



EOG Resources

Weld Co., CO

Sec 16-T11N-R63W

Critter Creek #34-16H

Hz

Survey: Survey #1

Standard Survey Report

16 August, 2011





WELL DETAILS: Critter Creek #34-16H

Ground Level: 5275.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	582969.58	2294551.61	40.928786	-104.434092

SECTION DETAILS

No plan data is available

FORMATION TOP DETAILS

No formation data is available

ANNOTATIONS

TVD	MD	Annotation
7366.5	12875.0	Projection to Bit

CASING DETAILS

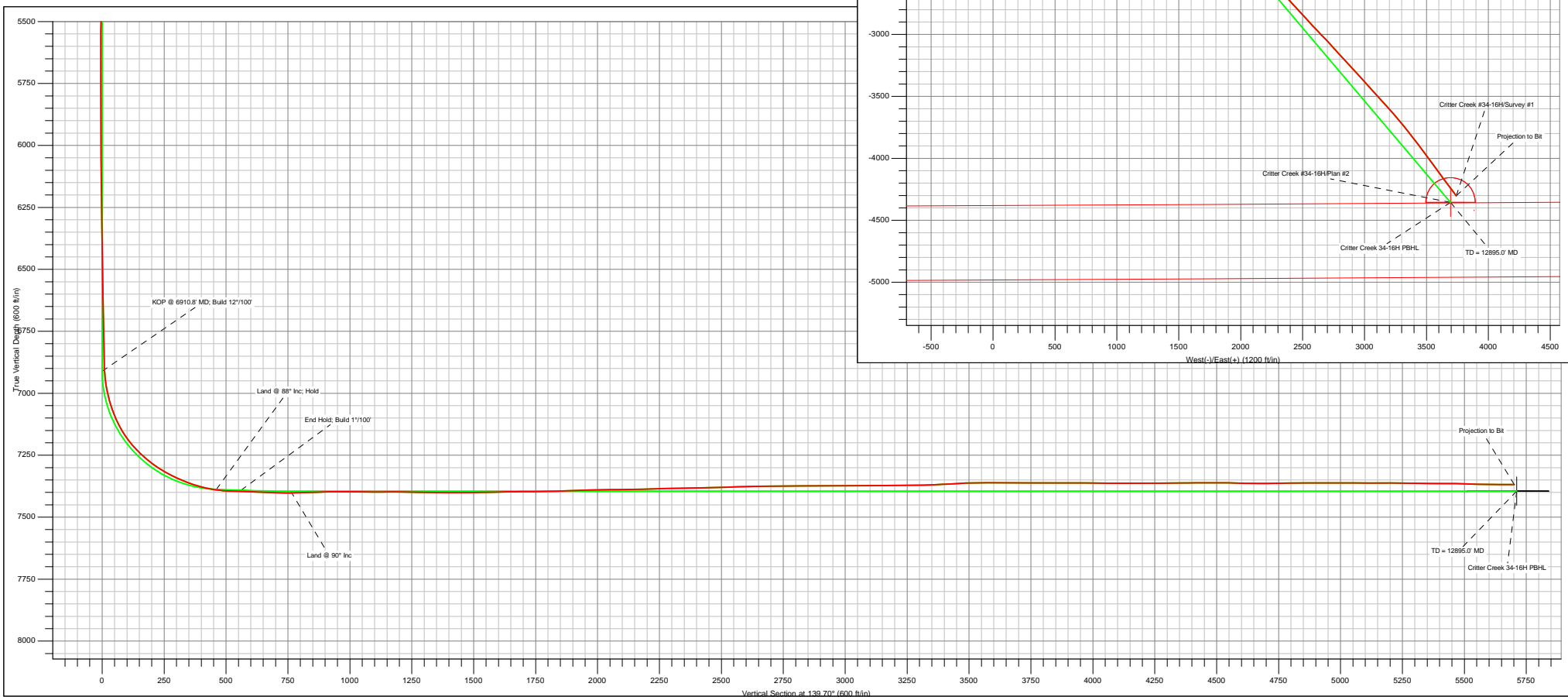
No casing data is available

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Critter Creek 34-16H PBH695.0		-4355.7	3694.5	40.916831	-104.420725	Circle (Radius: 200.0)



Azimuths to True North
Magnetic North: 8.73°
Magnetic Field
Strength: 53434.7nT
Dip Angle: 67.53°
Date: 06/26/2011
Model: IGRF2010-14



Company:	EOG Resources	Local Co-ordinate Reference:	Well Critter Creek #34-16H
Project:	Weld Co., CO	TVD Reference:	CC 34-16H KBE @ 5300.0ft (True 30)
Site:	Sec 16-T11N-R63W	MD Reference:	CC 34-16H KBE @ 5300.0ft (True 30)
Well:	Critter Creek #34-16H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Local

Project	Weld Co., 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 16-T11N-R63W		
Site Position:		Northing:	
From:	Lat/Long	Easting:	
Position Uncertainty:	0.0 ft	Slot Radius:	
		Latitude:	
		Longitude:	
		Grid Convergence:	1.00

Well	Critter Creek #34-16H		
Well Position	+N/-S	0.0 ft	Northing: 582,969.59 ft
	+E/-W	0.0 ft	Easting: 2,294,551.61 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.928786
		Longitude:	-104.434092
		Ground Level:	5,275.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010-14	06/22/11	8.73	67.53	53,435

Design	Hz				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	139.70	

Survey Program	Date	08/16/11			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
1,422.0	12,875.0	Survey #1 (Hz)	MWD		

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	-5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,422.0	0.00	0.00	1,422.0	-3,878.0	0.0	0.0	0.0	0.00	0.00	0.00
1,462.0	0.48	57.07	1,462.0	-3,838.0	0.1	0.1	0.0	1.20	1.20	0.00
1,736.0	0.84	55.75	1,736.0	-3,564.0	1.8	2.8	0.4	0.13	0.13	-0.48
2,013.0	0.75	56.02	2,013.0	-3,287.0	4.0	5.9	0.8	0.03	-0.03	0.10
2,302.0	0.48	33.69	2,301.9	-2,998.1	6.1	8.2	0.7	0.12	-0.09	-7.73
2,588.0	0.40	86.43	2,587.9	-2,712.1	7.1	9.8	0.9	0.14	-0.03	18.44
2,878.0	0.62	99.08	2,877.9	-2,422.1	6.9	12.4	2.7	0.08	0.08	4.36
3,167.0	0.44	98.73	3,166.9	-2,133.1	6.5	15.0	4.8	0.06	-0.06	-0.12
3,455.0	0.55	62.43	3,454.9	-1,845.1	7.0	17.4	5.9	0.11	0.04	-12.60

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Well:	Critter Creek #34-16H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Local

Survey											
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
3,742.0	0.57	43.01	3,741.9	-1,558.1	8.7	19.6	6.0	0.07	0.01	-6.77	
4,032.0	0.57	49.07	4,031.9	-1,268.1	10.7	21.6	5.9	0.02	0.00	2.09	
4,320.0	0.62	359.06	4,319.9	-980.1	13.2	22.7	4.6	0.18	0.02	-17.36	
4,611.0	0.22	332.61	4,610.8	-689.2	15.2	22.4	2.9	0.15	-0.14	-9.09	
4,901.0	0.35	338.06	4,900.8	-399.2	16.6	21.8	1.5	0.05	0.04	1.88	
5,186.0	0.79	318.90	5,185.8	-114.2	18.8	20.2	-1.3	0.17	0.15	-6.72	
5,476.0	1.80	31.05	5,475.8	175.8	24.3	21.2	-4.8	0.60	0.35	24.88	
5,604.0	0.13	39.40	5,603.7	303.7	26.1	22.4	-5.4	1.31	-1.30	6.52	
5,766.0	0.84	235.40	5,765.7	465.7	25.6	21.5	-5.6	0.60	0.44	-101.23	
6,054.0	1.32	207.19	6,053.7	753.7	21.4	18.3	-4.5	0.24	0.17	-9.80	
6,343.0	1.19	183.54	6,342.6	1,042.6	15.5	16.5	-1.1	0.18	-0.04	-8.18	
6,633.0	1.05	148.56	6,632.6	1,332.6	10.2	17.7	3.7	0.24	-0.05	-12.06	
6,824.0	1.01	139.42	6,823.5	1,523.5	7.4	19.8	7.1	0.09	-0.02	-4.79	
6,856.0	0.97	136.35	6,855.5	1,555.5	7.0	20.1	7.7	0.21	-0.13	-9.59	
6,888.0	1.63	134.24	6,887.5	1,587.5	6.5	20.6	8.4	2.07	2.06	-6.59	
6,920.0	4.35	136.52	6,919.5	1,619.5	5.3	21.8	10.1	8.51	8.50	7.13	
6,952.0	7.60	138.90	6,951.3	1,651.3	2.8	24.0	13.4	10.18	10.16	7.44	
6,984.0	10.64	139.86	6,982.9	1,682.9	-1.0	27.3	18.5	9.51	9.50	3.00	
7,016.0	13.80	139.86	7,014.2	1,714.2	-6.2	31.7	25.2	9.88	9.88	0.00	
7,047.0	17.05	140.30	7,044.0	1,744.0	-12.5	37.0	33.5	10.49	10.48	1.42	
7,079.0	20.40	140.48	7,074.3	1,774.3	-20.5	43.5	43.8	10.47	10.47	0.56	
7,110.0	23.87	140.74	7,103.1	1,803.1	-29.5	50.9	55.4	11.20	11.19	0.84	
7,142.0	27.78	141.09	7,131.9	1,831.9	-40.3	59.7	69.4	12.23	12.22	1.09	
7,175.0	32.04	141.88	7,160.5	1,860.5	-53.2	70.0	85.8	12.96	12.91	2.39	
7,207.0	36.70	141.97	7,186.9	1,886.9	-67.4	81.1	103.9	14.56	14.56	0.28	
7,239.0	41.27	142.06	7,211.7	1,911.7	-83.3	93.5	124.0	14.28	14.28	0.28	
7,271.0	44.92	141.88	7,235.1	1,935.1	-100.5	106.9	145.8	11.41	11.41	-0.56	
7,303.0	48.40	141.27	7,257.0	1,957.0	-118.7	121.4	169.1	10.96	10.88	-1.91	
7,335.0	51.91	141.09	7,277.5	1,977.5	-137.8	136.8	193.6	10.98	10.97	-0.56	
7,368.0	55.87	141.53	7,297.0	1,997.0	-158.7	153.5	220.3	12.05	12.00	1.33	
7,399.0	59.74	141.80	7,313.5	2,013.5	-179.2	169.7	246.5	12.51	12.48	0.87	
7,431.0	62.95	141.18	7,328.8	2,028.8	-201.2	187.2	274.5	10.17	10.03	-1.94	
7,462.0	65.45	140.83	7,342.3	2,042.3	-222.9	204.8	302.4	8.13	8.06	-1.13	
7,495.0	67.96	140.92	7,355.4	2,055.4	-246.4	223.9	332.7	7.61	7.61	0.27	
7,527.0	70.68	141.44	7,366.7	2,066.7	-269.7	242.7	362.7	8.63	8.50	1.63	
7,560.0	74.59	141.62	7,376.5	2,076.5	-294.4	262.3	394.1	11.86	11.85	0.55	
7,591.0	78.20	141.88	7,383.8	2,083.8	-318.0	280.9	424.2	11.67	11.65	0.84	
7,624.0	81.67	141.80	7,389.6	2,089.6	-343.6	301.0	456.7	10.52	10.52	-0.24	
7,655.0	85.58	141.88	7,393.0	2,093.0	-367.8	320.0	487.5	12.62	12.61	0.26	
7,711.0	88.53	141.37	7,395.9	2,095.9	-411.6	354.7	543.4	5.35	5.27	-0.91	
7,780.0	87.69	140.74	7,398.2	2,098.2	-465.3	398.1	612.3	1.52	-1.22	-0.91	
7,843.0	88.13	140.57	7,400.5	2,100.5	-514.0	438.0	675.3	0.75	0.70	-0.27	
7,907.0	89.10	140.48	7,402.0	2,102.0	-563.3	478.7	739.2	1.52	1.52	-0.14	

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Design:	Hz	Database:	Local

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7,971.0	92.04	140.74	7,401.4	2,101.4	-612.8	519.3	803.2	4.61	4.59	0.41	
8,035.0	91.78	140.13	7,399.3	2,099.3	-662.1	560.0	867.2	1.04	-0.41	-0.95	
8,068.0	91.74	140.13	7,398.2	2,098.2	-687.4	581.2	900.2	0.12	-0.12	0.00	
8,099.0	90.90	139.69	7,397.5	2,097.5	-711.1	601.1	931.2	3.06	-2.71	-1.42	
8,132.0	89.54	139.07	7,397.4	2,097.4	-736.2	622.6	964.2	4.53	-4.12	-1.88	
8,164.0	89.54	138.72	7,397.7	2,097.7	-760.3	643.6	996.2	1.09	0.00	-1.09	
8,228.0	89.27	137.93	7,398.3	2,098.3	-808.1	686.2	1,060.1	1.30	-0.42	-1.23	
8,293.0	90.37	137.58	7,398.5	2,098.5	-856.2	729.9	1,125.1	1.78	1.69	-0.54	
8,325.0	90.51	137.23	7,398.3	2,098.3	-879.8	751.6	1,157.1	1.18	0.44	-1.09	
8,390.0	89.01	136.26	7,398.6	2,098.6	-927.1	796.1	1,222.0	2.75	-2.31	-1.49	
8,422.0	88.97	135.91	7,399.1	2,099.1	-950.2	818.3	1,253.9	1.10	-0.13	-1.09	
8,487.0	89.23	136.17	7,400.1	2,100.1	-996.9	863.4	1,318.8	0.57	0.40	0.40	
8,518.0	89.19	136.08	7,400.6	2,100.6	-1,019.3	884.9	1,349.7	0.32	-0.13	-0.29	
8,550.0	88.88	136.00	7,401.1	2,101.1	-1,042.3	907.1	1,381.6	1.00	-0.97	-0.25	
8,582.0	89.54	136.35	7,401.6	2,101.6	-1,065.4	929.2	1,413.6	2.33	2.06	1.09	
8,614.0	90.33	136.96	7,401.6	2,101.6	-1,088.7	951.2	1,445.5	3.12	2.47	1.91	
8,646.0	90.99	137.49	7,401.2	2,101.2	-1,112.2	972.9	1,477.5	2.65	2.06	1.66	
8,678.0	91.25	137.75	7,400.6	2,100.6	-1,135.8	994.5	1,509.5	1.15	0.81	0.81	
8,711.0	91.96	137.84	7,399.7	2,099.7	-1,160.2	1,016.7	1,542.4	2.17	2.15	0.27	
8,774.0	91.21	137.67	7,397.9	2,097.9	-1,206.8	1,059.0	1,605.4	1.22	-1.19	-0.27	
8,805.0	90.24	137.40	7,397.5	2,097.5	-1,229.7	1,079.9	1,636.4	3.25	-3.13	-0.87	
8,837.0	90.42	137.49	7,397.3	2,097.3	-1,253.3	1,101.6	1,668.3	0.63	0.56	0.28	
8,869.0	91.08	137.23	7,396.9	2,096.9	-1,276.8	1,123.2	1,700.3	2.22	2.06	-0.81	
8,901.0	90.46	136.08	7,396.5	2,096.5	-1,300.1	1,145.2	1,732.2	4.08	-1.94	-3.59	
8,934.0	89.85	135.73	7,396.4	2,096.4	-1,323.8	1,168.2	1,765.2	2.13	-1.85	-1.06	
8,998.0	91.69	136.08	7,395.6	2,095.6	-1,369.7	1,212.7	1,829.0	2.93	2.88	0.55	
9,063.0	92.57	135.91	7,393.1	2,093.1	-1,416.5	1,257.8	1,893.8	1.38	1.35	-0.26	
9,127.0	91.52	135.56	7,390.9	2,090.9	-1,462.3	1,302.5	1,957.7	1.73	-1.64	-0.55	
9,159.0	91.47	135.56	7,390.0	2,090.0	-1,485.1	1,324.9	1,989.6	0.16	-0.16	0.00	
9,224.0	90.02	134.15	7,389.2	2,089.2	-1,530.9	1,370.9	2,054.3	3.11	-2.23	-2.17	
9,287.0	91.12	133.97	7,388.5	2,088.5	-1,574.8	1,416.2	2,117.0	1.77	1.75	-0.29	
9,319.0	90.95	133.80	7,388.0	2,088.0	-1,596.9	1,439.3	2,148.8	0.75	-0.53	-0.53	
9,351.0	91.12	134.41	7,387.4	2,087.4	-1,619.2	1,462.2	2,180.7	1.98	0.53	1.91	
9,383.0	91.56	135.47	7,386.6	2,086.6	-1,641.8	1,484.9	2,212.6	3.59	1.38	3.31	
9,415.0	91.69	136.26	7,385.7	2,085.7	-1,664.8	1,507.2	2,244.5	2.50	0.41	2.47	
9,447.0	91.60	136.96	7,384.8	2,084.8	-1,688.0	1,529.1	2,276.4	2.20	-0.28	2.19	
9,479.0	91.38	137.93	7,384.0	2,084.0	-1,711.6	1,550.8	2,308.4	3.11	-0.69	3.03	
9,511.0	90.90	139.07	7,383.3	2,083.3	-1,735.5	1,572.0	2,340.4	3.86	-1.50	3.56	
9,544.0	90.86	140.13	7,382.8	2,082.8	-1,760.7	1,593.4	2,373.4	3.21	-0.12	3.21	
9,575.0	91.38	140.57	7,382.2	2,082.2	-1,784.5	1,613.1	2,404.4	2.20	1.68	1.42	
9,607.0	91.52	140.48	7,381.4	2,081.4	-1,809.2	1,633.5	2,436.3	0.52	0.44	-0.28	
9,672.0	91.65	139.95	7,379.6	2,079.6	-1,859.1	1,675.0	2,501.3	0.84	0.20	-0.82	

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9,704.0	92.00	139.86	7,378.6	2,078.6	-1,883.6	1,695.6	2,533.3	1.13	1.09	-0.28
9,737.0	91.52	140.13	7,377.6	2,077.6	-1,908.9	1,716.8	2,566.3	1.67	-1.45	0.82
9,800.0	91.30	140.39	7,376.0	2,076.0	-1,957.3	1,757.1	2,629.3	0.54	-0.35	0.41
9,863.0	90.24	139.95	7,375.2	2,075.2	-2,005.7	1,797.5	2,692.2	1.82	-1.68	-0.70
9,927.0	90.68	140.65	7,374.7	2,074.7	-2,054.9	1,838.3	2,756.2	1.29	0.69	1.09
9,991.0	90.11	139.77	7,374.2	2,074.2	-2,104.1	1,879.3	2,820.2	1.64	-0.89	-1.38
10,054.0	90.51	141.01	7,373.9	2,073.9	-2,152.6	1,919.5	2,883.2	2.07	0.63	1.97
10,118.0	90.24	141.09	7,373.5	2,073.5	-2,202.4	1,959.7	2,947.2	0.44	-0.42	0.13
10,181.0	90.33	142.32	7,373.2	2,073.2	-2,251.8	1,998.7	3,010.2	1.96	0.14	1.95
10,244.0	90.07	141.62	7,372.9	2,072.9	-2,301.5	2,037.5	3,073.1	1.19	-0.41	-1.11
10,308.0	90.42	142.76	7,372.7	2,072.7	-2,352.0	2,076.8	3,137.1	1.86	0.55	1.78
10,340.0	90.42	141.88	7,372.4	2,072.4	-2,377.3	2,096.3	3,169.0	2.75	0.00	-2.75
10,404.0	90.37	141.01	7,372.0	2,072.0	-2,427.4	2,136.2	3,233.0	1.36	-0.08	-1.36
10,468.0	90.90	139.51	7,371.3	2,071.3	-2,476.6	2,177.1	3,297.0	2.49	0.83	-2.34
10,499.0	91.96	139.25	7,370.5	2,070.5	-2,500.1	2,197.3	3,328.0	3.52	3.42	-0.84
10,530.0	92.57	139.25	7,369.3	2,069.3	-2,523.6	2,217.5	3,358.9	1.97	1.97	0.00
10,563.0	92.97	139.25	7,367.7	2,067.7	-2,548.6	2,239.0	3,391.9	1.21	1.21	0.00
10,594.0	92.97	138.98	7,366.1	2,066.1	-2,572.0	2,259.3	3,422.9	0.87	0.00	-0.87
10,626.0	93.19	139.42	7,364.4	2,064.4	-2,596.2	2,280.2	3,454.8	1.54	0.69	1.38
10,658.0	92.53	140.04	7,362.8	2,062.8	-2,620.5	2,300.8	3,486.8	2.83	-2.06	1.94
10,690.0	91.25	139.69	7,361.7	2,061.7	-2,645.0	2,321.5	3,518.8	4.15	-4.00	-1.09
10,723.0	89.85	138.37	7,361.4	2,061.4	-2,669.9	2,343.1	3,551.8	5.83	-4.24	-4.00
10,755.0	89.63	137.67	7,361.5	2,061.5	-2,693.7	2,364.5	3,583.7	2.29	-0.69	-2.19
10,787.0	89.98	137.58	7,361.7	2,061.7	-2,717.3	2,386.1	3,615.7	1.13	1.09	-0.28
10,819.0	90.42	137.40	7,361.5	2,061.5	-2,740.9	2,407.7	3,647.7	1.49	1.38	-0.56
10,852.0	90.07	137.31	7,361.4	2,061.4	-2,765.2	2,430.0	3,680.7	1.10	-1.06	-0.27
10,916.0	89.54	137.67	7,361.6	2,061.6	-2,812.4	2,473.3	3,744.6	1.00	-0.83	0.56
10,948.0	89.32	137.75	7,361.9	2,061.9	-2,836.0	2,494.8	3,776.6	0.73	-0.69	0.25
11,012.0	90.07	137.84	7,362.3	2,062.3	-2,883.5	2,537.8	3,840.6	1.18	1.17	0.14
11,075.0	90.33	136.61	7,362.1	2,062.1	-2,929.7	2,580.6	3,903.5	2.00	0.41	-1.95
11,139.0	89.41	136.08	7,362.2	2,062.2	-2,976.0	2,624.8	3,967.4	1.66	-1.44	-0.83
11,172.0	88.84	136.17	7,362.7	2,062.7	-2,999.8	2,647.7	4,000.3	1.75	-1.73	0.27
11,234.0	90.02	136.87	7,363.3	2,063.3	-3,044.8	2,690.3	4,062.2	2.21	1.90	1.13
11,267.0	90.64	137.67	7,363.1	2,063.1	-3,069.0	2,712.7	4,095.2	3.07	1.88	2.42
11,299.0	90.15	137.05	7,362.9	2,062.9	-3,092.5	2,734.4	4,127.2	2.47	-1.53	-1.94
11,330.0	89.80	137.23	7,362.9	2,062.9	-3,115.3	2,755.5	4,158.1	1.27	-1.13	0.58
11,395.0	89.89	137.75	7,363.1	2,063.1	-3,163.2	2,799.4	4,223.1	0.81	0.14	0.80
11,460.0	90.29	137.58	7,363.0	2,063.0	-3,211.2	2,843.2	4,288.0	0.67	0.62	-0.26
11,492.0	90.77	137.49	7,362.7	2,062.7	-3,234.8	2,864.8	4,320.0	1.53	1.50	-0.28
11,524.0	91.12	137.31	7,362.2	2,062.2	-3,258.4	2,886.4	4,352.0	1.23	1.09	-0.56
11,556.0	89.89	136.96	7,361.9	2,061.9	-3,281.8	2,908.2	4,384.0	4.00	-3.84	-1.09
11,589.0	90.46	137.40	7,361.8	2,061.8	-3,306.1	2,930.6	4,416.9	2.18	1.73	1.33
11,620.0	90.64	137.05	7,361.5	2,061.5	-3,328.8	2,951.7	4,447.9	1.27	0.58	-1.13

Company:	EOG Resources	Local Co-ordinate Reference:	Well Critter Creek #34-16H
Project:	Weld Co., CO	TVD Reference:	CC 34-16H KBE @ 5300.0ft (True 30)
Site:	Sec 16-T11N-R63W	MD Reference:	CC 34-16H KBE @ 5300.0ft (True 30)
Well:	Critter Creek #34-16H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Local

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,652.0	90.20	137.14	7,361.3	2,061.3	-3,352.2	2,973.5	4,479.9	1.40	-1.38	0.28
11,685.0	89.63	137.40	7,361.3	2,061.3	-3,376.5	2,995.8	4,512.8	1.90	-1.73	0.79
11,717.0	88.79	138.19	7,361.8	2,061.8	-3,400.2	3,017.3	4,544.8	3.60	-2.63	2.47
11,749.0	88.66	138.46	7,362.5	2,062.5	-3,424.1	3,038.6	4,576.8	0.94	-0.41	0.84
11,782.0	88.92	138.28	7,363.2	2,063.2	-3,448.7	3,060.5	4,609.8	0.96	0.79	-0.55
11,844.0	89.80	138.02	7,363.9	2,063.9	-3,494.9	3,101.9	4,671.7	1.48	1.42	-0.42
11,909.0	91.03	137.93	7,363.4	2,063.4	-3,543.2	3,145.4	4,736.7	1.90	1.89	-0.14
11,973.0	90.55	137.93	7,362.5	2,062.5	-3,590.7	3,188.3	4,800.7	0.75	-0.75	0.00
12,038.0	89.98	138.54	7,362.2	2,062.2	-3,639.2	3,231.6	4,865.7	1.28	-0.88	0.94
12,101.0	89.89	139.69	7,362.3	2,062.3	-3,686.8	3,272.8	4,928.7	1.83	-0.14	1.83
12,164.0	89.93	140.48	7,362.4	2,062.4	-3,735.1	3,313.2	4,991.6	1.26	0.06	1.25
12,227.0	90.07	141.36	7,362.4	2,062.4	-3,784.0	3,353.0	5,054.6	1.41	0.22	1.40
12,290.0	89.71	142.15	7,362.5	2,062.5	-3,833.5	3,391.9	5,117.6	1.38	-0.57	1.25
12,321.0	90.46	142.76	7,362.4	2,062.4	-3,858.1	3,410.8	5,148.6	3.12	2.42	1.97
12,354.0	90.51	143.20	7,362.2	2,062.2	-3,884.4	3,430.7	5,181.5	1.34	0.15	1.33
12,385.0	89.54	143.55	7,362.2	2,062.2	-3,909.3	3,449.2	5,212.4	3.33	-3.13	1.13
12,417.0	88.79	143.73	7,362.6	2,062.6	-3,935.1	3,468.2	5,244.4	2.41	-2.34	0.56
12,480.0	88.88	143.64	7,363.9	2,063.9	-3,985.8	3,505.5	5,307.2	0.20	0.14	-0.14
12,542.0	90.20	143.64	7,364.4	2,064.4	-4,035.8	3,542.2	5,369.0	2.13	2.13	0.00
12,574.0	91.03	143.55	7,364.1	2,064.1	-4,061.5	3,561.2	5,401.0	2.61	2.59	-0.28
12,605.0	89.89	143.29	7,363.8	2,063.8	-4,086.4	3,579.7	5,431.9	3.77	-3.68	-0.84
12,637.0	88.26	143.64	7,364.3	2,064.3	-4,112.1	3,598.7	5,463.8	5.21	-5.09	1.09
12,700.0	88.18	143.38	7,366.3	2,066.3	-4,162.8	3,636.2	5,526.7	0.43	-0.13	-0.41
12,732.0	88.48	143.20	7,367.2	2,067.2	-4,188.4	3,655.3	5,558.6	1.09	0.94	-0.56
12,819.0	89.93	143.03	7,368.4	2,068.4	-4,258.0	3,707.5	5,645.4	1.68	1.67	-0.20
Projection to Bit										
12,875.0	89.93	143.03	7,368.5	2,068.5	-4,302.7	3,741.2	5,701.3	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (-4,355.7)	+E/-W (3,694.5)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Critter Creek 34-16H PB	0.00	0.00	7,395.0	-4,355.7	3,694.5	578,658.61	2,298,298.17	40.916831	-104.420725
- survey misses target center by 75.5ft at 12875.0ft MD (7368.5 TVD, -4302.7 N, 3741.2 E)									
- Circle (radius 200.0)									

Survey Annotations				
Measured Depth (')	Vertical Depth (')	Local Coordinates		Comment
		+N/-S (')	+E/-W (')	
12,875.0	7,368.5	-4,302.7	3,741.2	Projection to Bit



Company:	EOG Resources	Local Co-ordinate Reference:	Well Critter Creek #34-16H
Project:	Weld Co., CO	TVD Reference:	CC 34-16H KBE @ 5300.0ft (True 30)
Site:	Sec 16-T11N-R63W	MD Reference:	CC 34-16H KBE @ 5300.0ft (True 30)
Well:	Critter Creek #34-16H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Local

Checked By: _____ Approved By: _____ Date: _____