

August 19, 2020

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

Subject: Probity SWD LLC – Tyson Lea 01D (pBL1934054649)  
Application for Authorization to Inject

To Whom It May Concern,

On behalf of Probity SWD, LLC (Probity), ALL Consulting, LLC (ALL) is submitting the attached documents to supplement the Application for Authorization to Inject for the Tyson Lea 01D, (pBL1934054649), a proposed salt water disposal well in Lea County, NM.

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

Sincerely,  
ALL Consulting



Nate Alleman  
Sr. Regulatory Specialist

Application for Authorization to Inject  
Well Name: Tyson Lea 01D

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

#### A.

##### (1) General Well Information:

Operator: Probity SWD, LLC (OGRID No. 296278)  
Lease Name & Well Number: Tyson Lea 01D  
Location Footage Calls: 1,506' FNL & 2,457' FWL  
Legal Location: Unit Letter F, S9 T22S R32E  
Ground Elevation: 3,774'  
Proposed Injection Interval: 15,900' – 17,250'  
County: Lea

##### (2) Casing Information:

| Type           | Hole Size | Casing Size | Casing Weight | Setting Depth | Sacks of Cement | Estimated TOC | Method Determined |
|----------------|-----------|-------------|---------------|---------------|-----------------|---------------|-------------------|
| Surface        | 26"       | 20"         | 94.0 lb/ft    | 1,150'        | 1,700           | Surface       | Circulation       |
| Intermediate 1 | 17-1/2"   | 13-3/8"     | 68.0 lb/ft    | 4,850'        | 1,550           | Surface       | Circulation       |
| Intermediate 2 | 12-1/4"   | 9-7/8"      | 62.8 lb/ft    | 12,600'       | 2,300           | Surface       | Circulation       |
| Liner          | 8-1/2"    | 7-5/8"      | 39.0 lb/ft    | 15,900'       | 450             | 11,700'       | CBL               |

*(The Wellbore Diagram is attached)* **Note:** A DV Tool will be set in the second Intermediate Casing at 4,800 ft.

##### (3) Tubing Information:

5"x5.5" Internally plastic coated tubing with setting depth of 15,800'

##### (4) Packer Information: Baker Arrow-set retrievable packer set at 15,800'

#### B.

##### (1) Injection Formation Name: Devonian and Silurian formations

**Pool Name:** SWD; DEVONIAN - SILURIAN

**Pool Code:** 97869

##### (2) Injection Interval: Perforated injection between 15,900' – 17,250'

##### (3) Drilling Purpose: New Drill for Salt Water Disposal

##### (4) Other Perforated Intervals: No other perforated intervals exist.

##### (5) Overlying Oil and Gas Zones:

- Delaware Lamar (4,848')
- Bone Springs (9,523')
- Wolfcamp (11,839')
- Atoka (13,637')
- Morrow (13,987')

##### (6) 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
- 2-mile Lease Map
- 1-mile Well Detail List
- Pending and Permitted SWD Map

## VI – AOR Well List

There are no wells within the 1-mile AOR that 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:** 40,000 bpd  
**Proposed Average Injection Rate:** 20,000 bpd
- (2) A **closed system** will be used.
- (3) **Proposed Maximum Surface Injection Pressure:** 3,180 psi (based on 0.2 psi per foot)
- (4) **Proposed Average Surface Injection Pressure:** approximately 1,500 – 2,000 psi
- (5) **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**.
- (6) **Injection Formation Water Analysis:** The proposed SWD will be injecting water into the Devonian and Silurian formation which is a non-productive zone known to be compatible with formation water from the Wolfcamp and Bone Springs formations. Water analyses from the Devonian and Silurian formation in the area are included in **Attachment 4**.

## VIII – Geologic Description

The proposed injection interval includes the Devonian and Silurian formations from 15,900 – 17,250 feet. This formation consists of carbonate rocks which include light colored dolomite and chert intervals interspersed with some tight limestone intervals. Several thick sections of porous sandstone capable of taking water are present within the subject formation in the area.

The base of the deepest Underground Source of Drinking Water (USDW) is at a depth of approximately 1,077 feet. Surface casing will be set at a depth of 1,150 feet, which is 73 feet below the top of the Rustler formation, which isolates the USDW. Geophysical log assessment was conducted to accurately determine the top of the Rustler formation, and the top and the base of the Salado formation in this area. Water well depths in the area range from approximately 340 - 560 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

Geophysical 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 three groundwater wells located within 1-mile of the proposed SWD location. However, all of the groundwater wells within 1-mile of the proposed location are inactive; therefore, no groundwater samples were collected in association with this application.

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

## **XII – No Hydrologic Connection Statement**

The original application included a Seismic Risk Assessment attachment prepared by Permits West Inc. which included a conclusion that "there is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

ALL reviewed the casing and cementing program and confirmed that the proposed design will further ensure that there will be no hydrologic connection between the injection interval and overlying USDWs.

## **XIII – Proof of Notice**

The original application documented that a Public Notice was filed with the Hobbs News - Sun Newspaper.

ALL reviewed the mineral owners, mineral leases, and oil and gas wells within the AOR and developed a revised list of Affected Parties. ALL then mailed full and complete copies of the application to all the identified Affected Parties. A list of the recipients, as well as mailing confirmations (green sheets), are included in **Attachment 6**.

# Attachments

**Attachment 1:** Wellbore Diagram

**Attachment 2:** Area of Review Information:

- 2-mile Oil & Gas Well Map
- 1/2-mile Well Detail List
- 2-mile Lease Map
- 2-mile Pending and Permitted SWD Map

**Attachment 3:** Source Water Analyses

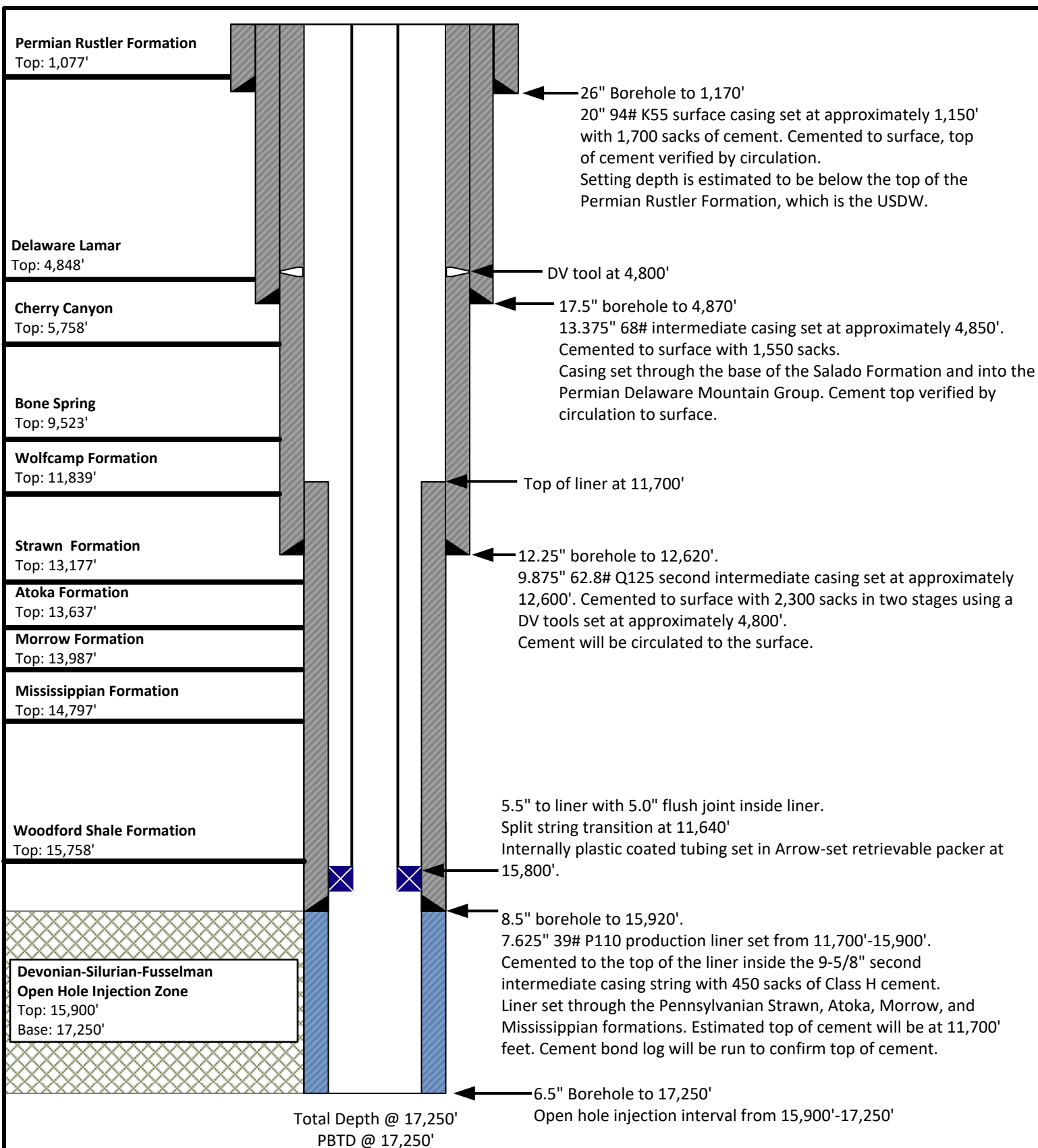
**Attachment 4:** Injection Formation Water Analyses

**Attachment 5:** Water Well Map and Well Data

**Attachment 6:** Notice of Application Confirmations

#### **Attachment 1**

- Wellbore Diagram



NOT TO SCALE

Prepared by:  
**ALL CONSULTING**  
Prepared for:  
**Probit**  
SWD, LLC.

Drawn by: Joshua Ticknor

Project Manager:  
Dan Arthur

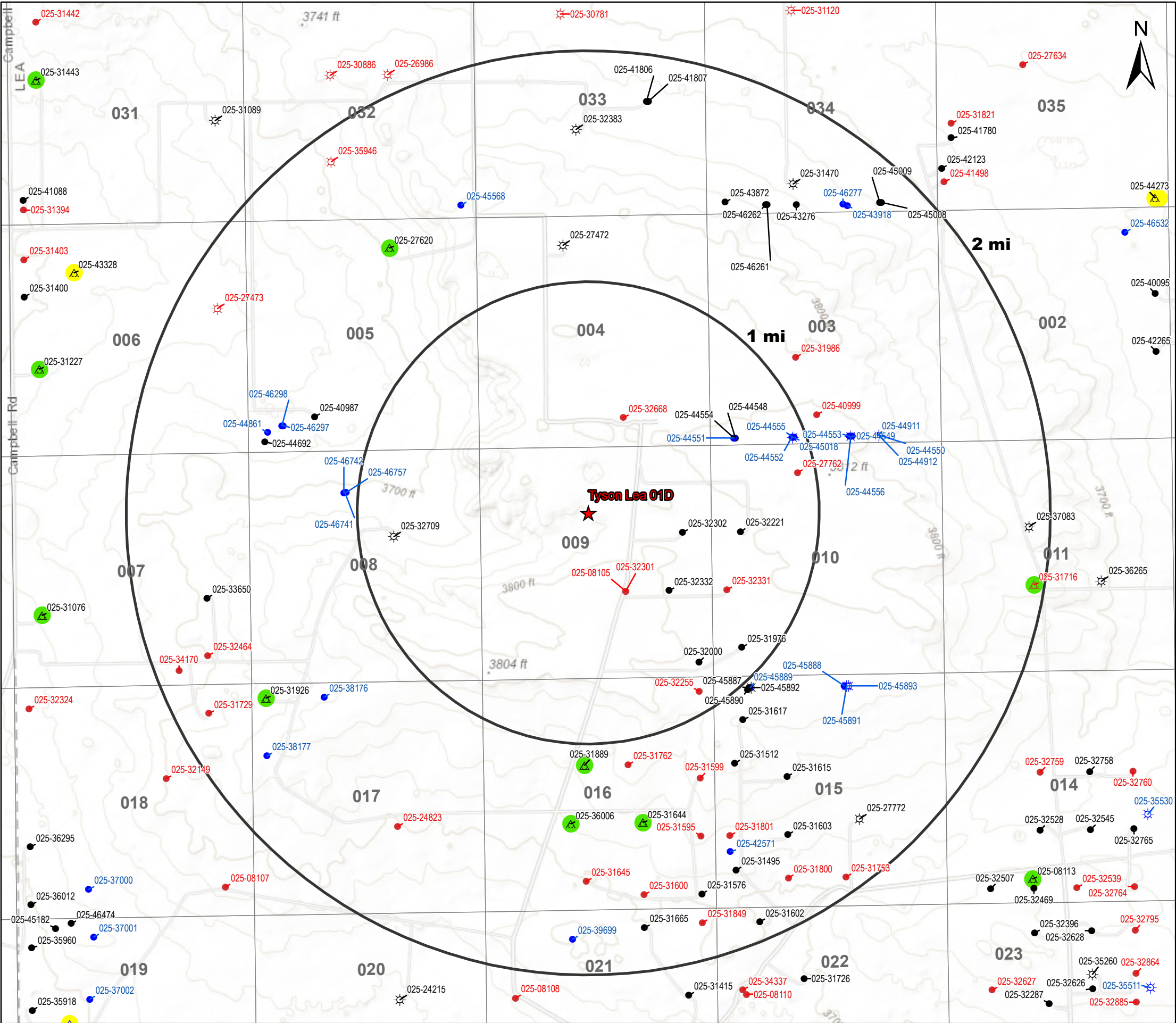
Date: 8/14/2020

Probit SWD, LLC.  
Tyson Lea 01D  
Unit Letter F, Section 9, Township 22S, Range 32E  
1,506' FNL, 2,457 FWL  
Lea County, NM

## **Attachment 2**

Area of Review Information:

- 2-mile Oil & Gas Well Map
- 1/2-mile Well Detail List
- 2-mile Lease Map
- 2-mile Pending and Permitted SWD Map



Legend

- ★ Proposed SWD
- ☀ Gas, Active (11)
- ☀ Gas, New (7)
- ☀ Gas, Plugged (6)
- Oil, Active (52)
- Oil, New (26)
- Oil, Plugged (41)
- △ Salt Water Injection, Active (11)
- △ Salt Water Injection, New (1)
- △ Salt Water Injection, Plugged (1)
- Deep Injection Zone (4)
- Shallow Injection Zone (10)

Source Info: NMOCD O&G Wells updated 8/3/2020  
(<http://www.emnrd.state.nm.us/OCD/ocdgis.html>)

O&G Wells Area of Review

Tyson Lea 01D  
Lea County, New Mexico

Proj Mgr:  
Dan Arthur

August 14, 2020

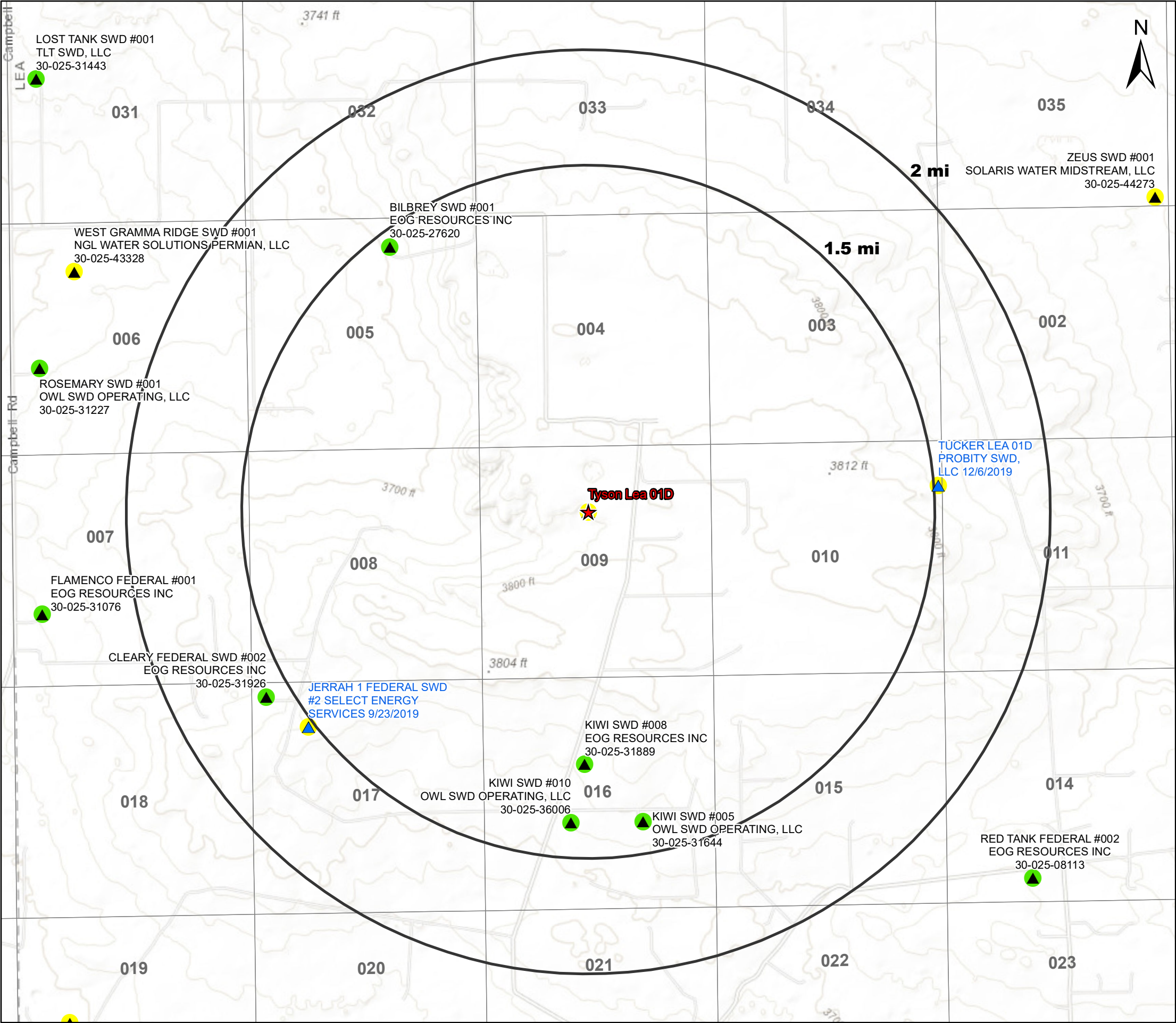
Mapped by:  
Ben Bockelmann

Prepared for:  
**Probit**  
SWD, LLC.

Prepared by:  
**ALL**CONSULTING

| AOR Tabulation for Tyson Lea 01D (Top of Injection Interval: 15,900')   |              |           |                                                       |             |                            |                      |                      |
|-------------------------------------------------------------------------|--------------|-----------|-------------------------------------------------------|-------------|----------------------------|----------------------|----------------------|
| Well Name                                                               | API#         | Well Type | Operator                                              | Spud Date   | Location (Sec., Tn., Rng.) | Total Vertical Depth | Penetrate Inj. Zone? |
| WHITE SWAN 9 FEDERAL #003                                               | 30-025-32301 | Plugged   | DEVON ENERGY PRODUCTION COMPANY, LP                   | 12/30/94    | J-09-22S-32E               | Plugged (7280)       | No                   |
| EMERALD FEDERAL #001                                                    | 30-025-31976 | O         | COG OPERATING LLC                                     | 05/24/93    | M-10-22S-32E               | 8830                 | No                   |
| WHITE SWAN 9 FEDERAL #004                                               | 30-025-32302 | O         | DEVON ENERGY PRODUCTION COMPANY, LP                   | 03/22/95    | H-09-22S-32E               | 8920                 | No                   |
| TRUMPETER 4 STATE #001                                                  | 30-025-32668 | Plugged   | DEVON ENERGY PRODUCTION COMPANY, LP                   | 09/26/94    | O-04-22S-32E               | Plugged (8900)       | No                   |
| WHITE SWAN 9 FEDERAL #001                                               | 30-025-32000 | O         | DEVON ENERGY PRODUCTION COMPANY, LP                   | 06/09/93    | P-09-22S-32E               | 8920                 | No                   |
| KIWI AKX STATE #009                                                     | 30-025-32255 | Plugged   | EOG Y RESOURCES, INC.                                 | 10/11/93    | A-16-22S-32E               | Plugged (8915)       | No                   |
| BARR NONE FEDERAL #001                                                  | 30-025-32221 | O         | JUDAH OIL LLC                                         | 10/05/93    | E-10-22S-32E               | 8910                 | No                   |
| WILD TURKEY 9 STATE #001                                                | 30-025-32332 | O         | LEGACY RESERVES OPERATING, LP                         | 04/05/94    | I-09-22S-32E               | 9000                 | No                   |
| WILD TURKEY 10 STATE #001                                               | 30-025-32331 | Plugged   | LEGACY RESERVES OPERATING, LP                         | 04/19/95    | L-10-22S-32E               | Plugged (9000)       | No                   |
| NINA CORTELL FEDERAL COM #201H                                          | 30-025-44554 | O         | MATADOR PRODUCTION COMPANY                            | 09/05/18    | M-03-22S-32E               | 12216                | No                   |
| NINA CORTELL FEDERAL COM #131H                                          | 30-025-44551 | O         | MATADOR PRODUCTION COMPANY                            | Not Drilled | M-03-22S-32E               | Proposed (10978)     | No                   |
| NINA CORTELL FEDERAL COM #121H                                          | 30-025-44548 | O         | MATADOR PRODUCTION COMPANY                            | 09/03/19    | M-03-22S-32E               | 9978                 | No                   |
| NINA CORTELL FEDERAL COM #132H                                          | 30-025-44552 | O         | MATADOR PRODUCTION COMPANY                            | Not Drilled | N-03-22S-32E               | Proposed (11927)     | No                   |
| NINA CORTELL FEDERAL COM #202H                                          | 30-025-44555 | G         | MATADOR PRODUCTION COMPANY                            | Not Drilled | N-03-22S-32E               | Proposed (12077)     | No                   |
| NINA CORTELL FEDERAL COM #122H                                          | 30-025-45018 | O         | MATADOR PRODUCTION COMPANY                            | Not Drilled | N-03-22S-32E               | Proposed (10976)     | No                   |
| FEDERAL 8 COM #001                                                      | 30-025-32709 | G         | OXY USA INC                                           | 04/05/95    | G-08-22S-32E               | 15100                | No                   |
| PRE-ONGARD WELL #001                                                    | 30-025-08105 | Plugged   | PRE-ONGARD WELL OPERATOR<br>(Culberson & Irwin, Inc.) | 01/04/48    | J-09-22S-32E               | Plugged (5035)       | No                   |
| BARR NONE FEDERAL #003                                                  | 30-025-27762 | Plugged   | WTI 1993 LTD                                          | 09/28/93    | C-10-22S-32E               | Plugged (213)        | No                   |
| Notes: No wells within the 1-mile AOR penetrate the injection interval. |              |           |                                                       |             |                            |                      |                      |





Legend

- ★ Proposed SWD
- ▲ Permitted SWDs (12)
- ▲ Pending SWDs (3)

Proposed Injection Zone

- Deep
- Shallow

Source Info: NMOCD O&G Wells updated 8/3/2020  
(<http://www.emnrd.state.nm.us/OCD/ocdgis.html>)

Pending & Permitted SWDs

Tyson Lea 01D  
Lea County, New Mexico

Proj Mgr:  
Dan Arthur

August 19, 2020

Mapped by:  
Ben Bockelmann

Prepared for:  
**Probit**  
SWD, LLC.

Prepared by:  
**ALL**CONSULTING

**Attachment 3**

Source Water Analyses

| Source Water Analysis                                       |            |            |              |         |          |       |      |       |       |        |       |             |                       |            |                 |                     |                |
|-------------------------------------------------------------|------------|------------|--------------|---------|----------|-------|------|-------|-------|--------|-------|-------------|-----------------------|------------|-----------------|---------------------|----------------|
| Probity SWD, LLC - Bone Springs, Morrow, Delaware, Wolfcamp |            |            |              |         |          |       |      |       |       |        |       |             |                       |            |                 |                     |                |
| WellName                                                    | API        | Latitude   | Longitude    | Section | Township | Range | Unit | Ftgns | Ftgew | County | State | Field       | Formation             | TDS (Mg/L) | Chloride (Mg/L) | Bircarbonate (Mg/L) | Sulfate (Mg/L) |
| BILBREY BASIN 5 STATE COM #001H                             | 3002540987 | 32.4155464 | -103.70047   | 5       | 22S      | 32E   | N    | 790S  | 1520W | Lea    | NM    |             | BONE SPRING 2ND SAND  | 109780.5   | 67200           | 97                  | 7.5            |
| BILBREY BASIN 5 STATE COM #001H                             | 3002540987 | 32.4155464 | -103.70047   | 5       | 22S      | 32E   | N    | 790S  | 1520W | Lea    | NM    |             | BONE SPRING 2ND SAND  |            | 93000           | 342                 | 658            |
| BILBREY BASIN 5 STATE COM #001H                             | 3002540987 | 32.4155464 | -103.70047   | 5       | 22S      | 32E   | N    | 790S  | 1520W | Lea    | NM    |             | BONE SPRING 2ND SAND  |            | 124390          | 159                 | 650            |
| BILBREY 33 FEDERAL COM #003H                                | 3002541806 | 32.4351044 | -103.6756058 | 33      | 21S      | 32E   | J    | 2600S | 1350E | Lea    | NM    |             | BONE SPRING 2ND SAND  | 119028.4   | 72082.6         | 323.7               | 51             |
| BILBREY 33 FEDERAL COM #004H                                | 3002541807 | 32.4351044 | -103.6754456 | 33      | 21S      | 32E   | I    | 2600S | 1300E | Lea    | NM    |             | BONE SPRING 2ND SAND  | 120177.2   | 74017.1         | 253.7               | 34             |
| BILBREY 33 FEDERAL COM #003H                                | 3002541806 | 32.4351044 | -103.6756058 | 33      | 21S      | 32E   | J    | 2600S | 1350E | Lea    | NM    |             | BONE SPRING 2ND SAND  |            | 86000           | 195                 | 597            |
| GAUCHO UNIT #012H                                           | 3002541564 | 32.384037  | -103.4853745 | 20      | 22S      | 34E   | A    | 275N  | 575E  | Lea    | NM    |             | BONE SPRING 2ND SAND  | 109808.2   | 66984.9         | 280.6               | 1030           |
| GAUCHO UNIT #013H                                           | 3002541565 | 32.3841743 | -103.4853745 | 20      | 22S      | 34E   | A    | 225N  | 575E  | Lea    | NM    |             | BONE SPRING 2ND SAND  | 139904.6   | 85080.8         | 292.8               | 740            |
| GAUCHO UNIT #015H                                           | 3002541566 | 32.3841896 | -103.4984589 | 20      | 22S      | 34E   | D    | 100N  | 660W  | Lea    | NM    |             | BONE SPRING 2ND SAND  | 184420.1   | 115274          | 268.4               | 765            |
| GAUCHO UNIT #007H                                           | 3002534440 | 32.3889961 | -103.4941711 | 17      | 22S      | 34E   | K    | 1650S | 1980W | Lea    | NM    |             | BONE SPRING 2ND SAND  | 151777.7   | 91600           | 244                 | 0              |
| GAUCHO UNIT #007H                                           | 3002534440 | 32.3889961 | -103.4941711 | 17      | 22S      | 34E   | K    | 1650S | 1980W | Lea    | NM    |             | BONE SPRING 2ND SAND  | 166697.6   | 101677.1        | 61                  | 675            |
| TOMB RAIDER 1 FEDERAL #001H                                 | 3001542655 | 32.3400421 | -103.7294922 | 1       | 23S      | 31E   | B    | 200N  | 2005E | EDDY   | NM    |             | BONE SPRING 2ND SAND  | 146749.4   | 87902.2         |                     | 952.5          |
| GAUCHO UNIT #011H                                           | 3002541184 | 32.385006  | -103.4891129 | 17      | 22S      | 34E   | O    | 200S  | 1730E | Lea    | NM    |             | BONE SPRING 3RD SAND  | 156141.2   | 97977.9         | 305                 | 1005           |
| ALDABRA 25 FEDERAL COM #001H                                | 3001538612 | 32.2686806 | -103.7379837 | 25      | 23S      | 31E   | M    | 200S  | 635W  | EDDY   | NM    |             | BONE SPRING 3RD SAND  | 109640.8   | 66018.5         |                     | 648.6          |
| ALDABRA 26 FEDERAL #008H                                    | 3001538624 | 32.2690926 | -103.7414856 | 26      | 23S      | 31E   | P    | 350S  | 445E  | EDDY   | NM    |             | BONE SPRING 3RD SAND  | 113709.7   | 72869           | 122                 | 0              |
| ALDABRA 25 FEDERAL #003H                                    | 3001538614 | 32.2686806 | -103.7327271 | 25      | 23S      | 31E   | N    | 200S  | 2260W | EDDY   | NM    |             | BONE SPRING 3RD SAND  | 117104.1   | 73200           | 244                 | 0              |
| ALDABRA 26 FEDERAL #008H                                    | 3001538624 | 32.2690926 | -103.7414856 | 26      | 23S      | 31E   | P    | 350S  | 445E  | EDDY   | NM    |             | BONE SPRING 3RD SAND  | 116691.1   | 71000           | 134                 | 3.4            |
| ALDABRA 27 FEDERAL #001H                                    | 3001538625 | 32.2686996 | -103.7733154 | 27      | 23S      | 31E   | M    | 200S  | 275W  | EDDY   | NM    |             | BONE SPRING 3RD SAND  | 124604     | 71737           | 109                 | 3.4            |
| ALDABRA 27 FEDERAL #001H                                    | 3001538625 | 32.2686996 | -103.7733154 | 27      | 23S      | 31E   | M    | 200S  | 275W  | EDDY   | NM    |             | BONE SPRING 3RD SAND  | 125038     | 71737           | 109                 | 627            |
| MEDANO VA STATE #003                                        | 3001526591 | 32.305336  | -103.7860031 | 16      | 23S      | 31E   | F    | 2310N | 1650W | EDDY   | NM    | LOS MEDANOS | DELAWARE              |            | 109108          | 537                 | 125            |
| GARDNER TL #001                                             | 3001505847 | 32.2599945 | -103.7667236 | 34      | 23S      | 31E   | K    | 2310S | 2310W | EDDY   | NM    |             | DELAWARE              | 383600     |                 |                     |                |
| THISTLE UNIT #018H                                          | 3002540010 | 32.2825584 | -103.5810394 | 28      | 23S      | 33E   | C    | 150N  | 1470W | Lea    | NM    |             | DELAWARE-BRUSHY CANYO | 254702.7   | 157600          | 122                 |                |
| THISTLE UNIT #032H                                          | 3002540016 | 32.2543526 | -103.5691833 | 33      | 23S      | 33E   | P    | 150S  | 150E  | Lea    | NM    |             | DELAWARE-BRUSHY CANYO | 256044.9   | 160600          | 122                 |                |
| THISTLE UNIT #017H                                          | 3002539893 | 32.2543602 | -103.5734558 | 33      | 23S      | 33E   | O    | 150S  | 1470E | Lea    | NM    |             | DELAWARE-BRUSHY CANYO | 283085.1   | 179335          | 427                 |                |
| THISTLE UNIT #018H                                          | 3002540010 | 32.2825584 | -103.5810394 | 28      | 23S      | 33E   | C    | 150N  | 1470W | Lea    | NM    |             | DELAWARE-BRUSHY CANYO | 182009     | 111474.9        | 61                  | 600            |
| THISTLE UNIT #020H                                          | 3002540015 | 32.2825584 | -103.5682526 | 27      | 23S      | 33E   | D    | 150N  | 150W  | Lea    | NM    |             | DELAWARE-BRUSHY CANYO | 167967.8   | 102676.8        | 73.2                | 425            |
| THISTLE UNIT #026H                                          | 3002542431 | 32.2965799 | -103.5666151 | 22      | 23S      | 33E   | M    | 100S  | 802W  | Lea    | NM    |             | DELAWARE-BRUSHY CANYO | 133984.6   | 80481.9         | 972.2               | 880            |
| THISTLE UNIT #017H                                          | 3002539893 | 32.2543602 | -103.5734558 | 33      | 23S      | 33E   | O    | 150S  | 1470E | Lea    | NM    |             | DELAWARE-BRUSHY CANYO | 249357.8   | 153350          | 61                  | 1010           |
| THISTLE UNIT #020H                                          | 3002540015 | 32.2825584 | -103.5682526 | 27      | 23S      | 33E   | D    | 150N  | 150W  | Lea    | NM    |             | DELAWARE-BRUSHY CANYO | 245475     | 151089          | 61                  | 990            |
| HAT MESA #001                                               | 3002524403 | 32.4806824 | -103.6390762 | 14      | 21S      | 32E   | H    | 1980N | 660E  | LEA    | NM    | HAT MESA    | MORROW                | 271555     | 199015          | 288.896             | 529.248        |
| BELLOQ 2 STATE #002H                                        | 3001542895 | 32.3400704 | -103.7515914 | 2       | 23S      | 31E   | C    | 200N  | 1720W | EDDY   | NM    |             | WOLFCAMP              | 119471.8   | 73172.5         |                     | 1035.5         |

**Attachment 4**

Injection Formation Water Analyses

| Injection Formation Water Analysis |            |            |              |         |          |       |      |       |       |        |       |                |           |            |                 |                     |                |
|------------------------------------|------------|------------|--------------|---------|----------|-------|------|-------|-------|--------|-------|----------------|-----------|------------|-----------------|---------------------|----------------|
| Probity SWD, LLC - Devonian        |            |            |              |         |          |       |      |       |       |        |       |                |           |            |                 |                     |                |
| WellName                           | API        | Latitude   | Longitude    | Section | Township | Range | Unit | Ftgns | Ftgew | County | State | Field          | Formation | TDS (Mg/L) | Chloride (Mg/L) | Bircarbonate (Mg/L) | Sulfate (Mg/L) |
| ANTELOPE RIDGE UNIT #003           | 3002521082 | 32.2593155 | -103.4610748 | 34      | 23S      | 34E   | K    | 1980S | 1650W | LEA    | NM    | ANTELOPE RIDGE | DEVONIAN  | 80187      |                 |                     |                |
| APPLESEED FEDERAL COM #001         | 3002520377 | 32.5750008 | -103.4730377 | 17      | 20S      | 35E   | H    | 1980N | 660E  | LEA    | NM    | LYNCH          | DEVONIAN  | 44825      |                 |                     |                |
| LEA UNIT #008                      | 3002502431 | 32.5927162 | -103.511673  | 12      | 20S      | 34E   | B    | 810N  | 1980E | LEA    | NM    | LEA            | DEVONIAN  | 33414      | 18570           | 227                 | 1961           |
| LEA UNIT #009                      | 3002502432 | 32.578598  | -103.5121155 | 13      | 20S      | 34E   | B    | 660N  | 2130E | LEA    | NM    | LEA            | DEVONIAN  | 45778      | 26440           | 1145                | 729            |
| BIG EDDY UT #001                   | 3001505819 | 32.5970078 | -103.8506088 | 3       | 20S      | 31E   | P    | 660S  | 660E  | EDDY   | NM    |                | DEVONIAN  | 24313      | 13960           | 469                 | 730            |

**Attachment 5**

Water Well Map and Well Data



Legend

★ Proposed SWD

OSE Points of Diversion

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

Water Wells Area of Review

Tyson Lea 01D  
Lea County, New Mexico

Proj Mgr:  
Dan Arthur

August 14, 2020

Mapped by:  
Ben Bockelmann

Prepared for:  
**Probit**  
SWD, LLC.

Prepared by:  
**ALL** CONSULTING

| Water Well Sampling Rationale       |                                            |                                                                |                    |                          |                   |                          |
|-------------------------------------|--------------------------------------------|----------------------------------------------------------------|--------------------|--------------------------|-------------------|--------------------------|
| Probability SWD, LLC- Tyson Lea 01D |                                            |                                                                |                    |                          |                   |                          |
| Water Wells                         | Owner                                      | Available Contact Information                                  | Use                | Coordinates              | Sampling Required | Notes                    |
| C-03717 Pod 1                       | Slash 46 Ranch                             | Stacey Mills<br>(PO BOX 1358 Loving, NM 88220)<br>575-390-2779 | Livestock Watering | 32.407450, -103.6804     | No                | Permit Status of Permit  |
| C-03724 Pod 1                       | Burea of Land Management<br>Slash 46 Ranch | Stacey Mills<br>(PO BOX 1358 Loving, NM 88220)<br>575-390-2780 | Livestock Watering | 32.413160, -103.6858     | No                | Permit Status of Expired |
| C-03771 Pod 1                       | Slash 46 Ranch                             | Stacey Mills<br>(PO BOX 1358 Loving, NM 88220)<br>575-390-2781 | Livestock Watering | 32.40697032, -103.685620 | No                | Permit Status of Expired |
| Notes:                              |                                            |                                                                |                    |                          |                   |                          |

**Attachment 6**

Notice of Application Confirmations

| Tyson Lea 01D - Notice of Application Recipients                                                                                                                                                                                                                                                                                                                                                                |                               |               |       |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------|-------|------------|
| Entity                                                                                                                                                                                                                                                                                                                                                                                                          | Address                       | City          | State | Zip Code   |
| Landowner                                                                                                                                                                                                                                                                                                                                                                                                       |                               |               |       |            |
| F.J. Mills                                                                                                                                                                                                                                                                                                                                                                                                      | 1602 Avenue J.                | Abernathy     | TX    | 79311      |
| OCD District                                                                                                                                                                                                                                                                                                                                                                                                    |                               |               |       |            |
| NMOCD District 1                                                                                                                                                                                                                                                                                                                                                                                                | 1625 N. French Drive          | Hobbs         | NM    | 88240      |
| Mineral Owner                                                                                                                                                                                                                                                                                                                                                                                                   |                               |               |       |            |
| New Mexico BLM                                                                                                                                                                                                                                                                                                                                                                                                  | 620 E Greene St.              | Carlsbad      | NM    | 88220      |
| Leasehold Operators                                                                                                                                                                                                                                                                                                                                                                                             |                               |               |       |            |
| Conoco Phillips Company (CONOCOPHILLIPS CO)                                                                                                                                                                                                                                                                                                                                                                     | P.O. Box 7500                 | Bartlesville  | OK    | 74005      |
| Cocho Oil & Gas, LLC (CONCHO OIL & GAS LLC)                                                                                                                                                                                                                                                                                                                                                                     | 600 W. Illinois Ave.          | Midland       | TX    | 79701      |
| COG Operating, LLC (COG OPERATING LLC)                                                                                                                                                                                                                                                                                                                                                                          | 600 W. Illinois Ave.          | Midland       | TX    | 79701      |
| Commision of Public Lands - State Land Office                                                                                                                                                                                                                                                                                                                                                                   | 310 Old Santa Fe Trail        | Santa Fe      | NM    | 87501      |
| Crown Oil Partners V, LP.(CROWN OIL PTNRS V LP)                                                                                                                                                                                                                                                                                                                                                                 | P.O. Box 50820                | Midland       | TX    | 79710      |
| David J. Pientenpol (PIETENPOL DAVID)                                                                                                                                                                                                                                                                                                                                                                           | 4714 Valley Ridge Ct.         | Fort Collins  | CO    | 80526      |
| Devon Energy Production Company, LP.<br>(DEVON ENERGY PROD CO LP)                                                                                                                                                                                                                                                                                                                                               | 333 W. Sheridan Ave.          | Oklahoma City | OK    | 73102      |
| EOG Resources, Inc. (EOG RES INC)                                                                                                                                                                                                                                                                                                                                                                               | 5509 Champions Drive          | Midland       | TX    | 79706      |
| Exco Resources, Inc. (EXCO RES INC)                                                                                                                                                                                                                                                                                                                                                                             | 12377 Merit Drive, Suite 1700 | Dallas        | TX    | 75251      |
| Judah Oil LLC (JUDAH OIL LLC)                                                                                                                                                                                                                                                                                                                                                                                   | P.O. Box 568                  | Artesia       | NM    | 88211      |
| Legacy Reserves Operating, LP<br>(LEGACY RESERVES OPER, LP)                                                                                                                                                                                                                                                                                                                                                     | 303 W. Wall St., Suite 1800   | Midland       | TX    | 79701      |
| Matador Production Company                                                                                                                                                                                                                                                                                                                                                                                      | 5400 LBJ Freeway, Suite 1500  | Dallas        | TX    | 75240      |
| Mobil Production Texas & New Mexico<br>(MOBIL PROD TX & NM)                                                                                                                                                                                                                                                                                                                                                     | 9 Greenway Plaza 2700         | Houston       | TX    | 77046      |
| MRC Permian Company<br>(MRC PERMIAN CO) (MRC PERMIAN LKE CO LLC)                                                                                                                                                                                                                                                                                                                                                | 5400 LBL Freeway, Suite 1500  | Dallas        | TX    | 75240      |
| OXY USA Inc. (OXY USA INC)                                                                                                                                                                                                                                                                                                                                                                                      | 5 Greenway Plaza, Suite 110   | Houston       | TX    | 77046-0521 |
| PXP Producing Company, LLC.(PXP PRODUCING CO LLC)                                                                                                                                                                                                                                                                                                                                                               | P.O. Box 2504                 | Houston       | TX    | 77252      |
| <b>Notes:</b> 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 names used on either the 1-mile well detail list (Attachment 2) or on the 2-mile Mineral Lease Map (Attachment 2). |                               |               |       |            |

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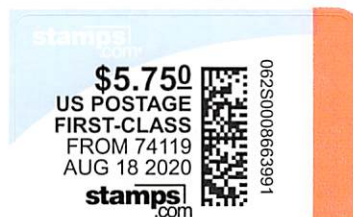
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