

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNMOCD
ArtesiaFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMNM15302

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
CORRAL CANYON FEDERAL 8H9. API Well No.
30-015-43709-00-X110. Field and Pool or Exploratory Area
WILLOW LAKE-BONE SPRING, SE11. County or Parish, State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

XTO ENERGY INCORPORATED

Contact: KELLY KARDOS

E-Mail: kelly_kardos@xtoenergy.com

3a. Address

6401 HOLIDAY HILL ROAD BLDG 5
MIDLAND, TX 79707

3b. Phone No. (include area code)

Ph: 432-462-4974

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 4 T25S R29E SESE 170FSL 610FEL

MAR 11 2019

NMOCD CONSERVATION
ARTESIA DISTRICT**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Hydraulic Fracturing☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other
Drilling Operations
CHANGE APD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompletable horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletable in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

XTO Energy Inc. requests permission to revise the casing/cement design per the attached drilling procedure.

Change BHL - ✓

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #454081 verified by the BLM Well Information System
For XTO ENERGY INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 02/11/2019 (19PP1034SE)

Name (Printed/Typed) KELLY KARDOS

Title REGULATORY COORDINATOR

Signature (Electronic Submission)

Date 02/11/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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 ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

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

XTO Energy Inc.
Corral Canyon Fed 8H
Projected TD: 14275' MD / 8732' TVD
SHL: 170' FNL & 610' FEL , Section 4, T25S, R29E
BHL: 50' FNL & 660' FEL , Section 4, T25S, R29E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	404'	Water
Top of Salt	785'	Water
Base of Salt	2826'	Water
Delaware	3023'	Water
Bone Spring	6810'	Water/Oil/Gas
1st Bone Spring Ss	7725'	Water/Oil/Gas
2nd Bone Spring Ss	8512'	Water/Oil/Gas
Target/Land Curve	8732'	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 @ 550' (235' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9-5/8 inch casing at 3000' 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' - 550'	13-3/8"	48	STC	H-40	New	1.89	3.06	12.20
12-1/4"	0' - 3000'	9-5/8"	36	LTC	J-55	New	1.53	2.18	4.19
8-3/4"	0' - 14275'	5-1/2"	17	BTC	P-110	New	1.12	1.77	2.94

- XTO requests to utilize centralizers only in the curve after 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
- 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 +/- 550'

Lead: 180 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water)

Tail: 300 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

Intermediate Casing: 9-5/8", 36 New J-55, LTC casing to be set at +/- 3000'

Lead: 830 sxs Halcem-C + 2% CaCl (mixed at 12.9 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 230 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

Production Casing: 5-1/2", 17 New P-110, BTC casing to be set at +/- 14275'

Lead: 620 sxs NeoCem (mixed at 10.5 ppg, 2.69 ft3/sx, 12.26 gal/sx water)

Tail: 1350 sxs VersaCem (mixed at 13.2 ppg, 1.61 ft3/sx, 8.38 gal/sx water)

Compressives: 12-hr = 1375 psi 24 hr = 2285 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 2302 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 nipping up on the 13-5/8" 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nipping 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.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 550'	17-1/2"	FW/Native	8.4-8.8	35-40	NC
550' to 3000'	12-1/4"	Brine/Gel Sweeps	9.8-10.2	30-32	NC
3000' to 14275'	8-3/4"	FW / Cut Brine / Polymer	9 - 9.3	29-32	NC - 20

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.

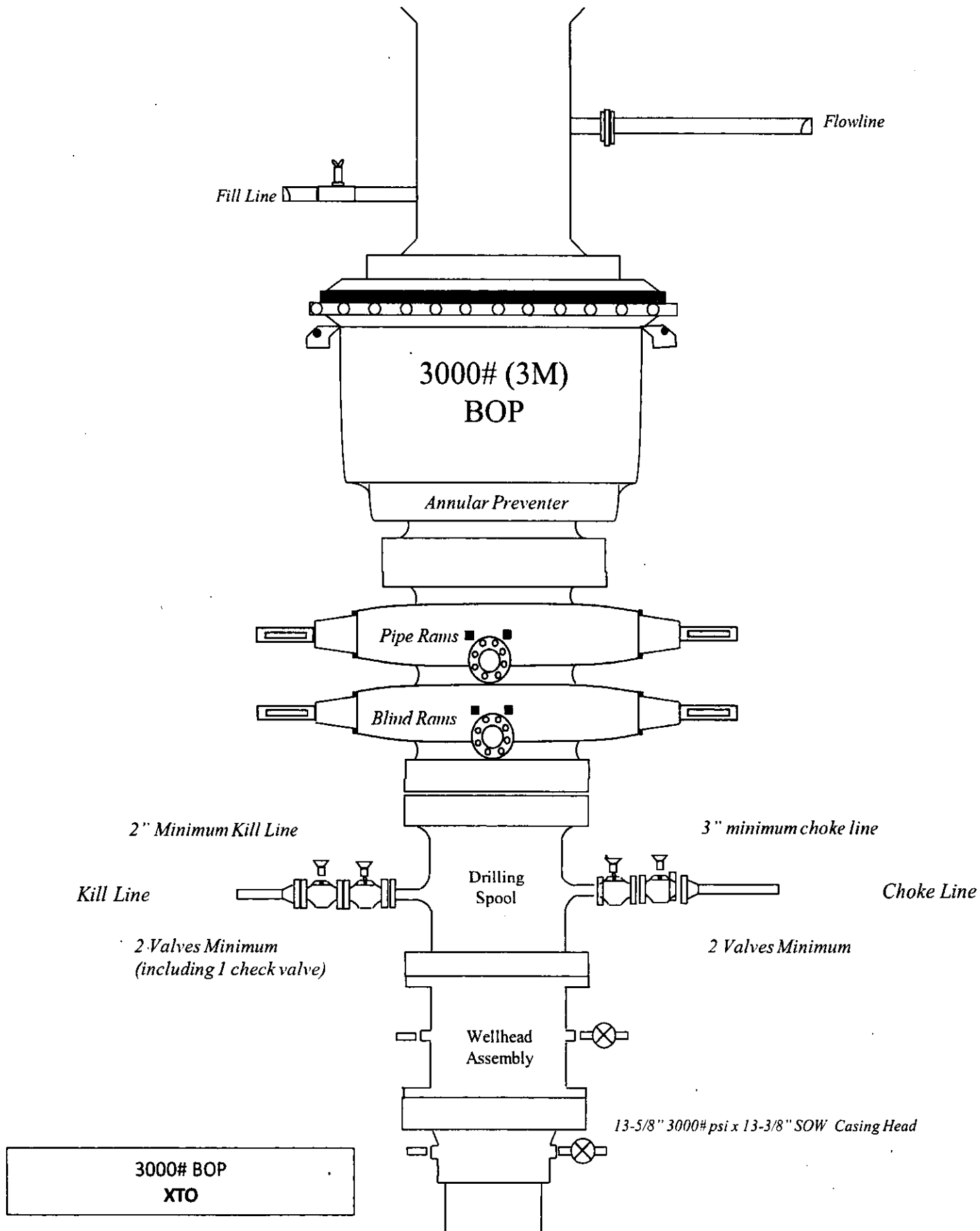
Open hole logging will not be done on this well.

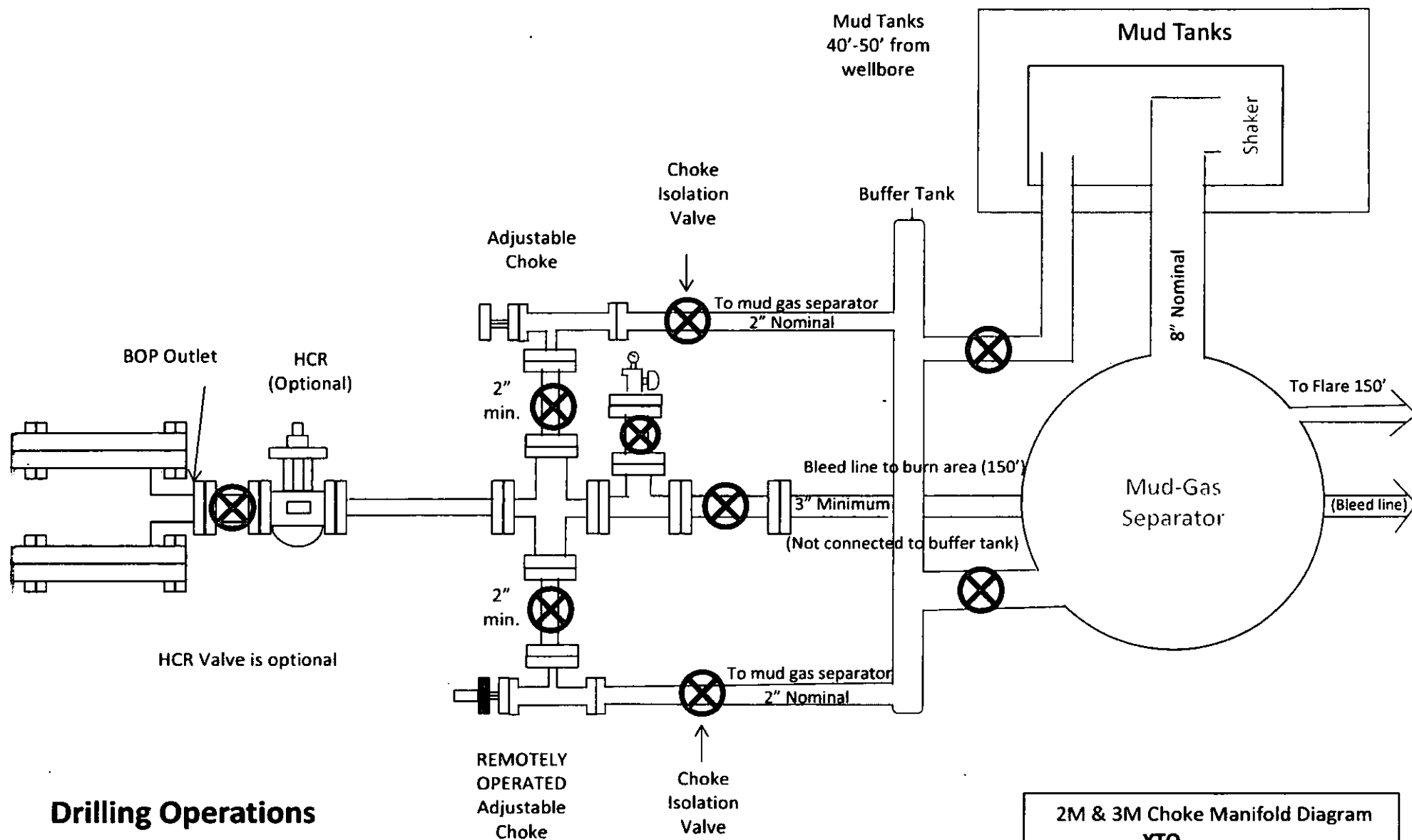
9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 135 to 155 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 4223 psi.

10. Anticipated Starting Date and Duration of Operations

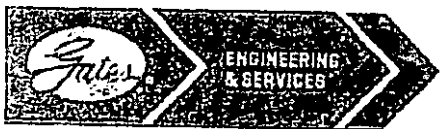
Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run, an additional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





Drilling Operations Choke Manifold 2M & 3M Service

2M & 3M Choke Manifold Diagram
XTO



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

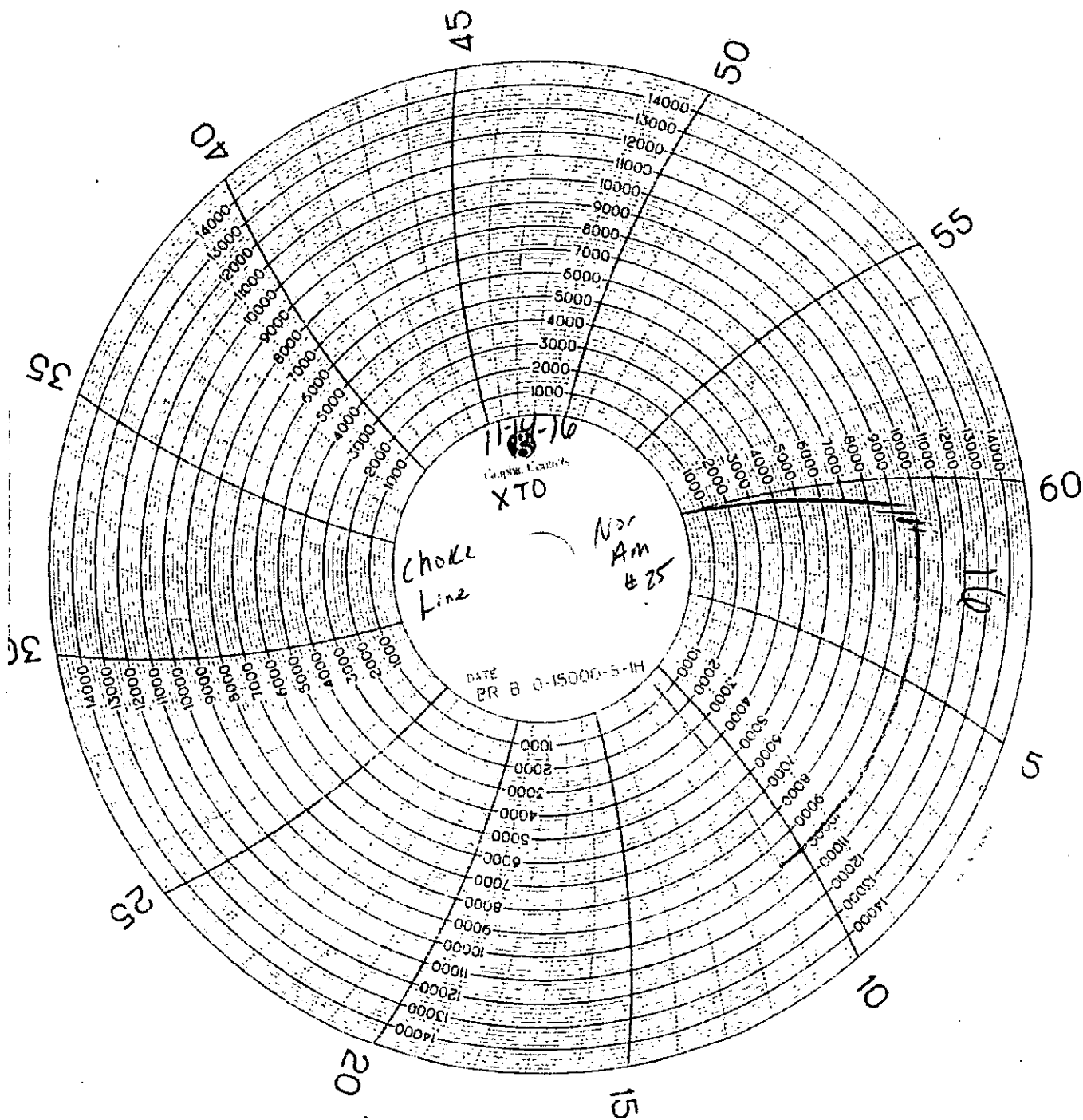
PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: crpe&s@gates.com
WEB: www.gates.com

GRADE D PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORHA
Product Description:	FD3.0+2.0R+1/16.5KFLGE/E LE		
End Fitting 1 :	4 1/16 in.5K FLG	End Fitting 2 :	4 1/16 in.5K FLG
Gates Part No. :	4774-6001	Assembly Code :	L33090011513D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

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.

Quality:	QUALITY	Technical Supervisor :	PRODUCTION
Date :	6/8/2014	Date :	6/8/2014
Signature :		Signature :	



NOON

HOSE I.D. 2 1/2" LENGTH 42 ft END 1 4 1/16" SKA END 2 4 1/16" SKA

GRADE D WORKING PRESSURE 5,000 P.S.I.

TEST PRESSURE 7,500 P.S.I. ASSEMBLY DATE 6-8-14

TEST DATE 6-8-14 SERIAL # 633096011513D-060814-1

NAME D-725 CR # 25673

CHARTER CODE



XTO ENERGY, INC.

Eddy County, NM

Sec 4, T25S, R29E

Corral Canyon Federal #08H

Wellbore #1

Plan: Plan #1

QES Well Planning Report

30 January, 2019





Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Corral Canyon Federal #08H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Project:	Eddy County, NM	MD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Site:	Sec 4, T25S, R29E	North Reference:	Grid
Well:	Corral Canyon Federal #08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Eddy County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Sec 4, T25S, R29E		
Site Position:		Northing:	419,294.20 usft
From:	Map	Easting:	608,673.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 9' 8.170 N
		Longitude:	103° 58' 55.875 W
		Grid Convergence:	0.19 °

Well	Corral Canyon Federal #08H		
Well Position	+N/-S	-0.3 usft	Northing:
	+E/-W	-50.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level:
			2,998.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	1/30/2019	(°)
			6.96
			Dip Angle
			(°)
			59.91
			Field Strength
			(nT)
			47,688.61574629

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			359.08

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,031.9	0.00	0.00	8,031.9	0.0	0.0	0.00	0.00	0.00	0.00	
9,131.6	90.00	359.08	8,732.0	700.0	-11.3	8.18	8.18	0.00	359.08	Corral Canyon Fed
13,371.5	90.00	359.08	8,732.0	4,939.3	-79.7	0.00	0.00	0.00	0.00	Corral Canyon Fed



Well Planning Report



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Project:	Eddy County, NM	MD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Site:	Sec 4, T25S, R29E	North Reference:	Grid
Well:	Corral Canyon Federal #08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
404.0	0.00	0.00	404.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
Salado (Top of Salt)									
785.0	0.00	0.00	785.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
Base of Salt									
2,826.0	0.00	0.00	2,826.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
Delaware (Bell Canyon)									
3,023.0	0.00	0.00	3,023.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
Cherry Canyon									
3,899.0	0.00	0.00	3,899.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00



Well Planning Report



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Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Brushy Canyon									
5,511.0	0.00	0.00	5,511.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
Bone Spring Lime									
6,810.0	0.00	0.00	6,810.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1st Bone Spring Sand									
7,726.0	0.00	0.00	7,726.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 8.18									
8,031.9	0.00	0.00	8,031.9	0.0	0.0	0.0	0.00	0.00	0.00
8,050.0	1.48	359.08	8,050.0	0.2	0.0	0.2	8.18	8.18	0.00
2nd Bone Spring Lime									
8,085.1	4.35	359.08	8,085.0	2.0	0.0	2.0	8.18	8.18	0.00
8,100.0	5.57	359.08	8,099.9	3.3	-0.1	3.3	8.18	8.18	0.00
8,150.0	9.66	359.08	8,149.4	9.9	-0.2	9.9	8.18	8.18	0.00
8,200.0	13.76	359.08	8,198.4	20.1	-0.3	20.1	8.18	8.18	0.00
8,250.0	17.85	359.08	8,246.5	33.7	-0.5	33.7	8.18	8.18	0.00
8,300.0	21.94	359.08	8,293.5	50.7	-0.8	50.7	8.18	8.18	0.00



Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Corral Canyon Federal #08H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Project:	Eddy County, NM	MD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Site:	Sec 4, T25S, R29E	North Reference:	Grid
Well:	Corral Canyon Federal #08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)
8,350.0	26.03	359.08	8,339.2	71.0	-1.1	71.0	8.18	8.18	0.00
8,400.0	30.12	359.08	8,383.3	94.5	-1.5	94.6	8.18	8.18	0.00
8,450.0	34.22	359.08	8,425.6	121.2	-2.0	121.2	8.18	8.18	0.00
8,500.0	38.31	359.08	8,465.9	150.7	-2.4	150.7	8.18	8.18	0.00
8,550.0	42.40	359.08	8,504.0	183.1	-3.0	183.1	8.18	8.18	0.00
2nd Bone Spring Sand									
8,560.9	43.30	359.08	8,512.0	190.5	-3.1	190.5	8.18	8.18	0.00
8,600.0	46.49	359.08	8,539.7	218.1	-3.5	218.1	8.18	8.18	0.00
8,650.0	50.58	359.08	8,572.8	255.5	-4.1	255.6	8.18	8.18	0.00
8,700.0	54.68	359.08	8,603.1	295.3	-4.8	295.3	8.18	8.18	0.00
8,750.0	58.77	359.08	8,630.5	337.1	-5.4	337.1	8.18	8.18	0.00
8,800.0	62.86	359.08	8,654.9	380.7	-6.1	380.7	8.18	8.18	0.00
8,850.0	66.95	359.08	8,676.1	426.0	-6.9	426.0	8.18	8.18	0.00
8,900.0	71.04	359.08	8,694.0	472.6	-7.6	472.7	8.18	8.18	0.00
2nd Bone Spring C									
8,936.5	74.04	359.08	8,705.0	507.5	-8.2	507.5	8.18	8.18	0.00
8,950.0	75.14	359.08	8,708.6	520.4	-8.4	520.5	8.18	8.18	0.00
9,000.0	79.23	359.08	8,719.7	569.2	-9.2	569.3	8.18	8.18	0.00
9,050.0	83.32	359.08	8,727.2	618.6	-10.0	618.7	8.18	8.18	0.00
9,100.0	87.41	359.08	8,731.3	668.4	-10.8	668.5	8.18	8.18	0.00
Start 4239.9 hold at 9131.6 MD									
9,131.6	90.00	359.08	8,732.0	700.0	-11.3	700.1	8.18	8.18	0.00
9,200.0	90.00	359.08	8,732.0	768.4	-12.4	768.5	0.00	0.00	0.00
9,300.0	90.00	359.08	8,732.0	868.4	-14.0	868.5	0.00	0.00	0.00
9,400.0	90.00	359.08	8,732.0	968.4	-15.6	968.5	0.00	0.00	0.00
9,500.0	90.00	359.08	8,732.0	1,068.3	-17.2	1,068.5	0.00	0.00	0.00
9,600.0	90.00	359.08	8,732.0	1,168.3	-18.9	1,168.5	0.00	0.00	0.00
9,700.0	90.00	359.08	8,732.0	1,268.3	-20.5	1,268.5	0.00	0.00	0.00
9,800.0	90.00	359.08	8,732.0	1,368.3	-22.1	1,368.5	0.00	0.00	0.00
9,900.0	90.00	359.08	8,732.0	1,468.3	-23.7	1,468.5	0.00	0.00	0.00
10,000.0	90.00	359.08	8,732.0	1,568.3	-25.3	1,568.5	0.00	0.00	0.00
10,100.0	90.00	359.08	8,732.0	1,668.3	-26.9	1,668.5	0.00	0.00	0.00
10,200.0	90.00	359.08	8,732.0	1,768.3	-28.5	1,768.5	0.00	0.00	0.00
10,300.0	90.00	359.08	8,732.0	1,868.2	-30.2	1,868.5	0.00	0.00	0.00
10,400.0	90.00	359.08	8,732.0	1,968.2	-31.8	1,968.5	0.00	0.00	0.00
10,500.0	90.00	359.08	8,732.0	2,068.2	-33.4	2,068.5	0.00	0.00	0.00
10,600.0	90.00	359.08	8,732.0	2,168.2	-35.0	2,168.5	0.00	0.00	0.00
10,700.0	90.00	359.08	8,732.0	2,268.2	-36.6	2,268.5	0.00	0.00	0.00
10,800.0	90.00	359.08	8,732.0	2,368.2	-38.2	2,368.5	0.00	0.00	0.00
10,900.0	90.00	359.08	8,732.0	2,468.2	-39.8	2,468.5	0.00	0.00	0.00
11,000.0	90.00	359.08	8,732.0	2,568.1	-41.5	2,568.5	0.00	0.00	0.00
11,100.0	90.00	359.08	8,732.0	2,668.1	-43.1	2,668.5	0.00	0.00	0.00
11,200.0	90.00	359.08	8,732.0	2,768.1	-44.7	2,768.5	0.00	0.00	0.00
11,300.0	90.00	359.08	8,732.0	2,868.1	-46.3	2,868.5	0.00	0.00	0.00
11,400.0	90.00	359.08	8,732.0	2,968.1	-47.9	2,968.5	0.00	0.00	0.00
11,500.0	90.00	359.08	8,732.0	3,068.1	-49.5	3,068.5	0.00	0.00	0.00
11,600.0	90.00	359.08	8,732.0	3,168.1	-51.1	3,168.5	0.00	0.00	0.00
11,700.0	90.00	359.08	8,732.0	3,268.1	-52.8	3,268.5	0.00	0.00	0.00
11,800.0	90.00	359.08	8,732.0	3,368.0	-54.4	3,368.5	0.00	0.00	0.00
11,900.0	90.00	359.08	8,732.0	3,468.0	-56.0	3,468.5	0.00	0.00	0.00
12,000.0	90.00	359.08	8,732.0	3,568.0	-57.6	3,568.5	0.00	0.00	0.00
12,100.0	90.00	359.08	8,732.0	3,668.0	-59.2	3,668.5	0.00	0.00	0.00
12,200.0	90.00	359.08	8,732.0	3,768.0	-60.8	3,768.5	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Corral Canyon Federal #08H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Project:	Eddy County, NM	MD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Site:	Sec 4, T25S, R29E	North Reference:	Grid
Well:	Corral Canyon Federal #08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

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)	
12,300.0	90.00	359.08	8,732.0	3,868.0	-62.4	3,868.5	0.00	0.00	0.00	
12,400.0	90.00	359.08	8,732.0	3,968.0	-64.1	3,968.5	0.00	0.00	0.00	
12,500.0	90.00	359.08	8,732.0	4,068.0	-65.7	4,068.5	0.00	0.00	0.00	
12,600.0	90.00	359.08	8,732.0	4,167.9	-67.3	4,168.5	0.00	0.00	0.00	
12,700.0	90.00	359.08	8,732.0	4,267.9	-68.9	4,268.5	0.00	0.00	0.00	
12,800.0	90.00	359.08	8,732.0	4,367.9	-70.5	4,368.5	0.00	0.00	0.00	
12,900.0	90.00	359.08	8,732.0	4,467.9	-72.1	4,468.5	0.00	0.00	0.00	
13,000.0	90.00	359.08	8,732.0	4,567.9	-73.7	4,568.5	0.00	0.00	0.00	
13,100.0	90.00	359.08	8,732.0	4,667.9	-75.4	4,668.5	0.00	0.00	0.00	
13,200.0	90.00	359.08	8,732.0	4,767.9	-77.0	4,768.5	0.00	0.00	0.00	
13,300.0	90.00	359.08	8,732.0	4,867.8	-78.6	4,868.5	0.00	0.00	0.00	
TD at 13371.5										
13,371.5	90.00	359.08	8,732.0	4,939.3	-79.7	4,940.0	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Corral Canyon Federal	0.00	0.00	0.0	0.0	0.0	419,293.90	608,623.40	32° 9' 8.168 N	103° 58' 56.456 W	
- plan hits target center										
- Point										
Corral Canyon Federal	0.00	0.00	8,732.0	4,809.3	-79.0	424,103.20	608,544.40	32° 9' 55.765 N	103° 58' 57.193 W	
- plan misses target center by 1.4usft at 13241.5usft MD (8732.0 TVD, 4809.3 N, -77.6 E)										
- Point										
Corral Canyon Federal	0.00	0.00	8,732.0	700.0	-11.3	419,993.90	608,612.10	32° 9' 15.096 N	103° 58' 56.561 W	
- plan hits target center										
- Point										
Corral Canyon Federal	0.00	0.00	8,732.0	4,939.3	-80.9	424,233.20	608,542.50	32° 9' 57.052 N	103° 58' 57.210 W	
- plan misses target center by 1.2usft at 13371.5usft MD (8732.0 TVD, 4939.3 N, -79.7 E)										
- Point										

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
404.0	404.0	Rustler				
785.0	785.0	Salado (Top of Salt)				
2,826.0	2,826.0	Base of Salt				
3,023.0	3,023.0	Delaware (Bell Canyon)				
3,899.0	3,899.0	Cherry Canyon				
5,511.0	5,511.0	Brushy Canyon				
6,810.0	6,810.0	Bone Spring Lime				
7,726.0	7,726.0	1st Bone Spring Sand				
8,085.1	8,085.0	2nd Bone Spring Lime				
8,560.9	8,512.0	2nd Bone Spring Sand				
8,936.5	8,705.0	2nd Bone Spring C				



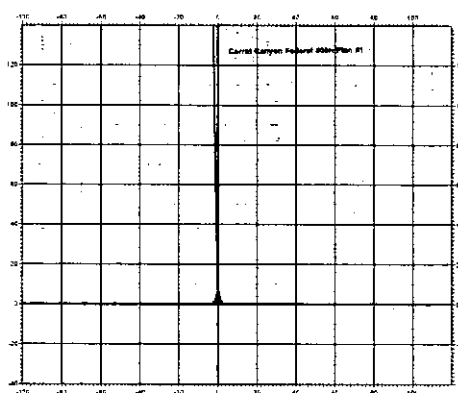
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Corral Canyon Federal #08H
Company:	XTO ENERGY, INC.	TVD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Project:	Eddy County, NM	MD Reference:	RKB (GL+27') @ 3025.0usft (Frontier #27)
Site:	Sec 4, T25S, R29E	North Reference:	Grid
Well:	Corral Canyon Federal #08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,031.9	8,031.9	0.0	0.0	Start Build 8.18
9,131.6	8,732.0	700.0	-11.3	Start 4239.9 hold at 9131.6 MD
13,371.5	8,732.0	4,939.3	-79.7	TD at 13371.5

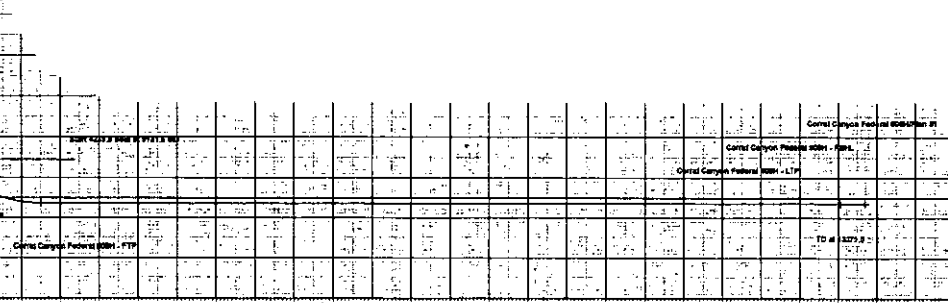
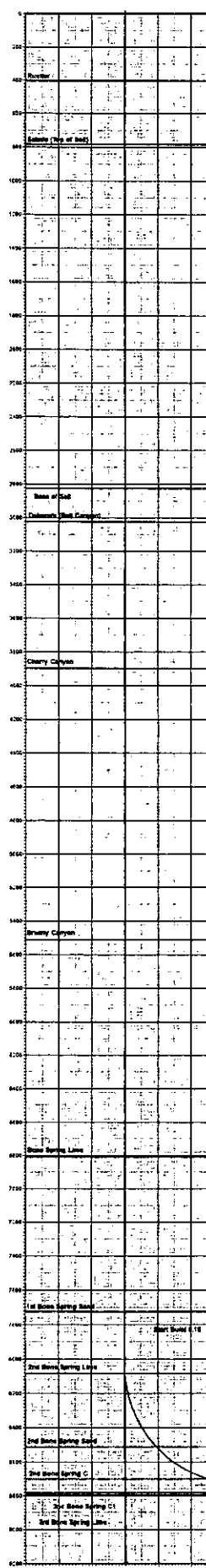
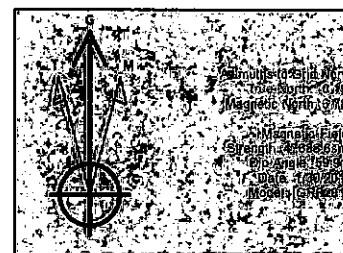
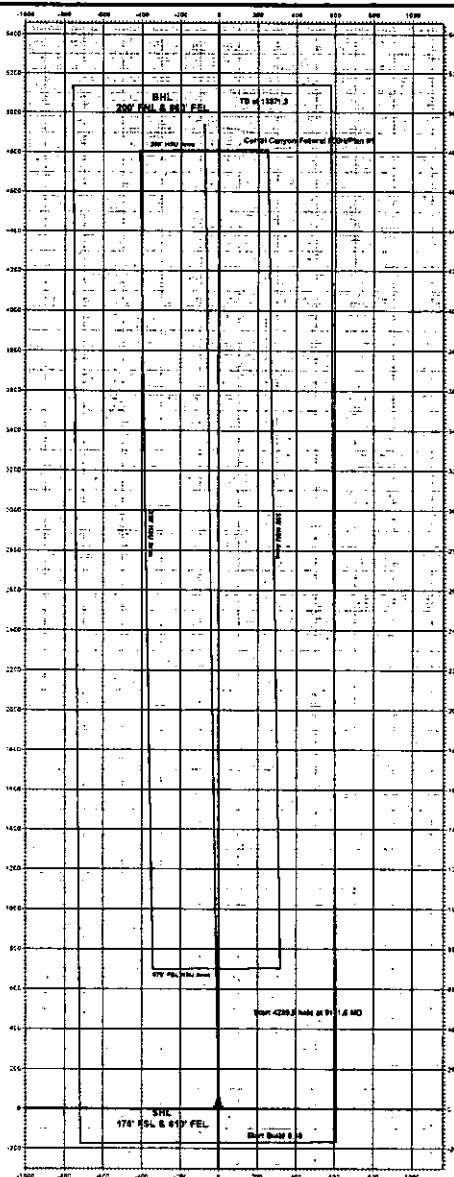
Corral Canyon Federal #08H
Eddy County, NM
Q190*** & RM-190***
Plan #1



Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: Corral Canyon Federal NM					
2006.0					
Ni-B	E-W	Northng	Easting	Latitude	Longitude
0.0	0.0	419293.50	586623.40	32° 5' 9.188 N	103° 00' 56.456 W

ANNOTATIONS									
MD	Inc	Azi	TVB	+H.S	+E-JW	VSecl	Departure	Arrival	
0031.5	0.00	8.00	0031.5	0.0	0.0	0.0	0.0	0.0	Start 1400 8.10
0131.5	90.00	359.00	0132.0	700.0	-11.3	700.1	700.1	700.1	Start 0230.9 hold at 0131.0 MD
13371.5	90.00	360.00	0732.0	4000.3	-79.7	4000.0	4000.0	4000.0	TD at 13371.5



Vertical Section at 359.08' (200 uast/in)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Energy Incorporated
LEASE NO.:	NMNM-15302
WELL NAME & NO.:	Corral Canyon Federal 8H
SURFACE HOLE FOOTAGE:	0170' FSL & 0610' FEL
BOTTOM HOLE FOOTAGE:	0050' FNL & 0660' FEL
LOCATION:	Section 04, T. 25 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

Original COAs still stand with the following drilling modifications:

A. 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.**

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