

RECEIVED

Form 3160-3
(April 2004)

AUG 16 2010

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR, Farmington Field Office
BUREAU OF LAND MANAGEMENT, Bureau of Land Management

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM-019414
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator XTO Energy Inc.		7. If Unit or CA Agreement, Name and No. NMNM-99310
3a. Address 382 CR 3100 Aztec, NM 87410		8. Lease Name and Well No. Stanolind Gas Com B #5H
3b. Phone No. (include area code) 505/ 333-3100		9. API Well No. 30-045-32879
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 820' FSL x 665' FEL At proposed prod. zone 1681' FSL x 2401' FEL- LOT 6		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
11. Sec., T. R. M. or Blk. and Survey or Area (P) Sec 9, T32N, R12W		
14. Distance in miles and direction from nearest town or post office* Approximately 19.72 miles North of the Farmington P.O.		12. County or Parish SAN JUAN
13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 665'	16. No. of acres in lease 536.84	17. Spacing Unit dedicated to this well FC: S/2 280.38
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 155'	19. Proposed Depth 3875' MD/ 1628' TVD	20. BLM/BIA Bond No. on file UTB000138
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6046' Ground Elevation	22. Approximate date work will start*	23. Estimated duration

RCVD FEB 14 '11

OIL CONS. DIV.
DIST. 3

24. Attachments

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

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

25. Signature <i>Malia Villers</i>	Name (Printed/Typed) Malia Villers	Date 08/13/2010
Title Permitting Tech.		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 2/8/11
Title 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.

*(Instructions on page 2)

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

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

NMOCD

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

RECEIVED

AUG 16 2010

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Farmington Field Office
Bureau of Land Management
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'

¹⁰Surface 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

¹¹Bottom 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	6	1681	SOUTH	2401	EAST	SAN JUAN

¹² Dedicated Acres S/2 280.38	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

24 COLORADO NEW MEXICO BHL 2401' 1681' Surf. Hole 665' 820'				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> <i>Malia Villers</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.



Weatherford[®]

Drilling Services

Proposal



Stanolind Gas Com B #5H

San Juan County, New Mexico

WELL FILE: Plan 7

March 19, 2010

Weatherford International, Ltd.

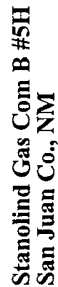
P.O. Box 61028

Midland, TX 79711 USA

+1.432.561.8892 Main

+1.432.561.8895 Fax

www.weatherford.com



SECTION DETAILS											
	VSec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLog	TFace	VSec	Target
1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2	1814.90	0.00	0.00	1814.90	0.00	0.00	0.00	0.00	0.00	
3	3	1829.90	2.00	296.03	1829.90	0.11	-0.24	13.33	296.03	0.26	0.44
4	4	1834.90	2.00	296.03	1834.90	0.19	-0.39	0.00	0.00	0.00	0.24
5	5	2171.84	103.08	296.03	2014.26	102.94	-210.74	30.00	0.00	234.54	
6	6	3875.59	103.08	296.03	1628.60	831.33	-170.87	0.00	0.00	1894.06	

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

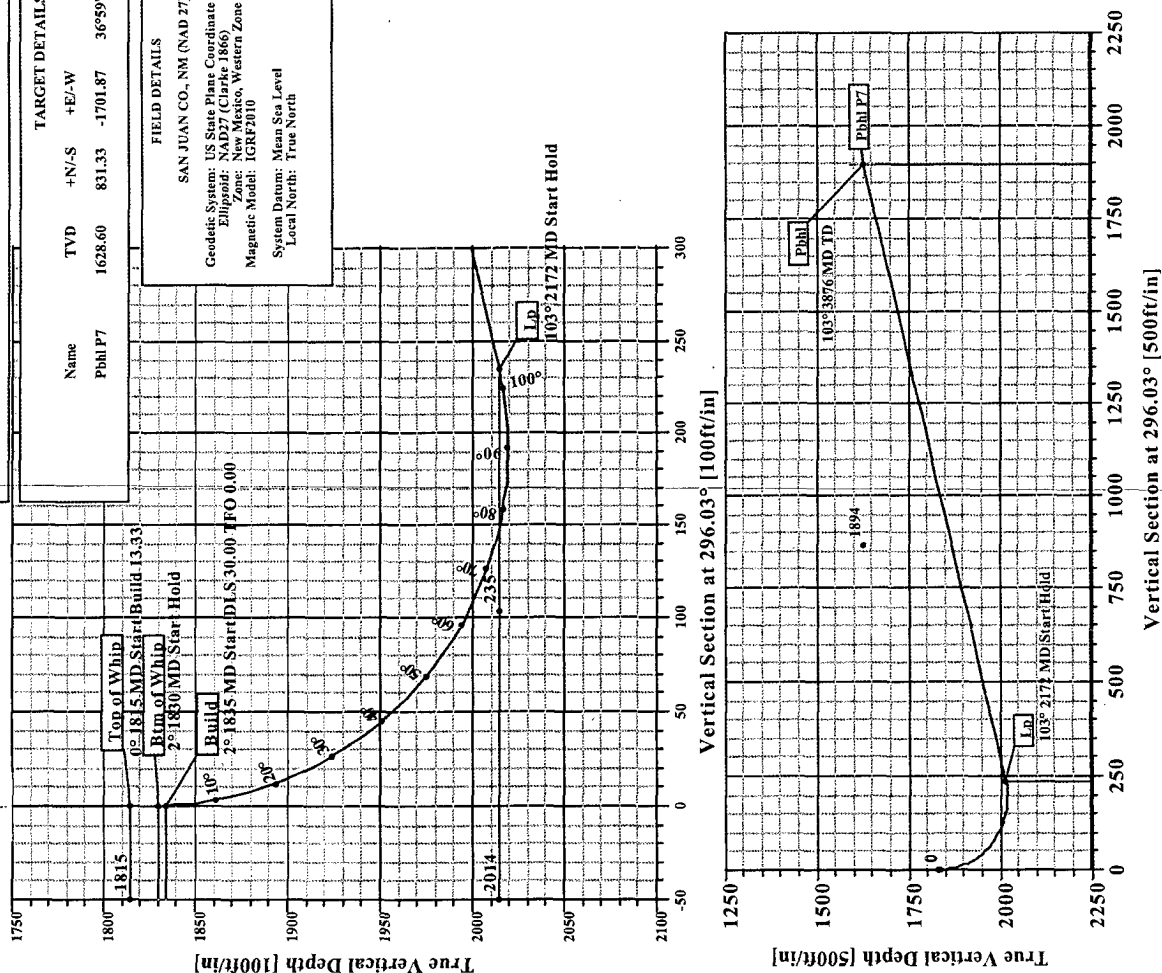
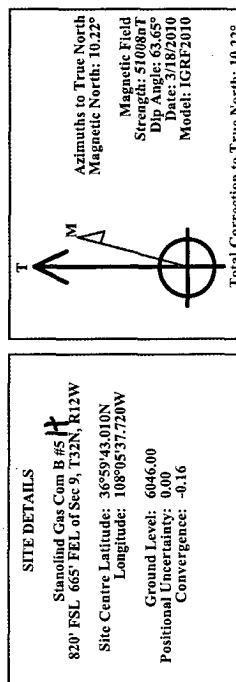
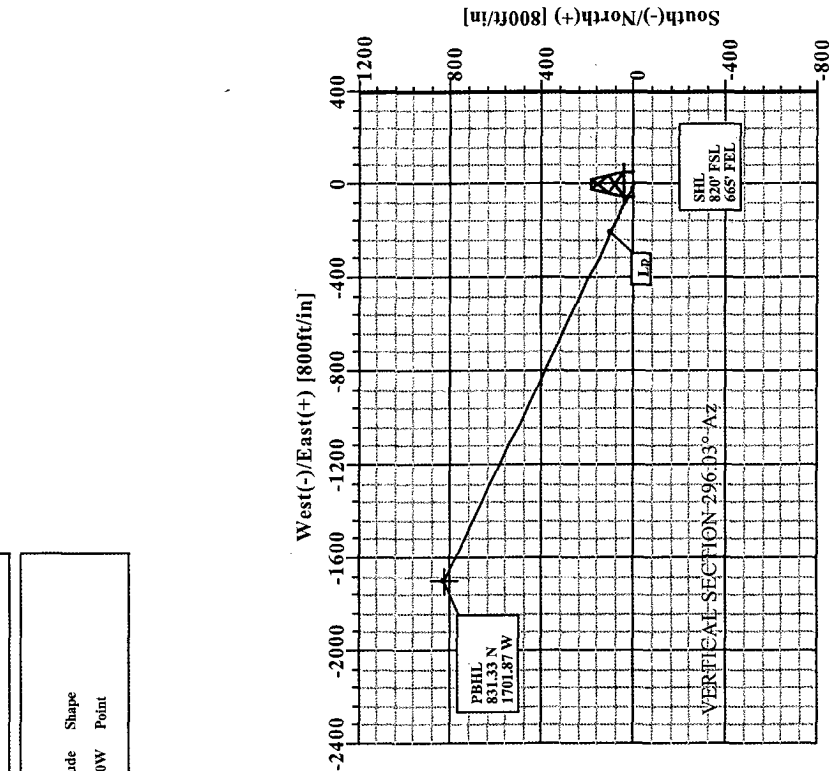
TARGET DETAILS						
Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape
Pbl P7	1628.60	831.33	-1701.87	36°59'51.230N	108°05'58.700W	Point

FIELD DETAILS

SAN JUAN CO., NM (NAD 27)

Geodetic System: US State Plane Coordinate System 1977
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Western Zone
Magnetic Model: IGRF2010

System Datum: Mean Sea Level
Local North: True North





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
+E/-W 0.00 ft	Easting: 423931.75 ft
Position Uncertainty: 0.00 ft	Latitude: 36 59 43.010 N
	Longitude: 108 5 37.720 W

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 3/18/2010	Above System Datum: Mean Sea Level
Field Strength: 51008 nT	Declination: 10.22 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 63.65 deg
ft	+N/-S
ft	+E/-W
ft	Direction
ft	deg
0.00	0.00
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



Company: XTO Date: 3/19/2010 Time: 05:31:01 Page: 2
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

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

**Weatherford®****Weatherford Drilling Services**

GeoDec v5.03

Report Date: March 18, 2010
Job Number: _____
Customer: XTO
Well Name: Stanolind Gas Com B #5H
API Number: _____
Rig Name: _____
Location: San Juan Co., NM
Block: _____
Engineer: R Joyner

Geodetic Latitude / Longitude	Geodetic Latitude / Longitude
System: Latitude / Longitude	System: Latitude / Longitude
Projection: Geodetic Latitude and Longitude	Projection: Geodetic Latitude and Longitude
Datum: NAD 1927 (NADCON CONUS)	Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866	Ellipsoid: Clarke 1866
Latitude 36.9952806 DEG	Latitude 36.9952806 DEG
Longitude -108.0938111 DEG	Longitude -108.0938111 DEG

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	36.99528° N	36° 59 min 43.010 sec
Longitude =	108.09381° W	108° 5 min 37.720 sec

Magnetic Declination =	10.22°	[True North Offset]
Local Gravity =	.9992 g	Checksum = 7385
Local Field Strength =	51004 nT	Magnetic Vector X = 22283 nT
Magnetic Dip =	63.65°	Magnetic Vector Y = 4018 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 45703 nT
Spud Date =	Mar 18, 2010	Magnetic Vector H = 22642 nT

Signed: _____

Date: _____

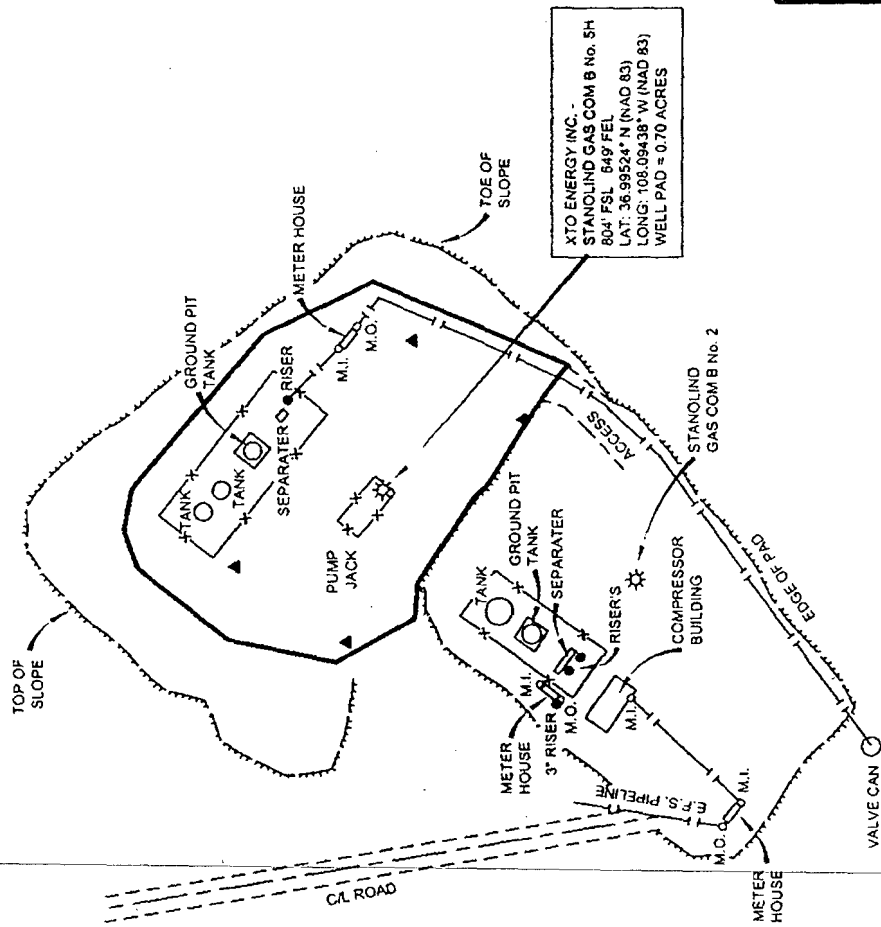
A SITE MAP OF AN EXISTING WELL LOCATION FOR

XTO ENERGY INC.

STANOLIND GAS COM B No. 5H

SEC. 9, TOWNSHIP 32 NORTH, RANGE 12 WEST, N.M.P.M.

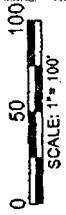
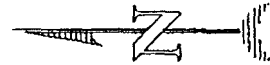
SAN JUAN COUNTY, NEW MEXICO



LEGEND	
WELL HEAD	—
PIPELINE	—
C/L ROAD	—
FENCE	—
EDGE OF PAD	—
RIG ANCHOR	—

REVISION	REV. BY	DATE
Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 510 Farmington, NM 87499 Phone (505) 326-1772 Fax (505) 326-6019		
SHEET 1 OF 1		CADFILE: CR400_SM01
DRAWN BY: G.V.		ROW#: CR400 DATE: 7/13/10

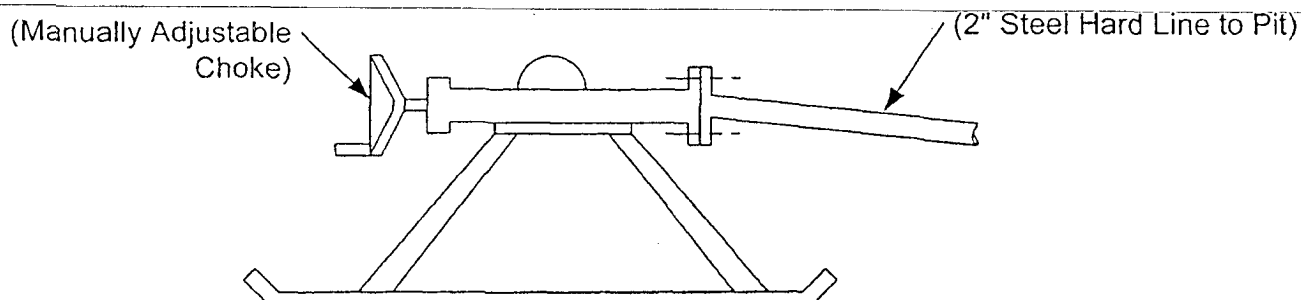
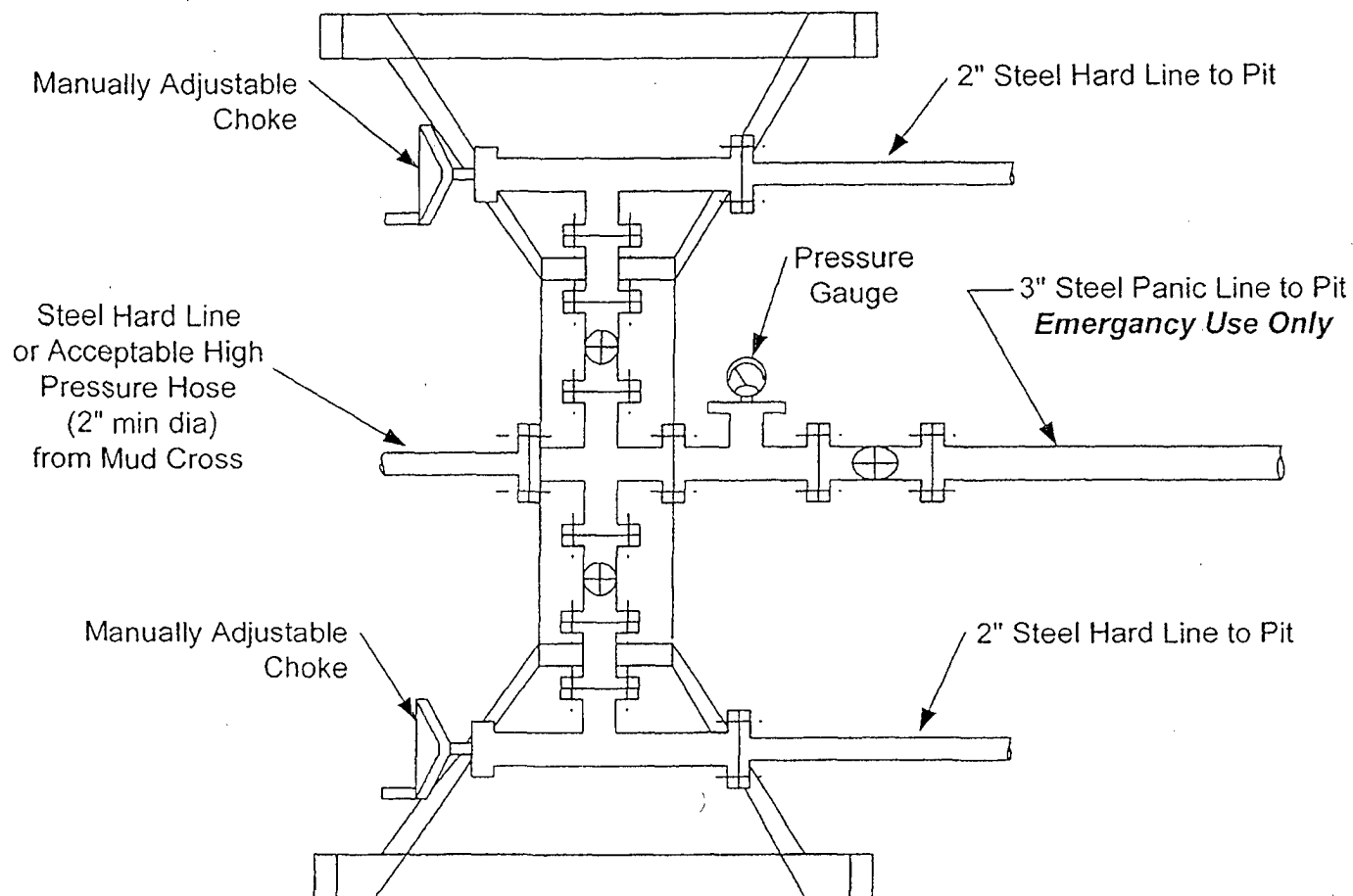
NOTE: PROPOSED HORIZONTAL RECOMPLETION, NO NEW SURFACE DISTURBANCE REQUIRED



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.

