

XTO Energy - Western Div. (NM, CO, UT)

LaPlata County (NAD83)

Huber Culhane #2-32

Huber Culhane #2-32

Huber Culhane -- Vertical Well

Plan: Huber Culhane -- Vertical Well

Standard Planning Report

14 June, 2013

XTO Energy, Inc.

Planning Report

Database:	LMRKPROD	Local Co-ordinate Reference:	Site Huber Culhane #2-32
Company:	XTO Energy - Western Div. (NM, CO, UT)	TVD Reference:	Rig KB @ 7031.00ft (Aztec 507)
Project:	LaPlata County (NAD83)	MD Reference:	Rig KB @ 7031.00ft (Aztec 507)
Site:	Huber Culhane #2-32	North Reference:	True
Well:	Huber Culhane #2-32	Survey Calculation Method:	Minimum Curvature
Wellbore:	Huber Culhane -- Vertical Well		
Design:	Huber Culhane -- Vertical Well		

Project	LaPlata County (NAD83), LaPlata County, Colorado, Directional Fruitland Coal Wells		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Southern Zone		

Site	Huber Culhane #2-32, T35N, R8W		
Site Position:		Northing:	1,224,717.13 usft
From:	Lat/Long	Easting:	2,340,735.41 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16"
		Latitude:	37° 15' 42.696000 N
		Longitude:	107° 45' 55.908000 W
		Grid Convergence:	-1.39 °

Well	Huber Culhane #2-32, Horizontal FC					
Well Position	+N/-S	0.00 ft	Northing:	1,224,717.13 usft	Latitude:	37° 15' 42.695949 N
	+E/-W	0.00 ft	Easting:	2,340,735.41 usft	Longitude:	107° 45' 55.908000 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	7,019.00 ft	Ground Level:	7,019.00 ft

Wellbore	Huber Culhane -- Vertical Well				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	3/13/2013	9.73	63.89	50,897

Design	Huber Culhane -- Vertical Well			
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	0.00

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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	

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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
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
516.00	0.00	0.00	516.00	0.00	0.00	0.00	0.00	0.00	0.00
Ojo Alamo									
566.00	0.00	0.00	566.00	0.00	0.00	0.00	0.00	0.00	0.00
Kirtland Shale									
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
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
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,396.00	0.00	0.00	1,396.00	0.00	0.00	0.00	0.00	0.00	0.00
Fruitland Coal									
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
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,837.00	0.00	0.00	1,837.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower Fruitland Coal Marker									
1,851.00	0.00	0.00	1,851.00	0.00	0.00	0.00	0.00	0.00	0.00
Target Interval 2									
1,866.00	0.00	0.00	1,866.00	0.00	0.00	0.00	0.00	0.00	0.00
Target Interval 1									
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,971.00	0.00	0.00	1,971.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Pictured Cliffs									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7"									

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Wellbore:	Huber Culhane -- Vertical Well		
Design:	Huber Culhane -- Vertical Well		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
225.00	225.00	9 5/8"	9-5/8	12-1/4	
2,000.00	2,000.00	7"	7	8-3/4	

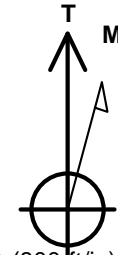
Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
516.00	516.00	Ojo Alamo		0.00	
566.00	566.00	Kirtland Shale		0.00	
1,396.00	1,396.00	Fruitland Coal		0.00	
1,837.00	1,837.00	Lower Fruitland Coal Marker		0.00	
1,851.00	1,851.00	Target Interval 2		0.00	
1,866.00	1,866.00	Target Interval 1		0.00	
1,971.00	1,971.00	Upper Pictured Cliffs		0.00	



Well Name: Huber Culhane #2-32

San Juan Division
Drilling Department

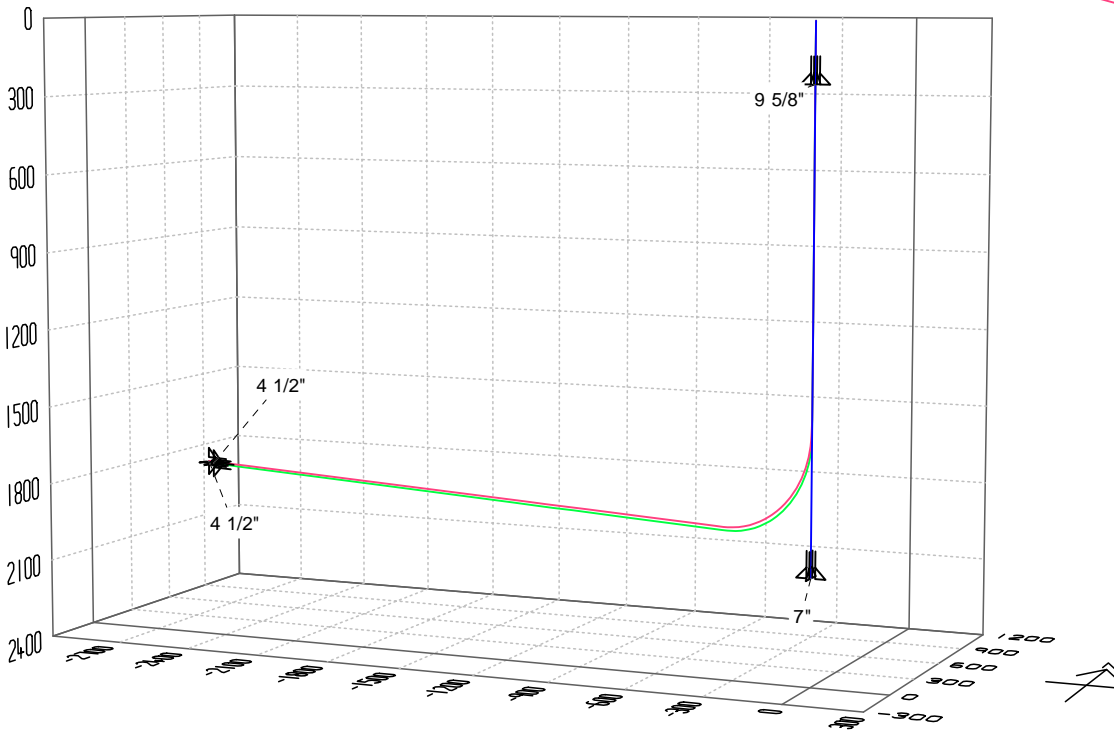
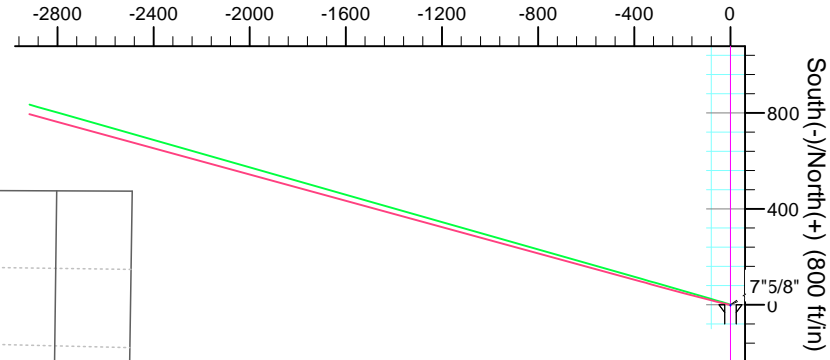
Calculation Method: Minimum Curvature
Geodetic Datum: North American Datum 1983
Lat: 37° 15' 42.696000 N
Long: 107° 45' 55.908000 W



Azimuths to True North
Magnetic North: 9.73°

Magnetic Field
Strength: 50897.1snT
Dip Angle: 63.89°
Date: 3/13/2013
Model: IGRF200510

West(-)/East(+) (800 ft/in)

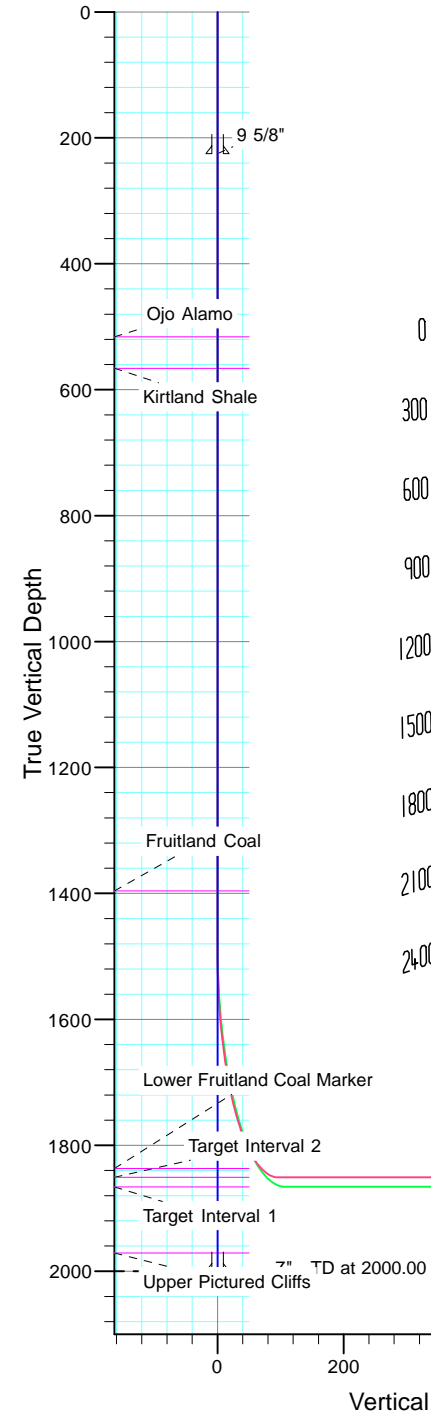


CASING DETAILS

TVD	MD	Name
225.00	225.00	9 5/8"
2000.00	2000.00	7"

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
516.00	516.00	Ojo Alamo
566.00	566.00	Kirtland Shale
1396.00	1396.00	Fruitland Coal
1837.00	1837.00	Lower Fruitland Coal Marker
1851.00	1851.00	Target Interval 2
1866.00	1866.00	Target Interval 1
1971.00	1971.00	Upper Pictured Cliffs



4 1/2" TD at 4707.26

4 1/2" TD at 4734.55

Vertical Section at 0.00°