Form 3160-5 (June 2015)	UNITED STATES	OCD – Artesia	– REC'D 5	/4/2020	APPROVED		
DE DE	EPARTMENT OF THE INT	ERIOR		Expires: Ja	J. 1004-0137 anuary 31, 2018		
SUNDRY	NOTICES AND REPORT	S ON WELLS	-	5. Lease Serial No. NMNM136870			
Do not use th abandoned we	abandoned well. Use form 3160-3 (APD) for such proposals.						
SUBMIT IN	TRIPLICATE - Other instruc	ctions on page 2		7. If Unit or CA/Agree	ment, Name and/or No.		
1. Type of Well □ Gas Well □ Ot	her			8. Well Name and No. CORRAL CANYO	N 3 FED COM 22H		
2. Name of Operator XTO ENERGY INCORPORA	Contact: KE TED E-Mail: kelly_kardos@	LLY KARDOS extoenergy.com		9. API Well No. 30-015-46326-0	0-X1		
3a. Address 6401 HOLIDAY HILL ROAD E MIDLAND, TX 79707	BLDG 5	<ul> <li>p. Phone No. (include area of here)</li> <li>h: 432-620-4374</li> </ul>	ode)	10. Field and Pool or E CORRAL CANY	Exploratory Area ON-BONE SPRING, S		
4. Location of Well (Footage, Sec., 7	., R., M., or Survey Description)			11. County or Parish, S	State		
Sec 10 T25S R29E NENW 50 32.150574 N Lat, 103.972923	00FNL 2460FWL 3 W Lon			EDDY COUNTY	′, NM		
12. CHECK THE AI	PPROPRIATE BOX(ES) TC	INDICATE NATUR	E OF NOTICE,	REPORT, OR OTH	IER DATA		
TYPE OF SUBMISSION		TYPI	E OF ACTION				
Notice of Intent	□ Acidize	Deepen	Producti	on (Start/Resume)	□ Water Shut-Off		
	□ Alter Casing	Hydraulic Fractur	ing 🔲 Reclama	tion	Well Integrity		
□ Subsequent Report	Casing Repair	New Construction	□ Recomp	lete	Other		
Final Abandonment Notice	Change Plans	$\Box$ Plug and Abandon $\Box$ T		arily Abandon	PD		
	Convert to Injection	Plug Back	🗖 Water D	isposal			
13. Describe Proposed or Completed Op If the proposal is to deepen direction. Attach the Bond under which the wo following completion of the involvec testing has been completed. Final Al determined that the site is ready for f	eration: Clearly state all pertinent de ally or recomplete horizontally, give rk will be performed or provide the d operations. If the operation results bandonment Notices must be filed of inal inspection.	etails, including estimated st subsurface locations and m Bond No. on file with BLM in a multiple completion or nly after all requirements, ir	arting date of any pr easured and true ver /BIA. Required sub recompletion in a n ccluding reclamation	roposed work and approx rtical depths of all pertin, sequent reports must be ew interval, a Form 3160 , have been completed a	imate duration thereof. ent markers and zones. filed within 30 days 0-4 must be filed once nd the operator has		
XTO Energy Inc. respectfully	requests permission to make	the following changes	to the original A	PD?			
Change well name from Corra	al Canyon Federal 22H to Co	rral Canyon 3 Fed Con	n 22H.				
Change SHL from 500'FNL &	2460'FWL to 500'FNL & 244	0'FWL. ***NO ADDITIO	ONAL SURFACE	E DISTURBANCE**	*		
Change BHL from 200'FNL &	1980'FWL in Sec. 34-T24S-I	R29E to 50'FNL & 1980	)'FWL in Sec. 3-	T25S-R29E.			
Change drilling program per tl	he attached procedure.						
14. I hereby certify that the foregoing is	s true and correct.	138 verified by the BLM	Well Information	System			
Com	For XTO ENERGY	INCORPORATED, sent	to the Carlsbad	(20 14 5000255)			
Name(Printed/Typed) KELLY KA	ARDOS	Title REC	GULATORY CO	ORDINATOR			
Signature (Electronic S	Submission)	Date 10/0	9/2019				
	THIS SPACE FOR	FEDERAL OR STA	TE OFFICE US	SE			
Approved By CODY LAYTON		TitleASSIS	T FIELD MANAG	GER LANDS MINEF	ALS Date 10/09/2019		
Conditions of approval, if any, are attache	d. Approval of this notice does not	warrant or					
certify that the applicant holds legal or eq which would entitle the applicant to condu	uitable title to those rights in the sub act operations thereon.	oject lease Office Carls	sbad				

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2) \*\* BLM REVISED \*\*

# Revisions to Operator-Submitted EC Data for Sundry Notice #487138

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM136870	NMNM136870
Agreement:		
Operator:	XTO ENERGY INC 6401 HOLIDAY HILL RD BLDG 5 MIDLAND, TX 79707 Ph: 432-620-4374	XTO ENERGY INCORPORATED 6401 HOLIDAY HILL ROAD BLDG 5 MIDLAND, TX 79707 Ph: 432.683 2277
Admin Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com
	Ph: 432-620-4374	Ph: 432-620-4374
Tech Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com
	Ph: 432-620-4374	Ph: 432-620-4374
Location: State: County:	NM EDDY	NM EDDY
Field/Pool:	WILLOW LAKE BONE SPRING	CORRAL CANYON-BONE SPRING, S
Well/Facility:	CORRAL CANYON FEDERAL 22H Sec 10 T25S R29E Mer NMP NENW 500FNL 2460FWL	CORRAL CANYON 3 FED COM 22H Sec 10 T25S R29E NENW 500FNL 2460FWL 32.150574 N Lat, 103.972923 W Lon

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	XTO Energy
LEASE NO.:	NMNM-136870
WELL NAME & NO.:	Corral Canyon 3 Fed Com 22H
SURFACE HOLE FOOTAGE:	0500' FNL & 2440' FWL
<b>BOTTOM HOLE FOOTAGE</b>	0050' FNL & 1980' FWL Sec. 03, T. 25 S., R 29 E.
LOCATION:	Section 10, T. 25 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

## **Communitization Agreement**

The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

• If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.

• In addition, the well sign shall include the surface and bottom hole lease numbers. <u>When the Communitization Agreement number is known, it shall also be</u> <u>on the sign.</u>

# A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

## **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.
- Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

# **B.** CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

# Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

# Medium Cave/Karst Possibility of water flows in the Salado and Castile. Possibility of lost circulation in the Red Beds, Rustler, and Delaware.

- 1. The 13-3/8 inch surface casing shall be set at approximately 621 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

# **b.** Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

If cement does not circulate to surface on the intermediate casing, the cement on the production casing must come to surface.

Centralizers required through the curve and a minimum of one every other joint.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

# C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

- 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
  - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
  - d. The results of the test shall be reported to the appropriate BLM office.
  - e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

# D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

# E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

# JAM 100919

District I

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District III</u> 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u>

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

<sup>1</sup> API Number				<sup>2</sup> Pool Code	2		<sup>3</sup> Pool Na	me			
	30-015- 46326 96217 WILLOW LAKE; BONE SPRING, SE										
<sup>4</sup> Property C	Code	<sup>5</sup> Property Name							<sup>6</sup> Well Number		
326221				С	ORRAL CANY	ON 3 FED COM				22H	
<sup>7</sup> OGRID N	No.				<sup>8</sup> Operato	or Name				<sup>9</sup> Elevation	
005380	)				XTO ENEF	RGY, INC.				3,031'	
<sup>10</sup> Surface Location											
UL or lot no.	Section	Township	Range	Lot Idn	Feet from th	ne North/South line	Feet from the	East	t/West line	County	
С	10	25 S	29 E		500	NORTH	2,440	WE	ST	EDDY	
		-	11 Bo	ttom Hol	le Location	If Different Fror	n Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from th	ne North/South line	Feet from the	East	t/West line	County	
3	3	25 S	29 E		50	NORTH	1,980	WE	ST	EDDY	
<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint o	r Infill	<sup>4</sup> Consolidation	Code <sup>15</sup> Or	rder No.						
159.85											

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.

16       B.H.L. 000       T24S       R29E         SEC. 33       F       E       SEC. 34         1,980       LIT.P.       LIT.P.         LOT 4       LOT 3       LOT 2       LOT 1	GEODETIC         COORDINATES         GEODETIC         COORDINATES           NAD         27         NME         NAD         83         NME           SURFACE         LOCATION         SURFACE         LOCATION         SURFACE         LOCATION           Y =         418,642.7         Y =         418,701.2         X =         611,674.6         X =         652,858.8           LAT. =         32.150451'N         LAT. =         32.150575'N         LONG. =         103.972984'W           FIRST         TAKE         POINT         FIRST         TAKE         POINT           NAD         27         NME         NAD         83         NME           Y =         419,239.8         Y =         419,298.3         X =         652,398.0           LAT. =         32.152097'N         LAT. =         32.152221'N         LONG. =         103.973980'W         LONG. =         103.974467'W	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Xelly Xardos Signature Date
330' → SEC. 3 T25S R29E D C C C C C C C C C C C C C C C C C C C	$\begin{array}{c} \mbox{CORNER COORDINATES TABLE} \\ \mbox{NAD 27 NME} \\ \mbox{A - Y = 419,132.7 N, X = 611,882.0 E} \\ \mbox{B - Y = 419,135.7 N, X = 610,558.0 E} \\ \mbox{C - Y = 421,798.1 N, X = 611,875.2 E} \\ \mbox{J - Y = 421,789.7 N, X = 610,546.7 E} \\ \mbox{E - Y = 424,447.5 N, X = 611,866.9 E} \\ \mbox{F - Y = 424,441.8 N, X = 610,533.9 E} \end{array}$	Kelly Kardos         Printed Name         kelly_kardos@xtoenergy.com         E-mail Address
F.T.P. SEC. 4 $=$ 1,980' SEC. 9 B $=$ 400 = 2,440' S.H.L.	<ul> <li>CORNER COORDINATES TABLE NAD 83 NME</li> <li>A - Y= 419,202.6 N, X= 653,066.6 E</li> <li>B - Y= 419,194.1 N, X= 651,742.5 E</li> <li>C - Y= 421,856.6 N, X= 653,059.3 E</li> <li>D - Y= 421,848.2 N, X= 651,730.8 E</li> <li>E - Y= 424,506.0 N, X= 653,051.3 E</li> <li>F - Y= 424,500.3 N, X= 651,718.3 E</li> </ul>	<b>18SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
LOT TABLE SECTION 3, T25S, R29E LOT 1 – 39.65 ACRES LOT 2 – 39.75 ACRES LOT 3 – 39.85 ACRES LOT 3 – 39.85 ACRES LOT 4 – 39.95 ACRES	LAST TAKE POINT         LAST TAKE POINT         LAST TAKE POINT           NAD 27 NME         NAD 83 NME           Y = 424,344.6         Y = 424,403.2           X = 611,181.8         X = 652,365.9           LAT.= 32.166130'N         LAT.= 32.166254'N           LONG.= 103.974028'W         LONG.= 103.974516'W           BOTTOM HOLE LOCATION         NAD 27 NME           NAD 27 NME         NAD 83 NME           Y = 424,394.6         Y = 424,453.2           X = 611,181.5         X = 652,365.6           LAT.= 32.166267'N         LAT.= 32.166391'N           LONG.= 103.974028'W         LONG.= 103.974516'W	09-30-2019 Date of Survey Signatue and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number AI/TM/AW 2017091549

### RWP 5/8/2020

Intent X As Drilled		
API #		
Operator Name: XTO ENERGY INC.	Property Name: CORRAL CANYON 3 FED COM	Well Number 22H

# Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	10	25S	29E		500	NORTH	2440	WEST	Eddy
Latitu <b>32.1</b>	<sup>de</sup> 50575	5			Longitude -103.972	2984			NAD NAD83

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
N	3	25S	29E		100	SOUTH	1980	WEST	Eddy
Latitu <b>32.1</b>	<sup>de</sup> 52221				Longitude -103.974	467			NAD NAD83

# Last Take Point (LTP)

ul M	Section 3	Township 25S	Range 29E	Lot 3	Feet 100	From N/S NORTH	Feet 1980	From E/W WEST	County Eddy
Latitude					Longitud	Longitude			NAD
32.166254				-103.9	-103.974516			NAD83	

Is this well the defining well for the Horizontal Spacing Unit? Υ

Is this well an infill well?

Ν

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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

# GAS CAPTURE PLAN

Date:10-09-19

 $\boxtimes$  Original

Operator & OGRID No.: XTO Energy, Inc [005380]

□ Amended - Reason for Amendment:

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

## Well(s)/Production Facility – Corral Canyon 10 East CTB

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location	Footages	Expected MCF/D	Flared or Vented	Comments
Corral Canyon 3 Fed Com 22H	30-015-46325	C-10-25S-29E	500'FNL & 2440'FWL	2500	Flared/Sold	CTB Connected to P/L

## **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to <u>ENLINK</u> and will be connected to <u>ENLINK</u> low/high pressure gathering system located in Lea County, New Mexico. It will require <u>0'</u> of pipeline to connect the facility to low/high pressure gathering system. <u>XTO ENERGY, INC</u> provides (periodically) to <u>ENLINK</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>XTO ENERGY, INC</u> and <u>ENLINK</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Lobo</u> Processing Plant located in Block 27, Section 4, Loving County TX. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

## Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on <u>ENLINK's</u> system at that time. Based on current information, it is <u>XTO ENERGY, INC's</u> belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

## Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

#### DRILLING PLAN: BLM COMPLIANCE (Supplement to BLM 3160-3)

#### XTO Energy Inc. Corral Canyon 3 Fed 22H Projected TD: 14385' MD / 8867' TVD SHL: 500' FNL & 2440' FWL , Section 10, T25S, R29E BHL: 50' FNL & 1980' FWL , Section 3, T25S, R29E Eddy County, NM

#### 1. Geologic Name of Surface Formation

Quaternary

Α.

#### 2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	533'	Water
Top of Salt	716'	Water
Base of Salt	2922'	Water
Delaware	3100'	Water
Bone Spring	6838'	Water/Oil/Gas
1st Bone Spring Ss	7791'	Water/Oil/Gas
2nd Bone Spring Ss	8617'	Water/Oil/Gas
Target/Land Curve	8867'	Water/Oil/Gas

\*\*\* Hydrocarbons @ Brushy Canyon

\*\*\* Groundwater depth 40' (per NM State Engineers Office).

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13-3/8 inch casing @ 600' (116' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9-5/8 inch casing at 3050' and circulating cement to surface. An 8-3/4 inch curve and lateral hole will be drilled to MD/TD and 5-1/2 inch casing will be set at TD and cemented back up to the 9-5/8 inch casing shoe.

#### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' - 600'	13-3/8"	48	STC	H-40	New	1.86	2.84	11.18
12-1/4"	0' – 3050'	9-5/8"	36	LTC	J-55	New	1.51	2.14	4.13
8-3/4"	0' – 14385'	5-1/2"	17	BTC	P-110	New	1.12	1.74	2.91

· XTO requests to utilize centralizers only above the KOP and only a minimum of one every other joint.

· 9-5/8" Collapse analyzed using 50% evacuation based on regional experience.

· 5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

#### WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head: 13-5/8" 5M top flange x 13-3/8" SOW bottom

B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange

- · Wellhead will be installed by manufacturer's representatives.
- · Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- · Operator will test the 9-5/8" casing per BLM Onshore Order 2
- $\cdot$  Wellhead Manufacturer representative will not be present for BOP test plug installation

#### 4. Cement Program

Surface Casing: 13-3/8", 48 New H-40, STC casing to be set at +/- 600'

 Tail: 620 sxs Class C + 0.5% CaCl (mixed at 14.8 ppg, 1.33 ft3/sx, 6.35 gal/sx water)

 Compressives:
 12-hr =
 900 psi
 24 hr = 1300 psi

Intermediate Casing: 9-5/8", 36 New J-55, LTC casing to be set at +/- 3050'

Lead: 890 sxs Class C (mixed at 13.5 ppg, 1.79 ft3/sx, 9.45 gal/sx water)

 Tail: 230 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.34 gal/sx water)

 Compressives:
 12-hr =
 1300 psi
 24 hr = 1800 psi

Production Casing: 5-1/2", 17 New P-110, BTC casing to be set at +/- 14385'

Lead: 660 sxs 50/50 Poz Class C (mixed at 11.5 ppg, 2.6 ft3/sx, 14.77 gal/sx water)

 Tail: 1320 sxs 50/50 Poz Class H (mixed at 13.2 ppg, 1.51 ft3/sx, 7.17 gal/sx water)

 Compressives:
 12-hr =
 140 psi
 24 hr = 1100 psi

#### 5. Pressure Control Equipment

The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP. MASP should not exceed 2337 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 13-5/8" 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nippling up on the 9-5/8", the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 600'	17-1/2"	FW/Native	8.4-8.8	35-40	NC
600' to 3050'	12-1/4"	Brine/Gel Sweeps	9.8-10.2	30-32	NC
3050' to 14385'	8-3/4"	FW / Cut Brine / Polymer	9 - 9.3	29-32	NC - 20

#### 6. Proposed Mud Circulation System

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.8ppg-10.2ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

#### 7. Auxiliary Well Control and Monitoring Equipment

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 13-3/8" casing.

#### 8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

Open hole logging will not be done on this well.

#### 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 140 to 160 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 4288 psi.

#### 10. Anticipated Starting Date and Duration of Operations

Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run, an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.





This drawing is the property of GE Oil & Gas Pressure Control LP and is considered confidential. Unless otherwise approved in writing, neither it nor its contents may be used, copied, transmitted or reproduced except for the sole purpose of GE Oil & Gas Pressure Control LP.	хто	D ENERGY,	INC.
13-3/8" x 9-5/8" x 5-1/2" 10M PSH-2 Wellboad	DRAWN	VJK	16FEB17
According With TEDO E Tubion Used	APPRV	KN	16FEB17
	FOR REFERENC	E ONLY D. 100	12842







GATES E & S NORTH AMERICA, INC DU-TEX 134 44TH STREET CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807 FAX: 361-887-0812 EMAIL: crpe&s@gates.com WEB: www.gates.com

# GRADE D PRESSURE TEST CERTIFICATE

AUSTIN DISTRIBUTING		Test Date:	6/8/2011		
Customer Ref. :	PENDING	Hose Sacal No :	6/8/2014		
Invoice No. :	201709	Croated Ru:	D-060814-1		
		Greated by.	LNORMA		
Product Description:		FD3.042.0R41/16.5KFLGE/E	LE		
Product Description:		FD3.042.0R41/16.5KFLGE/E	LE		
Product Description:	4 1/16 in.5K FLG	FD3.042.0R41/16.5KFLGE/E End Fitting 2 :	4 1/16 in 5K FLG		
Product Description:	4 1/16 in.5K FLG 4774-6001	FD3.042.0R41/16.5KFLGE/E End Fitting 2 : Assembly Code :	4 1/16 in.5K FLG		

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

	, //		
ity: : iture :	QUALITY	Technical Supervisor : Date :	PRODUCTION
	from The	Signature :	

Form PTC - 01 Rev.0 2



......



# **XTO Energy Inc.**

Eddy County, NM Corral Canyon 3 Fed Com 22H

ОН

Plan: Plan 2

# **Standard Planning Report**

10 October, 2019

Database: Company: Project: Site: Well: Wellbore: Design:	EDM 5000.14 S XTO Energy Ind Eddy County, N Corral Canyon S 22H OH Plan 2	Single User D C. IM 3 Fed Com	b	Local Co-or TVD Refere MD Referer North Refer Survey Cale	rdinate Reference: nce: rence: culation Method:	Well 22H GL 3031 + 31' GL 3031 + 31' Grid Minimum Curv	KB @ 3062.00usft (Akita 803) KB @ 3062.00usft (Akita 803) rature
Project	Eddy County, N	N					
Map System: Geo Datum: Map Zone:	US State Plane 19 NAD 1927 (NADC New Mexico East	927 (Exact so ON CONUS) 3001	ulution)	System Datu	m:	Mean Sea Level	
Site	Corral Canyon 3	Fed Com					
Site Position: From: Position Uncertainty:	Мар	0.00 usft	Northing: Easting: Slot Radius:	418,6 611,6	42.70 usft Latitud 74.60 usft Longitu 13-3/16 " Grid Co	e: ude: onvergence:	32.150451 -103.972497 0.19 °
Well	22H						
Well Position Position Uncertainty	+N/-S +E/-W	0.00 usft 0.00 usft 0.00 usft	Northing: Easting: Wellhead Elev	vation:	418,642.70 usft 611,674.60 usft	Latitude: Longitude: Ground Level:	32.150451 -103.972497 3,031.00 usft
Wellbore	ОН						
Magnetics	Model Name	e	Sample Date	Declinati (°)	on	Dip Angle (°)	Field Strength (nT)
	WMM	2015	10/2/2019		6.92	59.88	47,601.14778370
Design	Plan 2						
Audit Notes: Version:			Phase:	PLAN	Tie On Dep	oth:	0.00
Vertical Section:		Depth Fr	rom (TVD) sft)	+N/-S (usft)	+E/-W (usft)	D	irection (°)
		0	.00	0.00	0.00		359.26
Plan Survey Tool Pro Depth From (usft)	ogram I Depth To (usft) Su	Date 10/4/2 urvey (Wellbo	2019 pre)	Tool Name	Rema	arks	
1 0.00	14,385.04 PI	an 2 (OH)		MWD+IFR1+FE OWSG MWD +	DIR IFR1 + FDIR C		

Detail and	EDM 5000 44 Sizela Llass Dh		Well 2211
Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	vveli 22H
Company:	XTO Energy Inc.	TVD Reference:	GL 3031 + 31' KB @ 3062.00usft (Akita 803)
Project:	Eddy County, NM	MD Reference:	GL 3031 + 31' KB @ 3062.00usft (Akita 803)
Site:	Corral Canyon 3 Fed Com	North Reference:	Grid
Well:	22H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Desian:	Plan 2		

## Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,340.00	0.00	0.00	3,340.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,739.78	6.00	271.77	3,739.05	0.65	-20.89	1.50	1.50	0.00	271.77	
7,717.58	6.00	271.77	7,695.08	13.51	-436.26	0.00	0.00	0.00	0.00	
8,117.36	0.00	0.00	8,094.13	14.16	-457.15	1.50	-1.50	0.00	180.00	
8,317.36	0.00	0.00	8,294.13	14.16	-457.15	0.00	0.00	0.00	0.00	
8,318.36	0.00	0.00	8,295.13	14.16	-457.15	0.00	0.00	0.00	0.00	
9,228.35	91.00	359.64	8,867.02	596.10	-460.79	10.00	10.00	0.00	359.64	
9,229.35	91.00	359.64	8,867.00	597.10	-460.80	0.00	0.00	0.00	0.00 I	TP - Corral Canyon
14,385.04	91.00	359.64	8,777.02	5,751.90	-493.10	0.00	0.00	0.00	0.00	3HL - Corral Canyon

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 22H
Company:	XTO Energy Inc.	TVD Reference:	GL 3031 + 31' KB @ 3062.00usft (Akita 803)
Project:	Eddy County, NM	MD Reference:	GL 3031 + 31' KB @ 3062.00usft (Akita 803)
Site:	Corral Canyon 3 Fed Com	North Reference:	Grid
Well:	22H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan 2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3 300 00	0.00	0.00	3 300 00	0.00	0.00	0.00	0.00	0.00	0.00
3,340.00	0.00	0.00	3,340.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Nudge	Build 1.50								
3,400.00	0.90	271.77	3,400.00	0.01	-0.47	0.02	1.50	1.50	0.00
3,500.00	2.40	271.77	3,499.95	0.10	-3.35	0.15	1.50	1.50	0.00
3,600.00	3.90	271.77	3,599.80	0.27	-8.84	0.39	1.50	1.50	0.00
3,700.00	5.40	271.77	3,699.47	0.52	-16.94	0.74	1.50	1.50	0.00
3,739.78	6.00	271.77	3,739.05	0.65	-20.89	0.92	1.50	1.50	0.00
6° at 3739.78	MD	074 77			07.40	4.40			0.00
3,800.00	6.00	271.77	3,798.94	0.84	-27.18	1.19	0.00	0.00	0.00
3,900.00	0.00	2/1.//	3,696.39	1.17	-37.02	1.05	0.00	0.00	0.00
3,976.02	6.00	271.77	3,974.00	1.41	-45.56	2.00	0.00	0.00	0.00
Cherry Cany	on	074 77	2 007 95	1 40	40.00	0.44	0.00	0.00	0.00
4,000.00	6.00 6.00	2/1.// 271 77	3,997.85 1 007 30	1.49 1 81	-48.06 -58.51	2.11	0.00	0.00	0.00
4,100.00	6.00	271.77	4,097.30	2 14	-68.95	2.57	0.00	0.00	0.00
4,300.00	6.00	271.77	4,296.21	2.46	-79.39	3.49	0.00	0.00	0.00
4 400 00	6.00	074 77	1 205 66	0.70	00.00	2.05	0.00	0.00	0.00
4,400.00	6.00	271.77	4,395.00	2.78	-89.83	3.95	0.00	0.00	0.00
4,500.00	6.00	271.77	4,495.11	3.11	-100.27	4.40	0.00	0.00	0.00
4,000.00	6.00	271.77	4,594.50	3 75	-121 16	4.00 5.32	0.00	0.00	0.00
4.800.00	6.00	271.77	4,793.47	4.08	-131.60	5.78	0.00	0.00	0.00
1,000,00	0.00	074 77	4,000,000	4.40	140.04	0.04	0.00	0.00	0.00
4,900.00	6.00	2/1.//	4,892.92	4.40	-142.04	6.24	0.00	0.00	0.00
5,000.00	0.00 6.00	271.77	4,992.37	4.72	-162.40	0.70	0.00	0.00	0.00
5 200 00	6.00	271.77	5 191 28	5.00	-173.37	7.10	0.00	0.00	0.00
5,300.00	6.00	271.77	5,290.73	5.69	-183.81	8.07	0.00	0.00	0.00
5 400 00	6.00	271 77	5 300 10	6.02	104 25	8 53	0.00	0.00	0.00
5,400.00	0.00 6.00	271.77	5,390.19	6.34	-194.23	8.00	0.00	0.00	0.00
5,500.00	6.00	271.77	5,409.04	6.66	-204.70	9.45	0.00	0.00	0.00
5,700.00	6.00	271.77	5.688.54	6.99	-225.58	9.91	0.00	0.00	0.00
5,800.00	6.00	271.77	5,788.00	7.31	-236.02	10.37	0.00	0.00	0.00
5 900 00	6.00	271 77	5 887 45	7.63	-246.46	10.82	0.00	0.00	0.00
6,000,00	6.00	271.77	5 986 90	7.05	-240.40	11.28	0.00	0.00	0.00
6 100 00	6.00	271.77	6 086 36	8 28	-267 35	11.20	0.00	0.00	0.00
6,200.00	6.00	271.77	6,185.81	8.60	-277.79	12.20	0.00	0.00	0.00
6,300.00	6.00	271.77	6,285.26	8.93	-288.23	12.66	0.00	0.00	0.00
6.400.00	6 00	271 77	6.384 71	9 25	-298 67	13 12	0.00	0.00	0.00
6.500.00	6.00	271.77	6,484.17	9.57	-309.12	13.58	0.00	0.00	0.00
6,600.00	6.00	271.77	6,583.62	9.90	-319.56	14.03	0.00	0.00	0.00
6,620.49	6.00	271.77	6,604.00	9.96	-321.70	14.13	0.00	0.00	0.00
Basal Brush	y Canyon								
6,700.00	6.00	271.77	6,683.07	10.22	-330.00	14.49	0.00	0.00	0.00
6,800.00	6.00	271.77	6,782.53	10.54	-340.44	14.95	0.00	0.00	0.00
6,855.78	6.00	271.77	6,838.00	10.72	-346.27	15.21	0.00	0.00	0.00
Bone Spring									
6,897.01	6.00	271.77	6,879.00	10.86	-350.57	15.40	0.00	0.00	0.00
Bone Spring	Lime								
6,900.00	6.00	271.77	6,881.98	10.87	-350.88	15.41	0.00	0.00	0.00
7,000.00	6.00	271.77	6,981.43	11.19	-361.33	15.87	0.00	0.00	0.00
7,025.71	6.00	271.77	7,007.00	11.27	-364.01	15.99	0.00	0.00	0.00
BSPG_U_AV	LN								
7,100.00	6.00	271.77	7,080.88	11.51	-371.77	16.33	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 22H
Company:	XTO Energy Inc.	TVD Reference:	GL 3031 + 31' KB @ 3062.00usft (Akita 803)
Project:	Eddy County, NM	MD Reference:	GL 3031 + 31' KB @ 3062.00usft (Akita 803)
Site:	Corral Canyon 3 Fed Com	North Reference:	Grid
Well:	22H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7.200.00	6.00	271.77	7,180.34	11.84	-382.21	16.79	0.00	0.00	0.00
7.300.00	6.00	271.77	7.279.79	12.16	-392.65	17.24	0.00	0.00	0.00
7.400.00	6.00	271.77	7.379.24	12.48	-403.09	17.70	0.00	0.00	0.00
7 500 00		074 77		10.01		10.10			
7,500.00	6.00	2/1.//	7,478.69	12.81	-413.54	18.16	0.00	0.00	0.00
7,515.30	6.00	2/1.//	7,493.92	12.86	-415.13	18.23	0.00	0.00	0.00
Nudge - Cor	rral Canyon 3 Fee	d Com 22H							
7,600.00	6.00	271.77	7,578.15	13.13	-423.98	18.62	0.00	0.00	0.00
7,700.00	6.00	271.77	7,677.60	13.45	-434.42	19.08	0.00	0.00	0.00
7,717.58	6.00	2/1.//	7,695.08	13.51	-436.26	19.16	0.00	0.00	0.00
Start Drop -	1.50								
7 763 72	5 30	271 77	7 741 00	13 65	-440 80	19.36	1 50	-1 50	0.00
Bone Spring	n 1 Limo	27 1.77	1,111.00	10.00	110.00	10.00	1.00	1.00	0.00
7 800 00	4 76	271 77	7 777 14	13 75	443.08	10.50	1 50	1.50	0.00
7,800.00	4.70	271.77	7 791 00	13.75	-445.90	19.50	1.50	-1.50	0.00
Pana Spring	4.00	211.11	7,791.00	15.70	-445.11	19.55	1.50	-1.50	0.00
Bone Spring	2.00	074 77	7 976 90	12.07	450.07	10.04	1 50	1 50	0.00
7,900.00	3.20	2/1.//	7,876.89	13.97	-450.97	19.81	1.50	-1.50	0.00
8,000.00	1.76	2/1.//	1,910.19	14.10	-400.30	20.00	1.50	-1.50	0.00
8,100.00	0.26	271.77	8,076.77	14.16	-457.11	20.08	1.50	-1.50	0.00
8,100.23	0.26	271.77	8,077.00	14.16	-457.11	20.08	0.00	0.00	0.00
Bone Spring	g 2 Lime								
8,117.36	0.00	0.00	8,094.13	14.16	-457.15	20.08	1.52	-1.52	0.00
Vertical at 8	117.36 MD								
8.200.00	0.00	0.00	8,176,77	14,16	-457,15	20.08	0.00	0.00	0.00
8 300 00	0.00	0.00	8 276 77	14 16	-457 15	20.08	0.00	0.00	0.00
0,000.00	0.00	0.00	0,210111			_0.00	0.00	0.00	0.00
8,317.36	0.00	0.00	8,294.13	14.16	-457.15	20.08	0.00	0.00	0.00
8,318.36	0.00	0.00	8,295.13	14.16	-457.15	20.08	0.00	0.00	0.00
Start Build 1	10.00								
8,400.00	8.16	359.64	8,376.50	19.96	-457.18	25.88	10.00	10.00	0.00
8,500.00	18.16	359.64	8,473.75	42.71	-457.33	48.63	10.00	10.00	0.00
8,600.00	28.16	359.64	8,565.57	82.00	-457.57	87.91	10.00	10.00	0.00
8,656.52	33.82	359.64	8,614.00	111.08	-457.75	117.00	10.00	10.00	0.00
Bone Spring	a 2								
8.700.00	38.16	359.64	8.649.17	136.63	-457.91	142.55	10.00	10.00	0.00
8.800.00	48.16	359.64	8,722.02	204.95	-458.34	210.87	10.00	10.00	0.00
8.900.00	58.16	359.64	8,781,90	284.88	-458.84	290.80	10.00	10.00	0.00
9,000.00	68.16	359.64	8,826.98	374.00	-459.40	379.92	10.00	10.00	0.00
0 100 00	70.10	250.64	0.055.01	460 50	460.00	475 54	10.00	10.00	0.00
9,100.00	78.10	359.64	8,855.91	469.59	-460.00	475.51	10.00	10.00	0.00
9,163.05	00.47	339.04	0,007.00	551.62	-400.52	557.74	10.00	10.00	0.00
LP	00.40	050.04	0 007 70	500 75	400.00	574.07	40.00	10.00	0.00
9,200.00	88.16	359.64	8,867.79	568.75	-460.62	5/4.6/	10.00	10.00	0.00
9,228.35	91.00	359.64	8,867.02	596.10	-460.79	602.02	10.00	10.00	0.00
9,229.35	91.00	359.64	8,867.00	597.10	-460.80	603.02	0.00	0.00	0.00
LP 91° at 92	29.35 MD - FTP -	Corral Canyon	3 Fed Com 22H						
9,300.00	91.00	359.64	8,865.77	667.73	-461.24	673.65	0.00	0.00	0.00
9,400.00	91.00	359.64	8,864.02	767.72	-461.87	773.63	0.00	0.00	0.00
9,500.00	91.00	359.64	8,862.28	867.70	-462.50	873.62	0.00	0.00	0.00
9,600.00	91.00	359.64	8,860.53	967.68	-463.12	973.60	0.00	0.00	0.00
9,700.00	91.00	359.64	8,858.79	1,067.67	-463.75	1,073.58	0.00	0.00	0.00
0 200 00	Q1 00	350 64	8 857 04	1 167 65	-464 37	1 173 57	0.00	0.00	0.00
0,000.00 0 000 00	01 NO	350 61	8 855 30	1 267 63	-465 00	1 273 55	0.00	0.00	0.00
10 000 00	01 NO	350 61	8 853 55	1 367 61	-465 63	1 373 52	0.00	0.00	0.00
10,000.00	91.00 Q1 00	359.64	8 851 81	1 467 60	-466 25	1 473 51	0.00	0.00	0.00
10,100.00	91.00	359 64	8 850 06	1,567.58	-466 88	1 573 50	0.00	0.00	0.00
10,200.00	31.00		0,000.00	1,007.00	-00.00	1,070.00	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 22H
Company:	XTO Energy Inc.	TVD Reference:	GL 3031 + 31' KB @ 3062.00usft (Akita 803)
Project:	Eddy County, NM	MD Reference:	GL 3031 + 31' KB @ 3062.00usft (Akita 803)
Site:	Corral Canyon 3 Fed Com	North Reference:	Grid
Well:	22H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan 2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.00	91.00	359.64	8,848.31	1,667.56	-467.51	1,673.48	0.00	0.00	0.00
10,400.00	91.00	359.64	8,846.57	1,767.55	-468.13	1,773.46	0.00	0.00	0.00
10,500.00	91.00	359.64	8,844.82	1,867.53	-468.76	1,873.44	0.00	0.00	0.00
10,600.00	91.00	359.64	8,843.08	1,967.51	-469.39	1,973.43	0.00	0.00	0.00
10,700.00	91.00	359.64	8,841.33	2,067.49	-470.01	2,073.41	0.00	0.00	0.00
10,800.00	91.00	359.64	8,839.59	2,167.48	-470.64	2,173.39	0.00	0.00	0.00
10,900.00	91.00	359.64	8,837.84	2,267.46	-471.27	2,273.37	0.00	0.00	0.00
11,000.00	91.00	359.64	8,836.10	2,367.44	-471.89	2,373.36	0.00	0.00	0.00
11,100.00	91.00	359.64	8,834.35	2,467.43	-472.52	2,473.34	0.00	0.00	0.00
11,200.00	91.00	359.64	8,832.61	2,567.41	-473.15	2,573.32	0.00	0.00	0.00
11,300.00	91.00	359.64	8,830.86	2,667.39	-473.77	2,673.30	0.00	0.00	0.00
11,400.00	91.00	359.64	8,829.12	2,767.37	-474.40	2,773.29	0.00	0.00	0.00
11,500.00	91.00	359.64	8,827.37	2,807.30	-475.03	2,873.27	0.00	0.00	0.00
11,600.00	91.00	359.64	8,825.03	2,907.34	-475.05	2,973.25	0.00	0.00	0.00
11,700.00	91.00	359.64	8,823.88	3,067.32	-476.28	3,073.23	0.00	0.00	0.00
11,800.00	91.00	359.64	8,822.14	3,167.31	-476.90	3,173.22	0.00	0.00	0.00
11,900.00	91.00	359.64	8,820.39	3,267.29	-477.53	3,273.20	0.00	0.00	0.00
12,000.00	91.00	359.64	8,818.65	3,367.27	-478.16	3,373.18	0.00	0.00	0.00
12,100.00	91.00	359.64	8,816.90	3,467.25	-478.78	3,473.16	0.00	0.00	0.00
12,200.00	91.00	359.64	8,815.16	3,567.24	-479.41	3,573.15	0.00	0.00	0.00
12,300.00	91.00	359.64	8,813.41	3,667.22	-480.04	3,673.13	0.00	0.00	0.00
12,400.00	91.00	359.64	8,811.66	3,767.20	-480.66	3,773.11	0.00	0.00	0.00
12,500.00	91.00	359.64	8,809.92	3,867.18	-481.29	3,873.09	0.00	0.00	0.00
12,600.00	91.00	359.64	8,808.17	3,967.17	-481.92	3,973.08	0.00	0.00	0.00
12,700.00	91.00	359.64	8,806.43	4,067.15	-482.54	4,073.06	0.00	0.00	0.00
12,800.00	91.00	359.64	8,804.68	4,167.13	-483.17	4,173.04	0.00	0.00	0.00
12,900.00	91.00	359.64	8,802.94	4,267.12	-483.80	4,273.02	0.00	0.00	0.00
13,000.00	91.00	359.64	8,801.19	4,367.10	-484.42	4,373.01	0.00	0.00	0.00
13,100.00	91.00	359.64	8,799.45	4,467.08	-485.05	4,472.99	0.00	0.00	0.00
13,200.00	91.00	359.64	8,797.70	4,567.06	-485.68	4,572.97	0.00	0.00	0.00
13,300.00	91.00	359.64	8,795.96	4,667.05	-486.30	4,672.95	0.00	0.00	0.00
13,400.00	91.00	359.64	8,794.21	4,767.03	-486.93	4,772.94	0.00	0.00	0.00
13,500.00	91.00	359.64	8,792.47	4,867.01	-487.55	4,872.92	0.00	0.00	0.00
13,600.00	91.00	359.64	8,790.72	4,967.00	-488.18	4,972.90	0.00	0.00	0.00
13,700.00	91.00	359.64	8,788.98	5,066.98	-488.81	5,072.88	0.00	0.00	0.00
13,800.00	91.00	359.64	8,787.23	5,166.96	-489.43	5,172.87	0.00	0.00	0.00
13,900.00	91.00	359.64	8,785.49	5,266.94	-490.06	5,272.85	0.00	0.00	0.00
14,000.00	91.00	359.64	8,783.74	5,366.93	-490.69	5,372.83	0.00	0.00	0.00
14,100.00	91.00	359.64	8,782.00	5,466.91	-491.31	5,472.81	0.00	0.00	0.00
14,200.00	91.00	359.64	8,780.25	5,566.89	-491.94	5,572.80	0.00	0.00	0.00
14,300.00	91.00	359.64	8,778.51	5,666.88	-492.57	5,672.78	0.00	0.00	0.00
14,335.03	91.00	359.64	8,777.89	5,701.90	-492.79	5,707.80	0.00	0.00	0.00
14.385.03	91.00	359.64	8,777.02	5,751.90	-493.10	5,757.80	0.00	0.00	0.00
BHL - Corra	Canvon 3 Fed (	Com 22H	-,	-,		-,			
14 385 04	. 91 00	359 64	8,777 02	5,751 90	-493 10	5,757 80	0.00	0.00	0.00
TD at 1/295	04	200.07	0, <b>0</b>	0,101.00		0,101.00	0.00	0.00	0.00
1D at 14305									

Database: Company: Project: Site: Well: Wellbore: Design:	EDM 5000.14 XTO Energy I Eddy County, Corral Canyor 22H OH Plan 2	Single User nc. NM n 3 Fed Com	Db		Local Co-or TVD Refere MD Referer North Refer Survey Cal	rdinate Reference: ence: nce: rence: culation Method:	Well 22H GL 3031 + GL 3031 + Grid Minimum (	31' KB @ 3062.00usfi 31' KB @ 3062.00usfi Curvature	t (Akita 803) t (Akita 803)
Design Targets Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL - Corral Canyon 3 - plan misses targo - Point	F 0.00 et center by 0.29	0.00 9usft at 1438	8,777.31 5.03usft MD	5,751.90 (8777.02 TVE	-493.10 D, 5751.89 N,	424,394.60 -493.10 E)	611,181.50	32.166268	-103.974029
LTP - Corral Canyon 3 - plan misses targe - Point	F 0.00 et center by 0.29	0.00 9usft at 1433	8,778.18 5.03usft MD	5,701.90 (8777.89 TVE	-492.80 D, 5701.90 N,	424,344.60 -492.79 E)	611,181.80	32.166130	-103.974028
FTP - Corral Canyon 3	F 0.00	0.00	8,867.00	597.10	-460.80	419,239.80	611,213.80	32.152097	-103.973980

plan hits target center
Point

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Formations							
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	181.00	181.00	Base of Salt		0.00		
	533.00	533.00	Rustler		0.00		
	2,178.00	2,178.00	Top of Salt		0.00		
	3,100.00	3,100.00	Delaware		0.00		
	3,976.02	3,974.00	Cherry Canyon		0.00		
	6,620.49	6,604.00	Basal Brushy Canyon		0.00		
	6,855.78	6,838.00	Bone Spring		0.00		
	6,897.01	6,879.00	Bone Spring Lime		0.00		
	7,025.71	7,007.00	BSPG_U_AVLN		0.00		
	7,763.72	7,741.00	Bone Spring 1 Lime		0.00		
	7,813.91	7,791.00	Bone Spring 1		0.00		
	8,100.23	8,077.00	Bone Spring 2 Lime		0.00		
	8,656.52	8,614.00	Bone Spring 2		0.00		
	9,183.05	8,867.00	LP		0.00		

Plan Annotation	s					
	Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S +E/-W (usft) (usft)		Comment	
	3,340.00	3,340.00	0.00	0.00	Start Nudge Build 1.50	
	3,739.78	3,739.05	0.65	-20.89	6° at 3739.78 MD	
	7,717.58	7,695.08	13.51	-436.26	Start Drop -1.50	
	8,117.36	8,094.13	14.16	-457.15	Vertical at 8117.36 MD	
	8,318.36	8,295.13	14.16	-457.15	Start Build 10.00	
	9,229.35	8,867.00	597.10	-460.80	LP 91° at 9229.35 MD	
	14,385.04	8,777.02	5,751.90	-493.10	TD at 14385.04	