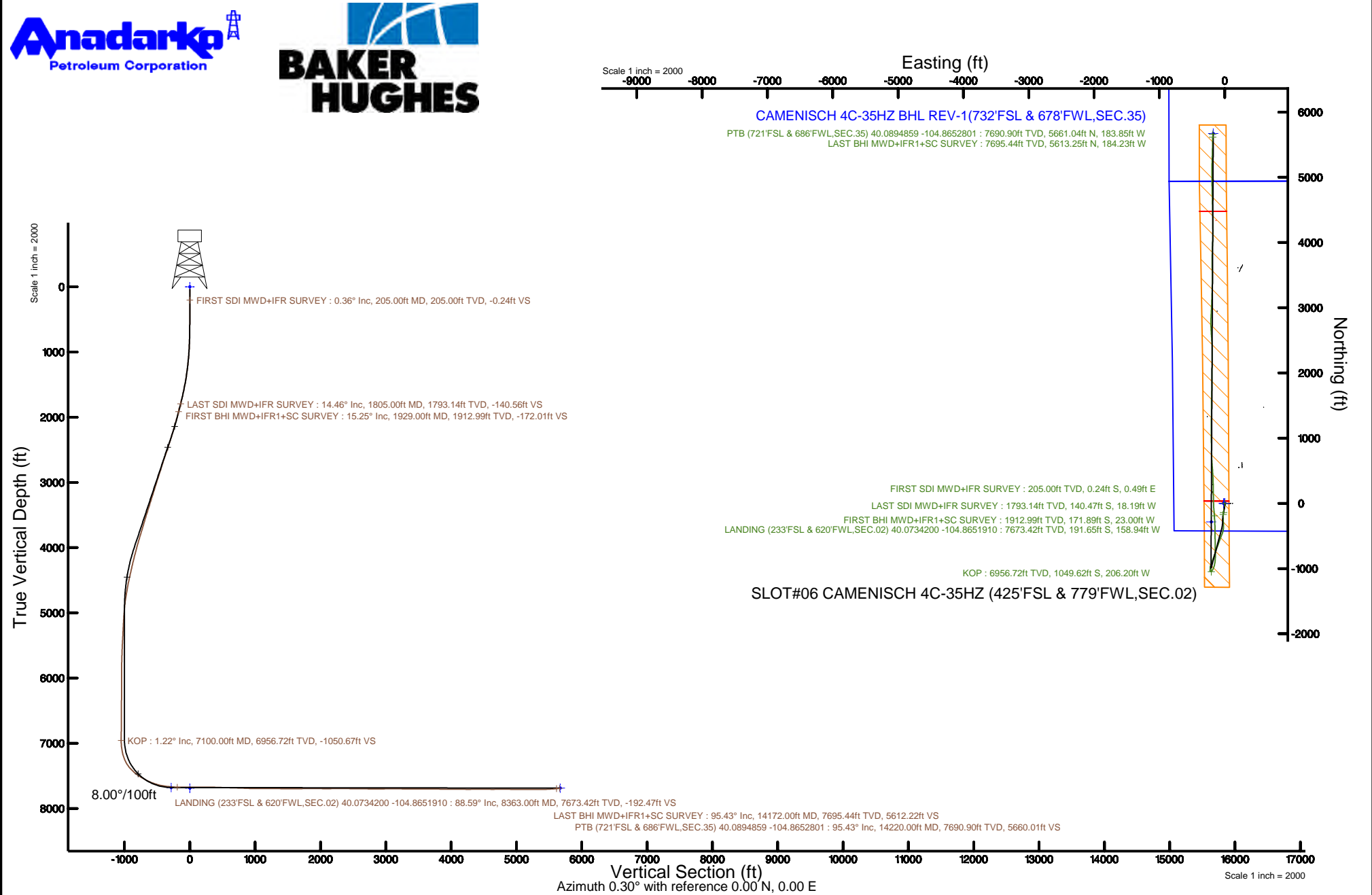


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)
Field: WELD COUNTY (UTM/TRUE NORTH) Well: CAMENISCH 4C-35HZ
Facility: SEC.02-T1N-R67W Wellbore: CAMENISCH 4C-35HZ PWB

Plot reference wellpath is CAMENISCH 4C-35HZ PWP Rev-B.0	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to NABORS X22 (32') (RT)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to NABORS X22 (32') (RT)	North Reference: True north
NABORS X22 (32') (RT) to Mean Sea Level: 5068 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2017-04-24
	Database: WA_DEN_Anadarko_Defn



Actual Wellpath Report

CAMENISCH 4C-35HZ AWP

Page 1 of 7

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)
Area	COLORADO	Well	CAMENISCH 4C-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CAMENISCH 4C-35HZ AWB
Facility	SEC.02-T1N-R67W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999602	Report Generated	4/24/2017 at 1:46 PM
Convergence at slot	0.09° East	Database/Source file	WA_DEN_Anadarko_Defn/CAMENISCH_4C-35HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-3595.56	-242.39	1678288.19	14553689.22	40°04'26.206"N	104°51'52.643"W
Facility Reference Pt			1678524.98	14557283.70	40°05'01.738"N	104°51'49.525"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	NABORS X22 (32') (RT) to Facility Vertical Datum	5068.00ft
Horizontal Reference Pt	Slot	NABORS X22 (32') (RT) to Mean Sea Level	5068.00ft
Vertical Reference Pt	NABORS X22 (32') (RT)	NABORS X22 (32') (RT) to Mud Line at Slot (SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02))	5068.00ft
MD Reference Pt	NABORS X22 (32') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	358.14°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)
Area	COLORADO	Well	CAMENISCH 4C-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CAMENISCH 4C-35HZ AWB
Facility	SEC.02-T1N-R67W		

WELLPATH DATA (155 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	116.250	0.00	0.00	0.00	0.00	1678288.19	14553689.22	40°04'26.206"N	104°51'52.643"W	0.00	
32.00	0.000	116.250	32.00	0.00	0.00	0.00	1678288.19	14553689.22	40°04'26.206"N	104°51'52.643"W	0.00	
205.00	0.360	116.250	205.00	-0.26	-0.24	0.49	1678288.67	14553688.98	40°04'26.204"N	104°51'52.637"W	0.21	FIRST SDI MWD+IFR SURVEY
335.00	0.170	121.770	335.00	-0.56	-0.52	1.02	1678289.21	14553688.70	40°04'26.201"N	104°51'52.630"W	0.15	
469.00	0.370	93.380	469.00	-0.70	-0.65	1.62	1678289.81	14553688.57	40°04'26.200"N	104°51'52.622"W	0.18	
557.00	0.430	115.760	556.99	-0.88	-0.81	2.20	1678290.39	14553688.41	40°04'26.198"N	104°51'52.615"W	0.19	
644.00	0.440	141.910	643.99	-1.30	-1.22	2.70	1678290.89	14553688.00	40°04'26.194"N	104°51'52.608"W	0.23	
733.00	1.250	150.830	732.98	-2.44	-2.33	3.38	1678291.57	14553686.89	40°04'26.183"N	104°51'52.599"W	0.92	
822.00	2.120	181.210	821.94	-4.95	-4.83	3.82	1678292.02	14553684.40	40°04'26.158"N	104°51'52.594"W	1.37	
910.00	2.680	179.480	909.87	-8.63	-8.51	3.81	1678292.01	14553680.71	40°04'26.122"N	104°51'52.594"W	0.64	
997.00	3.640	181.550	996.73	-13.42	-13.31	3.75	1678291.96	14553675.92	40°04'26.074"N	104°51'52.595"W	1.11	
1084.00	5.280	184.660	1083.47	-20.16	-20.06	3.35	1678291.57	14553669.17	40°04'26.008"N	104°51'52.600"W	1.90	
1170.00	5.710	189.020	1169.07	-28.29	-28.23	2.36	1678290.59	14553661.00	40°04'25.927"N	104°51'52.613"W	0.70	
1257.00	7.230	191.410	1255.51	-37.87	-37.87	0.60	1678288.84	14553651.36	40°04'25.832"N	104°51'52.635"W	1.77	
1344.00	8.810	191.220	1341.66	-49.69	-49.77	-1.78	1678286.48	14553639.46	40°04'25.714"N	104°51'52.666"W	1.82	
1433.00	9.760	189.310	1429.49	-63.73	-63.90	-4.33	1678283.96	14553625.34	40°04'25.575"N	104°51'52.699"W	1.12	
1521.00	10.670	191.690	1516.10	-78.96	-79.24	-7.19	1678281.12	14553610.00	40°04'25.423"N	104°51'52.735"W	1.14	
1610.00	11.840	190.440	1603.39	-95.90	-96.29	-10.51	1678277.83	14553592.95	40°04'25.254"N	104°51'52.778"W	1.34	
1697.00	13.070	189.840	1688.34	-114.25	-114.76	-13.81	1678274.56	14553574.48	40°04'25.072"N	104°51'52.821"W	1.42	
1781.00	14.570	189.540	1769.90	-133.91	-134.54	-17.18	1678271.21	14553554.71	40°04'24.876"N	104°51'52.864"W	1.79	
1805.00	14.460	189.620	1793.14	-139.80	-140.47	-18.19	1678270.22	14553548.78	40°04'24.818"N	104°51'52.877"W	0.47	LAST SDI MWD+IFR SURVEY
1929.00	15.250	187.860	1912.99	-171.05	-171.89	-23.00	1678265.46	14553517.36	40°04'24.507"N	104°51'52.939"W	0.73	FIRST BHI MWD+IFR1+SC SURVEY
2022.00	15.140	181.660	2002.75	-195.23	-196.15	-25.03	1678263.47	14553493.11	40°04'24.268"N	104°51'52.965"W	1.75	
2117.00	16.020	174.290	2094.26	-220.69	-221.59	-24.08	1678264.45	14553467.68	40°04'24.016"N	104°51'52.953"W	2.28	
2211.00	16.200	179.240	2184.58	-246.75	-247.61	-22.62	1678265.95	14553441.67	40°04'23.759"N	104°51'52.934"W	1.47	
2304.00	16.560	177.480	2273.80	-272.97	-273.83	-21.86	1678266.75	14553415.47	40°04'23.500"N	104°51'52.924"W	0.66	
2397.00	17.980	176.910	2362.61	-300.58	-301.40	-20.51	1678268.15	14553387.91	40°04'23.228"N	104°51'52.907"W	1.54	
2492.00	17.590	176.280	2453.07	-329.58	-330.37	-18.78	1678269.91	14553358.96	40°04'22.941"N	104°51'52.885"W	0.46	
2585.00	19.040	182.020	2541.36	-358.77	-359.55	-18.41	1678270.33	14553329.78	40°04'22.653"N	104°51'52.880"W	2.49	
2677.00	19.270	186.450	2628.27	-388.76	-389.64	-20.64	1678268.15	14553299.71	40°04'22.356"N	104°51'52.909"W	1.60	
2771.00	17.660	192.670	2717.44	-417.92	-418.97	-25.51	1678263.32	14553270.38	40°04'22.066"N	104°51'52.971"W	2.70	
2865.00	18.000	197.430	2806.93	-445.43	-446.73	-32.99	1678255.89	14553242.61	40°04'21.791"N	104°51'53.067"W	1.59	
2959.00	19.250	201.120	2896.01	-473.40	-475.05	-42.93	1678246.00	14553214.29	40°04'21.511"N	104°51'53.195"W	1.83	
3053.00	18.980	201.020	2984.82	-501.75	-503.77	-53.99	1678234.98	14553185.57	40°04'21.228"N	104°51'53.338"W	0.29	
3148.00	18.600	200.220	3074.76	-530.03	-532.41	-64.77	1678224.25	14553156.92	40°04'20.945"N	104°51'53.476"W	0.48	
3242.00	17.880	200.200	3164.04	-557.29	-560.02	-74.93	1678214.13	14553129.31	40°04'20.672"N	104°51'53.607"W	0.77	
3337.00	18.820	200.040	3254.21	-585.03	-588.10	-85.22	1678203.89	14553101.22	40°04'20.394"N	104°51'53.739"W	0.99	
3430.00	17.830	199.310	3342.49	-612.22	-615.63	-95.07	1678194.09	14553073.69	40°04'20.122"N	104°51'53.866"W	1.09	
3524.00	19.090	201.390	3431.65	-639.77	-643.53	-105.44	1678183.77	14553045.79	40°04'19.847"N	104°51'53.999"W	1.51	
3618.00	17.690	201.080	3520.85	-667.04	-671.17	-116.18	1678173.08	14553018.14	40°04'19.573"N	104°51'54.137"W	1.49	
3711.00	17.080	198.160	3609.60	-692.89	-697.33	-125.52	1678163.78	14552991.98	40°04'19.315"N	104°51'54.258"W	1.14	
3804.00	17.370	198.190	3698.43	-718.76	-723.50	-134.11	1678155.23	14552965.81	40°04'19.056"N	104°51'54.368"W	0.31	
3898.00	18.250	199.350	3787.92	-745.67	-750.71	-143.37	1678146.02	14552938.59	40°04'18.787"N	104°51'54.487"W	1.01	
3992.00	17.260	199.240	3877.45	-772.40	-777.77	-152.84	1678136.59	14552911.53	40°04'18.520"N	104°51'54.609"W	1.05	
4086.00	15.510	198.080	3967.63	-797.22	-802.88	-161.33	1678128.14	14552886.41	40°04'18.272"N	104°51'54.718"W	1.89	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)
Area	COLORADO	Well	CAMENISCH 4C-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CAMENISCH 4C-35HZ AWB
Facility	SEC.02-T1N-R67W		

WELLPATH DATA (155 stations) † = interpolated/extrapolated station												Comments
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	
4179.00	16.220	199.540	4057.08	-821.01	-826.95	-169.54	1678119.98	14552862.35	40°04'18.034"N	104°51'54.824"W	0.88	
4273.00	15.080	199.370	4147.60	-844.63	-850.86	-177.98	1678111.57	14552838.43	40°04'17.798"N	104°51'54.932"W	1.21	
4367.00	13.910	199.720	4238.60	-866.53	-873.03	-185.85	1678103.74	14552816.26	40°04'17.579"N	104°51'55.034"W	1.25	
4461.00	13.430	200.370	4329.94	-887.15	-893.90	-193.46	1678096.16	14552795.38	40°04'17.372"N	104°51'55.132"W	0.54	
4555.00	13.420	201.980	4421.37	-907.23	-914.25	-201.35	1678088.31	14552775.03	40°04'17.171"N	104°51'55.233"W	0.40	
4648.00	12.690	200.810	4511.97	-926.53	-933.80	-209.02	1678080.68	14552755.47	40°04'16.978"N	104°51'55.332"W	0.83	
4742.00	11.340	197.350	4603.91	-944.78	-952.28	-215.44	1678074.28	14552737.00	40°04'16.795"N	104°51'55.414"W	1.63	
4836.00	10.010	196.340	4696.28	-961.27	-968.94	-220.49	1678069.25	14552720.33	40°04'16.631"N	104°51'55.479"W	1.43	
4930.00	8.280	185.300	4789.09	-975.75	-983.52	-223.42	1678066.35	14552705.75	40°04'16.487"N	104°51'55.517"W	2.61	
5023.00	6.120	175.720	4881.35	-987.35	-995.13	-223.67	1678066.12	14552694.14	40°04'16.372"N	104°51'55.520"W	2.65	
5117.00	4.140	169.870	4974.97	-995.71	-1003.47	-222.70	1678067.11	14552685.81	40°04'16.290"N	104°51'55.508"W	2.18	
5211.00	3.520	177.650	5068.76	-1001.96	-1009.69	-221.98	1678067.83	14552679.59	40°04'16.228"N	104°51'55.498"W	0.86	
5305.00	3.180	189.050	5162.60	-1007.40	-1015.15	-222.27	1678067.55	14552674.14	40°04'16.174"N	104°51'55.502"W	0.79	
5423.00	3.000	196.920	5280.43	-1013.54	-1021.34	-223.69	1678066.14	14552667.95	40°04'16.113"N	104°51'55.520"W	0.39	
5518.00	3.130	202.970	5375.30	-1018.25	-1026.10	-225.42	1678064.42	14552663.18	40°04'16.066"N	104°51'55.543"W	0.37	
5611.00	3.240	179.590	5468.16	-1023.18	-1031.07	-226.39	1678063.45	14552658.22	40°04'16.017"N	104°51'55.555"W	1.39	
5706.00	2.680	138.040	5563.04	-1027.56	-1035.41	-224.89	1678064.96	14552653.88	40°04'15.974"N	104°51'55.536"W	2.28	
5800.00	2.500	135.190	5656.94	-1030.74	-1038.50	-221.98	1678067.88	14552650.80	40°04'15.943"N	104°51'55.498"W	0.24	
5893.00	2.180	140.270	5749.87	-1033.62	-1041.29	-219.42	1678070.44	14552648.01	40°04'15.916"N	104°51'55.465"W	0.41	
5987.00	1.290	107.770	5843.82	-1035.39	-1042.99	-217.27	1678072.60	14552646.31	40°04'15.899"N	104°51'55.438"W	1.38	
6081.00	0.980	95.240	5937.80	-1035.85	-1043.39	-215.46	1678074.40	14552645.92	40°04'15.895"N	104°51'55.414"W	0.42	
6175.00	0.810	111.820	6031.79	-1036.21	-1043.71	-214.04	1678075.82	14552645.60	40°04'15.892"N	104°51'55.396"W	0.33	
6270.00	0.800	109.280	6126.78	-1036.72	-1044.18	-212.79	1678077.07	14552645.14	40°04'15.887"N	104°51'55.380"W	0.04	
6363.00	0.650	115.940	6219.78	-1037.20	-1044.62	-211.70	1678078.16	14552644.69	40°04'15.883"N	104°51'55.366"W	0.18	
6457.00	0.340	118.760	6313.77	-1037.59	-1044.99	-210.98	1678078.88	14552644.33	40°04'15.879"N	104°51'55.357"W	0.33	
6552.00	0.210	161.280	6408.77	-1037.90	-1045.29	-210.68	1678079.18	14552644.03	40°04'15.876"N	104°51'55.353"W	0.25	
6646.00	0.220	154.860	6502.77	-1038.23	-1045.62	-210.54	1678079.32	14552643.70	40°04'15.873"N	104°51'55.351"W	0.03	
6740.00	0.460	134.790	6596.77	-1038.67	-1046.05	-210.20	1678079.66	14552643.27	40°04'15.869"N	104°51'55.347"W	0.28	
6834.00	0.790	138.470	6690.76	-1039.45	-1046.80	-209.50	1678080.36	14552642.52	40°04'15.861"N	104°51'55.338"W	0.35	
6929.00	1.030	142.560	6785.75	-1040.64	-1047.97	-208.55	1678081.32	14552641.36	40°04'15.850"N	104°51'55.326"W	0.26	
7023.00	1.050	138.570	6879.74	-1042.00	-1049.28	-207.47	1678082.40	14552640.04	40°04'15.837"N	104°51'55.312"W	0.08	
7100.00†	1.216	76.417	6956.72	-1042.37	-1049.62	-206.20	1678083.66	14552639.71	40°04'15.833"N	104°51'55.295"W	1.53	KOP
7116.00	1.380	68.380	6972.72	-1042.27	-1049.51	-205.86	1678084.01	14552639.82	40°04'15.835"N	104°51'55.291"W	1.53	
7207.00	7.740	33.270	7063.39	-1036.89	-1043.98	-201.48	1678088.38	14552645.35	40°04'15.889"N	104°51'55.235"W	7.32	
7300.00	15.600	31.730	7154.40	-1021.32	-1028.08	-191.45	1678098.38	14552661.26	40°04'16.046"N	104°51'55.106"W	8.46	
7392.00	24.140	28.700	7240.85	-994.77	-1001.00	-175.88	1678113.90	14552688.35	40°04'16.314"N	104°51'54.905"W	9.35	
7485.00	33.010	13.300	7322.55	-953.81	-959.53	-160.87	1678128.84	14552729.83	40°04'16.724"N	104°51'54.712"W	12.33	
7577.00	44.140	9.110	7394.37	-897.98	-903.33	-149.99	1678139.63	14552786.02	40°04'17.279"N	104°51'54.572"W	12.42	
7667.00	49.200	1.120	7456.16	-833.10	-838.23	-144.36	1678145.16	14552851.11	40°04'17.922"N	104°51'54.500"W	8.55	
7760.00	58.030	358.990	7511.28	-758.35	-763.44	-144.37	1678145.04	14552925.86	40°04'18.662"N	104°51'54.500"W	9.67	
7851.00	62.000	359.590	7556.75	-679.56	-684.64	-145.33	1678143.95	14553004.63	40°04'19.440"N	104°51'54.512"W	4.40	
7944.00	67.260	358.760	7596.58	-595.58	-600.65	-146.56	1678142.60	14553088.59	40°04'20.270"N	104°51'54.528"W	5.71	
8038.00	73.000	358.630	7628.52	-507.21	-512.31	-148.57	1678140.45	14553176.89	40°04'21.143"N	104°51'54.554"W	6.11	
8132.00	79.680	359.890	7650.71	-415.94	-421.03	-149.74	1678139.15	14553268.13	40°04'22.045"N	104°51'54.569"W	7.22	
8227.00	83.400	358.190	7664.68	-322.01	-327.09	-151.32	1678137.43	14553362.03	40°04'22.974"N	104°51'54.589"W	4.30	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)
Area	COLORADO	Well	CAMENISCH 4C-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CAMENISCH 4C-35HZ AWB
Facility	SEC.02-T1N-R67W		

WELLPATH DATA (155 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8321.00	87.630	356.110	7672.03	-228.34	-233.52	-155.98	1678132.63	14553455.55	40°04'23.898"N	104°51'54.649"W	5.01	
8363.00†	88.591	355.806	7673.42	-186.39	-191.65	-158.94	1678129.60	14553497.40	40°04'24.312"N	104°51'54.687"W	2.40	LANDING (233'FSL & 620'FWL,SEC.02) 40.0734200 -104.8651910
8415.00	89.780	355.430	7674.16	-134.45	-139.81	-162.91	1678125.55	14553549.22	40°04'24.824"N	104°51'54.739"W	2.40	
8509.00	90.310	357.130	7674.08	-40.50	-46.01	-169.01	1678119.32	14553642.97	40°04'25.751"N	104°51'54.817"W	1.89	
8602.00	90.310	358.530	7673.58	52.49	46.92	-172.53	1678115.65	14553735.85	40°04'26.670"N	104°51'54.862"W	1.51	
8696.00	90.400	358.660	7673.00	146.49	140.89	-174.84	1678113.21	14553829.78	40°04'27.598"N	104°51'54.892"W	0.17	
8790.00	88.800	359.350	7673.65	240.47	234.87	-176.47	1678111.43	14553923.72	40°04'28.527"N	104°51'54.913"W	1.85	
8883.00	90.030	358.460	7674.60	333.46	327.84	-178.25	1678109.51	14554016.66	40°04'29.446"N	104°51'54.936"W	1.63	
8977.00	87.600	356.890	7676.55	427.42	421.74	-182.06	1678105.56	14554110.51	40°04'30.374"N	104°51'54.985"W	3.08	
9070.00	89.140	356.410	7679.19	520.35	514.54	-187.49	1678099.99	14554203.26	40°04'31.291"N	104°51'55.055"W	1.73	
9164.00	87.600	355.580	7681.86	614.24	608.27	-194.05	1678093.29	14554296.94	40°04'32.217"N	104°51'55.139"W	1.86	
9258.00	88.770	358.490	7684.84	708.17	702.08	-198.91	1678088.29	14554390.71	40°04'33.144"N	104°51'55.202"W	3.34	
9351.00	88.000	357.770	7687.46	801.13	794.99	-201.94	1678085.12	14554483.58	40°04'34.062"N	104°51'55.241"W	1.13	
9446.00	87.530	359.670	7691.17	896.05	889.89	-204.06	1678082.85	14554578.44	40°04'35.000"N	104°51'55.268"W	2.06	
9540.00	89.380	359.900	7693.70	989.97	983.85	-204.42	1678082.36	14554672.36	40°04'35.929"N	104°51'55.273"W	1.98	
9634.00	91.170	359.600	7693.25	1083.93	1077.85	-204.83	1678081.80	14554766.32	40°04'36.857"N	104°51'55.278"W	1.93	
9728.00	88.610	358.930	7693.43	1177.90	1171.83	-206.03	1678080.46	14554860.26	40°04'37.786"N	104°51'55.293"W	2.82	
9822.00	90.220	2.030	7694.39	1271.80	1265.81	-205.24	1678081.10	14554954.21	40°04'38.715"N	104°51'55.283"W	3.72	
9915.00	89.170	0.390	7694.89	1364.66	1358.78	-203.28	1678082.92	14555047.14	40°04'39.634"N	104°51'55.258"W	2.09	
10009.00	88.370	359.370	7696.90	1458.60	1452.76	-203.48	1678082.58	14555141.08	40°04'40.562"N	104°51'55.261"W	1.38	
10103.00	89.660	1.630	7698.52	1552.50	1546.73	-202.66	1678083.26	14555235.02	40°04'41.491"N	104°51'55.250"W	2.77	
10197.00	91.420	1.800	7697.64	1646.30	1640.68	-199.84	1678085.93	14555328.94	40°04'42.420"N	104°51'55.214"W	1.88	
10290.00	91.700	1.250	7695.10	1739.11	1733.61	-197.37	1678088.26	14555421.84	40°04'43.338"N	104°51'55.182"W	0.66	
10384.00	90.550	359.420	7693.26	1833.01	1827.59	-196.82	1678088.67	14555515.77	40°04'44.267"N	104°51'55.175"W	2.30	
10478.00	89.450	359.810	7693.26	1926.98	1921.59	-197.45	1678087.89	14555609.73	40°04'45.195"N	104°51'55.183"W	1.24	
10572.00	88.330	1.970	7695.08	2020.85	2015.55	-195.99	1678089.21	14555703.66	40°04'46.124"N	104°51'55.164"W	2.59	
10666.00	90.550	1.410	7696.00	2114.66	2109.50	-193.22	1678091.84	14555797.57	40°04'47.052"N	104°51'55.129"W	2.44	
10760.00	90.930	0.320	7694.78	2208.54	2203.48	-191.80	1678093.11	14555891.52	40°04'47.981"N	104°51'55.110"W	1.23	
10854.00	90.030	0.350	7694.00	2302.47	2297.47	-191.25	1678093.52	14555985.48	40°04'48.910"N	104°51'55.103"W	0.96	
10948.00	89.260	358.450	7694.58	2396.44	2391.46	-192.24	1678092.39	14556079.42	40°04'49.839"N	104°51'55.116"W	2.18	
11042.00	88.340	355.830	7696.55	2490.40	2485.31	-196.93	1678087.56	14556173.23	40°04'50.766"N	104°51'55.176"W	2.95	
11136.00	90.460	356.200	7697.53	2584.32	2579.08	-203.46	1678080.89	14556266.95	40°04'51.693"N	104°51'55.260"W	2.29	
11231.00	89.110	356.870	7697.89	2679.28	2673.90	-209.20	1678075.01	14556361.72	40°04'52.630"N	104°51'55.334"W	1.59	
11325.00	88.980	359.510	7699.46	2773.26	2767.83	-212.17	1678071.90	14556455.61	40°04'53.558"N	104°51'55.373"W	2.81	
11419.00	89.600	2.910	7700.62	2867.10	2861.79	-210.18	1678073.74	14556549.54	40°04'54.487"N	104°51'55.347"W	3.68	
11513.00	91.760	3.300	7699.50	2960.74	2955.64	-205.09	1678078.68	14556643.36	40°04'55.414"N	104°51'55.282"W	2.34	
11607.00	89.450	2.310	7698.51	3054.41	3049.51	-200.49	1678083.14	14556737.20	40°04'56.342"N	104°51'55.222"W	2.67	
11701.00	91.110	1.960	7698.05	3148.18	3143.44	-196.99	1678086.50	14556831.10	40°04'57.270"N	104°51'55.177"W	1.80	
11795.00	88.310	1.640	7698.53	3241.98	3237.38	-194.04	1678089.30	14556925.01	40°04'58.198"N	104°51'55.139"W	3.00	
11889.00	89.630	1.620	7700.22	3335.79	3331.33	-191.36	1678091.83	14557018.92	40°04'59.127"N	104°51'55.105"W	1.40	
11983.00	89.110	359.740	7701.25	3429.68	3425.31	-190.25	1678092.81	14557112.87	40°05'00.056"N	104°51'55.091"W	2.07	
12077.00	91.200	359.820	7701.00	3523.64	3519.31	-190.61	1678092.30	14557206.82	40°05'00.984"N	104°51'55.095"W	2.23	
12171.00	88.890	359.560	7700.92	3617.60	3613.30	-191.12	1678091.65	14557300.77	40°05'01.913"N	104°51'55.102"W	2.47	
12265.00	90.520	359.440	7701.41	3711.57	3707.29	-191.94	1678090.69	14557394.73	40°05'02.842"N	104°51'55.112"W	1.74	
12360.00	89.290	1.020	7701.57	3806.50	3802.28	-191.56	1678090.93	14557489.68	40°05'03.781"N	104°51'55.107"W	2.11	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)
Area	COLORADO	Well	CAMENISCH 4C-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CAMENISCH 4C-35HZ AWB
Facility	SEC.02-T1N-R67W		

WELLPATH DATA (155 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12454.00	88.300	1.890	7703.54	3900.32	3896.23	-189.17	1678093.17	14557583.60	40°05'04.709"N	104°51'55.077"W	1.40	
12548.00	90.060	2.300	7704.89	3994.08	3990.16	-185.74	1678096.46	14557677.49	40°05'05.637"N	104°51'55.033"W	1.92	
12642.00	90.520	1.830	7704.41	4087.86	4084.09	-182.35	1678099.70	14557771.39	40°05'06.566"N	104°51'54.989"W	0.70	
12736.00	88.950	359.930	7704.85	4181.74	4178.07	-180.90	1678101.00	14557865.34	40°05'07.494"N	104°51'54.970"W	2.62	
12830.00	90.190	359.080	7705.55	4275.71	4272.06	-181.72	1678100.05	14557959.29	40°05'08.423"N	104°51'54.981"W	1.60	
12923.00	91.690	358.610	7704.03	4368.69	4365.03	-183.59	1678098.03	14558052.22	40°05'09.342"N	104°51'55.005"W	1.69	
13016.00	89.690	359.680	7702.91	4461.66	4458.01	-184.98	1678096.50	14558145.15	40°05'10.261"N	104°51'55.023"W	2.44	
13110.00	88.460	358.320	7704.42	4555.64	4551.98	-186.62	1678094.72	14558239.08	40°05'11.189"N	104°51'55.044"W	1.95	
13204.00	90.310	358.500	7705.43	4649.62	4645.93	-189.23	1678091.97	14558332.99	40°05'12.118"N	104°51'55.078"W	1.98	
13298.00	90.680	358.860	7704.62	4743.62	4739.90	-191.39	1678089.67	14558426.92	40°05'13.047"N	104°51'55.105"W	0.55	
13392.00	89.450	358.480	7704.51	4837.61	4833.87	-193.57	1678087.34	14558520.86	40°05'13.975"N	104°51'55.134"W	1.37	
13487.00	88.580	358.750	7706.15	4932.59	4928.83	-195.87	1678084.90	14558615.77	40°05'14.914"N	104°51'55.163"W	0.96	
13580.00	89.350	0.050	7707.83	5025.55	5021.81	-196.84	1678083.79	14558708.71	40°05'15.832"N	104°51'55.176"W	1.62	
13675.00	91.140	0.450	7707.42	5120.48	5116.80	-196.43	1678084.06	14558803.67	40°05'16.771"N	104°51'55.170"W	1.93	
13768.00	89.170	2.190	7707.17	5213.33	5209.77	-194.29	1678086.06	14558896.60	40°05'17.690"N	104°51'55.143"W	2.83	
13863.00	90.090	1.280	7707.78	5308.14	5304.72	-191.41	1678088.79	14558991.52	40°05'18.628"N	104°51'55.106"W	1.36	
13957.00	90.740	1.850	7707.10	5401.97	5398.68	-188.84	1678091.21	14559085.45	40°05'19.557"N	104°51'55.073"W	0.92	
14051.00	92.840	1.400	7704.17	5495.74	5492.59	-186.18	1678093.73	14559179.32	40°05'20.485"N	104°51'55.038"W	2.28	
14172.00	95.430	0.450	7695.44	5616.27	5613.25	-184.23	1678095.50	14559299.94	40°05'21.677"N	104°51'55.013"W	2.28	LAST BHI MWD+IFR1+SC SURVEY
14220.00	95.430	0.450	7690.90	5664.02	5661.04	-183.85	1678095.80	14559347.70	40°05'22.149"N	104°51'55.009"W	0.00	PTB (721'FSL & 686'FWL,SEC.35) 40.0894859 -104.8652801

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.02-T1N-R67W	0.00	0.30	-15.08	1678273.11	14553689.50	40°04'26.209"N	104°51'52.837"W	polygon
SEC.35-T2N-R67W	0.00	0.30	-15.08	1678273.11	14553689.50	40°04'26.209"N	104°51'52.837"W	polygon
CAMENISCH 4C-35HZ HEEL REV-1(140'FSL & 570'FWL,SEC.02)	7679.00	-283.82	-206.52	1678082.18	14553405.19	40°04'23.401"N	104°51'55.300"W	point
CAMENISCH 4C-35HZ 460' SETBACK 1	7688.00	0.00	0.00	1678288.19	14553689.22	40°04'26.206"N	104°51'52.643"W	polygon
CAMENISCH 4C-35HZ 460' SETBACK 2	7688.00	0.00	0.00	1678288.19	14553689.22	40°04'26.206"N	104°51'52.643"W	polygon
CAMENISCH 4C-35HZ BHL REV-1(732'FSL & 678'FWL,SEC.35)	7688.00	5671.99	-175.70	1678103.94	14559358.66	40°05'22.258"N	104°51'54.904"W	point
CAMENISCH 4C-35HZ LANDBOX	7688.00	0.00	0.00	1678288.19	14553689.22	40°04'26.206"N	104°51'52.643"W	polygon

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)
Area	COLORADO	Well	CAMENISCH 4C-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CAMENISCH 4C-35HZ AWB
Facility	SEC.02-T1N-R67W		

WELLPATH COMPOSITION - Ref Wellbore: CAMENISCH 4C-35HZ AWB			Ref Wellpath: CAMENISCH 4C-35HZ AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.00	1805.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	SDI Custom APC ISCWSA Rev-2 MWD+IFR1 <205 - 1805>	CAMENISCH 4C-35HZ AWB
1805.00	14172.00	Custom APC ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHI Custom APC ISCWSA Rev-2 MWD+IFR1+SC <1929 - 14172>	CAMENISCH 4C-35HZ AWB
14172.00	14220.00	Blind Drilling (std)	Projection to bit	CAMENISCH 4C-35HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#06 CAMENISCH 4C-35HZ (425'FSL & 779'FWL,SEC.02)
Area	COLORADO	Well	CAMENISCH 4C-35HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CAMENISCH 4C-35HZ AWB
Facility	SEC.02-T1N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
205.00	0.360	116.250	205.00	FIRST SDI MWD+IFR SURVEY
1805.00	14.460	189.620	1793.14	LAST SDI MWD+IFR SURVEY
1929.00	15.250	187.860	1912.99	FIRST BHI MWD+IFR1+SC SURVEY
7100.00	1.216	76.417	6956.72	KOP
8363.00	88.591	355.806	7673.42	LANDING (233'FSL & 620'FWL,SEC.02) 40.0734200 -104.8651910
14172.00	95.430	0.450	7695.44	LAST BHI MWD+IFR1+SC SURVEY
14220.00	95.430	0.450	7690.90	PTB (721'FSL & 686'FWL,SEC.35) 40.0894859 -104.8652801