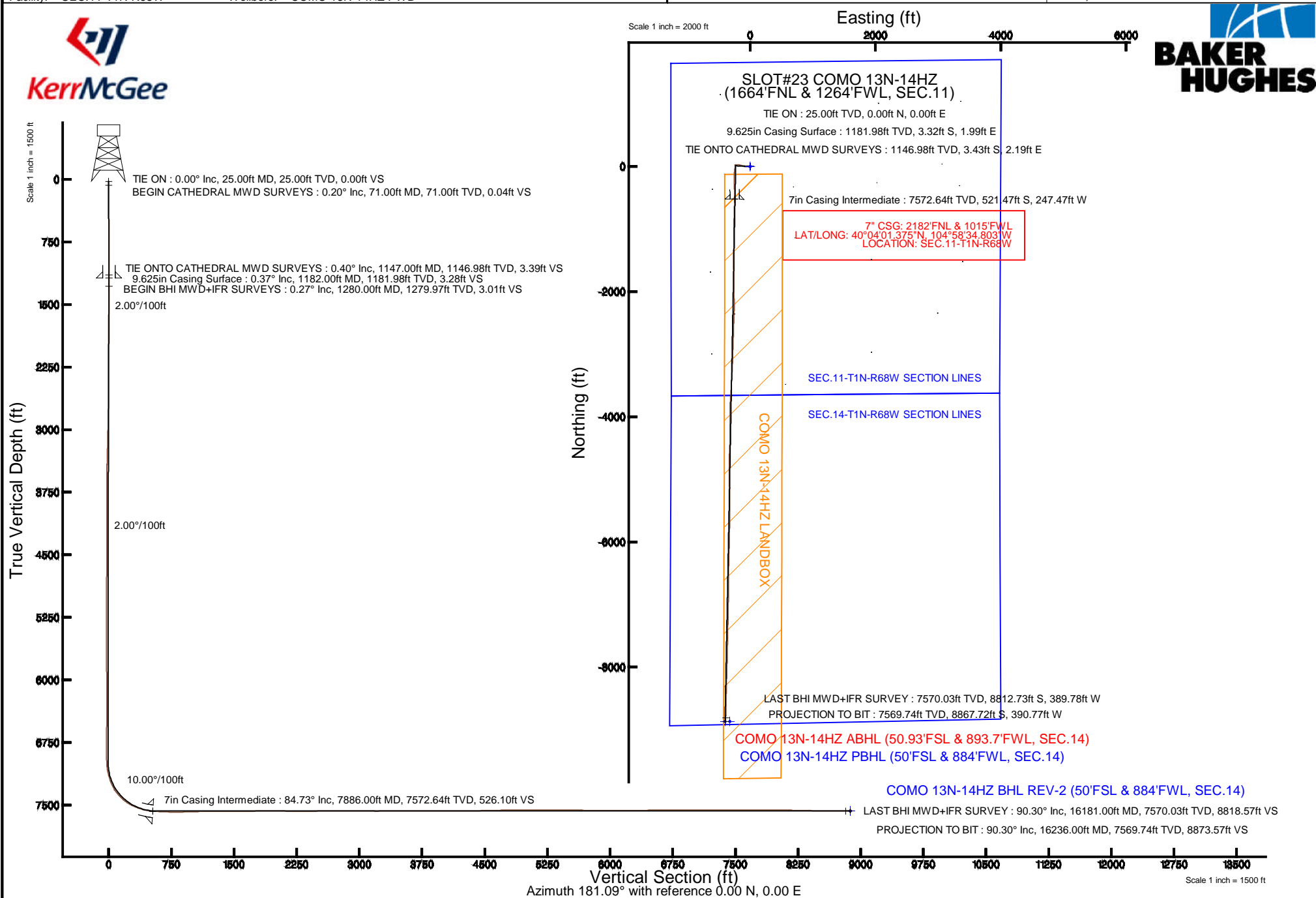


Location:	COLORADO	Slot:	SLOT#23 COMO 13N-14HZ (1664'FNL & 1264'FWL, SEC.11)
Field:	WELD COUNTY (KERR MCGEE)	Well:	COMO 13N-14HZ
Facility:	SEC.11-T1N-R68W	Wellbore:	COMO 13N-14HZ PWB

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#23 COMO 13N-14HZ (1664FNL & 1264FWL, SEC.11)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 1/9/2015



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#23 COMO 13N-14HZ (1664'FNL & 1264'FWL, SEC.11)
Area	COLORADO	Well	COMO 13N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13N-14HZ AWB <71-16236>
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	1/9/2015 at 3:52:55 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/COMO_13N-14HZ_AWB_71-16236_.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	476.11	3146806.15	1268226.61	40°04'06.528"N	104°58'31.620"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#23 COMO 13N-14HZ (1664'FNL & 1264'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	182.52°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)		Slot
Area	COLORADO		Well
Field	WELD COUNTY (KERR MCGEE)		Wellbore
Facility	SEC.11-T1N-R68W		COMO 13N-14HZ AWP <71-16236>

WELLPATH DATA (174 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	120.200	0.00	0.00	0.00	0.00	40°04'06.528"N	104°58'31.620"W	0.00	
25.00	0.000	120.200	25.00	0.00	0.00	0.00	40°04'06.528"N	104°58'31.620"W	0.00	TIE ON
71.00	0.200	120.200	71.00	0.04	-0.04	0.07	40°04'06.528"N	104°58'31.619"W	0.43	BEGIN CATHEDRAL MWD SURVEYS
142.00	0.100	309.500	142.00	0.06	-0.06	0.13	40°04'06.527"N	104°58'31.618"W	0.42	
240.00	0.200	23.200	240.00	-0.15	0.15	0.13	40°04'06.529"N	104°58'31.618"W	0.20	
339.00	0.400	122.900	339.00	-0.14	0.12	0.49	40°04'06.529"N	104°58'31.614"W	0.48	
419.00	0.600	150.500	419.00	0.36	-0.40	0.93	40°04'06.524"N	104°58'31.608"W	0.38	
499.00	0.300	165.800	498.99	0.91	-0.96	1.19	40°04'06.518"N	104°58'31.605"W	0.40	
579.00	0.600	140.900	578.99	1.42	-1.49	1.50	40°04'06.513"N	104°58'31.601"W	0.44	
659.00	0.400	135.700	658.99	1.93	-2.02	1.96	40°04'06.508"N	104°58'31.595"W	0.26	
739.00	0.700	162.800	738.98	2.58	-2.68	2.30	40°04'06.501"N	104°58'31.590"W	0.49	
819.00	0.500	126.700	818.98	3.24	-3.36	2.73	40°04'06.495"N	104°58'31.585"W	0.52	
899.00	0.100	5.200	898.98	3.36	-3.50	3.01	40°04'06.493"N	104°58'31.581"W	0.70	
979.00	0.200	264.300	978.98	3.31	-3.44	2.88	40°04'06.494"N	104°58'31.583"W	0.30	
1059.00	0.100	278.500	1058.98	3.33	-3.45	2.67	40°04'06.494"N	104°58'31.586"W	0.13	
1139.00	0.500	269.100	1138.98	3.34	-3.44	2.25	40°04'06.494"N	104°58'31.591"W	0.50	
1147.00	0.400	298.000	1146.98	3.33	-3.43	2.19	40°04'06.494"N	104°58'31.592"W	3.06	TIE ONTO CATHEDRAL MWD SURVEYS
1280.00	0.270	302.230	1279.97	2.97	-3.04	1.52	40°04'06.498"N	104°58'31.600"W	0.10	BEGIN BHI MWD+IFR SURVEYS
1373.00	0.270	305.450	1372.97	2.75	-2.80	1.15	40°04'06.500"N	104°58'31.605"W	0.02	
1467.00	2.100	286.710	1466.95	2.20	-2.18	-0.68	40°04'06.506"N	104°58'31.629"W	1.96	
1559.00	3.940	277.240	1558.82	1.53	-1.29	-5.43	40°04'06.515"N	104°58'31.690"W	2.07	
1651.00	5.830	281.630	1650.48	0.53	0.05	-13.14	40°04'06.528"N	104°58'31.789"W	2.09	
1744.00	5.800	277.880	1743.00	-0.65	1.64	-22.42	40°04'06.544"N	104°58'31.908"W	0.41	
1838.00	5.860	274.840	1836.52	-1.29	2.70	-31.91	40°04'06.555"N	104°58'32.030"W	0.33	
1931.00	5.490	272.870	1929.06	-1.51	3.32	-41.08	40°04'06.561"N	104°58'32.148"W	0.45	
2025.00	5.630	270.620	2022.62	-1.39	3.60	-50.18	40°04'06.564"N	104°58'32.265"W	0.28	
2118.00	5.630	267.590	2115.17	-0.84	3.46	-59.30	40°04'06.562"N	104°58'32.383"W	0.32	
2212.00	5.620	265.300	2208.72	0.13	2.88	-68.50	40°04'06.557"N	104°58'32.501"W	0.24	
2304.00	4.800	278.030	2300.34	0.33	3.05	-76.80	40°04'06.558"N	104°58'32.608"W	1.54	
2397.00	4.710	274.370	2393.02	-0.17	3.89	-84.46	40°04'06.566"N	104°58'32.706"W	0.34	
2490.00	4.480	270.760	2485.72	-0.18	4.23	-91.90	40°04'06.570"N	104°58'32.802"W	0.40	
2583.00	4.060	266.790	2578.46	0.26	4.09	-98.81	40°04'06.568"N	104°58'32.891"W	0.55	
2675.00	4.250	282.300	2670.22	0.01	4.63	-105.40	40°04'06.574"N	104°58'32.976"W	1.23	
2768.00	5.030	287.080	2762.92	-1.60	6.57	-112.66	40°04'06.593"N	104°58'33.069"W	0.94	
2861.00	4.810	285.290	2855.58	-3.49	8.79	-120.32	40°04'06.615"N	104°58'33.168"W	0.29	
2955.00	4.510	283.060	2949.27	-5.03	10.67	-127.72	40°04'06.633"N	104°58'33.263"W	0.37	
3050.00	5.570	285.660	3043.90	-6.76	12.75	-135.80	40°04'06.654"N	104°58'33.367"W	1.14	
3144.00	5.200	284.980	3137.48	-8.72	15.09	-144.31	40°04'06.677"N	104°58'33.476"W	0.40	
3239.00	5.010	285.660	3232.10	-10.59	17.32	-152.46	40°04'06.699"N	104°58'33.581"W	0.21	
3333.00	6.080	286.860	3325.66	-12.76	19.87	-161.18	40°04'06.724"N	104°58'33.693"W	1.14	
3427.00	5.580	285.200	3419.18	-14.99	22.51	-170.35	40°04'06.750"N	104°58'33.811"W	0.56	
3522.00	5.950	274.360	3513.70	-16.16	24.10	-179.72	40°04'06.766"N	104°58'33.932"W	1.21	
3616.00	5.310	267.350	3607.25	-15.93	24.27	-188.92	40°04'06.768"N	104°58'34.050"W	1.00	
3711.00	4.750	266.450	3701.88	-15.11	23.82	-197.24	40°04'06.763"N	104°58'34.157"W	0.60	
3805.00	4.310	271.260	3795.59	-14.63	23.66	-204.65	40°04'06.762"N	104°58'34.252"W	0.62	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#23 COMO 13N-14HZ (1664'FNL & 1264'FWL, SEC.11)
Area	COLORADO	Well	COMO 13N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13N-14HZ AWP <71-16236>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (174 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3900.00	4.440	275.070	3890.31	-14.71	24.06	-211.89	40°04'06.766"N	104°58'34.345"W	0.34	
3994.00	4.190	275.380	3984.04	-15.04	24.70	-218.93	40°04'06.772"N	104°58'34.436"W	0.27	
4089.00	3.790	274.160	4078.81	-15.31	25.26	-225.52	40°04'06.778"N	104°58'34.521"W	0.43	
4183.00	2.680	272.680	4172.66	-15.40	25.59	-230.81	40°04'06.781"N	104°58'34.589"W	1.18	
4277.00	0.950	269.200	4266.61	-15.36	25.68	-233.78	40°04'06.782"N	104°58'34.627"W	1.84	
4372.00	1.210	274.970	4361.59	-15.36	25.75	-235.57	40°04'06.782"N	104°58'34.650"W	0.30	
4466.00	0.530	90.780	4455.59	-15.41	25.83	-236.13	40°04'06.783"N	104°58'34.657"W	1.85	
4655.00	0.820	337.840	4644.58	-16.67	27.07	-235.76	40°04'06.796"N	104°58'34.652"W	0.60	
4843.00	1.170	322.040	4832.55	-19.35	29.83	-237.45	40°04'06.823"N	104°58'34.674"W	0.23	
4938.00	0.780	308.270	4927.54	-20.47	31.00	-238.55	40°04'06.834"N	104°58'34.688"W	0.48	
5127.00	0.910	278.600	5116.52	-21.38	32.02	-241.05	40°04'06.844"N	104°58'34.720"W	0.24	
5221.00	0.930	300.510	5210.51	-21.81	32.52	-242.44	40°04'06.849"N	104°58'34.738"W	0.37	
5316.00	0.910	131.440	5305.50	-21.70	32.41	-242.54	40°04'06.848"N	104°58'34.740"W	1.93	
5410.00	0.700	135.800	5399.49	-20.84	31.51	-241.58	40°04'06.839"N	104°58'34.727"W	0.23	
5788.00	0.360	126.470	5777.48	-18.59	29.14	-239.02	40°04'06.816"N	104°58'34.694"W	0.09	
6165.00	0.180	92.570	6154.47	-17.93	28.41	-237.47	40°04'06.809"N	104°58'34.674"W	0.06	
6543.00	0.220	66.300	6532.47	-18.25	28.68	-236.22	40°04'06.811"N	104°58'34.658"W	0.03	
6731.00	0.690	71.280	6720.46	-18.82	29.19	-234.81	40°04'06.816"N	104°58'34.640"W	0.25	
6826.00	0.560	80.800	6815.46	-19.12	29.45	-233.81	40°04'06.819"N	104°58'34.627"W	0.17	
6920.00	0.700	68.980	6909.45	-19.45	29.72	-232.82	40°04'06.822"N	104°58'34.615"W	0.20	
7015.00	3.830	187.630	7004.39	-16.52	26.79	-232.70	40°04'06.793"N	104°58'34.613"W	4.43	
7109.00	10.580	190.780	7097.59	-4.84	15.18	-234.74	40°04'06.678"N	104°58'34.639"W	7.19	
7156.00	14.870	193.050	7143.43	5.37	5.07	-236.91	40°04'06.578"N	104°58'34.667"W	9.19	
7203.00	18.300	188.830	7188.47	18.64	-8.10	-239.40	40°04'06.448"N	104°58'34.699"W	7.73	
7250.00	21.900	186.930	7232.60	34.72	-24.10	-241.59	40°04'06.290"N	104°58'34.727"W	7.78	
7297.00	26.150	186.280	7275.51	53.80	-43.11	-243.78	40°04'06.102"N	104°58'34.756"W	9.06	
7344.00	32.190	187.710	7316.54	76.62	-65.83	-246.60	40°04'05.877"N	104°58'34.792"W	12.94	
7391.00	37.630	186.100	7355.06	103.43	-92.52	-249.81	40°04'05.614"N	104°58'34.833"W	11.74	
7438.00	42.970	184.890	7390.90	133.78	-122.77	-252.70	40°04'05.315"N	104°58'34.870"W	11.48	
7485.00	48.200	182.500	7423.78	167.33	-156.26	-254.83	40°04'04.984"N	104°58'34.898"W	11.70	
7532.00	54.370	180.450	7453.16	203.97	-192.90	-255.74	40°04'04.622"N	104°58'34.909"W	13.56	
7579.00	58.820	178.300	7479.04	243.13	-232.12	-255.30	40°04'04.234"N	104°58'34.904"W	10.21	
7626.00	63.140	177.150	7501.83	284.08	-273.17	-253.66	40°04'03.828"N	104°58'34.883"W	9.44	
7673.00	66.840	177.600	7521.70	326.49	-315.72	-251.71	40°04'03.408"N	104°58'34.858"W	7.92	
7720.00	70.800	176.900	7538.68	370.12	-359.48	-249.60	40°04'02.976"N	104°58'34.830"W	8.54	
7768.00	75.320	177.570	7552.66	415.83	-405.33	-247.39	40°04'02.522"N	104°58'34.802"W	9.51	
7815.00	79.220	180.360	7563.02	461.57	-451.16	-246.57	40°04'02.070"N	104°58'34.791"W	10.12	
7858.00	83.020	180.870	7569.65	504.03	-493.63	-247.03	40°04'01.650"N	104°58'34.797"W	8.91	
7886.00†	84.726	180.935	7572.64	531.86	-521.47	-247.47	40°04'01.375"N	104°58'34.803"W	6.10	7" CASING POINT
7923.00	86.980	181.020	7575.32	568.74	-558.36	-248.10	40°04'01.010"N	104°58'34.811"W	6.10	
8018.00	87.900	181.730	7579.56	663.63	-653.24	-250.38	40°04'00.073"N	104°58'34.840"W	1.22	
8112.00	88.670	181.990	7582.37	757.58	-747.15	-253.43	40°03'59.145"N	104°58'34.880"W	0.86	
8206.00	91.040	181.790	7582.61	851.57	-841.09	-256.53	40°03'58.216"N	104°58'34.919"W	2.53	
8300.00	92.000	181.590	7580.12	945.52	-935.01	-259.30	40°03'57.288"N	104°58'34.955"W	1.04	
8395.00	91.350	180.830	7577.34	1040.45	-1029.95	-261.30	40°03'56.350"N	104°58'34.981"W	1.05	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#23 COMO 13N-14HZ (1664'FNL & 1264'FWL, SEC.11)
Area	COLORADO	Well	COMO 13N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13N-14HZ AWB <71-16236>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (174 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8489.00	90.610	180.280	7575.73	1134.38	-1123.93	-262.21	40°03'55.421"N	104°58'34.993"W	0.98	
8583.00	90.120	180.100	7575.13	1228.30	-1217.93	-262.52	40°03'54.492"N	104°58'34.997"W	0.56	
8678.00	89.720	180.230	7575.27	1323.22	-1312.93	-262.80	40°03'53.553"N	104°58'35.000"W	0.44	
8772.00	90.030	180.150	7575.47	1417.14	-1406.93	-263.11	40°03'52.624"N	104°58'35.004"W	0.34	
8866.00	89.560	180.080	7575.81	1511.06	-1500.92	-263.30	40°03'51.696"N	104°58'35.006"W	0.51	
8959.00	90.980	179.800	7575.37	1603.96	-1593.92	-263.20	40°03'50.777"N	104°58'35.005"W	1.56	
9051.00	91.380	179.530	7573.48	1695.83	-1685.90	-262.66	40°03'49.868"N	104°58'34.998"W	0.52	
9144.00	91.690	178.840	7570.98	1788.64	-1778.86	-261.34	40°03'48.949"N	104°58'34.981"W	0.81	
9237.00	90.860	179.190	7568.91	1881.44	-1871.82	-259.74	40°03'48.030"N	104°58'34.961"W	0.97	
9330.00	89.070	179.300	7568.97	1974.28	-1964.81	-258.52	40°03'47.111"N	104°58'34.945"W	1.93	
9421.00	89.010	179.060	7570.50	2065.11	-2055.78	-257.21	40°03'46.212"N	104°58'34.928"W	0.27	
9515.00	88.980	179.210	7572.14	2158.94	-2149.76	-255.80	40°03'45.284"N	104°58'34.910"W	0.16	
9608.00	89.720	180.060	7573.20	2251.81	-2242.75	-255.20	40°03'44.365"N	104°58'34.902"W	1.21	
9702.00	89.410	181.930	7573.91	2345.77	-2336.73	-256.84	40°03'43.436"N	104°58'34.923"W	2.02	
9795.00	91.660	182.010	7573.05	2438.76	-2429.66	-260.03	40°03'42.518"N	104°58'34.964"W	2.42	
9889.00	91.140	182.070	7570.75	2532.72	-2523.58	-263.38	40°03'41.589"N	104°58'35.007"W	0.56	
9982.00	90.400	181.720	7569.50	2625.71	-2616.52	-266.45	40°03'40.671"N	104°58'35.047"W	0.88	
10075.00	90.830	181.460	7568.50	2718.69	-2709.47	-269.03	40°03'39.752"N	104°58'35.080"W	0.54	
10167.00	90.580	182.010	7567.37	2810.68	-2801.42	-271.82	40°03'38.844"N	104°58'35.116"W	0.66	
10260.00	89.160	181.830	7567.58	2903.67	-2894.37	-274.93	40°03'37.925"N	104°58'35.156"W	1.54	
10353.00	89.290	181.170	7568.84	2996.64	-2987.33	-277.37	40°03'37.007"N	104°58'35.187"W	0.72	
10446.00	88.950	182.320	7570.27	3089.62	-3080.27	-280.20	40°03'36.088"N	104°58'35.224"W	1.29	
10538.00	89.440	182.380	7571.56	3181.61	-3172.19	-283.97	40°03'35.180"N	104°58'35.272"W	0.54	
10631.00	91.320	182.990	7570.94	3274.61	-3265.08	-288.33	40°03'34.262"N	104°58'35.328"W	2.13	
10724.00	90.000	182.750	7569.87	3367.60	-3357.95	-292.98	40°03'33.344"N	104°58'35.388"W	1.44	
10818.00	89.470	182.490	7570.31	3461.59	-3451.85	-297.28	40°03'32.416"N	104°58'35.443"W	0.63	
10913.00	90.390	183.220	7570.42	3556.59	-3546.73	-302.01	40°03'31.478"N	104°58'35.504"W	1.24	
11007.00	90.150	183.930	7569.98	3650.57	-3640.55	-307.87	40°03'30.551"N	104°58'35.579"W	0.80	
11102.00	90.800	183.680	7569.19	3745.55	-3735.34	-314.18	40°03'29.615"N	104°58'35.660"W	0.73	
11196.00	89.560	182.480	7568.90	3839.54	-3829.20	-319.23	40°03'28.687"N	104°58'35.725"W	1.84	
11290.00	89.810	180.810	7569.41	3933.52	-3923.15	-321.93	40°03'27.759"N	104°58'35.760"W	1.80	
11385.00	89.930	179.500	7569.63	4028.44	-4018.15	-322.18	40°03'26.820"N	104°58'35.763"W	1.38	
11478.00	90.090	178.660	7569.61	4121.27	-4111.14	-320.69	40°03'25.901"N	104°58'35.744"W	0.92	
11572.00	90.430	179.120	7569.19	4215.08	-4205.12	-318.87	40°03'24.972"N	104°58'35.721"W	0.61	
11666.00	90.400	180.160	7568.50	4308.96	-4299.11	-318.28	40°03'24.043"N	104°58'35.713"W	1.11	
11760.00	90.800	182.490	7567.52	4402.92	-4393.08	-320.45	40°03'23.115"N	104°58'35.741"W	2.51	
11854.00	91.320	182.860	7565.78	4496.91	-4486.96	-324.84	40°03'22.187"N	104°58'35.797"W	0.68	
11949.00	91.100	182.090	7563.77	4591.88	-4581.85	-328.94	40°03'21.249"N	104°58'35.850"W	0.84	
12043.00	91.350	181.230	7561.77	4685.85	-4675.78	-331.66	40°03'20.321"N	104°58'35.885"W	0.95	
12138.00	90.430	179.970	7560.29	4780.78	-4770.76	-332.66	40°03'19.382"N	104°58'35.898"W	1.64	
12232.00	89.720	179.430	7560.17	4874.67	-4864.76	-332.16	40°03'18.453"N	104°58'35.892"W	0.95	
12326.00	89.780	179.450	7560.58	4968.53	-4958.76	-331.25	40°03'17.524"N	104°58'35.880"W	0.07	
12421.00	90.300	179.290	7560.51	5063.39	-5053.75	-330.20	40°03'16.586"N	104°58'35.866"W	0.57	
12515.00	91.200	179.420	7559.28	5157.23	-5147.74	-329.14	40°03'15.657"N	104°58'35.853"W	0.97	
12609.00	90.610	179.610	7557.80	5251.09	-5241.72	-328.35	40°03'14.728"N	104°58'35.842"W	0.66	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#23 COMO 13N-14HZ (1664'FNL & 1264'FWL, SEC.11)
Area	COLORADO	Well	COMO 13N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13N-14HZ AWB <71-16236>
Facility	SEC.11-TIN-R68W		

WELLPATH DATA (174 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12703.00	90.030	178.700	7557.27	5344.93	-5335.71	-326.96	40°03'13.799"N	104°58'35.825"W	1.15	
12797.00	89.440	179.420	7557.70	5438.75	-5429.69	-325.42	40°03'12.871"N	104°58'35.805"W	0.99	
12892.00	89.130	180.080	7558.89	5533.63	-5524.68	-325.00	40°03'11.932"N	104°58'35.799"W	0.77	
12986.00	88.850	180.980	7560.55	5627.56	-5618.66	-325.87	40°03'11.003"N	104°58'35.811"W	1.00	
13080.00	89.250	181.320	7562.11	5721.52	-5712.63	-327.76	40°03'10.075"N	104°58'35.835"W	0.56	
13174.00	89.170	181.450	7563.40	5815.49	-5806.59	-330.03	40°03'09.146"N	104°58'35.864"W	0.16	
13268.00	90.270	180.680	7563.86	5909.46	-5900.58	-331.78	40°03'08.217"N	104°58'35.886"W	1.43	
13363.00	90.060	180.970	7563.59	6004.42	-5995.56	-333.15	40°03'07.279"N	104°58'35.904"W	0.38	
13457.00	89.380	182.100	7564.05	6098.40	-6089.53	-335.66	40°03'06.350"N	104°58'35.936"W	1.40	
13551.00	90.090	181.260	7564.48	6192.39	-6183.48	-338.42	40°03'05.421"N	104°58'35.972"W	1.17	
13645.00	90.490	181.340	7564.01	6286.37	-6277.46	-340.55	40°03'04.493"N	104°58'35.999"W	0.43	
13740.00	91.040	181.120	7562.74	6381.33	-6372.43	-342.59	40°03'03.554"N	104°58'36.025"W	0.62	
13834.00	90.490	180.390	7561.48	6475.28	-6466.41	-343.83	40°03'02.626"N	104°58'36.041"W	0.97	
13928.00	90.090	180.350	7561.01	6569.21	-6560.41	-344.44	40°03'01.697"N	104°58'36.049"W	0.43	
14023.00	91.350	180.030	7559.81	6664.12	-6655.40	-344.75	40°03'00.758"N	104°58'36.053"W	1.37	
14117.00	90.210	180.520	7558.53	6758.04	-6749.39	-345.20	40°02'59.829"N	104°58'36.059"W	1.32	
14211.00	89.960	181.640	7558.39	6852.01	-6843.37	-346.98	40°02'58.900"N	104°58'36.082"W	1.22	
14306.00	89.290	180.890	7559.02	6946.98	-6938.34	-349.07	40°02'57.962"N	104°58'36.109"W	1.06	
14400.00	89.870	180.730	7559.70	7040.94	-7032.33	-350.40	40°02'57.033"N	104°58'36.126"W	0.64	
14495.00	90.490	180.600	7559.41	7135.89	-7127.32	-351.50	40°02'56.094"N	104°58'36.140"W	0.67	
14589.00	90.400	181.530	7558.68	7229.85	-7221.30	-353.25	40°02'55.166"N	104°58'36.162"W	0.99	
14683.00	88.800	181.580	7559.33	7323.83	-7315.26	-355.80	40°02'54.237"N	104°58'36.195"W	1.70	
14778.00	89.410	181.150	7560.82	7418.80	-7410.22	-358.06	40°02'53.299"N	104°58'36.224"W	0.79	
14872.00	90.610	180.930	7560.80	7512.77	-7504.20	-359.77	40°02'52.370"N	104°58'36.246"W	1.30	
14966.00	90.180	181.120	7560.15	7606.73	-7598.19	-361.45	40°02'51.441"N	104°58'36.268"W	0.50	
15061.00	89.900	182.090	7560.09	7701.72	-7693.15	-364.11	40°02'50.503"N	104°58'36.302"W	1.06	
15155.00	89.470	181.270	7560.60	7795.71	-7787.11	-366.87	40°02'49.574"N	104°58'36.337"W	0.98	
15249.00	90.640	180.650	7560.51	7889.67	-7881.09	-368.44	40°02'48.645"N	104°58'36.358"W	1.41	
15344.00	90.300	181.300	7559.73	7984.63	-7976.07	-370.06	40°02'47.707"N	104°58'36.378"W	0.77	
15438.00	89.590	181.640	7559.82	8078.62	-8070.04	-372.47	40°02'46.778"N	104°58'36.409"W	0.84	
15533.00	88.520	182.010	7561.39	8173.59	-8164.98	-375.50	40°02'45.840"N	104°58'36.448"W	1.19	
15627.00	88.640	181.740	7563.72	8267.56	-8258.90	-378.57	40°02'44.912"N	104°58'36.488"W	0.31	
15721.00	89.010	181.220	7565.65	8361.52	-8352.85	-381.00	40°02'43.983"N	104°58'36.519"W	0.68	
15816.00	89.070	181.290	7567.24	8456.49	-8447.81	-383.08	40°02'43.045"N	104°58'36.546"W	0.10	
15910.00	89.350	180.950	7568.53	8550.45	-8541.78	-384.92	40°02'42.116"N	104°58'36.569"W	0.47	
16004.00	89.380	181.030	7569.58	8644.41	-8635.76	-386.54	40°02'41.187"N	104°58'36.590"W	0.09	
16099.00	89.900	181.070	7570.17	8739.38	-8730.75	-388.28	40°02'40.249"N	104°58'36.613"W	0.55	
16181.00	90.300	181.030	7570.03	8821.35	-8812.73	-389.78	40°02'39.439"N	104°58'36.632"W	0.49	LAST BHI MWD+IFR SURVEY
16236.00	90.300	181.030	7569.74	8876.33	-8867.72	-390.77	40°02'38.895"N	104°58'36.645"W	0.00	PROJECTION TO BIT

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#23 COMO 13N-14HZ (1664'FNL & 1264'FWL, SEC.11)
Area	COLORADO	Well	COMO 13N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13N-14HZ AWB <71-16236>
Facility	SEC.11-T1N-R68W		

HOLE & CASING SECTIONS - Ref Wellbore: COMO 13N-14HZ AWB <71-16236> Ref Wellpath: COMO 13N-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	1182.00	1157.00	25.00	1181.98	0.00	0.00	-3.32	1.99
9.625in Casing Surface	25.00	1182.00	1157.00	25.00	1181.98	0.00	0.00	-3.32	1.99
8.75in Open Hole	1182.00	7905.00	6723.00	1181.98	7574.20	-3.32	1.99	-540.40	-247.79
7in Casing Intermediate	25.00	7886.00	7861.00	25.00	7572.64	0.00	0.00	-521.47	-247.47
6.125in Open Hole	7905.00	16236.00	8331.00	7574.20	7569.74	-540.40	-247.79	-8867.72	-390.77

WELLPATH COMPOSITION - Ref Wellbore: COMO 13N-14HZ AWB <71-16236> Ref Wellpath: COMO 13N-14HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1147.00	ISCWSA MWD, Rev. 2 (Standard)	CATHEDRAL MWD SURVEYS <71-1147>	COMO 13N-14HZ AWB <71-16236>
1147.00	7858.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 8 3/4" <1280-7858>	COMO 13N-14HZ AWB <71-16236>
7858.00	16181.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 6 1/8" <7923-16181>	COMO 13N-14HZ AWB <71-16236>
16181.00	16236.00	Blind Drilling (std)	Projection to bit	COMO 13N-14HZ AWB <71-16236>

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#23 COMO 13N-14HZ (1664'FNL & 1264'FWL, SEC.11)
Area	COLORADO	Well	COMO 13N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13N-14HZ AWB <71-16236>
Facility	SEC.11-T1N-R68W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
25.00	0.000	120.200	25.00	TIE ON	
71.00	0.200	120.200	71.00	BEGIN CATHEDRAL MWD SURVEYS	
1147.00	0.400	298.000	1146.98	TIE ONTO CATHEDRAL MWD SURVEYS	
1280.00	0.270	302.230	1279.97	BEGIN BHI MWD+IFR SURVEYS	
7886.00	84.726	180.935	7572.64	7" CASING POINT	
16181.00	90.300	181.030	7570.03	LAST BHI MWD+IFR SURVEY	
16236.00	90.300	181.030	7569.74	PROJECTION TO BIT	