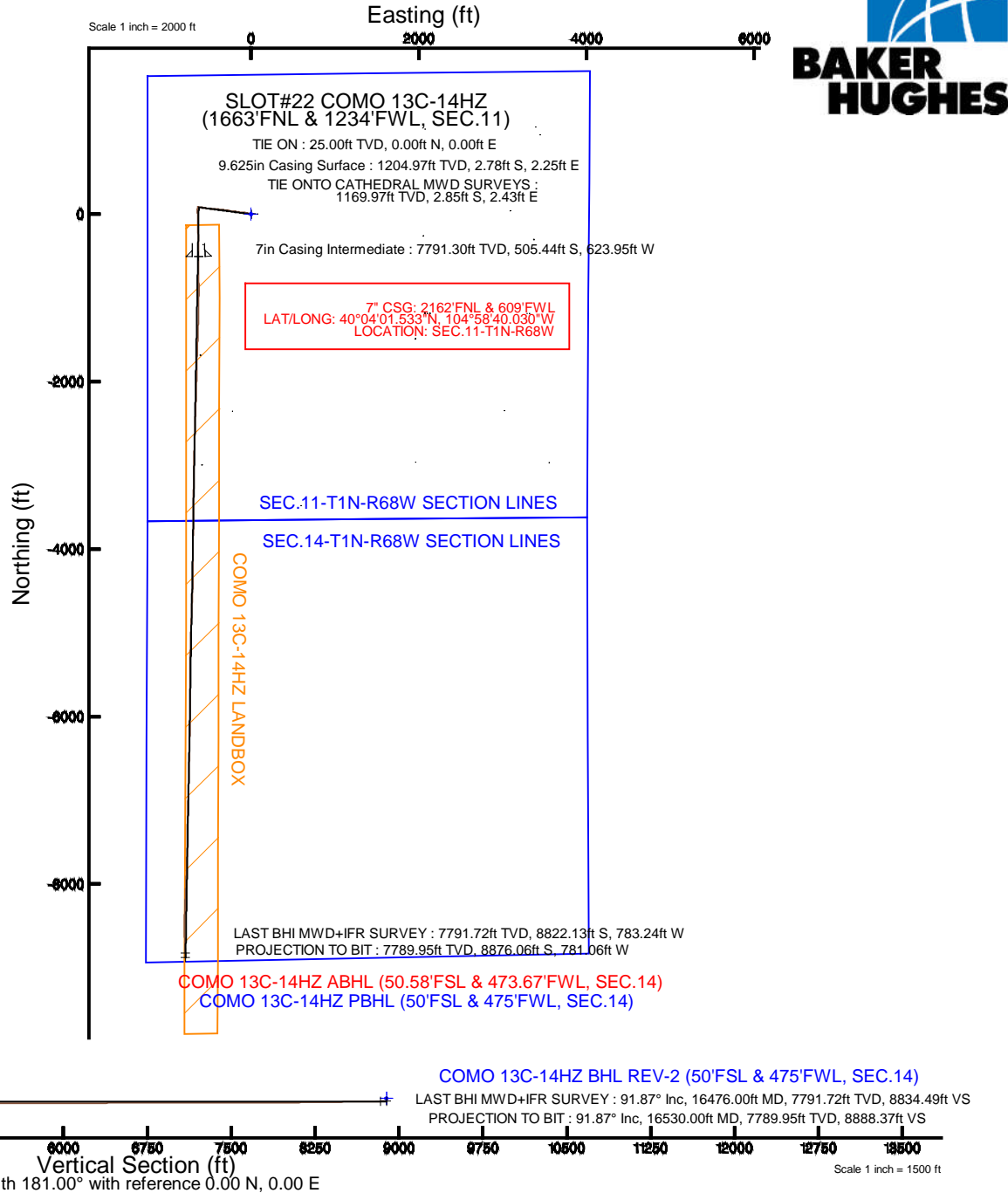
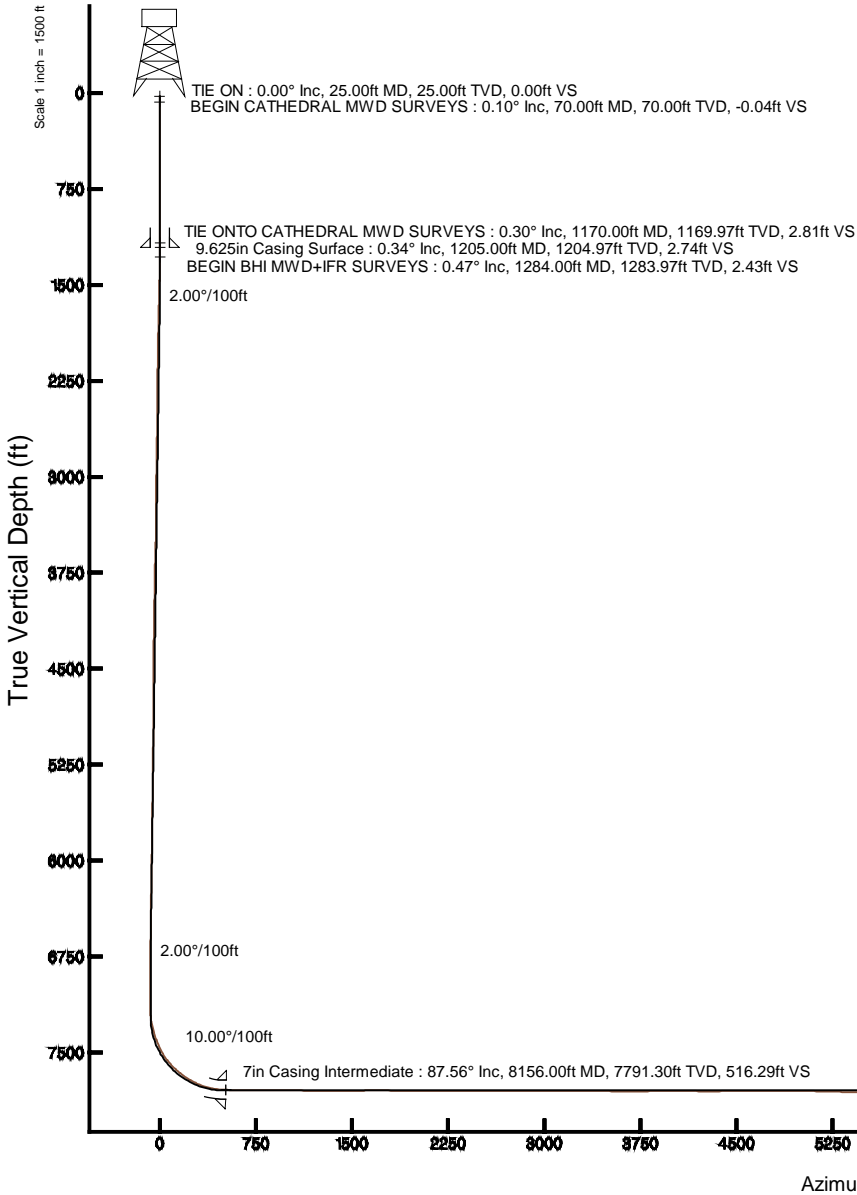


# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)  
 Field: WELD COUNTY (KERR MCGEE) Well: COMO 13C-14HZ  
 Facility: SEC.11-T1N-R68W Wellbore: COMO 13C-14HZ PWB

Plot reference wellpath is COMO 13C-14HZ (REV-A.0) PWP

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#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot.	Created by: robiale01 on 1/9/2015





# Actual Wellpath Report

COMO 13C-14HZ AWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)
Area	COLORADO	Well	COMO 13C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13C-14HZ AWP <16530>
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 2:01:54 PM
Convergence at slot	n/a	Database/Source file	MAPCHECKDB/COMO_13C-14HZ_AWP_16530_.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	446.18	3146776.22	1268226.43	40°04'06.528"N	104°58'32.005"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#22 COMO 13C-14HZ (1663'FNL & 1234'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	185.03°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)
Area	COLORADO	Well	COMO 13C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13C-14HZ AWB <16530>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (183 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	340.600	0.00	0.00	0.00	0.00	40°04'06.528"N	104°58'32.005"W	0.00	
25.00	0.000	340.600	25.00	0.00	0.00	0.00	40°04'06.528"N	104°58'32.005"W	0.00	TIE ON
70.00	0.100	340.600	70.00	-0.04	0.04	-0.01	40°04'06.528"N	104°58'32.005"W	0.22	BEGIN CATHEDRAL MWD SURVEYS
142.00	0.300	142.100	142.00	0.05	-0.05	0.08	40°04'06.527"N	104°58'32.004"W	0.55	
240.00	0.100	26.300	240.00	0.15	-0.18	0.28	40°04'06.526"N	104°58'32.001"W	0.36	
339.00	0.100	278.500	339.00	0.07	-0.09	0.23	40°04'06.527"N	104°58'32.002"W	0.16	
419.00	0.200	212.900	419.00	0.19	-0.19	0.09	40°04'06.526"N	104°58'32.004"W	0.23	
499.00	0.300	151.200	499.00	0.48	-0.50	0.11	40°04'06.523"N	104°58'32.004"W	0.34	
579.00	0.400	201.500	579.00	0.93	-0.94	0.11	40°04'06.519"N	104°58'32.004"W	0.39	
659.00	0.200	116.500	659.00	1.24	-1.26	0.13	40°04'06.516"N	104°58'32.003"W	0.54	
739.00	0.700	138.700	738.99	1.63	-1.69	0.58	40°04'06.511"N	104°58'31.998"W	0.65	
819.00	1.000	113.300	818.98	2.19	-2.33	1.54	40°04'06.505"N	104°58'31.985"W	0.59	
899.00	0.700	101.300	898.98	2.46	-2.71	2.66	40°04'06.501"N	104°58'31.971"W	0.43	
979.00	0.100	306.700	978.97	2.48	-2.76	3.09	40°04'06.501"N	104°58'31.965"W	0.99	
1059.00	0.300	235.300	1058.97	2.58	-2.84	2.86	40°04'06.500"N	104°58'31.968"W	0.36	
1139.00	0.200	296.400	1138.97	2.66	-2.89	2.56	40°04'06.499"N	104°58'31.972"W	0.34	
1170.00	0.300	284.600	1169.97	2.63	-2.85	2.43	40°04'06.500"N	104°58'31.974"W	0.36	TIE ONTO CATHEDRAL MWD SURVEYS
1284.00	0.470	311.640	1283.97	2.30	-2.46	1.80	40°04'06.504"N	104°58'31.982"W	0.21	BEGIN BHI MWD+IFR SURVEYS
1375.00	2.200	298.300	1374.94	1.38	-1.39	-0.02	40°04'06.514"N	104°58'32.005"W	1.92	
1468.00	4.300	298.010	1467.79	-0.68	1.10	-4.67	40°04'06.539"N	104°58'32.065"W	2.26	
1559.00	5.710	283.160	1558.44	-2.65	3.73	-12.09	40°04'06.565"N	104°58'32.161"W	2.09	
1653.00	7.630	283.390	1651.80	-4.22	6.24	-22.72	40°04'06.590"N	104°58'32.297"W	2.04	
1746.00	7.510	281.490	1743.99	-5.81	8.88	-34.68	40°04'06.616"N	104°58'32.451"W	0.30	
1840.00	7.310	279.270	1837.21	-6.94	11.07	-46.60	40°04'06.637"N	104°58'32.604"W	0.37	
1933.00	7.300	280.030	1929.45	-7.89	13.05	-58.26	40°04'06.657"N	104°58'32.754"W	0.10	
2027.00	7.200	279.790	2022.70	-8.90	15.09	-69.94	40°04'06.677"N	104°58'32.905"W	0.11	
2120.00	7.180	277.900	2114.97	-9.68	16.88	-81.44	40°04'06.695"N	104°58'33.053"W	0.26	
2305.00	7.140	273.680	2298.53	-9.98	19.21	-104.37	40°04'06.718"N	104°58'33.347"W	0.29	
2491.00	6.770	270.960	2483.16	-8.93	20.13	-126.87	40°04'06.727"N	104°58'33.637"W	0.27	
2584.00	6.220	282.230	2575.57	-9.18	21.29	-137.27	40°04'06.738"N	104°58'33.771"W	1.49	
2769.00	5.630	278.700	2759.58	-11.01	24.79	-156.04	40°04'06.773"N	104°58'34.012"W	0.37	
2862.00	6.350	279.390	2852.07	-11.70	26.32	-165.62	40°04'06.788"N	104°58'34.135"W	0.78	
2957.00	8.410	278.870	2946.28	-12.56	28.25	-177.67	40°04'06.807"N	104°58'34.290"W	2.17	
3146.00	7.360	276.540	3133.49	-13.81	31.76	-203.35	40°04'06.842"N	104°58'34.621"W	0.58	
3335.00	6.460	274.510	3321.11	-14.03	33.97	-225.98	40°04'06.864"N	104°58'34.912"W	0.49	
3429.00	5.950	271.960	3414.56	-13.72	34.55	-236.12	40°04'06.869"N	104°58'35.042"W	0.62	
3523.00	5.450	276.560	3508.10	-13.58	35.23	-245.42	40°04'06.876"N	104°58'35.162"W	0.72	
3618.00	6.900	285.990	3602.55	-14.79	37.32	-255.39	40°04'06.897"N	104°58'35.290"W	1.86	
3712.00	8.780	290.290	3695.66	-17.75	41.36	-267.55	40°04'06.937"N	104°58'35.446"W	2.09	
3806.00	6.870	276.600	3788.79	-19.79	44.49	-279.87	40°04'06.968"N	104°58'35.605"W	2.83	
3996.00	5.490	273.110	3977.68	-19.80	46.29	-300.23	40°04'06.985"N	104°58'35.867"W	0.75	
4090.00	5.960	277.650	4071.22	-19.87	47.19	-309.56	40°04'06.994"N	104°58'35.987"W	0.69	
4184.00	7.060	281.880	4164.61	-20.78	49.03	-320.05	40°04'07.012"N	104°58'36.122"W	1.28	
4279.00	6.760	281.410	4258.92	-22.10	51.33	-331.24	40°04'07.035"N	104°58'36.266"W	0.32	
4373.00	6.340	280.870	4352.31	-23.24	53.41	-341.76	40°04'07.056"N	104°58'36.401"W	0.45	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)
Area	COLORADO	Well	COMO 13C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13C-14HZ AWB <16530>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (183 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4468.00	8.050	273.210	4446.56	-23.57	54.77	-353.56	40°04'07.069"N	104°58'36.553"W	2.06	
4656.00	6.030	270.090	4633.13	-22.30	55.52	-376.58	40°04'07.077"N	104°58'36.849"W	1.09	
4750.00	7.250	272.410	4726.50	-21.60	55.78	-387.44	40°04'07.079"N	104°58'36.988"W	1.33	
4845.00	7.650	274.920	4820.70	-21.32	56.57	-399.73	40°04'07.087"N	104°58'37.147"W	0.54	
4939.00	7.500	272.700	4913.88	-21.06	57.40	-412.09	40°04'07.095"N	104°58'37.306"W	0.35	
5034.00	6.970	272.140	5008.12	-20.51	57.91	-424.04	40°04'07.100"N	104°58'37.459"W	0.56	
5128.00	6.810	273.550	5101.44	-20.08	58.47	-435.31	40°04'07.106"N	104°58'37.604"W	0.25	
5222.00	6.790	278.270	5194.78	-20.25	59.61	-446.37	40°04'07.117"N	104°58'37.746"W	0.59	
5317.00	8.380	277.050	5288.94	-20.81	61.27	-458.80	40°04'07.133"N	104°58'37.906"W	1.68	
5411.00	8.040	275.660	5381.98	-21.13	62.76	-472.14	40°04'07.148"N	104°58'38.078"W	0.42	
5600.00	6.870	273.550	5569.38	-20.98	64.76	-496.57	40°04'07.168"N	104°58'38.392"W	0.64	
5695.00	6.860	276.630	5663.70	-20.99	65.77	-507.88	40°04'07.178"N	104°58'38.538"W	0.39	
5789.00	7.640	278.570	5756.95	-21.54	67.35	-519.63	40°04'07.193"N	104°58'38.689"W	0.87	
5883.00	6.630	277.140	5850.22	-22.12	68.95	-531.20	40°04'07.209"N	104°58'38.838"W	1.09	
5978.00	6.810	277.570	5944.57	-22.57	70.38	-542.22	40°04'07.223"N	104°58'38.979"W	0.20	
6072.00	7.410	277.870	6037.84	-23.12	71.94	-553.75	40°04'07.239"N	104°58'39.128"W	0.64	
6166.00	6.320	277.100	6131.17	-23.61	73.41	-564.89	40°04'07.253"N	104°58'39.271"W	1.16	
6261.00	7.090	280.500	6225.52	-24.36	75.12	-575.84	40°04'07.270"N	104°58'39.412"W	0.91	
6355.00	6.490	280.630	6318.86	-25.43	77.16	-586.77	40°04'07.290"N	104°58'39.552"W	0.64	
6450.00	5.830	279.210	6413.31	-26.30	78.92	-596.81	40°04'07.308"N	104°58'39.681"W	0.71	
6544.00	5.080	278.620	6506.88	-26.91	80.31	-605.64	40°04'07.322"N	104°58'39.795"W	0.80	
6638.00	4.600	277.930	6600.55	-27.36	81.45	-613.48	40°04'07.333"N	104°58'39.896"W	0.51	
6733.00	4.130	278.790	6695.27	-27.78	82.50	-620.64	40°04'07.343"N	104°58'39.988"W	0.50	
6827.00	3.080	297.380	6789.09	-28.96	84.18	-626.23	40°04'07.360"N	104°58'40.060"W	1.66	
6921.00	1.120	300.880	6883.02	-30.33	85.82	-629.26	40°04'07.376"N	104°58'40.099"W	2.09	
7016.00	1.080	267.110	6978.00	-30.61	86.25	-630.95	40°04'07.380"N	104°58'40.121"W	0.67	
7110.00	1.060	240.740	7071.99	-29.99	85.78	-632.59	40°04'07.376"N	104°58'40.142"W	0.52	
7204.00	1.570	202.060	7165.96	-28.27	84.16	-633.83	40°04'07.360"N	104°58'40.158"W	1.06	
7251.00	4.720	191.200	7212.89	-25.73	81.66	-634.45	40°04'07.335"N	104°58'40.166"W	6.79	
7298.00	8.820	190.380	7259.55	-20.22	76.22	-635.48	40°04'07.281"N	104°58'40.179"W	8.73	
7345.00	13.960	184.270	7305.61	-10.96	67.02	-636.55	40°04'07.190"N	104°58'40.193"W	11.22	
7392.00	18.010	181.080	7350.78	1.96	54.09	-637.11	40°04'07.062"N	104°58'40.200"W	8.81	
7439.00	20.110	180.890	7395.21	17.27	38.75	-637.37	40°04'06.911"N	104°58'40.203"W	4.47	
7486.00	22.860	178.780	7438.94	34.41	21.54	-637.30	40°04'06.741"N	104°58'40.202"W	6.08	
7533.00	26.590	177.590	7481.62	53.92	1.89	-636.66	40°04'06.547"N	104°58'40.194"W	8.01	
7580.00	32.420	176.360	7522.51	76.83	-21.21	-635.42	40°04'06.318"N	104°58'40.178"W	12.47	
7627.00	38.740	178.440	7560.71	103.92	-48.51	-634.22	40°04'06.049"N	104°58'40.163"W	13.69	
7675.00	43.610	180.820	7596.84	135.37	-80.10	-634.05	40°04'05.736"N	104°58'40.160"W	10.66	
7722.00	47.370	181.020	7629.78	168.79	-113.60	-634.59	40°04'05.405"N	104°58'40.167"W	8.01	
7769.00	51.330	179.060	7660.39	204.31	-149.25	-634.59	40°04'05.053"N	104°58'40.167"W	9.00	
7816.00	55.450	176.430	7688.42	241.71	-186.94	-633.09	40°04'04.681"N	104°58'40.148"W	9.85	
7864.00	60.280	176.650	7713.94	281.90	-227.50	-630.64	40°04'04.280"N	104°58'40.116"W	10.07	
7910.00	63.590	178.820	7735.58	322.16	-268.05	-629.04	40°04'03.879"N	104°58'40.096"W	8.31	
7958.00	68.500	179.390	7755.07	365.78	-311.89	-628.36	40°04'03.446"N	104°58'40.087"W	10.29	
8005.00	74.210	179.140	7770.09	410.06	-356.41	-627.79	40°04'03.006"N	104°58'40.080"W	12.16	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)
Area	COLORADO	Well	COMO 13C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13C-14HZ AWB <16530>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (183 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8052.00	79.110	178.150	7780.93	455.50	-402.11	-626.71	40°04'02.554"N	104°58'40.066"W	10.62	
8119.00	86.420	178.410	7789.36	521.46	-468.50	-624.71	40°04'01.898"N	104°58'40.040"W	10.92	
8156.00†	87.560	179.220	7791.30	558.19	-505.44	-623.95	40°04'01.533"N	104°58'40.030"W	3.78	7" CASING POINT
8204.00	89.040	180.270	7792.73	605.96	-553.42	-623.74	40°04'01.059"N	104°58'40.028"W	3.78	
8299.00	89.040	179.960	7794.32	700.60	-648.40	-623.93	40°04'00.120"N	104°58'40.030"W	0.33	
8393.00	89.530	179.960	7795.49	794.23	-742.40	-623.86	40°03'59.191"N	104°58'40.029"W	0.52	
8487.00	89.930	179.430	7795.93	887.82	-836.39	-623.36	40°03'58.263"N	104°58'40.023"W	0.71	
8582.00	90.180	180.280	7795.84	982.43	-931.39	-623.12	40°03'57.324"N	104°58'40.020"W	0.93	
8676.00	89.590	180.670	7796.03	1076.13	-1025.39	-623.90	40°03'56.395"N	104°58'40.030"W	0.75	
8770.00	89.470	180.790	7796.80	1169.86	-1119.38	-625.10	40°03'55.466"N	104°58'40.045"W	0.18	
8864.00	89.290	181.310	7797.82	1263.63	-1213.36	-626.82	40°03'54.537"N	104°58'40.067"W	0.59	
8959.00	90.000	182.000	7798.41	1358.46	-1308.31	-629.56	40°03'53.599"N	104°58'40.102"W	1.04	
9052.00	89.380	181.670	7798.91	1451.32	-1401.26	-632.54	40°03'52.680"N	104°58'40.141"W	0.76	
9143.00	91.070	182.280	7798.55	1542.18	-1492.21	-635.68	40°03'51.782"N	104°58'40.181"W	1.97	
9236.00	91.160	182.480	7796.74	1635.07	-1585.11	-639.54	40°03'50.864"N	104°58'40.231"W	0.24	
9330.00	89.960	181.490	7795.83	1728.93	-1679.04	-642.79	40°03'49.935"N	104°58'40.272"W	1.65	
9422.00	89.260	181.200	7796.45	1820.73	-1771.02	-644.95	40°03'49.026"N	104°58'40.300"W	0.82	
9514.00	89.130	181.390	7797.74	1912.53	-1862.98	-647.03	40°03'48.118"N	104°58'40.327"W	0.25	
9608.00	89.040	181.210	7799.25	2006.32	-1956.95	-649.17	40°03'47.189"N	104°58'40.354"W	0.21	
9701.00	89.750	181.710	7800.23	2099.13	-2049.91	-651.53	40°03'46.270"N	104°58'40.385"W	0.93	
9794.00	89.840	181.400	7800.56	2191.96	-2142.88	-654.06	40°03'45.352"N	104°58'40.417"W	0.35	
9888.00	90.210	181.890	7800.52	2285.80	-2236.84	-656.76	40°03'44.423"N	104°58'40.452"W	0.65	
9981.00	90.700	182.440	7799.78	2378.68	-2329.77	-660.27	40°03'43.505"N	104°58'40.497"W	0.79	
10075.00	89.630	181.620	7799.51	2472.54	-2423.70	-663.60	40°03'42.576"N	104°58'40.540"W	1.43	
10167.00	89.500	181.600	7800.21	2564.38	-2515.67	-666.18	40°03'41.668"N	104°58'40.573"W	0.14	
10260.00	89.870	181.670	7800.72	2657.21	-2608.63	-668.84	40°03'40.749"N	104°58'40.607"W	0.40	
10353.00	90.980	182.370	7800.03	2750.08	-2701.56	-672.12	40°03'39.830"N	104°58'40.649"W	1.41	
10446.00	90.430	182.110	7798.89	2842.96	-2794.49	-675.75	40°03'38.912"N	104°58'40.696"W	0.65	
10538.00	89.530	181.020	7798.92	2934.79	-2886.45	-678.26	40°03'38.003"N	104°58'40.728"W	1.54	
10631.00	89.720	180.540	7799.53	3027.54	-2979.44	-679.53	40°03'37.084"N	104°58'40.744"W	0.56	
10724.00	90.330	180.510	7799.49	3120.25	-3072.43	-680.38	40°03'36.165"N	104°58'40.755"W	0.66	
10817.00	90.580	180.620	7798.75	3212.96	-3165.43	-681.30	40°03'35.247"N	104°58'40.767"W	0.29	
10911.00	89.040	181.260	7799.06	3306.72	-3259.41	-682.84	40°03'34.318"N	104°58'40.787"W	1.77	
11006.00	89.290	181.120	7800.44	3401.50	-3354.38	-684.81	40°03'33.379"N	104°58'40.812"W	0.30	
11100.00	89.620	181.320	7801.34	3495.28	-3448.35	-686.81	40°03'32.451"N	104°58'40.838"W	0.41	
11194.00	89.380	180.850	7802.16	3589.06	-3542.33	-688.59	40°03'31.522"N	104°58'40.861"W	0.56	
11288.00	89.840	180.070	7802.80	3682.76	-3636.33	-689.35	40°03'30.593"N	104°58'40.870"W	0.96	
11383.00	90.270	180.250	7802.71	3777.41	-3731.33	-689.61	40°03'29.654"N	104°58'40.874"W	0.49	
11477.00	91.380	180.270	7801.35	3871.08	-3825.31	-690.04	40°03'28.725"N	104°58'40.879"W	1.18	
11572.00	90.670	180.580	7799.65	3965.75	-3920.29	-690.75	40°03'27.787"N	104°58'40.888"W	0.82	
11666.00	89.100	180.230	7799.84	4059.44	-4014.29	-691.41	40°03'26.858"N	104°58'40.897"W	1.71	
11760.00	89.500	179.450	7800.99	4153.05	-4108.28	-691.15	40°03'25.929"N	104°58'40.893"W	0.93	
11854.00	89.380	180.110	7801.91	4246.65	-4202.28	-690.79	40°03'25.000"N	104°58'40.889"W	0.71	
11948.00	90.150	181.500	7802.30	4340.39	-4296.26	-692.11	40°03'24.071"N	104°58'40.906"W	1.69	
12043.00	90.920	181.340	7801.41	4435.20	-4391.23	-694.46	40°03'23.133"N	104°58'40.936"W	0.83	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)
Area	COLORADO	Well	COMO 13C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13C-14HZ AWB <16530>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (183 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12137.00	89.900	181.910	7800.74	4529.03	-4485.19	-697.13	40°03'22.204"N	104°58'40.970"W	1.24	
12232.00	90.640	182.300	7800.29	4623.90	-4580.12	-700.62	40°03'21.266"N	104°58'41.015"W	0.88	
12326.00	89.350	182.040	7800.30	4717.79	-4674.05	-704.18	40°03'20.338"N	104°58'41.061"W	1.40	
12420.00	89.960	182.170	7800.86	4811.66	-4767.99	-707.63	40°03'19.410"N	104°58'41.105"W	0.66	
12514.00	90.550	182.590	7800.44	4905.56	-4861.90	-711.53	40°03'18.482"N	104°58'41.155"W	0.77	
12609.00	90.330	182.150	7799.71	5000.45	-4956.82	-715.46	40°03'17.544"N	104°58'41.206"W	0.52	
12703.00	88.640	181.780	7800.56	5094.31	-5050.76	-718.68	40°03'16.615"N	104°58'41.247"W	1.84	
12797.00	88.520	181.630	7802.89	5188.12	-5144.68	-721.48	40°03'15.687"N	104°58'41.283"W	0.20	
12891.00	88.480	181.650	7805.35	5281.93	-5238.61	-724.17	40°03'14.759"N	104°58'41.318"W	0.05	
12985.00	88.890	181.040	7807.51	5375.71	-5332.56	-726.37	40°03'13.830"N	104°58'41.346"W	0.78	
13079.00	89.810	180.890	7808.57	5469.46	-5426.54	-727.96	40°03'12.902"N	104°58'41.366"W	0.99	
13174.00	89.560	180.670	7809.09	5564.20	-5521.53	-729.25	40°03'11.963"N	104°58'41.383"W	0.35	
13268.00	89.380	180.060	7809.96	5657.89	-5615.53	-729.85	40°03'11.034"N	104°58'41.391"W	0.68	
13362.00	89.780	179.670	7810.65	5751.50	-5709.52	-729.63	40°03'10.105"N	104°58'41.388"W	0.59	
13457.00	89.660	179.560	7811.12	5846.08	-5804.52	-728.99	40°03'09.166"N	104°58'41.379"W	0.17	
13543.00	89.910	179.030	7811.44	5931.65	-5890.51	-727.93	40°03'08.317"N	104°58'41.366"W	0.68	
13637.00	90.490	180.340	7811.11	6025.23	-5984.51	-727.41	40°03'07.388"N	104°58'41.359"W	1.52	
13732.00	90.670	180.500	7810.15	6119.92	-6079.50	-728.11	40°03'06.449"N	104°58'41.368"W	0.25	
13826.00	90.890	180.660	7808.87	6213.63	-6173.49	-729.06	40°03'05.520"N	104°58'41.380"W	0.29	
13920.00	90.730	181.120	7807.54	6307.38	-6267.47	-730.52	40°03'04.591"N	104°58'41.399"W	0.52	
14015.00	90.150	181.090	7806.81	6402.15	-6362.44	-732.35	40°03'03.653"N	104°58'41.422"W	0.61	
14109.00	90.580	181.550	7806.21	6495.95	-6456.42	-734.52	40°03'02.724"N	104°58'41.450"W	0.67	
14203.00	89.690	181.300	7805.99	6589.76	-6550.39	-736.86	40°03'01.796"N	104°58'41.480"W	0.98	
14298.00	90.180	180.440	7806.10	6684.51	-6645.37	-738.30	40°03'00.857"N	104°58'41.499"W	1.04	
14392.00	90.360	182.300	7805.66	6778.31	-6739.34	-740.55	40°02'59.928"N	104°58'41.528"W	1.99	
14487.00	91.070	182.320	7804.47	6873.20	-6834.26	-744.37	40°02'58.990"N	104°58'41.577"W	0.75	
14581.00	89.750	181.870	7803.80	6967.07	-6928.19	-747.81	40°02'58.062"N	104°58'41.621"W	1.48	
14675.00	90.270	182.010	7803.78	7060.94	-7022.14	-750.99	40°02'57.134"N	104°58'41.662"W	0.57	
14770.00	89.750	181.030	7803.77	7155.76	-7117.10	-753.51	40°02'56.195"N	104°58'41.694"W	1.17	
14864.00	89.810	181.190	7804.13	7249.54	-7211.08	-755.33	40°02'55.266"N	104°58'41.718"W	0.18	
14958.00	90.210	180.910	7804.11	7343.31	-7305.07	-757.06	40°02'54.338"N	104°58'41.740"W	0.52	
15053.00	90.520	181.090	7803.51	7438.07	-7400.05	-758.71	40°02'53.399"N	104°58'41.761"W	0.38	
15147.00	89.200	180.530	7803.73	7531.81	-7494.04	-760.04	40°02'52.470"N	104°58'41.778"W	1.53	
15241.00	90.700	181.230	7803.82	7625.56	-7588.02	-761.49	40°02'51.541"N	104°58'41.797"W	1.76	
15336.00	90.360	181.130	7802.94	7720.35	-7683.00	-763.44	40°02'50.603"N	104°58'41.822"W	0.37	
15430.00	89.070	181.820	7803.41	7814.16	-7776.96	-765.86	40°02'49.674"N	104°58'41.853"W	1.56	
15525.00	89.130	181.740	7804.90	7909.00	-7871.91	-768.81	40°02'48.736"N	104°58'41.891"W	0.11	
15619.00	90.520	182.540	7805.19	8002.87	-7965.84	-772.32	40°02'47.808"N	104°58'41.936"W	1.71	
15713.00	91.940	183.190	7803.17	8096.78	-8059.70	-777.02	40°02'46.880"N	104°58'41.996"W	1.66	
15808.00	91.690	183.230	7800.16	8191.69	-8154.50	-782.34	40°02'45.943"N	104°58'42.065"W	0.27	
15902.00	90.460	182.020	7798.39	8285.58	-8248.38	-786.64	40°02'45.016"N	104°58'42.120"W	1.84	
15996.00	89.780	181.460	7798.20	8379.43	-8342.34	-789.50	40°02'44.087"N	104°58'42.156"W	0.94	
16091.00	91.010	180.370	7797.54	8474.18	-8437.32	-791.01	40°02'43.148"N	104°58'42.176"W	1.73	
16185.00	90.860	179.920	7796.01	8567.82	-8531.30	-791.25	40°02'42.220"N	104°58'42.179"W	0.50	
16279.00	90.270	178.690	7795.08	8661.35	-8625.29	-790.11	40°02'41.291"N	104°58'42.164"W	1.45	

# Actual Wellpath Report

COMO 13C-14HZ AWP

Page 6 of 7

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)
Area	COLORADO	Well	COMO 13C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13C-14HZ AWB <16530>
Facility	SEC.11-T1N-R68W		

WELLPATH DATA (183 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16374.00	90.860	177.830	7794.15	8755.68	-8720.24	-787.23	40°02'40.353"N	104°58'42.127"W	1.10	
16476.00	91.870	177.690	7791.72	8856.83	-8822.13	-783.24	40°02'39.346"N	104°58'42.076"W	1.00	LAST BHI MWD+IFR SURVEY
16530.00	91.870	177.690	7789.95	8910.36	-8876.06	-781.06	40°02'38.813"N	104°58'42.048"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: COMO 13C-14HZ AWB <16530> Ref Wellpath: COMO 13C-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	1205.00	1180.00	25.00	1204.97	0.00	0.00	-2.78	2.25	
9.625in Casing Surface	25.00	1205.00	1180.00	25.00	1204.97	0.00	0.00	-2.78	2.25	
8.75in Open Hole	1205.00	8167.00	6962.00	1204.97	7791.74	-2.78	2.25	-516.43	-623.82	
7in Casing Intermediate	25.00	8156.00	8131.00	25.00	7791.30	0.00	0.00	-505.44	-623.95	
6.125in Open Hole	8167.00	16530.00	8363.00	7791.74	7789.95	-516.43	-623.82	-8876.06	-781.06	

WELLPATH COMPOSITION - Ref Wellbore: COMO 13C-14HZ AWB <16530> Ref Wellpath: COMO 13C-14HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1170.00	ISCWSA MWD, Rev. 2 (Standard)	CATHEDRAL MWD SURVEYS <70-1170>	COMO 13C-14HZ AWB <16530>
1170.00	8119.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 8 3/4" <1284-8119>	COMO 13C-14HZ AWB <16530>
8119.00	16476.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 6 1/8" <8204-16476>	COMO 13C-14HZ AWB <16530>
16476.00	16530.00	Blind Drilling (std)	Projection to bit	COMO 13C-14HZ AWB <16530>



# Actual Wellpath Report

COMO 13C-14HZ AWP

Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 COMO 13C-14HZ (1663'FNL & 1234'FWL, SEC.11)
Area	COLORADO	Well	COMO 13C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COMO 13C-14HZ AWB <16530>
Facility	SEC.11-T1N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
25.00	0.000	340.600	25.00	TIE ON
70.00	0.100	340.600	70.00	BEGIN CATHEDRAL MWD SURVEYS
1170.00	0.300	284.600	1169.97	TIE ONTO CATHEDRAL MWD SURVEYS
1284.00	0.470	311.640	1283.97	BEGIN BHI MWD+IFR SURVEYS
8156.00	87.560	179.220	7791.30	7" CASING POINT
16476.00	91.870	177.690	7791.72	LAST BHI MWD+IFR SURVEY
16530.00	91.870	177.690	7789.95	PROJECTION TO BIT