

# **Denver Division- Colorado**

**DJ - Hereford Ranch**

**Geary Creek 06-10H**

**Geary Creek 06-10H**

**Original Wellbore**

**Plan: APD Directional Plan**

## **Standard Planning Report**

**08 March, 2011**

# EOG Resources Inc

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Site Geary Creek 06-10H
<b>Company:</b>	Denver Division- Colorado	<b>TVD Reference:</b>	RIG @ 5212.00ft (TBD)
<b>Project:</b>	DJ - Hereford Ranch	<b>MD Reference:</b>	RIG @ 5212.00ft (TBD)
<b>Site:</b>	Geary Creek 06-10H	<b>North Reference:</b>	True
<b>Well:</b>	Geary Creek 06-10H	<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		

<b>Site</b>	Geary Creek 06-10H		
<b>Site Position:</b>		<b>Northing:</b>	556,342.30 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,296,834.55 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	40° 51' 20.279 N
		<b>Longitude:</b>	104° 25' 37.189 W
		<b>Grid Convergence:</b>	0.69 deg

<b>Well</b>	Geary Creek 06-10H		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	40° 51' 20.279 N
		<b>Longitude:</b>	104° 25' 37.189 W
		<b>Ground Level:</b>	5,190.00 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	3/8/2011	8.71	67.49	53,450

<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	153.30

<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	
6,754.53	0.00	0.00	6,754.53	0.00	0.00	0.00	0.00	0.00	0.00	
7,504.54	90.00	153.30	7,232.00	-426.56	214.53	12.00	12.00	0.00	153.30	
11,571.76	90.00	153.30	7,232.00	-4,060.11	2,041.99	0.00	0.00	0.00	0.00	Geary Creek 06-10H

# EOG Resources Inc

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Site Geary Creek 06-10H
<b>Company:</b>	Denver Division- Colorado	<b>TVD Reference:</b>	RIG @ 5212.00ft (TBD)
<b>Project:</b>	DJ - Hereford Ranch	<b>MD Reference:</b>	RIG @ 5212.00ft (TBD)
<b>Site:</b>	Geary Creek 06-10H	<b>North Reference:</b>	True
<b>Well:</b>	Geary Creek 06-10H	<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
1,290.00	0.00	0.00	1,290.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9-5/8"</b>									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
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

# EOG Resources Inc

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Site Geary Creek 06-10H
<b>Company:</b>	Denver Division- Colorado	<b>TVD Reference:</b>	RIG @ 5212.00ft (TBD)
<b>Project:</b>	DJ - Hereford Ranch	<b>MD Reference:</b>	RIG @ 5212.00ft (TBD)
<b>Site:</b>	Geary Creek 06-10H	<b>North Reference:</b>	True
<b>Well:</b>	Geary Creek 06-10H	<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)
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
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
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,754.53	0.00	0.00	6,754.53	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	5.46	153.30	6,799.93	-1.93	0.97	2.16	12.00	12.00	0.00
6,900.00	17.46	153.30	6,897.76	-19.64	9.88	21.99	12.00	12.00	0.00
7,000.00	29.46	153.30	6,989.33	-55.14	27.73	61.72	12.00	12.00	0.00
7,100.00	41.46	153.30	7,070.64	-106.87	53.75	119.62	12.00	12.00	0.00
7,200.00	53.46	153.30	7,138.13	-172.57	86.79	193.16	12.00	12.00	0.00
7,300.00	65.46	153.30	7,188.86	-249.37	125.42	279.13	12.00	12.00	0.00
7,400.00	77.46	153.30	7,220.60	-333.91	167.94	373.76	12.00	12.00	0.00
7,500.00	89.46	153.30	7,231.98	-422.50	212.49	472.93	12.00	12.00	0.00
7,504.54	90.00	153.30	7,232.00	-426.56	214.53	477.47	11.99	11.99	0.00
7"									
7,600.00	90.00	153.30	7,232.00	-511.84	257.43	572.93	0.00	0.00	0.00
7,700.00	90.00	153.30	7,232.00	-601.18	302.36	672.93	0.00	0.00	0.00
7,800.00	90.00	153.30	7,232.00	-690.52	347.29	772.93	0.00	0.00	0.00
7,900.00	90.00	153.30	7,232.00	-779.85	392.22	872.93	0.00	0.00	0.00
8,000.00	90.00	153.30	7,232.00	-869.19	437.15	972.93	0.00	0.00	0.00
8,100.00	90.00	153.30	7,232.00	-958.53	482.08	1,072.93	0.00	0.00	0.00
8,200.00	90.00	153.30	7,232.00	-1,047.87	527.01	1,172.93	0.00	0.00	0.00
8,300.00	90.00	153.30	7,232.00	-1,137.20	571.94	1,272.93	0.00	0.00	0.00
8,400.00	90.00	153.30	7,232.00	-1,226.54	616.88	1,372.93	0.00	0.00	0.00
8,500.00	90.00	153.30	7,232.00	-1,315.88	661.81	1,472.93	0.00	0.00	0.00
8,600.00	90.00	153.30	7,232.00	-1,405.22	706.74	1,572.93	0.00	0.00	0.00
8,700.00	90.00	153.30	7,232.00	-1,494.55	751.67	1,672.93	0.00	0.00	0.00
8,800.00	90.00	153.30	7,232.00	-1,583.89	796.60	1,772.93	0.00	0.00	0.00
8,900.00	90.00	153.30	7,232.00	-1,673.23	841.53	1,872.93	0.00	0.00	0.00
9,000.00	90.00	153.30	7,232.00	-1,762.57	886.46	1,972.93	0.00	0.00	0.00
9,100.00	90.00	153.30	7,232.00	-1,851.90	931.39	2,072.93	0.00	0.00	0.00
9,200.00	90.00	153.30	7,232.00	-1,941.24	976.33	2,172.93	0.00	0.00	0.00
9,300.00	90.00	153.30	7,232.00	-2,030.58	1,021.26	2,272.93	0.00	0.00	0.00
9,400.00	90.00	153.30	7,232.00	-2,119.91	1,066.19	2,372.93	0.00	0.00	0.00
9,500.00	90.00	153.30	7,232.00	-2,209.25	1,111.12	2,472.93	0.00	0.00	0.00
9,600.00	90.00	153.30	7,232.00	-2,298.59	1,156.05	2,572.93	0.00	0.00	0.00
9,700.00	90.00	153.30	7,232.00	-2,387.93	1,200.98	2,672.93	0.00	0.00	0.00
9,800.00	90.00	153.30	7,232.00	-2,477.26	1,245.91	2,772.93	0.00	0.00	0.00
9,900.00	90.00	153.30	7,232.00	-2,566.60	1,290.85	2,872.93	0.00	0.00	0.00
10,000.00	90.00	153.30	7,232.00	-2,655.94	1,335.78	2,972.93	0.00	0.00	0.00

# EOG Resources Inc

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Site Geary Creek 06-10H
<b>Company:</b>	Denver Division- Colorado	<b>TVD Reference:</b>	RIG @ 5212.00ft (TBD)
<b>Project:</b>	DJ - Hereford Ranch	<b>MD Reference:</b>	RIG @ 5212.00ft (TBD)
<b>Site:</b>	Geary Creek 06-10H	<b>North Reference:</b>	True
<b>Well:</b>	Geary Creek 06-10H	<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)
10,100.00	90.00	153.30	7,232.00	-2,745.28	1,380.71	3,072.93	0.00	0.00	0.00
10,200.00	90.00	153.30	7,232.00	-2,834.61	1,425.64	3,172.93	0.00	0.00	0.00
10,300.00	90.00	153.30	7,232.00	-2,923.95	1,470.57	3,272.93	0.00	0.00	0.00
10,400.00	90.00	153.30	7,232.00	-3,013.29	1,515.50	3,372.93	0.00	0.00	0.00
10,500.00	90.00	153.30	7,232.00	-3,102.63	1,560.43	3,472.93	0.00	0.00	0.00
10,600.00	90.00	153.30	7,232.00	-3,191.96	1,605.36	3,572.93	0.00	0.00	0.00
10,700.00	90.00	153.30	7,232.00	-3,281.30	1,650.30	3,672.93	0.00	0.00	0.00
10,800.00	90.00	153.30	7,232.00	-3,370.64	1,695.23	3,772.93	0.00	0.00	0.00
10,900.00	90.00	153.30	7,232.00	-3,459.98	1,740.16	3,872.93	0.00	0.00	0.00
11,000.00	90.00	153.30	7,232.00	-3,549.31	1,785.09	3,972.93	0.00	0.00	0.00
11,100.00	90.00	153.30	7,232.00	-3,638.65	1,830.02	4,072.93	0.00	0.00	0.00
11,200.00	90.00	153.30	7,232.00	-3,727.99	1,874.95	4,172.93	0.00	0.00	0.00
11,300.00	90.00	153.30	7,232.00	-3,817.33	1,919.88	4,272.93	0.00	0.00	0.00
11,400.00	90.00	153.30	7,232.00	-3,906.66	1,964.81	4,372.93	0.00	0.00	0.00
11,500.00	90.00	153.30	7,232.00	-3,996.00	2,009.75	4,472.93	0.00	0.00	0.00
11,571.76	90.00	153.30	7,232.00	-4,060.11	2,041.99	4,544.69	0.00	0.00	0.00
Geary Creek 06-10H (BHL)									

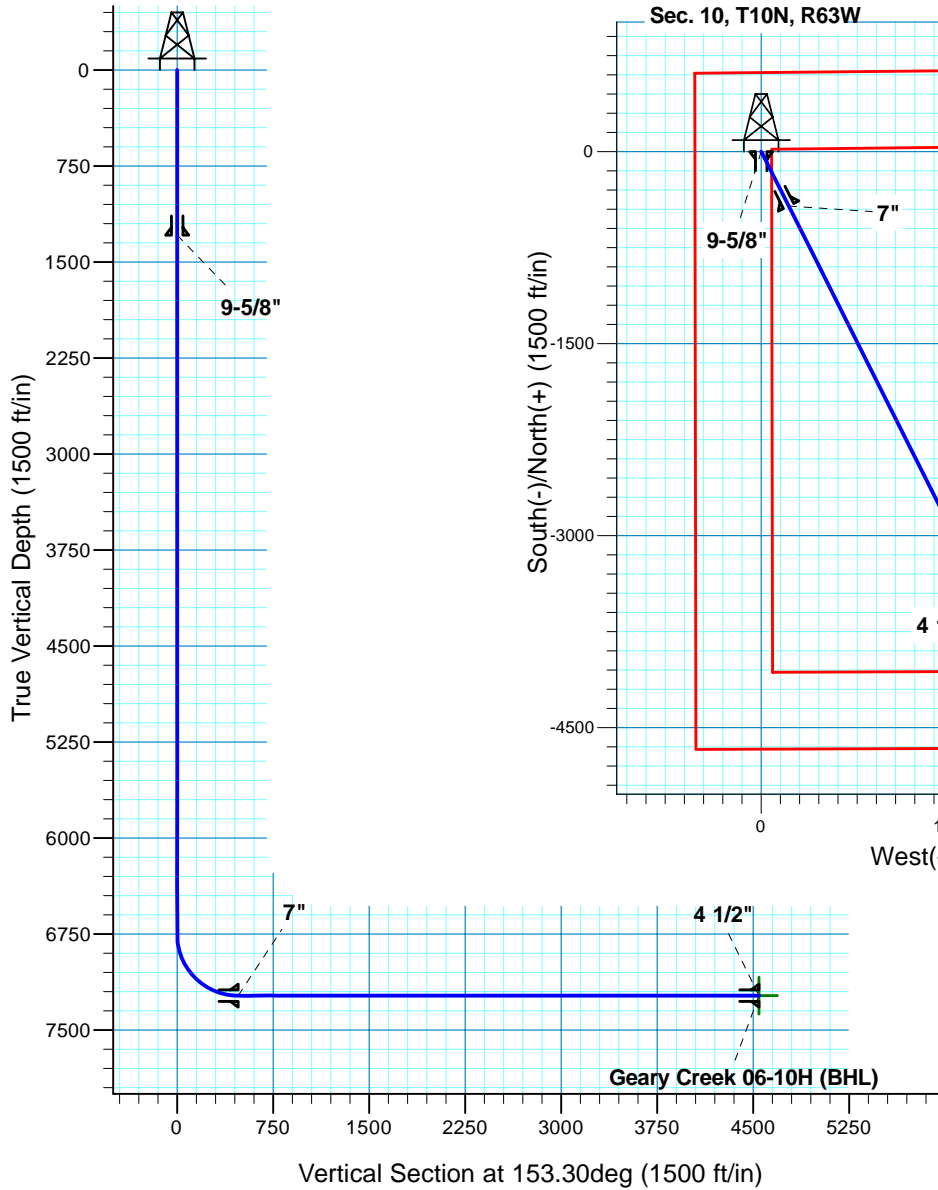
Targets									
Target Name	- hit/miss target	Dip Angle (deg)	Dip Dir. (deg)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude Longitude
Geary Creek 06-10H (	- plan hits target center	0.00	0.00	7,232.00	-4,060.11	2,041.99	552,307.21	2,298,925.51	40° 50' 40.160 N 104° 25' 10.621 W
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,290.00	1,290.00	9-5/8"	9-5/8	13-1/2	
7,504.54	7,232.00	7"	7	8-3/4	
11,571.76	7,232.00	4 1/2"	4-1/2	6	

**Geary Creek 06-10H**  
**Section 10 T10N R63W**  
**Weld County, CO**

Surface Location

NAD 1927 (NADCON CONUS) Colorado North 501  
Ground Elevation: 5190.00 RIG @ 5212.00ft (TBD)  
Northing Easting Latitude Longitude  
556342.30 2296834.55 40° 51' 20.279 N 104° 25' 37.189 W



**T M**  
Azimuths to True North  
Magnetic North: 8.71°  
Magnetic Field  
Strength: 53450.4snT  
Dip Angle: 67.49°  
Date: 3/8/2011  
Model: IGRF200510

Project: DJ - Hereford Ranch  
Site: Geary Creek 06-10H  
Well: Geary Creek 06-10H  
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	6754.53	0.00	0.00	6754.53	0.00	0.00	0.00	0.00	0.00	
3	7504.54	90.00	153.30	7232.00	-426.56	214.53	12.00	153.30	477.47	
4	11571.76	90.00	153.30	7232.00	-4060.11	2041.99	0.00	0.00	4544.69	Geary Creek 06-10H (BHL)

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
Geary Creek 06-10H (BHL)	7232.00	-4060.11	2041.99	552307.21	2298925.51	40° 50' 40.160 N	104° 25' 10.621 W	