

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB NO 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of Work ☒ DRILL ☐ REENTER		5 Lease Serial No. NMM-8405-NDD-0-14-20-3597	
1b Type of Well ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Borehole		6 If Indian, Allottee or Tribe Name Navajo Allotment	
2 Name of Operator XTO Energy Inc.		7 Unit or QA Agreement Name and No. MA NDD-14	
3a Address 382 Road 3100, Aztec, NM 87410		8 Lease Name and Well No. Canyon #19H	
3b Phone No. (include area code) 505-333-3100		9 API Well No. 30-045-35387	
4 Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1736' FSL & 417' FEL (I) Sec. 2, T25N, R11W At proposed prod. zone 2180' FSL & 1950' FEL (J) Sec. 3, T25N, R11W		10 Field and Pool Exploration Bush Meadows	
11 Sec., T, R, M, or Blk. and Survey or Area Sec. 3, T25N, R11W		12 County or Parish San Juan	
13 State NM		14 Distance in miles and direction from nearest town or post office* 21.4 Miles SW of Bloomfield, NM	
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg. unit line, if any) 417' from lease line		16 No. of Acres in lease 160 800 acres	
17 Spacing Unit dedicated to this well 962.33 acres All of Sec. 2, E/2 Sec. 3		18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 1,304 feet	
19 Proposed Depth 11,614' TMD, 5144' TVD		20 BLM/BIA Bond No. on file UTB000138	
21 Elevations (Show whether DF, KDB, RT, GL, etc) 6389' ground elevation		22 Approximate date work will start* 12/2012	
23 Estimated duration 2 weeks		24 Attachments RCVD AUG 3 '12 OIL CONS. DIV. DIST. 3	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form

- | | |
|--|---|
| 1 Well plat certified by a registered surveyor | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2 A Drilling Plan | 5 Operator certification |
| 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6 Such other site specific information and/or plans as may be required by the BLM |

25 Signature Cherylene Charley	Name (Printed/Typed) Cherylene Charley	Date 6/26/12
Title Sr. Permitting Tech		
Approved by (Signature) [Signature]	Name (Printed/Typed) [Signature]	Date 8/2/12
Title AFM		
Office FFO		

Application approval 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
Conditions of approval, if any, are attached

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.

(Continued on page 2)

Hold C104

for Directional Survey
and "As Drilled" plat

*(Instructions on page 2)

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOC FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOC PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

H₂S POTENTIAL EXISTNOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOC
A

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

AUG 17 2012 ca

16

XTO ENERGY, INC
CANYON #19H
BOTTOM HOLE
LAT 36 42879"N - NAD 83
LONG 107.98911"W - NAD 83
LAT. 36°25'43 593"N - NAD 27
LONG 107°59'18 568"W - NAD 27

XTO ENERGY, INC
CANYON #19H
SURFACE LOCATION
LAT. 36.42754°N - NAD 83
LONG 107.96600°W - NAD 83
LAT. 36°25'39 110"N - NAD 27
LONG 107°57'55.365"W - NAD 27

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.

Cherylene Charley 4/26/12
Signature Date

Cherylene Charley
Printed Name

cherylene_charley@xtoenergy.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plot 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

MARCH 15 2012
Date of Survey

William E. Mahnkens
Signature and Seal of Professional Surveyor:

WILLIAM E. MAHNKENS
Certificate Number PLS-8466

19

XTO ENERGY INC.

Canyon #19H

APD Data

May 25, 2012

Location: 1736' FSL x 417' FEL Sec 2, T25N, R11W County: San Juan State: New Mexico
Bottomhole Location: 2180' FSL x 1950' FEL Sec 3, T25N, R11W

GREATEST PROJECTED TVD: 5144'

APPROX GR ELEV: 6389'

GREATEST PROJECTED MD: 11614'

Est. KB ELEV: 6401' (22' AGL)

OBJECTIVE: Gallup Horizontal

1. MUD PROGRAM:

INTERVAL	0' to 500'	500' to 5697'	5697' to TD
HOLE SIZE	12.25"	8.75"	6.125"
MUD TYPE	FW/Spud Mud	FW/Polymer/LSND	Oil Based Mud/Invert
WEIGHT	8.6-9.0	8.4-9.2	11-13.5
VISCOSITY	28-32	28-36	28-36
WATER LOSS	NC	NC	NC

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning.

2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at $\pm 500'$ in a 12-1/4" hole filled with 9.20 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll ¹	SF Burst ²	SF Ten ³
0'-500'	500'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	8.44	14.7	21.9

Intermediate Casing: 7" casing to be set at $\pm 5697'$ MD, 5144' TVD in 8.75" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll ¹	SF Burst ²	SF Ten ³
0'-5697'	5697'	26 #	J-55	ST&C	4320	4980	334	6.276	6.151	1.76	2.02	2.25

Production Casing: 4.5" casing to be set at $\pm 11614'$ MD, 5054' TVD in 6.125" hole filled with 13.5 ppg mud. (Mud may be weighted up to 13.5 ppg for hole stability reasons. Anticipated Reservoir pressure ~ 7.5 ppg)

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll ¹	SF Burst ²	SF Ten ³
5637'-11614'	5977'	11.6#	N-80	LT&C	6350	7780	223	4.00	3.875	1.79	2.19	3.22

¹Collapse SF is based on evacuated casing and hydrostatic at TVD.

²Burst SF is based on evacuated annulus and hydrostatic at TVD.

³Tensile SF is based on hanging air weight of casing in a vertical hole at measured depth.

3. **WELLHEAD:**

- A. Casing Head: C-22 profile (or equivalent), 9-5/8 slip on weld on x 11", 5000# with 11" x 7-1/16" 5000# C-22 casing hanger.
- B. Tubing Head: TCM (or equivalent), 11" 5000# x 7-1/16" 5000#, TC-1A 7-1/16" x 2-3/8 tubing Hanger

4. **CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):**

- A. Surface: 9.625", 36.0#, J-55, ST&C casing to be set at $\pm 500'$ in 12-1/4" hole.

± 268 sx of Type V cement (or equivalent) typically containing accelerator and LCM, mixed at 15.8 ppg, 1.17 ft³/sk, & 5.01 gal wtr/sk.

Total slurry volume is 313 ft³, 100% excess of calculated annular volume to 500'.

- B. Intermediate Casing: 7", 26#/ft, J-55, ST&C casing to be set at $\pm 5697'$ MD, 5144' TVD in 8.75" hole. DV Tool set at $\pm 3850'$.

LEAD 1:

± 88 sx of Type V (or equivalent) typically containing accelerator, LCM, dispersant, and fluid loss additives at 12.3 ppg, 2.36 ft³/sk, & 12.95 gal wtr/sk.

TAIL 1:

± 100 sx of Type V or Class G cement typically containing accelerator, LCM, dispersant, and fluid loss additives at 13.5 ppg, 1.81 ft³/sk, & 8.85 gal wtr/sk.

LEAD 2:

± 257 sx of Type V (or equivalent) typically containing accelerator, LCM, dispersant, and fluid loss additives at 12.3 ppg, 2.36 ft³/sk, & 12.95 gal wtr/sk.

TAIL 2:

± 100 sx of Type V or Class G cement typically containing accelerator, LCM, dispersant, and fluid loss additives at 13.5 ppg, 1.81 ft³/sk, & 8.85 gal wtr/sk.

Total estimated slurry volume for the 7" production casing is 1177 ft³.

- C. Production Liner: 4.5", 11.6#/ft, N-80, LT&C casing is to be set at 11614' MD, 5054' TVD in 6.125" hole.

The production liner will be set using an uncemented liner hanger. The liner may be tied back to surface during the completion of the well.

Note: The slurry design may change based upon actual conditions. Final cement volumes will be determined from the caliper logs (if available) plus 40%. It will be attempted to circulate cement to the surface.

5. **LOGGING PROGRAM:**

A. Mud Logger: A geologic consultant or unmanned mud logging unit will begin logging the well once the surface shoe is drilled out and remain on the well to TD.

B. Open Hole Logs as follows: Gamma Ray from Surface shoe to TD.

6. **FORMATION TOPS:**

See attached Directional Program.

**** Maximum anticipated BHP should be <2,000 psig (<0.38psi/ft) ****

7. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Cellular Phone
Ross Lubbers	Drilling Manager	303-397-3721	405-659-8563
Justin Niederhofer	Drilling Engineer	303-397-3719	505-320-0158
Bobby Jackson	Drilling Superintendent	303-397-3720	505-486-4706
Reed Meek	Project Geologist	817-885-2800	--

JDN
5/25/12



Well Name: Canyon #19H

San Juan Division
Drilling Department

Calculation Method Minimum Curvature
Geodetic Datum North American Datum 1983
Lat 36° 25' 39.14 N
Long: 107° 57' 57.60 W



Azimuths to True North
Magnetic North: 10.10°

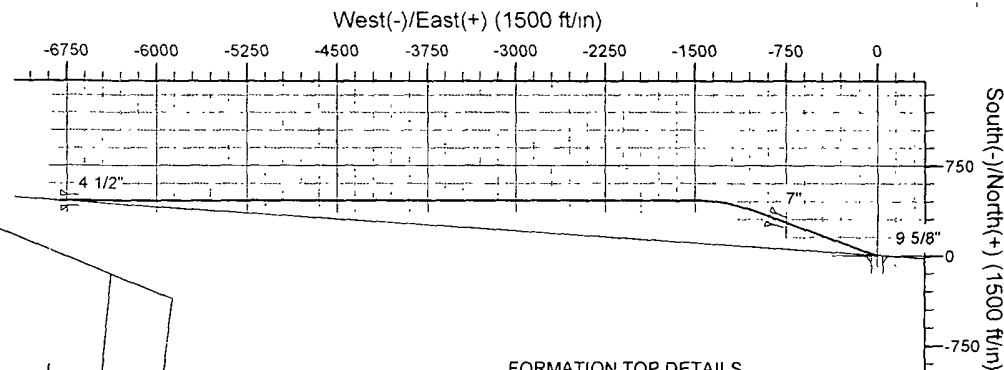
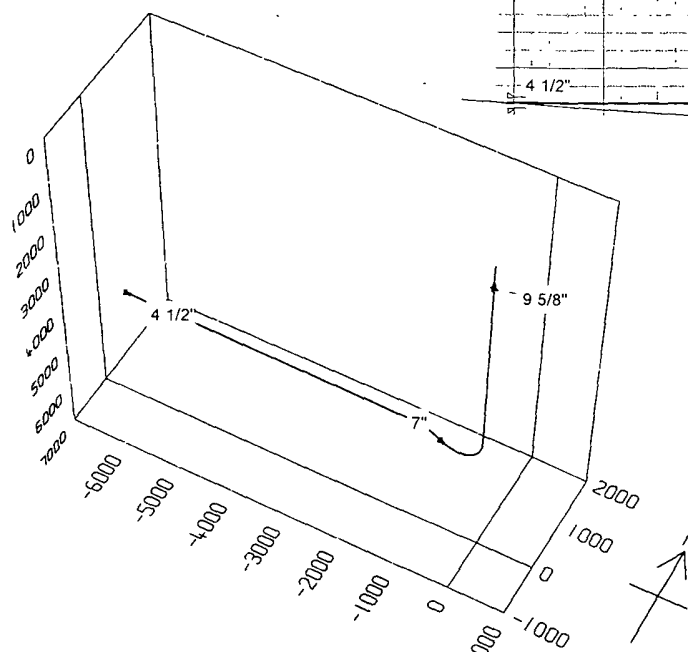
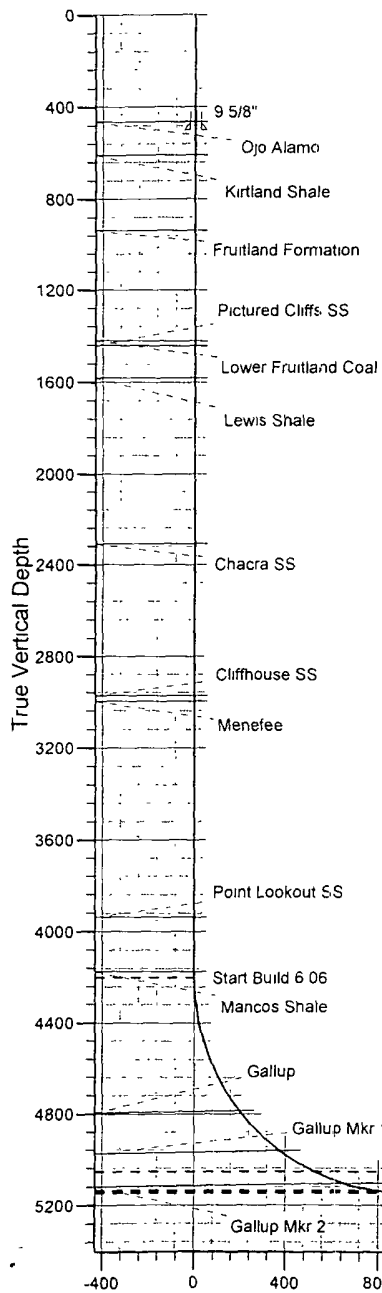
Magnetic Field
Strength: 50702.0snT
Dip Angle: 63.20°
Date: 12/31/2009
Model: IGRF200510

CASING DETAILS

TVD	MD	Name	Size
500.00	500.00	9 5/8"	9.625
5144.01	5697.00	7"	7.000
5054.10	11613.60	4 1/2"	4.500

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4199.00	0.00	0.00	4199.00	0.00	0.00	0.00	0.00	0.00	
3	5697.92	90.87	290.00	5144.00	328.15	-901.60	6.06	290.00	921.53	
4	5832.92	90.87	290.00	5141.95	374.32	-1028.44	0.00	0.00	1051.18	
5	6334.18	90.87	269.95	5134.26	460.68	-1519.54	4.00	-89.85	1546.96	Proposed BHL -- Canyon #19H
6	11613.72	90.87	269.95	5054.10	455.86	-6798.48	0.00	0.00	6813.74	Proposed BHL -- Canyon #19H



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
466.00	466.00	Ojo Alamo
611.00	611.00	Kirtland Shale
941.00	941.00	Fruitland Formation
1424.00	1424.00	Lower Fruitland Coal
1444.00	1444.00	Pictured Cliffs SS
1582.00	1582.00	Lewis Shale
2311.00	2311.00	Chacra SS
2974.00	2974.00	Cliffhouse SS
3000.00	3000.00	Menefee
3939.00	3939.00	Point Lookout SS
4176.00	4176.00	Mancos Shale
4787.44	4834.19	Gallup
4966.10	5094.00	Gallup Mkr 1
5105.55	5412.67	Gallup Mkr 2

Start 5279.55 hold at 6334.18 MD

4 1/2"

TD at 11613.72

Vertical Section at 273.84°

XTO Energy Inc.
Planning Report

Database: EDM
Company: XTO Energy
Project: San Juan Basin (NAD 83)
Site: Canyon #19H
Well: Canyon #19H
Wellbore: Canyon #19H
Design: Permitted wellbore

Local Co-ordinate Reference: Well Canyon #19H
TVD Reference: Rig KB @ 6401 00ft (AWS 777)
MD Reference: Rig KB @ 6401 00ft (AWS 777)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project: San Juan Basin (NAD 83), San Juan Co , NM,

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Western Zone
System Datum: Mean Sea Level

Site: Canyon #19H, T25N, R11W

Site Position:
From: Lat/Long
Position Uncertainty: 0 00 ft
Northing: 1,974,954 93 ft
Easting: 2,684,063 43 ft
Slot Radius: in
Latitude: 36° 25' 39 14 N
Longitude: 107° 57' 57 60 W
Grid Convergence: -0 08 °

Well: Canyon #19H, Horizontal Mancos

Well Position
+N/-S 0 00 ft
+E/-W 0 00 ft
Position Uncertainty 0 00 ft
Northing: 1,974,954 93 ft
Easting: 2,684,063 43 ft
Wellhead Elevation: 6,389 00 ft
Latitude: 36° 25' 39 14 N
Longitude: 107° 57' 57 60 W
Ground Level: 6,389 00 ft

Wellbore: Canyon #19H

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	10 10	63 20	50,702

Design: Permitted wellbore

Audit Notes:

Version: Phase: PROTOTYPE Tie On Depth: 0 00

Vertical Section	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0 00	0.00	0 00	273 84

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	
4,199 00	0 00	0 00	4,199 00	0 00	0 00	0 00	0 00	0 00	0 00	
5,697 92	90 87	290 00	5,144 00	328 15	-901 60	6 06	6 06	0 00	290 00	
5,832 92	90 87	290 00	5,141 95	374 32	-1,028 44	0 00	0 00	0 00	0 00	
6,334 18	90 87	269 95	5,134 26	460 68	-1,519 54	4 00	0 00	-4 00	-89 85	Proposed BHL -- Can
11,613 72	90 87	269 95	5,054.10	455 86	-6,798 48	0 00	0 00	0 00	0 00	Proposed BHL -- Can

XTO Energy Inc.

Planning Report

Database: EDM
Company: XTO Energy
Project: San Juan Basin (NAD 83)
Site: Canyon #19H
Well: Canyon #19H
Wellbore: Canyon #19H
Design: Permitted wellbore

Local Co-ordinate Reference: Well Canyon #19H
TVD Reference: Rig KB @ 6401 00ft (AWS 777)
MD Reference: Rig KB @ 6401 00ft (AWS 777)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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
400 00	0 00	0 00	400 00	0 00	0 00	0 00	0 00	0 00	0 00
466 00	0 00	0 00	466 00	0 00	0 00	0 00	0 00	0 00	0 00
Ojo Alamo									
500 00	0 00	0 00	500 00	0 00	0 00	0 00	0 00	0 00	0 00
9 5/8"									
600 00	0 00	0 00	600 00	0 00	0 00	0 00	0 00	0 00	0 00
611 00	0 00	0 00	611 00	0 00	0 00	0 00	0 00	0 00	0 00
Kirtland Shale									
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
941 00	0 00	0 00	941 00	0 00	0 00	0 00	0 00	0 00	0 00
Fruitland Formation									
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
1,424 00	0 00	0 00	1,424 00	0 00	0 00	0 00	0 00	0 00	0 00
Lower Fruitland Coal									
1,444 00	0 00	0 00	1,444 00	0 00	0 00	0 00	0 00	0 00	0 00
Pictured Cliffs SS									
1,500 00	0 00	0 00	1,500 00	0 00	0 00	0 00	0 00	0 00	0 00
1,582 00	0 00	0 00	1,582 00	0 00	0 00	0 00	0 00	0 00	0 00
Lewis Shale									
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
2,311 00	0 00	0 00	2,311 00	0 00	0 00	0 00	0 00	0 00	0 00
Chacra SS									
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
2,700 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
2,900 00	0 00	0 00	2,900 00	0 00	0 00	0 00	0 00	0 00	0 00
2,974 00	0 00	0 00	2,974 00	0 00	0 00	0 00	0 00	0 00	0 00
Cliffhouse SS									
3,000 00	0 00	0 00	3,000 00	0 00	0 00	0 00	0 00	0 00	0 00
Menefee									
3,100 00	0 00	0 00	3,100 00	0 00	0 00	0 00	0 00	0 00	0 00
3,200 00	0 00	0 00	3,200 00	0 00	0 00	0 00	0 00	0 00	0 00
3,300 00	0 00	0 00	3,300 00	0 00	0 00	0 00	0 00	0 00	0 00
3,400 00	0 00	0 00	3,400 00	0 00	0 00	0 00	0 00	0 00	0 00

XTO Energy Inc.

Planning Report

Database: EDM
Company: XTO Energy
Project: San Juan Basin (NAD 83)
Site: Canyon #19H
Well: Canyon #19H
Wellbore: Canyon #19H
Design: Permitted wellbore

Local Co-ordinate Reference: Well Canyon #19H
TVD Reference: Rig KB @ 6401 00ft (AWS 777)
MD Reference: Rig KB @ 6401 00ft (AWS 777)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,500 00	0 00	0 00	3,500 00	0 00	0 00	0 00	0 00	0 00	0 00
3,600 00	0 00	0 00	3,600 00	0 00	0 00	0 00	0 00	0 00	0 00
3,700 00	0 00	0 00	3,700 00	0 00	0 00	0 00	0 00	0 00	0 00
3,800 00	0 00	0 00	3,800 00	0 00	0 00	0 00	0 00	0 00	0 00
3,900 00	0 00	0 00	3,900 00	0 00	0 00	0 00	0 00	0 00	0 00
3,939 00	0 00	0 00	3,939 00	0 00	0 00	0 00	0 00	0 00	0 00
Point Lookout SS									
4,000 00	0 00	0 00	4,000 00	0 00	0 00	0 00	0 00	0 00	0 00
4,100 00	0 00	0 00	4,100 00	0 00	0 00	0 00	0 00	0 00	0 00
4,176 00	0 00	0 00	4,176 00	0 00	0 00	0 00	0 00	0 00	0 00
Mancos Shale									
4,199 00	0 00	0 00	4,199 00	0 00	0 00	0 00	0 00	0 00	0 00
4,250 00	3 09	290 00	4,249 98	0 47	-1 29	1 32	6 06	6 06	0 00
4,300 00	6 12	290 00	4,299 81	1 84	-5 07	5 18	6 06	6 06	0 00
4,350 00	9 15	290 00	4,349 36	4 12	-11 31	11 56	6 06	6 06	0 00
4,400 00	12 19	290 00	4,398 49	7 28	-20 01	20 45	6 06	6 06	0 00
4,450 00	15 22	290 00	4,447 06	11 33	-31 14	31 82	6 06	6 06	0 00
4,500 00	18 25	290 00	4,494 94	16 26	-44 66	45 65	6 06	6 06	0 00
4,550 00	21 28	290 00	4,541 99	22 04	-60 55	61 89	6 06	6 06	0 00
4,600 00	24 31	290 00	4,588 08	28 66	-78 75	80 49	6 06	6 06	0 00
4,650 00	27 34	290 00	4,633 08	36 11	-99 21	101 41	6 06	6 06	0 00
4,700 00	30 37	290 00	4,676 86	44 36	-121 89	124 58	6 06	6 06	0 00
4,750 00	33 40	290 00	4,719 31	53 40	-146 70	149 95	6 06	6 06	0 00
4,800 00	36 43	290 00	4,760 31	63 18	-173 60	177 43	6 06	6 06	0 00
4,834 19	38 51	290 00	4,787 44	70 30	-193 14	197 41	6 06	6 06	0 00
Gallup									
4,850 00	39 47	290 00	4,799 73	73 70	-202 49	206 96	6 06	6 06	0 00
4,900 00	42 50	290 00	4,837 47	84 91	-233 30	238 45	6 06	6 06	0 00
4,950 00	45 53	290 00	4,873 43	96 79	-265 94	271 82	6 06	6 06	0 00
5,000 00	48 56	290 00	4,907 49	109 31	-300 32	306 96	6 06	6 06	0 00
5,050 00	51 59	290 00	4,939 58	122 42	-336 35	343 79	6 06	6 06	0 00
5,094 00	54 26	290 00	4,966 10	134 43	-369 33	377 50	6 06	6 06	0 00
Gallup Mkr 1									
5,100 00	54 62	290 00	4,969 59	136 10	-373 92	382 19	6 06	6 06	0 00
5,150 00	57 65	290 00	4,997 45	150 29	-412 93	422 06	6 06	6 06	0 00
5,200 00	60 68	290 00	5,023 07	164 98	-453 27	463 29	6 06	6 06	0 00
5,250 00	63 72	290 00	5,046 39	180 10	-494 83	505 77	6 06	6 06	0 00
5,300 00	66 75	290 00	5,067 33	195 63	-537 48	549 37	6 06	6 06	0 00
5,350 00	69 78	290 00	5,085 85	211 51	-581 12	593 97	6 06	6 06	0 00
5,400 00	72 81	290 00	5,101 88	227 71	-625 62	639 45	6 06	6 06	0 00
5,412 67	73 58	290 00	5,105 55	231 86	-637 02	651 11	6 06	6 06	0 00
Gallup Mkr 2									
5,450 00	75 84	290 00	5,115 39	244 17	-670 85	685 68	6 06	6 06	0 00
5,500 00	78 87	290 00	5,126 34	260 85	-716 69	732 54	6 06	6 06	0 00
5,550 00	81 90	290 00	5,134 69	277 71	-763 01	779 88	6 06	6 06	0 00
5,600 00	84 93	290 00	5,140 42	294 70	-809 68	827 58	6 06	6 06	0 00
5,650 00	87 96	290 00	5,143 51	311 77	-856 57	875 51	6 06	6 06	0 00
5,697 00	90 81	290 00	5,144 01	327 84	-900 73	920 64	6 06	6 06	0 00
7"									
5,697 92	90 87	290 00	5,144 00	328 15	-901 60	921 53	6 06	6 06	0 00
5,700 00	90 87	290 00	5,143 97	328 86	-903 55	923 52	0 00	0 00	0 00
5,800 00	90 87	290 00	5,142 45	363 06	-997 51	1,019 56	0 00	0 00	0 00
5,832 92	90 87	290 00	5,141 95	374 32	-1,028 44	1,051 18	0 00	0 00	0 00

XTO Energy Inc.

Planning Report

Database: EDM
Company: XTO Energy
Project: San Juan Basin (NAD 83)
Site: Canyon #19H
Well: Canyon #19H
Wellbore: Canyon #19H
Design: Permitted wellbore

Local Co-ordinate Reference: Well Canyon #19H
TVD Reference: Rig KB @ 6401 00ft (AWS 777)
MD Reference: Rig KB @ 6401 00ft (AWS 777)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	N-S (ft)	E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,900.00	90.88	287.32	5,140.93	395.78	-1,091.98	1,116.01	4.00	0.01	-4.00
6,000.00	90.88	283.32	5,139.39	422.18	-1,188.39	1,213.98	4.00	0.01	-4.00
6,100.00	90.88	279.32	5,137.85	441.80	-1,286.42	1,313.09	4.00	0.00	-4.00
6,200.00	90.88	275.32	5,136.31	454.53	-1,385.57	1,412.88	4.00	0.00	-4.00
6,300.00	90.87	271.31	5,134.78	460.31	-1,485.37	1,512.84	4.00	-0.01	-4.00
6,334.18	90.87	269.95	5,134.26	460.68	-1,519.54	1,546.96	4.00	-0.01	-4.00
6,400.00	90.87	269.95	5,133.26	460.62	-1,585.36	1,612.62	0.00	0.00	0.00
6,500.00	90.87	269.95	5,131.74	460.53	-1,685.35	1,712.38	0.00	0.00	0.00
6,600.00	90.87	269.95	5,130.22	460.44	-1,785.34	1,812.14	0.00	0.00	0.00
6,700.00	90.87	269.95	5,128.71	460.35	-1,885.32	1,911.90	0.00	0.00	0.00
6,800.00	90.87	269.95	5,127.19	460.26	-1,985.31	2,011.66	0.00	0.00	0.00
6,900.00	90.87	269.95	5,125.67	460.17	-2,085.30	2,111.42	0.00	0.00	0.00
7,000.00	90.87	269.95	5,124.15	460.08	-2,185.29	2,211.17	0.00	0.00	0.00
7,100.00	90.87	269.95	5,122.63	459.98	-2,285.28	2,310.93	0.00	0.00	0.00
7,200.00	90.87	269.95	5,121.11	459.89	-2,385.27	2,410.69	0.00	0.00	0.00
7,300.00	90.87	269.95	5,119.60	459.80	-2,485.26	2,510.45	0.00	0.00	0.00
7,400.00	90.87	269.95	5,118.08	459.71	-2,585.24	2,610.21	0.00	0.00	0.00
7,500.00	90.87	269.95	5,116.56	459.62	-2,685.23	2,709.97	0.00	0.00	0.00
7,600.00	90.87	269.95	5,115.04	459.53	-2,785.22	2,809.72	0.00	0.00	0.00
7,700.00	90.87	269.95	5,113.52	459.44	-2,885.21	2,909.48	0.00	0.00	0.00
7,800.00	90.87	269.95	5,112.00	459.34	-2,985.20	3,009.24	0.00	0.00	0.00
7,900.00	90.87	269.95	5,110.49	459.25	-3,085.19	3,109.00	0.00	0.00	0.00
8,000.00	90.87	269.95	5,108.97	459.16	-3,185.17	3,208.76	0.00	0.00	0.00
8,100.00	90.87	269.95	5,107.45	459.07	-3,285.16	3,308.52	0.00	0.00	0.00
8,200.00	90.87	269.95	5,105.93	458.98	-3,385.15	3,408.27	0.00	0.00	0.00
8,300.00	90.87	269.95	5,104.41	458.89	-3,485.14	3,508.03	0.00	0.00	0.00
8,400.00	90.87	269.95	5,102.89	458.80	-3,585.13	3,607.79	0.00	0.00	0.00
8,500.00	90.87	269.95	5,101.38	458.70	-3,685.12	3,707.55	0.00	0.00	0.00
8,600.00	90.87	269.95	5,099.86	458.61	-3,785.11	3,807.31	0.00	0.00	0.00
8,700.00	90.87	269.95	5,098.34	458.52	-3,885.09	3,907.07	0.00	0.00	0.00
8,800.00	90.87	269.95	5,096.82	458.43	-3,985.08	4,006.82	0.00	0.00	0.00
8,900.00	90.87	269.95	5,095.30	458.34	-4,085.07	4,106.58	0.00	0.00	0.00
9,000.00	90.87	269.95	5,093.78	458.25	-4,185.06	4,206.34	0.00	0.00	0.00
9,100.00	90.87	269.95	5,092.27	458.16	-4,285.05	4,306.10	0.00	0.00	0.00
9,200.00	90.87	269.95	5,090.75	458.06	-4,385.04	4,405.86	0.00	0.00	0.00
9,300.00	90.87	269.95	5,089.23	457.97	-4,485.02	4,505.62	0.00	0.00	0.00
9,400.00	90.87	269.95	5,087.71	457.88	-4,585.01	4,605.37	0.00	0.00	0.00
9,500.00	90.87	269.95	5,086.19	457.79	-4,685.00	4,705.13	0.00	0.00	0.00
9,600.00	90.87	269.95	5,084.67	457.70	-4,784.99	4,804.89	0.00	0.00	0.00
9,700.00	90.87	269.95	5,083.15	457.61	-4,884.98	4,904.65	0.00	0.00	0.00
9,800.00	90.87	269.95	5,081.64	457.52	-4,984.97	5,004.41	0.00	0.00	0.00
9,900.00	90.87	269.95	5,080.12	457.42	-5,084.95	5,104.16	0.00	0.00	0.00
10,000.00	90.87	269.95	5,078.60	457.33	-5,184.94	5,203.92	0.00	0.00	0.00
10,100.00	90.87	269.95	5,077.08	457.24	-5,284.93	5,303.68	0.00	0.00	0.00
10,200.00	90.87	269.95	5,075.56	457.15	-5,384.92	5,403.44	0.00	0.00	0.00
10,300.00	90.87	269.95	5,074.04	457.06	-5,484.91	5,503.20	0.00	0.00	0.00
10,400.00	90.87	269.95	5,072.53	456.97	-5,584.90	5,602.96	0.00	0.00	0.00
10,500.00	90.87	269.95	5,071.01	456.88	-5,684.89	5,702.71	0.00	0.00	0.00
10,600.00	90.87	269.95	5,069.49	456.78	-5,784.87	5,802.47	0.00	0.00	0.00
10,700.00	90.87	269.95	5,067.97	456.69	-5,884.86	5,902.23	0.00	0.00	0.00
10,800.00	90.87	269.95	5,066.45	456.60	-5,984.85	6,001.99	0.00	0.00	0.00
10,900.00	90.87	269.95	5,064.93	456.51	-6,084.84	6,101.75	0.00	0.00	0.00
11,000.00	90.87	269.95	5,063.42	456.42	-6,184.83	6,201.51	0.00	0.00	0.00
11,100.00	90.87	269.95	5,061.90	456.33	-6,284.82	6,301.26	0.00	0.00	0.00

XTO Energy Inc.

Planning Report

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 Company: XTO Energy
 Project: San Juan Basin (NAD 83)
 Site: Canyon #19H
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 Wellbore: Canyon #19H
 Design: Permitted wellbore

Local Co-ordinate Reference: Well Canyon #19H
 TVD Reference: Rig KB @ 6401.00ft (AWS 777)
 MD Reference: Rig KB @ 6401.00ft (AWS 777)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
11,200.00	90.87	269.95	5,060.38	456.24	-6,384.80	6,401.02	0.00	0.00	0.00	
11,300.00	90.87	269.95	5,058.86	456.14	-6,484.79	6,500.78	0.00	0.00	0.00	
11,400.00	90.87	269.95	5,057.34	456.05	-6,584.78	6,600.54	0.00	0.00	0.00	
11,500.00	90.87	269.95	5,055.82	455.96	-6,684.77	6,700.30	0.00	0.00	0.00	
11,600.00	90.87	269.95	5,054.31	455.87	-6,784.76	6,800.06	0.00	0.00	0.00	
11,613.60	90.87	269.95	5,054.10	455.86	-6,798.36	6,813.62	0.00	0.00	0.00	
4 1/2"										
11,613.72	90.87	269.95	5,054.10	455.86	-6,798.48	6,813.74	0.00	0.00	0.00	

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Proposed BHL -- Canyon		0.00	0.00	5,054.00	455.86	-6,798.48	1,975,420.13	2,677,265.60	36° 25' 43.64 N	107° 59' 20.80 W
- plan misses by 0.10ft at 11613.72R MD (5054.10 TVD, 455.86 N, -6798.48 E)										
- Point										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)		Name	Casing Diameter (in)	Hole Diameter (in)
500.00	500.00	9 5/8"		9.625	12.250
5,697.00	5,144.01	7"		7.000	8.750
11,613.60	5,054.10	4 1/2"		4.500	6.125

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
466 00	466 00	Ojo Alamo		0 00		
611 00	611 00	Kirtland Shale		0 00		
941 00	941 00	Fruitland Formation		0 00		
1,424 00	1,424 00	Lower Fruitland Coal		0 00		
1,444 00	1,444 00	Pictured Cliffs SS		0 00		
1,582 00	1,582 00	Lewis Shale		0 00		
2,311 00	2,311.00	Chacra SS		0 00		
2,974 00	2,974 00	Cliffhouse SS		0.00		
3,000 00	3,000 00	Menefee		0 00		
3,939 00	3,939 00	Point Lookout SS		0 00		
4,176 00	4,176 00	Mancos Shale		0 00		
4,834 19	4,790 00	Gallup		0 76	90 00	
5,094 00	4,971 00	Gallup Mkr 1		0 76	90.00	
5,412 67	5,114 00	Gallup Mkr 2		0 76	90 00	



Cy Zimmerman
Associate Landman
(817) 885-1130
Fax (817) 885-1854
Cy_Zimmerman@xtoenergy.com

RECEIVED

JUL 10 2012

LAND DEPARTMENT

Via Federal Express

RECEIVED

JUL 11 2012

SJBU - LAND DEPT.

July 9, 2012

CononoPhillips Company
Burlington Resources Oil & Gas
3401 East 30th St.
P.O. Box 4289
Farmington, New Mexico 87499-4289
Attn: Mr. Terry Simcoe

Re: **Horizontal Project Area**
Canyon 19H
Sec. 2 & E/2 of Sec. 3, T25N, R11W
San Juan County, New Mexico

Dear Working Interest Owner:

XTO Energy Inc. would like to form a Project area as defined in **Section 19.15.16.7 L** of NMOCD Order Number R-13499 for purposes of drilling a horizontal well targeting the Mancos Formation. The Project Area will consist of **Sections 2 & E/2 of Section 3 in T25N, R11W** containing 962.33 acres, more or less

Pursuant to Section 19.15.16.15 A of NMOCD Order Number R 13499, XTO is required to obtain the consent of one additional working interest owner before filing for a Permit to Drill (APD).

Our records indicate you are a working interest owner in the N/2 of Section 2. Please indicate your approval or disapproval of the proposed Project Area below.

If you have any questions regarding this matter, please contact me at (817) 885-1130

Yours truly,

Cy Zimmerman
Associate Landman

The undersigned hereby agrees this ___ day of _____, 2012, to approve the proposed Project Area.

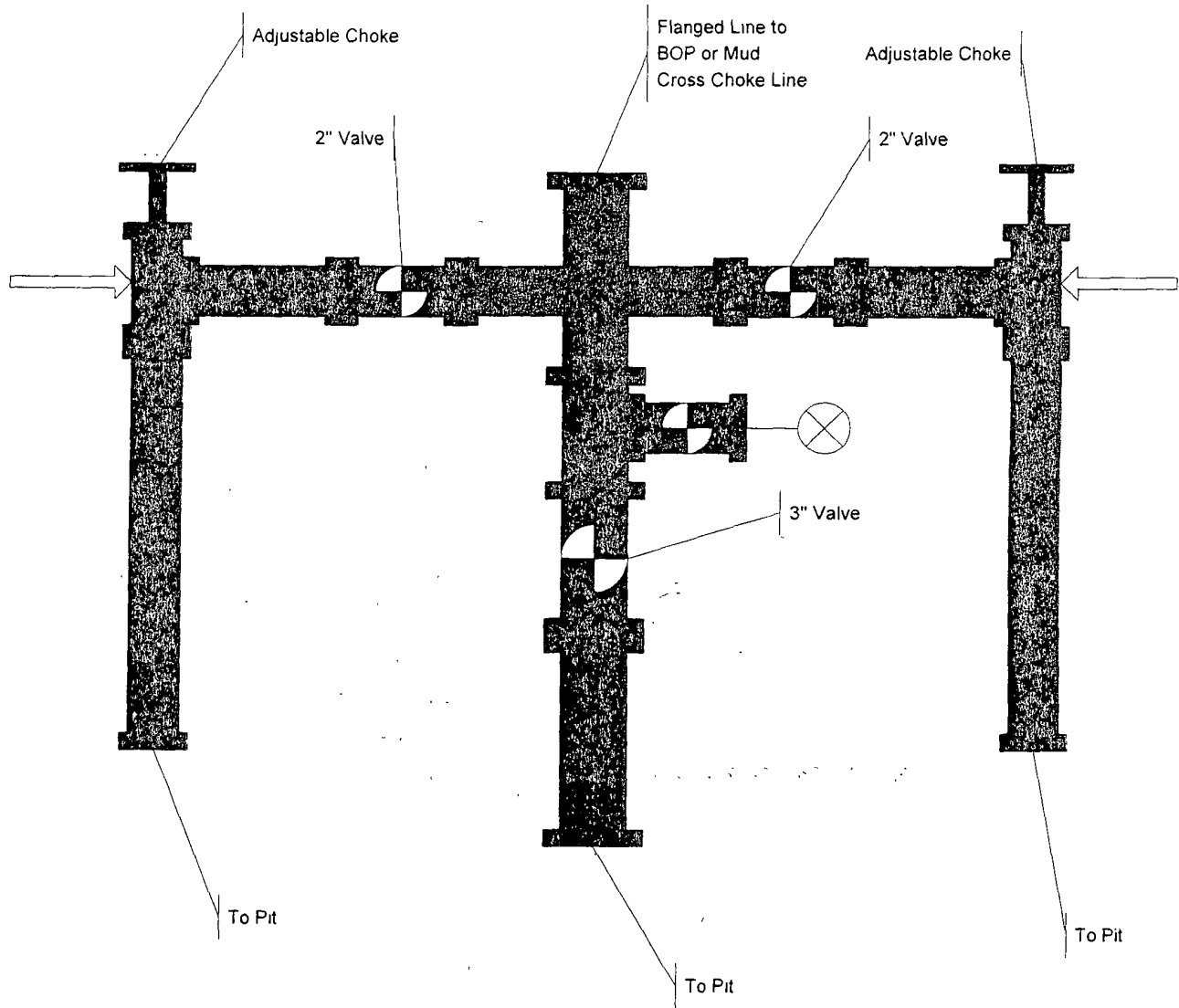
Name: Paul H. Neal

Title: Land Manager

Company: CONOCO PHILLIPS COMPANY

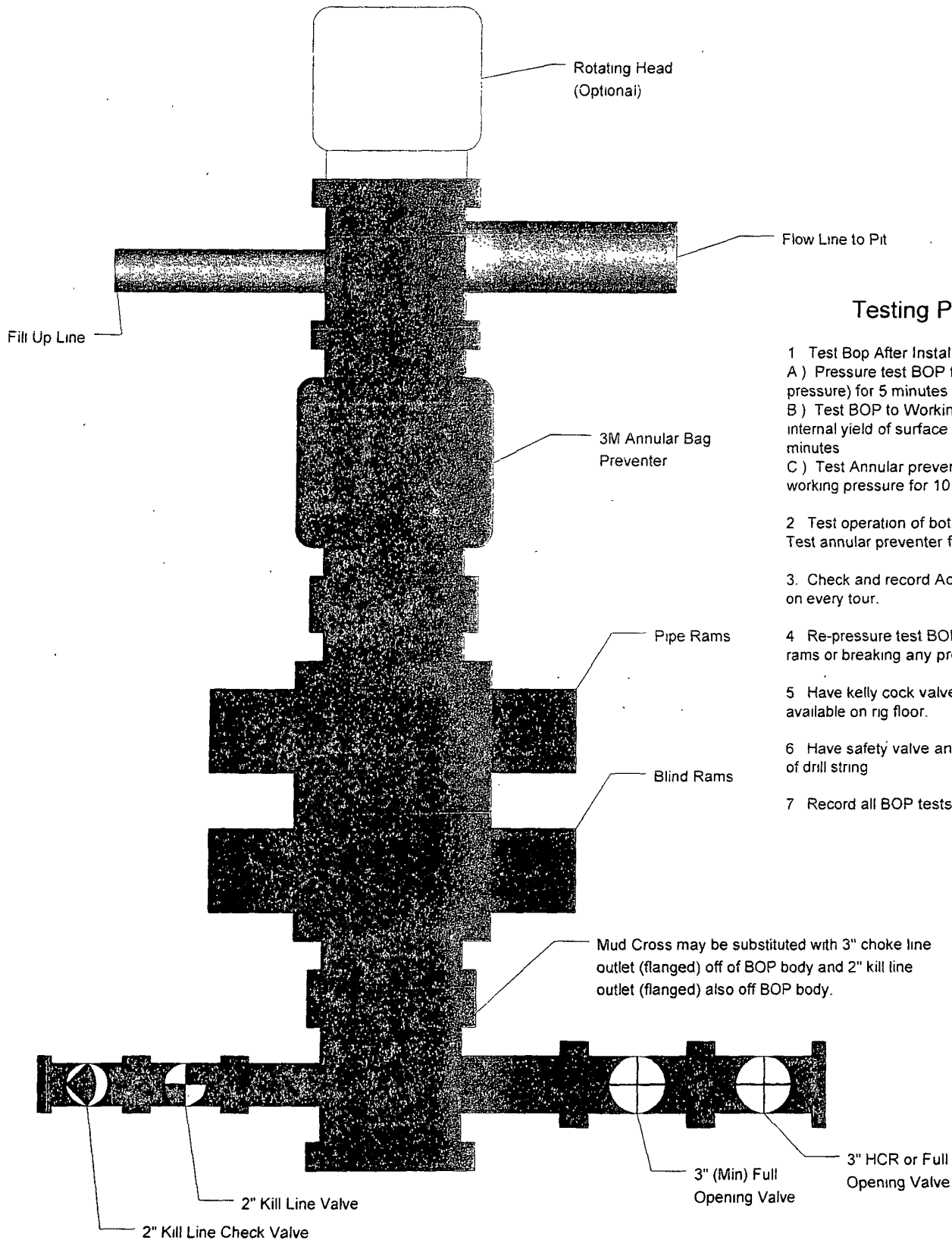
XTO Energy

3M Choke
Manifold



XTO Energy

3M BOP Stack



Testing Procedure

- 1 Test Bop After Installation.
 - A) Pressure test BOP to 200-300 psig (low pressure) for 5 minutes
 - B) Test BOP to Working pressure or 70% internal yield of surface casing for 10 minutes
 - C) Test Annular preventer to 50% of working pressure for 10 minutes
- 2 Test operation of both rams on each trip
Test annular preventer function weekly.
3. Check and record Accumulator pressure on every tour.
- 4 Re-pressure test BOP after changing rams or breaking any pressure tested seal
- 5 Have kelly cock valve with handle available on rig floor.
- 6 Have safety valve and subs to fit all sizes of drill string
- 7 Record all BOP tests in IADC book.