08/24/20 1 Analyzed: 08/25/20 0
Diesel Range Organics (C10-C28)	498	25.0	500	ND	99.7	38-132	1.29	20	
Surrogate: n-Nonane	*43.9*		*50.0*		*87.9*	*50-200*			

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Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

Anions by EPA 300.0/9056A - Quality Control

Analyte	Result	Reporting Limit	Spike Level	Source Result	REC	REC Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2035013-BLK1)									Prepared: 08/25/20 0 Analyzed: 08/25/20 1
Chloride	ND	20.0							
LCS (2035013-BS1)									Prepared: 08/25/20 0 Analyzed: 08/25/20 1
Chloride	247	20.0	250		98.7	90-110			
Matrix Spike (2035013-MS1)					**Source: P008061-21**				Prepared: 08/25/20 0 Analyzed: 08/25/20 1
Chloride	308	20.0	250	55.3	101	80-120			
Matrix Spike Dup (2035013-MSD1)					**Source: P008061-21**				Prepared: 08/25/20 0 Analyzed: 08/25/20 1
Chloride	311	20.0	250	55.3	102	80-120	1.11	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 my differ slightly.

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Analytical Laboratory

Spur	Project Name:	Pronghorn SWD	
PO Box 1058	Project Number:	20046-0001	**Reported:**
Hobbs NM, 88240	Project Manager:	Brady Moulder	08/26/20 15:21

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

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

Project Information | Chain of Custody | Page 1 of 1

Client:	SPUR Energy
Project:	Pronghorn SWD
Project Manager:	Brady Maulder
Address:	
City, State, Zip	
Phone:	
Email:	
Report due by:	

Bill To

Attention:	ESS
Address:	7 w compress rd
City, State, Zip	Artesia NM 88210
Phone:	
Email:	Natalie@energystaffingllc.com

Lab Use Only		TAT		EPA Program		
Lab WO#	Job Number	1D	3D	RCRA	CWA	SDWA
P008079	200460-0001	/				

State			
NM	CO	UT	AZ
/			
TX	OK		

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC - NM	BGDOC - TX			Remarks
8:20	8/24	S	1	Background	1									\				
9:13	8/24	1	1	SP1 4'	2									\				
10:41	8/24	1	1	SP2 4'	3									\				
11:08	8/24	1	1	SP3 4'	4									\				

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Juan Talavera	8/24/20	1620		8.24.2020	1620
	8.24.2020	1648	Raina Lopez	8/25/20	11:15

Lab Use Only

Received on ice: (Y) / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

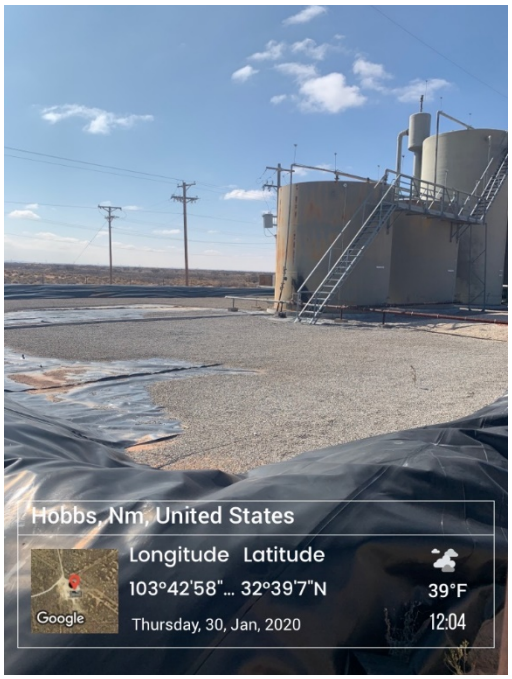
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____

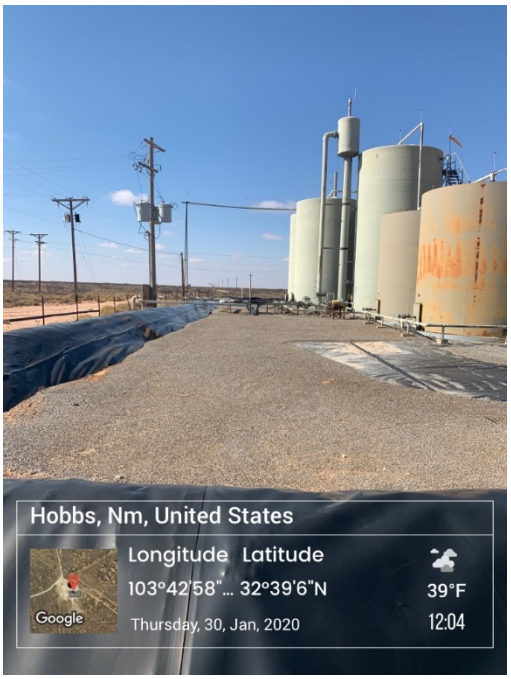
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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

envirotech Analytical Laboratory
5795 US Highway 64, Farmington, NM 87401
24 Hour Emergency Response Phone (800) 362-1879
Ph (505) 632-1881 Fx (505) 632-1865
envirotech-inc.com
labadmin@envirotech-inc.com

PRONGHORN SWD #001
BEGINNING PHOTO PAGE


Hobbs, Nm, United States
Longitude Latitude
103°42'58"... 32°39'7"N
39°F
Thursday, 30, Jan, 2020
12:04
Google


Hobbs, Nm, United States
Longitude Latitude
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39°F
Thursday, 30, Jan, 2020
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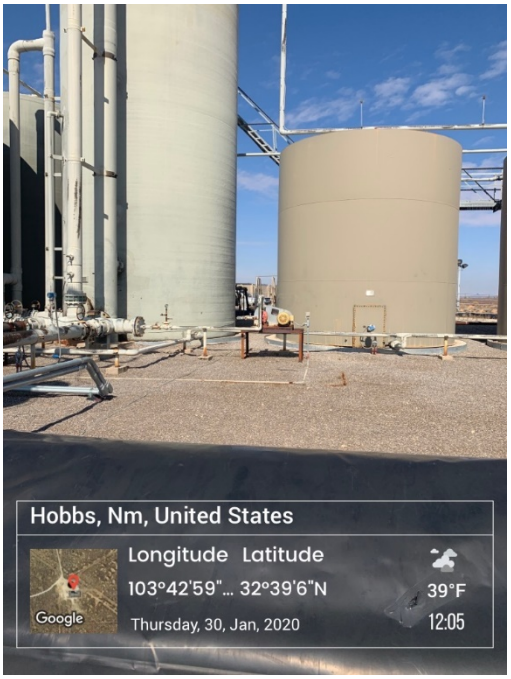
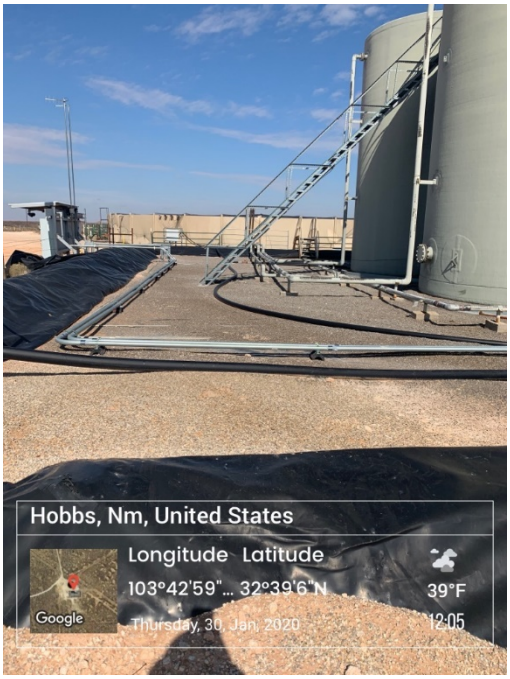
Google


Hobbs, Nm, United States
Longitude Latitude
103°42'59"... 32°39'6"N
39°F
Thursday, 30, Jan, 2020
12:05
Google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Longitude Latitude
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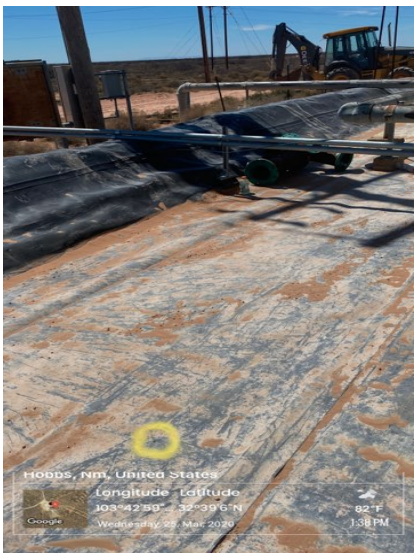
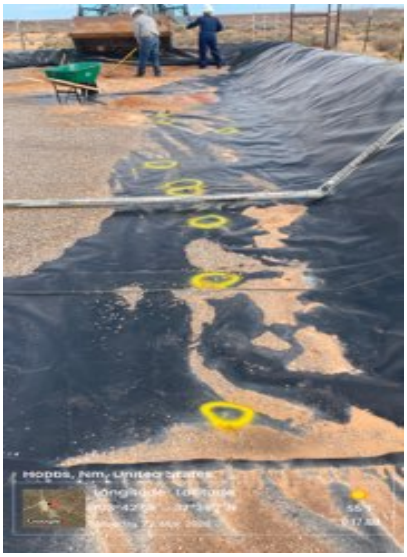
39°F
Thursday, 30, Jan, 2020
12:05
Google

SPUR ENERGY
PRONGHORN
DURING PHOTOS





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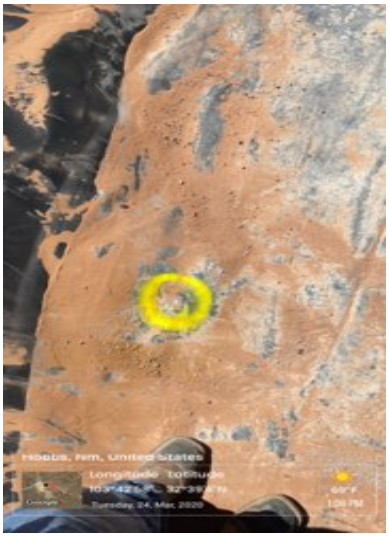
DURING PHOTOS



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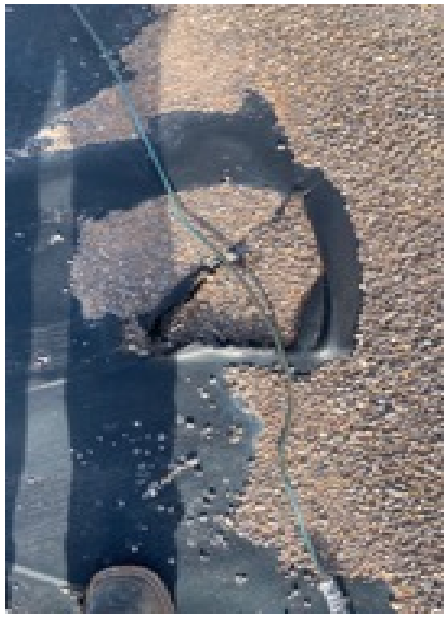

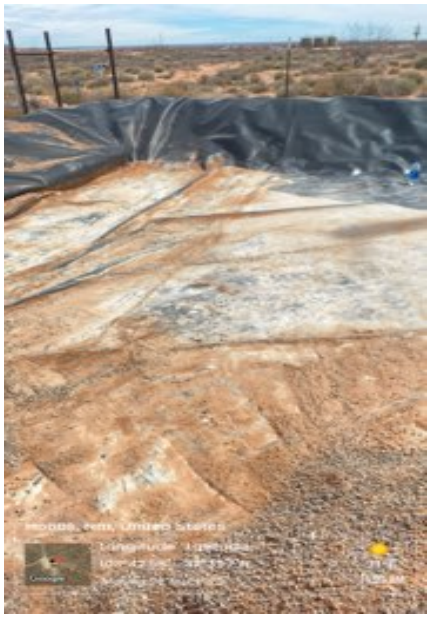

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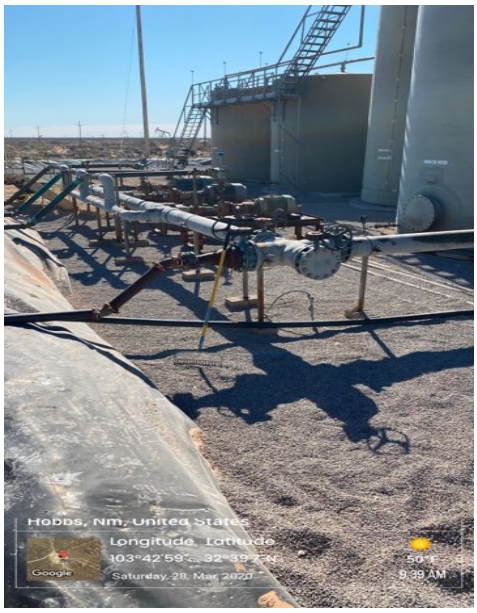
SPUR ENERGY
PRONGHORN SWD #001
FINAL PHOTOS



SPUR ENERGY
PRONGHORN SWD #001
FINAL PHOTOS

SPUR ENERGY
PRONGHORN SWD #001
FINAL PHOTOS

SPUR ENERGY
PRONGHORN SWD #001
FINAL PHOTOS

natalie@energystaffingllc.com

From: Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>
Sent: Friday, August 14, 2020 1:27 PM
To: natalie@energystaffingllc.com
Subject: FW: NRM1927460517 PRONGHORN SWD #001 @ 30-025-32735
Attachments: (C-141 Closure) NRM1927460517.pdf

Natalie,

I apologize, I sent this to the wrong email address. Please see the email below.

Thanks,
Cristina Eads | 505-670-5601

From: Eads, Cristina, EMNRD
Sent: Friday, August 14, 2020 12:24 PM
To: 'ngladden@energystaffing.com' <ngladden@energystaffing.com>
Cc: Mike EMNRD Bratcher (mike.bratcher@state.nm.us) <mike.bratcher@state.nm.us>; Robert EMNRD Hamlet (Robert.Hamlet@state.nm.us) <Robert.Hamlet@state.nm.us>; Victoria EMNRD Venegas (Victoria.Venegas@state.nm.us) <Victoria.Venegas@state.nm.us>
Subject: NRM1927460517 PRONGHORN SWD #001 @ 30-025-32735

NRM1927460517 PRONGHORN SWD #001 @ 30-025-32735

Natalie,

The OCD has denied the submitted Closure Request C-141 for incident # NRM1927460517 for the following reason:

- Soil samples were not collected and analyzed at a lab where perforations in the liner were found. Because the liner was found to be compromised in several locations, additional investigation needs to take place to ensure soils have not been impacted.

I would also like to note that the depth to groundwater has not been adequately determined at this site. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site and the data should be no more than 25 years old, and well construction information should be provided. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine depth to groundwater. If the responsible party chooses to drill to determine depth to groundwater, this should be done following 19.27.4 NMAC (WELL DRILLER LICENSING; CONSTRUCTION, REPAIR AND PLUGGING OF WELLS).

The Denied C-141 can be found in the online image file. Please review and make the required correction prior to resubmitting though the fee portal. If you have any questions or believe this denial is in error, please contact me prior to submitting an additional C-141.

Thanks,

Cristina Eads
Environmental Bureau
EMNRD – Oil Conservation Division
5200 Oakland Avenue NE, Suite 100
Albuquerque, New Mexico 87113

505.670-5601
email: Cristina.Eads@state.nm.us

emnrd

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	185' (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

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

Signature: Natalie Gladden Date: 6/12/20

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

OCD Only

Received by: _____ Date: _____

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Page 5

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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

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

Signature: Natalie Gladden Date: 6/12/20

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

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NRM1927460517
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

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

Signature: Natalie Gladden Date: 8/12/20

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

OCD Only

Received by: Cristina Eads Date: 08/28/2020

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

Closure Approved by: Date: 02/04/2021

Printed Name: Cristina Eads Title: Environmental Specialist

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 9902

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
SPUR ENERGY PARTNERS LLC 9655 Katy Freeway Suite 500 Houston, TX77024	328947	9902	C-141

OCD Reviewer	Condition
ceads	None