

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

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

SUNDRY NOTICES AND REPORTS ON WELLS MAY 20 2010

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals and Management

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
XTO ENERGY INC.

3a. Address
382 RD 3100, AZTEC, NM 87410

3b. Phone No. (include area code)
505-333-3100

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SHL 915' FNL x 2430' FEL (B) Sec. 31, T32N, R7W
BHL 2189' FSL x 1968' FEL ✓

5. Lease Serial No.

NMNM 83503

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA/Agreement, Name and/or No.
NMNM87178

8. Well Name and No.
GRASSY CANYON #8

9. API Well No.
30-045-35067

10. Field and Pool, or Exploratory Area
BASIN FRUITLAND COAL

11. County or Parish, State
SAN JUAN NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|--|
| ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☐ Alter Casing | ☐ Fracture Treat | ☐ Reclamation | ☐ Well Integrity |
| ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☒ Other <u>REVISED</u> |
| ☐ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | <u>DRILLING PROGRAM</u> |
| ☐ Convert to Injection | ☐ Plug Back | ☐ Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Please see attached revised drilling program reflecting the change of BHL. ✓

* Revised C-102 Plat on record

RCVD MAY 26 '10

OIL CONS. DIV.

DIST. 3

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)
Malia Villers

Title Permitting Tech.

Signature Malia Villers

Date 5/19/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Troy L. Salyers

Title Petroleum Engineer

Date 5/24/2010

Conditions of approval, if any, are attached. Approval of this notice 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.

Office FFO

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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.

XTO ENERGY INC.

Grassy Canyon #8

APD Data

May 19, 2010

Location: 915' FNL x 2430' FEL Sec 31, T32N, R07W County: San Juan

State: NM

Bottomhole Location: 2189' FSL x 1968' FEL Sec 31, T32N, R07W ✓

GREATEST PROJECTED TD: 4555' MD, 3900' TVD ✓

APPROX GR ELEV: 6807'

OBJECTIVE: Fruitland Coal

Est KB ELEV: 6819' (12' AGL)

Please note attached directional program.

1. MUD PROGRAM:

INTERVAL	0' to 250'	250' to 4555'
HOLE SIZE	12.25"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer
WEIGHT	8.6-9.0	8.4-9.2
VISCOSITY	28-32	28-32
WATER LOSS	NC	NC

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

2. CASING PROGRAM:

Surface Casing: 8.625" casing to be set at $\pm 250'$ in a 12-1/4" hole filled with 9.0 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-250'	250'	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	11.71	25.21	40.66

Production Casing: 5.5" casing to be set at TD ($\pm 4475'$) in 7-7/8" 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	SF Burst	SF Ten
0'-4555'	4555'	17.0#	J-55	ST&C	4910	5320	229	4.892	4.767	2.63	2.85	2.96

Note: Safety factors are calculated based on a 9.2 ppg mwe with no backup using measured depth assumed to be in a vertical wellbore.

3. WELLHEAD:

- Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 5-1/2" 8rnd female thread on bottom (or slip-on, weld-on), 8-5/8" 8rnd thread on top.

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

A. Surface: 8.625", 24.0#, J-55, ST&C casing to be set at $\pm 250'$ in 12-1/4" hole.

148 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft³/sk, & 6.70 gal wtr/sk.

Total slurry volume is 206 ft³, 100% excess of calculated annular volume to 250'. ✓

B. Production: 5.5", 17.0#, J-55 (or K-55), ST&C casing to be set at $\pm 4555'$ in 7.875" hole.

LEAD:

± 467 sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft³/sk, 10.55 gal wtr/sx.

TAIL:

± 100 sx Type III or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

Total estimated slurry volume for the 5-1/2" production casing is 1093 ft³. ✓

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

5. LOGGING PROGRAM:

A. Mud Logger: If requested by Fort Worth Geology, the mud logger will come on at 1,500' and will remain on the hole until TD. The mud will be logged in 10' intervals.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (4555') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (4555') to the bottom of the surface csg.

6. FORMATION TOPS:

Please see directional plat for estimated formation tops. ✓ BHP anticipated to be less than 1,500 psi. ✓

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
John Klutsch	Project Geologist	817-885-2800	N/A

XTO Energy

San Juan Basin (NAD 83)

Grassy Canyon #8

Grassy Canyon #8

Grassy Canyon #8✓

Plan: Permitted Wellbore

Standard Planning Report

19 May, 2010✓

RCVD MAY 26 '10

OIL CONS. DIV.

DIST. 3



XTO Energy Inc.

Planning Report

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Grassy Canyon #8
Company:	XTO Energy	TVD Reference:	Rig KB @ 6819.0ft (Aztec 507)
Project:	San Juan Basin (NAD 83)	MD Reference:	Rig KB @ 6819.0ft (Aztec 507)
Site:	Grassy Canyon #8	North Reference:	True
Well:	Grassy Canyon #8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Grassy Canyon #8		
Design:	Permitted Wellbore		

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:	Grassy Canyon #8, T32N, R7W		
Site Position:		Northing:	659,211.85 m
From:	Lat/Long	Easting:	850,041.13 m
Position Uncertainty:	0.0 ft	Slot Radius:	in
		Latitude:	36° 56' 35.844 N
		Longitude:	107° 36' 29.988 W
		Grid Convergence:	0 14 °

Well:	Grassy Canyon #8, S-Well to top of FC		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	6,807.0 ft
		Latitude:	36° 56' 35.844 N
		Longitude:	107° 36' 29.988 W
		Ground Level:	6,807.0 ft

Wellbore:	Grassy Canyon #8		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	11/2/2009	10.04
			Dip Angle
			63.72
			Field Strength
			51,059

Design:	Permitted Wellbore		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			162.82

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,850.0	45.00	162.82	1,700.5	-534.4	165.2	3.00	3.00	0.00	162.82	
3,053.6	45.00	162.82	2,551.6	-1,347.6	416.5	0.00	0.00	0.00	0.00	
4,220.3	10.00	162.82	3,570.4	-1,854.3	573.1	3.00	-3.00	0.00	180.00	
4,555.0	10.00	162.82	3,900.0	-1,909.8	590.3	0.00	0.00	0.00	0.00	Proposed BHL--Grass

XTO Energy Inc.
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Project:	San Juan Basin (NAD 83)	MD Reference:	Rig KB @ 6819.0ft (Aztec 507)
Site:	Grassy Canyon #8	North Reference:	True
Well:	Grassy Canyon #8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Grassy Canyon #8		
Design:	Permitted Wellbore		

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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	0.00	
8 5/8"										
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	1.50	162.82	400.0	-0.6	0.2	0.7	3.00	3.00	0.00	
500.0	4.50	162.82	499.8	-5.6	1.7	5.9	3.00	3.00	0.00	
600.0	7.50	162.82	599.3	-15.6	4.8	16.3	3.00	3.00	0.00	
700.0	10.50	162.82	698.0	-30.6	9.4	32.0	3.00	3.00	0.00	
800.0	13.50	162.82	795.8	-50.4	15.6	52.8	3.00	3.00	0.00	
900.0	16.50	162.82	892.4	-75.1	23.2	78.6	3.00	3.00	0.00	
1,000.0	19.50	162.82	987.5	-104.7	32.3	109.5	3.00	3.00	0.00	
1,100.0	22.50	162.82	1,080.9	-138.9	42.9	145.4	3.00	3.00	0.00	
1,200.0	25.50	162.82	1,172.2	-177.8	54.9	186.0	3.00	3.00	0.00	
1,300.0	28.50	162.82	1,261.3	-221.1	68.3	231.4	3.00	3.00	0.00	
1,400.0	31.50	162.82	1,347.9	-268.9	83.1	281.4	3.00	3.00	0.00	
1,500.0	34.50	162.82	1,431.8	-320.9	99.2	335.9	3.00	3.00	0.00	
1,600.0	37.50	162.82	1,512.6	-377.1	116.5	394.7	3.00	3.00	0.00	
1,700.0	40.50	162.82	1,590.4	-437.2	135.1	457.6	3.00	3.00	0.00	
1,800.0	43.50	162.82	1,664.7	-501.1	154.9	524.5	3.00	3.00	0.00	
1,850.0	45.00	162.82	1,700.5	-534.4	165.2	559.4	3.00	3.00	0.00	
1,900.0	45.00	162.82	1,735.8	-568.2	175.6	594.7	0.00	0.00	0.00	
2,000.0	45.00	162.82	1,806.5	-635.8	196.5	665.5	0.00	0.00	0.00	
2,100.0	45.00	162.82	1,877.3	-703.3	217.4	736.2	0.00	0.00	0.00	
2,200.0	45.00	162.82	1,948.0	-770.9	238.3	806.9	0.00	0.00	0.00	
2,300.0	45.00	162.82	2,018.7	-838.4	259.1	877.6	0.00	0.00	0.00	
2,400.0	45.00	162.82	2,089.4	-906.0	280.0	948.3	0.00	0.00	0.00	
2,500.0	45.00	162.82	2,160.1	-973.6	300.9	1,019.0	0.00	0.00	0.00	
2,600.0	45.00	162.82	2,230.8	-1,041.1	321.8	1,089.7	0.00	0.00	0.00	
2,700.0	45.00	162.82	2,301.5	-1,108.7	342.7	1,160.4	0.00	0.00	0.00	
2,800.0	45.00	162.82	2,372.2	-1,176.2	363.5	1,231.1	0.00	0.00	0.00	
2,900.0	45.00	162.82	2,442.9	-1,243.8	384.4	1,301.8	0.00	0.00	0.00	
3,000.0	45.00	162.82	2,513.6	-1,311.4	405.3	1,372.6	0.00	0.00	0.00	
3,040.1	45.00	162.82	2,542.0	-1,338.4	413.7	1,400.9	0.00	0.00	0.00	
Ojo Alamo SS										
3,053.6	45.00	162.82	2,551.6	-1,347.6	416.5	1,410.5	0.00	0.00	0.00	
3,100.0	43.61	162.82	2,584.8	-1,378.5	426.1	1,442.9	3.00	-3.00	0.00	
3,173.6	41.40	162.82	2,639.0	-1,426.0	440.8	1,492.6	3.00	-3.00	0.00	
Kirtland Shale										
3,200.0	40.61	162.82	2,658.9	-1,442.6	445.9	1,509.9	3.00	-3.00	0.00	
3,300.0	37.61	162.82	2,736.5	-1,502.8	464.5	1,573.0	3.00	-3.00	0.00	
3,400.0	34.61	162.82	2,817.3	-1,559.1	481.9	1,631.9	3.00	-3.00	0.00	
3,500.0	31.61	162.82	2,901.1	-1,611.3	498.0	1,686.5	3.00	-3.00	0.00	
3,600.0	28.61	162.82	2,987.6	-1,659.2	512.8	1,736.7	3.00	-3.00	0.00	
3,673.8	26.39	162.82	3,053.0	-1,691.8	522.9	1,770.8	3.00	-3.00	0.00	
Fruitland Formation										
3,700.0	25.61	162.82	3,076.6	-1,702.8	526.3	1,782.2	3.00	-3.00	0.00	
3,800.0	22.61	162.82	3,167.8	-1,741.8	538.3	1,823.1	3.00	-3.00	0.00	
3,900.0	19.61	162.82	3,261.1	-1,776.2	549.0	1,859.1	3.00	-3.00	0.00	
4,000.0	16.61	162.82	3,356.1	-1,805.9	558.2	1,890.2	3.00	-3.00	0.00	
4,012.4	16.24	162.82	3,368.0	-1,809.2	559.2	1,893.7	3.00	-3.00	0.00	
Upper Fruitland Coal										

XTO Energy Inc.
Planning Report

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Grassy Canyon #8
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Project:	San Juan Basin (NAD 83)	MD Reference:	Rig KB @ 6819.0ft (Aztec 507)
Site:	Grassy Canyon #8	North Reference:	True
Well:	Grassy Canyon #8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Grassy Canyon #8		
Design:	Permitted Wellbore		

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)
4,100.0	13.61	162.82	3,452.7	-1,830.8	565.9	1,916.2	3.00	-3.00	0.00
4,113.7	13.20	162.82	3,466.0	-1,833.8	566.8	1,919.4	3.00	-3.00	0.00
Middle Fruitland Coal									
4,200.0	10.61	162.82	3,550.4	-1,850.8	572.0	1,937.2	3.00	-3.00	0.00
4,220.3	10.00	162.82	3,570.4	-1,854.3	573.1	1,940.8	3.00	-3.00	0.00
4,251.4	10.00	162.82	3,601.0	-1,859.5	574.7	1,946.2	0.00	0.00	0.00
Pictured Cliffs Tongue									
4,300.0	10.00	162.82	3,648.9	-1,867.5	577.2	1,954.7	0.00	0.00	0.00
4,356.0	10.00	162.82	3,704.0	-1,876.8	580.1	1,964.4	0.00	0.00	0.00
Pictured Cliffs									
4,400.0	10.00	162.82	3,747.4	-1,884.1	582.3	1,972.1	0.00	0.00	0.00
4,459.5	10.00	162.82	3,806.0	-1,894.0	585.4	1,982.4	0.00	0.00	0.00
Base of Pictured Cliffs									
4,500.0	10.00	162.82	3,845.9	-1,900.7	587.5	1,989.4	0.00	0.00	0.00
4,555.0	10.00	162.82	3,900.0	-1,909.8	590.3	1,999.0	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
Proposed BHL-Grassy Canyon - plan hits target - Rectangle (sides W20.0 H20.0 D0.0)	0.00	0.00	3,900.0	-1,909.8	590.3	658,630.17	850,222.42	36° 56' 16.959 N	107° 36' 22.717 W

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
250.0	250.0	8 5/8"	8.625	12.250
4,555.0	3,900.0	5 1/2"	5.500	7.875

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,040.1	2,542.0	Ojo Alamo SS		0.00	
3,173.6	2,639.0	Kirtland Shale		0.00	
3,673.8	3,053.0	Fruitland Formation		0.00	
4,012.4	3,368.0	Upper Fruitland Coal		0.00	
4,113.7	3,466.0	Middle Fruitland Coal		0.00	
4,251.4	3,601.0	Pictured Cliffs Tongue		0.00	
4,356.0	3,704.0	Pictured Cliffs		0.00	
4,459.5	3,806.0	Base of Pictured Cliffs		0.00	



Well Name: Grassy Canyon #8

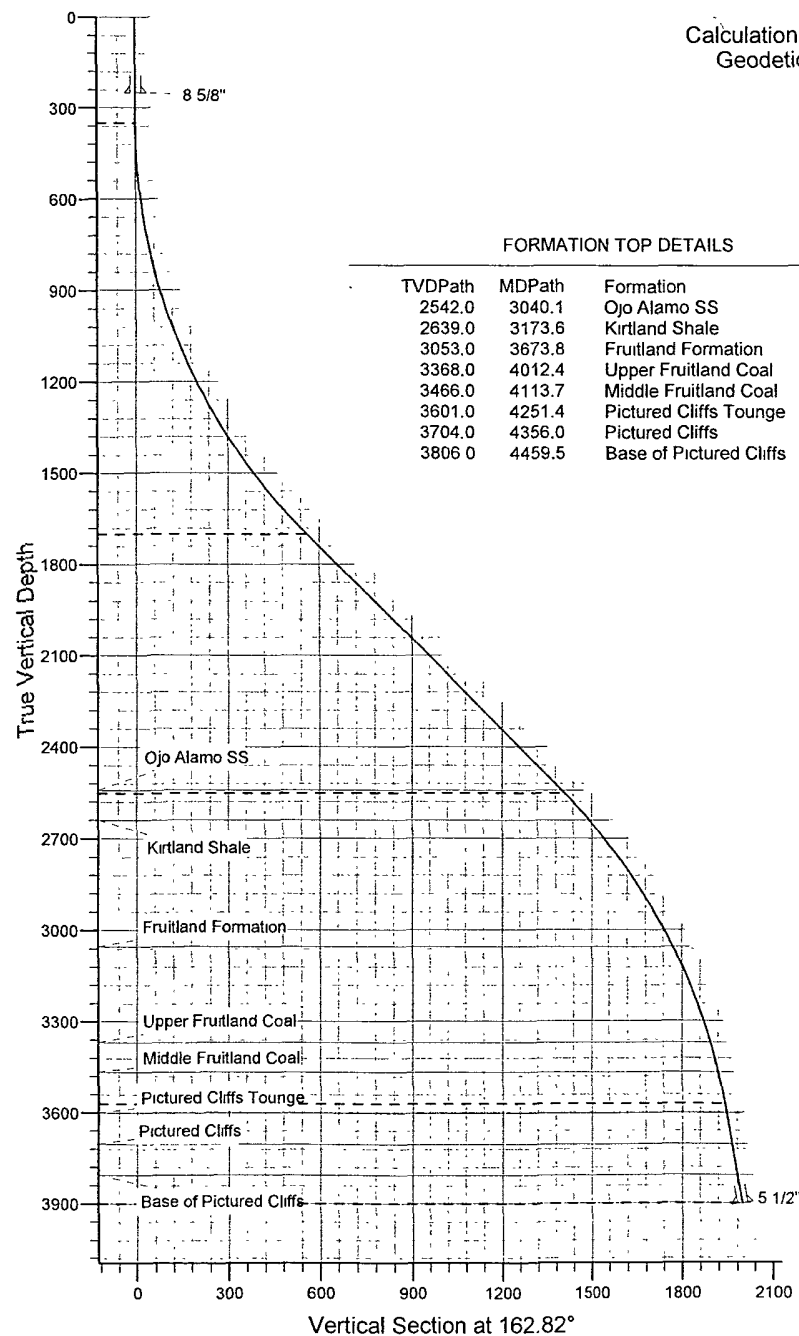
San Juan Division
Drilling Department

Calculation Method: Minimum Curvature
Geodetic Datum: North American Datum 1983
Lat: 36° 56' 35.844 N
Long: 107° 36' 29.988 W



Azimuths to True North
Magnetic North: 10.04°

Magnetic Field
Strength: 51058.9snT
Dip Angle: 63.72°
Date: 11/2/2009
Model: IGRF200510

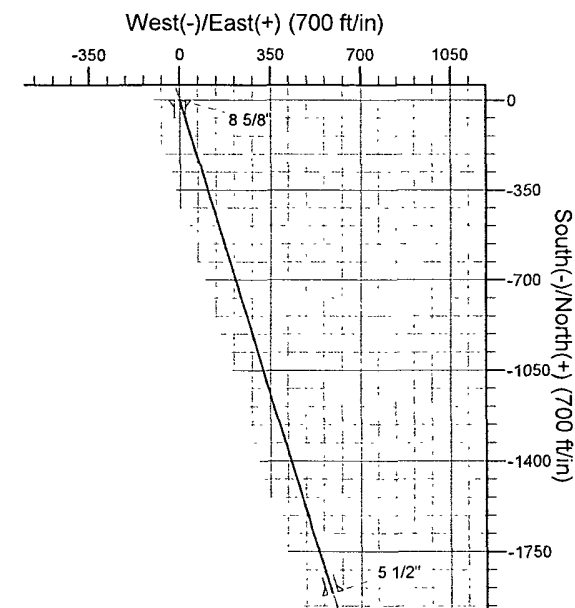
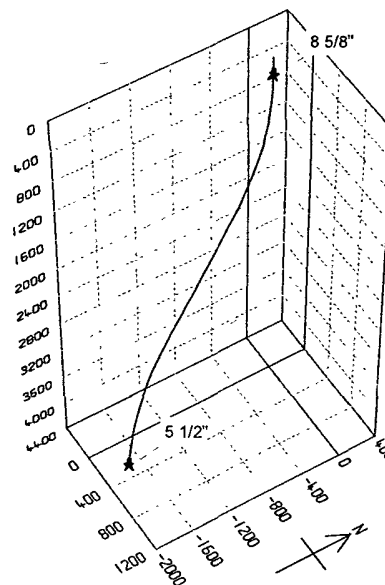


FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2542.0	3040.1	Ojo Alamo SS
2639.0	3173.6	Kirtland Shale
3053.0	3673.8	Fruitland Formation
3368.0	4012.4	Upper Fruitland Coal
3466.0	4113.7	Middle Fruitland Coal
3601.0	4251.4	Pictured Cliffs Tongue
3704.0	4356.0	Pictured Cliffs
3806.0	4459.5	Base of Pictured Cliffs

CASING DETAILS

TVD	MD	Name	Size
250.0	250.0	8 5/8"	8.625
3900.0	4555.0	5 1/2"	5.500



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.0	
3	1850.0	45.00	162.82	1700.5	-534.4	165.2	3.00	162.82	559.4	
4	3053.6	45.00	162.82	2551.6	-1347.6	416.5	0.00	0.00	1410.5	
5	4220.3	10.00	162.82	3570.4	-1854.3	573.1	3.00	180.00	1940.8	
6	4555.0	10.00	162.82	3900.0	-1909.8	590.3	0.00	0.00	1999.0	Proposed BHL--Grassy Canyon #8