

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_NICHOLS 3-8 Pad

NICHOLS 25-8

Nichols 25-8

Plan: Nichols 25-8 (wp01)

Standard Planning Report

03 January, 2011



Weatherford[®]

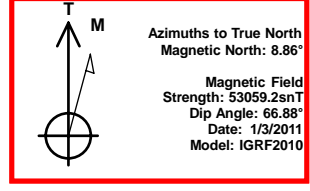
Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_NICHOLS 3-8 Pad
 Well: NICHOLS 25-8
 Wellbore: Nichols 25-8
 Section:
 SHL:
 Design: Nichols 25-8 (wp01)
 Latitude: 40.158510
 Longitude: -104.690038
 GL: 4894.00
 KB: WELL @ 4894.00ft (Original Well Elev)

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4094.00	4389.93	PK
4504.00	4840.67	SX
6964.00	7352.76	NIO
7244.00	7632.76	CD
7331.00	7719.76	GH
7694.00	8082.76	J

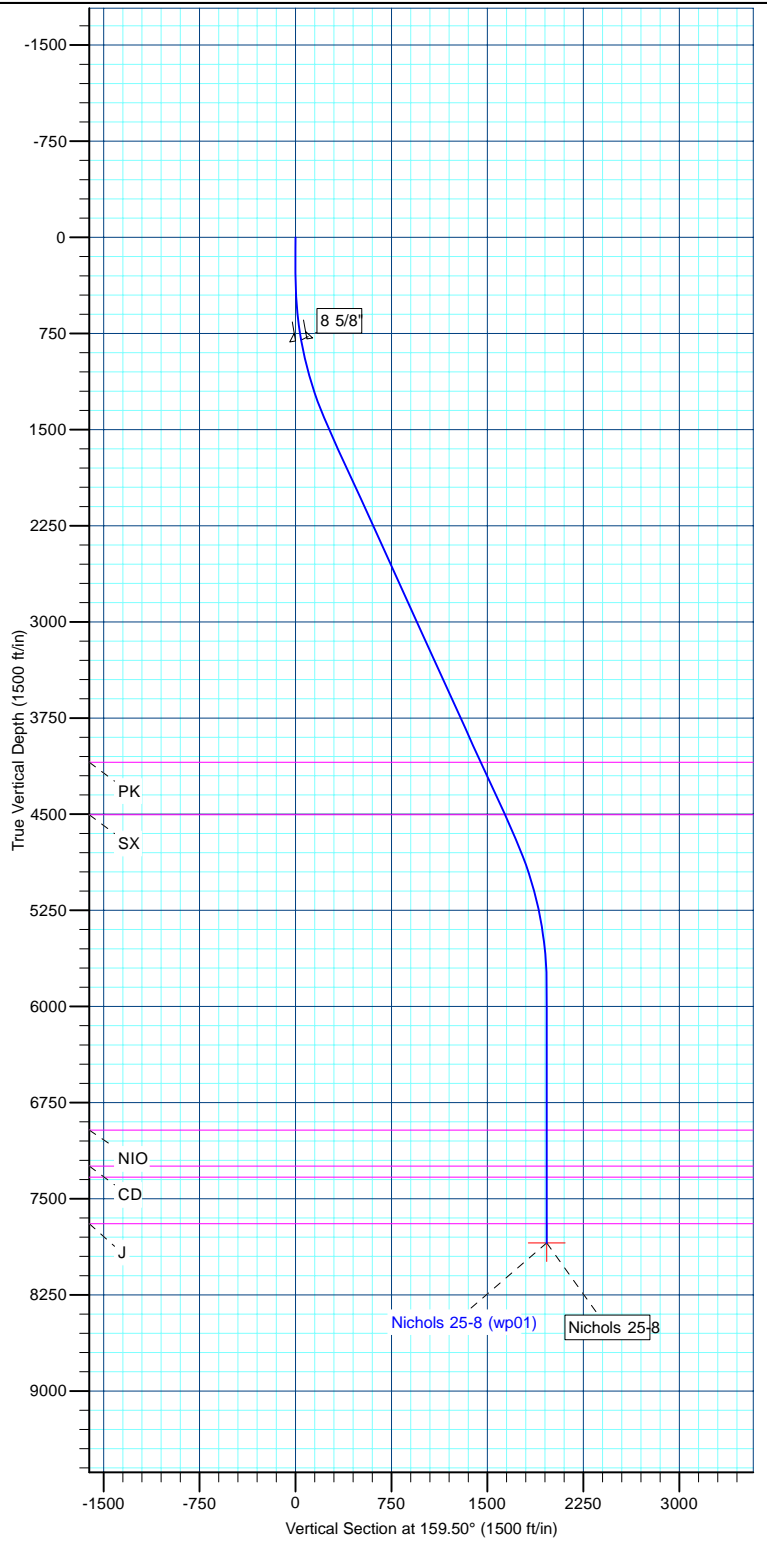


WELL DETAILS: NICHOLS 25-8						
+N/-S	+E/-W	Northing	Ground Level: Easting	4894.00 Latitude	Longitude	Slot
0.00	0.00	1301622.29	3226383.20	40.158510	-104.690038	

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	Point
Nichols 25-8	7844.00	-1838.50	687.35	1299790.15	3227087.31	40.153463	-104.687579	Point	



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	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1527.38	24.55	159.50	1490.17	-242.53	90.67	2.00	159.50	258.93		
5005.39	24.55	159.50	4653.83	-1595.97	596.67	0.00	0.00	1703.86		
6232.76	0.00	0.00	5844.00	-1838.50	687.35	2.00	180.00	1962.79		
8232.76	0.00	0.00	7844.00	-1838.50	687.35	0.00	0.00	1962.79	Nichols 25-8	



Database:	edm5000p	Local Co-ordinate Reference:	Well NICHOLS 25-8
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4894.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4894.00ft (Original Well Elev)
Site:	WELD_NICHOLS 3-8 Pad	North Reference:	True
Well:	NICHOLS 25-8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Nichols 25-8		
Design:	Nichols 25-8 (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_NICHOLS 3-8 Pad				
Site Position:		Northing:	1,301,644.68 ft	Latitude:	40.158572
From:	Lat/Long	Easting:	3,226,360.36 ft	Longitude:	-104.690119
Position Uncertainty:	0.00 ft	Slot Radius:	0 "	Grid Convergence:	0.52 °

Well	NICHOLS 25-8					
Well Position	+N/-S	-22.60 ft	Northing:	1,301,622.29 ft	Latitude:	40.158510
	+E/-W	22.64 ft	Easting:	3,226,383.20 ft	Longitude:	-104.690038
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,894.00 ft

Wellbore	Nichols 25-8				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/3/2011	8.86	66.88	53,059

Design	Nichols 25-8 (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	159.50

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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,527.38	24.55	159.50	1,490.17	-242.53	90.67	2.00	2.00	0.00	159.50	
5,005.39	24.55	159.50	4,653.83	-1,595.97	596.67	0.00	0.00	0.00	0.00	
6,232.76	0.00	0.00	5,844.00	-1,838.50	687.35	2.00	-2.00	0.00	180.00	
8,232.76	0.00	0.00	7,844.00	-1,838.50	687.35	0.00	0.00	0.00	0.00	Nichols 25-8

Database:	edm5000p	Local Co-ordinate Reference:	Well NICHOLS 25-8
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4894.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4894.00ft (Original Well Elev)
Site:	WELD_NICHOLS 3-8 Pad	North Reference:	True
Well:	NICHOLS 25-8	Survey Calculation Method:	Minimum Curvature
Wellbore:	Nichols 25-8		
Design:	Nichols 25-8 (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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
802.57	10.05	159.50	800.00	-41.19	15.40	43.97	2.00	2.00	0.00	
8 5/8"										
1,527.38	24.55	159.50	1,490.17	-242.53	90.67	258.93	2.00	2.00	0.00	
4,389.93	24.55	159.50	4,094.00	-1,356.47	507.13	1,448.17	0.00	0.00	0.00	
PK										
4,840.67	24.55	159.50	4,504.00	-1,531.87	572.71	1,635.43	0.00	0.00	0.00	
SX										
5,005.39	24.55	159.50	4,653.83	-1,595.97	596.67	1,703.86	0.00	0.00	0.00	
6,232.76	0.00	0.00	5,844.00	-1,838.50	687.35	1,962.79	2.00	-2.00	0.00	
7,352.76	0.00	0.00	6,964.00	-1,838.50	687.35	1,962.79	0.00	0.00	0.00	
NIO										
7,632.76	0.00	0.00	7,244.00	-1,838.50	687.35	1,962.79	0.00	0.00	0.00	
CD										
7,719.76	0.00	0.00	7,331.00	-1,838.50	687.35	1,962.79	0.00	0.00	0.00	
GH										
8,082.76	0.00	0.00	7,694.00	-1,838.50	687.35	1,962.79	0.00	0.00	0.00	
J										
8,232.76	0.00	0.00	7,844.00	-1,838.50	687.35	1,962.79	0.00	0.00	0.00	
Nichols 25-8										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
Nichols 25-8 - hit/miss target - Shape - Point	0.00	0.00	7,844.00	-1,838.50	687.35	1,299,790.15	3,227,087.31	40.153463	-104.687579	

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")		
802.57	800.00	8 5/8"	8-5/8	11		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,389.93	4,094.00	PK				
4,840.67	4,504.00	SX				
7,352.76	6,964.00	NIO				
7,632.76	7,244.00	CD				
7,719.76	7,331.00	GH				
8,082.76	7,694.00	J				

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