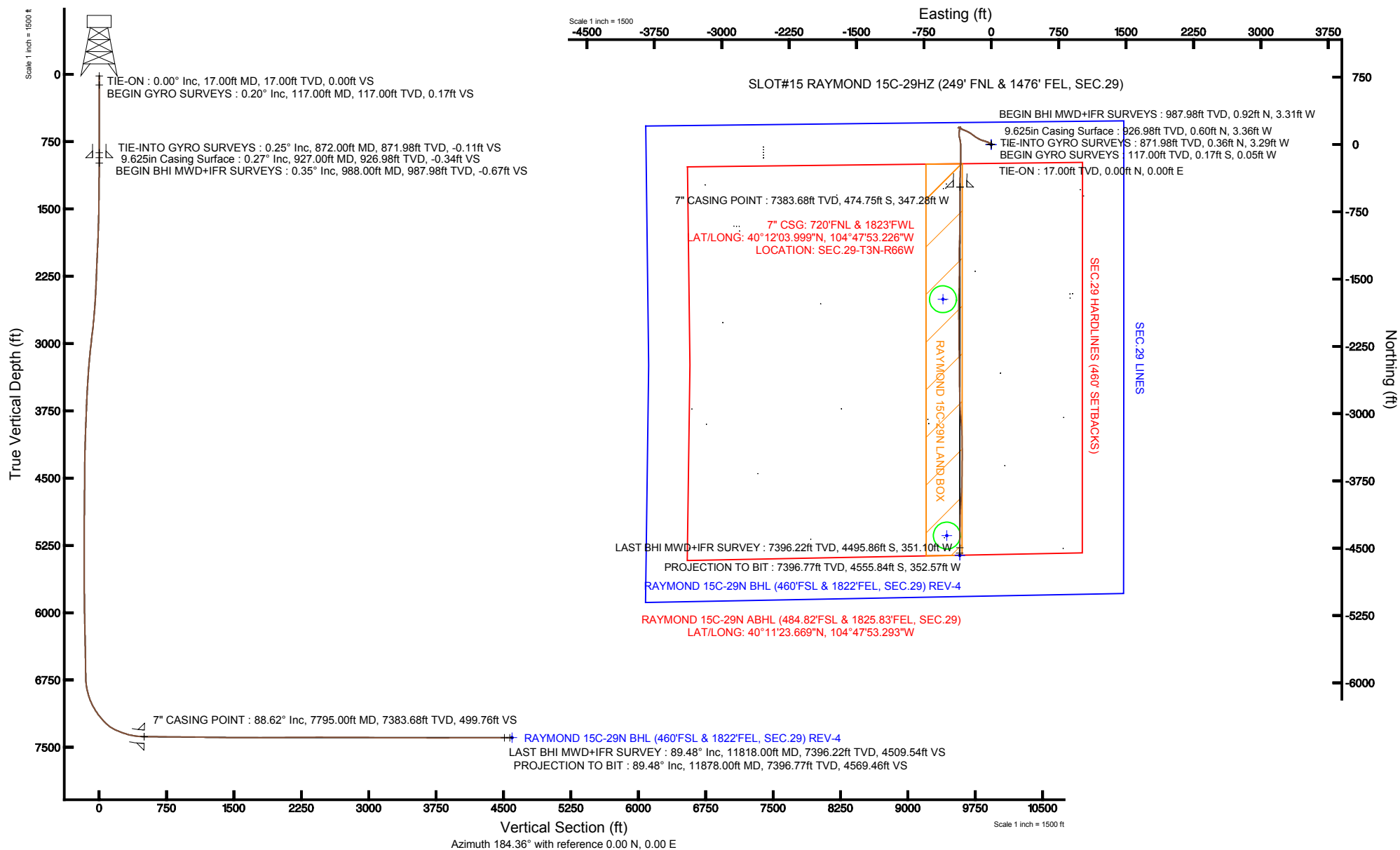


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)
Field: WELD COUNTY (KERR MCGEE) Well: RAYMOND 15C-29HZ
Facility: SEC.29-T3N-R66W Wellbore: RAYMOND 15C-29HZ PWB

Plot reference wellpath is RAYMOND 15C-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: 4941 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wlsje02 on 3/6/2013





Actual Wellpath Report

RAYMOND 15C-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 15C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 15C-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 12:46:45
Convergence at slot	0.45° East	Database/Source file	WellArchitectDB/RAYMOND_15C-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	912.32	2803.12	3196396.27	1317360.44	40°12'08.690"N	104°47'48.750"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	4941.00ft
Horizontal Reference Pt	Slot	XTREME 8 (RKB) to Mean Sea Level	4941.00ft
Vertical Reference Pt	XTREME 8 (RKB)	XTREME 8 (RKB) to Mud Line at Slot (SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29))	4941.00ft
MD Reference Pt	XTREME 8 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	184.43°



Actual Wellpath Report

RAYMOND 15C-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 15C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 15C-29HZ AWP
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (153 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	196.410	0.00	0.00	0.00	0.00	40°12'08.690"N	104°47'48.750"W	0.00	
17.00	0.000	196.410	17.00	0.00	0.00	0.00	40°12'08.690"N	104°47'48.750"W	0.00	TIE-ON
117.00	0.200	196.410	117.00	0.17	-0.17	-0.05	40°12'08.688"N	104°47'48.751"W	0.20	BEGIN GYRO SURVEYS
217.00	0.090	301.850	217.00	0.31	-0.29	-0.17	40°12'08.687"N	104°47'48.752"W	0.24	
317.00	0.390	313.590	317.00	0.05	-0.02	-0.48	40°12'08.690"N	104°47'48.756"W	0.30	
417.00	0.570	292.040	417.00	-0.31	0.40	-1.19	40°12'08.694"N	104°47'48.765"W	0.25	
517.00	0.590	274.990	516.99	-0.47	0.64	-2.16	40°12'08.696"N	104°47'48.778"W	0.17	
617.00	0.360	259.490	616.99	-0.39	0.62	-2.98	40°12'08.696"N	104°47'48.788"W	0.26	
717.00	0.300	193.550	716.99	-0.05	0.31	-3.35	40°12'08.693"N	104°47'48.793"W	0.36	
817.00	0.200	42.950	816.98	0.07	0.18	-3.29	40°12'08.692"N	104°47'48.792"W	0.48	
872.00	0.250	330.640	871.98	-0.10	0.36	-3.29	40°12'08.694"N	104°47'48.792"W	0.49	TIE-INTO GYRO SURVEYS
988.00	0.350	15.960	987.98	-0.66	0.92	-3.31	40°12'08.699"N	104°47'48.793"W	0.21	BEGIN BHI MWD+IFR SURVEYS
1048.00	0.440	16.950	1047.98	-1.07	1.32	-3.20	40°12'08.703"N	104°47'48.791"W	0.15	
1139.00	0.480	2.870	1138.98	-1.79	2.03	-3.08	40°12'08.710"N	104°47'48.790"W	0.13	
1230.00	0.520	347.800	1229.98	-2.57	2.82	-3.14	40°12'08.718"N	104°47'48.791"W	0.15	
1321.00	0.610	342.870	1320.97	-3.41	3.68	-3.37	40°12'08.726"N	104°47'48.793"W	0.11	
1412.00	0.810	332.190	1411.96	-4.41	4.71	-3.82	40°12'08.737"N	104°47'48.799"W	0.26	
1497.00	0.850	325.800	1496.96	-5.41	5.77	-4.45	40°12'08.747"N	104°47'48.807"W	0.12	
1582.00	2.410	316.680	1581.92	-7.10	7.59	-6.03	40°12'08.765"N	104°47'48.828"W	1.85	
1668.00	4.050	294.930	1667.78	-9.38	10.19	-10.03	40°12'08.791"N	104°47'48.879"W	2.35	
1753.00	4.140	303.170	1752.57	-11.91	13.13	-15.32	40°12'08.820"N	104°47'48.947"W	0.70	
1838.00	5.610	299.320	1837.26	-15.13	16.84	-21.51	40°12'08.856"N	104°47'49.027"W	1.77	
1924.00	6.290	299.440	1922.79	-18.89	21.22	-29.28	40°12'08.900"N	104°47'49.127"W	0.79	
2009.00	7.210	293.210	2007.20	-22.58	25.61	-38.23	40°12'08.943"N	104°47'49.243"W	1.38	
2094.00	8.330	293.350	2091.42	-26.30	30.15	-48.79	40°12'08.988"N	104°47'49.379"W	1.32	
2179.00	9.210	288.150	2175.43	-29.91	34.71	-60.91	40°12'09.033"N	104°47'49.535"W	1.39	
2264.00	11.080	284.520	2259.10	-32.95	38.88	-75.28	40°12'09.074"N	104°47'49.720"W	2.32	
2349.00	10.540	289.580	2342.59	-36.42	43.53	-90.51	40°12'09.120"N	104°47'49.916"W	1.28	
2434.00	10.730	287.280	2426.13	-40.21	48.49	-105.39	40°12'09.169"N	104°47'50.108"W	0.55	
2520.00	11.060	292.750	2510.58	-44.58	54.05	-120.64	40°12'09.224"N	104°47'50.305"W	1.26	
2605.00	10.960	299.780	2594.02	-50.61	61.22	-135.18	40°12'09.295"N	104°47'50.492"W	1.58	
2690.00	11.420	298.360	2677.40	-57.48	69.23	-149.59	40°12'09.374"N	104°47'50.678"W	0.63	
2776.00	11.610	302.390	2761.68	-64.99	77.91	-164.39	40°12'09.460"N	104°47'50.869"W	0.96	
2861.00	11.860	307.190	2844.90	-73.73	87.77	-178.57	40°12'09.557"N	104°47'51.051"W	1.19	
2946.00	12.640	305.740	2927.96	-83.29	98.48	-193.08	40°12'09.663"N	104°47'51.238"W	0.99	
3031.00	11.920	306.680	3011.02	-92.81	109.16	-207.67	40°12'09.769"N	104°47'51.426"W	0.88	
3117.00	11.940	303.500	3095.16	-101.88	119.38	-222.21	40°12'09.870"N	104°47'51.614"W	0.76	
3202.00	11.090	302.400	3178.45	-109.98	128.61	-236.45	40°12'09.961"N	104°47'51.797"W	1.03	
3287.00	10.740	298.490	3261.91	-117.05	136.77	-250.31	40°12'10.042"N	104°47'51.976"W	0.96	
3372.00	10.540	297.520	3345.45	-123.33	144.14	-264.17	40°12'10.114"N	104°47'52.155"W	0.32	
3458.00	9.970	293.580	3430.08	-128.85	150.75	-277.96	40°12'10.180"N	104°47'52.332"W	1.05	
3543.00	9.700	291.970	3513.83	-133.43	156.37	-291.35	40°12'10.235"N	104°47'52.505"W	0.45	
3628.00	9.090	293.010	3597.69	-137.73	161.68	-304.17	40°12'10.288"N	104°47'52.670"W	0.74	
3714.00	7.250	289.970	3682.81	-141.35	166.19	-315.52	40°12'10.332"N	104°47'52.816"W	2.20	
3799.00	6.540	294.730	3767.20	-144.46	170.04	-324.96	40°12'10.370"N	104°47'52.938"W	1.07	



Actual Wellpath Report

RAYMOND 15C-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 15C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 15C-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3884.00	6.100	297.390	3851.68	-147.90	174.15	-333.37	40°12'10.411"N	104°47'53.046"W	0.62	
3969.00	4.990	297.000	3936.28	-151.09	177.90	-340.67	40°12'10.448"N	104°47'53.141"W	1.31	
4055.00	4.770	297.240	4021.97	-153.91	181.24	-347.18	40°12'10.481"N	104°47'53.224"W	0.26	
4140.00	4.740	296.240	4106.68	-156.58	184.41	-353.48	40°12'10.512"N	104°47'53.306"W	0.10	
4225.00	3.510	299.290	4191.46	-158.98	187.23	-358.90	40°12'10.540"N	104°47'53.375"W	1.47	
4311.00	1.040	328.980	4277.39	-160.73	189.19	-361.60	40°12'10.560"N	104°47'53.410"W	3.09	
4396.00	0.530	41.020	4362.38	-161.67	190.15	-361.73	40°12'10.569"N	104°47'53.412"W	1.19	
4481.00	0.400	16.970	4447.38	-162.28	190.73	-361.39	40°12'10.575"N	104°47'53.408"W	0.27	
4567.00	0.300	348.750	4533.38	-162.79	191.24	-361.35	40°12'10.580"N	104°47'53.407"W	0.23	
4652.00	1.090	53.030	4618.37	-163.53	191.94	-360.74	40°12'10.587"N	104°47'53.399"W	1.17	
4737.00	1.950	80.880	4703.34	-164.41	192.66	-358.67	40°12'10.594"N	104°47'53.372"W	1.31	
4822.00	1.340	75.300	4788.30	-165.07	193.14	-356.28	40°12'10.599"N	104°47'53.342"W	0.74	
4908.00	0.830	39.190	4874.29	-165.91	193.88	-354.91	40°12'10.606"N	104°47'53.324"W	0.96	
4993.00	0.650	324.750	4959.28	-166.79	194.75	-354.80	40°12'10.614"N	104°47'53.323"W	1.07	
5078.00	0.630	316.580	5044.28	-167.47	195.48	-355.40	40°12'10.622"N	104°47'53.330"W	0.11	
5163.00	0.280	64.810	5129.28	-167.89	195.91	-355.54	40°12'10.626"N	104°47'53.332"W	0.90	
5249.00	0.510	119.380	5215.27	-167.83	195.81	-355.01	40°12'10.625"N	104°47'53.325"W	0.48	
5334.00	0.550	113.970	5300.27	-167.54	195.46	-354.31	40°12'10.621"N	104°47'53.316"W	0.08	
5419.00	0.630	121.550	5385.27	-167.19	195.05	-353.54	40°12'10.617"N	104°47'53.306"W	0.13	
5504.00	0.680	101.330	5470.26	-166.91	194.70	-352.65	40°12'10.614"N	104°47'53.295"W	0.28	
5589.00	0.830	89.180	5555.25	-166.91	194.61	-351.54	40°12'10.613"N	104°47'53.281"W	0.26	
5675.00	0.750	96.580	5641.25	-166.95	194.56	-350.35	40°12'10.613"N	104°47'53.265"W	0.15	
5760.00	0.920	110.620	5726.24	-166.73	194.25	-349.16	40°12'10.610"N	104°47'53.250"W	0.31	
5845.00	1.130	121.030	5811.22	-166.17	193.58	-347.81	40°12'10.603"N	104°47'53.232"W	0.33	
5931.00	1.040	131.540	5897.21	-165.32	192.63	-346.50	40°12'10.594"N	104°47'53.216"W	0.25	
6016.00	1.080	150.080	5982.19	-164.19	191.42	-345.52	40°12'10.582"N	104°47'53.203"W	0.40	
6101.00	1.240	165.540	6067.18	-162.66	189.84	-344.89	40°12'10.566"N	104°47'53.195"W	0.41	
6186.00	1.540	167.420	6152.15	-160.70	187.83	-344.41	40°12'10.546"N	104°47'53.189"W	0.36	
6272.00	0.890	184.410	6238.13	-158.92	186.04	-344.21	40°12'10.528"N	104°47'53.186"W	0.86	
6357.00	1.410	174.570	6323.11	-157.23	184.34	-344.16	40°12'10.512"N	104°47'53.186"W	0.65	
6442.00	0.860	208.340	6408.10	-155.62	182.73	-344.37	40°12'10.496"N	104°47'53.188"W	0.99	
6527.00	1.130	212.520	6493.09	-154.30	181.47	-345.12	40°12'10.483"N	104°47'53.198"W	0.33	
6613.00	1.200	213.710	6579.07	-152.76	180.00	-346.08	40°12'10.469"N	104°47'53.210"W	0.09	
6698.00	1.460	236.530	6664.05	-151.32	178.66	-347.47	40°12'10.456"N	104°47'53.228"W	0.69	
6739.00	1.510	235.300	6705.03	-150.66	178.07	-348.35	40°12'10.450"N	104°47'53.240"W	0.14	
6790.00	2.420	215.660	6756.00	-149.32	176.81	-349.53	40°12'10.437"N	104°47'53.255"W	2.19	
6868.00	10.230	194.300	6833.47	-141.07	168.75	-352.21	40°12'10.358"N	104°47'53.289"W	10.29	
6911.00	13.570	193.340	6875.54	-132.32	160.14	-354.32	40°12'10.272"N	104°47'53.316"W	7.78	
6954.00	15.370	183.310	6917.18	-121.64	149.54	-355.81	40°12'10.168"N	104°47'53.336"W	7.16	
6997.00	19.740	185.620	6958.17	-108.67	136.62	-356.85	40°12'10.040"N	104°47'53.349"W	10.29	
7039.00	24.200	182.240	6997.11	-92.97	120.95	-357.88	40°12'09.885"N	104°47'53.362"W	11.03	
7082.00	28.260	175.670	7035.69	-74.09	101.98	-357.46	40°12'09.698"N	104°47'53.357"W	11.60	
7124.00	31.020	168.500	7072.20	-53.85	81.45	-354.55	40°12'09.495"N	104°47'53.319"W	10.69	
7167.00	34.860	168.370	7108.28	-31.38	58.54	-349.86	40°12'09.269"N	104°47'53.259"W	8.93	
7210.00	37.780	168.820	7142.92	-6.88	33.58	-344.83	40°12'09.022"N	104°47'53.194"W	6.82	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 15C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 15C-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (153 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7252.00	39.990	175.420	7175.63	18.86	7.49	-341.25	40°12'08.764"N	104°47'53.148"W	11.17	
7295.00	42.500	179.670	7207.96	46.99	-20.82	-340.07	40°12'08.484"N	104°47'53.133"W	8.75	
7338.00	47.340	179.570	7238.40	77.24	-51.17	-339.86	40°12'08.184"N	104°47'53.130"W	11.26	
7380.00	52.710	180.100	7265.37	109.31	-83.34	-339.78	40°12'07.866"N	104°47'53.129"W	12.82	
7423.00	59.300	179.980	7289.40	144.84	-118.97	-339.80	40°12'07.514"N	104°47'53.129"W	15.33	
7466.00	64.610	180.540	7309.61	182.67	-156.91	-339.98	40°12'07.139"N	104°47'53.132"W	12.40	
7508.00	68.220	181.350	7326.42	221.09	-195.39	-340.61	40°12'06.759"N	104°47'53.140"W	8.77	
7551.00	70.750	182.260	7341.48	261.31	-235.64	-341.89	40°12'06.361"N	104°47'53.156"W	6.21	
7594.00	73.380	182.480	7354.72	302.20	-276.51	-343.58	40°12'05.958"N	104°47'53.178"W	6.14	
7636.00	77.450	181.830	7365.30	342.80	-317.12	-345.10	40°12'05.556"N	104°47'53.198"W	9.81	
7679.00	80.390	181.350	7373.56	384.94	-359.30	-346.27	40°12'05.139"N	104°47'53.213"W	6.92	
7722.00	84.210	180.610	7379.32	427.47	-401.89	-347.00	40°12'04.718"N	104°47'53.222"W	9.05	
7760.00	86.830	180.150	7382.29	465.26	-439.77	-347.25	40°12'04.344"N	104°47'53.225"W	7.00	
7795.00†	88.620	179.947	7383.68	500.13	-474.75	-347.28	40°12'03.999"N	104°47'53.226"W	5.15	7" CASING POINT
7822.00	90.000	179.790	7384.00	527.04	-501.74	-347.22	40°12'03.732"N	104°47'53.225"W	5.15	
7907.00	90.120	179.690	7383.92	611.75	-586.74	-346.83	40°12'02.892"N	104°47'53.220"W	0.18	
7993.00	89.230	181.330	7384.40	697.55	-672.73	-347.60	40°12'02.042"N	104°47'53.230"W	2.17	
8078.00	89.140	180.180	7385.61	782.36	-757.72	-348.72	40°12'01.202"N	104°47'53.244"W	1.36	
8163.00	89.510	180.520	7386.61	867.14	-842.71	-349.24	40°12'00.362"N	104°47'53.251"W	0.59	
8248.00	89.720	180.550	7387.18	951.94	-927.70	-350.03	40°11'59.522"N	104°47'53.261"W	0.25	
8334.00	89.880	181.820	7387.48	1037.80	-1013.68	-351.81	40°11'58.673"N	104°47'53.284"W	1.49	
8419.00	88.680	182.410	7388.55	1122.73	-1098.62	-354.95	40°11'57.833"N	104°47'53.324"W	1.57	
8504.00	88.470	179.940	7390.67	1207.56	-1183.56	-356.69	40°11'56.994"N	104°47'53.347"W	2.92	
8589.00	89.290	179.880	7392.33	1292.28	-1268.55	-356.56	40°11'56.154"N	104°47'53.345"W	0.97	
8675.00	89.260	180.030	7393.42	1378.01	-1354.54	-356.49	40°11'55.304"N	104°47'53.344"W	0.18	
8760.00	89.690	179.890	7394.20	1462.75	-1439.54	-356.43	40°11'54.465"N	104°47'53.343"W	0.53	
8845.00	90.310	180.900	7394.20	1547.53	-1524.53	-357.01	40°11'53.625"N	104°47'53.351"W	1.39	
8930.00	89.880	182.280	7394.05	1632.43	-1609.50	-359.37	40°11'52.785"N	104°47'53.381"W	1.70	
9016.00	89.230	181.250	7394.72	1718.33	-1695.45	-362.02	40°11'51.936"N	104°47'53.415"W	1.42	
9101.00	90.150	180.070	7395.18	1803.14	-1780.44	-363.00	40°11'51.096"N	104°47'53.428"W	1.76	
9186.00	90.520	179.620	7394.69	1887.87	-1865.44	-362.77	40°11'50.256"N	104°47'53.425"W	0.69	
9271.00	90.460	178.730	7393.96	1972.51	-1950.43	-361.55	40°11'49.416"N	104°47'53.409"W	1.05	
9357.00	90.950	179.250	7392.90	2058.12	-2036.41	-360.03	40°11'48.566"N	104°47'53.390"W	0.83	
9442.00	90.700	180.180	7391.68	2142.82	-2121.40	-359.61	40°11'47.726"N	104°47'53.384"W	1.13	
9527.00	90.460	180.640	7390.82	2227.61	-2206.39	-360.22	40°11'46.886"N	104°47'53.392"W	0.61	
9612.00	90.120	177.730	7390.39	2312.24	-2291.37	-359.01	40°11'46.047"N	104°47'53.376"W	3.45	
9698.00	90.150	178.940	7390.18	2397.75	-2377.33	-356.51	40°11'45.197"N	104°47'53.344"W	1.41	
9783.00	89.900	179.670	7390.15	2482.41	-2462.33	-355.48	40°11'44.357"N	104°47'53.331"W	0.91	
9868.00	89.590	180.200	7390.52	2567.15	-2547.33	-355.38	40°11'43.517"N	104°47'53.330"W	0.72	
9953.00	89.530	179.600	7391.18	2651.88	-2632.32	-355.23	40°11'42.677"N	104°47'53.328"W	0.71	
10038.00	90.030	177.860	7391.50	2736.46	-2717.30	-353.35	40°11'41.838"N	104°47'53.303"W	2.13	
10123.00	90.490	178.510	7391.12	2820.95	-2802.25	-350.66	40°11'40.998"N	104°47'53.269"W	0.94	
10209.00	90.000	178.110	7390.75	2906.46	-2888.21	-348.12	40°11'40.149"N	104°47'53.236"W	0.74	
10294.00	87.620	175.550	7392.52	2990.69	-2973.05	-343.42	40°11'39.310"N	104°47'53.175"W	4.11	
10379.00	88.050	175.630	7395.73	3074.62	-3057.74	-336.89	40°11'38.473"N	104°47'53.091"W	0.51	



Actual Wellpath Report

RAYMOND 15C-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 15C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 15C-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10464.00	90.550	176.560	7396.76	3158.71	-3142.53	-331.10	40°11'37.636"N	104°47'53.017"W	3.14	
10549.00	89.820	177.930	7396.49	3243.04	-3227.43	-327.02	40°11'36.797"N	104°47'52.964"W	1.83	
10634.00	89.720	179.260	7396.83	3327.60	-3312.40	-324.94	40°11'35.957"N	104°47'52.937"W	1.57	
10720.00	89.600	179.060	7397.34	3413.23	-3398.39	-323.67	40°11'35.107"N	104°47'52.921"W	0.27	
10805.00	90.210	180.750	7397.48	3497.96	-3483.39	-323.53	40°11'34.267"N	104°47'52.919"W	2.11	
10890.00	89.820	180.900	7397.46	3582.80	-3568.38	-324.76	40°11'33.427"N	104°47'52.935"W	0.49	
10975.00	89.540	180.790	7397.94	3667.63	-3653.37	-326.01	40°11'32.587"N	104°47'52.951"W	0.35	
11060.00	89.630	180.280	7398.55	3752.43	-3738.36	-326.80	40°11'31.748"N	104°47'52.961"W	0.61	
11145.00	90.650	182.640	7398.34	3837.31	-3823.32	-328.97	40°11'30.908"N	104°47'52.989"W	3.02	
11230.00	90.430	182.660	7397.54	3922.26	-3908.23	-332.90	40°11'30.069"N	104°47'53.040"W	0.26	
11315.00	90.680	183.600	7396.72	4007.24	-3993.10	-337.54	40°11'29.230"N	104°47'53.099"W	1.14	
11400.00	89.940	182.740	7396.26	4092.21	-4077.97	-342.24	40°11'28.392"N	104°47'53.160"W	1.33	
11485.00	90.060	180.610	7396.26	4177.11	-4162.92	-344.73	40°11'27.552"N	104°47'53.192"W	2.51	
11571.00	90.370	181.360	7395.94	4262.96	-4248.91	-346.20	40°11'26.702"N	104°47'53.211"W	0.94	
11656.00	90.000	180.920	7395.66	4347.82	-4333.89	-347.89	40°11'25.863"N	104°47'53.233"W	0.68	
11741.00	89.850	181.120	7395.77	4432.66	-4418.88	-349.41	40°11'25.023"N	104°47'53.252"W	0.29	
11818.00	89.480	181.400	7396.22	4509.55	-4495.86	-351.10	40°11'24.262"N	104°47'53.274"W	0.60	LAST BHI MWD+IFR SURVEY
11878.00	89.480	181.400	7396.77	4569.46	-4555.84	-352.57	40°11'23.669"N	104°47'53.293"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: RAYMOND 15C-29HZ AWB Ref Wellpath: RAYMOND 15C-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	927.00	910.00	17.00	926.98	0.00	0.00	0.60	-3.36
9.625in Casing Surface	17.00	927.00	910.00	17.00	926.98	0.00	0.00	0.60	-3.36
8.75in Open Hole	927.00	7806.00	6879.00	926.98	7383.89	0.60	-3.36	-485.74	-347.27
7in Casing Intermediate	17.00	7795.00	7778.00	17.00	7383.68	0.00	0.00	-474.75	-347.28
6.125in Open Hole	7795.00	11878.00	4083.00	7383.68	7396.77	-474.75	-347.28	-4555.84	-352.57



Actual Wellpath Report

RAYMOND 15C-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 15C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 15C-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
SEC.29 LINES		-1.00	0.00	0.00	3196396.27	1317360.44	40°12'08.690"N	104°47'48.750"W	polygon
UPRC 29-7K 150' CIRCLE		7183.00	-1724.75	-537.76	3195872.23	1315631.56	40°11'51.646"N	104°47'55.680"W	circle
RAYMOND 15C-29N BHL (460'FSL & 1822'FEL, SEC.29) REV-4		7395.00	-4580.66	-349.01	3196083.61	1312777.36	40°11'23.424"N	104°47'53.247"W	point
RAYMOND 15C-29N BHL (460'FSL & 1822'FEL, SEC.29) REV-2		7409.00	-4580.66	-349.01	3196083.61	1312777.36	40°11'23.424"N	104°47'53.247"W	point
RAYMOND 15C-29N BHL ON PLAT (460'FSL & 1832'FEL, SEC.29) REV-1		7409.00	-4580.66	-359.01	3196073.61	1312777.29	40°11'23.424"N	104°47'53.376"W	point
RAYMOND 15C-29N BHL (460'FSL & 1852'FEL, SEC.29) REV-3		7411.00	-4580.66	-379.01	3196053.61	1312777.12	40°11'23.424"N	104°47'53.634"W	point
UPRC 29-15K 150' CIRCLE		7411.00	-4360.93	-495.05	3195935.84	1312995.92	40°11'25.595"N	104°47'55.129"W	circle
RAYMOND 15C-29N LAND BOX		7499.00	0.00	0.00	3196396.27	1317360.44	40°12'08.690"N	104°47'48.750"W	polygon
SEC.29 HARDLINES (460' SETBACKS)		7599.00	0.00	0.00	3196396.27	1317360.44	40°12'08.690"N	104°47'48.750"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: RAYMOND 15C-29HZ AWB Ref Wellpath: RAYMOND 15C-29HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	872.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <117-872>	RAYMOND 15C-29HZ AWB
872.00	7760.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <988-7760>	RAYMOND 15C-29HZ AWB
7760.00	11818.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7822-11818>	RAYMOND 15C-29HZ AWB
11818.00	11878.00	Blind Drilling (std)	Projection to bit	RAYMOND 15C-29HZ AWB



Actual Wellpath Report

RAYMOND 15C-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 RAYMOND 15C-29HZ (249' FNL & 1476' FEL, SEC.29)
Area	COLORADO	Well	RAYMOND 15C-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RAYMOND 15C-29HZ AWP
Facility	SEC.29-T3N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	196.410	17.00	TIE-ON
117.00	0.200	196.410	117.00	BEGIN GYRO SURVEYS
872.00	0.250	330.640	871.98	TIE-INTO GYRO SURVEYS
988.00	0.350	15.960	987.98	BEGIN BHI MWD+IFR SURVEYS
7795.00	88.620	179.947	7383.68	7" CASING POINT
11818.00	89.480	181.400	7396.22	LAST BHI MWD+IFR SURVEY
11878.00	89.480	181.400	7396.77	PROJECTION TO BIT