

Denver Division- Colorado

DJ - Hereford Ranch

Critter Creek 22-27H

Critter Creek 22-27H

Original Wellbore

Plan: APD Directional Plan

Standard Planning Report

10 March, 2010

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Critter Creek 22-27H
Company:	Denver Division- Colorado	TVD Reference:	Rig @ 5244.00ft
Project:	DJ - Hereford Ranch	MD Reference:	Rig @ 5244.00ft
Site:	Critter Creek 22-27H	North Reference:	True
Well:	Critter Creek 22-27H	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	Critter Creek 22-27H		
Site Position:		Northing:	572,256.84 ft
From:	Lat/Long	Easting:	2,296,896.06 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	40° 53' 57.509 N
		Longitude:	104° 25' 33.881 W
		Grid Convergence:	0.69 deg

Well	Critter Creek 22-27H		
Well Position	+N/-S	0.00 ft	Northing: 572,256.84 ft
	+E/-W	0.00 ft	Easting: 2,296,896.06 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	40° 53' 57.509 N
		Longitude:	104° 25' 33.881 W
		Ground Level:	5,219.00 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (deg)	Dip Angle (deg)	Field Strength (nT)
	IGRF200510	12/31/2009	8.88	67.57	53,595

Design	APD Directional Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (deg)
	0.00	0.00	0.00	134.53

Plan Sections										
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	
6,746.53	0.00	0.00	6,746.53	0.00	0.00	0.00	0.00	0.00	0.00	
7,496.54	90.00	134.53	7,224.00	-334.87	340.35	12.00	12.00	0.00	134.53	
12,933.55	90.00	134.53	7,224.00	-4,148.06	4,216.00	0.00	0.00	0.00	0.00	Critter Creek 22-27H

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Well:	Critter Creek 22-27H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	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
1,320.00	0.00	0.00	1,320.00	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

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Wellbore:	Original Wellbore		
Design:	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
6,746.53	0.00	0.00	6,746.53	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	6.42	134.53	6,799.89	-2.10	2.13	2.99	12.00	12.00	0.00
6,900.00	18.42	134.53	6,897.37	-17.15	17.43	24.45	12.00	12.00	0.00
7,000.00	30.42	134.53	6,988.26	-46.09	46.84	65.71	12.00	12.00	0.00
7,100.00	42.42	134.53	7,068.59	-87.64	89.08	124.97	12.00	12.00	0.00
7,200.00	54.42	134.53	7,134.84	-140.01	142.30	199.63	12.00	12.00	0.00
7,300.00	66.42	134.53	7,184.12	-200.89	204.18	286.43	12.00	12.00	0.00
7,400.00	78.42	134.53	7,214.27	-267.62	272.01	381.59	12.00	12.00	0.00
7,496.54	90.00	134.53	7,224.00	-334.87	340.35	477.47	12.00	12.00	0.00
7"									
7,500.00	90.00	134.53	7,224.00	-337.30	342.82	480.93	0.00	0.00	0.00
7,600.00	90.00	134.53	7,224.00	-407.43	414.10	580.93	0.00	0.00	0.00
7,700.00	90.00	134.53	7,224.00	-477.56	485.39	680.93	0.00	0.00	0.00
7,800.00	90.00	134.53	7,224.00	-547.70	556.67	780.93	0.00	0.00	0.00
7,900.00	90.00	134.53	7,224.00	-617.83	627.95	880.93	0.00	0.00	0.00
8,000.00	90.00	134.53	7,224.00	-687.97	699.23	980.93	0.00	0.00	0.00
8,100.00	90.00	134.53	7,224.00	-758.10	770.52	1,080.93	0.00	0.00	0.00
8,200.00	90.00	134.53	7,224.00	-828.23	841.80	1,180.93	0.00	0.00	0.00
8,300.00	90.00	134.53	7,224.00	-898.37	913.08	1,280.93	0.00	0.00	0.00
8,400.00	90.00	134.53	7,224.00	-968.50	984.36	1,380.93	0.00	0.00	0.00
8,500.00	90.00	134.53	7,224.00	-1,038.64	1,055.65	1,480.93	0.00	0.00	0.00
8,600.00	90.00	134.53	7,224.00	-1,108.77	1,126.93	1,580.93	0.00	0.00	0.00
8,700.00	90.00	134.53	7,224.00	-1,178.90	1,198.21	1,680.93	0.00	0.00	0.00
8,800.00	90.00	134.53	7,224.00	-1,249.04	1,269.50	1,780.93	0.00	0.00	0.00
8,900.00	90.00	134.53	7,224.00	-1,319.17	1,340.78	1,880.93	0.00	0.00	0.00
9,000.00	90.00	134.53	7,224.00	-1,389.31	1,412.06	1,980.93	0.00	0.00	0.00
9,100.00	90.00	134.53	7,224.00	-1,459.44	1,483.34	2,080.93	0.00	0.00	0.00
9,200.00	90.00	134.53	7,224.00	-1,529.57	1,554.63	2,180.93	0.00	0.00	0.00
9,300.00	90.00	134.53	7,224.00	-1,599.71	1,625.91	2,280.93	0.00	0.00	0.00
9,400.00	90.00	134.53	7,224.00	-1,669.84	1,697.19	2,380.93	0.00	0.00	0.00
9,500.00	90.00	134.53	7,224.00	-1,739.97	1,768.47	2,480.93	0.00	0.00	0.00
9,600.00	90.00	134.53	7,224.00	-1,810.11	1,839.76	2,580.93	0.00	0.00	0.00
9,700.00	90.00	134.53	7,224.00	-1,880.24	1,911.04	2,680.93	0.00	0.00	0.00
9,800.00	90.00	134.53	7,224.00	-1,950.38	1,982.32	2,780.93	0.00	0.00	0.00
9,900.00	90.00	134.53	7,224.00	-2,020.51	2,053.61	2,880.93	0.00	0.00	0.00
10,000.00	90.00	134.53	7,224.00	-2,090.64	2,124.89	2,980.93	0.00	0.00	0.00

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Project:	DJ - Hereford Ranch	MD Reference:	Rig @ 5244.00ft
Site:	Critter Creek 22-27H	North Reference:	True
Well:	Critter Creek 22-27H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	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	134.53	7,224.00	-2,160.78	2,196.17	3,080.93	0.00	0.00	0.00
10,200.00	90.00	134.53	7,224.00	-2,230.91	2,267.45	3,180.93	0.00	0.00	0.00
10,300.00	90.00	134.53	7,224.00	-2,301.05	2,338.74	3,280.93	0.00	0.00	0.00
10,400.00	90.00	134.53	7,224.00	-2,371.18	2,410.02	3,380.93	0.00	0.00	0.00
10,500.00	90.00	134.53	7,224.00	-2,441.31	2,481.30	3,480.93	0.00	0.00	0.00
10,600.00	90.00	134.53	7,224.00	-2,511.45	2,552.58	3,580.93	0.00	0.00	0.00
10,700.00	90.00	134.53	7,224.00	-2,581.58	2,623.87	3,680.93	0.00	0.00	0.00
10,800.00	90.00	134.53	7,224.00	-2,651.72	2,695.15	3,780.93	0.00	0.00	0.00
10,900.00	90.00	134.53	7,224.00	-2,721.85	2,766.43	3,880.93	0.00	0.00	0.00
11,000.00	90.00	134.53	7,224.00	-2,791.98	2,837.72	3,980.93	0.00	0.00	0.00
11,100.00	90.00	134.53	7,224.00	-2,862.12	2,909.00	4,080.93	0.00	0.00	0.00
11,200.00	90.00	134.53	7,224.00	-2,932.25	2,980.28	4,180.93	0.00	0.00	0.00
11,300.00	90.00	134.53	7,224.00	-3,002.39	3,051.56	4,280.93	0.00	0.00	0.00
11,400.00	90.00	134.53	7,224.00	-3,072.52	3,122.85	4,380.93	0.00	0.00	0.00
11,500.00	90.00	134.53	7,224.00	-3,142.65	3,194.13	4,480.93	0.00	0.00	0.00
11,600.00	90.00	134.53	7,224.00	-3,212.79	3,265.41	4,580.93	0.00	0.00	0.00
11,700.00	90.00	134.53	7,224.00	-3,282.92	3,336.69	4,680.93	0.00	0.00	0.00
11,800.00	90.00	134.53	7,224.00	-3,353.06	3,407.98	4,780.93	0.00	0.00	0.00
11,900.00	90.00	134.53	7,224.00	-3,423.19	3,479.26	4,880.93	0.00	0.00	0.00
12,000.00	90.00	134.53	7,224.00	-3,493.32	3,550.54	4,980.93	0.00	0.00	0.00
12,100.00	90.00	134.53	7,224.00	-3,563.46	3,621.82	5,080.93	0.00	0.00	0.00
12,200.00	90.00	134.53	7,224.00	-3,633.59	3,693.11	5,180.93	0.00	0.00	0.00
12,300.00	90.00	134.53	7,224.00	-3,703.73	3,764.39	5,280.93	0.00	0.00	0.00
12,400.00	90.00	134.53	7,224.00	-3,773.86	3,835.67	5,380.93	0.00	0.00	0.00
12,500.00	90.00	134.53	7,224.00	-3,843.99	3,906.96	5,480.93	0.00	0.00	0.00
12,600.00	90.00	134.53	7,224.00	-3,914.13	3,978.24	5,580.93	0.00	0.00	0.00
12,700.00	90.00	134.53	7,224.00	-3,984.26	4,049.52	5,680.93	0.00	0.00	0.00
12,800.00	90.00	134.53	7,224.00	-4,054.40	4,120.80	5,780.93	0.00	0.00	0.00
12,900.00	90.00	134.53	7,224.00	-4,124.53	4,192.09	5,880.93	0.00	0.00	0.00
12,933.55	90.00	134.53	7,224.00	-4,148.06	4,216.00	5,914.48	0.00	0.00	0.00
4 1/2" - Critter Creek 22-27H (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
Critter Creek 22-27H (- plan hits target center	0.00	0.00	7,224.00	-4,148.06	4,216.00	568,160.15	2,301,161.98	40° 53' 16.519 N 104° 24' 38.992 W
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,320.00	1,320.00	9 5/8"	9-5/8	12-1/4	
7,496.54	7,224.00	7"	7	8-3/4	
12,933.55	7,224.00	4 1/2"	4-1/2	6-1/4	

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Critter Creek 22-27H
Company:	Denver Division- Colorado	TVD Reference:	Rig @ 5244.00ft
Project:	DJ - Hereford Ranch	MD Reference:	Rig @ 5244.00ft
Site:	Critter Creek 22-27H	North Reference:	True
Well:	Critter Creek 22-27H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Directional Plan		