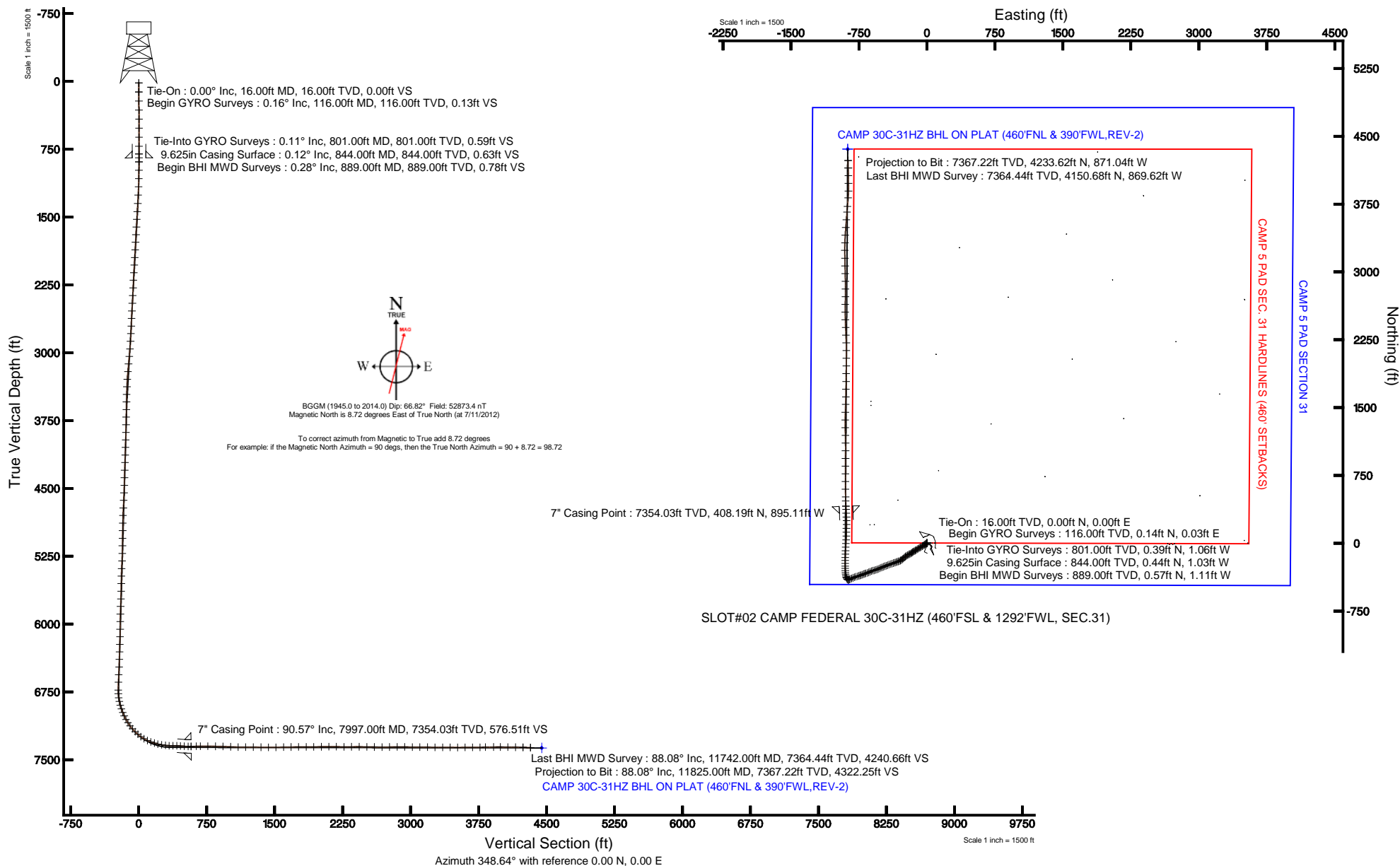


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31)
 Field: WELD COUNTY (KERR MCGEE) Well: CAMP FEDERAL 30C-31HZ
 Facility: SEC.31-T3N-R65W Wellbore: CAMP FEDERAL 30C-31HZ PWB

Plot reference wellpath is CAMP FEDERAL 30C-31HZ (REV-B.0) PWP

True vertical depths are referenced to XTREME 20 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 20 (RKB)	North Reference: True north
XTREME 20 (RKB) to Mean Sea Level: 4985 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsjef02 on 8/6/2012





Actual Wellpath Report

CAMP FEDERAL 30C-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31)
Area	COLORADO	Well	CAMP FEDERAL 30C-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CAMP FEDERAL 30C-31HZ AWB
Facility	SEC.31-T3N-R65W		

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	0.999958	Report Generated	8/6/2012 at 10:21:42
Convergence at slot	0.51° East	Database/Source file	WellArchitectDB/CAMP_FEDERAL_30C-31HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	28.25	3220408.18	1307925.81	40°10'33.460"N	104°42'40.370"W
Facility Reference Pt			3220379.93	1307925.56	40°10'33.460"N	104°42'40.734"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 20 (RKB) to Facility Vertical Datum	4985.00ft
Horizontal Reference Pt	Slot	XTREME 20 (RKB) to Mean Sea Level	4985.00ft
Vertical Reference Pt	XTREME 20 (RKB)	XTREME 20 (RKB) to Mud Line at Slot (SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31))	4985.00ft
MD Reference Pt	XTREME 20 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	348.37°



Actual Wellpath Report

CAMP FEDERAL 30C-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31)
Area	COLORADO	Well	CAMP FEDERAL 30C-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CAMP FEDERAL 30C-31HZ AWB
Facility	SEC.31-T3N-R65W		

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

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	10.840	0.00	0.00	0.00	0.00	40°10'33.460"N	104°42'40.370"W	0.00	
16.00	0.000	10.840	16.00	0.00	0.00	0.00	40°10'33.460"N	104°42'40.370"W	0.00	Tie-On
116.00	0.160	10.840	116.00	0.13	0.14	0.03	40°10'33.461"N	104°42'40.370"W	0.16	Begin GYRO Surveys
216.00	0.140	345.750	216.00	0.38	0.39	0.02	40°10'33.464"N	104°42'40.370"W	0.07	
316.00	0.180	313.180	316.00	0.63	0.62	-0.12	40°10'33.466"N	104°42'40.372"W	0.10	
416.00	0.290	313.500	416.00	0.97	0.90	-0.42	40°10'33.469"N	104°42'40.375"W	0.11	
516.00	0.210	260.010	516.00	1.18	1.04	-0.78	40°10'33.470"N	104°42'40.380"W	0.24	
616.00	0.150	172.600	616.00	1.05	0.88	-0.95	40°10'33.469"N	104°42'40.382"W	0.25	
716.00	0.260	209.850	716.00	0.75	0.55	-1.04	40°10'33.465"N	104°42'40.383"W	0.17	
801.00	0.110	85.840	801.00	0.60	0.39	-1.06	40°10'33.464"N	104°42'40.384"W	0.39	Tie-Into GYRO Surveys
889.00	0.280	322.480	889.00	0.78	0.57	-1.11	40°10'33.466"N	104°42'40.384"W	0.40	Begin BHI MWD Surveys
981.00	1.510	239.580	980.98	0.59	0.13	-2.29	40°10'33.461"N	104°42'40.399"W	1.63	
1073.00	3.700	235.320	1072.88	-0.96	-2.17	-5.77	40°10'33.439"N	104°42'40.444"W	2.39	
1164.00	4.890	235.970	1163.63	-3.59	-6.01	-11.40	40°10'33.401"N	104°42'40.517"W	1.31	
1257.00	6.740	233.350	1256.14	-7.41	-11.49	-19.07	40°10'33.346"N	104°42'40.616"W	2.01	
1349.00	7.890	236.150	1347.39	-12.08	-18.23	-28.64	40°10'33.280"N	104°42'40.739"W	1.31	
1441.00	8.730	235.770	1438.43	-17.15	-25.67	-39.66	40°10'33.206"N	104°42'40.881"W	0.91	
1528.00	9.650	239.680	1524.31	-22.03	-33.07	-51.41	40°10'33.133"N	104°42'41.032"W	1.28	
1613.00	10.140	238.500	1608.05	-26.85	-40.57	-63.94	40°10'33.059"N	104°42'41.194"W	0.62	
1699.00	9.030	237.830	1692.84	-31.80	-48.12	-76.11	40°10'32.984"N	104°42'41.351"W	1.30	
1784.00	8.930	239.900	1776.80	-36.23	-54.98	-87.47	40°10'32.917"N	104°42'41.497"W	0.40	
1869.00	8.800	235.840	1860.79	-40.81	-61.94	-98.55	40°10'32.848"N	104°42'41.640"W	0.75	
1955.00	8.800	237.230	1945.78	-45.70	-69.20	-109.53	40°10'32.776"N	104°42'41.781"W	0.25	
2040.00	8.460	236.230	2029.81	-50.41	-76.19	-120.19	40°10'32.707"N	104°42'41.918"W	0.44	
2125.00	8.480	237.500	2113.89	-55.00	-83.03	-130.68	40°10'32.639"N	104°42'42.053"W	0.22	
2210.00	7.810	239.090	2198.03	-59.14	-89.37	-140.92	40°10'32.577"N	104°42'42.185"W	0.83	
2295.00	7.090	239.740	2282.31	-62.72	-94.98	-150.40	40°10'32.521"N	104°42'42.308"W	0.85	
2381.00	6.910	234.110	2367.67	-66.54	-100.69	-159.18	40°10'32.465"N	104°42'42.421"W	0.82	
2466.00	7.940	233.020	2451.96	-71.16	-107.21	-168.01	40°10'32.400"N	104°42'42.534"W	1.22	
2551.00	8.770	238.460	2536.06	-75.88	-114.14	-178.22	40°10'32.332"N	104°42'42.666"W	1.35	
2636.00	8.130	243.230	2620.13	-79.66	-120.23	-189.11	40°10'32.272"N	104°42'42.806"W	1.12	
2721.00	9.270	245.900	2704.15	-82.70	-125.74	-200.73	40°10'32.217"N	104°42'42.956"W	1.42	
2806.00	9.200	240.520	2788.05	-86.27	-131.88	-212.89	40°10'32.157"N	104°42'43.113"W	1.02	
2892.00	9.930	238.990	2872.86	-90.84	-139.08	-225.23	40°10'32.086"N	104°42'43.272"W	0.90	
2977.00	10.920	228.580	2956.46	-97.27	-148.18	-237.55	40°10'31.996"N	104°42'43.430"W	2.50	
3062.00	10.020	227.850	3040.05	-105.03	-158.47	-249.07	40°10'31.894"N	104°42'43.579"W	1.07	
3147.00	10.470	227.040	3123.69	-112.80	-168.70	-260.21	40°10'31.793"N	104°42'43.722"W	0.56	
3232.00	9.250	231.060	3207.43	-119.95	-178.25	-271.18	40°10'31.698"N	104°42'43.863"W	1.65	
3318.00	9.460	236.510	3292.29	-125.75	-186.50	-282.45	40°10'31.617"N	104°42'44.009"W	1.06	
3403.00	9.140	243.430	3376.18	-130.10	-193.37	-294.31	40°10'31.549"N	104°42'44.161"W	1.37	
3488.00	8.690	246.990	3460.15	-133.10	-198.90	-306.26	40°10'31.494"N	104°42'44.315"W	0.84	
3573.00	8.320	250.080	3544.22	-135.26	-203.51	-317.95	40°10'31.449"N	104°42'44.466"W	0.69	
3658.00	8.900	252.500	3628.26	-136.82	-207.58	-330.00	40°10'31.409"N	104°42'44.621"W	0.80	
3743.00	9.740	253.790	3712.14	-138.07	-211.56	-343.18	40°10'31.369"N	104°42'44.791"W	1.02	
3829.00	9.810	249.550	3796.89	-139.77	-216.16	-357.03	40°10'31.324"N	104°42'44.969"W	0.84	



Actual Wellpath Report

CAMP FEDERAL 30C-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31)
Area	COLORADO	Well	CAMP FEDERAL 30C-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CAMP FEDERAL 30C-31HZ AWB
Facility	SEC.31-T3N-R65W		

WELLPATH DATA (154 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3914.00	10.330	253.700	3880.58	-141.50	-220.82	-371.13	40°10'31.278"N	104°42'45.151"W	1.05	
3999.00	11.450	247.930	3964.05	-143.65	-226.13	-386.26	40°10'31.225"N	104°42'45.346"W	1.84	
4084.00	11.210	250.320	4047.39	-146.34	-232.09	-401.86	40°10'31.166"N	104°42'45.547"W	0.62	
4169.00	11.860	249.530	4130.68	-148.84	-237.92	-417.82	40°10'31.109"N	104°42'45.753"W	0.79	
4254.00	10.750	248.410	4214.03	-151.56	-243.90	-433.38	40°10'31.050"N	104°42'45.953"W	1.33	
4340.00	10.380	247.200	4298.57	-154.44	-249.85	-447.98	40°10'30.991"N	104°42'46.141"W	0.50	
4425.00	10.320	251.430	4382.19	-156.85	-255.24	-462.26	40°10'30.938"N	104°42'46.325"W	0.90	
4510.00	11.370	249.940	4465.67	-159.00	-260.54	-477.34	40°10'30.885"N	104°42'46.519"W	1.28	
4595.00	11.280	248.740	4549.01	-161.62	-266.43	-492.96	40°10'30.827"N	104°42'46.721"W	0.30	
4680.00	10.810	243.940	4632.44	-165.00	-272.94	-507.87	40°10'30.763"N	104°42'46.913"W	1.21	
4766.00	11.030	245.350	4716.88	-168.86	-279.92	-522.59	40°10'30.694"N	104°42'47.102"W	0.40	
4851.00	11.650	248.460	4800.22	-172.17	-286.46	-537.97	40°10'30.629"N	104°42'47.300"W	1.02	
4936.00	10.210	252.950	4883.68	-174.36	-291.82	-553.15	40°10'30.576"N	104°42'47.496"W	1.97	
5022.00	10.630	250.100	4968.26	-176.22	-296.76	-567.90	40°10'30.527"N	104°42'47.686"W	0.77	
5107.00	10.210	255.170	5051.86	-177.77	-301.35	-582.55	40°10'30.482"N	104°42'47.875"W	1.19	
5192.00	11.040	255.160	5135.40	-178.65	-305.37	-597.70	40°10'30.442"N	104°42'48.070"W	0.98	
5277.00	11.150	250.370	5218.82	-180.25	-310.21	-613.31	40°10'30.394"N	104°42'48.271"W	1.09	
5363.00	11.010	245.880	5303.22	-183.18	-316.36	-628.64	40°10'30.334"N	104°42'48.468"W	1.02	
5448.00	11.390	245.190	5386.60	-186.85	-323.20	-643.66	40°10'30.266"N	104°42'48.662"W	0.47	
5533.00	11.660	252.580	5469.89	-189.64	-329.29	-659.48	40°10'30.206"N	104°42'48.866"W	1.76	
5618.00	10.430	253.480	5553.31	-191.16	-334.05	-675.05	40°10'30.159"N	104°42'49.066"W	1.46	
5704.00	9.230	249.740	5638.05	-192.86	-338.65	-688.99	40°10'30.113"N	104°42'49.246"W	1.58	
5789.00	9.310	248.020	5721.94	-195.12	-343.59	-701.76	40°10'30.065"N	104°42'49.410"W	0.34	
5874.00	10.220	246.030	5805.71	-197.97	-349.22	-715.02	40°10'30.009"N	104°42'49.581"W	1.14	
5959.00	9.230	251.850	5889.49	-200.35	-354.41	-728.39	40°10'29.958"N	104°42'49.754"W	1.64	
6044.00	8.910	253.340	5973.42	-201.71	-358.42	-741.18	40°10'29.918"N	104°42'49.918"W	0.47	
6130.00	9.740	251.960	6058.29	-203.10	-362.59	-754.47	40°10'29.877"N	104°42'50.090"W	1.00	
6215.00	11.050	251.860	6141.89	-204.83	-367.35	-769.05	40°10'29.830"N	104°42'50.277"W	1.54	
6300.00	11.180	250.550	6225.29	-206.88	-372.63	-784.56	40°10'29.778"N	104°42'50.477"W	0.33	
6385.00	11.380	251.430	6308.65	-209.01	-378.04	-800.28	40°10'29.724"N	104°42'50.680"W	0.31	
6470.00	10.920	248.040	6392.05	-211.47	-383.72	-815.70	40°10'29.668"N	104°42'50.878"W	0.94	
6555.00	9.750	245.210	6475.67	-214.55	-389.75	-829.70	40°10'29.608"N	104°42'51.059"W	1.50	
6641.00	10.020	243.020	6560.39	-218.19	-396.20	-842.98	40°10'29.545"N	104°42'51.230"W	0.54	
6726.00	8.400	239.810	6644.29	-222.13	-402.68	-854.94	40°10'29.481"N	104°42'51.384"W	2.00	
6813.00	6.800	258.350	6730.54	-224.15	-406.91	-865.47	40°10'29.439"N	104°42'51.520"W	3.34	
6855.00	8.140	287.740	6772.20	-222.70	-406.51	-870.74	40°10'29.443"N	104°42'51.587"W	9.51	
6899.00	10.220	310.500	6815.65	-218.08	-403.02	-876.68	40°10'29.477"N	104°42'51.664"W	9.42	
6941.00	13.140	323.070	6856.78	-210.82	-396.79	-882.39	40°10'29.539"N	104°42'51.737"W	9.18	
6984.00	15.870	332.570	6898.41	-200.75	-387.66	-888.03	40°10'29.629"N	104°42'51.810"W	8.40	
7026.00	18.460	341.690	6938.54	-188.61	-376.24	-892.77	40°10'29.742"N	104°42'51.871"W	8.88	
7069.00	21.560	348.260	6978.95	-173.94	-362.04	-896.52	40°10'29.882"N	104°42'51.919"W	8.90	
7111.00	24.900	354.380	7017.54	-157.43	-345.68	-898.95	40°10'30.044"N	104°42'51.951"W	9.80	
7154.00	28.510	355.910	7055.95	-138.24	-326.43	-900.57	40°10'30.234"N	104°42'51.972"W	8.55	
7196.00	32.800	356.970	7092.07	-117.05	-305.06	-901.89	40°10'30.445"N	104°42'51.989"W	10.29	
7239.00	36.570	358.140	7127.43	-92.90	-280.62	-902.92	40°10'30.687"N	104°42'52.002"W	8.90	



Actual Wellpath Report

CAMP FEDERAL 30C-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31)
Area	COLORADO	Well	CAMP FEDERAL 30C-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CAMP FEDERAL 30C-31HZ AWB
Facility	SEC.31-T3N-R65W		

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

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7281.00	41.640	0.030	7160.01	-66.89	-254.14	-903.32	40°10'30.948"N	104°42'52.007"W	12.40	
7325.00	45.650	359.880	7191.84	-37.14	-223.78	-903.35	40°10'31.248"N	104°42'52.007"W	9.12	
7367.00	49.710	0.740	7220.11	-6.77	-192.73	-903.17	40°10'31.555"N	104°42'52.005"W	9.78	
7410.00	54.570	1.770	7246.50	26.32	-158.80	-902.42	40°10'31.891"N	104°42'51.996"W	11.46	
7453.00	60.450	2.510	7269.58	61.53	-122.57	-901.06	40°10'32.249"N	104°42'51.978"W	13.75	
7495.00	65.810	2.350	7288.56	97.86	-85.15	-899.47	40°10'32.618"N	104°42'51.958"W	12.77	
7538.00	71.120	3.600	7304.34	136.55	-45.23	-897.39	40°10'33.013"N	104°42'51.931"W	12.64	
7580.00	72.500	3.400	7317.45	175.06	-5.40	-894.95	40°10'33.406"N	104°42'51.899"W	3.32	
7622.00	76.530	2.250	7328.66	214.25	35.02	-892.96	40°10'33.806"N	104°42'51.874"W	9.95	
7666.00	81.290	1.880	7337.12	256.19	78.16	-891.41	40°10'34.232"N	104°42'51.854"W	10.85	
7708.00	83.980	1.370	7342.50	296.73	119.79	-890.22	40°10'34.644"N	104°42'51.839"W	6.52	
7751.00	85.500	1.440	7346.45	338.45	162.59	-889.17	40°10'35.067"N	104°42'51.825"W	3.54	
7794.00	91.260	0.340	7347.66	380.39	205.55	-888.51	40°10'35.491"N	104°42'51.817"W	13.64	
7836.00	89.630	359.560	7347.34	421.53	247.55	-888.54	40°10'35.906"N	104°42'51.817"W	4.30	
7878.00	85.680	357.500	7349.05	462.83	289.49	-889.62	40°10'36.321"N	104°42'51.831"W	10.60	
7921.00	85.550	356.950	7352.34	505.19	332.31	-891.70	40°10'36.744"N	104°42'51.858"W	1.31	
7963.00	89.660	357.570	7354.10	546.64	374.22	-893.70	40°10'37.158"N	104°42'51.884"W	9.90	
7997.00†	90.574	357.691	7354.03	580.20	408.19	-895.11	40°10'37.494"N	104°42'51.902"W	2.71	7" Casing Point
8056.00	92.160	357.900	7352.62	638.39	467.13	-897.38	40°10'38.076"N	104°42'51.931"W	2.71	
8100.00	89.440	358.540	7352.01	681.73	511.10	-898.74	40°10'38.511"N	104°42'51.949"W	6.35	
8185.00	89.940	359.830	7352.47	765.22	596.09	-899.95	40°10'39.350"N	104°42'51.964"W	1.63	
8270.00	88.980	359.350	7353.27	848.59	681.08	-900.56	40°10'40.190"N	104°42'51.972"W	1.26	
8355.00	88.310	0.480	7355.28	931.84	766.05	-900.69	40°10'41.030"N	104°42'51.974"W	1.55	
8441.00	87.470	0.670	7358.44	1015.84	851.99	-899.82	40°10'41.879"N	104°42'51.963"W	1.00	
8526.00	88.340	359.830	7361.55	1098.97	936.93	-899.45	40°10'42.719"N	104°42'51.958"W	1.42	
8611.00	90.180	0.260	7362.65	1182.20	1021.92	-899.39	40°10'43.558"N	104°42'51.957"W	2.22	
8696.00	89.780	359.410	7362.68	1265.50	1106.92	-899.63	40°10'44.398"N	104°42'51.960"W	1.11	
8782.00	89.290	358.180	7363.38	1350.08	1192.89	-901.44	40°10'45.248"N	104°42'51.984"W	1.54	
8867.00	89.690	359.350	7364.13	1433.68	1277.87	-903.27	40°10'46.088"N	104°42'52.007"W	1.45	
8952.00	90.460	0.760	7364.02	1516.92	1362.87	-903.19	40°10'46.928"N	104°42'52.006"W	1.89	
9037.00	91.320	1.340	7362.70	1599.84	1447.84	-901.63	40°10'47.767"N	104°42'51.986"W	1.22	
9123.00	90.960	2.070	7360.99	1683.50	1533.78	-899.07	40°10'48.617"N	104°42'51.953"W	0.95	
9208.00	90.340	1.300	7360.03	1766.21	1618.74	-896.57	40°10'49.456"N	104°42'51.921"W	1.16	
9293.00	90.590	1.090	7359.34	1849.09	1703.72	-894.80	40°10'50.296"N	104°42'51.898"W	0.38	
9378.00	90.180	0.670	7358.76	1932.07	1788.71	-893.50	40°10'51.136"N	104°42'51.882"W	0.69	
9464.00	90.870	0.760	7357.98	2016.08	1874.70	-892.42	40°10'51.986"N	104°42'51.868"W	0.81	
9549.00	90.120	0.760	7357.24	2099.10	1959.69	-891.30	40°10'52.825"N	104°42'51.853"W	0.88	
9634.00	89.140	359.000	7357.79	2182.38	2044.68	-891.47	40°10'53.665"N	104°42'51.856"W	2.37	
9719.00	89.510	1.110	7358.79	2265.61	2129.67	-891.39	40°10'54.505"N	104°42'51.855"W	2.52	
9804.00	90.800	358.380	7358.56	2348.93	2214.66	-891.77	40°10'55.345"N	104°42'51.859"W	3.55	
9890.00	89.780	357.600	7358.13	2433.72	2300.60	-894.79	40°10'56.194"N	104°42'51.898"W	1.49	
9975.00	89.140	357.180	7358.93	2517.67	2385.51	-898.66	40°10'57.033"N	104°42'51.948"W	0.90	
10060.00	88.800	358.500	7360.46	2601.49	2470.43	-901.86	40°10'57.873"N	104°42'51.990"W	1.60	
10145.00	90.180	0.400	7361.21	2684.90	2555.42	-902.68	40°10'58.713"N	104°42'52.000"W	2.76	
10231.00	90.430	0.130	7360.75	2769.06	2641.42	-902.28	40°10'59.562"N	104°42'51.995"W	0.43	



Actual Wellpath Report

CAMP FEDERAL 30C-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31)
Area	COLORADO	Well	CAMP FEDERAL 30C-31HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CAMP FEDERAL 30C-31HZ AWB
Facility	SEC.31-T3N-R65W		

WELLPATH DATA (154 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10316.00	90.830	1.490	7359.82	2852.05	2726.40	-901.08	40°11'00.402"N	104°42'51.980"W	1.67	
10401.00	88.920	359.560	7360.01	2935.14	2811.39	-900.30	40°11'01.242"N	104°42'51.970"W	3.19	
10487.00	88.920	358.920	7361.63	3019.58	2897.37	-901.44	40°11'02.092"N	104°42'51.984"W	0.74	
10572.00	90.460	359.140	7362.09	3103.11	2982.35	-902.88	40°11'02.931"N	104°42'52.003"W	1.83	
10657.00	88.800	358.500	7362.64	3186.70	3067.33	-904.63	40°11'03.771"N	104°42'52.026"W	2.09	
10742.00	88.830	358.860	7364.39	3270.31	3152.29	-906.59	40°11'04.611"N	104°42'52.051"W	0.42	
10828.00	90.060	359.830	7365.23	3354.73	3238.27	-907.57	40°11'05.461"N	104°42'52.064"W	1.82	
10913.00	89.810	1.610	7365.32	3437.76	3323.26	-906.50	40°11'06.300"N	104°42'52.050"W	2.11	
10998.00	89.600	3.700	7365.76	3520.13	3408.17	-902.56	40°11'07.139"N	104°42'51.999"W	2.47	
11083.00	91.970	4.210	7364.60	3601.99	3492.95	-896.70	40°11'07.977"N	104°42'51.924"W	2.85	
11168.00	89.370	4.170	7363.60	3683.76	3577.71	-890.49	40°11'08.815"N	104°42'51.844"W	3.06	
11254.00	90.580	4.580	7363.64	3766.43	3663.46	-883.93	40°11'09.662"N	104°42'51.759"W	1.49	
11316.00	91.160	5.960	7362.70	3825.74	3725.19	-878.24	40°11'10.272"N	104°42'51.686"W	2.41	
11411.00	90.960	3.850	7360.94	3916.80	3819.82	-870.12	40°11'11.207"N	104°42'51.581"W	2.23	
11486.00	89.540	0.940	7360.61	3989.55	3894.74	-866.98	40°11'11.948"N	104°42'51.541"W	4.32	
11572.00	88.710	358.870	7361.93	4073.80	3980.73	-867.13	40°11'12.797"N	104°42'51.543"W	2.59	
11657.00	89.910	359.370	7362.95	4157.30	4065.71	-868.43	40°11'13.637"N	104°42'51.560"W	1.53	
11742.00	88.080	359.020	7364.44	4240.77	4150.68	-869.62	40°11'14.477"N	104°42'51.575"W	2.19	Last BHI MWD Survey
11825.00	88.080	359.020	7367.22	4322.30	4233.62	-871.04	40°11'15.297"N	104°42'51.593"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: CAMP FEDERAL 30C-31HZ AWB Ref Wellpath: CAMP FEDERAL 30C-31HZ 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	16.00	844.00	828.00	16.00	844.00	0.00	0.00	0.44	-1.03
9.625in Casing Surface	16.00	844.00	828.00	16.00	844.00	0.00	0.00	0.44	-1.03
8.75in Open Hole	844.00	8015.00	7171.00	844.00	7353.77	0.44	-1.03	426.17	-895.82
7in Casing Intermediate	16.00	7997.00	7981.00	16.00	7354.03	0.00	0.00	408.19	-895.11
6.125in Open Hole	7997.00	11825.00	3828.00	7354.03	7367.22	408.19	-895.11	4233.62	-871.04

WELLPATH COMPOSITION - Ref Wellbore: CAMP FEDERAL 30C-31HZ AWB Ref Wellpath: CAMP FEDERAL 30C-31HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	801.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <116-801>	CAMP FEDERAL 30C-31HZ AWB
801.00	7963.00	NaviTrak (Standard)	BHI MWD SURVEYS 8 3/4" HOLE <889-7963>	CAMP FEDERAL 30C-31HZ AWB
7963.00	11742.00	OnTrak (Standard)	BHI MWD SURVEYS 6 1/8" HOLE <8056-11742>	CAMP FEDERAL 30C-31HZ AWB
11742.00	11825.00	Blind Drilling (std)	Projection to bit	CAMP FEDERAL 30C-31HZ AWB



Actual Wellpath Report

CAMP FEDERAL 30C-31HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CAMP FEDERAL 30C-31HZ (460'FSL & 1292'FWL, SEC.31)
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Field	WELD COUNTY (KERR MCGEE)	Wellbore	CAMP FEDERAL 30C-31HZ AWB
Facility	SEC.31-T3N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	10.840	16.00	Tie-On
116.00	0.160	10.840	116.00	Begin GYRO Surveys
801.00	0.110	85.840	801.00	Tie-Into GYRO Surveys
889.00	0.280	322.480	889.00	Begin BHI MWD Surveys
7997.00	90.574	357.691	7354.03	7" Casing Point
11742.00	88.080	359.020	7364.44	Last BHI MWD Survey
11825.00	88.080	359.020	7367.22	Projection to Bit