

# Initial Application Part I

Received: 07/16/2019

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

RECEIVED: <b>07/16/2019</b>	REVIEWER:	TYPE: <b>SWD</b>	APP NO: <b>pMAM1919753456</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> <u>Overflow Energy, LLC</u>	<b>OGRID Number:</b> <u>292641</u>
<b>Well Name:</b> <u>Rita SWD 1</u>	<b>API:</b> <u>30-015-45719</u>
<b>Pool:</b> <u>SWD; Devonian</u>	<b>Pool Code:</b> <u>96101</u>

**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<sub>(PROJECT AREA)</sub>       NSP<sub>(PRORATION UNIT)</sub>       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-2193**

- 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

7-15-19  
Date

Print or Type Name

505 466-8120  
Phone Number

Signature

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: OVERFLOW ENERGY, LLC

ADDRESS: PO BOX 66, DAROUZETT TX 79024

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:

Rita SWD 1  
30-015-45719

SWD; Devonian (96101)

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: JULY 12, 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.

---

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

OPERATOR: OVERFLOW ENERGY, LLC

WELL NAME & NUMBER: RITA SWD 1

WELL LOCATION: 1876' FNL & 807' FWL

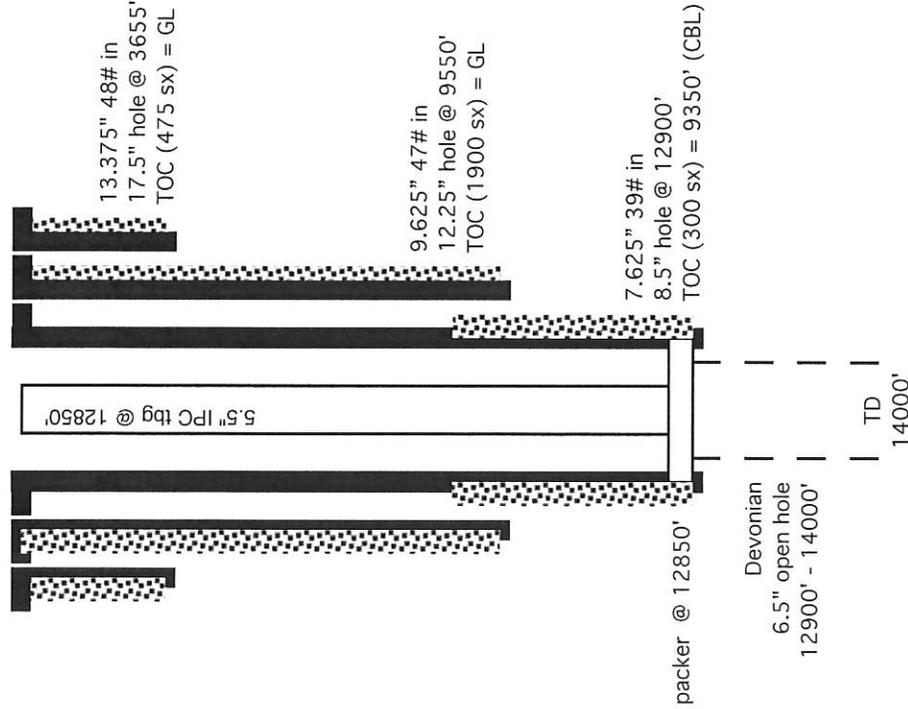
E 27 22 S 27 E

UNIT LETTER SECTION TOWNSHIP RANGE

FOOTAGE LOCATION

WELLBORE SCHEMATIC

(not to scale)



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17.5" Casing Size: 13.375"  
 Cemented with: 475 sx. or          ft<sup>3</sup>  
 Top of Cement: SURFACE Method Determined: CIRCULATE

Intermediate Casing

Hole Size: 12.25 Casing Size: 9.625"  
 Cemented with: 1900 sx. or          ft<sup>3</sup>  
 Top of Cement: SURFACE Method Determined: CIRCULATE

Production Casing

Hole Size: 8.5" Casing Size: 7.625"  
 Cemented with: 300 sx. or          ft<sup>3</sup>

Top of Cement: 9350' Method Determined: CBL

Total Depth: CSG @ 12900' & TD @ 14000'

Injection Interval

6.5" HOLE SIZE 12900 feet to 14000'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 5.5" Lining Material: IPC

Type of Packer: NICKEL OR STAINLESS STEEL

Packer Setting Depth: ≈12850'

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 (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: DELAWARE (2140'), BONE SPRING (5460'), WOLFCAMP (9150'),

STRAWN (10470'), ATOKA (10875'), & MORROW (11430')

UNDER: NONE

I. Goal is to drill a 14,000' deep commercial saltwater disposal well. Proposed disposal interval will be 12,900' - 14,000' in the SWD; Devonian (96101). See Exhibit A for C-102 and map.

II. Operator: Overflow Energy, LLC [OGRID 292641]  
Operator phone number: (806) 625-1010  
Operator address: PO Box 66, Darrouzett TX 79024  
Contact for Application: Brian Wood (Permits West, Inc.)  
Phone: (505) 466-8120

III. A. (1) Lease name: Rita SWD (fee)  
Well name and number: Rita SWD 1  
Location: 1876' FNL & 807' FWL Section 27, T. 22 S., R. 27 E.

A. (2) Surface casing (13.375", 48#, ST&C) will be set at 525' in a 17.5" hole and cemented to GL with 475 sacks.

Intermediate casing (9.625", 47#, BTC) will be set at 9,550' in a 12.25" hole and cemented to GL with 1,900 sacks. DV tool location TBD after drilling.

Production casing (7.625", 39#, FJ) will be set at 12,900' in an 8.5" hole and cemented to 9,350' with 300 sacks.

A 6.5" open hole will be drilled to 14,000'.

A. (3) IPC tubing will be 5.5", 20#, L-80, BTC Setting depth will be  $\approx$ 12,850'. (Disposal interval will be 12,900' to 14,000').

A. (4) A nickel or stainless-steel packer will be set at  $\approx$ 12,850' (or  $\leq$ 100' above the top of the open hole which will be at 12,900').

- B. (1) Disposal zone will be the Devonian (SWD; Devonian (96101) pool). Estimated fracture gradient is  $\approx 0.65$  psi per foot.
  - B. (2) Disposal interval will be open hole from 132,900' to 14,000'.
  - 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 (12,900') are the Delaware (2,140'), Bone Spring (5,460'), Wolfcamp (9,150'), Strawn (10,470'), Atoka (10,875') and Morrow (11,430'). 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 57 existing wells (13 gas or oil + 3 P&A + 41 water wells) within a 1-mile radius. Deepest well within 1-mile is 12,290' TVD. Exhibit C shows all 196 existing wells (35 oil or gas wells + 25 P & A wells + 2 SWD wells + 2 brine wells + 132 water wells) within a 2-mile radius.  
All leases within a 1-mile radius are fee. Exhibit D shows and tabulates all leases within 1-mile. Two-mile radius leases are BLM, fee, and NMSLO (Exhibit E).
- VI. No Devonian penetrator is within a mile. Deepest (12,290' TVD) well (30-015-25253) within a mile bottomed in the Barnett, 610' above the Devonian.
- VII.
  1. Average injection rate will be  $\approx 20,000$  bwpd. Maximum injection rate will be 25,000 bwpd.
  2. System will be open and closed. Water will be trucked and piped.
  3. Average injection pressure will be  $\approx 2,500$  psi. Maximum injection pressure will be 2580 psi ( $= 0.2$  psi/foot  $\times$  12,900' (top of open hole)).

4. Disposal water will be produced water, mainly from the Bone Spring and Wolfcamp. There are 84 approved Bone Spring wells and 238 approved Wolfcamp wells in T. 22 & 23 S., R. 27 E. The well will also take other Permian Basin waters (e. g., Atoka, Delaware, Morrow, Strawn). A table of TDS ranges from nearby wells is below. Abstracts from the NM Produced Water Quality Database v.2 for nearby wells are in Exhibit F.

Formation	TDS range (mg/l)
Artesia	10050 - 11800
Atoka	31911 - 50026
Avalon	154164 - 154965
Bone Spring	129394 - 271010
Brushy Canyon	108093 - 303550
Capitan	27400 - 29392
Delaware	116788 - 164679
Devonian	16223 - 64582
Morrow	53480 - 62523
Wolfcamp	13711 - 13711

No compatibility problems have been reported from the closest (4-1/2 miles southwest) active Devonian; SWD well. At least 4,341,202 barrels of water have been disposed to date in 30-015-44265. (Closest Devonian; SWD APD, regardless of status, is  $\geq 3$  miles south.)

5. Closest Devonian producer (30-015-05614) is >25 miles northeast.

VIII. The Devonian (estimated 1,100' thick) consists of limestone and dolomite. Closest possible underground source of drinking water above the proposed disposal interval is the Quaternary at the surface. According to State Engineer records (Exhibit G), 41 water wells are within a mile and 132 water wells are within 2-miles. Deepest water well with 2-miles is 300'. No underground source of drinking water is below the proposed disposal interval.

Estimated formation tops are:

Quaternary = 0'  
Salado = 430'  
Delaware = 2140'  
Bone Spring = 5460'  
Wolfcamp = 9150'  
Strawn = 10470'  
Atoka = 10875'  
Morrow = 11430'  
Mississippian = 11975'  
Barnett = 12010'  
Devonian carbonate = 12900'  
*disposal interval = 12900' - 14000'*  
TD = 14000'

There will be 12,600' of vertical separation including shale, salt, and anhydrite intervals between the bottom of the only likely underground water source (Quaternary) and the top of the Devonian.

IX. Well will be stimulated with acid.

X. A CBL will be run on the production casing.

XI. Two water wells within a mile were sampled (Exhibit H) on June 16-17, 2019. C 04027 is 567' west. C 03364 is 4516' southeast. Local residents report most water wells were abandoned once the Otis water system was built.

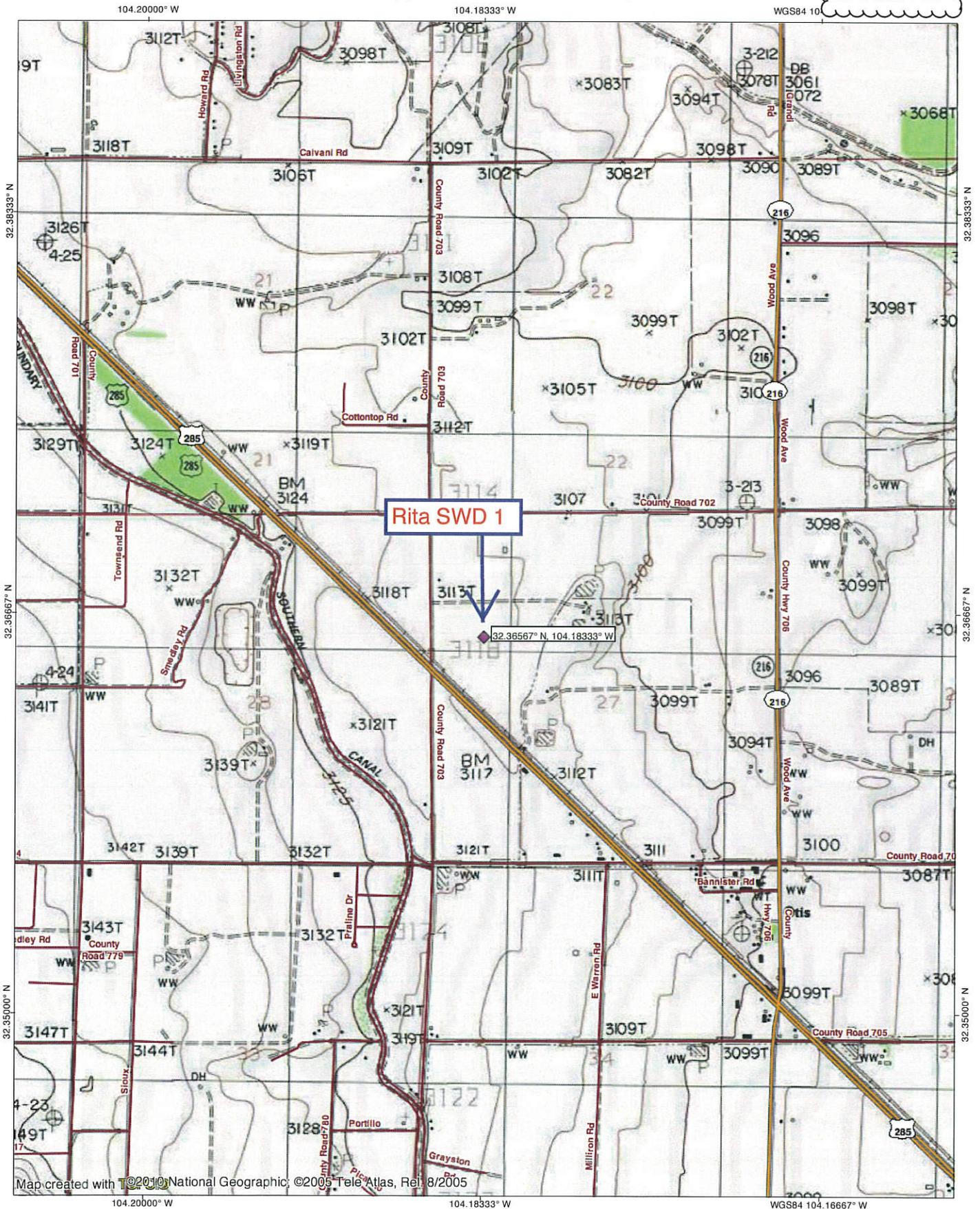
OVERFLOW ENERGY, LLC  
RITA SWD 1  
1876' FNL & 807' FWL  
SEC. 27, T. 22 S., R. 27 E., EDDY COUNTY, NM

PAGE 5

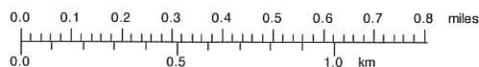
30-015-45719

XII. Overflow Energy, LLC (Exhibit I) 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 3200-meter (2 miles) radius is 300'. There are 153 active Devonian SWD wells in New Mexico. Closest Quaternary fault is  $\approx$ 54 miles southwest.

XIII. A legal ad (Exhibit J) was published on January 9, 2019. Notice (Exhibit K) and this application has been sent to the surface owner (Juan Haro), leasehold operators, and other interest owners within a mile.



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



TN A MN

7°

01/13/19

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720

District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

EXHIBIT A

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015- 45719		2 Pool Code 96101		3 Pool Name SWD; Devonian	
4 Property Code 324972		5 Property Name RITA SWD			6 Well Number 1
7 OGRID No. 292641		8 Operator Name OVERFLOW ENERGY, LLC			9 Elevation 3113.6

10 Surface Location

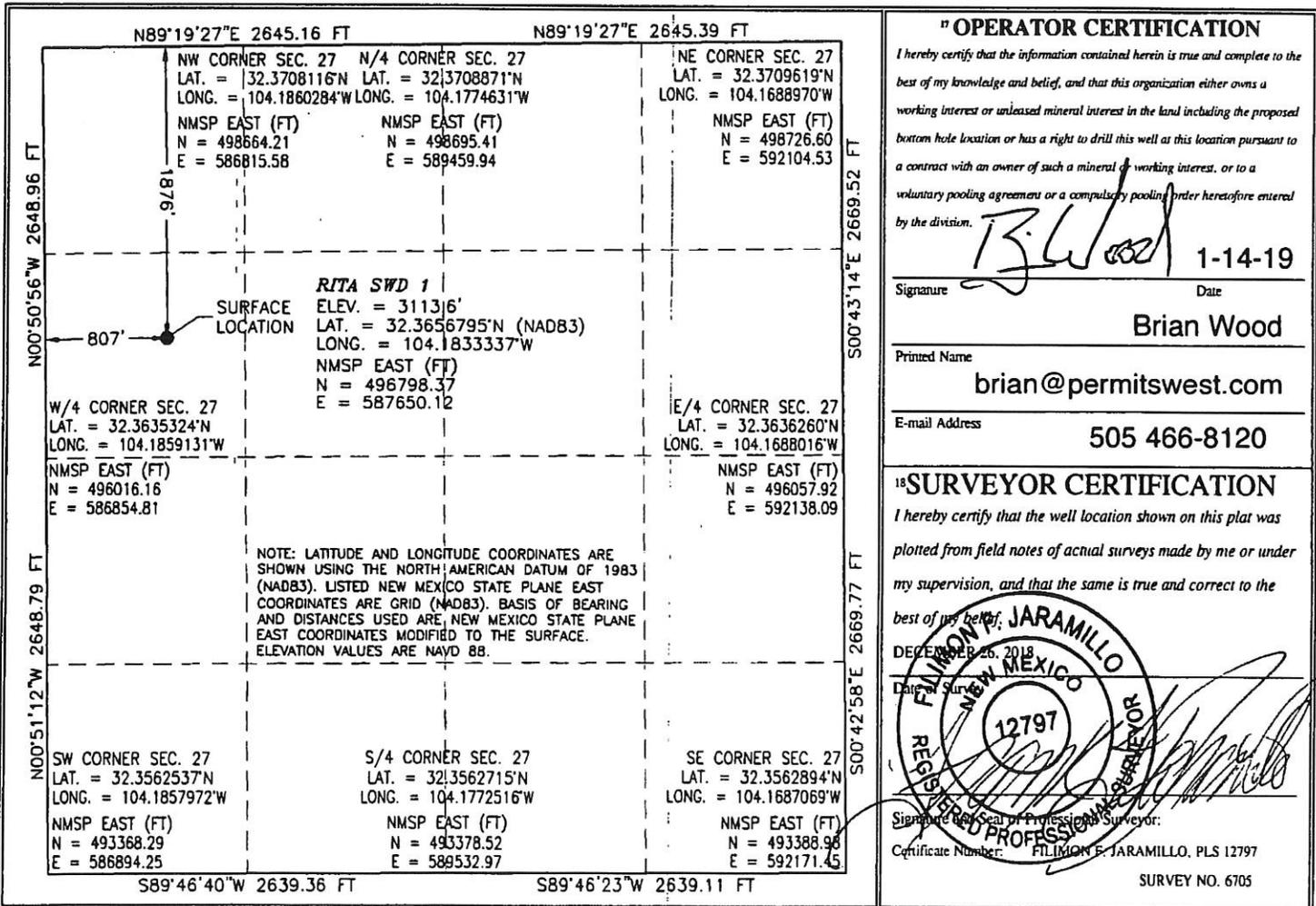
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	27	22 S	27 E		1876	NORTH	807	WEST	EDDY

11 Bottom Hole Location If Different From Surface

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

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



RUP 2-13-19

EXHIBIT B

Rita SWD 1

1 mile radius

LEGEND

- New
- ✦ Active
- ✦ HRZ
- ⊙ BHL
- ⊕ P&A
- ⊙ INJ
- ⊙ SWD
- ⊙ Water
- ⊙ BRN

Quad: OTIS  
Scale: 1 inch = 2,000 ft.

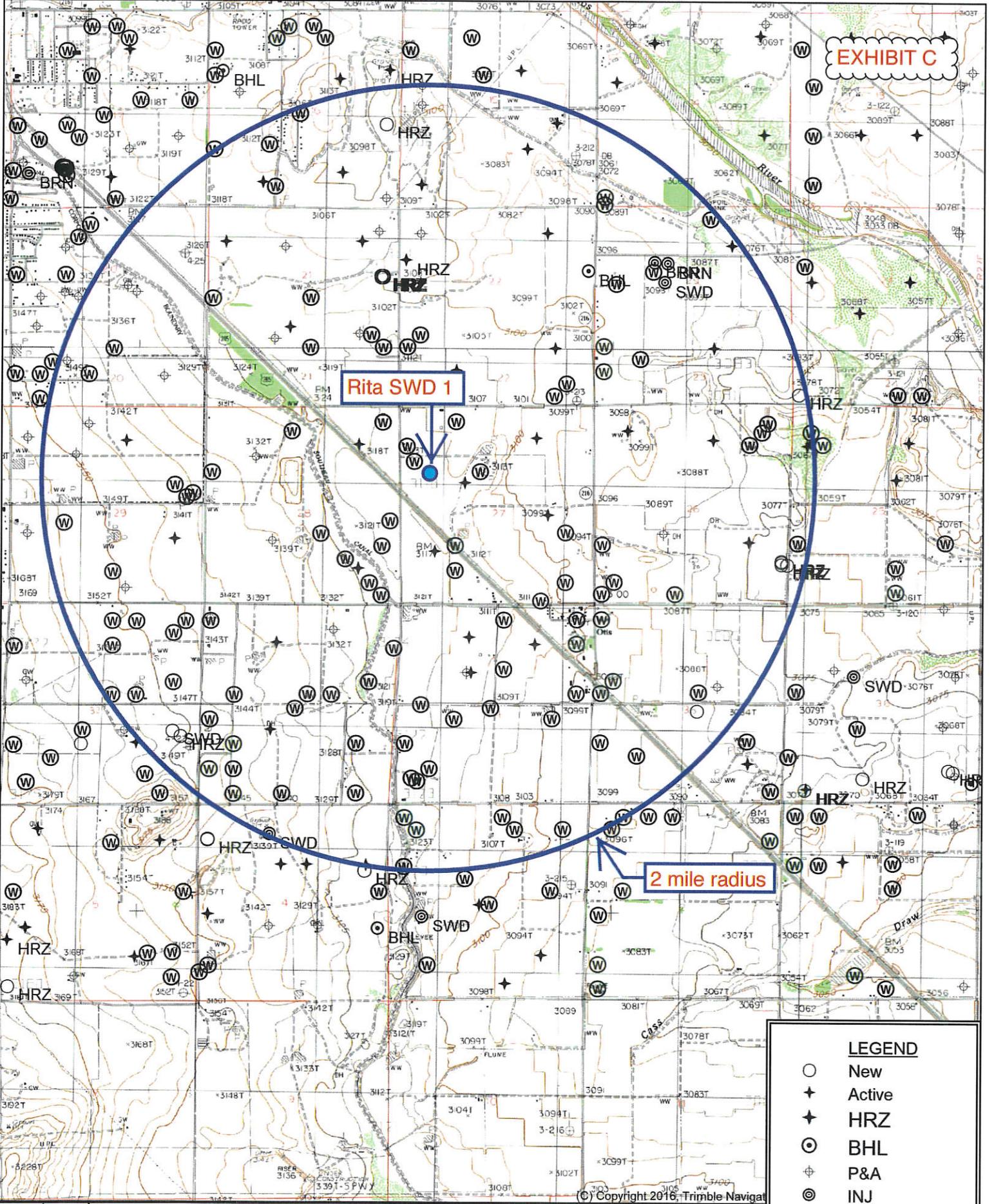


(C) Copyright 2016, Trimble Navigat

SORTED BY DISTANCE FROM RITA SWD 1

API	OPERATOR	WELL	STATUS	UNIT-SECTION-T22S-R27E	TVD	ZONE @ TD	FEET FROM RITA SWD 1
3001524827	Devon	Weems 001	G	C-27	12032	Barnett	940
3001529477	Devon	Weems 002	O	F-27	5640	Bone Spring	1005
3001525031	Devon	Lovelace 001	G	L-27	12120	Barnett	2051
3001524603	Devon	Neeley 001	G	A-28	12014	Mississippian	2090
3001532876	Marathon	Henry 003	G	N-22	12115	Mississippian	2921
3001532847	Devon	Sito 27 Fee 001	G	B-27	12118	Barnett	3075
3001533527	Marathon	Skeen 002	G	P-28	12150	Barnett	3163
3001534135	Devon	Lovelace 27 Fee 002	O	I-27	12200	Mississippian	3395
3001524447	Marathon	Boggs Fee 001	G	I-21	11960	Barnett	4254
3001542014	RKI	Warren Fee 001	O	C-34	9280	Wolfcamp	4530
3001525191	Bird Creek	Skeen 001	P&A	K-28	12018	Barnett	4611
3001534147	Devon	Townsend 28 001	P&A	C-28	12005	Mississippian	4734
3001542350	RKI	Hepler Fee 001	G	F-34	9293	Wolfcamp	4817
3001525253	Wildcat	Henry 002	G	I-22	12290	Barnett	4831
3001533943	Chi	Otis 33 003	P&A	B-33	12115	Barnett	4908
3001524205	Westbrook	Grandi 001	G	E-22	12032	Mississippian	5172
3001545643	WPX	Collie 35 34 22 27 Fee 401H	G	E-34	9227 plan	Wolfcamp	5182
3001524658	<i>Read &amp; Stevens</i>	<i>Otis 34 001</i>	<i>P&amp;A</i>	<i>F-34</i>	<i>12180</i>	<i>Barnett</i>	<i>5407</i>

**EXHIBIT C**



Rita SWD 1

2 mile radius

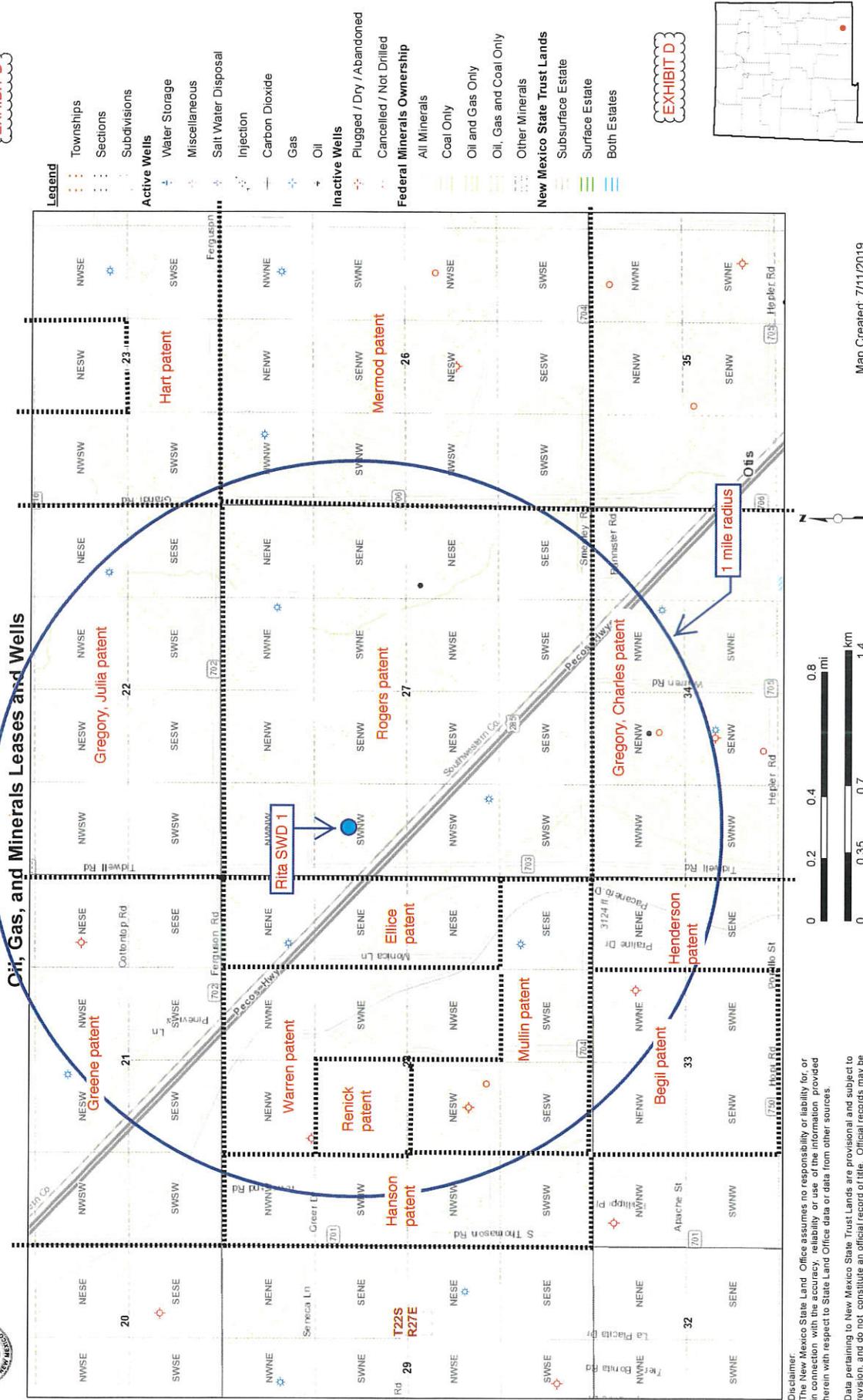
LEGEND	
○	New
+	Active
✦	HRZ
⊙	BHL
⊕	P&A
⊗	INJ
⊖	SWD
⊗	Water
⊗	BRN



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



EXHIBIT D



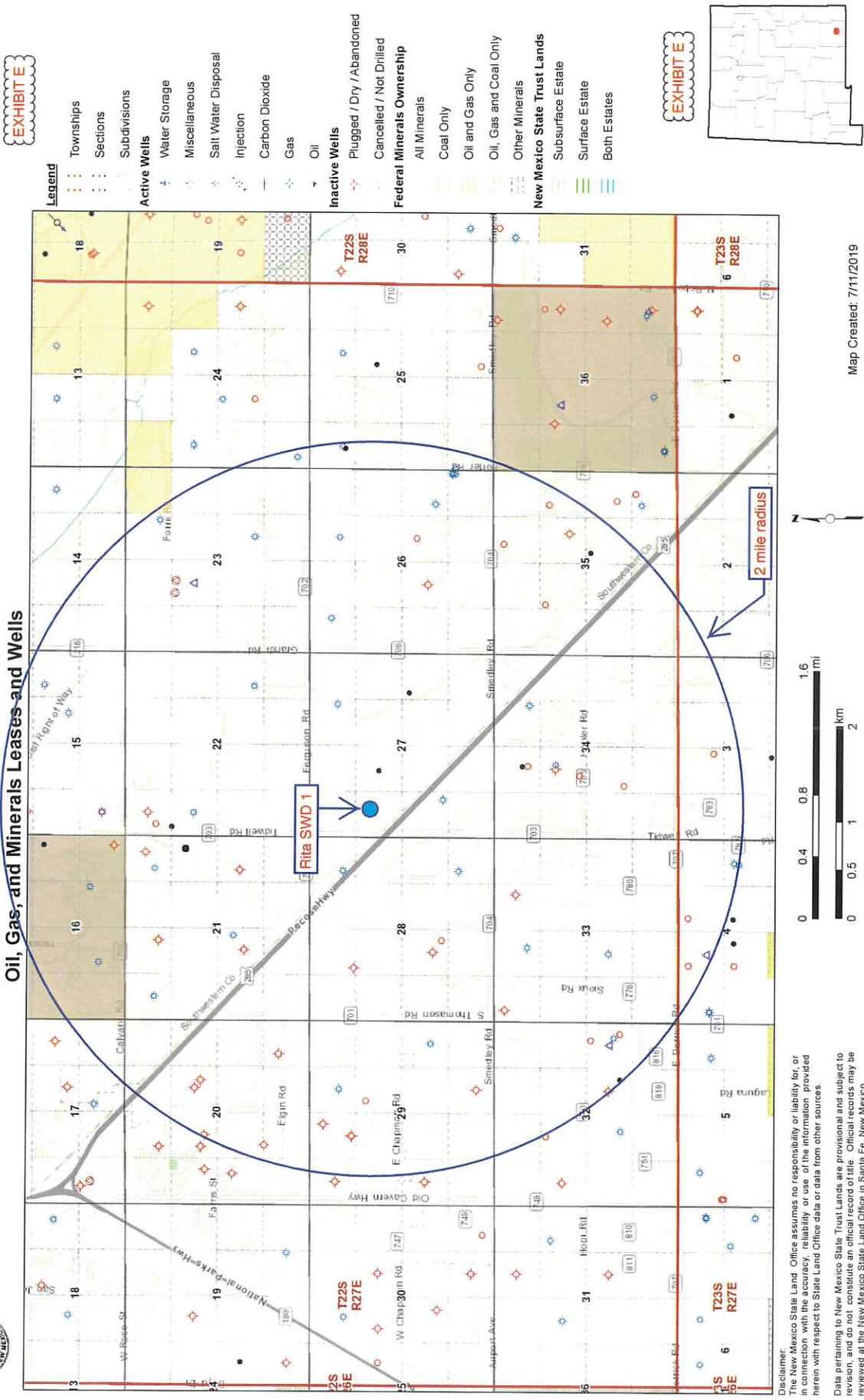
**Disclaimer:**  
The New Mexico State Land Office assumes no responsibility or liability for or in connection with the accuracy, reliability or use of the information provided herein with respect to State Land Office data or data from other sources.  
Data pertaining to New Mexico State Trust Lands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

RITA SWD 1 AREA OF REVIEW LEASES (all fee)

Aliquot Parts in Area of Review (T. 22 S., R. 27 E.)	Patent	Leases (dedications)	Well Operators (all shallower than Devonian)
S2NE4, SE4, S2SW4, & NESW Sec. 21	Greene	Hokie, Looney, & Walterthon	Ascent & WPX
S2, S2NW4, & SWNE Sec. 22	Gregory, Julia	Grandi, Henri	Devon, Fulfer, & Wildcat
SWSW Sec. 23	Hart	Ferguson	Devon
W2W2 Sec. 26	Mermod	Henry & Henry 26	Devon
all Sec. 27	Rogers	Lovelace, Sito, & Weems	Devon
E2NE4 & NESE Sec. 28	Ellice	Neeley & Skeen	Devon & Marathon
W2NE4, NWSE, & NENW Sec. 28	Warren	Neeley & Skeen	Devon & Marathon
W2W2 Sec. 28	Hanson	Neeley & Skeen	Devon & Marathon
SENE Sec. 28	Renick	Neeley	Devon
E2SW4 & S2SE4 Sec. 28	Mullin	Skeen	Marathon
E2NE4 Sec. 33	Henderson	Otis 33	Marathon
NENW & W2NE4 Sec. 33	Begil	Otis 33	Marathon
N2N2, S2NW4, & SWNE Sec. 34	Gregory, Charles	Collie, Helper, Warren, & Weems	WPX



# Oil, Gas, and Minerals Leases and Wells



Map Created: 7/11/2019

**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 review and may constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico.