

Initial Application Part I

Received 11/8/2018

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

RECEIVED: <u>11/08/2014</u>	REVIEWER:	TYPE: <u>SWD</u>	APP NO: <u>P MAM/8324 36723</u>
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: <u>OWL SWD OPERATING, LLC</u>	OGRID Number: <u>308339</u>
Well Name: <u>SHOLES DEEP SWD #3</u>	API: <u>TBD</u>
Pool: <u>SWD; SILURIAN-DEVONIAN</u>	Pool Code: <u>97869</u>

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location – Spacing Unit – Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- B. Check one only for [I] or [II]
 [I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
 [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

NOV 08 2018 AM 11:25

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.
- A. ☒ Offset operators or lease holders
 - B. ☐ Royalty, overriding royalty owners, revenue owners
 - C. ☒ Application requires published notice
 - D. ☐ Notification and/or concurrent approval by SLO
 - E. ☒ Notification and/or concurrent approval by BLM
 - F. ☒ Surface owner
 - G. ☒ For all of the above, proof of notification or publication is attached, and/or,
 - H. ☐ No notice required

FOR OCD ONLY

- ☐ Notice Complete
☐ Application Content Complete

- 3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

RAMONA HOVEY

Print or Type Name

Ramona K Hovey
 Signature

OCTOBER 18, 2018

Date

512-600-1777

Phone Number

RAMONA@LONQUIST.COM

e-mail Address

November 7, 2018

New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division District IV
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
(505) 476-3440

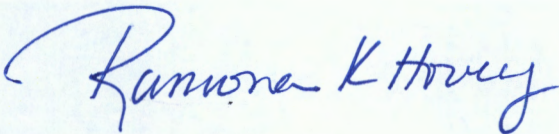
RE: SHOLES DEEP SWD NO. 3 AUTHORIZATION TO INJECT

To Whom It May Concern:

Attached for your review is Form C-108, Application for Authorization to Inject, and its supplemental documents prepared for OWL SWD Operating, LLC's Sholes Deep SWD No. 3. In addition, Forms C-101 and C-102 have been included with this package. Proof of notice delivery will be sent to the OCD upon receipt.

Any questions should be directed towards OWL SWD Operating, LLC's agent Lonquist & Co., LLC.

Regards,



Ramona K. Hovey
Sr. Petroleum Engineer
Lonquist & Co., LLC
(512) 600-1777
ramona@lonquist.com

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: OWL SWD Operating, LLC
ADDRESS: 8214 Westchester Drive, Suite 850, Dallas, TX 75255
CONTACT PARTY: Preston Carr PHONE: (855) 695-7937
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Ramona Hovey TITLE: Consulting Engineer – Agent for OWL SWD Operating, LLC
SIGNATURE: Ramona K Hovey DATE: 10/25/2018
E-MAIL ADDRESS: ramona@lonquist.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: OWL SWD Operating, LLC (OGRID 308339)WELL NAME & NUMBER: Sholes Deep SWD No. 3WELL LOCATION: 2,335' FSL & 205' FEL
FOOTAGE LOCATIONI
UNIT LETTER07
SECTION25 S
TOWNSHIP37 E
RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 20"

Casing Size: 16"

Cemented with: 1380 sks*or* _____ ft³Top of Cement: surfaceMethod Determined: circulationIntermediate CasingHole Size: 14-3/4"

Casing Size: 10-3/4"

Cemented with: 1,750 sks*or* _____ ft³Top of Cement: surfaceMethod Determined: circulationProduction CasingHole Size: 9-1/2"

Casing Size: 7-5/8"

Cemented with: 1065 sks*or* _____ ft³Top of Cement: surfaceMethod Determined: circulation

Total Depth: 11,665'

Injection Interval

9,850 feet to 11,665 feet

(Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 5.500", 17.0 lb/ft, P-110 UFJ (or equivalent), from 0' – 9,800'

Lining Material: Duoline

Type of Packer: 7-5/8" x 5-1/2" D&L Oil Tools Permapack Packer – Single Bore

Packer Setting Depth: 9,800'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes No

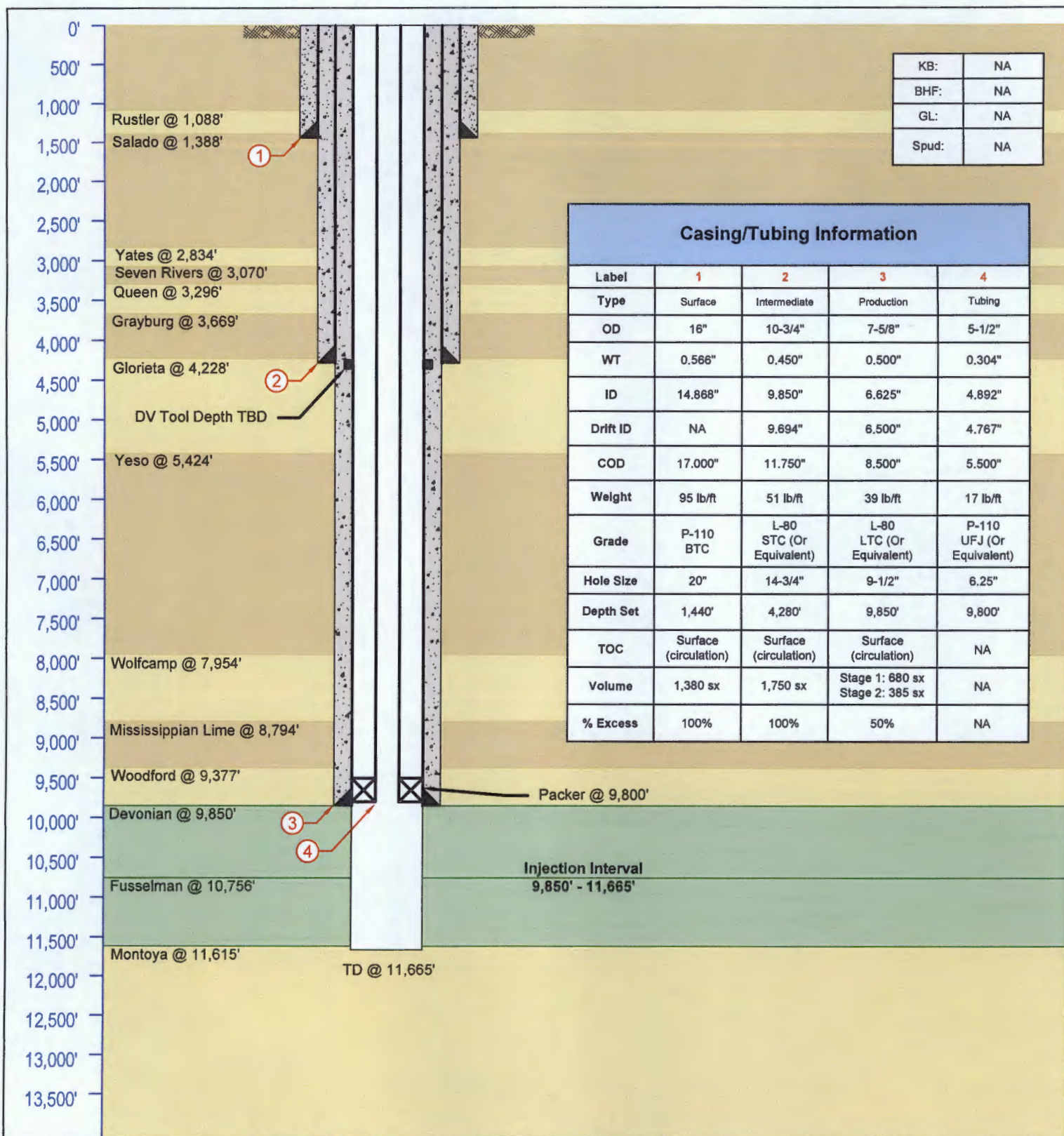
If no, for what purpose was the well originally drilled?

2. Name of the Injection Formation: Silurian-Devonian

3. Name of Field or Pool (if applicable): SWD; Silurian-Devonian

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

No, new drill.



LONQUIST & CO. LLC PETROLEUM ENGINEERS ENERGY ADVISORS HOUSTON CALGARY AUSTIN WICHITA DENVER Texas License F-9147 12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	OWL		Sholes Deep SWD No. 3	
	Country: USA		State/Province: New Mexico	County/Parish: Lea
	Location:		Site:	Survey:
	API No: NA		Field:	Well Type/Status: SWD / New Drill
	RRC District No:		Project No: 1809	Date: 10/22/2018
	Drawn: JAM		Reviewed:	Approved:
	Rev No: 0		Notes:	

OWL SWD Operating, LLC.

Sholes Deep SWD No. 3

FORM C-108 Supplemental Information

III. Well Data

A. Wellbore Information

1.

Well information	
Lease Name	Sholes Deep SWD
Well No.	3
Location	Unit I S-07 T-25S R-37E
Footage Location	2,335' FSL & 205' FEL

2.

a. Wellbore Description

Casing Information			
Type	Surface	Intermediate	Production
OD	16"	10-3/4"	7-5/8"
WT	0.566"	0.450"	0.500"
ID	14.868"	9.850"	6.625"
Drift ID	N/A	9.694"	6.500"
COD	17.000"	11.750"	8.500"
Weight	95 lb/ft	51lb/ft	39 lb/ft
Grade	P-110 BTC (or Equivalent)	L-80 STC (Or Equivalent)	L-80 LTC (Or Equivalent)
Hole Size	20"	14-3/4"	9-1/2"
Depth Set	1,440'	4,280'	9,850'

b. Cementing Program

Cement Information			
Casing String	Surface	Intermediate 1	Production
Lead Cement	ECONOCEM	NeoCem	Stage 1: NeoCem Stage 2: NeoCem
Lead Cement Volume	875 sks	1,155 sks	Stage 1: 450 sks Stage 2: 285 sks
Tail Cement	HALCEM	NeoCem	Stage 1: VersaCem Stage 2: HalCem
Tail Cement Volume	505 sks	595 sks	Stage 1: 230 sks Stage 2: 100 sks
Cement Excess	100%	100%	50%
TOC	Surface	Surface	Surface
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface

3. Tubing Description

Tubing	
OD	5-1/2"
WT	0.304"
ID	4.892"
Drift ID	4.767"
COD	5.500"
Weight	17 lb/ft
Grade	P-110 UFJ (Or Equivalent)
Depth Set	9,800'

Tubing will be lined with Duoline.

4. Packer Description

D&L Oil Tools 7-5/8" x 5-1/2" Permapack Packer – Single Bore

B. Completion Information

1. Injection Formation: Silurian - Devonian
2. Gross Injection Interval: 9,850' – 11,665'

Completion Type: Open Hole

3. Drilled for injection.
4. See the attached wellbore schematic.
5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Yates	2,834'
Seven Rivers	3,070'
Queen	3,296'
Glorieta	4,228'
Wolfcamp	7,954'
Woodford	9,377'
Devonian	9,850'
Fusselman	10,756'

VI. Area of Review

One well within the one-mile AOR penetrated the proposed injection zone. The Fulfer Oil & Cattle, LLC's Jal North Ranch SWD #1 (30-025-27085) is currently an active injection well.

VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injection:

Average Volume: 20,000 BPD
Maximum Volume: 30,000 BPD

2. Closed System

3. Anticipated Injection Pressure:

Average Injection Pressure: 1,478 PSI (surface pressure)
Maximum Injection Pressure: 1,970 PSI (surface pressure)

4. The injection fluid is to be locally produced water. Attached are produced water sample analyses taken from the closest wells that feature samples from the Devonian and Fusselman formations.
5. As mentioned above, a Devonian produced water sample analysis is attached.

VIII. Geological Data

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation near Jal are two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a successful Salt Water Disposal horizon.

A. Injection Zone: Devonian-Silurian Formation

Formation	Depth
Rustler	1,088'
Salado	1,388'
Yates	2,834'
Seven Rivers	3,070'
Queen	3,296'
Grayburg	3,569'
Glorieta	4,228'
Yeso	5,424'
Wolfcamp	7,954'
Mississippian Lime	8,794'
Woodford	9,377'
Devonian	9,850'
Fusselman	10,756'
Montoya	11,615'

B. Underground Sources of Drinking Water

Water wells in the one-mile surrounding area for the proposed Sholes Deep SWD #2 well are at depths ranging from 57 ft to 495 ft. The Rustler may also be another USDW and will be protected through the top of the Salado Formation at 1,388' by setting surface casing at 1,440'.

IX. Proposed Stimulation Program

No proposed stimulation program.

X. Logging and Test Data on the Well

There are no existing logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

XI. Chemical Analysis of Fresh Water Wells

There are nine (9) fresh water wells within one mile of the well location, per the New Mexico Office of the State Engineer. A list of all the water wells, a map of these wells and their associated Water Right Summaries are attached. Fresh water samples will be obtained from two of the wells and analysis of these samples will be submitted as soon as possible.

XII. Affirmative Statement of Examination of Geologic and Engineering Data

Based on the available engineering and geologic data we find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
November 01, 2018
and ending with the issue dated
November 01, 2018.



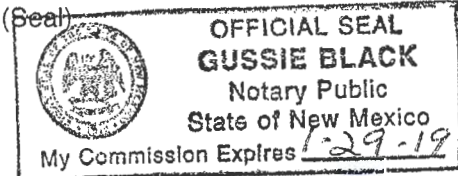
Publisher

Sworn and subscribed to before me this
1st day of November 2018.



Business Manager

My commission expires
January 29, 2019



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

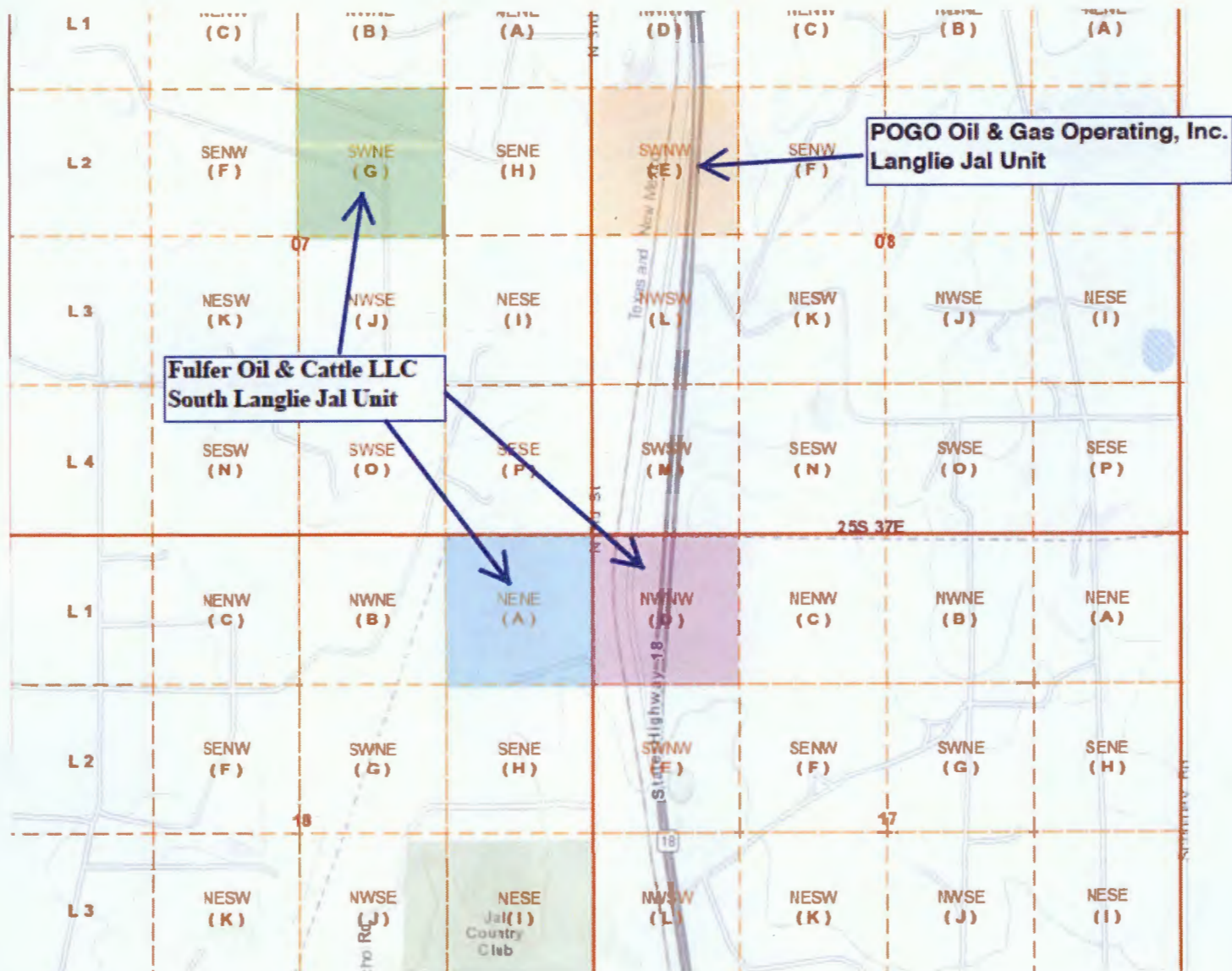
LEGAL NOTICE NOVEMBER 1, 2018

OWL SWD Operating, LLC, 8214 Westchester Dr., Suite 850, Dallas, Texas 75255, is filling Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Sholes Deep SWD No. 3. The proposed well will be located 2,335' FSL & 205' FEL in Section 07, Township 25S, Range 37E in Lea County, New Mexico. Disposal water will be sourced from area production, and will be injected into the Devonian-Silurian Formation (determined by offset log analysis) through an open hole completion between a maximum applied for top of 9850 feet to a maximum depth of 11,665 feet. The maximum surface injection pressure will not exceed 1,970 psi with a maximum rate of 30,000 BWPD. Interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days. Additional information can be obtained from the applicant's agent, Lonquist & Co., LLC, at (512) 600-1774. #33412

67112661

00220235

LONQUIST & CO., LLC
12912 HILL COUNTRY BLVD, STE F200
AUSTIN, TX 78738



Operator

General Contact Information

Company: [141402] FULFER OIL & CATTLE LLC
 Address: P.O. Box 1224
 Jal, NM 88252
 Country: U.S.A.

Main Phone: 505-935-9970
 Main Fax: 505-395-9971

Central Contact

Name: Gregg Fulfer
 Title: Owner
 E-Mail Address: gfulfer@aol.com

Phone Number: 505-935-9970
 Cell Number: 505-631-0522
 Fax Number: 505-395-9971

Hobbs Contact

Name: Gregg Fulfer
 Title:
 E-Mail Address: gfulfer@aol.com

Phone Number: 505-395-9970
 Cell Number: 505-631-0522
 Fax Number: 505-395-9971

Operator

General Contact Information

Company:	[372000] POGO OIL & GAS OPERATING, INC	Main Phone:	806-790-5547
Address:	1515 Calle Sur, Ste 174	Main Fax:	
	Hobbs, NM 88240		
Country:	U.S.A.		

Central Contact

Name:	Nicholas Holbrook	Phone Number:	806-790-5547
Title:	President	Cell Number:	806-790-5547
E-Mail Address:	nick@pogoresources.com	Fax Number:	

Hobbs Contact

Name:	Nicholas Holbrook	Phone Number:	806-790-5547
Title:		Cell Number:	806-790-5547
E-Mail Address:	nick@pogoresources.com	Fax Number:	

Artesia Contact

Name:	Nicholas Holbrook	Phone Number:	806-790-5547
Title:		Cell Number:	806-790-5547
E-Mail Address:	nick@pogoresources.com	Fax Number:	

WATER WELL SUMMARIES




New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00888 **Subbasin:** CP **Cross Reference:** -
Primary Purpose: PDL NON 72-12-1 DOMESTIC & LIVESTOCK
Primary Status: DCL DECLARATION
Total Acres: 0 **Subfile:** -
Total Diversion: 3 **Cause/Case:** -
Owner: CLAY OSBORN
Owner: GERALDINE (JERI) OSBORN

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/		Acres	Diversion	Consumptive
			1	2		To				
	600955	DCL	2000-02-22	DCL	PRC	CP 00888	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00888 POD1		4	2	2	18	25S	37E	670301	3556806*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1949	DCL	0	3	CP 00888 POD1	

Place of Use

Q	Q	Q	Q	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4				0	3		PDL	12/31/1949	DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		PDL	12/31/1949	GW



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00889 **Subbasin:** CP **Cross Reference:** -
Primary Purpose: PLS NON 72-12-1 LIVESTOCK WATERING
Primary Status: DCL DECLARATION
Total Acres: 0 **Subfile:** -
Total Diversion: 3 **Cause/Case:** -
Owner: CLAY OSBORN
Owner: GERALDINE (JERI) OSBORN

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
get images	600958	DCL	2000-02-22	DCL	PRC CP 00889	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	Q	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00889 POD1		2	3	3	07	25S	37E		669100	3557391*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1950	DCL	0	3	CP 00889 POD1	

Place of Use

Q	Q	Q	Q	Q	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4					0	3		PLS	12/31/1950	DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		PLS	12/31/1950	GW



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00891 **Subbasin:** CP **Cross Reference:** -
Primary Purpose: PDL NON 72-12-1 DOMESTIC & LIVESTOCK
Primary Status: DCL DECLARATION
Total Acres: 0 **Subfile:** -
Total Diversion: 3 **Cause/Case:** -
Owner: CLAY OSBORN
Owner: GERALDINE (JERI) OSBORN

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/		Acres	Diversion	Consumptive
			1	2		To				
600990	DCL	2000-02-22	DCL	PRC	CP 00891	T		0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	Q	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00891 POD1		3	2	2	18	25S	37E		670101	3556806*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1908	DCL	0	3	CP 00891 POD1	

Place of Use

Q	Q	Q	Q	Q	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4					0	3		PDL	12/31/1908	DCL	NO PLACE OF USE GIVEN

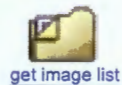
Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		PDL	12/31/1908	GW



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00892 **Subbasin:** CP **Cross Reference:** -
Primary Purpose: PDL NON 72-12-1 DOMESTIC & LIVESTOCK
Primary Status: DCL DECLARATION
Total Acres: 0 **Subfile:** -
Total Diversion: 3 **Cause/Case:** -
Owner: CLAY OSBORN
Owner: GERALDINE (JERI) OSBORN

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
600992	DCL	2000-02-22	DCL	PRC	CP 00892	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	Q	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00892 POD1		3	2	2	18	25S	37E		670101	3556806*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1908	DCL	0	3	CP 00892 POD1	

Place of Use

Q	Q	Q	Q	Q	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4					0	3		PDL	12/31/1908	DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		PDL	12/31/1908	GW



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00893 Subbasin: CP Cross Reference: -
Primary Purpose: PDL NON 72-12-1 DOMESTIC & LIVESTOCK
Primary Status: DCL DECLARATION
Total Acres: 0 Subfile: -
Total Diversion: 3 Cause/Case: -
Owner: CLAY OSBORN
Owner: GERALDINE (JERI) OSBORN

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
get images	600998	DCL	2000-02-22	DCL	PRC	CP 00893	T	0	3

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	Q	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00893 POD1		4	2	2	18	25S	37E		670301	3556806*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1953	DCL	0	3	CP 00893 POD1	

Place of Use

Q	Q	Q	Q	Q	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4					0	3		PDL	12/31/1953	DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		PDL	12/31/1953	GW



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00894 Subbasin: CP Cross Reference: -
Primary Purpose: PDL NON 72-12-1 DOMESTIC & LIVESTOCK
Primary Status: DCL DECLARATION
Total Acres: 0 Subfile: -
Total Diversion: 3 Cause/Case: -
Owner: CLAY OSBORN
Owner: GERALDINE (JERI) OSBORN

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/		Acres	Diversion	Consumptive
			1	2		To				
get images	601002	DCL	2000-02-22	DCL	PRC	CP 00894	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	Q	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00894 POD1		4	2	2	18	25	S	37E	670301	3556806*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1958	DCL	0	3	CP 00894 POD1	

Place of Use

Q	Q	Q	Q	Q	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4					0	3		PDL	12/31/1958	DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		PDL	12/31/1958	GW



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 01089 **Subbasin:** CP **Cross Reference:** -
Primary Purpose: MON MONITORING WELL
Primary Status: PMT PERMIT
Total Acres: 0 **Subfile:** -
Total Diversion: 0 **Cause/Case:** -
Agent: PARKER ENERGY SUPPORT SVCS, INC
Contact: VERNON K. BLACK

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
602831	EXPL	2012-05-15	PMT	LOG	CP 01089	T	0	0	

Current Points of Diversion

POD Number	Source	Q Q Q			(NAD83 UTM in meters)			Other Location Desc
		64	16	4	Sec	Tws	Rng	
CP 01089 POD1		3	3	3	08	25S	37E	670529 3557286
CP 01089 POD2		3	3	3	08	25S	37E	670530 3557274

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	0		MON	05/15/2012	GW




New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 01314 **Subbasin:** CP **Cross Reference:** -
Primary Purpose: COM COMMERCIAL
Primary Status: PMT PERMIT
Total Acres: 0 **Subfile:** -
Total Diversion: 100 **Cause/Case:** -
Owner: FULFER INVISTMENTS LLC
Contact: GREGG FULFER
Owner: ATKINS ENGINEERING ASSOC, INC.
Contact: RICHARD CIBAK

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
 get images	604725	APPRO 2016-01-21	PMT	LOG	CP 01314	T	0	100	100

Current Points of Diversion

POD Number	Source	Q Q Q			(NAD83 UTM in meters)		Other Location Desc
		64	16	4	X	Y	
CP 01314 POD1	Artesian	4	4	2	18 25S 37E	670261 3556290	

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
03/27/2014	PMT	0	100	CP 01314 POD1	Artesian

Place of Use

Q Q Q Q				Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4							
				0	100	100	COM	03/27/2014	PMT	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	100	100	COM	03/27/2014	GW

C-101 APPLICATION FOR PERMIT TO DRILL

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101
Revised July 18, 2013

Energy Minerals and Natural Resources

Oil Conservation Division

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address OWL SWD Operating, LLC 8214 Westchester Drive, Suite 850, Dallas, TX 75255		² OGRID Number 308339
		³ API Number 30-025-
⁴ Property Code	⁵ Property Name Sholes Deep SWD	⁶ Well No. 3

⁷ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	07	25S	37E		2,335'	South	205'	East	Lea

⁸ Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

⁹ Pool Information

Pool Name	Pool Code
SWD; Silurian-Devonian	97869

Additional Well Information

¹¹ Work Type N	¹² Well Type SWD	¹³ Cable/Rotary R	¹⁴ Lease Type Private	¹⁵ Ground Level Elevation 3,153'
¹⁶ Multiple N	¹⁷ Proposed Depth 11,665'	¹⁸ Formation Silurian-Devonian	¹⁹ Contractor TBD	²⁰ Spud Date ASAP
Depth to Ground water 495'	Distance from nearest fresh water well 1902'		Distance to nearest surface water +1 mi	

☐ We will be using a closed-loop system in lieu of lined pits

²¹ Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	20"	16"	95 lb/ft	1,440'	1,380 sks	Surface
Intermediate	14-3/4"	10-3/4"	51 lb/ft	4,280'	1,750 sks	Surface
Production	9-1/2"	7-5/8"	39 lb/ft	9,850'	1065 sks	Surface
Tubing	N/A	5.5"	17 lb/ft	0' - 9,800'	N/A	N/A

Casing/Cement Program: Additional Comments

See attached schematic.

²² Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/ Blinds, Pipe	8,000 psi	10,000 psi	TBD (Schaffer/Cameron)

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☒, if applicable.
Signature:

Printed name: Ramona Hovey

Title: Consulting Engineer- Agent for OWL SWD Operating, LLC

E-mail Address: ramona@lonquist.com

Date: 11/07/2018

Phone: 512-600-1777

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached

C-102 WELL LOCATION PLAT

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Artesia, NM 87410
District IV
1220 S. St Francis Dr., NM 87505
Phone: (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 97869	³ Pool Name SWD; Silurian-Devonian
⁴ Property Code	⁵ Property Name SHOLES DEEP SWD	⁶ Well Number #3
⁷ OGRID No. 308339	⁸ Operator Name OWL SWD OPERATING	⁹ Elevation 3152.94'

¹⁰ Surface Location

UL or lot no. I	Section 7	Township 25 S	Range 37 E	Lot Idn	Feet from the 2335	North/South line SOUTH	Feet from the 205	East/West line EAST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p>GEODETTIC DATA NAD 83 GRID - NM EAST SHOLES DEEP NO. 3 Y= 417984.33 N X= 893909.53 E LAT= 32.143991 N LONG= 103.194209 W 1 - Y= 420885.72, X= 888915.59 2 - Y= 420831.85, X= 894070.86 3 - Y= 415851.19, X= 894142.08 4 - Y= 415804.85, X= 888987.02</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling-order heretofore entered by the division.</p> <p><i>Ramona K. Hovey</i> 11/7/18 Signature Date RAMONA HOVEY Printed Name Date ramona@longquist.com Email Address Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>2 Nov 2018 Date of Survey Date <i>Jeffrey E. Hudson</i> Signature and Seal of Professional Surveyor JEFFREY E. HUDSON NEW MEXICO 20559 PROFESSIONAL SURVEYOR Certificate Number 20559</p>

PROOF OF NOTICES SENT

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

ENERVEST OPERATING LLC
2700 FARMINGTON AVE,
BLDG K, STE 1
FARMINGTON, NM 87401
1809-SHOLES DEEP SWD #3



9590 9402 4057 8079 2000 28

2. Article Number (Transfer from service label)

7017 2680 0000 7062 9241

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☒ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☒ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over \$500)

- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

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Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postage

\$

Total

\$

Sent

Street

City

Postmark
Here

ENERVEST OPERATING LLC
2700 FARMINGTON AVE,
BLDG K, STE 1
FARMINGTON, NM 87401
1809-SHOLES DEEP SWD #3

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

PRIMAL ENERGY CORP
211 HIGHLAND CROSS, STE 227
HOUSTON, TX 77073

1809-SHOLES DEEP SWD #3



9590 9402 4057 8079 2000 35

2. Article Number (Transfer from service label)

7017 2680 0000 7062 9234

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent
☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

 D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type

- | | |
|--|---|
| <input checked="" type="checkbox"/> Adult Signature | <input type="checkbox"/> Priority Mail Express® |
| <input type="checkbox"/> Adult Signature Restricted Delivery | <input type="checkbox"/> Registered Mail™ |
| <input checked="" type="checkbox"/> Certified Mail® | <input type="checkbox"/> Registered Mail Restricted Delivery |
| <input type="checkbox"/> Certified Mail Restricted Delivery | <input type="checkbox"/> Return Receipt for Merchandise |
| <input type="checkbox"/> Collect on Delivery | <input type="checkbox"/> Signature Confirmation™ |
| <input type="checkbox"/> Collect on Delivery Restricted Delivery | <input type="checkbox"/> Signature Confirmation Restricted Delivery |
| <input type="checkbox"/> Insured Mail | |
| <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500) | |

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Extra Services & Fees (check box, add fee as appropriate)

- | | |
|--|----|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ |
| <input type="checkbox"/> Adult Signature Required | \$ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ |

Postage

\$

To

\$

Se

St

Ct

PRIMAL ENERGY CORP
211 HIGHLAND CROSS, STE 227
HOUSTON, TX 77073

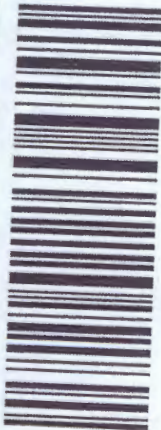
1809-SHOLES DEEP SWD #3

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

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1. Article Addressed to:

ROVER OPERATING LLC
55 OLD SANTA FE TRAIL, SECOND FLOOR
SANTA FE, NM 87501
1809-SHOLES DEEP SWD#3



9590 9402 4057 8079 2000 42

2. Article Number (Transfer from service label)

7017 2680 0000 7062 9227

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

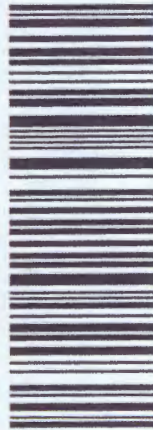
☒ Adult Signature☒ Adult Signature Restricted Delivery☒ Certified Mail®☐ Certified Mail Restricted Delivery☐ Collect on Delivery☐ Collect on Delivery Restricted Delivery☐ Insured Mail☐ Insured Mail Restricted Delivery (over \$500)☐ Priority Mail Express®☐ Registered Mail™☐ Registered Mail Restricted Delivery☐ Return Receipt for Merchandise☐ Signature Confirmation™☐ Signature Confirmation Restricted Delivery

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☐ Return Receipt (hardcopy) \$☐ Return Receipt (electronic) \$☐ Certified Mail Restricted Delivery \$☐ Adult Signature Required \$☐ Adult Signature Restricted Delivery \$

Postage

\$

Tot

\$

Set

Stn

City

Postmark
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ROVER OPERATING LLC

55 OLD SANTA FE TRAIL, SECOND FLOOR

SANTA FE, NM 87501

1809-SHOLES DEEP SWD#3

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

POGO OIL & GAS OPERATING INC
1515 CALLE SUR, STE 174
HOBBS, NM 88240

1809-SHOLES DEEP SWD #3



9590 9402 4057 8079 2000 66

2. Article Number (Transfer from service label)

7017 2680 0000 7062 9197

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type

☒ Adult Signature☐ Adult Signature Restricted Delivery☒ Certified Mail®☐ Certified Mail Restricted Delivery☐ Collect on Delivery☐ Collect on Delivery Restricted Delivery☐ Insured Mail☐ Insured Mail Restricted Delivery (over \$500)☐ Priority Mail Express®☐ Registered Mail™☐ Registered Mail Restricted Delivery☐ Return Receipt for Merchandise☐ Signature Confirmation™☐ Signature Confirmation Restricted Delivery

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Postage

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Total

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Sent

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Street

City, State

Zip

POGO OIL & GAS OPERATING INC
1515 CALLE SUR, STE 174
HOBBS, NM 88240

1809-SHOLES DEEP SWD #3

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- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**SPECIAL ENERGY CORP
PO DRAWER 369
STILLWATER, OK 74076**

1809-SHOLES DEEP SWD #3



9590 9402 4057 8079 2000 73

2. Article Number (Transfer from service label)

7017 2680 0000 7062 9180

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

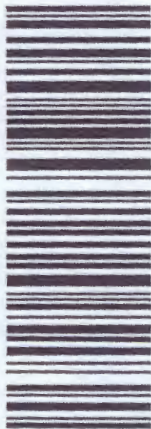
- ☒ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☒ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over \$500)

- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

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OF THE RETURN ADDRESS. FOLD AT DOTTED LINE.

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7017 2680 0000 7062 9180

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Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postage

\$

Total

\$

Sent

State

City

City

Postmark
Here

**SPECIAL ENERGY CORP
PO DRAWER 369
STILLWATER, OK 74076**

1809-SHOLES DEEP SWD #3

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

FULFER INVESTMENTS LLC
FULFER OIL & CATTLE LLC
PO BOX 1224
JAL,NM 88252
1809-SHOLES DEEP SWD #3



9590 9402 4057 8079 2000 80

2. Article Number (Transfer from service label)

7017 2680 0000 7062 9166

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Adult Signature☐ Adult Signature Restricted Delivery☒ Certified Mail®☐ Certified Mail Restricted Delivery☐ Collect on Delivery☐ Collect on Delivery Restricted Delivery☐ Insured Mail☐ Insured Mail Restricted Delivery (over \$500)☐ Priority Mail Express®☐ Registered Mail™☐ Registered Mail Restricted Delivery☐ Return Receipt for Merchandise☐ Signature Confirmation™☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053

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7017 2680 0000 7062 9166U.S. Postal Service™
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Certified Mail Fee

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Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)☐ Return Receipt (electronic)☐ Certified Mail Restricted Delivery☐ Adult Signature Required☐ Adult Signature Restricted Delivery

Postage

\$

Total

\$

Sent

State

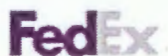
City

FULFER INVESTMENTS LLC
FULFER OIL & CATTLE LLC
PO BOX 1224
JAL,NM 88252
1809-SHOLES DEEP SWD #3

Postmark
Here

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

**Shipment Receipt****Address Information****Ship to:**

ROVER OPERATING LLC

17304 PRESTON ROAD

DALLAS, TX

75252

US

214-234-9115

Ship from:

Steve Pattee

1001 MCKINNEY ST

STE 1650

HOUSTON, TX

770026423

US

7135599956

Shipment Information:

Tracking no.: 773623331319

Ship date: 11/01/2018

Estimated shipping charges: 12.92 USD

Package Information

Pricing option: FedEx Standard Rate

Service type: FedEx Ground

Package type: Your Packaging

Number of packages: 1

Total weight: 1 LBS

Declared Value: 0.00 USD

Special Services: Direct signature required

Pickup/Drop-off: Use an already scheduled pickup at my location

Billing Information:

Bill transportation to: MyAccount-089

Your reference: 1809-Resend Legal Notice

P.O. no.:

Invoice no.:

Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.**Please Note**

FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1000, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details. The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable [FedEx Service Guide](#) or the FedEx Rate Sheets for details on how shipping charges are calculated.

McMillan, Michael, EMNRD

From: Ramona Hovey <ramona@lonquist.com>
Sent: Tuesday, December 11, 2018 12:18 PM
To: McMillan, Michael, EMNRD
Subject: [EXT] Fresh Water Well Sample Analyses - OWL's Sholes Deep No. 3
Attachments: Sholes Deep 3_Water Analysis.pdf

Good morning. Please find the attached offset water analysis as required for OWL's Sholes Deep SWD #3 permit application.

Regards,

LONQUIST & CO. LLC



HOUSTON CALGARY
AUSTIN WICHITA DENVER

Ramona Hovey • Sr. Petroleum Engineer • Lonquist & Co., LLC • 12912 Hill Country Blvd., Suite F-200 • Bee Cave, Texas, USA 78738
Direct: 512-600-1777 • Cell: 512-585-0654 • Fax: 512-732-9816 • ramona@lonquist.com • www.lonquist.com

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December 03, 2018

RAMONA HOVEY

Lonquist Field Services, LLC

3345 Bee Cave Road, Suite 201

Austin, TX 78746

RE: SHOLES DEEP SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 11/21/18 15:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

Lonquist Field Services, LLC
3345 Bee Cave Road, Suite 201
Austin TX, 78746

Project: SHOLES DEEP SWD #3
Project Number: 32.143991 / -103.194209
Project Manager: RAMONA HOVEY
Fax To: (512) 732-9816

Reported:
03-Dec-18 16:12

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CP - 00889 - POD #1	H803428-01	Water	21-Nov-18 10:41	21-Nov-18 15:30
CP - 00892 - POD #1	H803428-02	Water	21-Nov-18 11:06	21-Nov-18 15:30

Cardinal Laboratories

*—Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Lonquist Field Services, LLC
3345 Bee Cave Road, Suite 201
Austin TX, 78746

Project: SHOLES DEEP SWD #3
Project Number: 32.143991 / -103.194209
Project Manager: RAMONA HOVEY
Fax To: (512) 732-9816

Reported:
03-Dec-18 16:12

CP - 00889 - POD #1

H803428-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Alkalinity, Bicarbonate	225		5.00	mg/L	1	8112610	AC	26-Nov-18	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	8112610	AC	26-Nov-18	310.1	
Chloride*	630		4.00	mg/L	1	8112601	AC	29-Nov-18	4500-Cl-B	
Conductivity*	2580		1.00	uS/cm	1	8112710	AC	27-Nov-18	120.1	
pH*	7.36		0.100	pH Units	1	8112710	AC	27-Nov-18	150.1	
Resistivity	3.88			Ohms/m	1	8112710	AC	27-Nov-18	120.1	
Specific Gravity @ 60° F	0.9938		0.000	[blank]	1	8112817	AC	28-Nov-18	SM 2710F	
Sulfate*	284		62.5	mg/L	6.25	8112713	AC	27-Nov-18	375.4	
TDS*	1540		5.00	mg/L	1	8112718	AC	28-Nov-18	160.1	
Alkalinity, Total*	176		4.00	mg/L	1	8112610	AC	26-Nov-18	310.1	
Sulfide, total	0.0639		0.0100	mg/L	1	8112819	AC	28-Nov-18	376.2	

Green Analytical Laboratories

Total Recoverable Metals by ICP (E200.7)

Barium*	<0.050		0.050	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Calcium*	201		0.100	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Iron*	18.1		0.050	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Magnesium*	64.4		0.100	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Potassium*	5.03		1.00	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Sodium*	162		1.00	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Lonquist Field Services, LLC
3345 Bee Cave Road, Suite 201
Austin TX, 78746

Project: SHOLES DEEP SWD #3
Project Number: 32.143991 / -103.194209
Project Manager: RAMONA HOVEY
Fax To: (512) 732-9816

Reported:
03-Dec-18 16:12

CP - 00892 - POD #1
H803428-02 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories
Inorganic Compounds

Alkalinity, Bicarbonate	249		5.00	mg/L	1	8112610	AC	26-Nov-18	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	8112610	AC	26-Nov-18	310.1	
Chloride*	620		4.00	mg/L	1	8112601	AC	29-Nov-18	4500-Cl-B	
Conductivity*	2710		1.00	uS/cm	1	8112710	AC	27-Nov-18	120.1	
pH*	7.62		0.100	pH Units	1	8112710	AC	27-Nov-18	150.1	
Resistivity	3.70			Ohms/m	1	8112710	AC	27-Nov-18	120.1	
Specific Gravity @ 60° F	1.001		0.000	[blank]	1	8112817	AC	28-Nov-18	SM 2710F	
Sulfate*	367		50.0	mg/L	5	8112713	AC	27-Nov-18	375.4	
TDS*	1730		5.00	mg/L	1	8112718	AC	28-Nov-18	160.1	
Alkalinity, Total*	204		4.00	mg/L	1	8112610	AC	26-Nov-18	310.1	
Sulfide, total	<0.0100		0.0100	mg/L	1	8112819	AC	28-Nov-18	376.2	

Green Analytical Laboratories
Total Recoverable Metals by ICP (E200.7)

Barium*	<0.050		0.050	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Calcium*	208		0.100	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Iron*	6.91		0.050	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Magnesium*	66.7		0.100	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Potassium*	5.56		1.00	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	
Sodium*	189		1.00	mg/L	1	B811241	AES	30-Nov-18	EPA200.7	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Lonquist Field Services, LLC
3345 Bee Cave Road, Suite 201
Austin TX, 78746

Project: SHOLES DEEP SWD #3
Project Number: 32.143991 / -103.194209
Project Manager: RAMONA HOVEY
Fax To: (512) 732-9816

Reported:
03-Dec-18 16:12

Inorganic Compounds - Quality Control
Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8112601 - General Prep - Wet Chem										
Blank (8112601-BLK1)				Prepared & Analyzed: 26-Nov-18						
Chloride	ND	4.00	mg/L							
LCS (8112601-BS1)				Prepared & Analyzed: 26-Nov-18						
Chloride	100	4.00	mg/L	100		100	80-120			
LCS Dup (8112601-BSD1)				Prepared & Analyzed: 26-Nov-18						
Chloride	100	4.00	mg/L	100		100	80-120	0.00	20	
Batch 8112610 - General Prep - Wet Chem										
Blank (8112610-BLK1)				Prepared & Analyzed: 26-Nov-18						
Alkalinity, Carbonate	ND	1.00	mg/L							
Alkalinity, Bicarbonate	5.00	5.00	mg/L							
Alkalinity, Total	4.00	4.00	mg/L							
LCS (8112610-BS1)				Prepared & Analyzed: 26-Nov-18						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120			
Alkalinity, Bicarbonate	318	12.5	mg/L				80-120			
Alkalinity, Total	260	10.0	mg/L	250		104	80-120			
LCS Dup (8112610-BSD1)				Prepared & Analyzed: 26-Nov-18						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120		20	
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120	4.02	20	
Alkalinity, Total	250	10.0	mg/L	250		100	80-120	3.92	20	
Batch 8112710 - General Prep - Wet Chem										
LCS (8112710-BS1)				Prepared & Analyzed: 27-Nov-18						
Conductivity	499		uS/cm	500		99.8	80-120			
pH	7.09		pH Units	7.00		101	90-110			

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Lonquist Field Services, LLC
3345 Bee Cave Road, Suite 201
Austin TX, 78746

Project: SHOLES DEEP SWD #3
Project Number: 32.143991 / -103.194209
Project Manager: RAMONA HOVEY
Fax To: (512) 732-9816

Reported:
03-Dec-18 16:12

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 8112710 - General Prep - Wet Chem

Duplicate (8112710-DUP1)

Source: H803427-01

Prepared & Analyzed: 27-Nov-18

Conductivity	2960	1.00	uS/cm		2980			0.673	20	
pH	7.23	0.100	pH Units		7.20			0.416	20	
Resistivity	3.38		Ohms/m		3.36			0.673	20	

Batch 8112713 - General Prep - Wet Chem

Blank (8112713-BLK1)

Prepared & Analyzed: 27-Nov-18

Sulfate	ND	10.0	mg/L							
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LCS (8112713-BS1)

Prepared & Analyzed: 27-Nov-18

Sulfate	23.3	10.0	mg/L	20.0		117	80-120			
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LCS Dup (8112713-BSD1)

Prepared & Analyzed: 27-Nov-18

Sulfate	19.6	10.0	mg/L	20.0		98.0	80-120	17.5	20	
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Batch 8112718 - Filtration

Blank (8112718-BLK1)

Prepared: 27-Nov-18 Analyzed: 28-Nov-18

TDS	ND	5.00	mg/L							
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LCS (8112718-BS1)

Prepared: 27-Nov-18 Analyzed: 28-Nov-18

TDS	574		mg/L	672		85.4	80-120			
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Duplicate (8112718-DUP1)

Source: H803420-01

Prepared: 27-Nov-18 Analyzed: 28-Nov-18

TDS	265000	5.00	mg/L		254000			3.95	20	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Lonquist Field Services, LLC
3345 Bee Cave Road, Suite 201
Austin TX, 78746

Project: SHOLES DEEP SWD #3
Project Number: 32.143991 / -103.194209
Project Manager: RAMONA HOVEY
Fax To: (512) 732-9816

Reported:
03-Dec-18 16:12

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 8112817 - General Prep - Wet Chem**Duplicate (8112817-DUP1)**

Source: H803427-01

Prepared & Analyzed: 28-Nov-18

Specific Gravity @ 60° F	1.004	0.000	[blank]		1.003			0.116	20	
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Batch 8112819 - General Prep - Wet Chem**Blank (8112819-BLK1)**

Prepared & Analyzed: 28-Nov-18

Sulfide, total	ND	0.0100	mg/L							
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Duplicate (8112819-DUP1)

Source: H803427-01

Prepared & Analyzed: 28-Nov-18

Sulfide, total	ND	0.0100	mg/L		ND				20	
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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Longist Field Services, LLC
3345 Bee Cave Road, Suite 201
Austin TX, 78746

Project: SHOLES DEEP SWD #3
Project Number: 32.143991 / -103.194209
Project Manager: RAMONA HOVEY
Fax To: (512) 732-9816

Reported:
03-Dec-18 16:12

Total Recoverable Metals by ICP (E200.7) - Quality Control
Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B811241 - Total Rec. 200.7/200.8/200.2
Blank (B811241-BLK1)

Prepared: 29-Nov-18 Analyzed: 30-Nov-18

Barium	ND	0.050	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Sodium	ND	1.00	mg/L							
Calcium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							

LCS (B811241-BS1)

Prepared: 29-Nov-18 Analyzed: 30-Nov-18

Sodium	3.13	1.00	mg/L	3.24		96.5	85-115			
Iron	3.76	0.050	mg/L	4.00		94.1	85-115			
Calcium	3.86	0.100	mg/L	4.00		96.6	85-115			
Potassium	7.85	1.00	mg/L	8.00		98.1	85-115			
Barium	1.88	0.050	mg/L	2.00		93.9	85-115			
Magnesium	19.2	0.100	mg/L	20.0		95.9	85-115			

LCS Dup (B811241-BS1)

Prepared: 29-Nov-18 Analyzed: 30-Nov-18

Barium	1.86	0.050	mg/L	2.00		92.9	85-115	1.06	20	
Magnesium	18.9	0.100	mg/L	20.0		94.4	85-115	1.54	20	
Iron	3.74	0.050	mg/L	4.00		93.6	85-115	0.521	20	
Sodium	3.09	1.00	mg/L	3.24		95.5	85-115	1.00	20	
Potassium	7.87	1.00	mg/L	8.00		98.3	85-115	0.199	20	
Calcium	3.79	0.100	mg/L	4.00		94.8	85-115	1.87	20	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Longist</u>		BILL TO		ANALYSIS REQUEST																							
Project Manager:		P.O. #:		<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-family: cursive; font-size: 2em; margin-right: 10px;">Scale</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-family: cursive; font-size: 2em;">T. Sulfido</div> </div>																							
Address:		Company:																									
City:	State:	Zip:	Attn:																								
Phone #:	Fax #:	Address:																									
Project #:	Project Owner:		City:																								
Project Name: <u>SHOLE'S OVERPASS #3</u>		State:														Zip:											
Project Location: <u>37.143 991 / -103.194209</u>		Phone #:																									
Sampler Name: <u>K. Hernandez</u>		Fax #:																									
FOR LAB USE ONLY	Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX				PRESERV.	SAMPLING																	
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME												
	<u>H803428</u>																										
		<u>1 CP-00889-Pod #1</u>												<u>11-21-18</u>	<u>10:41</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
		<u>2 CP-00892-Pod 1</u>												<u>11-21</u>	<u>11:06</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: <u>11-21-18</u>	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
<u>[Signature]</u>	Time: <u>3:30</u>	<u>[Signature]</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		<div style="font-family: cursive; font-size: 3em; text-align: center;">Rush!</div>	
Delivered By: (Circle One)				
Sampler - UPS - Bus - Other: <u>5.8c H97</u>	Sample Condition	CHECKED BY:		
	Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	(Initials)		
	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	<u>JO.</u>		

CARDINAL LABORATORIES

SCALE INDEX WATER ANALYSIS REPORT

Company : LONQUIST FIELD SERVICES, LLC	Date Sampled : 11/21/18
Lease Name : SHOLES DEEP SWD #3	Company Rep. : RAMONA HOVEY
Well Number : CP-00889-POD #1 (H803428-01)	
Location : 32.143991 / -103.194209	

ANALYSIS

1. pH	7.36	
2. Specific Gravity @ 60/60 F.	0.9938	
3. CaCO3 Saturation Index @ 80 F.	+0.208	'Calcium Carbonate Scale Possible'
@ 140 F.	+0.908	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0.064	PPM
5. Carbon Dioxide	ND	PPM
6. Dissolved Oxygen	ND	PPM

Cations

		/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	201.00	/	20.1	=	10.00
8. Magnesium (Mg++)	64.40	/	12.2	=	5.28
9. Sodium (Na+)	162	/	23.0	=	11.97
10. Barium (Ba++)	0.000	/	68.7	=	0.00

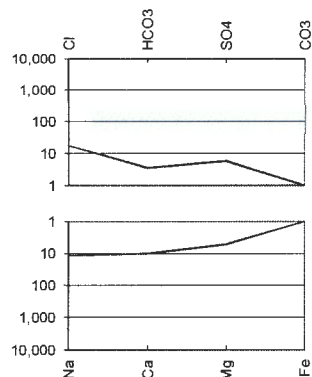
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	225	/	61.1	=	3.68
14. Sulfate (SO4=)	284	/	48.8	=	5.82
15. Chloride (Cl-)	630	/	35.5	=	17.75

Other

16. Total Iron (Fe)	18.100	/	18.2	=	0.99
17. Total Dissolved Solids	1,540				
18. Total Hardness As CaCO3	767.0				
19. Calcium Sulfate Solubility @ 90 F.	1,382				
20. Resistivity (Measured)	3.880	Ohm/Meters	@ 77	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	3.68	=	298
CaSO4	68.07	X	5.82	=	396
CaCl2	55.50	X	0.50	=	28
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	5.28	=	251
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	11.97	=	700

ND = Not Determined

CARDINAL LABORATORIES
SCALE INDEX WATER ANALYSIS REPORT

Company : LONQUIST FIELD SERVICES, LLC	Date Sampled : 11/21/18
Lease Name : SHOLES DEEP SWD #3	Company Rep. : RAMONA HOVEY
Well Number : CP-00892-POD #1 (H803428-02)	
Location : 32.143991 / -103.194209	

ANALYSIS

- | | | |
|---|--------|------------------------------------|
| 1. pH | 7.62 | |
| 2. Specific Gravity @ 60/60 F. | 1.0010 | |
| 3. CaCO ₃ Saturation Index @ 80 F. | +0.267 | 'Calcium Carbonate Scale Possible' |
| @ 140 F. | +0.967 | 'Calcium Carbonate Scale Possible' |

Dissolved Gasses

- | | | |
|---------------------|-------|-----|
| 4. Hydrogen Sulfide | 0.000 | PPM |
| 5. Carbon Dioxide | ND | PPM |
| 6. Dissolved Oxygen | ND | PPM |

Cations

- | | | / | Eq. Wt. | = | MEQ/L |
|---------------------|--------|---|---------|---|-------|
| 7. Calcium (Ca++) | 208.00 | / | 20.1 | = | 10.35 |
| 8. Magnesium (Mg++) | 66.70 | / | 12.2 | = | 5.47 |
| 9. Sodium (Na+) | 189 | / | 23.0 | = | 13.25 |
| 10. Barium (Ba++) | 0.000 | / | 68.7 | = | 0.00 |

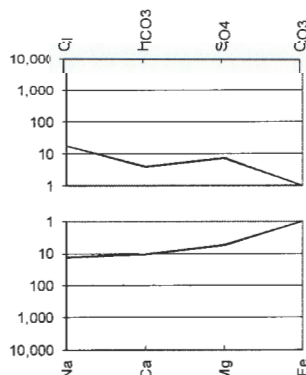
Anions

- | | | | | | |
|--------------------------------------|-----|---|------|---|-------|
| 11. Hydroxyl (OH-) | 0 | / | 17.0 | = | 0.00 |
| 12. Carbonate (CO ₃ =) | 0 | / | 30.0 | = | 0.00 |
| 13. Bicarbonate (HCO ₃ -) | 249 | / | 61.1 | = | 4.08 |
| 14. Sulfate (SO ₄ =) | 367 | / | 48.8 | = | 7.52 |
| 15. Chloride (Cl-) | 620 | / | 35.5 | = | 17.46 |

Other

- | | | | | | |
|---|-------|------------|------|-------------|------|
| 16. Total Iron (Fe) | 6.910 | / | 18.2 | = | 0.38 |
| 17. Total Dissolved Solids | 1,730 | | | | |
| 18. Total Hardness As CaCO ₃ | 794.0 | | | | |
| 19. Calcium Sulfate Solubility @ 90 F. | 1,425 | | | | |
| 20. Resistivity (Measured) | 3.700 | Ohm/Meters | @ 77 | Degrees (F) | |

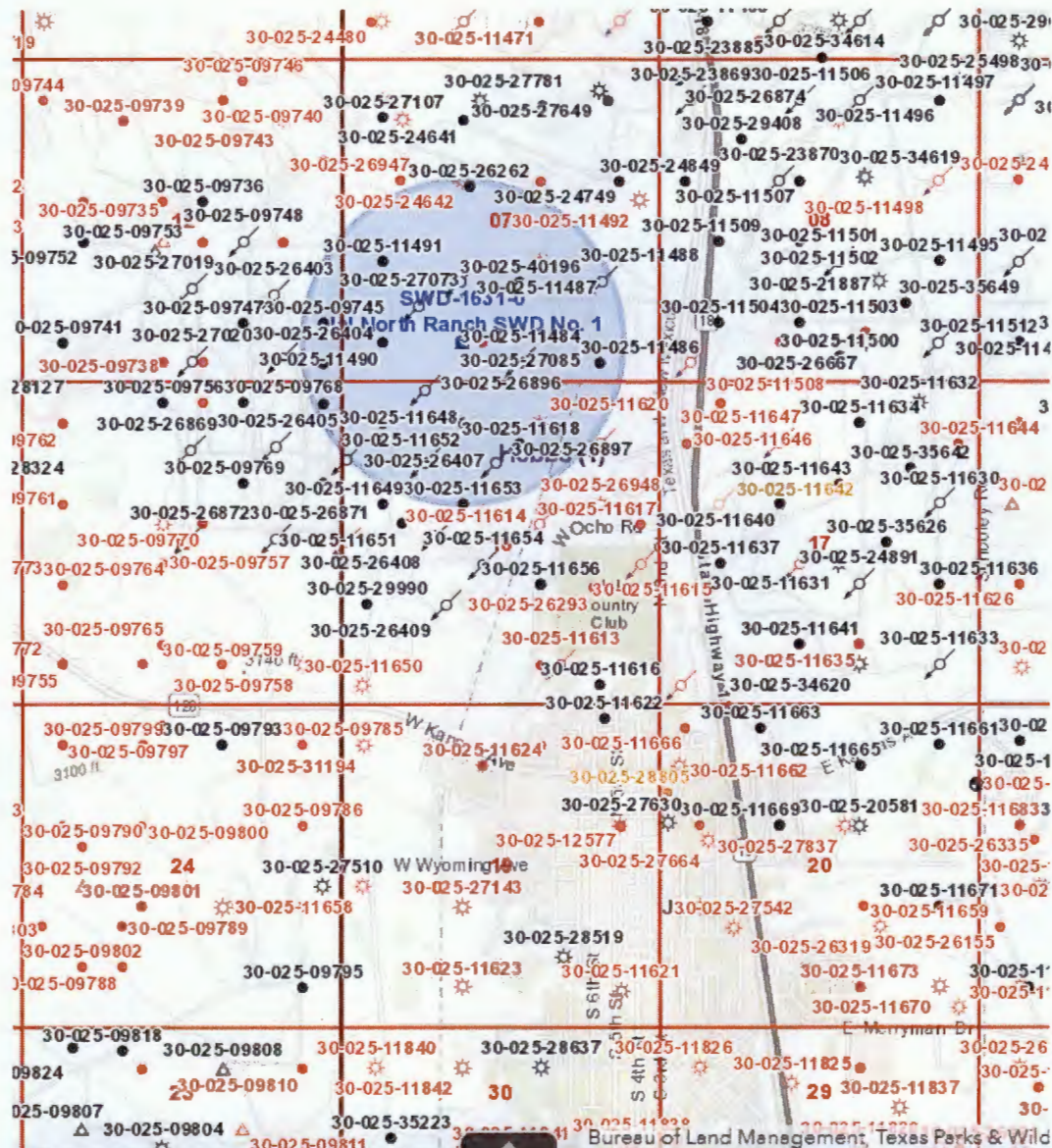
Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	4.08	=	330
CaSO ₄	68.07	X	6.27	=	427
CaCl ₂	55.50	X	0.00	=	0
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	5.47	=	260
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	1.25	=	89
NaCl	58.46	X	12.00	=	701

ND = Not Determined



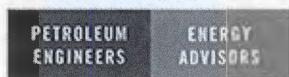
McMillan, Michael, EMNRD

From: Ramona Hovey <ramona@lonquist.com>
Sent: Wednesday, December 12, 2018 11:34 AM
To: McMillan, Michael, EMNRD
Subject: [EXT] RE: Fresh Water Well Sample Analyses - OWL's Sholes Deep No. 3
Attachments: 5_AffidavitofPublication.pdf

I show that it was included in the original package I mailed on 11/7 for the Sholes Deep No. 3 well. I've attached it to confirm.

Regards,

LONQUIST & CO. LLC



HOUSTON | CALGARY
AUSTIN | WICHITA | DENVER

Ramona Hovey • Sr. Petroleum Engineer • Lonquist & Co., LLC • 12912 Hill Country Blvd., Suite F-200 • Bee Cave, Texas, USA 78738
Direct: 512-600-1777 • Cell: 512-585-0654 • Fax: 512-732-9816 • ramona@lonquist.com • www.lonquist.com

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From: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Sent: Wednesday, December 12, 2018 12:06 PM
To: Ramona Hovey <ramona@lonquist.com>
Subject: RE: Fresh Water Well Sample Analyses - OWL's Sholes Deep No. 3

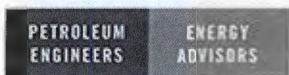
Need affidavit of publication

From: Ramona Hovey <ramona@lonquist.com>
Sent: Tuesday, December 11, 2018 12:18 PM
To: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: [EXT] Fresh Water Well Sample Analyses - OWL's Sholes Deep No. 3

Good morning. Please find the attached offset water analysis as required for OWL's Sholes Deep SWD #3 permit application.

Regards,

LONQUIST & CO. LLC



HOUSTON | CALGARY
AUSTIN | WICHITA | DENVER

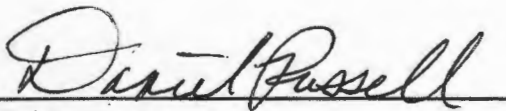
Ramona Hovey • Sr. Petroleum Engineer • Lonquist & Co., LLC • 12912 Hill Country Blvd., Suite F-200 • Bee Cave, Texas, USA 78738
Direct: 512-600-1777 • Cell: 512-585-0654 • Fax: 512-732-9816 • ramona@lonquist.com • www.lonquist.com

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

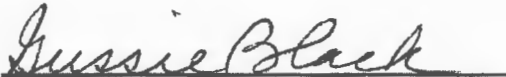
I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
November 01, 2018
and ending with the issue dated
November 01, 2018.



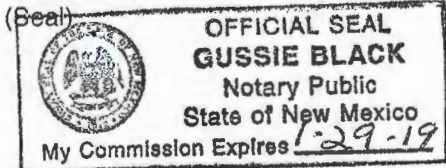
Publisher

Sworn and subscribed to before me this
1st day of November 2018.



Business Manager

My commission expires
January 29, 2019



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE NOVEMBER 1, 2018

OWL SWD Operating, LLC, 8214 Westchester Dr., Suite 850, Dallas, Texas 75255, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Sholes Deep SWD No. 3. The proposed well will be located 2,335' FSL & 205' FEL in Section 07, Township 25S, Range 37E in Lea County, New Mexico. Disposal water will be sourced from area production, and will be injected into the Devonian-Silurian Formation (determined by offset log analysis) through an open hole completion between a maximum applied for top of 9850 feet to a maximum depth of 11,665 feet. The maximum surface injection pressure will not exceed 1,970 psi with a maximum rate of 20,000 BWPD. Interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87503, within 15 days. Additional information can be obtained from the applicant's agent, Lonquist & Co., LLC, at (512) 600-1774. #33412

67112661

00220235

LONQUIST & CO., LLC
12912 HILL COUNTRY BLVD, STE F200
AUSTIN, TX 78738

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Production Summary Report

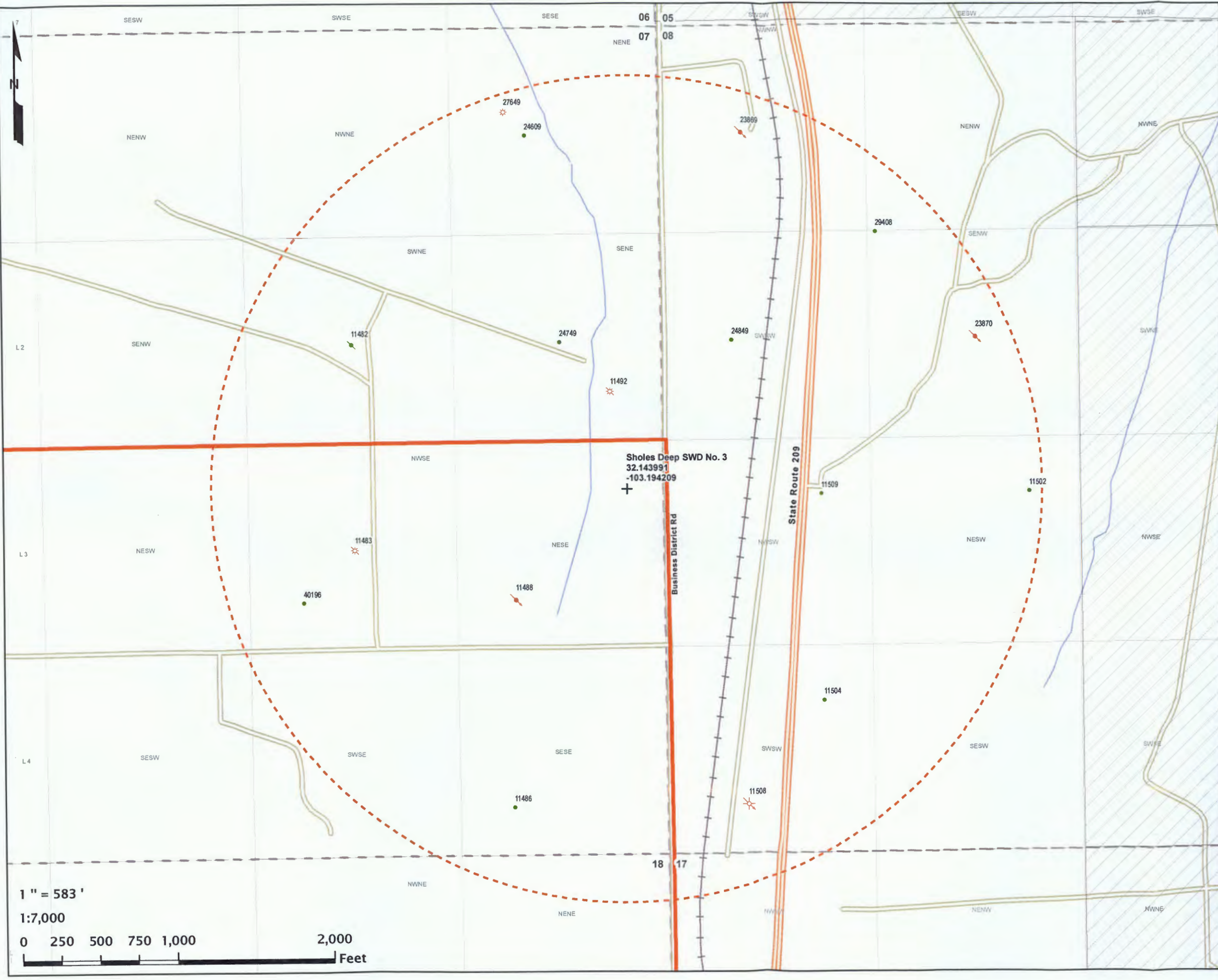
API: 30-025-27085

JAL NORTH RANCH SWD #001

Year	Pool	Injection			
		Water(BBLS)	Co2(MCF)	Gas(MCF)	Pressure
11/1/2016	[96141] SWD;YATES-SEVEN RIVERS	0	0	0	0
12/1/2016	[96141] SWD;YATES-SEVEN RIVERS	0	0	0	0
1/1/2017	[96141] SWD;YATES-SEVEN RIVERS	0	0	0	0
2/1/2017	[96141] SWD;YATES-SEVEN RIVERS	0	0	0	0
3/1/2017	[96141] SWD;YATES-SEVEN RIVERS	0	0	0	0
4/1/2017	[96141] SWD;YATES-SEVEN RIVERS	1590	0	0	1880
05/1/2017	[96141] SWD;YATES-SEVEN RIVERS	1120	0	0	1880
6/1/2017	[96141] SWD;YATES-SEVEN RIVERS	6608	0	0	1880
7/1/2017	[96141] SWD;YATES-SEVEN RIVERS	27286	0	0	1880
8/1/2017	[96141] SWD;YATES-SEVEN RIVERS	15177	0	0	1880
9/1/2017	[96141] SWD;YATES-SEVEN RIVERS	39245	0	0	1880
10/1/2017	[96141] SWD;YATES-SEVEN RIVERS	63686	0	0	1880
11/1/2017	[96141] SWD;YATES-SEVEN RIVERS	2980	0	0	1880
12/1/2017	[96141] SWD;YATES-SEVEN RIVERS	3711	0	0	1880
1/1/2018	[96141] SWD;YATES-SEVEN RIVERS	27102	0	0	1880
2/1/2018	[96141] SWD;YATES-SEVEN RIVERS	20269	0	0	1880
3/1/2018	[96141] SWD;YATES-SEVEN RIVERS	28619	0	0	1880
4/1/2018	[96141] SWD;YATES-SEVEN RIVERS	28682	0	0	1880
5/1/2018	[96141] SWD;YATES-SEVEN RIVERS	35770	0	0	1880
6/1/2018	[96141] SWD;YATES-SEVEN RIVERS	53780	0	0	1880
7/1/2018	[96141] SWD;YATES-SEVEN RIVERS	17828	0	0	1880
8/1/2018	[96141] SWD;YATES-SEVEN RIVERS	11596	0	0	1880
9/1/2018	[96141] SWD;YATES-SEVEN RIVERS	37920	0	0	1880
10/1/2018	[96141] SWD;YATES-SEVEN RIVERS	32520	0	0	1880

Cum

455489



Sholes Deep SWD No. 3
1/2 Mile Offset Lessees
Oilfield Water Logistics
Lea Co., NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)

Drawn by: SJL | Date: 10/16/2018 | Approved by: ELR

LONQUIST & CO. LLC

**PETROLEUM
ENGINEERS**

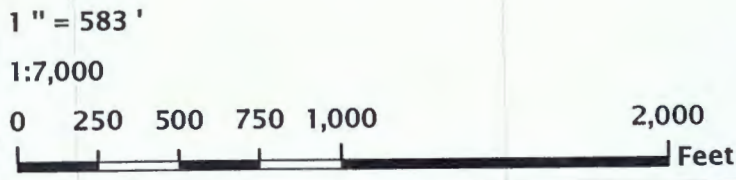
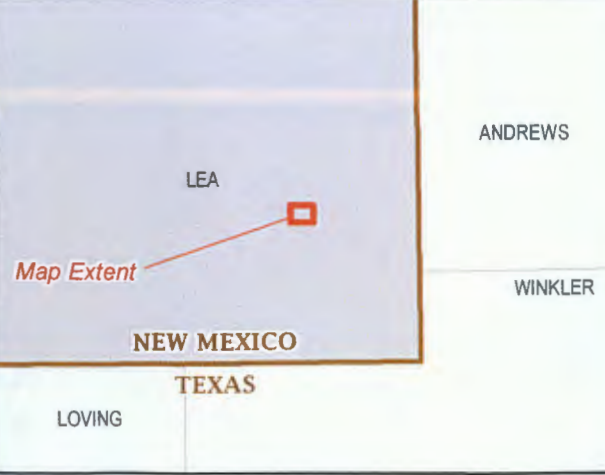
**ENERGY
ADVISORS**

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

- + Sholes Deep SWD No. 3
- 1/2 Mile Radius
- Fulfer Ranch Property Boundary
- QQ-Section (NM-PLSS 2nd Div.)
- Section (NM-PLSS 1st Div.)
- Township/Range (NM-PLSS)
- NM - BLM (O&G Leases)
- API (30-025-...) SHL Status - Type (Count)
 - Active - Oil (9)
 - Active - Gas (1)
 - Active - Injection (3)
 - Plugged (Site Released) - Oil (1)
 - Plugged (Site Released) - Gas (2)
 - Plugged (Site Released) - Injection (1)

No Lessees

SHL Source: NM-OCD (2018)

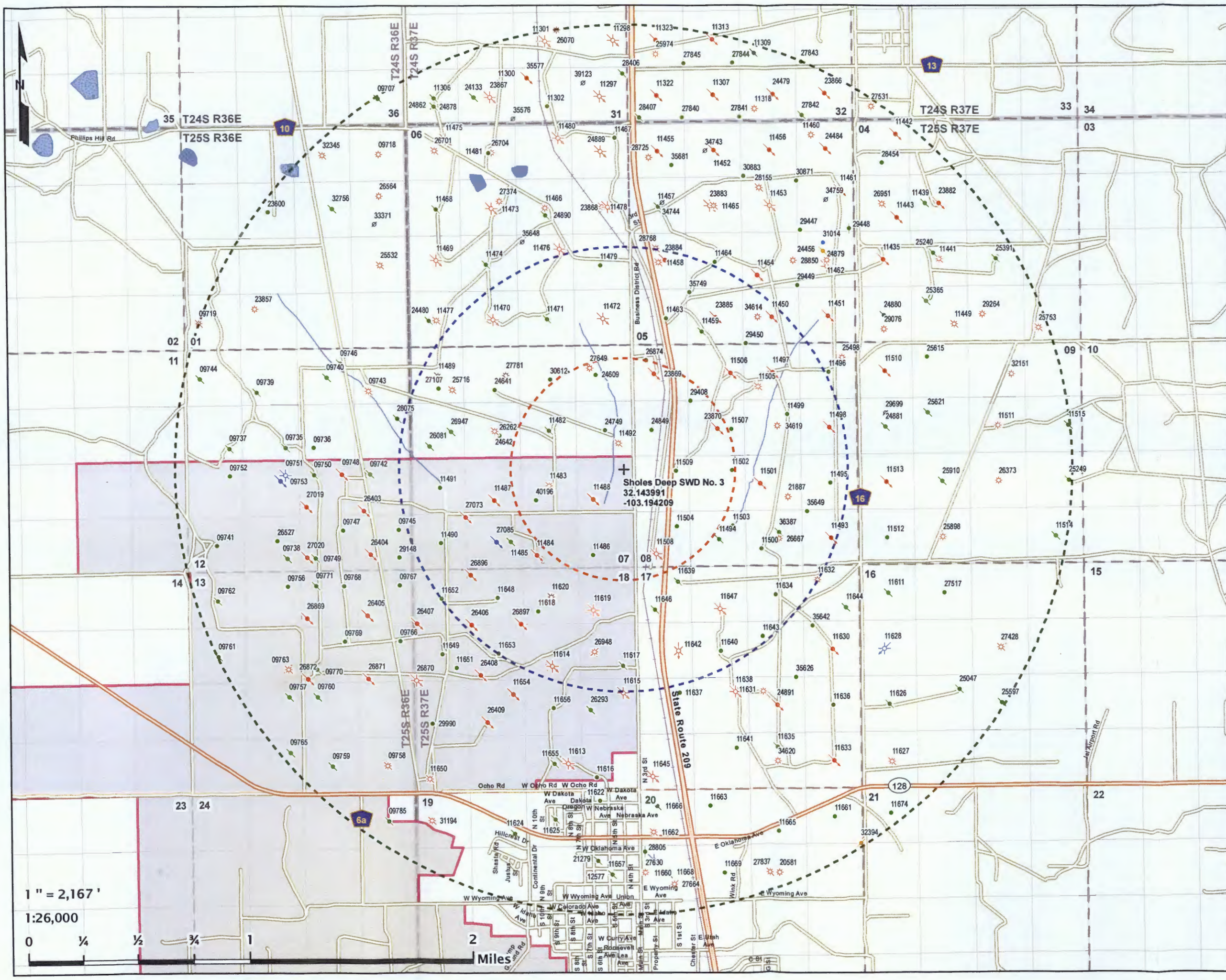


Sholes Deep SWD No. 3
1/2 Mile Offset Operators and Lessees List

S/T/R	QQ UNIT LETTER(S)	OPERATOR	MINERAL LESSEE	MINERAL OWNER	SURFACE OWNER	ADDRESS 1	ADDRESS 2
8/25S/37E	C,E	POGO OIL & GAS OPERATING INC	-	-	-	1515 CALLE SUR, STE 174	HOBBS, NM 88240
	D,F	ENERVEST OPERATING LLC	-	-	-	2700 FARMINGTON AVE, BLDG K SUITE 1	FARMINGTON, NM 87401
	K,L,M,N	FULFER OIL & CATTLE LLC	-	-	-	PO BOX 1224	JAL, NM 88252
7/25S/37E	A	SPECIAL ENERGY CORP	-	-	-	PO DRAWER 369	STILLWATER, OK 74076
		PRIMAL ENERGY CORPORATION	-	-	-	211 HIGHLAND CROSS SUITE 227	HOUSTON, TX 77073
	B	ROVER OPERATING LLC	-	-	-	55 OLD SANTA FE TRAIL, SECOND FLOOR	SANTA FE, NM 87501
	F,H	PRIMAL ENERGY CORPORATION	-	-	-	211 HIGHLAND CROSS SUITE 227	HOUSTON, TX 77073
	I,J,K,N,O,P	FULFER OIL & CATTLE LLC	-	-	-	PO BOX 1224	JAL, NM 88252
	G	-	-	PRIVATE (UNKNOWN)	-	-	-
18/25S/37E	B	FULFER OIL & CATTLE LLC	-	-	-	PO BOX 1224	JAL, NM 88252
	A	-	-	PRIVATE (UNKNOWN)	-	-	-
17/25S/37E	D	-	-	PRIVATE (UNKNOWN)	-	-	-
Surface Location	-	-	-	-	FULFER INVESTMENTS LLC	PO BOX 1224	JAL, NM 88252

Produced Water Analysis - Surrounding Areas
Sholes Deep SWD #2

wellname	api	latitude	longitude	section	township	range	unit	ftgns	ftgew	county	state	formation	sampledate	ph	tds_mgL	resistivity_ohm_cm	sodium_mgL	calcium_mgL	magnesium_mgL	chloride_mgL	carbonate_mgL	bicarbonate_mgL	sulfate_mgL
STATE B COM #001	3002509716	32.1794052	-103.2212524	36	24S	36E	C	600N	1880W	LEA	NM	DEVONIAN			176234					107400		128	1004
ARNOTT RAMSAY NCT-B #003	3002511863	32.0922279	-103.1784439	32	25S	37E	A	660N	660E	LEA	NM	DEVONIAN	1/2/1900 0:00				17244	5345		100382		476	
ARNOTT RAMSAY NCT-B #003	3002511863	32.0922279	-103.1784439	32	25S	37E	A	660N	660E	LEA	NM	DEVONIAN			158761								
CARLSON A #002	3002511764	32.1003838	-103.1113434	25	25S	37E	I	2310S	990E	LEA	NM	FUSSELMAN			208280					124000		510	3400
CARLSON B 25 #004	3002511784	32.096756	-103.1113434	25	25S	37E	P	990S	990E	LEA	NM	FUSSELMAN			184030					112900		68	1806
COPPER #001	3002511818	32.0994835	-103.1656723	28	25S	37E	J	1980S	1981E	LEA	NM	DEVONIAN			27506					15270		1089	1079
LEARCY MCBUFFINGTON #008	3002511569	32.1239548	-103.118782	13	25S	37E	N	330S	1980W	LEA	NM	FUSSELMAN	1/2/1900 0:00	7.6	67909		2603	684		38887		742	2489
SOUTH JUSTIS UNIT #016F	3002511556	32.1312065	-103.1187744	13	25S	37E	F	2310N	1980W	LEA	NM	FUSSELMAN			57675					34030		595	1211
SOUTH JUSTIS UNIT #023C	3002511760	32.1067276	-103.1184616	25	25S	37E	C	660N	2080W	LEA	NM	FUSSELMAN			63817					35870		360	3442
STATE NJ A #001	3002511398	32.1647491	-103.1273346	2	25S	37E	A	663N	660E	LEA	NM	DEVONIAN			105350					59300		660	4950
STATE Y #009	3002511777	32.1058197	-103.1113434	25	25S	37E	A	990N	990E	LEA	NM	FUSSELMAN	3/17/1961 0:00	7.3	219570					129000		960	4630
STATE Y #009	3002511777	32.1058197	-103.1113434	25	25S	37E	A	990N	990E	LEA	NM	FUSSELMAN	3/18/1961 0:00	6.8	163430					96000		290	3780
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1	25S	37E	E	1980N	330W	LEA	NM	FUSSELMAN	6/17/1961 0:00	6	80880					46200		340	3050
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1	25S	37E	E	1980N	330W	LEA	NM	FUSSELMAN			84900					48600		840	2650
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1	25S	37E	E	1980N	330W	LEA	NM	FUSSELMAN			72200					41000		370	2960
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1	25S	37E	E	1980N	330W	LEA	NM	FUSSELMAN			80900					46200		340	3050
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1	25S	37E	E	1980N	330W	LEA	NM	FUSSELMAN			77600					44000		550	3240
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1	25S	37E	E	1980N	330W	LEA	NM	FUSSELMAN			135000					77000		650	5810
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1	25S	37E	E	1980N	330W	LEA	NM	FUSSELMAN			114000					65000		280	5110
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1	25S	37E	E	1980N	330W	LEA	NM	FUSSELMAN			135000					77000		500	5320
WESTATES FEDERAL #008	3002511393	32.1621208	-103.1241226	1	25S	37E	E	1620N	330W	LEA	NM	FUSSELMAN			91058					51020		376	4783
WESTATES FEDERAL #008	3002511393	32.1621208	-103.1241226	1	25S	37E	E	1620N	330W	LEA	NM	FUSSELMAN			86847					50450		363	2544
FARNSWORTH FEDERAL #006	3002511950	32.0777245	-103.162468	4	26S	37E	A	660N	990E	LEA	NM	DEVONIAN			31931					20450		302	591



Sholes Deep SWD No. 3
2 Mile Area of Review
Oilfield Water Logistics
Lea Co., NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)

Drawn by: SJL | Date: 10/15/2018 | Approved by: ELR

LONQUIST & CO. LLC

PETROLEUM ENGINEERS **ENERGY ADVISORS**

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

- + Sholes Deep SWD No. 3
- 1/2 Mile Radius
- 1 Mile Radius
- 2 Mile Radius
- Fulfer Ranch Property Boundary
- QQ-Section (NM-PLSS 2nd Div.)
- Section (NM-PLSS 1st Div.)
- Township/Range (NM-PLSS)
- API (30-025-...) SHL Status - Type (Count)
 - Active - Oil (81)
 - Active - Gas (33)
 - Active - Salt Water Disposal (2)
 - Active - Injection (53)
 - Active - Water Source (1)
 - Canceled Location (9)
 - Plugged (Not Released) - Gas (2)
 - Plugged (Not Released) - Salt Water Disposal (1)
 - Plugged (Not Released) - Miscellaneous (1)
 - Plugged (Site Released) - Oil (70)
 - Plugged (Site Released) - Gas (31)
 - Plugged (Site Released) - Salt Water Disposal (2)
 - Plugged (Site Released) - Injection (25)
 - Plugged (Site Released) - Miscellaneous (1)
 - Approved TA - Oil (2)
 - Approved TA - Injection (1)

SHL Source: NM-OCD (2018)



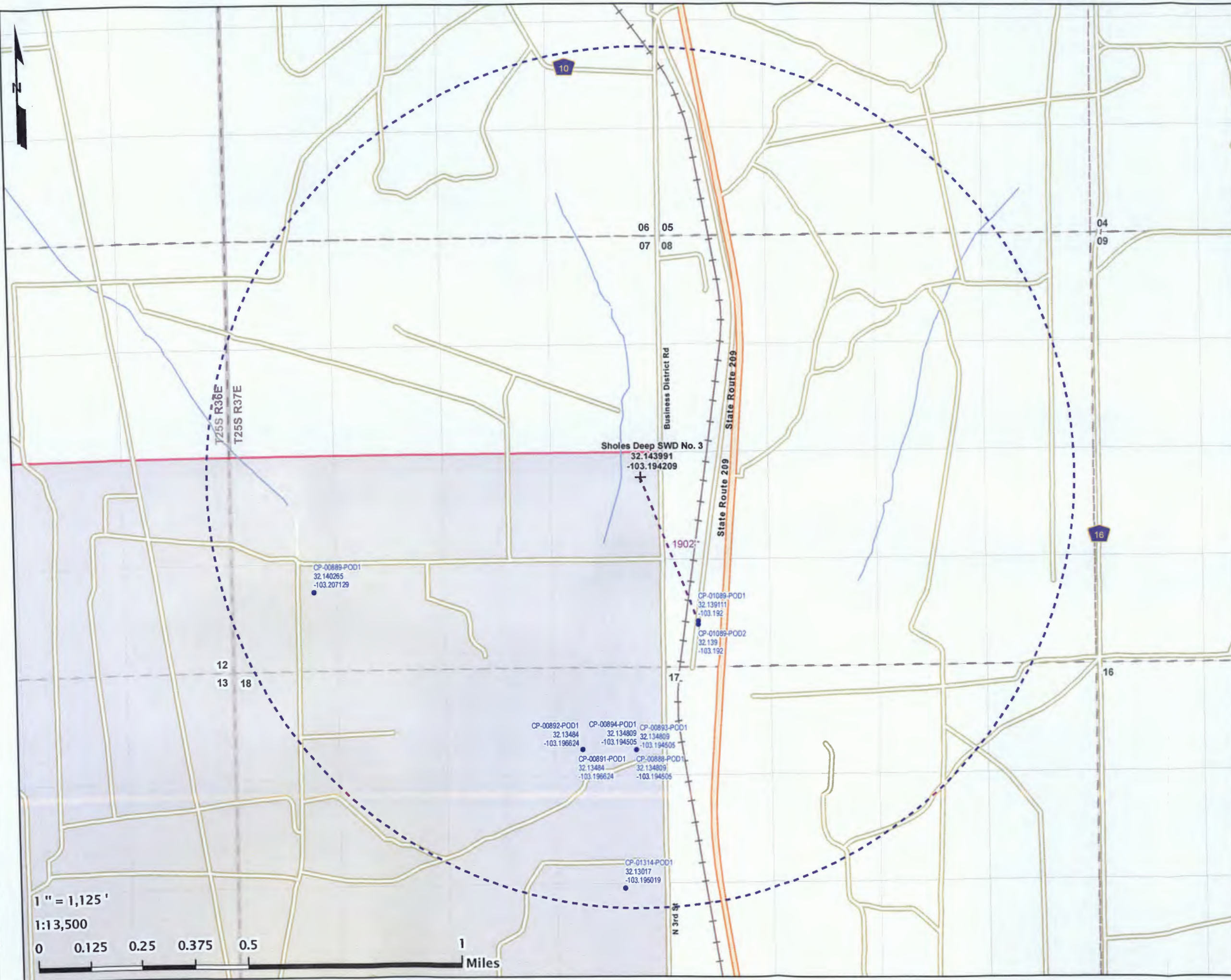
1" = 2,167'
1:26,000
0 1/4 1/2 3/4 1 Miles

**Sholes Deep SWD No. 3
1 Mile Area of Review List**

API (30-025-...)	WELL NAME	WELL TYPE	STATUS	OPERATOR	TVD (FT.)	LATITUDE (NAD83 DD)	LONGITUDE (NAD83 DD)	DATE DRILLED
11450	LANGLIE JAL UNIT #064	I	A	POGO OIL & GAS OPERATING, INC	3700	32.15384670000	-103.18276980000	12/31/9999
11458	E J WELLS #013	G	P	HERMAN L. LOEB LLC	3526	32.1574707000	-103.191291800	3/6/1947
11459	PRE-ONGARD WELL #014	O	P	PRE-ONGARD WELL OPERATOR	0	32.15293880000	-103.18809510000	1/1/1900
11463	LANGLIE JAL UNIT #066	O	A	POGO OIL & GAS OPERATING, INC	3660	32.1538429000	-103.190803500	11/28/1955
11470	LANGLIE JAL UNIT #069	I	P	LEGACY RESERVES OPERATING, LP	3600	32.15384670000	-103.20389560000	1/27/1966
11471	LANGLIE JAL UNIT #068	O	P	LEGACY RESERVES OPERATING, LP	3600	32.1538467000	-103.199821500	12/31/9999
11472	LANGLIE JAL UNIT #067	I	P	LEGACY RESERVES OPERATING, LP	3600	32.15384290000	-103.19555660000	12/31/9999
11479	LANGLIE JAL UNIT #056	O	A	POGO OIL & GAS OPERATING, INC	3780	32.1573334000	-103.195716900	7/3/1947
11482	SOUTH LANGLIE JAL UNIT #001	O	P	BC OPERATING, INC.	3355	32.1465874000	-103.199813800	12/31/9999
11483	WINTERS C #001	G	P	BC OPERATING, INC.	3345	32.1429710000	-103.199806200	3/12/1953
11484	SOUTH LANGLIE JAL UNIT #008	I	A	FULFER OIL & CATTLE LLC	3338	32.1384392000	-103.200866700	9/15/1953
11485	SOUTH LANGLIE JAL UNIT #007	O	P	BC OPERATING, INC.	3361	32.1393471000	-103.202850300	12/31/9999
11486	SOUTH LANGLIE JAL UNIT #009	O	A	FULFER OIL & CATTLE LLC	3325	32.1384354000	-103.196601900	3/5/1954
11487	SOUTH LANGLIE JAL UNIT #002	I	A	FULFER OIL & CATTLE LLC	3358	32.1420708000	-103.204040500	6/1/1955
11488	SOUTH LANGLIE JAL UNIT #004	I	A	FULFER OIL & CATTLE LLC	3353	32.14206310000	-103.19651030000	3/29/1954
11489	PRE-ONGARD WELL #001	G	P	PRE-ONGARD WELL OPERATOR	0	32.1502190000	-103.208160400	1/1/1900
11490	ELYDIA C WINTERS B #001	O	A	FULFER OIL & CATTLE LLC	3054	32.1393509000	-103.208175700	12/31/9999
11491	ELYDIA C WINTERS B #002	O	A	FULFER OIL & CATTLE LLC	3034	32.1429787000	-103.208175700	12/31/9999
11492	PRE-ONGARD WELL #001	G	P	PRE-ONGARD WELL OPERATOR	0	32.14570240000	-103.19451140000	1/1/1900
11493	LANGLIE JAL UNIT #085	I	A	POGO OIL & GAS OPERATING, INC	3686	32.13935090000	-103.17849730000	1/21/1935
11494	PRE-ONGARD WELL #003	O	P	PRE-ONGARD WELL OPERATOR	0	32.1393433000	-103.187011700	1/1/1900
11495	LANGLIE JAL UNIT #082	O	A	POGO OIL & GAS OPERATING, INC	3713	32.1429787000	-103.178497300	7/14/1937
11497	LANGLIE JAL UNIT #073	I	A	POGO OIL & GAS OPERATING, INC	3662	32.1502190000	-103.182769800	1/31/1938
11498	LANGLIE JAL UNIT #077	I	A	POGO OIL & GAS OPERATING, INC	3647	32.1465912000	-103.178504900	12/31/9999
11499	LANGLIE JAL UNIT #078	O	A	POGO OIL & GAS OPERATING, INC	3730	32.1474953000	-103.181701700	4/4/1938
11500	LANGLIE JAL UNIT #086	O	A	POGO OIL & GAS OPERATING, INC	3755	32.1387138000	-103.183822600	12/27/1952
11501	LANGLIE JAL UNIT #081	I	A	POGO OIL & GAS OPERATING, INC	3650	32.1429749000	-103.183830300	12/31/9999
11502	SOUTH LANGLIE JAL UNIT #006	O	A	FULFER OIL & CATTLE LLC	3404	32.14387890000	-103.18595120000	9/6/1948
11503	SOUTH LANGLIE JAL UNIT #011	O	A	FULFER OIL & CATTLE LLC	3392	32.1402512000	-103.185943600	3/27/1952
11504	SOUTH LANGLIE JAL UNIT #029	O	A	FULFER OIL & CATTLE LLC	3538	32.14024730000	-103.19020840000	3/7/1951
11505	PRE-ONGARD WELL #003	G	P	PRE-ONGARD WELL OPERATOR	0	32.1493111000	-103.183837900	1/1/1900
11506	LANGLIE JAL UNIT #072	I	A	POGO OIL & GAS OPERATING, INC	3748	32.1502151000	-103.185958900	11/12/1937
11507	F M BURLESON WN #002	O	A	ENERVEST OPERATING L.L.C.	3467	32.1465874000	-103.185951200	6/22/1939
11508	SOUTH LANGLIE JAL UNIT #010	I	P	CHAPARRAL ENERGY LLC	3380	32.1384315000	-103.191787700	4/21/1954
11509	SOUTH LANGLIE JAL UNIT #005	O	A	FULFER OIL & CATTLE LLC	3402	32.1438751000	-103.190216100	9/23/1982
11614	SOUTH LANGLIE JAL UNIT #016	I	P	CHAPARRAL ENERGY LLC	3349	32.1311798000	-103.199791000	3/7/1960
11617	SOUTH LANGLIE JAL UNIT #017	O	P	BC OPERATING, INC.	3336	32.1311760000	-103.194458000	2/21/1953
11618	SOUTH LANGLIE JAL UNIT #012	O	A	FULFER OIL & CATTLE LLC	3342	32.1348076000	-103.200859100	8/7/1953
11619	SOUTH LANGLIE JAL UNIT #013	I	P	BC OPERATING, INC.	3320	32.1348038000	-103.196594200	2/2/1954
11620	PRE-ONGARD WELL #001	G	P	PRE-ONGARD WELL OPERATOR	0	32.13571550000	-103.19979860000	1/1/1900
11632	WOOLWORTH WN #001	G	A	BRECK OPERATING CORP	99999	32.13662720000	-103.17955780000	12/31/9999
11634	LANGLIE JAL UNIT #087	O	A	POGO OIL & GAS OPERATING, INC	3650	32.1357193000	-103.182754500	12/8/1952
11639	WOOLWORTH B #001	O	P	TEXACO EXPLORATION & PRODUCTION INC	99999	32.1366196000	-103.190200800	12/31/9999
11640	SOUTH LANGLIE JAL UNIT #019	O	A	FULFER OIL & CATTLE LLC	3403	32.1320877000	-103.186996500	1/17/1952
11642	SOUTH LANGLIE JAL UNIT #018	I	T	FULFER OIL & CATTLE LLC	3397	32.1320839000	-103.190193200	3/19/1952
11643	LANGLIE JAL UNIT #090	O	A	POGO OIL & GAS OPERATING, INC	3565	32.1329956000	-103.183815000	7/10/1952

Sholes Deep SWD No. 3
1 Mile Area of Review List

11646	SOUTH LANGLIE JAL UNIT #014	O	P	TEXACO EXPLORATION & PRODUCTION INC	0	32.1348038000	-103.191955600	1/1/1900
11647	SOUTH LANGLIE JAL UNIT #015	I	P	BC OPERATING, INC.	3380	32.1348076000	-103.187004100	12/31/9999
11648	JALMAT YATES UNIT #017	O	A	LEGACY RESERVES OPERATING, LP	3400	32.13571930000	-103.20391850000	12/31/1953
11652	JALMAT YATES UNIT #016	O	A	LEGACY RESERVES OPERATING, LP	3038	32.1357231000	-103.208183300	8/29/1951
11653	JALMAT YATES UNIT #024	O	A	LEGACY RESERVES OPERATING, LP	3400	32.1320915000	-103.203926100	11/22/1953
21887	LANGLIE FEDERAL #003	G	A	HERMAN L. LOEB LLC	3043	32.1420708000	-103.181694000	10/20/1966
23869	LANGLIE JAL UNIT #071	I	A	POGO OIL & GAS OPERATING, INC	3600	32.1502151000	-103.191772500	10/9/1971
23870	LANGLIE JAL UNIT #079	I	A	POGO OIL & GAS OPERATING, INC	3600	32.14658740000	-103.18701930000	9/10/1971
23884	LANGLIE JAL UNIT #057	I	A	POGO OIL & GAS OPERATING, INC	99999	32.1576080000	-103.190803500	12/31/9999
23885	LANGLIE JAL UNIT #065	I	A	POGO OIL & GAS OPERATING, INC	99999	32.15384670000	-103.18702700000	12/31/9999
24609	HARRISON #001	O	A	PRIMAL ENERGY CORPORATION	3462	32.1502151000	-103.196197500	12/8/1973
24641	JUDY #001	O	A	PRIMAL ENERGY CORPORATION	3621	32.1493111000	-103.203895600	1/24/1974
24642	PRE-ONGARD WELL #002	G	P	PRE-ONGARD WELL OPERATOR	0	32.14659120000	-103.20390320000	1/1/1900
24749	HARRISON #002	O	A	PRIMAL ENERGY CORPORATION	3610	32.14658740000	-103.19554900000	5/24/1974
24849	LANGLIE JAL UNIT #080	O	A	POGO OIL & GAS OPERATING, INC	3850	32.1465874000	-103.192024200	12/7/1974
25716	ETZ #001	G	P	DOYLE HARTMAN	3535	32.14931490000	-103.20709990000	11/24/1977
26081	ETZ #002	O	P	DOYLE HARTMAN	3560	32.1456871000	-103.208915700	9/19/1978
26262	JUDY #003	O	A	PRIMAL ENERGY CORPORATION	3500	32.14631650000	-103.20358280000	3/19/1979
26406	JALMAT YATES UNIT #019	I	A	LEGACY RESERVES OPERATING, LP	99999	32.13396070000	-103.20595550000	12/31/9999
26667	EL PASO RUBY FEDERAL #001	G	A	LANEXCO INC	3300	32.1393471000	-103.182434100	12/31/9999
26874	F M BURLESON WN #003	O	A	ENERVEST OPERATING L.L.C.	3155	32.15112300000	-103.19235990000	12/31/9999
26896	JALMAT YATES UNIT #011	I	A	LEGACY RESERVES OPERATING, LP	99999	32.1371994000	-103.205947900	12/31/9999
26897	JALMAT YATES UNIT #018	I	A	LEGACY RESERVES OPERATING, LP	3500	32.1339569000	-103.202179000	12/31/9999
26947	ETZ #003	O	P	ENERVEST OPERATING L.L.C.	3600	32.1465912000	-103.207260100	8/9/1980
26948	E C WINTERS #002	G	H	CIMAREX ENERGY CO. OF COLORADO	3030	32.1320839000	-103.196594200	8/18/1980
27073	JALMAT YATES UNIT #010	I	A	LEGACY RESERVES OPERATING, LP	3497	32.1409988000	-103.206268300	12/31/9999
27085	JAL NORTH RANCH SWD #001	S	A	FULFER OIL & CATTLE LLC	13300	32.1393471000	-103.203910800	9/5/1981
27107	ETZ #004	O	A	ENERVEST OPERATING L.L.C.	3600	32.1494522000	-103.208160400	12/31/9999
27649	MUNN HARRISON #001	G	A	SPECIAL ENERGY CORP	3200	32.1506271000	-103.196617100	12/31/9999
27781	MUNN HARRISON B #001	G	A	SPECIAL ENERGY CORP	3200	32.1502190000	-103.203002900	12/31/9999
29408	LANGLIE JAL UNIT #112	O	A	POGO OIL & GAS OPERATING, INC	3804	32.1484566000	-103.189041100	12/14/1985
29450	LANGLIE JAL UNIT #111	O	A	POGO OIL & GAS OPERATING, INC	3800	32.1521683000	-103.184776300	12/4/1985
30612	PAPOOSE #001	O	A	ROVER OPERATING, LLC	3620	32.1499405000	-103.199653600	12/31/9999
34614	WELLS FEDERAL #021	G	A	HERMAN L. LOEB LLC	3130	32.15384670000	-103.18383790000	6/22/1999
34619	LANGLIE JAL FEDERAL #002	G	A	HERMAN L. LOEB LLC	3050	32.14672850000	-103.18244170000	6/14/1999
35649	LANGLIE JAL UNIT #125	O	A	POGO OIL & GAS OPERATING, INC	3760	32.1411362000	-103.180290200	8/9/2001
35749	LANGLIE JAL UNIT #127	O	A	POGO OIL & GAS OPERATING, INC	3800	32.1555214000	-103.188995400	11/15/2001
36387	NANCY 8 FEDERAL COM #001	O	P	TOM BROWN INC	9700	32.1397591000	-103.182434100	10/9/2003
40196	SOUTH LANGLIE JAL UNIT #030	O	A	FULFER OIL & CATTLE LLC	3603	32.1420670000	-103.200874300	8/3/2011



Sholes Deep SWD No. 3 Water Wells within 1 Mile Oilfield Water Logistics Lea Co., NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)

Drawn by: SJL | Date: 10/15/2018 | Approved by: ELR

LONQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

+ Sholes Deep SWD No. 3

• Water Well (9) [NM-OSE]

1 Mile Radius

Distance Call

Fulfer Ranch Property Boundary

QQ-Section (NM-PLSS 2nd Div.)

Section (NM-PLSS 1st Div.)

Township/Range (NM-PLSS)

1" = 1,125'

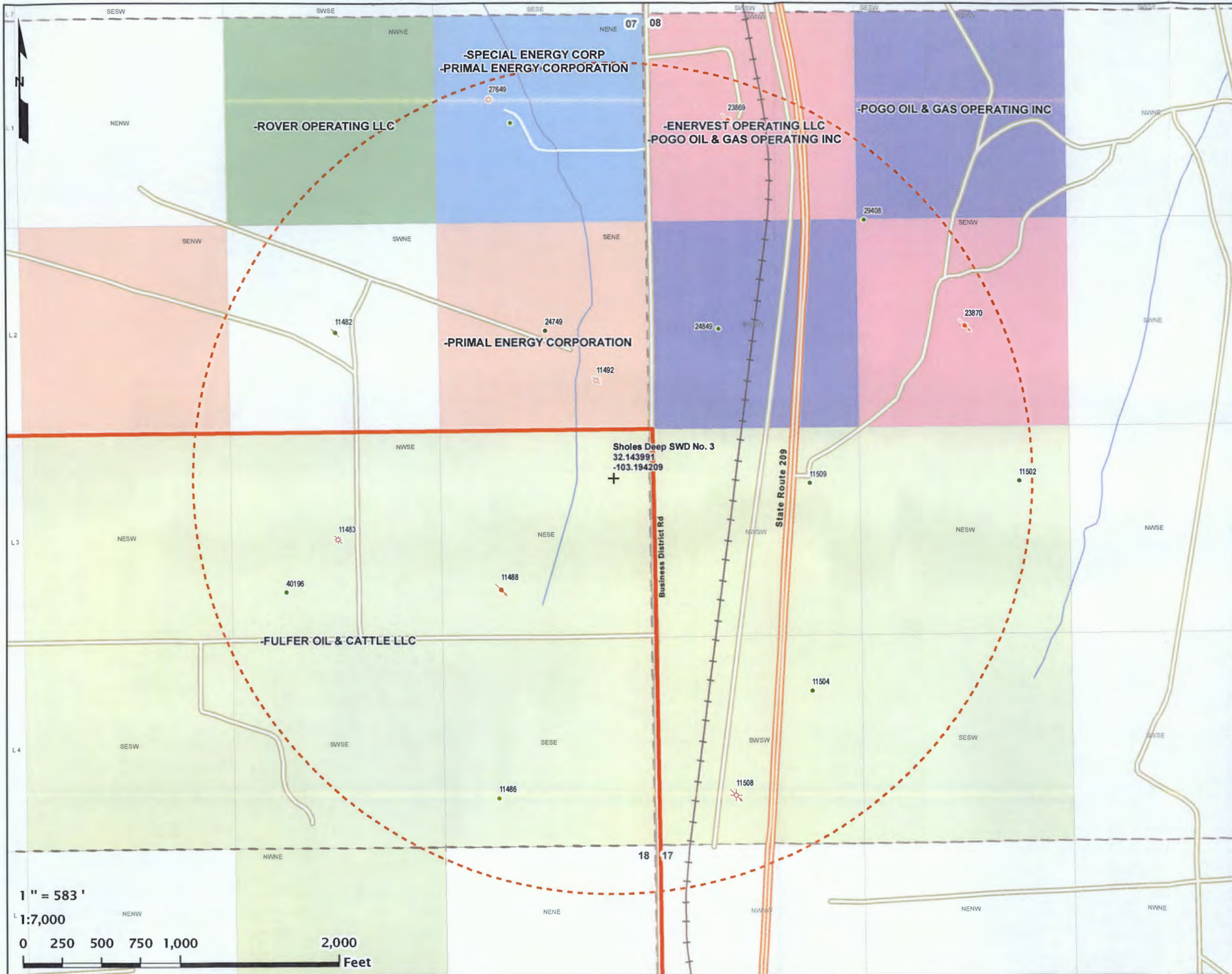
1:13,500

0 0.125 0.25 0.375 0.5 1 Miles



Sholes Deep SWD #3
Water Wells Within 1 Mile

POD BASIN	POD #	POD SUFIX	T	R	S	WELL DEPTH	WATER DEPTH	USE	POD STATUS	STATUS	OWNER LAST NAME	OWNER FIRST NAME	ADDRESS	CITY	ST	ZIP	LAT	LONG	EASTING	NORTHING	DATUM
CP	00893	POD1	25S	37E	18	0	0	PDL		DCL	OSBORN	CLAY	PO BOX 1285	JAL	NM	88252	32.13480937650	-103.19450488400	670301.0	3556806.0	NAD83
CP	00892	POD1	25S	37E	18	0	0	PDL		DCL	OSBORN	CLAY	PO BOX 1285	JAL	NM	88252	32.13483959710	-103.19662434000	670101.0	3556806.0	NAD83
CP	00889	POD1	25S	37E	07	0	0	PLS		DCL	OSBORN	CLAY	PO BOX 1285	JAL	NM	88252	32.14026537230	-103.20712903900	669100.0	3557391.0	NAD83
CP	01089	POD1	25S	37E	08	71	0	MON	ACT	PMT	PARKER ENERGY SUPPORT SVCS,INC		P.O. BOX 1058	HOBBS	NM	88241	32.13911116550	-103.19199995600	670529.3	3557286.9	NAD83
CP	01089	POD2	25S	37E	08	57	0	MON	ACT	PMT	PARKER ENERGY SUPPORT SVCS,INC		P.O. BOX 1058	HOBBS	NM	88241	32.13900022480	-103.19200002500	670529.5	3557274.6	NAD83
CP	00888	POD1	25S	37E	18	0	0	PDL		DCL	OSBORN	CLAY	PO BOX 1285	JAL	NM	88252	32.13480937650	-103.19450488400	670301.0	3556806.0	NAD83
CP	00891	POD1	25S	37E	18	0	0	PDL		DCL	OSBORN	CLAY	PO BOX 1285	JAL	NM	88252	32.13483959710	-103.19662434000	670101.0	3556806.0	NAD83
CP	00894	POD1	25S	37E	18	0	0	PDL		DCL	OSBORN	CLAY	PO BOX 1285	JAL	NM	88252	32.13480937650	-103.19450488400	670301.0	3556806.0	NAD83
CP	01314	POD1	25S	37E	18	494	300	COM	ACT	PMT	FULFER INVISTMENTS LLC		P.O. BOX 578	JAL	NM	88252	32.13016978140	-103.19501922700	670261.1	3556290.8	NAD83



Sholes Deep SWD No. 3

1/2 Mile Offset Operators

Oilfield Water Logistics

Lea Co., NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)

Drawn by: SJL | Date: 10/16/2018 | Approved by: ELR

LONQUIST & CO. LLC

PETROLEUM ENGINEERS | ENERGY ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

+

Sholes Deep SWD No. 3

1/2 Mile Radius

Fulfer Ranch Property Boundary

QQ-Section (NM-PLSS 2nd Div.)

Section (NM-PLSS 1st Div.)

Township/Range (NM-PLSS)

API (30-025-...) SHL Status - Type (Count)

- Active - Oil (9)
- ✱ Active - Gas (1)
- ✱ Active - Injection (3)
- ✱ Plugged (Site Released) - Oil (1)
- ✱ Plugged (Site Released) - Gas (2)
- ✱ Plugged (Site Released) - Injection (1)

Operators

- ENERVEST OPERATING LLC; -POGO OIL & GAS OPERATING INC
- FULFER OIL & CATTLE LLC
- POGO OIL & GAS OPERATING INC
- PRIMAL ENERGY CORPORATION
- ROVER OPERATING LLC
- SPECIAL ENERGY CORP; -PRIMAL ENERGY CORPORATION

SHL Source: NM-OCD (2018)

ANDREWS

LEA

Map Extent

NEW MEXICO

LOVING

TEXAS

WINKLER

