AE Order Number Banner

Application Number: pMSG2314755059

SWD-2537

GOODNIGHT MIDSTREAM PERMIAN, LLC [372311]

ALL CONSULTING
GOVERNMENT RELATIONS · ENERGY · PLANNING · TECHNOLOGY
ENGINEERING · ENVIRONMENTAL

May 12, 2023

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

Subject: Goodnight Midstream Permian, LLC – Seaver SWD # 1
Application for Authorization to Inject

To Whom It May Concern,

On behalf of Goodnight Midstream Permian, LLC (Goodnight), ALL Consulting, LLC (ALL) is submitting the enclosed Application for Authorization to Inject for the Seaver SWD #1, a proposed salt water disposal well, in Lea County, NM.

Should you have any questions regarding the enclosed application, please contact Nate Alleman at (918) 382-7581 or nalleman@all-llc.com.

Sincerely,
ALL Consulting

Nate Alleman
Sr. Regulatory Specialist

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: _____ **OGRID Number:** _____
Well Name: _____ **API:** _____
Pool: _____ **Pool Code:** _____

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.

Date

Print or Type Name

Phone Number

Nathan Alleman
Signature

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: Goodnight Midstream Permian, LLC

ADDRESS: 5910 N Central Expressway, Suite 850, Dallas, TX 75206

CONTACT PARTY: Grant Adams PHONE: 214-444-7388(0)

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: Nathan Alleman TITLE: Sr. Regulatory Specialist

SIGNATURE:  DATE: 5/12/2023

E-MAIL ADDRESS: nalleman@all-llc.com

XV. 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

Side 2

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.

Application for Authorization to Inject
Well Name: Seaver SWD #1

III – Well Data (*The Wellbore Diagram is included as **Attachment 1***)

A.

(1) General Well Information:

Operator: Goodnight Midstream Permian, LLC (OGRID No. 372311)
Lease Name & Well Number: Seaver SWD #1
Location Footage Calls: 1,809 FSL & 1,428 FWL
Legal Location: Unit Letter K, S10 T21S R36E
Ground Elevation: 3,575'
Proposed Injection Interval: 4,200' – 5,300'
County: Lea

(2) Casing Information:

Type	Hole Size	Casing Size	Casing Weight	Setting Depth	Sacks of Cement	Estimated TOC	Method Determined
Surface	17-1/2"	13-3/8"	54.5 lb./ft	1,380'	1,180	Surface	Circulation
Production	12-1/4"	9-5/8"	40.0 lb./ft	5,300'	1,400	Surface	Circulation
Tubing	N/A	5-1/2"	17.0 lb./ft	4,150'	N/A	N/A	N/A

(3) Tubing Information:

5-1/2" (composite weight string) of fiberglass-coated tubing with setting depth of 4,150'

(4) Packer Information: Baker Hornet or equivalent packer set at 4,150'

B.

(1) Injection Formation Name: San Andres
Pool Name: SWD; SAN ANDRES
Pool Code: 96121
(2) Injection Interval: Perforated injection between 4,200' – 5,300'
(3) Drilling Purpose: New Drill for Salt Water Disposal
(4) Other Perforated Intervals: No other perforated intervals exist.
(5) Overlying Oil and Gas Zones: Below are the approximate formation tops for known oil and gas producing zones in the area.

- Grayburg (3,707')

Underlying Oil and Gas Zones: Below is the approximate formation tops for known oil and gas producing zones in the area.

- Glorieta (5,303')
- Tubb (6,810')

V – Well and Lease Maps

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

- 2-mile Oil & Gas Well Map
- 1/2-mile Well Detail List with Penetrating Well Casing and Plugging Information.
- Plugged Penetrating Wellbore Diagrams.
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- Potash Lease Map

VI – AOR Well List

A list of the wells within the 1/2-mile AOR is included in ***Attachment 2***.

There are six wells that penetrate the injection zone, one of which has been properly plugged and abandoned, while the other five wells have been properly cased and cemented to isolate the San Andres. A wellbore diagram and casing information for each of the plugged wells is included in ***Attachment 2***

VII – Proposed Operation

(1) **Proposed Maximum Injection Rate:** 42,000 bpd
Proposed Average Injection Rate: 27,500 bpd

(2) A **closed system** will be used.

(3) **Proposed Maximum Injection Pressure**: 840 psi (surface)
Proposed Average Injection Pressure: approximately 537 psi (surface)

(4) **Source Water Analysis:** It is expected that the injectate will consist of produced water from production wells completed in the Delaware Mountain Group (DMG), Wolfcamp, and Bone Springs formations. Analysis of water from these formations is included in ***Attachment 3***.

(5) **Injection Formation Water Analysis:** The proposed SWD will be injecting water into the San Andres formation which is a non-productive zone known to be compatible with formation water from the DMG, Wolfcamp and Bone Springs formations. Water analyses from the San Andres formation in the area are included in ***Attachment 4.***

VIII – Geologic Description

The proposed injection interval includes the San Andres formation from 4,200 – 5,300 feet. The Permian San Andres formation consists of interbedded carbonates rock including dolomites, siltstones and sands. Several thick intervals of porous and permeable carbonate rock capable of taking water are present within the subject formation in the area.

The deepest underground source of groundwater (USDW) is the Rustler formation at a depth of approximately 1,355 feet. Water well depths in the area range from approximately 81 – 242 feet below ground surface.

IX – Proposed Stimulation Program

A small cleanup acid job may be used to remove mud and drill cuttings from the formation. However, no other formation stimulation is currently planned.

X – Logging and Test Data

Logs will be submitted to the Division upon completion of the well.

XI – Fresh Groundwater Samples

Based on a review of data from the New Mexico Office of the State Engineer, 9 groundwater wells are located within 1 mile of the proposed SWD location. As such two of the groundwater wells located within one mile have been sampled (CP-01696 POD 1 on 8/26/2021 and CP-01039 POD 1 on 9/9/2021).

A water well map, details of water wells within 1-mile, and water sampling results are included in ***Attachment 5***.

XII – No Hydrologic Connection Statement

No faulting is present in the area that would provide a hydrologic connection between the injection interval and overlying USDWs. Additionally, the casing program has been designed to ensure there will be no hydrologic connection between the injection interval and overlying USDWs.

A signed no hydrological connection statement is included as **Attachment 7.**

XIII – Proof of Notice

A Public Notice was filed with the Hobbs News-Sun newspaper and an affidavit is included in ***Attachment 6***.

A copy of the application was mailed to the OCD District Office, landowner, and leasehold operators within 1/2-mile of the proposed SWD location. A list of the recipients, as well as delivery confirmations, are included in ***Attachment 6***.

Attachments

Attachment 1: Well Details:

- C-102
- Wellbore Diagram

Attachment 2: Area of Review Information:

- 2-mile Oil & Gas Well Map
- 1/2-mile Well Detail List With Penetrating Well Casing and Plugging Information
- Wellbore Diagrams - Plugged penetrating wells
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- Potash Lease Map

Attachment 3: Source Water Analyses

Attachment 4: Injection Formation Water Analyses

Attachment 5: Water Well Map and Well Data

Attachment 6: Public Notice Affidavit and Notice of Application Confirmations

Attachment 7: No Hydrological Connection Statement

Attachment 1

- C-102
- Wellbore Diagram

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

API Number	Pool Code	Pool Name
30-025-	96121	SWD; SAN ANDRES

Property Code	Property Name	Well Number
	SEAVER SWD	1

OGRID No.	Operator Name	Elevation
372311	GOODNIGHT MIDSTREAM PERMIAN, LLC	3575'

Surface Location

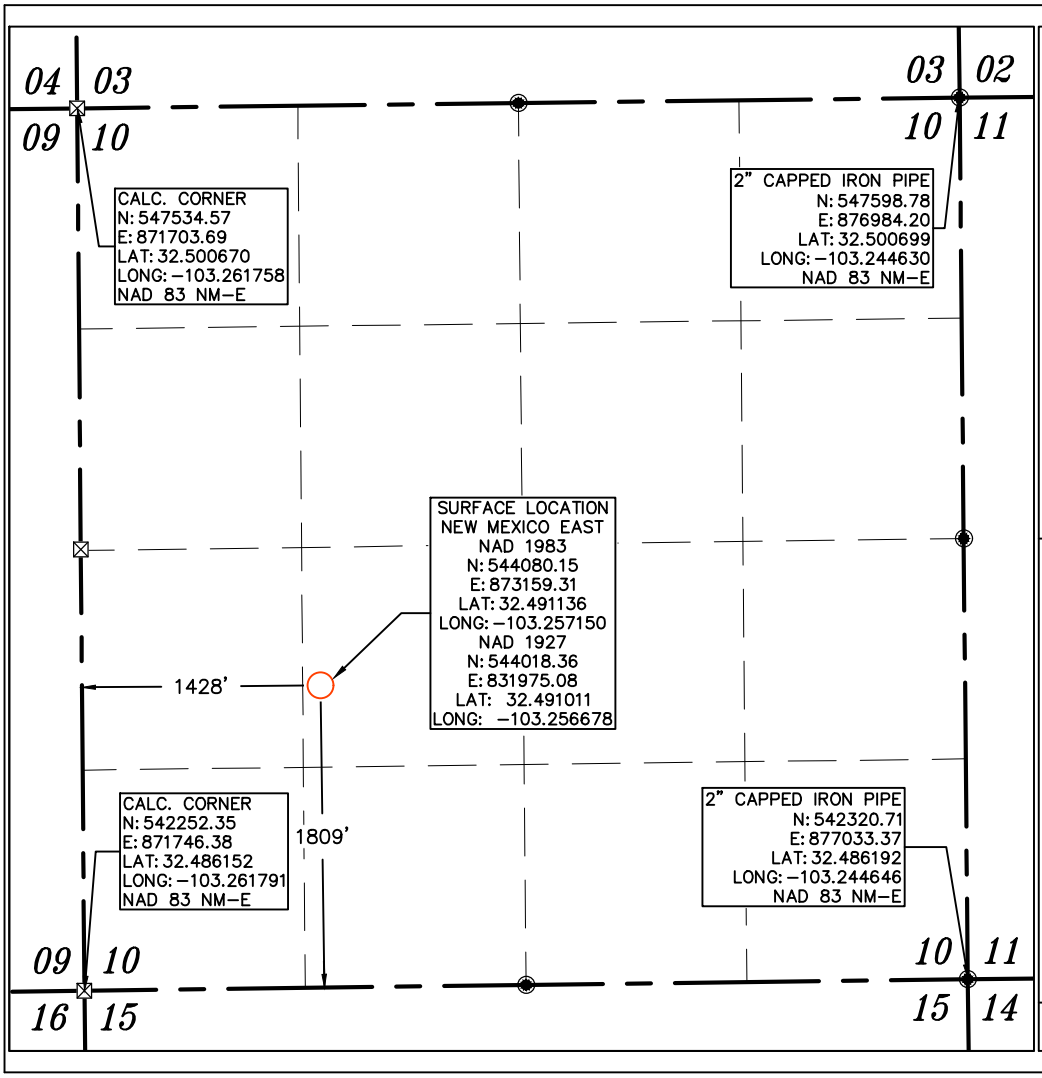
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	10	21 S	36 E		1809'	SOUTH	1428'	WEST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	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.



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.

Signature Date

Printed Name

E-mail Address

SURVEYOR CERTIFICATION

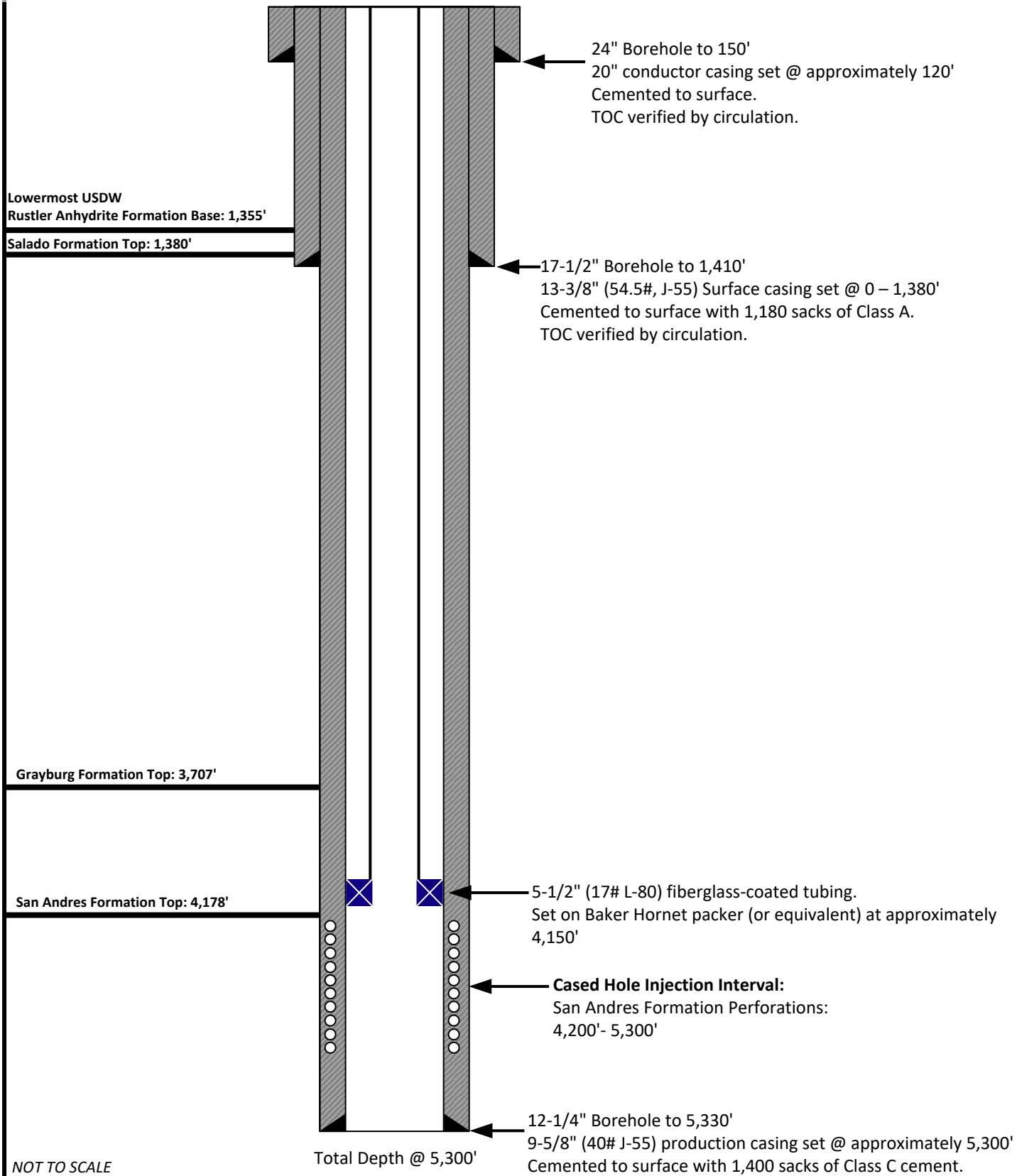
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

04/28/2023
Date of Survey

Signature and Seal of Professional Surveyor:

TIM C. PAPPAS
NEW MEXICO
21209
PROFESSIONAL SURVEYOR

Certificate Number
21209
TIM C. PAPPAS



NOT TO SCALE
Cement volumes include 25% excess.
Anticipated daily maximum volume: 42,000 bwpd
Maximum surface Injection Pressure: 840 psig
(0.2 psi/ft to the top of the injection interval)

Prepared by: ALL CONSULTING *Prepared for:* GOODNIGHT MIDSTREAM	Drawn by: Joshua Ticknor, P.E. Project Manager: Nathan Alleman Date: 4/11/2023	**Goodnight Midstream Permian, LLC** Proposed Wellbore Diagram Seaver SWD #1 1,809' FSL & 1,428' FWL Section 10 , Twp 21 S, Rng 36 E Lea County, New Mexico

HORNET Packer
Product Family No. H64682

HORNET EL Packer
Product Family No. H64683

The mechanically set HORNET™ packer offers ease of operation with quarter-turn right to set and release. Converting it for wireline-setting applications is simple and inexpensive. The HORNET packer provides for landing in compression, tension, or neutral positions. Every component from the jay track, to the internal bypass, to the packing-element system and the upper slip assembly has been developed to ensure the HORNET's setting and releasing reliability.

The HORNET EL packer is run and set on electric line using an E-4™ (Product Family No. H43702) with a slow-set power charge or a J™ setting tool (Product Family No. H41371) and a special wireline adapter kit. An L-10™ type on/off seal nipple is run on top of the packer to connect the tubing to the packer and to house a blanking plug when the packer is used as a temporary bridge plug.

Features and Benefits

- Upper Slip Assembly:
  - Thoroughly tested across API minimum to maximum casing ID tolerances for each specified casing weight, for setting and releasing reliability
  - Slip-wicker configuration providing bidirectional-load support with solid upper cone to support highest tensile loads
  - Staged-release action eliminates high-overpull requirement
  - Minimal set-down weight required to anchor slips
- Internal Bypass Seal:
  - Durable bypass seal design provides sealing after unloading, under differential pressures
  - No O-ring sealing system
- Packing Element System:
  - Fully tested to combined ratings at the API's maximum ID tolerance
  - Patented enhancements to control overboost
  - High-performance, three-piece element system
- Lower Slip and Jay Assembly:
  - Slips and drag blocks tested to maximum API tolerance ID for positive set and ease of release
  - One-quarter-turn right setting and releasing action
  - Packoff of packing elements with applied tension or compression
  - Spacing in jay ensures opening of internal bypass, before slip releasing action begins—important to both ease of release and safety
  - Automatically returns to running position

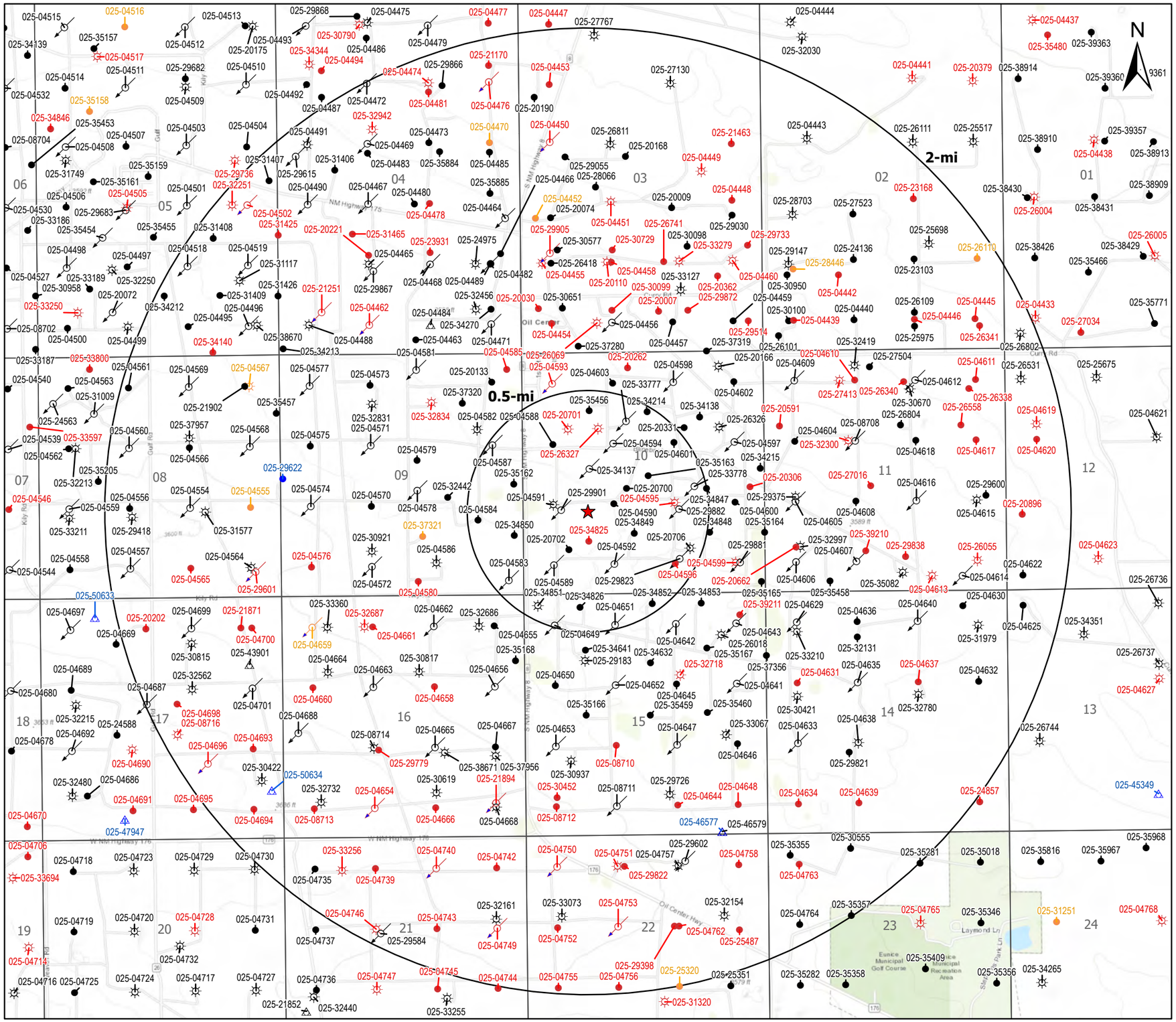
HORNET Packer Product Family No. H64682

HORNET EL Packer Product Family No. H64683

Attachment 2

Area of Review Information:

- 2-mile Oil & Gas Well Map
- 1/2-mile Well Detail List With Penetrating Well Casing and Plugging Information
- Wellbore Diagrams - Plugged Penetrating Wells
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- Potash Lease Map



Legend

- Proposed SWD
- Gas, Active (96)
- Gas, Plugged (49)
- Gas, Temporarily Abandoned (1)
- Injection, Active (94)
- Injection, Plugged (15)
- Injection, Temporarily Abandoned (1)
- Oil, Active (178)
- Oil, New (1)
- Oil, Plugged (99)
- Oil, Temporarily Abandoned (10)
- Salt Water Injection, Active (4)
- Salt Water Injection, New (5)

Source Info: NMOCD O&G Wells updated 1/17/2023 (https://www.emnrd.nm.gov/ocd/ocd-data/ftp-server/l)

Service Layer Credits: Topographic: Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

O&G Wells Area of Review

SEAVER SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Nate Alleman	May 03, 2023	Mapped by: Ben Bockelmann

Prepared for: GOODNIGHT MIDSTREAM

Prepared by: ALL CONSULTING

AOR Tabulation for Seaver SWD #1 (Injection Interval: 4,200' - 5,300')

Well Name	API#	Well Type	Operator	Spud Date	Location (Sec., Tn., Rng.)	Total Vertical Depth	Penetrate Inj. Zone?
EUNICE MONUMENT SOUTH UNIT #344	30-025-04592	Injection	Empire New Mexico LLC	3/3/1936	N-10-21S-36E	3,865	No
A J ADKINS COM #001	30-025-04591	Gas	Empire New Mexico LLC	4/7/1937	L-10-21S-36E	3,867	No
EUNICE MONUMENT SOUTH UNIT #317	30-025-04590	Oil	Empire New Mexico LLC	4/4/1936	K-10-21S-36E	3,880	No
EUNICE MONUMENT SOUTH UNIT #359	30-025-04651	Injection	Empire New Mexico LLC	8/12/1936	C-15-21S-36E	3,881	No
EUNICE MONUMENT SOUTH UNIT #360	30-025-04649	Injection	Empire New Mexico LLC	1/24/1936	D-15-21S-36E	3,885	No
EUNICE MONUMENT SOUTH UNIT #303	30-025-04594	Injection	Empire New Mexico LLC	10/26/1936	F-10-21S-36E	3,890	No
EUNICE MONUMENT SOUTH UNIT #670	30-025-34214	Oil	Empire New Mexico LLC	2/17/1998	B-10-21S-36E	3,893	No
EUNICE MONUMENT SOUTH UNIT #342	30-025-04583	Injection	Empire New Mexico LLC	12/23/1935	P-09-21S-36E	3,895	No
EUNICE MONUMENT SOUTH UNIT #696	30-025-34137	Injection	Empire New Mexico LLC	12/2/1997	F-10-21S-36E	3,910	No
EUNICE MONUMENT SOUTH UNIT #343	30-025-04589	Injection	Empire New Mexico LLC	12/8/1935	M-10-21S-36E	3,910	No
EUNICE MONUMENT SOUTH UNIT #301	30-025-04587	Injection	Empire New Mexico LLC	9/29/1957	H-09-21S-36E	3,900	No
EUNICE MONUMENT SOUTH UNIT #735	30-025-34826	Oil	Empire New Mexico LLC	2/4/2000	D-15-21S-36E	3,925	No
EUNICE MONUMENT SOUTH UNIT #736	30-025-34852	Oil	Empire New Mexico LLC	3/15/2000	B-15-21S-36E	3,925	No
EUNICE MONUMENT SOUTH UNIT #671	30-025-35456	Oil	Empire New Mexico LLC	6/5/2001	C-10-21S-36E	3,925	No
EUNICE MONUMENT SOUTH UNIT #709	30-025-34849	Oil	Empire New Mexico LLC	3/8/2000	K-10-21S-36E	3,930	No
EUNICE MONUMENT SOUTH UNIT #695	30-025-35162	Oil	Empire New Mexico LLC	10/12/2000	I-09-21S-36E	3,930	No
EUNICE MONUMENT SOUTH UNIT #710	30-025-34825	Plugged	Empire New Mexico LLC	1/25/2000	N-10-21S-36E	3,931	No
EUNICE MONUMENT SOUTH UNIT #304	30-025-04601	Oil	Empire New Mexico LLC	11/15/1936	G-10-21S-36E	3,935	No
EUNICE MONUMENT SOUTH UNIT #711	30-025-34850	Oil	Empire New Mexico LLC	4/11/2000	P-09-21S-36E	3,940	No
EUNICE MONUMENT SOUTH UNIT #318	30-025-29901	Injection	Empire New Mexico LLC	12/31/9999	L-10-21S-36E	4,000	No
EUNICE MONUMENT SOUTH UNIT #316	30-025-29882	Injection	Empire New Mexico LLC	4/24/1987	J-10-21S-36E	4,050	No
EUNICE MONUMENT SOUTH UNIT #345	30-025-29823	Injection	Empire New Mexico LLC	3/22/1987	O-10-21S-36E	4,054	No
A J ADKINS COM #009	30-025-20701	Plugged	Empire New Mexico LLC	12/31/9999	E-10-21S-36E	Plugged (5,960)	Yes
A J ADKINS COM #010	30-025-20702	Oil	Empire New Mexico LLC	10/16/1964	M-10-21S-36E	6,010	Yes
JOHN D KNOX #012	30-025-20706	Gas	Empire New Mexico LLC	3/27/1964	O-10-21S-36E	6,020	Yes
A J ADKINS #008	30-025-20700	Oil	Empire New Mexico LLC	12/31/9999	K-10-21S-36E	6,050	Yes
JOHN D KNOX #014	30-025-33778	Injection	Empire New Mexico LLC	1/1/1998	J-10-21S-36E	6,220	Yes
A J ADKINS #011	30-025-33777	Injection	Empire New Mexico LLC	12/9/1997	F-10-21S-36E	6,225	Yes
EUNICE MONUMENT SOUTH UNIT #319	30-025-04584	Oil	Empire New Mexico LLC	4/1/1936	I-09-21S-36E	3790'	No
JOHN D KNOX #001	30-025-04595	Plugged	EXXON MOBIL CORPORATION	2/16/1936	J-10-21S-36E	3,865	No
PRE-ONGARD WELL #002	30-025-04596	Plugged	PRE-ONGARD WELL OPERATOR	1/1/1900	O-10-21S-36E	3,860	No
A J ADKINS COM #002	30-025-26327	Plugged	XTO ENERGY, INC	7/5/1979	F-10-21S-36E	3,675	No
EUNICE MONUMENT SOUTH UNIT #302	30-025-04588	Oil	XTO ENERGY, INC	10/18/1935	E-10-21S-36E	3,890	No
EUNICE MONUMENT SOUTH UNIT #734	30-025-34851	Gas	XTO ENERGY, INC	3/23/2000	D-15-21S-36E	3,940	No
EUNICE MONUMENT SOUTH UNIT #697	30-025-35163	Oil	XTO ENERGY, INC	10/20/2000	J-10-21S-36E	3,942	No

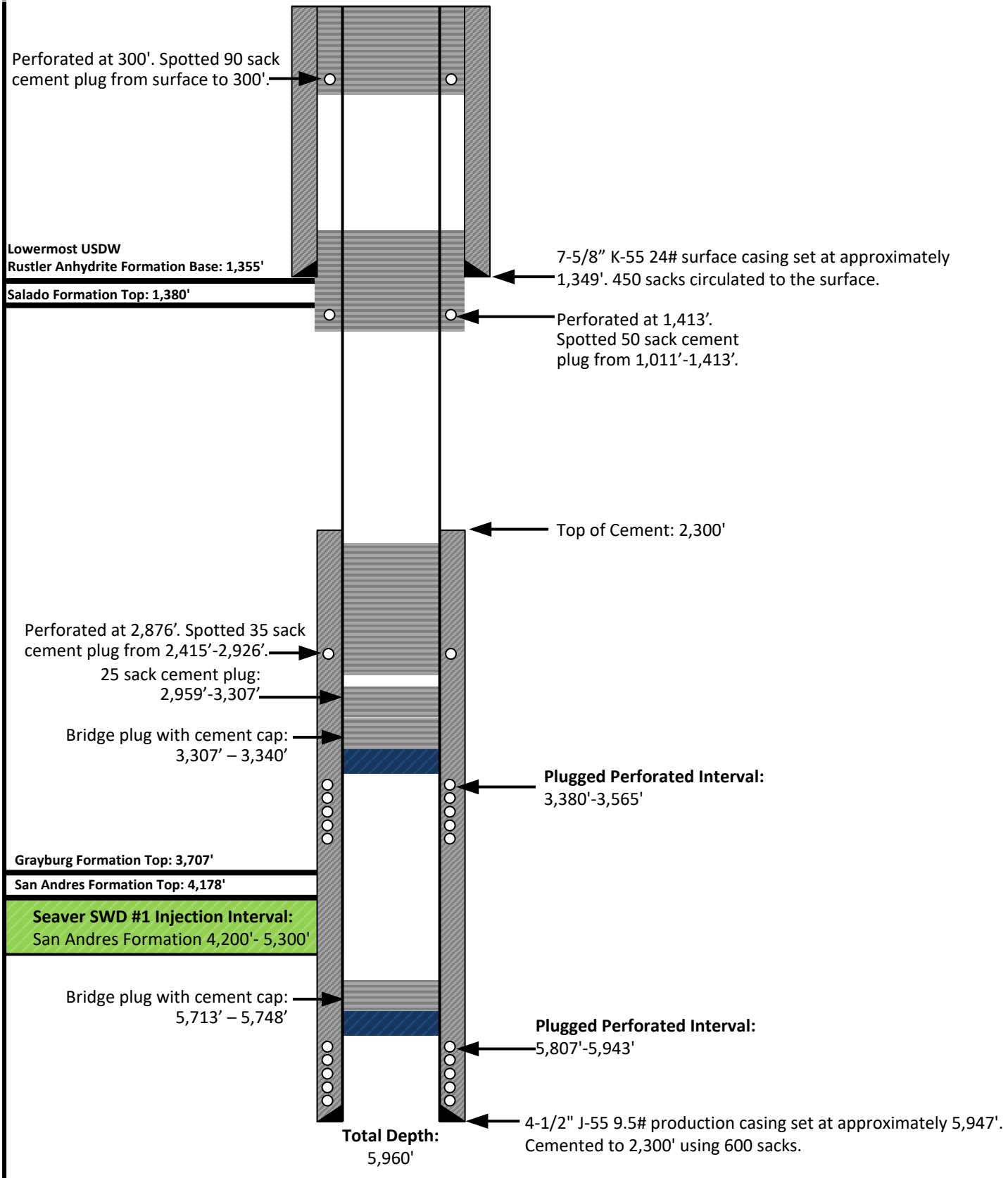
Notes:

Casing Information for Wells Penetrating the Seaver SWD #1 Injection Zone

Well Name	Surface Casing					Intermediate Casing					
	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole Size
A J ADKINS COM #009	1349'	7.625"	Surface	Circulation	450	N/A	N/A	N/A	N/A	N/A	N/A
A J ADKINS COM #010	1413'	7.625"	Surface	Circulation	450	N/A	N/A	N/A	N/A	N/A	N/A
JOHN D KNOX #012	1353'	7.625"	Surface	Circulation	450	N/A	N/A	N/A	N/A	N/A	N/A
A J ADKINS #008	1364'	7.625"	Surface	Circulation	625	N/A	N/A	N/A	N/A	N/A	N/A
JOHN D KNOX #014	1350'	8.625"	Surface	Circulation	800	N/A	N/A	N/A	N/A	N/A	N/A
A J ADKINS #011	1362'	8.625"	Surface	Circulation	640	N/A	N/A	N/A	N/A	N/A	N/A

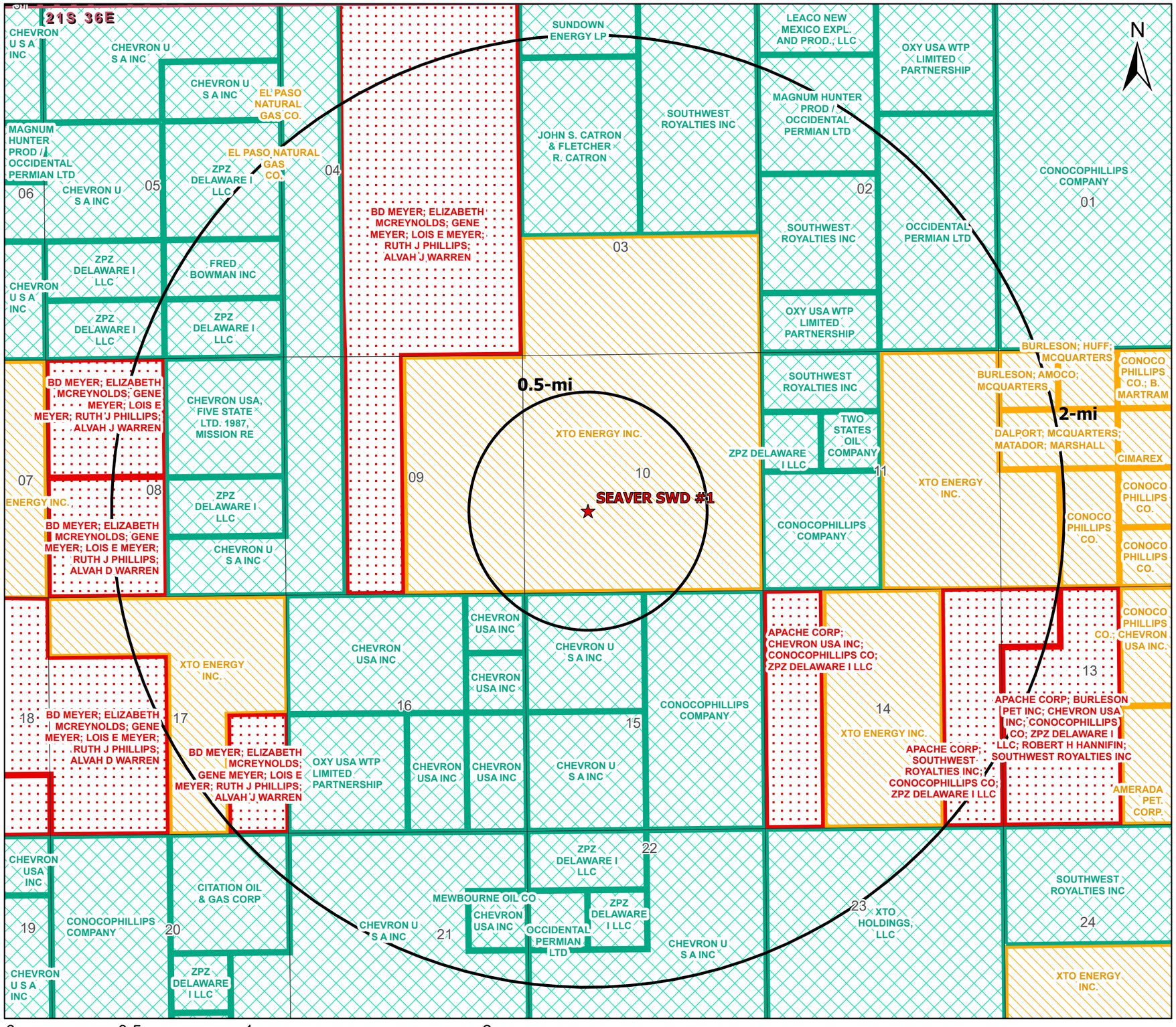
Well Name	Production Casing , Intermediate II Casing, or Liner					Production Casing II & Liner					
	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole Size
A J ADKINS COM #009	5947'	4.5"	2300'	Temp. Survey	600	N/A	N/A	N/A	N/A	N/A	N/A
A J ADKINS COM #010	6010'	4.5"	2285'	Temp. Survey	600	N/A	N/A	N/A	N/A	N/A	N/A
JOHN D KNOX #012	6020'	4.5"	2500'	Temp. Survey	525	N/A	N/A	N/A	N/A	N/A	N/A
A J ADKINS #008	6040'	4.5"	2600'	Temp. Survey	600	N/A	N/A	N/A	N/A	N/A	N/A
JOHN D KNOX #014	6400'	5.5"	Surface	Circulation	1200	N/A	N/A	N/A	N/A	N/A	N/A
A J ADKINS #011	6219'	5.5"	Surface	Circulation	1245	N/A	N/A	N/A	N/A	N/A	N/A

Well Name	Plugging Information
A J ADKINS COM #009	Bridge plug with cement cap 5,713' - 5,748', second bridge plug with a cement cap 3,307'-3,340'. Plugs set at 2959' - 3,307' with 25 sacks, 2,415'-2,926' with 35 sacks, 1,011' - 1,413' with 50 sacks, surface - 300' with 90 sacks.
A J ADKINS COM #010	-
JOHN D KNOX #012	-
A J ADKINS #008	-
JOHN D KNOX #014	-
A J ADKINS #011	-



Not to Scale

Prepared by: ALL CONSULTING *Prepared for:* GOODNIGHT MIDSTREAM	Drawn by: Joshua Ticknor Project Manager: Nathan Alleman Date: 05/05/2023	Adkins A J 9 Wellbore Diagram API: 30-025-20701 Spud Date: 11/05/1992 Plugged and Abandoned: 03/18/2020 Operated By: Exxon Mobil Corporation



Legend

- Proposed SWD
- NMSLO Mineral Leases
- BLM Mineral Leases
- Private Mineral Leases

Mineral Lease Area of Review

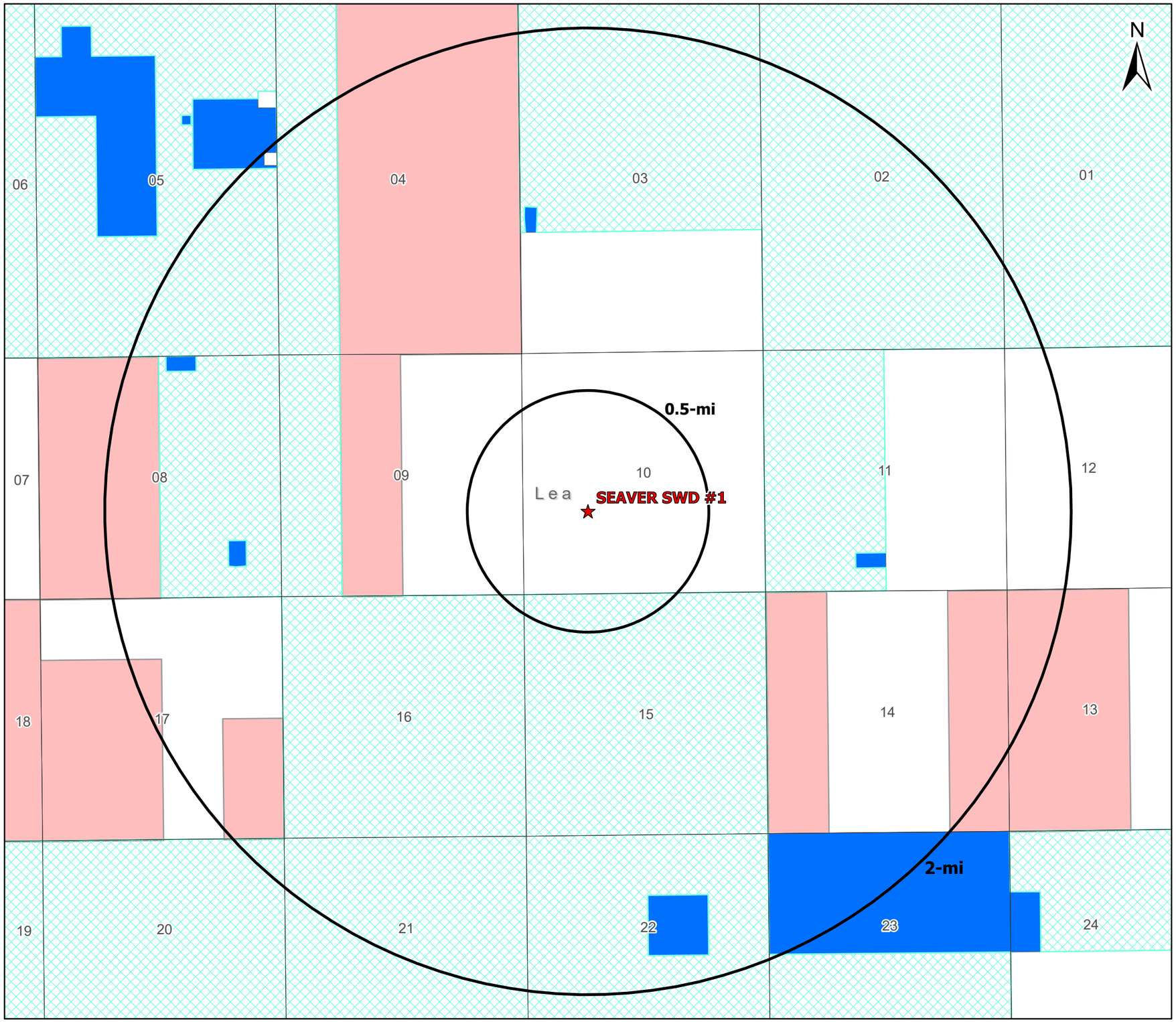
SEAVER SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Nate Alleman	May 03, 2023	Mapped by: Ben Bockelmann

Prepared for: GOODNIGHT MIDSTREAM

Prepared by: ALL CONSULTING



Legend

- Proposed SWD
- Private minerals
- Subsurface minerals (NMSLO)
- Surface and Subsurface minerals (NMSLO)
- All minerals are owned by U.S. (BLM)

Source Info: BLM Mineral Ownership (https://catalog.data.gov/dataset/blm-new-mexico-mineral-ownership) & NMSLO Ownership (http://www.nmstatelands.org/maps-gis/gis-data-download/)

Mineral Ownership
Area of Review

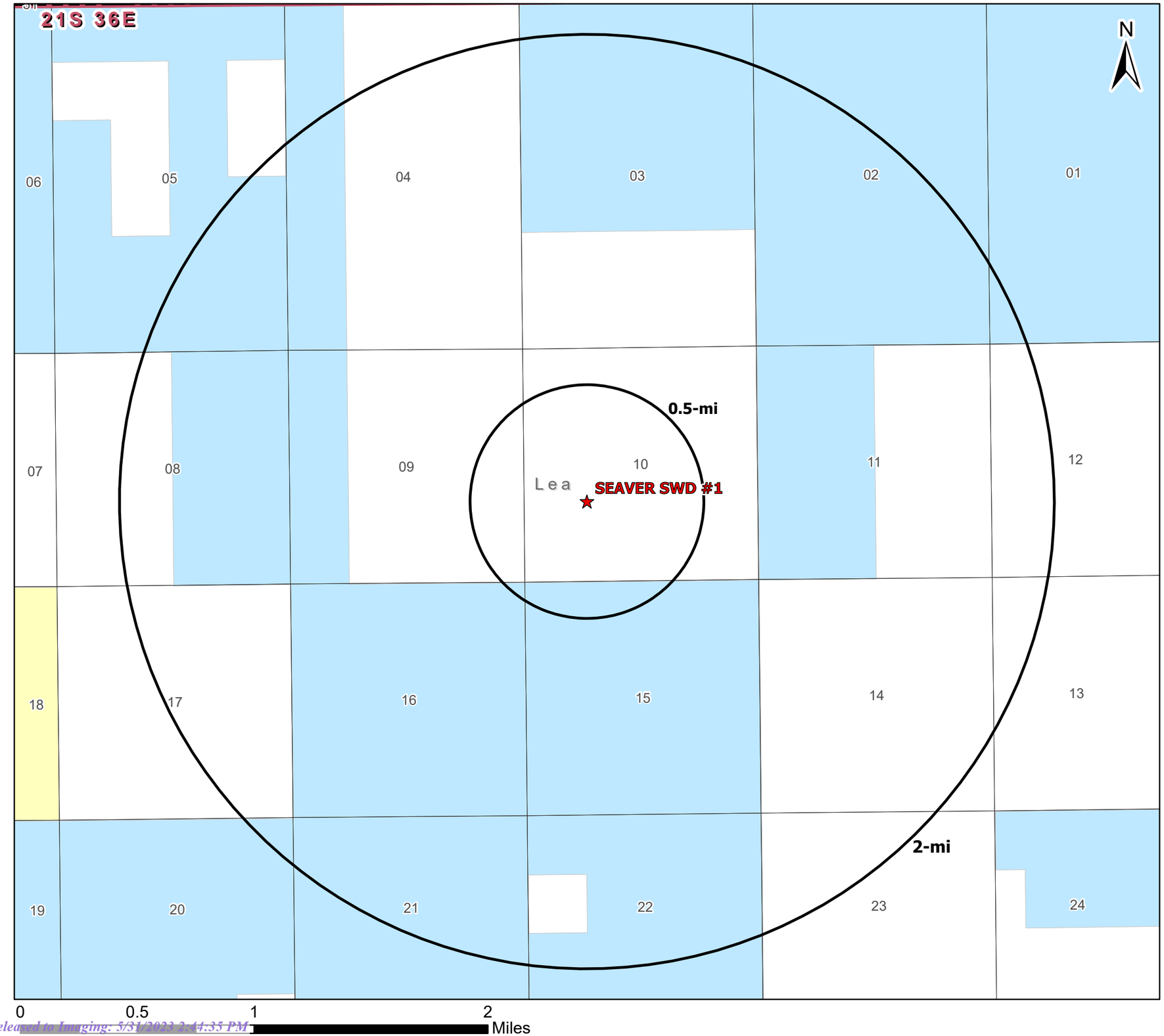
SEAVER SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Nate Alleman	May 03, 2023	Mapped by: Ben Bockelmann

Prepared for: GOODNIGHT MIDSTREAM

Prepared by: ALL CONSULTING



Legend

- Proposed SWD

Surface Ownership

- BLM
- Private
- State

Surface Ownership
Area of Review

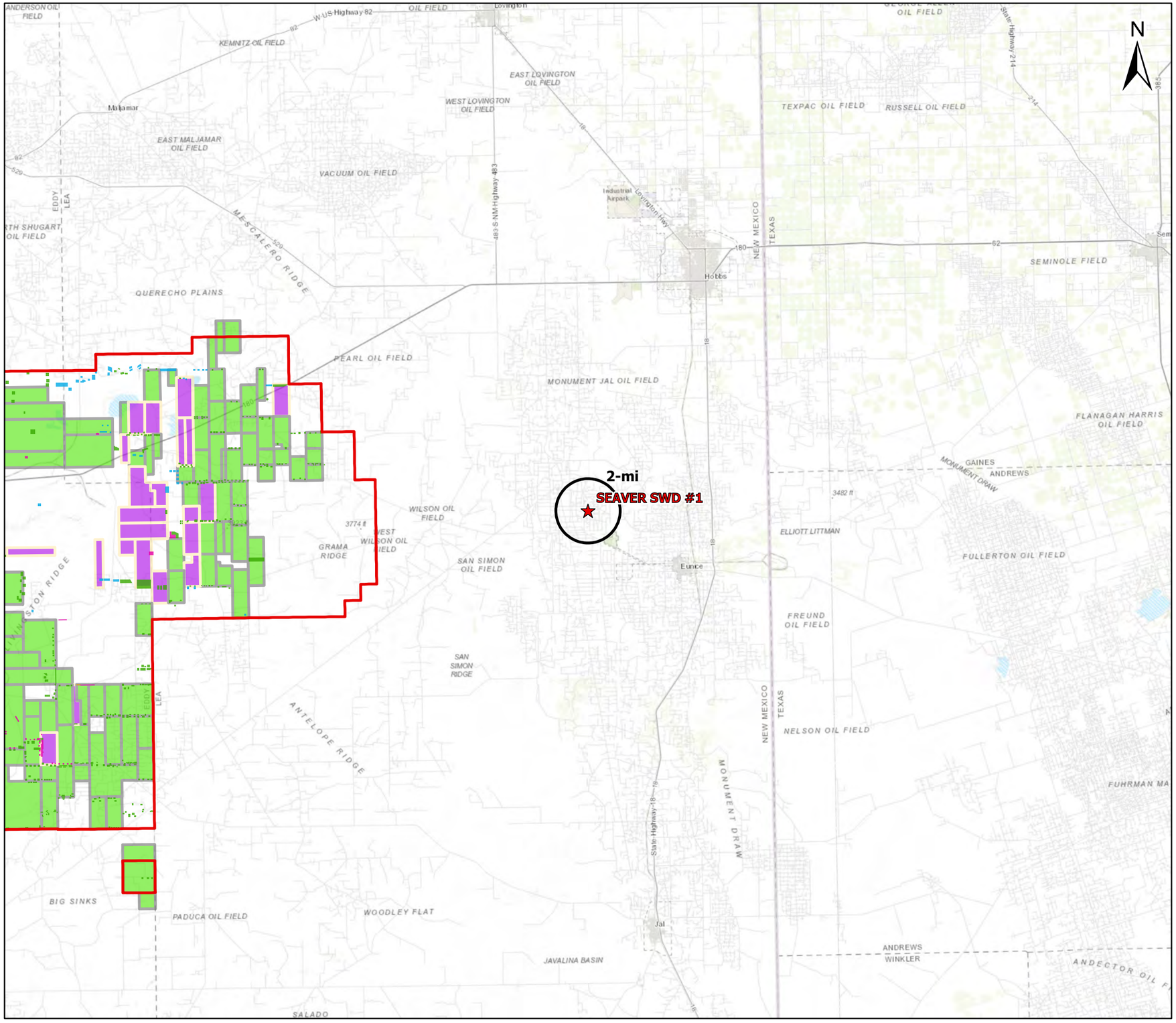
SEAVER SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Nate Alleman	May 03, 2023	Mapped by: Ben Bockelmann

Prepared for: GOODNIGHT MIDSTREAM

Prepared by: ALL CONSULTING



Legend

- Proposed SWD (1)
- SOPA 1986 (2)

Drill Islands

Status, Depth Buffer

- Approved, Half Mile (288)
- Approved, Quarter Mile (29)
- Nominated, Half Mile (46)
- Nominated, Quarter Mile (1)

Development Areas

Status

- Approved (86)
- Pending (24)
- Pending NMOCD Order (0)

Service Layer Credits: Topographic: Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Potash Area of Review

SEAVER SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Nate Alleman	May 03, 2023	Mapped by: Ben Bockelmann

Prepared for: GOODNIGHT MIDSTREAM

Prepared by: ALL CONSULTING

Attachment 3

Source Water Analyses

Source Water Formation Analysis

Goodnight Midstream Permian, LLC - Bone Spring, Wolfcamp & Delaware Formations

Wellname	API	Latitude	Longitude	Section	Township	Range	Unit	Ftgns	Ftgew	County	State	Field	Formation	Tds (mg/L)	Chloride (mg/L)	Bicarbonate (mg/L)	Sulfate (mg/L)
GAUCHO UNIT #012H	3002541564	32.384037	-103.4853745	20	22S	34E	A	275N	575E	Lea	NM		BONE SPRING 2ND SAND	109,808	66,985	281	1,030
GAUCHO UNIT #013H	3002541565	32.3841743	-103.4853745	20	22S	34E	A	225N	575E	Lea	NM		BONE SPRING 2ND SAND	139,905	85,081	293	740
GAUCHO UNIT #015H	3002541566	32.3841896	-103.4984589	20	22S	34E	D	100N	660W	Lea	NM		BONE SPRING 2ND SAND	184,420	115,274	268	765
GAUCHO 21 FEDERAL #002H	3002540626	32.3709793	-103.4823151	21	22S	34E	M	375S	375W	Lea	NM		DELAWARE-BRUSHY CANYON	266,468	167,562	366	-
GAUCHO 21 FEDERAL #002H	3002540626	32.3709793	-103.4823151	21	22S	34E	M	375S	375W	Lea	NM		DELAWARE-BRUSHY CANYON		224,384	366	210
GAUCHO 21 FEDERAL #002H	3002540626	32.3709793	-103.4823151	21	22S	34E	M	375S	375W	Lea	NM		DELAWARE-BRUSHY CANYON		169,000	37	341
GAUCHO UNIT #012H	3002541564	32.384037	-103.4853745	20	22S	34E	A	275N	575E	Lea	NM		BONE SPRING 2ND SAND		68,000	427	97
GAUCHO UNIT #013H	3002541565	32.3841743	-103.4853745	20	22S	34E	A	225N	575E	Lea	NM		BONE SPRING 2ND SAND		77,000	305	1,600
GAUCHO UNIT #014H	3002541571	32.3840523	-103.4984589	20	22S	34E	D	150N	660W	Lea	NM		BONE SPRING 2ND SAND		82,000	220	624
GAUCHO UNIT #015H	3002541566	32.3841896	-103.4984589	20	22S	34E	D	100N	660W	Lea	NM		BONE SPRING 2ND SAND	158,147	96,378	232	710
MOBIL LEA STATE #001	3002531696	32.5999107	-103.5331573	2	20S	34E	K	1800S	1980W	LEA	NM	LEA NORTHEAST	DELAWARE	152,064	102,148	404	691
MOBIL LEA STATE #003	3002532105	32.5976906	-103.5367584	2	20S	34E	M	990S	870W	LEA	NM	LEA NORTHEAST	DELAWARE	296,822	215,237	143	294
MOBIL LEA STATE #005	3002532466	32.6028633	-103.5367584	2	20S	34E	E	2440N	870W	LEA	NM	LEA NORTHEAST	DELAWARE	340,838	245,270	229	147
LEA UNIT #004H	3002502424	32.5895081	-103.524559	11	20S	34E	H	1980N	660E	LEA	NM	LEA	BONE SPRING	29,436	16,720	634	1,142
LEA UNIT #001	3002502427	32.5858536	-103.520256	12	20S	34E	L	1980S	660W	LEA	NM	LEA	DELAWARE	214,787	132,700	208	1,816
LEA UNIT #001	3002502427	32.5858536	-103.520256	12	20S	34E	L	1980S	660W	LEA	NM	LEA	BONE SPRING	15,429			
LEA UNIT #001	3002502427	32.5858536	-103.520256	12	20S	34E	L	1980S	660W	LEA	NM	LEA	BONE SPRING	180,701	108,300	1,016	670
LEA UNIT #005	3002502429	32.5858536	-103.5116501	12	20S	34E	J	1980S	1980E	LEA	NM	LEA	BONE SPRING	202,606	118,100	5,196	992
LEA UNIT #005	3002502429	32.5858536	-103.5116501	12	20S	34E	J	1980S	1980E	LEA	NM	LEA	BONE SPRING	121,800			
LEA UNIT #008	3002502431	32.5927162	-103.511673	12	20S	34E	B	810N	1980E	LEA	NM	LEA	BONE SPRING	147,229	89,640	108	1,038
MONK 21 STATE COM #001H	3002540986	32.4706993	-103.4818954	21	21S	34E	D	330N	460W	Lea	NM		BONE SPRING 2ND SAND	261,089	160,264	122	425
MONK 21 STATE #004H	3002542193	32.47107672	-103.4727296	21	21S	34E	B	200N	1980E	Lea	NM		BONE SPRING 2ND SAND	184,233	112,775	488	425
MONK 21 STATE COM #001H	3002540986	32.4706993	-103.4818954	21	21S	34E	D	330N	460W	Lea	NM		BONE SPRING 2ND SAND		103,000	207	439
H L VINSON #001	3002503587	33.5251312	-103.237999	22	09S	36E	A	660N	660E	Lea	NM		WOLFCAMP		66,400	187	690
PHILLIPS STATE #001	3002503659	33.3458824	-103.2939529	22	11S	36E	N	660S	1980W	LEA	NM	CINDY	WOLFCAMP	78,885	47,400	354	875
STATE CA #001	3002503743	32.902153	-103.3229828	23	16S	36E	O	660S	1980E	LEA	NM	LOVINGTON	WOLFCAMP	167,968	102,800	61	623
SINCLAIR STATE #002	3002503123	32.7386246	-103.4561005	21	18S	35E	A	660N	660E	LEA	NM	VACUUM SOUTH	WOLFCAMP	60,950	33,568	1,087	3,049

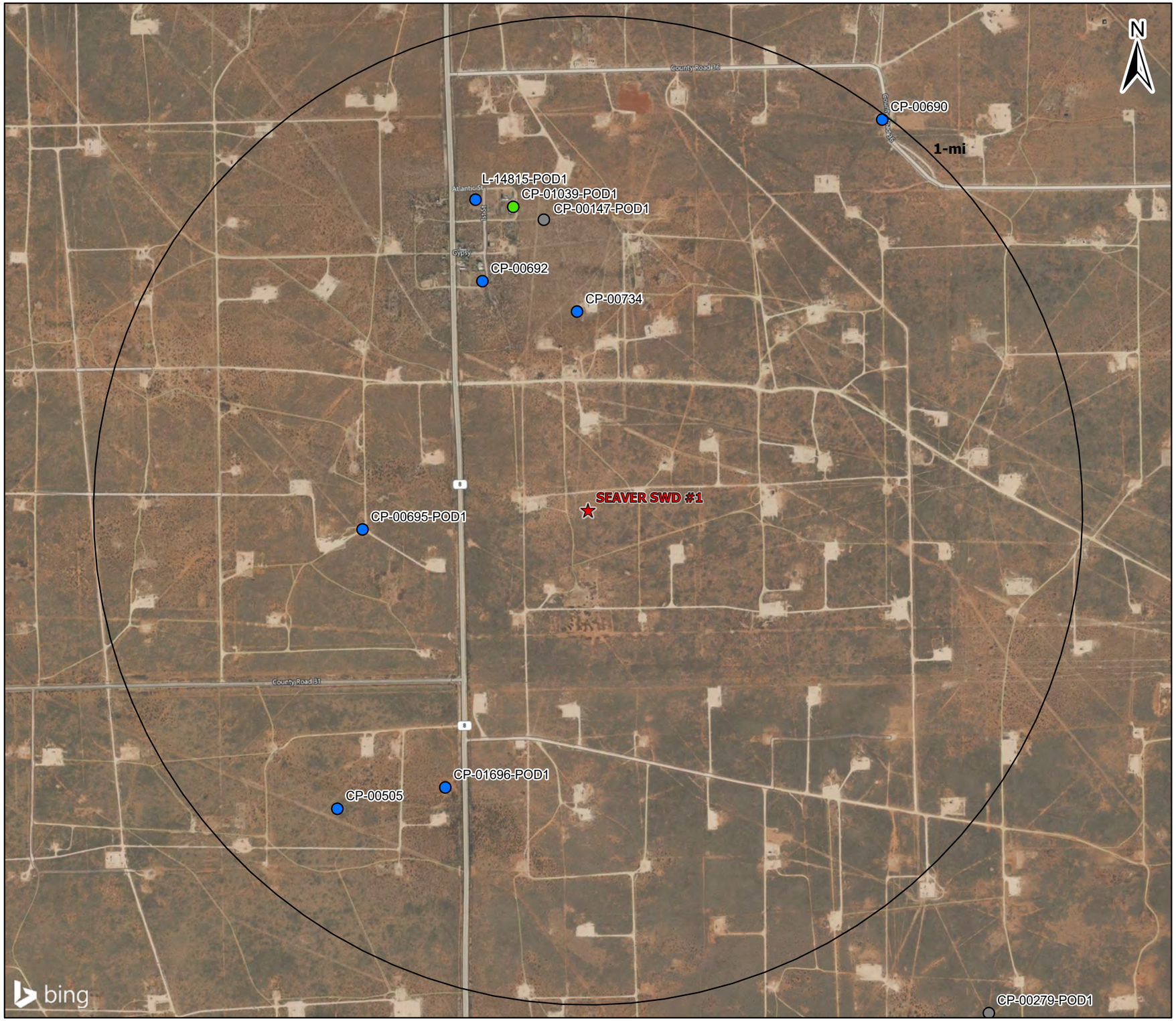
Attachment 4

Injection Formation Water Analyses

Goodnight Midstream Permian, LLC - San Andres Formation																	
Wellname	API	Latitude	Longitude	Section	Township	Range	Unit	Ftgns	Ftgew	County	State	Field	Formation	Tds (mg/L)	Chloride (mg/L)	Bicarbonate (mg/L)	Sulfate (mg/L)
SIMMONS #001	3002510070	32.4232674	-103.1821976	5	22S	37E	G	1760N	1760E	LEA	NM	EUNICE SOUTHWEST	SAN ANDRES	78,653	46,510	580	2,184
C P FALBY B FEDERAL #004	3002510106	32.4045296	-103.1914597	8	22S	37E	L	1980S	660W	LEA	NM	CARY	SAN ANDRES	80,540	43,500	755	5,950
C P FALBY A FEDERAL #003	3002510118	32.4081421	-103.1871872	8	22S	37E	F	1980N	1980W	LEA	NM	EUNICE SOUTHWEST	SAN ANDRES	59,766			
C P FALBY A FEDERAL #004	3002510120	32.4081345	-103.1914673	8	22S	37E	E	1980N	660W	LEA	NM	EUNICE SOUTHWEST	SAN ANDRES	10,925	5,312	1,620	201
PENROSE #002	3002510146	32.4078712	-103.1739807	9	22S	37E	E	2086N	776W	LEA	NM	EUNICE SOUTHWEST	SAN ANDRES	64,895	38,010	488	2,100
LOU WORTHAM #020	3002510216	32.411808	-103.1401749	11	22S	37E	D	660N	660W	LEA	NM	EUNICE SOUTH	SAN ANDRES	10,947	6,527	20	236
LOU WORTHAM #005	3002523606	32.4109001	-103.1369629	11	22S	37E	C	990N	1650W	LEA	NM	EUNICE SOUTH	SAN ANDRES	18,587	9,460	13	2,518
LOU WORTHAM #006	3002523756	32.4072723	-103.1410828	11	22S	37E	E	2310N	380W	LEA	NM	EUNICE SOUTH	SAN ANDRES	9,192	4,443	12	1,491
LOU WORTHAM #006	3002523756	32.4072723	-103.1410828	11	22S	37E	E	2310N	380W	LEA	NM	EUNICE SOUTH	SAN ANDRES	14,868	9,040	24	112
LOU WORTHAM #006	3002523756	32.4072723	-103.1410828	11	22S	37E	E	2310N	380W	LEA	NM	EUNICE SOUTH	SAN ANDRES	13,828	7,298	18	1,389
LOU WORTHAM #006	3002523756	32.4072723	-103.1410828	11	22S	37E	E	2310N	380W	LEA	NM	EUNICE SOUTH	SAN ANDRES	14,957	8,867	18	406
HUGH COI #013	3002523275	32.3982162	-103.1396637	14	22S	37E	D	330N	820W	LEA	NM	EUNICE SOUTH	SAN ANDRES	14,215	6,495	2,529	191
LOU WORTHAM #006	3002523756	32.4072723	-103.1410828	11	22S	37E	E	2310N	380W	LEA	NM	EUNICE SOUTH	SAN ANDRES	14,824	7,018	2,344	207
E M E SWD #008	3002506017	32.5895042	-103.2725601	8	20S	37E	G	1980N	2310E	LEA	NM	MONUMENT PADDOCK	SAN ANDRES	65,365	36,905	560	1,460
THEODORE ANDERSON #002	3002506139	32.5785942	-103.2758102	17	20S	37E	C	660N	1980W	Lea	NM		SAN ANDRES		67,245	564	489
E M E SWD #008	3002506017	32.5895042	-103.2725601	8	20S	37E	G	1980N	2310E	LEA	NM	MONUMENT	SAN ANDRES	65,361	36,900	560	1,460

Attachment 5

Water Well Map and Well Data



Legend

- Proposed SWD

OSE PODs

Status

- Active (7)
- Pending (1)
- Change Location of Well (0)
- Capped (0)
- Plugged (0)
- Incomplete (0)
- Unknown (2)

Service Layer Credits: Bing Maps Hybrid: © 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS © 2023 TomTom

Water Wells Area of Review

SEAVER SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Nate Alleman	May 03, 2023	Mapped by: Ben Bockelmann

Prepared for: GOODNIGHT MIDSTREAM

Prepared by: ALL CONSULTING

Water Well Sampling Rationale					
Goodnight Midstream Permian- Seaver SWD #1					
Water Wells	**Owner**	**Available Contact Information**	**Use**	**Sampling Required**	**Notes**
CP-00147-POD1	HUMBLE OIL & REFINING COMPANY	P.O. BOX 2100, Hobbs, NM, 88240	Commercial	No	Two water wells are already being sampled.
CP-00505	SNYDER RANCHES LTD.	P.O. BOX 726, Lovington, NM, 88260	Livestock Watering	No	Owner was unaware of a well at this location, believes there to be a caliche pit located there.
CP-00690	SUN EXPL. & PROD.	P.O. BOX 692, Tatum, NM, 88267	PRO	No	Two water wells are already being sampled.
CP-00692	W.L. VAN NOY	P.O. BOX 7, Oil Center, NM, 88266	Domestic	No	Two water wells are already being sampled.
CP-00695-POD1	CHEVRON USA INC	P.O. BOX 670, Hobbsm, NM, 88240	Secondary Recovery of Oil	No	Not a freshwater well.
CP-00734	W.L. VAN NOY	P.O. BOX 7, Oil Center, NM, 88266	Domestic	No	Two water wells are already being sampled.
CP-01039-POD1	Jerauld Anderson	575-631-1922	Domestic	Yes	Sampled on 9/9/2021
CP-01696-POD1	Wilberta Tivis - Tivis Ranch LLC	P.O. box 1617 Eunice, nm 88231 575-369-8419 Cell 575-394-3223 Ranch phone	Livestock Watering	Yes	Sampled on 8/26/2021
L-14815-POD1	Micheal & Carla Mcneil	P.O. Box 1032 Eunice, NM 88231 575-390-7138 cell (carla)	Domestic	No	Two water wells are already being sampled.
Note:					

CARDINAL Laboratories

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

September 17, 2021

OLIVER SEEKINS

ALL CONSULTING, LLC

1718 S. CHEYENNE AVE.

TULSA, OK 74119

RE: JERAULD ANDERSON

Enclosed are the results of analyses for samples received by the laboratory on 09/09/21 11:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: JERAULD ANDERSON Project Number: 32.50083-103.259567 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 17-Sep-21 14:00

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CP - 01039 POD 1	H212493-01	Water	09-Sep-21 10:30	09-Sep-21 11:12

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: JERAULD ANDERSON Project Number: 32.50083-103.259567 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 17-Sep-21 14:00

CP - 01039 POD 1

H212493-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**342**		5.00	mg/L	1	1072906	GM	09-Sep-21	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	1072906	GM	09-Sep-21	310.1	
Chloride*	**1000**		4.00	mg/L	1	1090801	GM	09-Sep-21	4500-Cl-B	
Conductivity*	**5030**		1.00	umhos/cm @ 25°C	1	1090914	GM	09-Sep-21	120.1	
pH*	**7.21**		0.100	pH Units	1	1090914	GM	09-Sep-21	150.1	
Temperature °C	**19.9**			pH Units	1	1090914	GM	09-Sep-21	150.1	
Resistivity	**1.99**			Ohms/m	1	1090914	GM	09-Sep-21	120.1	
Specific Gravity @ 60° F	**1.004**		0.000	[blank]	1	1090915	GM	09-Sep-21	SM 2710F	
Sulfate*	**1220**		250	mg/L	25	1090803	GM	10-Sep-21	375.4	
TDS*	**3420**		5.00	mg/L	1	1090811	GM	13-Sep-21	160.1	
Alkalinity, Total*	**280**		4.00	mg/L	1	1072906	GM	09-Sep-21	310.1	
TSS*	**3.00**		2.00	mg/L	1	1091005	GM	14-Sep-21	160.2	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Barium*	<0.250		0.250	mg/L	5	B212168	AES	16-Sep-21	EPA200.7	
Calcium*	**199**		0.500	mg/L	5	B212168	AES	16-Sep-21	EPA200.7	
Hardness as CaCO3	**971**		3.31	mg/L	5	[CALC]	AES	16-Sep-21	2340 B	
Iron*	<0.250		0.250	mg/L	5	B212168	AES	16-Sep-21	EPA200.7	
Magnesium*	**115**		0.500	mg/L	5	B212168	AES	16-Sep-21	EPA200.7	
Potassium*	**29.1**		5.00	mg/L	5	B212168	AES	16-Sep-21	EPA200.7	
Sodium*	**787**		5.00	mg/L	5	B212168	AES	16-Sep-21	EPA200.7	
Strontium*	**5.72**		0.500	mg/L	5	B212168	AES	16-Sep-21	EPA200.7	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: JERAULD ANDERSON Project Number: 32.50083-103.259567 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 17-Sep-21 14:00

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1072906 - General Prep - Wet Chem										
Blank (1072906-BLK1)				Prepared: 29-Jul-21 Analyzed: 30-Jul-21						
Alkalinity, Carbonate	ND	1.00	mg/L							
Alkalinity, Bicarbonate	5.00	5.00	mg/L							
Alkalinity, Total	4.00	4.00	mg/L							
LCS (1072906-BS1)				Prepared: 29-Jul-21 Analyzed: 30-Jul-21						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120			
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120			
Alkalinity, Total	250	10.0	mg/L	250		100	80-120			
LCS Dup (1072906-BSD1)				Prepared: 29-Jul-21 Analyzed: 30-Jul-21						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120		20	
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120	0.00	20	
Alkalinity, Total	250	10.0	mg/L	250		100	80-120	0.00	20	
Batch 1090801 - General Prep - Wet Chem										
Blank (1090801-BLK1)				Prepared & Analyzed: 08-Sep-21						
Chloride	ND	4.00	mg/L							
LCS (1090801-BS1)				Prepared & Analyzed: 08-Sep-21						
Chloride	104	4.00	mg/L	100		104	80-120			
LCS Dup (1090801-BSD1)				Prepared & Analyzed: 08-Sep-21						
Chloride	100	4.00	mg/L	100		100	80-120	3.92	20	
Batch 1090803 - General Prep - Wet Chem										
Blank (1090803-BLK1)				Prepared: 08-Sep-21 Analyzed: 10-Sep-21						
Sulfate	ND	10.0	mg/L							

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: JERAULD ANDERSON Project Number: 32.50083-103.259567 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 17-Sep-21 14:00

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1090803 - General Prep - Wet Chem										
LCS (1090803-BS1)				Prepared: 08-Sep-21 Analyzed: 10-Sep-21						
Sulfate	22.0	10.0	mg/L	20.0		110	80-120			
LCS Dup (1090803-BSD1)				Prepared: 08-Sep-21 Analyzed: 10-Sep-21						
Sulfate	19.2	10.0	mg/L	20.0		96.0	80-120	13.4	20	
Batch 1090811 - Filtration										
Blank (1090811-BLK1)				Prepared: 08-Sep-21 Analyzed: 10-Sep-21						
TDS	ND	5.00	mg/L							
LCS (1090811-BS1)				Prepared: 08-Sep-21 Analyzed: 10-Sep-21						
TDS	275		mg/L	300		91.7	80-120			
Duplicate (1090811-DUP1)		**Source: H212440-02**		Prepared: 08-Sep-21 Analyzed: 10-Sep-21						
TDS	661	5.00	mg/L		699			5.59	20	
Batch 1090914 - General Prep - Wet Chem										
LCS (1090914-BS1)				Prepared & Analyzed: 09-Sep-21						
pH	7.04		pH Units	7.00		101	90-110			
Conductivity	494		uS/cm	500		98.8	80-120			
Duplicate (1090914-DUP1)		**Source: H212493-01**		Prepared & Analyzed: 09-Sep-21						
pH	7.23	0.100	pH Units		7.21			0.277	20	
Conductivity	5060	1.00	umhos/cm @ 25°C		5030			0.595	20	
Resistivity	1.98		Ohms/m		1.99			0.595	20	
Temperature °C	20.0		pH Units		19.9			0.501	200	

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: JERAULD ANDERSON Project Number: 32.50083-103.259567 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 17-Sep-21 14:00

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1090915 - General Prep - Wet Chem										
Duplicate (1090915-DUP1)		**Source: H212493-01**		Prepared & Analyzed: 09-Sep-21						
Specific Gravity @ 60° F	1.012	0.000	[blank]		1.004			0.806	20	
Batch 1091005 - Filtration										
Blank (1091005-BLK1)				Prepared: 10-Sep-21 Analyzed: 14-Sep-21						
TSS	ND	2.00	mg/L							
Duplicate (1091005-DUP1)		**Source: H212493-01**		Prepared: 10-Sep-21 Analyzed: 14-Sep-21						
TSS	4.00	2.00	mg/L		3.00			28.6	52.7	

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: JERAULD ANDERSON Project Number: 32.50083-103.259567 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 17-Sep-21 14:00

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
Batch B212168 - Total Rec. 200.7/200.8/200.2										
Blank (B212168-BLK1)				Prepared: 15-Sep-21 Analyzed: 16-Sep-21						
Magnesium	ND	0.100	mg/L							
Strontium	ND	0.100	mg/L							
Barium	ND	0.050	mg/L							
Sodium	ND	1.00	mg/L							
Potassium	ND	1.00	mg/L							
Calcium	ND	0.100	mg/L							
Iron	ND	0.050	mg/L							
LCS (B212168-BS1)				Prepared: 15-Sep-21 Analyzed: 16-Sep-21						
Magnesium	9.98	0.100	mg/L	10.0		99.8	85-115			
Iron	1.95	0.050	mg/L	2.00		97.6	85-115			
Barium	0.983	0.050	mg/L	1.00		98.3	85-115			
Potassium	3.93	1.00	mg/L	4.00		98.3	85-115			
Sodium	1.53	1.00	mg/L	1.62		94.6	85-115			
Calcium	1.95	0.100	mg/L	2.00		97.3	85-115			
Strontium	1.90	0.100	mg/L	2.00		95.1	85-115			
LCS Dup (B212168-BSD1)				Prepared: 15-Sep-21 Analyzed: 16-Sep-21						
Iron	1.95	0.050	mg/L	2.00		97.7	85-115	0.137	20	
Calcium	1.96	0.100	mg/L	2.00		97.8	85-115	0.568	20	
Magnesium	9.96	0.100	mg/L	10.0		99.6	85-115	0.237	20	
Potassium	3.98	1.00	mg/L	4.00		99.5	85-115	1.19	20	
Sodium	1.55	1.00	mg/L	1.62		95.5	85-115	0.984	20	
Strontium	1.93	0.100	mg/L	2.00		96.3	85-115	1.22	20	
Barium	0.944	0.050	mg/L	1.00		94.4	85-115	4.10	20	

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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

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CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Lab. Services
Project Manager: Dustin Armstrong
Address:
City: State: Zip:
Phone #: Fax #:
Project #: Project Owner:
Project Name: Jerauld Anderson
Project Location: 32.50083, -103.259567
Sampler Name:

BILL TO
P.O. #:
Company: All Consul
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		Cation/Anions	Spec. Gravity	TSS	Resistivity	Ba, Fe, Sr	Total Hardness								
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :		ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME															
H212493																													
1	CP-01039 Pod 1	G	2	✓								✓		9-9-21	1030	✓	✓	✓	✓	✓	✓									

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 consequental 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: Caeda D. [signature] Date: 9-9-21 Time: 1112 Received By: Tamara Oldaker
Relinquished By: Date: Time: Received By:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:
Observed Temp. °C 5.8
Corrected Temp. °C
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) T.O.

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
REMARKS:

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #113
Correction Factor None
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

FORM-006 R 3.1 06/04/20

CARDINAL Laboratories

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

September 14, 2021

OLIVER SEEKINS

ALL CONSULTING, LLC

1718 S. CHEYENNE AVE.

TULSA, OK 74119

RE: WILBERTA TIVIS

Enclosed are the results of analyses for samples received by the laboratory on 08/26/21 15:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: WILBERTA TIVIS Project Number: 32.48377-103.262247 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 14-Sep-21 09:47

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CP - 01696 POD 1	H212303-01	Water	26-Aug-21 14:15	26-Aug-21 15:15

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: WILBERTA TIVIS Project Number: 32.48377-103.262247 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 14-Sep-21 09:47

CP - 01696 POD 1

H212303-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**200**		5.00	mg/L	1	1072906	AC	27-Aug-21	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	1072906	AC	27-Aug-21	310.1	
Chloride*	**900**		4.00	mg/L	1	1081907	GM	30-Aug-21	4500-Cl-B	
Conductivity*	**5000**		1.00	umhos/cm @ 25°C	1	1082704	AC	27-Aug-21	120.1	
pH*	**7.50**		0.100	pH Units	1	1082704	AC	27-Aug-21	150.1	
Temperature °C	**19.6**			pH Units	1	1082704	AC	27-Aug-21	150.1	
Resistivity	**2.00**			Ohms/m	1	1082704	AC	27-Aug-21	120.1	
Sulfate*	**1430**		10.0	mg/L	1	1083008	GM	30-Aug-21	375.4	
TDS*	**3530**		5.00	mg/L	1	1081913	GM	30-Aug-21	160.1	
Alkalinity, Total*	**164**		4.00	mg/L	1	1072906	AC	27-Aug-21	310.1	
TSS*	**2.00**		2.00	mg/L	1	1083009	AC	31-Aug-21	160.2	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Barium*	<0.250		0.250	mg/L	5	B212084	AES	09-Sep-21	EPA200.7	
Calcium*	**233**		0.500	mg/L	5	B212084	AES	09-Sep-21	EPA200.7	
Hardness as CaCO3	**1090**		3.31	mg/L	5	[CALC]	AES	09-Sep-21	2340 B	
Iron*	<0.250		0.250	mg/L	5	B212084	AES	09-Sep-21	EPA200.7	
Magnesium*	**124**		0.500	mg/L	5	B212084	AES	09-Sep-21	EPA200.7	
Potassium*	**15.3**		5.00	mg/L	5	B212084	AES	09-Sep-21	EPA200.7	
Sodium*	**621**		5.00	mg/L	5	B212084	AES	09-Sep-21	EPA200.7	
Strontium*	**6.51**		0.500	mg/L	5	B212084	AES	09-Sep-21	EPA200.7	

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: WILBERTA TIVIS Project Number: 32.48377-103.262247 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 14-Sep-21 09:47

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1072906 - General Prep - Wet Chem										
Blank (1072906-BLK1)				Prepared: 29-Jul-21 Analyzed: 30-Jul-21						
Alkalinity, Carbonate	ND	1.00	mg/L							
Alkalinity, Bicarbonate	5.00	5.00	mg/L							
Alkalinity, Total	4.00	4.00	mg/L							
LCS (1072906-BS1)				Prepared: 29-Jul-21 Analyzed: 30-Jul-21						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120			
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120			
Alkalinity, Total	250	10.0	mg/L	250		100	80-120			
LCS Dup (1072906-BSD1)				Prepared: 29-Jul-21 Analyzed: 30-Jul-21						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120		20	
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120	0.00	20	
Alkalinity, Total	250	10.0	mg/L	250		100	80-120	0.00	20	
Batch 1081907 - General Prep - Wet Chem										
Blank (1081907-BLK1)				Prepared & Analyzed: 19-Aug-21						
Chloride	ND	4.00	mg/L							
LCS (1081907-BS1)				Prepared & Analyzed: 19-Aug-21						
Chloride	100	4.00	mg/L	100		100	80-120			
LCS Dup (1081907-BSD1)				Prepared & Analyzed: 19-Aug-21						
Chloride	104	4.00	mg/L	100		104	80-120	3.92	20	
Batch 1081913 - Filtration										
Blank (1081913-BLK1)				Prepared: 19-Aug-21 Analyzed: 20-Aug-21						
TDS	ND	5.00	mg/L							

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: WILBERTA TIVIS Project Number: 32.48377-103.262247 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 14-Sep-21 09:47

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1081913 - Filtration										
LCS (1081913-BS1)				Prepared: 19-Aug-21 Analyzed: 20-Aug-21						
TDS	539		mg/L	500		108	80-120			
Duplicate (1081913-DUP1)		**Source: H212190-02**		Prepared: 19-Aug-21 Analyzed: 20-Aug-21						
TDS	620	5.00	mg/L		645			3.95	20	
Batch 1082704 - General Prep - Wet Chem										
LCS (1082704-BS1)				Prepared & Analyzed: 27-Aug-21						
Conductivity	51400		uS/cm	50000		103	80-120			
pH	7.05		pH Units	7.00		101	90-110			
Duplicate (1082704-DUP1)		**Source: H212303-01**		Prepared & Analyzed: 27-Aug-21						
pH	7.54	0.100	pH Units		7.50			0.532	20	
Conductivity	5010	1.00	umhos/cm @ 25°C		5000			0.200	20	
Resistivity	2.00		Ohms/m		2.00			0.200	20	
Temperature °C	19.6		pH Units		19.6			0.00	200	
Batch 1083008 - General Prep - Wet Chem										
Blank (1083008-BLK1)				Prepared & Analyzed: 30-Aug-21						
Sulfate	ND	10.0	mg/L							
LCS (1083008-BS1)				Prepared & Analyzed: 30-Aug-21						
Sulfate	20.5	10.0	mg/L	20.0		103	80-120			
LCS Dup (1083008-BSD1)				Prepared & Analyzed: 30-Aug-21						
Sulfate	21.9	10.0	mg/L	20.0		110	80-120	6.59	20	

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: WILBERTA TIVIS Project Number: 32.48377-103.262247 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 14-Sep-21 09:47

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1083009 - Filtration										
Blank (1083009-BLK1)				Prepared: 30-Aug-21 Analyzed: 31-Aug-21						
TSS	ND	2.00	mg/L							
Duplicate (1083009-DUP1)		**Source: H212303-01**		Prepared: 30-Aug-21 Analyzed: 31-Aug-21						
TSS	2.00	2.00	mg/L		2.00			0.00	52.7	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: WILBERTA TIVIS Project Number: 32.48377-103.262247 Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 14-Sep-21 09:47

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
Batch B212084 - Total Rec. 200.7/200.8/200.2										
Blank (B212084-BLK1)				Prepared: 07-Sep-21 Analyzed: 09-Sep-21						
Magnesium	ND	0.100	mg/L							
Barium	ND	0.050	mg/L							
Strontium	ND	0.100	mg/L							
Calcium	ND	0.100	mg/L							
Sodium	ND	1.00	mg/L							
Iron	ND	0.050	mg/L							
Potassium	ND	1.00	mg/L							
LCS (B212084-BS1)				Prepared: 07-Sep-21 Analyzed: 09-Sep-21						
Strontium	3.93	0.100	mg/L	4.00		98.3	85-115			
Sodium	3.19	1.00	mg/L	3.24		98.3	85-115			
Potassium	7.82	1.00	mg/L	8.00		97.7	85-115			
Magnesium	20.3	0.100	mg/L	20.0		101	85-115			
Iron	3.94	0.050	mg/L	4.00		98.6	85-115			
Calcium	3.97	0.100	mg/L	4.00		99.3	85-115			
Barium	1.96	0.050	mg/L	2.00		98.1	85-115			
LCS Dup (B212084-BSD1)				Prepared: 07-Sep-21 Analyzed: 09-Sep-21						
Magnesium	20.2	0.100	mg/L	20.0		101	85-115	0.516	20	
Calcium	3.90	0.100	mg/L	4.00		97.6	85-115	1.81	20	
Potassium	7.82	1.00	mg/L	8.00		97.7	85-115	0.0383	20	
Barium	1.93	0.050	mg/L	2.00		96.7	85-115	1.45	20	
Sodium	3.17	1.00	mg/L	3.24		97.9	85-115	0.443	20	
Strontium	3.92	0.100	mg/L	4.00		98.0	85-115	0.321	20	
Iron	3.87	0.050	mg/L	4.00		96.9	85-115	1.74	20	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Lab Services / acl Consult.
Project Manager:	Dustin Armstrong
Address:	
City:	State: Zip:
Phone #:	Fax #:
Project #:	Project Owner:
Project Name:	Wilburta Tivis
Project Location:	
Sampler Name:	

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cation/Anions	Ba, Fe, Sr	Resistivity	Total Hardness	TSS
H212303-1	CP-09696 Pod 1	G	2	✓									~~8.15~~ 8.24	2:15	✓	✓	✓	✓	✓

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 consequental 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: 8.24.23	Received By:	
Relinquished By:	Time: 3:15	Received By:	
	Date:		
	Time:		

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:

REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 5.9	Sample Condition: Cool ☑ Yes ☐ No / Intact ☑ Yes ☐ No	CHECKED BY: (Initials) TO	Turnaround Time: Standard ☑ / Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C			Thermometer ID #113 / Correction Factor None

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No / Intact ☐ Yes ☐ No — Observed Temp. °C / Corrected Temp. °C

FORM-006 R 3.1 08/04/20

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

Attachment 6

Public Notice Affidavit and Notice of Application Confirmations

APPLICATION FOR AUTHORIZATION TO INJECT

NOTICE IS HEREBY GIVEN: That Goodnight Midstream Permian, LLC, 5910 N Central Expressway, Unit 800, Dallas, TX 75206, is requesting that the New Mexico Oil Conservation Division administratively approve the APPLICATION FOR AUTHORIZATION TO INJECT as follows:

PURPOSE: The intended purpose of the injection well is to dispose of salt water produced from permitted oil and gas wells.

WELL NAME AND LOCATION: Seaver SWD #1
Located 6.8 miles northwest of Eunice, NM
UL K, Section 10, Township 21S, Range 36E
1,809 FSL & 1,428' FWL
Lea County, NM

NAME AND DEPTH OF DISPOSAL ZONE: San Andres (4,200'– 5,300')
EXPECTED MAXIMUM INJECTION RATE: 42,000 Bbls/day
EXPECTED MAXIMUM INJECTION PRESSURE: 840 psi (surface)

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., Santa Fe, New Mexico 87505.

Additional information may be obtained by contacting Nate Alleman at 918-382-7581.

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
May 09, 2023
and ending with the issue dated
May 09, 2023.

LEGAL NOTICE
May 9, 2023

APPLICATION FOR AUTHORIZATION TO INJECT

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Additional information may be obtained by contacting Nate Alleman at 918-382-7581.
#00278374

Publisher

Sworn and subscribed to before me this
9th day of May 2023.

Business Manager

My commission expires
January 29, 2027
(Seal)

STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
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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

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DANIEL ARTHUR
ALL CONSULTING
1718 S. CHEYENNE AVE.
TULSA, OK 74119

Seaver SWD #1 - Notice of Application Recipients				
Entity	**Address**	**City**	**State**	**Zip Code**
Land & Mineral Owner				
Millard Deck Estate, Terry Richey Trustee Senior Vice President - Sr. Trust Officer Southwest Bank Trust Department	4800 East 42nd Street	Odessa	Texas	79762
OCD District				
NMOCD District 1	1625 N. French Drive	Hobbs	NM	88240
Leasehold Operators				
New Mexico State Land Office	310 Old Sante Fe Trail	Sante Fe	NM	87501
XTO Energy Inc. (XTO ENERGY INC.)	500 W. Illinois, Suite 100	Midland	TX	79701
ConocoPhillips Company (CONOCOPHILLIPS COMPANY)	960 Plaza Office Bldg	Bartlesville	OK	74004
Empire New Mexico LLC	2200 S. Utice Pl., Suite 150	Tulsa	OK	74114
Chevron USA Inc. (CHEVRON U S A INC) (CHEVRON USA INC)	6301 Deauville Blvd.	Midland	TX	79706

Notes: The table above shows the Entities who were identified as parties of interest requiring notification on either the 0.5-mile well detail list (Attachment 2) or on the 2-mile Mineral Lease Map (Attachment 2). The names listed above in parenthesis, are the abbreviated entity names used on either the 0.5-mile well detail list (Attachment 2) or on the 2-mile Mineral Lease Map (Attachment 2).

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Millard Deck Estate, Terry Richey
Senior VP - Sr. Trust Officer
4800 E 42ND ST STE 100
ODESSA TX 79762-7214

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09/19

Attachment 7

Signed No Hydrological Connection Statement

GOODNIGHT
MIDSTREAM

Steve Drake
V.P. Geology and Reservoir Engineering
Goodnight Midstream, LLC
5910 North Central Expressway, Suite 850
Dallas, Texas 75206

RE: Goodnight Midstream, LLC Seaver SWD well permit

Lot K, Section 10, Township 21S Range 36E
Lea County, New Mexico

Goodnight Midstream conducted a hydrogeologic investigation related to the proposed injection well. The scope of the investigation was to determine if there is any hydrologic connection between the proposed injection interval and any sources of underground drinking water.

Goodnight geologist performed an analysis of subsurface well log data. It is our conclusion that there is no evidence of faulting in the data we evaluated at the depths that are being considered. There are small scale flexures which may or may not be associated with small scale faults. None of these flexures extend above the Wolfcamp unconformity and are not seen in the Leonard intervals.

Goodnight acquired and evaluated 3D seismic to the west but does not cover the lands that this salt water disposal well is located upon. This data shows the geologic setting in the area. No faults are seen in the Artesia Group, San Andres, Glorieta, or Leonard series. The San Andres contains small scale flexures and changes in seismic velocity that may indicate karsting. These flexures and velocity anomalies are being used to target disposal reservoir opportunities. The Grayburg thickens over the San Andres sag. There is also a thickening of the Yates relative to the low in the San Andres. These stratigraphic changes do not indicate the presence of faulting and there is no communication between these intervals.

Water has been disposed into the San Andres in this area since 1966. There is a good record of pressure separation. Production from the Artesia group has proceeded without interruption or encroachment from San Andres disposal for more than 50 years. Containment and isolation from the hydrocarbon intervals would then also be isolated from any sources of fresh water above.

We see no evidence of faulting that would extend to or form a connection between the injection zone and any underground sources of drinking water.

Steve Drake — 4/6/2023

Steve Drake
V.P. Geology and Reservoir Engineering
Goodnight Midstream, LLC

Date

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 222434

CONDITIONS

Operator: GOODNIGHT MIDSTREAM PERMIAN, LLC 5910 North Central Expressway Dallas, TX 75206	OGRID: 372311
	Action Number: 222434
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	5/31/2023