

RECEIVED: <u>3/18/2014</u>	REVIEWER: <u>MAM</u>	TYPE: <u>SWD</u>	APP NO: <u>DMAM1907754798</u>
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505

**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND
 REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: BOPCO, LP XTO Permian Operating, LLC **OGRID Number:** 373075
Well Name: Poker Lake Unit Platy 36 State SWD #1 **API:** To be assigned
Pool: Devonian, SWD (06104) 32 **Pool Code:** _____
SWD, Devonian-Silurian

**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**2) NOTIFICATION REQUIRED TO:** Check those which apply.A. ☒ Offset operators or lease holdersB. ☐ Royalty, overriding royalty owners, revenue ownersC. ☒ Application requires published noticeD. ☒ Notification and/or concurrent approval by SLOE. ☒ Notification and/or concurrent approval by BLMF. ☒ Surface ownerG. ☒ For all of the above, proof of notification or publication is attached, and/or,H. ☐ No notice required**FOR OCD ONLY**☐ Notice Complete☐ 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.

Tracie J. Cherry, Regulatory Coordinator

Print or Type Name

Signature

Date

432-571-8220

Phone Number

tracie_cherry@xtoenergy.com

e-mail Address

III. Well Data

A. 1) Lease name: **Poker Lake Unit 32 Platy State SWD**
 Well #: **1** API # **TBA**
 Section: **32**
 Township: **23S**
 Range: **30E**
 Footage: **283 FSL & 1151 FWL**

2) Casing Info:

Casing size	Set depth	Sacks cmt	Hole size	TOC	Method
18-5/8", 87.5# J-55 BTC	400'	870 sx C	24	Surf	Circ
13-3/8" 68# HCL-80 BTC	3464'	2310 sx Poz/C 855 sx C	17-1/2"	Surf	Circ
9-5/8" 53.5# HCP-110 BTC	11280'	2385 sx Poz/H	12-1/4"	2700	CBL
7" 32# HCP-110 BTC	10,800'-15,710'	720 sx Poz/H	8-1/2"	10,800'	Circ

3) Tubing to be used (size, lining material, setting depth):

Tapered String

5-1/2" , 17#, P-110 IPC to 10,300"

4-1/2" , 13.65#, P-110 IPC tubing @ 10,300'-15,635'

4) Name, model, and depth of packer to be used:

Baker Series F nickle plated permanent packer @ 15,635'

B. 1) Name of the injection formation and, if applicable, the field or pool name:

SWD; Devonian

2) The injection interval and whether it is perforated or open hole:

Open hole, 15,710'-16,795' (or to the base of the Fusselman as determined by mud logs)

3) State if the well was drilled for injection or, if not, the original purpose of the well:

This well is being drilled for the purpose of injection

4) Give the depths of any other perforated intervals and detail on the sacks of cement or BPs used to seal off such perforations:

N/A

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:

Higher: Bell Canyon (+/-3607'), Cherry Canyon (+/-4391') Brushy Canyon (+/-6,104'),

Avalon/Bone Spring (+/-7,474'), Wolfcamp (+/-10,708'), Atoka (+/-12,928'), Morrow (+/-13,490')

Lower: None

C-108 DATA

- 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.

Map attached.

- 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 wells type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

There are no wells penetrating the proposed injection zone within the one mile area of review

There are two (2) horizontal wellbores that terminated inside the 1 mile AOR. Noe of the TVDs penetrates the proposed injection zone

**Poker Lake Unit #265H (30-015-35614)
Poker Lake Unit #263H (30-015-35115)**

**Bone Spring
Bone Spring**

- VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected:

20,000 average, 40,000 maximum BWPD

2. Whether the system is open or closed: **closed**

3. Proposed average and maximum injection pressure: **2,000 psi average, 3,142 psi maximum**

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water: **Well will be part of a multi-well SWD system taking Permian waters. The majority of the produced water will come from Delaware, Bone Spring and Wolfcamp formations with minor amounts from Atoka and Morrow.**

An analysis of water to be disposed is attached

5. If injection is for disposal purposes into a zone not productive of oil & gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water:

No disposal wells within 1 mile of proposed well

- 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 TDS 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:

Lithologic Detail: Carbonate (Dolomites and Limestones)

Geological Name: Devonian to Fusselman

Thickness: Est. 1,113'

Depth: Est.15,694'/16,807'

The Capitan Reef a known drinking water aquifer is not present in this area based on published maps

The Dewey Lake Red Beds consists of alluvial siltstones, shales and sandstones which are present at the surface to the top of the Rustler Anhydrite. The top of the Rustler Anhydrite is estimated to be at 277 feet below the surface in this proposed Poker Lake Unit 32 Platy State SWD 1 well. These Dewey Lake Red Beds may contain fresh water throughout this geographic area, but it is not likely of drinking water quality (TDS of 10,000 mg/L or less).

No sources of fresh water are known to exist below the proposed disposal zone.

- IX. Describe the proposed stimulation program, if any:
Acid stimulate with approximately 5000 gallons of 15% NEFE HCL acid.
- X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)
Logs will be submitted with completion papers when well is drilled.
- 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.
According to the New Mexico Office of State Engineer database, no active water wells or other points of diversion within 1 mile of the proposed well.
- 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 hydrology connection between the disposal zone and any underground sources of drinking water.
(See attached affidavit)

Poker Lake Unit 32 Platy State SWD #1

Proposed SWD Schematic (Mar 8, 2019)

County: Eddy
SHL: 283' FSL, 1151' FWL
Sec 32, T 23S, R 30E

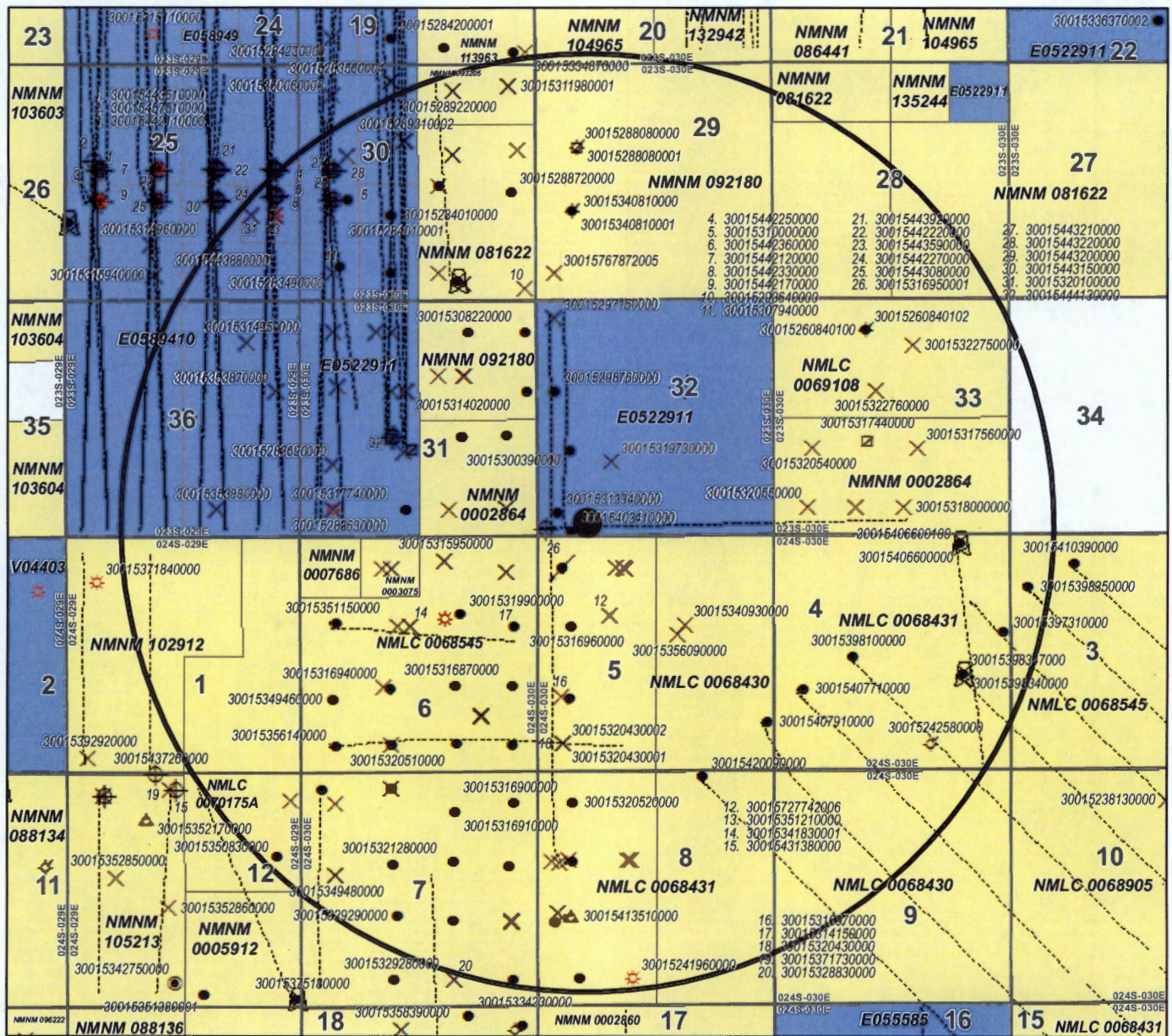
BHL: 283' FSL, 1151' FWL
Sec 32, T 23S, R 30E



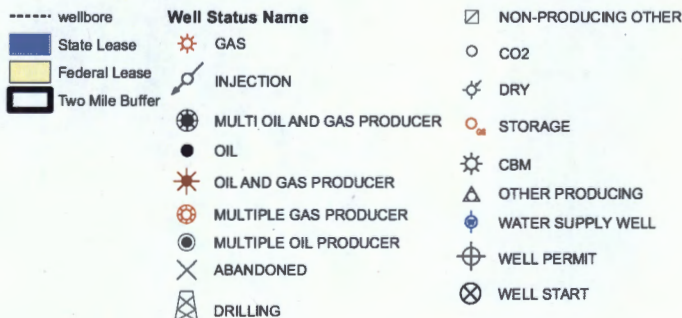
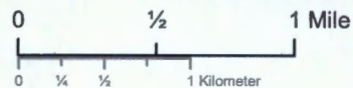
AFE # N/A
XTO ID # N/A
API # N/A
Elevation GL 3245', KB 3275' (30" AGL)
Rig: TBD (RKB 30')

Geology	Casing & Cement	Wellhead	Hole Size	General Notes
TVD Formation		(Tech Data Sheet)		
275' Rustler	<u>Tail (100% OH excess)</u> 870 sx 14.8ppg Class C Top of Tail @ 0'	400' MD	24"	
724' Top Salt	<u>Lead (150% OH excess)</u> 2310 sx 12.8ppg Poz/C Top of Lead @ 0		17-1/2"	
3,353' Base Salt	<u>Tail (100% OH excess)</u> 855 sx 14.8ppg Class C Top of Tail @ 2700'	3464' MD		
3,575' Delaware	<u>Lead (100% OH excess)</u> 1830 sx 11.5ppg Poz/H Top of Lead @ 2700'		12-1/4"	
7,394' Bone Spring	<u>Tail (100% OH excess)</u> 555 sx 14.8ppg Poz/H Top of Tail @ 10280'	10800' MD	5-1/2" 17# P-110 TK-15XT tbg 0-10,300'	Crossover @ 10,300'
10,677' Wolfcamp			4-1/2" 13.5# P-110 TK-15XT tbg 10,300' - 15,635'	
11,132' Wolfcamp B	9-5/8" 53.5# P-110 BTC	11280' MD		
12,757' Strawn			8-1/2"	
12,926' Atoka	<u>Tail (40% OH excess)</u> 720 sx 14.5ppg Poz/H Top of Tail @ 10800'			
13,486' Morrow				
15,225' Mississippian Lm				
15,562' Woodford				
15,632' Devonian	7" 32# P-110 BTC	15710' MD		Baker Hughes Signature Series F Permanent Pkr 15,635'
16,795' TVD at BHL	Open hole completion	16,795' MD 16,795' TVD	6"	
16,805' Montoya				
Approvals				
Prepared by: _____	Peer Reviewed by: _____ Date _____			
Reviewed by: _____	Approved by: _____			

Poker Lake Unit 32 Platy State SWD 1 Eddy County, New Mexico



Two Mile Radius



Known Well Operator in Buffer
 BASS ENTRPRS PROD CO
 BASS PERRY R
 BEPCO LP
 BETTIS BOYLE&STOVALL
 BOPCO LP
 CHESAPEAKE OPERG INC
 COG OPERATING LLC
 MARALO INCORPORATED
 MARALO LLC
 SANTA FE ENRG RES
 TEXACO EXPL&PROD INC
 XTO ENERGY INC

Customer: XTO ENERGY INC

Region: Carlsbad, NM

Location: Nash Draw 8

System: Production System

Equipment: NASH DRAW 8 FEDERAL001H SWD

Sample Point: Well Head

Sample ID: AL07041

Acct Rep Email: Anthony.Baeza@ecolab.com

Collection Date: 06/08/2018

Receive Date: 06/21/2018

Report Date: 06/25/2018

Location Code: 343691

Field Analysis

Bicarbonate	48 mg/L	Dissolved CO2	400 mg/L	Dissolved H2S	9 mg/L
Pressure Surface	20 psi	Temperature	97 ° F	pH of Water	6.3
Oil per Day	0 B/D	Gas per Day	0 Mcf/D	Water per Day	6500 B/D

Sample Analysis

Calculated Gaseous CO2	0.81 %	Calculated pH	6.30	Conductivity (Calculated)	319277 µS - cm3
Ionic Strength	4.15	Resistivity	0.031 ohms - m	Specific Gravity	1.175
Total Dissolved Solids	204372.5 mg/L				

Cations

Iron	30.5 mg/L	Manganese	4.8 mg/L	Barium	5.18 mg/L
Strontium	1420 mg/L	Calcium	19900 mg/L	Magnesium	2960 mg/L
Sodium	44800.00 mg/L	Potassium	1340 mg/L	Boron	25 mg/L
Lithium	15.2 mg/L	Copper	0.037 mg/L	Nickel	0.019 mg/L
Zinc	0.377 mg/L	Lead	0.084 mg/L	Cobalt	0.014 mg/L
Chromium	0.002 mg/L	Silicon	5.26 mg/L	Aluminum	0.078 mg/L
Molybdenum	0.02 mg/L	Phosphorus	0.857 mg/L		

Anions

Bromide	1407.806 mg/L	Chloride	134917 mg/L	Sulfate	286.045 mg/L
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PTB Value

	Barite PTB	Calcite PTB	Celestite PTB	Gypsum PTB	Halite PTB	Iron Carbonate PTB	Iron Sulfide PTB
50°	2.87	6.39	117.45	0.00	0.00	0.00	5.48
75°	2.61	5.82	97.91	0.00	0.00	0.00	4.88
100°	2.20	5.35	85.10	0.00	0.00	0.00	4.42
125°	1.59	5.00	78.13	0.00	0.00	0.00	4.08
150°	0.77	4.80	75.51	0.00	0.00	0.00	3.86
175°	0.00	4.74	75.65	0.00	0.00	0.00	3.75
200°	0.00	4.80	77.23	0.00	0.00	0.00	3.73
225°	0.00	4.97	79.35	0.00	0.00	0.00	3.78
250°	0.00	5.23	81.43	0.00	0.00	0.00	3.90
275°	0.00	5.55	83.16	0.00	0.00	0.00	4.05
300°	0.00	5.91	84.45	0.00	0.00	0.00	4.22
325°	0.00	6.29	85.31	0.00	0.00	0.00	4.40
350°	0.00	6.68	85.77	0.00	0.00	0.00	4.58
375°	0.00	7.04	85.77	0.00	0.00	0.00	4.74
400°	0.00	8.16	84.99	0.00	0.00	0.00	5.87

Saturation Index

	Barite SI	Calcite SI	Celestite SI	Gypsum SI	Halite SI	Iron Carbonate SI	Iron Sulfide SI
50°	1.15	0.77	0.46	-0.06	-0.80	-0.74	1.77
75°	0.82	0.69	0.35	-0.18	-0.82	-0.72	1.47
100°	0.55	0.62	0.29	-0.24	-0.84	-0.69	1.25
125°	0.32	0.58	0.26	-0.29	-0.85	-0.66	1.10
150°	0.13	0.55	0.25	-0.33	-0.87	-0.63	1.00
175°	-0.04	0.54	0.25	-0.38	-0.88	-0.60	0.94
200°	-0.18	0.55	0.25	-0.44	-0.89	-0.57	0.91
225°	-0.30	0.56	0.27	-0.51	-0.90	-0.55	0.92
250°	-0.41	0.59	0.28	-0.58	-0.91	-0.53	0.94
275°	-0.52	0.63	0.28	-0.66	-0.92	-0.53	0.97
300°	-0.63	0.66	0.29	-0.72	-0.92	-0.54	1.01
325°	-0.73	0.70	0.29	-0.76	-0.93	-0.57	1.06
350°	-0.84	0.73	0.29	-0.76	-0.93	-0.61	1.10
375°	-0.96	0.76	0.29	-0.68	-0.94	-0.68	1.13
400°	-1.09	0.92	0.29	-0.52	-0.94	-0.63	1.48

Scaling predictions calculated using Scale Soft Pitzer 2017

Scaling predictions dependent on provided field data. Incomplete/partial field data may impact results generated by scaling software.

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06/27/2018

Page 1 of 2

NALCO Champion

An Ecolab Company

Complete Water Analysis Report

Customer: XTO ENERGY INC

Region: Carlsbad, NM

Location: Nash Draw 8

System: Production System

Equipment: NASH DRAW 8 FEDERAL001H SWD

Sample Point: Well Head

Sample ID: AL07041

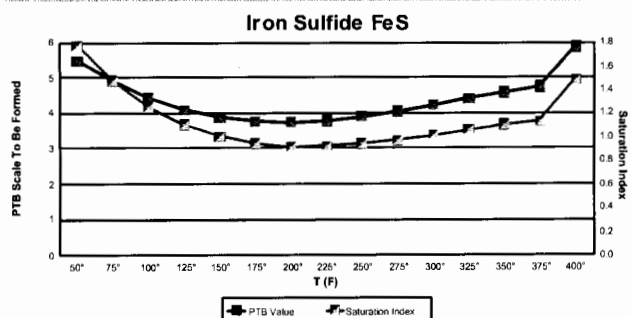
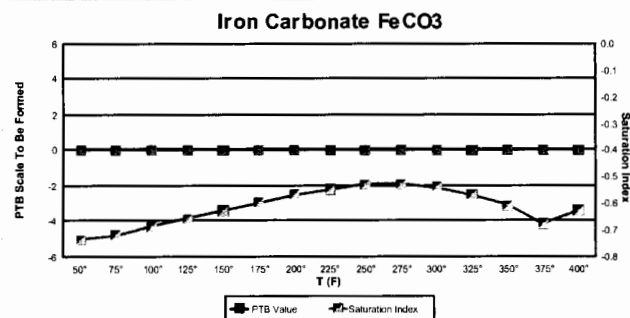
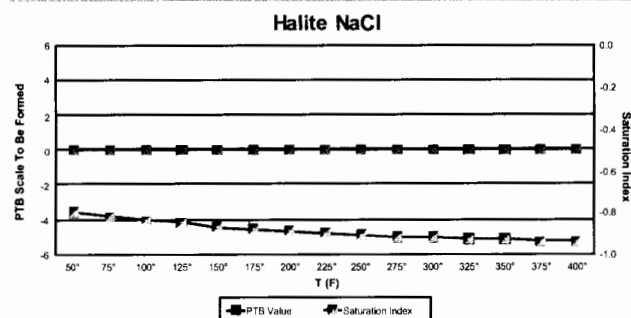
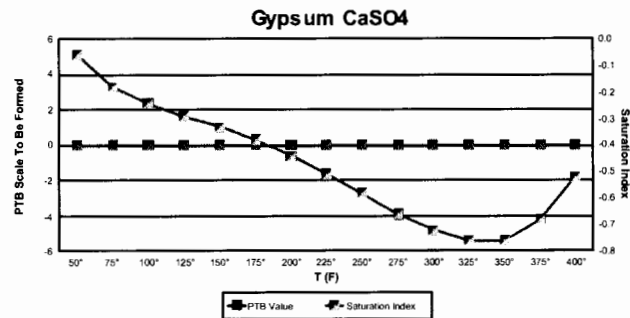
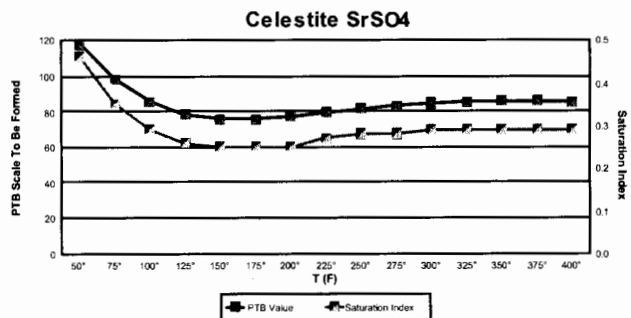
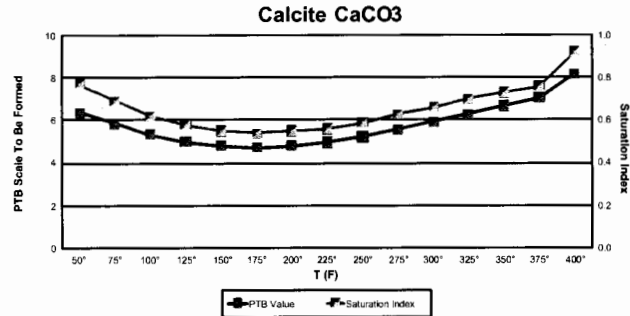
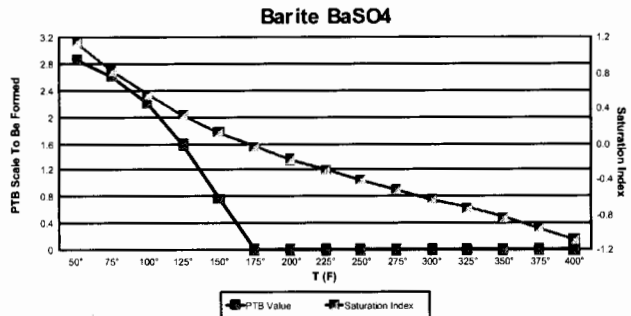
Acct Rep Email: Anthony.Baeza@ecolab.com

Collection Date: 06/08/2018

Receive Date: 06/21/2018

Report Date: 06/25/2018

Location Code: 343691



Comments

Scaling predictions calculated using Scale Soft Pitzer 2017

Scaling predictions dependent on provided field data. Incomplete/partial field data may impact results generated by scaling software.





















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06/27/2018

Page 2 of 2

The map displays the Gulf of Mexico with various maritime boundaries and navigational aids. Key features include:

- Latitude and Longitude:** The map shows coordinates ranging from approximately 24°N to 30°N latitude and 90°W to 100°W longitude.
- Navigational Aids:** Numerous buoys are marked with numbers (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35) and symbols (X, dot).
- Maritime Boundaries:** Several areas are labeled with codes such as NMNM 081622, NMNM 092180, NMNM 0002864, NMNM 0007686, NMNM 0003075, NMLC 0068545, NMLC 0068430, NMLC 0068431, and NMLC 0069108.
- Search Area:** A large black circle is drawn across the map, centered around 28°N, 95°W, likely indicating a search area or a specific boundary.

- | | | |
|---|--|---|
| ----- wellbore | Well Status Name | <input checked="" type="checkbox"/> NON-PRODUCING OTHER |
|  State Lease |  GAS |  CO2 |
|  Federal Lease |  INJECTION |  DRY |
|  One Mile Buffer |  MULTI OIL AND GAS PRODUCER |  STORAGE |
| |  OIL |  CBM |
| |  OIL AND GAS PRODUCER |  OTHER PRODUCING |
| |  MULTIPLE GAS PRODUCER |  WATER SUPPLY WELL |
| |  MULTIPLE OIL PRODUCER |  WELL PERMIT |
| |  ABANDONED |  WELL START |
| |  DRILLING | |

Known Well Operator in Buffer
BASS ENTRPRS PROD CO
BEPCO LP
BOPCO LP
CHESAPEAKE OPERG INC
COG OPERATING LLC
MARALO INCORPORATED
MARALO LLC
TEXACO EXPL&PROD INC
XTO ENERGY INC

March 12, 2019

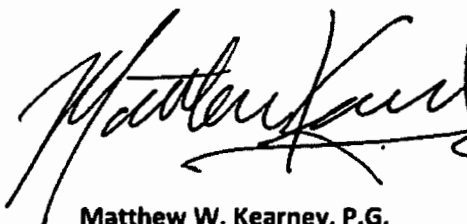
New Mexico, Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Geology Statement per Question XII on the Application for Authorization to Inject Form C-108 for
XTO Energy Inc., an ExxonMobil subsidiary
Poker Lake Unit 32 Platy State SWD 1,
Section 32, Township 23 South, Range 30 East,
Eddy County, New Mexico

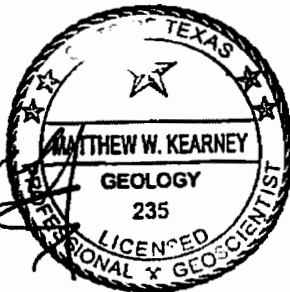
To whom it may concern:

XTO Energy, Inc., an ExxonMobil subsidiary, has examined available geological data at the above-mentioned well located at 283 feet from the south line and 1,151 feet from the west of Section 32, Township 32 South, Range 30 East, Eddy County, New Mexico; and finds no evidence of open faults or other hydrologic connection between the disposal zone and the underground sources of drinking water.

Respectively Submitted,



Matthew W. Kearney, P.G.



Division Geologist
XTO Energy Inc., an ExxonMobil subsidiary
22777 Springwoods Village Parkway
Spring, Texas 77389



New Mexico Office of the State Engineer
Active & Inactive Points of Diversion
(with Ownership Information)

No PODs found.

PLSS Search:

Section(s): 29, 30, 31-33 Township: 23S Range: 30E

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.

3/12/19 3:18 PM

ACTIVE & INACTIVE POINTS OF DIVERSION



New Mexico Office of the State Engineer
Active & Inactive Points of Diversion
(with Ownership Information)

No PODs found.

PLSS Search:

Section(s): 4-6 Township: 24S Range: 30E

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.

3/12/19 3:06 PM

ACTIVE & INACTIVE POINTS OF DIVERSION

CERTIFIED MAILING LIST
BOPCO, LP
Poker Lake Unit ~~36~~ Platy State SWD #1
32

Certified #7018 2290 0001 1289 5559

Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220-6292

Certified #7018 2290 0001 1289 5566

W.L. Mobly JR.
3515 Standpipe Rd
Carlsbad, NM 88220

Certified #7018 2290 0001 1289 5573

RKI Exploration & Production, Inc
3500 One Williams Ctr
Tulsa, OK 74172-0135

Certified #7018 2290 0001 1289 5580

Devon Energy Corporation
333 W. Sheridan Ave
Oklahoma City, OK 73102

Certified #7018 2290 0001 1289 5597

Aquila Energy Resources Corp
10370 Richmond Ave
Houston, TX 77042

Certified #7018 2290 0001 1289 5603

Dominion Ok Tx Exploration & Prod Inc
14000 Quail Springs Pky #600
Oklahoma City, OK 73134

Certified #7018 2290 0001 1289 5610

Apache Corp
2000 Post Oak Blvd Ste 100
Houston, TX 77056-4400

Certified #7018 2290 0001 1289 5627

COG Operating, LLC
600 W Illinois Ave
Midland, TX 79701-4882

Certified #7018 2290 0001 1289 5634

ConocoPhillips
PO Box 2197
Houston, TX 77252-2197

Certified #7018 2290 0001 1289 5641

PXP Producing Co., LLC
717 Texas St. Ste 2100
Houston, TX 77002-2753

Certified #7018 2290 0001 1289 5658

Burlington Resources Oil & Gas Co. LP
PO Box 51810
Midland, TX 79710-1810

Certified #7018 2290 0001 1289 5665

Sonic Oil & Gas LP
PO Box 1240
Graham, TX 76450

Certified #7018 2290 0001 1289 5672

The New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501

I, Tracie J Cherry, do hereby certify the surface owner for the well(s) shown were furnished a copy of BOPCO, LP's application for salt water disposal, via certified mail.

Signed:

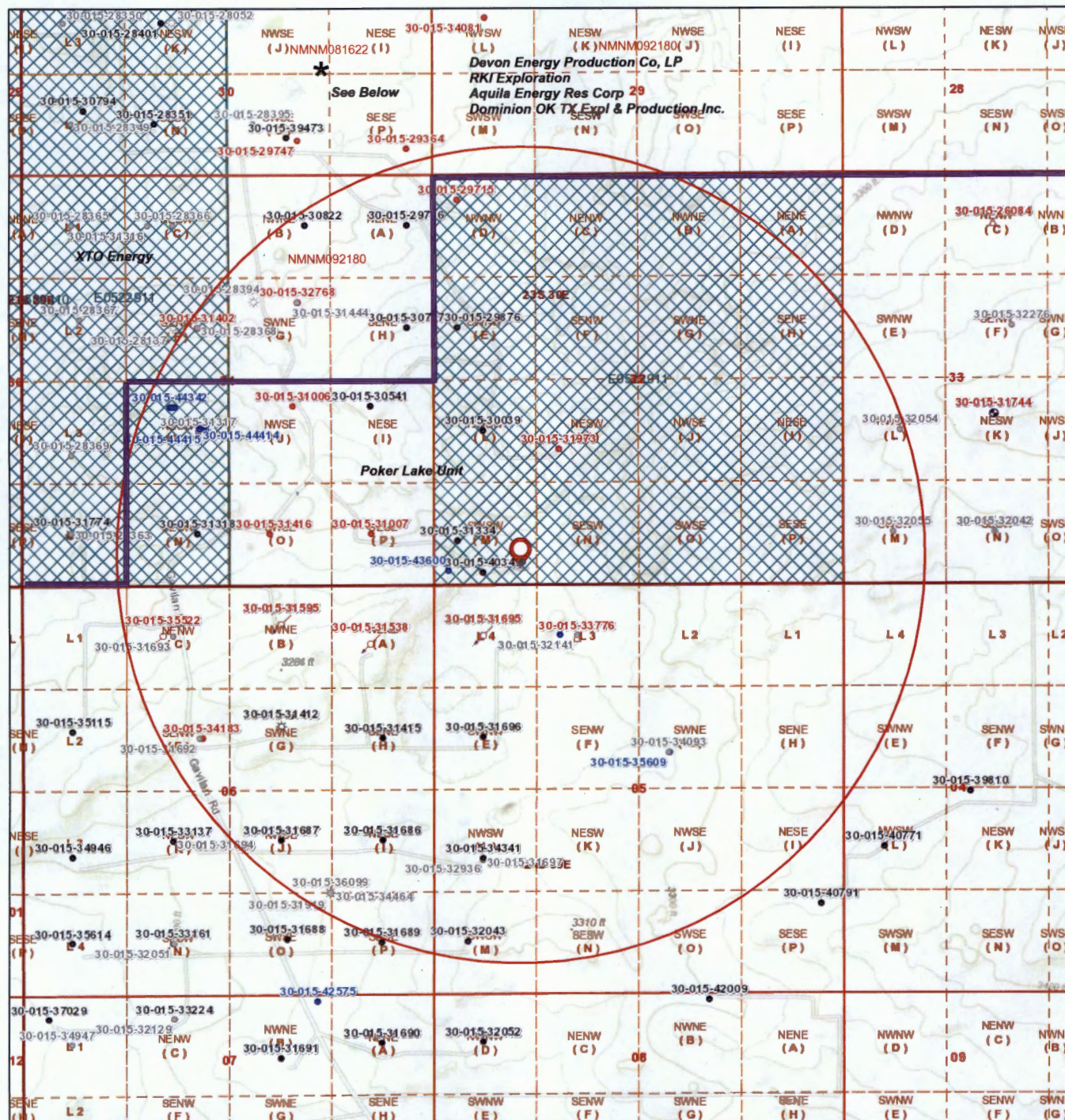

Tracie J. Cherry

Title: Regulatory Coordinator

Date:

03/14/19

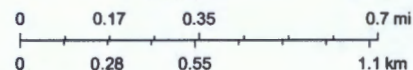
PLU Platy SWD 1 Mile Notice



2/5/2019 5:12:50 PM

1:18.056

- Well Locations - Small Scale**
- Active
 - New
 - Plugged
 - Cancelled
 - Temporarily Abandoned
- Well Locations - Large Scale**
- Miscellaneous
 - CO2 Active
 - CO2 Cancelled
 - CO2 New
 - CO2, Plugged
 - CO2, Temporarily Abandoned
 - Gas Active
- Legend**
- Gas, Cancelled, Never Drilled
 - Gas, New
 - Gas, Plugged
 - Gas, Temporarily Abandoned
 - Injection, Active
 - Injection, Cancelled
 - Injection, New
 - Injection, Plugged
 - Injection, Temporarily Abandoned
 - Oil, Active
 - Oil, Cancelled
 - Oil, New
 - Oil, Plugged
 - Oil, Temporarily Abandoned
 - Salt Water Injection, Active
 - Salt Water Injection, Cancelled
 - Salt Water Injection, New
 - Salt Water Injection, Plugged
 - Salt Water Injection Temporarily Abandoned
 - Water, Active
 - Water, Cancelled
 - Water, New
 - Water, Plugged
 - Water, Temporarily Abandoned
 - OCD Districts
 - ★ OCD District Offices



* Devon Energy Production Co, LP
RKI Exploration
Aquila Energy Res Corp
Apache Corp
COG Operating, LLC
ConocoPhillips
PXP Producin Co , LLC
Burlington Res oil & Gas Co, LP
Sonic Oil & Gas. LP

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

CARLSBAD
CURRENT-ARGUS

AFFIDAVIT OF PUBLICATION

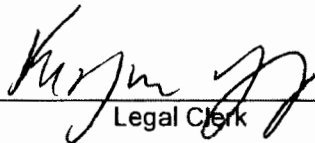
Ad No.
0001280022

Tracie J Cherry
XTO ENERGY
6401 HOLIDAY HILL RD. BLDG 5

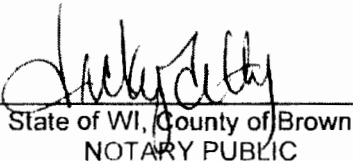
MIDLAND TX 79707

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

03/14/19


Legal Clerk

Subscribed and sworn before me this
14th of March 2019.


State of WI, County of Brown
NOTARY PUBLIC


My Commission Expires

NOTICE OF APPLICATION FOR WATER DISPOSAL WELL PERMIT

BOPCO, L.P. has applied to the New Mexico Oil Conservation Division for a permit to dispose of produced water into a porous formation not productive of oil or gas.

The applicant proposes to dispose of produced water into the **Poker Lake Unit 32 Platy State SWD #1** (Siluro-Devonian and Fusselman Formations). The maximum injection pressure will be 3,142 psi and the maximum rate will be 40,000 bbls. produced water per day. The proposed disposal well is located approximately 10 miles NE of Malaga, New Mexico in Section 32, T23S, R30E, 283' FSL & 1,151' FWL, Eddy County, New Mexico. The produced water will be disposed at a subsurface depth of 15,710' - 16,795'.

Any questions concerning this application should be directed to Tracie J Cherry, Regulatory Coordinator, BOPCO, L.P, 6401 Holiday Hill Rd, Bldg 5, Midland, Texas 79707, (432) 221-7379.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, New Mexico 87505 within 15 days.

Pub: March 14, 2019 #1280022

Ad#: 0001280022
P O : 0001280022
of Affidavits : 0.00





Statements Regarding Seismicity

XTO has performed a seismicity risk assessment associated with the proposed Poker Lake Unit 32 Platy SWD Well by investigating historic seismicity, the presence of deep faulting and the potential for pore pressure build up that might cause a fault to slip. The analysis was done utilizing Stanford's Fault Slip Potential Tool version 2.0 (FSP; Walsh et al. 2017).

As part of our risk assessment we also consider mitigation options to address inherent uncertainties associated with the evaluation of possible seismicity. XTO has developed and will implement, as a precautionary measure, a seismicity monitoring plan to address the inherent uncertainty in the subsurface characterization, future rates of disposal and reservoir response.

A summary of the evaluation and seismicity monitoring plan follows:

Historic Seismicity

There are three seismic events reported by the USGS and State Geologic Survey within 6 miles of the proposed well. The New Mexico Tech Seismological Observatory determined that the March 18, 2012 event was linked to the collapse of a potash mine. Additionally, the Texas Bureau of Economic Geology's TexNet website shows no recent earthquakes in Texas within ~25 miles of the New Mexico border in the Delaware Basin (Figure 1).

Deep Faulting

Utilizing licensed 3D seismic data in the area of the proposed SWD well, XTO did not interpret any coherent faults and/or linear features near the subject well. There are several seismic discontinuities that are interpreted as karst features in the Devonian section that do not appear to have significant lateral continuity.

Stress Regime

Utilizing data and analysis from Snee and Zoback, 'State of Stress in the Permian Basin, Texas and New Mexico: Implications for Induced Seismicity' (Feb 2018, The Leading Edge) the region near the well is primarily a normal faulting regime and the subject well sits at the boundary of stress regions two and four (Figure 1).

Pore Pressure Modeling

A screening level investigation of possible pore pressure increases due to the proposed SWD well was performed utilizing the FSP tool. For this screening level analysis a 'high-side' flat rate model was run assuming disposal of 40,000 BWPD beginning in 2019 and continuing at that rate until 2040 (Figure 2). Snapshots of the calculated pore pressure increase in 2025 and 2040 are also shown in Figure 2.

Monitoring Plan

To manage the inherent uncertainty, XTO has contracted with a third party to provide seismicity monitoring using public seismometers augmented by a private array in the area of the proposed well. This will allow for a better determination of baseline seismicity as well as early detection should there be anomalous events. Additionally, XTO will determine the original pore pressure of the disposal interval prior to initiating operations. Upon request, XTO will share the results of this work with the EMNRD's UIC staff.

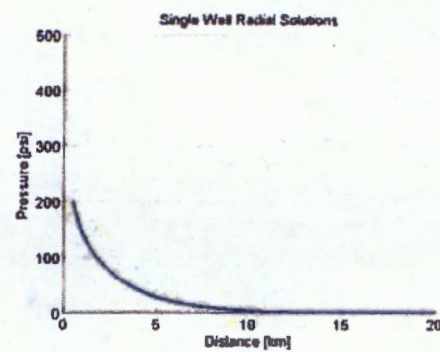
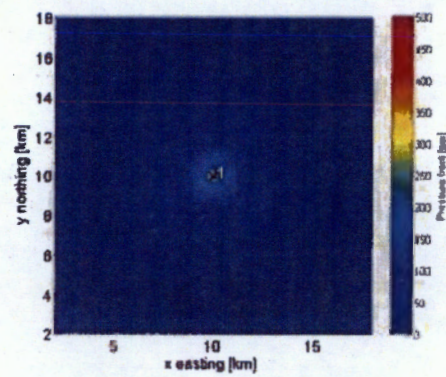


Tim Tyrrell
XTO Geoscience Technical Manager



Pore Pressure Analysis

2025 Snapshot



2040 Snapshot

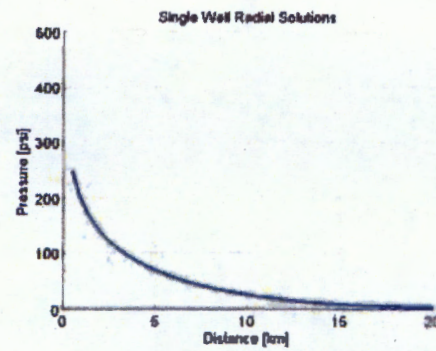
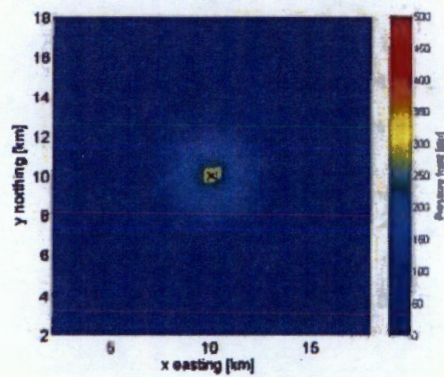


Figure 2



FORM C-108 Technical Review Summary [Prepared by reviewer and included with application; V17]

DATE RECORD: First Rec: 3/18/19 Admin Complete: 3/18/19 or Suspended: Not Protested Add. Request/Reply: —

ORDER TYPE: WFX / PMX / SWD Number: 1997 Order Date: 8/28/19 Legacy Permits/Orders: —

Well No. 1 Well Name(s): Poker Lake Unit 32 Platy State SWD

API: 30-015-Pending Spud Date: TBD New or Old (EPA): New (UIC Class II Primacy 03/07/1982)

Footages 283 FSL / 1151 FWL Lot — or Unit M Sec 32 Tsp 23S Rge 31E County Eddy

General Location: Remuda Basin, 11 mi east of Loving, 5 mi S of Highway 180, SWD; Devonian-Silurian Pool No.: 97869

BLM 100K Map: Jul Operator: XTO Permian Operating LLC OGRID: 373075 Contact: Tracie Cherry

COMPLIANCE RULE 5.9: Total Wells: 778 Inactive: 0 Fincl Assur: OK Compl. Order? No IS 5.9 OK? Yes Date: 8/28/19

WELL FILE REVIEWED ☒ Current Status: 16 APD on file / no API at time of review

WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: —

Planned Rehab Work to Well: —

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing <u>—</u> Surface		<u>24 / 15 1/2</u>	<u>0 to 400</u>		<u>870</u>	<u>Cir to surf</u>
Planned <input type="checkbox"/> or Existing <u>—</u> (Interm) Prod		<u>17 1/2 / 13 3/8</u>	<u>0 to 3464</u>	<u>None</u>	<u>2310 + 853</u>	<u>Cir to surf</u>
Planned <input type="checkbox"/> or Existing <u>—</u> (Interm) Prod		<u>12 1/4 / 9 5/8</u>	<u>0 to 11280</u>	<u>?</u>	<u>2385</u>	<u>To east / CBL</u>
Planned <input type="checkbox"/> or Existing <u>—</u> Prod (Line)		<u>8 1/2 / 7</u>	<u>10800 - 15710</u>	<u>None</u>	<u>720</u>	<u>Circulate - CBL</u>
Planned <input type="checkbox"/> or Existing <u>—</u> Liner						
Planned <input checked="" type="checkbox"/> or Existing <u>—</u> (OH) PERF		<u>6 / —</u>	<u>15710 - 16795</u>	<u>Inj Length</u> <u>1085</u>		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		<u>Mississippian LS</u>	<u>15225</u>
Confining Unit: <u>Litho.</u> Struc. Por.	<u>±</u>	<u>Woodford shale</u>	<u>15562</u>
Proposed Inj Interval TOP:	<u>15710</u>	<u>Devonian</u>	<u>15692</u>
Proposed Inj Interval BOTTOM:	<u>16795</u>	<u>Silurian</u>	<u>—</u>
Confining Unit: <u>Litho.</u> Struc. <u>Por.</u>	<u>±10</u>	<u>Ordovician</u>	<u>16805</u>
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:	
Drilled TD <u>—</u>	PBTD <u>—</u>
NEW TD <u>16,795</u>	NEW PBTD <u>—</u>
NEW Open Hole <input checked="" type="checkbox"/> or NEW Perfs <input type="checkbox"/>	
Tubing Size <u>5 1/2 x 4 1/2</u> in.	Inter Coated? <u>Yes</u>
Proposed Packer Depth <u>15635</u> ft	
Min. Packer Depth <u>15610</u> (100-ft limit)	
Proposed Max. Surface Press. <u>3142</u> psi	
Admin. Inj. Press. <u>3142</u> (0.2 psi per ft)	

AOR: Hydrologic and Geologic Information

POTASH: R-111-P NO Noticed? NA BLM Sec Ord Yes WIPP — Noticed? No Salt/Salado T: 724 8353 NW: Cliff House fm NA

USDW: Aquifer(s) Rustler fm / Davey Lake Depth <400' HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: Carlbad CAPITAN REEF: thru — adj — NA ☒ No. GW Wells in 1-Mile Radius? 0 FW Analysis? NA

Disposal Fluid: Formation Source(s) DMG / WC / BS Analysis? From Nash Draw 8 On Lease ☐ Operator Only ☒ or Commercial ☐

Disposal Interval: Inject Rate (Avg/Max BWPD): 20000/40000 Protectable Waters? 16 Source: Historical System Closed or Open

HC Potential: Producing Interval? No Formerly Producing? No Method: Logs/DST/P&A/Other Mudlog required 2-Mi Radius Pool Map ☒

AOR Wells: 1/2-M — or ONE-M ☒ RADIUS MAP/WELL LIST: Total Penetrating Wells: 0 [AOR Hor: — AOR SWDs: —]

Penetrating Wells: No. Active Wells 0 No. Corrective? — on which well(s)? — Diagrams? —

Penetrating Wells: No. P&A Wells 0 No. Corrective? — on which well(s)? — Diagrams? —

Induced-Seismicity Risk Assess: analysis submitted ☒ historical/catalog review ☒ fault-slip model ☒ probability low

NOTICE: 1/2-M — or ONE-M ☒ : Newspaper Date 03/14/19 Mineral Owner* NMSLO Surface Owner NMSLO N. Date 3/14/19

RULE 26.7(A): Identified Tracts? ☒ Affected Persons*: BLM & NMSLO identified; 11 operators noticed N. Date 3/14/19

* new definition as of 12/28/2018 [any the mineral estate of United States or state of New Mexico; SWD operators within the notice radius]

Order Conditions: Issues: HC potential; stat control; 95% cmt not circ.

Additional COAs: Mudlog/geophysical logs; stat picks verified; BH pressure measurement; circ cmt 95%



Stephanie Garcia Richard
COMMISSIONER

State of New Mexico
Commissioner of Public Lands

310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE

Phone (505) 827-5760

Fax (505) 827-5766

www.nmstatelands.org

August 28, 2019

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

RE: XTO Applications for PLU Platy SWD 1 & JRU Rambler SWD 1

The New Mexico State Land Office has been made aware of two applications pending before the Oil Conservation Division. XTO has filed applications for the following salt water disposal wells:

PLU Platy SWD 1

Poker Lake Unit 32 Platy State SWD #1
SWSW Sec 32 T23S-R30E, Unit Letter M

JRU Rambler SWD 1

James Ranch Unit 36 Rambler State SWD 1
API 30-015-45691
SENE Sec 36 T22S-R30E, Unit Letter F

The State Land office understands that neither application has any objections at this time. Both proposed wells are located on New Mexico State Trust Land, within established Units. The State Land Office is supportive of these applications by XTO and believes their approval would benefit the State Land Office. I am sending this letter to make the OCD aware of the State Land Office's support for these applications and request the OCD proceed with approval of the above XTO applications as expeditiously as possible. We appreciate your consideration of our request. Please feel free to contact me if you have any concerns or would like to further discuss.

Kind Regards,

A handwritten signature in black ink, appearing to read "Jordan Kessler", is written over the typed name.

Jordan Kessler,
Assistant Commissioner OGML

cc: James Hall <James_Hall@xtoenergy.com>

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-	² Pool Code	³ Pool Name
⁴ Property Code	⁵ Property Name POKER LAKE UNIT 32 PLATY STATE SWD	⁶ Well Number 1
⁷ OGRID No. 260737	⁸ Operator Name BOPCO, L.P.	⁹ Elevation 3,245'

¹⁰ Surface Location

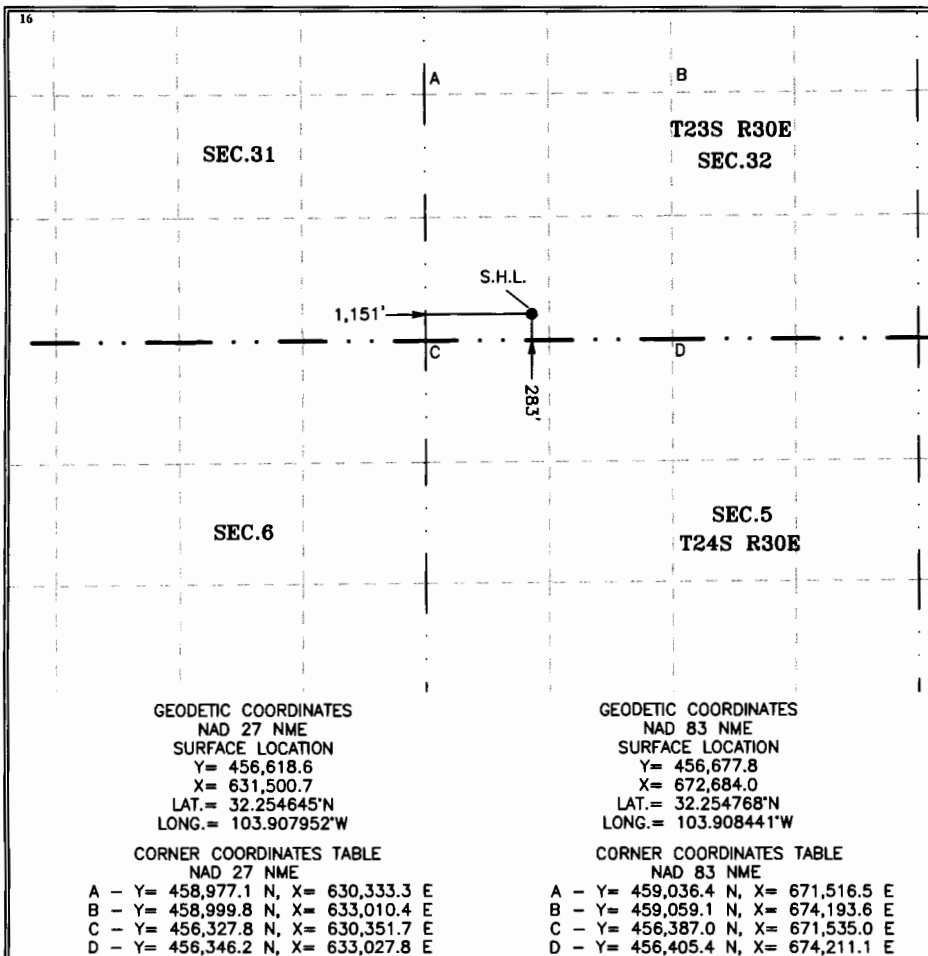
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	32	23 S	30 E		283	SOUTH	1,151	WEST	EDDY

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.



¹⁷ OPERATOR CERTIFICATION

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

Signature _____ Date _____

Printed Name _____

E-mail Address _____

¹⁸ SURVEYOR CERTIFICATION

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

1-23-2019

Date of Survey

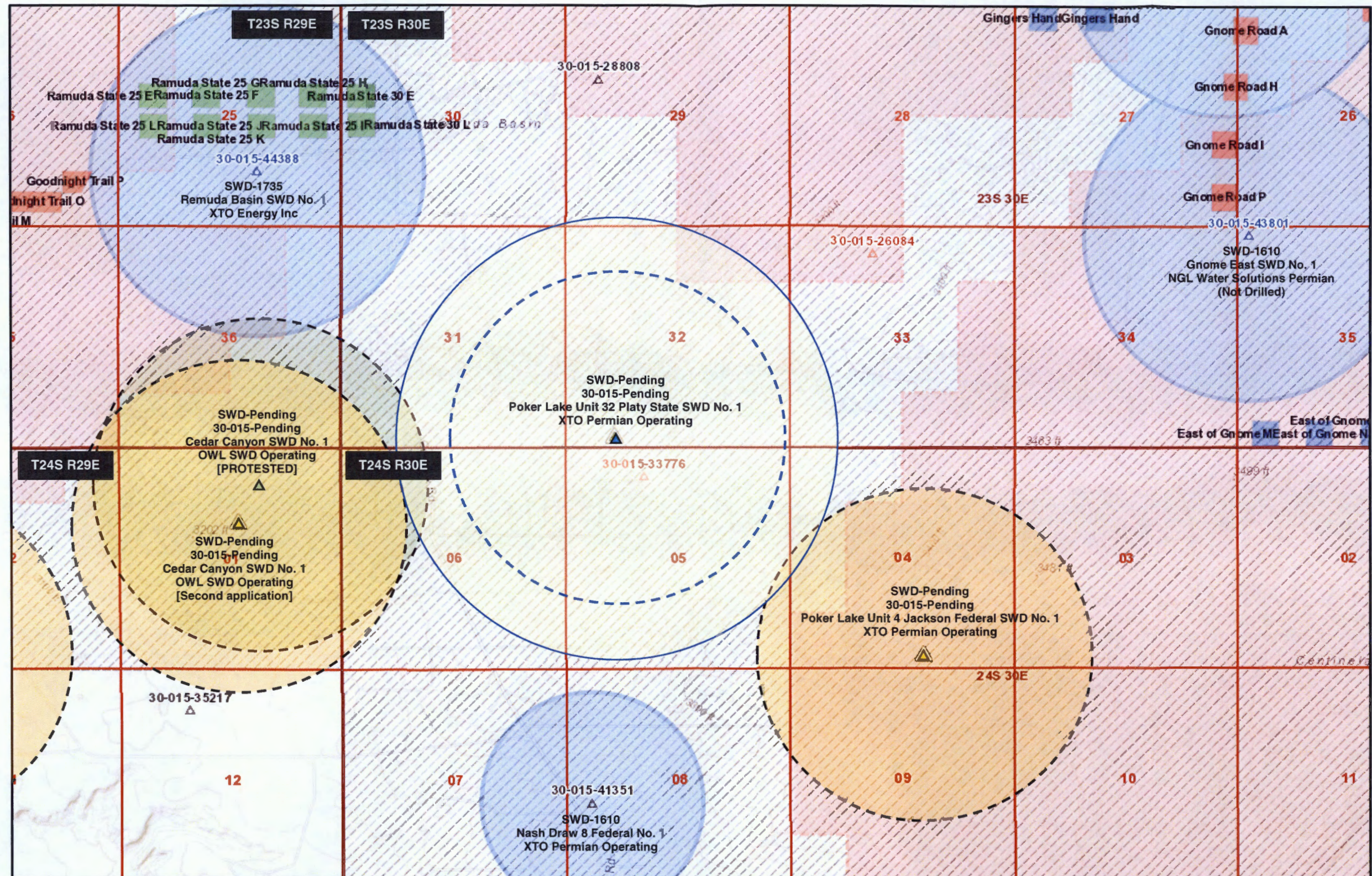
Signature and Seal of
Professional Surveyor:



MARK DILLON HARP 23786
Certificate Number

JC 2019010196

Pending Application for High-Volume Devonian Disposal Well
C-108 Application for Poker Lake Unit 32 Platy State SWD No. 1 – XTO Permian Operating, LLC



Closest High-Volume Devonian Disposal Well: Remuda Basin SWD No. 1 (30-015-44388): XTO Permian Operating; recently came online.