



## **EOG Resources**

**Weld Co., CO**

**Sec 27-T11N-R63W**

**Critter Creek 22-27H**

**Hz**

**Survey: Survey #1**

## **Standard Survey Report**

**26 October, 2010**





Phoenix Technology Services  
Survey Report



Company:	EOG Resources	Local Co-ordinate Reference:	Well Critter Creek 22-27H
Project:	Weld Co., CO	TVD Reference:	CC 22-27H KBE @ 5241.0ft (DHS #8)
Site:	Sec 27-T11N-R83W	MD Reference:	CC 22-27H KBE @ 5241.0ft (DHS #8)
Well:	Critter Creek 22-27H	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 27-T11N-R83W		
Site Position:		Northing:	Latitude:
From:	Lat/Long	Easting:	Longitude:
Position Uncertainty:	0.0 ft	Slot Radius:	Grid Convergence: 1.00

Well	Critter Creek 22-27H				
Well Position	+N/-S	0.0 ft	Northing:	572,256.96 ft	Latitude: 40° 53' 57.510 N
	+E/-W	0.0 ft	Easting:	2,296,896.12 ft	Longitude: 104° 25' 33.880 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 5,219.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010-14	10/06/10	8.82	67.53	53,496

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	134.53	

Survey Program	Date	10/26/10			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
1,339.0	12,950.0	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	-5,241.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,339.0	0.00	0.00	1,339.0	-3,902.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,389.0	0.90	40.10	1,389.0	-3,852.0	0.3	0.3	0.0	1.80	1.80	0.00	
1,670.0	0.90	40.40	1,670.0	-3,571.0	3.7	3.1	-0.4	0.00	0.00	0.11	
1,956.0	1.10	43.60	1,955.9	-3,285.1	7.4	6.5	-0.6	0.07	0.07	1.12	
2,240.0	1.50	46.50	2,239.8	-3,001.2	11.9	11.0	-0.5	0.14	0.14	1.02	
2,525.0	1.20	48.30	2,524.8	-2,716.2	16.5	16.0	-0.2	0.11	-0.11	0.63	
2,807.0	1.20	32.20	2,806.7	-2,434.3	20.9	19.7	-0.6	0.12	0.00	-5.71	
3,089.0	0.90	15.10	3,088.7	-2,152.3	25.6	21.9	-2.3	0.15	-0.11	-6.06	
3,370.0	1.00	359.70	3,369.6	-1,871.4	30.1	22.5	-5.1	0.10	0.04	-5.48	

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<b>Site:</b>	Sec 27-T11N-R83W	<b>MD Reference:</b>	CC 22-27H KBE @ 5241.0ft (DHS #8)
<b>Well:</b>	Critter Creek 22-27H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Hz	<b>Database:</b>	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)
3,651.0	1.00	337.50	3,650.6	-1,590.4	34.9	21.5	-9.1	0.14	0.00	-7.90
3,936.0	1.50	333.60	3,935.5	-1,305.5	40.5	18.9	-14.9	0.18	0.18	-1.37
4,220.0	1.70	337.30	4,219.4	-1,021.6	47.7	15.6	-22.3	0.08	0.07	1.30
4,504.0	2.00	336.10	4,503.3	-737.7	56.1	12.0	-30.8	0.11	0.11	-0.42
4,786.0	1.20	339.60	4,785.1	-455.9	63.4	9.0	-38.1	0.29	-0.28	1.24
5,069.0	1.30	358.00	5,068.1	-172.9	69.4	7.8	-43.1	0.15	0.04	6.50
5,354.0	1.50	17.50	5,353.0	112.0	76.2	8.8	-47.1	0.18	0.07	6.84
5,634.0	0.20	118.90	5,633.0	392.0	79.4	10.4	-48.3	0.55	-0.46	36.21
5,917.0	0.60	250.70	5,916.0	675.0	78.7	9.4	-48.5	0.26	0.14	46.57
6,200.0	0.40	266.30	6,198.9	957.9	78.1	7.0	-49.8	0.08	-0.07	5.51
6,483.0	0.70	201.80	6,481.9	1,240.9	76.5	5.4	-49.8	0.23	0.11	-22.79
6,794.0	0.60	261.10	6,792.9	1,551.9	74.5	3.1	-50.0	0.21	-0.03	19.07
6,825.0	2.60	166.80	6,823.9	1,582.9	73.7	3.1	-49.5	8.75	6.45	-304.19
6,857.0	6.50	153.20	6,855.8	1,614.8	71.4	4.0	-47.2	12.56	12.19	-42.50
6,888.0	10.50	147.30	6,886.5	1,645.5	67.5	6.4	-42.8	13.19	12.90	-19.03
6,919.0	14.60	145.40	6,916.7	1,675.7	61.9	10.1	-36.2	13.29	13.23	-6.13
6,952.0	19.30	146.20	6,948.3	1,707.3	53.9	15.5	-26.8	14.26	14.24	2.42
6,984.0	23.80	147.00	6,978.0	1,737.0	44.1	22.0	-15.3	14.09	14.06	2.50
7,015.0	27.80	147.40	7,005.9	1,764.9	32.8	29.3	-2.1	12.92	12.90	1.29
7,046.0	32.00	147.00	7,032.8	1,791.8	19.8	37.6	13.0	13.56	13.55	-1.29
7,077.0	36.30	146.50	7,058.4	1,817.4	5.2	47.2	30.0	13.90	13.87	-1.61
7,109.0	40.20	144.90	7,083.6	1,842.6	-11.1	58.4	49.4	12.57	12.19	-5.00
7,141.0	44.10	143.00	7,107.3	1,866.3	-28.5	71.0	70.6	12.82	12.19	-5.94
7,173.0	47.70	141.70	7,129.6	1,888.6	-46.7	85.0	93.3	11.62	11.25	-4.06
7,203.0	51.60	140.80	7,149.0	1,908.0	-64.5	99.4	116.0	13.20	13.00	-3.00
7,235.0	55.40	140.20	7,168.0	1,927.0	-84.3	115.7	141.6	11.97	11.88	-1.88
7,267.0	59.10	140.00	7,185.3	1,944.3	-105.0	133.0	168.4	11.57	11.56	-0.63
7,298.0	62.90	140.00	7,200.3	1,959.3	-125.7	150.4	195.4	12.26	12.26	0.00
7,330.0	66.50	140.20	7,214.0	1,973.0	-147.9	169.0	224.2	11.26	11.25	0.63
7,362.0	69.90	140.00	7,225.9	1,984.9	-170.7	188.0	253.7	10.64	10.63	-0.63
7,394.0	72.10	140.20	7,236.3	1,995.3	-193.9	207.4	283.9	6.90	6.88	0.63
7,425.0	75.00	140.10	7,245.1	2,004.1	-216.7	226.5	313.4	9.36	9.35	-0.32
7,457.0	76.50	140.10	7,253.0	2,012.0	-240.5	246.4	344.3	4.69	4.69	0.00
7,489.0	78.50	138.50	7,259.9	2,018.9	-264.2	266.7	375.4	7.93	6.25	-5.00
7,521.0	80.60	136.70	7,265.7	2,024.7	-287.5	288.0	406.9	8.58	6.56	-5.63
7,536.0	80.80	136.80	7,268.1	2,027.1	-298.2	298.1	421.7	1.49	1.33	0.67
7,618.0	85.40	134.50	7,278.0	2,037.0	-356.4	355.0	503.0	6.26	5.61	-2.80
7,649.0	85.30	134.20	7,280.5	2,039.5	-378.0	377.1	533.9	1.02	-0.32	-0.97
7,681.0	86.20	134.10	7,282.9	2,041.9	-400.2	400.0	565.8	2.83	2.81	-0.31
7,713.0	86.50	133.80	7,284.9	2,043.9	-422.4	423.0	597.8	1.32	0.94	-0.94
7,745.0	87.90	133.50	7,286.5	2,045.5	-444.5	446.1	629.7	4.47	4.38	-0.94
7,777.0	89.50	132.90	7,287.2	2,046.2	-466.4	469.4	661.7	5.34	5.00	-1.88
7,809.0	91.20	132.90	7,287.0	2,046.0	-488.2	492.9	693.7	5.31	5.31	0.00

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<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Hz	<b>Database:</b>	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)
7,840.0	90.60	132.70	7,286.5	2,045.5	-509.2	515.6	724.7	2.04	-1.94	-0.65
7,873.0	90.20	131.90	7,286.3	2,045.3	-531.4	540.0	757.6	2.71	-1.21	-2.42
7,905.0	90.20	132.40	7,286.2	2,045.2	-552.9	563.7	789.6	1.56	0.00	1.56
7,937.0	90.90	132.50	7,285.8	2,044.8	-574.5	587.3	821.6	2.21	2.19	0.31
7,968.0	90.90	132.70	7,285.4	2,044.4	-595.5	610.2	852.6	0.65	0.00	0.65
8,000.0	90.60	132.70	7,284.9	2,043.9	-617.2	633.7	884.5	0.94	-0.94	0.00
8,032.0	90.20	132.50	7,284.7	2,043.7	-638.8	657.2	916.5	1.40	-1.25	-0.63
8,063.0	90.00	132.70	7,284.7	2,043.7	-659.8	680.0	947.5	0.91	-0.65	0.65
8,095.0	90.00	132.60	7,284.7	2,043.7	-681.5	703.6	979.5	0.31	0.00	-0.31
8,127.0	90.20	133.10	7,284.6	2,043.6	-703.3	727.0	1,011.5	1.68	0.63	1.56
8,159.0	90.20	131.90	7,284.5	2,043.5	-724.9	750.6	1,043.5	3.75	0.00	-3.75
8,191.0	89.70	131.40	7,284.5	2,043.5	-746.1	774.5	1,075.4	2.21	-1.56	-1.56
8,222.0	89.50	131.50	7,284.7	2,043.7	-766.7	797.8	1,106.4	0.72	-0.65	0.32
8,254.0	89.50	131.40	7,285.0	2,044.0	-787.8	821.8	1,138.3	0.31	0.00	-0.31
8,286.0	89.90	131.60	7,285.2	2,044.2	-809.0	845.7	1,170.3	1.40	1.25	0.63
8,318.0	90.10	131.90	7,285.2	2,044.2	-830.4	869.6	1,202.2	1.13	0.63	0.94
8,350.0	90.40	131.70	7,285.0	2,044.0	-851.7	893.5	1,234.2	1.13	0.94	-0.63
8,382.0	90.50	132.00	7,284.8	2,043.8	-873.0	917.3	1,266.2	0.99	0.31	0.94
8,413.0	91.00	131.60	7,284.4	2,043.4	-893.7	940.4	1,297.1	2.07	1.61	-1.29
8,445.0	90.90	131.50	7,283.9	2,042.9	-914.9	964.3	1,329.1	0.44	-0.31	-0.31
8,477.0	90.20	131.00	7,283.6	2,042.6	-936.0	988.4	1,361.0	2.69	-2.19	-1.56
8,508.0	90.40	131.10	7,283.4	2,042.4	-956.4	1,011.8	1,392.0	0.72	0.65	0.32
8,540.0	90.90	131.60	7,283.0	2,042.0	-977.5	1,035.8	1,423.9	2.21	1.56	1.56
8,572.0	91.30	132.10	7,282.4	2,041.4	-998.9	1,059.6	1,455.9	2.00	1.25	1.56
8,604.0	91.80	132.00	7,281.5	2,040.5	-1,020.3	1,083.4	1,487.8	1.59	1.56	-0.31
8,636.0	91.60	133.50	7,280.6	2,039.6	-1,042.0	1,106.9	1,519.8	4.73	-0.63	4.69
8,667.0	91.40	133.70	7,279.8	2,038.8	-1,063.4	1,129.3	1,550.8	0.91	-0.65	0.65
8,699.0	91.30	134.30	7,279.0	2,038.0	-1,085.6	1,152.3	1,582.8	1.90	-0.31	1.88
8,731.0	91.30	134.60	7,278.3	2,037.3	-1,108.0	1,175.2	1,614.8	0.94	0.00	0.94
8,762.0	89.90	135.10	7,278.0	2,037.0	-1,129.9	1,197.1	1,645.8	4.80	-4.52	1.61
8,794.0	89.10	134.90	7,278.3	2,037.3	-1,152.5	1,219.8	1,677.8	2.58	-2.50	-0.63
8,826.0	89.30	134.70	7,278.7	2,037.7	-1,175.0	1,242.5	1,709.8	0.88	0.63	-0.63
8,858.0	89.50	135.00	7,279.0	2,038.0	-1,197.6	1,265.2	1,741.8	1.13	0.63	0.94
8,890.0	90.00	134.30	7,279.2	2,038.2	-1,220.1	1,287.9	1,773.8	2.69	1.56	-2.19
8,922.0	90.30	134.20	7,279.1	2,038.1	-1,242.4	1,310.8	1,805.8	0.99	0.94	-0.31
8,953.0	90.00	134.60	7,279.0	2,038.0	-1,264.1	1,333.0	1,836.8	1.61	-0.97	1.29
8,985.0	90.30	134.00	7,278.9	2,037.9	-1,286.4	1,355.9	1,868.8	2.10	0.94	-1.88
9,016.0	90.90	134.20	7,278.6	2,037.6	-1,308.0	1,378.2	1,899.8	2.04	1.94	0.65
9,048.0	91.30	134.20	7,278.0	2,037.0	-1,330.3	1,401.1	1,931.7	1.25	1.25	0.00
9,080.0	91.20	134.20	7,277.3	2,036.3	-1,352.6	1,424.0	1,963.7	0.31	-0.31	0.00
9,111.0	91.40	134.30	7,276.6	2,035.6	-1,374.3	1,446.2	1,994.7	0.72	0.65	0.32
9,143.0	91.20	134.70	7,275.9	2,034.9	-1,396.7	1,469.0	2,026.7	1.40	-0.63	1.25



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<b>Well:</b>	Critter Creek 22-27H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Hz	<b>Database:</b>	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)	Bulld Rate (°/100ft)	Turn Rate (°/100ft)
9,175.0	91.60	135.20	7,275.1	2,034.1	-1,419.3	1,491.7	2,058.7	2.00	1.25	1.56
9,207.0	91.60	135.00	7,274.2	2,033.2	-1,441.9	1,514.3	2,090.7	0.62	0.00	-0.63
9,239.0	91.90	134.90	7,273.2	2,032.2	-1,484.5	1,536.9	2,122.7	0.99	0.94	-0.31
9,270.0	90.80	135.50	7,272.5	2,031.5	-1,486.5	1,558.7	2,153.7	4.04	-3.55	1.94
9,303.0	90.60	135.00	7,272.1	2,031.1	-1,510.0	1,582.0	2,186.7	1.63	-0.61	-1.52
9,335.0	90.50	135.60	7,271.8	2,030.8	-1,532.7	1,604.5	2,218.7	1.90	-0.31	1.88
9,367.0	89.60	135.70	7,271.7	2,030.7	-1,555.6	1,626.8	2,250.7	2.83	-2.81	0.31
9,399.0	89.70	135.70	7,271.9	2,030.9	-1,578.5	1,649.2	2,282.6	0.31	0.31	0.00
9,431.0	90.30	136.10	7,271.9	2,030.9	-1,601.5	1,671.5	2,314.6	2.25	1.88	1.25
9,463.0	90.80	135.60	7,271.6	2,030.6	-1,624.4	1,693.8	2,346.6	2.21	1.56	-1.56
9,494.0	90.90	135.80	7,271.2	2,030.2	-1,646.6	1,715.4	2,377.6	0.72	0.32	0.65
9,527.0	91.00	134.90	7,270.6	2,029.6	-1,670.1	1,738.6	2,410.6	2.74	0.30	-2.73
9,558.0	91.20	135.60	7,270.0	2,029.0	-1,692.1	1,760.4	2,441.6	2.35	0.65	2.26
9,590.0	89.20	134.90	7,269.9	2,028.9	-1,714.8	1,782.9	2,473.6	6.62	-6.25	-2.19
9,622.0	90.00	135.30	7,270.1	2,029.1	-1,737.5	1,805.5	2,505.6	2.80	2.50	1.25
9,654.0	91.10	134.80	7,269.8	2,028.8	-1,760.1	1,828.1	2,537.6	3.78	3.44	-1.56
9,686.0	89.80	134.40	7,269.6	2,028.6	-1,782.6	1,850.9	2,569.6	4.25	-4.06	-1.25
9,718.0	88.40	134.10	7,270.1	2,029.1	-1,804.9	1,873.8	2,601.6	4.47	-4.38	-0.94
9,749.0	88.10	133.80	7,271.0	2,030.0	-1,826.4	1,896.1	2,632.6	1.37	-0.97	-0.97
9,781.0	88.30	134.10	7,272.0	2,031.0	-1,848.6	1,919.2	2,664.6	1.13	0.63	0.94
9,813.0	88.40	134.10	7,273.0	2,032.0	-1,870.9	1,942.1	2,696.5	0.31	0.31	0.00
9,844.0	89.40	134.00	7,273.6	2,032.6	-1,892.4	1,964.4	2,727.5	3.24	3.23	-0.32
9,876.0	89.50	134.60	7,273.9	2,032.9	-1,914.8	1,987.3	2,759.5	1.90	0.31	1.88
9,908.0	90.90	134.80	7,273.8	2,032.8	-1,937.3	2,010.1	2,791.5	4.42	4.38	0.63
9,940.0	91.20	134.80	7,273.2	2,032.2	-1,959.8	2,032.8	2,823.5	0.94	0.94	0.00
9,971.0	91.60	134.20	7,272.4	2,031.4	-1,981.6	2,054.9	2,854.5	2.33	1.29	-1.94
10,003.0	91.50	134.80	7,271.5	2,030.5	-2,004.0	2,077.7	2,886.5	1.90	-0.31	1.88
10,034.0	91.60	133.80	7,270.7	2,029.7	-2,025.6	2,099.9	2,917.5	3.24	0.32	-3.23
10,066.0	91.60	133.80	7,269.8	2,028.8	-2,047.8	2,122.9	2,949.5	0.00	0.00	0.00
10,098.0	91.60	133.60	7,268.9	2,027.9	-2,069.9	2,146.1	2,981.5	0.62	0.00	-0.63
10,129.0	91.30	134.90	7,268.1	2,027.1	-2,091.5	2,168.3	3,012.4	4.30	-0.97	4.19
10,161.0	90.60	134.60	7,267.6	2,026.6	-2,114.0	2,191.0	3,044.4	2.38	-2.19	-0.94
10,193.0	90.70	134.60	7,267.2	2,026.2	-2,136.5	2,213.8	3,076.4	0.31	0.31	0.00
10,224.0	90.00	133.90	7,267.0	2,026.0	-2,158.1	2,236.0	3,107.4	3.19	-2.26	-2.26
10,256.0	89.80	134.70	7,267.1	2,026.1	-2,180.5	2,258.9	3,139.4	2.58	-0.63	2.50
10,288.0	90.50	134.30	7,267.0	2,026.0	-2,202.9	2,281.7	3,171.4	2.52	2.19	-1.25
10,320.0	90.40	134.60	7,266.8	2,025.8	-2,225.3	2,304.6	3,203.4	0.99	-0.31	0.94
10,352.0	89.80	134.60	7,266.7	2,025.7	-2,247.8	2,327.3	3,235.4	1.88	-1.88	0.00
10,384.0	90.30	134.90	7,266.7	2,025.7	-2,270.3	2,350.1	3,267.4	1.82	1.56	0.94
10,415.0	90.40	135.50	7,266.5	2,025.5	-2,292.3	2,371.9	3,298.4	1.96	0.32	1.94
10,447.0	89.90	135.70	7,266.4	2,025.4	-2,315.2	2,394.3	3,330.4	1.68	-1.56	0.63
10,479.0	89.90	135.50	7,266.5	2,025.5	-2,338.0	2,416.7	3,362.4	0.63	0.00	-0.63
10,511.0	90.20	136.00	7,266.4	2,025.4	-2,360.9	2,439.0	3,394.4	1.82	0.94	1.56

<b>Company:</b>	EOG Resources	<b>Local Co-ordinate Reference:</b>	Well Critter Creek 22-27H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	CC 22-27H KBE @ 5241.0ft (DHS #8)
<b>Site:</b>	Sec 27-T11N-R63W	<b>MD Reference:</b>	CC 22-27H KBE @ 5241.0ft (DHS #8)
<b>Well:</b>	Critter Creek 22-27H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Hz	<b>Database:</b>	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)
10,542.0	90.20	135.60	7,266.3	2,025.3	-2,383.2	2,460.6	3,425.4	1.29	0.00	-1.29
10,574.0	89.80	135.80	7,266.3	2,025.3	-2,406.1	2,483.0	3,457.4	1.40	-1.25	0.63
10,606.0	89.70	136.40	7,266.5	2,025.5	-2,429.1	2,505.2	3,489.4	1.90	-0.31	1.88
10,637.0	90.30	136.90	7,266.5	2,025.5	-2,451.7	2,526.4	3,520.4	2.52	1.94	1.61
10,669.0	90.80	136.30	7,266.2	2,025.2	-2,474.9	2,548.4	3,552.3	2.44	1.56	-1.88
10,701.0	90.00	136.70	7,265.9	2,024.9	-2,498.1	2,570.5	3,584.3	2.80	-2.50	1.25
10,733.0	89.60	136.50	7,266.1	2,025.1	-2,521.4	2,592.4	3,616.3	1.40	-1.25	-0.63
10,765.0	89.60	136.10	7,266.3	2,025.3	-2,544.5	2,614.5	3,648.3	1.25	0.00	-1.25
10,796.0	89.60	136.20	7,266.5	2,025.5	-2,566.9	2,636.0	3,679.3	0.32	0.00	0.32
10,828.0	89.90	136.70	7,266.6	2,025.6	-2,590.1	2,658.1	3,711.3	1.82	0.94	1.56
10,860.0	90.60	136.40	7,266.5	2,025.5	-2,613.3	2,680.1	3,743.2	2.38	2.19	-0.94
10,891.0	91.00	135.60	7,266.1	2,025.1	-2,635.6	2,701.6	3,774.2	2.89	1.29	-2.58
10,923.0	90.70	136.30	7,265.6	2,024.6	-2,658.6	2,723.9	3,806.2	2.38	-0.94	2.19
10,955.0	90.70	135.50	7,265.2	2,024.2	-2,681.6	2,746.1	3,838.2	2.50	0.00	-2.50
10,987.0	90.00	135.60	7,265.0	2,024.0	-2,704.4	2,768.5	3,870.2	2.21	-2.19	0.31
11,018.0	90.20	135.60	7,264.9	2,023.9	-2,726.6	2,790.2	3,901.2	0.65	0.65	0.00
11,050.0	90.50	135.40	7,264.8	2,023.8	-2,749.4	2,812.7	3,933.2	1.13	0.94	-0.63
11,082.0	90.20	134.90	7,264.6	2,023.6	-2,772.1	2,835.2	3,965.2	1.82	-0.94	-1.56
11,113.0	90.30	134.80	7,264.4	2,023.4	-2,793.9	2,857.2	3,996.2	0.46	0.32	-0.32
11,145.0	90.20	134.60	7,264.3	2,023.3	-2,816.4	2,879.9	4,028.2	0.70	-0.31	-0.63
11,177.0	89.00	134.90	7,264.5	2,023.5	-2,839.0	2,902.7	4,060.2	3.87	-3.75	0.94
11,209.0	88.90	134.60	7,265.1	2,024.1	-2,861.5	2,925.4	4,092.2	0.99	-0.31	-0.94
11,240.0	89.20	134.00	7,265.6	2,024.6	-2,883.1	2,947.6	4,123.2	2.16	0.97	-1.94
11,272.0	89.50	134.20	7,266.0	2,025.0	-2,905.4	2,970.5	4,155.2	1.13	0.94	0.63
11,304.0	89.80	134.40	7,266.2	2,025.2	-2,927.7	2,993.5	4,187.2	1.13	0.94	0.63
11,335.0	89.70	135.00	7,266.3	2,025.3	-2,949.6	3,015.5	4,218.2	1.96	-0.32	1.94
11,367.0	90.00	135.20	7,266.4	2,025.4	-2,972.2	3,038.1	4,250.2	1.13	0.94	0.63
11,399.0	89.50	134.30	7,266.5	2,025.5	-2,994.7	3,060.8	4,282.2	3.22	-1.56	-2.81
11,430.0	89.80	135.00	7,266.7	2,025.7	-3,016.5	3,082.9	4,313.2	2.46	0.97	2.26
11,462.0	90.00	134.30	7,266.8	2,025.8	-3,039.0	3,105.6	4,345.2	2.28	0.63	-2.19
11,494.0	89.90	134.30	7,266.8	2,025.8	-3,061.4	3,128.5	4,377.2	0.31	-0.31	0.00
11,525.0	89.70	134.60	7,266.9	2,025.9	-3,083.1	3,150.6	4,408.2	1.16	-0.65	0.97
11,557.0	89.80	134.20	7,267.0	2,026.0	-3,105.5	3,173.5	4,440.2	1.29	0.31	-1.25
11,589.0	89.80	134.50	7,267.2	2,026.2	-3,127.8	3,196.4	4,472.2	0.94	0.00	0.94
11,620.0	90.40	133.80	7,267.1	2,026.1	-3,149.4	3,218.6	4,503.2	2.97	1.94	-2.26
11,652.0	90.40	134.20	7,266.9	2,025.9	-3,171.7	3,241.7	4,535.2	1.25	0.00	1.25
11,685.0	90.60	133.60	7,266.6	2,025.6	-3,194.5	3,265.4	4,568.1	1.92	0.61	-1.82
11,716.0	90.20	133.40	7,266.4	2,025.4	-3,215.9	3,287.9	4,599.1	1.44	-1.29	-0.65
11,749.0	89.20	133.10	7,266.5	2,025.5	-3,238.5	3,312.0	4,632.1	3.16	-3.03	-0.91
11,781.0	89.10	133.80	7,267.0	2,026.0	-3,260.5	3,335.2	4,664.1	2.21	-0.31	2.19
11,813.0	89.20	133.00	7,267.5	2,026.5	-3,282.5	3,358.4	4,696.1	2.52	0.31	-2.50
11,845.0	89.10	133.40	7,268.0	2,027.0	-3,304.4	3,381.8	4,728.1	1.29	-0.31	1.25

<b>Company:</b>	EOG Resources	<b>Local Co-ordinate Reference:</b>	Well Critter Creek 22-27H
<b>Project:</b>	Weld Co., CO	<b>TVD Reference:</b>	CC 22-27H KBE @ 5241.0ft (DHS #8)
<b>Site:</b>	Sec 27-T11N-R63W	<b>MD Reference:</b>	CC 22-27H KBE @ 5241.0ft (DHS #8)
<b>Well:</b>	Critter Creek 22-27H	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Hz	<b>Database:</b>	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)
11,877.0	89.50	133.30	7,268.4	2,027.4	-3,326.3	3,405.0	4,760.1	1.29	1.25	-0.31
11,909.0	89.30	133.20	7,268.7	2,027.7	-3,348.3	3,428.3	4,792.1	0.70	-0.63	-0.31
11,941.0	89.20	133.30	7,269.1	2,028.1	-3,370.2	3,451.6	4,824.1	0.44	-0.31	0.31
11,973.0	89.40	133.10	7,269.5	2,028.5	-3,392.1	3,475.0	4,856.1	0.88	0.63	-0.63
12,004.0	89.50	133.50	7,269.8	2,028.8	-3,413.4	3,497.5	4,887.1	1.33	0.32	1.29
12,036.0	89.30	133.40	7,270.1	2,029.1	-3,435.4	3,520.7	4,919.0	0.70	-0.63	-0.31
12,068.0	89.30	133.90	7,270.5	2,029.5	-3,457.5	3,543.9	4,951.0	1.56	0.00	1.56
12,100.0	89.10	134.30	7,271.0	2,030.0	-3,479.7	3,566.9	4,983.0	1.40	-0.63	1.25
12,131.0	90.50	134.20	7,271.1	2,030.1	-3,501.3	3,589.1	5,014.0	4.53	4.52	-0.32
12,163.0	90.50	134.20	7,270.8	2,029.8	-3,523.7	3,612.0	5,046.0	0.00	0.00	0.00
12,195.0	91.00	134.30	7,270.4	2,029.4	-3,546.0	3,634.9	5,078.0	1.59	1.56	0.31
12,227.0	91.00	134.70	7,269.8	2,028.8	-3,568.4	3,657.8	5,110.0	1.25	0.00	1.25
12,259.0	90.90	134.30	7,269.3	2,028.3	-3,590.8	3,680.6	5,142.0	1.29	-0.31	-1.25
12,291.0	90.70	134.20	7,268.8	2,027.8	-3,613.2	3,703.5	5,174.0	0.70	-0.63	-0.31
12,322.0	90.80	134.20	7,268.4	2,027.4	-3,634.8	3,725.7	5,205.0	0.32	0.32	0.00
12,355.0	91.00	134.50	7,267.9	2,026.9	-3,657.8	3,749.3	5,238.0	1.09	0.61	0.91
12,387.0	90.80	133.90	7,267.4	2,026.4	-3,680.1	3,772.3	5,270.0	1.98	-0.63	-1.88
12,419.0	91.60	133.30	7,266.8	2,025.8	-3,702.2	3,795.4	5,302.0	3.12	2.50	-1.88
12,451.0	91.60	131.80	7,265.9	2,024.9	-3,723.8	3,819.0	5,334.0	4.69	0.00	-4.69
12,483.0	91.70	132.30	7,264.9	2,023.9	-3,745.3	3,842.7	5,365.9	1.59	0.31	1.56
12,516.0	91.30	132.10	7,264.1	2,023.1	-3,767.4	3,867.2	5,398.9	1.36	-1.21	-0.61
12,548.0	91.50	131.70	7,263.3	2,022.3	-3,788.8	3,891.0	5,430.8	1.40	0.63	-1.25
12,579.0	93.00	133.00	7,262.1	2,021.1	-3,809.7	3,913.9	5,461.8	6.40	4.84	4.19
12,611.0	93.00	133.50	7,260.4	2,019.4	-3,831.5	3,937.2	5,493.7	1.56	0.00	1.56
12,644.0	93.00	133.50	7,258.7	2,017.7	-3,854.2	3,961.1	5,526.7	0.00	0.00	0.00
12,675.0	93.00	132.70	7,257.0	2,016.1	-3,875.4	3,983.7	5,557.6	2.58	0.00	-2.58
12,707.0	92.90	133.30	7,255.4	2,014.4	-3,897.2	4,007.0	5,589.6	1.90	-0.31	1.88
12,739.0	92.70	132.70	7,253.8	2,012.8	-3,919.0	4,030.4	5,621.5	1.97	-0.63	-1.88
12,770.0	92.50	133.00	7,252.4	2,011.4	-3,940.0	4,053.1	5,652.5	1.16	-0.65	0.97
12,802.0	92.40	132.60	7,251.1	2,010.1	-3,961.8	4,076.6	5,684.4	1.29	-0.31	-1.25
12,834.0	92.00	132.20	7,249.8	2,008.8	-3,983.3	4,100.2	5,716.4	1.77	-1.25	-1.25
12,865.0	91.60	132.30	7,248.9	2,007.9	-4,004.2	4,123.1	5,747.3	1.33	-1.29	0.32
12,897.0	91.60	131.70	7,248.0	2,007.0	-4,025.6	4,146.9	5,779.3	1.87	0.00	-1.88
12,903.0	91.40	131.80	7,247.8	2,006.8	-4,029.6	4,151.4	5,785.3	3.73	-3.33	1.67
<b>Projection to Bit</b>										
12,950.0	91.40	131.80	7,246.7	2,005.7	-4,060.9	4,186.4	5,832.2	0.00	0.00	0.00

**Survey Annotations**

Measured Depth (')	Vertical Depth (')	Local Coordinates		Comment
		+N/-S (')	+E/-W (')	
12,950.0	7,246.7	-4,060.9	4,186.4	Projection to Bit



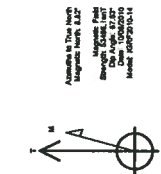
Phoenix Technology Services  
Survey Report



Company:	EOG Resources	Local Co-ordinate Reference:	Well Critter Creek 22-27H
Project:	Weld Co., CO	TVD Reference:	CC 22-27H KBE @ 5241.0ft (DHS #8)
Site:	Sec 27-T11N-R83W	MD Reference:	CC 22-27H KBE @ 5241.0ft (DHS #8)
Well:	Critter Creek 22-27H	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	Hz	Database:	Local

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_





No plan data is available

## CHALLENGE QUESTIONS



**PHOENIX**  
TECHNOLOGY SERVICES

Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape No wellbore target data is available.
<b>WELLBORE TARGET DETAILS (LAT/LONG)</b>						

