

Denver Division- Colorado

**DJ - Hereford Ranch
Jackson Draw 10-19H
Jackson Draw 10-19H
Original Wellbore**

Plan: APD Directional Plan

Standard Planning Report

19 January, 2011

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Jackson Draw 10-19H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 4996.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 4996.00ft (TBD)
Site:	Jackson Draw 10-19H	North Reference:	True
Well:	Jackson Draw 10-19H	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	Jackson Draw 10-19H		
Site Position:		Northing:	514,799.68 ft
From:	Lat/Long	Easting:	2,347,059.54 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	40° 44' 23.320 N
		Longitude:	104° 14' 51.310 W
		Grid Convergence:	0.81 deg

Well	Jackson Draw 10-19H		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (deg)	Dip Angle (deg)	Field Strength (nT)
	IGRF200510	1/19/2011	8.62	67.43	53,424

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	156.97

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	
6,132.53	0.00	0.00	6,132.53	0.00	0.00	0.00	0.00	0.00	0.00	
6,882.54	90.00	156.97	6,610.00	-439.42	186.77	12.00	12.00	0.00	156.97	
10,900.10	90.00	156.97	6,610.00	-4,136.84	1,758.36	0.00	0.00	0.00	0.00	Jackson Draw 10-1

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Well:	Jackson Draw 10-19H	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
875.00	0.00	0.00	875.00	0.00	0.00	0.00	0.00	0.00	0.00
9-5/8"									
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
1,400.00	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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Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 4996.00ft (TBD)
Site:	Jackson Draw 10-19H	North Reference:	True
Well:	Jackson Draw 10-19H	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)
5,100.00	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
6,132.53	0.00	0.00	6,132.53	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	8.10	156.97	6,199.78	-4.38	1.86	4.76	12.00	12.00	0.00
6,300.00	20.10	156.97	6,296.59	-26.75	11.37	29.07	12.00	12.00	0.00
6,400.00	32.10	156.97	6,386.23	-67.16	28.55	72.98	12.00	12.00	0.00
6,500.00	44.10	156.97	6,464.78	-123.84	52.64	134.56	12.00	12.00	0.00
6,600.00	56.10	156.97	6,528.82	-194.31	82.59	211.13	12.00	12.00	0.00
6,700.00	68.10	156.97	6,575.53	-275.49	117.10	299.34	12.00	12.00	0.00
6,800.00	80.10	156.97	6,602.88	-363.84	154.65	395.34	12.00	12.00	0.00
6,882.54	90.00	156.97	6,610.00	-439.42	186.78	477.47	12.00	12.00	0.00
7"									
6,900.00	90.00	156.97	6,610.00	-455.49	193.61	494.93	0.00	0.00	0.00
7,000.00	90.00	156.97	6,610.00	-547.52	232.72	594.93	0.00	0.00	0.00
7,100.00	90.00	156.97	6,610.00	-639.55	271.84	694.93	0.00	0.00	0.00
7,200.00	90.00	156.97	6,610.00	-731.59	310.96	794.93	0.00	0.00	0.00
7,300.00	90.00	156.97	6,610.00	-823.62	350.08	894.93	0.00	0.00	0.00
7,400.00	90.00	156.97	6,610.00	-915.65	389.20	994.93	0.00	0.00	0.00
7,500.00	90.00	156.97	6,610.00	-1,007.68	428.31	1,094.93	0.00	0.00	0.00
7,600.00	90.00	156.97	6,610.00	-1,099.71	467.43	1,194.93	0.00	0.00	0.00
7,700.00	90.00	156.97	6,610.00	-1,191.74	506.55	1,294.93	0.00	0.00	0.00
7,800.00	90.00	156.97	6,610.00	-1,283.77	545.67	1,394.93	0.00	0.00	0.00
7,900.00	90.00	156.97	6,610.00	-1,375.81	584.78	1,494.93	0.00	0.00	0.00
8,000.00	90.00	156.97	6,610.00	-1,467.84	623.90	1,594.93	0.00	0.00	0.00
8,100.00	90.00	156.97	6,610.00	-1,559.87	663.02	1,694.93	0.00	0.00	0.00
8,200.00	90.00	156.97	6,610.00	-1,651.90	702.14	1,794.93	0.00	0.00	0.00
8,300.00	90.00	156.97	6,610.00	-1,743.93	741.26	1,894.93	0.00	0.00	0.00
8,400.00	90.00	156.97	6,610.00	-1,835.96	780.37	1,994.93	0.00	0.00	0.00
8,500.00	90.00	156.97	6,610.00	-1,928.00	819.49	2,094.93	0.00	0.00	0.00
8,600.00	90.00	156.97	6,610.00	-2,020.03	858.61	2,194.93	0.00	0.00	0.00
8,700.00	90.00	156.97	6,610.00	-2,112.06	897.73	2,294.93	0.00	0.00	0.00
8,800.00	90.00	156.97	6,610.00	-2,204.09	936.85	2,394.93	0.00	0.00	0.00
8,900.00	90.00	156.97	6,610.00	-2,296.12	975.96	2,494.93	0.00	0.00	0.00
9,000.00	90.00	156.97	6,610.00	-2,388.15	1,015.08	2,594.93	0.00	0.00	0.00
9,100.00	90.00	156.97	6,610.00	-2,480.18	1,054.20	2,694.93	0.00	0.00	0.00
9,200.00	90.00	156.97	6,610.00	-2,572.22	1,093.32	2,794.93	0.00	0.00	0.00
9,300.00	90.00	156.97	6,610.00	-2,664.25	1,132.43	2,894.93	0.00	0.00	0.00
9,400.00	90.00	156.97	6,610.00	-2,756.28	1,171.55	2,994.93	0.00	0.00	0.00
9,500.00	90.00	156.97	6,610.00	-2,848.31	1,210.67	3,094.93	0.00	0.00	0.00
9,600.00	90.00	156.97	6,610.00	-2,940.34	1,249.79	3,194.93	0.00	0.00	0.00
9,700.00	90.00	156.97	6,610.00	-3,032.37	1,288.91	3,294.93	0.00	0.00	0.00
9,800.00	90.00	156.97	6,610.00	-3,124.40	1,328.02	3,394.93	0.00	0.00	0.00
9,900.00	90.00	156.97	6,610.00	-3,216.44	1,367.14	3,494.93	0.00	0.00	0.00
10,000.00	90.00	156.97	6,610.00	-3,308.47	1,406.26	3,594.93	0.00	0.00	0.00

EOG Resources Inc

Planning Report

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Company:	Denver Division- Colorado	TVD Reference:	RIG @ 4996.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 4996.00ft (TBD)
Site:	Jackson Draw 10-19H	North Reference:	True
Well:	Jackson Draw 10-19H	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	156.97	6,610.00	-3,400.50	1,445.38	3,694.93	0.00	0.00	0.00
10,200.00	90.00	156.97	6,610.00	-3,492.53	1,484.50	3,794.93	0.00	0.00	0.00
10,300.00	90.00	156.97	6,610.00	-3,584.56	1,523.61	3,894.93	0.00	0.00	0.00
10,400.00	90.00	156.97	6,610.00	-3,676.59	1,562.73	3,994.93	0.00	0.00	0.00
10,500.00	90.00	156.97	6,610.00	-3,768.62	1,601.85	4,094.93	0.00	0.00	0.00
10,600.00	90.00	156.97	6,610.00	-3,860.66	1,640.97	4,194.93	0.00	0.00	0.00
10,700.00	90.00	156.97	6,610.00	-3,952.69	1,680.08	4,294.93	0.00	0.00	0.00
10,800.00	90.00	156.97	6,610.00	-4,044.72	1,719.20	4,394.93	0.00	0.00	0.00
10,900.00	90.00	156.97	6,610.00	-4,136.75	1,758.32	4,494.93	0.00	0.00	0.00
10,900.10	90.00	156.97	6,610.00	-4,136.84	1,758.36	4,495.03	0.00	0.00	0.00
Jackson Draw 10-19H (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									
Jackson Draw 10-19H	0.00	0.00	6,610.00	-4,136.84	1,758.36	510,688.09	2,348,876.14	40° 43' 42.442 N	104° 14' 28.471 W
- plan hits target center									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
875.00	875.00	9-5/8"	9-5/8	13-1/2
6,882.54	6,610.00	7"	7	8-3/4
10,900.10	6,610.00	4 1/2"	4-1/2	6-1/4

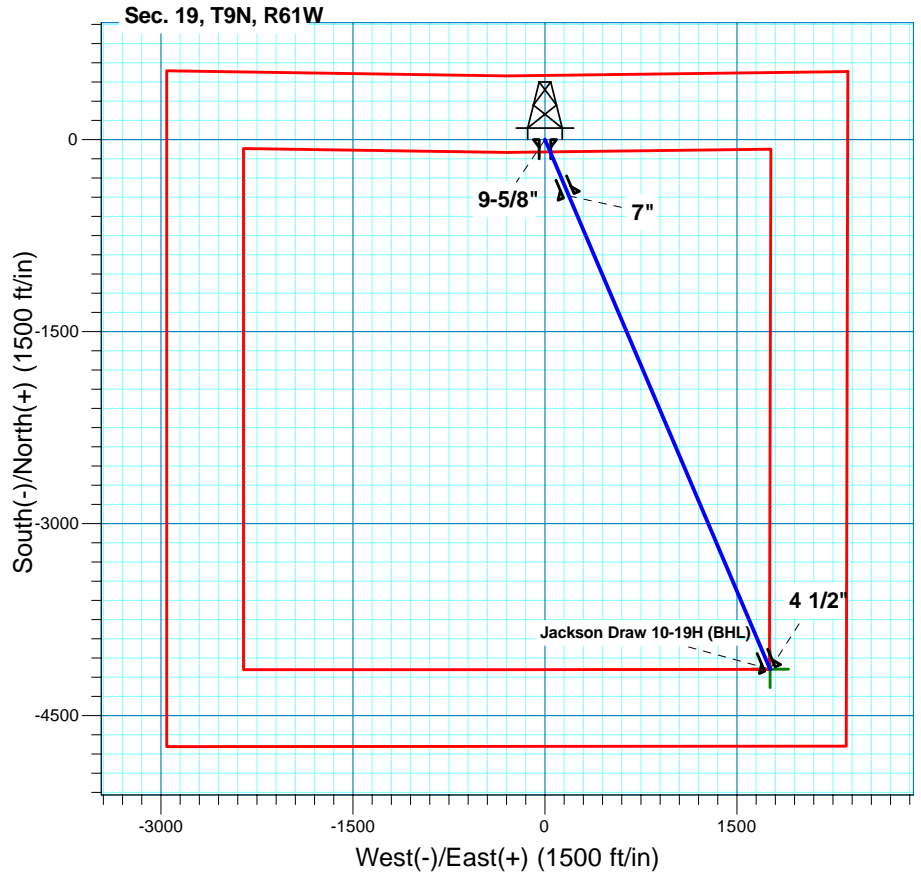
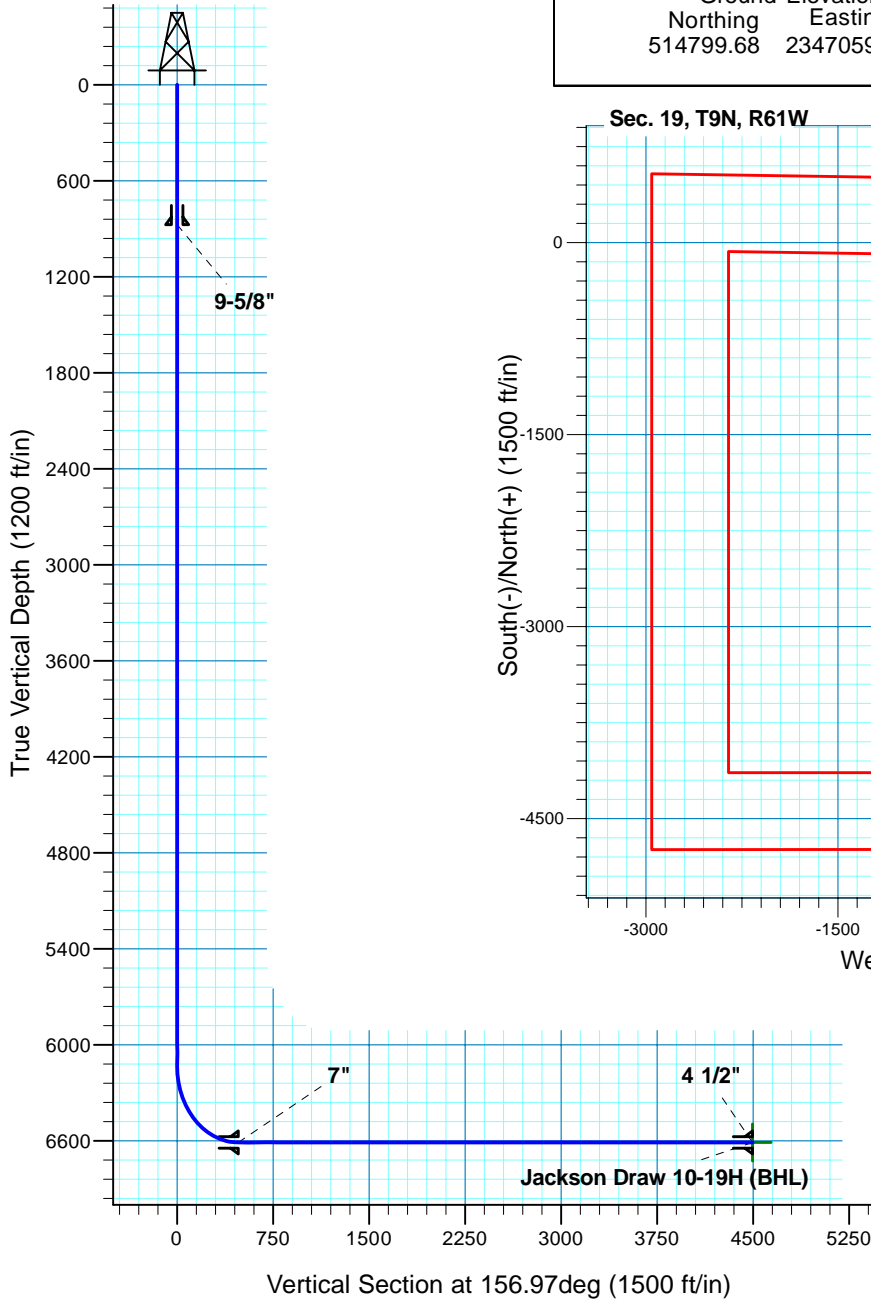
Jackson Draw 10-19H

Section 19 T9N R61W

Weld County, CO

Surface Location

NAD 1927 (NADCON CONUS) Colorado North 501
 Ground Elevation: 4974.00 RIG @ 4996.00ft (TBD)
 Northing Easting Latitude Longitude
 514799.68 2347059.54 40° 44' 23.320 N 104° 14' 51.310 W



T M
 Azimuths to True North
 Magnetic North: 8.62°
 Magnetic Field
 Strength: 53424.2snT
 Dip Angle: 67.43°
 Date: 1/19/2011
 Model: IGRF200510

Project: DJ - Hereford Ranch
 Site: Jackson Draw 10-19H
 Well: Jackson Draw 10-19H
 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	6132.53	0.00	0.00	6132.53	0.00	0.00	0.00	0.00	0.00	
3	6882.54	90.00	156.97	6610.00	-439.42	186.77	12.00	156.97	477.47	
4	10900.10	90.00	156.97	6610.00	-4136.84	1758.36	0.00	0.00	4495.03	Jackson Draw 10-19H (BHL)

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
Jackson Draw 10-19H (BHL)	6610.00	-4136.84	1758.36	510688.09	2348876.14	40° 43' 42.442 N	104° 14' 28.471 W	