

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 30-045-35245
⁴ Property Code 24507	⁵ Property Name BROWN	⁶ Well No. #4H
⁹ Proposed Pool 1 BASIN FRUITLAND COAL		¹⁰ Proposed Pool 2

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	29	30N	12W		185'	SOUTH	2025'	WEST	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
L	29	30N	12W		1940'	SOUTH	700'	WEST	SAN JUAN

Additional Well Information

¹¹ Work Type Code New Well	¹² Well Type Code G	¹³ Cable/Rotary	¹⁴ Lease Type Code Private	¹⁵ Ground Level Elevation 5484'
¹⁶ Multiple No	¹⁷ Proposed Depth 3452'	¹⁸ Formation Fruitland Coal	¹⁹ Contractor	²⁰ Spud Date January 15, 2011

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
13.50	9.625	36	225	188	
8.75	7	23	1961	99	
8.75	7	23	1961	100	
6.125	4.5	10.5	3452	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 program and horizontal plan.

VOID DEC 16 '10
OIL CONS. DIV.
DIST. 3

Hold C104
for Directional Survey
and "As Drilled" plat

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.	OIL CONSERVATION DIVISION	
Signature: <i>Malia Villers</i>	Approved by: <i>Charles H. [Signature]</i>	2-21-2011
Printed name: Malia Villers	Title: SUPERVISOR DISTRICT # 3	
Title: Permitting Tech.	Approval Date: FEB 23 2011	Expiration Date: FEB 23 2012
E-mail Address: malia_villers@xtoenergy.com		
Date: 12/13/2010	Phone: 505-333-3100	Conditions of Approval Attached <input type="checkbox"/>

Hold C104
for Directional Survey
and "As Drilled" plat FEB 23 2011

Delay in approval due to operator out of comp. 5.9 F/A 4 T/A wells

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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 October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35245	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 24507	⁵ Property Name BROWN	
⁷ OGRID No. 5380	⁸ Operator Name XTO ENERGY INC.	⁶ Well Number 4H
		⁹ Elevation 5484'

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
N	29	30-N	12-W		185	SOUTH	2025	WEST	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
L	29	30-N	12-W		1940	SOUTH	700	WEST	SAN JUAN

¹² Dedicated Acres 5/2 320.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁶

SET P&C
STAMPED
LS. NO. 8894

B.H.L.
B.H.L. FOOTAGES ARE
PROVIDED BY XTO ENERGY INC.
CLIENT

BOTTOM HOLE:
LAT: 36.78220° N. (NAD 83)
LONG: 108.12780° W. (NAD 83)
LAT: 36°46'55.93" N. (NAD 27)
LONG: 108°07'37.83" W. (NAD 27)

SURFACE:
LAT: 36.77735° N. (NAD 83)
LONG: 108.12328° W. (NAD 83)
LAT: 36°46'38.45" N. (NAD 27)
LONG: 108°07'21.55" W. (NAD 27)

S 89-19-22 E
5279.50' (M)

FD. 2" AC.
STAMPED
LS. NO. 11598
1996

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.

Malia Villers 12/13/10
Signature Date

Malia Villers
Printed Name

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.

FEBRUARY 12, 2009
Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number

XTO ENERGY INC.

Brown #4H

APD Data

December 9, 2010

Location: 185' FSL x 2025' FWL Sec 29, T30N, R12W **County:** San Juan **State:** New Mexico
Bottomhole Location: 1940' FSL x 700' FWL Sec 29, T30N, R12W

GREATEST PROJECTED TVD: 1552'

APPROX GR ELEV: 5484'

GREATEST PROJECTED MD: 3452'

Est KB ELEV: 5496' (12' AGL)

OBJECTIVE: Fruitland Coal

1. MUD PROGRAM:

INTERVAL	0' to 225'	225' to 1961'	1961' to TD
HOLE SIZE	13.5"	8.75"	6.125"
MUD TYPE	FW/Spud Mud	FW/Polymer	FW/ Polymer
WEIGHT	8.6-9.0	8.6-9.2	8.4-8.8
VISCOSITY	28-32	28-36	28-32
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 ± 225' in a 13-1/2" 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'-225'	225'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	18.76	32.7	48.6

Intermediate Casing: 7" casing to be set at ±1961' MD, 1552' 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'-1961'	1961'	23.0#	J-55	ST&C	3270	4360	284	6.276	6.151	4.40	5.87	6.30

Production Casing: 4.5" casing to be set at ±3452' MD, 1552' TVD in 6.125" hole filled with 8.4 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
1900'-3452'	1552'	10.5	J-55	ST&C	4010	4790	132	4.052	3.927	5.91	7.06	8.10

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

²Burst SF is based on evacuated casing 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: WHI QDF System (or equivalent), 9-5/8" x 7", 3,000 psig WP (4,000 psig test) with 9-5/8" 8rnd thread ST&C pin end on bottom and 4-1/2" slips on top.
- B. Tubing Head: WHI W2F (or equivalent), 7.063" nominal, 5,000 psig WP (5,000 psig test), 5-1/2" slip-on or weld-on.

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 $\pm 225'$ in 13-1/2" hole.

± 188 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 220 ft³, 100% excess of calculated annular volume to 225'.

- B. Production Casing: 7", 23#/ft, J-55, ST&C casing to be set at $\pm 1961'$ MD, 1552' TVD in 8.75" hole.

LEAD:

± 99 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:

± 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 413 ft³.

- C. Production Liner: 4.5", 10.5#/ft, J-55, ST&C casing is to be set at 3452' MD, 1552' 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 slightly 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 Plan

**** Maximum anticipated BHP should be <2,000 psig (<0.30 psi/ft) ****

7. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
Brian Henthorn	Project Geologist	817-885-2800	--

JDN
12/9/10

CP

XTO Energy

San Juan Basin (NAD 83)

Brown #4H

Brown #4H

Brown #4H

Plan: Permitted wellbore -- Brown #4H

Standard Planning Report

08 December, 2010

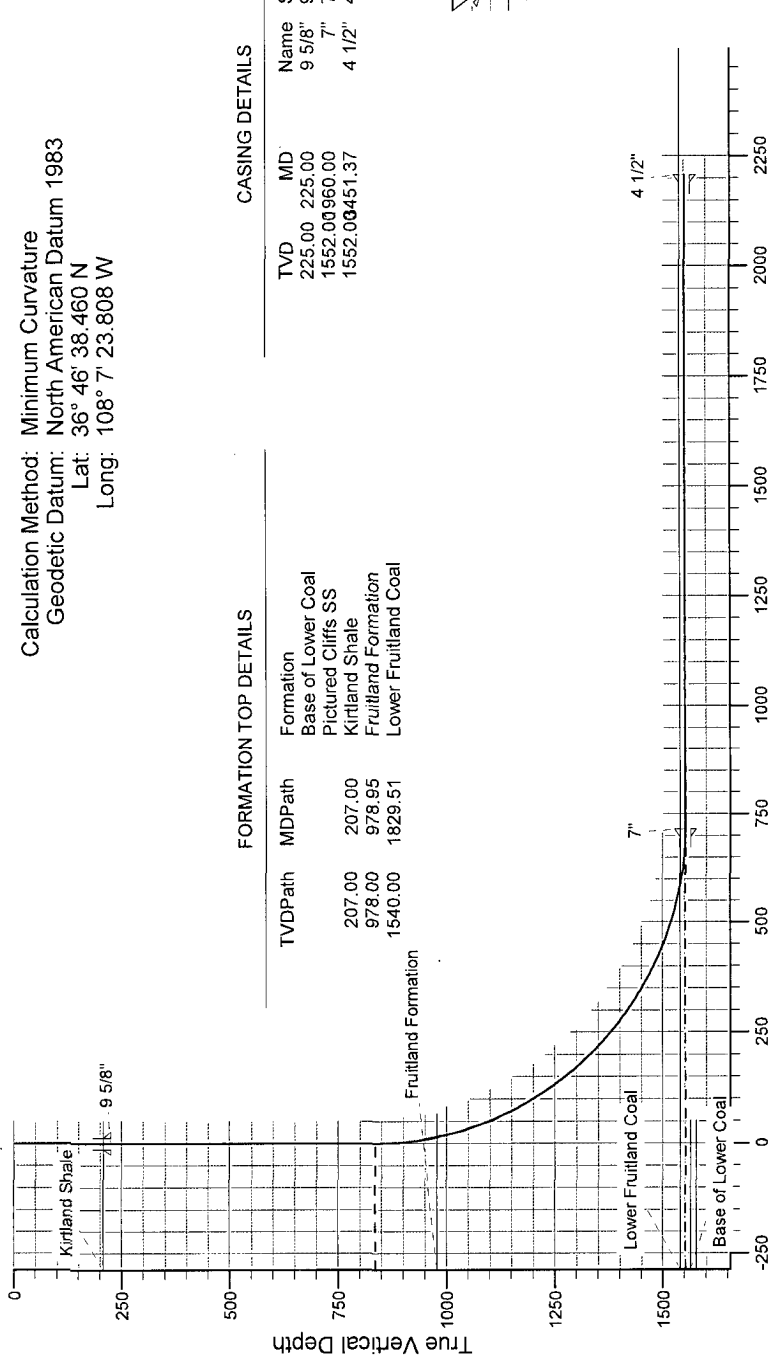
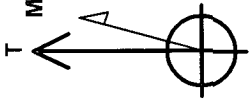


Well Name: Brown #4H

San Juan Division
Drilling Department

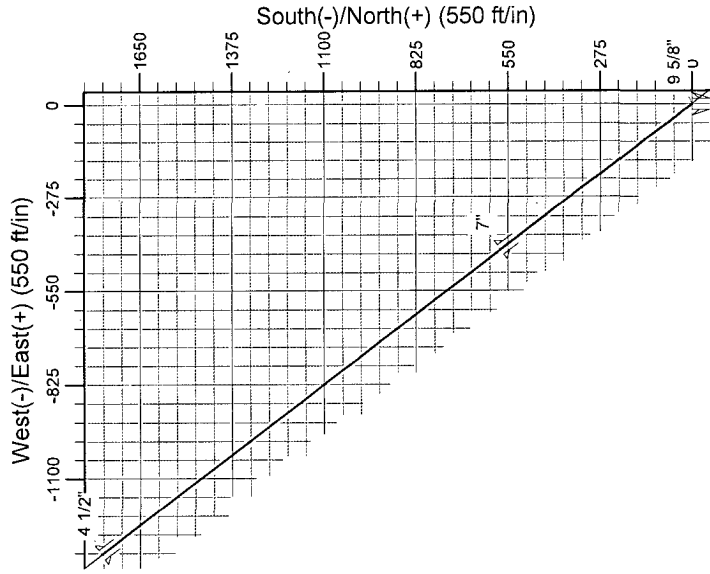
Calculation Method: Minimum Curvature
Geodetic Datum: North American Datum 1983
Lat: 36° 46' 38.460 N
Long: 108° 7' 23.808 W

Azimuths to True North
Magnetic North: 10.21°
Magnetic Field
Strength: 50888.6snT
Dip Angle: 63.47°
Date: 12/31/2009
Model: IGRF200510

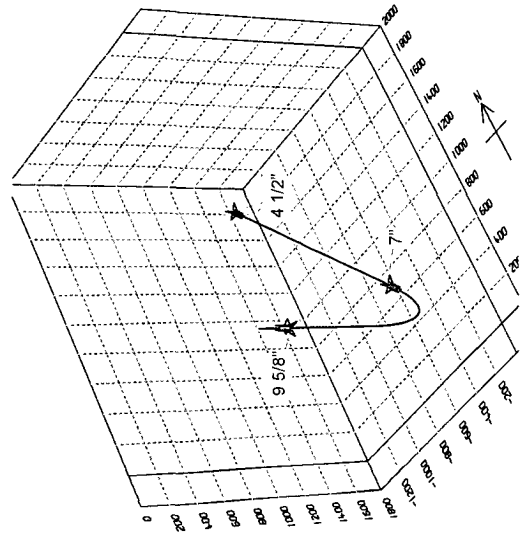


CASING DETAILS

Name	Size	TVD	MD
9 5/8"	9.625	225.00	225.00
7"	7.000	1552.00	960.00
4 1/2"	4.500	1552.00	451.37



Vertical Section at 323.14°



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	0.00
2	835.80	0.00	0.00	835.80	0.00	0.00	0.00	0.00	0.00	0.00
3	1960.80	90.00	323.14	1552.00	573.06	-429.58	8.00	323.14	716.20	
4	3451.37	90.00	323.14	1552.00	1765.72	-1323.65	0.00	0.00	2206.76	Proposed BHL -- Brown #4H

XTO Energy Inc.
Planning Report

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Brown #4H
Company:	XTO Energy	TVD Reference:	Rig KB @ 5496.00ft (Aztec 507)
Project:	San Juan Basin (NAD 83)	MD Reference:	Rig KB @ 5496.00ft (Aztec 507)
Site:	Brown #4H	North Reference:	True
Well:	Brown #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Brown #4H		
Design:	Permitted wellbore -- Brown #4H		

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	Brown #4H, T30N, R12W				
Site Position:	Northing:	2,102,403.11ft	Latitude:	36° 46' 38.460 N	
From:	Lat/Long	Easting:	2,638,178.55ft	Longitude:	108° 7' 23.808 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	-0.17 °

Well	Brown #4H, Horizontal FC					
Well Position	+N/-S	0.00 ft	Northing:	2,102,403.11ft	Latitude:	36° 46' 38.460 N
	+E/-W	0.00 ft	Easting:	2,638,178.55ft	Longitude:	108° 7' 23.808 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	5,484.00ft	Ground Level:	5,484.00ft

Wellbore	Brown #4H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	10.21	63.47	50,889

Design	Permitted wellbore -- Brown #4H			
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	323.14

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	
835.80	0.00	0.00	835.80	0.00	0.00	0.00	0.00	0.00	0.00	
1,960.80	90.00	323.14	1,552.00	573.06	-429.58	8.00	8.00	0.00	323.14	
3,451.37	90.00	323.14	1,552.00	1,765.72	-1,323.65	0.00	0.00	0.00	0.00	Proposed BHL -- Bi

XTO Energy Inc.

Planning Report

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Brown #4H
Company:	XTO Energy	TVD Reference:	Rig KB @ 5496.00ft (Aztec 507)
Project:	San Juan Basin (NAD 83)	MD Reference:	Rig KB @ 5496.00ft (Aztec 507)
Site:	Brown #4H	North Reference:	True
Well:	Brown #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Brown #4H		
Design:	Permitted wellbore -- Brown #4H		

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
207.00	0.00	0.00	207.00	0.00	0.00	0.00	0.00	0.00	0.00
Kirtland Shale									
225.00	0.00	0.00	225.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
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
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
835.80	0.00	0.00	835.80	0.00	0.00	0.00	0.00	0.00	0.00
850.00	1.14	323.14	850.00	0.11	-0.08	0.14	8.00	8.00	0.00
900.00	5.14	323.14	899.91	2.30	-1.72	2.88	8.00	8.00	0.00
950.00	9.14	323.14	949.52	7.27	-5.45	9.09	8.00	8.00	0.00
978.95	11.45	323.14	978.00	11.41	-8.55	14.26	8.00	8.00	0.00
Fruitland Formation									
1,000.00	13.14	323.14	998.57	14.99	-11.24	18.74	8.00	8.00	0.00
1,050.00	17.14	323.14	1,046.82	25.44	-19.07	31.79	8.00	8.00	0.00
1,100.00	21.14	323.14	1,094.05	38.55	-28.90	48.18	8.00	8.00	0.00
1,150.00	25.14	323.14	1,140.02	54.27	-40.68	67.82	8.00	8.00	0.00
1,200.00	29.14	323.14	1,184.51	72.51	-54.36	90.62	8.00	8.00	0.00
1,250.00	33.14	323.14	1,227.29	93.19	-69.86	116.47	8.00	8.00	0.00
1,300.00	37.14	323.14	1,268.18	116.21	-87.12	145.24	8.00	8.00	0.00
1,350.00	41.14	323.14	1,306.95	141.46	-106.04	176.79	8.00	8.00	0.00
1,400.00	45.14	323.14	1,343.43	168.81	-126.54	210.97	8.00	8.00	0.00
1,450.00	49.14	323.14	1,377.44	198.12	-148.52	247.61	8.00	8.00	0.00
1,500.00	53.14	323.14	1,408.80	229.27	-171.87	286.54	8.00	8.00	0.00
1,550.00	57.14	323.14	1,437.38	262.09	-196.47	327.55	8.00	8.00	0.00
1,600.00	61.14	323.14	1,463.02	296.42	-222.21	370.46	8.00	8.00	0.00
1,650.00	65.14	323.14	1,485.61	332.10	-248.96	415.06	8.00	8.00	0.00
1,700.00	69.14	323.14	1,505.04	368.96	-276.59	461.12	8.00	8.00	0.00
1,750.00	73.14	323.14	1,521.20	406.81	-304.96	508.43	8.00	8.00	0.00
1,800.00	77.14	323.14	1,534.02	445.47	-333.94	556.74	8.00	8.00	0.00
1,829.51	79.50	323.14	1,540.00	468.60	-351.28	585.64	8.00	8.00	0.00
Lower Fruitland Coal									
1,850.00	81.14	323.14	1,543.45	484.75	-363.39	605.84	8.00	8.00	0.00
1,900.00	85.14	323.14	1,549.42	524.47	-393.16	655.47	8.00	8.00	0.00
1,950.00	89.14	323.14	1,551.92	564.41	-423.11	705.39	8.00	8.00	0.00
1,960.00	89.94	323.14	1,552.00	572.42	-429.10	715.39	8.00	8.00	0.00
7"									
1,960.80	90.00	323.14	1,552.00	573.06	-429.58	716.20	8.00	8.00	0.00
2,000.00	90.00	323.14	1,552.00	604.42	-453.10	755.39	0.00	0.00	0.00
2,100.00	90.00	323.14	1,552.00	684.44	-513.08	855.39	0.00	0.00	0.00
2,200.00	90.00	323.14	1,552.00	764.45	-573.06	955.39	0.00	0.00	0.00
2,300.00	90.00	323.14	1,552.00	844.46	-633.04	1,055.39	0.00	0.00	0.00
2,400.00	90.00	323.14	1,552.00	924.48	-693.02	1,155.39	0.00	0.00	0.00
2,500.00	90.00	323.14	1,552.00	1,004.49	-753.00	1,255.39	0.00	0.00	0.00
2,600.00	90.00	323.14	1,552.00	1,084.51	-812.98	1,355.39	0.00	0.00	0.00
2,700.00	90.00	323.14	1,552.00	1,164.52	-872.97	1,455.39	0.00	0.00	0.00
2,800.00	90.00	323.14	1,552.00	1,244.53	-932.95	1,555.39	0.00	0.00	0.00
2,900.00	90.00	323.14	1,552.00	1,324.55	-992.93	1,655.39	0.00	0.00	0.00

XTO Energy Inc.
Planning Report

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Brown #4H
Company:	XTO Energy	TVD Reference:	Rig KB @ 5496.00ft (Aztec 507)
Project:	San Juan Basin (NAD 83)	MD Reference:	Rig KB @ 5496.00ft (Aztec 507)
Site:	Brown #4H	North Reference:	True
Well:	Brown #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Brown #4H		
Design:	Permitted wellbore -- Brown #4H		

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)	
3,000.00	90.00	323.14	1,552.00	1,404.56	-1,052.91	1,755.39	0.00	0.00	0.00	
3,100.00	90.00	323.14	1,552.00	1,484.57	-1,112.89	1,855.39	0.00	0.00	0.00	
3,200.00	90.00	323.14	1,552.00	1,564.59	-1,172.87	1,955.39	0.00	0.00	0.00	
3,300.00	90.00	323.14	1,552.00	1,644.60	-1,232.85	2,055.39	0.00	0.00	0.00	
3,400.00	90.00	323.14	1,552.00	1,724.62	-1,292.83	2,155.39	0.00	0.00	0.00	
3,451.37	90.00	323.14	1,552.00	1,765.72	-1,323.65	2,206.76	0.00	0.00	0.00	

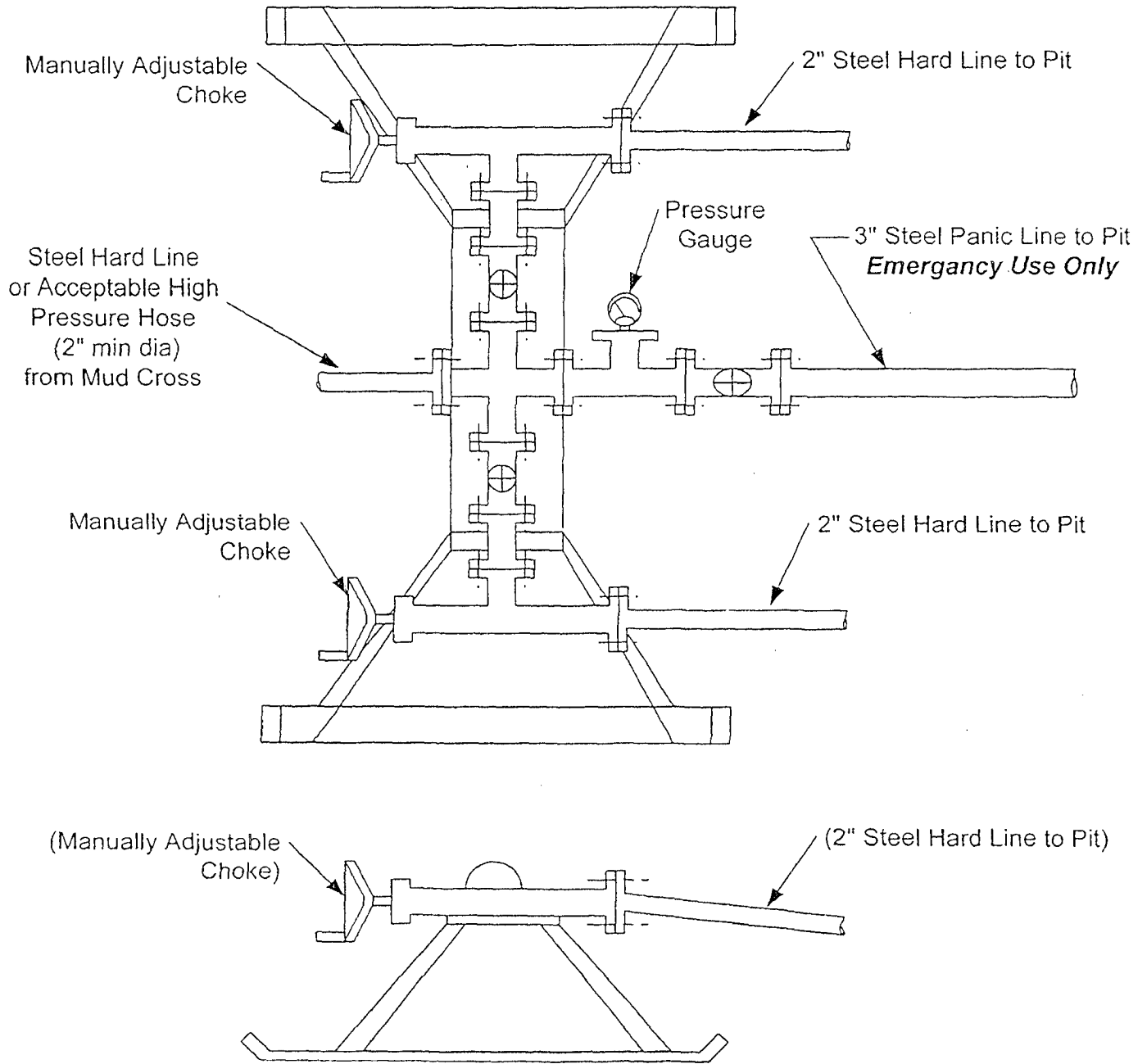
Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
225.00	225.00	9 5/8"	9.625	13.500	
1,960.00	1,552.00	7"	7.000	8.750	
3,451.37	1,552.00	4 1/2"	4.500	6.125	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
207.00	207.00	Kirtland Shale		0.00	
978.95	978.00	Fruitland Formation		0.00	
1,829.51	1,540.00	Lower Fruitland Coal		0.00	
	1,564.00	Base of Lower Coal		0.00	
	1,577.00	Pictured Cliffs SS		0.00	

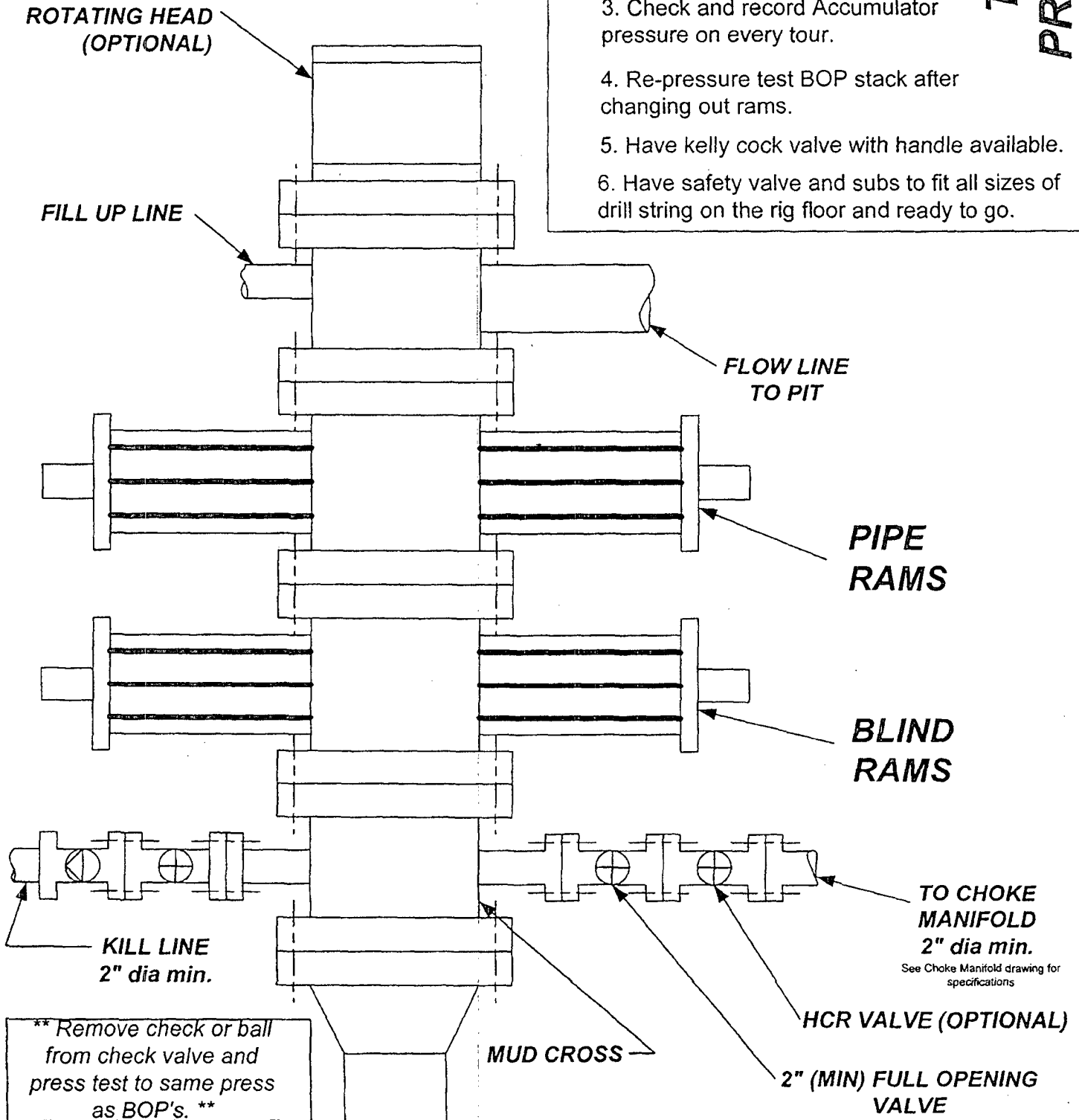
CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

1. Stake all lines from choke manifold to pit.
2. Pressure test choke manifold after installation.
3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

TESTING PROCEDURE



BOP SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE



- ## TESTING PROCEDURE
1. Test BOP after installation:
 Pressure test BOP to 200-300 psig (low pressure) for 10 min.
 Test BOP to Working Press or to 70% internal yield of surf csg (10 min) or which ever is less.
 2. Test operation of (both) rams on every trip.
 3. Check and record Accumulator pressure on every tour.
 4. Re-pressure test BOP stack after changing out rams.
 5. Have kelly cock valve with handle available.
 6. Have safety valve and subs to fit all sizes of drill string on the rig floor and ready to go.