

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_Lee 2-6 pad

Lee 17-6

Lee 17-6

Plan: Lee 17-6 (wp01)

Standard Planning Report

04 January, 2011



Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_Lee 2-6 pad
 Well: Lee 17-6
 Wellbore: Lee 17-6
 Section:
 SHL:
 Design: Lee 17-6 (wp01)
 Latitude: 40.172913
 Longitude: -104.703822
 GL: 4962.00
 KB: WELL @ 4962.00ft (Original Well Elev)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4162.00	4300.07	PK
4537.00	4675.74	SX
7040.00	7178.74	NIO
7322.00	7460.74	CD
7408.00	7546.74	GH



Weatherford

WELL DETAILS: Lee 17-6

+N/-S	+E/-W	Northing	Ground Level: Easting	4962.00 Latitude	Longitude	Slot
0.00	0.00	1306833.93	3222483.59	40.172913	-104.703822	

CASING DETAILS

TVD	MD	Name	Size
800.00	800.00	8 5/8"	8-5/8

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Lee 17-6 BHL	7482.00	-675.71	610.04	1306163.72	3223099.67	40.171058	-104.701639	Point

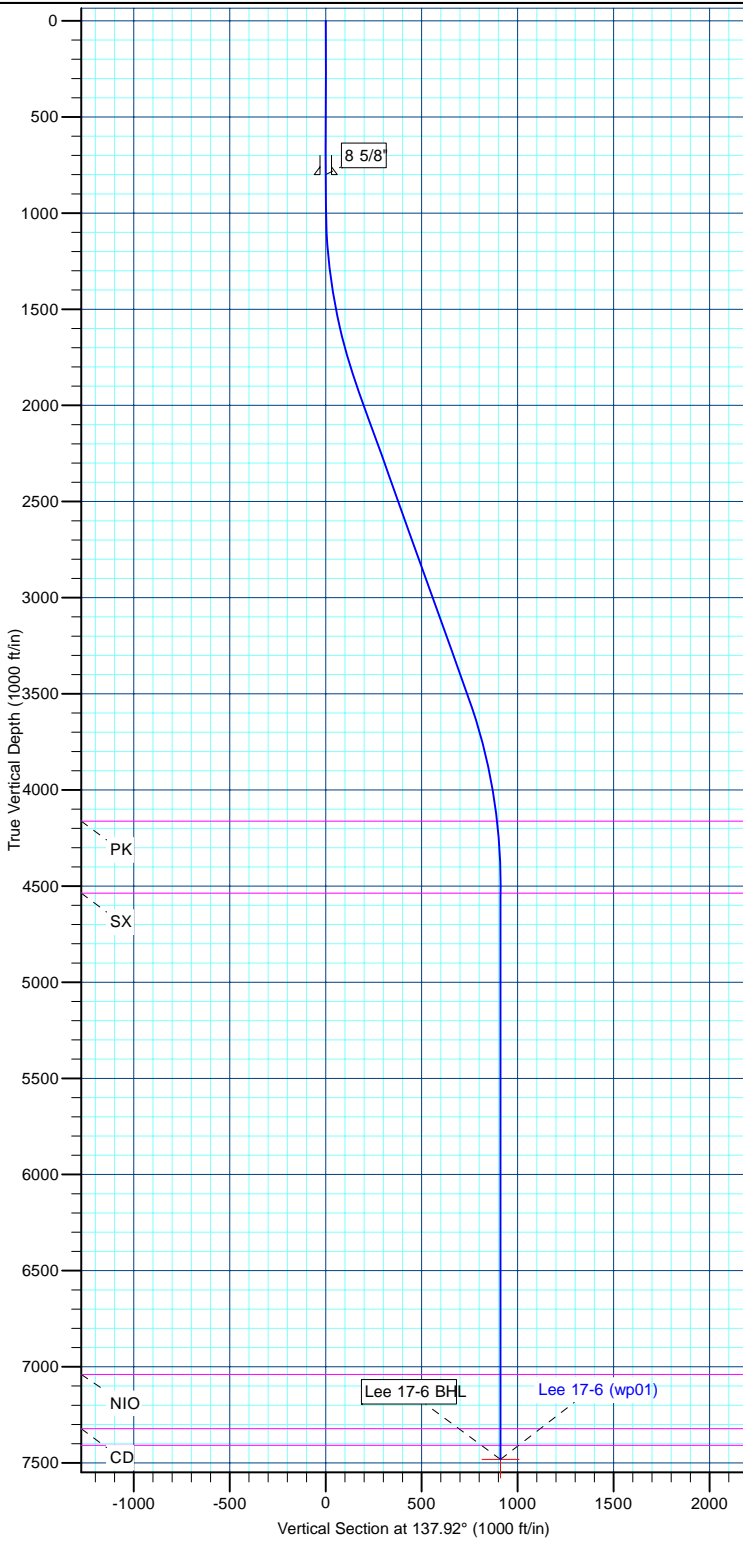


Azimuths to True North
 Magnetic North: 8.87°

Magnetic Field
 Strength: 53064.7snT
 Dip Angle: 66.89°
 Date: 1/3/2011
 Model: IGRF2010

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
950.00	0.00	0.00	950.00	0.00	0.00	0.00	0.00	0.00	
1938.03	19.76	137.92	1918.56	-125.22	113.05	2.00	137.92	168.70	
3632.70	19.76	137.92	3513.44	-550.50	496.99	0.00	0.00	741.65	
4620.74	0.00	0.00	4482.00	-675.71	610.04	2.00	180.00	910.35	
7620.74	0.00	0.00	7482.00	-675.71	610.04	0.00	0.00	910.35	Lee 17-6 BHL



Database:	edm5000p	Local Co-ordinate Reference:	Well Lee 17-6
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4962.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4962.00ft (Original Well Elev)
Site:	WELD_Lee 2-6 pad	North Reference:	True
Well:	Lee 17-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lee 17-6		
Design:	Lee 17-6 (wp01)		

Project	COLORADO NORTHERN ZONE - 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		WELD_Lee 2-6 pad			
Site Position:		Northing:	1,306,833.80 ft	Latitude:	40.172913
From:	Lat/Long	Easting:	3,222,467.38 ft	Longitude:	-104.703880
Position Uncertainty:	0.00 ft	Slot Radius:	0 "	Grid Convergence:	0.51

Well	Lee 17-6					
Well Position	+N-S	-0.02 ft	Northing:	1,306,833.93 ft	Latitude:	40.172913
	+E-W	16.21 ft	Easting:	3,222,483.59 ft	Longitude:	-104.703822
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,962.00 ft

Wellbore	Lee 17-6				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/3/2011	8.87	66.89	53,065

Design	Lee 17-6 (wp01)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	137.92

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	
950.00	0.00	0.00	950.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,938.03	19.76	137.92	1,918.56	-125.22	113.05	2.00	2.00	0.00	137.92	
3,632.70	19.76	137.92	3,513.44	-550.50	496.99	0.00	0.00	0.00	0.00	
4,620.74	0.00	0.00	4,482.00	-675.71	610.04	2.00	-2.00	0.00	180.00	
7,620.74	0.00	0.00	7,482.00	-675.71	610.04	0.00	0.00	0.00	0.00	Lee 17-6 BHL

Database:	edm5000p	Local Co-ordinate Reference:	Well Lee 17-6
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4962.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4962.00ft (Original Well Elev)
Site:	WELD_Lee 2-6 pad	North Reference:	True
Well:	Lee 17-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lee 17-6		
Design:	Lee 17-6 (wp01)		

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
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
8 5/8"									
950.00	0.00	0.00	950.00	0.00	0.00	0.00	0.00	0.00	0.00
1,938.03	19.76	137.92	1,918.56	-125.22	113.05	168.70	2.00	2.00	0.00
3,632.70	19.76	137.92	3,513.44	-550.50	496.99	741.65	0.00	0.00	0.00
4,300.07	6.41	137.92	4,162.00	-662.41	598.03	892.42	2.00	-2.00	0.00
PK									
4,620.74	0.00	0.00	4,482.00	-675.71	610.04	910.35	2.00	-2.00	0.00
4,675.74	0.00	0.00	4,537.00	-675.71	610.04	910.35	0.00	0.00	0.00
SX									
7,178.74	0.00	0.00	7,040.00	-675.71	610.04	910.35	0.00	0.00	0.00
NIO									
7,460.74	0.00	0.00	7,322.00	-675.71	610.04	910.35	0.00	0.00	0.00
CD									
7,546.74	0.00	0.00	7,408.00	-675.71	610.04	910.35	0.00	0.00	0.00
GH									
7,620.74	0.00	0.00	7,482.00	-675.71	610.04	910.35	0.00	0.00	0.00
Lee 17-6 BHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Lee 17-6 BHL	0.00	0.00	7,482.00	-675.71	610.04	1,306,163.72	3,223,099.67	40.171058	-104.701639
- plan hits target center									
- Point									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
800.00	800.00	8 5/8"	8-5/8	11

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,300.07	4,162.00	PK			
4,675.74	4,537.00	SX			
7,178.74	7,040.00	NIO			
7,460.74	7,322.00	CD			
7,546.74	7,408.00	GH			