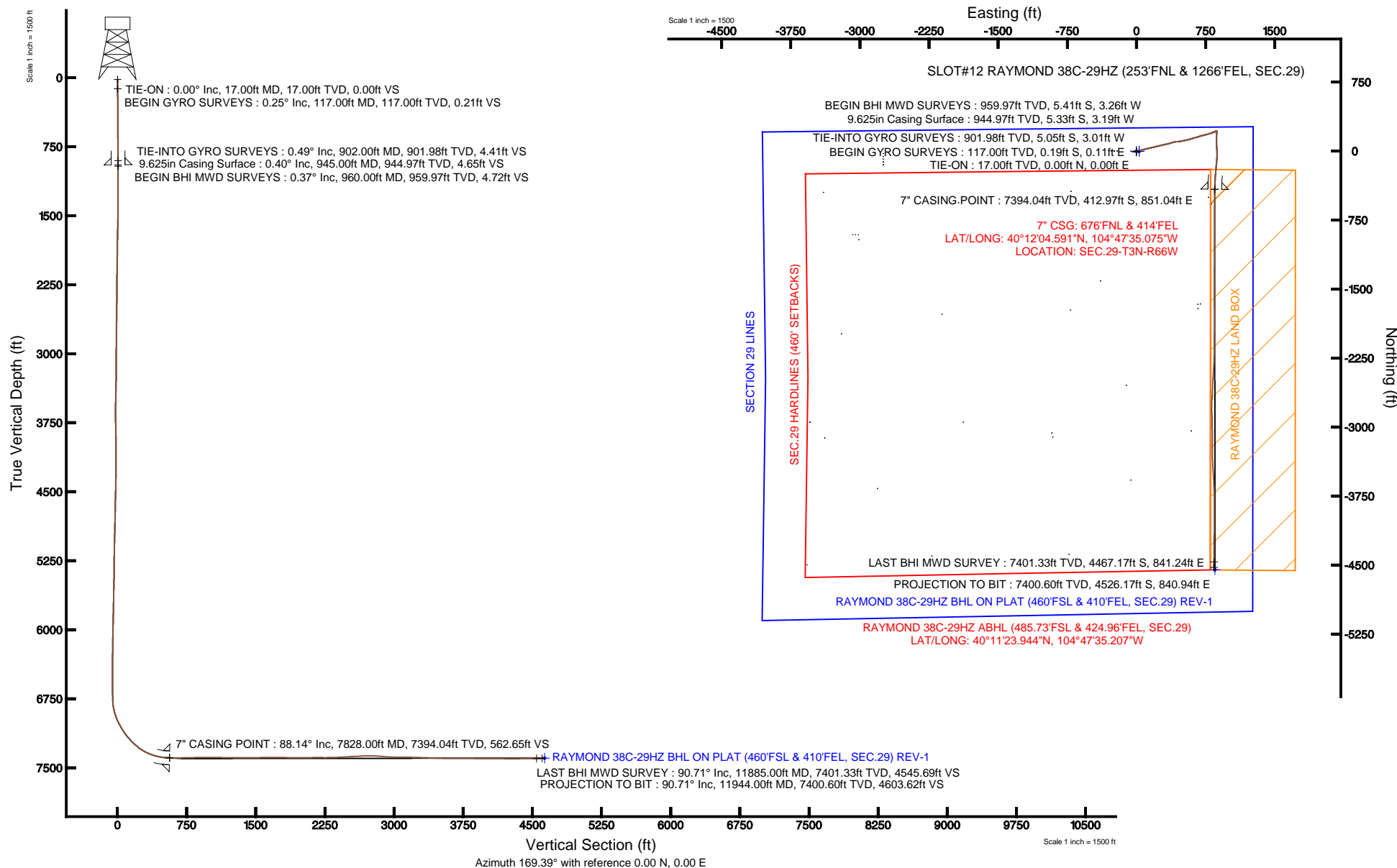


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#12 RAYMOND 38C-29HZ (253°FNL & 1266°FEL, SEC.29)
 Field: WELD COUNTY (KERR MCGEE) Well: RAYMOND 38C-29HZ
 Facility: SEC.29-T3N-R66W Wellbore: RAYMOND 38C-29HZ PWB

Plot reference wellpath is RAYMOND 38C-29HZ (REV-C.0) PWP

True vertical depths are referenced to XTREME 8 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 8 (RKB)	North Reference: True north
XTREME 8 (RKB) to Mean Sea Level: 4942 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#12 RAYMOND 38C-29HZ (253°FNL & 1266°FEL, SEC.29)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsje02 on 3/6/2013





Actual Wellpath Report

RAYMOND 38C-29HZ AWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RAYMOND 38C-29HZ (253'FNL & 1266'FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 38C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 38C-29HZ AWB
Facility	SEC.29-T3N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Wilsjef02
Scale	0.999957	Report Generated	3/6/2013 at 09:56:52
Convergence at slot	0.45° East	Database/Source file	WellArchitectDB/RAYMOND_38C-29HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	910.53	3013.17	3196606.32	1317360.29	40°12'08.672"N	104°47'46.043"W
Facility Reference Pt			3193600.49	1316426.28	40°11'59.676"N	104°48'24.876"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 8 (RKB) to Facility Vertical Datum	4942.00ft
Horizontal Reference Pt	Slot	XTREME 8 (RKB) to Mean Sea Level	4942.00ft
Vertical Reference Pt	XTREME 8 (RKB)	XTREME 8 (RKB) to Mud Line at Slot (SLOT#12 RAYMOND 38C-29HZ (253'FNL & 1266'FEL, SEC.29))	4942.00ft
MD Reference Pt	XTREME 8 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	169.47°



Actual Wellpath Report

RAYMOND 38C-29HZ AWP

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RAYMOND 38C-29HZ (253'FNL & 1266'FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 38C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 38C-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (154 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	150.950	0.00	0.00	0.00	0.00	40°12'08.672"N	104°47'46.043"W	0.00	
17.00	0.000	150.950	17.00	0.00	0.00	0.00	40°12'08.672"N	104°47'46.043"W	0.00	TIE-ON
117.00	0.250	150.950	117.00	0.21	-0.19	0.11	40°12'08.670"N	104°47'46.042"W	0.25	BEGIN GYRO SURVEYS
217.00	0.280	221.920	217.00	0.56	-0.56	0.05	40°12'08.666"N	104°47'46.042"W	0.31	
317.00	0.440	196.360	317.00	1.05	-1.11	-0.22	40°12'08.661"N	104°47'46.046"W	0.22	
417.00	0.230	218.980	417.00	1.53	-1.64	-0.46	40°12'08.656"N	104°47'46.049"W	0.24	
517.00	0.450	219.340	516.99	1.91	-2.10	-0.83	40°12'08.651"N	104°47'46.054"W	0.22	
617.00	0.610	197.620	616.99	2.63	-2.91	-1.24	40°12'08.643"N	104°47'46.059"W	0.25	
717.00	0.480	225.310	716.98	3.34	-3.71	-1.70	40°12'08.635"N	104°47'46.065"W	0.29	
817.00	0.690	229.380	816.98	3.87	-4.40	-2.46	40°12'08.629"N	104°47'46.075"W	0.21	
902.00	0.490	207.480	901.98	4.42	-5.05	-3.01	40°12'08.622"N	104°47'46.082"W	0.35	TIE-INTO GYRO SURVEYS
960.00	0.370	223.290	959.97	4.72	-5.41	-3.26	40°12'08.619"N	104°47'46.085"W	0.29	BEGIN BHI MWD SURVEYS
1052.00	0.340	192.780	1051.97	5.15	-5.89	-3.52	40°12'08.614"N	104°47'46.088"W	0.21	
1142.00	1.650	71.870	1141.96	5.22	-5.75	-2.35	40°12'08.615"N	104°47'46.073"W	2.05	
1233.00	3.580	78.090	1232.86	4.98	-4.75	1.68	40°12'08.625"N	104°47'46.021"W	2.14	
1323.00	4.910	75.400	1322.61	4.64	-3.20	8.16	40°12'08.640"N	104°47'45.938"W	1.49	
1416.00	5.920	75.040	1415.20	3.99	-0.96	16.64	40°12'08.662"N	104°47'45.829"W	1.09	
1501.00	7.610	74.780	1499.60	3.19	1.65	26.31	40°12'08.688"N	104°47'45.704"W	1.99	
1586.00	8.500	70.110	1583.76	1.70	5.26	37.65	40°12'08.724"N	104°47'45.558"W	1.30	
1672.00	8.490	71.350	1668.82	-0.23	9.45	49.64	40°12'08.765"N	104°47'45.403"W	0.21	
1757.00	9.240	71.640	1752.80	-2.04	13.61	62.06	40°12'08.806"N	104°47'45.243"W	0.88	
1842.00	10.370	76.310	1836.56	-3.40	17.57	75.97	40°12'08.846"N	104°47'45.064"W	1.62	
1928.00	10.340	75.890	1921.16	-4.31	21.28	90.97	40°12'08.882"N	104°47'44.871"W	0.09	
2013.00	11.080	76.170	2004.68	-5.26	25.10	106.30	40°12'08.920"N	104°47'44.673"W	0.87	
2098.00	11.810	74.520	2087.99	-6.48	29.37	122.62	40°12'08.962"N	104°47'44.463"W	0.94	
2184.00	11.800	77.240	2172.17	-7.58	33.66	139.68	40°12'09.005"N	104°47'44.243"W	0.65	
2269.00	12.060	78.260	2255.34	-8.11	37.39	156.85	40°12'09.041"N	104°47'44.022"W	0.39	
2354.00	12.330	78.020	2338.42	-8.53	41.08	174.42	40°12'09.078"N	104°47'43.795"W	0.32	
2440.00	12.310	75.670	2422.44	-9.37	45.25	192.28	40°12'09.119"N	104°47'43.565"W	0.58	
2525.00	11.620	73.910	2505.59	-10.80	49.87	209.29	40°12'09.165"N	104°47'43.346"W	0.92	
2610.00	11.330	77.930	2588.89	-11.85	53.99	225.68	40°12'09.205"N	104°47'43.135"W	1.00	
2696.00	11.380	77.340	2673.21	-12.40	57.61	242.22	40°12'09.241"N	104°47'42.921"W	0.15	
2781.00	11.230	76.620	2756.56	-13.12	61.37	258.45	40°12'09.278"N	104°47'42.712"W	0.24	
2866.00	11.340	75.930	2839.92	-14.05	65.31	274.61	40°12'09.317"N	104°47'42.504"W	0.20	
2951.00	11.750	77.600	2923.20	-14.85	69.20	291.17	40°12'09.356"N	104°47'42.290"W	0.62	
3037.00	11.430	77.270	3007.44	-15.47	72.96	308.03	40°12'09.393"N	104°47'42.073"W	0.38	
3122.00	10.080	77.390	3090.95	-16.06	76.44	323.51	40°12'09.427"N	104°47'41.874"W	1.59	
3207.00	10.360	77.780	3174.60	-16.56	79.68	338.24	40°12'09.459"N	104°47'41.684"W	0.34	
3293.00	10.580	76.960	3259.17	-17.13	83.10	353.49	40°12'09.493"N	104°47'41.487"W	0.31	
3378.00	9.900	71.590	3342.82	-18.48	87.17	368.02	40°12'09.533"N	104°47'41.300"W	1.38	
3463.00	9.350	71.760	3426.62	-20.41	91.64	381.51	40°12'09.578"N	104°47'41.126"W	0.65	
3549.00	9.740	72.250	3511.43	-22.26	96.04	395.08	40°12'09.621"N	104°47'40.951"W	0.46	
3634.00	9.340	76.680	3595.25	-23.50	99.82	408.64	40°12'09.658"N	104°47'40.777"W	0.98	
3719.00	9.320	81.890	3679.13	-23.55	102.38	422.16	40°12'09.684"N	104°47'40.602"W	0.99	
3805.00	8.660	86.910	3764.07	-22.41	103.72	435.52	40°12'09.697"N	104°47'40.430"W	1.19	



Actual Wellpath Report

RAYMOND 38C-29HZ AWP

Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RAYMOND 38C-29HZ (253'FNL & 1266'FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 38C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 38C-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (154 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3890.00	9.650	85.560	3847.99	-20.83	104.61	449.01	40°12'09.706"N	104°47'40.256"W	1.19	
3975.00	11.510	82.940	3931.54	-19.56	106.21	464.53	40°12'09.721"N	104°47'40.056"W	2.26	
4060.00	11.990	81.200	4014.76	-18.78	108.60	481.68	40°12'09.745"N	104°47'39.835"W	0.70	
4145.00	12.530	79.100	4097.82	-18.58	111.69	499.46	40°12'09.776"N	104°47'39.606"W	0.82	
4231.00	12.660	78.780	4181.75	-18.75	115.29	517.86	40°12'09.811"N	104°47'39.369"W	0.17	
4316.00	12.860	78.130	4264.65	-19.09	119.05	536.25	40°12'09.848"N	104°47'39.132"W	0.29	
4401.00	12.600	74.780	4347.57	-20.07	123.43	554.46	40°12'09.892"N	104°47'38.897"W	0.92	
4486.00	12.980	74.000	4430.46	-21.74	128.49	572.58	40°12'09.942"N	104°47'38.664"W	0.49	
4572.00	12.170	73.440	4514.39	-23.61	133.74	590.55	40°12'09.994"N	104°47'38.432"W	0.95	
4657.00	12.180	73.630	4597.48	-25.47	138.82	607.74	40°12'10.044"N	104°47'38.210"W	0.05	
4742.00	12.140	74.570	4680.57	-27.15	143.73	624.96	40°12'10.092"N	104°47'37.989"W	0.24	
4827.00	11.970	73.630	4763.70	-28.81	148.59	642.04	40°12'10.140"N	104°47'37.769"W	0.31	
4912.00	11.900	73.840	4846.86	-30.57	153.51	658.91	40°12'10.189"N	104°47'37.551"W	0.10	
4998.00	11.760	72.970	4931.04	-32.43	158.55	675.81	40°12'10.239"N	104°47'37.333"W	0.26	
5083.00	11.610	72.130	5014.27	-34.50	163.71	692.23	40°12'10.290"N	104°47'37.122"W	0.27	
5168.00	10.720	71.870	5097.66	-36.64	168.79	707.88	40°12'10.340"N	104°47'36.920"W	1.05	
5253.00	10.330	76.920	5181.24	-38.03	172.98	722.82	40°12'10.381"N	104°47'36.727"W	1.18	
5339.00	10.390	78.510	5265.83	-38.50	176.27	737.93	40°12'10.414"N	104°47'36.533"W	0.34	
5424.00	10.700	76.340	5349.40	-39.06	179.66	753.11	40°12'10.447"N	104°47'36.337"W	0.59	
5509.00	10.760	73.720	5432.91	-40.29	183.74	768.39	40°12'10.488"N	104°47'36.140"W	0.58	
5595.00	9.230	72.350	5517.61	-41.95	188.09	782.67	40°12'10.531"N	104°47'35.956"W	1.80	
5680.00	9.490	72.370	5601.47	-43.66	192.28	795.85	40°12'10.572"N	104°47'35.786"W	0.31	
5765.00	9.610	73.650	5685.30	-45.25	196.40	809.33	40°12'10.613"N	104°47'35.612"W	0.29	
5851.00	8.390	70.550	5770.24	-46.95	200.51	822.14	40°12'10.653"N	104°47'35.447"W	1.53	
5936.00	6.950	70.260	5854.47	-48.74	204.31	832.82	40°12'10.691"N	104°47'35.310"W	1.69	
6021.00	5.730	67.080	5938.95	-50.47	207.70	841.57	40°12'10.724"N	104°47'35.197"W	1.49	
6106.00	4.710	67.500	6023.60	-52.11	210.69	848.71	40°12'10.754"N	104°47'35.105"W	1.20	
6192.00	3.980	65.690	6109.35	-53.55	213.27	854.69	40°12'10.779"N	104°47'35.028"W	0.86	
6277.00	3.150	63.350	6194.19	-54.90	215.53	859.46	40°12'10.802"N	104°47'34.966"W	0.99	
6362.00	2.740	63.420	6279.07	-56.11	217.48	863.37	40°12'10.821"N	104°47'34.916"W	0.48	
6448.00	1.920	63.710	6365.00	-57.07	219.04	866.50	40°12'10.836"N	104°47'34.876"W	0.95	
6533.00	1.490	66.120	6449.96	-57.72	220.12	868.79	40°12'10.847"N	104°47'34.846"W	0.51	
6619.00	0.890	110.750	6535.95	-57.63	220.34	870.43	40°12'10.849"N	104°47'34.825"W	1.23	
6704.00	0.800	135.600	6620.94	-56.79	219.68	871.46	40°12'10.843"N	104°47'34.812"W	0.44	
6790.00	0.610	162.180	6706.93	-55.84	218.81	872.03	40°12'10.834"N	104°47'34.804"W	0.43	
6861.00	2.170	174.190	6777.91	-54.12	217.12	872.28	40°12'10.817"N	104°47'34.801"W	2.22	
6918.00	8.870	178.310	6834.61	-48.70	211.64	872.52	40°12'10.763"N	104°47'34.798"W	11.77	
6960.00	13.910	181.410	6875.77	-40.56	203.35	872.49	40°12'10.681"N	104°47'34.798"W	12.08	
7003.00	17.750	185.530	6917.13	-29.20	191.66	871.73	40°12'10.566"N	104°47'34.808"W	9.30	
7046.00	21.640	183.280	6957.61	-15.19	177.21	870.64	40°12'10.423"N	104°47'34.822"W	9.22	
7088.00	25.170	182.520	6996.15	1.03	160.55	869.81	40°12'10.258"N	104°47'34.833"W	8.44	
7131.00	27.300	180.080	7034.72	19.64	141.55	869.39	40°12'10.071"N	104°47'34.838"W	5.55	
7174.00	30.760	178.630	7072.31	40.19	120.69	869.64	40°12'09.865"N	104°47'34.835"W	8.21	
7216.00	34.620	179.060	7107.65	62.57	98.02	870.09	40°12'09.640"N	104°47'34.829"W	9.21	
7259.00	37.820	178.330	7142.34	87.65	72.62	870.68	40°12'09.389"N	104°47'34.822"W	7.51	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RAYMOND 38C-29HZ (253'FNL & 1266'FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 38C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 38C-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (154 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7302.00	40.270	177.050	7175.73	114.45	45.56	871.78	40°12'09.122"N	104°47'34.808"W	6.00	
7344.00	44.210	176.210	7206.82	142.46	17.38	873.44	40°12'08.844"N	104°47'34.786"W	9.48	
7387.00	46.100	178.370	7237.14	172.66	-13.07	874.88	40°12'08.543"N	104°47'34.768"W	5.66	
7430.00	50.110	182.060	7265.86	204.09	-45.06	874.72	40°12'08.227"N	104°47'34.770"W	11.30	
7472.00	54.790	183.400	7291.45	236.48	-78.31	873.13	40°12'07.898"N	104°47'34.790"W	11.43	
7515.00	59.880	184.270	7314.65	271.54	-114.41	870.70	40°12'07.541"N	104°47'34.822"W	11.96	
7557.00	64.420	185.240	7334.27	307.35	-151.41	867.61	40°12'07.176"N	104°47'34.861"W	11.00	
7600.00	69.100	185.390	7351.23	345.35	-190.74	863.95	40°12'06.787"N	104°47'34.909"W	10.89	
7643.00	72.540	185.530	7365.35	384.38	-231.16	860.09	40°12'06.388"N	104°47'34.958"W	8.01	
7685.00	76.320	183.780	7376.63	423.42	-271.48	856.81	40°12'05.989"N	104°47'35.001"W	9.85	
7728.00	80.440	183.630	7385.28	464.24	-313.50	854.09	40°12'05.574"N	104°47'35.036"W	9.59	
7771.00	84.640	181.860	7390.87	505.73	-356.08	852.05	40°12'05.153"N	104°47'35.062"W	10.59	
7794.00	86.890	180.710	7392.56	528.18	-379.01	851.54	40°12'04.927"N	104°47'35.069"W	10.98	
7828.00†	88.138	180.976	7394.04	561.48	-412.97	851.04	40°12'04.591"N	104°47'35.075"W	3.75	7" CASING POINT
7858.00	89.240	181.210	7394.73	590.86	-442.96	850.47	40°12'04.295"N	104°47'35.083"W	3.75	
7900.00	90.550	180.390	7394.80	632.04	-484.95	849.88	40°12'03.880"N	104°47'35.090"W	3.68	
7986.00	91.170	180.760	7393.51	716.42	-570.94	849.02	40°12'03.030"N	104°47'35.101"W	0.84	
8071.00	91.050	180.110	7391.87	799.85	-655.92	848.37	40°12'02.190"N	104°47'35.110"W	0.78	
8156.00	91.080	180.870	7390.29	883.27	-740.90	847.65	40°12'01.350"N	104°47'35.119"W	0.89	
8242.00	90.120	180.570	7389.38	967.61	-826.89	846.57	40°12'00.501"N	104°47'35.133"W	1.17	
8327.00	89.380	179.330	7389.76	1051.20	-911.88	846.64	40°11'59.661"N	104°47'35.132"W	1.70	
8412.00	88.490	179.520	7391.34	1134.90	-996.86	847.49	40°11'58.821"N	104°47'35.121"W	1.07	
8498.00	89.570	180.320	7392.79	1219.46	-1082.85	847.61	40°11'57.971"N	104°47'35.120"W	1.56	
8583.00	89.290	180.150	7393.64	1302.96	-1167.84	847.26	40°11'57.131"N	104°47'35.124"W	0.39	
8668.00	91.350	181.260	7393.16	1386.33	-1252.83	846.22	40°11'56.291"N	104°47'35.138"W	2.75	
8754.00	90.370	181.000	7391.87	1470.54	-1338.80	844.52	40°11'55.442"N	104°47'35.160"W	1.18	
8839.00	90.680	179.680	7391.09	1554.02	-1423.80	844.02	40°11'54.602"N	104°47'35.166"W	1.60	
8924.00	90.770	179.720	7390.02	1637.66	-1508.79	844.46	40°11'53.762"N	104°47'35.160"W	0.12	
9009.00	89.510	179.280	7389.81	1721.36	-1593.78	845.21	40°11'52.922"N	104°47'35.151"W	1.57	
9095.00	89.200	179.560	7390.78	1806.06	-1679.77	846.08	40°11'52.072"N	104°47'35.140"W	0.49	
9180.00	88.950	180.120	7392.15	1889.66	-1764.76	846.31	40°11'51.233"N	104°47'35.137"W	0.72	
9265.00	89.570	179.950	7393.25	1973.22	-1849.75	846.26	40°11'50.393"N	104°47'35.137"W	0.76	
9351.00	91.480	180.180	7392.46	2057.74	-1935.74	846.16	40°11'49.543"N	104°47'35.139"W	2.24	
9436.00	90.280	180.360	7391.15	2141.23	-2020.73	845.76	40°11'48.703"N	104°47'35.144"W	1.43	
9521.00	89.540	180.300	7391.29	2224.71	-2105.73	845.27	40°11'47.863"N	104°47'35.150"W	0.87	
9606.00	90.860	180.620	7390.99	2308.15	-2190.72	844.59	40°11'47.023"N	104°47'35.159"W	1.60	
9692.00	92.770	182.150	7388.27	2392.25	-2276.65	842.51	40°11'46.174"N	104°47'35.186"W	2.85	
9777.00	92.870	183.360	7384.09	2474.87	-2361.45	838.43	40°11'45.336"N	104°47'35.238"W	1.43	
9862.00	93.240	183.990	7379.56	2557.16	-2446.15	832.99	40°11'44.499"N	104°47'35.309"W	0.86	
9948.00	92.960	182.090	7374.90	2640.63	-2531.90	828.44	40°11'43.652"N	104°47'35.367"W	2.23	
10033.00	90.760	182.650	7372.15	2723.44	-2616.78	824.93	40°11'42.813"N	104°47'35.413"W	2.67	
10118.00	86.110	184.260	7374.47	2805.86	-2701.57	819.81	40°11'41.975"N	104°47'35.479"W	5.79	
10203.00	85.390	179.320	7380.77	2888.65	-2786.26	817.16	40°11'41.138"N	104°47'35.513"W	5.86	
10289.00	87.930	176.180	7385.78	2973.60	-2872.03	820.53	40°11'40.290"N	104°47'35.469"W	4.69	
10374.00	90.550	180.100	7386.91	3057.59	-2956.96	823.29	40°11'39.451"N	104°47'35.434"W	5.55	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RAYMOND 38C-29HZ (253'FNL & 1266'FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 38C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 38C-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (154 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10459.00	88.400	179.240	7387.69	3141.24	-3041.95	823.78	40°11'38.611"N	104°47'35.428"W	2.72	
10545.00	88.580	180.150	7389.95	3225.85	-3127.91	824.24	40°11'37.762"N	104°47'35.422"W	1.08	
10630.00	89.030	180.020	7391.73	3309.38	-3212.90	824.11	40°11'36.922"N	104°47'35.423"W	0.55	
10715.00	86.510	178.750	7395.03	3393.04	-3297.82	825.02	40°11'36.083"N	104°47'35.412"W	3.32	
10801.00	89.170	178.120	7398.27	3477.92	-3383.72	827.37	40°11'35.234"N	104°47'35.382"W	3.18	
10886.00	89.230	175.650	7399.46	3562.19	-3468.58	831.99	40°11'34.395"N	104°47'35.322"W	2.91	
10971.00	89.780	176.730	7400.20	3646.61	-3553.38	837.63	40°11'33.557"N	104°47'35.249"W	1.43	
11056.00	90.180	177.350	7400.23	3730.87	-3638.27	842.02	40°11'32.719"N	104°47'35.193"W	0.87	
11142.00	89.110	180.160	7400.76	3815.73	-3724.24	843.89	40°11'31.869"N	104°47'35.169"W	3.50	
11227.00	89.110	179.050	7402.08	3899.39	-3809.22	844.48	40°11'31.029"N	104°47'35.161"W	1.31	
11312.00	89.560	180.100	7403.07	3983.07	-3894.21	845.11	40°11'30.189"N	104°47'35.153"W	1.34	
11397.00	90.210	180.850	7403.24	4066.50	-3979.21	844.40	40°11'29.349"N	104°47'35.162"W	1.17	
11483.00	89.530	179.980	7403.43	4150.94	-4065.21	843.78	40°11'28.500"N	104°47'35.170"W	1.28	
11568.00	89.500	180.100	7404.15	4234.50	-4150.20	843.72	40°11'27.660"N	104°47'35.171"W	0.15	
11653.00	90.240	180.700	7404.34	4317.95	-4235.20	843.13	40°11'26.820"N	104°47'35.179"W	1.12	
11739.00	90.860	180.520	7403.52	4402.33	-4321.19	842.21	40°11'25.970"N	104°47'35.191"W	0.75	
11824.00	90.920	180.340	7402.20	4485.77	-4406.18	841.58	40°11'25.130"N	104°47'35.199"W	0.22	
11885.00	90.710	180.290	7401.33	4545.68	-4467.17	841.24	40°11'24.527"N	104°47'35.203"W	0.35	LAST BHI MWD SURVEY
11944.00	90.710	180.290	7400.60	4603.62	-4526.17	840.94	40°11'23.944"N	104°47'35.207"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: RAYMOND 38C-29HZ AWB Ref Wellpath: RAYMOND 38C-29HZ AWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
12.25in Open Hole	17.00	945.00	928.00	17.00	944.97	0.00	0.00	-5.33	-3.19
9.625in Casing Surface	17.00	945.00	928.00	17.00	944.97	0.00	0.00	-5.33	-3.19
8.75in Open Hole	945.00	7837.00	6892.00	944.97	7394.31	-5.33	-3.19	-421.96	850.88
7in Casing Intermediate	17.00	7828.00	7811.00	17.00	7394.04	0.00	0.00	-412.97	851.04
6.125in Open Hole	7828.00	11944.00	4116.00	7394.04	7400.60	-412.97	851.04	-4526.17	840.94



Actual Wellpath Report

RAYMOND 38C-29HZ AWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RAYMOND 38C-29HZ (253'FNL & 1266'FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 38C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 38C-29HZ AWB
Facility	SEC.29-T3N-R66W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
RAYMOND PAD SECTION LINES		0.00	-0.30	29.87	3196636.19	1317360.22	40°12'08.669"N	104°47'45.658"W	polygon
RAYMOND 38C-29HZ BHL ON PLAT (460'FSL & 410'FEL, SEC.29) REV-1		7397.00	-4551.90	852.98	3197495.36	1312815.50	40°11'23.690"N	104°47'35.052"W	point
RAYMOND 38C-29HZ LAND BOX		7400.00	0.00	0.00	3196606.32	1317360.29	40°12'08.672"N	104°47'46.043"W	polygon
RAYMOND PAD HARDLINES (460' SETBACKS)		7500.00	-0.30	29.87	3196636.19	1317360.22	40°12'08.669"N	104°47'45.658"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: RAYMOND 38C-29HZ AWB Ref Wellpath: RAYMOND 38C-29HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	902.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <117-902>	RAYMOND 38C-29HZ AWB
902.00	7794.00	NaviTrak (MagCorr)	BHI MWD SURVEYS 8 3/4" HOLE <960-7794>	RAYMOND 38C-29HZ AWB
7794.00	11885.00	OnTrak (MagCorr)	BHI MWD SURVEYS 6 1/8" HOLE <7858-11885>	RAYMOND 38C-29HZ AWB
11885.00	11944.00	Blind Drilling (std)	Projection to bit	RAYMOND 38C-29HZ AWB



Actual Wellpath Report

RAYMOND 38C-29HZ AWP

Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 RAYMOND 38C-29HZ (253'FNL & 1266'FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 38C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 38C-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	150.950	17.00	TIE-ON
117.00	0.250	150.950	117.00	BEGIN GYRO SURVEYS
902.00	0.490	207.480	901.98	TIE-INTO GYRO SURVEYS
960.00	0.370	223.290	959.97	BEGIN BHI MWD SURVEYS
7828.00	88.138	180.976	7394.04	7" CASING POINT
11885.00	90.710	180.290	7401.33	LAST BHI MWD SURVEY
11944.00	90.710	180.290	7400.60	PROJECTION TO BIT