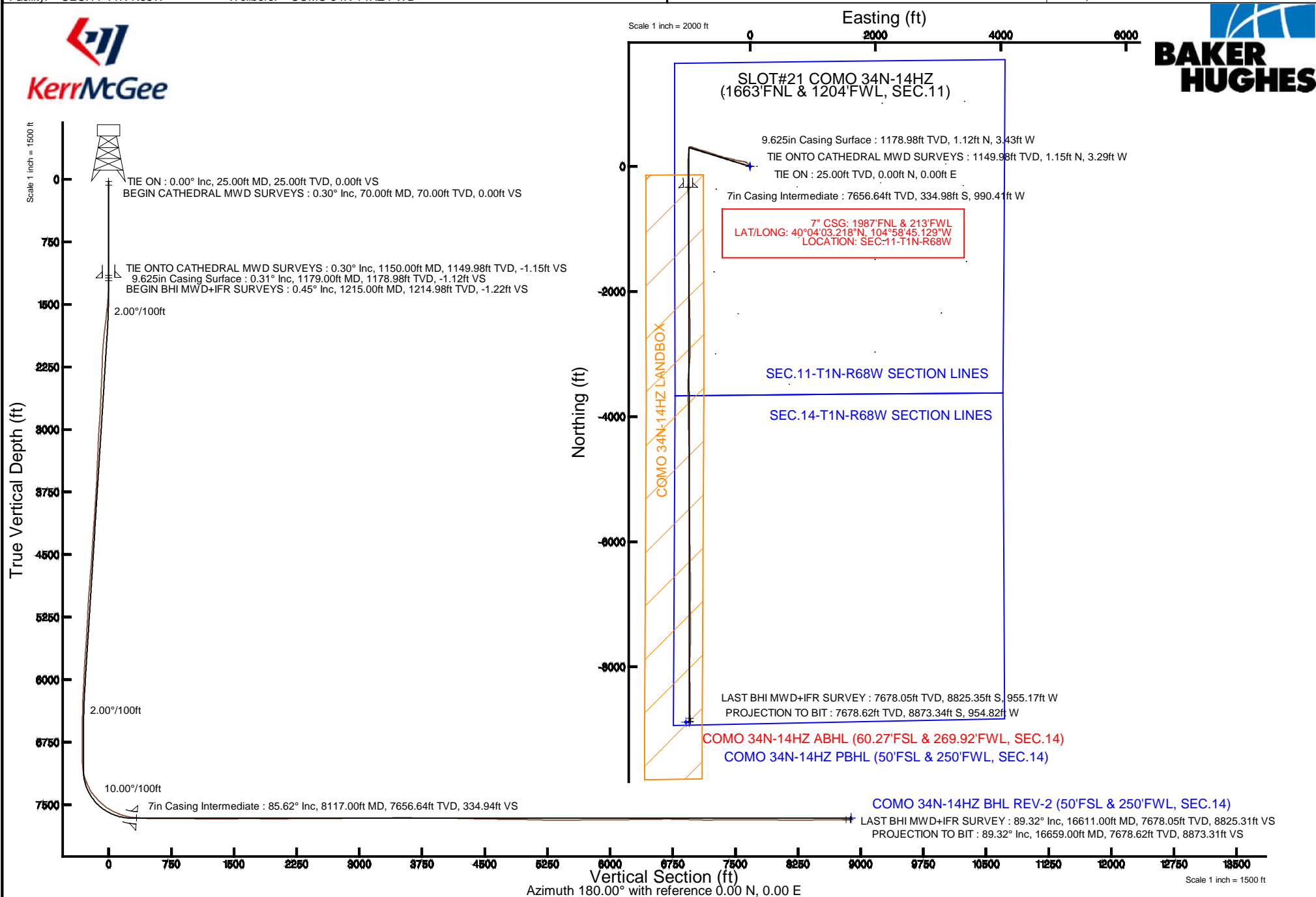


Location:	COLORADO	Slot:	SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11)
Field:	WELD COUNTY (KERR MCGEE)	Well:	COMO 34N-14HZ
Facility:	SEC. 11-T1N-R68W	Wellbore:	COMO 34N-14HZ PWB

True vertical depths are referenced to H&P 307 (25KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 307 (25KB) (RKB)	North Reference: True north
H&P 307 (25KB) (RKB) to Mean Sea Level: 5055 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#21 COMO 34N-14HZ (1663FNL & 1204FWL, SEC.11)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 11/19/2014



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11)
Area	COLORADO	Well	COMO 34N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 34N-14HZ AWB <70-16659>
Facility	SEC.11-T1N-R68W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Robiale01
Scale	0.999962	Report Generated	11/19/2014 at 4:05:19 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/COMO_34N-14HZ_AWB_70-16659_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1148.93	416.25	3146746.29	1268226.25	40°04'06.528"N	104°58'32.390"W
Facility Reference Pt			3146323.29	1269372.66	40°04'17.882"N	104°58'37.744"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 307 (25'KB) (RKB) to Facility Vertical Datum	5055.00ft
Horizontal Reference Pt	Slot	H&P 307 (25'KB) (RKB) to Mean Sea Level	5055.00ft
Vertical Reference Pt	H&P 307 (25'KB) (RKB)	H&P 307 (25'KB) (RKB) to Mud Line at Slot (SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11))	5055.00ft
MD Reference Pt	H&P 307 (25'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	186.14°

# Actual Wellpath Report

COMO 34N-14HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11)
Area	COLORADO	Well	COMO 34N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 34N-14HZ AWB <70-16659>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (191 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	269.300	0.00	0.00	0.00	0.00	40°04'06.528"N	104°58'32.390"W	0.00	
25.00	0.000	269.300	25.00	0.00	0.00	0.00	40°04'06.528"N	104°58'32.390"W	0.00	TIE ON
70.00	0.300	269.300	70.00	0.01	0.00	-0.12	40°04'06.528"N	104°58'32.392"W	0.67	BEGIN CATHEDRAL MWD SURVEYS
142.00	0.300	302.500	142.00	-0.05	0.10	-0.47	40°04'06.529"N	104°58'32.396"W	0.24	
240.00	0.300	311.600	240.00	-0.31	0.41	-0.87	40°04'06.532"N	104°58'32.401"W	0.05	
339.00	0.800	311.400	338.99	-0.86	1.03	-1.59	40°04'06.538"N	104°58'32.410"W	0.51	
419.00	0.900	291.700	418.98	-1.35	1.64	-2.59	40°04'06.544"N	104°58'32.423"W	0.38	
499.00	0.300	278.500	498.98	-1.53	1.90	-3.38	40°04'06.547"N	104°58'32.433"W	0.76	
579.00	0.100	223.300	578.98	-1.48	1.88	-3.63	40°04'06.547"N	104°58'32.437"W	0.32	
659.00	0.400	132.100	658.98	-1.26	1.64	-3.48	40°04'06.544"N	104°58'32.435"W	0.52	
739.00	0.100	325.000	738.98	-1.15	1.51	-3.31	40°04'06.543"N	104°58'32.433"W	0.62	
819.00	0.200	75.400	818.98	-1.25	1.60	-3.21	40°04'06.544"N	104°58'32.431"W	0.32	
899.00	0.100	237.800	898.98	-1.26	1.60	-3.14	40°04'06.544"N	104°58'32.430"W	0.37	
979.00	0.100	228.400	978.98	-1.16	1.52	-3.25	40°04'06.543"N	104°58'32.432"W	0.02	
1059.00	0.200	132.900	1058.98	-1.03	1.38	-3.20	40°04'06.542"N	104°58'32.431"W	0.29	
1150.00	0.300	239.600	1149.98	-0.79	1.15	-3.29	40°04'06.539"N	104°58'32.432"W	0.45	TIE ONTO CATHEDRAL MWD SURVEYS
1215.00	0.450	306.910	1214.98	-0.82	1.22	-3.64	40°04'06.540"N	104°58'32.437"W	0.67	BEGIN BHI MWD+IFR SURVEYS
1277.00	1.470	320.990	1276.97	-1.51	1.98	-4.33	40°04'06.548"N	104°58'32.446"W	1.68	
1371.00	3.130	320.850	1370.89	-4.16	4.91	-6.71	40°04'06.576"N	104°58'32.476"W	1.77	
1464.00	5.850	325.140	1463.59	-9.52	10.77	-11.03	40°04'06.634"N	104°58'32.532"W	2.94	
1558.00	6.850	327.370	1557.02	-17.51	19.42	-16.79	40°04'06.720"N	104°58'32.606"W	1.10	
1651.00	8.030	323.160	1649.23	-26.59	29.29	-23.67	40°04'06.817"N	104°58'32.694"W	1.40	
1745.00	8.980	320.570	1742.20	-36.53	40.21	-32.27	40°04'06.925"N	104°58'32.805"W	1.09	
1838.00	10.190	308.760	1833.91	-46.04	50.97	-43.29	40°04'07.032"N	104°58'32.947"W	2.48	
1931.00	10.520	300.000	1925.40	-53.91	60.36	-57.06	40°04'07.125"N	104°58'33.124"W	1.73	
2028.00	10.930	294.350	2020.70	-60.37	68.58	-73.11	40°04'07.206"N	104°58'33.330"W	1.16	
2122.00	11.410	282.380	2112.94	-64.16	74.25	-90.31	40°04'07.262"N	104°58'33.552"W	2.51	
2215.00	11.660	277.510	2204.06	-65.39	77.45	-108.62	40°04'07.293"N	104°58'33.787"W	1.08	
2308.00	11.770	276.030	2295.12	-65.59	79.68	-127.37	40°04'07.315"N	104°58'34.028"W	0.34	
2402.00	13.240	282.580	2386.90	-66.78	83.03	-147.41	40°04'07.348"N	104°58'34.286"W	2.17	
2495.00	14.520	281.620	2477.18	-69.09	87.70	-169.22	40°04'07.395"N	104°58'34.567"W	1.40	
2588.00	13.230	277.920	2567.46	-70.53	91.51	-191.18	40°04'07.432"N	104°58'34.849"W	1.68	
2680.00	12.360	283.000	2657.18	-72.03	95.18	-211.21	40°04'07.469"N	104°58'35.107"W	1.54	
2774.00	12.200	284.040	2749.03	-74.60	99.85	-230.64	40°04'07.515"N	104°58'35.357"W	0.29	
2866.00	13.520	285.020	2838.72	-77.60	105.00	-250.46	40°04'07.566"N	104°58'35.612"W	1.45	
2959.00	13.650	286.640	2929.12	-81.27	110.95	-271.48	40°04'07.624"N	104°58'35.882"W	0.43	
3051.00	12.260	286.590	3018.78	-85.02	116.85	-291.24	40°04'07.683"N	104°58'36.136"W	1.51	
3144.00	12.530	282.760	3109.61	-87.98	121.90	-310.54	40°04'07.733"N	104°58'36.384"W	0.93	
3237.00	12.700	279.550	3200.37	-89.75	125.82	-330.46	40°04'07.771"N	104°58'36.641"W	0.78	
3330.00	12.630	281.520	3291.10	-91.31	129.55	-350.51	40°04'07.808"N	104°58'36.898"W	0.47	
3425.00	12.170	283.040	3383.89	-93.48	133.88	-370.44	40°04'07.851"N	104°58'37.155"W	0.59	
3519.00	11.080	281.940	3475.96	-95.59	137.99	-388.93	40°04'07.892"N	104°58'37.393"W	1.18	
3614.00	10.970	280.560	3569.20	-97.21	141.53	-406.75	40°04'07.927"N	104°58'37.622"W	0.30	
3709.00	11.830	284.110	3662.33	-99.25	145.56	-425.08	40°04'07.966"N	104°58'37.858"W	1.17	
3803.00	12.470	289.300	3754.23	-102.90	151.27	-444.00	40°04'08.023"N	104°58'38.101"W	1.35	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11)
Area	COLORADO	Well	COMO 34N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 34N-14HZ AWB <70-16659>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (191 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3897.00	11.640	288.310	3846.15	-107.21	157.60	-462.58	40°04'08.085"N	104°58'38.340"W	0.91	
3991.00	12.990	285.920	3937.99	-111.00	163.48	-481.75	40°04'08.143"N	104°58'38.586"W	1.53	
4086.00	12.260	287.670	4030.69	-114.83	169.47	-501.62	40°04'08.203"N	104°58'38.842"W	0.87	
4180.00	12.070	288.650	4122.58	-118.95	175.64	-520.45	40°04'08.264"N	104°58'39.084"W	0.30	
4274.00	13.420	286.750	4214.26	-123.09	181.93	-540.20	40°04'08.326"N	104°58'39.338"W	1.50	
4464.00	11.350	287.840	4399.83	-130.94	194.01	-579.12	40°04'08.445"N	104°58'39.839"W	1.10	
4558.00	11.750	288.860	4491.93	-134.92	199.94	-596.98	40°04'08.504"N	104°58'40.069"W	0.48	
4652.00	11.670	289.430	4583.97	-139.21	206.20	-615.00	40°04'08.566"N	104°58'40.301"W	0.15	
4747.00	12.620	290.290	4676.85	-143.96	212.99	-633.80	40°04'08.633"N	104°58'40.542"W	1.02	
4841.00	14.380	288.390	4768.24	-148.95	220.24	-654.51	40°04'08.704"N	104°58'40.809"W	1.93	
4935.00	13.770	288.550	4859.42	-153.83	227.48	-676.19	40°04'08.776"N	104°58'41.088"W	0.65	
5030.00	11.770	294.430	4952.07	-159.30	235.08	-695.73	40°04'08.851"N	104°58'41.339"W	2.51	
5124.00	13.030	285.250	5043.89	-163.98	241.84	-714.69	40°04'08.918"N	104°58'41.583"W	2.48	
5218.00	12.630	282.760	5135.54	-166.85	246.89	-734.94	40°04'08.968"N	104°58'41.843"W	0.73	
5313.00	12.920	280.380	5228.19	-168.83	251.10	-755.51	40°04'09.009"N	104°58'42.108"W	0.63	
5407.00	13.200	285.120	5319.76	-171.28	255.79	-776.21	40°04'09.056"N	104°58'42.374"W	1.18	
5502.00	11.590	284.270	5412.54	-174.32	260.97	-795.93	40°04'09.107"N	104°58'42.628"W	1.71	
5596.00	11.160	288.140	5504.70	-177.55	266.13	-813.73	40°04'09.158"N	104°58'42.857"W	0.93	
5691.00	10.840	290.250	5597.95	-181.64	272.09	-830.85	40°04'09.217"N	104°58'43.077"W	0.54	
5785.00	11.820	293.130	5690.12	-186.60	278.93	-847.99	40°04'09.284"N	104°58'43.297"W	1.20	
5880.00	10.980	289.210	5783.25	-191.49	285.73	-865.48	40°04'09.351"N	104°58'43.522"W	1.20	
5974.00	9.670	284.230	5875.72	-194.63	290.62	-881.59	40°04'09.400"N	104°58'43.730"W	1.69	
6068.00	9.880	285.930	5968.36	-197.11	294.77	-897.00	40°04'09.441"N	104°58'43.928"W	0.38	
6163.00	7.740	288.180	6062.23	-199.83	299.00	-910.92	40°04'09.483"N	104°58'44.107"W	2.28	
6257.00	7.480	297.770	6155.41	-203.41	303.83	-922.34	40°04'09.530"N	104°58'44.254"W	1.38	
6351.00	5.750	297.020	6248.78	-207.34	308.82	-931.95	40°04'09.580"N	104°58'44.377"W	1.84	
6446.00	2.510	296.150	6343.52	-209.75	311.90	-938.06	40°04'09.610"N	104°58'44.456"W	3.41	
6540.00	4.570	283.790	6437.34	-210.95	313.70	-943.55	40°04'09.628"N	104°58'44.527"W	2.32	
6635.00	3.330	280.410	6532.11	-211.66	315.10	-949.94	40°04'09.642"N	104°58'44.609"W	1.33	
6729.00	2.400	269.160	6625.99	-211.62	315.56	-954.59	40°04'09.646"N	104°58'44.669"W	1.15	
6823.00	2.180	267.470	6719.92	-211.12	315.46	-958.34	40°04'09.645"N	104°58'44.717"W	0.24	
6918.00	1.350	267.310	6814.87	-210.67	315.32	-961.27	40°04'09.644"N	104°58'44.754"W	0.87	
7059.00	1.230	244.280	6955.84	-209.62	314.59	-964.29	40°04'09.637"N	104°58'44.793"W	0.37	
7106.00	2.150	222.810	7002.82	-208.64	313.72	-965.34	40°04'09.628"N	104°58'44.807"W	2.34	
7153.00	6.360	195.110	7049.68	-205.36	310.56	-966.62	40°04'09.597"N	104°58'44.823"W	9.72	
7201.00	10.630	192.350	7097.14	-198.33	303.67	-968.26	40°04'09.529"N	104°58'44.844"W	8.93	
7248.00	14.600	190.210	7143.00	-188.11	293.60	-970.24	40°04'09.429"N	104°58'44.870"W	8.50	
7295.00	18.190	189.350	7188.08	-174.87	280.53	-972.48	40°04'09.300"N	104°58'44.899"W	7.66	
7342.00	22.270	187.650	7232.17	-158.64	264.45	-974.86	40°04'09.141"N	104°58'44.929"W	8.77	
7389.00	25.760	185.780	7275.10	-139.52	245.46	-977.08	40°04'08.954"N	104°58'44.958"W	7.60	
7436.00	29.290	187.010	7316.77	-117.80	223.88	-979.51	40°04'08.740"N	104°58'44.989"W	7.61	
7484.00	33.990	185.470	7357.63	-92.63	198.86	-982.22	40°04'08.493"N	104°58'45.024"W	9.93	
7531.00	39.700	185.730	7395.22	-64.46	170.82	-984.97	40°04'08.216"N	104°58'45.059"W	12.15	
7578.00	43.890	183.830	7430.26	-33.15	139.61	-987.56	40°04'07.907"N	104°58'45.093"W	9.31	
7625.00	46.170	183.360	7463.47	0.06	106.43	-989.64	40°04'07.580"N	104°58'45.119"W	4.90	

# Actual Wellpath Report

COMO 34N-14HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11)
Area	COLORADO	Well	COMO 34N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 34N-14HZ AWB <70-16659>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (191 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7672.00	49.190	183.160	7495.11	34.76	71.74	-991.62	40°04'07.237"N	104°58'45.145"W	6.43	
7719.00	53.360	181.910	7524.51	71.35	35.12	-993.23	40°04'06.875"N	104°58'45.165"W	9.11	
7766.00	58.560	181.100	7550.81	110.15	-3.80	-994.24	40°04'06.490"N	104°58'45.178"W	11.16	
7813.00	62.960	179.560	7573.76	150.94	-44.80	-994.47	40°04'06.085"N	104°58'45.181"W	9.79	
7860.00	65.980	179.370	7594.02	193.06	-87.21	-994.07	40°04'05.666"N	104°58'45.176"W	6.44	
7907.00	68.930	179.630	7612.03	236.17	-130.61	-993.69	40°04'05.237"N	104°58'45.171"W	6.30	
7954.00	73.040	179.510	7627.34	280.31	-175.03	-993.36	40°04'04.798"N	104°58'45.167"W	8.75	
8001.00	76.850	178.960	7639.55	325.35	-220.41	-992.75	40°04'04.350"N	104°58'45.159"W	8.18	
8049.00	80.390	178.940	7649.02	372.03	-267.45	-991.89	40°04'03.885"N	104°58'45.148"W	7.38	
8091.00	84.730	178.640	7654.46	413.33	-309.08	-991.01	40°04'03.473"N	104°58'45.137"W	10.36	
8117.00†	85.616	178.718	7656.64	439.02	-334.98	-990.41	40°04'03.218"N	104°58'45.129"W	3.42	7" CASING POINT
8204.00	88.580	178.980	7661.05	525.19	-421.84	-988.67	40°04'02.359"N	104°58'45.107"W	3.42	
8298.00	88.150	179.220	7663.73	618.44	-515.79	-987.19	40°04'01.431"N	104°58'45.087"W	0.52	
8393.00	89.810	180.110	7665.42	712.82	-610.77	-986.64	40°04'00.492"N	104°58'45.080"W	1.98	
8487.00	89.960	180.450	7665.61	806.33	-704.76	-987.10	40°03'59.563"N	104°58'45.086"W	0.40	
8581.00	90.270	179.340	7665.42	899.77	-798.76	-986.92	40°03'58.634"N	104°58'45.084"W	1.23	
8675.00	89.630	179.850	7665.50	993.15	-892.76	-986.26	40°03'57.705"N	104°58'45.075"W	0.87	
8770.00	89.470	180.040	7666.25	1087.59	-987.76	-986.17	40°03'56.767"N	104°58'45.074"W	0.26	
8864.00	89.350	178.880	7667.22	1180.95	-1081.75	-985.28	40°03'55.838"N	104°58'45.063"W	1.24	
8958.00	90.210	178.630	7667.58	1274.17	-1175.72	-983.24	40°03'54.909"N	104°58'45.036"W	0.95	
9053.00	89.900	178.910	7667.49	1368.38	-1270.70	-981.20	40°03'53.970"N	104°58'45.010"W	0.44	
9147.00	89.380	178.810	7668.08	1461.62	-1364.68	-979.33	40°03'53.042"N	104°58'44.986"W	0.56	
9242.00	90.920	178.660	7667.83	1555.83	-1459.65	-977.23	40°03'52.103"N	104°58'44.959"W	1.63	
9333.00	90.580	178.740	7666.64	1646.05	-1550.62	-975.17	40°03'51.204"N	104°58'44.932"W	0.38	
9427.00	90.210	178.560	7665.99	1739.25	-1644.59	-972.95	40°03'50.276"N	104°58'44.904"W	0.44	
9520.00	89.930	178.940	7665.88	1831.47	-1737.57	-970.93	40°03'49.357"N	104°58'44.878"W	0.51	
9613.00	88.580	179.300	7667.09	1923.77	-1830.55	-969.50	40°03'48.438"N	104°58'44.859"W	1.50	
9704.00	89.440	180.130	7668.66	2014.18	-1921.53	-969.04	40°03'47.539"N	104°58'44.853"W	1.31	
9798.00	90.240	179.680	7668.92	2107.62	-2015.53	-968.89	40°03'46.610"N	104°58'44.851"W	0.98	
9891.00	91.380	179.710	7667.61	2200.02	-2108.52	-968.39	40°03'45.691"N	104°58'44.845"W	1.23	
9985.00	90.830	178.960	7665.79	2293.34	-2202.49	-967.30	40°03'44.762"N	104°58'44.831"W	0.99	
10078.00	90.240	179.000	7664.92	2385.61	-2295.48	-965.65	40°03'43.843"N	104°58'44.809"W	0.64	
10172.00	89.470	177.980	7665.16	2478.77	-2389.44	-963.17	40°03'42.915"N	104°58'44.778"W	1.36	
10265.00	89.500	177.850	7666.00	2570.81	-2482.37	-959.79	40°03'41.996"N	104°58'44.734"W	0.14	
10358.00	90.400	179.420	7666.08	2663.01	-2575.34	-957.57	40°03'41.078"N	104°58'44.705"W	1.95	
10450.00	91.290	180.310	7664.72	2754.45	-2667.33	-957.36	40°03'40.169"N	104°58'44.703"W	1.37	
10543.00	91.630	180.050	7662.35	2846.91	-2760.30	-957.65	40°03'39.250"N	104°58'44.706"W	0.46	
10636.00	91.290	180.390	7659.98	2939.39	-2853.27	-958.00	40°03'38.331"N	104°58'44.711"W	0.52	
10728.00	89.410	179.950	7659.42	3030.88	-2945.26	-958.28	40°03'37.422"N	104°58'44.714"W	2.10	
10821.00	90.360	182.630	7659.61	3123.54	-3038.23	-960.37	40°03'36.503"N	104°58'44.741"W	3.06	
10914.00	90.360	184.800	7659.02	3216.45	-3131.03	-966.40	40°03'35.586"N	104°58'44.819"W	2.33	
11007.00	90.550	185.580	7658.29	3309.43	-3223.64	-974.81	40°03'34.671"N	104°58'44.927"W	0.86	
11100.00	90.520	183.930	7657.42	3402.40	-3316.32	-982.52	40°03'33.755"N	104°58'45.026"W	1.77	
11194.00	90.890	184.130	7656.26	3496.33	-3410.08	-989.12	40°03'32.829"N	104°58'45.111"W	0.45	
11288.00	90.210	181.360	7655.36	3590.15	-3503.95	-993.62	40°03'31.901"N	104°58'45.169"W	3.03	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11)
Area	COLORADO	Well	COMO 34N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 34N-14HZ AWB <70-16659>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (191 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11382.00	88.860	178.380	7656.12	3683.57	-3597.94	-993.41	40°03'30.972"N	104°58'45.166"W	3.48	
11477.00	89.040	178.040	7657.86	3777.64	-3692.88	-990.44	40°03'30.034"N	104°58'45.128"W	0.40	
11571.00	89.130	178.840	7659.36	3870.78	-3786.83	-987.88	40°03'29.106"N	104°58'45.095"W	0.86	
11665.00	89.380	179.040	7660.59	3964.03	-3880.80	-986.15	40°03'28.177"N	104°58'45.072"W	0.34	
11759.00	90.860	179.460	7660.39	4057.35	-3974.79	-984.92	40°03'27.248"N	104°58'45.056"W	1.64	
11854.00	89.410	179.040	7660.16	4151.66	-4069.78	-983.67	40°03'26.309"N	104°58'45.040"W	1.59	
11948.00	88.850	179.200	7661.59	4244.95	-4163.76	-982.23	40°03'25.381"N	104°58'45.022"W	0.62	
12043.00	88.520	178.760	7663.77	4339.18	-4258.72	-980.54	40°03'24.442"N	104°58'45.000"W	0.58	
12137.00	88.700	178.300	7666.05	4432.32	-4352.66	-978.13	40°03'23.514"N	104°58'44.969"W	0.53	
12231.00	88.700	178.530	7668.18	4525.45	-4446.60	-975.53	40°03'22.586"N	104°58'44.935"W	0.24	
12326.00	88.980	178.810	7670.11	4619.62	-4541.55	-973.32	40°03'21.647"N	104°58'44.907"W	0.42	
12420.00	89.380	179.180	7671.45	4712.88	-4635.53	-971.67	40°03'20.719"N	104°58'44.886"W	0.58	
12514.00	89.380	179.270	7672.47	4806.19	-4729.52	-970.40	40°03'19.790"N	104°58'44.869"W	0.10	
12608.00	89.810	179.600	7673.13	4899.55	-4823.51	-969.48	40°03'18.861"N	104°58'44.857"W	0.58	
12702.00	88.640	180.220	7674.41	4992.98	-4917.50	-969.33	40°03'17.932"N	104°58'44.856"W	1.41	
12891.00	88.490	180.660	7679.14	5180.98	-5106.43	-970.78	40°03'16.065"N	104°58'44.874"W	0.25	
12985.00	88.210	180.710	7681.85	5274.52	-5200.39	-971.90	40°03'15.136"N	104°58'44.888"W	0.30	
13079.00	89.660	180.060	7683.59	5368.03	-5294.37	-972.53	40°03'14.208"N	104°58'44.897"W	1.69	
13173.00	90.210	178.400	7683.70	5461.34	-5388.35	-971.27	40°03'13.279"N	104°58'44.880"W	1.86	
13268.00	89.870	178.460	7683.63	5555.48	-5483.32	-968.67	40°03'12.341"N	104°58'44.847"W	0.36	
13362.00	90.950	177.680	7682.96	5648.54	-5577.26	-965.50	40°03'11.412"N	104°58'44.806"W	1.42	
13456.00	90.950	180.320	7681.40	5741.79	-5671.22	-963.86	40°03'10.484"N	104°58'44.785"W	2.81	
13550.00	90.890	179.620	7679.89	5835.24	-5765.21	-963.81	40°03'09.555"N	104°58'44.784"W	0.75	
13645.00	90.090	179.730	7679.08	5929.63	-5860.21	-963.27	40°03'08.616"N	104°58'44.777"W	0.85	
13739.00	89.440	179.450	7679.47	6023.01	-5954.20	-962.60	40°03'07.687"N	104°58'44.768"W	0.75	
13833.00	90.580	179.470	7679.45	6116.37	-6048.20	-961.72	40°03'06.758"N	104°58'44.757"W	1.21	
13927.00	90.830	179.090	7678.29	6209.69	-6142.18	-960.53	40°03'05.829"N	104°58'44.742"W	0.48	
14022.00	91.440	179.230	7676.41	6303.97	-6237.15	-959.14	40°03'04.891"N	104°58'44.724"W	0.66	
14117.00	90.120	179.490	7675.12	6398.29	-6332.13	-958.08	40°03'03.952"N	104°58'44.710"W	1.42	
14211.00	90.270	178.660	7674.80	6491.58	-6426.12	-956.56	40°03'03.024"N	104°58'44.691"W	0.90	
14305.00	91.260	178.420	7673.54	6584.74	-6520.08	-954.17	40°03'02.095"N	104°58'44.660"W	1.08	
14400.00	90.830	179.000	7671.81	6678.93	-6615.04	-952.03	40°03'01.157"N	104°58'44.632"W	0.76	
14494.00	89.590	180.260	7671.47	6772.32	-6709.03	-951.42	40°03'00.228"N	104°58'44.624"W	1.88	
14588.00	89.320	180.850	7672.36	6865.87	-6803.02	-952.33	40°02'59.299"N	104°58'44.636"W	0.69	
14683.00	87.960	181.210	7674.61	6960.46	-6897.98	-954.04	40°02'58.360"N	104°58'44.658"W	1.48	
14777.00	87.870	180.510	7678.03	7054.00	-6991.91	-955.45	40°02'57.432"N	104°58'44.676"W	0.75	
14871.00	88.450	179.260	7681.05	7147.39	-7085.86	-955.26	40°02'56.504"N	104°58'44.674"W	1.47	
14966.00	90.240	178.750	7682.14	7241.64	-7180.83	-953.61	40°02'55.565"N	104°58'44.652"W	1.96	
15060.00	91.350	179.740	7680.83	7334.95	-7274.81	-952.37	40°02'54.637"N	104°58'44.636"W	1.58	
15154.00	89.810	180.730	7679.88	7428.44	-7368.80	-952.76	40°02'53.708"N	104°58'44.641"W	1.95	
15249.00	89.530	179.850	7680.43	7522.94	-7463.80	-953.24	40°02'52.769"N	104°58'44.647"W	0.97	
15343.00	89.750	180.560	7681.02	7616.44	-7557.79	-953.58	40°02'51.840"N	104°58'44.652"W	0.79	
15438.00	90.550	181.090	7680.77	7711.03	-7652.78	-954.95	40°02'50.901"N	104°58'44.669"W	1.01	
15532.00	90.670	182.030	7679.77	7804.72	-7746.74	-957.50	40°02'49.973"N	104°58'44.702"W	1.01	
15626.00	89.870	182.560	7679.33	7898.51	-7840.66	-961.27	40°02'49.045"N	104°58'44.750"W	1.02	



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11)
Area	COLORADO	Well	COMO 34N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 34N-14HZ AWB <70-16659>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (191 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
15721.00	89.040	181.220	7680.23	7993.24	-7935.61	-964.40	40°02'48.106"N	104°58'44.791"W	1.66	
15815.00	88.740	180.260	7682.05	8086.80	-8029.58	-965.62	40°02'47.178"N	104°58'44.806"W	1.07	
15909.00	89.500	178.740	7683.50	8180.16	-8123.56	-964.79	40°02'46.249"N	104°58'44.796"W	1.81	
16004.00	89.290	178.610	7684.50	8274.34	-8218.53	-962.60	40°02'45.311"N	104°58'44.767"W	0.26	
16098.00	90.120	178.230	7684.98	8367.49	-8312.49	-960.01	40°02'44.382"N	104°58'44.734"W	0.97	
16192.00	92.700	179.480	7682.67	8460.69	-8406.44	-958.13	40°02'43.454"N	104°58'44.710"W	3.05	
16287.00	91.290	179.900	7679.36	8555.03	-8501.37	-957.61	40°02'42.515"N	104°58'44.703"W	1.55	
16381.00	90.430	179.230	7677.95	8648.40	-8595.36	-956.90	40°02'41.587"N	104°58'44.694"W	1.16	
16475.00	90.180	179.700	7677.45	8741.76	-8689.35	-956.02	40°02'40.658"N	104°58'44.683"W	0.57	
16611.00	89.320	179.580	7678.05	8876.88	-8825.35	-955.17	40°02'39.314"N	104°58'44.671"W	0.64	LAST BHI MWD+IFR SURVEY
16659.00	89.320	179.580	7678.62	8924.57	-8873.34	-954.82	40°02'38.839"N	104°58'44.667"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: COMO 34N-14HZ AWB <70-16659> Ref Wellpath: COMO 34N-14HZ 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]
13.5in Open Hole	25.00	1179.00	1154.00	25.00	1178.98	0.00	0.00	1.12	-3.43
9.625in Casing Surface	25.00	1179.00	1154.00	25.00	1178.98	0.00	0.00	1.12	-3.43
8.75in Open Hole	1179.00	8139.00	6960.00	1178.98	7658.18	1.12	-3.43	-356.92	-989.93
7in Casing Intermediate	25.00	8117.00	8092.00	25.00	7656.64	0.00	0.00	-334.98	-990.41
6.125in Open Hole	8139.00	16659.00	8520.00	7658.18	7678.62	-356.92	-989.93	-8873.34	-954.82

WELLPATH COMPOSITION - Ref Wellbore: COMO 34N-14HZ AWB <70-16659> Ref Wellpath: COMO 34N-14HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1150.00	ISCWSA MWD, Rev. 2 (Standard)	CATHEDRAL MWD SURVEYS <70-1150>	COMO 34N-14HZ AWB <70-16659>
1150.00	8091.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 8 3/4" <1215-8091>	COMO 34N-14HZ AWB <70-16659>
8091.00	16611.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 6 1/8" <8204-16611>	COMO 34N-14HZ AWB <70-16659>
16611.00	16659.00	Blind Drilling (std)	Projection to bit	COMO 34N-14HZ AWB <70-16659>

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 COMO 34N-14HZ (1663'FNL & 1204'FWL, SEC.11)
Area	COLORADO	Well	COMO 34N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 34N-14HZ AWB <70-16659>
Facility	SEC.11-T1N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
25.00	0.000	269.300	25.00	TIE ON
70.00	0.300	269.300	70.00	BEGIN CATHEDRAL MWD SURVEYS
1150.00	0.300	239.600	1149.98	TIE ONTO CATHEDRAL MWD SURVEYS
1215.00	0.450	306.910	1214.98	BEGIN BHI MWD+IFR SURVEYS
8117.00	85.616	178.718	7656.64	7" CASING POINT
16611.00	89.320	179.580	7678.05	LAST BHI MWD+IFR SURVEY
16659.00	89.320	179.580	7678.62	PROJECTION TO BIT