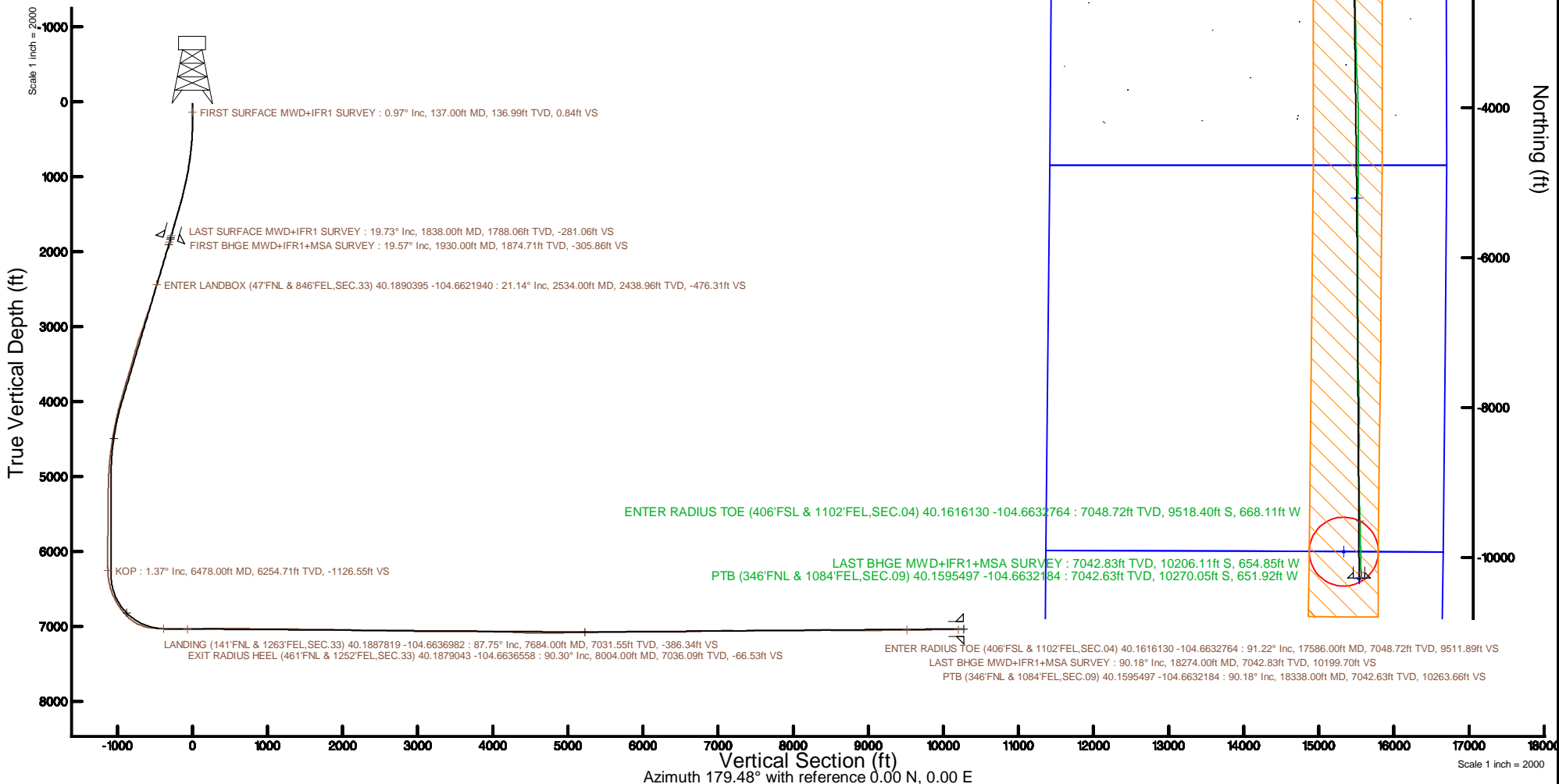


# KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33)  
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: CANNON 2N-9HZ  
 Facility: SEC.33-T3N-R65W Wellbore: CANNON 2N-9HZ PWB

Plot reference wellpath is CANNON 2N-9HZ PWP Rev-A.0	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to PD 564 (26) (RT)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to PD 564 (26) (RT)	North Reference: True north
PD 564 (26) (RT) to Mean Sea Level: 4862 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2017-10-17
	Database: WA_DEN_Anadarko_Defn



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWB
Facility	SEC.33-T3N-R65W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999610	Report Generated	10/17/2017 at 1:42 PM
Convergence at slot	0.22° East	Database/Source file	WA_DEN_Anadarko_Defn/CANNON_2N-9HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	1439.44	1624.37	1735125.33	14595279.57	40°11'15.868"N	104°39'39.190"W
Facility Reference Pt			1733507.01	14593834.61	40°11'01.644"N	104°40'00.120"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PD 564 (26') (RT) to Facility Vertical Datum	4862.00ft
Horizontal Reference Pt	Slot	PD 564 (26') (RT) to Mean Sea Level	4862.00ft
Vertical Reference Pt	PD 564 (26') (RT)	PD 564 (26') (RT) to Mud Line at Slot (SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33))	4862.00ft
MD Reference Pt	PD 564 (26') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.48°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520°FNL & 477°FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (245 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	153.410	0.00	0.00	0.00	0.00	1735125.33	14595279.57	40°11'15.868"N	104°39'39.190"W	0.00	
26.00	0.000	153.410	26.00	0.00	0.00	0.00	1735125.33	14595279.57	40°11'15.868"N	104°39'39.190"W	0.00	
137.00	0.970	153.410	136.99	0.84	-0.84	0.42	1735125.75	14595278.73	40°11'15.860"N	104°39'39.185"W	0.87	FIRST SURFACE MWD+IFR1 SURVEY
169.00	0.660	140.490	168.99	1.23	-1.22	0.66	1735125.99	14595278.35	40°11'15.856"N	104°39'39.182"W	1.12	
200.00	0.350	179.520	199.99	1.46	-1.46	0.77	1735126.11	14595278.12	40°11'15.854"N	104°39'39.180"W	1.44	
232.00	0.180	247.370	231.99	1.58	-1.57	0.73	1735126.06	14595278.00	40°11'15.852"N	104°39'39.181"W	1.02	
264.00	0.480	301.070	263.99	1.53	-1.52	0.57	1735125.90	14595278.05	40°11'15.853"N	104°39'39.183"W	1.25	
296.00	1.050	355.030	295.99	1.17	-1.16	0.43	1735125.76	14595278.41	40°11'15.857"N	104°39'39.185"W	2.69	
327.00	1.670	346.680	326.98	0.44	-0.44	0.30	1735125.63	14595279.13	40°11'15.864"N	104°39'39.186"W	2.09	
359.00	1.800	353.360	358.96	-0.51	0.51	0.13	1735125.46	14595280.08	40°11'15.873"N	104°39'39.188"W	0.75	
391.00	2.150	337.980	390.94	-1.57	1.57	-0.15	1735125.17	14595281.14	40°11'15.883"N	104°39'39.192"W	1.98	
422.00	3.080	330.160	421.91	-2.84	2.83	-0.78	1735124.53	14595282.40	40°11'15.896"N	104°39'39.200"W	3.21	
454.00	3.250	331.570	453.86	-4.39	4.37	-1.64	1735123.67	14595283.94	40°11'15.911"N	104°39'39.211"W	0.58	
486.00	3.690	328.140	485.80	-6.07	6.05	-2.62	1735122.69	14595285.60	40°11'15.928"N	104°39'39.224"W	1.52	
518.00	4.790	329.630	517.72	-8.11	8.07	-3.84	1735121.46	14595287.63	40°11'15.948"N	104°39'39.239"W	3.45	
550.00	5.800	324.100	549.58	-10.58	10.54	-5.46	1735119.83	14595290.08	40°11'15.972"N	104°39'39.260"W	3.53	
580.00	6.550	324.360	579.41	-13.22	13.15	-7.35	1735117.93	14595292.69	40°11'15.998"N	104°39'39.285"W	2.50	
612.00	7.600	323.130	611.16	-16.42	16.33	-9.68	1735115.59	14595295.86	40°11'16.029"N	104°39'39.315"W	3.32	
644.00	8.530	321.990	642.84	-20.01	19.89	-12.41	1735112.85	14595299.41	40°11'16.065"N	104°39'39.350"W	2.95	
676.00	8.440	321.460	674.49	-23.74	23.60	-15.34	1735109.91	14595303.10	40°11'16.101"N	104°39'39.388"W	0.37	
707.00	8.880	322.780	705.14	-27.45	27.28	-18.20	1735107.03	14595306.78	40°11'16.138"N	104°39'39.425"W	1.56	
739.00	8.830	318.380	736.76	-31.28	31.09	-21.33	1735103.89	14595310.56	40°11'16.175"N	104°39'39.465"W	2.12	
771.00	9.360	317.680	768.36	-35.07	34.85	-24.71	1735100.50	14595314.31	40°11'16.212"N	104°39'39.508"W	1.69	
802.00	10.240	319.880	798.90	-39.07	38.82	-28.18	1735097.01	14595318.27	40°11'16.252"N	104°39'39.553"W	3.08	
834.00	10.940	320.840	830.36	-43.64	43.35	-31.93	1735093.24	14595322.78	40°11'16.296"N	104°39'39.601"W	2.26	
866.00	11.210	319.700	861.76	-48.40	48.07	-35.86	1735089.30	14595327.49	40°11'16.343"N	104°39'39.652"W	1.09	
897.00	11.560	318.820	892.15	-53.07	52.71	-39.86	1735085.29	14595332.11	40°11'16.389"N	104°39'39.704"W	1.26	
929.00	13.140	320.410	923.41	-58.33	57.93	-44.29	1735080.84	14595337.31	40°11'16.440"N	104°39'39.761"W	5.05	
960.00	13.750	320.490	953.56	-63.93	63.49	-48.88	1735076.23	14595342.84	40°11'16.495"N	104°39'39.820"W	1.97	
992.00	13.750	319.530	984.65	-69.80	69.31	-53.76	1735071.32	14595348.65	40°11'16.553"N	104°39'39.883"W	0.71	
1024.00	14.500	319.000	1015.68	-75.76	75.23	-58.86	1735066.20	14595354.55	40°11'16.611"N	104°39'39.948"W	2.38	
1055.00	15.820	321.200	1045.60	-82.03	81.45	-64.05	1735060.99	14595360.75	40°11'16.673"N	104°39'40.015"W	4.64	
1087.00	16.040	320.490	1076.37	-88.89	88.26	-69.60	1735055.42	14595367.53	40°11'16.740"N	104°39'40.087"W	0.92	
1118.00	16.610	318.740	1106.12	-95.58	94.90	-75.25	1735049.75	14595374.14	40°11'16.806"N	104°39'40.160"W	2.43	
1150.00	16.960	318.210	1136.76	-102.55	101.81	-81.37	1735043.60	14595381.03	40°11'16.874"N	104°39'40.238"W	1.19	
1182.00	16.700	321.720	1167.39	-109.70	108.90	-87.33	1735037.62	14595388.10	40°11'16.944"N	104°39'40.315"W	3.28	
1213.00	16.660	323.040	1197.08	-116.79	115.95	-92.76	1735032.16	14595395.12	40°11'17.014"N	104°39'40.385"W	1.23	
1245.00	17.230	322.510	1227.69	-124.27	123.38	-98.41	1735026.49	14595402.52	40°11'17.087"N	104°39'40.458"W	1.85	
1277.00	17.450	321.200	1258.24	-131.83	130.88	-104.30	1735020.57	14595410.00	40°11'17.161"N	104°39'40.534"W	1.40	
1309.00	18.150	319.790	1288.71	-139.43	138.42	-110.52	1735014.32	14595417.52	40°11'17.236"N	104°39'40.614"W	2.57	
1340.00	18.900	319.970	1318.10	-147.02	145.95	-116.87	1735007.95	14595425.02	40°11'17.310"N	104°39'40.696"W	2.43	
1372.00	18.890	322.870	1348.38	-155.17	154.05	-123.33	1735001.46	14595433.09	40°11'17.390"N	104°39'40.779"W	2.93	
1403.00	19.070	326.210	1377.69	-163.44	162.26	-129.17	1734995.59	14595441.28	40°11'17.471"N	104°39'40.854"W	3.55	
1435.00	19.820	325.500	1407.87	-172.31	171.08	-135.15	1734989.58	14595450.07	40°11'17.559"N	104°39'40.931"W	2.46	
1467.00	20.300	325.420	1437.93	-181.40	180.12	-141.38	1734983.32	14595459.08	40°11'17.648"N	104°39'41.012"W	1.50	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (245 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
1498.00	19.120	326.120	1467.11	-190.10	188.76	-147.26	1734977.41	14595467.70	40°11'17.733"N	104°39'41.087"W	3.88	
1530.00	18.900	325.240	1497.36	-198.76	197.37	-153.14	1734971.50	14595476.28	40°11'17.818"N	104°39'41.163"W	1.13	
1562.00	19.030	325.060	1527.63	-207.35	205.91	-159.08	1734965.53	14595484.79	40°11'17.903"N	104°39'41.240"W	0.45	
1594.00	19.470	324.100	1557.84	-216.00	214.50	-165.19	1734959.38	14595493.36	40°11'17.988"N	104°39'41.319"W	1.69	
1625.00	20.390	323.660	1586.98	-224.60	223.04	-171.42	1734953.12	14595501.87	40°11'18.072"N	104°39'41.399"W	3.01	
1656.00	19.250	324.270	1616.14	-233.15	231.54	-177.61	1734946.91	14595510.34	40°11'18.156"N	104°39'41.478"W	3.74	
1688.00	19.030	324.090	1646.37	-241.71	240.04	-183.75	1734940.74	14595518.82	40°11'18.240"N	104°39'41.558"W	0.71	
1719.00	18.900	323.480	1675.69	-249.90	248.17	-189.70	1734934.76	14595526.92	40°11'18.320"N	104°39'41.634"W	0.76	
1751.00	19.030	322.430	1705.95	-258.25	256.47	-195.96	1734928.46	14595535.19	40°11'18.402"N	104°39'41.715"W	1.14	
1783.00	18.940	321.640	1736.21	-266.52	264.68	-202.37	1734922.03	14595543.37	40°11'18.484"N	104°39'41.798"W	0.85	
1817.00	19.730	321.720	1768.30	-275.41	273.51	-209.35	1734915.02	14595552.17	40°11'18.571"N	104°39'41.887"W	2.32	
1838.00	19.730	322.870	1788.06	-281.06	279.12	-213.68	1734910.66	14595557.76	40°11'18.626"N	104°39'41.943"W	1.85	LAST SURFACE MWD+IFR1 SURVEY
1930.00	19.570	322.640	1874.71	-305.86	303.75	-232.41	1734891.85	14595582.31	40°11'18.870"N	104°39'42.185"W	0.19	FIRST BHGE MWD+IFR1+MSA SURVEY
2020.00	20.620	322.600	1959.23	-330.60	328.32	-251.18	1734872.99	14595606.80	40°11'19.112"N	104°39'42.427"W	1.17	
2109.00	20.430	321.630	2042.58	-355.40	352.95	-270.34	1734853.75	14595631.34	40°11'19.356"N	104°39'42.673"W	0.44	
2198.00	20.440	319.220	2125.98	-379.53	376.89	-290.13	1734833.87	14595655.21	40°11'19.592"N	104°39'42.928"W	0.95	
2288.00	21.470	318.800	2210.02	-404.02	401.19	-311.25	1734812.67	14595679.41	40°11'19.833"N	104°39'43.200"W	1.16	
2377.00	21.570	321.700	2292.82	-429.30	426.28	-332.12	1734791.72	14595704.41	40°11'20.080"N	104°39'43.469"W	1.20	
2467.00	21.500	325.750	2376.54	-456.10	452.90	-351.65	1734772.09	14595730.95	40°11'20.344"N	104°39'43.721"W	1.65	
2534.00†	21.139	325.406	2438.96	-476.31	472.99	-365.42	1734758.24	14595750.98	40°11'20.542"N	104°39'43.899"W	0.57	ENTER LANDBOX (47'FNL & 846'FEL,SEC.33) 40.1890395 -104.6621940
2556.00	21.020	325.290	2459.49	-482.86	479.50	-369.92	1734753.72	14595757.47	40°11'20.606"N	104°39'43.957"W	0.57	
2646.00	18.280	327.440	2544.24	-508.19	504.67	-386.71	1734736.84	14595782.56	40°11'20.855"N	104°39'44.173"W	3.15	
2735.00	17.740	332.890	2628.88	-532.15	528.51	-400.40	1734723.07	14595806.34	40°11'21.091"N	104°39'44.349"W	1.99	
2824.00	19.230	334.980	2713.29	-557.61	553.86	-412.78	1734710.59	14595831.63	40°11'21.341"N	104°39'44.509"W	1.83	
2914.00	21.000	333.870	2797.80	-585.64	581.77	-426.15	1734697.12	14595859.48	40°11'21.617"N	104°39'44.681"W	2.01	
3004.00	20.620	333.810	2881.93	-614.47	610.47	-440.25	1734682.92	14595888.12	40°11'21.901"N	104°39'44.863"W	0.42	
3093.00	21.790	329.730	2964.90	-642.94	638.80	-455.50	1734667.57	14595916.38	40°11'22.181"N	104°39'45.059"W	2.12	
3183.00	23.170	323.380	3048.07	-671.76	667.44	-474.48	1734648.49	14595944.94	40°11'22.464"N	104°39'45.304"W	3.10	
3272.00	22.790	322.540	3130.01	-699.68	695.18	-495.41	1734627.46	14595972.58	40°11'22.738"N	104°39'45.574"W	0.56	
3362.00	21.590	322.300	3213.34	-726.81	722.12	-516.14	1734606.64	14595999.43	40°11'23.004"N	104°39'45.841"W	1.34	
3451.00	20.570	322.170	3296.39	-752.29	747.42	-535.74	1734586.95	14596024.65	40°11'23.254"N	104°39'46.093"W	1.15	
3541.00	18.720	321.520	3381.15	-776.26	771.22	-554.43	1734568.18	14596048.37	40°11'23.489"N	104°39'46.334"W	2.07	
3630.00	18.960	323.000	3465.38	-799.15	793.95	-572.01	1734550.51	14596071.02	40°11'23.714"N	104°39'46.561"W	0.60	
3720.00	19.880	326.340	3550.26	-823.72	818.36	-589.30	1734533.14	14596095.36	40°11'23.955"N	104°39'46.783"W	1.60	
3810.00	20.180	324.850	3634.82	-849.31	843.79	-606.72	1734515.63	14596120.71	40°11'24.206"N	104°39'47.008"W	0.66	
3899.00	20.520	322.130	3718.26	-874.34	868.66	-625.13	1734497.13	14596145.50	40°11'24.452"N	104°39'47.245"W	1.13	
3989.00	19.540	322.510	3802.82	-898.91	893.05	-643.97	1734478.20	14596169.81	40°11'24.693"N	104°39'47.488"W	1.10	
4078.00	19.400	322.060	3886.73	-922.54	916.52	-662.12	1734459.97	14596193.20	40°11'24.925"N	104°39'47.722"W	0.23	
4168.00	19.830	322.170	3971.51	-946.55	940.37	-680.67	1734441.34	14596216.96	40°11'25.161"N	104°39'47.961"W	0.48	
4257.00	19.550	322.590	4055.30	-970.47	964.12	-698.98	1734422.95	14596240.63	40°11'25.395"N	104°39'48.197"W	0.35	
4346.00	17.210	318.670	4139.76	-992.35	985.84	-716.72	1734405.13	14596262.28	40°11'25.610"N	104°39'48.425"W	2.97	
4436.00	15.740	318.870	4226.06	-1011.70	1005.03	-733.55	1734388.24	14596281.40	40°11'25.800"N	104°39'48.642"W	1.63	
4525.00	15.440	318.750	4311.79	-1029.84	1023.03	-749.30	1734372.42	14596299.33	40°11'25.977"N	104°39'48.845"W	0.34	
4615.00	12.670	319.770	4399.08	-1046.51	1039.58	-763.57	1734358.09	14596315.82	40°11'26.141"N	104°39'49.029"W	3.09	
4704.00	11.840	318.420	4486.06	-1060.91	1053.86	-775.94	1734345.68	14596330.05	40°11'26.282"N	104°39'49.188"W	0.99	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (245 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
4793.00	11.250	317.230	4573.25	-1074.22	1067.06	-787.89	1734333.68	14596343.20	40°11'26.413"N	104°39'49.342"W	0.71	
4883.00	9.950	318.300	4661.72	-1086.57	1079.31	-799.03	1734322.50	14596355.40	40°11'26.534"N	104°39'49.486"W	1.46	
4998.00	6.290	338.480	4775.57	-1099.94	1092.60	-807.95	1734313.53	14596368.65	40°11'26.665"N	104°39'49.601"W	3.99	
5088.00	4.160	338.840	4865.19	-1107.60	1100.23	-810.94	1734310.51	14596376.26	40°11'26.740"N	104°39'49.639"W	2.37	
5177.00	3.350	1.650	4954.00	-1113.22	1105.84	-812.03	1734309.40	14596381.87	40°11'26.796"N	104°39'49.653"W	1.89	
5267.00	1.760	23.760	5043.91	-1117.11	1109.73	-811.40	1734310.02	14596385.76	40°11'26.834"N	104°39'49.645"W	2.05	
5357.00	1.520	24.810	5133.87	-1119.44	1112.08	-810.34	1734311.07	14596388.11	40°11'26.857"N	104°39'49.632"W	0.27	
5446.00	1.570	26.780	5222.84	-1121.59	1114.24	-809.29	1734312.10	14596390.28	40°11'26.879"N	104°39'49.618"W	0.08	
5536.00	1.310	24.950	5312.81	-1123.62	1116.27	-808.31	1734313.08	14596392.31	40°11'26.899"N	104°39'49.605"W	0.29	
5625.00	0.890	64.340	5401.80	-1124.83	1117.50	-807.25	1734314.13	14596393.54	40°11'26.911"N	104°39'49.592"W	0.94	
5715.00	0.870	82.740	5491.79	-1125.21	1117.88	-805.95	1734315.44	14596393.93	40°11'26.915"N	104°39'49.575"W	0.31	
5804.00	0.850	68.530	5580.78	-1125.52	1118.21	-804.66	1734316.72	14596394.26	40°11'26.918"N	104°39'49.559"W	0.24	
5894.00	1.120	65.230	5670.76	-1126.12	1118.82	-803.24	1734318.14	14596394.88	40°11'26.924"N	104°39'49.540"W	0.31	
5983.00	0.780	69.150	5759.75	-1126.69	1119.40	-801.88	1734319.49	14596395.47	40°11'26.930"N	104°39'49.523"W	0.39	
6073.00	0.920	87.750	5849.74	-1126.93	1119.65	-800.59	1734320.78	14596395.72	40°11'26.932"N	104°39'49.506"W	0.34	
6162.00	0.790	91.630	5938.73	-1126.92	1119.66	-799.26	1734322.11	14596395.73	40°11'26.932"N	104°39'49.489"W	0.16	
6252.00	0.580	97.220	6028.72	-1126.84	1119.59	-798.19	1734323.18	14596395.66	40°11'26.932"N	104°39'49.475"W	0.24	
6341.00	0.570	72.180	6117.72	-1126.91	1119.67	-797.32	1734324.05	14596395.75	40°11'26.932"N	104°39'49.464"W	0.28	
6431.00	0.420	85.590	6207.72	-1127.07	1119.83	-796.57	1734324.80	14596395.91	40°11'26.934"N	104°39'49.454"W	0.21	
6478.00†	1.366	161.203	6254.71	-1126.55	1119.31	-796.22	1734325.16	14596395.40	40°11'26.929"N	104°39'49.450"W	2.82	KOP
6520.00	2.520	169.500	6296.69	-1125.16	1117.93	-795.89	1734325.49	14596394.02	40°11'26.915"N	104°39'49.445"W	2.82	
6610.00	9.500	181.050	6386.14	-1115.78	1108.55	-795.66	1734325.75	14596384.64	40°11'26.823"N	104°39'49.443"W	7.83	
6699.00	15.810	182.460	6472.93	-1096.31	1089.07	-796.32	1734325.17	14596365.17	40°11'26.630"N	104°39'49.451"W	7.10	
6789.00	20.900	178.770	6558.33	-1067.99	1060.75	-796.50	1734325.10	14596336.86	40°11'26.350"N	104°39'49.453"W	5.80	
6878.00	26.810	180.350	6639.69	-1032.02	1024.78	-796.28	1734325.45	14596300.90	40°11'25.995"N	104°39'49.450"W	6.68	
6968.00	32.650	176.280	6717.82	-987.44	980.21	-794.83	1734327.07	14596256.36	40°11'25.554"N	104°39'49.432"W	6.86	
7057.00	39.080	177.170	6789.91	-935.38	928.18	-791.88	1734330.22	14596204.36	40°11'25.040"N	104°39'49.394"W	7.25	
7147.00	43.300	178.840	6857.62	-876.15	868.96	-789.86	1734332.47	14596145.17	40°11'24.455"N	104°39'49.368"W	4.85	
7236.00	51.700	180.810	6917.70	-810.60	803.41	-789.73	1734332.84	14596079.65	40°11'23.807"N	104°39'49.366"W	9.58	
7326.00	62.480	179.960	6966.53	-735.16	727.97	-790.20	1734332.66	14596004.23	40°11'23.062"N	104°39'49.372"W	12.00	
7416.00	73.520	179.280	7000.19	-651.85	644.65	-789.63	1734333.55	14595920.95	40°11'22.238"N	104°39'49.365"W	12.29	
7505.00	83.170	179.330	7018.15	-564.78	557.60	-788.58	1734334.94	14595833.93	40°11'21.378"N	104°39'49.351"W	10.84	
7595.00	85.960	179.210	7026.67	-475.20	468.02	-787.43	1734336.42	14595744.40	40°11'20.493"N	104°39'49.336"W	3.10	
7684.00	87.750	178.520	7031.55	-386.34	379.17	-785.67	1734338.52	14595655.59	40°11'19.615"N	104°39'49.314"W	2.16	LANDING (141'FNL & 1263'FEL,SEC.33) 40.1887819 -104.6636982
7774.00	88.950	177.620	7034.14	-296.41	289.26	-782.64	1734341.89	14595565.73	40°11'18.726"N	104°39'49.274"W	1.67	
7863.00	88.830	177.370	7035.87	-207.48	200.37	-778.76	1734346.12	14595476.88	40°11'17.848"N	104°39'49.224"W	0.31	
7953.00	90.460	178.160	7036.43	-117.52	110.44	-775.25	1734349.97	14595387.01	40°11'16.959"N	104°39'49.179"W	2.01	
8004.00†	90.301	178.664	7036.09	-66.53	59.46	-773.83	1734351.58	14595336.05	40°11'16.455"N	104°39'49.161"W	1.04	EXIT RADIUS HEEL (461'FNL & 1252'FEL,SEC.33) 40.1879043 -104.6636558
8043.00	90.180	179.050	7035.92	-27.54	20.47	-773.05	1734352.50	14595297.08	40°11'16.070"N	104°39'49.151"W	1.04	
8132.00	91.390	178.680	7034.70	61.45	-68.50	-771.29	1734354.60	14595208.15	40°11'15.191"N	104°39'49.128"W	1.42	
8222.00	92.430	178.290	7031.70	151.38	-158.42	-768.91	1734357.33	14595118.28	40°11'14.302"N	104°39'49.097"W	1.23	
8312.00	91.600	179.420	7028.54	241.32	-248.35	-767.12	1734359.46	14595028.40	40°11'13.414"N	104°39'49.074"W	1.56	
8401.00	90.400	179.860	7026.99	330.30	-337.33	-766.56	1734360.36	14594939.45	40°11'12.534"N	104°39'49.067"W	1.44	
8491.00	88.710	180.090	7027.69	420.29	-427.32	-766.52	1734360.75	14594849.49	40°11'11.645"N	104°39'49.066"W	1.90	
8581.00	90.490	180.500	7028.31	510.28	-517.31	-766.98	1734360.63	14594759.53	40°11'10.756"N	104°39'49.072"W	2.03	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520°FNL & 477°FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (245 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
8670.00	90.430	178.760	7027.60	599.27	-606.31	-766.41	1734361.54	14594670.58	40°11'09.876"N	104°39'49.065"W	1.96	
8760.00	87.780	179.360	7029.01	689.25	-696.28	-764.93	1734363.36	14594580.65	40°11'08.987"N	104°39'49.046"W	3.02	
8850.00	88.120	179.400	7032.22	779.19	-786.21	-763.96	1734364.68	14594490.76	40°11'08.099"N	104°39'49.033"W	0.38	
8939.00	88.770	179.230	7034.64	868.16	-875.17	-762.89	1734366.08	14594401.84	40°11'07.219"N	104°39'49.020"W	0.75	
9029.00	89.200	178.910	7036.23	958.14	-965.15	-761.43	1734367.88	14594311.90	40°11'06.330"N	104°39'49.001"W	0.60	
9118.00	90.120	178.210	7036.76	1047.13	-1054.11	-759.20	1734370.46	14594222.98	40°11'05.451"N	104°39'48.972"W	1.30	
9207.00	89.540	179.170	7037.03	1136.12	-1143.09	-757.16	1734372.83	14594134.05	40°11'04.572"N	104°39'48.946"W	1.26	
9297.00	90.990	179.550	7036.61	1226.11	-1233.08	-756.16	1734374.18	14594044.10	40°11'03.683"N	104°39'48.933"W	1.67	
9386.00	89.660	179.030	7036.11	1315.11	-1322.07	-755.05	1734375.62	14593955.15	40°11'02.803"N	104°39'48.918"W	1.60	
9476.00	88.340	178.290	7037.68	1405.08	-1412.03	-752.95	1734378.07	14593865.23	40°11'01.914"N	104°39'48.891"W	1.68	
9566.00	88.890	178.140	7039.85	1495.04	-1501.96	-750.15	1734381.21	14593775.35	40°11'01.026"N	104°39'48.855"W	0.63	
9655.00	90.550	177.960	7040.29	1584.00	-1590.90	-747.12	1734384.58	14593686.45	40°11'00.147"N	104°39'48.816"W	1.88	
9745.00	88.860	176.920	7040.75	1673.94	-1680.81	-743.10	1734388.94	14593596.60	40°10'59.258"N	104°39'48.764"W	2.20	
9834.00	88.240	177.690	7043.00	1762.85	-1769.68	-738.92	1734393.46	14593507.78	40°10'58.380"N	104°39'48.710"W	1.11	
9924.00	89.720	177.650	7044.60	1852.79	-1859.59	-735.26	1734397.46	14593417.92	40°10'57.491"N	104°39'48.663"W	1.65	
10013.00	88.280	178.270	7046.16	1941.74	-1948.52	-732.09	1734400.97	14593329.04	40°10'56.613"N	104°39'48.622"W	1.76	
10103.00	90.090	180.510	7047.44	2031.72	-2038.49	-731.13	1734402.27	14593239.10	40°10'55.723"N	104°39'48.610"W	3.20	
10192.00	88.830	180.210	7048.28	2120.70	-2127.48	-731.69	1734402.05	14593150.14	40°10'54.844"N	104°39'48.617"W	1.46	
10282.00	88.000	180.350	7050.77	2210.66	-2217.45	-732.13	1734401.95	14593060.21	40°10'53.955"N	104°39'48.623"W	0.94	
10371.00	89.080	180.610	7053.03	2299.62	-2306.41	-732.88	1734401.55	14592971.28	40°10'53.076"N	104°39'48.632"W	1.25	
10461.00	90.400	180.870	7053.44	2389.59	-2396.40	-734.04	1734400.73	14592881.32	40°10'52.187"N	104°39'48.647"W	1.49	
10550.00	88.950	180.130	7053.95	2478.57	-2485.40	-734.82	1734400.29	14592792.36	40°10'51.307"N	104°39'48.657"W	1.83	
10640.00	86.950	179.690	7057.17	2568.51	-2575.33	-734.67	1734400.78	14592702.46	40°10'50.418"N	104°39'48.655"W	2.28	
10729.00	87.630	179.270	7061.37	2657.41	-2664.23	-733.87	1734401.92	14592613.60	40°10'49.540"N	104°39'48.645"W	0.90	
10819.00	88.950	178.740	7064.06	2747.36	-2754.17	-732.31	1734403.83	14592523.70	40°10'48.651"N	104°39'48.625"W	1.58	
10908.00	90.250	178.100	7064.68	2836.34	-2843.14	-729.85	1734406.62	14592434.78	40°10'47.772"N	104°39'48.593"W	1.63	
10998.00	89.510	177.720	7064.87	2926.31	-2933.07	-726.57	1734410.25	14592344.89	40°10'46.883"N	104°39'48.551"W	0.92	
11088.00	88.740	179.360	7066.24	3016.28	-3023.03	-724.28	1734412.88	14592254.98	40°10'45.994"N	104°39'48.521"W	2.01	
11177.00	89.970	179.540	7067.25	3105.27	-3112.02	-723.42	1734414.08	14592166.03	40°10'45.115"N	104°39'48.510"W	1.40	
11267.00	90.920	178.740	7066.55	3195.27	-3202.01	-722.07	1734415.77	14592076.09	40°10'44.226"N	104°39'48.493"W	1.38	
11356.00	90.250	179.200	7065.64	3284.26	-3290.99	-720.47	1734417.71	14591987.15	40°10'43.346"N	104°39'48.472"W	0.91	
11446.00	88.340	178.110	7066.75	3374.24	-3380.95	-718.36	1734420.16	14591897.23	40°10'42.457"N	104°39'48.445"W	2.44	
11535.00	88.860	177.990	7068.92	3463.18	-3469.87	-715.33	1734423.53	14591808.35	40°10'41.579"N	104°39'48.406"W	0.60	
11625.00	89.690	177.400	7070.06	3553.13	-3559.79	-711.71	1734427.49	14591718.49	40°10'40.690"N	104°39'48.359"W	1.13	
11715.00	90.710	175.350	7069.74	3642.99	-3649.60	-706.02	1734433.52	14591628.73	40°10'39.802"N	104°39'48.286"W	2.54	
11804.00	90.280	176.910	7068.98	3731.83	-3738.39	-700.02	1734439.86	14591540.00	40°10'38.925"N	104°39'48.208"W	1.82	
11893.00	90.090	179.630	7068.69	3820.81	-3827.34	-697.33	1734442.89	14591451.09	40°10'38.046"N	104°39'48.174"W	3.06	
11983.00	89.350	178.600	7069.13	3910.80	-3917.33	-695.94	1734444.62	14591361.15	40°10'37.157"N	104°39'48.156"W	1.41	
12074.00	87.810	180.180	7071.38	4001.77	-4008.29	-694.97	1734445.94	14591270.23	40°10'36.258"N	104°39'48.143"W	2.42	
12168.00	88.210	179.960	7074.65	4095.71	-4102.23	-695.09	1734446.18	14591176.32	40°10'35.330"N	104°39'48.145"W	0.49	
12260.00	89.420	179.660	7076.55	4187.68	-4194.21	-694.78	1734446.84	14591084.38	40°10'34.421"N	104°39'48.141"W	1.36	
12352.00	87.320	179.950	7079.17	4279.64	-4286.17	-694.47	1734447.50	14590992.46	40°10'33.512"N	104°39'48.137"W	2.30	
12445.00	87.630	179.740	7083.26	4372.55	-4379.08	-694.22	1734448.11	14590899.59	40°10'32.594"N	104°39'48.133"W	0.40	
12535.00	88.430	179.040	7086.36	4462.49	-4469.02	-693.26	1734449.41	14590809.69	40°10'31.705"N	104°39'48.121"W	1.18	
12628.00	89.480	178.610	7088.05	4555.47	-4561.98	-691.35	1734451.67	14590716.77	40°10'30.786"N	104°39'48.096"W	1.22	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520°FNL & 477°FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (245 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
12720.00	90.370	179.300	7088.17	4647.46	-4653.97	-689.67	1734453.70	14590624.83	40°10'29.877"N	104°39'48.075"W	1.22	
12812.00	90.120	179.990	7087.78	4739.46	-4745.96	-689.10	1734454.62	14590532.87	40°10'28.968"N	104°39'48.067"W	0.80	
12904.00	91.140	180.230	7086.77	4831.45	-4837.96	-689.28	1734454.79	14590440.92	40°10'28.059"N	104°39'48.070"W	1.14	
12994.00	90.800	181.290	7085.25	4921.41	-4927.93	-690.47	1734453.94	14590350.97	40°10'27.170"N	104°39'48.085"W	1.24	
13084.00	90.340	181.590	7084.35	5011.35	-5017.90	-692.74	1734452.03	14590261.03	40°10'26.281"N	104°39'48.114"W	0.61	
13173.00	89.630	181.180	7084.37	5100.30	-5106.87	-694.89	1734450.21	14590172.08	40°10'25.402"N	104°39'48.142"W	0.92	
13263.00	90.370	180.930	7084.37	5190.27	-5196.86	-696.54	1734448.90	14590082.13	40°10'24.512"N	104°39'48.163"W	0.87	
13352.00	91.510	181.080	7082.91	5279.22	-5285.83	-698.10	1734447.68	14589993.19	40°10'23.633"N	104°39'48.183"W	1.29	
13442.00	92.620	181.000	7079.67	5369.13	-5375.76	-699.74	1734446.39	14589903.29	40°10'22.745"N	104°39'48.204"W	1.24	
13531.00	91.080	180.100	7076.80	5458.07	-5464.70	-700.59	1734445.88	14589814.38	40°10'21.866"N	104°39'48.215"W	2.00	
13621.00	90.180	178.700	7075.81	5548.06	-5554.69	-699.65	1734447.17	14589724.43	40°10'20.976"N	104°39'48.203"W	1.85	
13710.00	89.630	180.220	7075.96	5637.05	-5643.68	-698.81	1734448.34	14589635.47	40°10'20.097"N	104°39'48.192"W	1.82	
13800.00	90.590	179.950	7075.78	5727.05	-5733.68	-698.94	1734448.55	14589545.51	40°10'19.208"N	104°39'48.194"W	1.11	
13889.00	88.920	179.930	7076.16	5816.04	-5822.68	-698.85	1734448.99	14589456.55	40°10'18.328"N	104°39'48.193"W	1.88	
13979.00	89.440	180.210	7077.45	5906.03	-5912.67	-698.96	1734449.22	14589366.60	40°10'17.439"N	104°39'48.194"W	0.66	
14068.00	90.060	180.000	7077.84	5995.02	-6001.66	-699.12	1734449.40	14589277.63	40°10'16.559"N	104°39'48.196"W	0.74	
14158.00	90.830	179.370	7077.14	6085.01	-6091.66	-698.63	1734450.23	14589187.68	40°10'15.670"N	104°39'48.190"W	1.11	
14247.00	91.540	179.190	7075.30	6173.99	-6180.63	-697.51	1734451.69	14589098.74	40°10'14.791"N	104°39'48.175"W	0.82	
14336.00	89.480	180.340	7074.51	6262.98	-6269.62	-697.15	1734452.40	14589009.79	40°10'13.911"N	104°39'48.170"W	2.65	
14426.00	89.850	180.610	7075.03	6352.97	-6359.62	-697.89	1734451.99	14588919.83	40°10'13.022"N	104°39'48.180"W	0.51	
14515.00	90.340	180.420	7074.89	6441.95	-6448.61	-698.69	1734451.53	14588830.86	40°10'12.143"N	104°39'48.190"W	0.59	
14605.00	91.630	180.440	7073.34	6531.93	-6538.59	-699.37	1734451.20	14588740.92	40°10'11.253"N	104°39'48.199"W	1.43	
14694.00	92.990	180.190	7069.75	6620.84	-6627.52	-699.86	1734451.05	14588652.02	40°10'10.375"N	104°39'48.205"W	1.55	
14784.00	90.740	179.640	7066.82	6710.78	-6717.47	-699.72	1734451.53	14588562.12	40°10'09.486"N	104°39'48.203"W	2.57	
14873.00	92.340	179.920	7064.43	6799.75	-6806.43	-699.38	1734452.21	14588473.19	40°10'08.607"N	104°39'48.199"W	1.83	
14963.00	92.150	180.570	7060.91	6889.67	-6896.36	-699.76	1734452.17	14588383.29	40°10'07.718"N	104°39'48.204"W	0.75	
15052.00	90.310	180.870	7059.00	6978.63	-6985.33	-700.88	1734451.39	14588294.36	40°10'06.839"N	104°39'48.218"W	2.09	
15142.00	91.080	180.170	7057.90	7068.60	-7075.32	-701.70	1734450.92	14588204.40	40°10'05.949"N	104°39'48.229"W	1.16	
15231.00	89.140	179.670	7057.73	7157.60	-7164.31	-701.58	1734451.38	14588115.44	40°10'05.070"N	104°39'48.227"W	2.25	
15321.00	89.970	179.400	7058.43	7247.59	-7254.30	-700.84	1734452.46	14588025.49	40°10'04.181"N	104°39'48.218"W	0.97	
15411.00	89.410	179.100	7058.92	7337.59	-7344.30	-699.67	1734453.98	14587935.54	40°10'03.291"N	104°39'48.202"W	0.71	
15500.00	90.490	178.170	7059.00	7426.58	-7433.27	-697.55	1734456.44	14587846.61	40°10'02.412"N	104°39'48.175"W	1.60	
15590.00	91.820	177.110	7057.18	7516.51	-7523.17	-693.84	1734460.48	14587756.75	40°10'01.524"N	104°39'48.127"W	1.89	
15679.00	90.400	177.370	7055.46	7605.42	-7612.05	-689.56	1734465.11	14587667.93	40°10'00.646"N	104°39'48.072"W	1.62	
15769.00	88.890	178.690	7056.02	7695.39	-7701.99	-686.46	1734468.54	14587578.04	40°09'59.757"N	104°39'48.032"W	2.23	
15858.00	90.120	178.860	7056.78	7784.38	-7790.96	-684.56	1734470.78	14587489.10	40°09'58.877"N	104°39'48.008"W	1.40	
15948.00	91.570	177.950	7055.46	7874.35	-7880.91	-682.06	1734473.63	14587399.20	40°09'57.989"N	104°39'47.975"W	1.90	
16037.00	90.710	179.290	7053.69	7963.32	-7969.87	-679.91	1734476.11	14587310.29	40°09'57.110"N	104°39'47.948"W	1.79	
16127.00	88.920	180.820	7053.98	8053.31	-8059.86	-680.00	1734476.37	14587220.33	40°09'56.220"N	104°39'47.949"W	2.62	
16216.00	90.060	180.940	7054.77	8142.27	-8148.85	-681.37	1734475.34	14587131.38	40°09'55.341"N	104°39'47.966"W	1.29	
16306.00	91.570	180.450	7053.49	8232.24	-8238.83	-682.46	1734474.60	14587041.43	40°09'54.452"N	104°39'47.980"W	1.76	
16395.00	90.120	179.680	7052.18	8321.22	-8327.81	-682.56	1734474.83	14586952.47	40°09'53.572"N	104°39'47.982"W	1.84	
16485.00	90.990	179.210	7051.31	8411.22	-8417.80	-681.69	1734476.05	14586862.52	40°09'52.683"N	104°39'47.970"W	1.10	
16574.00	88.800	180.730	7051.47	8500.21	-8506.80	-681.64	1734476.44	14586773.57	40°09'51.804"N	104°39'47.970"W	3.00	
16664.00	88.210	181.060	7053.82	8590.15	-8596.75	-683.05	1734475.37	14586683.64	40°09'50.915"N	104°39'47.988"W	0.75	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWP
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (245 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
16754.00	89.510	180.080	7055.61	8680.11	-8686.73	-683.94	1734474.82	14586593.70	40°09'50.025"N	104°39'47.999"W	1.81	
16843.00	90.340	180.020	7055.72	8769.11	-8775.73	-684.02	1734475.09	14586504.73	40°09'49.146"N	104°39'48.000"W	0.94	
16933.00	92.000	179.970	7053.89	8859.08	-8865.71	-684.01	1734475.44	14586414.79	40°09'48.257"N	104°39'48.000"W	1.85	
17022.00	89.630	179.220	7052.62	8948.06	-8954.69	-683.38	1734476.41	14586325.85	40°09'47.377"N	104°39'47.992"W	2.79	
17112.00	89.780	179.090	7053.08	9038.06	-9044.68	-682.05	1734478.08	14586235.90	40°09'46.488"N	104°39'47.975"W	0.22	
17201.00	90.990	178.170	7052.49	9127.05	-9133.65	-679.93	1734480.54	14586146.97	40°09'45.609"N	104°39'47.948"W	1.71	
17290.00	90.490	179.110	7051.34	9216.03	-9222.61	-677.81	1734482.99	14586058.05	40°09'44.730"N	104°39'47.920"W	1.20	
17380.00	89.480	178.760	7051.36	9306.02	-9312.60	-676.14	1734485.01	14585968.11	40°09'43.841"N	104°39'47.899"W	1.19	
17469.00	90.800	177.870	7051.14	9395.00	-9401.55	-673.53	1734487.96	14585879.20	40°09'42.962"N	104°39'47.865"W	1.79	
17559.00	91.480	176.960	7049.35	9484.92	-9491.44	-669.47	1734492.36	14585789.36	40°09'42.073"N	104°39'47.813"W	1.26	
17586.00†	91.219	177.285	7048.72	9511.89	-9518.40	-668.11	1734493.82	14585762.42	40°09'41.807"N	104°39'47.795"W	1.54	ENTER RADIUS TOE (406'FSL & 1102'FEL,SEC.04) 40.1616130 -104.6632764
17648.00	90.620	178.030	7047.72	9573.85	-9580.34	-665.58	1734496.59	14585700.51	40°09'41.195"N	104°39'47.763"W	1.54	
17738.00	89.290	179.430	7047.79	9663.84	-9670.32	-663.58	1734498.93	14585610.58	40°09'40.306"N	104°39'47.737"W	2.15	
17827.00	90.890	179.820	7047.65	9752.84	-9759.31	-663.00	1734499.85	14585521.62	40°09'39.426"N	104°39'47.729"W	1.85	
17917.00	92.310	179.460	7045.14	9842.80	-9849.27	-662.44	1734500.76	14585431.70	40°09'38.537"N	104°39'47.722"W	1.63	
18006.00	90.770	179.940	7042.75	9931.77	-9938.23	-661.97	1734501.56	14585342.77	40°09'37.658"N	104°39'47.716"W	1.81	
18096.00	89.440	178.760	7042.58	10021.76	-10028.23	-660.95	1734502.93	14585252.82	40°09'36.769"N	104°39'47.703"W	1.98	
18185.00	90.030	178.000	7042.99	10110.74	-10117.19	-658.43	1734505.78	14585163.91	40°09'35.890"N	104°39'47.670"W	1.08	
18274.00	90.180	177.380	7042.83	10199.70	-10206.11	-654.85	1734509.71	14585075.03	40°09'35.011"N	104°39'47.624"W	0.72	LAST BHGE MWD+IFR1+MSA SURVEY
18338.00	90.180	177.380	7042.63	10263.66	-10270.05	-651.92	1734512.88	14585011.13	40°09'34.379"N	104°39'47.586"W	0.00	PTB (346'FNL & 1084'FEL,SEC.09) 40.1595497 -104.6632184

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWB
Facility	SEC.33-T3N-R65W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.04-T2N-R65W	-26.00	149.24	-3770.95	1731355.31	14595414.36	40°11'17.340"N	104°40'27.779"W	polygon
SEC.33-T3N-R65W	-26.00	149.24	-3770.95	1731355.31	14595414.36	40°11'17.340"N	104°40'27.779"W	polygon
SEC.09-T2N-R65W	0.00	-1.11	119.91	1735245.19	14595278.92	40°11'15.857"N	104°39'37.645"W	polygon
CANNON 2N-9HZ HEEL REV-1(154'FNL & 1244'FEL,SEC.33)	7032.00	365.73	-768.01	1734356.22	14595642.22	40°11'19.482"N	104°39'49.086"W	point
CANNON 2N-9HZ HEEL REV-2(154'FNL & 1254'FEL,SEC.33)	7032.00	365.73	-778.01	1734346.23	14595642.18	40°11'19.482"N	104°39'49.215"W	point
CANNON 2N-9HZ BHL REV-1(360'FNL & 1113'FEL,SEC.09)	7034.00	-10284.16	-680.59	1734484.27	14584996.92	40°09'34.240"N	104°39'47.956"W	point
CANNON 2N-9HZ BHL REV-2(353'FNL & 1113'FEL,SEC.09)	7034.00	-10277.16	-680.59	1734484.25	14585003.91	40°09'34.309"N	104°39'47.956"W	point
CANNON 2N-9HZ LANDBOX	7034.00	0.00	0.00	1735125.33	14595279.57	40°11'15.868"N	104°39'39.190"W	polygon
CANNON 2N-9HZ RADIUS 1	7034.00	517.40	-829.68	1734294.00	14595793.60	40°11'20.981"N	104°39'49.881"W	polygon
CANNON 2N-9HZ RADIUS 2	7034.00	-9924.15	-884.77	1734278.80	14585356.00	40°09'37.797"N	104°39'50.586"W	polygon
CANNON 2N-9HZ INT TARGET@5200'VS	7076.00	-5206.73	-712.28	1734433.21	14590072.20	40°10'24.415"N	104°39'48.366"W	point

WELLPATH COMPOSITION - Ref Wellbore: CANNON 2N-9HZ AWB Ref Wellpath: CANNON 2N-9HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	1838.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC_ISCWSA Rev-2 MWD+IFR1 <137 - 1838>	CANNON 2N-9HZ AWB
1838.00	18274.00	Custom APC_ISCWSA REV 2 MWD+IFR1+MSA (approximation)	BHGE Custom APC_ISCWSA Rev-2 MWD+IFR1+MSA <1930 - 18274>	CANNON 2N-9HZ AWB
18274.00	18338.00	Blind Drilling (std)	Projection to bit	CANNON 2N-9HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#41 CANNON 2N-9HZ(520'FNL & 477'FEL,SEC.33)
Area	COLORADO	Well	CANNON 2N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 2N-9HZ AWP
Facility	SEC.33-T3N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
137.00	0.970	153.410	136.99	FIRST SURFACE MWD+IFR1 SURVEY
1838.00	19.730	322.870	1788.06	LAST SURFACE MWD+IFR1 SURVEY
1930.00	19.570	322.640	1874.71	FIRST BHGE MWD+IFR1+MSA SURVEY
2534.00	21.139	325.406	2438.96	ENTER LANDBOX (47'FNL & 846'FEL,SEC.33) 40.1890395 -104.6621940
6478.00	1.366	161.203	6254.71	KOP
7684.00	87.750	178.520	7031.55	LANDING (141'FNL & 1263'FEL,SEC.33) 40.1887819 -104.6636982
8004.00	90.301	178.664	7036.09	EXIT RADIUS HEEL (461'FNL & 1252'FEL,SEC.33) 40.1879043 -104.6636558
17586.00	91.219	177.285	7048.72	ENTER RADIUS TOE (406'FSL & 1102'FEL,SEC.04) 40.1616130 -104.6632764
18274.00	90.180	177.380	7042.83	LAST BHGE MWD+IFR1+MSA SURVEY
18338.00	90.180	177.380	7042.63	PTB (346'FNL & 1084'FEL,SEC.09) 40.1595497 -104.6632184