

RECEIVED: 3/11/2019	REVIEWER: 	TYPE: SWD	APP NO: MAM/4071 38568
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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:** 260737  
**Well Name:** James Ranch Unit 17 Skylark SWD #1 **API:** To be assigned  
**Pool:** ~~Devonian, SWD (90101)~~ SWD; Devonian - Silurian **Pool Code:** 97869

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

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]  
 A. Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- 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 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

**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

03/08/19

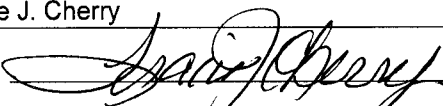
432-571-8220

Phone Number

tracie\_cherry@xtoenergy.com

e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance XX \_\_\_\_\_ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? XX Yes \_\_\_\_\_ No
- II. OPERATOR: BOPCO, LP  
ADDRESS: 6401 Holiday Hill Rd. Bldg 5, Midland, TX 79707  
CONTACT PARTY: Tracie J. Cherry, Regulatory Coordinator PHONE: 432-221-7379
- 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 XX \_\_\_\_\_ 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: Tracie J. Cherry TITLE: Regulatory Coordinator  
SIGNATURE:  DATE: 03/08/19  
E-MAIL ADDRESS: tracie\_cherry@xtoenergy.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.

# JRU 17 Skylark SWD #1

Proposed SWD Schematic (Feb 28, 2019)

County: Eddy  
SHL: 2490' FNL, 1223' FWL  
Sec 17, T 23S, R 31E  
  
BHL: 2490' FNL, 1223' FWL  
Sec 17, T 23S, R 31E



API # N/A  
Elevation GL 3317', KB 3347' (30' AGL)  
Rig: TBD (RKB 27')

Geology	Casing & Cement	Wellhead	Hole Size	General Notes
TVD Formation		(Tech Data Sheet)		
371' Rustler	<u>Tail (100% OH excess)</u> 1150 sx 14.8ppg Class C Top of Tail @ 0'  18-5/8" 87.5# J-55 BTC	550' MD	24"	
722' Top Salt	<u>Lead (150% OH excess)</u> 2600 sx 12.8ppg Poz/C Top of Lead @ 0'  <u>Tail (100% OH excess)</u> 935 sx 14.8ppg Class C Top of Tail @ 3100'		17-1/2"	
3,827' Base Salt	13-3/8" 68# HCL-80 BTC	3940' MD		
4,047' Delaware	<u>Stg 2 Lead (100% OH excess)</u> 790 sx 11.5ppg Poz/H Top of Lead @ 0'  <u>Stg 2 Tail (100% OH excess)</u> 445 sx 14.8ppg Poz/H Top of Tail @ 3100'  DV Tool @ 4040'		12-1/4"	
7,932' Bone Spring	<u>Stg 1 Lead (100% OH excess)</u> 1610 sx 11.5ppg Poz/H Top of Lead @ 4040'	11300' MD	5-1/2" 17#, P-110 IPC tbg to 10,800'	Crossover
11,222' Wolfcamp	<u>Stg 1 Tail (100% OH excess)</u> 555 sx 14.8ppg Poz/H Top of Tail @ 10720'		4-1/2" 13.65#, P-110 IPC tbg 10,800' - 15,830'	
11,567' Wolfcamp B	9-5/8" 53.5# HCP-110 BTC	11720' MD		
12,902' Strawn 13,087' Atoka 13,722' Morrow  15,316' Mississippian Lm 15,761' Woodford 15,906' Devonian	<u>Tail (40% OH excess)</u> 685 sx 14.5ppg Poz/H Top of Tail @ 11300'  7" 32# HCP-110 BTC	15930' MD	8-1/2"	Baker Series F nickle plated permanent packer @ 15,830'
17,120' TVD at BHL	Open hole completion	17,120' MD 17,120' TVD	6"	
17,136' Montoya				
<div> <div>Prepared by: _____</div> <div>Reviewed by: _____</div> </div> <div> <div>Peer Reviewed by: _____</div> <div>Approved by: _____</div> </div> <div>Date</div>				



## 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 four (4) horizontal wellbores that terminated inside the 1 mile AOR. None of the wells TVD penetrate the proposed injection zone**

**Iridium MDP1 28 21 Federal COM 001 930-015-45242)**

**Not drilled/completed**

**Iridium MDPI 28 21 Federal COM 011H (30-015-45073)**

**Bone Spring**

**Iridium MDPI 28 21 Federal COM 021H (30-015-45074)**

**Bone Spring**

**Iridium MDPI 28 21 Federal COM 171H (30-015-45076)**

**Wolfcamp**

- 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, 3,186 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:

**There is one disposal well within a 1 mile radius of the proposed well**

**The well does not penetrate the proposed disposal interval**

- 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:

<b>Lithologic Detail:</b>	<b>Carbonate (Dol.&amp;Ls.)</b>
<b>Geological Name:</b>	<b>Siluro/Devonian &amp; Fusselman</b>
<b>Thickness:</b>	<b>Est. 1,230'</b>
<b>Depth:</b>	<b>Est 15,906'/17,136'</b>

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

### III. Well Data

A. 1) Lease name: **James Ranch Unit 36 Skylark SWD**  
 Well #: **1** API # **TBA**  
 Section: **17**  
 Township: **23S**  
 Range: **31E**  
 Footage: **2490 FNL & 1223 FWL**

2) Casing Info:

Casing size	Set depth	Sacks cmt	Hole size	TOC	Method
18-5/8", 87.5# J-55 BTC	550'	1150 sx C	24	Surf	Circ
13-3/8" 68# HCL-80 BTC	3940'	2600 sx Poz/C	17-1/2"	Surf	Circ
		935 sx C			
9-5/8" 53.5# HCP-110 BTC	11720'	Stg 1:	12-1/4"	Surf	Circ
DV @ 4040'		2165 sx Poz/H			
		Stg 2:			
		1235 sx Poz/H			
7" 32# HCP-110 BTC	11,300'-15,930'	665 sx Poz/H	8-1/2"	11,300	Circ

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

**Tapered String**

**5-1/2" , 17#, P-110 IPC to 10,800'**

**4-1/2" , 13.65#, P110 IPC tubing @ 10,800'-15,830'**

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

**Baker Series F nickle plated permanent packer @ 15,830'**

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, 15,930'-17,120' (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 (+/-4,072), Cherry Canyon (+/-4,919) Brushy Canyon (+/-6,584),  
 Avalon/Bone Spring (+/-7,995), Wolfcamp (+/-11,242), Atoka (l+/-13,087), Morrow (+/-13,722)**

**Lower: None**

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, 1 active water well used for livestock is located in NWSW Sec 17 23S-31E**

*C-63389 / 300ft - 6in casing / 150' DTW*

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)**

October 14, 2019

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

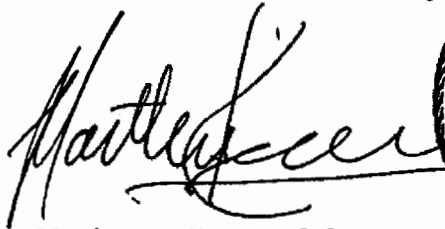
**Re: Geology Statement per Question XII on the Application for Authorization to Inject Form C-108 for**

XTO Energy Inc., an ExxonMobil subsidiary  
James Ranch Unit 17 Skylark SWD #1,  
Section 17, Township 23 South, Range 31 East,  
Eddy County, New Mexico

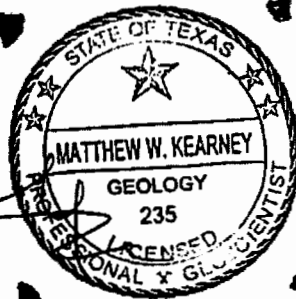
To whom it may concern:

XTO Energy, Inc., an ExxonMobil subsidiary, has examined available geological data at the above-mentioned well located at 2,490 feet north and 1,223 feet west of Section 17, Township 23 South, Range 31 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.

Respectfully Submitted,



Matthew W. Kearney, P.G.























Division Geologist

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



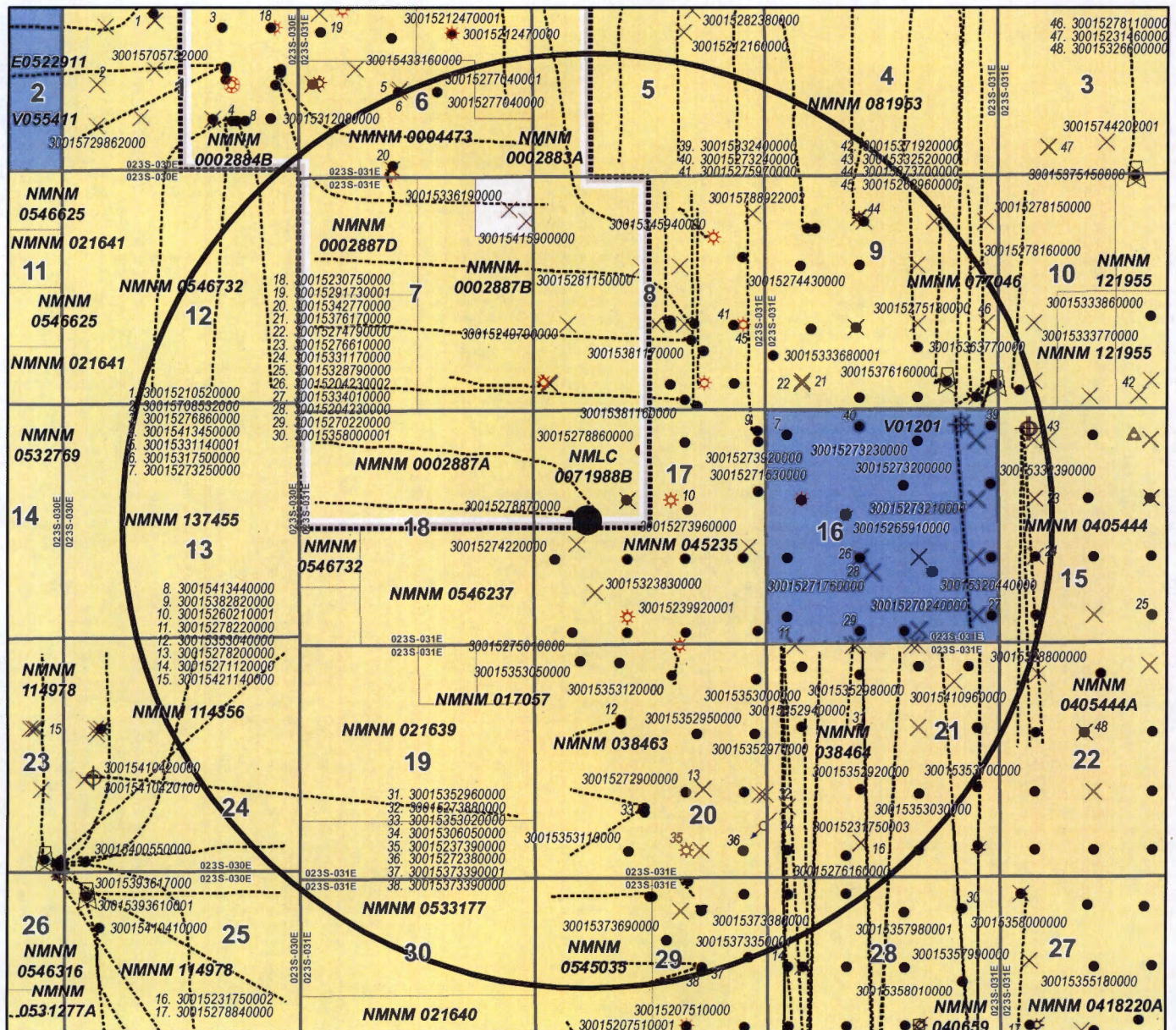
[illegible]

- |   |  |   |
|---|--|---|
| ----- wellbore  | <b>Well Status Name</b>  | <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                   |   |

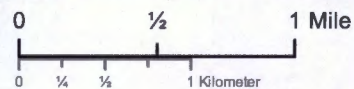
**known well operator in buffer**  
BASS ENTRPRS PROD CO  
BOPCO LP  
DEVON ENERGY PROD  
EOG RESOURCES INC  
OXY U S A INC  
SANTA FE ENR OP PRTN  
YATES PETROLEUM CORP



# James Ranch Unit 17 Skylark SWD 1 Eddy County, New Mexico



2 Mile Radius



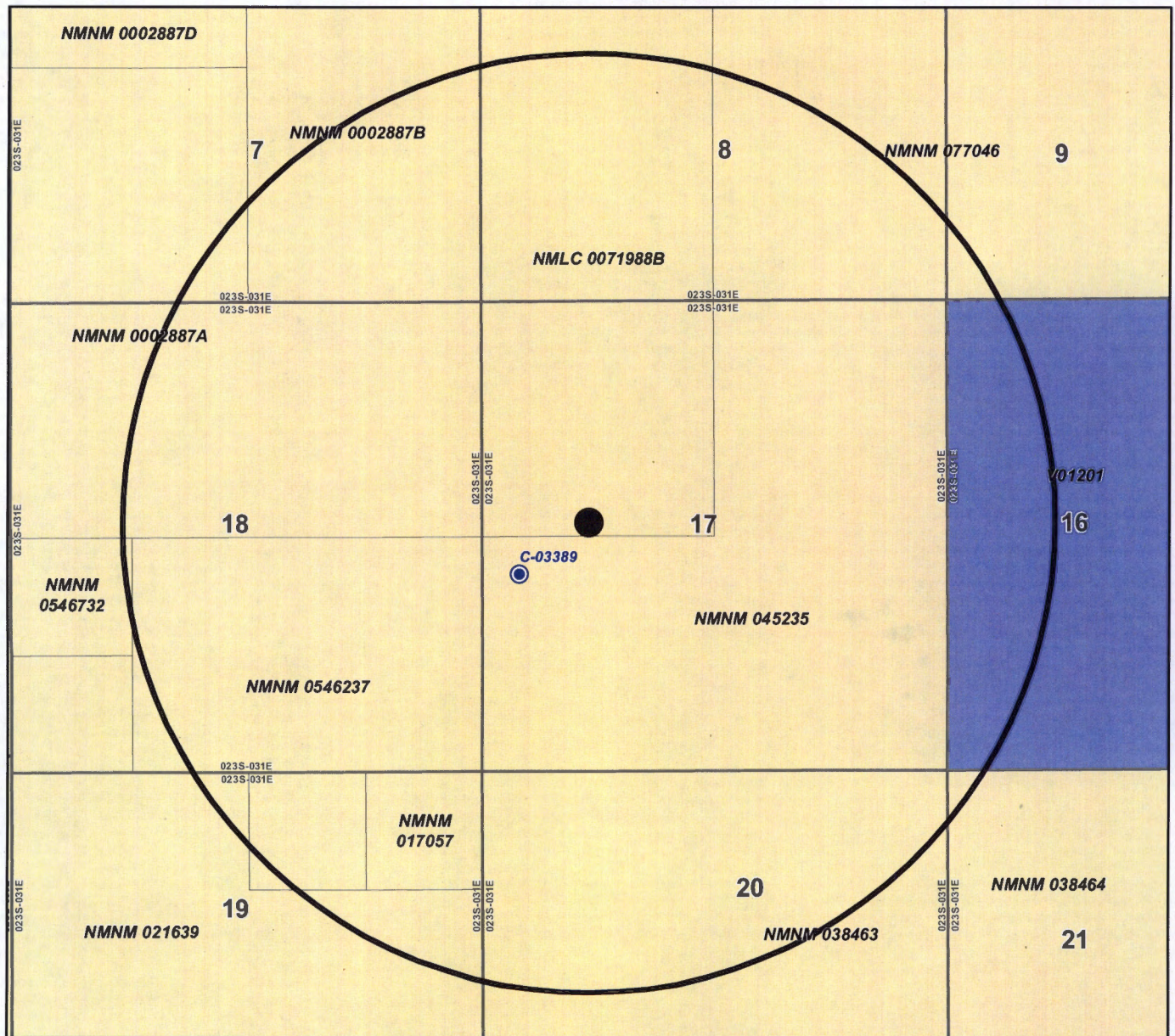
----- wellbore	<b>Well Status Name</b>	☐ NON-PRODUCING OTHER
State Lease	★ GAS	○ CO2
Federal Lease	⚡ INJECTION	☐ DRY
two mile buffer	⊙ MULTI OIL AND GAS PRODUCER	☐ STORAGE
BLM Active Unit - James Ranch	● OIL	☐ CBM
	★ OIL AND GAS PRODUCER	△ OTHER PRODUCING
	⊙ MULTIPLE GAS PRODUCER	⚡ WATER SUPPLY WELL
	⊙ MULTIPLE OIL PRODUCER	⊕ WELL PERMIT
	✕ ABANDONED	⊗ WELL START
	⚡ DRILLING	

known well operator in buffer

BASS ENTRPRS PROD CO  
BOPCO LP  
DEVON ENERGY PROD  
EOG RESOURCES INC  
KAISER-FRANCIS OIL  
OXY U S A INC  
SANTA FE ENR OP PRTN  
YATES PETROLEUM CORP



# James Ranch Unit 17 Skylark SWD 1 Eddy County, New Mexico



Water Wells within 1 mile



- water well
  - location
  - surface declaration
  - surface permit
- State Lease
- Federal Lease
- one mile buffer





# New Mexico Office of the State Engineer Water Right Summary



**WR File Number:** C 03389      **Subbasin:** C      **Cross Reference:** -  
**Primary Purpose:** STK 72-12-1 LIVESTOCK WATERING  
**Primary Status:** PMT PERMIT  
**Total Acres:**      **Subfile:** -  
**Total Diversion:** 3      **Cause/Case:** -  
**Owner:** JIMMY MILLS 2005 GST TRUST  
**Contact:** STACY MILLS  
**Owner:** BUREAU OF LAND MANAGEMENT  
**Contact:** SUSAN BRITT

## Documents on File

	Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
				1	2					
<a href="#">get images</a>	469691	COWNF	2009-02-02	CHG	PRC	C 03389	T		0	
<a href="#">get images</a>	469688	72121	2008-09-04	PMT	APR	C 03389	T		3	

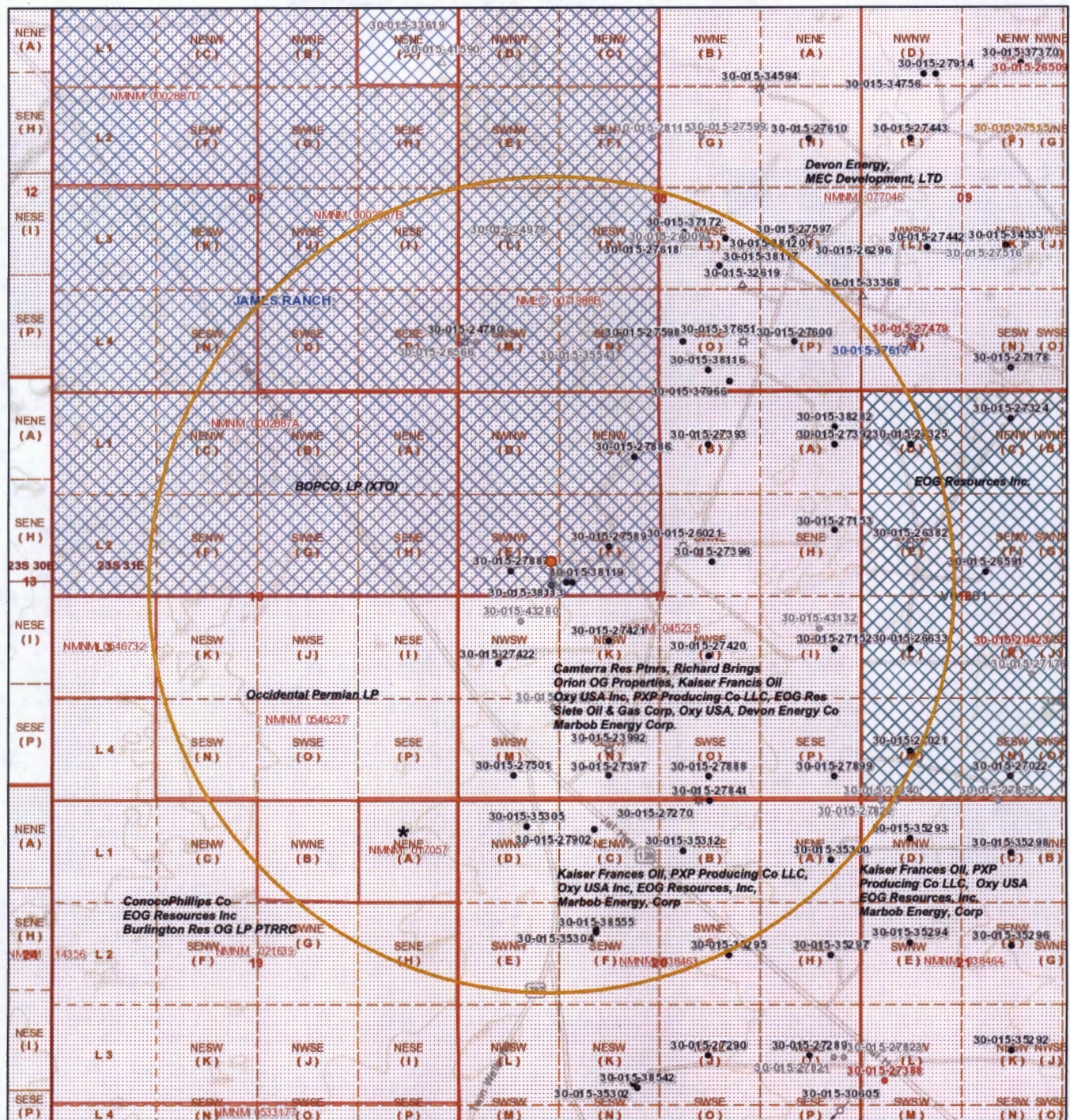
## Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	Q	Q	64	16	4	Sec	Tws	Rng	X	Y	Other Location Desc
<a href="#">C 03389</a>			1	1	3	17	23S	31E				612316	3574683	SE1/4



# James Ranch Unit 17 Skylark Operators/Leashold



3/5/2019 4:38:35 PM

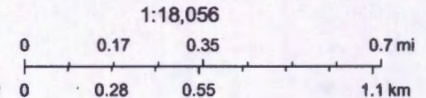
Well Locations - Large Scale

- Miscellaneous
- ★ CO2 Active
- ★ CO2 Cancelled
- ★ CO2 New
- ★ CO2, Plugged
- ★ CO2, Temporarily Abandoned
- ★ Gas Active
- ★ 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
- Well Locations - Small Scale
- Active
  - New
  - Plugged
  - Cancelled
  - Temporarily Abandoned
  - OCD Districts
  - ★ OCD District Offices
  - PLSS First Division

\* **Gilmore Resources, Inc**  
**Wheeler, Freddie Jean**  
**Hurt Properties LP**  
**The Gilmore Revocable Trust**  
**Martin, Cecile E**  
**Hurt, James R**



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

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. <http://nm-emrdr.maps.arcgis.com/apps/webappviewer/> New Mexico Oil Conservation Division



CARLSBAD  
**CURRENT-ARGUS**

**AFFIDAVIT OF PUBLICATION**

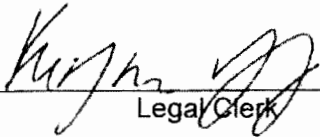
**Ad No.  
0001278944**

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

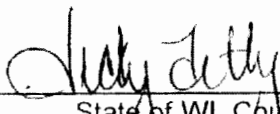
MIDLAND TX 79707

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:

03/02/19

  
Legal Clerk

Subscribed and sworn before me this  
6th of March 2019.



State of WI, County of Brown  
NOTARY PUBLIC

4-19-21

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 **James Ranch Unit 17 Skylark #1** (Siluro-Devonian and Fusselman Formations). The maximum injection pressure will be 3,186 psi and the maximum rate will be 40,000 bbls. produced water per day. The proposed disposal well is located approximately 20 miles NE of Malaga, New Mexico in Section 17, T23S, R31E, 2490' FNL & 1223' FWL, Eddy County, New Mexico. The produced water will be disposed at a subsurface depth of 15,930' - 17,120'.

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 2, 2019 #1278944

Ad#:0001278944  
P O : 0001278944  
# of Affidavits :0.00



CERTIFIED MAILING LIST  
BOPCO, LP  
James Ranch Unit 17 Skylark SWD #1

**Certified #7018 2290 0001 1289 5498**

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

**Certified #7018 2290 0001 1289 5504**

Jimmy Mills GST Trust  
Stacy Mills  
PO Box 1358  
Loving, NM 88256

**Certified #7018 2290 0001 1289 5511**

Devon Energy Corporation  
Attn: Ryan Cloer, Landman  
333 W. Sheridan Ave  
Oklahoma City, OK 73102

**Certified #7018 2290 0001 1289 2664**

EOG Resources, Inc  
Kay Maddox  
PO Box 2267  
Midland, TX 79702

**Certified #7018 2290 0001 1289 5535**

Oxy USA, Inc  
Kelley Montgomery  
PO Box 4294  
Houston, TX 77210-4294

**Certified #7018 2290 0001 1289 6310**

Gilmore Resources Inc  
PO Box 577  
Kimball NE 69145-0577

**Certified #7018 2290 0001 1289 6280**

Freddie Jean Wheeler  
1000 Cordova PL #454  
Santa Fe, NM 87505-1725

**Certified #7018 2290 0001 1289 6297**

Marbob Energy Corp  
PO Box 227  
Artesia, NM 88211-0227

**Certified #7018 2290 0001 1289 6303**

Hurt Properties LP  
PO Box 1927  
Abingdon VA 24212-1927

**Certified #7018 2290 0001 1289 6457**

The Gilmore Revocable Trust  
505 N Big Spring Ste 303  
Midland, TX 79701-4346

**Certified #7018 2290 0001 1289 6327**

Cecile E Martin  
411 Meadowlakes Dr  
Meadowlakes, TX 78654-7138

**Certified #7018 2290 0001 1289 6334**

James R Hurt  
PO Box 72  
Odessa, TX 79760-0072

**Certified #7018 2290 0001 1289 6341**

MEC Development LTD  
PO Box 4000  
The Woodlands, TX 77380-4000

**Certified #7018 2290 0001 1289 6358**

Occidental Permian, LP  
5 E Greenway Plaza #110  
Houston, TX 77046-0521

**Certified #7018 2290 0001 1289 6365**

ConocoPhillips Co  
PO Box 7500  
Bartlesville, OK 74005-7500

**Certified #7018 2290 0001 1289 6372**

Kaiser Francis Oil  
PO Box 21463  
Tulsa, OK 74121-1468

**Certified #7018 2290 0001 1289 6389**

Burlington Resources OG LP  
3401 E 30<sup>th</sup> St  
Farmington, NM 87402-8807

**Certified #7018 2290 0001 1289 6396**

Camterra Res Ptnrs  
2615 E End Blvd S  
Marshal, TX 75670

**Certified #7018 2290 0001 1289 6402**

Orion OG Properties  
PO Box 2523  
Roswell, NM 88202

**Certified #7018 2290 0001 1289 6419**

Siete Oil & Gas Corp  
PO Box 2523  
Roswell, NM 88202-2523

**Certified #7018 2290 0001 1289 6426**

Richard S Briggs  
17 Meadowbrook Ln  
Trophy Club, TX 76262

**Certified #7018 2290 0001 1289 6433**

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

**Certified #7018 2290 0001 1289 6440**

EOG Resources Inc  
333 Clay St #4200  
Houston, TX 77002

**Certified #7018 2290 0001 1289 6078**

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 and offset leasehold operator for the well 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:

03/08/19

## Goetze, Phillip, EMNRD

---

**From:** Cherry, Tracie <Tracie\_Cherry@xtoenergy.com>  
**Sent:** Tuesday, March 19, 2019 7:36 AM  
**To:** McMillan, Michael, EMNRD; Goetze, Phillip, EMNRD  
**Subject:** [EXT] James Ranch Unit 21 Skylark SWD  
**Attachments:** EWA\_SSP\_James Ranch 21 SWD.PDF

17 

Good morning gentlemen.

I just noticed a water sample of the disposal water was not included in the referenced application. The application should have arrived at the NMOCD 03/11/19. The omitted water sample is attached.

I have two other questions:

- Can you provide an update on the progress of the applications submitted so far? Don't hesitate to contact me if you need some additional information or I overlooked something.
- I have a few notices returned. These were attempted to offsets that had "operating rights" per BLM although there was an operator of record with NMOCD of producing wells on the tract (i.e. Devon). I cannot find alternate addresses. Am I required to publish?

Thank you...Tracie

---

Tracie J Cherry  
Regulatory Coordinator  
Direct number 432-221-7379



a subsidiary of ExxonMobil

# NALCO Champion

An Ecolab Company

## Complete Water Analysis Report

Customer: XTO ENERGY INC  
Region: Carlsbad, NM  
Location: James Ranch Unit 29 Federal Lease  
System: Production System

Equipment: SWD  
Sample Point: Inlet  
Sample ID: AL07042  
Acct Rep Email: Anthony.Baeza@ecolab.com

Collection Date: 06/12/2018  
Receive Date: 06/21/2018  
Report Date: 06/25/2018  
Location Code: 373826

### Field Analysis

Bicarbonate	12 mg/L	Dissolved CO2	350 mg/L	Dissolved H2S	9 mg/L
Pressure Surface	20 psi	Temperature	98 ° F	pH of Water	6.1
Oil per Day	0 B/D	Gas per Day	0 Mcf/D	Water per Day	6500 B/D

### Sample Analysis

Calculated Gaseous CO2	0.12%	Calculated pH	6.10	Conductivity (Calculated)	437728 µS - cm3
Ionic Strength	5.82	Resistivity	0.023 ohms - m	Specific Gravity	1.200
Total Dissolved Solids	280169.9 mg/L				

### Cations

Iron	15.7 mg/L	Manganese	8.03 mg/L	Barium	3.97 mg/L
Strontium	1480 mg/L	Calcium	27900 mg/L	Magnesium	4440 mg/L
Sodium	71900.00 mg/L	Potassium	1800 mg/L	Boron	28.7 mg/L
Lithium	10.8 mg/L	Copper	0.01 mg/L	Nickel	0.055 mg/L
Zinc	0.138 mg/L	Lead	0.033 mg/L	Cobalt	0.053 mg/L
Chromium	0.003 mg/L	Silicon	3.02 mg/L	Aluminum	Not Detected mg/L
Molybdenum	0.023 mg/L	Phosphorus	Not Detected mg/L		

### Anions

Bromide	1832.85 mg/L	Chloride	174225 mg/L	Sulfate	184.663 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°	2.13	0.13	89.54	31.55	0.00	0.00	2.08
75°	1.79	0.00	70.73	0.00	0.00	0.00	1.75
100°	1.19	0.00	54.88	0.00	0.00	0.00	1.42
125°	0.28	0.00	43.34	0.00	0.00	0.00	1.11
150°	0.00	0.00	35.91	0.00	0.00	0.00	0.86
175°	0.00	0.00	31.61	0.00	0.00	0.00	0.66
200°	0.00	0.00	29.33	0.00	0.00	0.00	0.53
225°	0.00	0.00	28.19	0.00	0.00	0.00	0.45
250°	0.00	0.00	27.59	0.00	0.00	0.00	0.41
275°	0.00	0.00	27.18	0.00	0.00	0.00	0.41
300°	0.00	0.00	26.83	0.00	0.00	0.00	0.43
325°	0.00	0.00	26.54	0.00	0.00	0.00	0.46
350°	0.00	0.00	26.37	0.00	0.00	0.00	0.48
375°	0.00	0.00	26.26	0.00	0.00	0.00	0.47
400°	0.00	0.00	25.92	0.00	0.00	0.00	1.14

### Saturation Index

	Barite SI	Calcite SI	Celestite SI	Gypsum SI	Halite SI	Iron Carbonate SI	Iron Sulfide SI
50°	1.01	0.05	0.60	0.14	-0.26	-1.89	1.55
75°	0.62	-0.14	0.40	-0.03	-0.29	-1.96	1.16
100°	0.31	-0.30	0.28	-0.13	-0.31	-2.03	0.85
125°	0.05	-0.44	0.20	-0.19	-0.33	-2.09	0.62
150°	-0.15	-0.55	0.16	-0.24	-0.35	-2.14	0.45
175°	-0.33	-0.64	0.14	-0.29	-0.37	-2.18	0.34
200°	-0.48	-0.70	0.14	-0.35	-0.39	-2.22	0.26
225°	-0.61	-0.75	0.12	-0.41	-0.41	-2.26	0.22
250°	-0.72	-0.78	0.12	-0.48	-0.43	-2.30	0.20
275°	-0.83	-0.80	0.12	-0.55	-0.45	-2.35	0.20
300°	-0.93	-0.81	0.12	-0.60	-0.47	-2.40	0.20
325°	-1.04	-0.82	0.12	-0.63	-0.49	-2.47	0.21
350°	-1.14	-0.83	0.11	-0.60	-0.51	-2.56	0.22
375°	-1.25	-0.86	0.11	-0.51	-0.52	-2.67	0.21
400°	-1.37	0.00	0.11	-0.33	-0.53	0.00	0.48

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

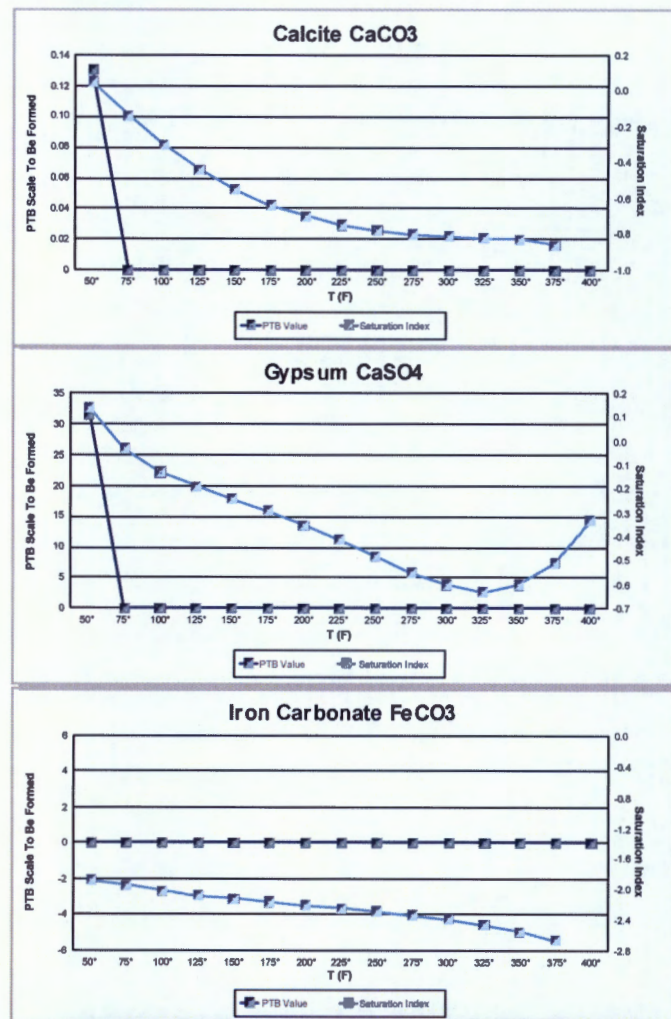
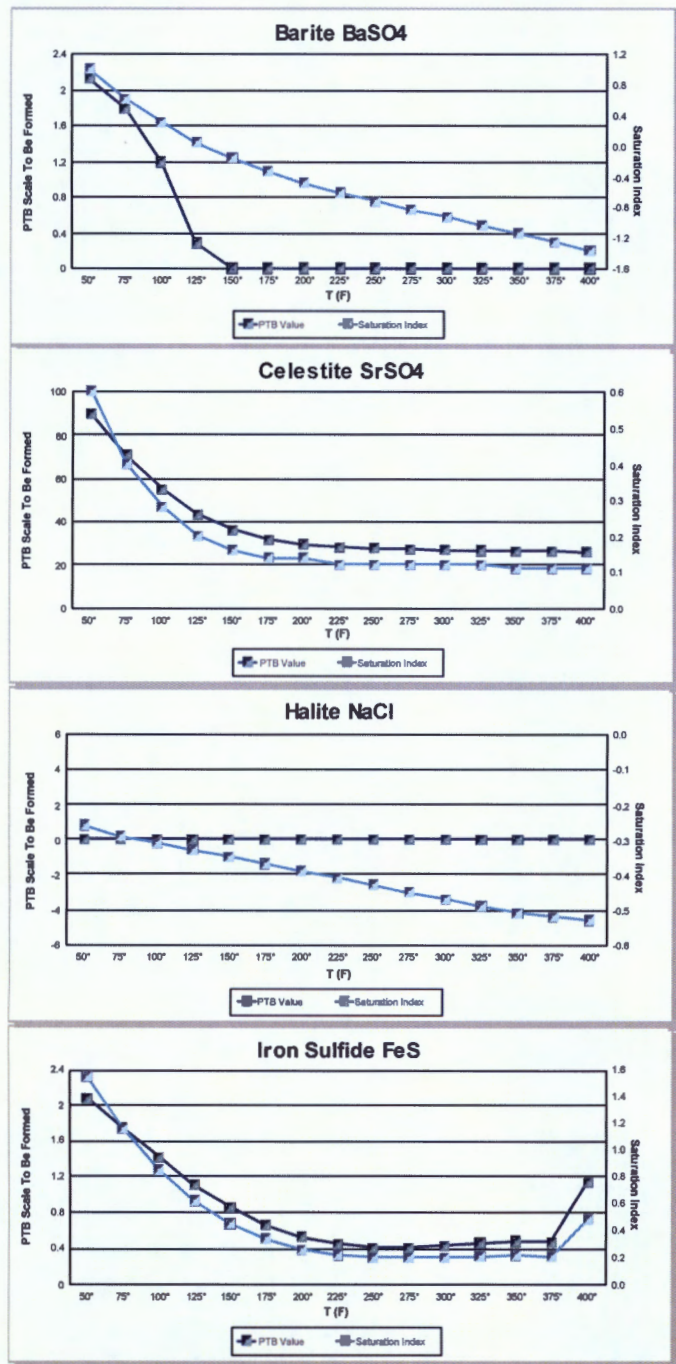
Page 1 of 2

## Complete Water Analysis Report

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Acct Rep Email: Anthony.Baeza@ecolab.com

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Receive Date: 06/21/2018  
Report Date: 06/25/2018  
Location Code: 373826



## Comments

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06/27/2018

Page 2 of 2



### **Statements Regarding Seismicity**

XTO has performed a seismicity risk assessment associated with the proposed James Ranch Unit 17 Skylark SWD Well by investigating historic seismicity, the presence of deep faulting, orientation of faults relative to the current stress regime 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). To accommodate the tool's analytics, a simplified spatial relationship between the proposed well and possible faulting was established.

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 has interpreted two faults and/or linear features. Additionally, 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 of the proposed well is primarily a normal faulting regime and the subject well is near the boundary of stress areas two and four (Figure 1).

### **Geomechanical Modeling**

A simple screening level geometric / geomechanical assessment of the two faults was performed utilizing the FSP tool. The model was run using the Aphi option which makes a simplifying and conservative assumption that faults are critically stressed and thus close to failure. Additionally, given the uncertainties in the geophysical interpretation and stress information, a probabilistic scenario was run varying fault and stress characteristics. FSP model deterministic and uncertainty inputs and results of the model are shown in Figures 2a and 2b.

### **Pore Pressure Modeling**

A screening level investigation of possible pore pressure increases due to the proposed SWD well was performed utilizing the FSP tool and a range of reservoir parameters. 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. Sensitivities were performed by varying several reservoir parameters. Deterministic models and uncertainty analysis are shown in Figure 3 which contains deterministic and probabilistic model inputs, snap shots of the calculated pore pressure increases in 2025 and 2040 and cross-plots of pore pressure uncertainty and fault slip probabilities.

#### **Integration of Geomechanical and Pore Pressure Modeling**

Integration of the geomechanical and hydrological elements of the assessment was performed using the FSP Integrated module and are shown in Figure 5. Note the y-axis in the lower right hand colored graph in Figure 5 is labeled 'Fault Slip Potential'. This a labeling convention within the tool but overstates the efficacy of the analysis. The FSP output should not be taken as calculating a reliable probability of a fault slipping but rather a screening method for assessing the relative potential of faults to slip.

#### **Uncertainty**

The analysis presented is a screening level approach that encompasses a range of uncertainties in several components that are difficult to individually constrain due to the limited static and dynamic data available for deep disposal wells. Accordingly, the analysis was done by varying key inputs to understand the relative importance of each and guide the focus of future data collection efforts.

#### **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

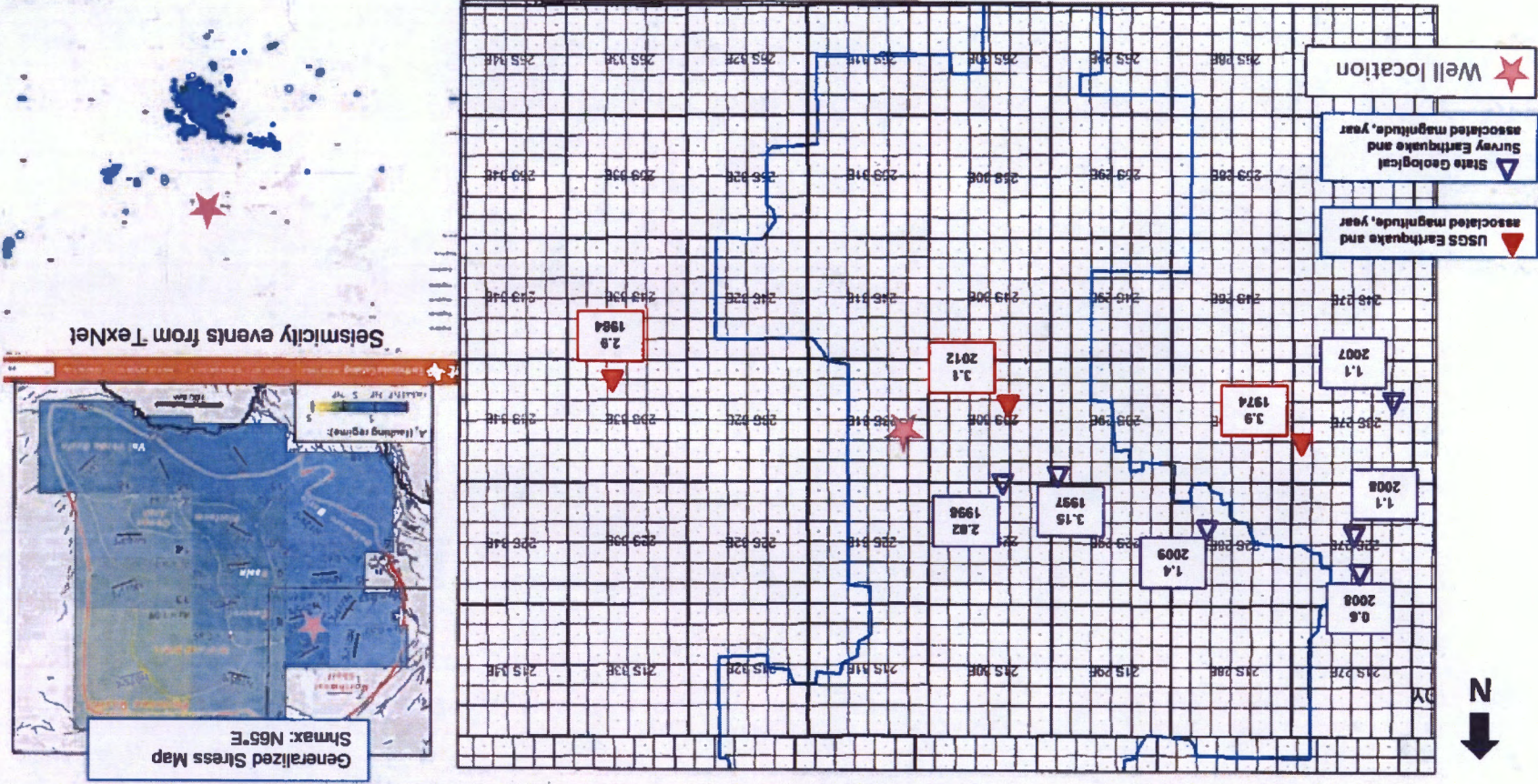


Figure 1



# Geomechanical Analysis

## Fault Inputs

Number of faults (max 500)

Friction Coefficient mu

☐ Random Faults

☒ Enter Faults

	X [East km]	Y [North km]	Strike [Deg]	Dip [Deg]	Length [km]
1	9.5000	9.5000	324	85	8.7600
2	10.4000	8.4000	13	80	7.2400

## Stress Regime Inputs

☒ Use A-Phi Model

Vertical Stress Gradient [psi/ft]

A-Phi Parameter

☐ Min Horiz Stress Grad Available [psi/ft]

Max Hor Stress Direction [deg H CW]

Initial Res Pressure Gradient [psi/ft]

Reference Depth for Calculations [ft]

Maximum Injection Rate: 40,000 bbl/day

## Stress Regime: Normal Faulting

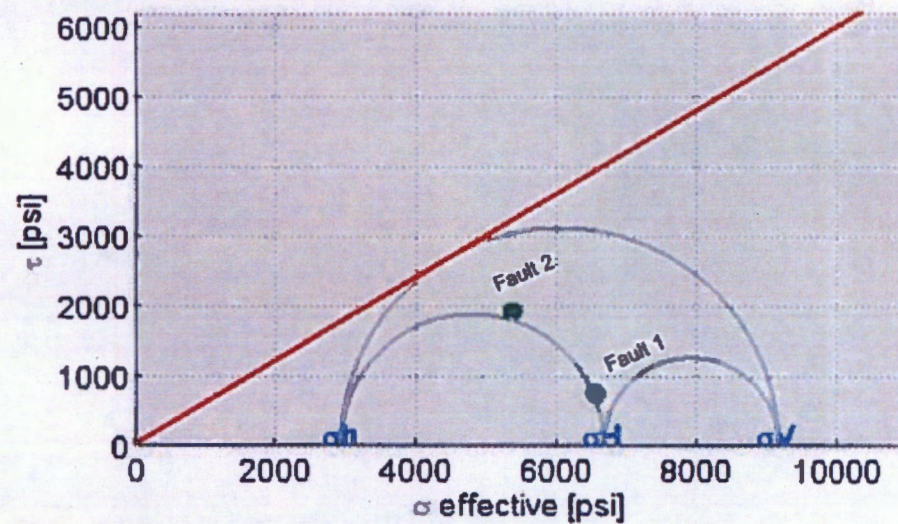


Figure 2a



# Geomechanical Analysis

## Uncertainty Ranges

Strike Angles (varying, degrees)	95
Dip Angles (varying, degrees)	15
Max Horiz. Stress Dir (95 degrees)	15
Friction Coeff Mu (0.6)	0
A-Phi Parameter (0.6)	0.2

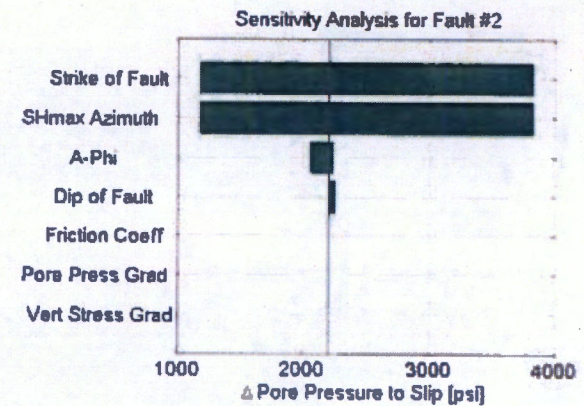
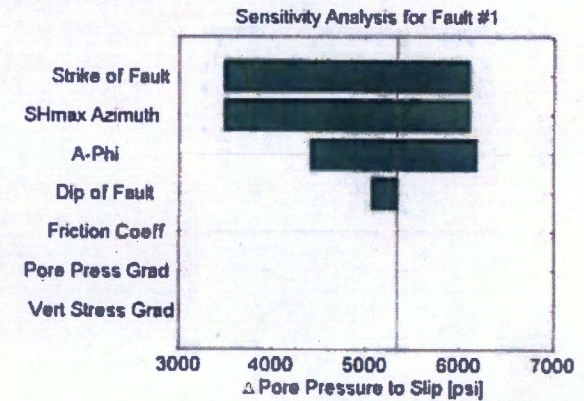
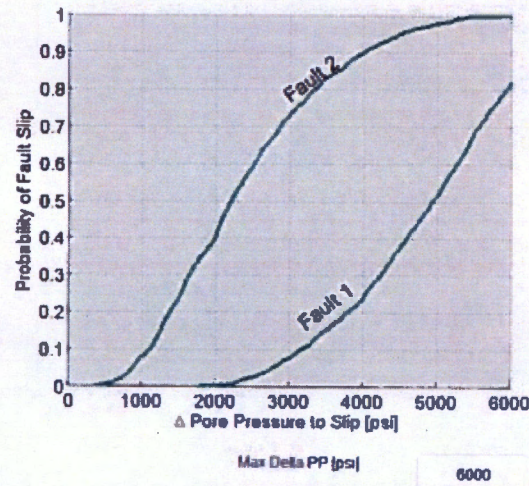
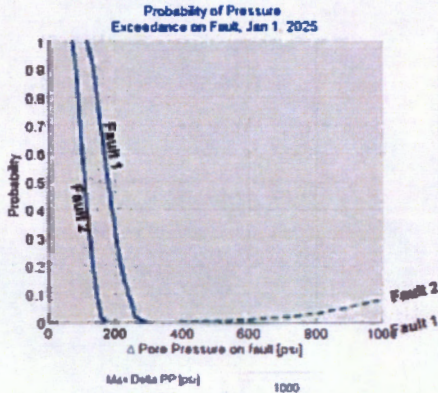
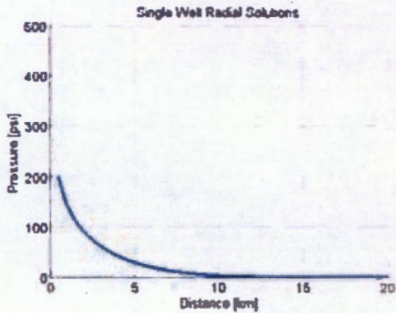
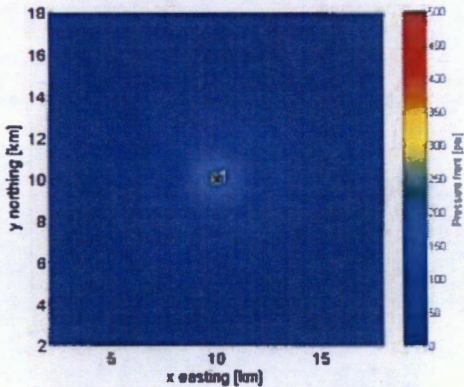


Figure 2b

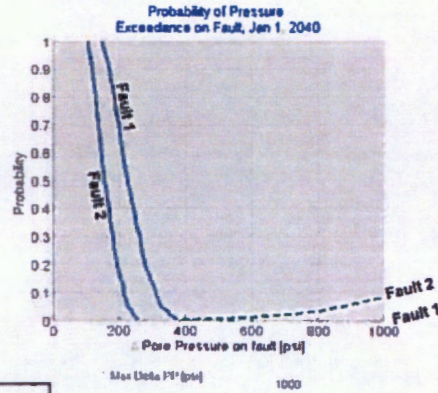
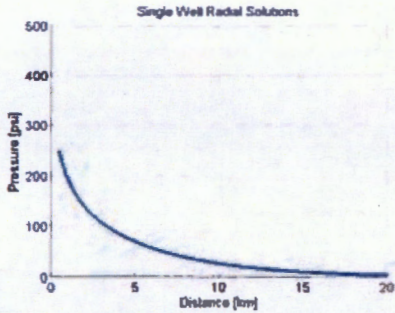
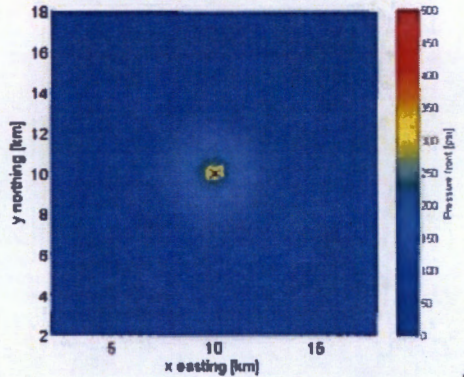


# Pore Pressure Analysis

2025 Snapshot



2040 Snapshot



Uncertainty Ranges	
Aquifer Thickness [750 ft]	250
Porosity [5 %]	3
Perm [75 mD]	15

Figure 3



## Geomechanical / Pore Pressure Integration

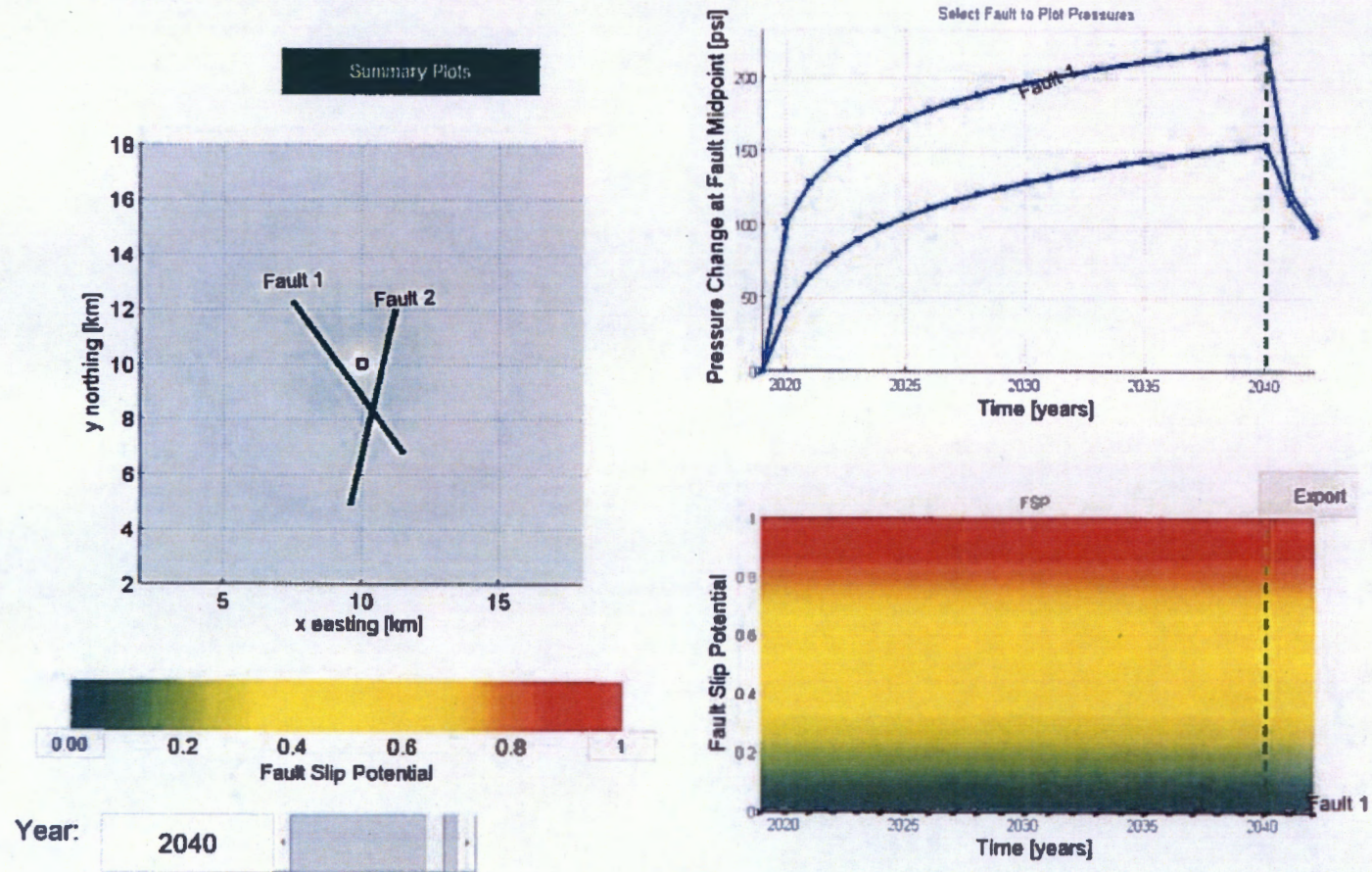
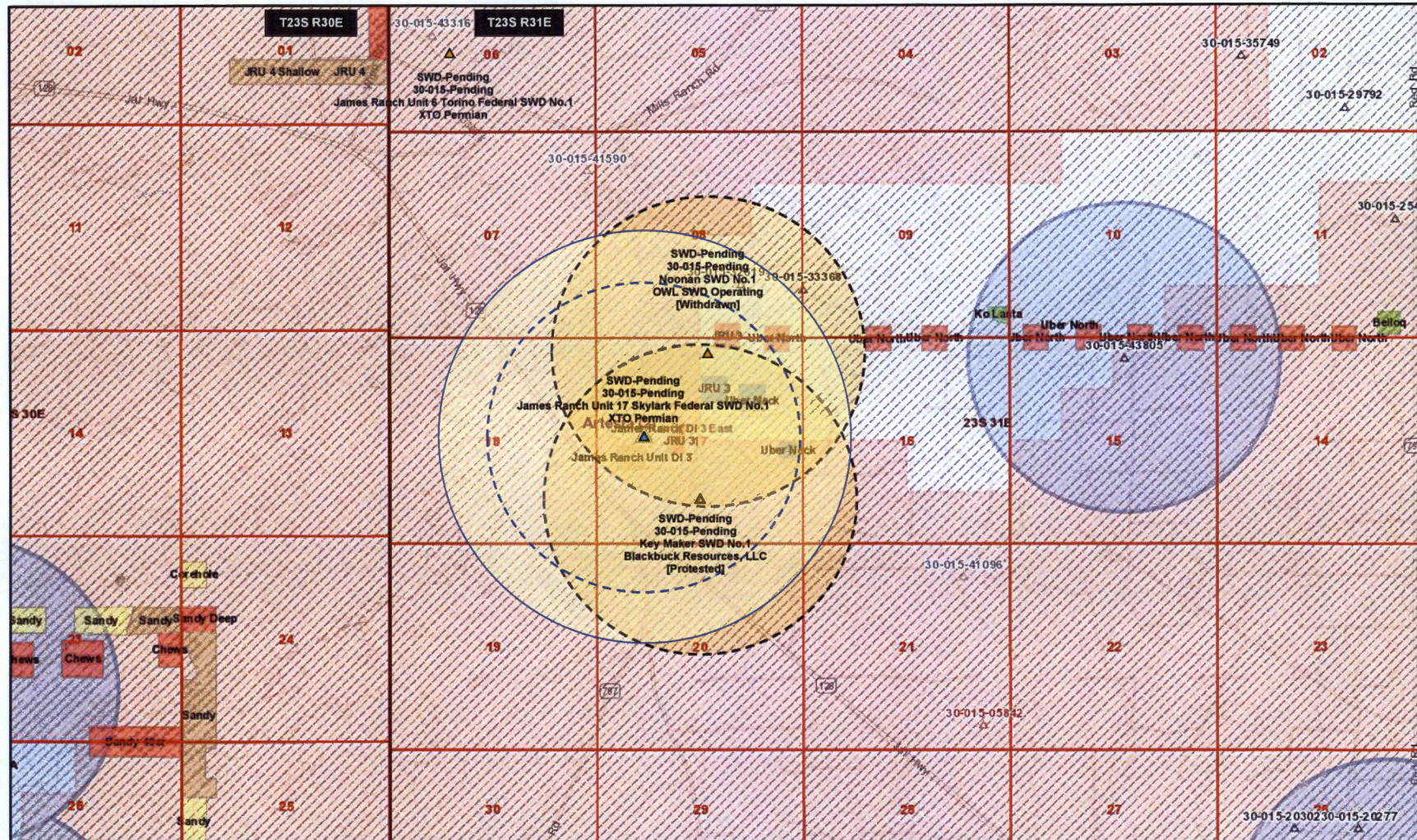


Figure 4



**Pending Application for High-Volume Devonian Disposal Well**  
**C-108 Application for James Ranch Unit 17 Skylark Federal SWD No. 1 –XTO Permian Operating, LLC**



**Closest High-Volume Devonian Disposal Well:** Uber North SWD No. 1 (30-015-43805); NGL





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

DATE RECORD: First Rec: 3/11/19 Admin Complete: 3/19/19 or Suspended: 3/26/19 Add. Request/Reply: Protested\*

ORDER TYPE: WFX / PMX / SWD Number: 1990 Order Date: 10/11/19 Legacy Permits/Orders: —

Well No. 1 Well Name(s): James Ranch Unit 17 Skylark Federal

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

Footages 2490 FWS/223 FWL Lot — or Unit E Sec 17 Tsp 23S Rge 31E County Eddy

General Location: S. of WIPP/ 16.5mi E of Loving Pool: SUD, Devonian-Silurian Pool No.: —

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

COMPLIANCE RULE 5.9: Total Wells: 799 Inactive: 0 Fincl Assur: OK Compl. Order? NO IS 5.9 OK? Yes Date: 10/11/2019

WELL FILE REVIEWED ☒ Current Status: NO API / well file

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)	Cement Size or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing <u>—</u> Surface		<u>24 18 5/8</u>	<u>550</u>	<u>1150</u>	<u>Circulate to surf</u>
Planned <input checked="" type="checkbox"/> or Existing <u>—</u> Intern/Prod		<u>17 1/2 13 3/8</u>	<u>3940</u>	<u>None</u>	<u>Circulate to surf</u>
Planned <input checked="" type="checkbox"/> or Existing <u>—</u> Intern/Prod		<u>12 1/4 9 5/8</u>	<u>11720</u>	<u>DR-3800</u>	<u>1) 2165 / 2) 1235</u>
Planned <input checked="" type="checkbox"/> or Existing <u>—</u> Prod/Kiner		<u>8 1/2 7</u>	<u>11,300 to 15,930</u>	<u>None</u>	<u>"Circulate"</u>
Planned <input checked="" type="checkbox"/> or Existing <u>—</u> Liner		<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned <input checked="" type="checkbox"/> or Existing <u>—</u> OH/PERF		<u>6</u>	<u>15,930 - 17,120</u>	<u>Inj Length 1190</u>	

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		<u>Mississippian</u>	<u>15316</u>
Confining Unit: <u>Litho.</u> Struc. Por.	<u>30'</u>	<u>Woodford Shale</u>	<u>15761</u>
Proposed Inj Interval TOP:	<u>15930</u>	<u>Devonian</u>	<u>15906</u>
Proposed Inj Interval BOTTOM:	<u>17120</u>	<u>Silurian</u>	
Confining Unit: <u>Litho.</u> Struc. Por.	<u>±20'</u>	<u>Montoya / Ord</u>	<u>17136</u>
Adjacent Unit: Litho. Struc. Por.		<u>—</u>	<u>—</u>

Completion/Operation Details:	
Drilled TD <u>—</u>	PBTD <u>—</u>
NEW TD <u>17120</u>	NEW PBTD <u>—</u>
NEW Open Hole <input checked="" type="checkbox"/> or NEW Perfs <input type="checkbox"/>	
Tubing Size <u>14.625 in.</u>	Inter Coated? <u>Yes</u>
Proposed Packer Depth <u>15,830</u> ft	
Min. Packer Depth <u>15,830</u> (100-ft limit)	
Proposed Max. Surface Press. <u>3186</u> psi	
Admin. Inj. Press. <u>3186</u> (0.2 psi per ft)	

### AOR: Hydrologic and Geologic Information

POTASH: R-111-P Yes Noticed? Yes BLM Sec Ord ☒ WIPP Not Required Salt Salado T: 722 B: 3827 NW: Cliff House fm NA

USDW: Aquifer(s) Rustler (at 371) / Devonian Max Depth <550 ft by test

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

Disposal Fluid: Formation Source(s) DMG/WC/BS/AR&MR Analysis? Yes On Lease ☐ Operator Only ☒ or Commercial ☐

Disposal Interval: Inject Rate (Avg/Max BWPD): 30,000/40,000 Protectable Waters? NO Source: Area historical System: Closed or Open

HC Potential: Producing Interval? NO Formerly Producing? NO Method: Logs/DST/P&A Other Mudlog 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 03/02/19 Mineral Owner\* BLM Surface Owner BLM N. Date 3/8/19

RULE 26.7(A): Identified Tracts? Yes Affected Persons\*: OXY\* plus SLO and 22 additional parties N. Date 3/8/19

\* 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: \* Protest withdrawn; liner cement not assessed;

Additional COAs: CBL for liner; notice if casing/cmt changed; BH pressure



## McMillan, Michael, EMNRD

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**From:** McMillan, Michael, EMNRD  
**Sent:** Monday, August 19, 2019 11:54 AM  
**To:** 'Willeto, Lisa'  
**Cc:** Moellenberg, Dalva L.; Cherry, Tracie; Murphy, Kathleen A, EMNRD; Goetze, Phillip, EMNRD; Jones, William V, EMNRD  
**Subject:** RE: Withdrawal of Request for Hearing and Protest

Lisa:  
Thank you for the update.

The application will be placed back in the administrative process

Mike

Michael McMillan  
1220 South St. Francis  
Santa Fe, New Mexico  
505-476-3448  
Michael.mcmillan@state.nm.us

**From:** Willeto, Lisa <lisa.willeto@gknet.com>  
**Sent:** Monday, August 19, 2019 8:51 AM  
**To:** McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>  
**Cc:** Moellenberg, Dalva L. <DLM@gknet.com>  
**Subject:** [EXT] Withdrawal of Request for Hearing and Protest

Re: Withdrawal of Request for Hearing and Protest on Application to Inject Fluid, XTO Energy on behalf of BOPCO, LP; James Ranch Unit 17 Skylark State SWD 001, Eddy County, New Mexico

Dear Mr. McMillan:

On behalf of Occidental Permian, LP and OXY USA Inc., by this letter we withdraw the request for hearing on and protest of the application by XTO Energy, on behalf of BOPCO, LP, to drill and complete a salt water disposal well, the James Ranch Unit 17 Skylark SWD #1. This well is proposed to be located in Section 17, T23S, R31E. Occidental Permian, LP and OXY USA Inc., who filed a request for hearing on March 26, 2019, have reached an agreement with the applicant and no longer object to administrative approval of the above application.

Gallagher & Kennedy, P.A.  
Dalva L. Moellenberg



Lisa Willeto  
Assistant to

1239 Paseo de Peralta  
Santa Fe, New Mexico 87501-2758  
505-982-9523 | [www.gknet.com](http://www.gknet.com)

Dalva Moellenberg and Gene Creely  
[lisa.willeto@gknet.com](mailto:lisa.willeto@gknet.com)  
505-989-7365

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**McMillan, Michael, EMNRD**

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**From:** McMillan, Michael, EMNRD  
**Sent:** Tuesday, March 26, 2019 3:25 PM  
**To:** 'Cherry, Tracie'  
**Cc:** 'Moellenberg, Dalva L.'; Goetze, Phillip, EMNRD; Lowe, Leonard, EMNRD; Murphy, Kathleen A, EMNRD; Jones, William V, EMNRD  
**Subject:** Notification of Protest for Application to Inject - JRU 17 Skylark SWD Well No. 1-OXY  
**Attachments:** BOPCO JRU 17 Skylark State #1\_OXY Prot.pdf

RE: JRU 17 Skylark SWD #1 (API 30-025-Pending; Admin. Appl. No pMAM1907138568) Unit E; Sec 17, T23S, R31E, NMPPM, Eddy County

Ms. Cherry:

OCD was notified by OXY USA, Inc., et. al. that they are protesting this application. These parties are identified as an affected person for the location being considered for the application. You are being notified that if BOPCO, LP wishes for this application to be considered, they must either go to hearing or may be reviewed administratively if the protest is withdrawn as a result of a negotiated resolution with this party. The application will be retained pending resolution of the protest. Please continue to provide OCD with information regarding the standing of this application. Please me call with any questions on this matter.

Contact for OXY USA Inc., et. al.  
Dalva Moellenberg  
Lawyer  
Gallagher and Kennedy  
1239 Paseo de Peralta  
Santa Fe, NM 87501  
Phone: 505.982.9523  
E-mail: [dlm@gknet.com](mailto:dlm@gknet.com)

Michael McMillan  
1220 South St. Francis  
Santa Fe, New Mexico  
505-476-3448  
[Michael.mcmillan@state.nm.us](mailto:Michael.mcmillan@state.nm.us)

March 26, 2019

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

Re: Request for Hearing on Application to Inject Fluid, XTO Energy on behalf of  
BOPCO, LP; James Ranch Unit 17 Skylark State SWD 001, Eddy County, New  
Mexico

Dear Director:

On behalf of Occidental Permian, LP and OXY USA Inc., by this letter we request a hearing on the application by XTO Energy, on behalf of BOPCO, LP, to drill and complete a salt water disposal well, the James Ranch Unit 17 Skylark SWD #1. The SWD well proposed by XTO would be located in Section 17, T23S, R31E, 2490 FNL & 1223 FWL, in the Devonian formation, with an injection interval from 15,930-17,120', or to the base of the Fusselman.

Occidental Permian, LP and OXY USA Inc. hold mineral interests located within one mile of the location of the well proposed in the above application, and Occidental Permian, LP received notice of the application from XTO Energy, Inc. Occidental Permian, LP and OXY USA Inc. hereby object to administrative approval of the above application and request a hearing to address concerns regarding geologic faulting and potential impacts on plans to develop projects and wells in the vicinity, including future well development known as the Pure Gold wells.

Very truly yours,

GALLAGHER & KENNEDY, P.A.

By: 

Dalva L. Moellenberg

Cc: Ms. Tracie J. Cherry  
Regulatory Coordinator  
XTO Energy Inc.

Ms. India Isbell



Tracie J Cherry  
Regulatory Coordinator  
XTO Energy Inc.  
6401 Holiday Hill Road, Bldg 5  
Midland, TX 79707  
(432) 221-7379

March 8, 2019

**Certified #7018 2290 0001 1289 6358**

Occidental Permian, LP  
5 E Greenway Plaza #110  
Houston, TX 77046-0521

RE: Notice of Application to Inject Fluid  
James Ranch Unit 17 Skylark State SWD 001  
Eddy County, New Mexico

Dear Offset Owner/Surface Owner:

This letter is to notify you XTO Energy, as agent for BOPCO, LP, has submitted to the New Mexico Oil Conservation Division (NMOCD) an application to drill and complete a salt water disposal well. Our records indicate that you are an offset operator, mineral owner or surface owner. Included herein, is a complete copy of the application as submitted to the NMOCD for their review and approval.

XTO is requesting the application be granted administratively. Any objections to the application or requests for a hearing must be filed with the Oil Conservation Division, 1220 South St Frances Dr., Santa Fe, New Mexico 87505 within 15 days receipt of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tracie J Cherry', written in a cursive style.

Tracie J Cherry  
Regulatory Coordinator

Attachments

## Goetze, Phillip, EMNRD

---

**From:** Bell, Ric <Ric.Bell@mosaicco.com>  
**Sent:** Monday, September 16, 2019 11:20 AM  
**To:** Hilger, Kenneth G  
**Subject:** RE: SWD Discussion

Ken,  
Mosaic will not object to these 2 wells as proposed in this email.  
Cheers,  
Ric

**From:** Hilger, Kenneth G [mailto:Kenneth\_Hilger@xtoenergy.com]  
**Sent:** Monday, September 16, 2019 11:12 AM  
**To:** Bell, Ric C - Carlsbad <Ric.Bell@mosaicco.com>  
**Subject:** FW: SWD Discussion

---

CAUTION: External Email.

---

Hey Ric,

As we discussed this morning, there are 2 SWD locations that the NMOCD, not BLM, is asking XTO to provide Mosaics no objection response to the wells' location. Looking back at my initial September email from a week or so ago I noticed I had then sent for your review the C-102 plats for both wells.

SWD Well 1:

The Skylark well is one of 3 we've discussed before (along with the Rambler and Torino) located on the southeast side of James Ranch Unit. It's location is within the KPLA on Drilling Island 3 in Section 17, T23S-R31E and based on my BLM map shows to be in excess of a mile from current Mosaic buffer and mining operations. Your previous review of Skylark, Rambler and Torino as a group resulted in no objection to any of these locations.

SWD Well 2:

The BEU 17 well is located in Section 17, T22S-R29E located outside the KPLA boundary, and just off Drilling Island 37. You and I previously had not discussed this location, however, given its position west of Big Eddy Unit, and outside the KPLA, it was not anticipated as one of concern for Mosaic.

After your review of this information if you have any questions please let me know. Otherwise, your response to this email will act as satisfactory confirmation of Mosaic's approval of the presented locations of the above 2 SWD wells that will be provided to the NMOCD pursuant to their request.

Thanks...ken

Kenneth Hilger, CPL  
Senior Land Advisor – Delaware Basin/Permian

XTO Energy Inc  
Land Dept. Loc. 115  
22777 Springwoods Village Pkwy  
Spring, TX 77389-1425  
Phone: (832) 625-4032 – office

(817) 888-0819 – cell

an ExxonMobil Subsidiary

**From:** Hilger, Kenneth G

**Sent:** Thursday, September 05, 2019 11:52 AM

**To:** 'ric.bell@mosaicco.com' <[ric.bell@mosaicco.com](mailto:ric.bell@mosaicco.com)>

**Subject:** SWD Discussion

Ric, been a while since we spoke, hope things are going well?

Following up on my phone message from yesterday I wanted to see if you would give me a call at your earliest opportunity to discuss the location of 2 SWD wells; one in James Ranch and the other in Big Eddy. I've attached the C-102 plats for each so you can refresh your memory on the locations. The James Ranch well is the Skylark which you and I had discussed with no issue. The Big Eddy well is outside the KPLA, but it appears in both cases BLM is asking for confirmation of Mosaic's endorsement to grant the permits.

Thanks in advance for your time on this...ken

Kenneth Hilger, CPL

Senior Land Advisor – Delaware Basin/Permian

XTO Energy Inc

Land Dept. Loc. 115

22777 Springwoods Village Pkwy

Spring, TX 77389-1425

Phone: (832) 625-4032 – office

(817) 888-0819 – cell

an ExxonMobil Subsidiary

## Goetze, Phillip, EMNRD

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**From:** Cherry, Tracie <Tracie\_Cherry@xtoenergy.com>  
**Sent:** Wednesday, October 9, 2019 3:43 PM  
**To:** Goetze, Phillip, EMNRD  
**Subject:** [EXT] JRU 17 Skylark SWD  
**Attachments:** RE: SWD Discussion

**Importance:** High

I was told you had some questions on this SWD application and will be out of the office tomorrow. I called and there was no answer and no voicemail option?

This well is on a drill island. Apparently, there is some type of mis-match between the BLM and NMOCD shape files. Jim Rutley can verify.

Also, I believe Mosaic had provided a letter/email of no objection to this well (attached).

Tracie

---

Tracie J Cherry  
Regulatory Coordinator  
Direct number 432-221-7379



a subsidiary of ExxonMobil

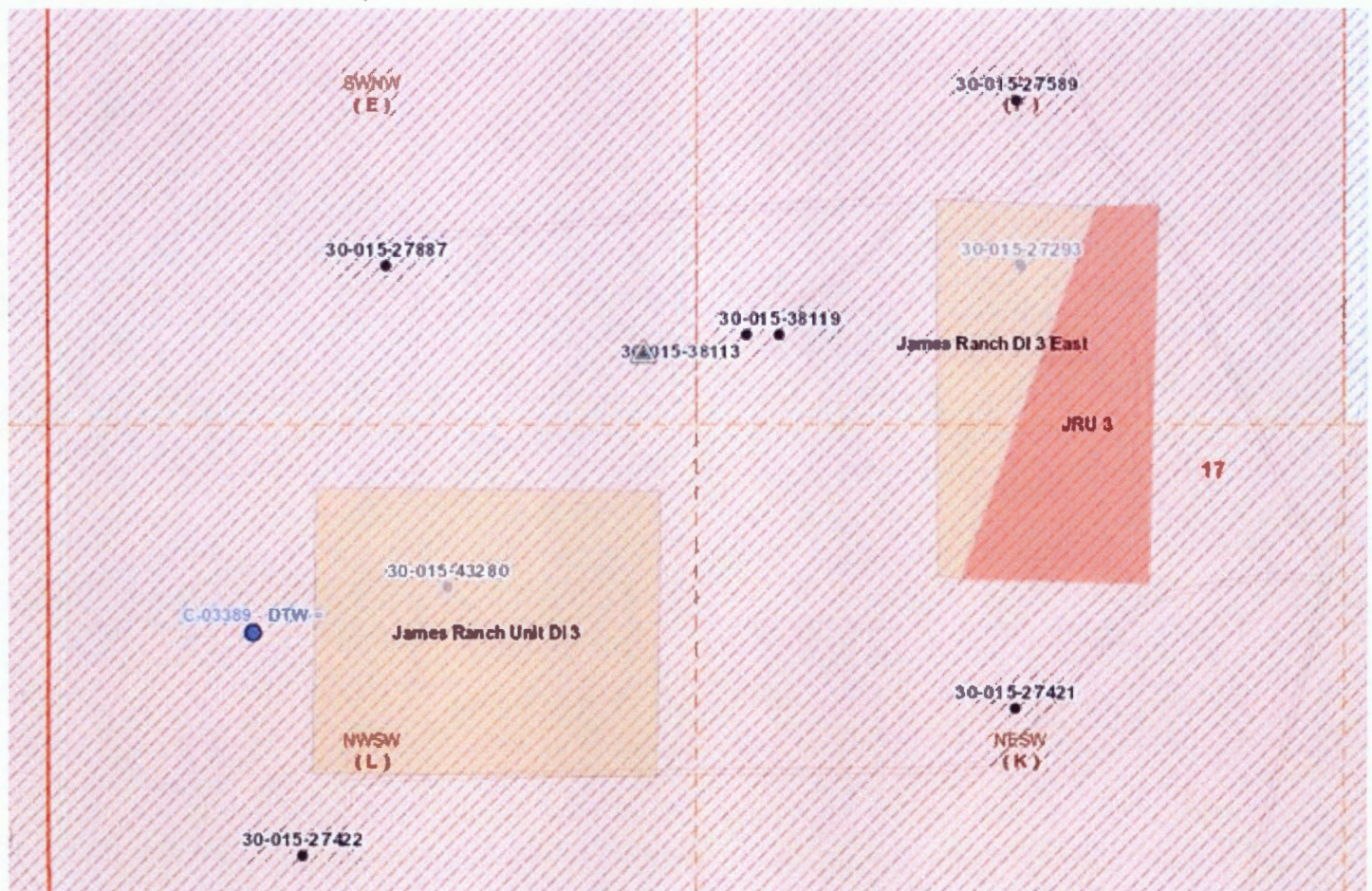


## Goetze, Phillip, EMNRD

**From:** Goetze, Phillip, EMNRD  
**Sent:** Monday, August 26, 2019 1:48 PM  
**To:** 'Cherry, Tracie'  
**Cc:** Rutley, James; Murphy, Kathleen A, EMNRD  
**Subject:** Application for JRU 17 Skylark Fed SWD No. 1 - Compliance With Order No. R-111-P

Tracie:

Review of the proposed James Ranch Unit 17 Skylark Federal SWD No. 1 (2490 FNL & 1223 FWL; UL E, Sec 17, T23S, R31E, NMPM) shows it has a surface location that is not within a proposed drilling island as shown on the BLM's most recent DI summary map. As such, the Division cannot approve this application without following the procedures detailed in Order R-111-P since this location is within the authority of this order. Further review of BLM's MTP and Potash plat indicates federal ownership of the mineral estate (and surface estate) with a Potash Preference Right Lease No. NM 069499.



Pursuant to Commission Order R-111-P, the applicant will have to obtain a determination as provided in Ordering Paragraph (G) *Designation of Drillable Location for Wells*. I suggest that you contact Mr. Rutley to consult with him on this matter. The application will be suspended until the matter is resolved. PRG

Phillip Goetze, PG



Township 23 South Range 31 East of the New Mexico Principal Meridian, New Mexico

County: Eddy - 015

BLM Field Office: Carlsbad

BUREAU OF LAND MANAGEMENT  
STATUS OF PUBLIC DOMAIN  
LAND AND MINERALS

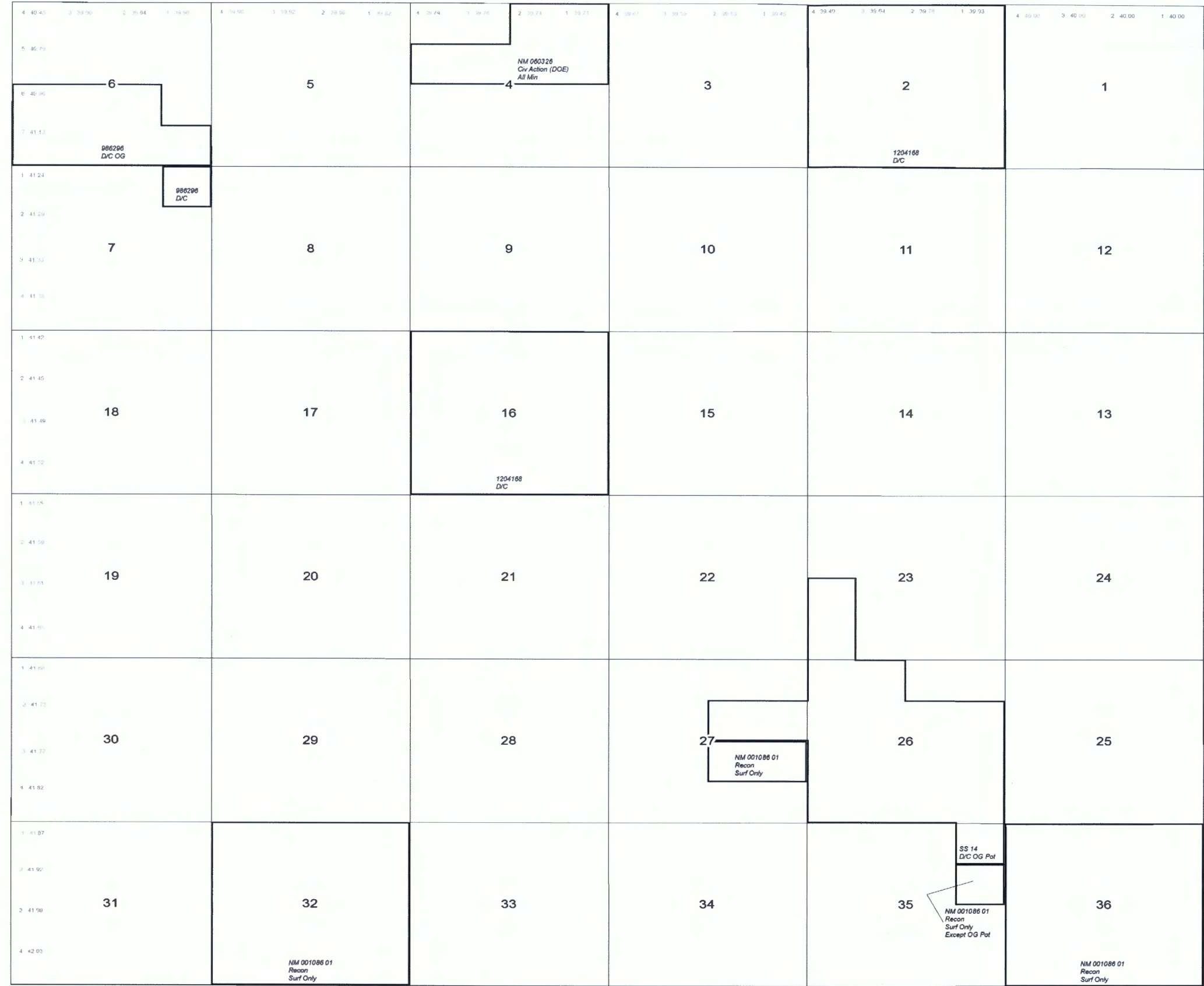
MTP

T23S R31E

Entire Township included  
EO Wdl NM 1 Pot Res 6 (3/11/1926)  
Revised Pot Area of 10/16/1951, SO 5/11/1965  
Designed Pot Area 10/7/1975  
Cl of Public Lands NM 0560202 (Cl No 30-06-01)

IN 1977 DOE CONDEMNED THE EXISTING LEASEHOLD INTEREST  
IN THIS AREA. THIS DOES NOT PRECLUDE OIL AND GAS LEASING  
Sec 5: Lot 4, SWNW,W2SW  
Sec 6: Lots 3,4

DUE TO WIPP SITE LOCATION IN T22S R31E CONTACT DOE  
PRIOR TO LEASING



NOTE: The Serial Numbers displayed are in the Bureau's LR2000 system format.  
If there is a zero in the 7<sup>th</sup> position (from the right), the serial number has a "prefix" zero;  
example NM 0012345.  
If there is not a zero in the 7<sup>th</sup> position (from the right) then the serial number does not have a "prefix" zero;  
example NM 012345.

**CAVEAT STATEMENT**  
This plat is the Bureau's Record of Title, and should be used only as a graphic display of the township survey data. Records hereon do not reflect title changes which may have been affected by lateral movements of rivers or other bodies of water. Refer to the cadastral surveys for official survey information.

T 23 S  
R 31 E  
NMPM

**BLM Field Office: Carlsbad**

BUREAU OF LAND MANAGEMENT  
STATUS OF PUBLIC DOMAIN  
LAND AND MINERALS

**T23S R31E**

Entire Township included  
EO Wdl NM 1 Pot Res 6 (3/11/1926)  
Revised Pot Area of 10/16/1951, SO 5/11/1965  
Designed Pot Area 10/71975  
Cl of Public Lands NM 0560202 (Cl No 30-06-01)

IN 1977 DOE CONDEMNED THE EXISTING LEASEHOLD INTEREST  
IN THIS AREA. THIS DOES NOT PRECLUDE OIL AND GAS LEASING  
Sec 5: Lot 4, SWNW,W2SW  
Sec 6: Lots 3,4

DUE TO WIPP SITE LOCATION IN T22S R31E CONTACT DOE  
PRIOR TO LEASING



**NOTE:** The Serial Numbers displayed are in the Bureau's LR2000 system format.

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- If there is not a zero in the 7<sup>th</sup> position (from the right) then the serial number does not have a "prefix" zero; example NM 012345.

T 23 S  
R 31 E  
NMPM

0 0.25 0.5 1 Mile

**1 inch = 30 chains**

**1 = 80,000**

### CAVEAT STATEMENT

**CAVEAT STATEMENT**  
This plat is the Bureau's Record of Title, and should be used only as a graphic display of the township survey data. Records hereon do not reflect title changes which may have been affected by lateral movements of rivers or other bodies of water. Refer to the redgetal survey for official survey information.



## Goetze, Phillip, EMNRD

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**From:** Ramona Hovey <ramona@lonquist.com>  
**Sent:** Thursday, October 3, 2019 10:17 AM  
**To:** Goetze, Phillip, EMNRD  
**Subject:** [EXT] Withdrawal of OWL's Noonan SWD #1 application  
**Attachments:** Noonan\_Withdrawal.pdf

Phil,

We would like to withdrawn OWL's Noonan SWD #1 application, per the attached letter which has also been mailed.

Regards,

**Ramona Hovey**  
Sr. Petroleum Engineer

**LONQUIST & CO. LLC**



Office: 512-600-1777 Cell: 512-585-0654

12912 Hill Country Blvd., Suite F-200, Austin, Texas, 78738

[ramona@lonquist.com](mailto:ramona@lonquist.com) • [www.lonquist.com](http://www.lonquist.com)

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# LONQUIST & CO. LLC

AUSTIN  
HOUSTON

PETROLEUM  
ENGINEERS

ENERGY  
ADVISORS

WICHITA  
CALGARY

[www.lonquist.com](http://www.lonquist.com)

October 3, 2019

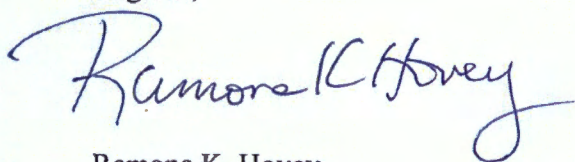
New Mexico Energy, Minerals, and Natural Resources Department  
Oil Conservation Division District IV  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
(505) 476-3440

**RE: NOONAN SWD NO. 1**

To Whom It May Concern:

On behalf of OWL SWD Operating, LLC, we would like to withdrawn the Noonan SWD #1 application.

Regards,



Ramona K. Hovey  
Sr. Petroleum Engineer  
Lonquist & Co., LLC  
(512) 600-1777  
[ramona@lonquist.com](mailto:ramona@lonquist.com)

## Goetze, Phillip, EMNRD

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**From:** Goetze, Phillip, EMNRD  
**Sent:** Tuesday, August 27, 2019 10:40 AM  
**To:** 'Cherry, Tracie'  
**Cc:** Jones, William V, EMNRD; McMillan, Michael, EMNRD; Rose-Coss, Dylan H, EMNRD  
**Subject:** Application for JRU 17 Skylark Fed SWD No. 1 - Protest of OWL's Noonan SWD No. 1 and of Blackbuck's Key Maker  
**Attachments:** OWL Noonan XTO Protest.pdf; BlackBuckResources KeyMaker XTO Protest.pdf

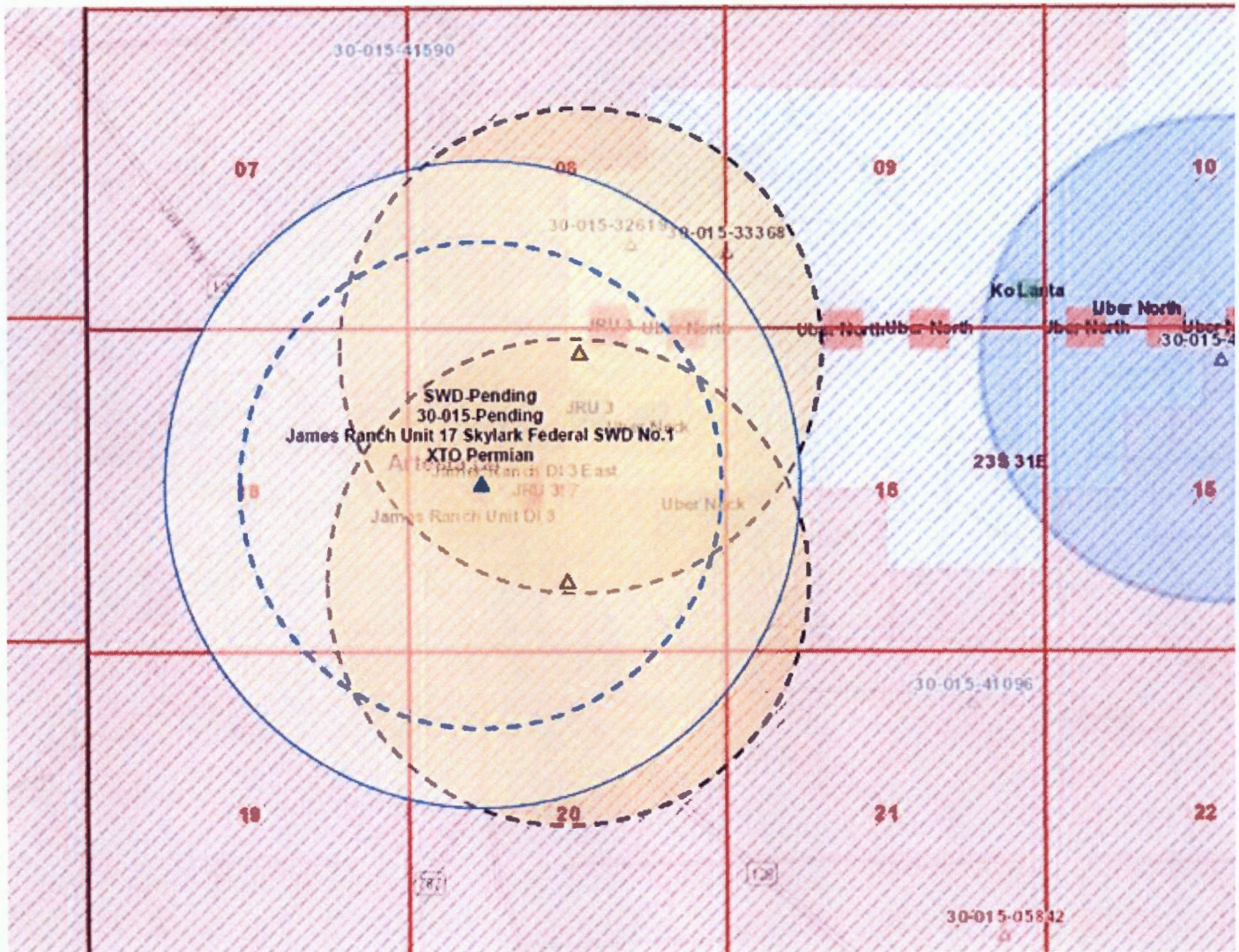
RE: James Ranch Unit 17 Skylark Fed SWD No. 1; Admin. Appl. No. pMAM1907138568

Tracie:

In addition to the issue around the potash assessment, there is the issue of protested applications. Both competing wells are within the  $\frac{3}{4}$ -mile radius buffer currently used as a screening tool by the Division for Devonian wells:

1. Noonan SWD #1; 309 FNL & 2342 FEL; UL B-S17-23S-31E; pMAM1828849834; OWL SWD Operating; application received: 10/10/2018
2. Key Maker SWD #1: 1067 FSL & 2629 FEL; UL O-S17-23S-31E; pMAM1908148579; Blackbuck Resources, LLC; application received: 3/22/2019





Based on the current processing procedure, the OWL SWD Operating application pre-dates XTO's application (10/10/2018 vs. 3/11/2019) and has the initial claim. XTO has protested both applications (see attachments), but there has been no indication of a resolution with either applicant. For the Skylark to proceed in the administrative process, the status of the Noonan SWD No. 1 must be resolved. This would be either a resolution between XTO and OWL (that is acceptable to the Division) or to proceed to hearing for a determination. At this point, the Skylark application cannot proceed and remains suspended.

Please review the content and contact me with any questions. PRG

Phillip Goetze, PG  
 Engineering Bureau, Oil Conservation Division  
 New Mexico Energy, Minerals and Natural Resources Department  
 1220 South St. Francis Drive, Santa Fe, NM 87505  
 Direct: 505.476.3466  
 E-mail: [phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

