

Denver Division- Colorado

DJ - Hereford Ranch

Critter Creek 34-16H

Critter Creek 34-16H

Original Wellbore

Plan: APD Directional Plan

Standard Planning Report

02 February, 2011

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Critter Creek 34-16H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5297.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5297.00ft (TBD)
Site:	Critter Creek 34-16H	North Reference:	True
Well:	Critter Creek 34-16H	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 34-16H		
Site Position:		Northing:	582,969.55 ft
From:	Lat/Long	Easting:	2,294,551.52 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	40° 55' 43.630 N
		Longitude:	104° 26' 2.731 W
		Grid Convergence:	0.69 deg

Well	Critter Creek 34-16H		
Well Position	+N/-S	0.00 ft	Northing: 582,969.55 ft
	+E/-W	0.00 ft	Easting: 2,294,551.52 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	40° 55' 43.630 N
		Longitude:	104° 26' 2.731 W
		Ground Level:	5,275.00 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (deg)	Dip Angle (deg)	Field Strength (nT)
	IGRF200510	2/1/2011	8.74	67.55	53,497

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	139.69

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	
6,906.53	0.00	0.00	6,906.53	0.00	0.00	0.00	0.00	0.00	0.00	
7,656.54	90.00	139.69	7,384.00	-364.11	308.86	12.00	12.00	0.00	139.69	
12,890.49	90.00	139.69	7,384.00	-4,355.51	3,694.57	0.00	0.00	0.00	0.00	Critter Creek 34-16H

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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
1,375.00	0.00	0.00	1,375.00	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
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,906.53	0.00	0.00	6,906.53	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	11.22	139.69	6,999.40	-6.95	5.90	9.12	12.00	12.00	0.00
7,100.00	23.22	139.69	7,094.75	-29.48	25.01	38.66	12.00	12.00	0.00
7,200.00	35.22	139.69	7,181.87	-66.64	56.53	87.38	12.00	12.00	0.00
7,300.00	47.22	139.69	7,256.95	-116.79	99.07	153.15	12.00	12.00	0.00
7,400.00	59.22	139.69	7,316.73	-177.76	150.78	233.10	12.00	12.00	0.00
7,500.00	71.22	139.69	7,358.57	-246.87	209.41	323.72	12.00	12.00	0.00
7,600.00	83.22	139.69	7,380.66	-321.10	272.37	421.06	12.00	12.00	0.00
7,656.54	90.00	139.69	7,384.00	-364.12	308.86	477.47	12.00	12.00	0.00
7"									
7,700.00	90.00	139.69	7,384.00	-397.26	336.98	520.93	0.00	0.00	0.00
7,800.00	90.00	139.69	7,384.00	-473.52	401.66	620.93	0.00	0.00	0.00
7,900.00	90.00	139.69	7,384.00	-549.78	466.35	720.93	0.00	0.00	0.00
8,000.00	90.00	139.69	7,384.00	-626.04	531.04	820.93	0.00	0.00	0.00
8,100.00	90.00	139.69	7,384.00	-702.30	595.73	920.93	0.00	0.00	0.00
8,200.00	90.00	139.69	7,384.00	-778.56	660.41	1,020.93	0.00	0.00	0.00
8,300.00	90.00	139.69	7,384.00	-854.82	725.10	1,120.93	0.00	0.00	0.00
8,400.00	90.00	139.69	7,384.00	-931.08	789.79	1,220.93	0.00	0.00	0.00
8,500.00	90.00	139.69	7,384.00	-1,007.34	854.48	1,320.93	0.00	0.00	0.00
8,600.00	90.00	139.69	7,384.00	-1,083.60	919.16	1,420.93	0.00	0.00	0.00
8,700.00	90.00	139.69	7,384.00	-1,159.86	983.85	1,520.93	0.00	0.00	0.00
8,800.00	90.00	139.69	7,384.00	-1,236.12	1,048.54	1,620.93	0.00	0.00	0.00
8,900.00	90.00	139.69	7,384.00	-1,312.38	1,113.23	1,720.93	0.00	0.00	0.00
9,000.00	90.00	139.69	7,384.00	-1,388.64	1,177.91	1,820.93	0.00	0.00	0.00
9,100.00	90.00	139.69	7,384.00	-1,464.89	1,242.60	1,920.93	0.00	0.00	0.00
9,200.00	90.00	139.69	7,384.00	-1,541.15	1,307.29	2,020.93	0.00	0.00	0.00
9,300.00	90.00	139.69	7,384.00	-1,617.41	1,371.98	2,120.93	0.00	0.00	0.00
9,400.00	90.00	139.69	7,384.00	-1,693.67	1,436.66	2,220.93	0.00	0.00	0.00
9,500.00	90.00	139.69	7,384.00	-1,769.93	1,501.35	2,320.93	0.00	0.00	0.00
9,600.00	90.00	139.69	7,384.00	-1,846.19	1,566.04	2,420.93	0.00	0.00	0.00
9,700.00	90.00	139.69	7,384.00	-1,922.45	1,630.72	2,520.93	0.00	0.00	0.00
9,800.00	90.00	139.69	7,384.00	-1,998.71	1,695.41	2,620.93	0.00	0.00	0.00
9,900.00	90.00	139.69	7,384.00	-2,074.97	1,760.10	2,720.93	0.00	0.00	0.00
10,000.00	90.00	139.69	7,384.00	-2,151.23	1,824.79	2,820.93	0.00	0.00	0.00

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Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5297.00ft (TBD)
Site:	Critter Creek 34-16H	North Reference:	True
Well:	Critter Creek 34-16H	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	139.69	7,384.00	-2,227.49	1,889.47	2,920.93	0.00	0.00	0.00
10,200.00	90.00	139.69	7,384.00	-2,303.75	1,954.16	3,020.93	0.00	0.00	0.00
10,300.00	90.00	139.69	7,384.00	-2,380.01	2,018.85	3,120.93	0.00	0.00	0.00
10,400.00	90.00	139.69	7,384.00	-2,456.27	2,083.54	3,220.93	0.00	0.00	0.00
10,500.00	90.00	139.69	7,384.00	-2,532.53	2,148.22	3,320.93	0.00	0.00	0.00
10,600.00	90.00	139.69	7,384.00	-2,608.79	2,212.91	3,420.93	0.00	0.00	0.00
10,700.00	90.00	139.69	7,384.00	-2,685.05	2,277.60	3,520.93	0.00	0.00	0.00
10,800.00	90.00	139.69	7,384.00	-2,761.31	2,342.29	3,620.93	0.00	0.00	0.00
10,900.00	90.00	139.69	7,384.00	-2,837.57	2,406.97	3,720.93	0.00	0.00	0.00
11,000.00	90.00	139.69	7,384.00	-2,913.83	2,471.66	3,820.93	0.00	0.00	0.00
11,100.00	90.00	139.69	7,384.00	-2,990.09	2,536.35	3,920.93	0.00	0.00	0.00
11,200.00	90.00	139.69	7,384.00	-3,066.35	2,601.04	4,020.93	0.00	0.00	0.00
11,300.00	90.00	139.69	7,384.00	-3,142.61	2,665.72	4,120.93	0.00	0.00	0.00
11,400.00	90.00	139.69	7,384.00	-3,218.87	2,730.41	4,220.93	0.00	0.00	0.00
11,500.00	90.00	139.69	7,384.00	-3,295.13	2,795.10	4,320.93	0.00	0.00	0.00
11,600.00	90.00	139.69	7,384.00	-3,371.39	2,859.79	4,420.93	0.00	0.00	0.00
11,700.00	90.00	139.69	7,384.00	-3,447.65	2,924.47	4,520.93	0.00	0.00	0.00
11,800.00	90.00	139.69	7,384.00	-3,523.91	2,989.16	4,620.93	0.00	0.00	0.00
11,900.00	90.00	139.69	7,384.00	-3,600.17	3,053.85	4,720.93	0.00	0.00	0.00
12,000.00	90.00	139.69	7,384.00	-3,676.43	3,118.54	4,820.93	0.00	0.00	0.00
12,100.00	90.00	139.69	7,384.00	-3,752.68	3,183.22	4,920.93	0.00	0.00	0.00
12,200.00	90.00	139.69	7,384.00	-3,828.94	3,247.91	5,020.93	0.00	0.00	0.00
12,300.00	90.00	139.69	7,384.00	-3,905.20	3,312.60	5,120.93	0.00	0.00	0.00
12,400.00	90.00	139.69	7,384.00	-3,981.46	3,377.29	5,220.93	0.00	0.00	0.00
12,500.00	90.00	139.69	7,384.00	-4,057.72	3,441.97	5,320.93	0.00	0.00	0.00
12,600.00	90.00	139.69	7,384.00	-4,133.98	3,506.66	5,420.93	0.00	0.00	0.00
12,700.00	90.00	139.69	7,384.00	-4,210.24	3,571.35	5,520.93	0.00	0.00	0.00
12,800.00	90.00	139.69	7,384.00	-4,286.50	3,636.03	5,620.93	0.00	0.00	0.00
12,890.49	90.00	139.69	7,384.00	-4,355.51	3,694.57	5,711.42	0.00	0.00	0.00
4 1/2" - Critter Creek 34-16H (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
- Shape									
Critter Creek 34-16H (0.00	0.00	7,384.00	-4,355.51	3,694.57	578,658.77	2,298,298.17	40° 55' 0.592 N	104° 25' 14.610 W
- plan hits target center									
- Point									

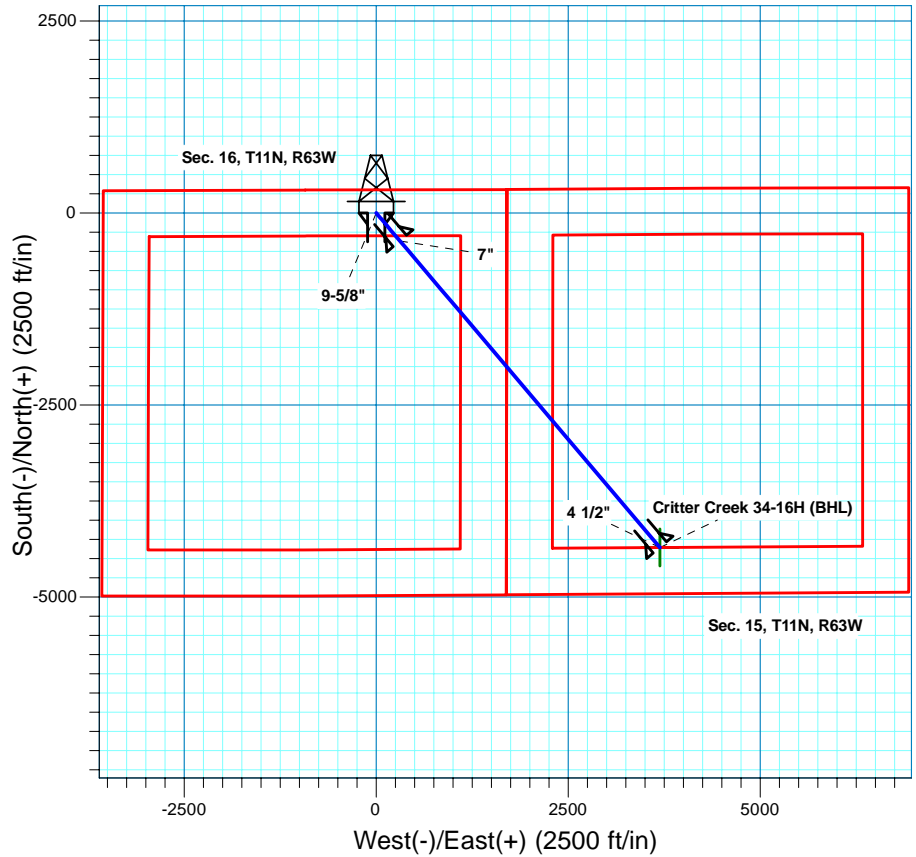
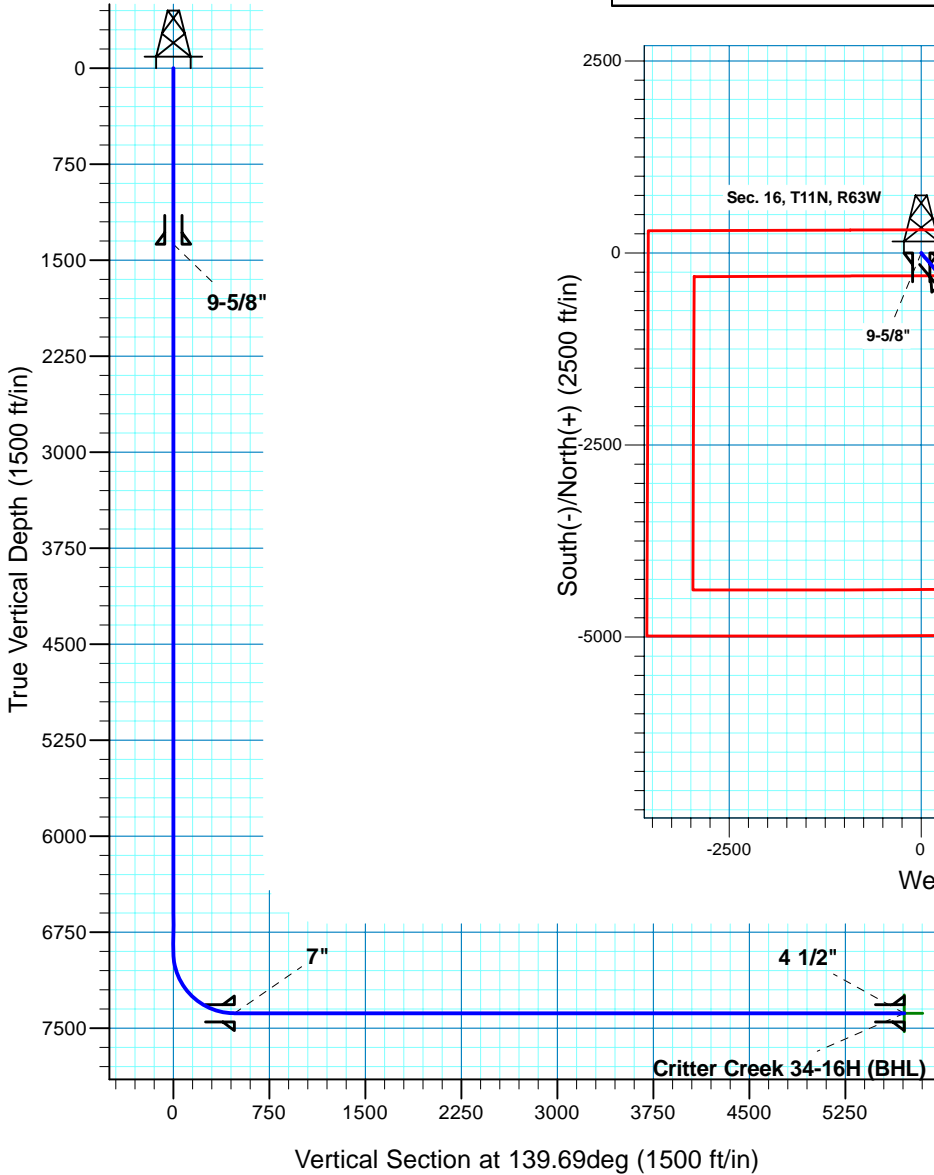
Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
1,375.00	1,375.00	9-5/8"	9-5/8	13-1/2
7,656.54	7,384.00	7"	7	8-3/4
12,890.49	7,384.00	4 1/2"	4-1/2	6-1/4

Critter Creek 34-16H
Section 16 T11N R63W
Weld County, CO

Surface Location

NAD 1927 (NADCON CONUS) Colorado North 501
Ground Elevation: 5275.00 RIG @ 5297.00ft (TBD)
Northing Easting Latitude Longitude
582969.55 2294551.52 40° 55' 43.630 N 104° 26' 2.731 W



T M
Azimuths to True North
Magnetic North: 8.74°
Magnetic Field
Strength: 53496.6nT
Dip Angle: 67.55°
Date: 2/1/2011
Model: IGRF200510

Project: DJ - Hereford Ranch
Site: Critter Creek 34-16H
Well: Critter Creek 34-16H
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	6906.53	0.00	0.00	6906.53	0.00	0.00	0.00	0.00	0.00	
3	7656.54	90.00	139.69	7384.00	-364.11	308.86	12.00	139.69	477.47	
4	12890.49	90.00	139.69	7384.00	-4355.51	3694.57	0.00	0.00	5711.42	Critter Creek 34-16H (BHL)

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
Critter Creek 34-16H (BHL)	7384.00	-4355.51	3694.57	578658.77	2298298.17	40° 55' 0.592 N	104° 25' 14.610 W	