AE Order Number Banner

Application Number: pMSG2404453250

SWD-2596

Pilot Water Solutions SWD LLC [331374]

ACE Energy Advisors

December 29, 2023

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

Subject: Pilot Water Solutions SWD LLC
Application for Authorization to Inject
Lamar SWD State #1

Mr. Fuge,

Pilot Water Solutions SWD LLC (Pilot) is applying for administrative approval of the attached Application for Authorization to Inject (Form C-108) for their proposed Lamar SWD State #1. The application is requesting authorization to dispose of saltwater from oil and gas production in the area via commercial disposal into the San Andres-Glorieta Formation in Lea County, NM.

Questions regarding this application or the included materials can be directed to Nate Alleman (Pilot Regulator Advisor Contractor) via telephone at 918-237-0559 or via email at nate.alleman@aceadvisors.com.

Sincerely,

Nathan Alleman

Nate Alleman
Chief Regulatory Advisor
Ace Energy Advisors

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

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: Pilot Water Solutions SWD LLC OGRID Number: 331374
Well Name: Lamar SWD State #1 API: 30-025-
Pool: SWD; San Andres-Glorieta Pool Code: 96127

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

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

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

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.

David Grounds
Print or Type Name

David Grounds
Signature

12/29/2023
Date

713-307-8752
Phone Number

david.grounds@pilotwater.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ____X__Disposal _____Storage
Application qualifies for administrative approval? ____X____Yes _____No

II. OPERATOR: Pilot Water Solutions SWD LLC

ADDRESS: 20 Greenway Plaza, Suite 200, Houston, TX 77046

CONTACT PARTY: David Grounds PHONE: 713-307-8752

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: David Grounds TITLE: VP - Regulatory Compliance

SIGNATURE: David Grounds DATE: 12/29/2023

E-MAIL ADDRESS: david.grounds@pilotwater.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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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.

Operator: Pilot Water Solutions SWD LLC (OGRID# 331374)
Lease/Well Name & Number: Lamar SWD State #1
Legal Location: 2,596' FSL & 351' FEL - Unit I – Section 3 T19S R37E – Lea County

(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.

Casing String	Hole Size (in)	Casing Size (in)	Casing Depth (ft)	Sacks Cement (sx)	Top of Cement (ft)	Method Determined
Surface	17-1/2	13-3/8	1,666	2,611.3	0	Circulation
Production	12-1/4	9-5/8	6,780	2,023.8	0	Circulation

A wellbore diagram is included in ***Attachment 1***.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

5-1/2” fiberglass-coated tubing set at 4,299’

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Weatherford AS1X Stainless 9-5/8’’ X 5-1/2’’’ set at 4,299’

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.

Injection Formation Name - San Andres-Glorieta
Pool Name - SWD; San Andres-Glorieta
Pool Code – 96127

(2) The injection interval and whether it is perforated or open-hole.

Cased-hole injection between 4,299’ - 6,780’

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

New drill for injection

(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.

None

(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.

- **Overlying**
  - Yates (2,866’)
  - Seven Rivers (3,143’)
  - Queen (3,679’)
  - Grayburg (4,067’)
- **Underlying -** No underlying oil and gas zones present.

Note: the proposed SWD is located on the Central Basin Platform. Therefore, the listed productive zones are limited to those productive zones occurring on the Central Basin Platform.

V. AOR Maps

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.

The following figures are included in ***Attachment 2***:

- 2-Mile Well Map
- 2-Mile Lease Map
- 1/2-Mile Well & Lease Map
- 1/2-Mile Well List
- 1/2-Mile Surface Ownership Map
- 1/2-Mile Mineral Ownership Map

VI. AOR List

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.

Details of the wells within the 0.5-mile AOR are included in ***Attachment 2***. One well within the 0.5-mile AOR penetrates the top of the proposed injection zone.

VII. Operational Information

Attach data on the proposed operation, including:

(1) Proposed average and maximum daily rate and volume of fluids to be injected;

Maximum: 25,000 bpd
Average: 15,000 bpd

(2) Whether the system is open or closed;

The system will be closed.

(3) Proposed average and maximum injection pressure;

Maximum: 859 psi (surface)
Average: approx. 500-600 psi (surface)

(4) Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water;

It is anticipated that produced water from Wofcamp and Bone Spring production wells in the area will be injected into the proposed SWD. Therefore, water analysis from these formations was obtained and is included in ***Attachment 3***.

(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.).

The proposed injection interval for this SWD is the San Andres-Glorieta formation, which is a non-productive zone known to be compatible with formation water from the Wofcamp and Bone Spring formations. Water analyses of samples collected from the proposed injection formation in the area were obtained and are included in ***Attachment 4*.**

VIII. Geologic Description

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.

The proposed injection interval consists of the San Andres-Glorieta formations between the depths of 4,299 and 6,780 feet. The San Andres formation consists of an interbedded carbonate sequence composed of limestone and dolomite. These cycles tend to be mappable within the San Andres and are differentiated by sections of either very high or very low porosity and permeability development. The Glorieta formation consists of very mature yellowish-brown sandstone, more specifically classified as quartzarenite.

Upper confinement is provided by tight carbonate facies, ranging from 125’ – 250’ net thickness (based on a review of nearby open-hole geophysical logs), present within the top of the San Andres formation above the porous injection interval. The lower confining interval occurs at the bottom of the Glorieta formation, directly overlying the Tubb formation, and ranges from 300’ - 450’ net thickness (based on a review of nearby open-hole geophysical logs).

The base of the lowermost Underground Source of Drinking Water (USDW), identified as the top of the first anhydrite, was determined to occur at the top of the Rustler formation at a depth of 1,641’. Water wells in the area are drilled to a depth of approximately 20' - 202'.

IX. Proposed Stimulation Program

Describe the proposed stimulation program, if any.

A minor acid job utilizing 15-20% hydrochloric acid may be used to cleanup the wellbore.

X. Logging and Test Data

Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

Logs will be run and submitted to the Division once the well is completed.

XI. Groundwater Wells

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.

Based on data obtained from the New Mexico Office of the State Engineer (OSE), a total of 23 groundwater wells (13 active, 7 pending, 2 plugged, 1 capped) are located within 1 mile of the proposed SWD location.

Five water wells meet sampling criteria based on status and use. Attempts to contact the water well owner to sample the water wells will be made and the associated analysis will be submitted to OCD upon completion.

Attachment 5 includes a table with details of the water wells within 1-mile and a water well map.

XII. No Hydrologic Connection Statement

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.

A geologic review conducted on offset wireline log data and published regional studies did not identify any faulting in the vicinity of the proposed locations that would allow for the hydraulic communication between the injection interval and overlying USDWs. The base of the lowermost Underground Source of Drinking Water (USDW), identified as the top of the first anhydrite, was determined to occur at the top of the Rustler formation at a depth of 1,641'.

XIII. Proof of Notice

Applicants must complete the "Proof of Notice" section on the reverse side of this form.

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.

A copy of the application was mailed to the Affected Persons, including the OCD District Office, surface owner, leasehold operators within the AOR, and BLM/SLO if they own minerals within the AOR. ***Attachment 6*** includes a list of the Affected Persons receiving notice of the application and the associated certified mailing receipts (green sheets).

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.

A Public Notice was published in the Hobbs NewsSun, a newspaper of general circulation in the area, and the associated affidavit is included in ***Attachment 6***.

Attachment 1

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
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	[3] Pool Name
	96127	SWD; San Andres-Glorieta

[4] Property Code	[5] Property Name	[6] Well Number
	LAMAR SWD STATE	#1

[7] OGRID No.	[8] Operator Name	[9] Elevation
331374	PILOT WATER SOLUTIONS SWD LLC	3735.08'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	3	19 S	37 E		2596	SOUTH	351	EAST	LEA

[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

[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.

[16]

① D	C	B	② A
E	F	G	H
L	K	J	I
④ M	N	O	P ③

GEODETIC DATA
NAD 83 NM EAST

LAMAR SWD STATE 1
N: 616193.28'
E: 880221.61'
LAT.: N 032.689122062
LONG.: W 103.231826799

1-Y=618920.61', X=875264.75'
2-Y=618956.55', X=880560.09'
3-Y=613601.83', X=880585.64'
4-Y=613555.50', X=875307.89'

351'

2596'

[17] OPERATOR CERTIFICATION

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.

Nathan Alleman 12/08/2023
Signature Date

Nate Alleman
Printed Name

nate.alleman@aceadvisors.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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.

11/22/2023
Date of Survey Date

Signature and Seal of Professional Surveyor:

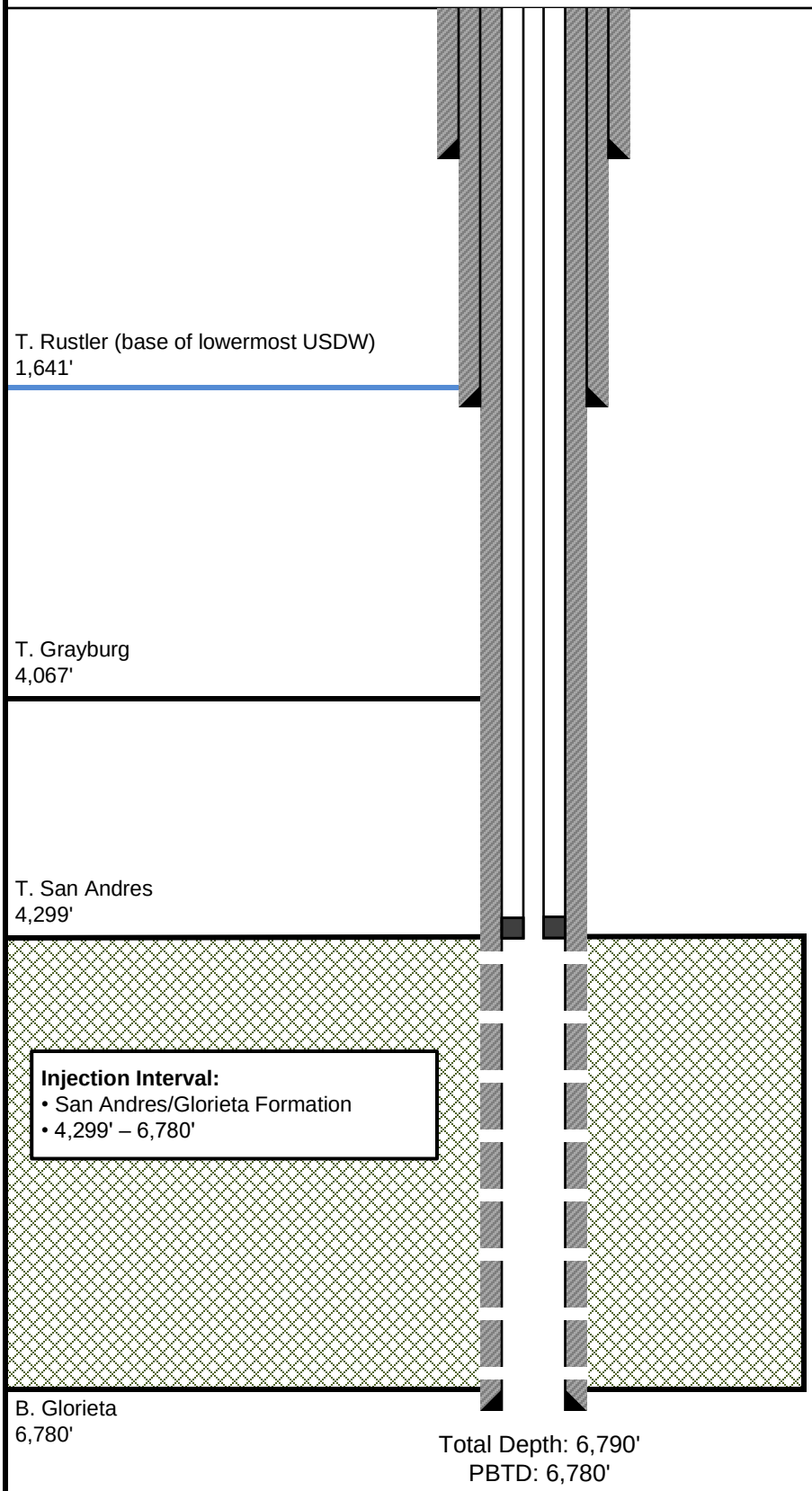
LEROY W. FARLEY NEW MEXICO 17320 CENSED PROFESSIONAL SURVEYOR

Certificate Number

Pilot Water Solutions SWD LLC

Lamar SWD State #1

Wellbore Diagram



Surface Casing

Casing Size (in):	13-3/8
Casing Weight (lb/ft):	68
Casing Grade:	L-80 BTC
Casing Depth (ft):	1,666
Hole Depth (ft):	1,676
Hole Size (in):	17-½
Top of Cement (ft):	0 (circulation)
Sks Cement:	2,611.3

Production Casing

Casing Size (in):	9-5/8
Casing Weight (lb/ft):	53.5
Casing Grade:	L-80 BTC
Casing Depth (ft):	6,780
Hole Depth (ft):	6,790
Hole Size (in):	12-1/4
Top of Cement (ft):	0 (circulation)
Sks Cement:	2,023.8

Tubing

Tubing Size (in): 5-1/2
Tubing Weight (lb/ft): 14
Tubing Grade: J-55 BTC
Tubing Depth (ft): 4,299
Packer Type: Weatherford AS1X Stainless
Packer Depth (ft): 4,299

Injection Interval

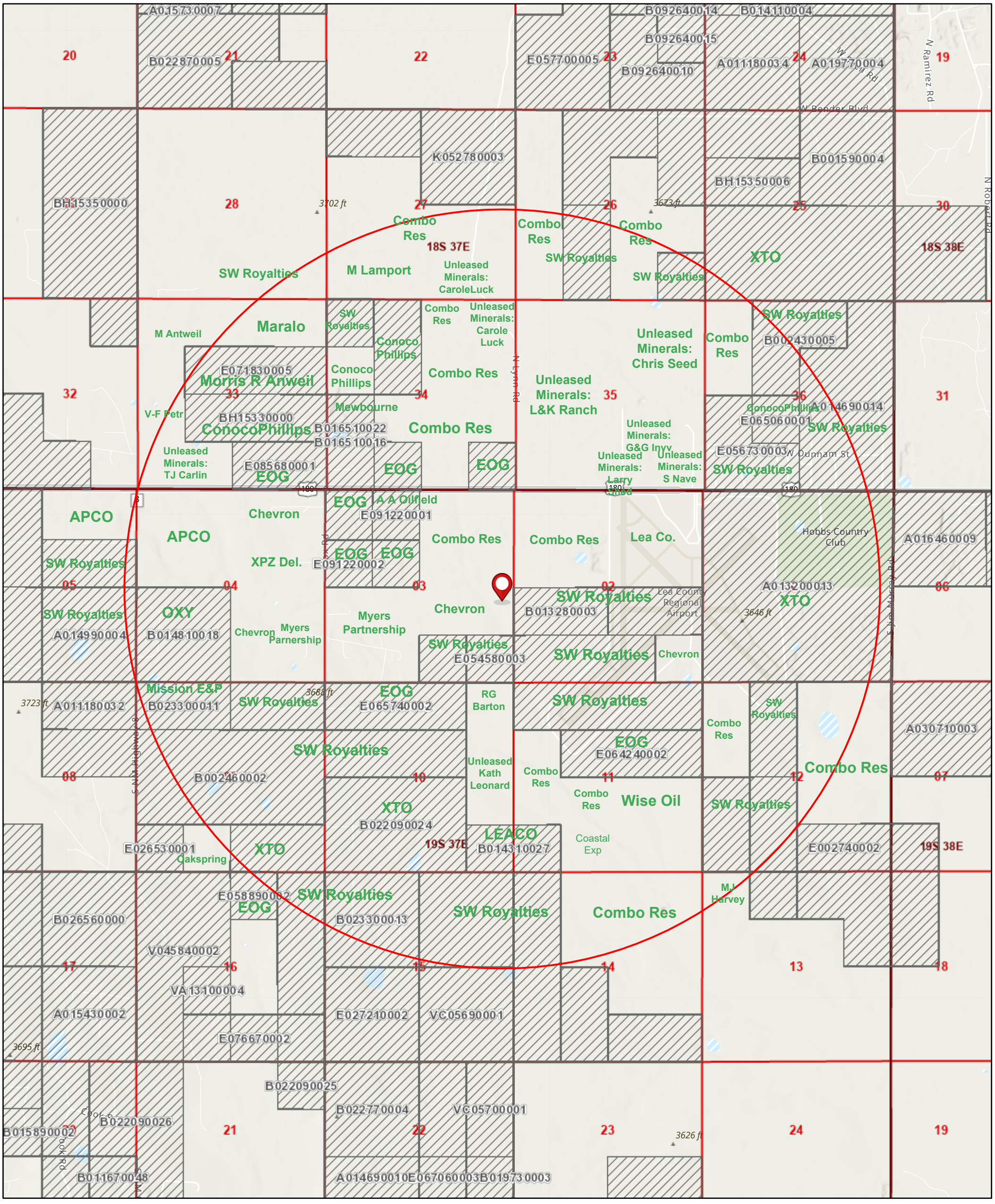
Formation: San Andres/Glorieta
Top (ft): 4,299
Bottom (ft): 6,780
Cased or Open-Hole: Cased

Note: Listed depths and cement volumes are approximates based on available information.

NOT TO SCALE

Attachment 2

2 Mile Lease Map



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Oil and Gas Leasing Restrictions

Oil and Gas Leases

PLSS First Division

PLSS Townships

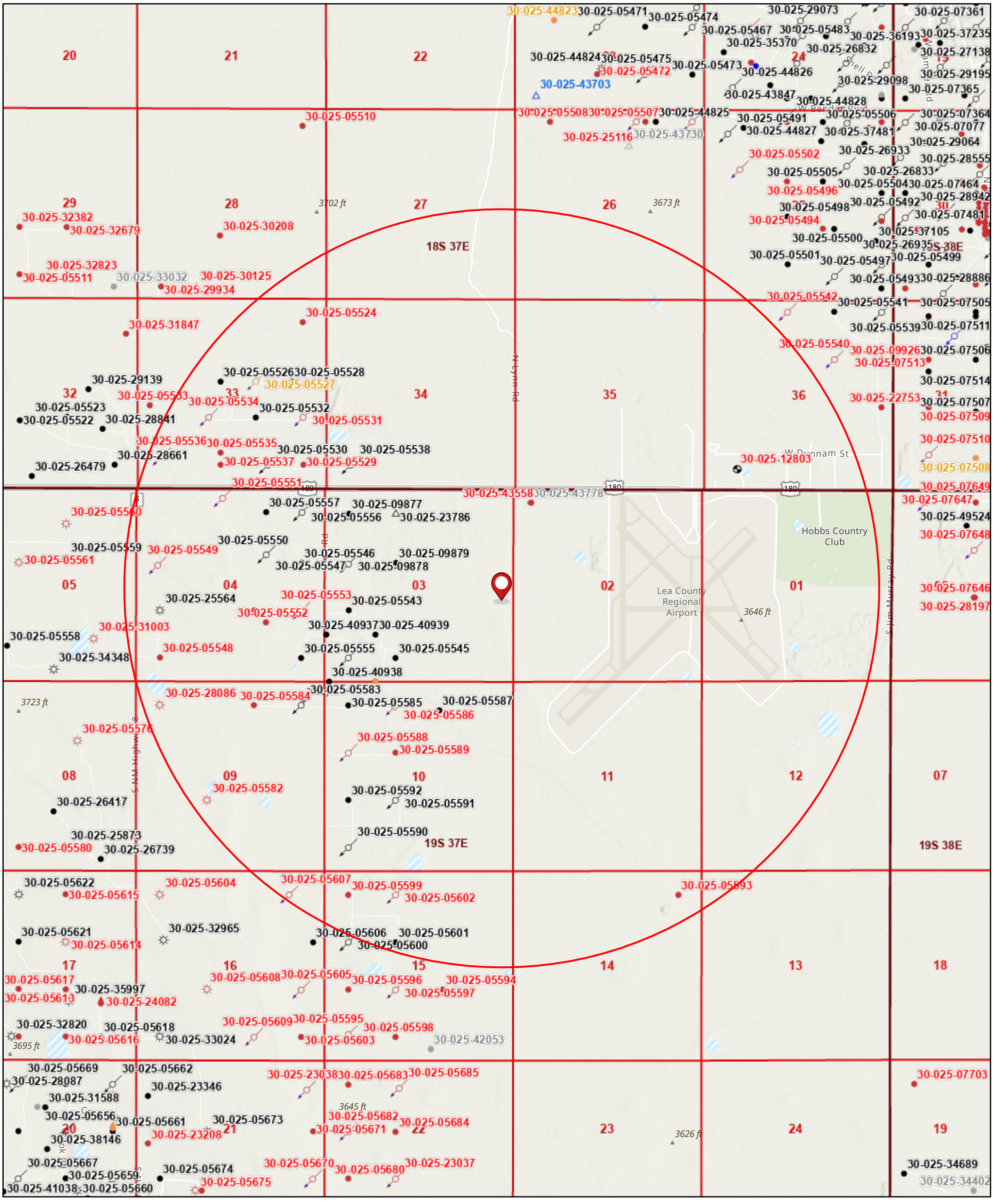
1:36,112

0 0.35 0.7 1.4 mi

0 0.5 1 2 km

Esri, NASA, NGA, USGS, FEMA, BLM, New Mexico State University, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

2 Mile Well Map



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Wells - Large Scale

- Miscellaneous
- Gas, Active
- Gas, Plugged
- Injection, Active
- Injection, New
- Injection, Plugged
- Injection, Temporarily Abandoned
- Oil, Active
- Oil, Cancelled
- Oil, New
- Oil, Plugged
- Oil, Temporarily Abandoned
- Salt Water Injection, Active
- Salt Water Injection, Cancelled
- Salt Water Injection, New
- Salt Water Injection, Plugged
- Water, Plugged
- Water, Temporarily Abandoned
- PLSS First Division
- PLSS Townships

1:36,112

0 0.35 0.7 1.4 mi

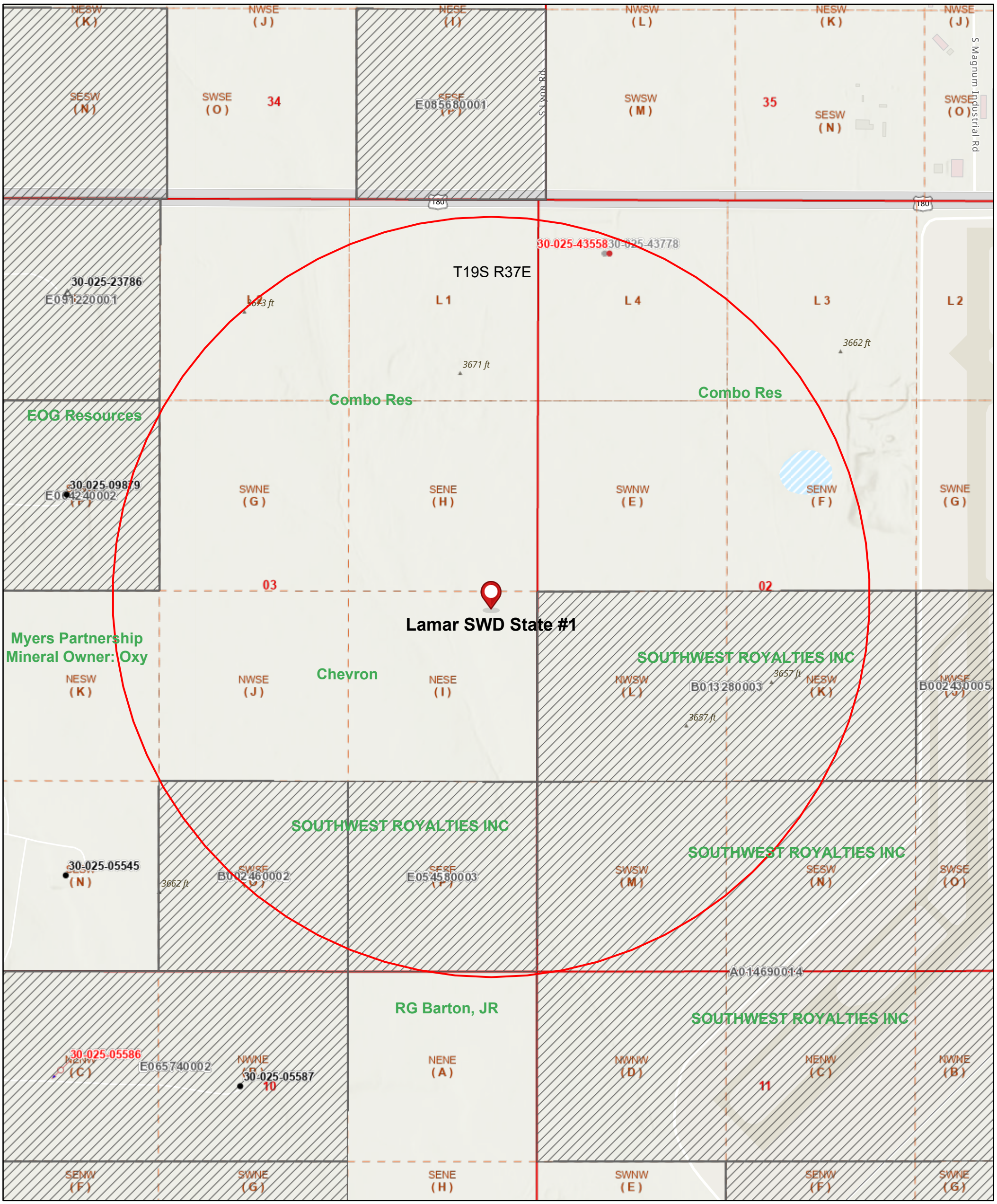
0 0.5 1 2 km

Esri, NASA, NGA, USGS, FEMA, Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., BLM, New Mexico State University, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

1/2 Mile Well & Lease Map



12/8/2023, 11:51:05 AM

Wells - Large Scale

- Injection, Plugged
- Oil, Active
- Oil, Cancelled
- Oil, Plugged
- Salt Water Injection, Active
- Oil and Gas Leasing Restrictions
- Oil and Gas Leases
- PLSS Second Division
- PLSS First Division

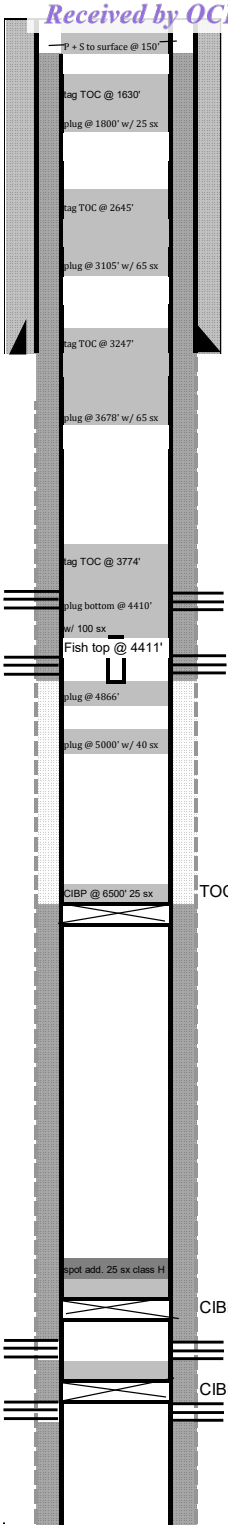
1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

1/2 Mile Well List (Top of Injection Interval: 4,299')								
Well Name	**API#**	**Well Type**	**Operator**	**Status**	**Spud Date**	**Location (Sec., Tn., Rng.)**	**Total Vertical Depth (feet)**	**Penetrate Inj. Zone?**
PIPER 2 STATE #001	30-025-43558	Oil	RILEY PERMIAN OPERATING COMPANY, LLC	Plugged (site released)	3/29/2017	D-02-19S-37E	9,500	Yes
MANTEL 35 #004H	30-025-43778	Oil	RILEY PERMIAN OPERATING COMPANY, LLC	Cancelled	N/A	D-02-19S-37E	N/A	N/A
Notes: One well within the 1/2-mile AOR penetrates the injection interval								

Penetrating Well Casing Data							
Well Name	**API#**	**Status**	**Hole Size**	**Casing Size, Weight**	**Depth Set (ft)**	**Sacks Cement**	**TOC**
PIPER 2 STATE #001	30-025-43558	Plugged	17-1/4"	13-3/8", 54.5#	1,725	1,330	Circ
			12-1/4"	9 5/8", 36#	3,492	863	150'
			8-3/4"	7", 26#	9500 DV @ 4,914	1,410	6,479' Circ



TOC=6479'

Sensor @ ESP=

CIBP @ 8990' TOC @ 8979.5'

9047'-9082'

CIBP @ 9110' TOC @ 9099.5'

9143'-9157'

RILEY EXPLORATION

Plan is to enter the well, drill up the plugs at 4200' and 4635' and circulate MFL. Then set the diagrammed plugs up to surface.

CURRENT WELLBORE DIAGRAM

Piper 2 State #1

FIELD: Eumont (San Andres)	API #: 30-02543558
STR 2, 19S, 37E	AFE #:
ACTUAL: SL: 330 FNL & 330 FWL	BHL:
CO, ST: Lea NM	COMPLETED: 11/28/2017
STATUS: TA'd	ACREAGE:
LATEST RIG WORKOVER:	
DIAGRAM REVISED: 08/16/2018 JW	

Surface

12 1/4" Hole

9 5/8" 36# J-55 LT&C @ 3492

Cemented w/ 1330 Sacks

Production

8 3/4" Hole

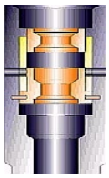
7" 32# L-80 LT&C @ 9,200'

Cemented w/ 1410 Sacks

4270'-4593' Squeezed **4 inch core being taken form 4,250' to 4,450' +-**

4655'-4737'

7" DV Tool @ 4,914'



Tubing

CASING						TUBING
Hole	17 1/4"	12 1/4"	8 3/4"			
Casing	13.375"	9 5/8"	7"			
Weight	54.50#	36#	26#			
Grade	J-55	J-55	L-80			
Thread	ST&C	LT&C	LT&C			
Top	0'	0'	0'			
Bottom	1,725'	3,492'	9,500'			
Mud wt						
Burst						
Collapse						
Capacity						
Cement Type						
Cement Sks	1,330	863	1,410			
Cement Top						

GROUND ELEV: 3,688.0'	LOG ELEV:	KB: 25'	
POP:	FTP:	LTP:	

TD:	9,800'
TVD:	9,799'
PBTD:	
KOP:	
LP:	

WELL HEAD PROGRAM

SECTION A:
SECTION B:
SECTION C:

TREE:

COMPLETION HISTORY

Date	Top Perf Depth	Bottom Perf Depth	Feet Perf'd	Open	Squeez'd	Holes	Cluster Spacing	Phasing Degree
5/31/2017	9143	9157	14	X		62	4 spf	60
6/6/2017	9073	9082	9	X		36	4 spf	90
	9047	9052	5	X		20	4 spf	90
6/26/2017	4730	4737	7	X		28	4 spf	90
	4705	4730	25	X		100	4 spf	90
	4680	4705	25	X		100	4 spf	90
	4655	4680	25	X		100	4 spf	90
6/29/2017	4565	4593	28		X	112	4 spf	90
	4540	4565	25		X	100	4 spf	90
	4515	4540	25		X	100	4 spf	90
	4490	4515	25		X	100	4 spf	90
7/4/2017	4440	4470	30		X	120	4 spf	90
	4420	4440	20		X	80	4 spf	90
7/7/2017	4365	4390	25		X	100	4 spf	90
	4340	4365	25		X	100	4 spf	90
	4315	4340	25		X	100	4 spf	90
	4290	4315	25		X	100	4 spf	90
	4270	4290	20		X	80	4 spf	90

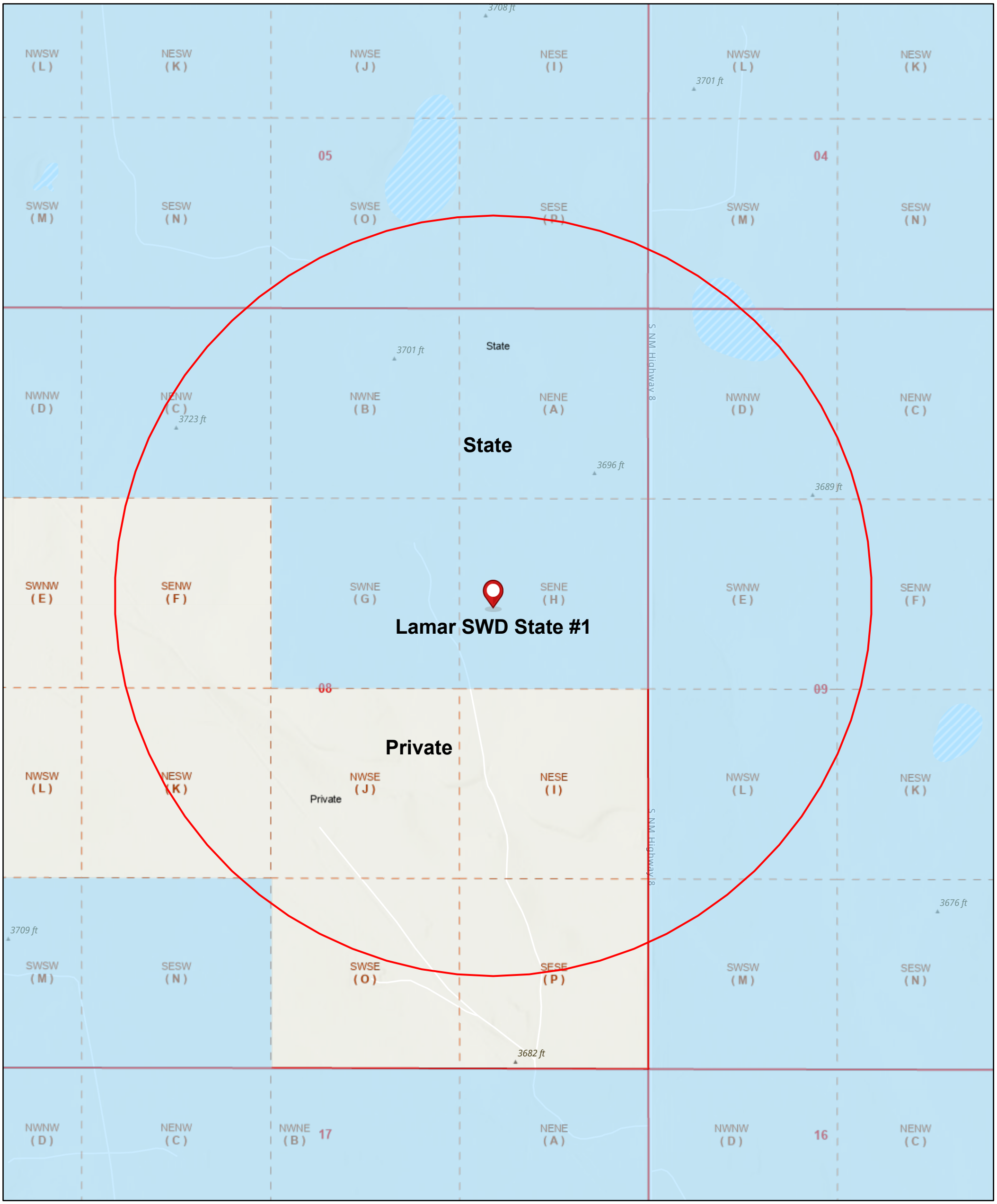
Perfs		
9143	9157	
9047	9082	
4655	4737	
4270	4390	Squeezed
4420	4470	Squeezed
4490	4593	Squeezed

CIBP top	base	Plugback
9143	9157	9110
9047	9082	8990
4655	4737	4635
4270	4593	4200'

FRAC INFO per stage :

Total Well FRAC INFO RECAP :

1/2 Mile Surface Ownership Map



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Land Ownership

- P
- S
- PLSS Second Division
- PLSS First Division

1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

1/2 Mile Mineral Ownership Map

12/12/2023, 4:29:48 PM

Mineral Ownership

N-No minerals are owned by the U.S.

PLSS Second Division

PLSS First Division

1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

Attachment 3

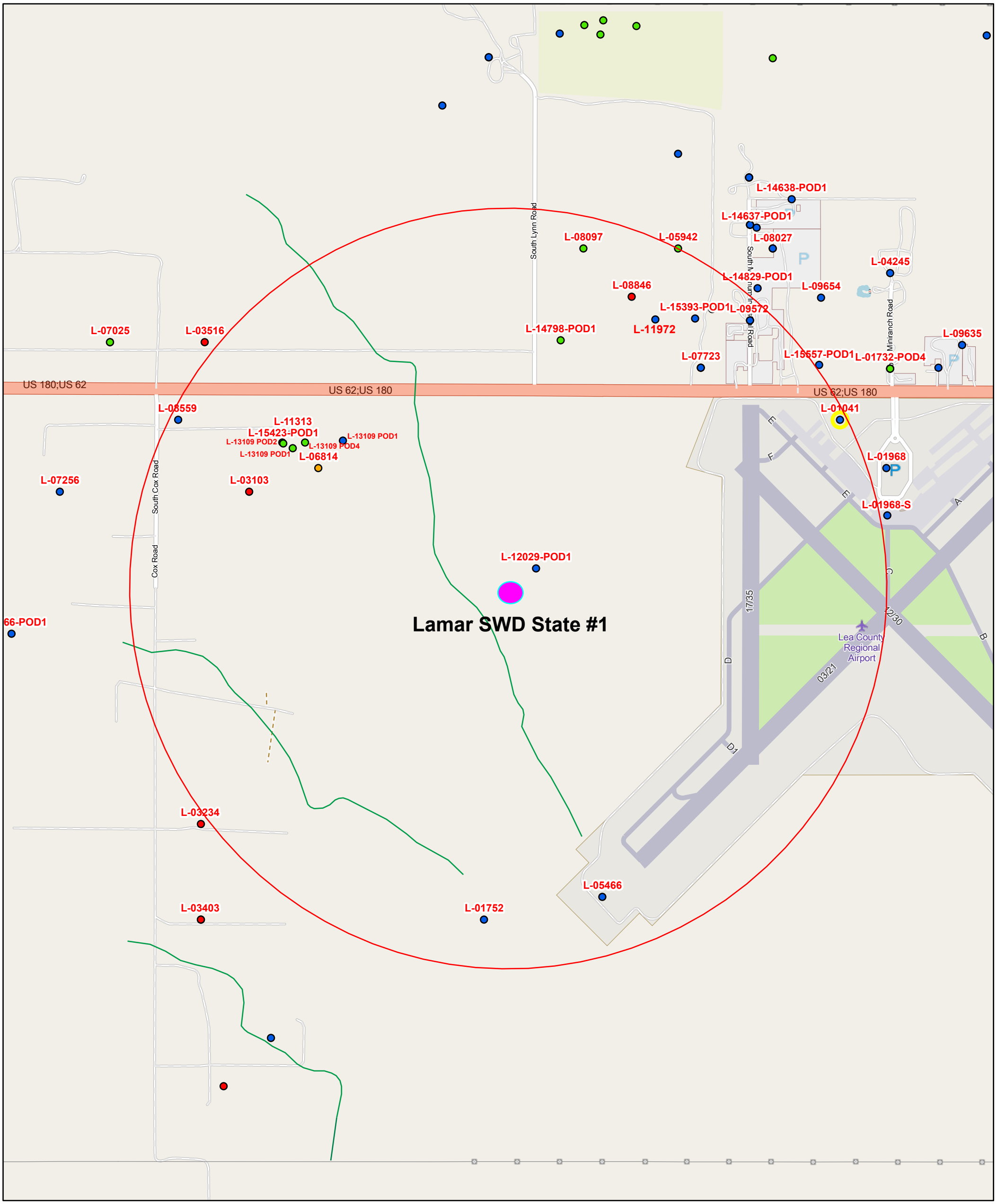
Source Formation Water Analysis																						
Well Name	API	Latitude	Longitude	Section	Township	Range	Unit	Ftgns	Ftgew	County	State	Formation	Sampled	PH	TDS (Mg/L)	Sodium (Mg/L)	Calcium (MG/L)	Iron (MG/L)	Magnesium (MG/L)	Manganese (MG/L)	Chloride (MG/L)	Bicarbonate (MG/L)	Sulfate (MG/L)
STATE NPA #001	3002503156	32.6879654	-103.5031815	6	19S	35E	L	1980S	660W	LEA	NM	BONE SPRING	1960	7.7	25800.0						14100.0	830.0	1120.0
SHOOTING STAR STATE SWD #001	3002529805	32.7594261	-103.4270935	11	18S	35E	J	1650S	2310E	LEA	NM	BONE SPRING	2001	6.2			15600.0	2.5	981.9		148248.0	244.0	650.0
SINCLAIR STATE #002	3002503123	32.7386246	-103.4561005	21	18S	35E	A	660N	660E	LEA	NM	WOLFCAMP	1960	7.1	60950.0						33568.0	1087.0	3049.0
IRONHOUSE 19 STATE COM #001H	3002540676	32.7266121	-103.499527	19	18S	35E	N	200S	1800W	Lea	NM	BONE SPRING 2ND SAND	2014	6.4	182863.9	58171.0	4944.4	49.0	1892.6	1.4	113954.0	195.2	0.0
IRONHOUSE 19 STATE COM #004H	3002541245	32.7264938	-103.5014343	19	18S	35E	M	150S	1215W	Lea	NM	BONE SPRING 2ND SAND	2014	6.2	189029.2	64016.2	5319.3	38.8	2044.4	1.5	113566.0	158.6	0.0
IRONHOUSE 19 STATE COM #002H	3002541094	32.7271118	-103.4903336	19	18S	35E	P	410S	630E	Lea	NM	BONE SPRING 2ND SAND	2014	6.0	205332.0	72646.0	4828.0	39.0	2316.0	2.0	130450.0	488.0	1503.0
IRONHOUSE 20 STATE COM #001	3002540611	32.7265129	-103.4774857	20	18S	35E	O	200S	1980E	Lea	NM	BONE SPRING 2ND SAND	2014	6.1	186865.0	65638.0	4698.0	16.0	1700.0	1.0	116510.0	1098.0	1804.0
IRONHOUSE 20 STATE #002H	3002540748	32.7265129	-103.4731903	20	18S	35E	P	200S	660E	Lea	NM	BONE SPRING 2ND SAND	2014	6.6	196865.0	66738.0	4631.0	23.0	1790.0	1.0	116580.0	1298.0	1894.0
IRONHOUSE 19 STATE COM #003H	3002541050	32.7264977	-103.4941711	19	18S	35E	O	175S	1810E	Lea	NM	BONE SPRING 2ND SAND	2014	6.2	178457.0	56874.0	6125.0	22.0	1457.0	1.0	125412.0	845.0	849.0
HAMON STATE #001	3002503140	32.7175827	-103.4464035	27	18S	35E	K	2310S	2310W	LEA	NM	BONE SPRING			154510.0						96360.0	430.0	1210.0
LEA 403 STATE #001	3002503126	32.7386093	-103.4518051	22	18S	35E	D	660N	660W	LEA	NM	BONE SPRING	1958	6.7	255451.0						156699.0	327.0	779.0

Attachment 4

Injection Formation Water Analysis																		
Well Name	API	Latitude	Longitude	Section	Township	Range	Unit	Ftgns	Ftgew	County	State	Formation	Sampled	PH	TDS (Mg/L)	Chloride (MG/L)	Bicarbonate (MG/L)	Sulfate (MG/L)
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			10905	2350	1100	3700
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			26735	14500	1370	1020
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			40250	20800	1390	3100
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			71110	39800	810	3500
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			156218	95130	176	771
NORTH MONUMENT G/SA UNIT #001	3002505647	32.6512489	-103.2843475	19	19S	37E	A	660N	660E	Lea	NM	SAN ANDRES	1964	6.0		10200	592	1938
GOODWIN #002	3002520651	32.7204323	-103.2928467	30	18S	37E	F	1980N	1980W	LEA	NM	SAN ANDRES			80467	45060	1492	3315
GOODWIN #002	3002520651	32.7204323	-103.2928467	30	18S	37E	F	1980N	1980W	LEA	NM	SAN ANDRES			69848	39130	1225	3114
NORTH HOBBS UNIT #001	3002505449	32.7530632	-103.21138	13	18S	37E	D	660N	660W	LEA	NM	SAN ANDRES	1960	8.0	12100	4500	504	2300
NORTH HOBBS UNIT #001	3002505449	32.7530632	-103.21138	13	18S	37E	D	660N	660W	LEA	NM	SAN ANDRES			12100	4541	509	2321
BOBBI STATE WF UNIT #006	3002503978	32.7231979	-103.373436	29	18S	36E	B	990N	1650E	LEA	NM	SAN ANDRES			20882	11190	645	1232
STATE NG #001	3002522795	32.7349815	-103.3057404	24	18S	36E	G	1980N	1980E	LEA	NM	SAN ANDRES	1968	6.5	265665	157000	98	5400
STATE NG #001	3002522795	32.7349815	-103.3057404	24	18S	36E	G	1980N	1980E	LEA	NM	SAN ANDRES	1968	6.3	203913	122000	110	3000
GRAHAM STATE NCT F #003	3002512476	32.6149902	-103.3056641	36	19S	36E	J	1980S	1980E	LEA	NM	SAN ANDRES	1900	6.5		16406	611	
NORTHWEST EUMONT UNIT #156	3002504099	32.617733	-103.3518143	33	19S	36E	H	2310N	330E	Lea	NM	SAN ANDRES	1960	7.0		38119	405	4317
GRAHAM STATE NCT F #003	3002512476	32.6149902	-103.3056641	36	19S	36E	J	1980S	1980E	Lea	NM	SAN ANDRES	1964	6.5		16406	611	
GRAHAM STATE NCT F #003	3002512476	32.6149902	-103.3056641	36	19S	36E	J	1980S	1980E	LEA	NM	SAN ANDRES			26344			
E M E SWD #008	3002506017	32.5895042	-103.2725601	8	20S	37E	G	1980N	2310E	LEA	NM	SAN ANDRES	1964	8.5	65365	36905	560	1460
THEODORE ANDERSON #002	3002506139	32.5785942	-103.2758102	17	20S	37E	C	660N	1980W	Lea	NM	SAN ANDRES	1964	6.7		67245	564	489
E M E SWD #008	3002506017	32.5895042	-103.2725601	8	20S	37E	G	1980N	2310E	LEA	NM	SAN ANDRES			65361	36900	560	1460
EUNICE MONUMENT UNIT #031	3002506169	32.5531693	-103.2843781	19	20S	37E	P	660S	660E	LEA	NM	SAN ANDRES			91120	59850	0	722

Attachment 5

1 Mile Water Well Map



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GIS WATERS PODs
- Active
- Pending
- Capped
- Plugged

NHD Flowlines
- Artificial Path
- Stream River

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

Water Well Sampling Table					
Water Well ID	**OSE Status**	**Owner**	**Available Contact Information**	**Use**	**Notes**
L 01041	Active	J. A. Gunn	1701 East Marland Hobbs, NM	Domestic	Meets sampling criteria. Attempts to contact the owner and sample the water well has been unsuccessful.
L 11313	Active	NM Commissioner Of Public Land	Nabors Well Services LTD William B. (Benny) Baldwin 515 West Greens RD STE 1170 Houston, TX 77067	Oil Field Mainenance	
L 12029 POD1	Active	Murty Eubanks	5709 W. Stiles Hobbs, NM 88242	Domestic	Meets sampling criteria. Attempts to contact the owner and sample the water well has been unsuccessful.
L 11972 POD1	Active	Stallion Oil Field Service	5621 Dunnam Hobbs, NM 88240	Sanitary - Commercial	
L 03103	Plugged	Makin Drilling Company	P.O. Box 1628 Hobbs, NM	Prospecting	
L 03081	Active	L&K Ranch Llc	P.O. Box 1503 Hobbs, NM 88241	Domestic	Meets sampling criteria. Attempts to contact the owner and sample the water well has been unsuccessful.
L 05466	Active	Harry Huston	Box 1082 Hobbs, NM	Domestic	Meets sampling criteria. Attempts to contact the owner and sample the water well has been unsuccessful.
L 13109 POD1	Active	New Mexico State Land Office	P.O. Box 1148 Santa Fe, NM 87504	Monitoring	
L 13109 POD2	Pending	Entech Consulting Corp	P.O. Box 9843 Midland, TX 79708	Monitoring	
L 01752	Active	Harry Huston	Box 1082 Hobbs, NM	Irrigation	Meets sampling criteria. Attempts to contact the owner and sample the water well has been unsuccessful.
L 06814	Capped	Moran Oil Prod & Dilling Corp	Box 1919 Hobbs, NM 88240	Exploration	
L 10028	Active	Don Rogers	6510 W. Carlsbad Hwy Hobbs, NM 88240	Domestic	Meets sampling criteria. Attempts to contact the owner and sample the water well has been unsuccessful.
L 07723	Active	L&K Ranch Llc	P.O. Box 1503 Hobbs, NM 88240	Domestic & Livestock	Meets sampling criteria. Attempts to contact the owner and sample the water well has been unsuccessful.
L 08097	Pending	Harry S Klein	P.O. Box 1503 Hobbs, NM 88240	Domestic	
L 09572	Active	New Mexico State Highway Dept	P.O. Box 1457 Roswell, NM 88202	Sanitary - Commercial	
L 08559	Active	Jake Diel Paving Co.	C/o Abbott Brothers Drilling P.O. Box 637 Hobbs, NM 88240	Sanitary - Commercial	
L 08846	Plugged	Larry Shed	1700 W. Marland Hobbs, NM 88240	Domestic	
L 13109 POD3	Pending	Entech Consulting Corp	P.O. Box 9843 Midland, TX 79708	Monitoring	
L 13109 POD4	Pending	Entech Consulting Corp	P.O. Box 9843 Midland, TX 79708	Monitoring	
L 14798 POD1	Pending	L&K Ranch Llc	P.O. Box 1503 Hobbs, NM 88240	Domestic & Livestock	
L 14871 POD	Pending	L&K Ranch Llc	P.O. Box 1503 Hobbs, NM 88240	Domestic & Livestock	
L 15393 POD1	Active	L&K Ranch Llc	2904 W 2Nd St Roswell, NM 88201	Domestic & Livestock	Meets sampling criteria. Attempts to contact the owner and sample the water well has been unsuccessful.
L 15423 POD1	Pending	Pilot Water Solutions	20 Greenway Plaza Houston, TX 77046	Exploration	
Notes: Attempts to contact and sample the candidate water wells will continue and associated analyses will be submitted to OCD upon completion.					

Attachment 6

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
December 14, 2023
and ending with the issue dated
December 14, 2023.

LEGAL NOTICE
December 14, 2023

Pilot Water Solutions SWD LLC, 20 Greenway Plaza, Suite 200, Houston, TX 77046, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for commercial saltwater injection into its Lamar SWD State #1. This will be a new well located 2,596' FSL & 351' FEL in Section 3 Township 19S Range 37E in Lea County, New Mexico. The purpose of the well is to inject produced water from permitted oil and gas wells in the area for commercial disposal into the San Andres formation at depths of 4,299' – 6,780' at a maximum surface injection pressure of 859 psi and a maximum injection rate of 25,000 barrels of water per day.

Objections or requests for hearing must be filed with the New Mexico Oil Conservation Division within fifteen (15) days. Any objection or request for hearing should be mailed to the Oil Conservation Division, 1220 South St. Francis Dr. Additional information may be obtained by contacting the operator contact, David Grounds, at 713-307-8752.
#00285764

Publisher

Sworn and subscribed to before me this
14th day of December 2023.

Business Manager

My commission expires
January 29, 2027

(Seal)

STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027

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 publication has been made.

67117907 00285764

NATE ALLEMAN
ACE ENERGY ADVISORS
501 E. FRANK PHILLIPS BLVD.
SUITE 201
BARTLESVILLE, OK 74006

Statement of Affected Person Notification

A copy of the C-108 application has been provided to the following Affected Persons as notification of the subject Application for Authorization to Inject (C-108).

Entity Name	Entity Address	Mailing Date
Site Surface Owner		
State Land Office	P.O. Box 1148 Santa Fe, NM 87504	12/29/2023
OCD District		
OCD - District 1	1625 N. French Drive Hobbs, NM 88240	12/29/2023
Leaseholders		
EOG Resources Inc	P.O. Box 2267 Midland, TX 79702	12/29/2023
Southwest Royalties, Inc	200 N Loraine St Ste 400 Midland, TX 79701	12/29/2023
Chevron	6301 Deauville Blvd Midland, TX 79706	12/29/2023
Combined Resource Group, LLC	12101 MENAUL NE, STE. B, ALBUQUERQUE, NM 87112	12/29/2023
R G Barton, Jr	1919 N Turner St Hobbs, NM 88240-2712	12/29/2023
Oxy USA WTP Limited Partnership	5 Greenway Plaza Ste 110 Houston, TX 77046	12/29/2023

Note: contact information could not be identified for “Myers Partnership”, identified as a leaseholder of the SW Quarter of Section 3 T19S R37E. Therefore, OXY, the mineral owner of record for that tract, is listed on the Leaseholder Map in Attachment 2 and is being notified as an Affected Party for this application.

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

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Midland TX 79702-2267

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Midland TX 79701-4735

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Oxy USA WTP Limited Partnership
5 Greenway Plz Ste 110
Houston TX 77046-0521

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
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Combined Resource Group
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Albuquerque NM 87112-2460

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Ace Energy Advisors
501 Se Fph Blvd Ste 201
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R G Barton, Jr
1919 N Turner St
Hobbs NM 88240-2712

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

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

CONDITIONS

Action 314044

CONDITIONS

Operator: Pilot Water Solutions SWD LLC 20 Greenway Plaza, Suite 200 Houston, TX 77046	OGRID: 331374
	Action Number: 314044
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	2/13/2024