



EOG Resources, Inc - RM

**Weld County, CO
Sec 28,T12N,R62W,6th P.M.
Randall Creek 1-28H**

Wellbore #1

Survey: MWD

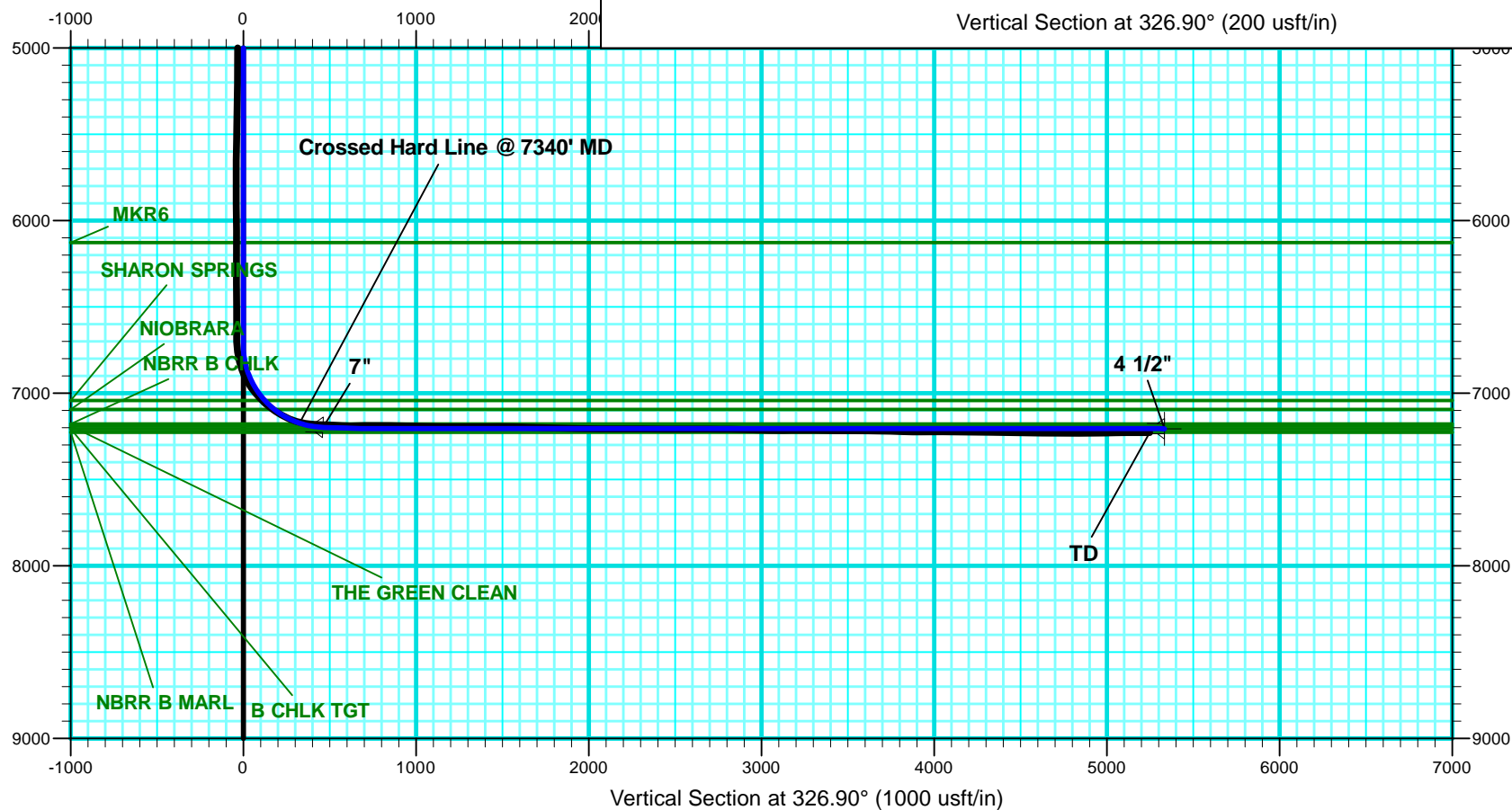
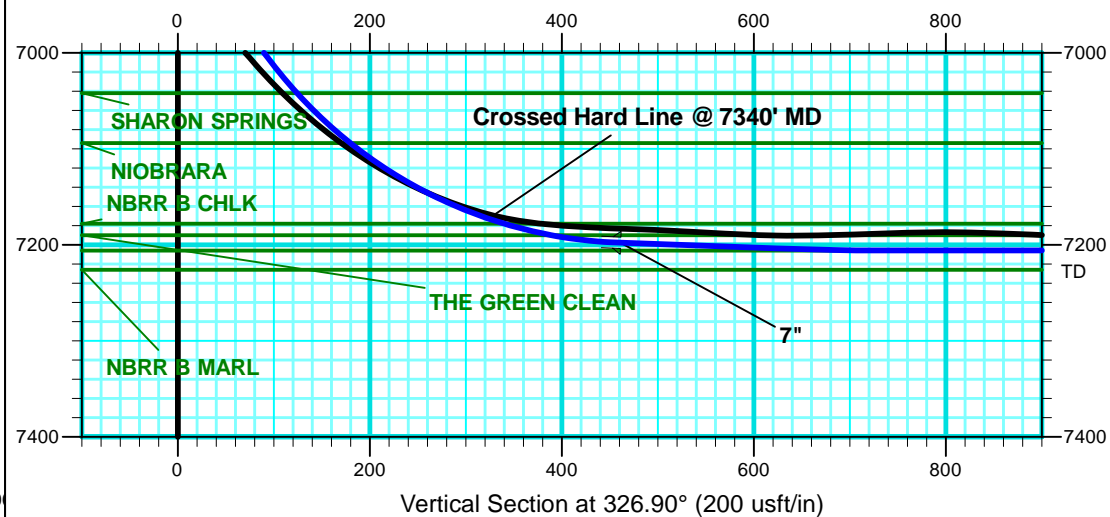
DDC Survey Report

20 June, 2011



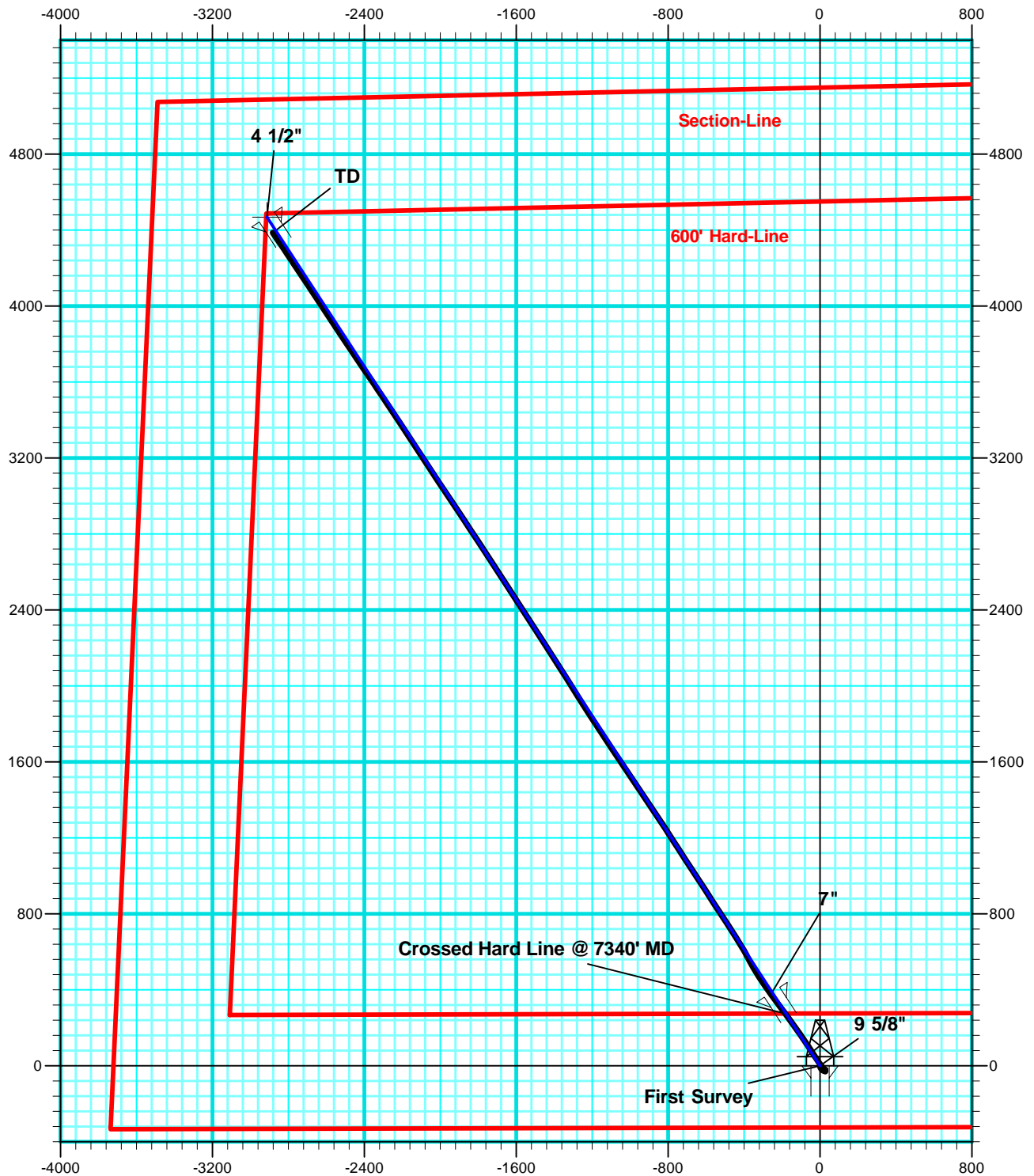


Weld County, CO
Sec 28,T12N,R62W,6th P.M.
Randall Creek 1-28H
RM-11297





Weld County, CO
Sec 28,T12N,R62W,6th P.M.
Randall Creek 1-28H
Wellbore #1
RM-11297



Company:	EOG Resources, Inc - RM	Local Co-ordinate Reference:	Well Randall Creek 1-28H
Project:	Weld County, CO	TVD Reference:	WELL @ 5310.0usft (SST #53)
Site:	Sec 28,T12N,R62W,6th P.M.	MD Reference:	WELL @ 5310.0usft (SST #53)
Well:	Randall Creek 1-28H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Weld County, CO		
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		Sec 28,T12N,R62W,6th P.M.			
Site Position:		Northing:	599,949.51 usft	Latitude:	40° 58' 27.500 N
From:	Map	Easting:	2,325,636.52 usft	Longitude:	104° 19' 14.875 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.76 °

Well	Randall Creek 1-28H					
Well Position	+N-S	0.0 usft	Northing:	599,949.51 usft	Latitude:	40° 58' 27.500 N
	+E-W	0.0 usft	Easting:	2,325,636.52 usft	Longitude:	104° 19' 14.875 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	5,287.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/24/2011	8.68	67.59	53,479

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.0	0.0	0.0	326.90	

Survey Program		Date	6/20/2011		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
1,381.0	12,262.0	MWD (Wellbore #1)	MWD default	MWD - Standard	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
First Survey									
1,381.0	0.00	0.00	1,381.0	0.0	0.0	0.0	0.00	0.00	0.00
1,418.0	0.50	160.60	1,418.0	-0.2	0.1	-0.2	1.35	1.35	0.00
1,662.0	0.30	162.70	1,662.0	-1.8	0.6	-1.8	0.08	-0.08	0.86
1,906.0	1.00	173.60	1,906.0	-4.5	1.0	-4.3	0.29	0.29	4.47
2,161.0	1.10	156.50	2,160.9	-8.9	2.2	-8.7	0.13	0.04	-6.71
2,415.0	1.50	146.00	2,414.9	-13.9	5.1	-14.5	0.18	0.16	-4.13
2,668.0	1.20	141.90	2,667.8	-18.8	8.6	-20.4	0.12	-0.12	-1.62
2,921.0	0.90	133.70	2,920.8	-22.2	11.6	-25.0	0.13	-0.12	-3.24
3,174.0	0.60	111.00	3,173.7	-24.1	14.3	-28.0	0.16	-0.12	-8.97

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,428.0	0.60	100.80	3,427.7	-24.8	16.9	-30.0	0.04	0.00	-4.02
3,683.0	0.40	97.30	3,682.7	-25.2	19.1	-31.5	0.08	-0.08	-1.37
3,934.0	0.30	124.70	3,933.7	-25.6	20.5	-32.7	0.08	-0.04	10.92
4,187.0	0.80	35.20	4,186.7	-24.6	22.0	-32.6	0.34	0.20	-35.38
4,441.0	0.80	71.40	4,440.7	-22.6	24.7	-32.4	0.20	0.00	14.25
4,695.0	0.80	49.50	4,694.6	-20.9	27.8	-32.6	0.12	0.00	-8.62
4,948.0	0.30	256.40	4,947.6	-19.9	28.5	-32.2	0.43	-0.20	-60.51
5,203.0	1.00	202.00	5,202.6	-22.1	27.0	-33.2	0.34	0.27	-21.33
5,458.0	1.30	152.10	5,457.6	-26.7	27.5	-37.4	0.40	0.12	-19.57
5,523.0	1.10	148.90	5,522.6	-27.9	28.2	-38.7	0.32	-0.31	-4.92
5,652.0	0.30	219.60	5,651.6	-29.2	28.6	-40.1	0.81	-0.62	54.81
5,905.0	0.30	247.70	5,904.6	-30.0	27.5	-40.2	0.06	0.00	11.11
6,032.0	0.20	11.30	6,031.6	-29.9	27.3	-39.9	0.35	-0.08	97.32
6,063.0	0.30	31.00	6,062.6	-29.8	27.3	-39.9	0.42	0.32	63.55
6,095.0	0.30	19.80	6,094.6	-29.6	27.4	-39.8	0.18	0.00	-35.00
6,127.0	0.30	34.70	6,126.6	-29.5	27.5	-39.7	0.24	0.00	46.56
6,159.0	0.30	28.70	6,158.6	-29.3	27.6	-39.6	0.10	0.00	-18.75
6,191.0	0.30	44.90	6,190.6	-29.2	27.7	-39.6	0.26	0.00	50.63
6,224.0	0.40	31.40	6,223.6	-29.0	27.8	-39.5	0.39	0.30	-40.91
6,256.0	0.30	37.90	6,255.5	-28.9	27.9	-39.4	0.34	-0.31	20.31
6,513.0	0.30	16.40	6,512.5	-27.7	28.5	-38.8	0.04	0.00	-8.37
6,642.0	0.30	351.30	6,641.5	-27.0	28.6	-38.2	0.10	0.00	-19.46
6,673.0	0.30	351.10	6,672.5	-26.9	28.5	-38.1	0.00	0.00	-0.65
6,706.0	2.10	324.00	6,705.5	-26.3	28.2	-37.4	5.57	5.45	-82.12
6,738.0	5.50	319.80	6,737.5	-24.6	26.8	-35.3	10.65	10.63	-13.13
6,770.0	9.20	321.40	6,769.2	-21.5	24.2	-31.2	11.58	11.56	5.00
6,802.0	12.30	321.60	6,800.6	-16.8	20.5	-25.3	9.69	9.69	0.63
6,834.0	15.40	321.60	6,831.7	-10.8	15.8	-17.7	9.69	9.69	0.00
6,865.0	19.00	321.90	6,861.3	-3.6	10.1	-8.5	11.62	11.61	0.97
6,897.0	23.00	322.50	6,891.2	5.5	3.1	2.9	12.52	12.50	1.88
6,929.0	27.20	324.90	6,920.1	16.4	-4.9	16.4	13.50	13.13	7.50
6,961.0	32.10	326.10	6,947.9	29.5	-13.9	32.3	15.42	15.31	3.75
6,993.0	36.40	326.80	6,974.4	44.5	-23.8	50.3	13.49	13.44	2.19
7,025.0	39.80	327.20	6,999.6	61.0	-34.6	70.0	10.65	10.63	1.25
7,056.0	42.80	327.40	7,022.9	78.2	-45.6	90.5	9.69	9.68	0.65
7,088.0	46.10	326.70	7,045.7	97.0	-57.8	112.9	10.43	10.31	-2.19
7,119.0	49.20	326.30	7,066.6	116.1	-70.5	135.8	10.05	10.00	-1.29
7,151.0	52.30	325.60	7,086.8	136.7	-84.4	160.6	9.83	9.69	-2.19
7,182.0	56.30	325.10	7,104.9	157.4	-98.7	185.7	12.97	12.90	-1.61
7,214.0	59.90	324.60	7,121.8	179.6	-114.3	212.9	11.33	11.25	-1.56
7,246.0	63.50	324.20	7,137.0	202.5	-130.7	241.0	11.30	11.25	-1.25
7,277.0	67.50	324.20	7,149.8	225.4	-147.2	269.2	12.90	12.90	0.00
7,308.0	71.70	324.00	7,160.6	248.9	-164.2	298.2	13.56	13.55	-0.65

Crossed Hard Line @ 7340' MD

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7,340.0	76.10	323.90	7,169.5	273.7	-182.3	328.9	13.75	13.75	-0.31
7,372.0	81.10	323.50	7,175.8	299.0	-200.9	360.2	15.67	15.63	-1.25
7,392.0	84.80	323.30	7,178.3	314.9	-212.7	380.0	18.53	18.50	-1.00
7,463.0	87.90	324.60	7,182.8	372.2	-254.4	450.8	4.73	4.37	1.83
7,493.0	87.80	323.70	7,183.9	396.5	-272.0	480.7	3.02	-0.33	-3.00
7,524.0	87.00	325.60	7,185.3	421.8	-289.9	511.6	6.64	-2.58	6.13
7,555.0	87.10	325.60	7,186.9	447.3	-307.4	542.6	0.32	0.32	0.00
7,585.0	87.00	327.40	7,188.5	472.3	-323.9	572.6	6.00	-0.33	6.00
7,616.0	87.70	329.50	7,189.9	498.7	-340.1	603.5	7.13	2.26	6.77
7,647.0	89.60	330.50	7,190.6	525.5	-355.6	634.5	6.93	6.13	3.23
7,680.0	91.60	331.20	7,190.3	554.4	-371.7	667.4	6.42	6.06	2.12
7,711.0	91.60	331.40	7,189.4	581.5	-386.6	698.3	0.64	0.00	0.65
7,743.0	91.60	329.70	7,188.5	609.4	-402.3	730.2	5.31	0.00	-5.31
7,775.0	91.90	329.30	7,187.6	636.9	-418.5	762.1	1.56	0.94	-1.25
7,807.0	90.20	328.60	7,187.0	664.4	-435.0	794.1	5.75	-5.31	-2.19
7,839.0	88.60	327.20	7,187.3	691.5	-452.0	826.1	6.64	-5.00	-4.38
7,872.0	87.80	326.30	7,188.3	719.0	-470.1	859.1	3.65	-2.42	-2.73
7,903.0	88.00	326.50	7,189.5	744.8	-487.3	890.1	0.91	0.65	0.65
7,934.0	89.10	327.20	7,190.3	770.8	-504.2	921.1	4.21	3.55	2.26
7,966.0	88.90	327.20	7,190.8	797.7	-521.5	953.1	0.63	-0.63	0.00
7,998.0	88.90	327.00	7,191.4	824.6	-538.9	985.0	0.62	0.00	-0.63
8,030.0	89.10	327.40	7,192.0	851.4	-556.3	1,017.0	1.40	0.63	1.25
8,061.0	89.10	327.40	7,192.5	877.6	-573.0	1,048.0	0.00	0.00	0.00
8,093.0	89.10	327.20	7,193.0	904.5	-590.2	1,080.0	0.62	0.00	-0.63
8,125.0	89.30	326.50	7,193.4	931.3	-607.7	1,112.0	2.27	0.63	-2.19
8,187.0	89.00	326.70	7,194.4	983.0	-641.9	1,174.0	0.58	-0.48	0.32
8,249.0	90.10	327.00	7,194.8	1,034.9	-675.8	1,236.0	1.84	1.77	0.48
8,314.0	90.20	326.80	7,194.7	1,089.4	-711.3	1,301.0	0.34	0.15	-0.31
8,378.0	90.20	327.00	7,194.4	1,143.0	-746.2	1,365.0	0.31	0.00	0.31
8,441.0	90.40	327.40	7,194.1	1,196.0	-780.3	1,428.0	0.71	0.32	0.63
8,505.0	89.20	326.70	7,194.3	1,249.7	-815.1	1,492.0	2.17	-1.88	-1.09
8,569.0	89.90	326.50	7,194.8	1,303.1	-850.4	1,556.0	1.14	1.09	-0.31
8,633.0	88.00	326.30	7,196.0	1,356.4	-885.8	1,620.0	2.99	-2.97	-0.31
8,695.0	87.60	326.00	7,198.4	1,407.8	-920.3	1,681.9	0.81	-0.65	-0.48
8,758.0	88.60	325.80	7,200.5	1,460.0	-955.6	1,744.9	1.62	1.59	-0.32
8,821.0	88.80	326.30	7,201.9	1,512.2	-990.8	1,807.9	0.85	0.32	0.79
8,885.0	88.60	326.30	7,203.4	1,565.4	-1,026.3	1,871.9	0.31	-0.31	0.00
8,949.0	88.40	326.50	7,205.0	1,618.7	-1,061.7	1,935.8	0.44	-0.31	0.31
9,012.0	89.30	326.30	7,206.3	1,671.2	-1,096.5	1,998.8	1.46	1.43	-0.32
9,076.0	90.00	326.30	7,206.7	1,724.4	-1,132.0	2,062.8	1.09	1.09	0.00
9,139.0	90.50	326.30	7,206.4	1,776.9	-1,167.0	2,125.8	0.79	0.79	0.00
9,203.0	89.90	327.00	7,206.2	1,830.3	-1,202.2	2,189.8	1.44	-0.94	1.09
9,266.0	88.80	327.70	7,206.9	1,883.4	-1,236.2	2,252.8	2.07	-1.75	1.11

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9,329.0	89.50	328.10	7,207.8	1,936.7	-1,269.6	2,315.8	1.28	1.11	0.63
9,393.0	89.90	327.40	7,208.2	1,990.8	-1,303.8	2,379.8	1.26	0.63	-1.09
9,456.0	90.00	328.10	7,208.2	2,044.1	-1,337.4	2,442.8	1.12	0.16	1.11
9,520.0	89.80	327.40	7,208.3	2,098.3	-1,371.6	2,506.8	1.14	-0.31	-1.09
9,583.0	90.00	327.50	7,208.5	2,151.4	-1,405.5	2,569.8	0.35	0.32	0.16
9,647.0	89.80	327.00	7,208.6	2,205.2	-1,440.1	2,633.7	0.84	-0.31	-0.78
9,711.0	89.70	327.20	7,208.8	2,258.9	-1,474.8	2,697.7	0.35	-0.16	0.31
9,774.0	89.90	327.20	7,209.1	2,311.9	-1,509.0	2,760.7	0.32	0.32	0.00
9,838.0	89.60	327.40	7,209.3	2,365.7	-1,543.5	2,824.7	0.56	-0.47	0.31
9,901.0	87.50	327.40	7,210.9	2,418.8	-1,577.5	2,887.7	3.33	-3.33	0.00
9,964.0	88.20	326.70	7,213.3	2,471.6	-1,611.7	2,950.7	1.57	1.11	-1.11
9,996.0	88.50	326.80	7,214.2	2,498.4	-1,629.2	2,982.7	0.99	0.94	0.31
10,060.0	89.10	326.80	7,215.6	2,551.9	-1,664.3	3,046.6	0.94	0.94	0.00
10,123.0	90.10	327.00	7,216.0	2,604.7	-1,698.7	3,109.6	1.62	1.59	0.32
10,187.0	90.00	327.50	7,216.0	2,658.5	-1,733.3	3,173.6	0.80	-0.16	0.78
10,251.0	90.50	326.70	7,215.7	2,712.2	-1,768.1	3,237.6	1.47	0.78	-1.25
10,315.0	89.50	326.70	7,215.7	2,765.7	-1,803.2	3,301.6	1.56	-1.56	0.00
10,379.0	89.50	326.50	7,216.2	2,819.2	-1,838.4	3,365.6	0.31	0.00	-0.31
10,443.0	89.70	326.10	7,216.7	2,872.4	-1,873.9	3,429.6	0.70	0.31	-0.63
10,507.0	89.50	326.30	7,217.1	2,925.6	-1,909.5	3,493.6	0.44	-0.31	0.31
10,571.0	89.50	326.10	7,217.7	2,978.8	-1,945.2	3,557.6	0.31	0.00	-0.31
10,635.0	89.00	326.70	7,218.5	3,032.1	-1,980.6	3,621.6	1.22	-0.78	0.94
10,700.0	89.30	326.80	7,219.5	3,086.4	-2,016.2	3,686.6	0.49	0.46	0.15
10,763.0	88.90	326.10	7,220.5	3,138.9	-2,051.0	3,749.6	1.28	-0.63	-1.11
10,826.0	87.90	326.50	7,222.2	3,191.3	-2,086.0	3,812.6	1.71	-1.59	0.63
10,890.0	88.80	326.80	7,224.1	3,244.7	-2,121.1	3,876.5	1.48	1.41	0.47
10,921.0	90.00	326.70	7,224.4	3,270.7	-2,138.1	3,907.5	3.88	3.87	-0.32
10,985.0	90.00	326.80	7,224.4	3,324.2	-2,173.2	3,971.5	0.16	0.00	0.16
11,048.0	89.60	327.20	7,224.6	3,377.0	-2,207.5	4,034.5	0.90	-0.63	0.63
11,111.0	89.50	326.50	7,225.1	3,429.8	-2,242.0	4,097.5	1.12	-0.16	-1.11
11,174.0	90.60	326.50	7,225.1	3,482.3	-2,276.7	4,160.5	1.75	1.75	0.00
11,207.0	91.30	326.10	7,224.5	3,509.8	-2,295.1	4,193.5	2.44	2.12	-1.21
11,239.0	89.50	326.10	7,224.3	3,536.3	-2,312.9	4,225.5	5.63	-5.63	0.00
11,272.0	88.60	325.80	7,224.8	3,563.7	-2,331.4	4,258.5	2.87	-2.73	-0.91
11,304.0	88.50	325.80	7,225.6	3,590.1	-2,349.4	4,290.5	0.31	-0.31	0.00
11,368.0	88.30	325.60	7,227.4	3,643.0	-2,385.4	4,354.4	0.44	-0.31	-0.31
11,431.0	89.20	325.80	7,228.8	3,695.0	-2,420.9	4,417.4	1.46	1.43	0.32
11,495.0	88.80	326.10	7,229.9	3,748.0	-2,456.7	4,481.4	0.78	-0.63	0.47
11,559.0	90.00	326.10	7,230.6	3,801.1	-2,492.4	4,545.4	1.88	1.88	0.00
11,622.0	89.20	326.70	7,231.0	3,853.6	-2,527.3	4,608.4	1.59	-1.27	0.95
11,685.0	90.20	326.30	7,231.4	3,906.1	-2,562.1	4,671.4	1.71	1.59	-0.63
11,749.0	90.20	326.50	7,231.1	3,959.4	-2,597.5	4,735.4	0.31	0.00	0.31
11,812.0	89.40	326.70	7,231.4	4,012.0	-2,632.1	4,798.4	1.31	-1.27	0.32
11,875.0	90.40	326.70	7,231.5	4,064.7	-2,666.7	4,861.4	1.59	1.59	0.00

Company:	EOG Resources, Inc - RM	Local Co-ordinate Reference:	Well Randall Creek 1-28H
Project:	Weld County, CO	TVD Reference:	WELL @ 5310.0usft (SST #53)
Site:	Sec 28,T12N,R62W,6th P.M.	MD Reference:	WELL @ 5310.0usft (SST #53)
Well:	Randall Creek 1-28H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,938.0	90.50	326.70	7,231.0	4,117.3	-2,701.3	4,924.4	0.16	0.16	0.00
12,003.0	90.30	326.30	7,230.5	4,171.5	-2,737.2	4,989.4	0.69	-0.31	-0.62
12,066.0	91.10	326.10	7,229.8	4,223.9	-2,772.2	5,052.4	1.31	1.27	-0.32
12,128.0	90.40	326.50	7,228.9	4,275.5	-2,806.6	5,114.4	1.30	-1.13	0.65
12,191.0	90.00	325.30	7,228.7	4,327.6	-2,842.0	5,177.3	2.01	-0.63	-1.90
12,213.0	90.20	325.30	7,228.7	4,345.7	-2,854.5	5,199.3	0.91	0.91	0.00
TD									
12,262.0	90.20	325.30	7,228.5	4,386.0	-2,882.4	5,248.3	0.00	0.00	0.00

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,381.0	1,381.0	0.0	0.0	First Survey
7,340.0	7,169.5	273.7	-182.3	Crossed Hard Line @ 7340' MD
12,262.0	7,228.5	4,386.0	-2,882.4	TD

Checked By: _____	Approved By: _____	Date: _____
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Survey Certification Sheet

EOG Resources, Inc.
Company

RM-11297
Job Number

6/12/11
Date

Sec 28,T12N,R62W,6TH PM Randall Creek 1-28H
Lease Well Name

Weld, ND
County & State

Surveyed from a depth of: 1381 feet to 12262 feet MD

Type of Survey: MWD

Directional Supervisor/Surveyor: Mark Snyder

The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by **The Directional Drilling Company (DDC)**. This report represents a true and correct Directional survey of this well based on the original data obtained at the well site. Wellbore Coordinates are calculated using minimum curvature.

Digitally signed by Larry Wright
DN: cn=Larry Wright, o, ou,
email=larryw@directionaldrillers.com, c=US
Date: 2011.06.20 15:58:05 -05'00'

Larry Wright
MWD General Manager