

Denver Division- Colorado

DJ - Hereford Ranch

Elk Creek 10-14H

Elk Creek 10-14H

Original Wellbore

Plan: APD Directional Plan

Standard Planning Report

25 February, 2011

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Elk Creek 10-14H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5071.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5071.00ft (TBD)
Site:	Elk Creek 10-14H	North Reference:	True
Well:	Elk Creek 10-14H	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	Elk Creek 10-14H		
Site Position:		Northing:	551,720.42 ft
From:	Lat/Long	Easting:	2,336,238.11 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	40° 50' 29.591 N
		Longitude:	104° 17' 5.302 W
		Grid Convergence:	0.79 deg

Well	Elk Creek 10-14H		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	40° 50' 29.591 N
		Longitude:	104° 17' 5.302 W
		Ground Level:	5,049.00 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (deg)	Dip Angle (deg)	Field Strength (nT)
	IGRF200510	2/24/2011	8.64	67.50	53,462

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	160.62

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	
6,341.53	0.00	0.00	6,341.53	0.00	0.00	0.00	0.00	0.00	0.00	
7,091.54	90.00	160.62	6,819.00	-450.42	158.43	12.00	12.00	0.00	160.62	
11,190.69	90.00	160.62	6,819.00	-4,317.35	1,518.54	0.00	0.00	0.00	0.00	Elk Creek 10-14H (I

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Well:	Elk Creek 10-14H	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
9-5/8"									
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
1,400.00	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
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00

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Well:	Elk Creek 10-14H	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)
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
6,341.53	0.00	0.00	6,341.53	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	7.02	160.62	6,399.85	-3.37	1.19	3.58	12.00	12.00	0.00
6,500.00	19.02	160.62	6,497.11	-24.58	8.65	26.06	12.00	12.00	0.00
6,600.00	31.02	160.62	6,587.56	-64.40	22.65	68.27	12.00	12.00	0.00
6,700.00	43.02	160.62	6,667.26	-121.09	42.59	128.36	12.00	12.00	0.00
6,800.00	55.02	160.62	6,732.73	-192.17	67.59	203.71	12.00	12.00	0.00
6,900.00	67.02	160.62	6,781.10	-274.54	96.56	291.03	12.00	12.00	0.00
7,000.00	79.02	160.62	6,810.25	-364.59	128.24	386.49	12.00	12.00	0.00
7,091.54	90.00	160.62	6,819.00	-450.42	158.43	477.47	12.00	12.00	0.00
7"									
7,100.00	90.00	160.62	6,819.00	-458.40	161.23	485.93	0.00	0.00	0.00
7,200.00	90.00	160.62	6,819.00	-552.74	194.41	585.93	0.00	0.00	0.00
7,300.00	90.00	160.62	6,819.00	-647.07	227.59	685.93	0.00	0.00	0.00
7,400.00	90.00	160.62	6,819.00	-741.41	260.78	785.93	0.00	0.00	0.00
7,500.00	90.00	160.62	6,819.00	-835.74	293.96	885.93	0.00	0.00	0.00
7,600.00	90.00	160.62	6,819.00	-930.08	327.14	985.93	0.00	0.00	0.00
7,700.00	90.00	160.62	6,819.00	-1,024.41	360.32	1,085.93	0.00	0.00	0.00
7,800.00	90.00	160.62	6,819.00	-1,118.74	393.50	1,185.93	0.00	0.00	0.00
7,900.00	90.00	160.62	6,819.00	-1,213.08	426.68	1,285.93	0.00	0.00	0.00
8,000.00	90.00	160.62	6,819.00	-1,307.41	459.86	1,385.93	0.00	0.00	0.00
8,100.00	90.00	160.62	6,819.00	-1,401.75	493.04	1,485.93	0.00	0.00	0.00
8,200.00	90.00	160.62	6,819.00	-1,496.08	526.22	1,585.93	0.00	0.00	0.00
8,300.00	90.00	160.62	6,819.00	-1,590.42	559.40	1,685.93	0.00	0.00	0.00
8,400.00	90.00	160.62	6,819.00	-1,684.75	592.58	1,785.93	0.00	0.00	0.00
8,500.00	90.00	160.62	6,819.00	-1,779.09	625.76	1,885.93	0.00	0.00	0.00
8,600.00	90.00	160.62	6,819.00	-1,873.42	658.94	1,985.93	0.00	0.00	0.00
8,700.00	90.00	160.62	6,819.00	-1,967.76	692.12	2,085.93	0.00	0.00	0.00
8,800.00	90.00	160.62	6,819.00	-2,062.09	725.30	2,185.93	0.00	0.00	0.00
8,900.00	90.00	160.62	6,819.00	-2,156.43	758.48	2,285.93	0.00	0.00	0.00
9,000.00	90.00	160.62	6,819.00	-2,250.76	791.66	2,385.93	0.00	0.00	0.00
9,100.00	90.00	160.62	6,819.00	-2,345.10	824.84	2,485.93	0.00	0.00	0.00
9,200.00	90.00	160.62	6,819.00	-2,439.43	858.02	2,585.93	0.00	0.00	0.00
9,300.00	90.00	160.62	6,819.00	-2,533.77	891.20	2,685.93	0.00	0.00	0.00
9,400.00	90.00	160.62	6,819.00	-2,628.10	924.38	2,785.93	0.00	0.00	0.00
9,500.00	90.00	160.62	6,819.00	-2,722.44	957.56	2,885.93	0.00	0.00	0.00
9,600.00	90.00	160.62	6,819.00	-2,816.77	990.74	2,985.93	0.00	0.00	0.00
9,700.00	90.00	160.62	6,819.00	-2,911.11	1,023.93	3,085.93	0.00	0.00	0.00
9,800.00	90.00	160.62	6,819.00	-3,005.44	1,057.11	3,185.93	0.00	0.00	0.00
9,900.00	90.00	160.62	6,819.00	-3,099.78	1,090.29	3,285.93	0.00	0.00	0.00
10,000.00	90.00	160.62	6,819.00	-3,194.11	1,123.47	3,385.93	0.00	0.00	0.00
10,100.00	90.00	160.62	6,819.00	-3,288.45	1,156.65	3,485.93	0.00	0.00	0.00

EOG Resources Inc

Planning Report

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Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5071.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5071.00ft (TBD)
Site:	Elk Creek 10-14H	North Reference:	True
Well:	Elk Creek 10-14H	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)
10,200.00	90.00	160.62	6,819.00	-3,382.78	1,189.83	3,585.93	0.00	0.00	0.00
10,300.00	90.00	160.62	6,819.00	-3,477.12	1,223.01	3,685.93	0.00	0.00	0.00
10,400.00	90.00	160.62	6,819.00	-3,571.45	1,256.19	3,785.93	0.00	0.00	0.00
10,500.00	90.00	160.62	6,819.00	-3,665.79	1,289.37	3,885.93	0.00	0.00	0.00
10,600.00	90.00	160.62	6,819.00	-3,760.12	1,322.55	3,985.93	0.00	0.00	0.00
10,700.00	90.00	160.62	6,819.00	-3,854.45	1,355.73	4,085.93	0.00	0.00	0.00
10,800.00	90.00	160.62	6,819.00	-3,948.79	1,388.91	4,185.93	0.00	0.00	0.00
10,900.00	90.00	160.62	6,819.00	-4,043.12	1,422.09	4,285.93	0.00	0.00	0.00
11,000.00	90.00	160.62	6,819.00	-4,137.46	1,455.27	4,385.93	0.00	0.00	0.00
11,100.00	90.00	160.62	6,819.00	-4,231.79	1,488.45	4,485.93	0.00	0.00	0.00
11,190.69	90.00	160.62	6,819.00	-4,317.35	1,518.54	4,576.62	0.00	0.00	0.00
4 1/2" - Elk Creek 10-14H (BHL)									

Targets									
Target Name	Dip Angle (deg)	Dip Dir. (deg)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Elk Creek 10-14H (BHL)	0.00	0.00	6,819.00	-4,317.35	1,518.54	547,424.30	2,337,815.67	40° 49' 46.931 N	104° 16' 45.548 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,000.00	1,000.00	9-5/8"	9-5/8	13-1/2	
7,091.54	6,819.00	7"	7	8-3/4	
11,190.69	6,819.00	4 1/2"	4-1/2	6	

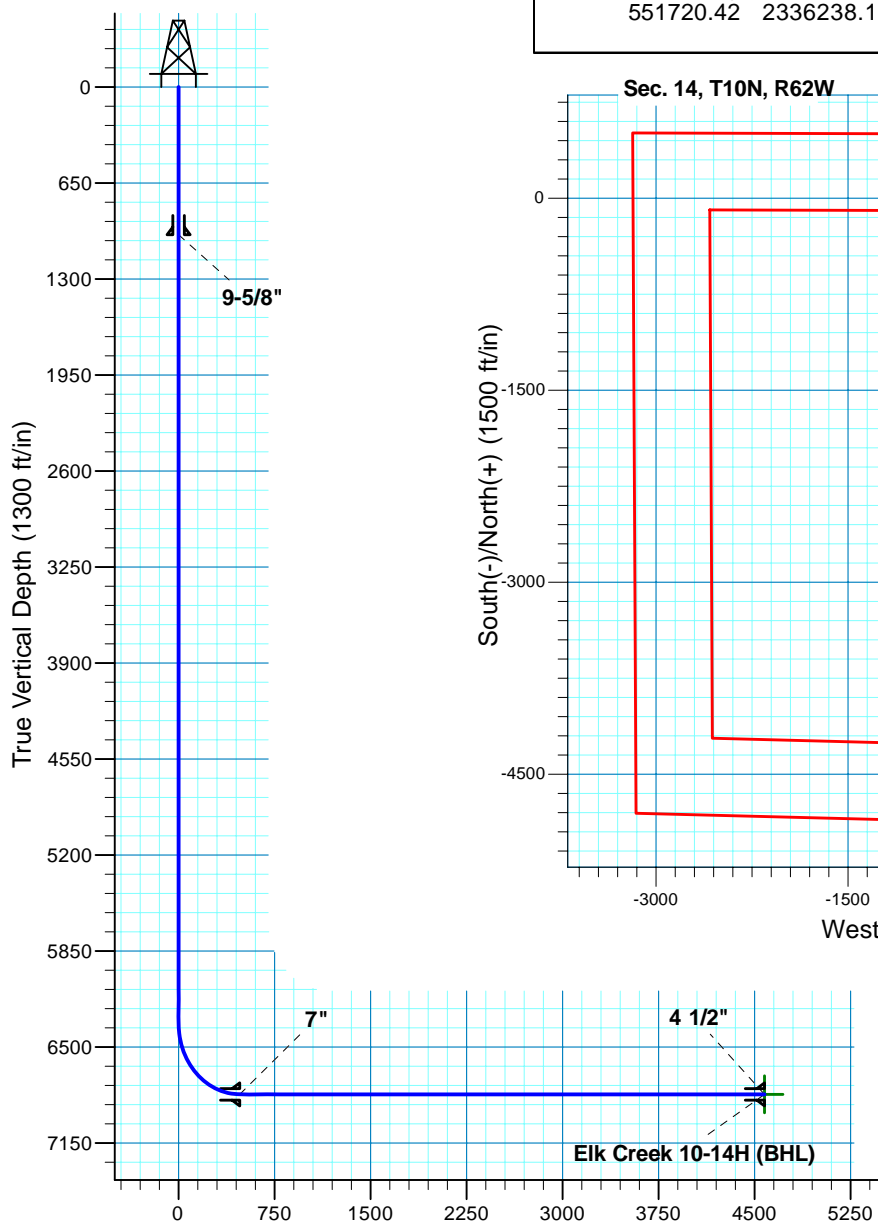
Elk Creek 10-14H

Section 14 T10N R62W

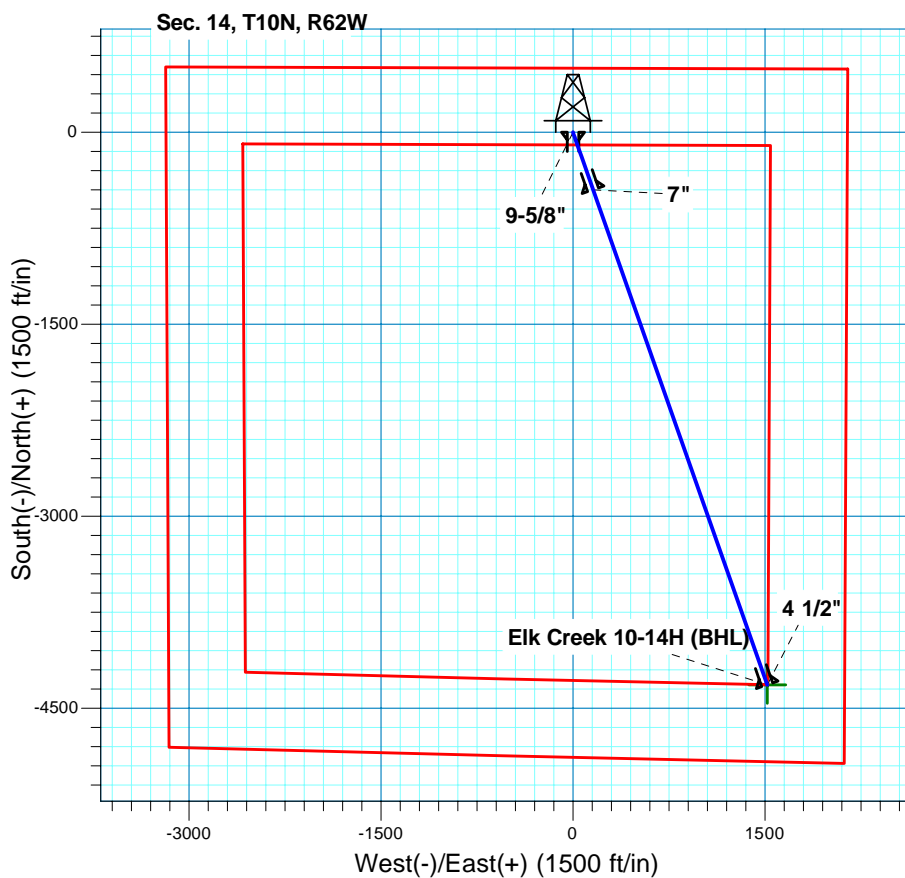
Weld County, CO

Surface Location

NAD 1927 (NADCON CONUS) Colorado North 501
 Ground Elevation: 5049.00 RIG @ 5071.00ft (TBD)
 Northing Easting Latitude Longitude
 551720.42 2336238.11 40° 50' 29.591 N 104° 17' 5.302 W



Vertical Section at 160.62deg (1500 ft/in)



T M
 Azimuths to True North
 Magnetic North: 8.64°
 Magnetic Field
 Strength: 53462.1nT
 Dip Angle: 67.50°
 Date: 2/24/2011
 Model: IGRF200510

Project: DJ - Hereford Ranch
 Site: Elk Creek 10-14H
 Well: Elk Creek 10-14H
 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	6341.53	0.00	0.00	6341.53	0.00	0.00	0.00	0.00	0.00	
3	7091.54	90.00	160.62	6819.00	-450.42	158.43	12.00	160.62	477.47	
4	11190.69	90.00	160.62	6819.00	-4317.35	1518.54	0.00	0.00	4576.62	Elk Creek 10-14H (BHL)

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Elk Creek 10-14H (BHL)	6819.00	-4317.35	1518.54	547424.30	2337815.67	40° 49' 46.931 N	104° 16' 45.548 W	Point