



Denver Division- Colorado

DJ - Hereford Ranch

Longhorn B5-36H

Longhorn B5-36H

Original Wellbore

Plan: APD

Standard Planning Report

29 April, 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well Longhorn B5-36H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5364.0ft (SST 56)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5364.0ft (SST 56)
Site:	Longhorn B5-36H	North Reference:	True
Well:	Longhorn B5-36H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD		

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		Longhorn B5-36H			
Site Position:		Northing:	594,716.42 ft	Latitude:	40° 57' 37.919 N
From:	Lat/Long	Easting:	2,309,075.33 ft	Longitude:	104° 22' 51.611 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.72 °

Well	Longhorn B5-36H					
Well Position	+N/-S	0.0 ft	Northing:	594,716.42 ft	Latitude:	40° 57' 37.919 N
	+E/-W	0.0 ft	Easting:	2,309,075.33 ft	Longitude:	104° 22' 51.611 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,343.0 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	3/29/2010	8.83	67.62	53,606

Design	APD			
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	354.85

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,550.0	0.50	65.00	1,550.0	0.1	0.2	1.00	1.00	0.00	65.00	
6,870.1	0.50	65.00	6,869.9	19.7	42.3	0.00	0.00	0.00	0.00	
7,618.8	90.00	354.18	7,346.0	495.1	-2.3	12.00	11.96	-9.46	-70.82	
11,233.3	90.00	354.18	7,346.0	4,091.0	-369.0	0.00	0.00	0.00	0.00	Longhorn B5-36H (Bt

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Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5364.0ft (SST 56)
Site:	Longhorn B5-36H	North Reference:	True
Well:	Longhorn B5-36H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,425.0	0.00	0.00	1,425.0	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8"									
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,550.0	0.50	65.00	1,550.0	0.1	0.2	0.1	1.00	1.00	0.00
1,600.0	0.50	65.00	1,600.0	0.3	0.6	0.2	0.00	0.00	0.00
1,700.0	0.50	65.00	1,700.0	0.6	1.4	0.5	0.00	0.00	0.00
1,800.0	0.50	65.00	1,800.0	1.0	2.2	0.8	0.00	0.00	0.00
1,900.0	0.50	65.00	1,900.0	1.4	3.0	1.1	0.00	0.00	0.00
2,000.0	0.50	65.00	2,000.0	1.8	3.8	1.4	0.00	0.00	0.00
2,100.0	0.50	65.00	2,100.0	2.1	4.5	1.7	0.00	0.00	0.00
2,200.0	0.50	65.00	2,200.0	2.5	5.3	2.0	0.00	0.00	0.00
2,300.0	0.50	65.00	2,300.0	2.9	6.1	2.3	0.00	0.00	0.00
2,400.0	0.50	65.00	2,400.0	3.2	6.9	2.6	0.00	0.00	0.00
2,500.0	0.50	65.00	2,500.0	3.6	7.7	2.9	0.00	0.00	0.00
2,600.0	0.50	65.00	2,600.0	4.0	8.5	3.2	0.00	0.00	0.00
2,700.0	0.50	65.00	2,700.0	4.3	9.3	3.5	0.00	0.00	0.00
2,800.0	0.50	65.00	2,800.0	4.7	10.1	3.8	0.00	0.00	0.00
2,900.0	0.50	65.00	2,899.9	5.1	10.9	4.1	0.00	0.00	0.00
3,000.0	0.50	65.00	2,999.9	5.4	11.7	4.4	0.00	0.00	0.00
3,100.0	0.50	65.00	3,099.9	5.8	12.5	4.7	0.00	0.00	0.00
3,200.0	0.50	65.00	3,199.9	6.2	13.2	5.0	0.00	0.00	0.00
3,300.0	0.50	65.00	3,299.9	6.5	14.0	5.3	0.00	0.00	0.00
3,400.0	0.50	65.00	3,399.9	6.9	14.8	5.6	0.00	0.00	0.00
3,500.0	0.50	65.00	3,499.9	7.3	15.6	5.9	0.00	0.00	0.00
3,600.0	0.50	65.00	3,599.9	7.7	16.4	6.1	0.00	0.00	0.00
3,700.0	0.50	65.00	3,699.9	8.0	17.2	6.4	0.00	0.00	0.00
3,800.0	0.50	65.00	3,799.9	8.4	18.0	6.7	0.00	0.00	0.00
3,900.0	0.50	65.00	3,899.9	8.8	18.8	7.0	0.00	0.00	0.00
4,000.0	0.50	65.00	3,999.9	9.1	19.6	7.3	0.00	0.00	0.00
4,100.0	0.50	65.00	4,099.9	9.5	20.4	7.6	0.00	0.00	0.00
4,200.0	0.50	65.00	4,199.9	9.9	21.2	7.9	0.00	0.00	0.00
4,300.0	0.50	65.00	4,299.9	10.2	21.9	8.2	0.00	0.00	0.00
4,400.0	0.50	65.00	4,399.9	10.6	22.7	8.5	0.00	0.00	0.00
4,500.0	0.50	65.00	4,499.9	11.0	23.5	8.8	0.00	0.00	0.00
4,600.0	0.50	65.00	4,599.9	11.3	24.3	9.1	0.00	0.00	0.00
4,700.0	0.50	65.00	4,699.9	11.7	25.1	9.4	0.00	0.00	0.00
4,800.0	0.50	65.00	4,799.9	12.1	25.9	9.7	0.00	0.00	0.00
4,900.0	0.50	65.00	4,899.9	12.4	26.7	10.0	0.00	0.00	0.00
5,000.0	0.50	65.00	4,999.9	12.8	27.5	10.3	0.00	0.00	0.00

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Well:	Longhorn B5-36H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,100.0	0.50	65.00	5,099.9	13.2	28.3	10.6	0.00	0.00	0.00
5,200.0	0.50	65.00	5,199.9	13.6	29.1	10.9	0.00	0.00	0.00
5,300.0	0.50	65.00	5,299.9	13.9	29.9	11.2	0.00	0.00	0.00
5,400.0	0.50	65.00	5,399.9	14.3	30.6	11.5	0.00	0.00	0.00
5,500.0	0.50	65.00	5,499.8	14.7	31.4	11.8	0.00	0.00	0.00
5,600.0	0.50	65.00	5,599.8	15.0	32.2	12.1	0.00	0.00	0.00
5,700.0	0.50	65.00	5,699.8	15.4	33.0	12.4	0.00	0.00	0.00
5,800.0	0.50	65.00	5,799.8	15.8	33.8	12.7	0.00	0.00	0.00
5,900.0	0.50	65.00	5,899.8	16.1	34.6	13.0	0.00	0.00	0.00
6,000.0	0.50	65.00	5,999.8	16.5	35.4	13.3	0.00	0.00	0.00
6,100.0	0.50	65.00	6,099.8	16.9	36.2	13.6	0.00	0.00	0.00
6,200.0	0.50	65.00	6,199.8	17.2	37.0	13.9	0.00	0.00	0.00
6,300.0	0.50	65.00	6,299.8	17.6	37.8	14.1	0.00	0.00	0.00
6,400.0	0.50	65.00	6,399.8	18.0	38.6	14.4	0.00	0.00	0.00
6,500.0	0.50	65.00	6,499.8	18.3	39.3	14.7	0.00	0.00	0.00
6,600.0	0.50	65.00	6,599.8	18.7	40.1	15.0	0.00	0.00	0.00
6,700.0	0.50	65.00	6,699.8	19.1	40.9	15.3	0.00	0.00	0.00
6,800.0	0.50	65.00	6,799.8	19.5	41.7	15.6	0.00	0.00	0.00
6,870.1	0.50	65.00	6,869.9	19.7	42.3	15.8	0.00	0.00	0.00
6,900.0	3.78	1.35	6,899.8	20.8	42.4	16.9	12.00	10.98	-213.05
7,000.0	15.76	355.85	6,998.1	37.7	41.5	33.8	12.00	11.98	-5.49
7,100.0	27.75	355.07	7,090.9	74.5	38.5	70.8	12.00	12.00	-0.78
7,200.0	39.75	354.75	7,173.8	129.8	33.6	126.2	12.00	12.00	-0.33
7,300.0	51.75	354.55	7,243.5	201.0	26.9	197.7	12.00	12.00	-0.20
7,400.0	63.75	354.41	7,296.8	285.0	18.8	282.1	12.00	12.00	-0.14
7,500.0	75.75	354.30	7,331.3	378.2	9.5	375.8	12.00	12.00	-0.11
7,600.0	87.75	354.20	7,345.6	476.5	-0.4	474.6	12.00	12.00	-0.10
7,618.8	90.00	354.18	7,346.0	495.2	-2.3	493.4	11.97	11.97	-0.10
7"									
7,700.0	90.00	354.18	7,346.0	575.9	-10.5	574.6	0.00	0.00	0.00
7,800.0	90.00	354.18	7,346.0	675.4	-20.6	674.5	0.00	0.00	0.00
7,900.0	90.00	354.18	7,346.0	774.9	-30.8	774.5	0.00	0.00	0.00
8,000.0	90.00	354.18	7,346.0	874.4	-40.9	874.5	0.00	0.00	0.00
8,100.0	90.00	354.18	7,346.0	973.9	-51.1	974.5	0.00	0.00	0.00
8,200.0	90.00	354.18	7,346.0	1,073.4	-61.2	1,074.5	0.00	0.00	0.00
8,300.0	90.00	354.18	7,346.0	1,172.8	-71.4	1,174.5	0.00	0.00	0.00
8,400.0	90.00	354.18	7,346.0	1,272.3	-81.5	1,274.5	0.00	0.00	0.00
8,500.0	90.00	354.18	7,346.0	1,371.8	-91.7	1,374.5	0.00	0.00	0.00
8,600.0	90.00	354.18	7,346.0	1,471.3	-101.8	1,474.5	0.00	0.00	0.00
8,700.0	90.00	354.18	7,346.0	1,570.8	-112.0	1,574.5	0.00	0.00	0.00
8,800.0	90.00	354.18	7,346.0	1,670.3	-122.1	1,674.5	0.00	0.00	0.00
8,900.0	90.00	354.18	7,346.0	1,769.7	-132.2	1,774.5	0.00	0.00	0.00
9,000.0	90.00	354.18	7,346.0	1,869.2	-142.4	1,874.5	0.00	0.00	0.00
9,100.0	90.00	354.18	7,346.0	1,968.7	-152.5	1,974.5	0.00	0.00	0.00
9,200.0	90.00	354.18	7,346.0	2,068.2	-162.7	2,074.4	0.00	0.00	0.00
9,300.0	90.00	354.18	7,346.0	2,167.7	-172.8	2,174.4	0.00	0.00	0.00
9,400.0	90.00	354.18	7,346.0	2,267.2	-183.0	2,274.4	0.00	0.00	0.00
9,500.0	90.00	354.18	7,346.0	2,366.6	-193.1	2,374.4	0.00	0.00	0.00
9,600.0	90.00	354.18	7,346.0	2,466.1	-203.3	2,474.4	0.00	0.00	0.00
9,700.0	90.00	354.18	7,346.0	2,565.6	-213.4	2,574.4	0.00	0.00	0.00
9,800.0	90.00	354.18	7,346.0	2,665.1	-223.6	2,674.4	0.00	0.00	0.00
9,900.0	90.00	354.18	7,346.0	2,764.6	-233.7	2,774.4	0.00	0.00	0.00
10,000.0	90.00	354.18	7,346.0	2,864.1	-243.8	2,874.4	0.00	0.00	0.00

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Site:	Longhorn B5-36H	North Reference:	True
Well:	Longhorn B5-36H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,100.0	90.00	354.18	7,346.0	2,963.6	-254.0	2,974.4	0.00	0.00	0.00	
10,200.0	90.00	354.18	7,346.0	3,063.0	-264.1	3,074.4	0.00	0.00	0.00	
10,300.0	90.00	354.18	7,346.0	3,162.5	-274.3	3,174.4	0.00	0.00	0.00	
10,400.0	90.00	354.18	7,346.0	3,262.0	-284.4	3,274.4	0.00	0.00	0.00	
10,500.0	90.00	354.18	7,346.0	3,361.5	-294.6	3,374.4	0.00	0.00	0.00	
10,600.0	90.00	354.18	7,346.0	3,461.0	-304.7	3,474.4	0.00	0.00	0.00	
10,700.0	90.00	354.18	7,346.0	3,560.5	-314.9	3,574.3	0.00	0.00	0.00	
10,800.0	90.00	354.18	7,346.0	3,659.9	-325.0	3,674.3	0.00	0.00	0.00	
10,900.0	90.00	354.18	7,346.0	3,759.4	-335.2	3,774.3	0.00	0.00	0.00	
11,000.0	90.00	354.18	7,346.0	3,858.9	-345.3	3,874.3	0.00	0.00	0.00	
11,100.0	90.00	354.18	7,346.0	3,958.4	-355.4	3,974.3	0.00	0.00	0.00	
11,200.0	90.00	354.18	7,346.0	4,057.9	-365.6	4,074.3	0.00	0.00	0.00	
11,233.3	90.00	354.18	7,346.0	4,091.0	-369.0	4,107.6	0.00	0.00	0.00	
Longhorn B5-36H (BHL)										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,425.0	1,425.0	9 5/8"	9-5/8	13-1/2	
7,618.8	7,346.0	7"	7	8-3/4	
11,233.3	7,346.0	4 1/2"	4-1/2	6	