Initial

Application

Part I

Received: <u>06/28/2019</u>

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

RECEIVED: 06/28/2019	REVIEWER:	TYPE: SWD	PP NO: pMAM1918228720

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION



NEW MEXICO OIL CONSERVAN	OIL DIVIDION
- Geological & Engineering Br	ureau – •••••••••••••••••••••••••••••••••••
1220 South St. Francis Drive, Santa F	e, NM 87505
ADMINISTRATIVE APPLICATION THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVI	NS FOR EXCEPTIONS TO DIVISION RULES AND
Applicant: XTO Permian Operating, LLC	OGRID Number: 373075
Vell Name: CC SR 24 RIBEYE SWD 1	API: TBA
ool: Devonian; SWD	Pool Code: 96101 Should 97869
SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED INDICATED BELOW	O TO PROCESS THE TYPE OF APPLICATION
1) TYPE OF APPLICATION: Check those which apply for [A] A. Location – Spacing Unit – Simultaneous Dedication NSL NSP _(PROJECT AREA) NSP _(PROJECT AREA)	SWD-2175
B. Check one only for [1] or [1] [1] Commingling – Storage – Measurement DHC CTB PLC PC OLS [11] Injection – Disposal – Pressure Increase – Enhance WFX PMX SWD IPI EOR 2) NOTIFICATION REQUIRED TO: Check those which apply. A. Offset operators or lease holders	
 B. Royalty, overriding royalty owners, revenue owner 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 public H. No notice required 	Content Complete
CERTIFICATION: I hereby certify that the information submadministrative approval is accurate and complete to the understand that no action will be taken on this application notifications are submitted to the Division.	best of my knowledge. I also
Note: Statement must be completed by an individual with ma	nagerial and/or supervisory capacity.
	6/26/19
Cheryl Rowell, Regulatory Coordinator	Date '
Print or Type Name	420 574 0205
	432-571-8205

Cheryl Rowell
Signature

Phone Number cheryl_rowell@xtoenergy.com

e-mail Address

McMillan, Michael, EMNRD

From: Rowell, Cheryl < Cheryl_Rowell@xtoenergy.com>

Sent: Friday, June 28, 2019 8:44 AM **To:** McMillan, Michael, EMNRD

Subject: [EXT] SWD Application Submitted - CC 24 Ribeye SWD 1

Attachments: Submitted 6 27 19 _ CC 24 Ribeye SWD 1.pdf

Mr McMillan,

I have submitted the attached SWD application for the CC 24 Ribeye SWD 1 by certified mail on 6/27/19 to your office in Santa Fe.

Once received if you have any questions you can contact me at the number below.

Regards, Cheryl

Cheryl Rowell

Regulatory Coordinator

EN ERGY
An ExxonMobil Subsidiary

6401 Holiday Hill Rd, Bldg 5

Midland, TX 79701 Phone: 432-571-8205 STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

	AFFEICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: XTO PERMIAN OPERATING, LLC
	ADDRESS: 6401 HOLIDAY HILL RD., BLDG 5, MIDLAND, TX 79707
	CONTACT PARTY: Cheryl Rowell PHONE: 432-571-8205
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 Yes 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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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: Cheryl Rowell TITLE: Regulatory Coordinator
	SIGNATURE: Cheryl Rowell DATE: 6/26/19
*	E-MAIL ADDRESS: cheryl_rowell@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.

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.

III. Well Data

A. Lease name:

CC SR 24 Ribeye SWD

API # TBA

Well #:

1

Section:

24

Township: Range:

25S

29E

Footage:

110 FSL & 419 FEL

2) Casing Info:

Casing size	Set depth	Sacks cmt	Hole size	TOC	Method
18-5/8", 87.5# J-55 BTC	860'	1520 sxs C	24	Surf	Circ
13-3/8" 68# HCL-80 BTC	3,350'	1970 sx Poz/C	17-1/2"	Surf	Circ
		840 sx C			
9-5/8" 53.5# HCP-110 BTC	11,140'	Stage 1 1065 sxs POZ/H	12-1/4"	Surf	Circ
DV tool @ 3450'		Stage 2 2165 sxs POZ/H			
7" 32# HCP-110 BTC	10,500'-16060'	790 sx Poz/H	8-1/2"	10,700'	Circ

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

Tapered String

5-1/2", 17#, P-110 IPC to 10,200'

4-1/2", 13.65#, P-110 IPC tubing @ 10,200'-15,960'

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

Baker Series F nickle plated permanent packer @ 15,960'

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

SWD; Devonian

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

Open hole, 16,060-17,186' (or to the base of the Fusselman as determined by mud logs)

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

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

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: Cherry Canyon (+/-4107') Brushy Canyon (+/-5782'),

Avalon/Bone Spring (+/-7942'), Wolfcamp (+/-10,257'), Atoka (+/-12,867)Morrow (+/-13,477')

Lower: None

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

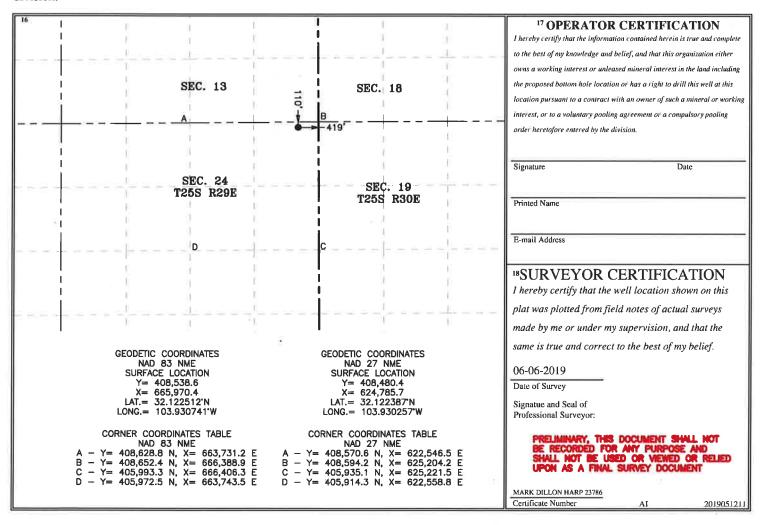
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

				70111101	THID HER	LAGE DEDIC	ZITIOITI L	× 1		
1	API Numbei	•	1	² Pool Code			3 Pool Na	me		
	30-015-		1							
⁴ Property (Code				5 Property N	Name			0.1	Well Number
					CC SR 24 RIBI	EYE SWD				1
7 OGRID I	No.			40	8 Operator !	Name		- "		⁹ Elevation
260737	7				XTO ENERG	SY, INC.				3,154'
					¹⁰ Surface I	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East	/West line	County
Α	24	25 S	29 E		110	NORTH	419	EAS	ST	EDDY
			п Во	ttom Hole	Location If	Different From	n 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 o	Infill 14 Con	solidation	Code 15 Ord	er No.					,
	1									

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.



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.
 Maps attached (Exhibit A & Exhibit B).
- 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.
 (Exhibit C)
- **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, 3212 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 amouts from Atoka and Morrow. An analysis of water to be disposed is attached (Exhibit D)
- 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 are within one mile of the 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: Carbonates (Dolomite and Limestone)

Geological Name: Devonian (Silurian-Devonian)

Thickness: Est. 1,147'

Depth: Est. 16,039' to 17,186' (includes 100 ft. b

The Dewey Lake Red Beds consisting of alluvial sandstones, siltstones, and shales are present from the surface to the top of the Rustler Anhydrite. The top of the Rustler Anhydrite is estimated to be at approximately 720 feet below the surface in this CC SR 24 Ribeye 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).

Based on published maps, the Capitan Reef Aquifer is not present in this area.

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, there are no active water wells or points of diversion within a one-mile radius of the proposed well. (Exhibit E)

Applicants for disposal wells must make an affimative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydology connection between the disposal zone and any underground sources of drinking water.

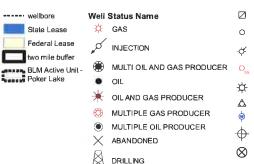
(Exhibit F)

XIV. Proof of Notice (Exhibit G)

Corral Canyon 24 Ribeye SWD #1 Proposed SWD Schematic (June 26, 2019) County: Eddy SHL: 110' FNL, 419' FEL Sec 24, T 25S, R 29E API# N/A BHL: 110' FNL, 419' FEL Elevation GL 3154', KB 3186' (32' AGL) Sec 24, T 25S, R 29E Rig: TBD (RKB 32') Geology Casing & Cement Wellhead Hole Size **General Notes** TVD Formation (Tech Data Sheet) Lead (100% OH excess) 24" 540 sx 12 8ppg Class C 720' Rustler Top of Tail @ 0' Tail (100% OH excess) 980 sx 14 8ppg Class C Top of Tail @ 400' 18-5/8" 87.5# J-55 BTC 860' MD 17-1/2" 986' Top Salt Lead (150% OH excess) 1970 sx 12.8ppg Poz/C Top of Lead @ 0 Tail (100% OH excess) 840 sx 14.8ppg Class C Top of Tail @ 2600' 3,244' Base Salt 13-3/8" 68# HCL-80 BTC 3350' MD Stg 2 Lead (100% OH excess) 12-1/4" 3,451' Delaware 665 sx 11.5ppg Poz/H Top of Lead @ 0' 5-1/2", 17#, P-110 IPC tbg to 10,200' Stg 2 Tail (100% OH excess) 400 sx 14 8ppg Poz/H Top of Tail @ 2600' DV tool at 3450' Crossover 10,200' Stg 1 Lead (100% OH excess) 1610 sx 11.5ppg Poz/H 7,238' Bone Spring 10700' MD Top of Lead @ 3450' Stg 1 Tail (100% OH excess) 4-1/2", 13.65#, P-110 IPC tbg 555 sx 14.8ppg Poz/H Top of Tail @ 10140' 10,466' Wolfcamp 10,000'-15,512' 10,994' Wolfcamp B 9-5/8" 53.5# HCP-110 BTC 11140' MD 8-1/2" Tail (40% OH excess) 790 sx 14.5ppg Poz/H Top of Tail @ 10700' 12,929' Strawn 13,058' Atoka 13,854' Morrow Baker Series F nickle plated 15,476' Mississippian Lm permancent packer at 16,009' 15.696' Woodford 16,039' Devonian 16060' MD 7" 32# HCP-110 BTC 17,036' Base of Fusselman 17,186' TVD at BHL Open hole completion 17.186' MD 17,186' TVD **Approvals** Prepared by: Peer Reviewed by: __ Date Reviewed by: Approved by: ___

CC SR 24 Ribeye SWD 1 Eddy County, New Mexico

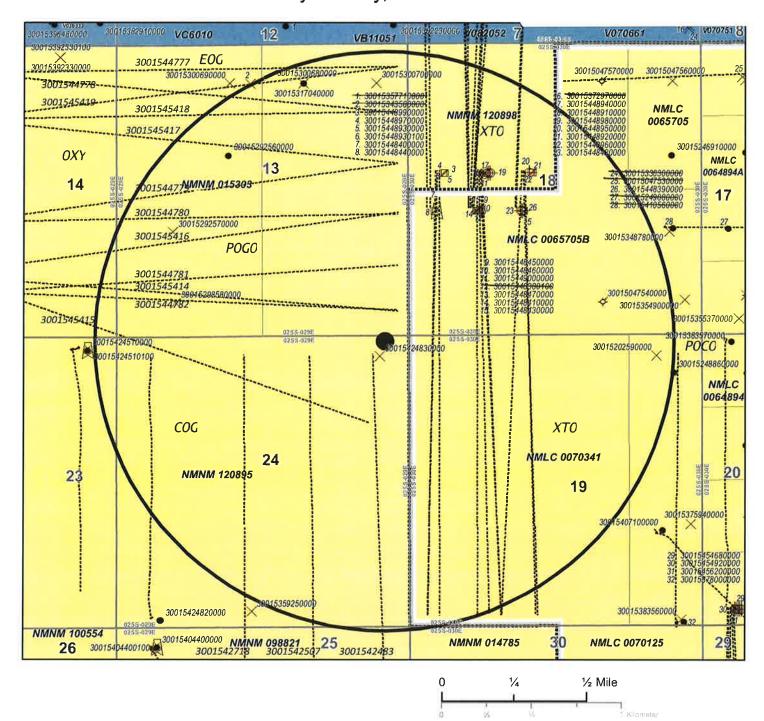


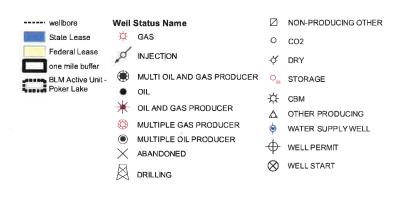




ALAMO CORPORATION
BASS PERRY R
BENNETT J GLENN
BOPCO LP
CALVIN F TENNISON
CARPER DRLG CO
CHEVRON U S A INC
COG OPERATING LLC
COG PROD LLC
ENDEAVOR ENERGY RES
EOG RESOURCES INC
GIANT OPERATING LLC
HARVARD PET CO LLC

known well operators in buffer
ORATION LOWE RALPH L
R MARBOB ENERGY CORP
LENN MOBIL PRDUCNG TX&NM
OXY U S A INC
NISON POCO RESOURCES LLC
G CO POGO PRODUCING CO
6 A INC POOL FRED DRLG INC
ING LLC STEWRT J RAY
LC WESTERN STATES PROD
NERGY RES XTO ENERGY INC
ICCS INC XTO PERMAN OPER LLC
TING LLC YATES DRILLING CO





known well operators in buffer ALAMO CORPORATION OXY U S A INC POGO PRODUCING CO WESTERN STATES PROD XTO ENERGY INC XTO PERMIAN OPER LLC

CC SR 24		SI	
	CC SR 24 Ribeye SWD 1		
E 1	ye SWD 1	CC 5R 24 B	I

API Wellname	Sec	Twn	Rng	Unit Ltr	Operator	Pool	West Constitution
30-015-24886 POKER LAKE #065	19	255	30F	A	POCO Recourses 110	[63350] CODDA! CARIXON DEL	Well Status
30-015-29256 BRADLY 13 FFDFRAL #001	0.0	0 11 0	1 1	(1	OCC VESOUITES FEC	Lassoy CORRAL CANYON, DELAWARE	Active
30-015-31704 RRADIV 13 EEDEBAL #0040	T	200	29E	_	OXY USA INC	[13365] CORRAL CANYON, DELAWARE, WEST	Active
SO OUT SOOTS PRANTY AS THE WORLD AND THE WORLD	13	522	29E	80	OXY USA INC	[13365] CORRAL CANYON, DELAWARE, WEST	Active
	13	255	29E	Σ	POGO PRODUCING CO	No Data	Cancelled APD
	13	255	36Z	В	POGO PRODUCING CO	No Data	Cancelled ADD
	13	255	29E	٧	POGO PRODUCING CO	N Spare	Cancered Arts
30-015-44838 MUY WAYNO 18 FEDERAL #102H	18	255	30E	m	XTO ENERGY INC	[98220] PDI E SAGE MOI FOAMB (CAS)	Cancelled APD
30-015-44839 MUY WAYNO 18 FEDERAL #104H	18	255	305	n'	XTO ENERGY INC		New (Not Urilled/Completed)
30-015-44840 MUY WAYNO 18 FEDERAL #121H	1 1	250	305) (1	VED ENERGY, INC.	[36220] FORFLE SAGE, WOLFLAMPI (GAS)	New (Not Drilled/Completed)
30-015-44841 MIIV WAVNO 12 EEDEDAL #1000	9 6	2 6	100	n (ALC ENERGY, INC	[98220] PURPLE SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
	TQ	222	305	7)	XTO ENERGY, INC	[98220] PURPLE SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
20-015-44642 MIDT WAYNO 18 FEDERAL #123H	18	255	30E	¥	XTO ENERGY, INC	[98220] PURPLE SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
30-015-44645 MIOT WAYNO 18 FEDERAL #124H	18	255	30E	¥	XTO ENERGY, INC	[98220] PURPLE SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
						[96473] PIERCE CROSSING, BONE SPRING, EAST; [98220] PURPLE	
3U-U15-44844 MIUY WAYNO 18 FEDERAL #161H	18	255	30E	m	XTO ENERGY, INC	SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
30-015-44845 MUY WAYNO 18 FEDERAL #703H	18	255	30E	ĸ	XTO ENERGY, INC	[96473] PIERCE CROSSING, BONE SPRING, EAST	New (Not Drilled/Completed)
	18	255	30E	m	XTO ENERGY, INC	SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
30-015-44847 MUY WAYNO 18 FEDERAL #903H	18	255	30E	m	XTO ENERGY, INC	[96473] PIERCE CROSSING RONE SPRING FAST	New (Not Orillad/Completed)
30-015-44891 POKER LAKE UNIT 18 BD #103H	18	255	30E	2	XTO PERMIAN OPFRATING LLC.	[98220] PLIRDLE SAGE WOLFCAMP (GAS)	Now (Not balled (Completed)
30-015-44892 POKER LAKE UNIT 18 BD #104H	18	255	30E	ш	XTO PERMIAN OPERATING LLC	[98220] DIRDIE SAGE WOLDAND (CAS)	New (Not Diffed Completed)
30-015-44893 POKER LAKE UNIT 18 BD #121H	2	250	30F		VIO DEDMINAN ODEDATING III	(Second Figure 1 to CT (WOLF CAME)	New (Not Drilled/Completed)
	9 6	7 1	100	7 (ALO PENINIAN OPERALING LLC.	(9822U) PURPLE SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
	18	522	30E	2	XTO PERMIAN OPERATING LLC.	[98220] PURPLE SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
	18	255	30E	ш	XTO PERMIAN OPERATING LLC.	[98220] PURPLE SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
30-015-44896 POKER LAKE UNIT 18 BD #124H	18	255	30E	ıL	XTO PERMIAN OPERATING LLC.	[98220] PURPLE SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
						[96473] PIERCE CROSSING, BONE SPRING, EAST; [98220] PURPLE	
30-015-44897 POKER LAKE UNIT 18 BD #161H	18	255	30E	2	XTO PERMIAN OPERATING LLC.	SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
30-015-44898 POKER LAKE UNIT 18 BD #703H	18	255	30E	u.	XTO PERMIAN OPERATING LLC.	[96473] PIERCE CROSSING, BONE SPRING, EAST	New (Not Drilled/Completed)
100 00 First Tyle 2 070 00 000 000 000 000 000 000 000 00		į				[96473] PIERCE CROSSING, BONE SPRING, EAST; [98220] PURPLE	
SO-OLD-144099 PONER LANE ONIT 18 BU #101H	100	255	30E	2	XTO PERMIAN OPERATING LLC.	SAGE, WOLFCAMP (GAS)	New (Not Drilled/Completed)
30-015-44900 POKER JAKE LINIT 18 BRITSHY DRAW #903H	10	250	100	·	CHARLES	[90473] PIENCE CNOSSING, BOINE SPRING, EAST; [98220] PURPLE	
	10	200	2 6	7 (ALC PERINIPAIN OPERALING LLC.	SAGE, WOLFCAMIP (GAS)	New (Not Drilled/Completed)
	18	522	30E	0	ALAMO CORPORATION	WILDCAT	Plugged (Site Released
	19	255	30E	∢	WESTERN STATES PRODUCING CO	CORRAL CANYON, DELAWARE	Plugged (Site Released
30-015-29257 BRADLY 13 FEDERAL #002	13	255	29E	_	POGO PRODUCING CO	[13365] CORRAL CANYON, DELAWARE, WEST	Plugged (Site Released

Wells that treminate within the 1 mile radius							
API Wellname	Sec	Twn	Rng	Unit Ltr	Operator	Pool	Well Status
30-015-42483 CABO WABO 25 FEDERAL COM #004H	25	255	29E	Ы	COG OPERATING LLC	[96238] CORRAL DRAW, BONE SPRING	New (Not Drilled/Completed)
30-015-42507 CABO WABO 25 FEDERAL COM #003H	25	258	29E	0	COG PRODUCTION, LLC	[6217] WILLOW LAKE BONE SPRING SOUTHEAST	Active
30-015-42718 CABO WABO 25 FEDERAL COM #002H	25	258	29E	Z	COG PRODUCTION, LLC	[96217] WILLOW LAKE BONE SPRING SOLITHEAST	New (Not Drilled/Completed)
30-015-44777 CORRAL DRAW 14 13 FEDERAL #021H	14	258	29E	В	OXY USA INC	[96473] PIFRCE CROSSING BONE SPRING FAST	New (Not Diffied Completed)
30-015-44778 CORRAL DRAW 14 13 FEDERAL #022H	14	258	29E	В	OXY USA INC	[96473] PIERCE CROSSING BONE SPRING FAST	New (Not Diffice Completed)
30-015-44779 CORRAL DRAW 14 13 FEDERAL #023H	14	25S	29E	7	OXY USA INC	[96473] PIFRCE CROSSING RONE SPRING FACT	Now (Not Drilled/Completed)
30-015-44780 CORRAL DRAW 14 13 FEDERAL #024H	14	255	29E		OXY USA INC	[96473] PIFRCE CROSSING, BONE SPRING, FAST	New (Not Diffled/Completed)
30-015-44781 CORRAL DRAW 14 13 FEDERAL #025H	14	25S	29E	0	OXY USA INC	[96473] PIERCE CROSSING BONE SPRING FACT	New (Not Dirlied/Completed)
30-015-44782 CORRAL DRAW 14 13 FEDERAL #026H	14	258	29E	0	OXY USA INC	[96473] PIFRCE CROSSING BONE SPRING FAST	New (Not Dilled/Completed)
30-015-45414 CORRAL DRAW 14 13 FEDERAL #036H	14	258	29E	Z	OXY USA INC	[96473] PIERCE CROSSING, BONE SPRING, EAST	New (Not Drilled/Completed)
30-015-45415 CORRAL DRAW 14 13 FEDERAL #035H	14	255	29E	Z	OXY USA INC	[96473] PIERCE CROSSING, BONE SPRING, EAST	New (Not Drilled/Completed)
30-015-45416 CORRAL DRAW 14 13 FEDERAL #034H	14	258	29E	Z	OXY USA INC	[96473] PIFRCE CROSSING, BONE SPRING FAST	New (Not Diffed/Completed)
30-015-45417 CORRAL DRAW 14 13 FEDERAL #033H	14	258	29E	Ů	OXY USA INC	[96473] PIERCE CROSSING BONE SPRING FAST	New (Not Drilled/Completed)
30-015-45418 CORRAL DRAW 14 13 FEDERAL #032H	14	258	29E	В	OXY USA INC	[96473] PIFRCE CROSSING BONE SPRING FAST	New (Not Drilled/Completed)
30-015-45419 CORRAL DRAW 14 13 FEDERAL #031H	14	258	29E	В	OXY USA INC	[96473] PIERCE CROSSING, BONE SPRING, EAST	New (Not Drilled/Completed)

NALCO Champion

An Ecolab Company

Complete Water Analysis Report

Customer: XTO ENERGY INC

Region: Loving, NM
Location: Golden Child
System: H2O Discharge

Equipment: GOLDENCHILD 6 STATE 1SWD

Sample Point: Transfer Pump

Sample ID: AM70640
Acct Rep Email: gregory.oswood@ecolab.com

Collection Date: 03/18/2019

Receive Date: 04/03/2019
Report Date: 04/04/2019

Location Code: 326879

F	iel	d	A	nal	V	sis
				-	A 4	

Bicarbonate 122 mg/L Dissolved CO2 Dissolved H2S 40 mg/L 0 mg/L Pressure Surface 70°F 250 psi Temperature pH of Water 5.7 Oil per Day 0 B/D Gas per Day 0 Mcf/D Water per Day 15000 B/D

Sample Analysis

Calculated Gaseous CO2 9.64% Calculated pH 5.70 Conductivity (Calculated) 217091 μS - cm3 lonic Strength 2.66 Resistivity 0.046 ohms - m Specific Gravity 1.102

Total Dissolved Solids 140592 mg/L

Cations

				Callons					
Iron	21.1	mg/L	Manganese	0.912	mg/L	Barium	1.33	mg/L	
Strontium	651	mg/L	Calcium	7340	mg/L	Magnesium	1050	mg/L	
Sodlum	46800.00	mg/L	Potassium	786	mg/L	Boron	53.4	mg/L	
Copper	0.002	mg/L	Nickel	0.026	mg/L	Zinc	0.142	mg/L	
Lead	0.096	mg/L	Cobalt	0.029	mg/L	Chromium	0.009	mg/L	
Silicon	9.47	mg/L	Aluminum	Not Detected	mg/L	Molybdenum	0.009	mg/L	
Phosphorus	0.152	mg/L							

Anions

Bromide 782.805 mg/L Chloride 82478 mg/L Sulfate 495.263 mg/L

			PTB	Valu	е					Sa	iturat	ion In	idex	
	Barite PTB	Calcite PTB	Celestite PTB	Gypsum PTB	Halite PTB	Iron Carbonate PTB	iron Sulfide PTB		Barite SI	Calcite Si	Celestite SI	Gypsum SI	Halite SI	Iron Carbonate Si
50°	0.62	0.00	54.19	0.00	0.00	0.00	0.00	50°	0.66	-0.34	0.13	-0.48	-1.15	-1,57
75°	0.49	0.00	54.81	0.00	0.00	0.00	0.00	75°	0.42	-0.27	0.13	-0.50	-1.17	-1.40
100°	0.31	0.00	64.02	0.00	0.00	0.00	0.00	100°	0.21	-0.19	0.16	-0.51	-1.19	-1.23
125°	0.07	0.00	78.03	0.00	0.00	0.00	0.00	125°	0.04	-0.10	0.19	-0.50	-1.20	-1.08
150°	0.00	0.00	94.50	0.00	0.00	0.00	0.00	150°	-0.10	0.00	0.24	-0.50	-1.20	-0.93
175°	0.00	3.24	111,77	0.00	0.00	0.00	0.00	175°	-0.22	0.11	0.29	-0.51	-1.21	-0.80
200°	0.00	6.51	128.70	0.00	0.00	0.00	0.00	200°	-0.32	0.22	0.29	-0.53	-1,21	-0.67
225°	0.00	9.69	144 65	0.00	0.00	0.00	0,00	225°	-0.41	0.34	0,40	-0.57	-1.22	-0.56
250°	0,00	12.72	159.31	0.00	0.00	0.00	0.00	250°	-0.48	0.47	0.46	-0.62	-1:22	-0.45
275°	0.00	15.55	172.59	0.00	0.00	0.00	0.00	275°	-0.56	0.60	0.51	-0.66	-1,22	-0.36
300°	0,00	18.12	184.55	0.00	0.00	0.00	0.00	300°	-0.62	0.74	0.56	-0.70	-1.21	-0.28
325°	0,00	20.43	195.36	0.00	0.00	0.00	0,00	325°	-0.69	0.86	0.61	-0.71	-1.21	-0.22
350°	0,00	22.45	205.13	0.00	0.00	0.00	0.00	350°	-0.76	1.01	0.66	-0.67	-1.20	-0.17
375°	00,0	24.19	213.92	0.00	0.00	0.00	0.00	375°	-0.84	1.14	0.71	-0.57	-1.19	-0.14
400°	0.00	25.65	221.64	0.00	0.00	0.00	0.00	400°	-0.93	1.27	0.75	-0.37	-1.18	-0.13

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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O5/21/2019

Page 1 of 2



An Ecolab Company

Complete Water Analysis Report

Customer: XTO ENERGY INC

Region: Loving, NM Location: Golden Child System: H2O Discharge Equipment: GOLDENCHILD 6 STATE 1SWD

Sample Point: Transfer Pump

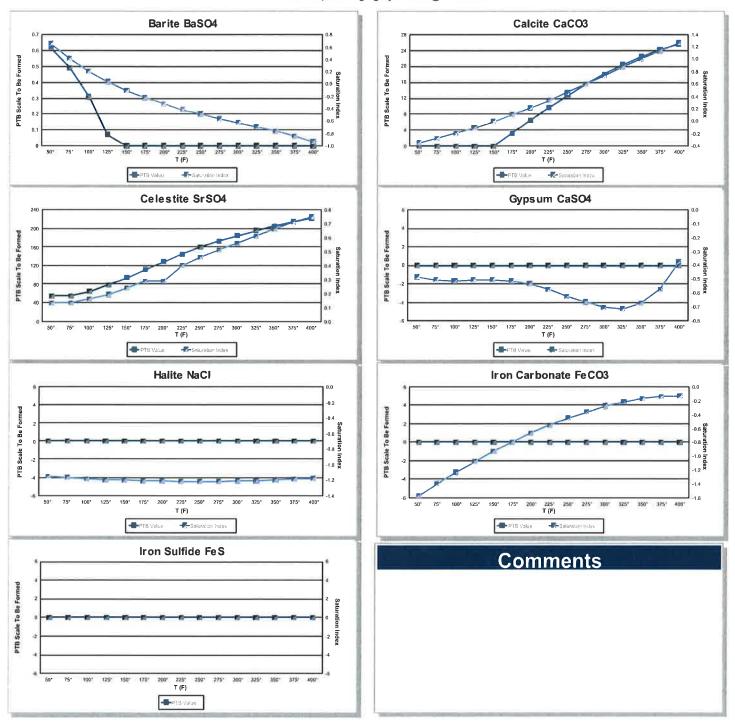
Sample ID: AM70640

Acct Rep Email: gregory.oswood@ecolab.com

Collection Date: 03/18/2019

Receive Date: 04/03/2019 Report Date: 04/04/2019

Location Code: 326879



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.

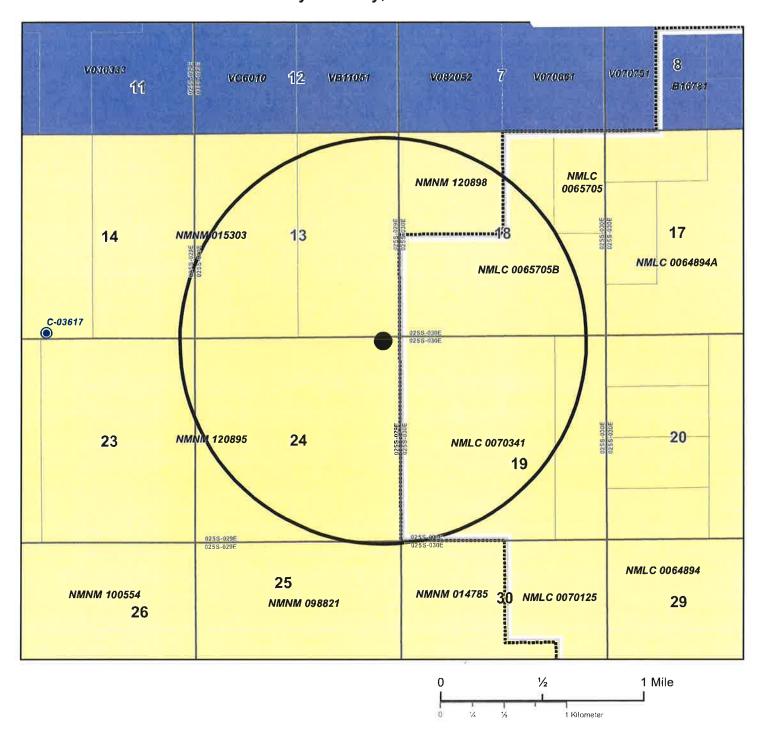
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O5/21/2019

Page 2 of 2

CC SR 24 Ribeye SWD 1 Eddy County, New Mexico

Exhibit E





CERTIFIED MAILING LIST XTO Energy CC SR Ribeye SWD #1

SURFACE OWNER:

Bureau of Land Management

Certified #7013 1710 0001 1160 4838

620 E. Greene Street

Carlsbad, NM 88220-6292

OFFSET OPERATOR NOTIFICATIONS:

OXY USA Inc PO Box 4294

Houston, TX 77210-4294

Certified #7013 1710 0001 1160 4852

COG Operating, LLC

PO Box 2064

Midland, TX 79702

Certified #7013 1710 0001 1160 4876

EOG Resources, Inc

PO Box 2267

Midland, TX 79702

Certified #7013 1710 0001 1160 4845

Atlantic Operating, Inc.

PO Box 3759

Midland, TX 79702

Certified #7018 1130 0001 5531 4869

POCO Resources LLC 3307 E Castleberry Rd

Artesia, NM 88210

Certified #7013 1710 0001 1160 4883

GRAZING LEASEE:

HENRY MCDONALD OR DRAPER BRANTLEY JR.

PO BOX 597

LOVING, NM 88256

Certified #7013 1710 0001 1160 4890

I, Cheryl Rowell, do hereby certify a copy of XTO Energy's application for salt water disposal for the CC SR 26 Salisbury SWD #1 was sent on this date to the surface owner and offset operator(s) listed, via certified mail.

Signed:

Title:

Regulatory Coordinator

Kowell

Date:

6/24/19

TRRENT-ARGUS

NOTAR L

AFFIDAVIT OF PUBLICATION

Ad No. 0001289667

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:

06/26/19

Legal Clerk

Subscribed and sworn before me this 26th of June 2019.

> State of W. County of Brown NOTARY PUBLIC

My Commission Expires

NOTICE OF APPLICATION FOR WATER DISPOSAL WELL PERMIT

XTO Energy, Inc. has applied to the New Mexico Oil Conservation Division for a permit to dispose of produced water into a porous forma-

tion not productive of oil or gas.

The applicant proposes to dispose of produced water into the CC SR 24 Ribeye SWD #1 (Siluro-Devonian and Fusselman Formations). The maximum injection pressure will be 3,212 psi and the maximum rate will be 40,000 bbls. produced water per day. The proposed disposal well is located approximately 11 miles Southeast of Malaga, New Mexico in Section 24, T25S, R29E, 110' FNL & 419' FEL, Eddy County, New Mexico. The produced water will be disposed at a subsurface depth of 16,059'-17,186'. Any questions concerning this application should be directed to Cheryl Rowell, Regulatory Coordinator, XTO Energy, Inc, 6401 Holiday Hill Rd, Bldg 5, Midland, Texas 79707, (432) 571-8205.

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.

Published: June 26, 2019

Ad#:0001289667 PO: CC SR 24 Ribeye SWD #1 # of Affidavits: 0.00

Exhibit G

June 21, 2019

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

Eddy County, New Mexico

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

XTO Energy Inc., an ExxonMobil subsidiary
CC SR 24 Ribeye SWD 1,
Section 24, Township 25 South, Range 29 East,

To whom it may concern:

XTO Energy, Inc., an ExxonMobil subsidiary, has examined available geological data at the abovementioned well located at 110 feet from north line and 419 feet from east line of Section 24, Township 25 South, Range 29 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, R.G.

Geoscientist Geologist

XTO Energy Inc., an ExxonMobil subsidiary

22777 Springwoods Village Parkway

Spring, Texas 77389



Statements Regarding Seismicity

XTO has performed a seismicity risk assessment associated with the proposed CC SR 24 Ribeye 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 no seismic events reported by the USGS and State Geologic Survey within 6 miles of the proposed well. 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 (Figure 1).

Pore Pressure Modeling

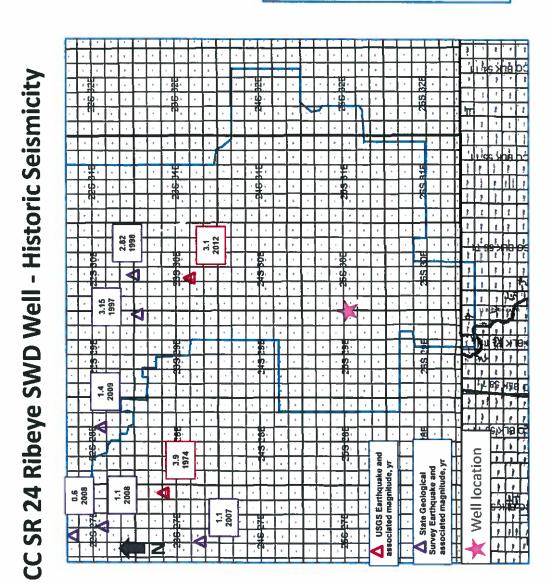
A screening level investigation of possible pore pressure increases due to the proposed SWD well was performed utilizing the FSP tool. For this screening level analysis a 'high-side' flat rate model was run assuming disposal of 40,000 BWPD beginning in 2019 and continuing at that rate until 2040 (Figure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

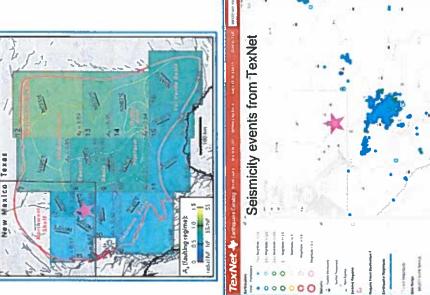
Monitoring Plan

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





10 Distance [km]

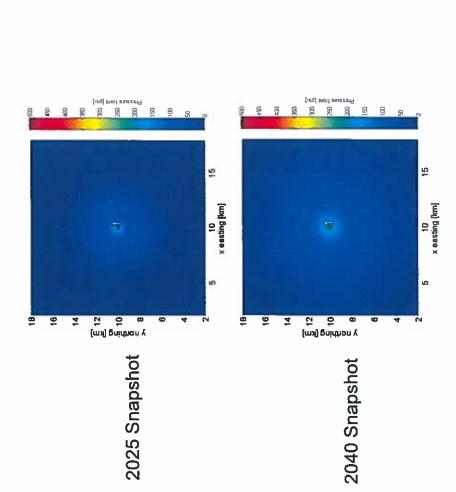
CC SR 24 Ribeye SWD Well – Pore Pressure

Single Well Redial Solutions

200

400

Pressure (psi)



Single Well Radial Solutions

500

Pressure [ps]

90

t0 Distance (km)