

# Initial Application Part I

Received: 08/12/2019

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

|                             |           |                  |                               |
|-----------------------------|-----------|------------------|-------------------------------|
| RECEIVED: <b>08/12/2019</b> | REVIEWER: | TYPE: <b>SWD</b> | APP NO: <b>pMAM1922435394</b> |
|-----------------------------|-----------|------------------|-------------------------------|

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

|  |                             |
|--|-----------------------------|
| <b>Applicant:</b> Delaware Water Management Company, LLC | <b>OGRID Number:</b> 374146 |
| <b>Well Name:</b> E Murphy FederalSWD I                  | <b>API:</b> 30-025-         |
| <b>Pool:</b> SWD; Devonian                               | <b>Pool Code:</b> 96101     |

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW**

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
- A. Location – Spacing Unit – Simultaneous Dedication
- NSL       NSP (PROJECT AREA)       NSP (PRORATION UNIT)       SD
- B. Check one only for [ I ] or [ II ]
- [ I ] Commingling – Storage – Measurement
- DHC     CTB     PLC     PC     OLS     OLM
- [ II ] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
- WFX     PMX     SWD     IPI     EOR     PPR

**SWD-2234**

- 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

| <b>FOR OCD ONLY</b>      |                              |
|--------------------------|------------------------------|
| <input type="checkbox"/> | Notice Complete              |
| <input type="checkbox"/> | Application Content Complete |

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

Brian Wood \_\_\_\_\_

Print or Type Name

Signature

8-9-19  
Date

505 466-8120  
Phone Number

brian@permitswest.com  
e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_ XXX Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ XXX Yes \_\_\_\_\_ No
- II. OPERATOR: DELAWARE WATER MANAGEMENT COMPANY, LLC  
ADDRESS: 5400 LBJ FREEWAY, SUITE 1500, DALLAS TX 75240  
CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-8120
- 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 XXX 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: BRIAN WOOD  TITLE: CONSULTANT

SIGNATURE: \_\_\_\_\_ DATE: AUG. 7, 2019

E-MAIL ADDRESS: brian@permitswest.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: \_\_\_\_\_

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.

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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.



**INJECTION WELL DATA SHEET**

Tubing Size: 5.5" Lining Material: IPC

Type of Packer: STAINLESS STEEL &/OR NICKEL

Packer Setting Depth: 16,214' - 16,314'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? XXX Yes        No

If no, for what purpose was the well originally drilled? \_\_\_\_\_

\_\_\_\_\_

2. Name of the Injection Formation: DEVONIAN

3. Name of Field or Pool (if applicable): SWD; DEVONIAN (POOL CODE 96101)

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

NO

\_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

OVER: BRUSHY CANYON (7226'), BONE SPRING (8844'), WOLFCAMP (12,125')

\_\_\_\_\_

UNDER: none

\_\_\_\_\_

I. Goal is to drill a 17,294' deep commercial saltwater disposal well. Disposal interval will be 16,314' – 17,294' in the SWD; Devonian (96101). See Exhibit A for C-102 and map. Well is on BLM surface and minerals.

II. Operator: Delaware Water Management Company, LLC [OGRID 374146]  
Operator phone number: (972) 371-5420  
Operator address: 5400 LBJ Freeway, Suite 1500, Dallas TX 75240  
Contact for Application: Brian Wood (Permits West, Inc.)  
Phone: (505) 466-8120

III. A. (1) Lease name: E Murphy Federal SWD  
Well name and number: E Murphy Federal SWD 1  
Location: 2443' FNL & 2634' FWL Section 1, T. 23 S., R. 32 E.

A. (2) Surface casing (20", 94# & 106.5#, J-55, BTC) will be set at 1,305' in a 26" hole and cemented to GL with 1,850 sacks (based on 50% OH excess).

First intermediate casing (13.375", 72#, P-110 HC, BTC) will be set at 5,112' in a 17.5" hole and cemented to GL with 3,080 sacks (based on 50% OH excess).

Second intermediate casing (9.625", 40#, P-110 EC, BTC) will be set at 12,700' in a 12.25" hole and cemented to 4,912 with 1,880 sacks (based on 40% OH excess).

Production liner (7.625", 33.7# P-110 HP, USS Liberty FJM) will be set from 12,200' to 16,314' in an 8.75" hole and cemented to 12,200' (CBL) with 390 sacks.

A 6.5" open hole will be drilled from 16,314' to 17,294'.

- A. (3) Tubing will be IPC lined, 5.5", 20#, P-110 HC, BTC. Setting depth will be  $\geq 16,214'$ . (Disposal interval will be 16,314' to 17,294'.)
- A. (4) A stainless steel and/or nickel packer will be set at  $\geq 16,214'$  (top of the open hole which will be at 16,314').
- B. (1) Disposal zone will be the Devonian (SWD; Devonian (96101) pool). Estimated fracture gradient is  $\approx 0.62$  to  $\approx 0.68$  psi per foot. Variation depends on whether limestone or dolomite.
- B. (2) Disposal interval will be open hole from 16,314' to 17,294'.
- B. (3) Well has not been drilled. It will be drilled as a saltwater disposal well.
- B. (4) No perforated intervals are in the well.
- B. (5) Productive zones in the area of review and above the Devonian (16,304') are the Brushy Canyon (7,226'), Bone Spring (8,831'), and Wolfcamp (12,125'). No oil or gas zone is below the Devonian in the area of review.

IV. This is not an expansion of an existing injection project. It is disposal only.

V. Exhibit B shows and tabulates the 20 existing wells (13 oil + 6 P&A + 1 SWD; Delaware) within a mile radius. Exhibit C shows all 87 existing wells (65 oil or gas wells + 20 P & A wells + 2 disposal wells) within a two-mile radius. Closest SWD; Devonian APD (30-025-45605) is 1.62 miles south. It is Delaware Water Management's R Wallman State SWD 1. C-108 approval is pending. The 2 active SWD wells within 2 miles are Delaware wells.

All leases within a one-mile radius are BLM or State. Exhibit D shows and tabulates all the leases within a mile. Exhibit E shows all lessors within a two-mile radius. Two-mile radius leases are BLM or NMSLO.

VI. No Devonian penetrator is within a mile. Deepest existing or proposed well within a mile is a 10,860' Bone Spring well.

- VII. 1. Average injection rate will be  $\approx$ 40,000 bwpd.  
 Maximum injection rate will be 45,000 bwpd.
2. System will be open and closed. Water will both be trucked and piped.
3. Average injection pressure will be  $\approx$ 2,500 psi  
 Maximum injection pressure will be 3,262 psi (= 0.2 psi/foot x 16,314' (top of open hole)).
4. Disposal water will be produced water, mainly from Bone Spring, Delaware, and Wolfcamp wells. There are 459 approved Bone Spring wells, 192 approved Delaware wells, and 38 approved Wolfcamp wells in T. 23 S., R. 32 and 33 E. The well will take other Permian Basin waters. A summary of produced water analyses from T. 23 S., R. 33 E. is in Exhibit F. Devonian produced water analyses (in mg/L) from wells in T. 23 S., R. 37 E. are in the table below. Compatibility problems are not expected.

| API        | Section | UL | TDS    | chloride | bicarbonate | sulfate |
|------------|---------|----|--------|----------|-------------|---------|
| 3002510717 | 14      | K  | 118979 | 71280    | 462         | 2593    |
| 3002510945 | 34      | A  | 112959 | 67390    | 288         | 2765    |
| 3002510947 | 34      | H  | 35639  |          |             |         |
| 3002510950 | 34      | A  | 236252 | 147000   | 129         | 781     |

5. No Devonian production is within ten miles.

VIII. The Devonian (estimated 1,200' thick) is comprised of limestone and dolomite. Closest possible underground source of drinking water above the proposed disposal interval is the Quaternary at the surface. There has been some interest in developing the <1280' deep brackish Dewey Lake.

According to State Engineer records (Exhibit G), no water well is within two miles. None were found within during a March 15, 2019 field inspection. No underground source of drinking water is below the proposed disposal interval.

Formation tops are:

Quaternary = 0'  
Rustler anhydrite = 1280'  
Salt top = 1769'  
Castile = 3730'  
Salt base = 5007'  
Bell Canyon = 5062'  
Cherry Canyon = 5859'  
Brushy Canyon = 7226'  
Bone Spring limestone = 8844'  
Wolfcamp = 12125'  
Strawn = 13310'  
Atoka = 13792'  
Morrow = 13993'  
Barnett = 14725'  
Mississippian limestone = 15740'  
Woodford shale = 16104'  
Devonian carbonate = 16304'  
*disposal interval = 16314' - 17294'*  
TD = 17294'  
(Montoya = 17304')

No water wells are within a 2-mile radius according to State Engineer records (Exhibit G) and a March 15, 2019 field inspection. There will be >2.8 miles of vertical separation and shale, salt, and anhydrite intervals between the bottom of the only likely underground water source (Dewey Lake) and the top of the Devonian.

- IX. The well will be stimulated with acid.
  
- X. GR log will be run from the third intermediate to TD.

XI. No water well was found within a mile during a March 15, 2019 field inspection.

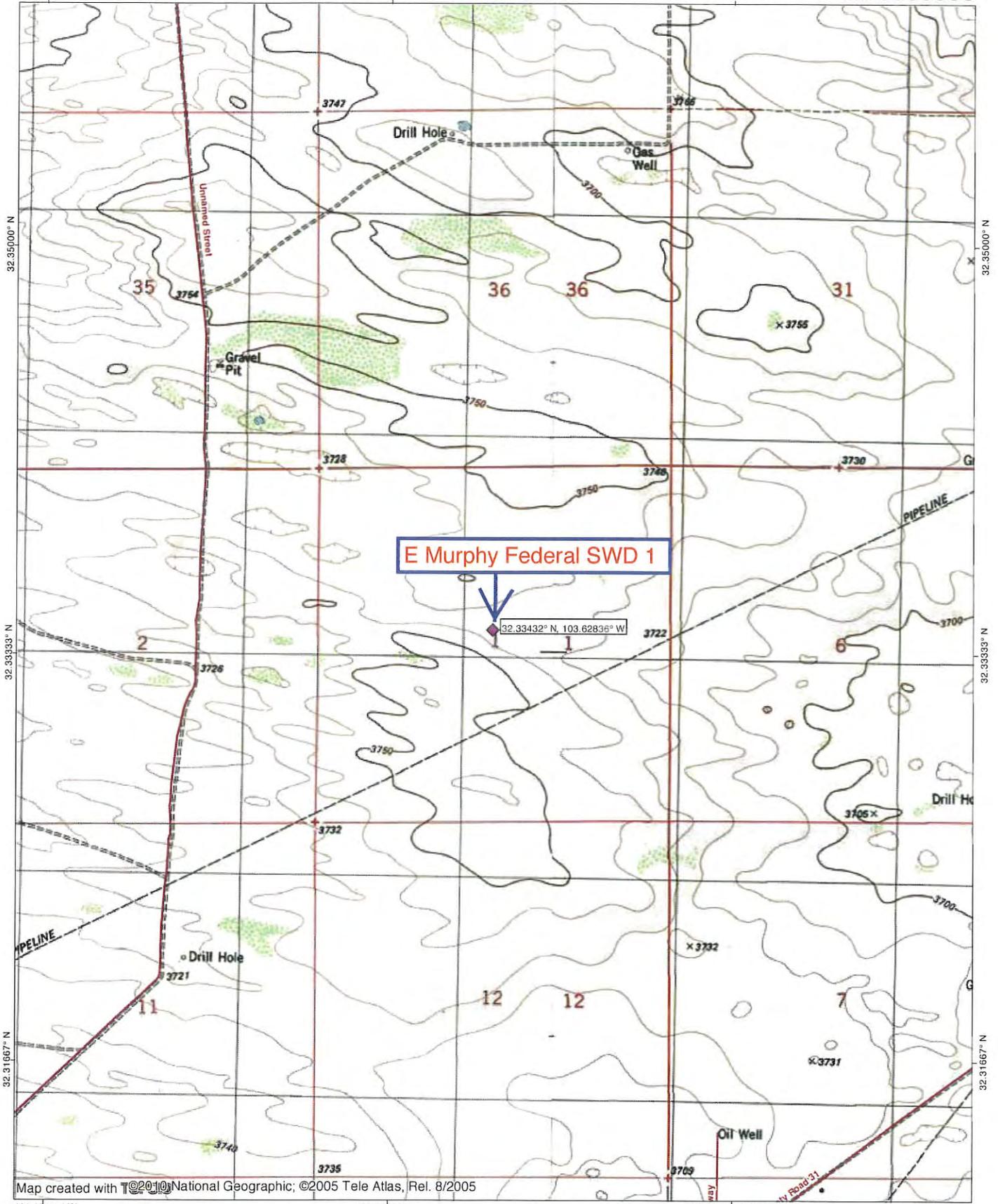
XII. Delaware Water Management Company, LLC (Exhibit H) is not aware of any geologic or engineering data that may indicate the Devonian is in hydrologic connection with any underground sources of water. Deepest water well within a 3-mile radius is 525'. It is 2.12 miles west. There are 155 active Devonian SWD wells in New Mexico.

XIII. A legal ad (see Exhibit I) was published on July 30, 2019. Notice (this application) has been sent (Exhibit J) to the surface owner (BLM) and all operators, lessees, and unleased mineral interest owners within a mile who are required to receive notice.

103.65000° W

103.63333° W

WGS84 103.61667° W

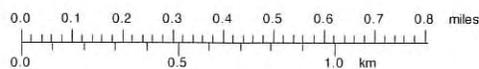


Map created with TOPO! National Geographic; ©2005 Tele Atlas, Rel. 8/2005

103.65000° W

103.63333° W

WGS84 103.61667° W



District I  
1625 N French Dr., Hobbs, NM 88240  
Phone (575) 393-6161 Fax (575) 393-9720  
District II  
811 S First St., Artesia, NM 88210  
Phone (575) 748-1283 Fax (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone (505) 334-6178 Fax (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources  
Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

FORM C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

AMENDED REPORT

EXHIBIT A

WELL LOCATION AND ACREAGE DEDICATION PLAT

|   |  |   |  |  |  |
|---|--|---|--|--|--|
| <sup>1</sup> API Number<br><b>30-025-</b> |  | <sup>2</sup> Pool Code<br><b>96101</b>                                      |  | <sup>3</sup> Pool Name<br><b>SWD; Devonian</b> |  |
| <sup>4</sup> Property Code                |  | <sup>5</sup> Property Name<br><b>E MURPHY FEDERAL SWD</b>                   |  |  | <sup>6</sup> Well Number<br><b>1</b>   |
| <sup>7</sup> OGRID No.<br><b>374146</b>   |  | <sup>8</sup> Operator Name<br><b>DELAWARE WATER MANAGEMENT COMPANY, LLC</b> |  |  | <sup>9</sup> Elevation<br><b>3742'</b> |

<sup>10</sup>Surface Location

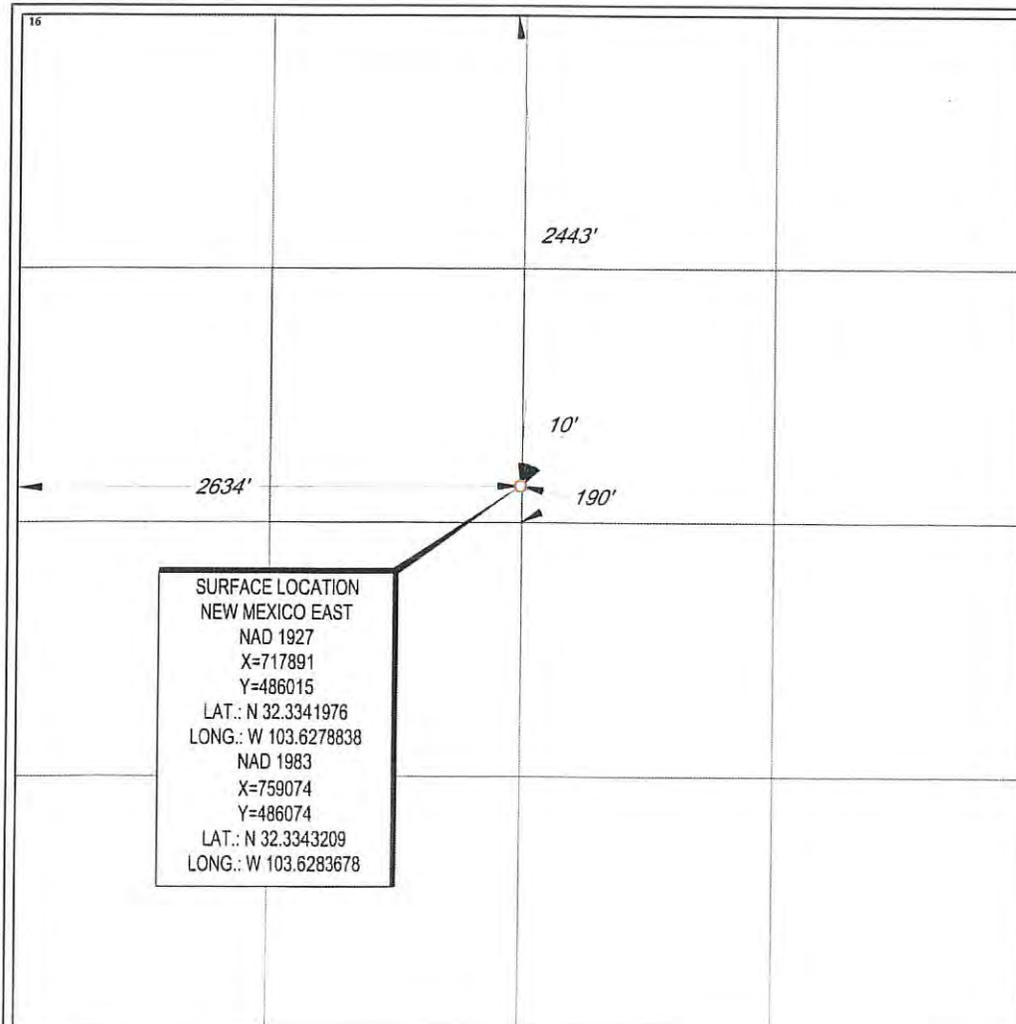
| UL or lot no. | Section  | Township    | Range       | Lot Idn  | Feet from the | North/South line | Feet from the | East/West line | County     |
|---------------|----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| <b>F</b>      | <b>1</b> | <b>23-S</b> | <b>32-E</b> | <b>-</b> | <b>2443'</b>  | <b>NORTH</b>     | <b>2634'</b>  | <b>WEST</b>    | <b>LEA</b> |

<sup>11</sup>Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
|               |         |          |       |         |               |                  |               |                |        |

|                               |                               |                                  |                         |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>13</sup> Dedicated Acres | <sup>12</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|                               |                               |                                  |                         |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



<sup>17</sup>OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that the organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill the well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Brian Wood* **7-29-19**  
Signature Date

**Brian Wood**  
Printed Name

**brian@permitswest.com**  
E-mail Address

**505 466-8120**  
Phone Number

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<sup>18</sup>SURVEYOR CERTIFICATION

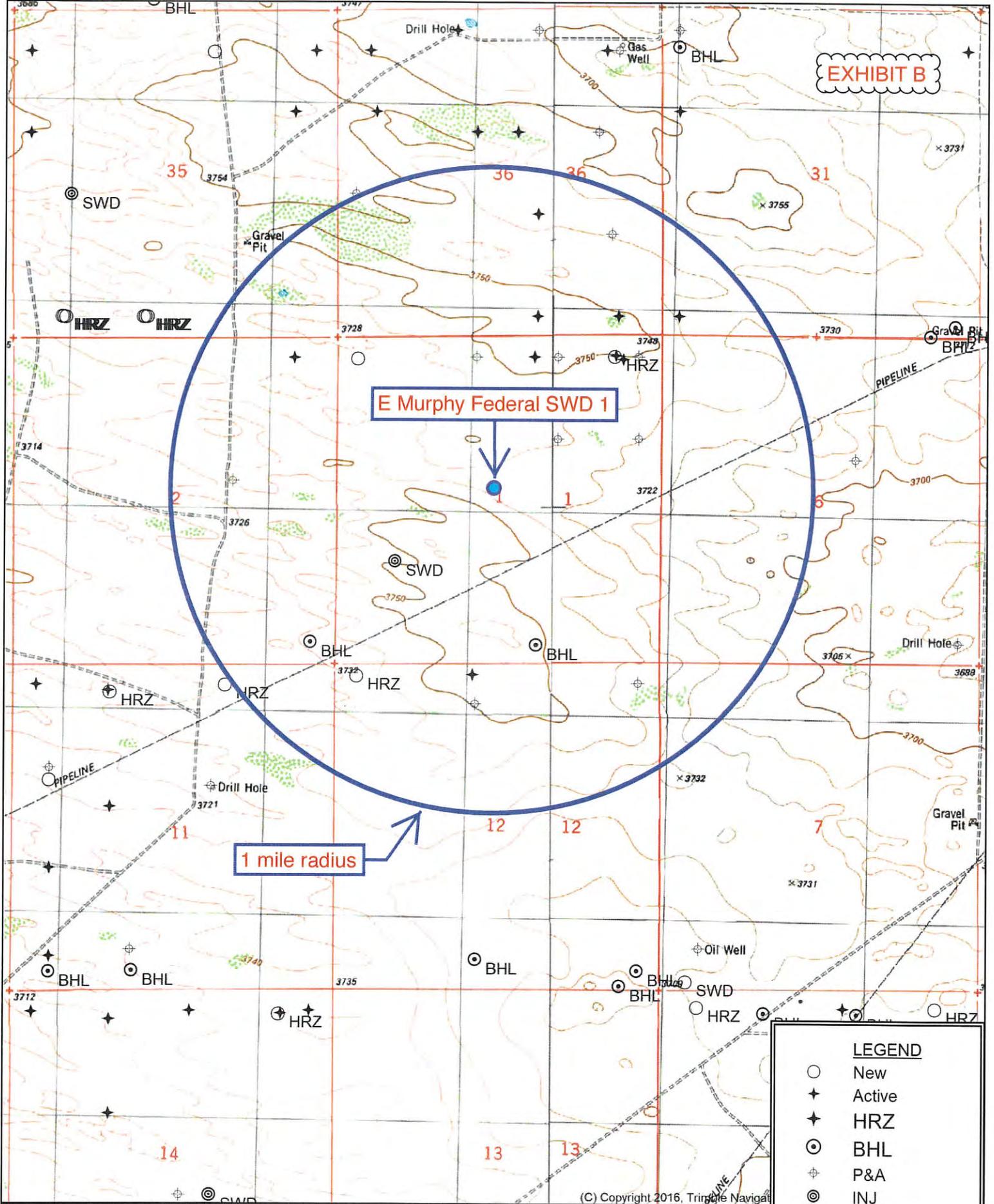
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

**02/25/2019**  
Date of Survey

*ANGEL M. BAEZA*  
Signature and Seal of Professional Surveyor

**25116**  
Certificate Number

EXHIBIT B



E Murphy Federal SWD 1

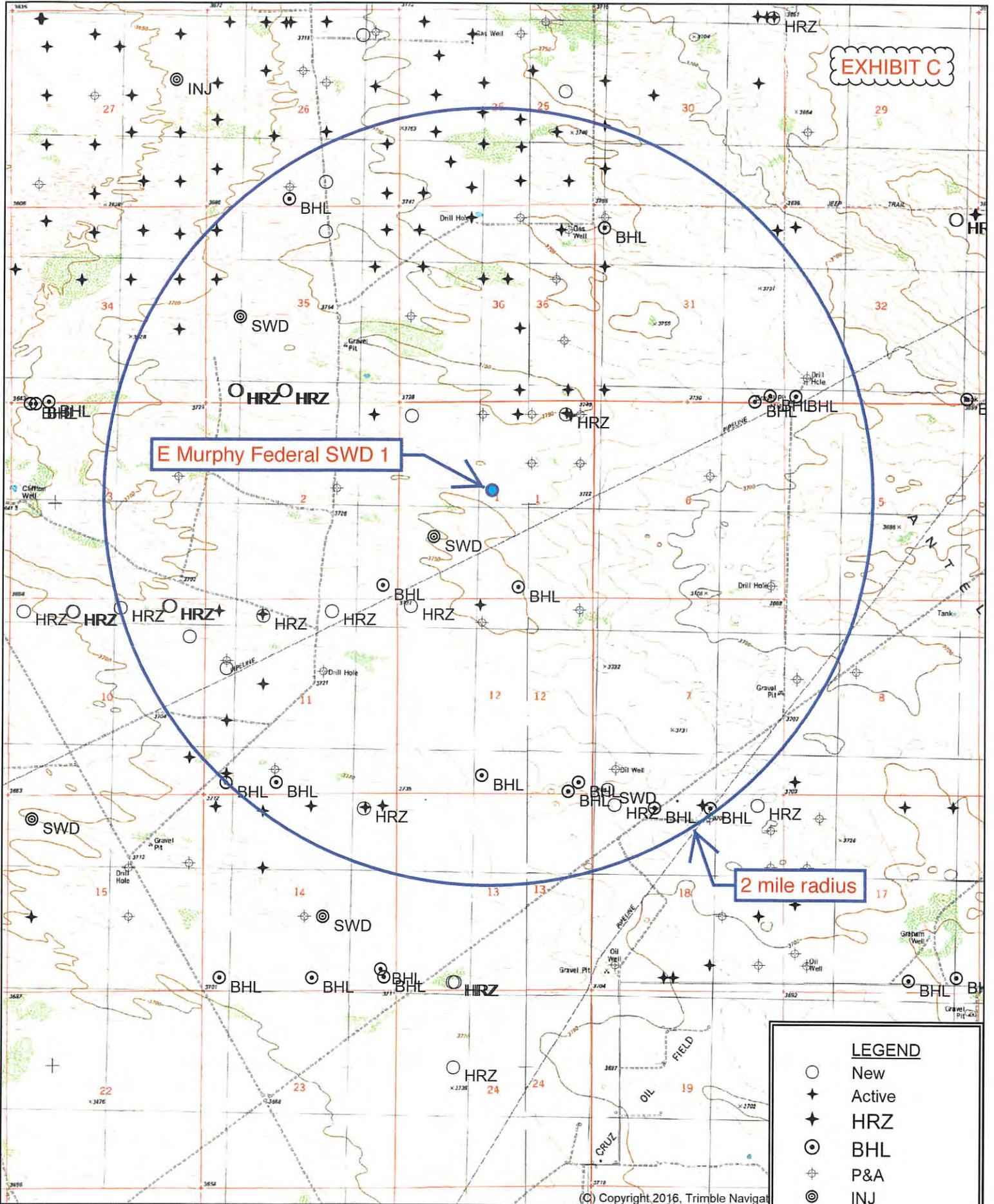
1 mile radius

| LEGEND |        |
|--------|--------|
| ○      | New    |
| +      | Active |
| +      | HRZ    |
| ⊙      | BHL    |
| ⊕      | P&A    |
| ⊙      | INJ    |
| ⊙      | SWD    |
| ⊙      | Brine  |
| ⊙      | Water  |

Quad: BOOTLEG RIDGE  
Scale: 1 inch = 2,000 ft.

(C) Copyright 2016, Tringale Navigat

**EXHIBIT C**



**E Murphy Federal SWD 1**

**2 mile radius**

| LEGEND |        |
|--------|--------|
| ○      | New    |
| +      | Active |
| ✦      | HRZ    |
| ⊙      | BHL    |
| ⊕      | P&A    |
| ⊗      | INJ    |
| ⊙      | SWD    |
| ⊙      | Brine  |
| ⊙      | Water  |



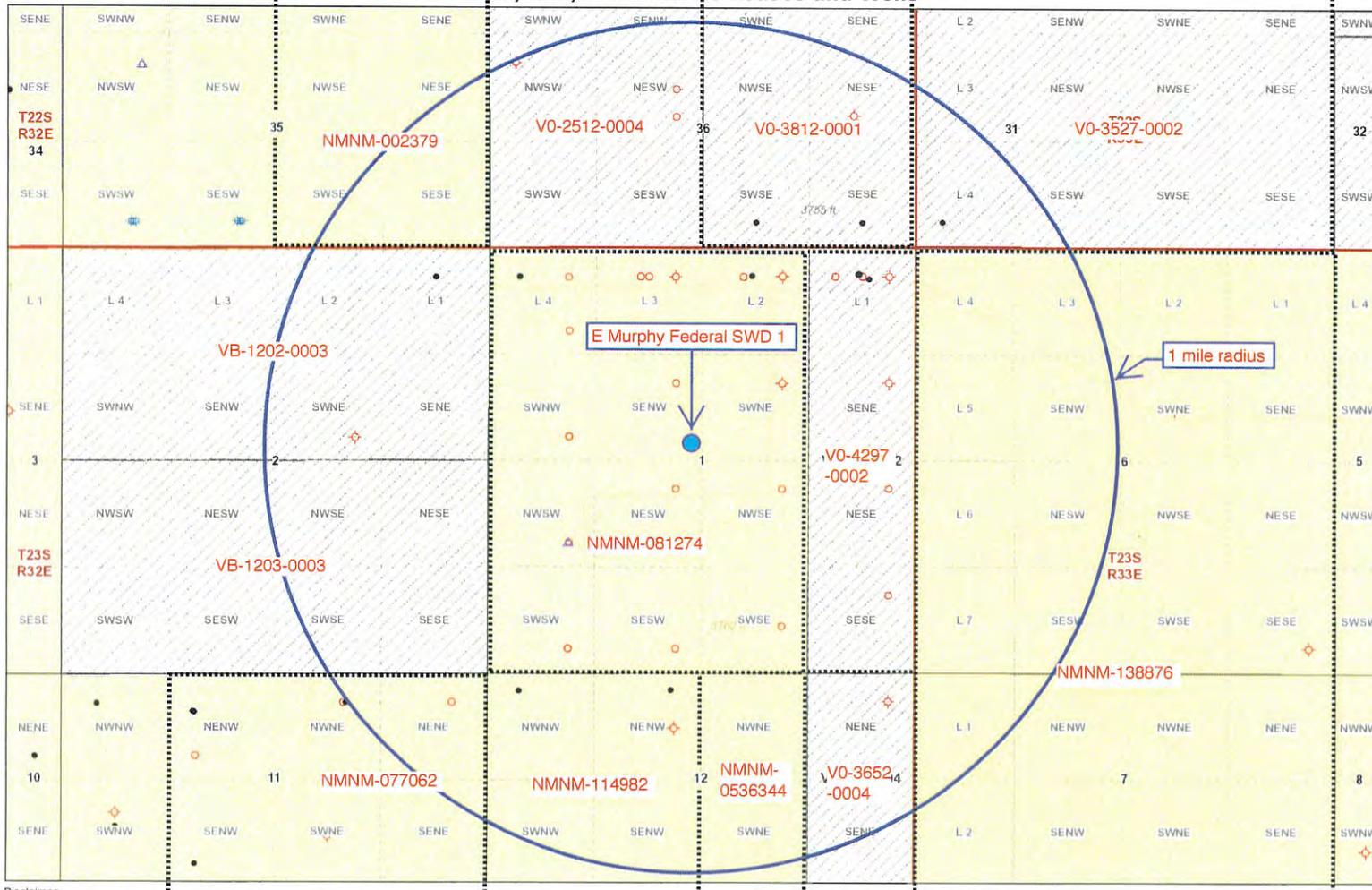
Quad: JAL  
Scale: 1 inch = 3,333 ft.



EXHIBIT D

### Oil, Gas, and Minerals Leases and Wells

#### Legend



- State Boundary
- County Boundaries
- Townships
- Sections
- Subdivisions
- Active Wells**
- Water Storage
- Miscellaneous
- Salt Water Disposal
- Injection
- Carbon Dioxide
- Gas
- Oil
- Inactive Wells**
- Plugged / Dry / Abandoned
- Cancelled / Not Drilled
- Detailed Roads
- Unit Agreement Boundaries
- Oil and Gas Leases
- Federal Minerals Ownership**
- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

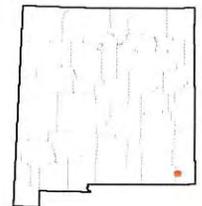
Disclaimer:  
 The New Mexico State Land Office assumes no responsibility or liability for, or in connection with the accuracy, reliability or use of the information provided herein with respect to State Land Office data or data from other sources.

Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico.



EXHIBIT D

Map Created: 7/29/2019



E MURPHY FEDERAL SWD 1 AREA OF REVIEW LEASES

| Aliquot Parts in Area of Review | Lessor | Lease        | Lessee(s) of Record | Operators (all shallower than Devonian) |
|---------------------------------|--------|--------------|---------------------|---|
| NESE & S2SE4 35-22s-32e         | BLM    | NMNM-002379  | OXY USA             | Matador                                 |
| SWNE & SE4 36-22s-32e           | NMSLO  | V0-3812-0001 | EOG                 | EOG                                     |
| S2NW4 & SW4 36-22s-33e          | NMSLO  | V0-2512-0004 | OXY USA             | OXY                                     |
| E2E2 1-23s-32e                  | NMSLO  | V0-4297-0002 | Cimarex             | Cimarex                                 |
| W2E2 & W2 1-23s-32e             | BLM    | NMNM-081274  | Cimarex             | Cimarex                                 |
| NE4 & SENW 2-23s-32e            | NMSLO  | VB-1202-0003 | COG                 | COG                                     |
| SE4 & NESW 2-23s-32e            | NMSLO  | VB-1203-0003 | COG                 | COG                                     |
| N2NE4 & SENE 11-23s-32e         | BLM    | NMNM-077062  | Cimarex             | Marathon                                |
| E2NE4 12-23s-32e                | NMSLO  | V0-3652-0004 | Cimarex             | Cimarex                                 |
| W2NE4 & NWNE 12-23s-32e         | BLM    | NMNM-0536344 | ConocoPhillips      | COG                                     |
| W2 6-23s-33e                    | BLM    | NMNM-138876  | Federal Abstract    | none                                    |
| N2NW4 & SWNW 7-23s-33e          | BLM    | NMNM-138876  | Federal Abstract    | none                                    |

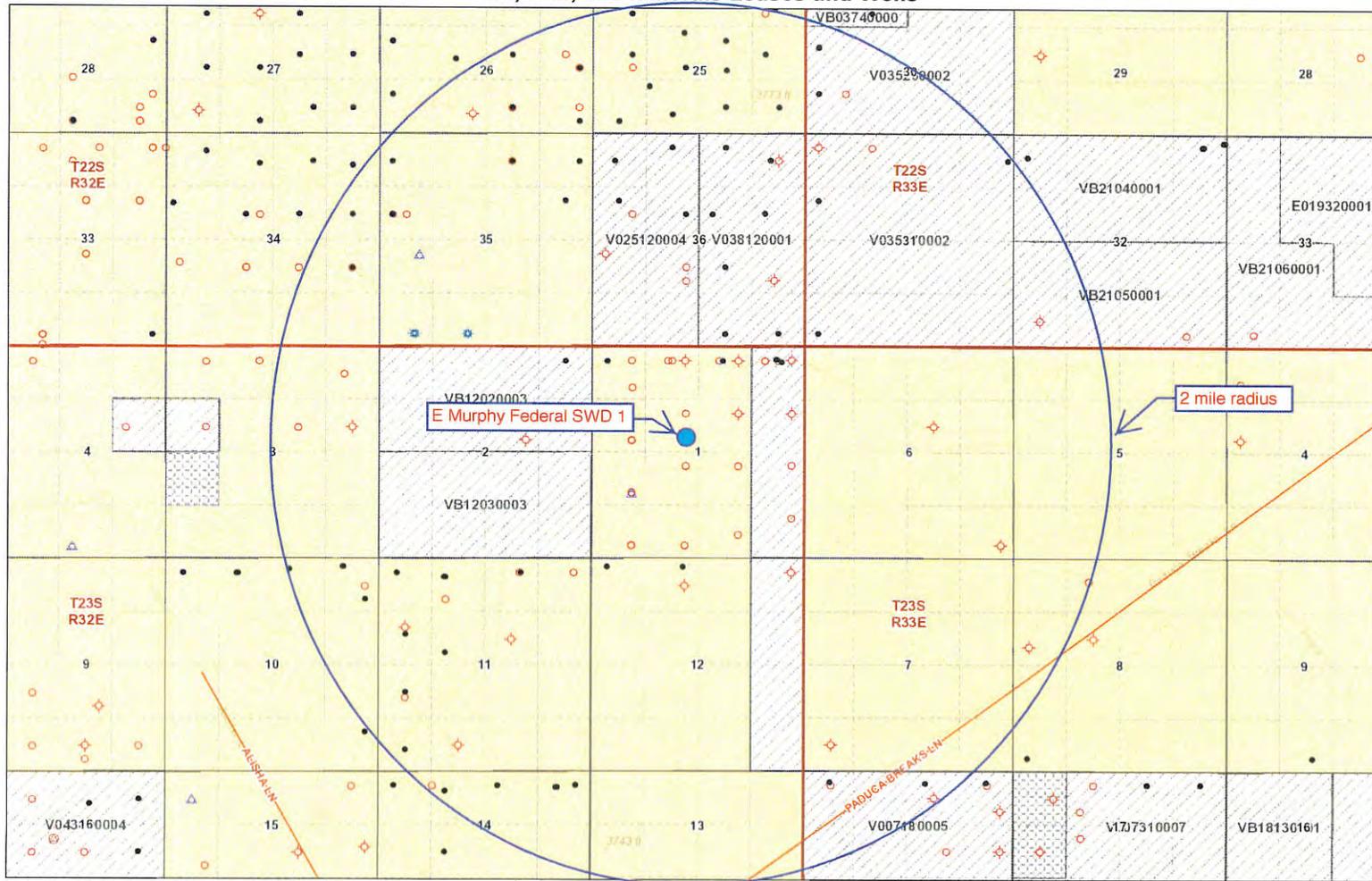


EXHIBIT E

### Oil, Gas, and Minerals Leases and Wells

**Legend**

- State Boundary
- County Boundaries
- Townships
- Sections
- Subdivisions
- Active Wells**
- ⊕ Water Storage
- ⊕ Miscellaneous
- ⊕ Salt Water Disposal
- ⊕ Injection
- ⊕ Carbon Dioxide
- ⊕ Gas
- ⊕ Oil
- Inactive Wells**
- ⊕ Plugged / Dry / Abandoned
- ⊕ Cancelled / Not Drilled
- Detailed Roads
- Unit Agreement Boundaries
- Oil and Gas Leases
- Federal Minerals Ownership**
- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals



2 mile radius

E Murphy Federal SWD 1

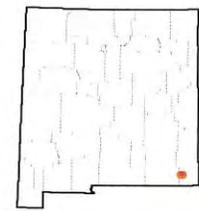
**Disclaimer:**  
 The New Mexico State Land Office assumes no responsibility or liability for, or in connection with the accuracy, reliability or use of the information provided herein with respect to State Land Office data or data from other sources.

Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico.



EXHIBIT E

Map Created: 7/29/2019



PRODUCED WATER SAMPLES (mg/L) FROM T23S-R33E

| API        | Section | UL | Formation            | TDS    | Sodium | Calcium | Iron | Magnesium | Chloride | Bicarbonate | Sulfate |
|------------|---------|----|----------------------|--------|--------|---------|------|-----------|----------|-------------|---------|
| 3002542425 | 27      | A  | Bone Spring 1st Sand | 171476 | 55363  | 9140    | 40   | 1023      | 104576   | 244         | 560     |
| 3002540173 | 15      | D  | Bone Spring 2nd Sand | 178123 | 56624  | 9330    | 65   | 985       | 108363   | 183         | 752     |
| 3002540743 | 15      | D  | Bone Spring 2nd Sand | 179067 | 55815  | 9603    | 89   | 998       | 109984   | 122         | 684     |
| 3002540173 | 15      | D  | Bone Spring 2nd Sand |        | 78099  | 12696   | 75   | 1273      | 148309   | 122         | 480     |
| 3002540743 | 15      | D  | Bone Spring 2nd Sand |        | 57680  | 10931   | 52   | 1378      | 112000   | 134         | 492     |
| 3002540743 | 15      | D  | Bone Spring 2nd Sand | 183674 | 59642  | 9492    | 48   | 1067      | 111975   | 61          | 765     |
| 3002541914 | 20      | M  | Bone Spring 2nd Sand | 272936 | 76650  | 21050   | 35   | 4456      | 169062   | 40          | 600     |
| 3002541913 | 20      | N  | Bone Spring 2nd Sand | 130154 | 49952  | 721     | 11   | 140       | 78282    | 159         | 740     |
| 3002541487 | 22      | M  | Bone Spring 2nd Sand |        | 84834  | 7818    | 12   | 927       | 146896   | 146         | 480     |
| 3002541487 | 22      | M  | Bone Spring 2nd Sand |        | 87007  | 9441    | 27   | 1109      | 154055   | 110         | 460     |
| 3002541488 | 22      | M  | Bone Spring 2nd Sand |        | 84044  | 9093    | 39   | 1085      | 149239   | 122         | 500     |
| 3002541487 | 22      | M  | Bone Spring 2nd Sand |        | 51734  | 13895   | 0    | 1692      | 109000   | 122         | 494     |
| 3002541488 | 22      | M  | Bone Spring 2nd Sand |        | 56352  | 9467    | 37   | 1271      | 107000   | 122         | 556     |
| 3002541487 | 22      | M  | Bone Spring 2nd Sand | 154844 | 51189  | 8663    | 20   | 924       | 91763    | 122         | 0       |
| 3002541488 | 22      | M  | Bone Spring 2nd Sand | 144753 | 47941  | 7688    | 37   | 848       | 85978    | 122         | 0       |
| 3002541488 | 22      | M  | Bone Spring 2nd Sand |        | 52748  | 8257    | 44   | 911       | 98911    | 73          | 460     |
| 3002541487 | 22      | M  | Bone Spring 2nd Sand | 236468 | 65181  | 19100   | 45   | 4014      | 146667   | 75          | 425     |
| 3002541488 | 22      | M  | Bone Spring 2nd Sand | 217107 | 62587  | 15640   | 26   | 3227      | 133870   | 256         | 635     |
| 3002541342 | 22      | O  | Bone Spring 2nd Sand | 165330 | 52113  | 8757    | 23   | 937       | 101300   | 183         | 0       |
| 3002541466 | 22      | O  | Bone Spring 2nd Sand |        | 45038  | 7608    | 34   | 833       | 86371    | 122         | 680     |
| 3002541467 | 22      | O  | Bone Spring 2nd Sand |        | 47247  | 8197    | 19   | 896       | 90999    | 244         | 600     |
| 3002541468 | 22      | O  | Bone Spring 2nd Sand |        | 47592  | 7723    | 16   | 841       | 90540    | 98          | 660     |
| 3002541340 | 22      | O  | Bone Spring 2nd Sand |        | 85421  | 9052    | 22   | 1111      | 151169   | 122         | 570     |
| 3002541466 | 22      | O  | Bone Spring 2nd Sand |        | 79770  | 8893    | 58   | 1105      | 142227   | 122         | 550     |
| 3002541467 | 22      | O  | Bone Spring 2nd Sand |        | 75949  | 9227    | 44   | 1171      | 137451   | 122         | 590     |
| 3002541468 | 22      | O  | Bone Spring 2nd Sand |        | 76951  | 8551    | 42   | 1055      | 137246   | 85          | 570     |
| 3002541340 | 22      | O  | Bone Spring 2nd Sand |        | 55815  | 9341    | 28   | 1275      | 106000   | 122         | 499     |
| 3002541341 | 22      | O  | Bone Spring 2nd Sand |        | 53627  | 10505   | 67   | 1394      | 105000   | 171         | 508     |
| 3002541466 | 22      | O  | Bone Spring 2nd Sand |        | 53998  | 10179   | 69   | 1422      | 105000   | 232         | 563     |
| 3002541467 | 22      | O  | Bone Spring 2nd Sand |        | 55684  | 8960    | 34   | 1264      | 105000   | 232         | 531     |

PRODUCED WATER SAMPLES (mg/L) FROM T23S-R33E

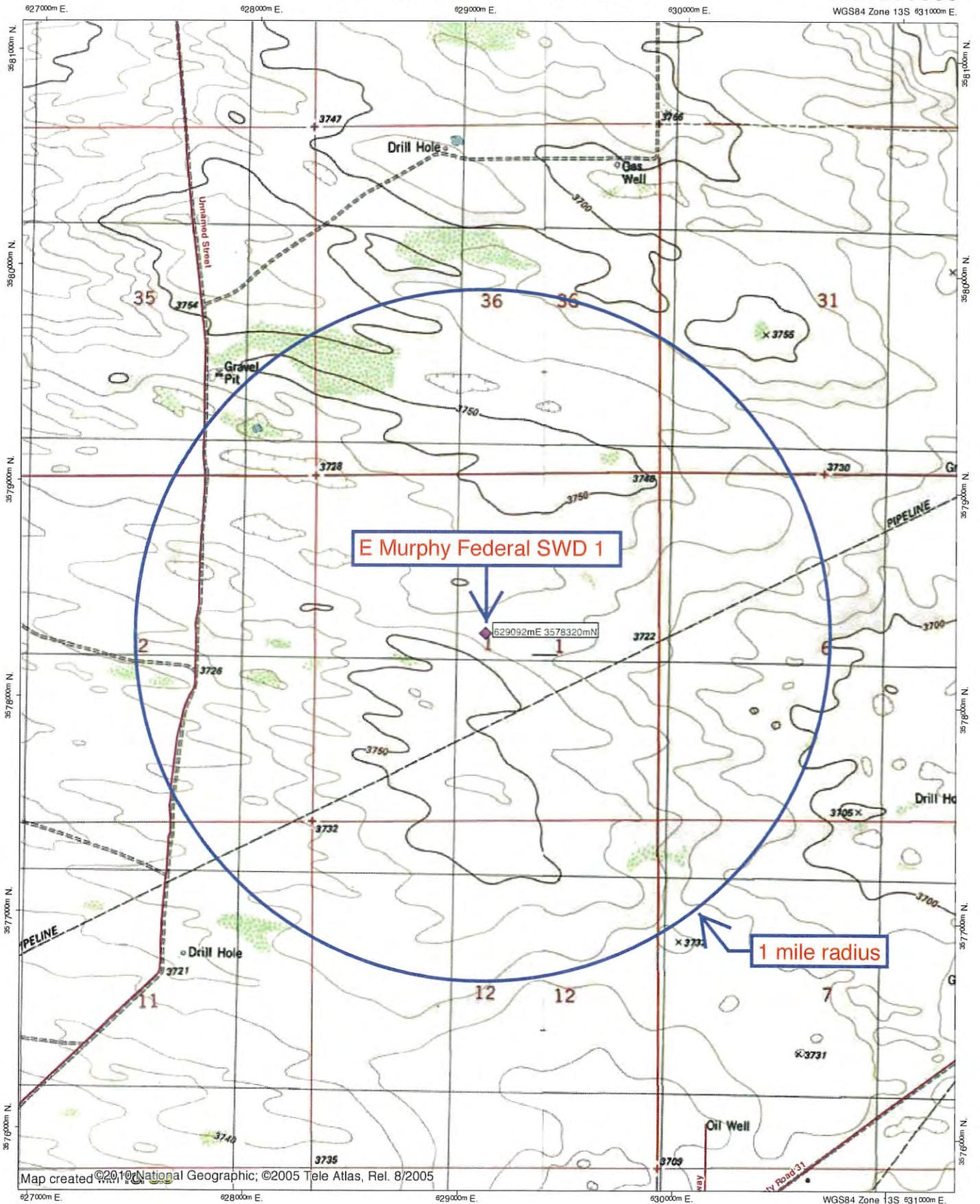
| API        | Section | UL | Formation            | TDS    | Sodium | Calcium | Iron | Magnesium | Chloride | Bicarbonate | Sulfate |
|------------|---------|----|----------------------|--------|--------|---------|------|-----------|----------|-------------|---------|
| 3002541468 | 22      | O  | Bone Spring 2nd Sand |        | 58238  | 3662    | 50   | 740       | 98000    | 171         | 599     |
| 3002541341 | 22      | O  | Bone Spring 2nd Sand |        | 79448  | 10789   | 52   | 1174      | 146515   | 122         | 520     |
| 3002541342 | 22      | O  | Bone Spring 2nd Sand |        | 60347  | 10265   | 60   | 1130      | 115793   | 134         | 560     |
| 3002541468 | 22      | O  | Bone Spring 2nd Sand |        | 47696  | 7829    | 32   | 888       | 90068    | 61          | 540     |
| 3002541341 | 22      | O  | Bone Spring 2nd Sand | 130631 | 47917  | 2149    | 13   | 341       | 78382    | 561         | 710     |
| 3002541342 | 22      | O  | Bone Spring 2nd Sand | 172312 | 54411  | 10120   | 45   | 1126      | 105276   | 305         | 425     |
| 3002541466 | 22      | O  | Bone Spring 2nd Sand | 106745 | 32885  | 5523    | 1    | 1747      | 64286    | 976         | 1205    |
| 3002541467 | 22      | O  | Bone Spring 2nd Sand | 164204 | 53030  | 8746    | 37   | 969       | 100077   | 193         | 635     |
| 3002541468 | 22      | O  | Bone Spring 2nd Sand | 184017 | 59935  | 9356    | 57   | 1065      | 111875   | 256         | 940     |
| 3002541794 | 28      | B  | Bone Spring 2nd Sand |        | 82792  | 8583    | 29   | 1027      | 146363   | 122         | 500     |
| 3002541796 | 28      | B  | Bone Spring 2nd Sand |        | 87646  | 8631    | 66   | 1030      | 154089   | 73          | 520     |
| 3002541794 | 28      | B  | Bone Spring 2nd Sand |        | 49335  | 11192   | 46   | 1560      | 100000   | 195         | 594     |
| 3002541796 | 28      | B  | Bone Spring 2nd Sand |        | 59742  | 11512   | 106  | 1633      | 117000   | 220         | 363     |
| 3002541796 | 28      | B  | Bone Spring 2nd Sand | 140111 | 47036  | 5996    | 30   | 763       | 84881    | 439         | 740     |
| 3002541897 | 28      | C  | Bone Spring 2nd Sand |        | 71047  | 8062    | 27   | 970       | 127280   | 146         | 560     |
| 3002541897 | 28      | C  | Bone Spring 2nd Sand |        | 51627  | 10603   | 46   | 1359      | 102000   | 195         | 468     |
| 3002541897 | 28      | C  | Bone Spring 2nd Sand | 161549 | 51768  | 8900    | 56   | 1004      | 98778    | 73          | 425     |
| 3002541896 | 28      | D  | Bone Spring 2nd Sand |        | 51318  | 7868    | 29   | 1149      | 96000    | 183         | 557     |
| 3002541896 | 28      | D  | Bone Spring 2nd Sand | 101658 | 34199  | 4245    | 13   | 579       | 61286    | 159         | 1030    |
| 3002540898 | 33      | M  | Bone Spring 2nd Sand | 143879 | 46057  | 7296    | 80   | 821       | 86700    | 244         | 0       |
| 3002540898 | 33      | M  | Bone Spring 2nd Sand |        | 48663  | 10816   | 76   | 1497      | 98000    | 134         | 792     |
| 3002540898 | 33      | M  | Bone Spring 2nd Sand | 155146 | 51156  | 7420    | 36   | 869       | 94479    | 183         | 600     |
| 3002541118 | 33      | N  | Bone Spring 2nd Sand | 163164 | 52348  | 8192    | 46   | 890       | 99400    | 122         | 0       |
| 3002541032 | 33      | N  | Bone Spring 2nd Sand |        | 55748  | 7983    | 68   | 924       | 103965   | 171         | 740     |
| 3002541032 | 33      | N  | Bone Spring 2nd Sand |        | 74216  | 6933    | 14   | 882       | 129179   | 122         | 430     |
| 3002541032 | 33      | N  | Bone Spring 2nd Sand |        | 77388  | 9133    | 27   | 1113      | 138954   | 98          | 640     |
| 3002541118 | 33      | N  | Bone Spring 2nd Sand |        | 70262  | 10319   | 26   | 1543      | 131655   | 122         | 620     |
| 3002541032 | 33      | N  | Bone Spring 2nd Sand |        | 54541  | 8845    | 28   | 1236      | 103000   | 146         | 534     |
| 3002541118 | 33      | N  | Bone Spring 2nd Sand |        | 54205  | 8584    | 33   | 1249      | 102000   | 146         | 608     |
| 3002541118 | 33      | N  | Bone Spring 2nd Sand | 166101 | 55345  | 7538    | 9    | 885       | 101077   | 244         | 635     |

PRODUCED WATER SAMPLES (mg/L) FROM T23S-R33E

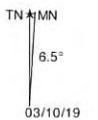
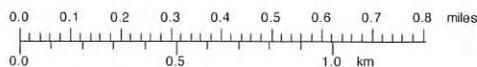
| API        | Section | UL | Formation            | TDS    | Sodium | Calcium | Iron | Magnesium | Chloride | Bicarbonate | Sulfate |
|------------|---------|----|----------------------|--------|--------|---------|------|-----------|----------|-------------|---------|
| 3002541303 | 33      | P  | Bone Spring 2nd Sand |        | 80875  | 6665    | 79   | 871       | 138579   | 183         | 470     |
| 3002541303 | 33      | P  | Bone Spring 2nd Sand |        | 87039  | 9224    | 50   | 1170      | 154348   | 98          | 700     |
| 3002541303 | 33      | P  | Bone Spring 2nd Sand |        | 89233  | 8044    | 45   | 1013      | 154983   | 159         | 690     |
| 3002541303 | 33      | P  | Bone Spring 2nd Sand |        | 53029  | 9452    | 70   | 1354      | 102000   | 122         | 668     |
| 3002541303 | 33      | P  | Bone Spring 2nd Sand | 159590 | 52594  | 7634    | 39   | 906       | 97178    | 183         | 635     |
| 3002541254 | 34      | N  | Bone Spring 2nd Sand |        | 51720  | 8636    | 84   | 1117      | 98474    | 183         | 690     |
| 3002541253 | 34      | N  | Bone Spring 2nd Sand | 161403 | 51347  | 7893    | 19   | 857       | 99100    | 122         | 0       |
| 3002541254 | 34      | N  | Bone Spring 2nd Sand | 161244 | 50960  | 7851    | 22   | 845       | 99300    | 122         | 0       |
| 3002541252 | 34      | N  | Bone Spring 2nd Sand |        | 85383  | 8644    | 36   | 1037      | 150004   | 85          | 650     |
| 3002541253 | 34      | N  | Bone Spring 2nd Sand |        | 59257  | 8179    | 13   | 1002      | 108767   | 110         | 630     |
| 3002541253 | 34      | N  | Bone Spring 2nd Sand |        | 56181  | 7137    | 15   | 1083      | 102000   | 122         | 626     |
| 3002541254 | 34      | N  | Bone Spring 2nd Sand |        | 53470  | 8231    | 38   | 1196      | 100000   | 183         | 695     |
| 3002541252 | 34      | N  | Bone Spring 2nd Sand |        | 77109  | 10168   | 43   | 1135      | 141623   | 110         | 580     |
| 3002541253 | 34      | N  | Bone Spring 2nd Sand | 162709 | 53858  | 7649    | 30   | 877       | 98978    | 244         | 675     |
| 3002541302 | 34      | P  | Bone Spring 2nd Sand | 158786 | 51054  | 8122    | 11   | 875       | 96500    | 122         | 0       |
| 3002541302 | 34      | P  | Bone Spring 2nd Sand |        | 83406  | 8769    | 52   | 1081      | 147503   | 122         | 540     |
| 3002541302 | 34      | P  | Bone Spring 2nd Sand |        | 60221  | 6449    | 42   | 772       | 106000   | 195         | 717     |
| 3002541302 | 34      | P  | Bone Spring 2nd Sand | 146169 | 47938  | 7126    | 54   | 824       | 88480    | 488         | 880     |
| 3002541625 | 35      | M  | Bone Spring 2nd Sand |        | 48857  | 6766    | 26   | 1090      | 90000    | 183         | 655     |
| 3002541625 | 35      | M  | Bone Spring 2nd Sand | 146174 | 48514  | 6777    | 39   | 763       | 88880    | 207         | 635     |
| 3002541599 | 35      | N  | Bone Spring 2nd Sand |        | 49141  | 6084    | 22   | 921       | 89000    | 220         | 269     |
| 3002542283 | 35      | O  | Bone Spring 2nd Sand | 118970 | 39811  | 5202    | 26   | 612       | 71984    | 232         | 820     |
| 3002508358 | 19      | M  | Delaware             | 238931 |        |         |      |           | 148600   | 127         | 156     |
| 3002542431 | 22      | M  | Del. - Brushy Canyon | 133985 | 45519  | 5227    | 38   | 673       | 80482    | 972         | 880     |
| 3002540015 | 27      | D  | Del. - Brushy Canyon |        | 85224  | 22553   | 30   | 4475      | 183663   | 85          | 250     |
| 3002540015 | 27      | D  | Del. - Brushy Canyon |        | 60914  | 21590   | 26   | 5449      | 148000   | 61          | 220     |
| 3002540015 | 27      | D  | Del. - Brushy Canyon | 167968 | 53996  | 9118    | 41   | 1014      | 102677   | 73          | 425     |
| 3002540015 | 27      | D  | Del. - Brushy Canyon | 245475 | 66848  | 20494   | 40   | 3559      | 151089   | 61          | 990     |
| 3002540010 | 28      | C  | Del. - Brushy Canyon |        | 93485  | 22643   | 31   | 4570      | 195932   | 73          | 270     |
| 3002540010 | 28      | C  | Del. - Brushy Canyon | 254703 | 70207  | 20688   | 48   | 3452      | 157600   | 122         | 0       |

PRODUCED WATER SAMPLES (mg/L) FROM T23S-R33E

| API        | Section | UL | Formation            | TDS    | Sodium | Calcium | Iron | Magnesium | Chloride | Bicarbonate | Sulfate |
|------------|---------|----|----------------------|--------|--------|---------|------|-----------|----------|-------------|---------|
| 3002540010 | 28      | C  | Del. - Brushy Canyon |        | 96068  | 22248   | 20   | 4460      | 199245   | 61          | 300     |
| 3002540010 | 28      | C  | Del. - Brushy Canyon |        | 67920  | 21017   | 20   | 4509      | 155000   | 61          | 303     |
| 3002540010 | 28      | C  | Del. - Brushy Canyon | 182009 | 56668  | 11090   | 47   | 1461      | 111475   | 61          | 600     |
| 3002539893 | 33      | O  | Del. - Brushy Canyon |        | 89832  | 22107   | 15   | 4443      | 189304   | 73          | 200     |
| 3002539893 | 33      | O  | Del. - Brushy Canyon | 283085 | 71469  | 25489   | 54   | 3894      | 179335   | 427         | 0       |
| 3002539893 | 33      | O  | Del. - Brushy Canyon |        | 82059  | 19233   | 14   | 3716      | 169603   | 61          | 640     |
| 3002539893 | 33      | O  | Del. - Brushy Canyon | 249358 | 68908  | 19792   | 108  | 3609      | 153350   | 61          | 1010    |
| 3002540016 | 33      | P  | Del. - Brushy Canyon | 256045 | 68991  | 20375   | 31   | 3375      | 160600   | 122         | 0       |
| 3002540016 | 33      | P  | Del. - Brushy Canyon |        | 91267  | 22892   | 11   | 4435      | 193029   | 37          | 250     |



Map created ©2010 National Geographic; ©2005 Tele Atlas, Rel. 8/2005





New Mexico Office of the State Engineer  
**Water Column/Average Depth to Water**

EXHIBIT G

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 629092

**Northing (Y):** 3578320

**Radius:** 3220

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

3/10/19 9:24 AM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

# Delaware Water Management Company, LLC

One Lincoln Centre • 5400 LBJ Freeway • Suite 1500 • Dallas, Texas 75240  
Voice 972.371.5200 • Fax 972.371.5201  
dbrugioni@matadorresources.com

---

**Jake Harrington**  
Senior Geologist

July 31, 2019

NM Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

**Re: Geology Statement**  
**E Murphy Federal SWD #1**  
**Section 1, T. 23S, R. 32E**  
**Lea County, New Mexico**

To whom it may concern:

Available geologic and engineering data related to the proposed Well have been thoroughly reviewed, and no evidence for a hydrological connection between the proposed deep Devonian injection zone, located at approximately 16,314 ft., and any underground sources of drinking water has been found.

Sincerely,  
Delaware Water Management Company, LLC



Jake Harrington

# Affidavit of Publication

STATE OF NEW MEXICO  
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated  
July 30, 2019  
and ending with the issue dated  
July 30, 2019.

**LEGALS**

**LEGAL NOTICE  
JULY 30, 2019**

Delaware Water Management Company, LLC is applying to drill the E Murphy Federal SWD 1 as a saltwater disposal well. The well is staked at 2443 FNL & 2634 FWL Sec. 1, T. 23 S., R. 32 E., Lea County and is 28 miles west-southwest of Eunice, NM. Disposal will be in the Devonian from 16,314' to 17,294'. Maximum injection pressure will be 3,262 psi. Maximum disposal rate will be 45,000 bwpd. Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 within 15 days. Additional information can be obtained by contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120. #34509

*Daniel Russell*

Publisher

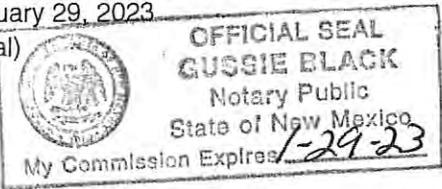
Sworn and subscribed to before me this  
30th day of July 2019.

*Gussie Black*

Business Manager

My commission expires  
January 29, 2023

(Seal)



02108485

00231426

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

BRIAN WOOD  
PERMITS WEST  
37 VERANO LOOP  
SANTA FE, NM 87508

August 7, 2019

BLM  
620 E Greene  
Carlsbad NM 88220

**TYPICAL LETTER**

Delaware Water Management Company, LLC is applying (see attached application) to drill the E Murphy Federal SWD 1 well as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) rules, I am notifying you of the following proposed saltwater disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: E Murphy Federal SWD 1 (BLM surface / BLM lease) ID = 17,294'

Proposed Disposal Zone: Devonian (from 16,314' to 17,294')

Location: 2443' FNL & 2634' FWL Sec. 1, T. 23 S., R. 32 E., Lea County, NM

Approximate Location: 28 miles west-southwest of Eunice, NM

Applicant: Delaware Water Management Company, LLC (972) 371-5420

Applicant's Address: 5400 LBJ Freeway, Suite 1500, Dallas TX 75240

Submittal Information: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. NMOCD address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Phone is (505) 476-3440.

Please call me if you have any questions.

Sincerely,



Brian Wood

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Midland TX 79710  
Delaware E Murphy SWD

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Delaware E Murphy SWD

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| <input type="checkbox"/> Return Receipt (hardcopy)           | \$ |
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| <input type="checkbox"/> Certified Mail Restricted Delivery  | \$ |
| <input type="checkbox"/> Adult Signature Required            | \$ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ |

Postage  
\$

Total Postage and Fees  
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Cimarex Energy Co  
600 N. Marienfeld Street  
Suite 600  
Midland TX 79701  
Delaware E-Murphy-SWD

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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7019 0140 0000 9915 6569

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| <input type="checkbox"/> Return Receipt (hardcopy)           | \$ |
| <input type="checkbox"/> Return Receipt (electronic)         | \$ |
| <input type="checkbox"/> Certified Mail Restricted Delivery  | \$ |
| <input type="checkbox"/> Adult Signature Required            | \$ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ |

Postage  
\$

Total Postage and Fees  
\$

Sent To  
Cimarex Energy Co  
1700 N. Lincoln St.  
STE 3700  
Denver CO 80203  
Delaware E-Murphy-SWD

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instruction

6959 516 0000 9915 6576  
7019 0140 0000 9915 6576

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**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

|  |    |
|--|----|
| <input type="checkbox"/> Return Receipt (hardcopy)           | \$ |
| <input type="checkbox"/> Return Receipt (electronic)         | \$ |
| <input type="checkbox"/> Certified Mail Restricted Delivery  | \$ |
| <input type="checkbox"/> Adult Signature Required            | \$ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ |

Postage  
\$

Total Postage and Fees  
\$

Sent To  
Conoco Phillips Co  
PO Box 7500  
Bartlesville OK 74005  
Delaware E Murphy SWD

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

6959 516 0000 9915 6590  
7019 0140 0000 9915 6590

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**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

|  |    |
|--|----|
| <input type="checkbox"/> Return Receipt (hardcopy)           | \$ |
| <input type="checkbox"/> Return Receipt (electronic)         | \$ |
| <input type="checkbox"/> Certified Mail Restricted Delivery  | \$ |
| <input type="checkbox"/> Adult Signature Required            | \$ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ |

Postage  
\$

Total Postage and Fees  
\$

Sent To  
COG Operating LLC  
600 W Illinois Ave  
Midland TX 79701  
Delaware E Murphy SWD

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

6959 516 0000 9915 6583  
7019 0140 0000 9915 6583

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**OFFICIAL USE**

Certified Mail Fee  
 \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage  
 \$

Total Postage and Fees  
 \$

Sent To  
**Crump Energy Partners III, LLC**  
**PO Box 50820**  
**Midland TX 79710**  
**Delaware E Murphy SWD**

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

PECOS NM  
 Postmark Here  
 AUG - 8 2019  
 87552-9995

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**OFFICIAL USE**

Certified Mail Fee  
 \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage  
 \$

Total Postage and Fees  
 \$

Sent To  
**Crown Oil Partners VI, LP**  
**PO Box 50820**  
**Midland TX 79710**  
**Delaware E Murphy SWD**

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

PECOS NM  
 Postmark Here  
 AUG - 8 2019  
 8666-2552

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**OFFICIAL USE**

Certified Mail Fee  
 \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage  
 \$

Total Postage and Fees  
 \$

Sent To  
**Federal Abstract Co**  
**PO Box 2288**  
**Santa Fe NM 87504**  
**Delaware E Murphy SWD**

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

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PECOS NM  
 Postmark Here  
 AUG - 8 2019  
 87552-9995

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**OFFICIAL USE**

Certified Mail Fee  
 \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage  
 \$

Total Postage and Fees  
 \$

Sent To  
**EOG Resources Inc**  
**PO Box 2267**  
**Midland TX 79702**  
**Delaware E Murphy SWD**

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

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 Postmark Here  
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Certified Mail Fee  
 \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage  
 \$

Total Postage and Fees  
 \$

Sent To  
**James H. & Carlene R. Howard**  
**3402 Windridge**  
**Garland TX 75043**  
**Delaware E Murphy SWD**

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

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 AUG - 8 2019  
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**OFFICIAL USE**

Certified Mail Fee  
 \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage  
 \$

Total Postage and Fees  
 \$

Sent To  
**Fortyniner Ridge LLC**  
**12000 Santa Monica Drive NE**  
**Albuquerque NM 87154**  
**Delaware E Murphy SWD**

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

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 Postmark Here  
 AUG - 8 2019  
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**OFFICIAL USE**

|   |   |
|---|---|
| Certified Mail Fee<br>\$  |  |
| Extra Services & Fees (check box, add fee as appropriate)       |   |
| <input type="checkbox"/> Return Receipt (hardcopy) \$           |   |
| <input type="checkbox"/> Return Receipt (electronic) \$         |   |
| <input type="checkbox"/> Certified Mail Restricted Delivery \$  |   |
| <input type="checkbox"/> Adult Signature Required \$            |   |
| <input type="checkbox"/> Adult Signature Restricted Delivery \$ |   |
| Postage<br>\$   |   |
| Total Postage and Fees  | Lakeiva L. Noel   |
| \$  | PO Box 2197   |
| \$  | Houston TX 77252  |
| Sent To   | Delaware E Murphy SWD   |
| Street and Apt. No., or PO Box No.                              |   |
| City, State, ZIP+4®   |   |

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|   |   |
|---|---|
| Certified Mail Fee<br>\$  |  |
| Extra Services & Fees (check box, add fee as appropriate)       |   |
| <input type="checkbox"/> Return Receipt (hardcopy) \$           |   |
| <input type="checkbox"/> Return Receipt (electronic) \$         |   |
| <input type="checkbox"/> Certified Mail Restricted Delivery \$  |   |
| <input type="checkbox"/> Adult Signature Required \$            |   |
| <input type="checkbox"/> Adult Signature Restricted Delivery \$ |   |
| Postage<br>\$   |   |
| Total Postage and Fees  | John Richardson   |
| \$  | 2 Soldiers Field Park #11   |
| \$  | Boston MA 02163   |
| Sent To   | Delaware E Murphy SWD   |
| Street and Apt. No., or PO Box No.                              |   |
| City, State, ZIP+4®   |   |

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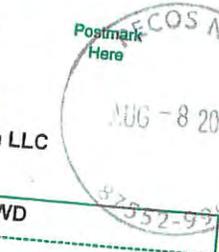
|   |  |
|---|--|
| Certified Mail Fee<br>\$  |  |
| Extra Services & Fees (check box, add fee as appropriate)       |  |
| <input type="checkbox"/> Return Receipt (hardcopy) \$           |  |
| <input type="checkbox"/> Return Receipt (electronic) \$         |  |
| <input type="checkbox"/> Certified Mail Restricted Delivery \$  |  |
| <input type="checkbox"/> Adult Signature Required \$            |  |
| <input type="checkbox"/> Adult Signature Restricted Delivery \$ |  |
| Postage<br>\$   |  |
| Total Postage and Fees  | Matador Production Company   |
| \$  | One Lincoln Centre   |
| \$  | 5400 LBJ Fwy, Ste 1500   |
| Sent To   | Dallas TX 75240  |
| Street and Apt. No., or PO Box No.                              |  |
| City, State, ZIP+4®   |  |

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|   |  |
|---|--|
| Certified Mail Fee<br>\$  |  |
| Extra Services & Fees (check box, add fee as appropriate)       |  |
| <input type="checkbox"/> Return Receipt (hardcopy) \$           |  |
| <input type="checkbox"/> Return Receipt (electronic) \$         |  |
| <input type="checkbox"/> Certified Mail Restricted Delivery \$  |  |
| <input type="checkbox"/> Adult Signature Required \$            |  |
| <input type="checkbox"/> Adult Signature Restricted Delivery \$ |  |
| Postage<br>\$   |  |
| Total Postage and Fees  | Marathon Oil Permian LLC   |
| \$  | 5555 San Felipe St.  |
| \$  | Houston TX 77056   |
| Sent To   | Delaware E Murphy SWD  |
| Street and Apt. No., or PO Box No.                              |  |
| City, State, ZIP+4®   |  |

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**OFFICIAL USE**

|   |   |
|---|---|
| Certified Mail Fee<br>\$  |  |
| Extra Services & Fees (check box, add fee as appropriate)       |   |
| <input type="checkbox"/> Return Receipt (hardcopy) \$           |   |
| <input type="checkbox"/> Return Receipt (electronic) \$         |   |
| <input type="checkbox"/> Certified Mail Restricted Delivery \$  |   |
| <input type="checkbox"/> Adult Signature Required \$            |   |
| <input type="checkbox"/> Adult Signature Restricted Delivery \$ |   |
| Postage<br>\$   |   |
| Total Postage and Fees  | New Mexico State Land Office  |
| \$  | PO Box 1148   |
| \$  | Santa Fe NM 87504   |
| Sent To   | Delaware E Murphy SWD   |
| Street and Apt. No., or PO Box No.                              |   |
| City, State, ZIP+4®   |   |

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|   |   |
|---|---|
| Certified Mail Fee<br>\$  |  |
| Extra Services & Fees (check box, add fee as appropriate)       |   |
| <input type="checkbox"/> Return Receipt (hardcopy) \$           |   |
| <input type="checkbox"/> Return Receipt (electronic) \$         |   |
| <input type="checkbox"/> Certified Mail Restricted Delivery \$  |   |
| <input type="checkbox"/> Adult Signature Required \$            |   |
| <input type="checkbox"/> Adult Signature Restricted Delivery \$ |   |
| Postage<br>\$   |   |
| Total Postage and Fees  | MRC Permian Company   |
| \$  | 5400 LBJ Freeway  |
| \$  | Suite 1500  |
| Sent To   | Dallas TX 75240   |
| Street and Apt. No., or PO Box No.                              |   |
| City, State, ZIP+4®   |   |

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**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

PECOS NM  
Postmark  
Here  
AUG - 8 2019

Postage  
\$

Total Postage and Fees \$

Sent To  
\$

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 0140 0000 9915 6729

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Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

PECOS NM  
Postmark  
Here  
AUG - 8 2019

Postage  
\$

Total Postage and Fees \$

Sent To  
\$

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 0140 0000 9915 6750

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**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

PECOS NM  
Postmark  
Here  
AUG - 8 2019

Postage  
\$

Total Postage and Fees \$

Sent To  
\$

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 0140 0000 9915 6774

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Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

PECOS NM  
Postmark  
Here  
AUG - 8 2019

Postage  
\$

Total Postage and Fees \$

Sent To  
\$

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

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7019 0140 0000 9915 6736

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**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

PECOS NM  
Postmark  
Here  
AUG - 8 2019

Postage  
\$

Total Postage and Fees \$

Sent To  
\$

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 0140 0000 9915 6743

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**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

PECOS NM  
Postmark  
Here  
AUG - 8 2019

Postage  
\$

Total Postage and Fees \$

Sent To  
\$

Street and Apt. No., or PO Box No.  
City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 0140 0000 9915 6767