

AE Order Number Banner

Application Number: pMSG2404539121

SWD-2601

Pilot Water Solutions SWD LLC [331374]



January 24, 2024

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

Subject: Pilot Water Solutions SWD LLC
Application for Authorization to Inject
Sanders 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 Sanders 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 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,

A handwritten signature in black ink that reads "Nathan Alleman".

Nate Alleman
Chief Regulatory Advisor
Ace Energy Advisors

| | | | |
|-----------|-----------|-------|---------|
| 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: Sanders SWD State #1 API: 30-025-
 Pool: SWD; San Andres Pool Code: 96121

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

- 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 | |
|--------------------------|------------------------------|
| <input type="checkbox"/> | Notice Complete |
| <input type="checkbox"/> | 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.

David Grounds

Print or Type Name

David Grounds

Signature

01/24/2024

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 _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: Pilot Water Solutions SWD LLC

ADDRESS: 20 Greenway Plaza, Suite 500, 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 _____ 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: 01/24/2024

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: Sanders SWD State #1

Legal Location: 499' FSL 1,302' FEL - Unit P – Section 15 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 | 1,540 | 2,413.8 | 0 | Circulation |
| Production | 12-1/4 | 9-5/8 | 4,949 | 1,477.3 | 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 4,543'

- (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 4,543'

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

Pool Name - SWD; San Andres

Pool Code – 96121

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

Cased-hole injection between 4,543' - 4,949'

- (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 (2,843')
 - Seven Rivers (3,116')
 - Queen (3,716')
 - Grayburg (4,075')
- **Underlying**
 - Tubb (6,645')

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**:

- 1/2-Mile and 2-Mile Well Map
- 1/2-Mile Well List
- 1/2-Mile and 2-Mile Lease Map
- 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**. No wells within the 0.5-mile AOR penetrate 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: 908 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 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 is located in the San Andres formation between the depths of 4,543 and 4,949 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. Upper and lower confinement will be provided by tight carbonate facies present within San Andres that occur above and below the porous injection interval. The upper confining interval immediately underlies the Grayburg formation and ranges from 125-220 net thick in offset open hole logs. The lower confining interval ranges from 130-200 net thick in open hole logs near the proposed locations.

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 1,515'. Water wells in the area for domestic/livestock use are drilled to a depth of approximately 50' - 150'.

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 8 groundwater wells (3 active, 1 capped, 4 plugged) are located within 1 mile of the proposed SWD location.

OSE data indicate that seven of the water wells are used for oil and gas prospecting and, therefore, do not meet the sampling requirements. One water well (L-00669-POD7) meets sampling criteria based on the listed status and use. Multiple attempts to contact the water well owner to sample the water well have been made. Additional contact attempts will be made and if the well is determined to be active, a sample will be collected 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 1,515'.

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
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazon Road, Artec, 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 96121 | ³ Pool Name SWD; SAN ANDRES |
| ⁴ Property Code | ⁵ Property Name SANDERS SWD STATE | |
| ⁷ OGRID No. 331374 | ⁸ Operator Name PILOT WATER SOLUTIONS SWD LLC | ⁶ Well Number #1 |
| | | ⁹ Elevation 3,634.55' |

¹⁰ Surface Location

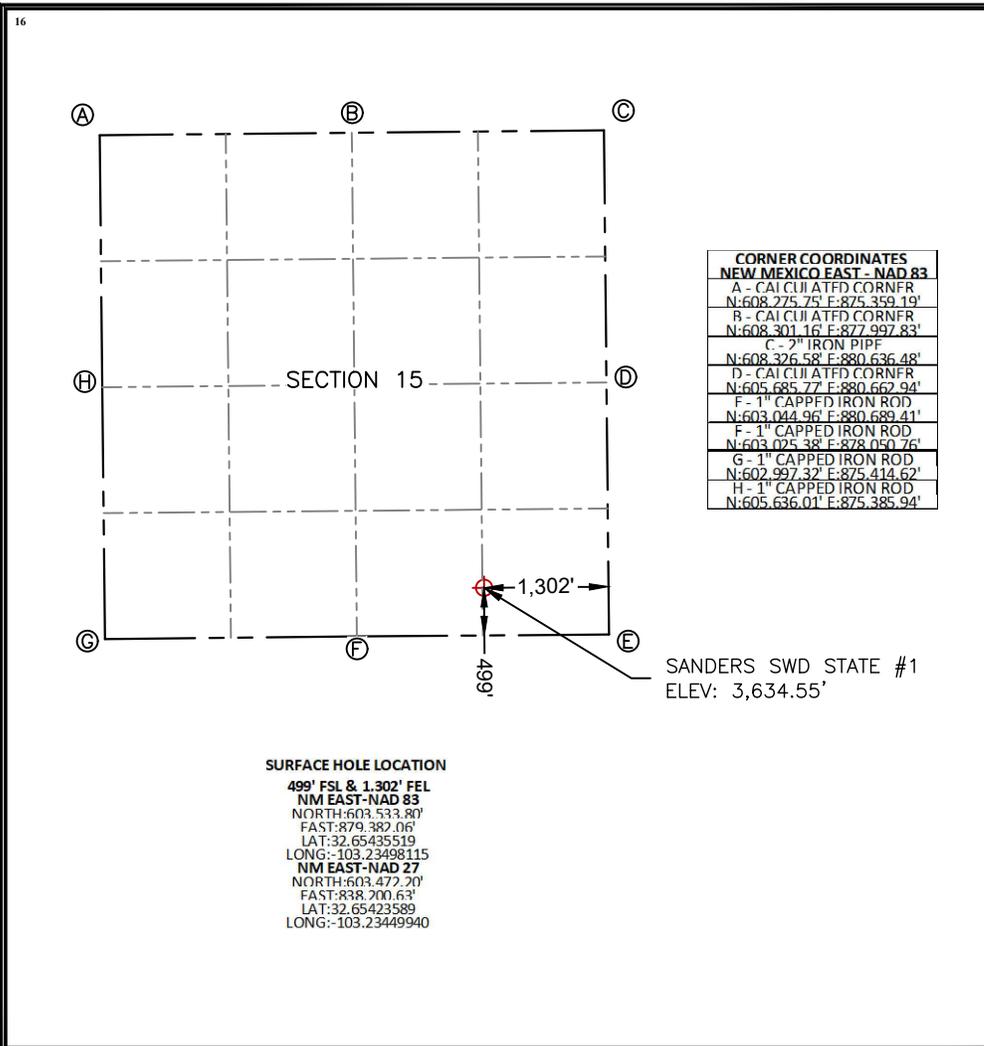
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|-----------|-------------|-------------|---------|---------------|------------------|---------------|----------------|------------|
| P | 15 | 19 S | 37 E | | 499' | SOUTH | 1,302' | 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.



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 01/18/2024

Signature Date

Nate Alleman

Printed Name

nate.alleman@aceadvisors.com

Email 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.

Date: 1/18/2024

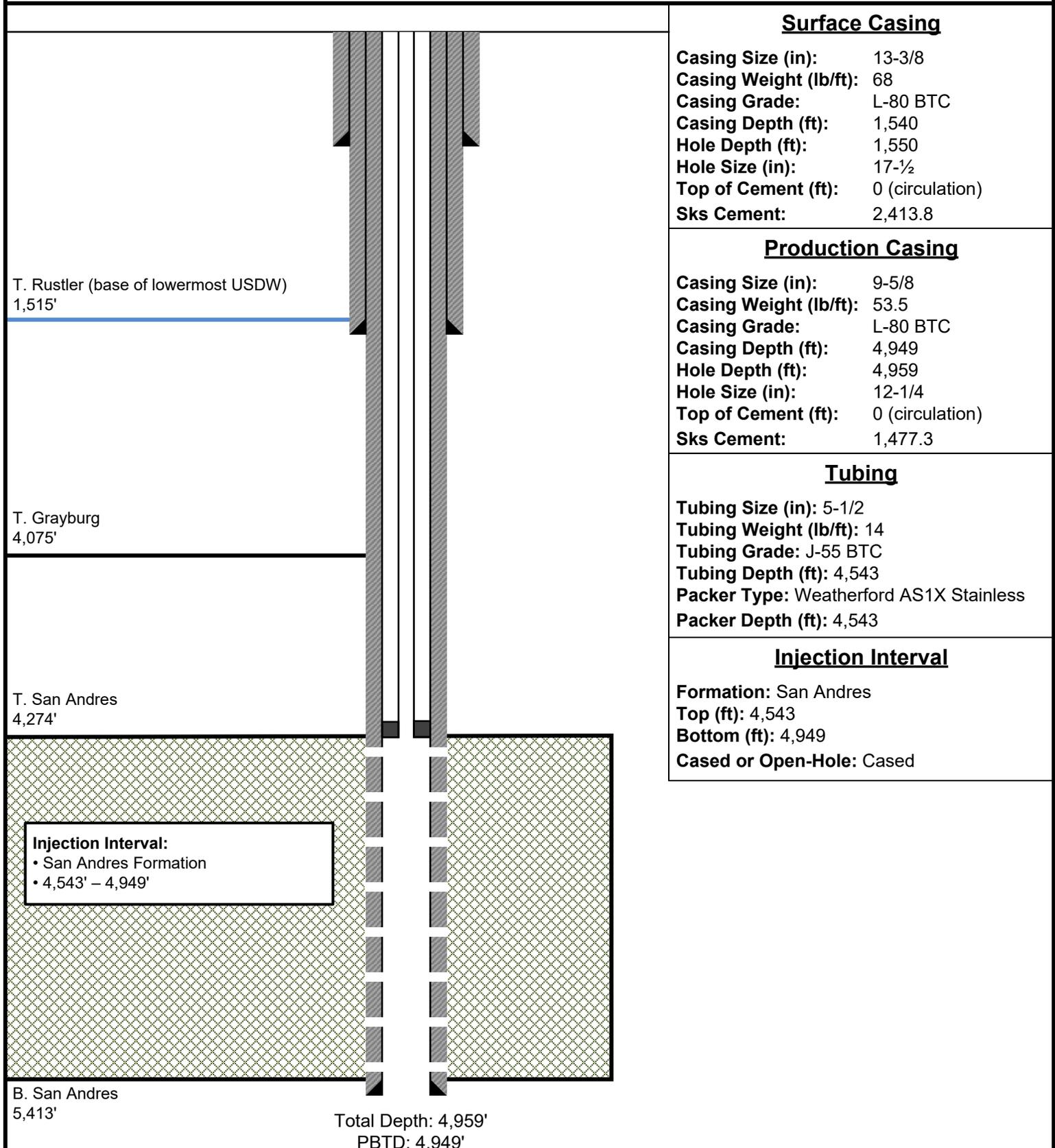


REGISTERED PROFESSIONAL SURVEYOR

MARK J. MURRAY P.L.S. NO. 12177

Pilot Water Solutions SWD LLC

Sanders 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): 1,540
 Hole Depth (ft): 1,550
 Hole Size (in): 17-1/2
 Top of Cement (ft): 0 (circulation)
 Sks Cement: 2,413.8

Production Casing

Casing Size (in): 9-5/8
 Casing Weight (lb/ft): 53.5
 Casing Grade: L-80 BTC
 Casing Depth (ft): 4,949
 Hole Depth (ft): 4,959
 Hole Size (in): 12-1/4
 Top of Cement (ft): 0 (circulation)
 Sks Cement: 1,477.3

Tubing

Tubing Size (in): 5-1/2
 Tubing Weight (lb/ft): 14
 Tubing Grade: J-55 BTC
 Tubing Depth (ft): 4,543
 Packer Type: Weatherford AS1X Stainless
 Packer Depth (ft): 4,543

Injection Interval

Formation: San Andres
 Top (ft): 4,543
 Bottom (ft): 4,949
 Cased or Open-Hole: Cased

Injection Interval:

- San Andres Formation
- 4,543' – 4,949'

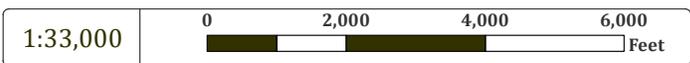
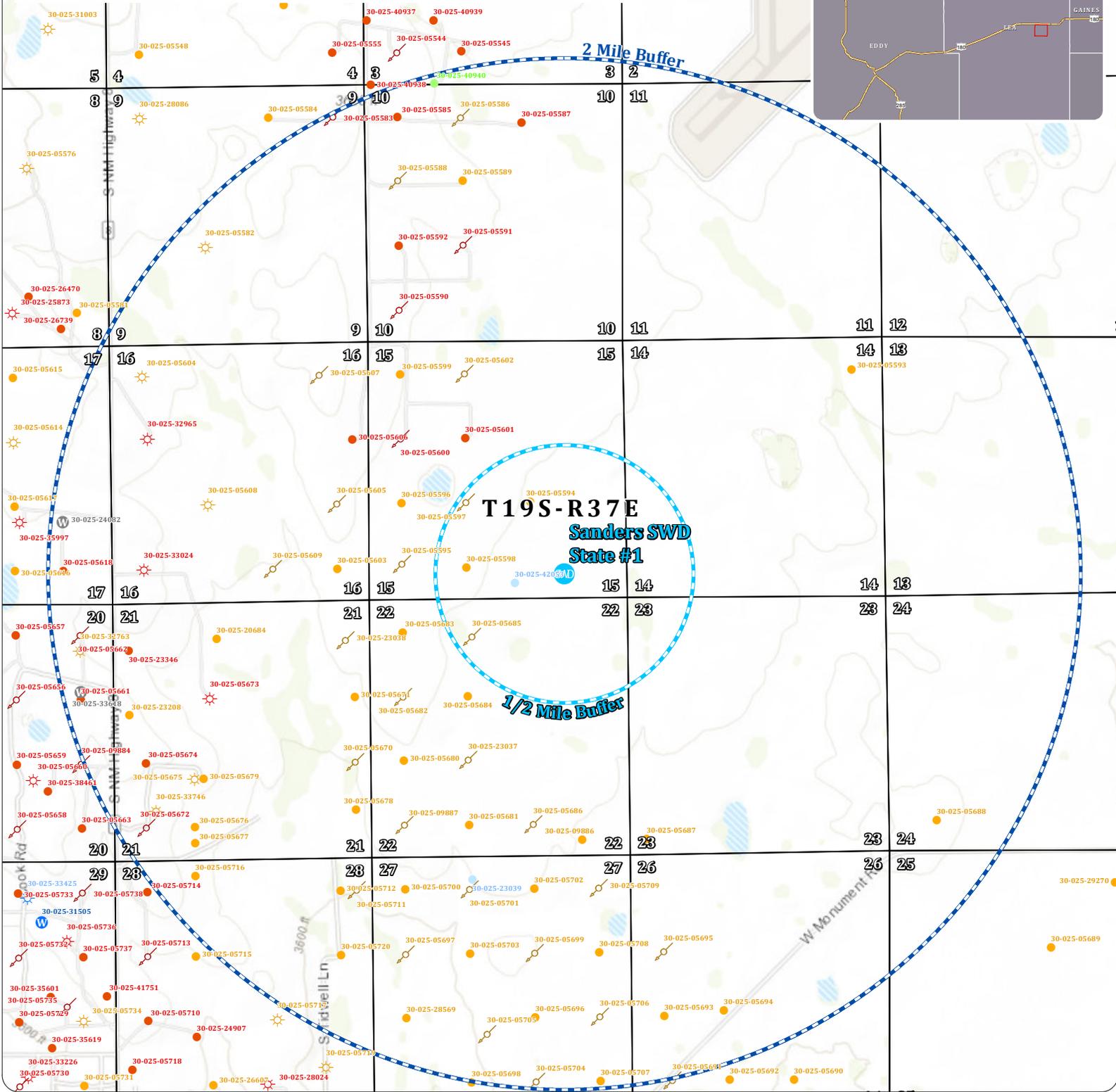
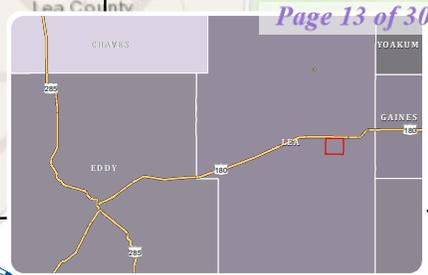
Note: Listed depths and cement volumes are approximates based on available information.

NOT TO SCALE

Attachment 2

WELL MAP

SECTION 15, TOWNSHIP 19 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



Project Managed By:
ACE Energy Advisors
 (918) 237-0559
 nate.allen@aceadvisors.com

Map Prepared By:
COOSA CONSULTING
 (432) 631-4738
 info@coosaconsulting.com

Coordinate System:
 NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
 Projection: Transverse Mercator
 Datum: North American 1983
 False Easting: 541,337.5000
 False Northing: 0.0000
 Central Meridian: -104.3333
 Scale Factor: 0.9999
 Latitude Of Origin: 31.0000
 Units: Foot US

Legend

- Proposed SWD
- 1/2 Mile Buffer
- 2 Mile Buffer
- Gas, Active
- Gas, Cancelled
- Gas, Plugged
- Gas, Temporary Abandonment
- Injection, Active
- Injection, Plugged
- Injection, Temporary Abandonment (expired)
- Oil, Active
- Oil, Cancelled
- Oil, Plugged
- Oil, Temporary Abandonment
- Oil, Zone Plugged (permanent)
- Salt Water Disposal, Active
- Salt Water Disposal, Cancelled
- Salt Water Disposal, Plugged
- Water, Active
- Water, Plugged

Sanders SWD State #1

OPERATOR:
PILOT WATER SOLUTIONS SWD, LLC

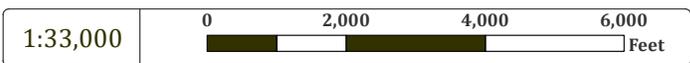
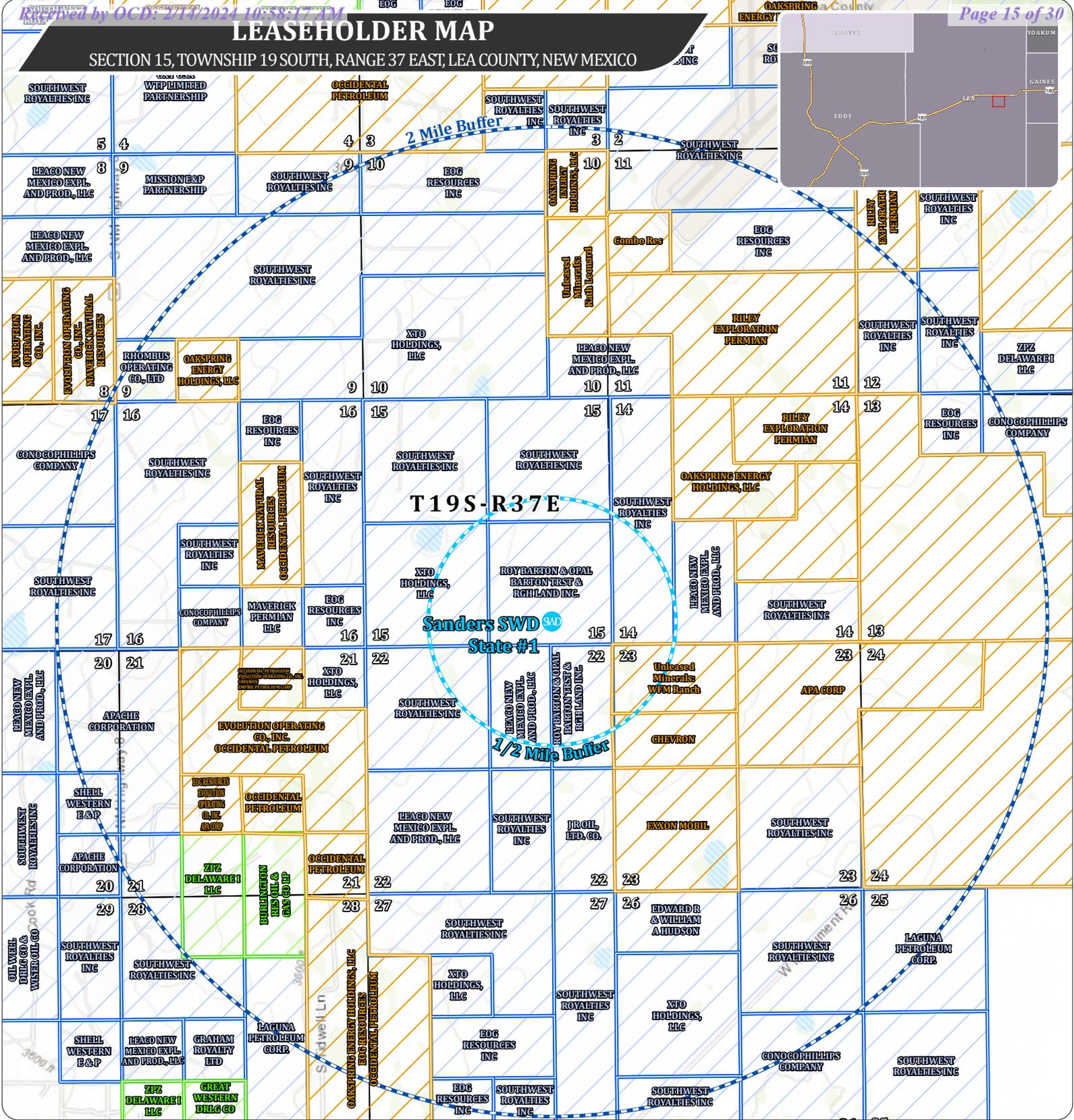
1/2-mile AOR Tabulation for Sanders SWD State #1 (Top of Injection Interval: 4,543')

| Well Name | API# | Well Type | Operator | Status | Spud Date | Location (Sec., Tn., Rng.) | Total Vertical Depth (feet) | Penetrate Inj. Zone? |
|-----------------------|--------------|-----------|---------------------------------|-----------|------------|----------------------------|-----------------------------|----------------------|
| PRE-ONGARD WELL #001 | 30-025-05594 | Oil | PRE-ONGARD WELL OPERATOR | Plugged | 7/15/1957 | J-15-19S-37E | 4,080 | No |
| EAST EUMONT UNIT #049 | 30-025-05598 | Oil | OXY USA WTP LIMITED PARTNERSHIP | Plugged | 6/22/1957 | N-15-19S-37E | 4,045 | No |
| EAST EUMONT UNIT #045 | 30-025-05597 | Injection | OXY USA WTP LIMITED PARTNERSHIP | Plugged | 5/5/1957 | K-15-19S-37E | 4,045 | No |
| EAST EUMONT UNIT #051 | 30-025-05685 | Injection | OXY USA WTP LIMITED PARTNERSHIP | Plugged | 12/27/1956 | C-22-19S-37E | 4,115 | No |
| SPRING STATE #001C | 30-025-42053 | Oil | MACK ENERGY CORP | Cancelled | N/A | O-15-19S-37E | N/A | No |

Notes: No wells within the 1/2-mile AOR penetrate the injection interval

LEASEHOLDER MAP

SECTION 15, TOWNSHIP 19 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



Project Managed By:
ACE Energy Advisors
 (918) 237-0559
 nate.allen@aceadvisors.com

Map Prepared By:
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Coordinate System:
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 Datum: North American 1983
 False Easting: 541,337.5000
 False Northing: 0.0000
 Central Meridian: -104.3333
 Scale Factor: 0.9999
 Latitude Of Origin: 31.0000
 Units: Foot US

Legend

- Proposed SWD
- 1/2 Mile Buffer
- 2 Mile Buffer
- BLM Mineral Leases
- NMSLO Mineral
- Private Mineral

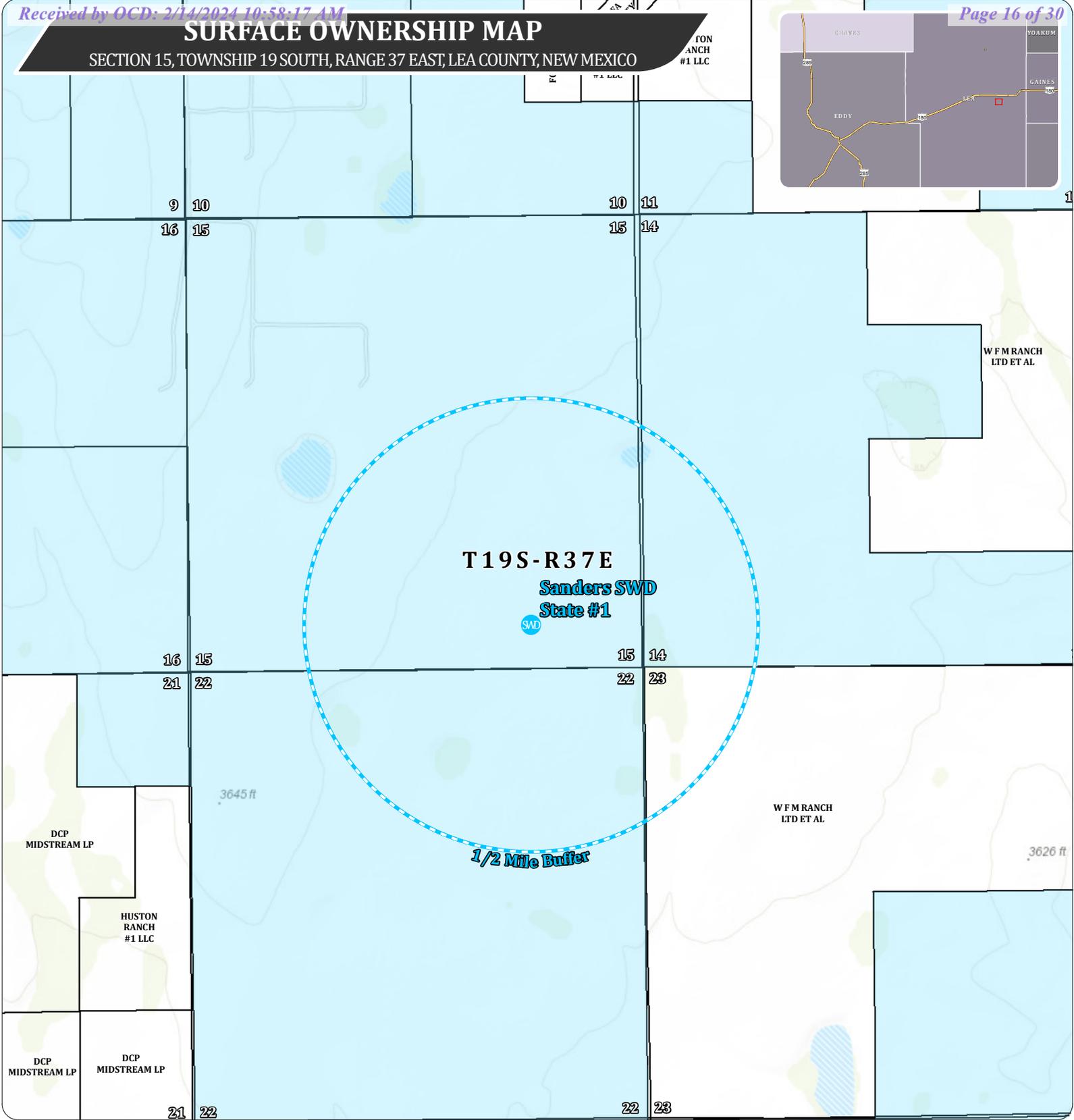
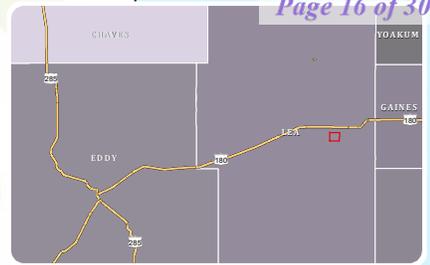
Sanders SWD State #1

OPERATOR:
PILOT WATER SOLUTIONS, LLC

SURFACE OWNERSHIP MAP

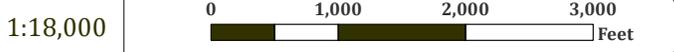
SECTION 15, TOWNSHIP 19 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO

FON
RANCH
#1 LLC



T 19 S - R 37 E
Sanders SWD
State #1

1/2 Mile Buffer



- Legend**
-  Proposed SWD
 -  1/2 Mile Buffer
 -  Federal Land
 -  State of NM Land
 -  Private Land

Sanders SWD State #1

OPERATOR:
PILOT WATER SOLUTIONS SWD, LLC



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(918) 237-0559
nate.alleman@aceadvisors.com

Map Prepared By:

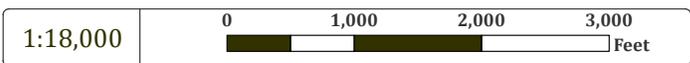
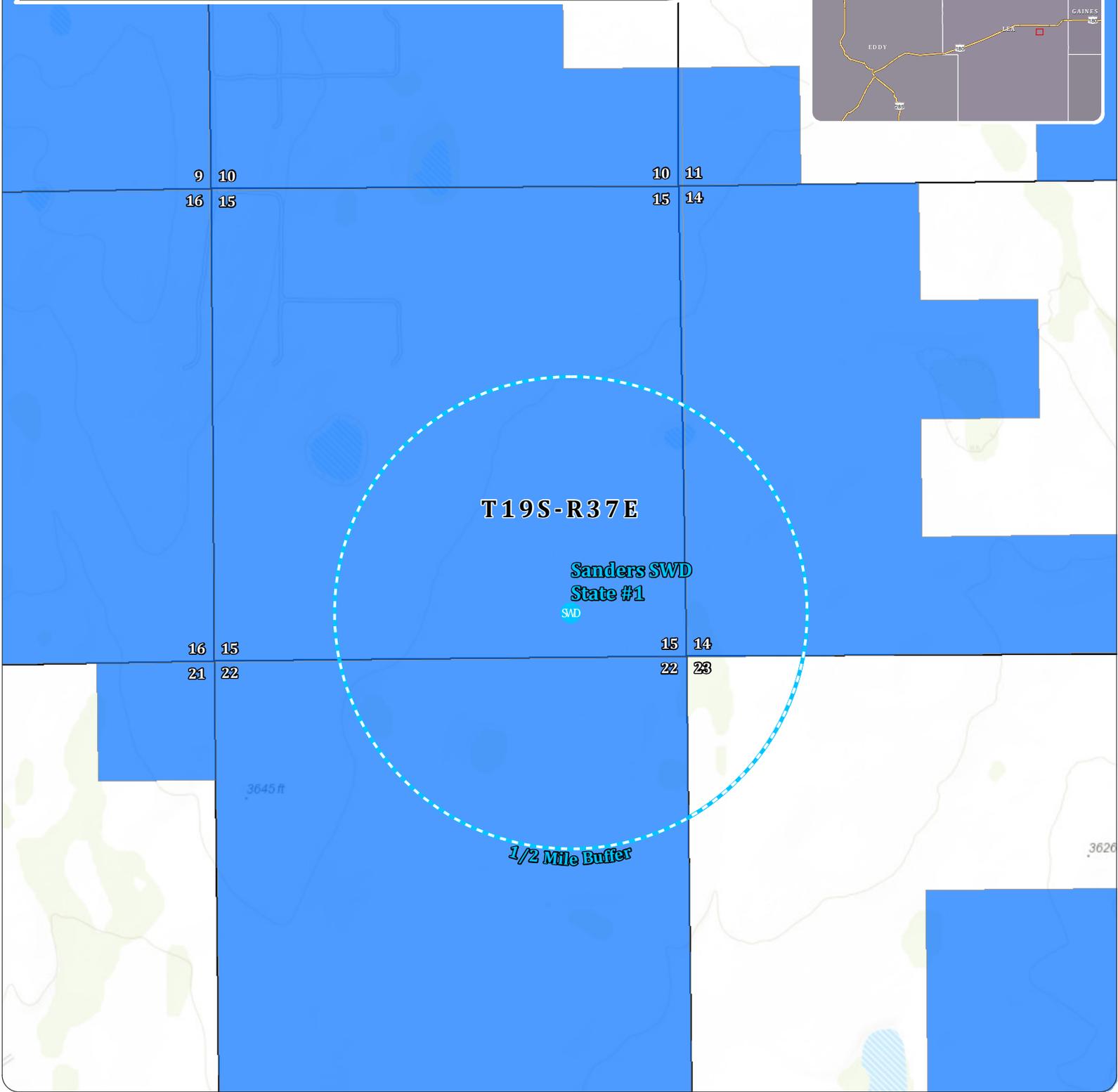
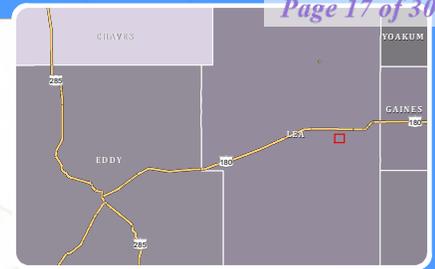
(432) 631-4738
info@coosaconsulting.com

Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Latitude Of Origin: 31.0000
Units: Foot US



MINERAL OWNERSHIP MAP

SECTION 15, TOWNSHIP 19 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



Project Managed By:
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 nate.alleman@aceadvisors.com

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Legend

- Proposed SWD
- 1/2 Mile Buffer
- Subsurface minerals (NMSLO)
- All minerals are owned by U.S. (BLM)
- Private minerals

Sanders SWD State #1

OPERATOR:
PILOT WATER SOLUTIONS SWD, LLC

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 |

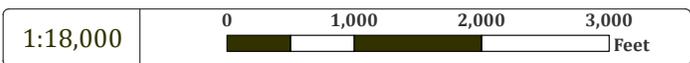
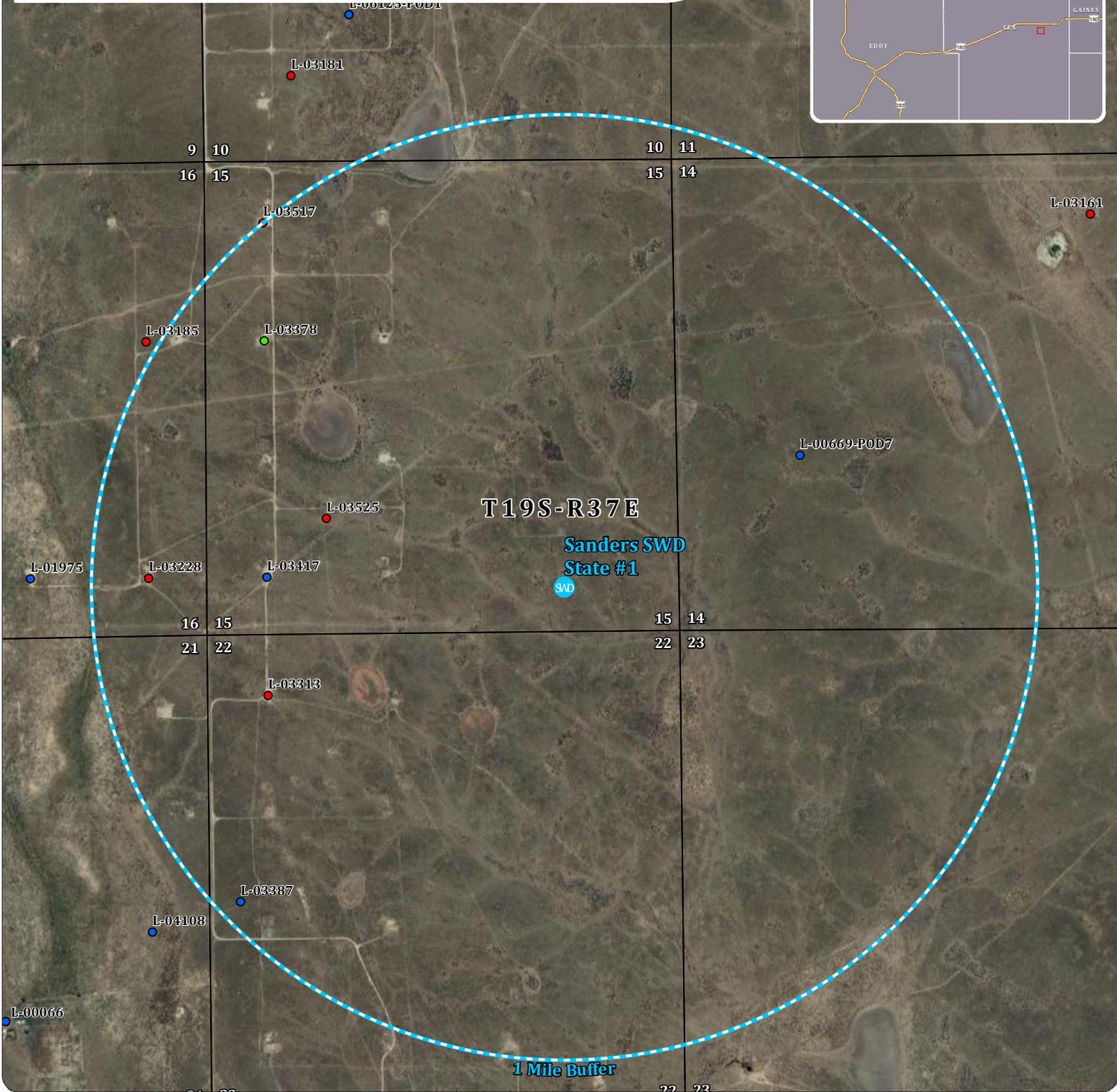
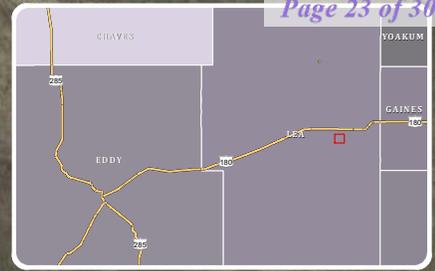
Attachment 4

| 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

WATER WELL MAP

SECTION 15, TOWNSHIP 19 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



Project Managed By:
ACE Energy Advisors
 (918) 237-0559
 nate.alleman@aceadvisors.com

Map Prepared By:
COOSA CONSULTING
 (432) 631-4738
 info@coosaconsulting.com

Coordinate System:
 NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
 Projection: Transverse Mercator
 Datum: North American 1983
 False Easting: 541,337.5000
 False Northing: 0.0000
 Central Meridian: -104.3333
 Scale Factor: 0.9999
 Latitude Of Origin: 31.0000
 Units: Foot US

Legend

- Proposed SWD
- 1 Mile Buffer
- NMOSE Points of Diversion**
- Active
- Pending
- Changed Location of Well
- Inactive
- Capped
- Plugged
- Unknown

Sanders SWD State #1

OPERATOR:
PILOT WATER SOLUTIONS SWD, LLC

| Water Well Sampling Table | | | | | |
|---------------------------|------------|-------------------------------|---------------------------------|-------------|---|
| Water Well ID | OSE Status | Owner | Available Contact Information | Use | Notes |
| L-03228 | Plugged | MAKIN DRILLING COMPANY | BOX 1628, HOBBS, NM | Prospecting | Doesn't meet sampling criteria. |
| L-03313 | Plugged | D-K DRILLING COMPANY | D-K DRILLING COMPANY | Prospecting | Doesn't meet sampling criteria. |
| L-03378 | Pending | MAKIN DRILLING COMPANY | BOX 1628, HOBBS, NM | Prospecting | Doesn't meet sampling criteria. |
| L-03387 | Active | AMERADA PETROLEUM CORPORATION | BOX 668, HOBBS, NM 88240 | Prospecting | Doesn't meet sampling criteria. |
| L-03417 | Active | SHERLO DRILLING COMPANY | BOX 1156, LOVINGTON, NM | Prospecting | Doesn't meet sampling criteria. |
| L-03517 | Plugged | CACTUS DRILLING COMPANY | 217 GREENACRES DRIVE, HOBBS, NM | Prospecting | Doesn't meet sampling criteria. |
| L-03525 | Plugged | DENVER DRILLING CORPORATION | BOX 669, ODESSA, TX 76452 | Prospecting | Doesn't meet sampling criteria. |
| L-00669-POD7 | Active | BRAND WEST FARMS LLC. | P.O BOX 11, ENERGY, TX 76452 | Irrigation | Multiple attempts have been made to contact the listed water well owner (Brand West Farms). If it is determined that the water well is active, a sample will be collected and the associated analysis will be submitted to OCD. |
| Notes: | | | | | |

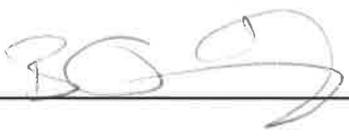
Attachment 6

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Blake Ovard, Editor 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
January 19, 2024
and ending with the issue dated
January 19, 2024.



Editor

Sworn and subscribed to before me this
19th day of January 2024.


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

LEGAL NOTICE
January 19, 2024

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 Sanders SWD State #1. This will be a new well located 499' FSL 1,302' FEL in Section 15 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 4543' - 4949' at a maximum surface injection pressure of 908 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. #00286612

67117907

00286612

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.

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 | 01-24-2024 |
| OCD District | | |
| OCD - District 1 | 1625 N. French Drive Hobbs, NM 88240 | 01-24-2024 |
| Leaseholders | | |
| Southwest Royalties | 200 N Loraine St Ste 400 Midland, TX 79701 | 01-24-2024 |
| XTO Holdings, LLC | 6401 Holiday Hill Rd Midland, TX 79707 | 01-24-2024 |
| Roy G Barton & Opal Barton Trust & RGH Land Inc. | 1919 S. Turner Street Hobbs, NM 88240 | 01-24-2024 |
| Leaco New Mexico Expl. and Prod, Inc. | 2000 Post Oak Blvd Ste 100 Houston, TX 77056 | 01-24-2024 |
| Chevron | 6301 Deauville Blvd Midland, TX 79706 | 01-24-2024 |
| Mineral Owners of Unleased Tracts | | |
| WFM Ranch | 777 Main Street, Ste 3600 Fort Worth, TX 76102 | 01-24-2024 |

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

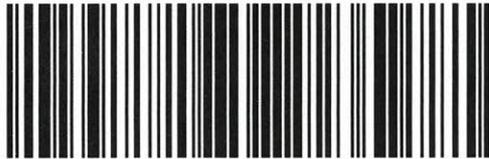
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State Land Office
Po Box 1148
Santa Fe NM 87504-1148

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

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OCD - DISTRICT 1
1625 N French Dr
Hobbs NM 88240-9273

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
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SOUTHWEST ROYALTIES INC
200 N Loraine St Ste 400
Midland TX 79701-4735

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

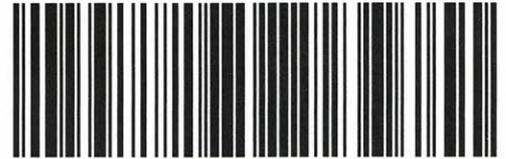
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XTO Holdings, LLC
6401 Holiday Hill Rd
Midland TX 79707-2154

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Roy G & Opal Barton T Land Inc.
1919 N Turner St
Hobbs NM 88240-2712

Nathan Alleman
Ace Energy Advisors
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LEACO NEW MEXICO EXP & PROD., LLC
2000 Post Oak Blvd Ste 100
Houston TX 77056-4497

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

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Chevron USA Inc
6301 Deauville
Midland TX 79706-2964

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

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WFM Ranch
777 Main St Ste 3600
Fort Worth TX 76102-5341

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 314317

CONDITIONS

| | |
|---|--|
| Operator: Pilot Water Solutions SWD LLC 20 Greenway Plaza, Suite 200 Houston, TX 77046 | OGRID: 331374 |
| | Action Number: 314317 |
| | Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO) |

CONDITIONS

| Created By | Condition | Condition Date |
|---------------|-----------|----------------|
| mgebremichael | None | 2/14/2024 |