



eog resources

Denver Division- Colorado

DJ - Hereford Ranch

Critter Creek 05-10H

Critter Creek 5-10H

Original Wellbore

Plan: APD

Standard Planning Report

15 January, 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Site Critter Creek 05-10H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5271.0ft (True 30)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5271.0ft (True 30)
Site:	Critter Creek 05-10H	North Reference:	True
Well:	Critter Creek 5-10H	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		Critter Creek 05-10H			
Site Position:		Northing:	583,877.66 ft	Latitude:	40° 55' 51.848 N
From:	Lat/Long	Easting:	2,300,827.14 ft	Longitude:	104° 24' 40.838 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.70 °

Well	Critter Creek 5-10H					
Well Position	+N/-S	0.0 ft	Northing:	583,877.66 ft	Latitude:	40° 55' 51.848 N
	+E/-W	0.0 ft	Easting:	2,300,827.14 ft	Longitude:	104° 24' 40.838 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,246.0 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	1/15/2010	8.87	67.59	53,610

Design	APD			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	316.17

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	
6,827.5	0.00	0.00	6,827.5	0.0	0.0	0.00	0.00	0.00	0.00	
7,577.5	90.00	316.17	7,305.0	344.5	-330.6	12.00	12.00	0.00	316.17	
12,861.0	90.00	316.17	7,305.0	4,156.1	-3,989.3	0.00	0.00	0.00	0.00	

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Wellbore: Original Wellbore
Design: APD

Local Co-ordinate Reference: Site Critter Creek 05-10H
TVD Reference: RIG @ 5271.0ft (True 30)
MD Reference: RIG @ 5271.0ft (True 30)
North Reference: True
Survey Calculation Method: Minimum Curvature

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
1,350.0	0.00	0.00	1,350.0	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8"									
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00

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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)
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,827.5	0.00	0.00	6,827.5	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	8.70	316.17	6,899.7	4.0	-3.8	5.5	12.00	12.00	0.00
7,000.0	20.70	316.17	6,996.3	22.2	-21.3	30.8	12.00	12.00	0.00
7,100.0	32.70	316.17	7,085.5	54.6	-52.4	75.7	12.00	12.00	0.00
7,200.0	44.70	316.17	7,163.4	99.6	-95.6	138.1	12.00	12.00	0.00
7,300.0	56.70	316.17	7,226.6	155.3	-149.1	215.3	12.00	12.00	0.00
7,400.0	68.70	316.17	7,272.4	219.3	-210.5	304.0	12.00	12.00	0.00
7,500.0	80.70	316.17	7,298.7	288.8	-277.2	400.3	12.00	12.00	0.00
7,577.5	90.00	316.17	7,305.0	344.4	-330.6	477.4	12.00	12.00	0.00
7"									
7,600.0	90.00	316.17	7,305.0	360.7	-346.2	499.9	0.02	0.02	0.00
7,700.0	90.00	316.17	7,305.0	432.8	-415.4	599.9	0.00	0.00	0.00
7,800.0	90.00	316.17	7,305.0	505.0	-484.7	699.9	0.00	0.00	0.00
7,900.0	90.00	316.17	7,305.0	577.1	-553.9	799.9	0.00	0.00	0.00
8,000.0	90.00	316.17	7,305.0	649.2	-623.2	899.9	0.00	0.00	0.00
8,100.0	90.00	316.17	7,305.0	721.4	-692.4	999.9	0.00	0.00	0.00
8,200.0	90.00	316.17	7,305.0	793.5	-761.7	1,099.9	0.00	0.00	0.00
8,300.0	90.00	316.17	7,305.0	865.7	-830.9	1,199.9	0.00	0.00	0.00
8,400.0	90.00	316.17	7,305.0	937.8	-900.2	1,299.9	0.00	0.00	0.00
8,500.0	90.00	316.17	7,305.0	1,010.0	-969.4	1,399.9	0.00	0.00	0.00
8,600.0	90.00	316.17	7,305.0	1,082.1	-1,038.7	1,499.9	0.00	0.00	0.00
8,700.0	90.00	316.17	7,305.0	1,154.2	-1,107.9	1,599.9	0.00	0.00	0.00
8,800.0	90.00	316.17	7,305.0	1,226.4	-1,177.2	1,699.9	0.00	0.00	0.00
8,900.0	90.00	316.17	7,305.0	1,298.5	-1,246.4	1,799.9	0.00	0.00	0.00
9,000.0	90.00	316.17	7,305.0	1,370.7	-1,315.7	1,899.9	0.00	0.00	0.00
9,100.0	90.00	316.17	7,305.0	1,442.8	-1,384.9	1,999.9	0.00	0.00	0.00
9,200.0	90.00	316.17	7,305.0	1,515.0	-1,454.2	2,099.9	0.00	0.00	0.00
9,300.0	90.00	316.17	7,305.0	1,587.1	-1,523.4	2,199.9	0.00	0.00	0.00
9,400.0	90.00	316.17	7,305.0	1,659.2	-1,592.7	2,299.9	0.00	0.00	0.00
9,500.0	90.00	316.17	7,305.0	1,731.4	-1,661.9	2,399.9	0.00	0.00	0.00
9,600.0	90.00	316.17	7,305.0	1,803.5	-1,731.2	2,499.9	0.00	0.00	0.00
9,700.0	90.00	316.17	7,305.0	1,875.7	-1,800.4	2,599.9	0.00	0.00	0.00
9,800.0	90.00	316.17	7,305.0	1,947.8	-1,869.7	2,699.9	0.00	0.00	0.00
9,900.0	90.00	316.17	7,305.0	2,020.0	-1,938.9	2,799.9	0.00	0.00	0.00
10,000.0	90.00	316.17	7,305.0	2,092.1	-2,008.2	2,899.9	0.00	0.00	0.00
10,100.0	90.00	316.17	7,305.0	2,164.2	-2,077.4	2,999.9	0.00	0.00	0.00

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Local Co-ordinate Reference: Site Critter Creek 05-10H
TVD Reference: RIG @ 5271.0ft (True 30)
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North Reference: True
Survey Calculation Method: Minimum Curvature

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)
10,200.0	90.00	316.17	7,305.0	2,236.4	-2,146.7	3,099.9	0.00	0.00	0.00
10,300.0	90.00	316.17	7,305.0	2,308.5	-2,215.9	3,199.9	0.00	0.00	0.00
10,400.0	90.00	316.17	7,305.0	2,380.7	-2,285.2	3,299.9	0.00	0.00	0.00
10,500.0	90.00	316.17	7,305.0	2,452.8	-2,354.4	3,399.9	0.00	0.00	0.00
10,600.0	90.00	316.17	7,305.0	2,525.0	-2,423.6	3,499.9	0.00	0.00	0.00
10,700.0	90.00	316.17	7,305.0	2,597.1	-2,492.9	3,599.9	0.00	0.00	0.00
10,800.0	90.00	316.17	7,305.0	2,669.2	-2,562.1	3,699.9	0.00	0.00	0.00
10,900.0	90.00	316.17	7,305.0	2,741.4	-2,631.4	3,799.9	0.00	0.00	0.00
11,000.0	90.00	316.17	7,305.0	2,813.5	-2,700.6	3,899.9	0.00	0.00	0.00
11,100.0	90.00	316.17	7,305.0	2,885.7	-2,769.9	3,999.9	0.00	0.00	0.00
11,200.0	90.00	316.17	7,305.0	2,957.8	-2,839.1	4,099.9	0.00	0.00	0.00
11,300.0	90.00	316.17	7,305.0	3,030.0	-2,908.4	4,199.9	0.00	0.00	0.00
11,400.0	90.00	316.17	7,305.0	3,102.1	-2,977.6	4,299.9	0.00	0.00	0.00
11,500.0	90.00	316.17	7,305.0	3,174.3	-3,046.9	4,399.9	0.00	0.00	0.00
11,600.0	90.00	316.17	7,305.0	3,246.4	-3,116.1	4,499.9	0.00	0.00	0.00
11,700.0	90.00	316.17	7,305.0	3,318.5	-3,185.4	4,599.9	0.00	0.00	0.00
11,800.0	90.00	316.17	7,305.0	3,390.7	-3,254.6	4,699.9	0.00	0.00	0.00
11,900.0	90.00	316.17	7,305.0	3,462.8	-3,323.9	4,799.9	0.00	0.00	0.00
12,000.0	90.00	316.17	7,305.0	3,535.0	-3,393.1	4,899.9	0.00	0.00	0.00
12,100.0	90.00	316.17	7,305.0	3,607.1	-3,462.4	4,999.9	0.00	0.00	0.00
12,200.0	90.00	316.17	7,305.0	3,679.3	-3,531.6	5,099.9	0.00	0.00	0.00
12,300.0	90.00	316.17	7,305.0	3,751.4	-3,600.9	5,199.9	0.00	0.00	0.00
12,400.0	90.00	316.17	7,305.0	3,823.5	-3,670.1	5,299.9	0.00	0.00	0.00
12,500.0	90.00	316.17	7,305.0	3,895.7	-3,739.4	5,399.9	0.00	0.00	0.00
12,600.0	90.00	316.17	7,305.0	3,967.8	-3,808.6	5,499.9	0.00	0.00	0.00
12,700.0	90.00	316.17	7,305.0	4,040.0	-3,877.9	5,599.9	0.00	0.00	0.00
12,800.0	90.00	316.17	7,305.0	4,112.1	-3,947.1	5,699.9	0.00	0.00	0.00
12,861.0	90.00	316.17	7,305.0	4,156.1	-3,989.3	5,760.9	0.00	0.00	0.00
Critter Creek 5-10H (BHL)									

Casing Points

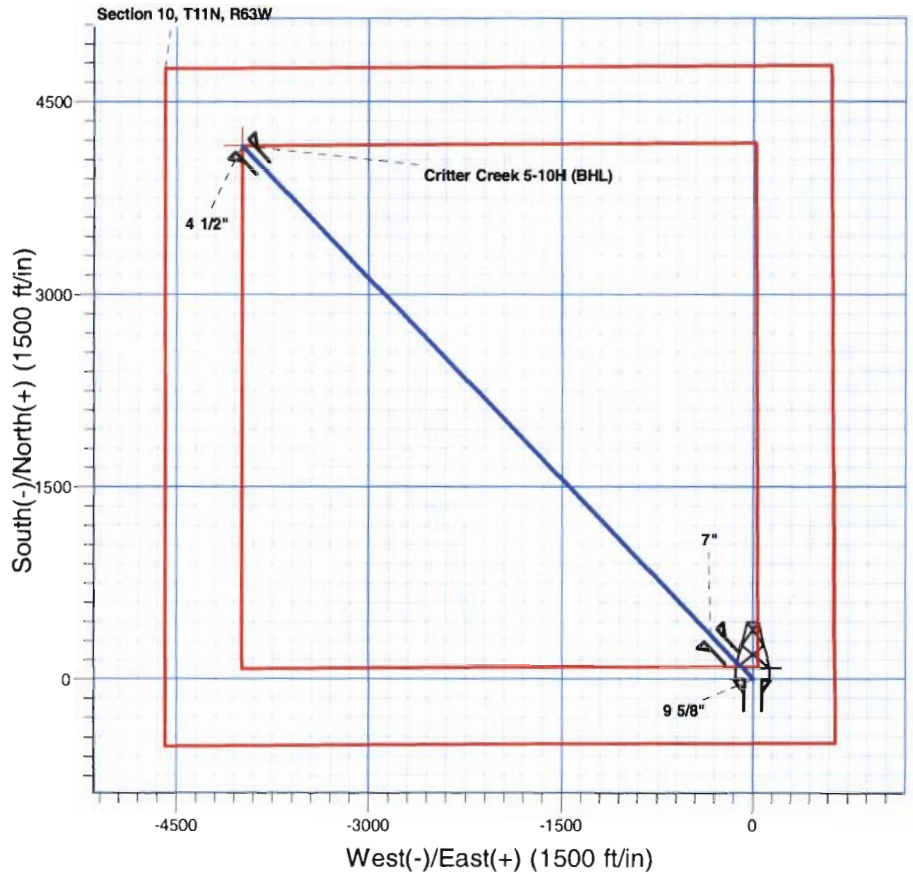
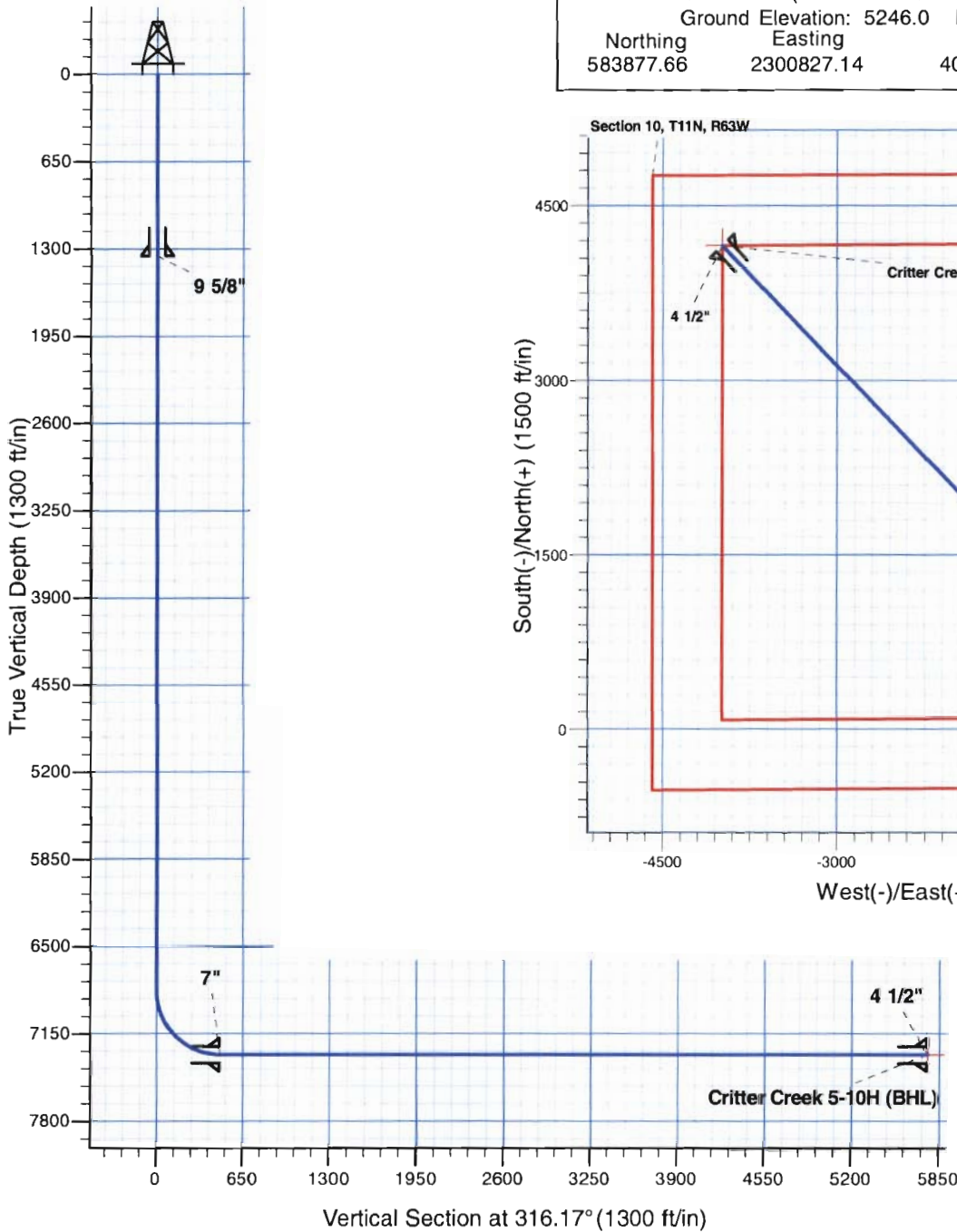
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
1,350.0	1,350.0	9 5/8"	9-5/8	12-1/4
7,577.5	7,305.0	7"	7	8-3/4
12,861.0	7,305.0	4 1/2"	4-1/2	6-1/4

Critter Creek 5-10H

Section 10 T11N R62W
Weld County, CO



Surface Location			
NAD 1927 (NADCON CONUS) Colorado North 501			
Ground Elevation: 5246.0 RIG @ 5271.0ft (True 30)			
Northing	Easting	Latitude	Longitude
583877.66	2300827.14	40° 55' 51.848 N	104° 24' 40.838 W



T M
Azimuths to True North
Magnetic North: 8.87°
Magnetic Field
Strength: 53609.6snT
Dip Angle: 67.59°
Date: 1/15/2010
Model: IGRF200510

Project: DJ - Hereford Ranch
Site: Critter Creek 05-10H
Well: Critter Creek 5-10H
Plan: APD

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	6827.5	0.00	0.00	6827.5	0.0	0.0	0.00	0.00	0.0	
3	7577.5	90.00	316.17	7305.0	344.5	-330.6	12.00	316.17	477.5	
4	12861.0	90.00	316.17	7305.0	4156.1	-3989.3	0.00	0.00	5760.9	

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
Critter Creek 5-10H (BHL)	7305.0	4156.1	-3989.3	587984.48	2296787.08	40° 56' 32.910 N	104° 25' 32.819 W	