

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		SIDETRACK		² OGRID Number 5380	
				³ API Number 30-045-32879	
⁴ Property Code 22637		⁵ Property Name Stanolind Gas Com B			⁶ Well No. #5H
⁷ Proposed Pool 1 Basin Fruitland Coal			¹⁰ Proposed Pool 2		

Surface Location

UL or lot no. P	Section 9	Township 32N	Range 12W	Lot Idn	Feet from the 820'	North/South line South	Feet from the 665'	East/West line East	County San Juan
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⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no. J	Section 9	Township 32N	Range 12W	Lot Idn	Feet from the 1681'	North/South line South	Feet from the 2401'	East/West line East	County San Juan
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Additional Well Information

¹¹ Work Type Code RC	¹² Well Type Code G	¹³ Cable Rotary	¹⁴ Lease Type Code	¹⁵ Ground Level Elevation 6,046'
¹⁶ Multiple No	¹⁷ Proposed Depth 4500'	¹⁸ Formation Fruitland Coal	¹⁹ Contractor	²⁰ Spud Date May 1, 2010

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	225	100	
4.75	3.5	9.3	4500	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.

RCVD APR 6 '10
OIL CONS. DIV.
DIST. 3

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>Chatter 4-9-10</i>	
Printed name: Malia Villers		Title: SUPERVISOR DISTRICT # 3	
Title: Permitting Tech.		Approval Date: APR 09 2010	Expiration Date: 4-9-2012
E-mail Address: malia_villers@xtoenergy.com			
Date: 3/29/2010	Phone: 505-333-3100	Conditions of Approval Attached ☐	

APR 09 2010 *[Signature]*

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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
Fee Lease - 3 Copies
State Lease - 4 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-32879		² Pool Code 71629		³ Pool Name BASIN FRUITLAND COAL	
⁴ Property Code 22637		⁵ Property Name STANOLIND GAS COM B			⁶ Well Number 5H
⁷ OGRID No. 5380		⁸ Operator Name XTO Energy, Inc.			⁹ Elevation 6046'

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
P	9	32-N	12-W		820	SOUTH	665	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
J	9	32-N	12-W		1681	SOUTH	2401	EAST	SAN JUAN

¹² Dedicated Acres S/2 280.38	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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>I hereby certify that the information contained herein is true & complete to the best of my knowledge & 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</i>
				Signature Malia Villers Printed Name Permitting Tech Title 3/29/2010 Date
¹⁸ SURVEYOR CERTIFICATION <i>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 & correct to the best of my belief.</i>				
6/23/1984 Date of Survey Original Survey Signed By: John A. Vukonich 14831 Certificate Number				

**Stanolind Gas Com B #5H
Sec 9N, T32N, R12W
San Juan Co., NM**

Sidetrack & Drill Horizontal Fruitland Coal

AFE #/Acct #: 1001451/ 68723
Prod Csg: 5-1/2", 15.5#, J-55 csg @ 2,317'
PBTD: 2,275'
Perfs: FC:1,909'- 2,101' @ 3 JSPF (ttl 162 -0.49" perfs)
Tbg : NC, NTT, 30-N-045 stator, & 66 jts 2-7/8" tbg. NTT @ 2,190'. EOT @ 2,190'.
Rods: 30-N-045 rotor, 1 - 7/8" rod, 85 - 7/8" rods w/3 molded guides per rod, 5 - 7/8" rods subs (8', 6', 4', 2' & 2') & 1-1/4" X 16' PR
Prod. Method: PC pump

Fruitland Coal Completion Procedure

1. Test anchors. MIRU PU. POH & LD rods & rotor. ND WH. NU BOP. Tag fill. TOH & visually inspect 2-7/8" tubing.
2. PU watermelon mill & CO csg to PBTD. TOH.
3. MIRU WL. Run gauge ring & junk basket for 5-1/2" 15.5# casing. Run GR/CBL/CCL.
4. RIH & Set 5-1/2" RBP at $\pm 1,829'$. Set down 8,000# of weight on RBP. Circulate the hole clean w/fresh water. TOH. RDMO WL. RDMO PU.
5. MIRU Drilling Rig.
6. Unload & tally $\pm 4,500'$ of 2-7/8" OD, AOH drill pipe.
7. PU Whipstock System. Total length of whipstock in the set position is approximately 12'. Orient the UBHO sub & whipstock face on the surface. Insert the gyro stinger to ensure compatibility and to check orientation.
8. TIH w/whipstock assembly slowly, being careful when picking the string up off the slips & when setting the slips. Fill DP every 1,000'. Tag RBP @ $\pm 1,829'$ w/2,000#. PU to first tool joint & RU gyro truck. Orient the whipstock to the desired azimuth & work the torque out of the drill string.
9. When desired orientation is achieved, tag RBP w/2,000#, take final check shot w/gyro, then apply weight & set the anchor w/8,000# compression to shear the running bolt. RD WL truck.

10. Obtain values of free torque, PU & SO weights. Install ditch magnets at the surface. Lower milling assembly & make the starting cut through the csg wall @ ~1,816'.
11. Mill the remainder of the window, 1,816 – 22' making the necessary rat hole (1,829') to ensure that the mill has fully opened the window, and that the window exit is smooth. Work the mills through the window. When the window is clean, TOH and LD the window mills.
12. PU 4-3/4" bit, PU directional assembly w/Non-Mag DC & Gamma Ray, run surface tests, & TIH. Use Gyro for first few surveys. Follow attached well plan. Open hole lateral length is $\pm 2,000'$.

Use FW/Polymer mud, WT 8.4-8.8 ppg, Vis. 30-34 to drill open hole section with high viscosity sweeps as needed for hole cleaning.

13. At TD, short trip to window and circulate hole clean w/polymer sweeps.
14. TOH & LD directional tools.
15. PU & TIH w/3-1/2", 9.3#, ultra-flush pre-perforated (0.5" holes, 4 spf) Liner and enough DP to facilitate running Liner into the open hole.
16. Drop off Liner into Open Hole. TOH & LD DP.
17. RDMO Drilling Rig.
18. MIRU 1-1/2" CTU.
19. RIH & CO w/AFU to PBTD.
20. RDMO CTU.
21. MI and set cmt base & Lufkin C-80-119-64 ppg unit w/C-46 gas engine. Set ppg ut in crank hole & sheave mtr (jackshaft if required) so it will pmp @ $\pm 5 \times 64"$ SPM. Rodstar run attached. Calc counter balance effect 4,937# & max CB moment 152 M in-lb.
22. MIRU PU.
23. RIH & retrieve whipstock.
24. RIH & retrieve RBP.
25. TIH w/4-3/4" bit & 2-7/8" tbg. TIH & CO to PBTD @ 2,275'.
26. TOH & LD bit.
27. TIH w/OEMA, SN & 67 jts 2-7/8" tbg. SN @ 2,175'. EOT @ 2,207'.

28. ND BOP. NU WH.
29. TIH w/ 2-3/8" x 2" x 12' RWAC-Z (DV) pmp & 1" X 1' strn nip, 1-1/4" sb, shear tl, 1-1/4" sb, 85 - 3/4" rods, & 1-1/4" x16' PR w/8' lnr. Space out pump and HWO.
30. Load tbg & start well pumping. RDMO PU.
31. RWTP. Report daily gas & water volumes. Shoot FL after well stabilizes for follow up.



Stanolind Gas Com B #5H
San Juan Co., NM



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	1814.90	0.00	0.00	1814.90	0.00	0.00	0.00	0.00	0.00	
3	1829.90	2.00	296.03	1829.90	0.11	-0.24	13.33	296.03	0.26	
4	1834.90	2.00	296.03	1834.89	0.19	-0.39	0.00	0.00	0.44	
5	2171.84	103.08	296.03	2014.26	102.94	-210.74	30.00	0.00	234.54	
6	3875.59	103.08	296.03	1628.60	831.33	-1701.87	0.00	0.00	1894.06	Pbhl P6

WELL DETAILS

Name	N/S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#5	0.00	0.00	2181655.56	423931.75	36°59'43.010N	08°05'37.720W	N/A

TARGET DETAILS

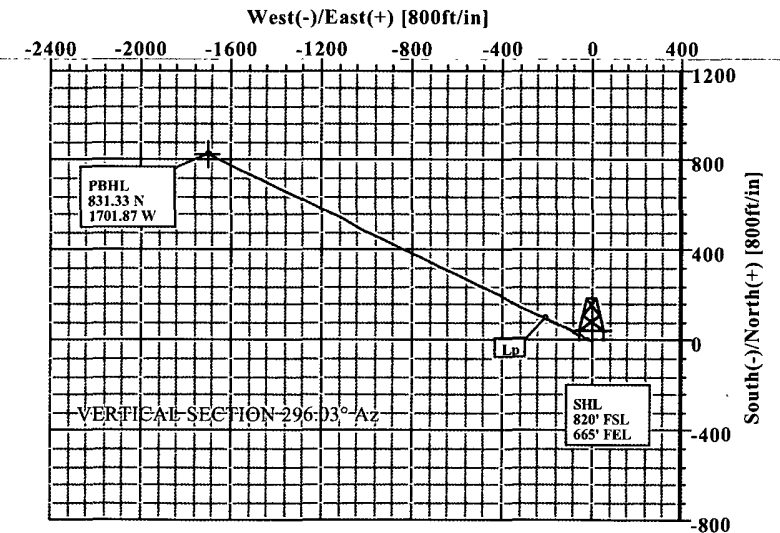
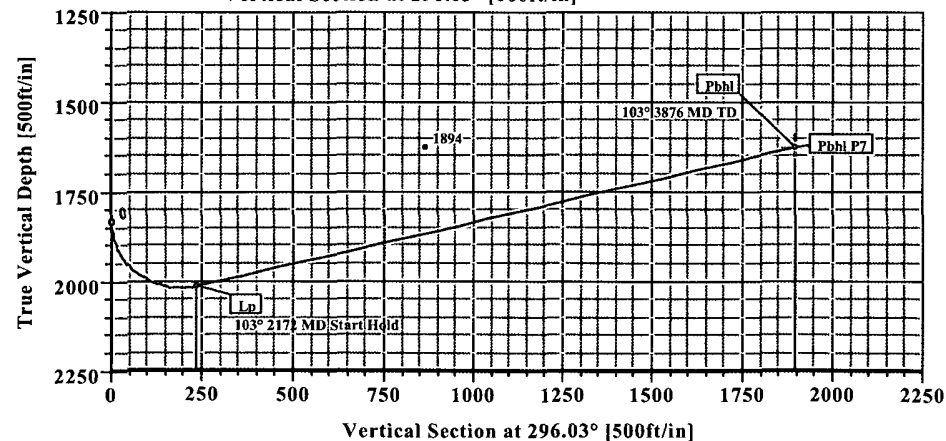
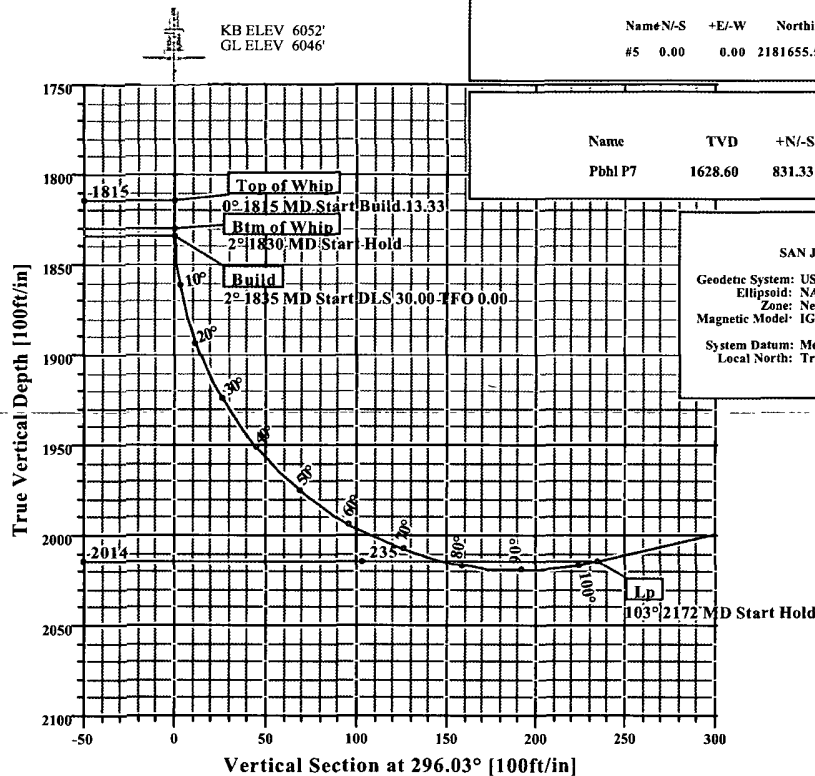
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Pbhl P7	1628.60	831.33	-1701.87	36°59'51.230N	108°05'58.700W	Point

FIELD DETAILS

SAN JUAN CO., NM (NAD 27)

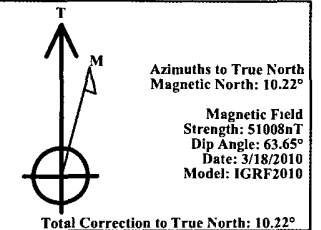
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Western Zone
Magnetic Model: IGRF2010

System Datum: Mean Sea Level
Local North: True North



SITE DETAILS

Stanolind Gas Com B #5
820° FSL 665° FEL of Sec 9, T32N, R12W
Site Centre Latitude: 36°59'43.010N
Longitude: 108°05'37.720W
Ground Level: 6046.00
Positional Uncertainty: 0.00
Convergence: -0.16



Plan Plan #7 (#5H/1)

Created By: Russell W Joyner

Date: 3/19/2010



Weatherford International Ltd.

WFT Plan Report Lat, Long

**Weatherford**

Company: XTO				Date: 3/19/2010		Time: 05:31:01		Page: 1						
Field: SAN JUAN CO., NM (NAD 27)				Co-ordinate(NE) Reference:		Well: #5, True North								
Site: Stanolind Gas Com B #5H				Vertical (TVD) Reference:		SITE 6052.0								
Well: #5				Section (VS) Reference:		Well (0 00N,0.00E,296.03Azi)								
Wellpath: 1				Survey Calculation Method:		Minimum Curvature		Db: Sybase						
Survey:				Start Date:										
Company:				Engineer:										
Tool:				Tied-to:										
Field: SAN JUAN CO , NM (NAD 27)														
Map System: US State Plane Coordinate System 1927					Map Zone: New Mexico, Western Zone									
Geo Datum: NAD27 (Clarke 1866)					Coordinate System: Well Centre									
Sys Datum: Mean Sea Level					Geomagnetic Model: IGRF2010									
Site: Stanolind Gas Com B #5H														
820' FSL 665' FEL of Sec 9, T32N, R12W														
Site Position:		Northing: 2181655.56 ft		Latitude: 36 59 43.010 N										
From: Geographic		Easting: 423931.75 ft		Longitude: 108 5 37.720 W										
Position Uncertainty: 0.00 ft				North Reference: True										
Ground Level: 6046.00 ft				Grid Convergence: -0.16 deg										
Well: #5														
Slot Name:														
Well Position: +N/-S 0.00 ft		Northing: 2181655.56 ft		Latitude: 36 59 43.010 N										
+E/-W 0.00 ft		Easting : 423931.75 ft		Longitude: 108 5 37.720 W										
Position Uncertainty: 0.00 ft														
Wellpath: 1														
Current Datum: SITE		Height 6052.00 ft		Drilled From: Surface										
Magnetic Data: 3/18/2010				Tie-on Depth: 0.00 ft										
Field Strength: 51008 nT				Above System Datum: Mean Sea Level										
Vertical Section: Depth From (TVD)		+N/-S ft		Declination: 10.22 deg										
				Mag Dip Angle: 63.65 deg										
				+E/-W ft		Direction deg								
0.00		0.00		0.00		296.03								
Plan Section Information														
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target				
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
1814.90	0.00	0.00	1814.90	0.00	0.00	0.00	0.00	0.00	0.00					
1829.90	2.00	296.03	1829.90	0.11	-0.24	13.33	13.33	0.00	296.03					
1834.90	2.00	296.03	1834.89	0.19	-0.39	0.00	0.00	0.00	0.00					
2171.84	103.08	296.03	2014.26	102.94	-210.74	30.00	30.00	0.00	0.00					
3875.59	103.08	296.03	1628.60	831.33	-1701.87	0.00	0.00	0.00	0.00					
Survey														
MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Lat	Min	Sec	Long	Min	Sec	Comment
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	36	59	43.010	108	5	37.720	
1814.90	0.00	0.00	1814.90	0.00	0.00	0.00	0.00	36	59	43.010	108	5	37.720	Top of Whip
1829.90	2.00	296.03	1829.90	0.11	-0.24	0.26	13.33	36	59	43.011	108	5	37.723	Btm of Whip
1834.90	2.00	296.03	1834.89	0.19	-0.39	0.44	0.00	36	59	43.012	108	5	37.725	Build
1900.00	21.53	296.03	1898.32	5.99	-12.26	13.65	30.00	36	59	43.069	108	5	37.871	
2000.00	51.53	296.03	1977.76	31.82	-65.14	72.49	30.00	36	59	43.325	108	5	38.523	
2100.00	81.53	296.03	2017.13	71.62	-146.62	163.17	30.00	36	59	43.718	108	5	39.527	
2171.84	103.08	296.03	2014.26	102.94	-210.74	234.54	30.00	36	59	44.028	108	5	40.318	Lp
2200.00	103.08	296.03	2007.89	114.98	-235.38	261.96	0.00	36	59	44.147	108	5	40.622	
2300.00	103.08	296.03	1985.25	157.73	-322.90	359.37	0.00	36	59	44.570	108	5	41.701	
2400.00	103.08	296.03	1962.61	200.48	-410.42	456.77	0.00	36	59	44.992	108	5	42.779	
2500.00	103.08	296.03	1939.98	243.23	-497.94	554.18	0.00	36	59	45.415	108	5	43.858	
2600.00	103.08	296.03	1917.34	285.99	-585.46	651.58	0.00	36	59	45.838	108	5	44.937	
2700.00	103.08	296.03	1894.71	328.74	-672.98	748.98	0.00	36	59	46.261	108	5	46.016	
2800.00	103.08	296.03	1872.07	371.49	-760.50	846.39	0.00	36	59	46.683	108	5	47.095	



Weatherford International Ltd.

WFT Plan Report Lat, Long

**Weatherford**

Company: XTO
Field: SAN JUAN CO., NM (NAD 27)
Site: Stanolind Gas Com B #5H
Well: #5
Wellpath: 1

Date: 3/19/2010 Time: 05:31.01 Page: 2
Co-ordinate(NE) Reference: Well: #5, True North
Vertical (TVD) Reference: SITE 6052.0
Section (VS) Reference: Well (0.00N,0.00E,296.03Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Lat	Min	Sec	Long	Min	Sec	Comment
2900.00	103.08	296.03	1849.43	414.24	-848.03	943.79	0.00	36	59	47.106	108	5	48.174	
3000.00	103.08	296.03	1826.80	457.00	-935.55	1041.20	0.00	36	59	47.529	108	5	49.253	
3100.00	103.08	296.03	1804.16	499.75	-1023.07	1138.60	0.00	36	59	47.952	108	5	50.332	
3200.00	103.08	296.03	1781.53	542.50	-1110.59	1236.01	0.00	36	59	48.374	108	5	51.411	
3300.00	103.08	296.03	1758.89	585.25	-1198.11	1333.41	0.00	36	59	48.797	108	5	52.490	
3400.00	103.08	296.03	1736.25	628.00	-1285.63	1430.81	0.00	36	59	49.220	108	5	53.569	
3500.00	103.08	296.03	1713.62	670.76	-1373.15	1528.22	0.00	36	59	49.642	108	5	54.648	
3600.00	103.08	296.03	1690.98	713.51	-1460.67	1625.62	0.00	36	59	50.065	108	5	55.727	
3700.00	103.08	296.03	1668.35	756.26	-1548.19	1723.03	0.00	36	59	50.488	108	5	56.805	
3800.00	103.08	296.03	1645.71	799.01	-1635.71	1820.43	0.00	36	59	50.910	108	5	57.884	
3875.59	103.08	296.03	1628.60	831.33	-1701.87	1894.06	0.00	36	59	51.230	108	5	58.700	Pbhl

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
Pbhl P7			1628.60	831.33	-1701.87	2182491.54	422232.16	36	59	51.230 N	108	5	58.700 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

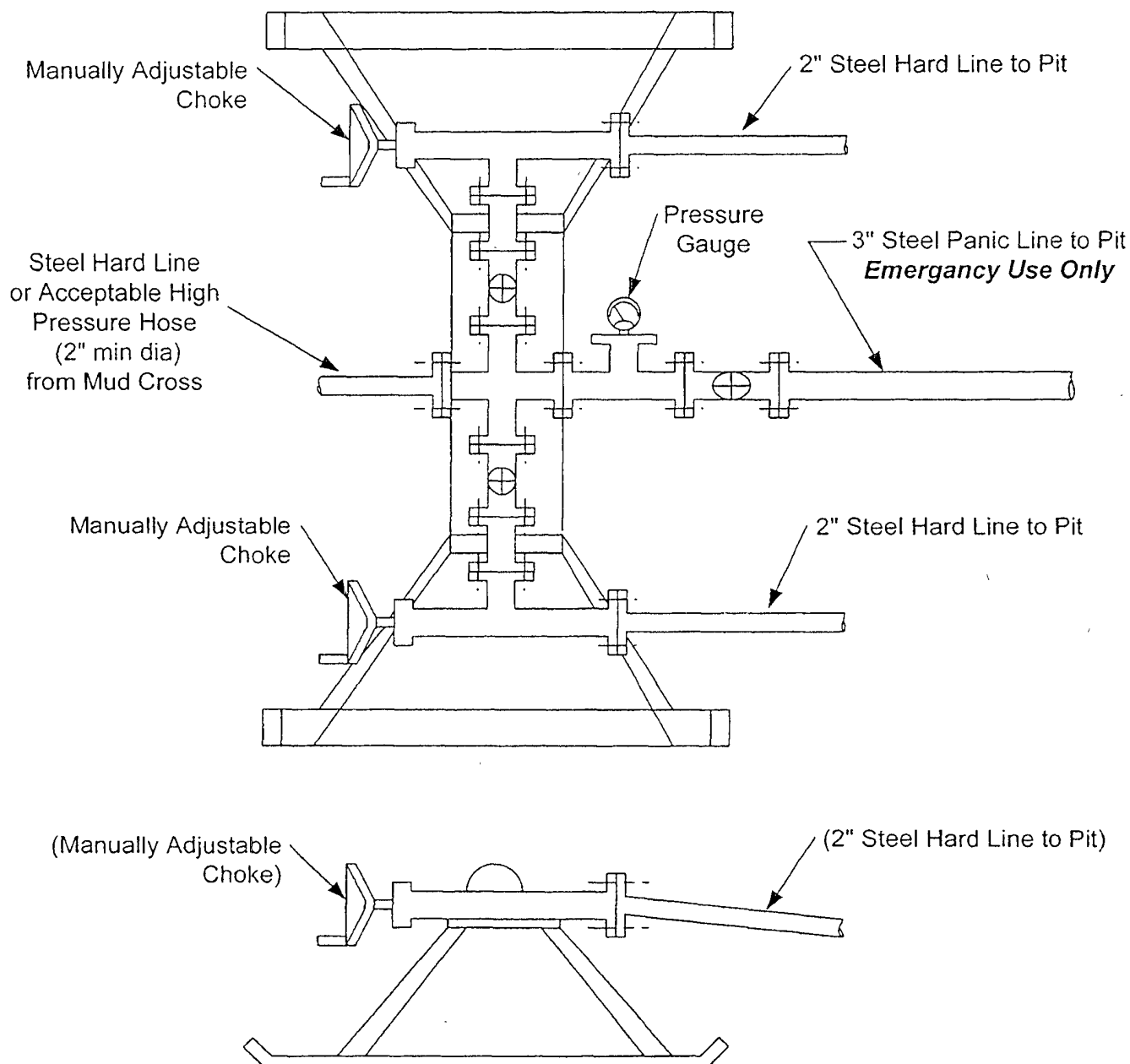
Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

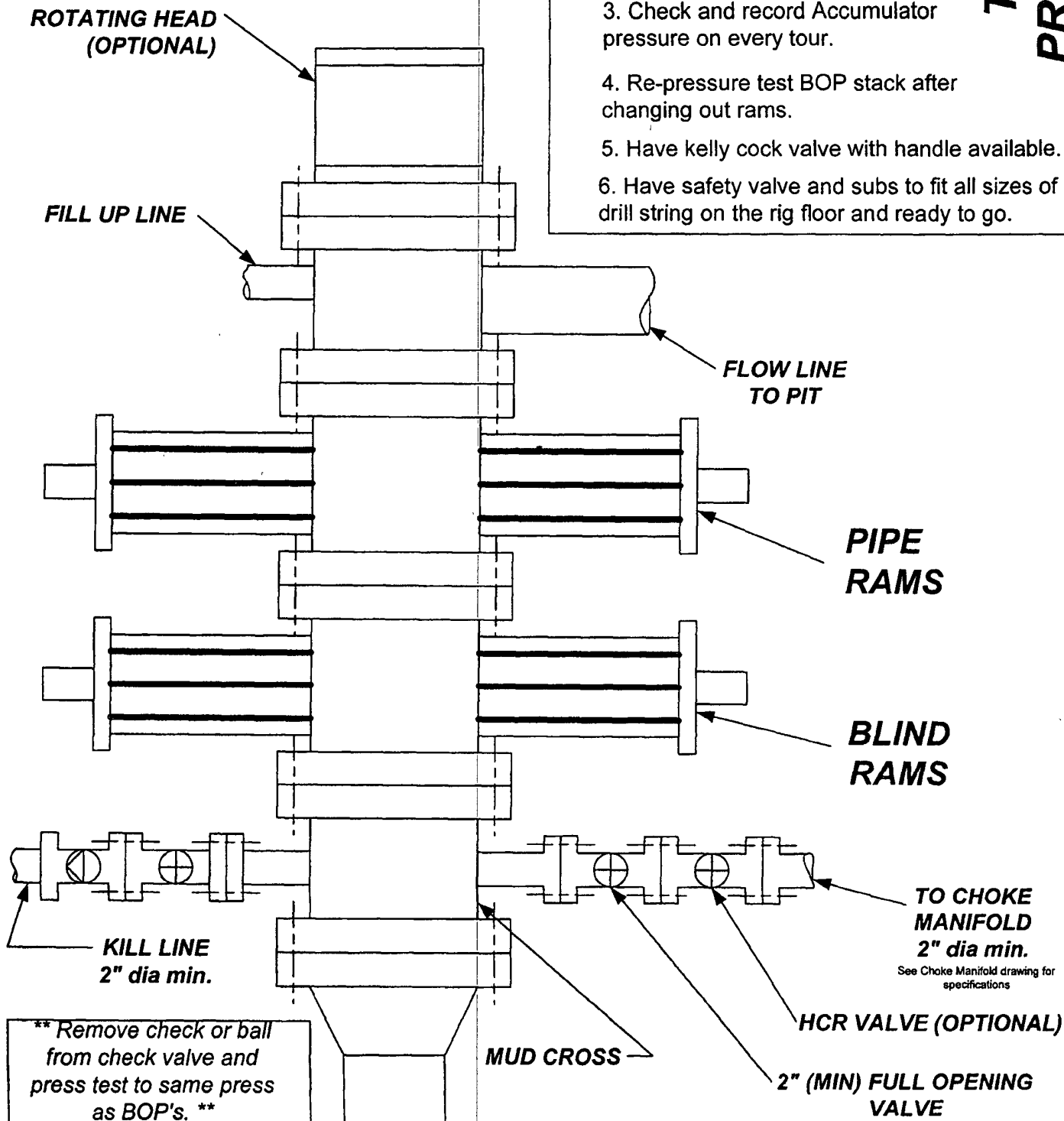
CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

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



**** Remove check or ball from check valve and press test to same press as BOP's. ****

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.

TESTING PROCEDURE