

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.
NMNM99147

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
CORRAL CANYON 8-32 FEDERAL 105H9. API Well No.
30-015-46489-00-X110. Field and Pool or Exploratory Area
PURPLE SAGE-WOLFCAMP (GAS)11. 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: 432-620-4374

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

Sec 8 T25S R29E NWSE 2513FSL 2123FEL
32.144310 N Lat, 104.004913 W Lon

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

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 recompleat 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 recompleat 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 change the casing & cement design per the attached drilling program.

XTO requests to not utilize centralizers in the curve and lateral.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set each casing string and ensure that the well is cemented properly and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per GE recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

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

Electronic Submission #501932 verified by the BLM Well Information System**For XTO ENERGY INCORPORATED, sent to the Carlsbad****Committed to AFMSS for processing by PRISCILLA PEREZ on 02/04/2020 (20PP1088SE)**

Name (Printed/Typed) KELLY KARDOS

Title REGULATORY COORDINATOR

Signature (Electronic Submission)

Date 02/04/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

ACCEPTEDALLISON MORENCY
Title PETROLEUM ENGINEER

Date 02/20/2020

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 Carlsbad

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 ****

Accepted 03/27/2020 - Kurt Simmons NMOCD

Additional data for EC transaction #501932 that would not fit on the form

32. Additional remarks, continued

Corral Canyon 8-32 Federal 165H 30-015-46490
Corral Canyon 8-32 Federal 125H 30-015-46487
Corral Canyon 8-32 Federal 105H 30-015-46489
Corral Canyon 8-32 Federal 126H 30-015-46491
Corral Canyon 8-32 Federal 166H 30-015-45488

Revisions to Operator-Submitted EC Data for Sundry Notice #501932

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM99147	NMNM99147
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 Ph: 432-620-4374	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374
Tech Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374
Location:		
State:	NM	NM
County:	EDDY	EDDY
Field/Pool:	PURPLE SAGE; WOLFCAMP	PURPLE SAGE-WOLFCAMP (GAS)
Well/Facility:	CORRAL CANYON 8-32 FEDERAL 105H Sec 8 T25S R29E Mer NMP NWSE 2513FSL 2123FEL	CORRAL CANYON 8-32 FEDERAL 105H Sec 8 T25S R29E NWSE 2513FSL 2123FEL 32.144310 N Lat, 104.004913 W Lon

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

XTO Energy Inc.
Corral Canyon 8-32 FED 105H
Projected TD: 20305' MD / 9936' TVD
SHL: 2513' FSL & 2123' FEL , Section 8, T25S, R29E
BHL: 2440' FSL & 2010' FEL , Section 32, T24S, R29E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Permian

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	279'	Water
Top of Salt	680'	Water
Base of Salt	2680'	Water
Delaware	2878'	Water
Bone Spring	6616'	Water/Oil/Gas
1st Bone Spring Ss	7555'	Water/Oil/Gas
2nd Bone Spring Ss	8381'	Water/Oil/Gas
3rd Bone Spring Ss	9443'	Water/Oil/Gas
Wolfcamp	9814'	Water/Oil/Gas
Wolfcamp A	9950'	Water/Oil/Gas
Target/Land Curve	9936'	Water/Oil/Gas

not in geo-prog

*** 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 16 inch casing @ ' (680' above the salt) and circulating cement back to surface. The salt will be isolated by setting 11-3/4 inch casing at 580' and circulating cement to surface. A 10-5/8 inch vertical hole will be drilled to 9460' and 8-5/8 inch casing ran and cemented 500' into the 11-3/4 inch casing. An 7-7/8 inch curve and lateral hole will be drilled to MD/TD and 5-1/2 casing will be set at TD and cemented back 300' into the 8-5/8 inch casing shoe.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
14-3/4"	0' – 580'	11-3/4"	47	BTC	J-55	New	1.31	5.01	17.50
10-5/8"	0' – 9460'	8-5/8"	32	BTC	HCL-80	New	1.39	1.60	2.42
7-7/8"	0' – 20305'	5-1/2"	20	BTC	P-110	New	1.18	1.79	2.42

· XTO requests to not utilize centralizers in the curve and lateral

8-5/8" 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

· Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head (RSH System): 11-3/4" SOW bottom x 13-5/8" 5M top flange

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 8-5/8" casing per Onshore Order 2.
- Wellhead manufacturer representative may not be present for BOP test plug installation

4. Cement Program

Surface Casing: 11-3/4", 47 New J-55, BTC casing to be set at +/- 580'

Lead: 120 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 190 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

Top of Cement: Surface

Intermediate Casing: 8-5/8", 32 New HCL-80, BTC casing to be set at +/- 9460'

ECP/DV Tool to be set at 3581'

1st Stage

Lead: 560 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 9.61 gal/sx water)

Tail: 220 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

2nd Stage

Lead: 1070 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 310 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

Top of Cement: 200' inside previous casing shoe

Production Casing: 5-1/2", 20 New P-110, BTC casing to be set at +/- 20305'

Lead: 1780 sxs Halcem-C + 2% CaCl (mixed at 11.5 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 1780 sxs VersaCem (mixed at 13.2 ppg, 8869 ft3/sx, 8.38 gal/sx water)

Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

Top of Cement: 300' inside previous casing shoe

5. Pressure Control Equipment

Once the permanent WH is installed on the 13-3/8 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M 3-Ram BOP. MASP should not exceed 4014 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M). Also a variance is requested to test the 5M annular to 70% of working pressure at 3500 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" 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When the 11-3/4" and 8-5/8" casing is set, the packoff seals will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M 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.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set each casing string and ensure that the well is cemented properly and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per GE recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 580'	14-3/4"	FW / Native	8.4-8.8	30-40	NC
580' to 9460'	10-5/8"	BW/FWM/Direct Emulsion	8.7-9.8	29-32	NC - 20
9460' to 20305'	7-7/8"	FW / Cut Brine / Polymer/OBM	11.5-12.5	32-50	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 and set 11 3/4" surface casing, isolating the fresh water aquifer. Drill out from under 11-3/4" surface casing with a brine/oil direct emulsion water-based mud. 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 11-3/4" casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below 1st 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 6200 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 PLAN: BLM COMPLIANCE

(Supplement to BLM 3160-3)

XTO Energy Inc.

Corral Canyon 8-32 FED 126H

Projected TD: 20519' MD / 10122' TVD

SHL: 2514' FSL & 2063' FEL , Section 8, T25S, R29E

BHL: 2440' FSL & 1590' FEL , Section 32, T24S, R29E

Eddy County, NM

1. Geologic Name of Surface Formation

A. Permian

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	278'	Water
Top of Salt	679'	Water
Base of Salt	2679'	Water
Delaware	2877'	Water
Bone Spring	66115'	Water/Oil/Gas
1st Bone Spring Ss	7554'	Water/Oil/Gas
2nd Bone Spring Ss	8380'	Water/Oil/Gas
3rd Bone Spring Ss	9442'	Water/Oil/Gas
Wolfcamp	9813'	Water/Oil/Gas
Wolfcamp A	9949'	Water/Oil/Gas
Target/Land Curve	10122'	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 16 inch casing @ ' (679' above the salt) and circulating cement back to surface. The salt will be isolated by setting 11-3/4 inch casing at 570' and circulating cement to surface. A 10-5/8 inch vertical hole will be drilled to 9670' and 8-5/8 inch casing ran and cemented 500' into the 11-3/4 inch casing. An 7-7/8 inch curve and lateral hole will be drilled to MD/TD and 5-1/2 casing will be set at TD and cemented back 300' into the 8-5/8 inch casing shoe.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
14-3/4"	0' – 570'	11-3/4"	47	BTC	J-55	New	1.28	5.09	17.81
10-5/8"	0' – 9670'	8-5/8"	32	BTC	HCL-80	New	1.36	1.57	2.37
7-7/8"	0' – 20519'	5-1/2"	20	BTC	P-110	New	1.18	1.76	2.38

• XTO requests to not utilize centralizers in the curve and lateral

8-5/8" 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

• Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head (RSH System): 11-3/4" SOW bottom x 13-5/8" 5M top flange

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 8-5/8" casing per Onshore Order 2.
- Wellhead manufacturer representative may not be present for BOP test plug installation

4. Cement Program

Surface Casing: 11-3/4", 47 New J-55, BTC casing to be set at +/- 570'

Lead: 120 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 190 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

Top of Cement: Surface

Intermediate Casing: 8-5/8", 32 New HCL-80, BTC casing to be set at +/- 9670'

ECP/DV Tool to be set at 3580'

1st Stage

Lead: 560 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 9.61 gal/sx water)

Tail: 220 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

2nd Stage

Lead: 1120 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 310 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

Top of Cement: 200' inside previous casing shoe

Production Casing: 5-1/2", 20 New P-110, BTC casing to be set at +/- 20519'

Lead: 1780 sxs Halcem-C + 2% CaCl (mixed at 11.5 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 1780 sxs VersaCem (mixed at 13.2 ppg, 9079 ft3/sx, 8.38 gal/sx water)

Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

Top of Cement: 300' inside previous casing shoe

5. Pressure Control Equipment

Once the permanent WH is installed on the 13-3/8 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M 3-Ram BOP. MASP should not exceed 4089 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M). Also a variance is requested to test the 5M annular to 70% of working pressure at 3500 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" 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When the 11-3/4" and 8-5/8" casing is set, the packoff seals will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M 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.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set each casing string and ensure that the well is cemented properly and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per GE recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 570'	14-3/4"	FW / Native	8.4-8.8	30-40	NC
570' to 9670'	10-5/8"	BW/FWM/Direct Emulsion	8.7-9.8	29-32	NC - 20
9670' to 20519'	7-7/8"	FW / Cut Brine / Polymer/OBM	11.5-12.5	32-50	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 and set 11 3/4" surface casing, isolating the fresh water aquifer. Drill out from under 11-3/4" surface casing with a brine/oil direct emulsion water-based mud. 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 11-3/4" casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below 1st intermediate casing.

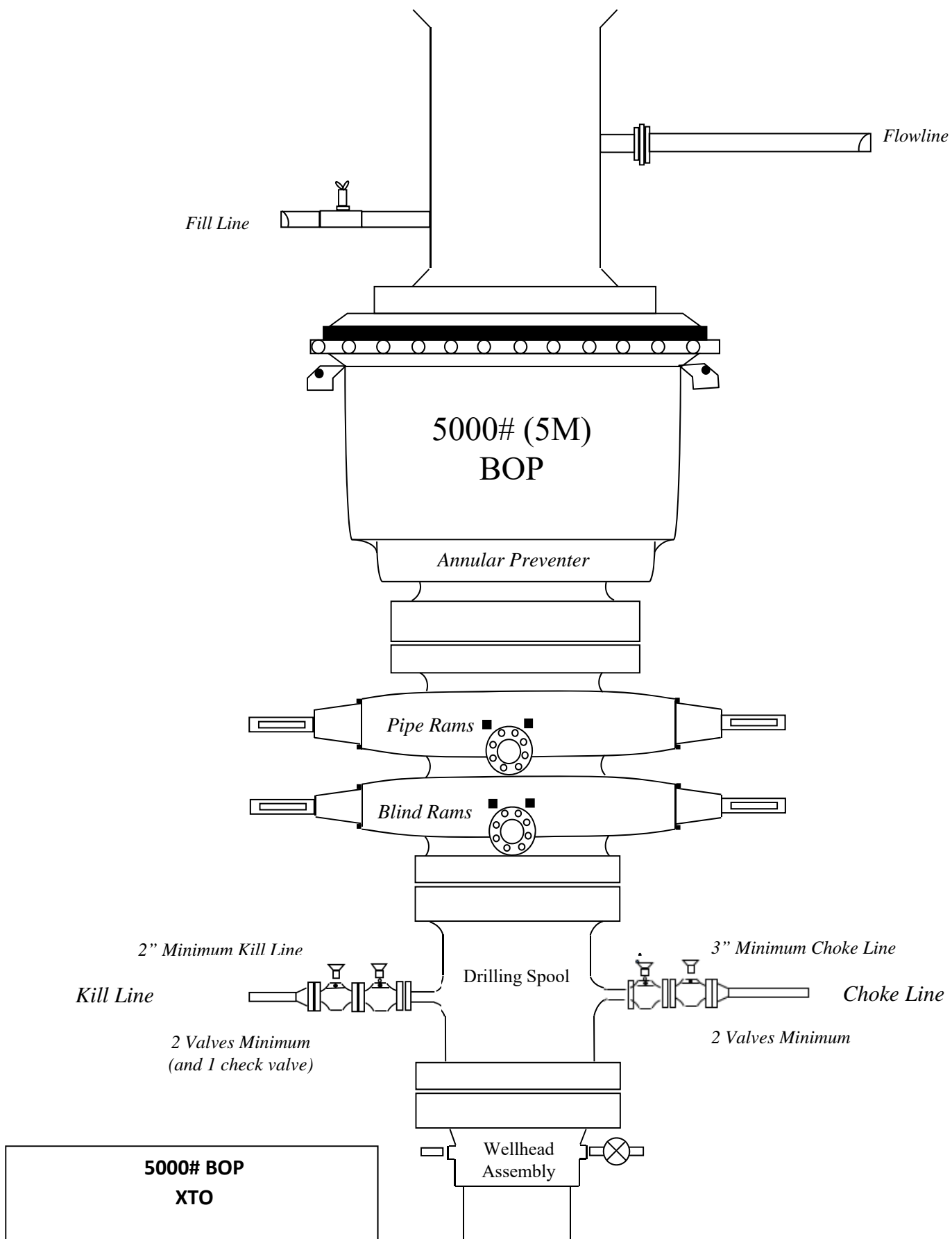
Open hole logging will not be done on this well.

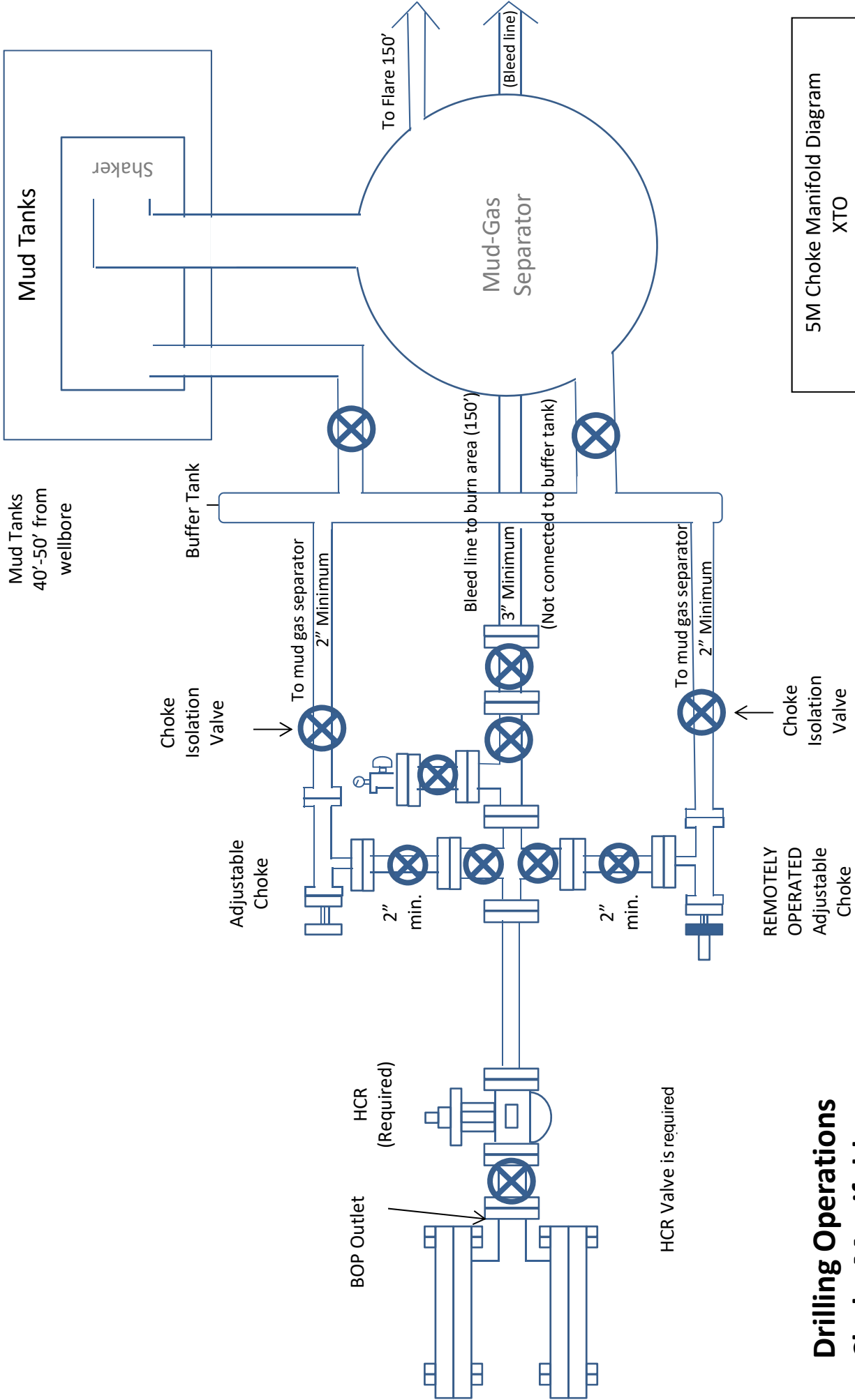
9. Abnormal Pressures and Temperatures / Potential Hazards

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 6316 psi.

10. Anticipated Starting Date and Duration of Operations

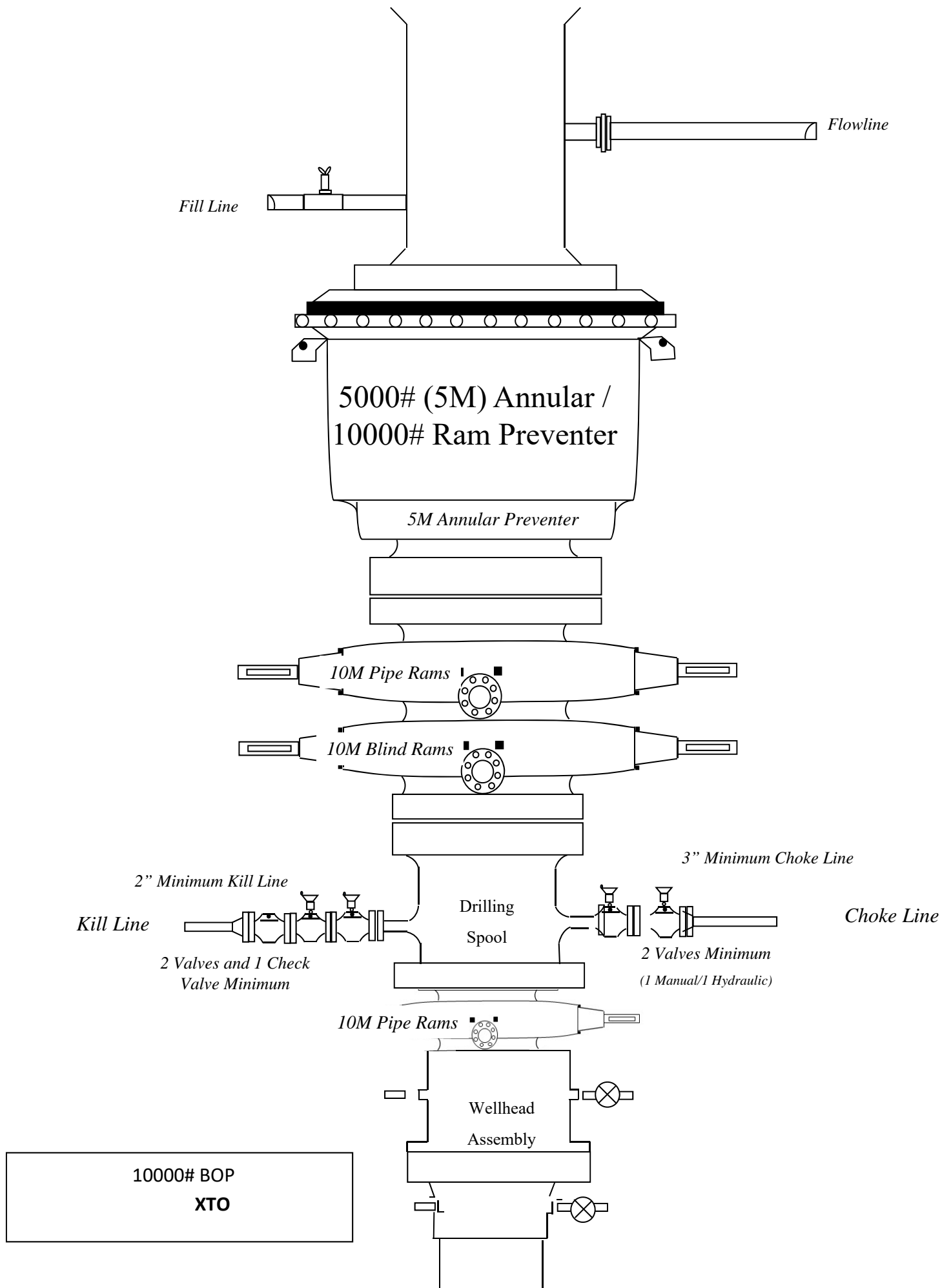
Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run, an additional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





5M Choke Manifold Diagram
XTO

Drilling Operations Choke Manifold 5M Service



10,000 PSI Annular BOP Variance Request

XTO Energy/XTO Permian Op. request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOPL).

1. Component and Preventer Compatibility Tables

The tables below outline the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

8-1/2" Production Hole Section 10M psi Requirement					
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	6.750"-8.000"	Annular	5M	-	-
Production Casing	5-1/2"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the XTO Energy/Permian Operating drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan

9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full-opening safety valve & close
3. Space out drill string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Running Production Casing

1. Sound alarm (alert crew)
2. Stab crossover and full-opening safety valve and close
3. Space out string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

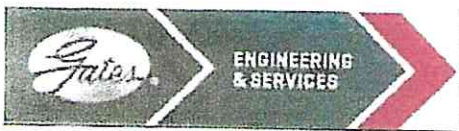
General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams (HCR & choke will already be in the closed position)
3. Confirm shut-in
4. Notify toolpusher/company representative
5. Read and record the following:
 - a. SICP
 - b. Pit gain
 - c. Time
6. Regroup and identify forward plan

General Procedures While Pulling BHA Through Stack

1. PRIOR to pulling last joint of drillpipe through stack:
 - a. Perform flow check. If flowing, continue to (b).
 - b. Sound alarm (alert crew)
 - c. Stab full-opening safety valve and close
 - d. Space out drill string with tool joint just beneath the upper variable bore rams
 - e. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
 - f. Confirm shut-in
 - g. Notify toolpusher/company representative
 - h. Read and record the following:
 - i. SIDPP & SICP
 - ii. Pit gain
 - iii. Time
 - i. Regroup and identify forward plan
2. With BHA in the stack and compatible ram preventer and pipe combination immediately available:
 - a. Sound alarm (alert crew)
 - b. Stab crossover and full-opening safety valve and close
 - c. Space out drill string with upset just beneath the upper variable bore rams
 - d. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
 - e. Confirm shut-in
 - f. Notify toolpusher/company representative
 - g. Read and record the following:
 - i. SIDPP & SICP

- ii. Pit gain
 - iii. Time
 - h. Regroup and identify forward plan
- 3. With BHA in the stack and NO compatible ram preventer and pipe combination immediately available:
 - a. Sound alarm (alert crew)
 - b. If possible, pull string clear of the stack and follow "Open Hole" procedure.
 - c. If impossible to pull string clear of the stack:
 - d. Stab crossover, make up one joint/stand of drillpipe and full-opening safety valve and close
 - e. Space out drill string with tooljoint just beneath the upper variable bore ram
 - f. Shut-in using upper variable bore ram (HCR & choke will already be in the closed position)
 - g. Confirm shut-in
 - h. Notify toolpusher/company representative
 - i. Read and record the following:
 - i. SIDPP & SICP
 - ii. Pit gain
 - iii. Time
 - j. Regroup and identify forward plan



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

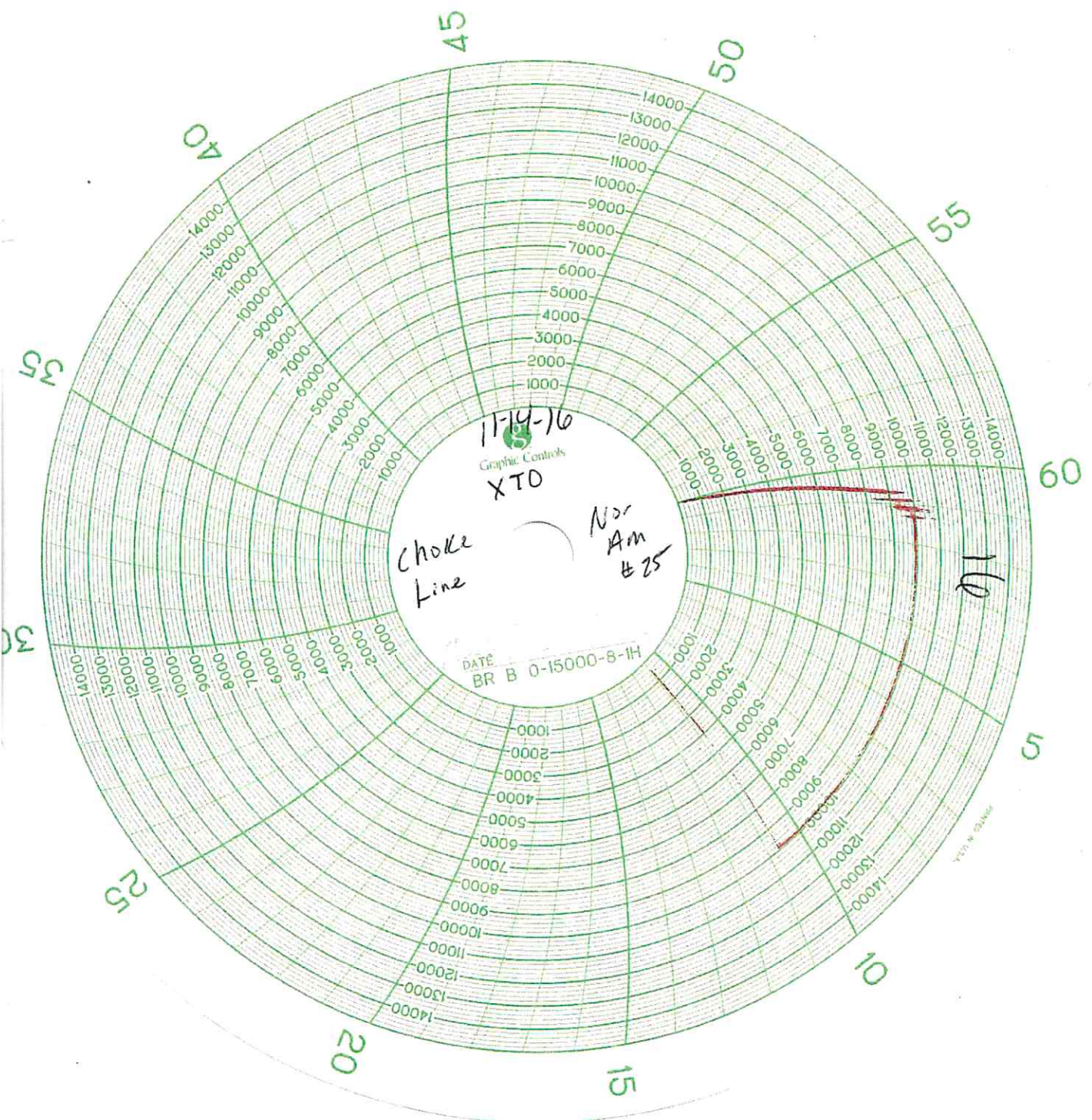
PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: crpe&s@gates.com
WEB: www.gates.com

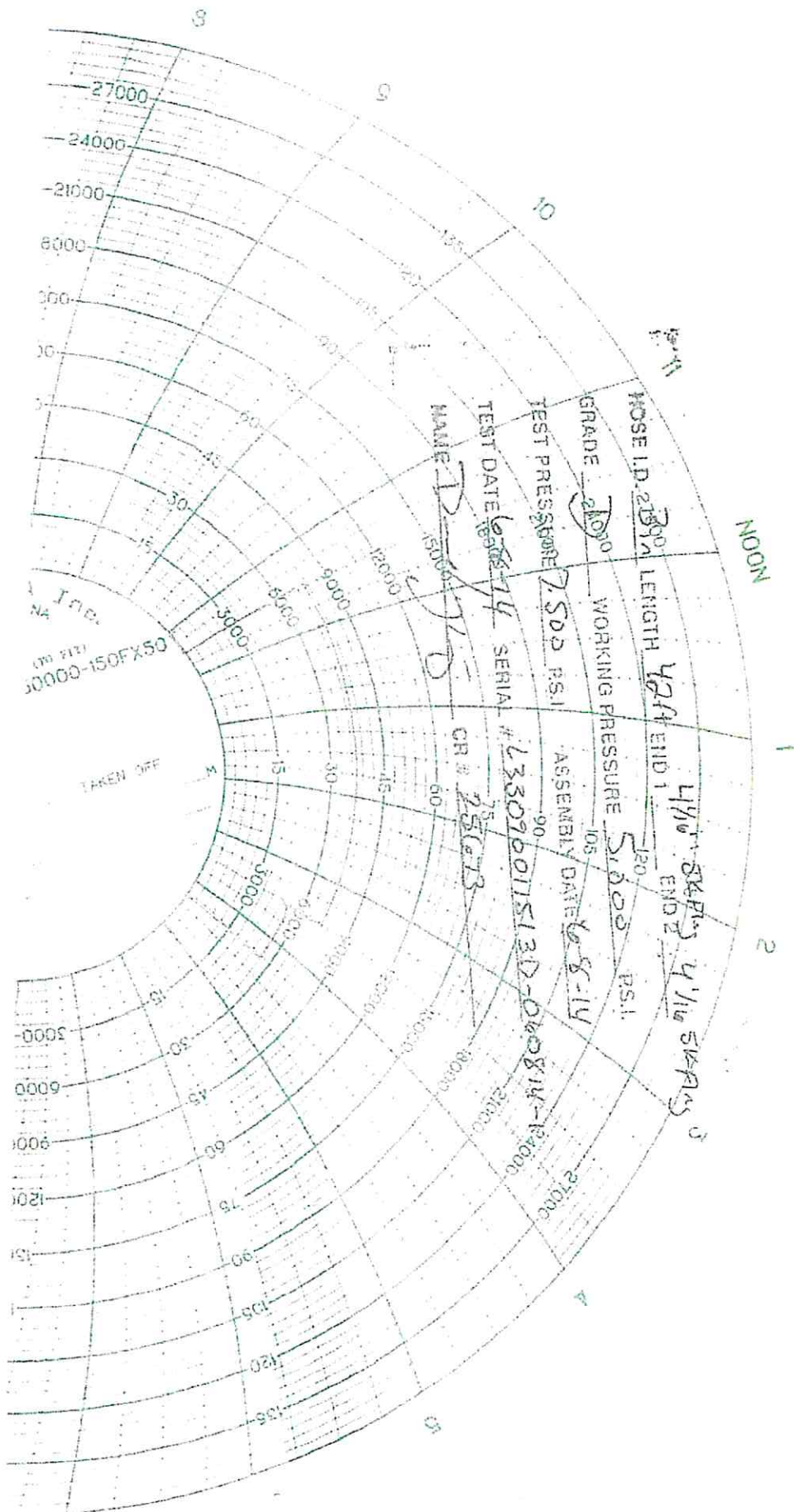
GRADE D PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA
Product Description:	FD3.042.0R41/16.5KFLGE/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 :	





Planning Report

Database:	XTO_EDM	Local Co-ordinate Reference:	Well 105H - Slot CC 8-32 FED 105H SHL
Company:	XTO Energy	TVD Reference:	2963+25 @ 2988.00usft (Ens451)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	2963+25 @ 2988.00usft (Ens451)
Site:	Corral Canyon 8-32 FED	North Reference:	Grid
Well:	105H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Project	Eddy County, NM (NAD27) NMEZ Grid		
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		Corral Canyon 8-32 FED			
Site Position:		Northing:	416,331.60 usft	Latitude:	32.1441849
From:	Map	Easting:	601,800.00 usft	Longitude:	-104.0044257
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.18 °

Well	105H - Slot CC 8-32 FED 105H SHL					
Well Position	+N/-S	0.00 usft	Northing:	416,331.60 usft	Latitude:	32.1441849
	+E/-W	0.00 usft	Easting:	601,800.00 usft	Longitude:	-104.0044257
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	2,963.00 usft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	01/15/20	6.90	59.81	47,551.97151497

Design	Plan #1				
Audit Notes:					
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	359.77	

Plan Survey Tool Program	Date	01/16/20			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	20,305.03	Plan #1 (Lateral)	MWD+IFR1+MS	
				OWSG MWD + IFR1 + Multi-St	

Planning Report

Database:	XTO_EDM	Local Co-ordinate Reference:	Well 105H - Slot CC 8-32 FED 105H SHL
Company:	XTO Energy	TVD Reference:	2963+25 @ 2988.00usft (Ens451)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	2963+25 @ 2988.00usft (Ens451)
Site:	Corral Canyon 8-32 FED	North Reference:	Grid
Well:	105H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,333.33	5.00	131.33	3,332.91	-9.60	10.91	1.50	1.50	0.00	131.33	
4,750.27	5.00	131.33	4,744.46	-91.16	103.65	0.00	0.00	0.00	0.00	
5,083.61	0.00	0.00	5,077.37	-100.76	114.56	1.50	-1.50	0.00	180.00	
7,006.24	0.00	0.00	7,000.00	-100.76	114.56	0.00	0.00	0.00	0.00	
9,369.29	0.00	0.00	9,363.05	-100.76	114.56	0.00	0.00	0.00	0.00	
10,271.29	90.20	359.77	9,936.00	474.20	112.25	10.00	10.00	0.00	359.77	
20,175.03	90.20	359.77	9,901.43	10,377.80	72.50	0.00	0.00	0.00	0.00	CC 8-32 FED 105H L
20,305.03	90.20	359.77	9,900.98	10,507.80	71.98	0.00	0.00	0.00	0.00	CC 8-32 FED 105H P

Planning Report

Database:	XTO_EDM	Local Co-ordinate Reference:	Well 105H - Slot CC 8-32 FED 105H SHL
Company:	XTO Energy	TVD Reference:	2963+25 @ 2988.00usft (Ens451)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	2963+25 @ 2988.00usft (Ens451)
Site:	Corral Canyon 8-32 FED	North Reference:	Grid
Well:	105H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
377.00	0.00	0.00	377.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,680.00	0.00	0.00	2,680.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Salt									
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,878.00	0.00	0.00	2,878.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,932.00	0.00	0.00	2,932.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	1.50	131.33	3,099.99	-0.86	0.98	-0.87	1.50	1.50	0.00
3,200.00	3.00	131.33	3,199.91	-3.46	3.93	-3.47	1.50	1.50	0.00
3,300.00	4.50	131.33	3,299.69	-7.78	8.84	-7.81	1.50	1.50	0.00
3,333.33	5.00	131.33	3,332.91	-9.60	10.91	-9.64	1.50	1.50	0.00
3,400.00	5.00	131.33	3,399.32	-13.44	15.28	-13.50	0.00	0.00	0.00
3,500.00	5.00	131.33	3,498.94	-19.19	21.82	-19.28	0.00	0.00	0.00
3,600.00	5.00	131.33	3,598.56	-24.95	28.37	-25.06	0.00	0.00	0.00
3,700.00	5.00	131.33	3,698.18	-30.70	34.91	-30.84	0.00	0.00	0.00
3,783.13	5.00	131.33	3,781.00	-35.49	40.35	-35.65	0.00	0.00	0.00
Cherry Canyon									
3,800.00	5.00	131.33	3,797.80	-36.46	41.46	-36.63	0.00	0.00	0.00
3,900.00	5.00	131.33	3,897.42	-42.22	48.00	-42.41	0.00	0.00	0.00
4,000.00	5.00	131.33	3,997.04	-47.97	54.54	-48.19	0.00	0.00	0.00
4,100.00	5.00	131.33	4,096.66	-53.73	61.09	-53.97	0.00	0.00	0.00
4,200.00	5.00	131.33	4,196.28	-59.48	67.63	-59.75	0.00	0.00	0.00

Planning Report

Database:	XTO_EDM	Local Co-ordinate Reference:	Well 105H - Slot CC 8-32 FED 105H SHL
Company:	XTO Energy	TVD Reference:	2963+25 @ 2988.00usft (Ens451)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	2963+25 @ 2988.00usft (Ens451)
Site:	Corral Canyon 8-32 FED	North Reference:	Grid
Well:	105H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,300.00	5.00	131.33	4,295.90	-65.24	74.18	-65.54	0.00	0.00	0.00
4,400.00	5.00	131.33	4,395.52	-71.00	80.72	-71.32	0.00	0.00	0.00
4,500.00	5.00	131.33	4,495.14	-76.75	87.27	-77.10	0.00	0.00	0.00
4,600.00	5.00	131.33	4,594.76	-82.51	93.81	-82.88	0.00	0.00	0.00
4,700.00	5.00	131.33	4,694.38	-88.26	100.36	-88.66	0.00	0.00	0.00
4,750.27	5.00	131.33	4,744.46	-91.16	103.65	-91.57	0.00	0.00	0.00
4,800.00	4.25	131.33	4,794.02	-93.81	106.66	-94.23	1.50	-1.50	0.00
4,900.00	2.75	131.33	4,893.83	-97.84	111.25	-98.29	1.50	-1.50	0.00
5,000.00	1.25	131.33	4,993.77	-100.15	113.87	-100.61	1.50	-1.50	0.00
5,083.61	0.00	0.00	5,077.37	-100.76	114.56	-101.21	1.50	-1.50	0.00
5,100.00	0.00	0.00	5,093.76	-100.76	114.56	-101.21	0.00	0.00	0.00
5,200.00	0.00	0.00	5,193.76	-100.76	114.56	-101.21	0.00	0.00	0.00
5,300.00	0.00	0.00	5,293.76	-100.76	114.56	-101.21	0.00	0.00	0.00
5,368.24	0.00	0.00	5,362.00	-100.76	114.56	-101.21	0.00	0.00	0.00
Brushy Canyon									
5,400.00	0.00	0.00	5,393.76	-100.76	114.56	-101.21	0.00	0.00	0.00
5,500.00	0.00	0.00	5,493.76	-100.76	114.56	-101.21	0.00	0.00	0.00
5,600.00	0.00	0.00	5,593.76	-100.76	114.56	-101.21	0.00	0.00	0.00
5,700.00	0.00	0.00	5,693.76	-100.76	114.56	-101.21	0.00	0.00	0.00
5,800.00	0.00	0.00	5,793.76	-100.76	114.56	-101.21	0.00	0.00	0.00
5,900.00	0.00	0.00	5,893.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,000.00	0.00	0.00	5,993.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,100.00	0.00	0.00	6,093.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,200.00	0.00	0.00	6,193.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,300.00	0.00	0.00	6,293.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,379.24	0.00	0.00	6,373.00	-100.76	114.56	-101.21	0.00	0.00	0.00
Basal Brushy									
6,400.00	0.00	0.00	6,393.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,500.00	0.00	0.00	6,493.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,600.00	0.00	0.00	6,593.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,622.24	0.00	0.00	6,616.00	-100.76	114.56	-101.21	0.00	0.00	0.00
Bone Spring									
6,644.24	0.00	0.00	6,638.00	-100.76	114.56	-101.21	0.00	0.00	0.00
Bone Spring Lime									
6,700.00	0.00	0.00	6,693.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,771.24	0.00	0.00	6,765.00	-100.76	114.56	-101.21	0.00	0.00	0.00
Upper Avalon									
6,800.00	0.00	0.00	6,793.76	-100.76	114.56	-101.21	0.00	0.00	0.00
6,900.00	0.00	0.00	6,893.76	-100.76	114.56	-101.21	0.00	0.00	0.00
7,006.24	0.00	0.00	7,000.00	-100.76	114.56	-101.21	0.00	0.00	0.00
7,100.00	0.00	0.00	7,093.76	-100.76	114.56	-101.21	0.00	0.00	0.00
7,200.00	0.00	0.00	7,193.76	-100.76	114.56	-101.21	0.00	0.00	0.00
7,246.24	0.00	0.00	7,240.00	-100.76	114.56	-101.21	0.00	0.00	0.00
Lower Avalon Shale									
7,300.00	0.00	0.00	7,293.76	-100.76	114.56	-101.21	0.00	0.00	0.00
7,396.24	0.00	0.00	7,390.00	-100.76	114.56	-101.21	0.00	0.00	0.00
1st Bone Springs Lime									
7,400.00	0.00	0.00	7,393.76	-100.76	114.56	-101.21	0.00	0.00	0.00
7,500.00	0.00	0.00	7,493.76	-100.76	114.56	-101.21	0.00	0.00	0.00
7,561.24	0.00	0.00	7,555.00	-100.76	114.56	-101.21	0.00	0.00	0.00
1st Bone Springs Sand									
7,600.00	0.00	0.00	7,593.76	-100.76	114.56	-101.21	0.00	0.00	0.00
7,700.00	0.00	0.00	7,693.76	-100.76	114.56	-101.21	0.00	0.00	0.00

Planning Report

Database:	XTO_EDM	Local Co-ordinate Reference:	Well 105H - Slot CC 8-32 FED 105H SHL
Company:	XTO Energy	TVD Reference:	2963+25 @ 2988.00usft (Ens451)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	2963+25 @ 2988.00usft (Ens451)
Site:	Corral Canyon 8-32 FED	North Reference:	Grid
Well:	105H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,764.24	0.00	0.00	7,758.00	-100.76	114.56	-101.21	0.00	0.00	0.00
2nd Bone Springs Lime									
7,800.00	0.00	0.00	7,793.76	-100.76	114.56	-101.21	0.00	0.00	0.00
7,900.00	0.00	0.00	7,893.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,000.00	0.00	0.00	7,993.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,100.00	0.00	0.00	8,093.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,200.00	0.00	0.00	8,193.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,300.00	0.00	0.00	8,293.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,387.24	0.00	0.00	8,381.00	-100.76	114.56	-101.21	0.00	0.00	0.00
2nd Bone Springs Sand									
8,400.00	0.00	0.00	8,393.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,500.00	0.00	0.00	8,493.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,600.00	0.00	0.00	8,593.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,644.24	0.00	0.00	8,638.00	-100.76	114.56	-101.21	0.00	0.00	0.00
3rd Bone Springs Lime									
8,700.00	0.00	0.00	8,693.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,800.00	0.00	0.00	8,793.76	-100.76	114.56	-101.21	0.00	0.00	0.00
8,900.00	0.00	0.00	8,893.76	-100.76	114.56	-101.21	0.00	0.00	0.00
9,000.00	0.00	0.00	8,993.76	-100.76	114.56	-101.21	0.00	0.00	0.00
9,100.00	0.00	0.00	9,093.76	-100.76	114.56	-101.21	0.00	0.00	0.00
9,200.00	0.00	0.00	9,193.76	-100.76	114.56	-101.21	0.00	0.00	0.00
9,300.00	0.00	0.00	9,293.76	-100.76	114.56	-101.21	0.00	0.00	0.00
9,369.29	0.00	0.00	9,363.05	-100.76	114.56	-101.21	0.00	0.00	0.00
9,400.00	3.07	359.77	9,393.75	-99.93	114.56	-100.39	10.00	10.00	0.00
9,449.50	8.02	359.77	9,443.00	-95.15	114.54	-95.61	10.00	10.00	0.00
3rd Bone Springs Sand									
9,450.00	8.07	359.77	9,443.50	-95.08	114.54	-95.54	10.00	10.00	0.00
9,500.00	13.07	359.77	9,492.63	-85.91	114.50	-86.37	10.00	10.00	0.00
9,550.00	18.07	359.77	9,540.78	-72.49	114.45	-72.95	10.00	10.00	0.00
9,600.00	23.07	359.77	9,587.58	-54.93	114.38	-55.39	10.00	10.00	0.00
9,650.00	28.07	359.77	9,632.67	-33.36	114.29	-33.81	10.00	10.00	0.00
9,700.00	33.07	359.77	9,675.70	-7.93	114.19	-8.39	10.00	10.00	0.00
9,750.00	38.07	359.77	9,716.36	21.14	114.07	20.69	10.00	10.00	0.00
9,800.00	43.07	359.77	9,754.33	53.65	113.94	53.19	10.00	10.00	0.00
9,850.00	48.07	359.77	9,789.32	89.35	113.80	88.89	10.00	10.00	0.00
9,888.40	51.91	359.77	9,814.00	118.75	113.68	118.30	10.00	10.00	0.00
Wolfcamp									
9,900.00	53.07	359.77	9,821.06	127.96	113.64	127.50	10.00	10.00	0.00
9,927.41	55.81	359.77	9,837.00	150.25	113.55	149.79	10.00	10.00	0.00
Wolfcamp X									
9,950.00	58.07	359.77	9,849.32	169.18	113.48	168.73	10.00	10.00	0.00
10,000.00	63.07	359.77	9,873.88	212.72	113.30	212.26	10.00	10.00	0.00
10,050.00	68.07	359.77	9,894.55	258.23	113.12	257.77	10.00	10.00	0.00
10,070.89	70.16	359.77	9,902.00	277.74	113.04	277.29	10.00	10.00	0.00
Wolfcamp Y									
10,100.00	73.07	359.77	9,911.18	305.36	112.93	304.91	10.00	10.00	0.00
10,150.00	78.07	359.77	9,923.63	353.77	112.74	353.32	10.00	10.00	0.00
10,200.00	83.07	359.77	9,931.82	403.08	112.54	402.62	10.00	10.00	0.00
10,250.00	88.07	359.77	9,935.68	452.91	112.34	452.46	10.00	10.00	0.00
10,266.53	89.72	359.77	9,936.00	469.44	112.27	468.98	10.00	10.00	0.00
LP									
10,271.29	90.20	359.77	9,936.00	474.20	112.25	473.74	10.00	10.00	0.00
10,300.00	90.20	359.77	9,935.90	502.91	112.14	502.46	0.00	0.00	0.00

Planning Report

Database:	XTO_EDM	Local Co-ordinate Reference:	Well 105H - Slot CC 8-32 FED 105H SHL
Company:	XTO Energy	TVD Reference:	2963+25 @ 2988.00usft (Ens451)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	2963+25 @ 2988.00usft (Ens451)
Site:	Corral Canyon 8-32 FED	North Reference:	Grid
Well:	105H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,400.00	90.20	359.77	9,935.55	602.91	111.74	602.46	0.00	0.00	0.00
10,500.00	90.20	359.77	9,935.21	702.91	111.34	702.45	0.00	0.00	0.00
10,600.00	90.20	359.77	9,934.86	802.91	110.93	802.45	0.00	0.00	0.00
10,700.00	90.20	359.77	9,934.51	902.90	110.53	902.45	0.00	0.00	0.00
10,800.00	90.20	359.77	9,934.16	1,002.90	110.13	1,002.45	0.00	0.00	0.00
10,900.00	90.20	359.77	9,933.81	1,102.90	109.73	1,102.45	0.00	0.00	0.00
11,000.00	90.20	359.77	9,933.46	1,202.90	109.33	1,202.45	0.00	0.00	0.00
11,100.00	90.20	359.77	9,933.11	1,302.90	108.93	1,302.45	0.00	0.00	0.00
11,200.00	90.20	359.77	9,932.76	1,402.90	108.53	1,402.45	0.00	0.00	0.00
11,300.00	90.20	359.77	9,932.41	1,502.90	108.12	1,502.45	0.00	0.00	0.00
11,400.00	90.20	359.77	9,932.06	1,602.89	107.72	1,602.45	0.00	0.00	0.00
11,500.00	90.20	359.77	9,931.71	1,702.89	107.32	1,702.45	0.00	0.00	0.00
11,600.00	90.20	359.77	9,931.37	1,802.89	106.92	1,802.45	0.00	0.00	0.00
11,700.00	90.20	359.77	9,931.02	1,902.89	106.52	1,902.45	0.00	0.00	0.00
11,800.00	90.20	359.77	9,930.67	2,002.89	106.12	2,002.45	0.00	0.00	0.00
11,900.00	90.20	359.77	9,930.32	2,102.89	105.72	2,102.45	0.00	0.00	0.00
12,000.00	90.20	359.77	9,929.97	2,202.89	105.31	2,202.45	0.00	0.00	0.00
12,100.00	90.20	359.77	9,929.62	2,302.88	104.91	2,302.45	0.00	0.00	0.00
12,200.00	90.20	359.77	9,929.27	2,402.88	104.51	2,402.44	0.00	0.00	0.00
12,300.00	90.20	359.77	9,928.92	2,502.88	104.11	2,502.44	0.00	0.00	0.00
12,400.00	90.20	359.77	9,928.57	2,602.88	103.71	2,602.44	0.00	0.00	0.00
12,500.00	90.20	359.77	9,928.22	2,702.88	103.31	2,702.44	0.00	0.00	0.00
12,600.00	90.20	359.77	9,927.87	2,802.88	102.91	2,802.44	0.00	0.00	0.00
12,700.00	90.20	359.77	9,927.53	2,902.88	102.50	2,902.44	0.00	0.00	0.00
12,800.00	90.20	359.77	9,927.18	3,002.87	102.10	3,002.44	0.00	0.00	0.00
12,900.00	90.20	359.77	9,926.83	3,102.87	101.70	3,102.44	0.00	0.00	0.00
13,000.00	90.20	359.77	9,926.48	3,202.87	101.30	3,202.44	0.00	0.00	0.00
13,100.00	90.20	359.77	9,926.13	3,302.87	100.90	3,302.44	0.00	0.00	0.00
13,200.00	90.20	359.77	9,925.78	3,402.87	100.50	3,402.44	0.00	0.00	0.00
13,300.00	90.20	359.77	9,925.43	3,502.87	100.10	3,502.44	0.00	0.00	0.00
13,400.00	90.20	359.77	9,925.08	3,602.87	99.69	3,602.44	0.00	0.00	0.00
13,500.00	90.20	359.77	9,924.73	3,702.86	99.29	3,702.44	0.00	0.00	0.00
13,600.00	90.20	359.77	9,924.38	3,802.86	98.89	3,802.44	0.00	0.00	0.00
13,700.00	90.20	359.77	9,924.03	3,902.86	98.49	3,902.44	0.00	0.00	0.00
13,800.00	90.20	359.77	9,923.69	4,002.86	98.09	4,002.43	0.00	0.00	0.00
13,900.00	90.20	359.77	9,923.34	4,102.86	97.69	4,102.43	0.00	0.00	0.00
14,000.00	90.20	359.77	9,922.99	4,202.86	97.29	4,202.43	0.00	0.00	0.00
14,100.00	90.20	359.77	9,922.64	4,302.86	96.88	4,302.43	0.00	0.00	0.00
14,200.00	90.20	359.77	9,922.29	4,402.86	96.48	4,402.43	0.00	0.00	0.00
14,300.00	90.20	359.77	9,921.94	4,502.85	96.08	4,502.43	0.00	0.00	0.00
14,400.00	90.20	359.77	9,921.59	4,602.85	95.68	4,602.43	0.00	0.00	0.00
14,500.00	90.20	359.77	9,921.24	4,702.85	95.28	4,702.43	0.00	0.00	0.00
14,600.00	90.20	359.77	9,920.89	4,802.85	94.88	4,802.43	0.00	0.00	0.00
14,700.00	90.20	359.77	9,920.54	4,902.85	94.48	4,902.43	0.00	0.00	0.00
14,800.00	90.20	359.77	9,920.20	5,002.85	94.07	5,002.43	0.00	0.00	0.00
14,900.00	90.20	359.77	9,919.85	5,102.85	93.67	5,102.43	0.00	0.00	0.00
15,000.00	90.20	359.77	9,919.50	5,202.84	93.27	5,202.43	0.00	0.00	0.00
15,100.00	90.20	359.77	9,919.15	5,302.84	92.87	5,302.43	0.00	0.00	0.00
15,200.00	90.20	359.77	9,918.80	5,402.84	92.47	5,402.43	0.00	0.00	0.00
15,300.00	90.20	359.77	9,918.45	5,502.84	92.07	5,502.43	0.00	0.00	0.00
15,400.00	90.20	359.77	9,918.10	5,602.84	91.67	5,602.43	0.00	0.00	0.00
15,500.00	90.20	359.77	9,917.75	5,702.84	91.26	5,702.42	0.00	0.00	0.00
15,600.00	90.20	359.77	9,917.40	5,802.84	90.86	5,802.42	0.00	0.00	0.00
15,700.00	90.20	359.77	9,917.05	5,902.83	90.46	5,902.42	0.00	0.00	0.00

Planning Report

Database:	XTO_EDM	Local Co-ordinate Reference:	Well 105H - Slot CC 8-32 FED 105H SHL
Company:	XTO Energy	TVD Reference:	2963+25 @ 2988.00usft (Ens451)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	2963+25 @ 2988.00usft (Ens451)
Site:	Corral Canyon 8-32 FED	North Reference:	Grid
Well:	105H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
15,800.00	90.20	359.77	9,916.70	6,002.83	90.06	6,002.42	0.00	0.00	0.00	
15,900.00	90.20	359.77	9,916.36	6,102.83	89.66	6,102.42	0.00	0.00	0.00	
16,000.00	90.20	359.77	9,916.01	6,202.83	89.26	6,202.42	0.00	0.00	0.00	
16,100.00	90.20	359.77	9,915.66	6,302.83	88.86	6,302.42	0.00	0.00	0.00	
16,200.00	90.20	359.77	9,915.31	6,402.83	88.45	6,402.42	0.00	0.00	0.00	
16,300.00	90.20	359.77	9,914.96	6,502.83	88.05	6,502.42	0.00	0.00	0.00	
16,400.00	90.20	359.77	9,914.61	6,602.82	87.65	6,602.42	0.00	0.00	0.00	
16,500.00	90.20	359.77	9,914.26	6,702.82	87.25	6,702.42	0.00	0.00	0.00	
16,600.00	90.20	359.77	9,913.91	6,802.82	86.85	6,802.42	0.00	0.00	0.00	
16,700.00	90.20	359.77	9,913.56	6,902.82	86.45	6,902.42	0.00	0.00	0.00	
16,800.00	90.20	359.77	9,913.21	7,002.82	86.05	7,002.42	0.00	0.00	0.00	
16,900.00	90.20	359.77	9,912.86	7,102.82	85.64	7,102.42	0.00	0.00	0.00	
17,000.00	90.20	359.77	9,912.52	7,202.82	85.24	7,202.42	0.00	0.00	0.00	
17,100.00	90.20	359.77	9,912.17	7,302.81	84.84	7,302.41	0.00	0.00	0.00	
17,200.00	90.20	359.77	9,911.82	7,402.81	84.44	7,402.41	0.00	0.00	0.00	
17,300.00	90.20	359.77	9,911.47	7,502.81	84.04	7,502.41	0.00	0.00	0.00	
17,400.00	90.20	359.77	9,911.12	7,602.81	83.64	7,602.41	0.00	0.00	0.00	
17,500.00	90.20	359.77	9,910.77	7,702.81	83.24	7,702.41	0.00	0.00	0.00	
17,600.00	90.20	359.77	9,910.42	7,802.81	82.83	7,802.41	0.00	0.00	0.00	
17,700.00	90.20	359.77	9,910.07	7,902.81	82.43	7,902.41	0.00	0.00	0.00	
17,800.00	90.20	359.77	9,909.72	8,002.80	82.03	8,002.41	0.00	0.00	0.00	
17,900.00	90.20	359.77	9,909.37	8,102.80	81.63	8,102.41	0.00	0.00	0.00	
18,000.00	90.20	359.77	9,909.03	8,202.80	81.23	8,202.41	0.00	0.00	0.00	
18,100.00	90.20	359.77	9,908.68	8,302.80	80.83	8,302.41	0.00	0.00	0.00	
18,200.00	90.20	359.77	9,908.33	8,402.80	80.43	8,402.41	0.00	0.00	0.00	
18,300.00	90.20	359.77	9,907.98	8,502.80	80.02	8,502.41	0.00	0.00	0.00	
18,400.00	90.20	359.77	9,907.63	8,602.80	79.62	8,602.41	0.00	0.00	0.00	
18,500.00	90.20	359.77	9,907.28	8,702.79	79.22	8,702.41	0.00	0.00	0.00	
18,600.00	90.20	359.77	9,906.93	8,802.79	78.82	8,802.41	0.00	0.00	0.00	
18,700.00	90.20	359.77	9,906.58	8,902.79	78.42	8,902.41	0.00	0.00	0.00	
18,800.00	90.20	359.77	9,906.23	9,002.79	78.02	9,002.40	0.00	0.00	0.00	
18,900.00	90.20	359.77	9,905.88	9,102.79	77.62	9,102.40	0.00	0.00	0.00	
19,000.00	90.20	359.77	9,905.53	9,202.79	77.21	9,202.40	0.00	0.00	0.00	
19,100.00	90.20	359.77	9,905.19	9,302.79	76.81	9,302.40	0.00	0.00	0.00	
19,200.00	90.20	359.77	9,904.84	9,402.78	76.41	9,402.40	0.00	0.00	0.00	
19,300.00	90.20	359.77	9,904.49	9,502.78	76.01	9,502.40	0.00	0.00	0.00	
19,400.00	90.20	359.77	9,904.14	9,602.78	75.61	9,602.40	0.00	0.00	0.00	
19,500.00	90.20	359.77	9,903.79	9,702.78	75.21	9,702.40	0.00	0.00	0.00	
19,600.00	90.20	359.77	9,903.44	9,802.78	74.81	9,802.40	0.00	0.00	0.00	
19,700.00	90.20	359.77	9,903.09	9,902.78	74.40	9,902.40	0.00	0.00	0.00	
19,800.00	90.20	359.77	9,902.74	10,002.78	74.00	10,002.40	0.00	0.00	0.00	
19,900.00	90.20	359.77	9,902.39	10,102.77	73.60	10,102.40	0.00	0.00	0.00	
20,000.00	90.20	359.77	9,902.04	10,202.77	73.20	10,202.40	0.00	0.00	0.00	
20,100.00	90.20	359.77	9,901.69	10,302.77	72.80	10,302.40	0.00	0.00	0.00	
20,175.03	90.20	359.77	9,901.43	10,377.80	72.50	10,377.42	0.00	0.00	0.00	
20,200.00	90.20	359.77	9,901.35	10,402.77	72.40	10,402.40	0.00	0.00	0.00	
20,305.03	90.20	359.77	9,900.98	10,507.80	71.98	10,507.42	0.00	0.00	0.00	

Planning Report

Database:	XTO_EDM	Local Co-ordinate Reference:	Well 105H - Slot CC 8-32 FED 105H SHL
Company:	XTO Energy	TVD Reference:	2963+25 @ 2988.00usft (Ens451)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	2963+25 @ 2988.00usft (Ens451)
Site:	Corral Canyon 8-32 FED	North Reference:	Grid
Well:	105H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
CC 8-32 FED 166H KOF	0.00	0.00	0.00	-103.46	474.56	416,228.14	602,274.56	32.1438965	-104.0028934
- plan misses target center by 485.71usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
CC 8-32 FED 105H KOF	0.00	0.00	0.00	-100.76	114.56	416,230.84	601,914.57	32.1439070	-104.0040565
- plan misses target center by 152.56usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
CC 8-32 FED 105H SHL	0.00	0.00	0.00	0.00	0.00	416,331.60	601,800.00	32.1441849	-104.0044257
- plan hits target center									
- Point									
CC 8-32 FED 105H PBI	0.00	0.00	9,900.98	10,507.80	72.70	426,839.40	601,872.70	32.1730700	-104.0040869
- plan misses target center by 0.72usft at 20305.03usft MD (9900.98 TVD, 10507.80 N, 71.98 E)									
- Rectangle (sides W100.00 H10,042.00 D0.00)									
CC 8-32 FED 105H LTP	0.00	0.00	9,901.43	10,377.80	73.20	426,709.40	601,873.20	32.1727127	-104.0040866
- plan misses target center by 0.70usft at 20175.03usft MD (9901.43 TVD, 10377.80 N, 72.50 E)									
- Point									
CC 8-32 FED 105H FTP	0.00	0.00	9,936.00	472.20	112.30	416,803.80	601,912.30	32.1454821	-104.0040582
- plan misses target center by 0.04usft at 10269.29usft MD (9936.01 TVD, 472.20 N, 112.26 E)									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
377.00	377.00	Rustler				
2,680.00	2,680.00	Base of Salt				
2,878.00	2,878.00	Delaware				
2,932.00	2,932.00	Bell Canyon				
3,783.13	3,781.00	Cherry Canyon				
5,368.24	5,362.00	Brushy Canyon				
6,379.24	6,373.00	Basal Brushy				
6,622.24	6,616.00	Bone Spring				
6,644.24	6,638.00	Bone Spring Lime				
6,771.24	6,765.00	Upper Avalon				
7,246.24	7,240.00	Lower Avalon Shale				
7,396.24	7,390.00	1st Bone Springs Lime				
7,561.24	7,555.00	1st Bone Springs Sand				
7,764.24	7,758.00	2nd Bone Springs Lime				
8,387.24	8,381.00	2nd Bone Springs Sand				
8,644.24	8,638.00	3rd Bone Springs Lime				
9,449.50	9,443.00	3rd Bone Springs Sand				
9,888.40	9,814.00	Wolfcamp				
9,927.41	9,837.00	Wolfcamp X				
10,070.89	9,902.00	Wolfcamp Y				
10,266.53	9,936.00	LP				