

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_Lee 2-6 pad

Lee 21-6

Lee 21-6

Plan: Lee 21-6 (wp01)

Standard Planning Report

04 January, 2011



Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_Lee 2-6 pad
 Well: Lee 21-6
 Wellbore: Lee 21-6
 Section:
 SHL:
 Design: Lee 21-6 (wp01)
 Latitude: 40.172913
 Longitude: -104.703994
 GL: 4962.00
 KB: WELL @ 4962.00ft (Original Well Elev)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4162.00	4266.28	PK
4537.00	4649.46	SX
7040.00	7153.68	NIO
7322.00	7435.68	CD
7408.00	7521.68	GH
7778.00	7891.68	J



Weatherford®

WELL DETAILS: Lee 21-6

+N/-S	+E/-W	Northing	Ground Level: Easting	4962.00 Latitude	Longitude	Slot
0.00	0.00	1306833.48	3222435.53	40.172913	-104.703994	

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 21-6 BHL	7927.00	-672.78	-591.88	1306155.41	3221849.71	40.171066	-104.706112	Point

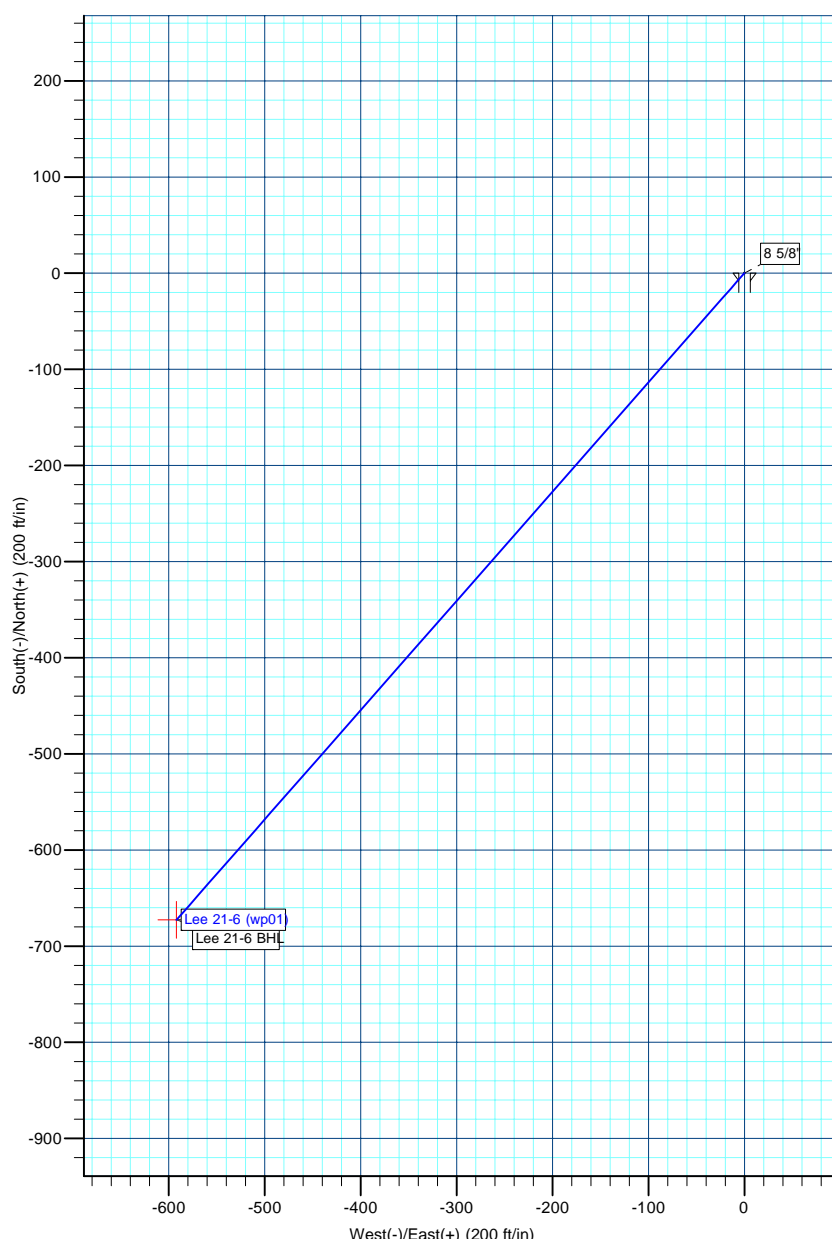
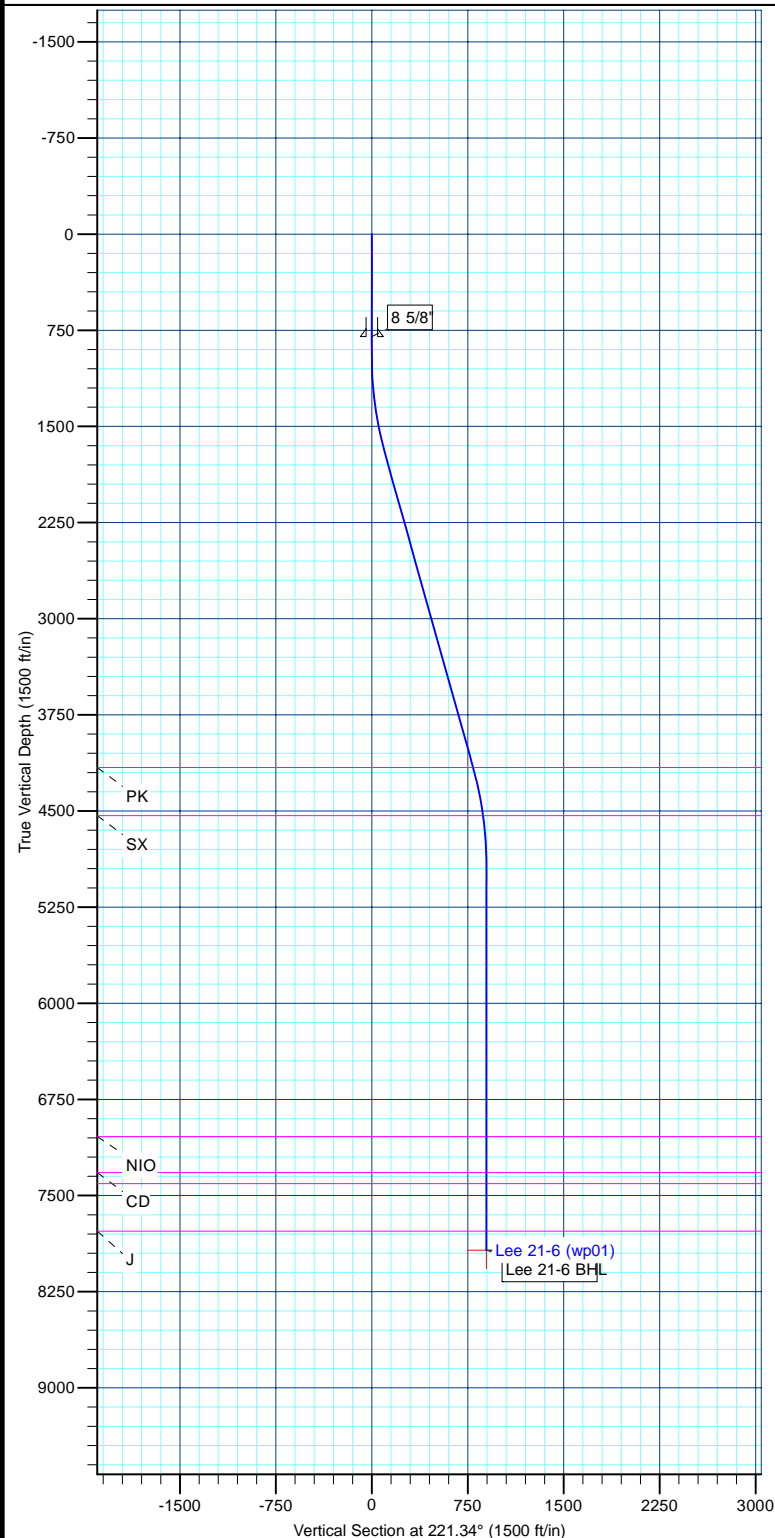


Azimuths to True North
 Magnetic North: 8.87°

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	VSec	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	
1735.26	15.71	221.34	1725.46	-80.30	-70.64	2.00	221.34	106.95	
4255.42	15.71	221.34	4151.54	-592.48	-521.23	0.00	0.00	789.13	
5040.68	0.00	0.00	4927.00	-672.78	-591.88	2.00	180.00	896.08	
8040.68	0.00	0.00	7927.00	-672.78	-591.88	0.00	0.00	896.08	Lee 21-6 BHL



Database:	edm5000p	Local Co-ordinate Reference:	Well Lee 21-6
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 21-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lee 21-6		
Design:	Lee 21-6 (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 21-6					
Well Position	+N-S	-0.04 ft	Northing:	1,306,833.48 ft	Latitude:	40.172913
	+E-W	-31.86 ft	Easting:	3,222,435.53 ft	Longitude:	-104.703994
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,962.00 ft

Wellbore	Lee 21-6				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/3/2011	8.87	66.89	53,065

Design	Lee 21-6 (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	221.34	

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	
1,735.26	15.71	221.34	1,725.46	-80.30	-70.64	2.00	2.00	0.00	221.34	
4,255.42	15.71	221.34	4,151.54	-592.48	-521.23	0.00	0.00	0.00	0.00	
5,040.68	0.00	0.00	4,927.00	-672.78	-591.88	2.00	-2.00	0.00	180.00	
8,040.68	0.00	0.00	7,927.00	-672.78	-591.88	0.00	0.00	0.00	0.00	Lee 21-6 BHL

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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 21-6	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lee 21-6		
Design:	Lee 21-6 (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
1,735.26	15.71	221.34	1,725.46	-80.30	-70.64	106.95	2.00	2.00	0.00
4,255.42	15.71	221.34	4,151.54	-592.48	-521.23	789.13	0.00	0.00	0.00
4,266.28	15.49	221.34	4,162.00	-594.68	-523.16	792.05	2.00	-2.00	0.00
PK									
4,649.46	7.82	221.34	4,537.00	-652.76	-574.26	869.41	2.00	-2.00	0.00
SX									
5,040.68	0.00	0.00	4,927.00	-672.78	-591.88	896.08	2.00	-2.00	0.00
7,153.68	0.00	0.00	7,040.00	-672.78	-591.88	896.08	0.00	0.00	0.00
NIO									
7,435.68	0.00	0.00	7,322.00	-672.78	-591.88	896.08	0.00	0.00	0.00
CD									
7,521.68	0.00	0.00	7,408.00	-672.78	-591.88	896.08	0.00	0.00	0.00
GH									
7,891.68	0.00	0.00	7,778.00	-672.78	-591.88	896.08	0.00	0.00	0.00
J									
8,040.68	0.00	0.00	7,927.00	-672.78	-591.88	896.08	0.00	0.00	0.00
Lee 21-6 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 21-6 BHL	0.00	0.00	7,927.00	-672.78	-591.88	1,306,155.41	3,221,849.71	40.171066	-104.706112
- 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 (°)	
4,266.28	4,162.00	PK				
4,649.46	4,537.00	SX				
7,153.68	7,040.00	NIO				
7,435.68	7,322.00	CD				
7,521.68	7,408.00	GH				
7,891.68	7,778.00	J				

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