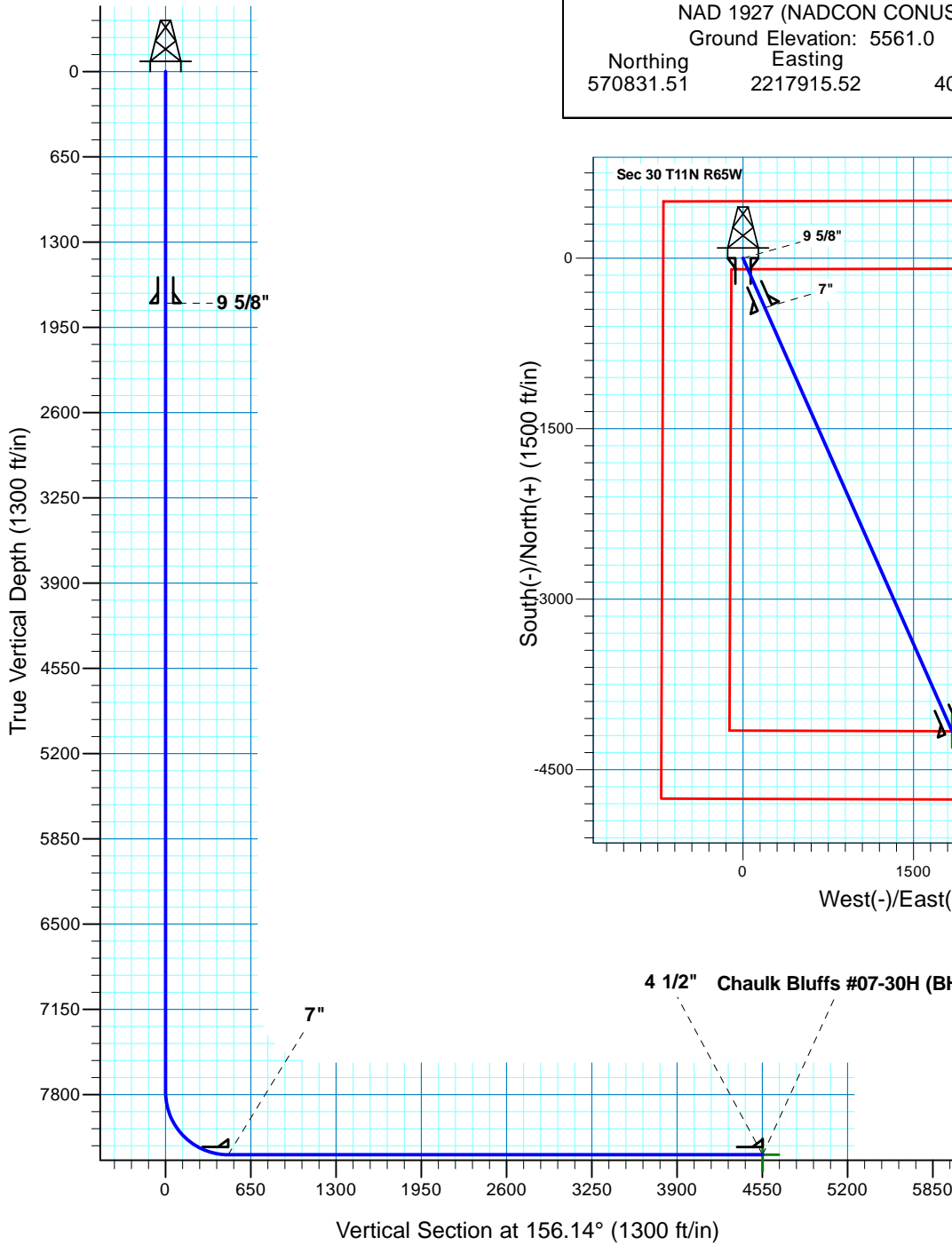
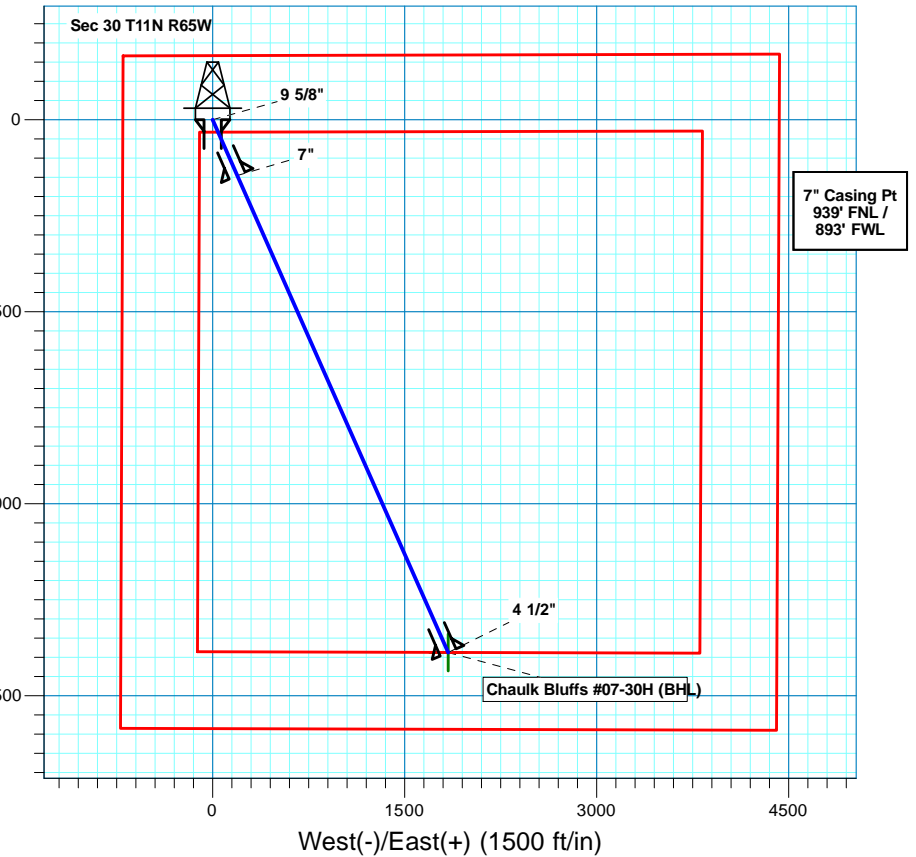


Chaulk Bluffs #07-30H
Section 30 T11N R65W
Weld County, CO



Surface Location			
NAD 1927 (NADCON CONUS)	Colorado North 501	Rig @ 5583.0ft (TBD)	
Ground Elevation: 5561.0	Latitude	Longitude	
Northing 570831.51	Easting 2217915.52	40° 53' 51.620 N	104° 42' 42.450 W



T M Azimuths to True North
Magnetic North: 9.04°
Magnetic Field
Strength: 53561.5nT
Dip Angle: 67.52°
Date: 12/31/2009
Model: IGRF200510

Project: DJ - Hereford Ranch
Site: Chaulk Bluffs #07-30H
Well: Chaulk Bluffs #07-30H
Plan: APD Directional Plan

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	7780.5	0.00	0.00	7780.5	0.0	0.0	0.00	0.00	0.0	
3	8530.5	90.00	156.14	8258.0	-436.7	193.1	12.00	156.14	477.5	
4	12604.6	90.00	156.14	8258.0	-4162.6	1841.2	0.00	0.00	4551.6	Chaulk Bluffs #07-30H (BHL)

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Chaulk Bluffs #07-30H (BHL)	8258.0	-4162.6	1841.2	566685.49	2219793.61	40° 53' 10.490 N	104° 42' 18.480 W	Point



Denver Division- Colorado

DJ - Hereford Ranch

Chaulk Bluffs #07-30H

Chaulk Bluffs #07-30H

Original Wellbore

Plan: APD Directional Plan

Standard Planning Report (Field)

30 November, 2010



Database:	Local	Local Co-ordinate Reference:	Site Chaulk Bluffs #07-30H
Company:	Denver Division- Colorado	TVD Reference:	Rig @ 5583.0ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	Rig @ 5583.0ft (TBD)
Site:	Chaulk Bluffs #07-30H	North Reference:	True
Well:	Chaulk Bluffs #07-30H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Directional Plan		

Project	DJ - Hereford Ranch, Weld County		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado North 501		

Site		Chaulk Bluffs #07-30H			
Site Position:		Northing:	570,831.52 ft	Latitude:	40° 53' 51.620 N
From:	Lat/Long	Easting:	2,217,915.52 ft	Longitude:	104° 42' 42.450 W
Position Uncertainty:	0.0 ft	Slot Radius:		Grid Convergence:	0.51

Well	Chaulk Bluffs #07-30H					
Well Position	+N/-S	0.0 ft	Northing:	570,831.51 ft	Latitude:	40° 53' 51.620 N
	+E/-W	0.0 ft	Easting:	2,217,915.52 ft	Longitude:	104° 42' 42.450 W
Position Uncertainty		0.0 ft	Wellhead Elevation:		Ground Level:	5,561.0 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/09	9.04	67.52	53,562

Design	APD Directional Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	156.14

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
7,780.5	0.00	0.00	7,780.5	0.0	0.0	0.00	0.00	0.00	0.00	
8,530.5	90.00	156.14	8,258.0	-436.7	193.1	12.00	12.00	0.00	156.14	
12,604.6	90.00	156.14	8,258.0	-4,162.6	1,841.2	0.00	0.00	0.00	0.00	Chaulk Bluffs #07-30H

Database:	Local	Local Co-ordinate Reference:	Site Chaulk Bluffs #07-30H
Company:	Denver Division- Colorado	TVD Reference:	Rig @ 5583.0ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	Rig @ 5583.0ft (TBD)
Site:	Chaulk Bluffs #07-30H	North Reference:	True
Well:	Chaulk Bluffs #07-30H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Directional Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
WHITE RIVER										
0.0	0.00	0.00	0.0	-5,583.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	-5,483.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	-5,383.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	-5,283.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	-5,183.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	-5,083.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	-4,983.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	-4,883.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	-4,783.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	-4,683.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	-4,583.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	-4,483.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	-4,383.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	-4,283.0	0.0	0.0	0.0	0.00	0.00	0.00
FOX HILLS										
1,308.0	0.00	0.00	1,308.0	-4,275.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	-4,183.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	-4,083.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	-3,983.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	-3,883.0	0.0	0.0	0.0	0.00	0.00	0.00
PIERRE SHALE										
1,703.0	0.00	0.00	1,703.0	-3,880.0	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8"										
1,765.0	0.00	0.00	1,765.0	-3,818.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	-3,783.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	-3,683.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	-3,583.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	-3,483.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	-3,383.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	-3,283.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	-3,183.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	-3,083.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	-2,983.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	-2,883.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	-2,783.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	-2,683.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	-2,583.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	-2,483.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	-2,383.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	-2,283.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	-2,183.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	-2,083.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	-1,983.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	-1,883.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	-1,783.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	-1,683.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	-1,583.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	-1,483.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	-1,383.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	-1,283.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	-1,183.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	-1,083.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	-983.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	Local	Local Co-ordinate Reference:	Site Chaulk Bluffs #07-30H
Company:	Denver Division- Colorado	TVD Reference:	Rig @ 5583.0ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	Rig @ 5583.0ft (TBD)
Site:	Chaulk Bluffs #07-30H	North Reference:	True
Well:	Chaulk Bluffs #07-30H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Directional Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
RICHARD SAND										
4,658.0	0.00	0.00	4,658.0	-925.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	-883.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	-783.0	0.0	0.0	0.0	0.00	0.00	0.00
HYGIENE										
4,828.0	0.00	0.00	4,828.0	-755.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	-683.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	-583.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	-483.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	-383.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	-283.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	-183.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	-83.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	17.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	117.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	217.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	317.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	417.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	517.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	617.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	717.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	817.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	917.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	1,017.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	1,117.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	1,217.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	1,317.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	1,417.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	1,517.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	1,617.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	1,717.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	1,817.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	1,917.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	2,017.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	2,117.0	0.0	0.0	0.0	0.00	0.00	0.00
7,780.5	0.00	0.00	7,780.5	2,197.5	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	2.34	156.14	7,800.0	2,217.0	-0.4	0.2	0.4	12.00	12.00	0.00
7,900.0	14.34	156.14	7,898.8	2,315.8	-13.6	6.0	14.9	12.00	12.00	0.00
8,000.0	26.34	156.14	7,992.4	2,409.4	-45.3	20.0	49.6	12.00	12.00	0.00
8,100.0	38.34	156.14	8,076.7	2,493.7	-94.2	41.6	102.9	12.00	12.00	0.00
SHARON SPRINGS										
8,177.0	47.58	156.14	8,133.0	2,550.0	-142.1	62.9	155.4	12.00	12.00	0.00
8,200.0	50.34	156.14	8,148.1	2,565.1	-158.0	69.9	172.7	12.00	12.00	0.00
NIORARA										
8,250.1	56.34	156.14	8,178.0	2,595.0	-194.7	86.1	212.9	11.97	11.97	0.00
B1 CHALK										
8,288.6	60.97	156.14	8,198.0	2,615.0	-224.7	99.4	245.7	12.04	12.04	0.00
8,300.0	62.34	156.14	8,203.4	2,620.4	-233.9	103.5	255.8	12.00	12.00	0.00
8,400.0	74.34	156.14	8,240.3	2,657.3	-318.8	141.0	348.6	12.00	12.00	0.00
B-CHALK										
8,410.5	75.60	156.14	8,243.0	2,660.0	-328.1	145.1	358.7	12.00	12.00	0.00
8,500.0	86.34	156.14	8,257.0	2,674.0	-408.8	180.8	447.0	12.00	12.00	0.00
7"										

Database:	Local	Local Co-ordinate Reference:	Site Chaulk Bluffs #07-30H
Company:	Denver Division- Colorado	TVD Reference:	Rig @ 5583.0ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	Rig @ 5583.0ft (TBD)
Site:	Chaulk Bluffs #07-30H	North Reference:	True
Well:	Chaulk Bluffs #07-30H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Directional Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,530.5	90.00	156.14	8,258.0	2,675.0	-436.6	193.1	477.4	12.00	12.00	0.00
8,600.0	90.00	156.14	8,258.0	2,675.0	-500.2	221.2	546.9	0.01	0.01	0.00
8,700.0	90.00	156.14	8,258.0	2,675.0	-591.6	261.7	646.9	0.00	0.00	0.00
8,800.0	90.00	156.14	8,258.0	2,675.0	-683.1	302.1	746.9	0.00	0.00	0.00
8,900.0	90.00	156.14	8,258.0	2,675.0	-774.6	342.6	846.9	0.00	0.00	0.00
9,000.0	90.00	156.14	8,258.0	2,675.0	-866.0	383.0	946.9	0.00	0.00	0.00
9,100.0	90.00	156.14	8,258.0	2,675.0	-957.5	423.5	1,046.9	0.00	0.00	0.00
9,200.0	90.00	156.14	8,258.0	2,675.0	-1,048.9	463.9	1,146.9	0.00	0.00	0.00
9,300.0	90.00	156.14	8,258.0	2,675.0	-1,140.4	504.4	1,246.9	0.00	0.00	0.00
9,400.0	90.00	156.14	8,258.0	2,675.0	-1,231.8	544.8	1,346.9	0.00	0.00	0.00
9,500.0	90.00	156.14	8,258.0	2,675.0	-1,323.3	585.3	1,446.9	0.00	0.00	0.00
9,600.0	90.00	156.14	8,258.0	2,675.0	-1,414.7	625.8	1,546.9	0.00	0.00	0.00
9,700.0	90.00	156.14	8,258.0	2,675.0	-1,506.2	666.2	1,646.9	0.00	0.00	0.00
9,800.0	90.00	156.14	8,258.0	2,675.0	-1,597.6	706.7	1,746.9	0.00	0.00	0.00
9,900.0	90.00	156.14	8,258.0	2,675.0	-1,689.1	747.1	1,846.9	0.00	0.00	0.00
10,000.0	90.00	156.14	8,258.0	2,675.0	-1,780.5	787.6	1,946.9	0.00	0.00	0.00
10,100.0	90.00	156.14	8,258.0	2,675.0	-1,872.0	828.0	2,046.9	0.00	0.00	0.00
10,200.0	90.00	156.14	8,258.0	2,675.0	-1,963.4	868.5	2,146.9	0.00	0.00	0.00
10,300.0	90.00	156.14	8,258.0	2,675.0	-2,054.9	908.9	2,246.9	0.00	0.00	0.00
10,400.0	90.00	156.14	8,258.0	2,675.0	-2,146.4	949.4	2,346.9	0.00	0.00	0.00
10,500.0	90.00	156.14	8,258.0	2,675.0	-2,237.8	989.8	2,446.9	0.00	0.00	0.00
10,600.0	90.00	156.14	8,258.0	2,675.0	-2,329.3	1,030.3	2,546.9	0.00	0.00	0.00
10,700.0	90.00	156.14	8,258.0	2,675.0	-2,420.7	1,070.7	2,646.9	0.00	0.00	0.00
10,800.0	90.00	156.14	8,258.0	2,675.0	-2,512.2	1,111.2	2,746.9	0.00	0.00	0.00
10,900.0	90.00	156.14	8,258.0	2,675.0	-2,603.6	1,151.6	2,846.9	0.00	0.00	0.00
11,000.0	90.00	156.14	8,258.0	2,675.0	-2,695.1	1,192.1	2,946.9	0.00	0.00	0.00
11,100.0	90.00	156.14	8,258.0	2,675.0	-2,786.5	1,232.5	3,046.9	0.00	0.00	0.00
11,200.0	90.00	156.14	8,258.0	2,675.0	-2,878.0	1,273.0	3,146.9	0.00	0.00	0.00
11,300.0	90.00	156.14	8,258.0	2,675.0	-2,969.4	1,313.4	3,246.9	0.00	0.00	0.00
11,400.0	90.00	156.14	8,258.0	2,675.0	-3,060.9	1,353.9	3,346.9	0.00	0.00	0.00
11,500.0	90.00	156.14	8,258.0	2,675.0	-3,152.3	1,394.3	3,446.9	0.00	0.00	0.00
11,600.0	90.00	156.14	8,258.0	2,675.0	-3,243.8	1,434.8	3,546.9	0.00	0.00	0.00
11,700.0	90.00	156.14	8,258.0	2,675.0	-3,335.2	1,475.2	3,646.9	0.00	0.00	0.00
11,800.0	90.00	156.14	8,258.0	2,675.0	-3,426.7	1,515.7	3,746.9	0.00	0.00	0.00
11,900.0	90.00	156.14	8,258.0	2,675.0	-3,518.2	1,556.1	3,846.9	0.00	0.00	0.00
12,000.0	90.00	156.14	8,258.0	2,675.0	-3,609.6	1,596.6	3,946.9	0.00	0.00	0.00
12,100.0	90.00	156.14	8,258.0	2,675.0	-3,701.1	1,637.0	4,046.9	0.00	0.00	0.00
12,200.0	90.00	156.14	8,258.0	2,675.0	-3,792.5	1,677.5	4,146.9	0.00	0.00	0.00
12,300.0	90.00	156.14	8,258.0	2,675.0	-3,884.0	1,717.9	4,246.9	0.00	0.00	0.00
12,400.0	90.00	156.14	8,258.0	2,675.0	-3,975.4	1,758.4	4,346.9	0.00	0.00	0.00
12,500.0	90.00	156.14	8,258.0	2,675.0	-4,066.9	1,798.8	4,446.9	0.00	0.00	0.00
12,600.0	90.00	156.14	8,258.0	2,675.0	-4,158.3	1,839.3	4,546.9	0.00	0.00	0.00
4 1/2" - Chaulk Bluffs #07-30H (BHL)										
12,604.6	90.00	156.14	8,258.0	2,675.0	-4,162.5	1,841.2	4,551.5	0.00	0.00	0.00

Database:	Local	Local Co-ordinate Reference:	Site Chaulk Bluffs #07-30H
Company:	Denver Division- Colorado	TVD Reference:	Rig @ 5583.0ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	Rig @ 5583.0ft (TBD)
Site:	Chaulk Bluffs #07-30H	North Reference:	True
Well:	Chaulk Bluffs #07-30H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Directional Plan		

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									
Chaulk Bluffs #07-30H (I	0.00	0.00	8,258.0	-4,162.6	1,841.2	566,685.49	2,219,793.61	40° 53' 10.490 N	104° 42' 18.480 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,765.0	1,765.0	9 5/8"	9-5/8	13-1/2	
8,530.5	8,258.0	7"	7	8-3/4	
12,604.6	8,258.0	4 1/2"	4-1/2	6	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
0.0	0.0	WHITE RIVER		0.00		
1,308.0	1,308.0	FOX HILLS		0.00		
1,703.0	1,703.0	PIERRE SHALE		0.00		
4,658.0	4,658.0	RICHARD SAND		0.00		
4,828.0	4,828.0	HYGIENE		0.00		
8,177.0	8,133.0	SHARON SPRINGS		0.00		
8,250.1	8,178.0	NIOBRARA		0.00		
8,288.6	8,198.0	B1 CHALK		0.00		
8,410.5	8,243.0	B-CHALK		0.00		