

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_Overlook 1-30 PAD

Overlook 8-30

Overlook 8-30

Plan: Overlook 8-30 (wp01)

Standard Planning Report

10 August, 2011



Project: COLORADO NORTHERN ZONE - 83
 Site: WELD_Overlook 1-30 PAD
 Well: Overlook 8-30
 Wellbore: Overlook 8-30
 Section:
 SHL:
 Design: Overlook 8-30 (wp01)
 Latitude: 40.114780
 Longitude: -104.926081
 GL: 5010.00
 KB: 15' rkb + 5010' gl @ 5025.00ft

TVDPATH	MDPATH	FORMATION
4160.00	4358.66	PK Depth
4553.00	4771.97	SX Depth
7318.00	7546.16	NIO Depth
7624.00	7852.16	CD Depth
7710.00	7938.16	GH Depth



Azimuths to True North
 Magnetic North: 8.91°

Magnetic Field
 Strength: 52953.5snT
 Dip Angle: 66.79°
 Date: 7/15/2011
 Model: IGRF2010

WELL DETAILS: Overlook 8-30

+N/-S	+E/-W	Northing	Ground Level: Easting	5010.00 Latitude	Longitude	Slot
0.00	0.00	1285177.87	3160513.74	40.114780	-104.926081	

CASING DETAILS

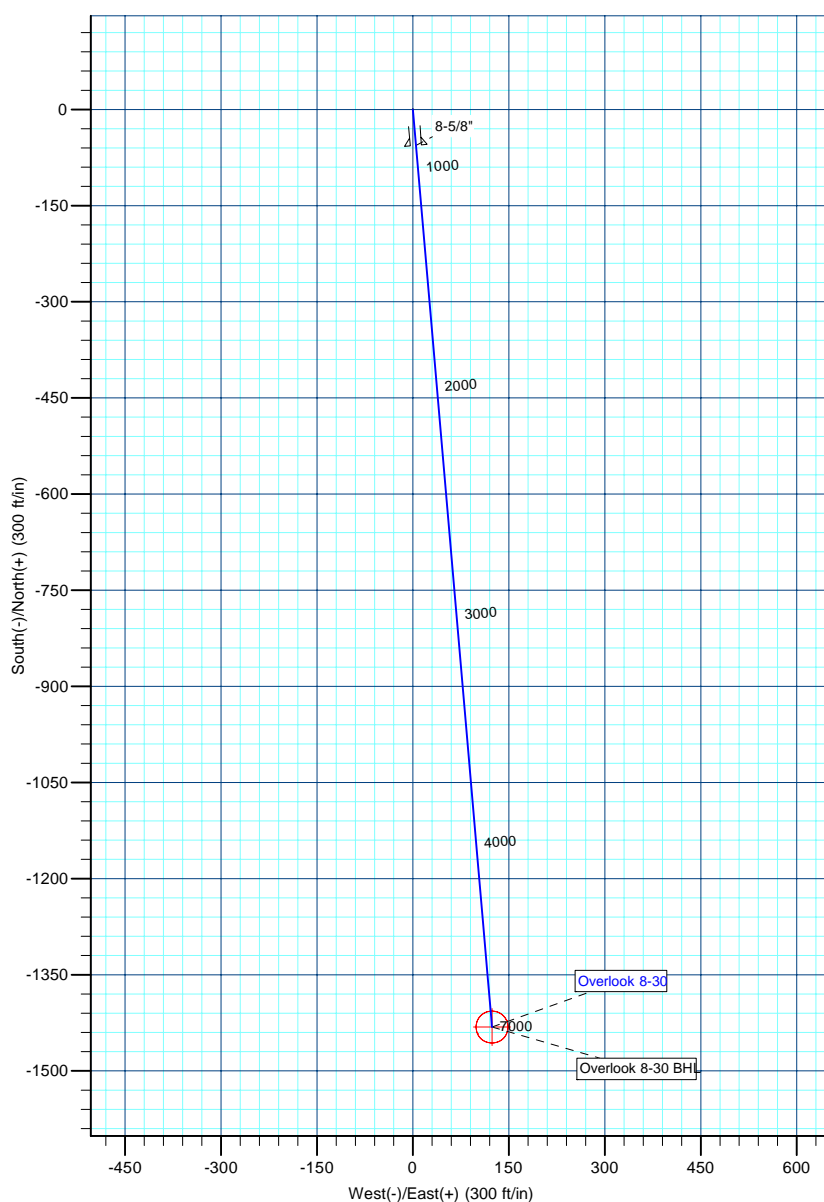
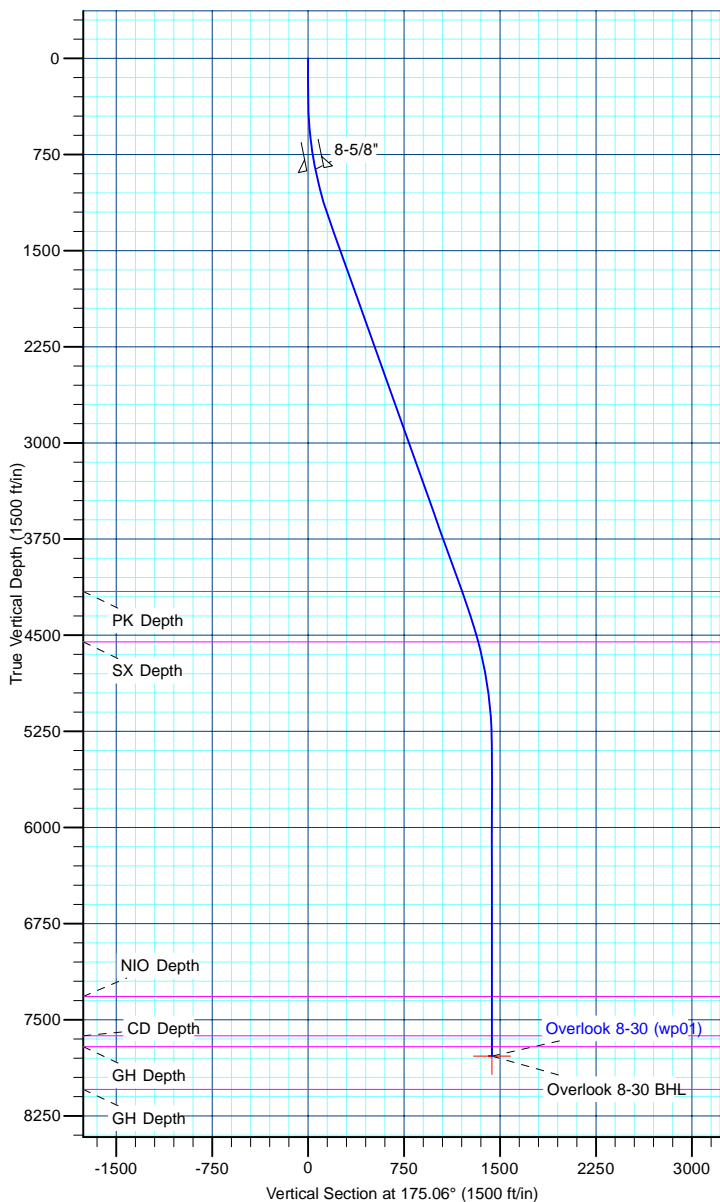
TVD	MD	Name	Size
865.00	868.73	8-5/8"	8-5/8

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Overlook 8-30 BHL	7784.00	-1431.60	123.63	1283747.10	3160646.63	40.110850	-104.925639	Circle (Radius: 25.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
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
1283.51	19.67	175.06	1264.31	-166.55	14.38	2.00	175.06	167.17
4488.15	19.67	175.06	4281.94	-1241.25	107.19	0.00	0.00	1245.87
5612.16	0.00	0.00	5384.00	-1431.60	123.63	1.75	180.00	1436.93
8012.16	0.00	0.00	7784.00	-1431.60	123.63	0.00	0.00	1436.93



Database:	edm5000p	Local Co-ordinate Reference:	Well Overlook 8-30
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' rkb + 5010' gl @ 5025.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' rkb + 5010' gl @ 5025.00ft
Site:	WELD_Overlook 1-30 PAD	North Reference:	True
Well:	Overlook 8-30	Survey Calculation Method:	Minimum Curvature
Wellbore:	Overlook 8-30		
Design:	Overlook 8-30 (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_Overlook 1-30 PAD			
Site Position:		Northing:	1,285,224.36 ft	Latitude:	40.114908
From:	Lat/Long	Easting:	3,160,489.94 ft	Longitude:	-104.926165
Position Uncertainty:	0.00 ft	Slot Radius:	0 "	Grid Convergence:	0.37 °

Well	Overlook 8-30					
Well Position	+N/-S	-46.64 ft	Northing:	1,285,177.87 ft	Latitude:	40.114780
	+E/-W	23.49 ft	Easting:	3,160,513.74 ft	Longitude:	-104.926081
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,010.00 ft

Wellbore	Overlook 8-30				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/15/2011	8.91	66.79	52,953

Design	Overlook 8-30 (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	175.06

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	
1,283.51	19.67	175.06	1,264.31	-166.55	14.38	2.00	2.00	0.00	175.06	
4,488.15	19.67	175.06	4,281.94	-1,241.25	107.19	0.00	0.00	0.00	0.00	
5,612.16	0.00	0.00	5,384.00	-1,431.60	123.63	1.75	-1.75	0.00	180.00	
8,012.16	0.00	0.00	7,784.00	-1,431.60	123.63	0.00	0.00	0.00	0.00	Overlook 8-30 BHL

Database:	edm5000p	Local Co-ordinate Reference:	Well Overlook 8-30
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' rkb + 5010' gl @ 5025.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' rkb + 5010' gl @ 5025.00ft
Site:	WELD_Overlook 1-30 PAD	North Reference:	True
Well:	Overlook 8-30	Survey Calculation Method:	Minimum Curvature
Wellbore:	Overlook 8-30		
Design:	Overlook 8-30 (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
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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	175.06	399.98	-1.74	0.15	1.75	2.00	2.00	0.00
500.00	4.00	175.06	499.84	-6.95	0.60	6.98	2.00	2.00	0.00
600.00	6.00	175.06	599.45	-15.64	1.35	15.69	2.00	2.00	0.00
700.00	8.00	175.06	698.70	-27.78	2.40	27.88	2.00	2.00	0.00
800.00	10.00	175.06	797.47	-43.36	3.74	43.52	2.00	2.00	0.00
868.73	11.37	175.06	865.00	-56.06	4.84	56.27	2.00	2.00	0.00
8-5/8"									
900.00	12.00	175.06	895.62	-62.37	5.39	62.60	2.00	2.00	0.00
1,000.00	14.00	175.06	993.06	-84.78	7.32	85.10	2.00	2.00	0.00
1,100.00	16.00	175.06	1,089.64	-110.57	9.55	110.98	2.00	2.00	0.00
1,200.00	18.00	175.06	1,185.27	-139.69	12.06	140.21	2.00	2.00	0.00
1,283.51	19.67	175.06	1,264.31	-166.55	14.38	167.17	2.00	2.00	0.00
1,300.00	19.67	175.06	1,279.83	-172.08	14.86	172.72	0.00	0.00	0.00
1,400.00	19.67	175.06	1,374.00	-205.62	17.76	206.38	0.00	0.00	0.00
1,500.00	19.67	175.06	1,468.16	-239.15	20.65	240.04	0.00	0.00	0.00
1,600.00	19.67	175.06	1,562.33	-272.69	23.55	273.71	0.00	0.00	0.00
1,700.00	19.67	175.06	1,656.49	-306.23	26.44	307.37	0.00	0.00	0.00
1,800.00	19.67	175.06	1,750.65	-339.76	29.34	341.03	0.00	0.00	0.00
1,900.00	19.67	175.06	1,844.82	-373.30	32.24	374.69	0.00	0.00	0.00
2,000.00	19.67	175.06	1,938.98	-406.83	35.13	408.35	0.00	0.00	0.00
2,100.00	19.67	175.06	2,033.15	-440.37	38.03	442.01	0.00	0.00	0.00
2,200.00	19.67	175.06	2,127.31	-473.91	40.92	475.67	0.00	0.00	0.00
2,300.00	19.67	175.06	2,221.48	-507.44	43.82	509.33	0.00	0.00	0.00
2,400.00	19.67	175.06	2,315.64	-540.98	46.72	542.99	0.00	0.00	0.00
2,500.00	19.67	175.06	2,409.81	-574.51	49.61	576.65	0.00	0.00	0.00
2,600.00	19.67	175.06	2,503.97	-608.05	52.51	610.31	0.00	0.00	0.00
2,700.00	19.67	175.06	2,598.14	-641.58	55.40	643.97	0.00	0.00	0.00
2,800.00	19.67	175.06	2,692.30	-675.12	58.30	677.63	0.00	0.00	0.00
2,900.00	19.67	175.06	2,786.46	-708.66	61.20	711.29	0.00	0.00	0.00
3,000.00	19.67	175.06	2,880.63	-742.19	64.09	744.95	0.00	0.00	0.00
3,100.00	19.67	175.06	2,974.79	-775.73	66.99	778.62	0.00	0.00	0.00
3,200.00	19.67	175.06	3,068.96	-809.26	69.88	812.28	0.00	0.00	0.00
3,300.00	19.67	175.06	3,163.12	-842.80	72.78	845.94	0.00	0.00	0.00
3,400.00	19.67	175.06	3,257.29	-876.34	75.68	879.60	0.00	0.00	0.00
3,500.00	19.67	175.06	3,351.45	-909.87	78.57	913.26	0.00	0.00	0.00
3,600.00	19.67	175.06	3,445.62	-943.41	81.47	946.92	0.00	0.00	0.00
3,700.00	19.67	175.06	3,539.78	-976.94	84.36	980.58	0.00	0.00	0.00
3,800.00	19.67	175.06	3,633.95	-1,010.48	87.26	1,014.24	0.00	0.00	0.00
3,900.00	19.67	175.06	3,728.11	-1,044.01	90.16	1,047.90	0.00	0.00	0.00
4,000.00	19.67	175.06	3,822.27	-1,077.55	93.05	1,081.56	0.00	0.00	0.00
4,100.00	19.67	175.06	3,916.44	-1,111.09	95.95	1,115.22	0.00	0.00	0.00
4,200.00	19.67	175.06	4,010.60	-1,144.62	98.84	1,148.88	0.00	0.00	0.00
4,300.00	19.67	175.06	4,104.77	-1,178.16	101.74	1,182.54	0.00	0.00	0.00
4,358.66	19.67	175.06	4,160.00	-1,197.83	103.44	1,202.29	0.00	0.00	0.00
PK Depth									
4,400.00	19.67	175.06	4,198.93	-1,211.69	104.64	1,216.20	0.00	0.00	0.00
4,488.15	19.67	175.06	4,281.94	-1,241.25	107.19	1,245.87	0.00	0.00	0.00
4,500.00	19.46	175.06	4,293.10	-1,245.21	107.53	1,249.84	1.75	-1.75	0.00
4,600.00	17.71	175.06	4,387.88	-1,276.97	110.27	1,281.72	1.75	-1.75	0.00
4,700.00	15.96	175.06	4,483.59	-1,305.82	112.77	1,310.68	1.75	-1.75	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' rkb + 5010' gl @ 5025.00ft
Site:	WELD_Overlook 1-30 PAD	North Reference:	True
Well:	Overlook 8-30	Survey Calculation Method:	Minimum Curvature
Wellbore:	Overlook 8-30		
Design:	Overlook 8-30 (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)
4,771.97	14.70	175.06	4,553.00	-1,324.78	114.40	1,329.71	1.75	-1.75	0.00
SX Depth									
4,800.00	14.21	175.06	4,580.14	-1,331.76	115.00	1,336.71	1.75	-1.75	0.00
4,900.00	12.46	175.06	4,677.44	-1,354.74	116.99	1,359.78	1.75	-1.75	0.00
5,000.00	10.71	175.06	4,775.40	-1,374.75	118.72	1,379.87	1.75	-1.75	0.00
5,100.00	8.96	175.06	4,873.92	-1,391.77	120.19	1,396.95	1.75	-1.75	0.00
5,200.00	7.21	175.06	4,972.93	-1,405.79	121.40	1,411.02	1.75	-1.75	0.00
5,300.00	5.46	175.06	5,072.31	-1,416.79	122.35	1,422.06	1.75	-1.75	0.00
5,400.00	3.71	175.06	5,171.99	-1,424.76	123.04	1,430.06	1.75	-1.75	0.00
5,500.00	1.96	175.06	5,271.86	-1,429.69	123.46	1,435.01	1.75	-1.75	0.00
5,600.00	0.21	175.06	5,371.84	-1,431.58	123.62	1,436.91	1.75	-1.75	0.00
5,612.16	0.00	0.00	5,384.00	-1,431.60	123.63	1,436.93	1.75	-1.75	0.00
5,700.00	0.00	0.00	5,471.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
5,800.00	0.00	0.00	5,571.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
5,900.00	0.00	0.00	5,671.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,000.00	0.00	0.00	5,771.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,100.00	0.00	0.00	5,871.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,200.00	0.00	0.00	5,971.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,300.00	0.00	0.00	6,071.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,400.00	0.00	0.00	6,171.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,500.00	0.00	0.00	6,271.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,600.00	0.00	0.00	6,371.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,700.00	0.00	0.00	6,471.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,800.00	0.00	0.00	6,571.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
6,900.00	0.00	0.00	6,671.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,000.00	0.00	0.00	6,771.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,100.00	0.00	0.00	6,871.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,200.00	0.00	0.00	6,971.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,300.00	0.00	0.00	7,071.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,400.00	0.00	0.00	7,171.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,500.00	0.00	0.00	7,271.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,546.16	0.00	0.00	7,318.00	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
NIO Depth									
7,600.00	0.00	0.00	7,371.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,700.00	0.00	0.00	7,471.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,800.00	0.00	0.00	7,571.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,852.16	0.00	0.00	7,624.00	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
CD Depth									
7,900.00	0.00	0.00	7,671.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
7,938.16	0.00	0.00	7,710.00	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
GH Depth									
8,000.00	0.00	0.00	7,771.84	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
8,012.16	0.00	0.00	7,784.00	-1,431.60	123.63	1,436.93	0.00	0.00	0.00
Overlook 8-30 BHL									

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' rkb + 5010' gl @ 5025.00ft
Site:	WELD_Overlook 1-30 PAD	North Reference:	True
Well:	Overlook 8-30	Survey Calculation Method:	Minimum Curvature
Wellbore:	Overlook 8-30		
Design:	Overlook 8-30 (wp01)		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Overlook 8-30 BHL	0.00	0.00	7,784.00	-1,431.60	123.63	1,283,747.10	3,160,646.63	40.110850	-104.925639
- plan hits target center									
- Circle (radius 25.00)									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(")	(")
868.73	865.00	8-5/8"		8-5/8	11

Formations						
Measured Depth	Vertical Depth	Name		Lithology	Dip	Dip Direction
(ft)	(ft)				(°)	(°)
4,358.66	4,160.00	PK Depth				
4,771.97	4,553.00	SX Depth				
7,546.16	7,318.00	NIO Depth				
7,852.16	7,624.00	CD Depth				
7,938.16	7,710.00	GH Depth				