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## **Puckett 13 Federal #008H Closure Report**

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**API No. 30-015-39658**

**2RP-5683**

**Release Date: 09/03/2019**

**U/L P, Section 12, Township 17S, Range 31E**

**Eddy County, New Mexico**

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**06/05/2020**

**Prepared by:**



**7 W Compress Road**

**Artesia, NM 88210**

**575-746-9547**



May 05, 2020

New Mexico Energy, Minerals & Natural Resources  
NMOCD District II  
C/O Mike Bratcher, Robert Hamlet & Victoria Venegas  
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  
920 Memorial City Way, Suite 1000  
Houston, TX 77024

**SUBJECT:      Closure Report for Spur Energy Partners – Puckett 13 Federal #008H**  
**API No. 30-015-39658**  
**2RP-5683**  
**U/L P, Section 12, Township 17S, Range 31E**  
**Eddy County**

To Whom It May Concern,

On behalf of Spur Energy Partners, Energy Staffing & Services (ESS) has prepared this CLOSURE REPORT that describes the assessment, delineation and remediation for the release associated with the Puckett 13 Federal #008H, dated September 3<sup>rd</sup>, 2019, with RP# 2RP-5683, with the Incident Number of NAB1930148648.

## **BACKGROUND**

This site is located in Eddy County, New Mexico. The release was discovered on September 3<sup>rd</sup>, 2019. The release was caused by a corroded nipple on the transfer pump. The nipple has been replaced. Approximately 8bbls of produced water was released into the lined facility with over-spray occurring in the pasture. A vacuum truck was dispatched to the site and approximately 7bbls of fluid was recovered, transported to an approved disposal facility. The area of impact

was approximately 424 sq. ft. in the overspray area outside the lined containment in the pasture.

## GROUNDWATER RESEARCH

ESS has conducted a groundwater study of this area. It has been determined that according to the New Mexico Office of the State Engineer, the closest well to the site is 5,275' with no water depth. The closest three wells are listed below:

RA 12042 POD 1 is 5275' from the site with no water depth

L 14207 POD 3 is 5284' from the site with 96'DGW

RA 10175 is 5329' from the site with no water depth

RA 10252 POD 1 is 5351' from the site with no water depth

RA 12020 POD 1 is 5372' from the site with 81'DGW

With the data collected during the groundwater research protocol, there is verifiable record of groundwater in the vicinity of the site detailed herein. There is no eminent danger of groundwater impact found at this site.

The Closure Criteria for Soils Impacted by a Release is shown below, based on groundwater of 96'bgs falls into the 50-100' depth category. Please see the groundwater data and map attached.

DGW	Constituent	Method	Limit
51'-100'	Chloride	EPA 300.0 OR SM4500 CLB	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

## KARST RESEARCH

The Karst Mapping Data found for this site indicates that the site is located inside the low marked area in green. Please see the attached Karst Map. With the low karst determination, the Closure Criteria will be based on depth of groundwater which is listed in the above Closure Criteria for Soils Impacted by a Release.

## DELINEATION AND REMEDIATION

On or about March 23<sup>rd</sup>, 2020, Hungry Horse, LLC dispatched a crew to the location to begin work. The site had been previously assessed, mapped, photographed and the pasture area was flagged and One-Called. The lined containment had to be hand excavated to remove the pea gravel that was placed on top of the liner. All of the impacted material that was removed from

the lined containment was stockpiled on plastic outside the containment and hauled to Lea Land for Disposal. The lined containment was then power-washed to remove all soil and any other materials. Witness of the liner inspection was submitted to the NMOCD. The liner was then inspected with no noted signs of tears or perforations. 3/8" pea gravel was hauled in and spread in the lined facility by hand shoveling.

On March 25, 2020, Hungry Horse, LLC began delineating the pasture area both vertically and horizontally. The site was sampled in 1' intervals by use of hand auger. Two (2) vertical sample points were set. The samples were tested in the field using the titration method as recommended by NMOCD. A PID Meter was also used to test for concentrations of TPH/BTEX. In the table below, you will find the surface samples as titrated in the field:

Ver Sam ID	Depth	Tit/Chl
SP 1	SURF	480
SP 2	SURF	160

Following the testing of surface samples, the site was fully delineated vertically to ascertain the depth of the impacted soil. Each sample was titrated in the field then jarred and sent to Envirotech Laboratory for confirmation. Below you will find the verified samples with the confirmed bottom hole samples by Envirotech Laboratories.

SP ID	Depth	Titr	PID	L-BTEX	L-DRO	L-ORO	L-GRO	L-TPH	L-CHL
SP 1	SURF	480	TPH						
	1'	440	TPH						
	2'	400	ND						
	3'	400	ND						
	4'	320	ND	ND	ND	ND	ND	ND	ND
SP 2	SURF	160	TPH						
	1'	320	TPH						
	2'	240	ND						
	3'	320	ND						
	4'	320	ND	ND	ND	ND	ND	ND	ND

As evidenced by the table above, the attached sample data and the lab analytical results, the confirmed samples were well within the proscribed limits set forth in the Closure Criteria for Soil Impacted by a Release in the 50-100' range.

Following vertical delineation, the site was fully delineated horizontally to ascertain the outside edges of the impacted soil. Four (4) sidewalls were sampled using 1' increments. Each sample was titrated in the field, then jarred and sent to Envirotech Laboratory for confirmation. Below you will find the verified samples as confirmed by Envirotech.



As shown on the above table of horizontally delineated sidewalls, all of the confirmed samples were well within the proscribed limits set forth in the in the Closure Criteria for Soils Impacted by a Release in the 50-100' range.

SP ID	Depth	Titr	PID	L-BTEX	L-DRO	L-ORO	L-GRO	L-TPH	L-CHL
SW 1	SURF	560	ND						
	1'	240	ND						
	2'	240	ND	ND	ND	ND	ND	ND	ND
SW 2	SURF	240	ND						
	1'	160	ND						
	2'	160	ND	ND	ND	ND	ND	ND	ND
SW 3	SURF	400	ND						
	1'	240	ND						
	2'	240	ND	ND	ND	ND	ND	ND	ND
SW 4	SURF	440	ND						
	1'	400	ND						
	2'	320	ND	ND	ND	ND	ND	ND	ND

Upon receipt of the vertical and sidewall verified samples there was no cause to perform closure samples due to all samples coming back as ND or not detectible. The pasture area was excavated to 4'bgs. The impacted soil was hauled to Lea Landfill and clean soil was backhauled for backfill. The area was backfilled, leveled and contoured back to its natural state. This will prevent non-native plants and noxious weeds from invading the area. The area was then seeded with BLM #3 seed.

#### SCOPE OF SERVICES AND LIMITATIONS

The scope of services consisted of review of Hungry Horse site assessment, delineation and remediation as well as regulatory liaison and preparation of this Closure Report by ESS. All work has been performed in accordance with NMOCD Rules and Regulations for Spills and Releases dated August 14<sup>th</sup>, 2018 (19.15.29 NMAC).

On behalf of Spur Energy Partners and Energy Staffing & Services, we respectfully request closure on the release associated with the Puckett 13 Federal #008H. If you have questions or concerns, please address them to me, Natalie Gladden, Director of Environmental and Regulatory Services for Energy Staffing & Services. I can be contacted either via cell phone at (575) 390-6397 or via email at [natalie@energystaffingllc.com](mailto:natalie@energystaffingllc.com).

Sincerely,

A handwritten signature in blue ink that reads "Natalie Gladden".

Natalie Gladden  
Director of Environmental & Regulatory Services  
Energy Staffing & Services  
7 W Compress Road  
Artesia, NM 88210

**ATTACHMENTS**

C-141  
Groundwater Data  
Groundwater Map  
Karst Map  
Site Map  
Sample Data  
Sample Map  
Laboratory Analytical Results  
Photo Pages  
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	
District RP	2RP-5683
Facility ID	
Application ID	pAB1930148364

## Release Notification 18DW3-190912-C-1410

### 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)

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

Cause of Release

Incident ID	
District RP	2RP-5683
Facility ID	
Application ID	pAB1930148364

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input type="checkbox"/> 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*

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: <u>Delann Opreant</u>	Date: _____
email: _____	Telephone: _____
<b><u>OCD Only</u></b>	
Received by: <u>Amalia Bustamante</u>	Date: <u>10/28/2019</u>



## New Mexico Office of the State Engineer

# Wells with Well Log Information

No wells found.

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 595210.9

**Northing (Y):** 3633965.3

**Radius:** 1000

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.

6/17/20 11:19 AM

WELLS WITH WELL LOG INFORMATION



## 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		q q q										Log File	Depth	Depth		License
POD Number	Code	Subbasin	County	Source	6416 4	Sec	Tw	Rng	X	Y	Distance	Start Date	Finish Date	Date	Well	Water	Driller	Number
<a href="#">RA 11914 POD1</a>		RA	ED	Shallow	2 4 2	20	17S	30E	594801	3632002		2005 03/19/2013	03/19/2013	04/09/2013	85	80	JOHN NORRIS	1682

**Record Count:** 1

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 595210.9

**Northing (Y):** 3633965.3

**Radius:** 5000

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.

6/17/20 11:20 AM

WELLS WITH WELL LOG INFORMATION



# 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 q q	6416 4	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
<a href="#">RA 12042 POD1</a>		RA	LE		2 2 1	28	17S	32E		614891	3631181	5275	11/13/2013	11/22/2013	12/12/2013	400		CRASS, DARRELL (LD)	1261
<a href="#">L 14207 POD3</a>		L	LE	Shallow	2 3 3	31	16S	37E		606117	3636977	5284	10/03/2016	10/12/2016	12/12/2016	240	96	WHITE, JOHN W	1456
<a href="#">RA 10175</a>		RA	LE	Shallow	2 1	28	17S	32E		614814	3631005*	5329	02/04/2002	02/04/2002	03/06/2002	158		EADES, ALAN	1044
<a href="#">RA 12522 POD1</a>		RA	LE	Shallow	3 3 4	21	17S	32E		614941	3631122	5351	07/25/2017	07/26/2017	08/22/2017	100		WHITE, JOHN W	1456
<a href="#">RA 12020 POD1</a>		RA	LE	Shallow	2 2 1	28	17S	32E		614828	3630954	5372	09/24/2013	09/25/2013	10/07/2013	120	81	WHITE, JOHN (LD)	1456
<a href="#">RA 12522 POD2</a>		RA	LE	Shallow	2 2 1	28	17S	32E		614949	3631098	5372	07/24/2017	07/26/2017	08/22/2017	100		WHITE, JOHN W	1456
<a href="#">RA 12522 POD3</a>		RA	LE	Shallow	4 4 3	28	17S	32E		614980	3631093	5400	07/20/2017	07/26/2017	08/22/2017	100		WHITE, JOHN W	1456
<a href="#">RA 12521 POD1</a>		RA	LE	Shallow	3 3 4	21	17S	32E		615127	3631271	5407	07/21/2017	07/26/2017	08/22/2017	105	92	WHITE, JOHN W	1456
<a href="#">RA 08855</a>		RA	LE		4 1 1	10	17S	32E		616061	3635742*	5433	07/28/1994	08/04/1994	08/10/1994	158		J & K DRILLING	1235
<a href="#">RA 12020 POD3</a>		RA	LE	Shallow	2 1 2	28	17S	32E		615152	3631019	5580	07/13/2015	07/15/2015	08/10/2015	112	83	WHITE, JOHN W	1456
<a href="#">RA 12721 POD1</a>		RA	LE		3 2 3	28	17S	32E		614645	3630141	5814	04/18/2019	04/19/2019	05/15/2019	125		JOHN W WHITE	1456
<a href="#">L 13050 POD1</a>		L	LE	Shallow	2 2 1	10	17S	32E		616463	3635945*	5872	12/23/1961	01/01/1962	01/18/1962	156	132	ALDREDGE, C.O.	79
<a href="#">RA 12721 POD2</a>		RA	LE	Shallow	1 1 4	28	17S	32E		615055	3630407	5909	04/18/2019	04/19/2019	05/15/2019	124	75	JOHN W WHITE	1456
<a href="#">RA 12436 POD1</a>		RA	LE	Shallow	2 2 1	10	17S	32E		616556	3635929	5959	01/04/2017	01/09/2017	01/13/2017	160	125	TAYLOR, ROY A.	1626
<a href="#">L 04021 POD3</a>		L	LE	Shallow	3 4	03	17S	32E		616761	3636252*	6242	07/28/1999	07/28/1999	08/30/1999	247		ALAN EADES	1044
<a href="#">RA 12721 POD3</a>		RA	LE	Shallow	2 3 4	28	17S	32E		615417	3629979	6466	04/18/2019	04/19/2019	05/15/2019	115		JOHN W WHITE	1456
<a href="#">RA 12721 POD4</a>		RA	LE		1 1 2	33	17S	32E		615055	3629589	6499	04/18/2019	04/19/2019	05/15/2019	140		JOHN W WHITE	1456
<a href="#">RA 12721 POD5</a>		RA	LE	Shallow	2 4 4	28	17S	32E		615650	3629961	6647	04/27/2020	04/28/2020	05/18/2020	130	124	WHITE, JOHNNOWN.GENER	1456
<a href="#">L 04021 S</a>		L	LE	Shallow	2 4 4	03	17S	32E		617262	3636354*	6751	01/21/2002	01/24/2002	02/05/2002	260		ALAN EADES	1044
<a href="#">RA 12721 POD7</a>		RA	LE		1 3 2	33	17S	32E		615064	3629198	6804	04/28/2020	04/28/2020	05/18/2020	130		WHITE, JOHNNOWN.GENER	1456
<a href="#">RA 12721 POD6</a>		RA	LE		1 2 2	33	17S	32E		615530	3629431	6936	04/28/2020	04/28/2020	05/18/2020	130		WHITE, JOHNNOWN.GENER	1456
<a href="#">L 13047 POD1</a>		L	LE			11	17S	32E		618187	3635254*	7451		09/10/1947	01/13/1959	140		BURKE	
<a href="#">L 03852 X</a>	R	L	LE	Shallow	4 4 4	13	16S	31E		610749	3642526*	8044	06/21/1963	07/02/1963	07/08/1963	333	299	F.M. OSBOURN	353
<a href="#">L 06557</a>		L	LE	Shallow	1 4	21	16S	32E		615089	3641466*	8209	07/01/1969	07/03/1969	07/09/1969	295	210	MURRELL ABBOTT	46
<a href="#">L 03980 S</a>		L	LE	Shallow	4 4 4	02	17S	32E		618870	3636170*	8268	09/21/1962	10/12/1962	11/07/1962	255	179		79
<a href="#">CP 00566 POD1</a>		CP	LE	Shallow	4 4 1	04	18S	32E		614960	3627280*	8329	06/01/1977	06/03/1977	06/13/1977	133	65	ABBOTT, MURRELL	46
<a href="#">RA 11590 POD3</a>		RA	ED		3 1 2	32	17S	31E		603932	3629260	8607	01/22/2010	01/22/2010	04/23/2010	60			225

<a href="#">L 02752</a>	L	LE	Shallow	1	3	26	16S	32E	617521	3639880*		8639	03/22/1955	03/23/1955	03/24/1955	324	280	MURRELL ABBOTT	46		
<a href="#">RA 11911 POD1</a>	RA	LE	Shallow	1	3	1	24	17S	32E	619192	3632296		8695	06/11/2013	06/11/2013	06/21/2013	35	NORRIS, JOHN D. (LD)	1682		
<a href="#">L 03587</a>	L	LE	Shallow	1	2	4	35	16S	32E	618647	3638383*		8785	06/08/1959	06/22/1959	07/09/1959	282	210	ALDREDGE, C.O.	79	
<a href="#">L 03587 S</a>	L	LE	Shallow	3	4	2	35	16S	32E	618642	3638586*		8873	01/02/1962	01/28/1962	02/12/1962	269	215	ALDREDGE, C.O.	79	
<a href="#">L 04737 POD3</a>	L	LE	Shallow	3	3	36	16S	32E	619048	3637777		8904	01/17/2014	01/20/2014	03/20/2014	304	214	BILL W. WHALEY	1472		
<a href="#">L 03980 S2</a>	L	LE	Shallow	3	2	3	01	17S	32E	619470	3636581*		8944	02/18/1960	03/03/1960	03/25/1960	225	175		79	
<a href="#">L 06400</a>	L	LE	Shallow	1	3	3	36	16S	32E	619054	3637985*		8989	12/10/1968	12/13/1968	03/05/1969	330	BOB CRANE			
<a href="#">L 03852 POD5</a>	R	L	LE	Shallow	2	3	2	13	16S	31E	610387	3643470		8996	11/22/1964	12/13/1964	12/17/1964	328	295	F.M. OSBOURN	353
<a href="#">RA 11590 POD4</a>	RA	ED		4	1	1	32	17S	31E	603308	3629253		9115	01/21/2010	01/22/2010	04/23/2010	55			225	
<a href="#">L 03587 S2</a>	L	LE	Shallow	2	2	35	16S	32E	618738	3639089*		9199	08/17/1966	08/18/1966	09/01/1966	299	192	ABBOTT, FLOYD	46		
<a href="#">L 03852 X2</a>	L	LE	Shallow	3	2	2	13	16S	31E	610535	3643733*		9254	12/01/1961	01/31/1962	01/02/1963	330	287	CLYDE J. TIDWELL	320	
<a href="#">L 08084 POD6</a>	L	LE	Shallow						618663	3639335		9261	12/08/2015	01/22/2016	01/22/2016	295	235	CALEB CURRY	1632		
<a href="#">L 08084 POD5</a>	L	LE	Shallow	4	1	4	26	16S	32E	618425	3639788*		9309	08/20/1984	08/25/1984	08/28/1984	296	165	ABBOTT, MURRELL	46	
<a href="#">L 03587 S4</a>	L	LE	Shallow	1	4	4	26	16S	32E	618632	3639590*		9371	11/02/1977	11/08/1977	11/10/1977	289	220	ABBOTT, FLOYD	46	
<a href="#">L 08084 POD7</a>	L	LE	Shallow						618393	3640052		9436	12/21/2015	01/22/2016	01/22/2016	295	230	CALEB CURRY	1632		
<a href="#">RA 11590 POD1</a>	RA	ED		2	1	3	32	17S	31E	603315	3628545		9533	01/20/2010	01/26/2010	04/23/2010	158			225	
<a href="#">L 03852</a>	R	L	LE	Shallow	2	2	2	14	16S	31E	609126	3643913*		9574	05/22/1963	06/05/1963	06/11/1963	370	314	FLOYD M. OSBOURN	353
<a href="#">CP 00672</a>	CP	LE	Shallow	4	4	07	18S	32E	612475	3624947*		9685	07/17/1992	08/07/1992	08/12/1992	524	430	ABBOTT, MURRELL	46		
<a href="#">CP 00672 CLW475398</a>	O	CP	LE	Shallow	4	4	07	18S	32E	612475	3624947*		9685	01/22/1985	01/29/1985	02/08/1985	540	460	FELKINS, LARRY	882	
<a href="#">L 08084 POD4</a>	L	LE	Shallow	2	26	16S	32E		618522	3640492*		9804	08/05/1991	08/20/1991	08/22/1991	303	233	ABBOTT, MURRELL	46		
<a href="#">L 08084 S3</a>	L	LE	Shallow	2	26	16S	32E		618522	3640492*		9804	10/20/2001	10/30/2001	11/29/2001	305	205	KIDD, GARY	854		
<a href="#">L 05494</a>	L	LE	Shallow	36	16S	32E			619758	3638489*		9836	05/01/1965	05/06/1965	05/19/1965	303	200	EDWARD B. BURKE	111		

Record Count: 49

## UTMNAD83 Radius Search (in meters):

Easting (X): 610775.25

Northing (Y): 3634481.7

Radius: 10000

\*UTM location was derived from PLSS - see Help

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6/17/20 9:50 AM

WELLS WITH WELL LOG INFORMATION





# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA 12042	POD1	2	2	1	28	17S	32E	614891	3631181

**Driller License:** 1261 **Driller Company:** DARRELL CRASS DRILLING CO., INC

**Driller Name:** CRASS, DARRELL (LD)

**Drill Start Date:** 11/13/2013

**Drill Finish Date:** 11/22/2013

**Plug Date:**

**Log File Date:** 12/12/2013

**PCW Rcv Date:**

**Source:**

**Pump Type:**

**Pipe Discharge Size:**

**Estimated Yield:**

**Casing Size:** 10.00

**Depth Well:** 400 feet

**Depth Water:**

**Water Bearing Stratifications:** **Top Bottom Description**

10 30 Sandstone/Gravel/Conglomerate



# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
L 14207	POD3	2	3	3	31	16S	37E	606117	3636977

<b>Driller License:</b> 1456	<b>Driller Company:</b> WHITE DRILLING COMPANY
<b>Driller Name:</b> WHITE, JOHN W	
<b>Drill Start Date:</b> 10/03/2016	<b>Drill Finish Date:</b> 10/12/2016
<b>Log File Date:</b> 12/12/2016	<b>PCW Rcv Date:</b>
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>
<b>Casing Size:</b> 4.00	<b>Depth Well:</b> 240 feet
	<b>Plug Date:</b>
	<b>Source:</b> Shallow
	<b>Estimated Yield:</b>
	<b>Depth Water:</b> 96 feet

Water Bearing Stratifications:	Top	Bottom	Description
	75	140	Sandstone/Gravel/Conglomerate
	140	200	Sandstone/Gravel/Conglomerate
	200	205	Sandstone/Gravel/Conglomerate
	205	218	Sandstone/Gravel/Conglomerate
	218	236	Sandstone/Gravel/Conglomerate
	236	237	Sandstone/Gravel/Conglomerate
	237	240	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	90	220



# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

<b>Well Tag</b>	<b>POD Number</b>	<b>Q64 Q16 Q4 Sec Tws Rng</b>	<b>X</b>	<b>Y</b>
RA 10175		2 1 28 17S 32E	614814	3631005*

<b>Driller License:</b> 1044	<b>Driller Company:</b> EADES WELL DRILLING & PUMP SERVICE
<b>Driller Name:</b> EADES, ALAN	
<b>Drill Start Date:</b> 02/04/2002	<b>Drill Finish Date:</b> 02/04/2002
<b>Log File Date:</b> 03/06/2002	<b>PCW Rcv Date:</b>
<b>Pump Type:</b>	<b>Source:</b> Shallow
<b>Casing Size:</b> 5.75	<b>Depth Well:</b> 158 feet
	<b>Depth Water:</b>

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	87	89	Shallow Alluvium/Basin Fill
	89	116	Shallow Alluvium/Basin Fill
	116	124	Shallow Alluvium/Basin Fill

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	118	158

<b>Meter Number:</b> 5380	<b>Meter Make:</b> SENSUS
<b>Meter Serial Number:</b> 560656282	<b>Meter Multiplier:</b> 10.0000
<b>Number of Dials:</b> 6	<b>Meter Type:</b> Diversion
<b>Unit of Measure:</b> Gallons	<b>Return Flow Percent:</b>
<b>Usage Multiplier:</b>	<b>Reading Frequency:</b> Annual

### Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount
03/20/2002	2002	0	A	RPT		0
05/06/2002	2002	170	A	RPT		0.005
02/13/2003	2002	2410	A	PRT		0.069
02/01/2005	2004	3420	A	ch		0.031

<b>**YTD Meter Amounts:</b>	<b>Year</b>	<b>Amount</b>
	2002	0.074
	2004	0.031

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA 12522 POD1		3	3	4	21	17S	32E	614941	3631122

<b>Driller License:</b> 1456	<b>Driller Company:</b> WHITE DRILLING COMPANY
<b>Driller Name:</b> WHITE, JOHN W	
<b>Drill Start Date:</b> 07/25/2017	<b>Drill Finish Date:</b> 07/26/2017
<b>Log File Date:</b> 08/22/2017	<b>PCW Rcv Date:</b>
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>
<b>Casing Size:</b> 4.00	<b>Depth Well:</b> 100 feet
	<b>Plug Date:</b>
	<b>Source:</b> Shallow
	<b>Estimated Yield:</b>
	<b>Depth Water:</b>

Water Bearing Stratifications:	Top	Bottom	Description
	78	86	Sandstone/Gravel/Conglomerate
	86	97	Sandstone/Gravel/Conglomerate
	97	100	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	70	100



# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA 12020	POD1	2	2	1	28	17S	32E	614828	3630954

<b>Driller License:</b> 1456	<b>Driller Company:</b> WHITE DRILLING COMPANY	
<b>Driller Name:</b> WHITE, JOHN (LD)		
<b>Drill Start Date:</b> 09/24/2013	<b>Drill Finish Date:</b> 09/25/2013	<b>Plug Date:</b>
<b>Log File Date:</b> 10/07/2013	<b>PCW Rcv Date:</b>	<b>Source:</b> Shallow
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>	<b>Estimated Yield:</b>
<b>Casing Size:</b> 2.00	<b>Depth Well:</b> 120 feet	<b>Depth Water:</b> 81 feet

Water Bearing Stratifications:	Top	Bottom	Description
	70	111	Sandstone/Gravel/Conglomerate
	111	120	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	75	110



**SPUR ENERGY**  
PUCKETT 13 FEDERAL #008H  
DOR: 9.3.19  
GROUND WATER MAP

L 14207 POD3 5284' FR SITE 96' DGW

PUCKETT 13 FEDERAL #008H

RA 12522 POD1 NO GW  
RA 12042 POD1 5275' FR SITE NO GW  
RA 12020 POD1 5372' FR SITE 81' DGW  
RA 10175 5329' FR SITE NO GW

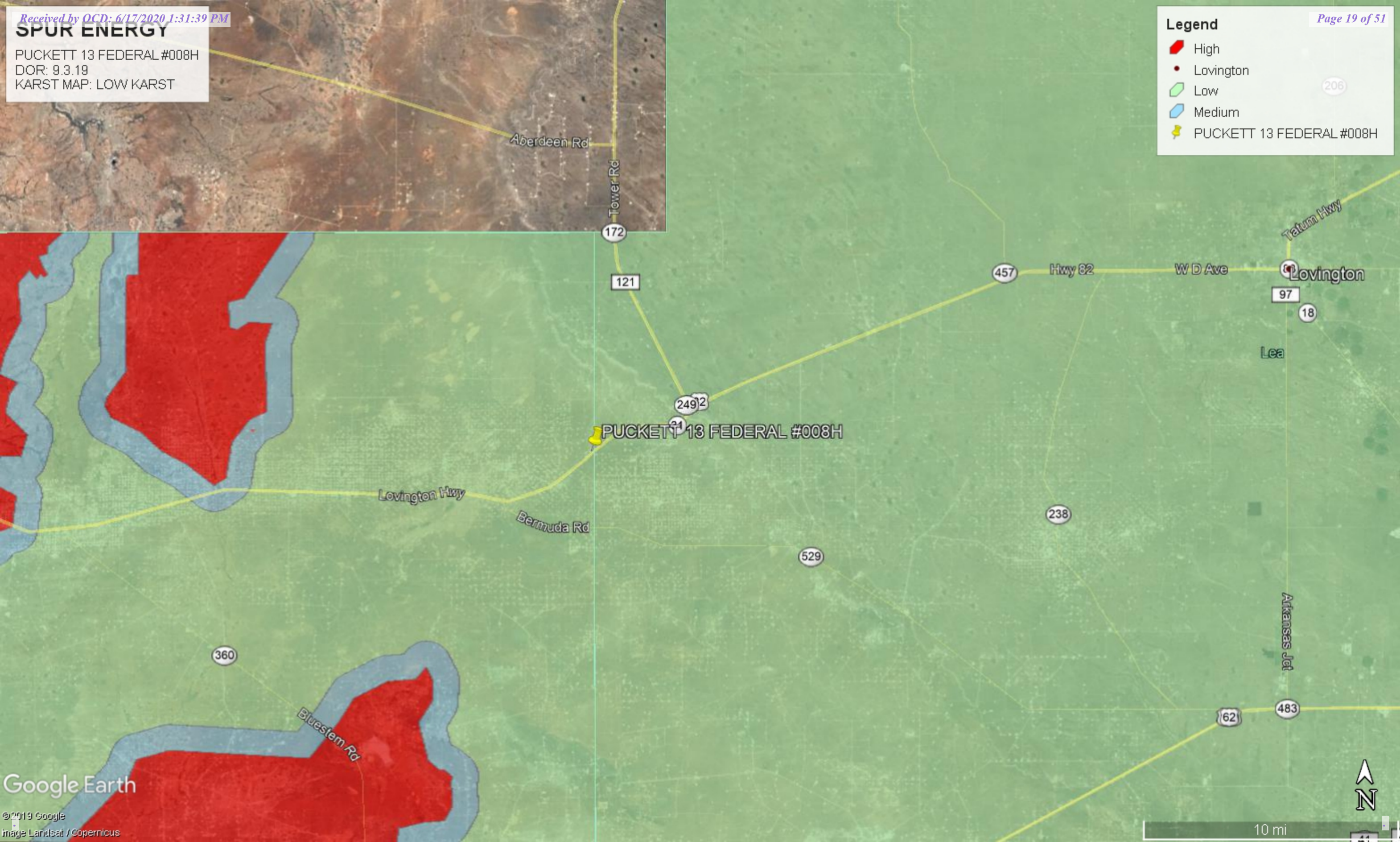


**SPUR ENERGY**

PUCKETT 13 FEDERAL #008H  
DOR: 9.3.19  
KARST MAP: LOW KARST

**Legend**

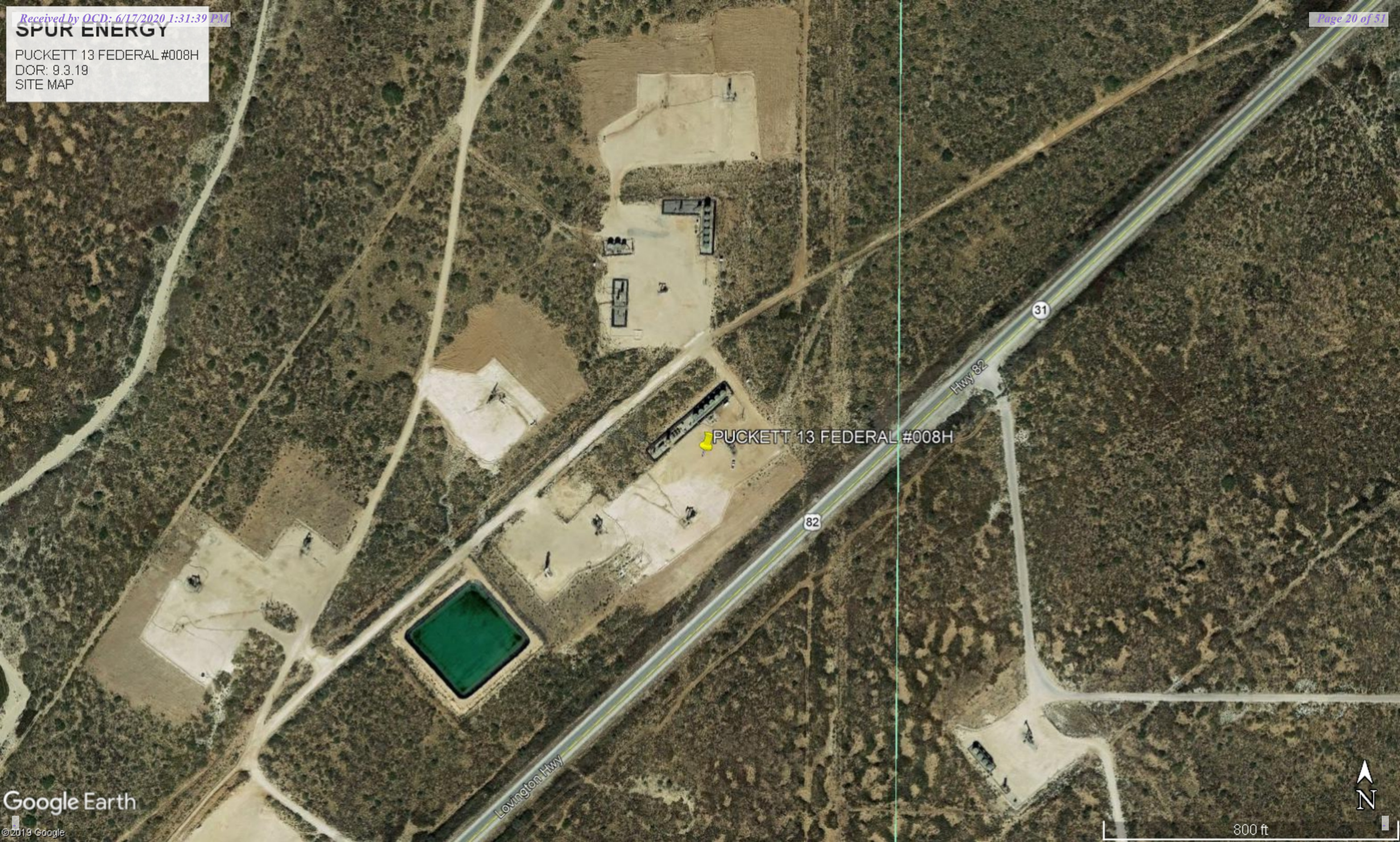
- High
- Lovington
- Low
- Medium
- PUCKETT 13 FEDERAL #008H





**SPUR ENERGY**

PUCKETT 13 FEDERAL #008H  
DOR: 9.3.19  
SITE MAP





**Company Name:** SPUR      **LOCATION NAME:** PUCKETT 13 FED #08 BTY      **Release Date:** 6/8/2018

[illegible]



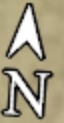
**Legend**

- PUCKETT 13 FEDERAL #008H
- RELEASE AREA
- SAMPLE POINTS
- SIDEWALL SAMPLE POINTS
- SPRAY AREA 536 SQ. FT.



SP1: 32.842834 -103.816516  
SP2: 32.842852 -104.816471

SW1: 32.842805 -103.816549  
SW2: 32.842865 -103.816527  
SW3: 32.842873 -103.816438  
SW4: 32.842828 -103.816467







## Analytical Report

### Report Summary

Client: Spur

Samples Received: 3/27/2020

Job Number: 19054-0003

Work Order: P003124

Project Name/Location: Puckett 13 Fed

Report Reviewed By:

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

Date: 3/30/20

Walter Hinchman, Laboratory Director



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



Spur	Project Name:	Puckett 13 Fed	<b>Reported:</b> 03/30/20 12:36
PO Box 1058	Project Number:	19054-0003	
Hobbs NM, 88240	Project Manager:	Natalie Gladden	

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP1-4'	P003124-01A	Soil	03/25/20	03/27/20	Glass Jar, 4 oz.
SP2-4'	P003124-02A	Soil	03/25/20	03/27/20	Glass Jar, 4 oz.
SW1-2'	P003124-03A	Soil	03/25/20	03/27/20	Glass Jar, 4 oz.
SW2-2'	P003124-04A	Soil	03/25/20	03/27/20	Glass Jar, 4 oz.
SW3-2'	P003124-05A	Soil	03/25/20	03/27/20	Glass Jar, 4 oz.
SW4-2'	P003124-06A	Soil	03/25/20	03/27/20	Glass Jar, 4 oz.

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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

**SP1-4'**  
**P003124-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		<i>104 %</i>		<i>50-150</i>	<i>2013020</i>	<i>03/27/20</i>	<i>03/27/20</i>	<i>EPA 8021B</i>	

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

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		<i>93.9 %</i>		<i>50-200</i>	<i>2013004</i>	<i>03/27/20</i>	<i>03/27/20</i>	<i>EPA 8015D</i>	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		<i>90.1 %</i>		<i>50-150</i>	<i>2013020</i>	<i>03/27/20</i>	<i>03/27/20</i>	<i>EPA 8015D</i>	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2013018	03/27/20	03/27/20	EPA 300.0/9056A	
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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

**SP2-4'**  
**P003124-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	2013020	03/27/20	03/27/20	EPA 8021B	

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

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		96.8 %		50-200	2013004	03/27/20	03/27/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.9 %		50-150	2013020	03/27/20	03/27/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2013018	03/27/20	03/27/20	EPA 300.0/9056A	
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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

**SW1-2'****P003124-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	2013020	03/27/20	03/27/20	EPA 8021B	

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

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		93.4 %		50-200	2013004	03/27/20	03/27/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.3 %		50-150	2013020	03/27/20	03/27/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2013018	03/27/20	03/27/20	EPA 300.0/9056A	
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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

**SW2-2'**  
**P003124-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	2013020	03/27/20	03/27/20	EPA 8021B	

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

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		94.2 %		50-200	2013004	03/27/20	03/27/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		88.2 %		50-150	2013020	03/27/20	03/27/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2013018	03/27/20	03/27/20	EPA 300.0/9056A	
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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

**SW3-2'****P003124-05 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		103 %		50-150	2013020	03/27/20	03/27/20	EPA 8021B	

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

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		94.4 %		50-200	2013004	03/27/20	03/27/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		89.1 %		50-150	2013020	03/27/20	03/27/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2013018	03/27/20	03/27/20	EPA 300.0/9056A	
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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

**SW4-2'****P003124-06 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		104 %		50-150	2013020	03/27/20	03/27/20	EPA 8021B	

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

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013004	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		111 %		50-200	2013004	03/27/20	03/27/20	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013020	03/27/20	03/27/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		87.5 %		50-150	2013020	03/27/20	03/27/20	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	2013018	03/27/20	03/27/20	EPA 300.0/9056A	
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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

## Volatile Organics by EPA 8021 - Quality Control

## Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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## Batch 2013020 - Purge and Trap EPA 5030A

## Blank (2013020-BLK1)

Prepared &amp; Analyzed: 03/27/20 1

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

Surrogate: 4-Bromochlorobenzene-PID 8.29 " 8.00 104 50-150

## LCS (2013020-BS1)

Prepared &amp; Analyzed: 03/27/20 1

Benzene	4.98	0.0250	mg/kg	5.00		99.5	70-130			
Toluene	5.12	0.0250	"	5.00		102	70-130			
Ethylbenzene	5.07	0.0250	"	5.00		101	70-130			
p,m-Xylene	10.1	0.0500	"	10.0		101	70-130			
o-Xylene	5.04	0.0250	"	5.00		101	70-130			
Total Xylenes	15.1	0.0250	"	15.0		101	0-200			

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

## Matrix Spike (2013020-MS1)

Source: P003122-01

Prepared: 03/27/20 1 Analyzed: 03/27/20 2

Benzene	4.72	0.0250	mg/kg	5.00	ND	94.4	54.3-133			
Toluene	4.88	0.0250	"	5.00	ND	97.6	61.4-130			
Ethylbenzene	4.81	0.0250	"	5.00	ND	96.2	61.4-133			
p,m-Xylene	9.54	0.0500	"	10.0	ND	95.4	63.3-131			
o-Xylene	4.74	0.0250	"	5.00	ND	94.8	63.3-131			
Total Xylenes	14.3	0.0250	"	15.0	ND	95.2	0-200			

Surrogate: 4-Bromochlorobenzene-PID 8.39 " 8.00 105 50-150

## Matrix Spike Dup (2013020-MSD1)

Source: P003122-01

Prepared: 03/27/20 1 Analyzed: 03/27/20 2

Benzene	4.86	0.0250	mg/kg	5.00	ND	97.3	54.3-133	3.02	20	
Toluene	4.98	0.0250	"	5.00	ND	99.7	61.4-130	2.10	20	
Ethylbenzene	4.92	0.0250	"	5.00	ND	98.5	61.4-133	2.36	20	
p,m-Xylene	9.76	0.0500	"	10.0	ND	97.6	63.3-131	2.38	20	
o-Xylene	4.88	0.0250	"	5.00	ND	97.7	63.3-131	2.99	20	
Total Xylenes	14.6	0.0250	"	15.0	ND	97.7	0-200	2.58	200	

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

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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

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

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 2013004 - DRO Extraction EPA 3570

##### Blank (2013004-BLK1)

Prepared &amp; Analyzed: 03/27/20 0

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	53.5		"	50.0		107	50-200			

##### LCS (2013004-BS1)

Prepared &amp; Analyzed: 03/27/20 0

Diesel Range Organics (C10-C28)	433	25.0	mg/kg	500		86.6	38-132			
Surrogate: n-Nonane	46.9		"	50.0		93.9	50-200			

##### Matrix Spike (2013004-MS1)

Source: P003122-01

Prepared &amp; Analyzed: 03/27/20 0

Diesel Range Organics (C10-C28)	722	25.0	mg/kg	500	311	82.2	38-132			
Surrogate: n-Nonane	24.8		"	25.0		99.4	50-200			

##### Matrix Spike Dup (2013004-MSD1)

Source: P003122-01

Prepared: 03/27/20 0 Analyzed: 03/27/20 1

Diesel Range Organics (C10-C28)	719	25.0	mg/kg	500	311	81.5	38-132	0.471	20	
Surrogate: n-Nonane	25.1		"	25.0		101	50-200			

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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

## Nonhalogenated Organics by 8015 - GRO - Quality Control

## Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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## Batch 2013020 - Purge and Trap EPA 5030A

## Blank (2013020-BLK1)

Prepared &amp; Analyzed: 03/27/20 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.12		"	8.00		89.0	50-150			

## LCS (2013020-BS2)

Prepared &amp; Analyzed: 03/27/20 1

Gasoline Range Organics (C6-C10)	46.3	20.0	mg/kg	50.0		92.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		"	8.00		89.1	50-150			

## Matrix Spike (2013020-MS2)

Source: P003122-01

Prepared: 03/27/20 1 Analyzed: 03/27/20 2

Gasoline Range Organics (C6-C10)	50.5	20.0	mg/kg	50.0	ND	101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		"	8.00		89.4	50-150			

## Matrix Spike Dup (2013020-MSD2)

Source: P003122-01

Prepared: 03/27/20 1 Analyzed: 03/27/20 2

Gasoline Range Organics (C6-C10)	49.3	20.0	mg/kg	50.0	ND	98.6	70-130	2.33	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.09		"	8.00		88.7	50-150			

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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2013018 - Anion Extraction EPA 300.0/9056A****Blank (2013018-BLK1)**

Prepared &amp; Analyzed: 03/27/20 1

Chloride ND 20.0 mg/kg

**LCS (2013018-BS1)**

Prepared &amp; Analyzed: 03/27/20 1

Chloride 249 20.0 mg/kg 250 99.4 90-110

**Matrix Spike (2013018-MS1)****Source: P003124-01**

Prepared &amp; Analyzed: 03/27/20 1

Chloride 251 20.0 mg/kg 250 ND 101 80-120

**Matrix Spike Dup (2013018-MSD1)****Source: P003124-01**

Prepared &amp; Analyzed: 03/27/20 1

Chloride 252 20.0 mg/kg 250 ND 101 80-120 0.314 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.

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Spur	Project Name:	Puckett 13 Fed	
PO Box 1058	Project Number:	19054-0003	<b>Reported:</b>
Hobbs NM, 88240	Project Manager:	Natalie Gladden	03/30/20 12:36

### 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.

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Client: Spur  
 Project: Puckett 13 Fed  
 Project Manager: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Email: \_\_\_\_\_  
 Report due by: \_\_\_\_\_

Attention: Natalie Gladden  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Email: ngladden@hungry-horse.com

Lab Use Only  
 Lab WO# P003124 Job Number 19054-0003  
 Analysis and Method  
 DRO/DRO by 8015  
 GRO/DRO by 8015  
 BTEX by 8021  
 VOC by 8260  
 Metals 6010  
 Chloride 300.0  
 BGDOC - NM  
 BGDOC - TX

TAT  
 1D ☒ 3D ☐

EPA Program  
 RCRA ☐ CWA ☐ SDWA ☐

State  
 NM ☐ CO ☐ UT ☐ AZ ☐

TX ☐ OK ☐

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC - NM	BGDOC - TX	Remarks
9:50	3/25/20	S	1	SP1-4'	1							X		
10:59	3/25/20			SP2-4'	2									
11:25	3/25/20			SW1-2'	3									
11:40	3/25/20			SW2-2'	4									
12:07	3/25/20			SW3-2'	5									
12:19	3/25/20			SW4-2'	6									

## 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) <u>[Signature]</u>	Date <u>3/26/20</u>	Time <u>10:55</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>3-26-2020</u>	Time <u>10:55</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>3-26-2020</u>	Time <u>1305</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>3/27/20</u>	Time <u>9:30</u>	
Relinquished by: (Signature) _____	Date _____	Time _____	Received by: (Signature) _____	Date _____	Time _____	

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.



5796 US Highway 64, Farmington, NM 87401  
 24 Hour Emergency Response Phone (800) 362-1879

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

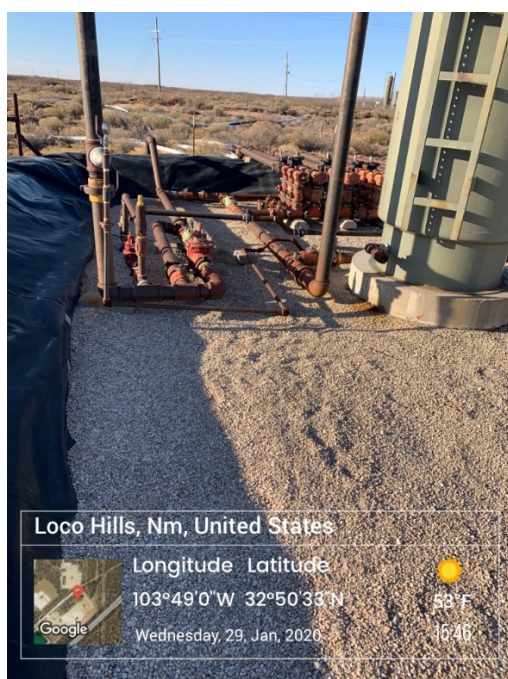
envirotech-inc.com  
 labadmin@envirotech-inc.com



# SPUR ENERGY

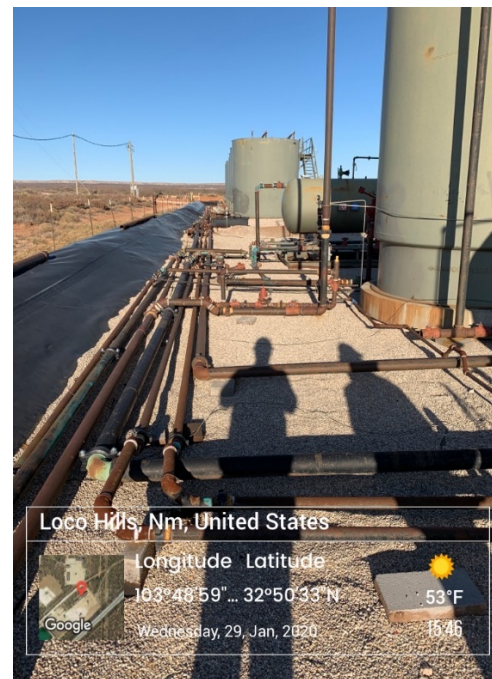
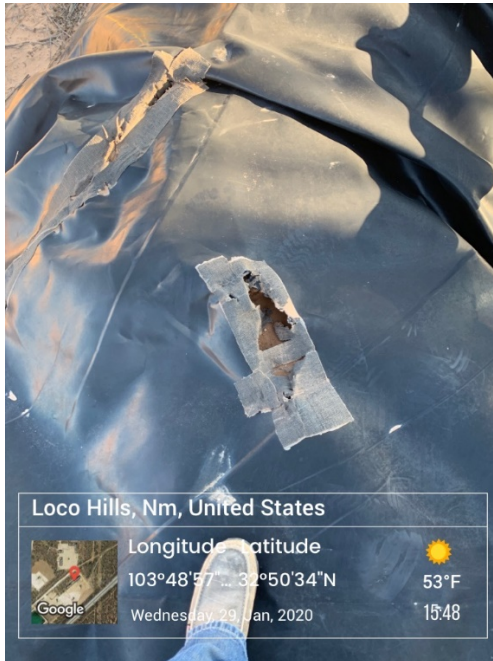
## PUCKETT FEDERAL #008 H

### BEGINNING PHOTOS



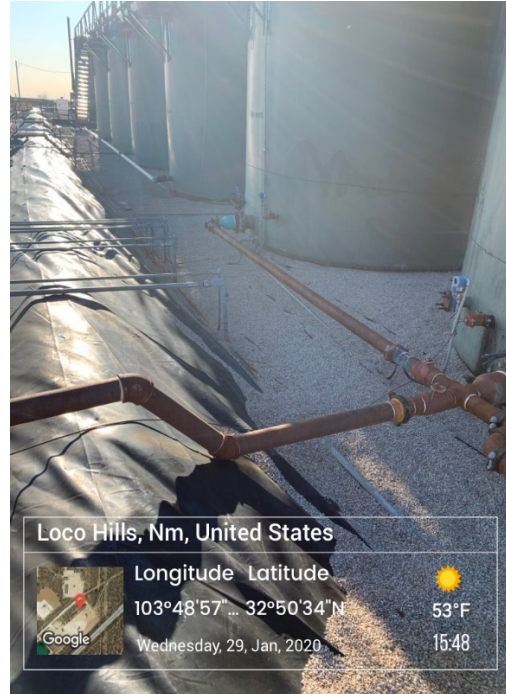


# SPUR ENERGY PUCKETT FEDERAL #008 H BEGINNING PHOTOS



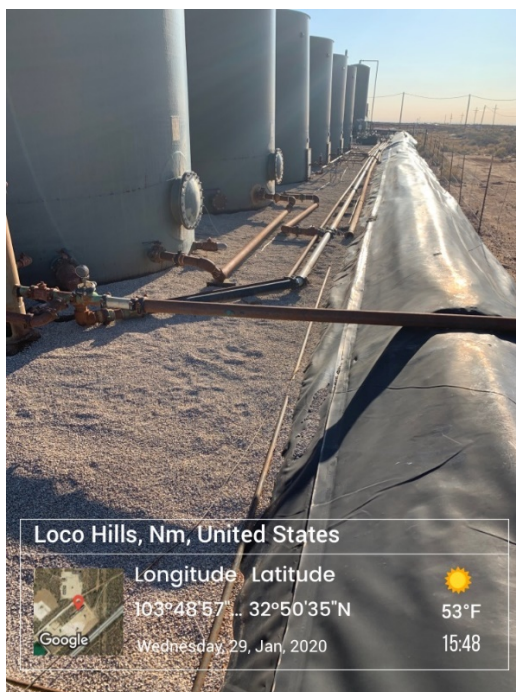
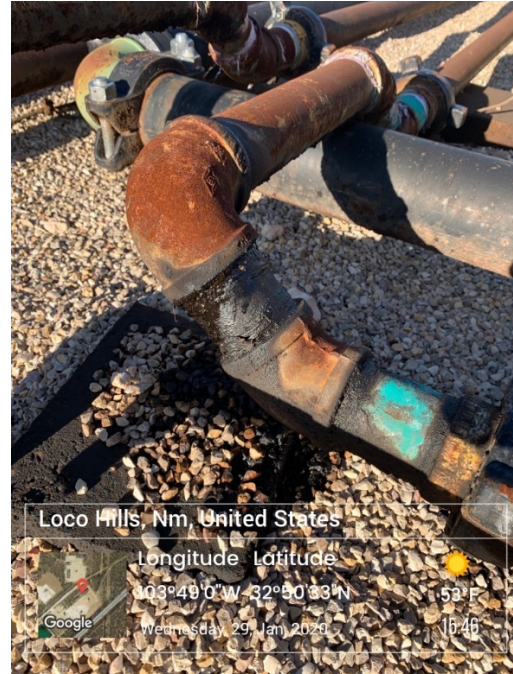


# SPUR ENERGY PUCKETT FEDERAL #008 H BEGINNING PHOTOS





# SPUR ENERGY PUCKETT FEDERAL #008 H BEGINNING PHOTOS



**SPUR ENERGY  
PUCKETT FEDERAL #008 H  
BEGINNING PHOTOS**





**SPUR ENERGY  
PUCKETT 13 FEDERAL #008H  
DURING PHOTOS**





**SPUR ENERGY  
PUCKETT 13 FEDERAL #008H  
DURING PHOTOS**



**SPUR ENERGY  
PUCKETT 13 FEDERAL #008H  
DURING PHOTOS**





# SPUR ENERGY PUCKETT 13 FEDERAL #008H FINAL PHOTOS





# SPUR ENERGY PUCKETT 13 FEDERAL #008H FINAL PHOTOS



**SPUR ENERGY  
PUCKETT 13 FEDERAL #008H  
FINAL PHOTOS**



Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	96' (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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


Form C-141

State of New Mexico  
Oil Conservation Division

Page 4

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 RegulatorySignature: Date: 6/17/20email: natalie@energystaffing.comTelephone: 575-390-6397**OCD Only**

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

Date: \_\_\_\_\_



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: 6/17/20

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: \_\_\_\_\_

Incident ID	
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:  Date: 6/17/20

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

### OCD Only

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

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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_