

Greasewood 14-29H

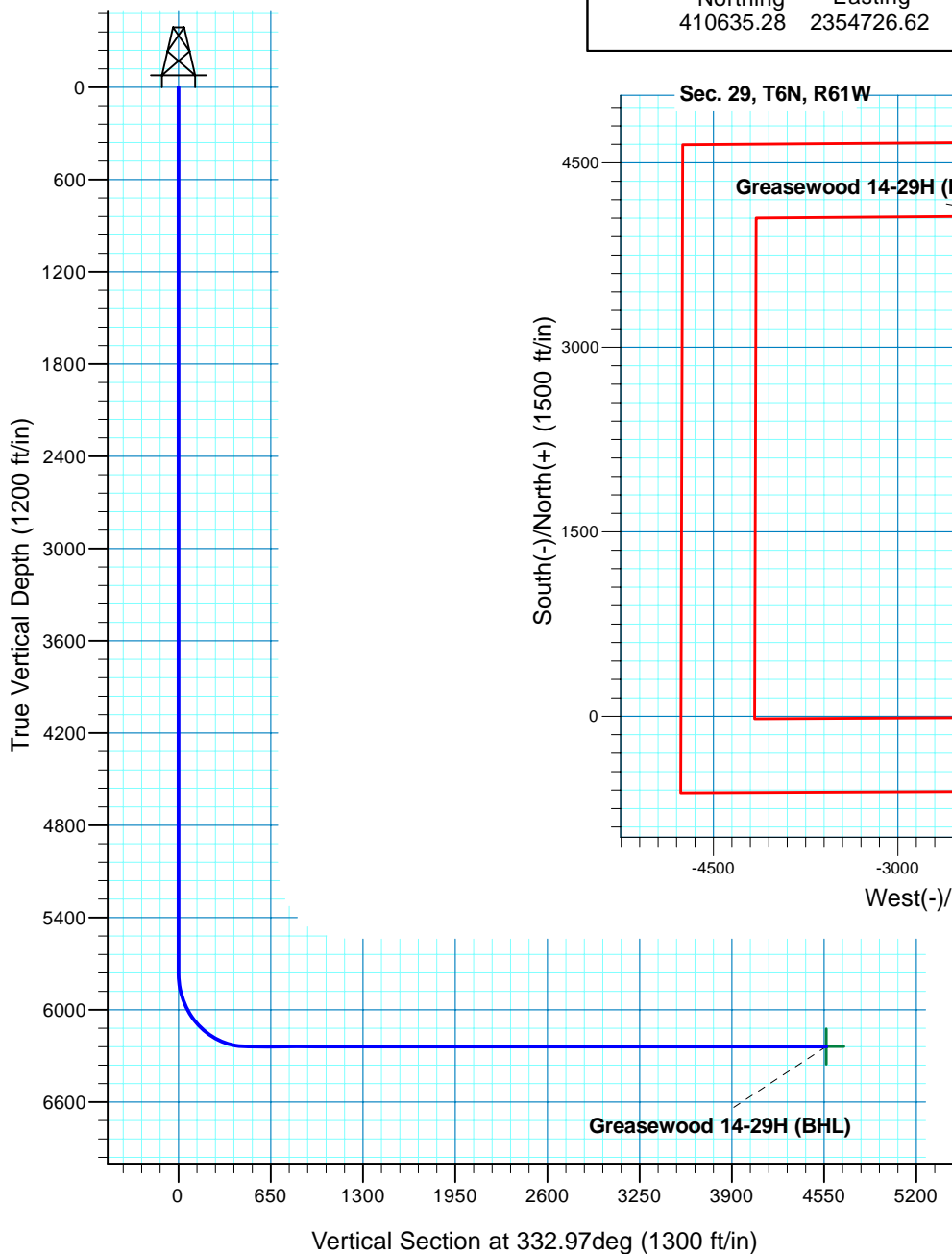
Section 29 T6N R61W

Weld County, CO



Surface Location

NAD 1927 (NADCON CONUS) Colorado North 501
 Ground Elevation: 4690.00 RIG @ 4712.00ft (TBD)
 Northing Easting Latitude Longitude
 410635.28 2354726.62 40° 27' 13.021 N 104° 13' 31.170 W



T M
 Azimuths to True North
 Magnetic North: 8.73°
 Magnetic Field
 Strength: 53389.9snT
 Dip Angle: 67.24°
 Date: 12/31/2009
 Model: IGRF200510

Project: DJ - Hereford Ranch
 Site: Greasewood 14-29H
 Well: Greasewood 14-29H
 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	5760.53	0.00	0.00	5760.53	0.00	0.00	0.00	0.00	0.00	
3	6510.54	90.00	332.97	6238.00	425.33	-216.96	12.00	332.97	477.47	
4	10598.75	90.00	332.97	6238.00	4067.09	-2074.65	0.00	0.00	4565.68	Greasewood 14-29H (BHL)

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Greasewood 14-29H (BHL)	6238.00	4067.09	-2074.65	414672.12	2352593.73	40° 27' 53.212 N	104° 13' 58.012 W	Point

Denver Division- Colorado

DJ - Hereford Ranch

Greasewood 14-29H

Greasewood 14-29H

Original Wellbore

Plan: APD Directional Plan

Standard Planning Report

18 October, 2011

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Greasewood 14-29H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 4712.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 4712.00ft (TBD)
Site:	Greasewood 14-29H	North Reference:	True
Well:	Greasewood 14-29H	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		Greasewood 14-29H			
Site Position:		Northing:	410,635.28ft	Latitude:	40° 27' 13.021 N
From:	Lat/Long	Easting:	2,354,726.62ft	Longitude:	104° 13' 31.170 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.82 deg

Well	Greasewood 14-29H					
Well Position	+N-S	0.00 ft	Northing:	410,635.28 ft	Latitude:	40° 27' 13.021 N
	+E-W	0.00 ft	Easting:	2,354,726.62 ft	Longitude:	104° 13' 31.170 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,690.00 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (deg)	Dip Angle (deg)	Field Strength (nT)
	IGRF200510	12/31/2009	8.73	67.24	53,390

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	332.97	

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	
5,760.53	0.00	0.00	5,760.53	0.00	0.00	0.00	0.00	0.00	0.00	
6,510.54	90.00	332.97	6,238.00	425.33	-216.96	12.00	12.00	0.00	332.97	
10,598.75	90.00	332.97	6,238.00	4,067.09	-2,074.65	0.00	0.00	0.00	0.00	Greasewood 14-29H

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Greasewood 14-29H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 4712.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 4712.00ft (TBD)
Site:	Greasewood 14-29H	North Reference:	True
Well:	Greasewood 14-29H	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

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Greasewood 14-29H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 4712.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 4712.00ft (TBD)
Site:	Greasewood 14-29H	North Reference:	True
Well:	Greasewood 14-29H	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
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,760.53	0.00	0.00	5,760.53	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	4.74	332.97	5,799.96	1.45	-0.74	1.63	12.00	12.00	0.00
5,900.00	16.74	332.97	5,898.03	18.02	-9.19	20.22	12.00	12.00	0.00
6,000.00	28.74	332.97	5,990.09	52.38	-26.72	58.80	12.00	12.00	0.00
6,100.00	40.74	332.97	6,072.12	103.04	-52.56	115.68	12.00	12.00	0.00
6,200.00	52.74	332.97	6,140.53	167.79	-85.59	188.36	12.00	12.00	0.00
6,300.00	64.74	332.97	6,192.33	243.80	-124.36	273.69	12.00	12.00	0.00
6,400.00	76.74	332.97	6,225.26	327.74	-167.18	367.91	12.00	12.00	0.00
6,500.00	88.74	332.97	6,237.88	415.94	-212.17	466.93	12.00	12.00	0.00
6,510.54	90.00	332.97	6,238.00	425.33	-216.96	477.47	12.00	12.00	0.00
7"									
6,600.00	90.00	332.97	6,238.00	505.02	-257.61	566.93	0.00	0.00	0.00
6,700.00	90.00	332.97	6,238.00	594.10	-303.05	666.93	0.00	0.00	0.00
6,800.00	90.00	332.97	6,238.00	683.18	-348.49	766.93	0.00	0.00	0.00
6,900.00	90.00	332.97	6,238.00	772.26	-393.93	866.93	0.00	0.00	0.00
7,000.00	90.00	332.97	6,238.00	861.34	-439.37	966.93	0.00	0.00	0.00
7,100.00	90.00	332.97	6,238.00	950.42	-484.81	1,066.93	0.00	0.00	0.00
7,200.00	90.00	332.97	6,238.00	1,039.50	-530.25	1,166.93	0.00	0.00	0.00
7,300.00	90.00	332.97	6,238.00	1,128.58	-575.69	1,266.93	0.00	0.00	0.00
7,400.00	90.00	332.97	6,238.00	1,217.66	-621.13	1,366.93	0.00	0.00	0.00
7,500.00	90.00	332.97	6,238.00	1,306.74	-666.57	1,466.93	0.00	0.00	0.00
7,600.00	90.00	332.97	6,238.00	1,395.82	-712.01	1,566.93	0.00	0.00	0.00
7,700.00	90.00	332.97	6,238.00	1,484.90	-757.45	1,666.93	0.00	0.00	0.00
7,800.00	90.00	332.97	6,238.00	1,573.98	-802.89	1,766.93	0.00	0.00	0.00
7,900.00	90.00	332.97	6,238.00	1,663.06	-848.33	1,866.93	0.00	0.00	0.00
8,000.00	90.00	332.97	6,238.00	1,752.14	-893.78	1,966.93	0.00	0.00	0.00
8,100.00	90.00	332.97	6,238.00	1,841.22	-939.22	2,066.93	0.00	0.00	0.00
8,200.00	90.00	332.97	6,238.00	1,930.30	-984.66	2,166.93	0.00	0.00	0.00
8,300.00	90.00	332.97	6,238.00	2,019.38	-1,030.10	2,266.93	0.00	0.00	0.00
8,400.00	90.00	332.97	6,238.00	2,108.45	-1,075.54	2,366.93	0.00	0.00	0.00
8,500.00	90.00	332.97	6,238.00	2,197.53	-1,120.98	2,466.93	0.00	0.00	0.00
8,600.00	90.00	332.97	6,238.00	2,286.61	-1,166.42	2,566.93	0.00	0.00	0.00
8,700.00	90.00	332.97	6,238.00	2,375.69	-1,211.86	2,666.93	0.00	0.00	0.00
8,800.00	90.00	332.97	6,238.00	2,464.77	-1,257.30	2,766.93	0.00	0.00	0.00
8,900.00	90.00	332.97	6,238.00	2,553.85	-1,302.74	2,866.93	0.00	0.00	0.00
9,000.00	90.00	332.97	6,238.00	2,642.93	-1,348.18	2,966.93	0.00	0.00	0.00
9,100.00	90.00	332.97	6,238.00	2,732.01	-1,393.62	3,066.93	0.00	0.00	0.00
9,200.00	90.00	332.97	6,238.00	2,821.09	-1,439.06	3,166.93	0.00	0.00	0.00
9,300.00	90.00	332.97	6,238.00	2,910.17	-1,484.50	3,266.93	0.00	0.00	0.00
9,400.00	90.00	332.97	6,238.00	2,999.25	-1,529.94	3,366.93	0.00	0.00	0.00
9,500.00	90.00	332.97	6,238.00	3,088.33	-1,575.38	3,466.93	0.00	0.00	0.00
9,600.00	90.00	332.97	6,238.00	3,177.41	-1,620.82	3,566.93	0.00	0.00	0.00
9,700.00	90.00	332.97	6,238.00	3,266.49	-1,666.26	3,666.93	0.00	0.00	0.00
9,800.00	90.00	332.97	6,238.00	3,355.57	-1,711.70	3,766.93	0.00	0.00	0.00
9,900.00	90.00	332.97	6,238.00	3,444.65	-1,757.14	3,866.93	0.00	0.00	0.00
10,000.00	90.00	332.97	6,238.00	3,533.73	-1,802.58	3,966.93	0.00	0.00	0.00
10,100.00	90.00	332.97	6,238.00	3,622.81	-1,848.02	4,066.93	0.00	0.00	0.00
10,200.00	90.00	332.97	6,238.00	3,711.89	-1,893.46	4,166.93	0.00	0.00	0.00

EOG Resources Inc

Planning Report

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Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 4712.00ft (TBD)
Site:	Greasewood 14-29H	North Reference:	True
Well:	Greasewood 14-29H	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	332.97	6,238.00	3,800.97	-1,938.90	4,266.93	0.00	0.00	0.00
10,400.00	90.00	332.97	6,238.00	3,890.05	-1,984.34	4,366.93	0.00	0.00	0.00
10,500.00	90.00	332.97	6,238.00	3,979.13	-2,029.78	4,466.93	0.00	0.00	0.00
10,598.75	90.00	332.97	6,238.00	4,067.09	-2,074.65	4,565.68	0.00	0.00	0.00
Greasewood 14-29H (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
- hit/miss target									
- Shape									
Greasewood 14-29H (0.00	0.00	6,238.00	4,067.09	-2,074.65	414,672.12	2,352,593.73	40° 27' 53.212 N	104° 13' 58.012 W
- plan hits target center									
- 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	
6,510.54	6,238.00	7"	7	8-3/4	
10,598.75	6,238.00	4 1/2"	4-1/2	6	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (deg)	Dip Direction (deg)
6,167.53	6,120.00	Niobrara Top		0.00	