Initial Application Part I

Received 1/13/21

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

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

January 13, 2021

Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Subject: Anthem Water Solutions, LLC – US 62 Federal SWD #2
Application for Authorization to Inject

To whom it may concern:

On behalf of Anthem Water Solutions, LLC, ALL Consulting, LLC (ALL) has prepared and is submitting an application for the US 62 Federal SWD #2 to convert an existing plugged and abandoned well for the purpose of saltwater disposal into the Devonian and Silurian formations.

This re-open and re-completion is for API No. 30-015-21248, which was drilled by Mesa Petroleum Company (Mesa) in 1974 to a total depth of 11,233'. The surface and intermediate casing were cemented to the surface, and this well was properly plugged and abandoned by Mesa in August of 1974 prior to completion of the well. A copy of the Sundry Notice plugging report C-103 is included with this application package.

If you have any questions regarding this application, please contact me at (918) 382-7581 or e-mail me at nalleman@all-llc.com.

Sincerely,
ALL Consulting

Nathan Alleman
Sr. Regulatory Specialist

Attachment

RECEIVED: 1/13/21	REVIEWER:	TYPE: SWD	APP NO: pBL2101557822

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: Anthem Water Solutions, LLC **OGRID Number:** 330069
Well Name: US 62 Federal SWD #2 **API:** 3001521248
Pool: SWD; DEVONIAN - SILURIAN **Pool Code:** 97869

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

SWD-2410

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.

Nathan Alleman
Print or Type Name

Nathan Alleman
Signature

1/13/2021
Date

918-382-7581
Phone Number

nalleman@all-llc.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: Anthem Water Solutions, LLC

ADDRESS: 5914 W. Courtyard Dr. Suite 320, Austin, TX, 78730

CONTACT PARTY: Nathan Alleman PHONE: 918-382-7581

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: Nate Alleman TITLE: Sr. Regulatory Specialist

XV. SIGNATURE: Nathan Alleman DATE: 1/13/2021

E-MAIL ADDRESS: nalleman@all-llc.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

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: US 62 Federal SWD #2

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

A.

(1) General Well Information:

Operator: Anthem Water Solutions, LLC (OGRID No. 330069)
Lease Name & Well Number: US 62 Federal SWD #2
Location Footage Calls: 660 FSL & 2,245 FEL
Legal Location: Unit Letter O, S30 T25S R25E
Ground Elevation: 3,687.9'
Proposed Injection Interval: 12,882' – 13,882'
County: Eddy

(2) Casing Information:

Type	Hole Size	Casing Size	Casing Weight	Setting Depth	Sacks of Cement	Estimated TOC	Method Determined
Surface	17.5"	13.325"	48.0 lb/ft	308'	350	Surface	Circulation
Intermediate	12.25"	9.625"	36 lb/ft	2,600'	900	Surface	Circulation
Production	8.75"	7"	26 lb/ft	12,882'	1,665	2,400'	CBL
Tubing	-	4.5"	11.6 lb/ft	12,862'	-	-	-

(*The Wellbore Diagram is* attached) **Note:** Two DV Tools will be set in the Production casing at 6,000 ft. and 9,000 ft.

(3) Tubing Information:

4.5" (11.6# N80 IPC) with setting depth of 12,862'

(4) Packer Information: Baker Hughes SC-2 or equivalent packer set at 12,862'

B.

(1) Injection Formation Name: Devonian - Silurian
Pool Name: SWD; DEVONIAN - SILURIAN
Pool Code: 97869
Injection Interval: Open hole injection between 12,882' – 13,882'

(2) Drilling Purpose: Re-Completion for Salt Water Disposal

(3) Other Perforated Intervals: No perforated intervals exist.

(4) Overlying Oil and Gas Zones: Below are the approximate formation tops for known oil and gas producing zones in the area.

- Delaware (1,784')
- Bone Springs (5,256')
- Wolfcamp (8,695')
- Atoka (11,657')
- Morrow (11,918')

(5) Underlying Oil and Gas Zones: No underlying oil and gas zones exist.

V – Well and Lease Maps

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

- 2-mile Oil & Gas Well Map
- 1-mile Well Detail List
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership map
- 1.5-mile Deep SWD Map (Devonian/Silurian)
- Potash Lease Map

VI – AOR Well List

There are three wells within the 1-mile AOR, including the subject well. None of those wells penetrate the proposed injection zone.

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

VII – Proposed Operation

(1) Proposed Maximum Injection Rate: 30,000 bpd
Proposed Average Injection Rate: 15,000 bpd

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

(3) Proposed Maximum Injection Pressure: 2,576 psi (surface)
Proposed Average Injection Pressure: approximately 1,200 – 1,700 psi (surface)

(4) Source Water Analysis: It is expected that the injectate will consist of produced water from production wells completed in the 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 Devonian - Silurian formations which are non-productive zones known to be compatible with formation water from the Wolfcamp and Bone Springs formations. Water analyses from the Devonian formation in the area are included in ***Attachment 4.***

VIII – Geologic Description

The proposed injection interval includes the Devonian - Silurian formations from 12,882 – 13,882 feet. This formation consists of interbedded carbonate rocks consisting of dolomites and limestones with some interbedded siltstones and shales. Several thick sections of porous and permeable intervals capable of taking water are present within the subject formation in the area.

The base of the lowermost Underground Source of Drinking Water (USDW) is at a depth of approximately 1,755 feet. The USDW covered by casing set at 2,600 feet that is cemented to surface and isolates the USDW. Geophysical log assessment was conducted to accurately determine the top of the Rustler formation as well as the top and the base of the Capitan Reef formation in this area. Water well depths in the area range from approximately 7 - 178 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, there are five groundwater well located within 1-mile of the proposed SWD location; however, none of the groundwater wells were determined to be active. Therefore, there were no groundwater samples collected in association with this application.

A water well map of the area is included in ***Attachment 5***.

XII – No Hydrologic Connection Statement

ALL Consulting has examined available geologic and engineering data, and has found no evidence of faulting present in the area that would provide a hydrologic connection between the injection interval and overlying USDWs. Additionally, the casing and cementing program has been designed to further ensure there will be no hydrologic connection between the injection interval and overlying USDWs. A letter from a knowledgeable and qualified expert stating that there is little to no risk of seismic activity from the proposed injection activities is included in ***Attachment 6*.**

XIII – Proof of Notice

A Public Notice was filed with the Carlsbad Current Argus newspaper and an affidavit is included in ***Attachment 7***.

A copy of the application was mailed to the OCD District Office, landowner, and leasehold operators within 1-mile of the proposed SWD location. A list of the recipients, as well as delivery confirmations, are included in ***Attachment 7***.

Attachments

Attachment 1:

- C-102
- Existing Wellbore Diagram
- Proposed Wellbore Diagram
- C-103

Attachment 2: Area of Review Information:

- 2-mile Oil & Gas Well Map
- 1-mile Well Detail List
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- 1.5-mile Deep SWD Map (Devonian/Silurian SWDs)
- 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 1

- C-102
- Existing Wellbore Diagram
- Proposed Wellbore Diagram
- C-103

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
MESA PETROLEUM COMPANY	HUAPACHE FEDERAL	1

Unit Letter	Section	Township	Range	County
O	30	25 SOUTH	25 EAST	EDDY

Actual Footage Location of Well:
660 feet from the SOUTH line and 2245 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage
3687.9	Morrow	Wildcat	317.28

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

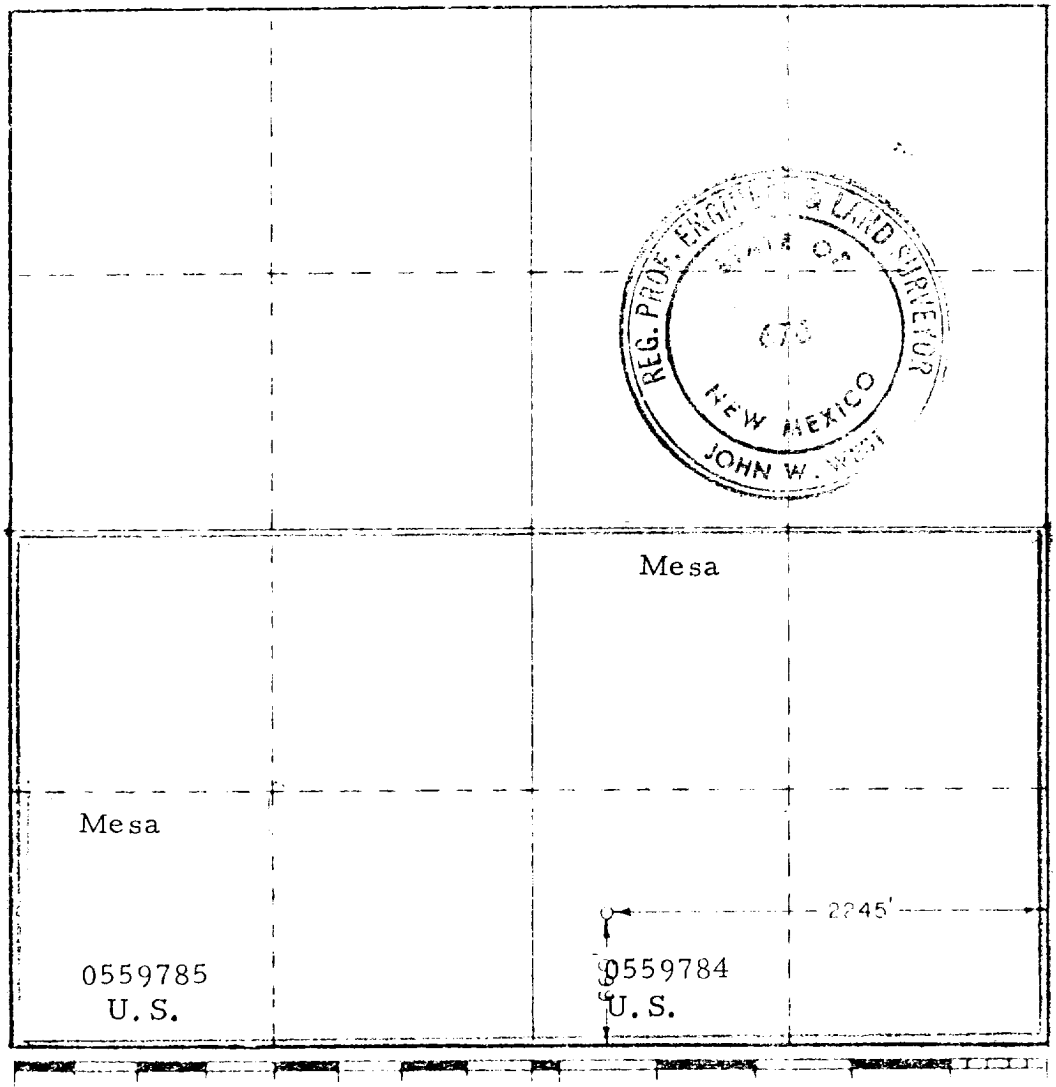
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

[x] Yes [ ] No If answer is "yes," type of consolidation Communitization, if production encountered

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Michael P. Houston

Position: Production Engineer

Company: Mesa Petroleum Co.

Date: June 4, 1974

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 knowledge and belief.

MAY 28 1974

AMA. PROD.

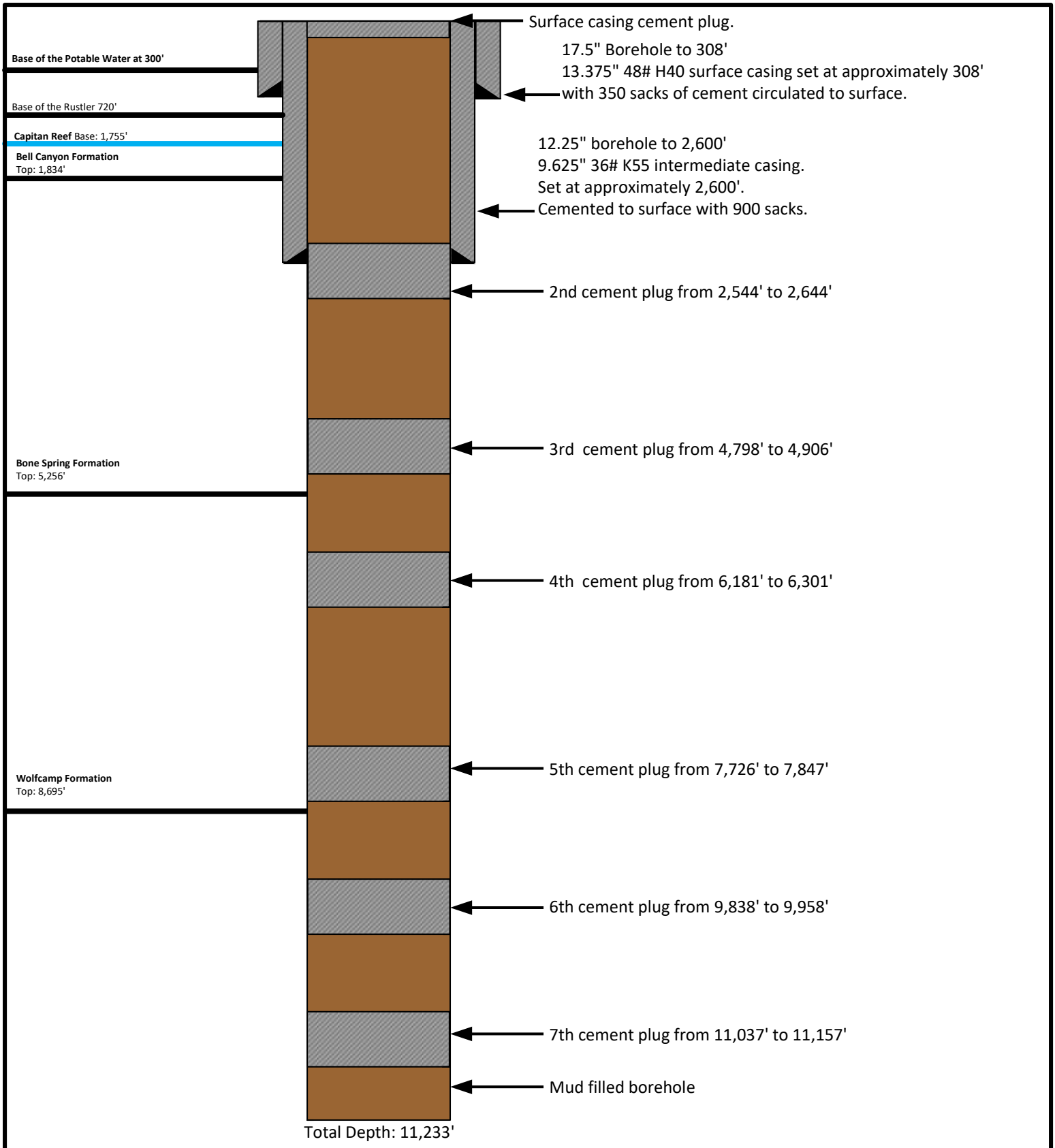
Date Surveyed: MAY 24, 1974

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. 676

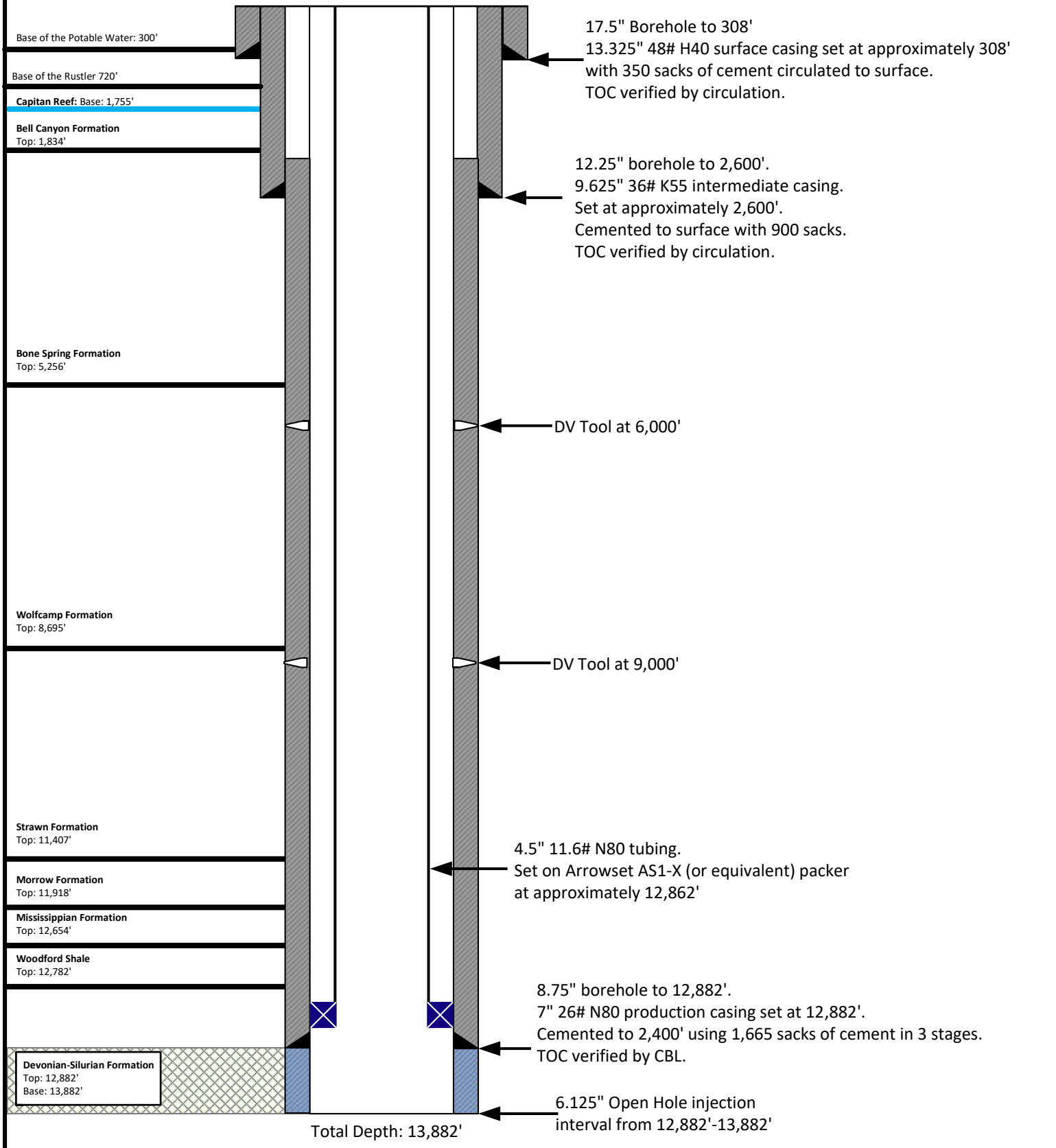
XC: 5 USGS, 1 Midland, O



Note: Listed depths and cement volumes are approximates based on available information. All cement calculations use yield of 1.18 cubic foot per sack and include 40% excess.

NOT TO SCALE

Prepared by: ALL CONSULTING *Prepared for:* ANTHEM WATER SOLUTIONS	Drawn by: Joshua Ticknor Project Manager: Dan Arthur Date: 10/29/2020	**Wellbore Diagram – Existing Construction** Anthem Water Solutions, LLC: US 62 Federal SWD # 2 API No. 30-015-21248 660' FSL & 2,245' FEL Section 30, Twp. 25S, Range 25E Eddy County, New Mexico



Note: Listed depths and cement volumes are approximates based on available information. All cement calculations use yield of 1.18 cubic foot per sack and include 25% excess.

NOT TO SCALE

Prepared by:
ALL CONSULTING

Prepared for:
ANTHEM WATER SOLUTIONS

Drawn by: Joshua Ticknor

Project Manager:
Dan Arthur

Date: 10/29/2020

Wellbore Diagram – Proposed Construction
Anthem Water Solutions, LLC - US 62 Federal SWD # 2
API No. 30-015-21248
660' FSL & 2,245' FEL
Section 30, Twp. 25S, Range 25E
Eddy County, New Mexico

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NM 0559784

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
JAN 30 1976
O. C. C.
ARTESIA, OFFICE

1. OIL WELL ☐ GAS WELL ☐ OTHER Dry Hole

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Mesa Petroleum Co.

8. FARM OR LEASE NAME
Huapache Federal

3. ADDRESS OF OPERATOR
P. O. Box 2009, Amarillo, Texas 79105

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
660' FSL & 2245' FEL of Sec. 30

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 30, T25S, R25E

14. PERMIT NO.
30-015-21248

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3688' GL 3701' RKB

12. COUNTY OR PARISH
Eddy Co.

13. STATE
NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

- TEST WATER SHUT-OFF ☐
- FRACTURE TREAT ☐
- SHOOT OR ACIDIZE ☐
- REPAIR WELL ☐
- (Other)
- PULL OR ALTER CASING ☐
- MULTIPLE COMPLETE ☐
- ABANDON* ☐
- CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

- WATER SHUT-OFF ☐
- FRACTURE TREATMENT ☐
- SHOOTING OR ACIDIZING ☐
- REPAIRING WELL ☐
- ALTERING CASING ☐
- ABANDONMENT* ☒
- (Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Well was drilled to total depth of 11,233 on August 18, 1974. DST results and electric logs did not indicate commercial zones of interest. The rotary was over the hole and verbal approval to plug and abandon was obtained from Mr. R. L. Beekman on August 22, 1974. Weighted brine (10.0#/gal) was left between the following cement (Class H) plugs.

50 sxs	11,037'	- 11,157'	Across top of Morrow
50 sxs	9,838'	- 9,958'	Across top of Atoka
50 sxs	7,727'	- 7,847'	Across top of Wolfcamp
50 sxs	6,181'	- 6,301'	Stabilizing plug
50 sxs	4,798'	- 4,906'	Across top of Bone Springs
50 sxs	2,544'	- 2,644'	Across 9 5/8" shoe @ 2600'
10 sxs	3' BGL-	30'	Surface plug

All cement plugs were spotted through drill pipe. No casing was pulled. (13 3/8" @ 308' and 9 5/8" @ 2,600') Dry hole marker was installed and rig released 8:00 pm (MDT) 8-23-74.

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Production Engineer DATE Sept. 5, 1974

(This space for Federal or State office use)

APPROVED BY ____ TITLE ____ DATE ____
CONDITIONS OF APPROVAL, IF ANY:

XC: 5-USGS, 1-Midland, 1-Engr., 2-Beard & Lemon

*See Instructions on Reverse Side

AS1-X MECHANICAL PACKER

The ACT AS1-X Packer is the most versatile of the mechanically set retrievable packers and may be used in any production application. Treating, testing, injecting, pumping wells, flowing wells, deep or shallow, the AS1-X is suited for all. The packer can be left in tension or compression, depending on well conditions and the required application. A large internal by-pass reduces swabbing when running and retrieving. The by-pass closes when the packer is set and opens prior to releasing the upper slips when retrieving to allow pressure equalization.

The J-slot design allows easy setting and releasing; 1/4 turn right-hand set, right-hand release. A patented upper-slip releasing system reduces the force required to release the packer. A non directional slip is released first, making it easier to release the other slips. The AS1-X packer can withstand 7,000 psi (48 MPa) of differential pressure above or below.

FEATURES, ADVANTAGES AND BENEFITS:

- The design holds high differential pressure from above or below, enabling the packer to meet most production, stimulation, and injection needs
- The packer can be set with compression, tension, or wire line, enabling deployment in shallow and deep applications
- The packer can be set and released with only a one-quarter turn of the tubing
- The bypass valve is below the upper slips so that debris are washed from the slips when the valve is opened, reducing the times for circulation and total retrieval
- The full opening enables unrestricted flow and the passage of wire line tools and other packer systems
- The packer can be run with the T-2 on-off tool, which enables the tubing to be disconnected and retrieved without retrieving the packer

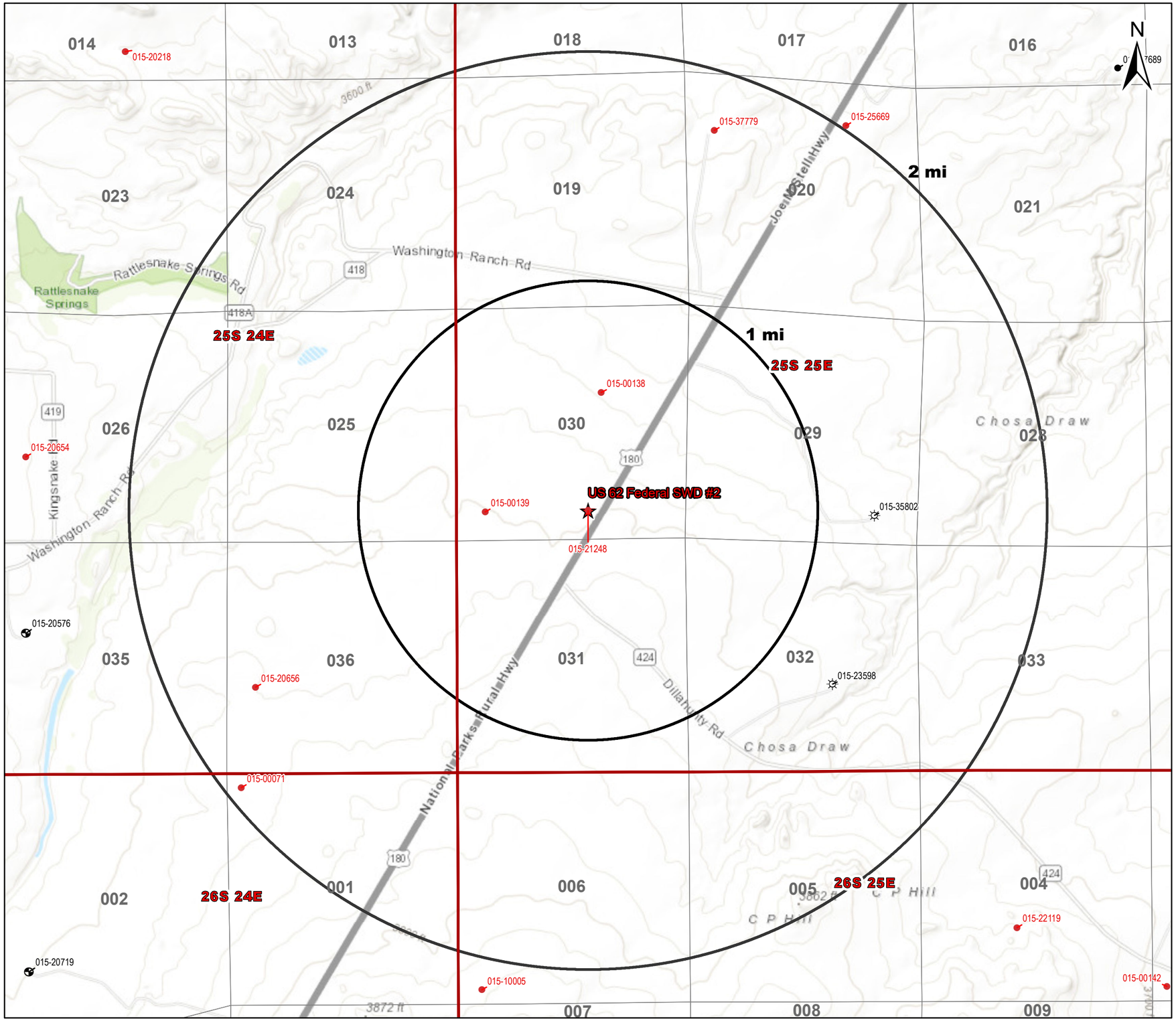
OPTIONS:

- Elastomer options are available for hostile environments
- Optional safety releases are available

Attachment 2

Area of Review Information:

- 2-mile Oil & Gas Well Map
- 1-mile Well Detail List
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- 1.5-mile Deep SWD Map (Devonian/Silurian SWDs)
- Potash Lease Map



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Legend

- Proposed SWD
- Miscellaneous (2)
- Gas, Active (2)
- Oil, Active (1)
- Oil, Plugged (12)
- Deep Injection Zone (0)
- Shallow Injection Zone (0)

Source Info: NMOCD O&G Wells updated 10/21/2020 (http://www.emnrd.state.nm.us/OCD/ocdgis.html)

O&G Wells Area of Review

US 62 Federal SWD #2

Eddy County, New Mexico

Proj Mgr: Dan Arthur	November 03, 2020	Mapped by: Ben Bockelmann

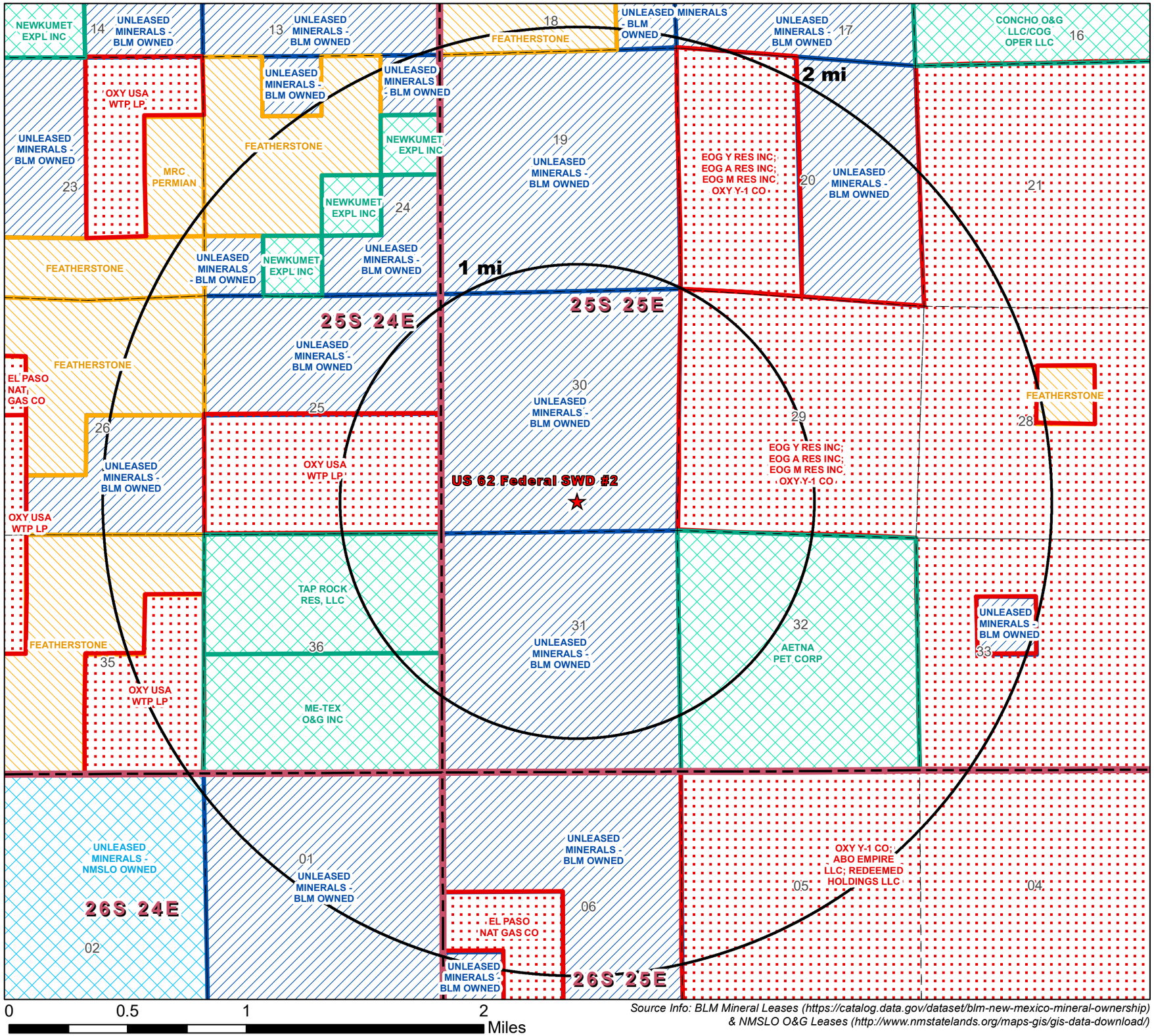
Prepared for: ANTHEM WATER SOLUTIONS

Prepared by: ALL CONSULTING

AOR Tabulation for US 62 Federal SWD #2 (Top of Injection Interval: 12,882')							
Well Name	**API#**	**Well Type**	**Operator**	**Spud Date**	**Location (Sec., Tn., Rng.)**	**Total Vertical Depth (feet)**	**Penetrate Inj. Zone?**
PRE-ONGARD WELL #001	30-015-00139	Plugged	PRE-ONGARD WELL OPERATOR (John M. Kelley)	12/27/1968	M-30-25S-25E	Plugged (1432)	No
Huapache Federal #1	30-015-21248	Plugged	Subject Well				
PRE-ONGARD WELL #001	30-015-00138	Plugged	PRE-ONGARD WELL OPERATOR (Gulf Oil Company)	1/11/1964	G-30-25S-25E	Plugged (6189)	No

Notes:

- No wells within a 1-mile AOR penetrated the injection interval.



N

Legend

- Proposed SWD
- NMSLO Mineral Leases
- BLM Mineral Leases
- Private Mineral Leases
- Unleased Minerals - Private Owned
- Unleased Minerals - BLM Owned
- Unleased Minerals - NMSLO Owned

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

Mineral Lease Area of Review

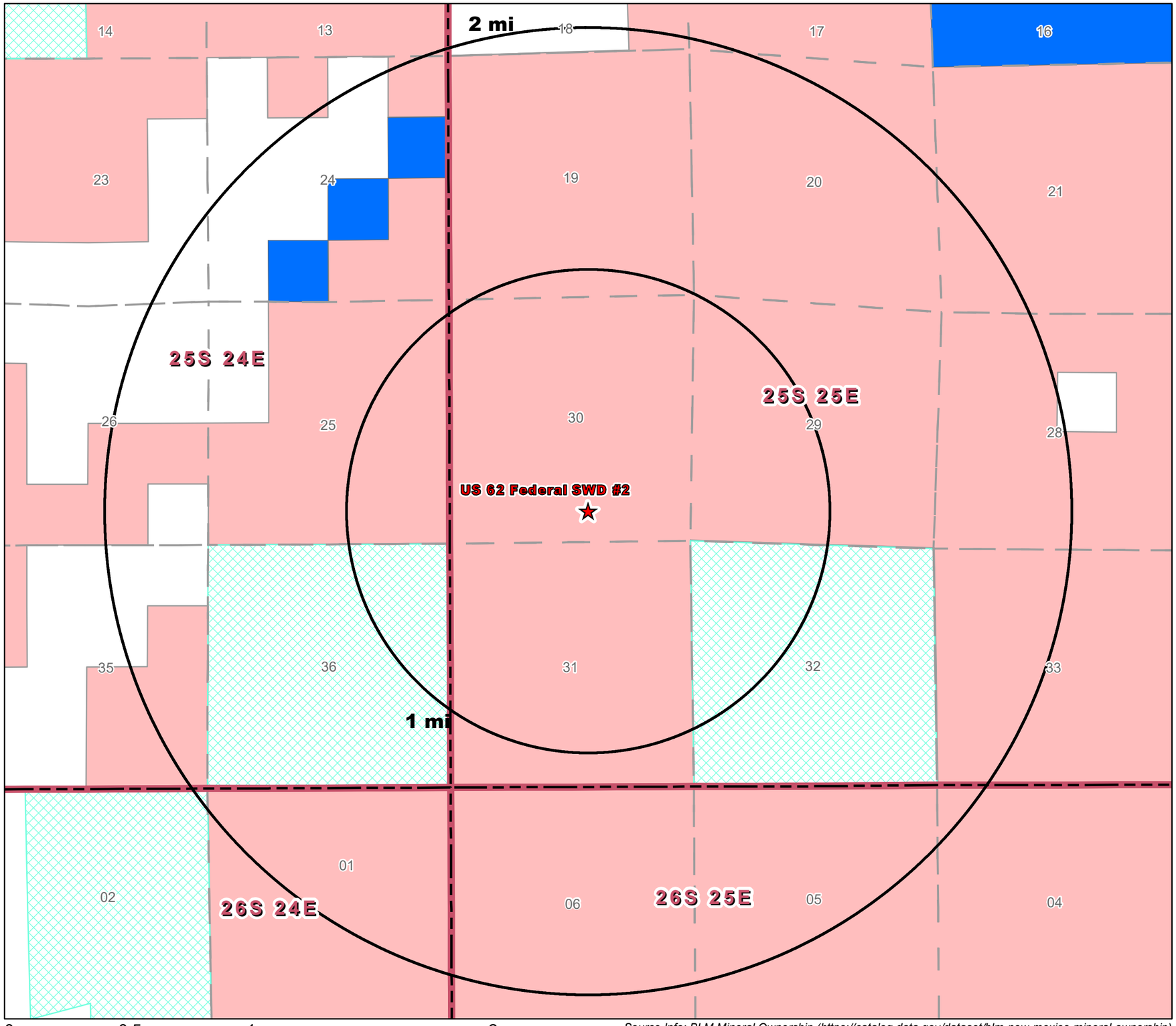
US 62 Federal SWD #2

Eddy County, New Mexico

Proj Mgr: Dan Arthur	November 13, 2020	Mapped by: Ben Bockelmann

Prepared for: ANTHEM WATER SOLUTIONS

Prepared by: ALL CONSULTING



N

Legend

- Proposed SWD

Mineral Ownership

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

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

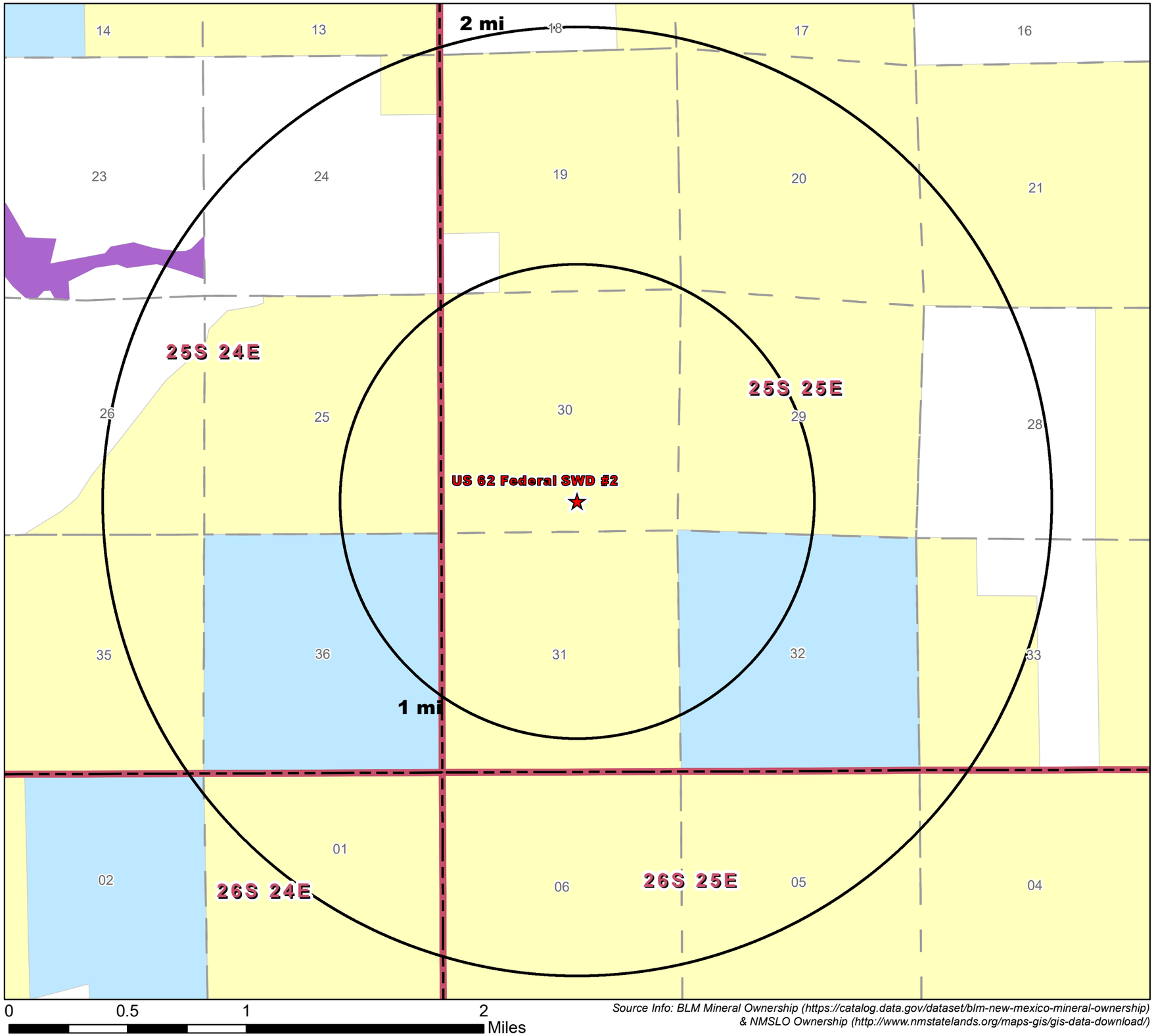
US 62 Federal SWD #2

Eddy County, New Mexico

Proj Mgr: Dan Arthur	November 05, 2020	Mapped by: Ben Bockelmann

Prepared for: ANTHEM WATER SOLUTIONS

Prepared by: ALL CONSULTING



N

Legend

- Proposed SWD

Surface Ownership

- BLM
- NPS
- Private
- State

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/)

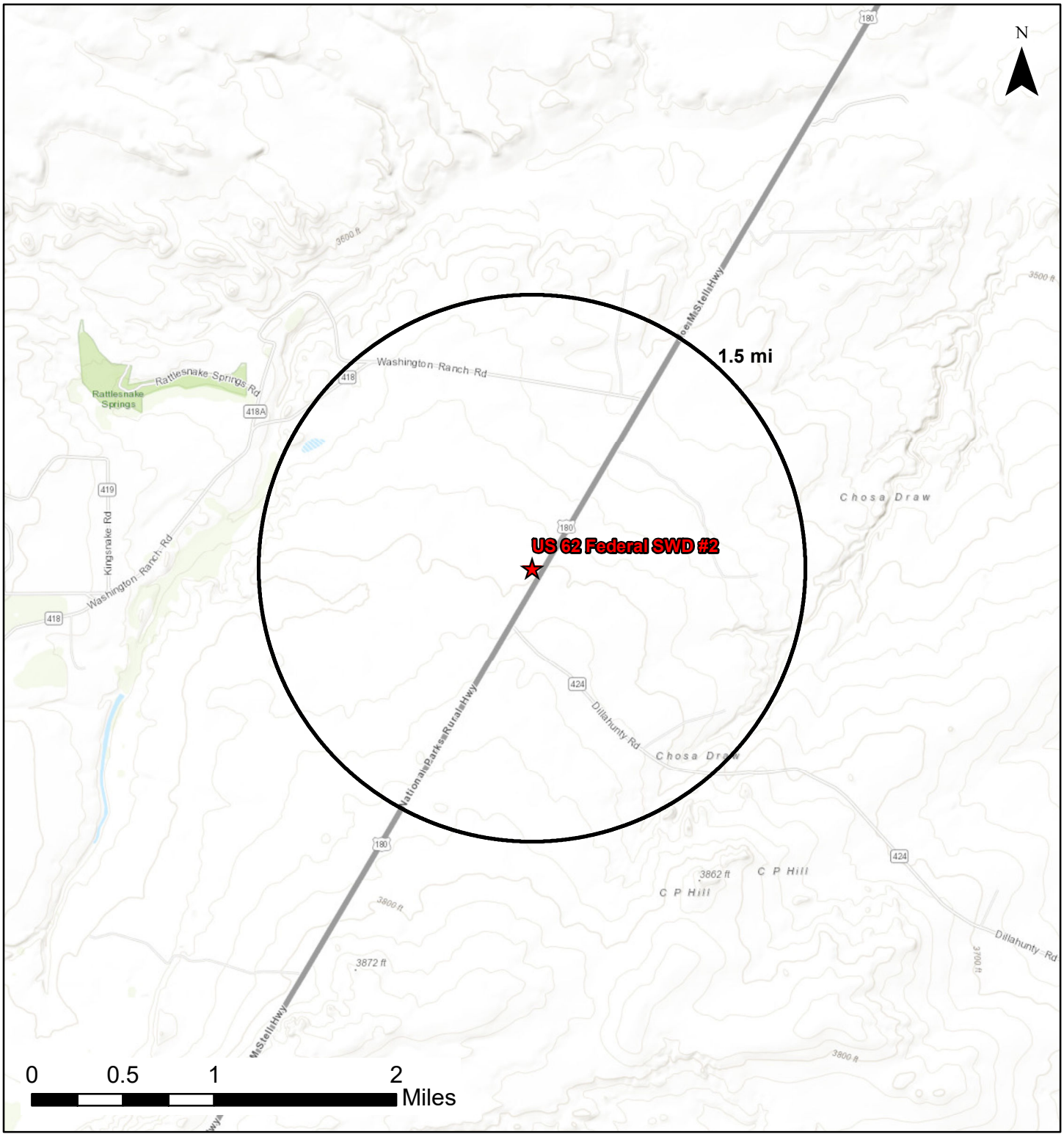
Surface Ownership
Area of Review

US 62 Federal SWD #2
Eddy County, New Mexico

Proj Mgr: Dan Arthur	November 05, 2020	Mapped by: Ben Bockelmann

Prepared for: ANTHEM WATER SOLUTIONS

Prepared by: ALL CONSULTING



US 62 Federal SWD #2
Deep SWDs AOR

Proj Mgr: Dan Arthur	Nov 11, 2020	Mapped by: Ben Bockelmann

Prepared by:

ALL CONSULTING

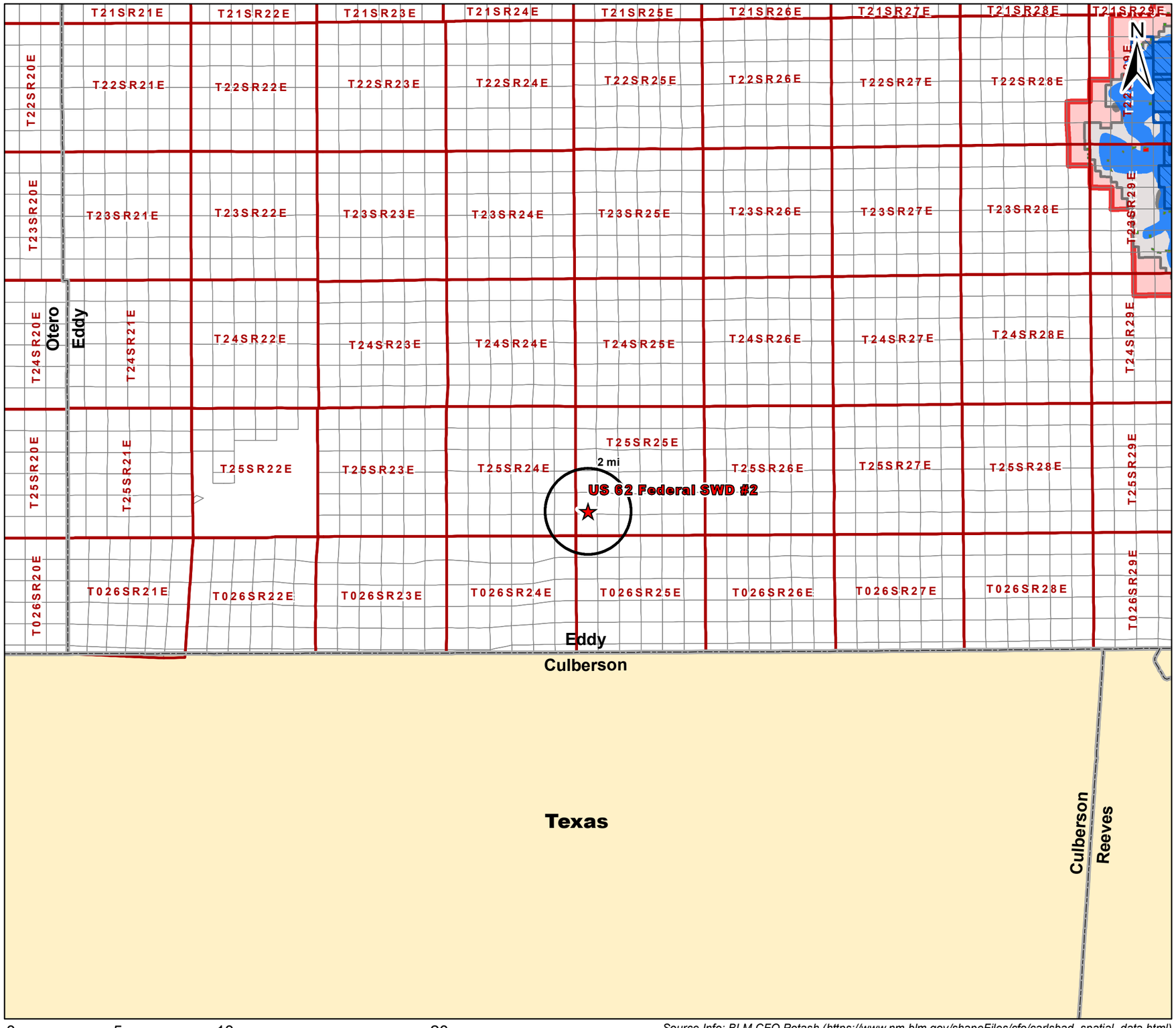
Legend

★ Proposed SWD

Devonian/Silurian SWDs

△ Salt Water Injection, Active (0)

△ Salt Water Injection, New (0)



Source Info: BLM CFO Potash (https://www.nm.blm.gov/shapeFiles/cfo/carlsbad_spatial_data.html)

Legend

- Proposed SWD
- Potash Leases
- Ore Type - Measured
- Ore Type - Indicated
- KPLA
- SOPA

Drill Islands

Status

- Approved
- Denied

Potash Leases
Area of Review

US 62 Federal SWD #2
Eddy County, New Mexico

Proj Mgr: Dan Arthur	November 05, 2020	Mapped by: Ben Bockelmann

Prepared for: ANTHEM WATER SOLUTIONS

Prepared by: ALL CONSULTING

Attachment 3

Source Water Analyses

Source Water Formation Analysis

Anthem Water Solutions, LLC- Bone Spring and Wolfcamp Formations

Wellname	API	Latitude	Longitude	Section	Township	Range	Unit	Ftgns	Ftgew	County	State	Formation	Tds (mg/L)	Chloride (mg/L)	Bicarbonate (mg/L)	Sulfate (mg/L)
DOC HOLLIDAY 32 STATE COM #001	3001541145	32.18041	-104.2201920	32	24S	27E	D	150N	330W	EDDY	NM	BONE SPRING 2ND SAND	193316.3	120600	170.8	17.0
PREACHER 19 FEDERAL #003H	3001541887	32.195770	-104.2276001	19	24S	27E	O	150S	1980E	EDDY	NM	BONE SPRING 2ND SAND	193786.1	119000	130.0	34.0
PREACHER 19 FEDERAL #003H	3001541887	32.195770	-104.2276001	19	24S	27E	O	150S	1980E	EDDY	NM	BONE SPRING 2ND SAND	177819.6	108940.6	366.0	0.0
JOSEY WALES 16 STATE COM #003H	3001541090	32.210400	-104.1936798	16	24S	27E	O	150S	1980E	EDDY	NM	BONE SPRING 2ND SAND	179419.7	112857	146.4	573.0
DOC HOLLIDAY 32 STATE COM #001	3001541145	32.18041	-104.2201920	32	24S	27E	D	150N	330W	EDDY	NM	BONE SPRING 2ND SAND	205799.3	128748.7	122.0	17.0
PREACHER 19 FEDERAL #003H	3001541887	32.195770	-104.2276001	19	24S	27E	O	150S	1980E	EDDY	NM	BONE SPRING 2ND SAND	203717.6	125604.7	144.0	34
JOSEY WALES 16 STATE COM #003H	3001541090	32.210400	-104.1936798	16	24S	27E	O	150S	1980E	EDDY	NM	BONE SPRING 2ND SAND	176588.8	109722	146.0	0.0
DOC HOLLIDAY 32 STATE COM #001	3001541145	32.180412	-104.2201920	32	24S	27E	D	150N	330W	EDDY	NM	BONE SPRING 2ND SAND	197760.1	123849.8	146.0	0.0
DOC HOLLIDAY 32 STATE COM #001	3001541145	32.180412	-104.2201920	32	24S	27E	D	150N	330W	EDDY	NM	BONE SPRING 2ND SAND	127681.6	77098	195.2	0.0
PREACHER 19 FEDERAL #003H	3001541887	32.19577	-104.2276001	19	24S	27E	O	150S	1980E	EDDY	NM	BONE SPRING 2ND SAND	312558	186000	201.4	3947.0
PREACHER 19 FEDERAL #003H	3001541887	32.19577	-104.2276001	19	24S	27E	O	150S	1980E	EDDY	NM	BONE SPRING 2ND SAND	312550	186000	201.4	0.0
JOSEY WALES 16 STATE COM #003H	3001541090	32.210400	-104.1936798	16	24S	27E	O	150S	1980E	EDDY	NM	BONE SPRING 2ND SAND	179141.4	109122.7	73.2	0.0
DOC HOLLIDAY 32 STATE COM #001	3001541145	32.18041	-104.2201920	32	24S	27E	D	150N	330W	EDDY	NM	BONE SPRING 2ND SAND	203230.2	124268.5	48.8	0.0
IRRITABLE 22 STATE COM #002H	3001541359	32.12192	-104.1758957	22	25S	27E	B	330N	1980E	EDDY	NM	BONE SPRING 2ND SAND	161087	100324.4		544.0
HABANERO 17 FEDERAL COM #001H	3001536108	32.221848	-104.206268	17	24S	27E	A	990N	660E	EDDY	NM	WOLFCAMP	108205	65927.2	146.0	0.0
SERRANO 29 FEDERAL #001H	3001537763	32.189884	-104.206215	29	24S	27E	H	1980N	660E	EDDY	NM	WOLFCAMP	102136.2	62812.7	183.0	0.0
SERRANO 29 FEDERAL #001H	3001537763	32.18988	-104.2062149	29	24S	27E	H	1980N	660E	EDDY	NM	WOLFCAMP	100994.9	63450.1	268.0	0.0
WHITE CITY PENN GAS COM UNIT 1 #001	3001500408	32.193752	-104.3088455	29	24S	26E	A	660N	660E	EDDY	NM	WOLFCAMP		10000	645.0	1320.0
LEE J FED #001	3001505973	32.215504	-104.3304367	18	24S	26E	J	1980S	1980E	EDDY	NM	WOLFCAMP		9100		7300.0

Attachment 4

Injection Formation Water Analyses

Injection Formation Water Analysis

Anthem Water Solutions, LLC - Devonian Formation

Wellname	API	Latitude	Longitude	Sec	Township	Rng	Unit	Ftgns	Ftgew	County	State	Formation	Tds (mg/L)	Chloride (mg/L)	Bicarbonate (mg/L)	Sulfate (mg/L)
FED UNION #001	3001502416	32.55272	-104.1623917	22	20S	28E	O	330S	1650E	EDDY	NM	DEVONIAN	39,605	22,620	810	1,618
BIG EDDY UT #001	3001502475	32.44215	-104.0423050	36	21S	28E	C	660N	1980W	EDDY	NM	DEVONIAN	16,223	7,000	1,030	2,290
BIG EDDY UT #001	3001502475	32.44215	-104.0423050	36	21S	28E	C	660N	1980W	EDDY	NM	DEVONIAN	19,941	10,700	640	1,130
CARNERO PEAK UT #001	3001510053	32.35340	-104.4281158	31	22S	25E	A	660N	660E	EDDY	NM	DEVONIAN	14,601	7,236	515	1,487
CARNERO PEAK UT #001	3001510053	32.35340	-104.4281158	31	22S	25E	A	660N	660E	EDDY	NM	DEVONIAN	15,580	7,853	487	1,488
CARNERO PEAK UT #001	3001510053	32.35340	-104.4281158	31	22S	25E	A	660N	660E	EDDY	NM	DEVONIAN	15,780	8,126	336	1,467
MCKITTRICK FED #1	3001500135	32.36516	-104.3481293	25	22S	25E	G	1650N	2310E	EDDY	NM	DEVONIAN	16,200	8,762	290	1,175
MCKITTRICK FED #1	3001500135	32.36516	-104.3481293	25	22S	25E	G	1650N	2310E	EDDY	NM	DEVONIAN	17,510	9,389	664	982
BANDANA POINT UT #001	3001500044	32.29861	-104.5515823	13	23S	23E	O	750S	1900E	EDDY	NM	DEVONIAN	15,500	8,020	500	1,190
TORTOISE ASB COM #001	3001510490	32.27669	-104.5190887	29	23S	24E	G	1980N	2250E	EDDY	NM	DEVONIAN	15,601	7,780	476	1,600
TORTOISE ASB COM #001	3001510490	32.27669	-104.5190887	29	23S	24E	G	1980N	2250E	EDDY	NM	DEVONIAN	17,861	7,760	490	3,100
JURNEGAN POINT #001	3001510280	32.24052	-104.4239120	5	24S	25E	M	660S	660W	EDDY	NM	DEVONIAN	203,100	121,100	175	2,220
JURNEGAN POINT #001	3001510280	32.24052	-104.4239120	5	24S	25E	M	660S	660W	EDDY	NM	DEVONIAN	229,706	136,964	198	2,511

Attachment 5

Water Well Map and Well Data

Legend

- Proposed SWD

NMOSE Points of Diversion

- Active (3)
- Pending (4)
- Change Location of Well (0)
- Capped (0)
- Plugged (0)
- Incomplete (0)
- Unknown (1)

0 0.25 0.5 1 Miles

SourceInfo: ttps://gis.ose.state.nm.us/arcgis/rest/services/WatersPod/OSE_PODs/MapServer/0

Water Wells Area of Review

US 62 Federal SWD #2

Eddy County, New Mexico

Proj Mgr:		Mapped by:
Dan Arthur	November 05, 2020	Ben Bockelmann

Prepared by:

ALL CONSULTING

Water Well Sampling Rationale

Anthem Water Solutions - US 62 Federal SWD #2

Water Wells	Owner	Available Contact Information	Use	Sampling Required	Notes
C 01267	Mrs. B E Price	2515 W. Iowa Carlsbad, NM	Livestock Watering	No	Dry Hole. Fomration consist of all Gypsum & Anhydrite.
C 00963	Gulf Oil Corporation	P.O. Box 2167, Hobbs, NM	Prospecting or Development of Natural Resources	No	Permitted to supply water for the drilling of an Oil well. Water well was plugged in September 1960.
C 03512	Yates Petroleum Corporation	Scott Pitts 575-365-4716 & 575-748-1471 scottp@yatespetroleum.com	Municipal - City or County Supplied Water	No	Water wells was drilled for exploratory purposes in 2011. Yates Petroleum collected a water sample and then filled the well to surface with bentonite.
C 03513	Yates Petroleum Corporation	Scott Pitts 575-365-4716 & 575-748-1471 scottp@yatespetroleum.com	Temporary Exploraory & Monitoring	No	Water wells was drilled for exploratory purposes in 2011. Yates Petroleum collected a water sample and then filled the well to surface with bentonite.
RA 11752	EOG Resources, LLC	Reese Martin Reese_Martin@eogresources.com	Exploration	No	Reese Martin was contacted on 11/13/2020 & 11/19/2020, and he informed us he does not believe the water well exists. The water well owner is confirming that the water well does not exist, and if the status of the water well changes the application will be updated accordingly.

Notes:

Attachment 6

Induced Seismicity Assessment Letter

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

November 20, 2020

Mr. Phillip Goetze, P.G.
NM EMNRD – Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Subject: Induced Seismicity Potential Statement for the US 62 Federal SWD #2

Dear Mr. Goetze,

This letter provides information regarding the seismic potential associated with injection operations related to Anthem Water Solutions (Anthem), proposed US 62 Federal SWD #2, hereinafter referred to as the "Subject Well."

As outlined herein, based on my experience as an expert on the issue of induced seismicity, it is my opinion that the potential for the proposed injection well to cause injection-induced seismicity is expected to be minimal, at best. This conclusion is based on (1) the lack of historic seismic activity and faulting in the area, (2) the low fault slip potential (FSP) of Precambrian faults in the area, (3) the presence of confining layers, and (4) the overall vertical distance between the proposed injection zone and basement rock.

The Subject Well, is located 660' FSL & 2,245' FEL of Section 30, in T25-S and R25-E of Eddy County, New Mexico. Historically, the Eddy and Lea Counties area has experienced very limited recorded seismic activity (per the U.S. Geological Survey [USGS] earthquake catalog database). There has been one known seismic event located within a 25-mile radius of the proposed Subject Well. The closest recorded seismic event was a M3.9 that occurred on November 28th, 1974 and was located approximately 22.6 miles northeast of the Subject Well (See Exhibit 1). The closest Class IID well injecting into the same formations (Devonian-Silurian) of the Subject Well is approximately 4.3 miles to the southeast (See Exhibit 1).

Anthem does not own either 2D or 3D seismic reflection data in the area of the Subject Well. Fault data from USGS indicates that the closest known fault is approximately 1.5 miles southwest of the Subject Well (See Exhibit 1).

In a recent paper written by Snee and Zoback (2018) entitled "State of Stress in the Permian Basin, Texas and New Mexico: Implications for Induced Seismicity,", the authors found that large groups of mostly north-south striking Precambrian basement faults, predominantly located along the Central Basin Platform, the western Delaware Basin, and large parts of the Northwest Shelf (which includes Eddy and Lea counties, New Mexico) have low FSP at the modeled fluid-pressure

perturbation. The map in Exhibit 2 depicts the low probability risk of FSP for the Delaware Basin and Northwest Shelf areas (Snee and Zoback 2018).

Geologic analysis indicates that the proposed Devonian-Silurian injection zone is overlain by approximately 200 to 400 feet of Woodford Shale, which is the upper confining zone and will serve as a barrier for upward injection fluid migration. Additionally, the Simpson Group that lies directly below the Montoya Formation will act as a lower confining zone to prohibit fluids from migrating downward into the underlying Ellenberger Formation and Precambrian basement rock. See the stratigraphic column for the Delaware Basin included in Exhibit 3.

In the Eddy and Lea Counties area of New Mexico, the Simpson Group is comprised of a series of Middle to Upper Ordovician carbonates, several sandstones, and sandy shales that range from approximately 350 to 650 feet thick (Jones 2008). This group of rocks is capped by the limestones of the Bromide Formation, which is approximately 200 feet thick in this area (Jones 2008). The closest deep well drilled into the Precambrian basement was completed by the Skelly Oil Company in 1975. This well is located in Section 17, Range 36E, Township 25S of Lea County (API No.30-025-25046) and encountered 602 feet of Ellenburger Formation before reaching the top of the Precambrian granite at a depth of 18,920 feet. Based on the estimated thickness of the Simpson Group and Ellenburger Formation in this area, the Precambrian basement should be approximately 1,000 to 1,200 feet below the bottom of the proposed injection zones in the Subject Well.

Conclusion

As an expert on the issue of induced seismicity, it is my opinion that the potential for the proposed injection well to cause injection-induced seismicity is expected to be minimal, at best. This conclusion is based on (1) the lack of historic seismic activity and faulting in the area, (2) the low FSP of Precambrian faults in the area, (3) the presence of confining layers, and (4) the overall vertical distance between the proposed injection zone and basement rock.

Sincerely,
ALL Consulting

J. Daniel Arthur, P.E., SPEC
President and Chief Engineer

Enclosures
References
Exhibits

References

Ball, Mahlon M. 1995. "Permian Basin Province (044)." In *National Assessment of United States Oil and Gas Resources—Results, Methodology, and Supporting Data.* U.S. Geological Survey. https://certmapper.cr.usgs.gov/data/noga95/prov44/text/prov44.pdf (accessed June 18, 2018).

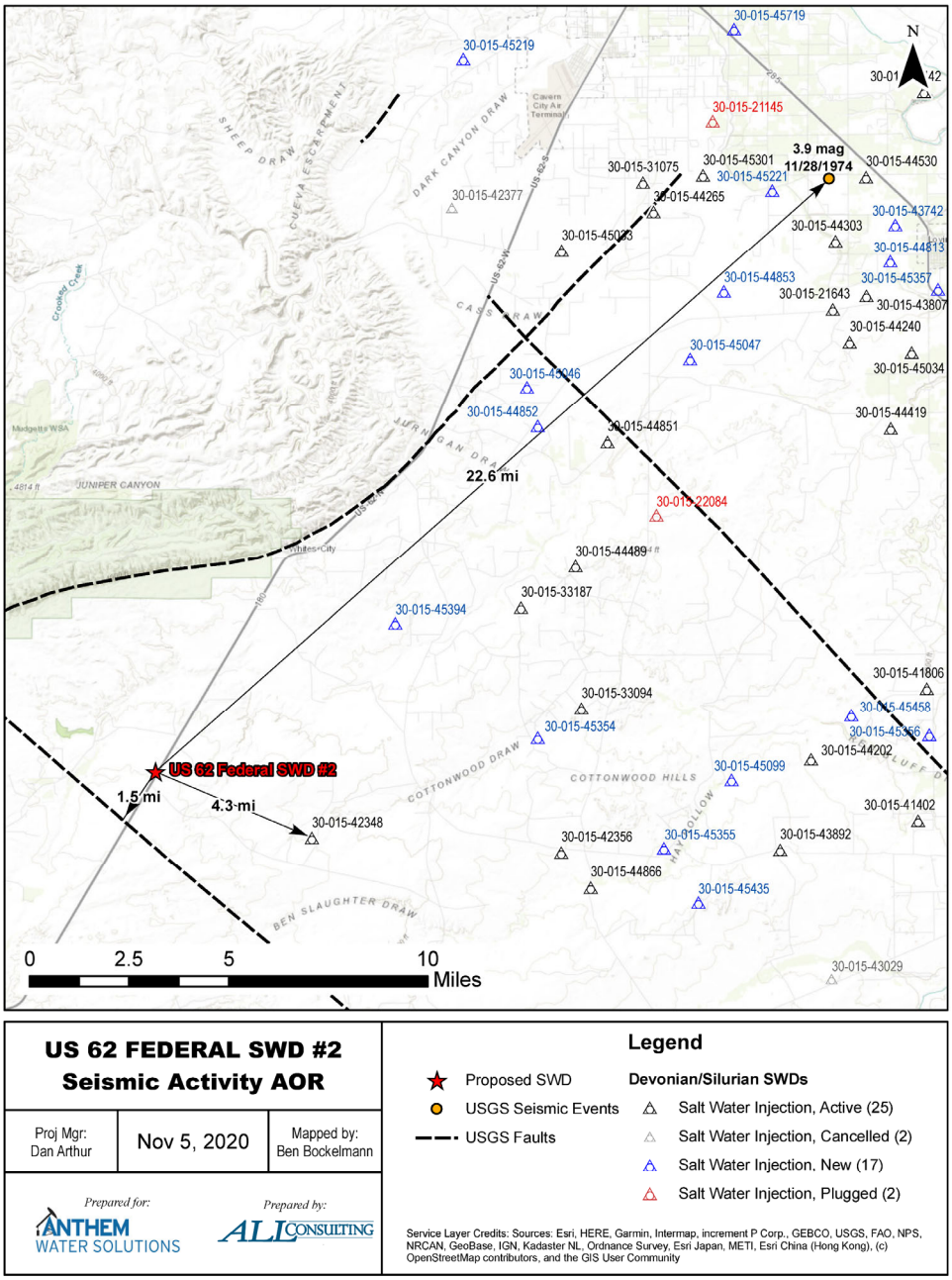
Green, G.N., and G.E. Jones. 1997. "The Digital Geologic Map of New Mexico in ARC/INFO Format." U.S. Geological Survey Open-File Report 97-0052. https://mrdata.usgs.gov/geology/state/state.php?state=NM (accessed June 14, 2018).

Jones, Rebecca H. 2008. "The Middle-Upper Ordovician Simpson Group of the Permian Basin: Deposition, Diagenesis, and Reservoir Development." http://www.beg.utexas.edu/resprog/permianbasin/PBGSP_members/writ_synth/Simpson.pdf (accessed June 19, 2018).

Snee, Jens-Erik Lund, and Mark D. Zoback. 2018. "State of Stress in the Permian Basin, Texas and New Mexico: Implications for Induced Seismicity." *The Leading Edge* 37, no. 2 (February 2018): 127-34.

U.S. Geological Survey (USGS). No date. Earthquakes Hazard Program: Earthquake Catalog. https://earthquake.usgs.gov/earthquakes/search/ (accessed June 14, 2018).

Exhibits



US 62 FEDERAL SWD #2
Seismic Activity AOR

Proj Mgr: Dan Arthur	Nov 5, 2020	Mapped by: Ben Bockelmann

Prepared for: ANTHEM WATER SOLUTIONS

Prepared by: ALL CONSULTING

Legend

- Proposed SWD
- USGS Seismic Events
- USGS Faults

Devonian/Silurian SWDs

- Salt Water Injection, Active (25)
- Salt Water Injection, Cancelled (2)
- Salt Water Injection, New (17)
- Salt Water Injection, Plugged (2)

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Exhibit 1. Map Showing the Distances from Known and Inferred Faults, Seismic Event, and Closest Deep Injection Well

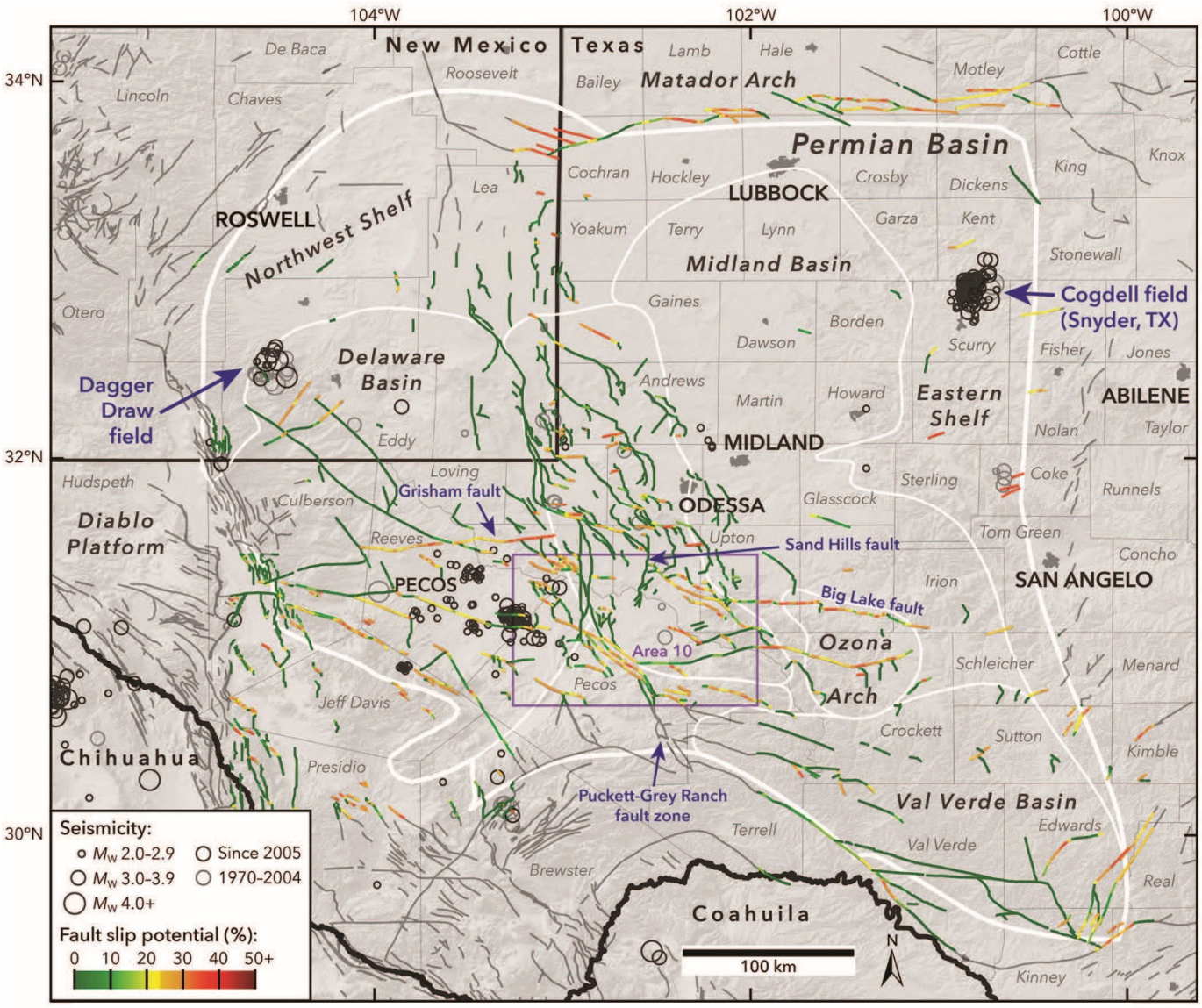


Exhibit 2. Results of the Snee and Zoback (2018) Probabilistic FSP Analysis Across the Permian Basin

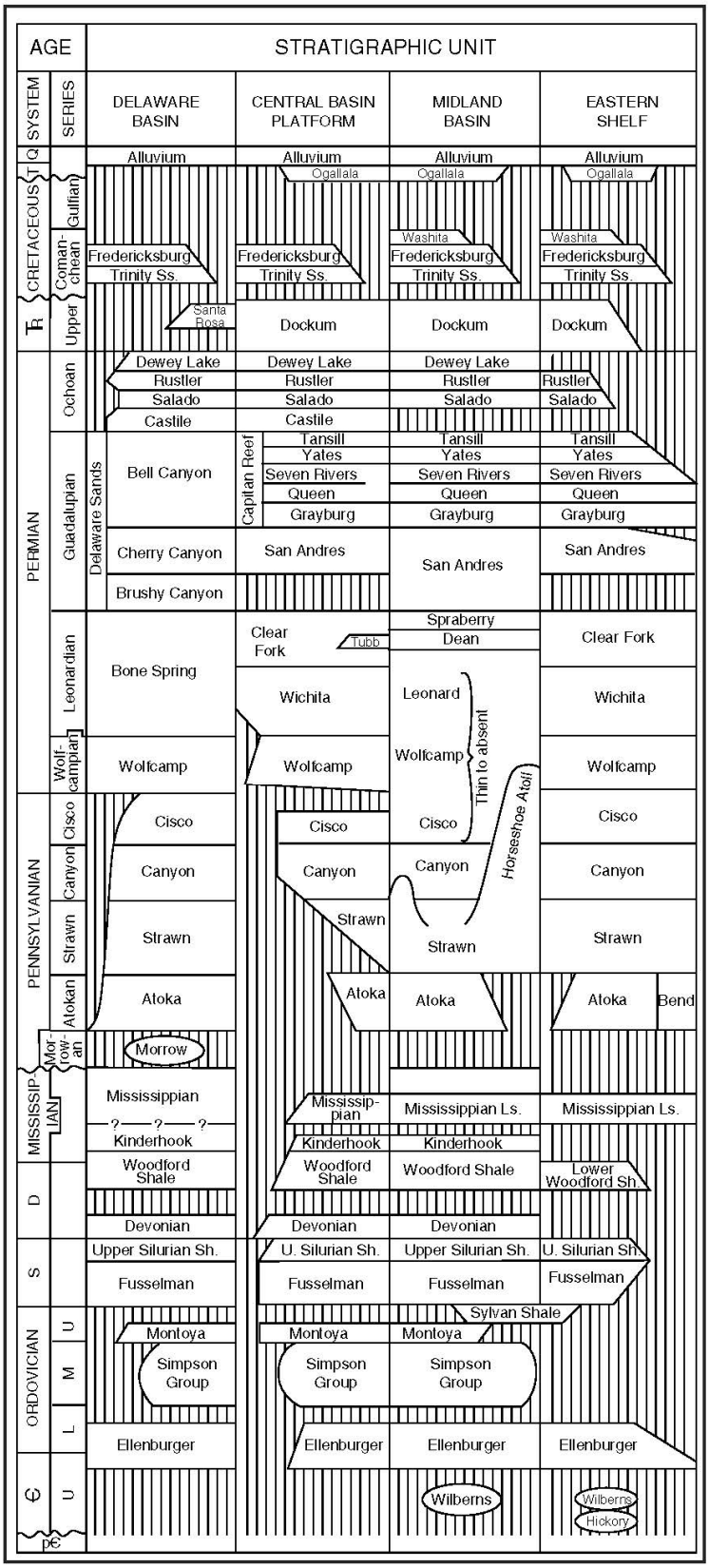


Exhibit 3. Delaware Basin Stratigraphic Chart (Ball 1995)

Attachment 7

Public Notice Affidavit and Notice of Application Confirmations

APPLICATION FOR AUTHORIZATION TO INJECT

NOTICE IS HEREBY GIVEN: That Anthem Water Solutions, LLC, 5914 W. Courtyard Dr, Suite 320, Austin, TX, 78730, 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: US 62 Federal SWD #2
Located 6.4 miles southwest of Whites City, NM
SW ¼ SE ¼, Section 30, Township 25S, Range 25E
660' FSL & 2,245' FEL
Eddy County, NM

NAME AND DEPTH OF DISPOSAL ZONE: Devonian - Silurian (12,882 – 13,882)

EXPECTED MAXIMUM INJECTION RATE: 30,000 Bbls/day

EXPECTED MAXIMUM INJECTION PRESSURE: 2,576 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.

Carlsbad Current Argus.
PART OF THE USA TODAY NETWORK

Affidavit of Publication

Ad # 0004527963

This is not an invoice

ALL CONSULTING- CARL SBAD
1718 SOUTH CHEYENNE AVENUE

TULSA, OK 74119

I, a legal clerk of the **Carlsbad Current Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

12/29/2020

Legal Clerk

Subscribed and sworn before me this January 5, 2021:

State of WI, County of Brown
NOTARY PUBLIC

10/23/2023
My commission expires

PANG PAPPATHOPOULOS
Notary Public
State of Wisconsin

Ad # 0004527963
PO #: Authorization to Inject
# of Affidavits: 1

This is not an invoice

APPLICATION FOR AUTHORIZATION TO INJECT

NOTICE IS HEREBY GIVEN: That Anthem Water Solutions, LLC, 5914 W. Courtyard Dr, Suite 320, Austin, TX, 78730, 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: US 62 Federal SWD #2

Located 6.4 miles southwest of Whites City, NM
SW ¼ SE ¼, Section 30, Township 25S, Range 25E
660' FSL & 2,245' FEL
Eddy County, NM

NAME AND DEPTH OF DISPOSAL ZONE: Devonian - Silurian (12,882 – 13,882)
EXPECTED MAXIMUM INJECTION RATE: 30,000 Bbls/day
EXPECTED MAXIMUM INJECTION PRESSURE: 2,576 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.
Dec. 29, 2020, Current Argus, #4527963

US 62 Federal SWD #2 - Notice of Application Recipients				
Entity	**Address**	**City**	**State**	**Zip Code**
Landowner & Mineral Owner				
New Mexico BLM	620 E Greene St.	Carlsbad	NM	88220
OCD District				
NMOCD District 2	811 S. 1st St.	Artesia	NM	88210
Leasehold Operators				
Aetna Petroleum Corporation (AETNA PET CORP)	P.O. Box 17006-GMF	Denver	CO	80217
Commission of Public Lands - State Land Office	310 Old Santa Fe Trail	Santa Fe	NM	87501
EOG Resources, Inc. (EOG Y RES INC.) (EOG A RES INC.) (EOG M RES INC.)	5509 Champions Drive	Midland	TX	79706
ME-TEX Oil & Gas, Inc. (ME-TEX O&G INC)	P.O. Box 2070	Hobbs	NM	88241
OXY USA Inc. (OXY Y-1 CO) (OXY USA WTP LP)	P.O. Box 27570	Houston	TX	77227-7757
Tap Rock Resources, LLC (TAP ROCK RES, LLC)	602 Park Point Drive, Suite 200	Golden	Co	80401

Notes: The table above shows the Entities who were identified as parties of interest requiring notification on either the 1-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, or subsidiary, names used on either the 1-mile well detail list (Attachment 2) or on the 2-mile Mineral Lease Map (Attachment 2).

Certified Mail® Labels Top of the page Print postage using Stamps.com Template **SDC-3610**

ALL Consulting, LLC
1718 S Cheyenne Ave
Tulsa OK 74119

$5.75 0
US POSTAGE
FIRST-CLASS
FROM 74119
JAN 12 2021
stamps endicia
062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9414 8118 9956 4631 5627 76

OXY USA Inc.
PO Box 27570
Houston TX 77227-7570

ALL Consulting, LLC
1718 S Cheyenne Ave
Tulsa OK 74119

$5.75 0
US POSTAGE
FIRST-CLASS
FROM 74119
JAN 12 2021
stamps endicia
062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9414 8118 9956 4631 5621 96

EOG Resources, Inc.
5509 Champions Drive
Midland TX 79706-2843

ALL Consulting, LLC
1718 S Cheyenne Ave
Tulsa OK 74119

$5.75 0
US POSTAGE
FIRST-CLASS
FROM 74119
JAN 12 2021
stamps endicia
062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9414 8118 9956 4631 5625 92

Aetna Petroleum Corp.
PO Box 17006GMF
Denver CO 80217

ALL Consulting, LLC
1718 S Cheyenne Ave
Tulsa OK 74119

$5.75 0
US POSTAGE
FIRST-CLASS
FROM 74119
JAN 12 2021
stamps endicia
062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9414 8118 9956 4631 5607 27

New Mexico BLM
620 East Greene Street
Carlsbad NM 88220-6292

For best results, feed this sheet through your printer as few times as possible.
To purchase or for printing instructions go to **www.stamps.com/3610.**

stamps.com®

01/19

Certified Mail® Labels Top of the page Print postage using Stamps.com Template **SDC-3610**

ALL Consulting, LLC
1718 S Cheyenne Ave
Tulsa OK 74119

$5.75⁰ US POSTAGE FIRST-CLASS FROM 74119 JAN 12 2021 stamps endicia 062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®

CERTIFIED MAIL®

9414 8118 9956 4631 5657 60

NMOCD District 2
811 South 1st Street
Artesia NM 88210-2834

ALL Consulting, LLC
1718 S Cheyenne Ave
Tulsa OK 74119

$5.75⁰ US POSTAGE FIRST-CLASS FROM 74119 JAN 12 2021 stamps endicia 062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®

CERTIFIED MAIL®

9414 8118 9956 4631 5656 30

State Land Office
Commission of Public Lands
310 Old Santa Fe Trail
Santa Fe NM 87501-2708

ALL Consulting, LLC
1718 S Cheyenne Ave
Tulsa OK 74119

$5.75⁰ US POSTAGE FIRST-CLASS FROM 74119 JAN 12 2021 stamps endicia 062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®

CERTIFIED MAIL®

9414 8118 9956 4631 5650 98

ME-TEX Oil & Gas, Inc.
PO Box 2070
Hobbs NM 88241-2070

ALL Consulting, LLC
1718 S Cheyenne Ave
Tulsa OK 74119

$5.75⁰ US POSTAGE FIRST-CLASS FROM 74119 JAN 12 2021 stamps endicia 062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®

CERTIFIED MAIL®

9414 8118 9956 4631 5622 26

Tap Rock Resources, LLC.
602 Park Point Drive Suite 200
Golden CO 80401-9359

For best results, feed this sheet through your printer as few times as possible.
To purchase or for printing instructions go to **www.stamps.com/3610.**

stamps.com®