

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
June 16, 2008

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

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address XTO Energy Inc. 382 CR 3100 AZTEC NM 87410		² OGRID Number 5380
		³ API Number 30-045-35469
⁴ Property Code 39810	⁵ Property Name SULLIVAN GAS COM	⁶ Well No. 1H
⁹ Proposed Pool 1 ARMENTA GALLUP		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	29	29N	10W		1861	NORTH	1584	EAST	SAN JUAN

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	28	29N	10W		2291	SOUTH	350	EAST	SAN JUAN

Additional Well Information

¹¹ Work Type Code D	¹² Well Type Code O	¹³ Cable/Rotary	¹⁴ Lease Type Code FEE	¹⁵ Ground Level Elevation 5513'
¹⁶ Multiple N	¹⁷ Proposed Depth 12,285'	¹⁸ Formation MANCOS MANCOS	¹⁹ Contractor	²⁰ Spud Date APRIL 15, 2013
				RCVD APR 5 '13

**OIL CONS. DIV.
DIST. 3**

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12.25	9.625	36	800	475	
8.75	7	26	6615	421	
8.75	7	26	6615	200	
Liner 6.125	4.5	11.6	12285	0	

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Please see attached drilling procedure and horizontal plan.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

malia villers

Printed name: MALIA VILLERS

Title: PERMITTING TECH.

E-mail Address: malia_villers@xtoenergy.com

Date: **4/5/13**

Phone: 505-333-3698

OIL CONSERVATION DIVISION

Approved by:

Charles L. 4-10-2013

Title:

SUPERVISOR DISTRICT # 3

Approval Date: **APR 10 2013**

Expiration Date: **APR 10 2015**

Conditions of Approval Attached ☐

Hold C104

for Directional Survey
and "As Drilled" plat

APR 10 2013 *ca*

Hold C104
for Directional Survey
and "As Drilled" plat

**NOTIFY AZTEC OCD 24 HRS. A
PRIOR TO CASING & CEMENT**

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35469		² Pool Code 2290	³ Pool Name Armenta Gallup
⁴ Property Code 39810	⁵ Property Name SULLIVAN GAS COM		⁶ Well Number 1H
⁷ OGRID No. 5380	⁸ Operator Name XTO ENERGY INC.		⁹ Elevation 5,513

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	29	29 N	10 W		1861	NORTH	1584	EAST	SAN JUAN

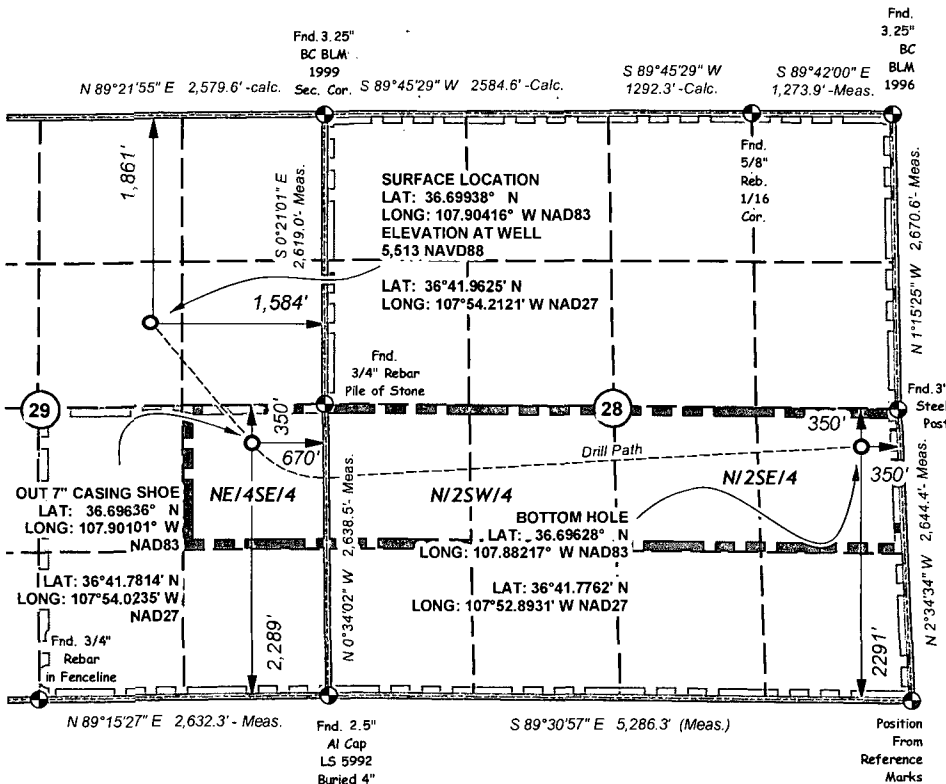
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	28	29 N	10 W		2291	SOUTH	350	EAST	SAN JUAN

¹² Dedicated Acres 1160 Sec. 28 40 Sec. 29	¹³ Joint or Infill NAD83	¹⁴ Consolidation Code	¹⁵ Order No. RCVD APR 5 '13
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OIL CONS. DIV.
DIST. 3

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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.

Signature: malia villers Date: 4/5/13
Printed Name: malia villers
E-mail Address: malia_villers@xtoenergy.com

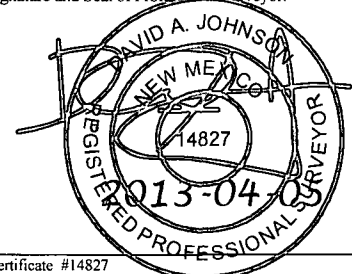
¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Dec 05, 2012

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate #14827

= Armenta Gallup Pool #2290

= Project Area

= Found Monument

XTO ENERGY INC.

Sullivan Gas Com #1H

APD Data

March 14, 2013

Location: 1861' FNL x 1584' FEL Sec 29, T29N, R10W County: San Juan

State: New Mexico

Bottomhole Location: 2291' FSL x 350' FEL Sec 28, T29N, R10W

GREATEST PROJECTED TVD: 5590'

APPROX GR ELEV: 5513'

GREATEST PROJECTED MD: 12285'

Est. KB ELEV: 5535' (22' AGL)

OBJECTIVE: Mancos Horizontal

1. MUD PROGRAM:

INTERVAL	0' to 800'	800' to 6615'	6615' 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	8.7-9.5
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 $\pm 800'$ 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'-800'	800'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	5.28	9.20	13.68

Intermediate Casing: 7" casing to be set at $\pm 6615'$ MD, 5590' 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'-6615'	6615'	26 #	J-55	ST&C	4320	4980	334	6.276	6.151	1.62	1.86	1.94

Production Casing: 4.5" casing to be set at $\pm 12285'$ MD, 5590' TVD in 6.125" hole filled with 9.2 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
5800'-12285'	6485'	11.6#	N-80	LT&C	6350	7780	223	4.00	3.875	2.37	2.91	2.96

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 $\pm 800'$ in 12-1/4" hole.

± 475 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 555 ft³, 100% excess of calculated annular volume to 800'.

- B. Intermediate Casing: 7", 26#/ft, J-55, ST&C casing to be set at $\pm 6615'$ MD, 5590' TVD in 8.75" hole.

LEAD :

± 421 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 :

± 200 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 1357 ft³.

- C. Production Liner: 4.5", 11.6#/ft, N-80, LT&C casing is to be set at 12285' MD, 5590' 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 KOP 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
3/14/13



Well Name: Sullivan Gas Com #1H

San Juan Division
Drilling Department

Calculation Method: Minimum Curvature
Geodetic Datum: North American Datum 1983
Lat: 36° 41' 57.768000 N
Long: 107° 54' 14.976000 W



Azimuths to True North:
Magnetic North: 9.73°

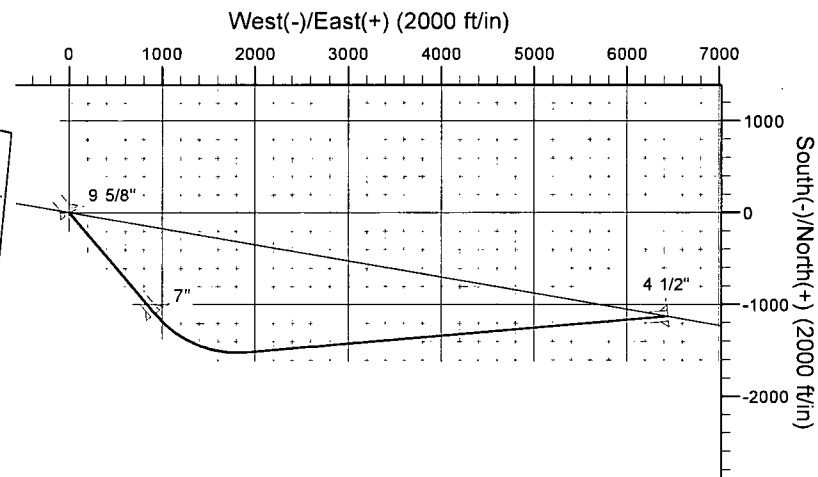
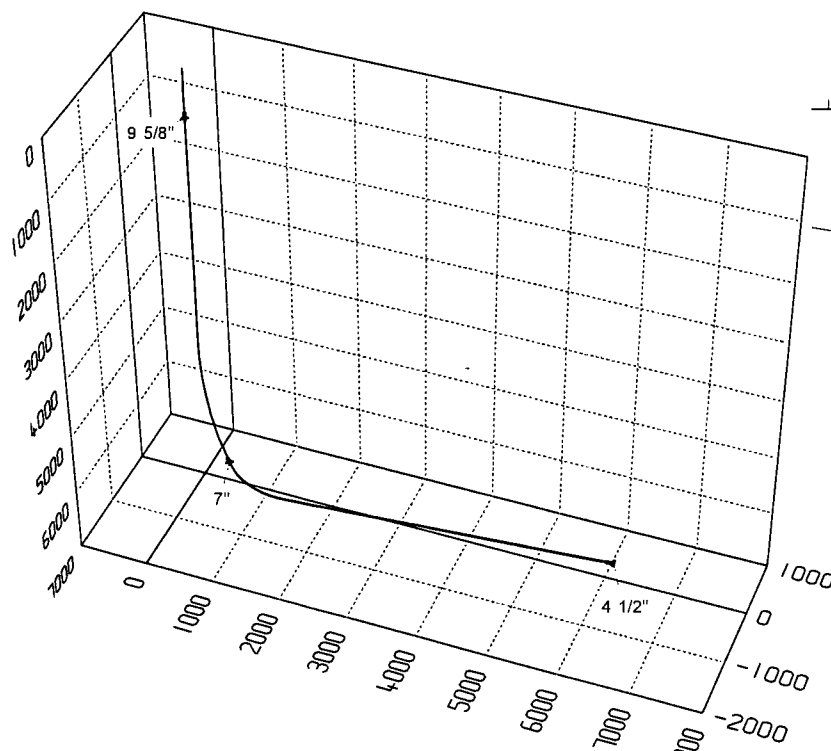
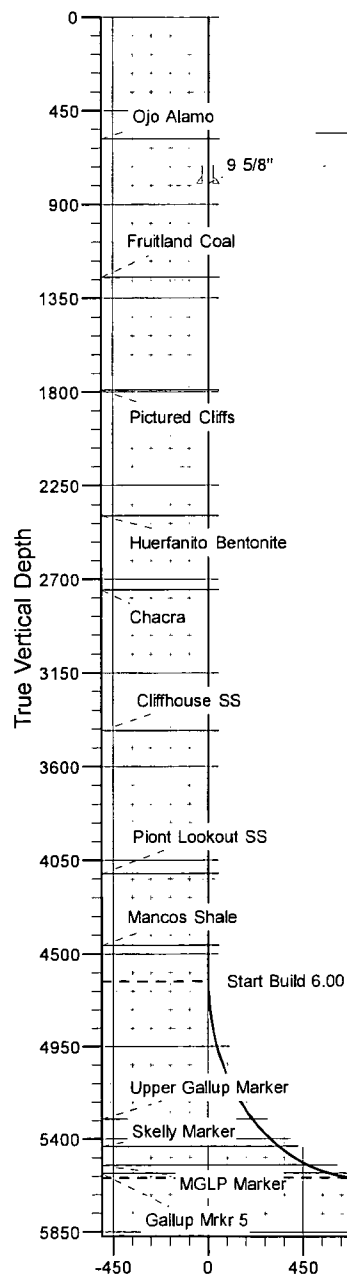
Magnetic Field
Strength: 50576.3nT
Dip Angle: 63.38°
Date: 2/22/2013
Model: IGRF200510

CASING DETAILS

TVD	MD	Name
800.00	800.00	9 5/8"
5590.00	6615.00	7"
5590.00	12285.00	4 1/2"

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4635.00	0.00	0.00	4635.00	0.00	0.00	0.00	0.00	0.00	
3	6135.11	90.00	140.00	5590.00	-731.57	613.86	6.00	140.00	730.75	
4	6635.11	90.00	140.00	5590.00	-1114.59	935.26	0.00	0.00	1113.34	
5	7733.88	90.00	85.06	5590.00	-1519.68	1911.73	5.00	-90.00	2145.01	Proposed BHL - Sullivan Gas Com #1H
6	12285.78	90.00	85.06	5590.00	-1127.82	6446.72	0.00	0.00	6544.63	Proposed BHL - Sullivan Gas Com #1H



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
586.00	586.00	Ojo Alamo
1250.00	1250.00	Fruitland Coal
1791.00	1791.00	Pictured Cliffs
2393.00	2393.00	Huerfano Bentonite
2751.00	2751.00	Chacra
3429.00	3429.00	Cliffhouse SS
4114.00	4114.00	Piont Lookout SS
4459.00	4459.00	Mancos Shale
5303.00	5374.80	Upper Gallup Marker
5436.00	5585.20	Skelly Marker
5527.00	5786.29	MGLP Marker
5567.00	5925.09	Gallup Mrkr 5

TD at 12285.78

4 1/2"

XTO Energy, Inc.
Planning Report

Database:	LMRKPROD	Local Co-ordinate Reference:	Site Sullivan Gas Com #1H
Company:	XTO Energy - Western Div. (NM, CO, UT)	TVD Reference:	rig KB @ 5535.00ft (Original Well Elev)
Project:	San Juan Basin (NAD 83)	MD Reference:	rig KB @ 5535.00ft (Original Well Elev)
Site:	Sullivan Gas Com #1H	North Reference:	True
Well:	Sullivan Gas Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Sullivan Gas Com #1H		
Design:	Permitted Wellbore - Sullivan Gas Com #1H		

Project: San Juan Basin(NAD 83), San Juan Co., NM			
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site Sullivan Gas Com #1H, T29N, R10W					
Site Position:		Northing:	2,073,896.95 usft	Latitude:	36° 41' 57.768000 N
From:	Lat/Long	Easting:	2,702,328.57 usft	Longitude:	107° 54' 14.976000 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16"	Grid Convergence:	-0.04 °

Well:	Sullivan Gas Com #1H, Horizontal Mancos					
Well Position	+N/-S	0.00 ft	Northing:	2,073,896.95 usft	Latitude:	36° 41' 57.768000 N
	+E/-W	0.00 ft	Easting:	2,702,328.57 usft	Longitude:	107° 54' 14.976000 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	5,513.00 ft	Ground Level:	5,513.00 ft

Wellbore	Sullivan Gas Com #1H				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	2/22/2013	9.73	63.38	50,576

Design:	Permitted Wellbore - Sullivan Gas Com #1H
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Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	99.92	

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(%)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,635.00	0.00	0.00	4,635.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,135.11	90.00	140.00	5,590.00	-731.57	613.86	6.00	6.00	0.00	140.00	
6,635.11	90.00	140.00	5,590.00	-1,114.59	935.26	0.00	0.00	0.00	0.00	
7,733.88	90.00	85.06	5,590.00	-1,519.68	1,911.73	5.00	0.00	-5.00	-90.00	Proposed BHL -- Sulli
12,285.78	90.00	85.06	5,590.00	-1,127.82	6,446.72	0.00	0.00	0.00	0.00	Proposed BHL -- Sulli

XTO Energy, Inc.

Planning Report

Database:	LMRKPROD	Local Co-ordinate Reference:	Site: Sullivan Gas Com #1H
Company:	XTO Energy - Western Div. (NM, CO, UT)	TVD Reference:	rig-KB @ 5535.00ft (Original Well Elev)
Project:	San Juan Basin(NAD 83)	MD Reference:	rig-KB @ 5535.00ft (Original Well Elev)
Site:	Sullivan Gas Com #1H	North Reference:	True
Well:	Sullivan Gas Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Sullivan Gas Com #1H		
Design:	Permitted Wellbore - Sullivan Gas Com #1H		

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
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
586.00	0.00	0.00	586.00	0.00	0.00	0.00	0.00	0.00	0.00
Ojo Alamo									
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
9 5/8"									
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
1,250.00	0.00	0.00	1,250.00	0.00	0.00	0.00	0.00	0.00	0.00
Fruitland Coal									
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
1,791.00	0.00	0.00	1,791.00	0.00	0.00	0.00	0.00	0.00	0.00
Pictured Cliffs									
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
2,393.00	0.00	0.00	2,393.00	0.00	0.00	0.00	0.00	0.00	0.00
Huerfano Bentonite									
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
2,751.00	0.00	0.00	2,751.00	0.00	0.00	0.00	0.00	0.00	0.00
Chacra									
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
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	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
3,429.00	0.00	0.00	3,429.00	0.00	0.00	0.00	0.00	0.00	0.00
Cliffhouse SS									
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

XTO Energy, Inc.
Planning Report

Database:	LMRKPROD	Local Co-ordinate Reference:	Site Sullivan Gas Com #1H
Company:	XTO Energy - Western Div. (NM, CO, UT)	TVD Reference:	rig KB @ 5535.00ft (Original Well Elev)
Project:	San Juan Basin(NAD 83)	MD Reference:	rig KB @ 5535.00ft (Original Well Elev)
Site:	Sullivan Gas Com #1H	North Reference:	True
Well:	Sullivan Gas Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Sullivan Gas Com #1H		
Design:	Permitted Wellbore - Sullivan Gas Com #1H		

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)
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
4,114.00	0.00	0.00	4,114.00	0.00	0.00	0.00	0.00	0.00	0.00
Piont Lookout SS									
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,459.00	0.00	0.00	4,459.00	0.00	0.00	0.00	0.00	0.00	0.00
Mancos Shale									
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,635.00	0.00	0.00	4,635.00	0.00	0.00	0.00	0.00	0.00	0.00
4,650.00	0.90	140.00	4,650.00	-0.09	0.08	0.09	6.00	6.00	0.00
4,700.00	3.90	140.00	4,699.95	-1.69	1.42	1.69	6.00	6.00	0.00
4,750.00	6.90	140.00	4,749.72	-5.30	4.45	5.29	6.00	6.00	0.00
4,800.00	9.90	140.00	4,799.18	-10.89	9.14	10.88	6.00	6.00	0.00
4,850.00	12.90	140.00	4,848.19	-18.46	15.49	18.44	6.00	6.00	0.00
4,900.00	15.90	140.00	4,896.61	-27.98	23.48	27.95	6.00	6.00	0.00
4,950.00	18.90	140.00	4,944.32	-39.44	33.09	39.39	6.00	6.00	0.00
5,000.00	21.90	140.00	4,991.18	-52.79	44.29	52.73	6.00	6.00	0.00
5,050.00	24.90	140.00	5,037.06	-67.99	57.05	67.92	6.00	6.00	0.00
5,100.00	27.90	140.00	5,081.84	-85.02	71.34	84.93	6.00	6.00	0.00
5,150.00	30.90	140.00	5,125.40	-103.82	87.12	103.70	6.00	6.00	0.00
5,200.00	33.90	140.00	5,167.61	-124.34	104.33	124.20	6.00	6.00	0.00
5,250.00	36.90	140.00	5,208.37	-146.52	122.95	146.36	6.00	6.00	0.00
5,300.00	39.90	140.00	5,247.55	-170.31	142.91	170.12	6.00	6.00	0.00
5,350.00	42.90	140.00	5,285.05	-195.64	164.16	195.42	6.00	6.00	0.00
5,374.80	44.39	140.00	5,303.00	-208.75	175.16	208.51	6.00	6.00	0.00
Upper Gallup Marker									
5,400.00	45.90	140.00	5,320.77	-222.43	186.64	222.18	6.00	6.00	0.00
5,450.00	48.90	140.00	5,354.61	-250.62	210.30	250.34	6.00	6.00	0.00
5,500.00	51.90	140.00	5,386.48	-280.13	235.05	279.81	6.00	6.00	0.00
5,550.00	54.90	140.00	5,416.29	-310.87	260.85	310.52	6.00	6.00	0.00
5,585.20	57.01	140.00	5,436.00	-333.21	279.60	332.84	6.00	6.00	0.00
Skelly Marker									
5,600.00	57.90	140.00	5,443.96	-342.77	287.62	342.38	6.00	6.00	0.00
5,650.00	60.90	140.00	5,469.42	-375.73	315.28	375.31	6.00	6.00	0.00
5,700.00	63.90	140.00	5,492.58	-409.67	343.75	409.21	6.00	6.00	0.00
5,750.00	66.90	140.00	5,513.40	-444.49	372.97	443.99	6.00	6.00	0.00
5,786.29	69.07	140.00	5,527.00	-470.26	394.60	469.73	6.00	6.00	0.00
MGLP Marker									
5,800.00	69.89	140.00	5,531.81	-480.10	402.85	479.56	6.00	6.00	0.00
5,850.00	72.89	140.00	5,547.76	-516.40	433.31	515.81	6.00	6.00	0.00
5,900.00	75.89	140.00	5,561.21	-553.28	464.26	552.66	6.00	6.00	0.00
5,925.09	77.40	140.00	5,567.00	-571.98	479.95	571.34	6.00	6.00	0.00
Gallup Mrkr 5									
5,950.00	78.89	140.00	5,572.12	-590.66	495.62	589.99	6.00	6.00	0.00
6,000.00	81.89	140.00	5,580.46	-628.42	527.30	627.71	6.00	6.00	0.00
6,050.00	84.89	140.00	5,586.21	-666.46	559.23	665.71	6.00	6.00	0.00
6,100.00	87.89	140.00	5,589.35	-704.68	591.30	703.89	6.00	6.00	0.00
6,135.11	90.00	140.00	5,590.00	-731.57	613.86	730.75	6.00	6.00	0.00
6,200.00	90.00	140.00	5,590.00	-781.28	655.57	780.40	0.00	0.00	0.00
6,300.00	90.00	140.00	5,590.00	-857.89	719.85	856.92	0.00	0.00	0.00

XTO Energy, Inc.

Planning Report

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Site:	Sullivan Gas Com #1H	North Reference:	True
Well:	Sullivan Gas Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Sullivan Gas Com #1H		
Design:	Permitted Wellbore - Sullivan Gas Com #1H		

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)	
6,400.00	90.00	140.00	5,590.00	-934.49	784.13	933.44	0.00	0.00	0.00	
6,500.00	90.00	140.00	5,590.00	-1,011.09	848.41	1,009.96	0.00	0.00	0.00	
6,600.00	90.00	140.00	5,590.00	-1,087.70	912.69	1,086.47	0.00	0.00	0.00	
6,615.00	90.00	140.00	5,590.00	-1,099.19	922.33	1,097.95	0.00	0.00	0.00	
7"										
6,635.11	90.00	140.00	5,590.00	-1,114.59	935.26	1,113.34	0.00	0.00	0.00	
6,700.00	90.00	136.76	5,590.00	-1,163.10	978.35	1,164.15	5.00	0.00	-5.00	
6,800.00	90.00	131.76	5,590.00	-1,232.86	1,049.95	1,246.70	5.00	0.00	-5.00	
6,900.00	90.00	126.76	5,590.00	-1,296.12	1,127.36	1,333.85	5.00	0.00	-5.00	
7,000.00	90.00	121.76	5,590.00	-1,352.39	1,209.99	1,424.94	5.00	0.00	-5.00	
7,100.00	90.00	116.76	5,590.00	-1,401.24	1,297.20	1,519.27	5.00	0.00	-5.00	
7,200.00	90.00	111.76	5,590.00	-1,442.31	1,388.35	1,616.13	5.00	0.00	-5.00	
7,300.00	90.00	106.76	5,590.00	-1,475.28	1,482.72	1,714.77	5.00	0.00	-5.00	
7,400.00	90.00	101.76	5,590.00	-1,499.90	1,579.61	1,814.46	5.00	0.00	-5.00	
7,500.00	90.00	96.76	5,590.00	-1,515.97	1,678.28	1,914.42	5.00	0.00	-5.00	
7,600.00	90.00	91.76	5,590.00	-1,523.39	1,777.97	2,013.90	5.00	0.00	-5.00	
7,700.00	90.00	86.76	5,590.00	-1,522.09	1,877.93	2,112.14	5.00	0.00	-5.00	
7,733.88	90.00	85.06	5,590.00	-1,519.68	1,911.73	2,145.01	5.00	0.00	-5.00	
7,800.00	90.00	85.06	5,590.00	-1,513.98	1,977.60	2,208.92	0.00	0.00	0.00	
7,900.00	90.00	85.06	5,590.00	-1,505.38	2,077.23	2,305.57	0.00	0.00	0.00	
8,000.00	90.00	85.06	5,590.00	-1,496.77	2,176.86	2,402.22	0.00	0.00	0.00	
8,100.00	90.00	85.06	5,590.00	-1,488.16	2,276.49	2,498.88	0.00	0.00	0.00	
8,200.00	90.00	85.06	5,590.00	-1,479.55	2,376.12	2,595.53	0.00	0.00	0.00	
8,300.00	90.00	85.06	5,590.00	-1,470.94	2,475.74	2,692.19	0.00	0.00	0.00	
8,400.00	90.00	85.06	5,590.00	-1,462.33	2,575.37	2,788.84	0.00	0.00	0.00	
8,500.00	90.00	85.06	5,590.00	-1,453.72	2,675.00	2,885.50	0.00	0.00	0.00	
8,600.00	90.00	85.06	5,590.00	-1,445.11	2,774.63	2,982.15	0.00	0.00	0.00	
8,700.00	90.00	85.06	5,590.00	-1,436.51	2,874.26	3,078.81	0.00	0.00	0.00	
8,800.00	90.00	85.06	5,590.00	-1,427.90	2,973.89	3,175.46	0.00	0.00	0.00	
8,900.00	90.00	85.06	5,590.00	-1,419.29	3,073.52	3,272.12	0.00	0.00	0.00	
9,000.00	90.00	85.06	5,590.00	-1,410.68	3,173.15	3,368.77	0.00	0.00	0.00	
9,100.00	90.00	85.06	5,590.00	-1,402.07	3,272.77	3,465.43	0.00	0.00	0.00	
9,200.00	90.00	85.06	5,590.00	-1,393.46	3,372.40	3,562.08	0.00	0.00	0.00	
9,300.00	90.00	85.06	5,590.00	-1,384.85	3,472.03	3,658.74	0.00	0.00	0.00	
9,400.00	90.00	85.06	5,590.00	-1,376.25	3,571.66	3,755.39	0.00	0.00	0.00	
9,500.00	90.00	85.06	5,590.00	-1,367.64	3,671.29	3,852.05	0.00	0.00	0.00	
9,600.00	90.00	85.06	5,590.00	-1,359.03	3,770.92	3,948.70	0.00	0.00	0.00	
9,700.00	90.00	85.06	5,590.00	-1,350.42	3,870.55	4,045.36	0.00	0.00	0.00	
9,800.00	90.00	85.06	5,590.00	-1,341.81	3,970.18	4,142.01	0.00	0.00	0.00	
9,900.00	90.00	85.06	5,590.00	-1,333.20	4,069.80	4,238.67	0.00	0.00	0.00	
10,000.00	90.00	85.06	5,590.00	-1,324.59	4,169.43	4,335.32	0.00	0.00	0.00	
10,100.00	90.00	85.06	5,590.00	-1,315.98	4,269.06	4,431.98	0.00	0.00	0.00	
10,200.00	90.00	85.06	5,590.00	-1,307.38	4,368.69	4,528.63	0.00	0.00	0.00	
10,300.00	90.00	85.06	5,590.00	-1,298.77	4,468.32	4,625.29	0.00	0.00	0.00	
10,400.00	90.00	85.06	5,590.00	-1,290.16	4,567.95	4,721.94	0.00	0.00	0.00	
10,500.00	90.00	85.06	5,590.00	-1,281.55	4,667.58	4,818.59	0.00	0.00	0.00	
10,600.00	90.00	85.06	5,590.00	-1,272.94	4,767.21	4,915.25	0.00	0.00	0.00	
10,700.00	90.00	85.06	5,590.00	-1,264.33	4,866.83	5,011.90	0.00	0.00	0.00	
10,800.00	90.00	85.06	5,590.00	-1,255.72	4,966.46	5,108.56	0.00	0.00	0.00	
10,900.00	90.00	85.06	5,590.00	-1,247.12	5,066.09	5,205.21	0.00	0.00	0.00	
11,000.00	90.00	85.06	5,590.00	-1,238.51	5,165.72	5,301.87	0.00	0.00	0.00	
11,100.00	90.00	85.06	5,590.00	-1,229.90	5,265.35	5,398.52	0.00	0.00	0.00	
11,200.00	90.00	85.06	5,590.00	-1,221.29	5,364.98	5,495.18	0.00	0.00	0.00	

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Wellbore:	Sullivan Gas Com #1H		
Design:	Permitted Wellbore - Sullivan Gas Com #1H		

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)	
11,300.00	90.00	85.06	5,590.00	-1,212.68	5,464.61	5,591.83	0.00	0.00	0.00	
11,400.00	90.00	85.06	5,590.00	-1,204.07	5,564.24	5,688.49	0.00	0.00	0.00	
11,500.00	90.00	85.06	5,590.00	-1,195.46	5,663.86	5,785.14	0.00	0.00	0.00	
11,600.00	90.00	85.06	5,590.00	-1,186.85	5,763.49	5,881.80	0.00	0.00	0.00	
11,700.00	90.00	85.06	5,590.00	-1,178.25	5,863.12	5,978.45	0.00	0.00	0.00	
11,800.00	90.00	85.06	5,590.00	-1,169.64	5,962.75	6,075.11	0.00	0.00	0.00	
11,900.00	90.00	85.06	5,590.00	-1,161.03	6,062.38	6,171.76	0.00	0.00	0.00	
12,000.00	90.00	85.06	5,590.00	-1,152.42	6,162.01	6,268.42	0.00	0.00	0.00	
12,100.00	90.00	85.06	5,590.00	-1,143.81	6,261.64	6,365.07	0.00	0.00	0.00	
12,200.00	90.00	85.06	5,590.00	-1,135.20	6,361.27	6,461.73	0.00	0.00	0.00	
12,285.00	90.00	85.06	5,590.00	-1,127.89	6,445.95	6,543.88	0.00	0.00	0.00	
4 1/2"										
12,285.78	90.00	85.06	5,590.00	-1,127.82	6,446.72	6,544.63	0.00	0.00	0.00	

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Proposed BHL -- Sullivan	0.00	0.00	5,590.00	-1,127.82	6,446.72	2,072,764.37	2,708,774.44	36° 41' 46.608000 N	107° 52' 55.812000 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,615.00	5,590.00	7"	7	8-3/4	
12,285.00	5,590.00	4 1/2"	4-1/2	6-1/8	
800.00	800.00	9 5/8"	9-5/8	12-1/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
586.00	586.00	Ojo Alamo		0.00	
1,250.00	1,250.00	Fruitland Coal		0.00	
1,791.00	1,791.00	Pictured Cliffs		0.00	
2,393.00	2,393.00	Huerfano Bentonite		0.00	
2,751.00	2,751.00	Chacra		0.00	
3,429.00	3,429.00	Cliffhouse SS		0.00	
4,114.00	4,114.00	Piont Lookout SS		0.00	
4,459.00	4,459.00	Mancos Shale		0.00	
5,374.80	5,303.00	Upper Gallup Marker		0.00	
5,585.20	5,436.00	Skelly Marker		0.00	
5,786.29	5,527.00	MGLP Marker		0.00	
5,925.09	5,567.00	Gallup Mrkr 5		0.00	

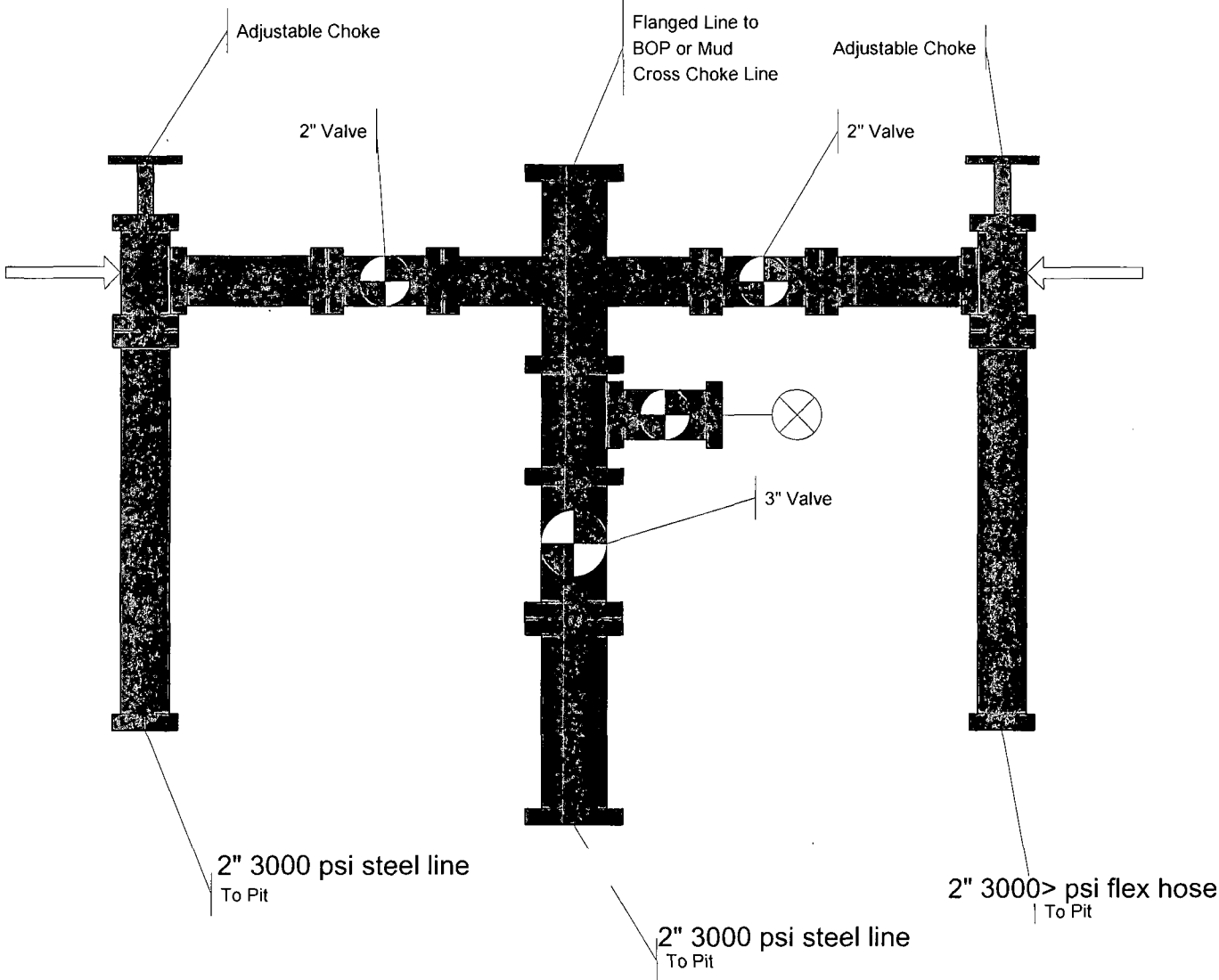
XTO Energy, Inc.

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Well:	Sullivan Gas Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Sullivan Gas Com #1H		
Design:	Permitted Wellbore -- Sullivan Gas Com #1H		

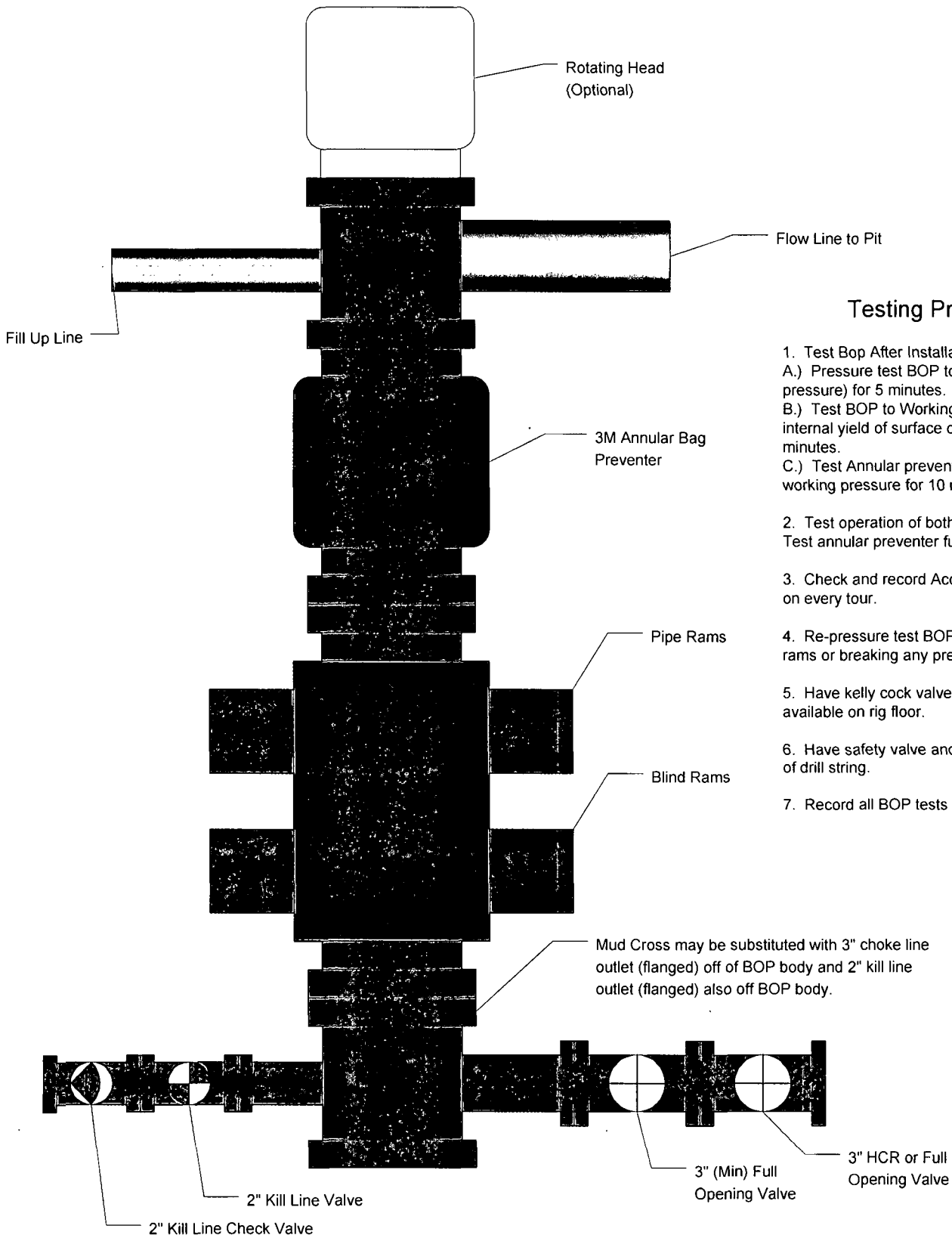
XTO Energy

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.