

Denver Division- Colorado

DJ - Hereford Ranch

Windmill 11-35H

Windmill 11-35H

Original Wellbore

Plan: APD Directional Plan

Standard Planning Report

23 June, 2011

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Windmill 11-35H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 4605.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 4605.00ft (TBD)
Site:	Windmill 11-35H	North Reference:	True
Well:	Windmill 11-35H	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	Windmill 11-35H		
Site Position:		Northing:	373,058.45ft
From:	Lat/Long	Easting:	2,339,369.00ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	40° 21' 3.848 N
		Longitude:	104° 16' 56.489 W
		Grid Convergence:	0.79 deg

Well	Windmill 11-35H					
Well Position	+N/-S	0.00 ft	Northing:	373,058.45 ft	Latitude:	40° 21' 3.848 N
	+E/-W	0.00 ft	Easting:	2,339,369.00 ft	Longitude:	104° 16' 56.489 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,583.00 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (deg)	Dip Angle (deg)	Field Strength (nT)
	IGRF200510	6/23/2011	8.55	67.10	53,178

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	333.62

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	
5,617.53	0.00	0.00	5,617.53	0.00	0.00	0.00	0.00	0.00	0.00	
6,367.54	90.00	333.62	6,095.00	427.74	-212.15	12.00	12.00	0.00	333.62	
10,416.40	90.00	333.62	6,095.00	4,054.97	-2,011.19	0.00	0.00	0.00	0.00	Windmill 11-35H (B)

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Well:	Windmill 11-35H	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
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
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

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Site:	Windmill 11-35H	North Reference:	True
Well:	Windmill 11-35H	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)
5,300.00	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
5,617.53	0.00	0.00	5,617.53	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	9.90	333.62	5,699.59	6.36	-3.16	7.10	12.00	12.00	0.00
5,800.00	21.90	333.62	5,795.59	30.86	-15.30	34.44	12.00	12.00	0.00
5,900.00	33.90	333.62	5,883.81	72.69	-36.05	81.14	12.00	12.00	0.00
6,000.00	45.90	333.62	5,960.39	130.05	-64.50	145.17	12.00	12.00	0.00
6,100.00	57.90	333.62	6,021.99	200.41	-99.40	223.71	12.00	12.00	0.00
6,200.00	69.90	333.62	6,065.91	280.72	-139.23	313.35	12.00	12.00	0.00
6,300.00	81.90	333.62	6,090.23	367.44	-182.24	410.16	12.00	12.00	0.00
6,367.54	90.00	333.62	6,095.00	427.75	-212.15	477.47	12.00	12.00	0.00
7"									
6,400.00	90.00	333.62	6,095.00	456.83	-226.58	509.93	0.00	0.00	0.00
6,500.00	90.00	333.62	6,095.00	546.41	-271.01	609.93	0.00	0.00	0.00
6,600.00	90.00	333.62	6,095.00	636.00	-315.44	709.93	0.00	0.00	0.00
6,700.00	90.00	333.62	6,095.00	725.59	-359.88	809.93	0.00	0.00	0.00
6,800.00	90.00	333.62	6,095.00	815.17	-404.31	909.93	0.00	0.00	0.00
6,900.00	90.00	333.62	6,095.00	904.76	-448.74	1,009.93	0.00	0.00	0.00
7,000.00	90.00	333.62	6,095.00	994.35	-493.18	1,109.93	0.00	0.00	0.00
7,100.00	90.00	333.62	6,095.00	1,083.93	-537.61	1,209.93	0.00	0.00	0.00
7,200.00	90.00	333.62	6,095.00	1,173.52	-582.04	1,309.93	0.00	0.00	0.00
7,300.00	90.00	333.62	6,095.00	1,263.10	-626.48	1,409.93	0.00	0.00	0.00
7,400.00	90.00	333.62	6,095.00	1,352.69	-670.91	1,509.93	0.00	0.00	0.00
7,500.00	90.00	333.62	6,095.00	1,442.28	-715.34	1,609.93	0.00	0.00	0.00
7,600.00	90.00	333.62	6,095.00	1,531.86	-759.77	1,709.93	0.00	0.00	0.00
7,700.00	90.00	333.62	6,095.00	1,621.45	-804.21	1,809.93	0.00	0.00	0.00
7,800.00	90.00	333.62	6,095.00	1,711.04	-848.64	1,909.93	0.00	0.00	0.00
7,900.00	90.00	333.62	6,095.00	1,800.62	-893.07	2,009.93	0.00	0.00	0.00
8,000.00	90.00	333.62	6,095.00	1,890.21	-937.51	2,109.93	0.00	0.00	0.00
8,100.00	90.00	333.62	6,095.00	1,979.79	-981.94	2,209.93	0.00	0.00	0.00
8,200.00	90.00	333.62	6,095.00	2,069.38	-1,026.37	2,309.93	0.00	0.00	0.00
8,300.00	90.00	333.62	6,095.00	2,158.97	-1,070.81	2,409.93	0.00	0.00	0.00
8,400.00	90.00	333.62	6,095.00	2,248.55	-1,115.24	2,509.93	0.00	0.00	0.00
8,500.00	90.00	333.62	6,095.00	2,338.14	-1,159.67	2,609.93	0.00	0.00	0.00
8,600.00	90.00	333.62	6,095.00	2,427.73	-1,204.10	2,709.93	0.00	0.00	0.00
8,700.00	90.00	333.62	6,095.00	2,517.31	-1,248.54	2,809.93	0.00	0.00	0.00
8,800.00	90.00	333.62	6,095.00	2,606.90	-1,292.97	2,909.93	0.00	0.00	0.00
8,900.00	90.00	333.62	6,095.00	2,696.48	-1,337.40	3,009.93	0.00	0.00	0.00
9,000.00	90.00	333.62	6,095.00	2,786.07	-1,381.84	3,109.93	0.00	0.00	0.00
9,100.00	90.00	333.62	6,095.00	2,875.66	-1,426.27	3,209.93	0.00	0.00	0.00
9,200.00	90.00	333.62	6,095.00	2,965.24	-1,470.70	3,309.93	0.00	0.00	0.00
9,300.00	90.00	333.62	6,095.00	3,054.83	-1,515.14	3,409.93	0.00	0.00	0.00
9,400.00	90.00	333.62	6,095.00	3,144.42	-1,559.57	3,509.93	0.00	0.00	0.00
9,500.00	90.00	333.62	6,095.00	3,234.00	-1,604.00	3,609.93	0.00	0.00	0.00
9,600.00	90.00	333.62	6,095.00	3,323.59	-1,648.44	3,709.93	0.00	0.00	0.00
9,700.00	90.00	333.62	6,095.00	3,413.18	-1,692.87	3,809.93	0.00	0.00	0.00
9,800.00	90.00	333.62	6,095.00	3,502.76	-1,737.30	3,909.93	0.00	0.00	0.00
9,900.00	90.00	333.62	6,095.00	3,592.35	-1,781.73	4,009.93	0.00	0.00	0.00
10,000.00	90.00	333.62	6,095.00	3,681.93	-1,826.17	4,109.93	0.00	0.00	0.00
10,100.00	90.00	333.62	6,095.00	3,771.52	-1,870.60	4,209.93	0.00	0.00	0.00
10,200.00	90.00	333.62	6,095.00	3,861.11	-1,915.03	4,309.93	0.00	0.00	0.00

EOG Resources Inc

Planning Report

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Well:	Windmill 11-35H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Directional Plan		

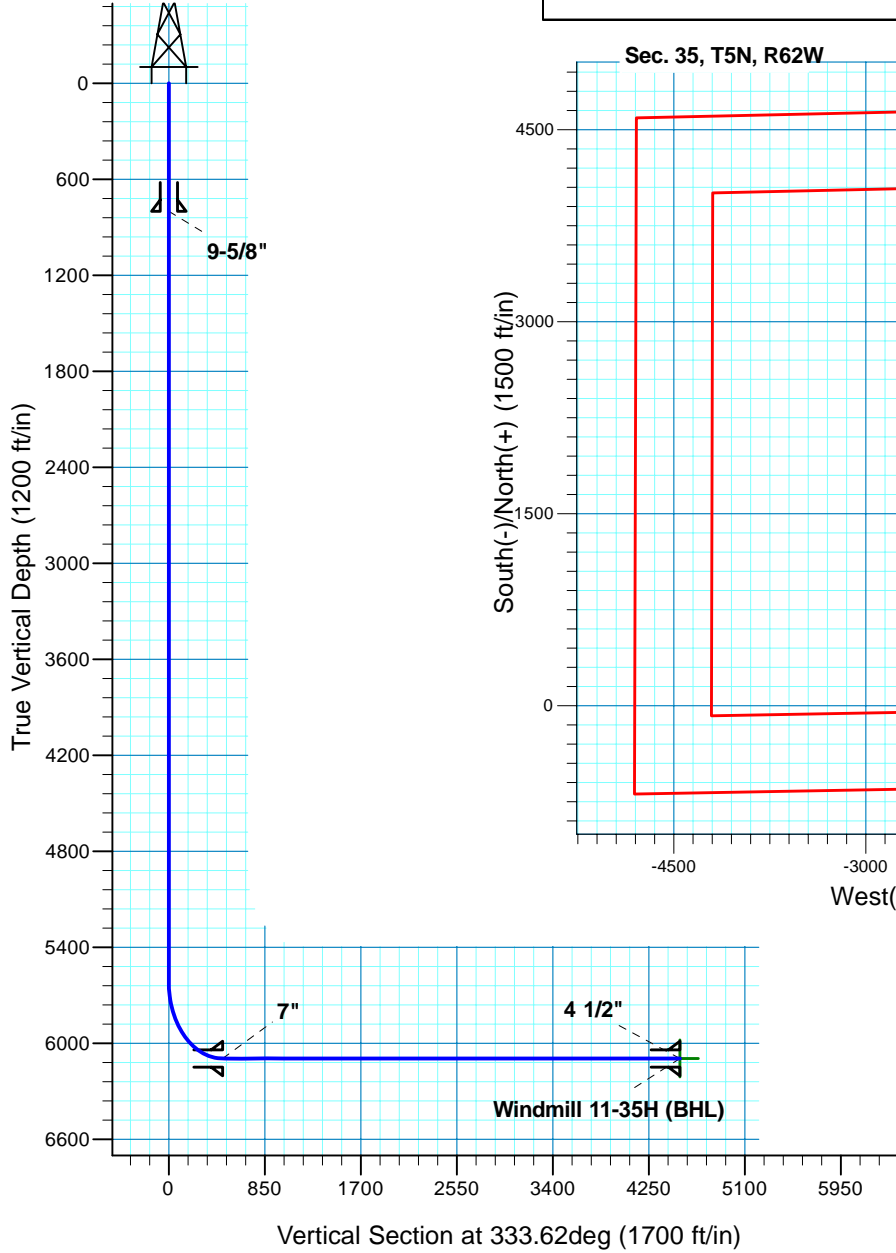
Planned Survey									
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (?/100ft)	Build Rate (?/100ft)	Turn Rate (?/100ft)
10,300.00	90.00	333.62	6,095.00	3,950.69	-1,959.47	4,409.93	0.00	0.00	0.00
10,400.00	90.00	333.62	6,095.00	4,040.28	-2,003.90	4,509.93	0.00	0.00	0.00
10,416.40	90.00	333.62	6,095.00	4,054.97	-2,011.19	4,526.33	0.00	0.00	0.00
4 1/2" - Windmill 11-35H (BHL)									

Design Targets									
Target Name	Dip Angle (deg)	Dip Dir. (deg)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Windmill 11-35H (BHL)	0.00	0.00	6,095.00	4,054.97	-2,011.19	377,085.42	2,337,302.33	40° 21' 43.920 N	104° 17' 22.470 W
- hit/miss target									
- Shape									
- Point									

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")		
800.00	800.00	9-5/8"	9-5/8	13-1/2		
6,367.54	6,095.00	7"	7	8-3/4		
10,416.40	6,095.00	4 1/2"	4-1/2	6		

Windmill 11-35H
Section 35 T5N R62W
Weld County, CO

Surface Location					
NAD 1927 (NADCON CONUS) Colorado North 501					
Ground Elevation: 4583.00 RIG @ 4605.00ft (TBD)					
Northing	Easting	Latitude	Longitude		
373058.45	2339369.00	40° 21' 3.848 N	104° 16' 56.489 W		



T M
 Azimuths to True North
 Magnetic North: 8.55°
 Magnetic Field
 Strength: 53177.6snT
 Dip Angle: 67.10°
 Date: 6/23/2011
 Model: IGRF200510

Project: DJ - Hereford Ranch
 Site: Windmill 11-35H
 Well: Windmill 11-35H
 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	5617.53	0.00	0.00	5617.53	0.00	0.00	0.00	0.00	0.00	
3	6367.54	90.00	333.62	6095.00	427.74	-212.15	12.00	333.62	477.47	
4	10416.40	90.00	333.62	6095.00	4054.97	-2011.19	0.00	0.00	4526.33	Windmill 11-35H (BHL)

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
Windmill 11-35H (BHL)	6095.00	4054.97	-2011.19	377085.42	2337302.33	40° 21' 43.920 N	104° 17' 22.470 W	