

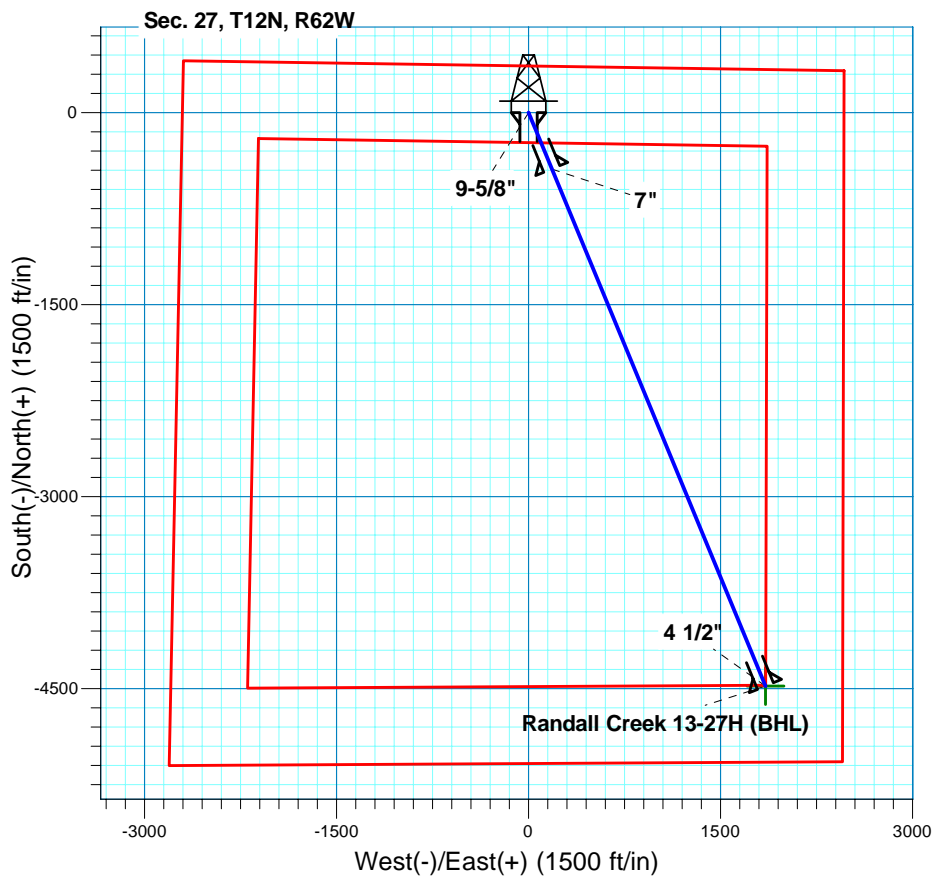
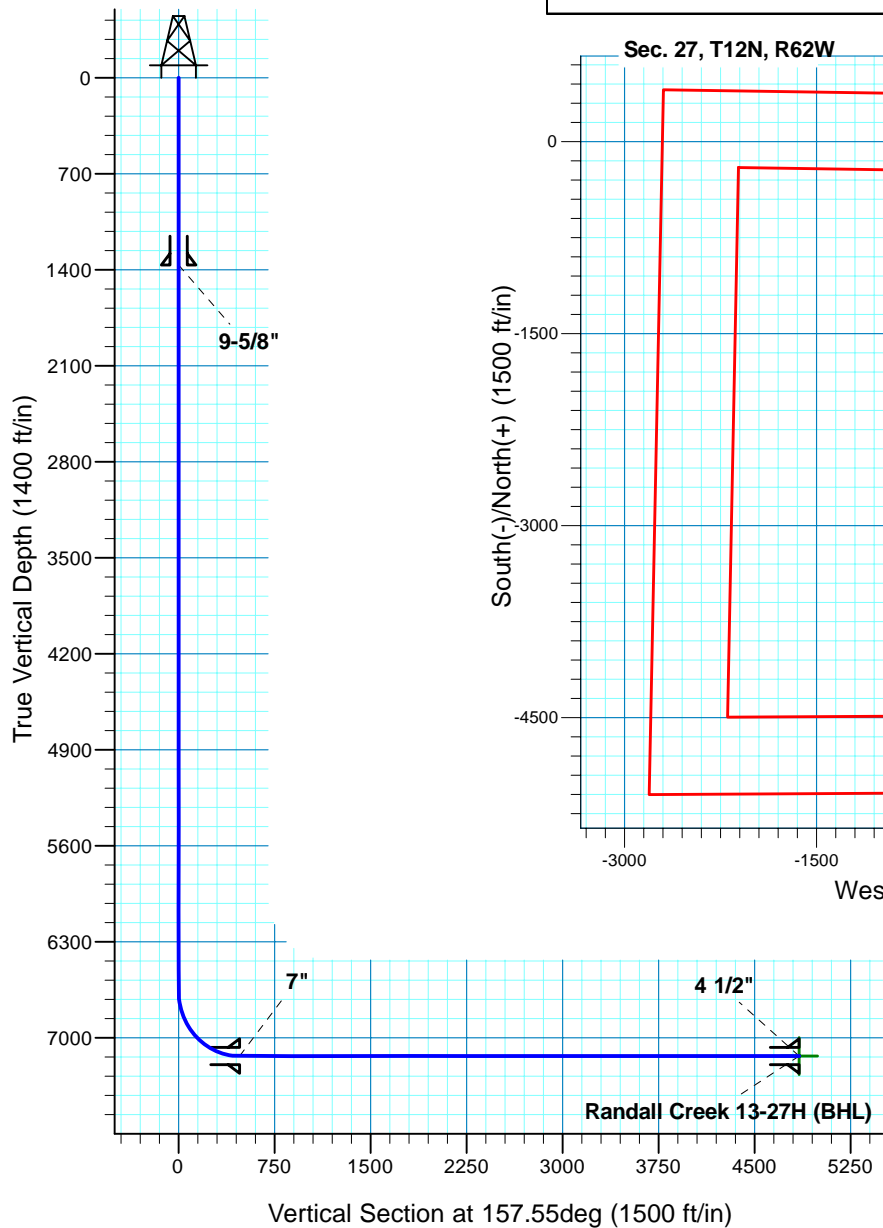
# Randall Creek 13-27H

## Section 27 T12N R62W

### Weld County, CO

#### Surface Location

NAD 1927 (NADCON CONUS) Colorado North 501  
 Ground Elevation: 5315.00 RIG @ 5337.00ft (TBD)  
 Northing Easting Latitude Longitude  
 604789.29 2329973.85 40° 59' 14.741 N 104° 18' 17.489 W



**T M**  
 Azimuths to True North  
 Magnetic North: 8.62°  
 Magnetic Field  
 Strength: 53500.9nT  
 Dip Angle: 67.61°  
 Date: 6/16/2011  
 Model: IGRF200510

Project: DJ - Hereford Ranch  
 Site: Randall Creek 13-27H  
 Well: Randall Creek 13-27H  
 Plan: APD Directional Plan

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	6656.53	0.00	0.00	6656.53	0.00	0.00	0.00	0.00	0.00	
3	7406.54	90.00	157.55	7134.00	-441.27	182.36	12.00	157.55	477.47	
4	11777.03	90.00	157.55	7134.00	-4480.43	1851.62	0.00	0.00	4847.96	Randall Creek 13-27H (BHL)

#### TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Randall Creek 13-27H (BHL)	7134.00	-4480.43	1851.62	600334.24	2331885.68	40° 58' 30.472 N	104° 17' 53.351 W	Point

# **Denver Division- Colorado**

**DJ - Hereford Ranch  
Randall Creek 13-27H  
Randall Creek 13-27H**

**Original Wellbore**

**Plan: APD Directional Plan**

## **Standard Planning Report**

**22 June, 2011**

# EOG Resources Inc

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Site Randall Creek 13-27H
<b>Company:</b>	Denver Division- Colorado	<b>TVD Reference:</b>	RIG @ 5337.00ft (TBD)
<b>Project:</b>	DJ - Hereford Ranch	<b>MD Reference:</b>	RIG @ 5337.00ft (TBD)
<b>Site:</b>	Randall Creek 13-27H	<b>North Reference:</b>	True
<b>Well:</b>	Randall Creek 13-27H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	APD Directional Plan		

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

Site		Randall Creek 13-27H			
Site Position:		Northing:	604,789.29 ft	Latitude:	40° 59' 14.741 N
From:	Lat/Long	Easting:	2,329,973.85 ft	Longitude:	104° 18' 17.489 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.77 deg

Well	Randall Creek 13-27H					
Well Position	+N-S	0.00 ft	Northing:	604,789.29 ft	Latitude:	40° 59' 14.741 N
	+E-W	0.00 ft	Easting:	2,329,973.85 ft	Longitude:	104° 18' 17.489 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,315.00 ft

<b>Wellbore</b>	Original Wellbore				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (deg)</b>	<b>Dip Angle (deg)</b>	<b>Field Strength (nT)</b>
	IGRF200510	6/16/2011	8.62	67.61	53,501

<b>Design</b>	APD Directional Plan				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (deg)</b>	
	0.00	0.00	0.00	157.55	

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (?/100ft)	Build Rate (?/100ft)	Turn Rate (?/100ft)	TFO (deg)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,656.53	0.00	0.00	6,656.53	0.00	0.00	0.00	0.00	0.00	0.00	
7,406.54	90.00	157.55	7,134.00	-441.27	182.36	12.00	12.00	0.00	157.55	
11,777.03	90.00	157.55	7,134.00	-4,480.43	1,851.62	0.00	0.00	0.00	0.00	Randall Creek 13-2

# EOG Resources Inc

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Site Randall Creek 13-27H
<b>Company:</b>	Denver Division- Colorado	<b>TVD Reference:</b>	RIG @ 5337.00ft (TBD)
<b>Project:</b>	DJ - Hereford Ranch	<b>MD Reference:</b>	RIG @ 5337.00ft (TBD)
<b>Site:</b>	Randall Creek 13-27H	<b>North Reference:</b>	True
<b>Well:</b>	Randall Creek 13-27H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	APD Directional Plan		

Planned Survey									
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	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	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	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
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,365.00	0.00	0.00	1,365.00	0.00	0.00	0.00	0.00	0.00	0.00
9-5/8"									
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00

# EOG Resources Inc

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Site Randall Creek 13-27H
<b>Company:</b>	Denver Division- Colorado	<b>TVD Reference:</b>	RIG @ 5337.00ft (TBD)
<b>Project:</b>	DJ - Hereford Ranch	<b>MD Reference:</b>	RIG @ 5337.00ft (TBD)
<b>Site:</b>	Randall Creek 13-27H	<b>North Reference:</b>	True
<b>Well:</b>	Randall Creek 13-27H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	APD Directional Plan		

Planned Survey									
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (?/100ft)	Build Rate (?/100ft)	Turn Rate (?/100ft)
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,656.53	0.00	0.00	6,656.53	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	5.22	157.55	6,699.94	-1.83	0.76	1.98	12.00	12.00	0.00
6,800.00	17.22	157.55	6,797.85	-19.77	8.17	21.39	12.00	12.00	0.00
6,900.00	29.22	157.55	6,889.59	-56.13	23.20	60.74	12.00	12.00	0.00
7,000.00	41.22	157.55	6,971.14	-109.33	45.18	118.30	12.00	12.00	0.00
7,100.00	53.22	157.55	7,038.93	-177.04	73.16	191.56	12.00	12.00	0.00
7,200.00	65.22	157.55	7,090.02	-256.29	105.92	277.31	12.00	12.00	0.00
7,300.00	77.22	157.55	7,122.16	-343.62	142.01	371.81	12.00	12.00	0.00
7,400.00	89.22	157.55	7,133.96	-435.23	179.87	470.93	12.00	12.00	0.00
7,406.54	90.00	157.55	7,134.00	-441.27	182.36	477.47	11.99	11.99	0.00
7"									
7,500.00	90.00	157.55	7,134.00	-527.65	218.06	570.93	0.00	0.00	0.00
7,600.00	90.00	157.55	7,134.00	-620.07	256.25	670.93	0.00	0.00	0.00
7,700.00	90.00	157.55	7,134.00	-712.48	294.45	770.93	0.00	0.00	0.00
7,800.00	90.00	157.55	7,134.00	-804.90	332.64	870.93	0.00	0.00	0.00
7,900.00	90.00	157.55	7,134.00	-897.32	370.84	970.93	0.00	0.00	0.00
8,000.00	90.00	157.55	7,134.00	-989.74	409.03	1,070.93	0.00	0.00	0.00
8,100.00	90.00	157.55	7,134.00	-1,082.16	447.22	1,170.93	0.00	0.00	0.00
8,200.00	90.00	157.55	7,134.00	-1,174.58	485.42	1,270.93	0.00	0.00	0.00
8,300.00	90.00	157.55	7,134.00	-1,267.00	523.61	1,370.93	0.00	0.00	0.00
8,400.00	90.00	157.55	7,134.00	-1,359.42	561.80	1,470.93	0.00	0.00	0.00
8,500.00	90.00	157.55	7,134.00	-1,451.83	600.00	1,570.93	0.00	0.00	0.00
8,600.00	90.00	157.55	7,134.00	-1,544.25	638.19	1,670.93	0.00	0.00	0.00
8,700.00	90.00	157.55	7,134.00	-1,636.67	676.39	1,770.93	0.00	0.00	0.00
8,800.00	90.00	157.55	7,134.00	-1,729.09	714.58	1,870.93	0.00	0.00	0.00
8,900.00	90.00	157.55	7,134.00	-1,821.51	752.77	1,970.93	0.00	0.00	0.00
9,000.00	90.00	157.55	7,134.00	-1,913.93	790.97	2,070.93	0.00	0.00	0.00
9,100.00	90.00	157.55	7,134.00	-2,006.35	829.16	2,170.93	0.00	0.00	0.00
9,200.00	90.00	157.55	7,134.00	-2,098.77	867.35	2,270.93	0.00	0.00	0.00
9,300.00	90.00	157.55	7,134.00	-2,191.18	905.55	2,370.93	0.00	0.00	0.00
9,400.00	90.00	157.55	7,134.00	-2,283.60	943.74	2,470.93	0.00	0.00	0.00
9,500.00	90.00	157.55	7,134.00	-2,376.02	981.94	2,570.93	0.00	0.00	0.00
9,600.00	90.00	157.55	7,134.00	-2,468.44	1,020.13	2,670.93	0.00	0.00	0.00
9,700.00	90.00	157.55	7,134.00	-2,560.86	1,058.32	2,770.93	0.00	0.00	0.00
9,800.00	90.00	157.55	7,134.00	-2,653.28	1,096.52	2,870.93	0.00	0.00	0.00
9,900.00	90.00	157.55	7,134.00	-2,745.70	1,134.71	2,970.93	0.00	0.00	0.00
10,000.00	90.00	157.55	7,134.00	-2,838.12	1,172.91	3,070.93	0.00	0.00	0.00
10,100.00	90.00	157.55	7,134.00	-2,930.54	1,211.10	3,170.93	0.00	0.00	0.00

# EOG Resources Inc

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Site Randall Creek 13-27H
<b>Company:</b>	Denver Division- Colorado	<b>TVD Reference:</b>	RIG @ 5337.00ft (TBD)
<b>Project:</b>	DJ - Hereford Ranch	<b>MD Reference:</b>	RIG @ 5337.00ft (TBD)
<b>Site:</b>	Randall Creek 13-27H	<b>North Reference:</b>	True
<b>Well:</b>	Randall Creek 13-27H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	APD Directional Plan		

Planned Survey									
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (?/100ft)	Build Rate (?/100ft)	Turn Rate (?/100ft)
10,200.00	90.00	157.55	7,134.00	-3,022.95	1,249.29	3,270.93	0.00	0.00	0.00
10,300.00	90.00	157.55	7,134.00	-3,115.37	1,287.49	3,370.93	0.00	0.00	0.00
10,400.00	90.00	157.55	7,134.00	-3,207.79	1,325.68	3,470.93	0.00	0.00	0.00
10,500.00	90.00	157.55	7,134.00	-3,300.21	1,363.87	3,570.93	0.00	0.00	0.00
10,600.00	90.00	157.55	7,134.00	-3,392.63	1,402.07	3,670.93	0.00	0.00	0.00
10,700.00	90.00	157.55	7,134.00	-3,485.05	1,440.26	3,770.93	0.00	0.00	0.00
10,800.00	90.00	157.55	7,134.00	-3,577.47	1,478.46	3,870.93	0.00	0.00	0.00
10,900.00	90.00	157.55	7,134.00	-3,669.89	1,516.65	3,970.93	0.00	0.00	0.00
11,000.00	90.00	157.55	7,134.00	-3,762.30	1,554.84	4,070.93	0.00	0.00	0.00
11,100.00	90.00	157.55	7,134.00	-3,854.72	1,593.04	4,170.93	0.00	0.00	0.00
11,200.00	90.00	157.55	7,134.00	-3,947.14	1,631.23	4,270.93	0.00	0.00	0.00
11,300.00	90.00	157.55	7,134.00	-4,039.56	1,669.42	4,370.93	0.00	0.00	0.00
11,400.00	90.00	157.55	7,134.00	-4,131.98	1,707.62	4,470.93	0.00	0.00	0.00
11,500.00	90.00	157.55	7,134.00	-4,224.40	1,745.81	4,570.93	0.00	0.00	0.00
11,600.00	90.00	157.55	7,134.00	-4,316.82	1,784.01	4,670.93	0.00	0.00	0.00
11,700.00	90.00	157.55	7,134.00	-4,409.24	1,822.20	4,770.93	0.00	0.00	0.00
11,777.03	90.00	157.55	7,134.00	-4,480.43	1,851.62	4,847.96	0.00	0.00	0.00
4 1/2" - Randall Creek 13-27H (BHL)									

Design Targets									
Target Name	Dip Angle (deg)	Dip Dir. (deg)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Randall Creek 13-27H	0.00	0.00	7,134.00	-4,480.43	1,851.62	600,334.24	2,331,885.68	40° 58' 30.472 N	104° 17' 53.351 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,365.00	1,365.00	9-5/8"	9-5/8	13-1/2	
7,406.54	7,134.00	7"	7	8-3/4	
11,777.03	7,134.00	4 1/2"	4-1/2	6	