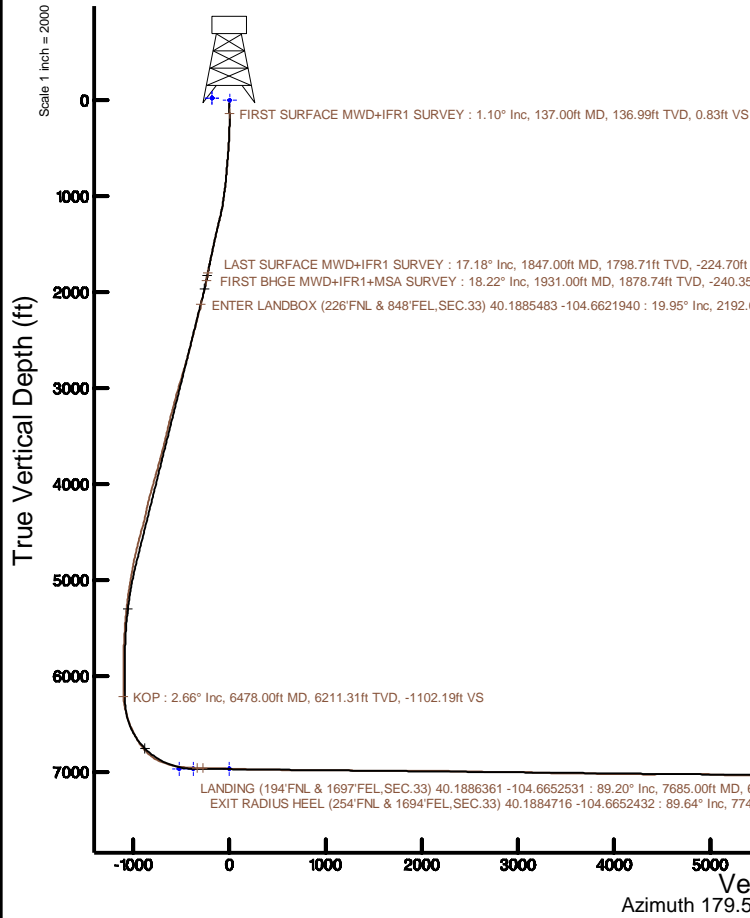
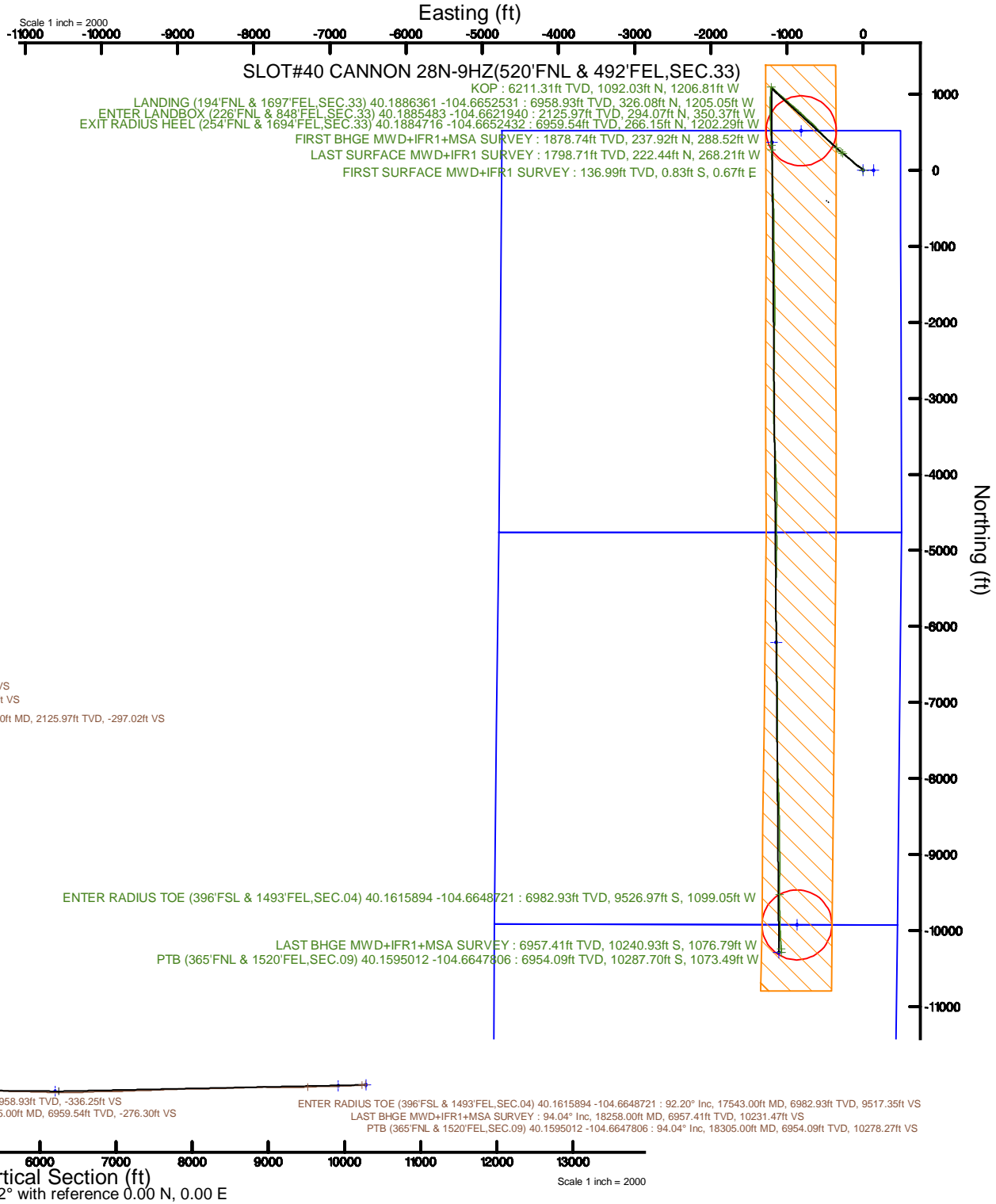


# KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)  
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: CANNON 28N-9HZ  
 Facility: SEC.33-T3N-R65W Wellbore: CANNON 28N-9HZ PWB

Plot reference wellpath is CANNON 28N-9HZ PWB Rev-B.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#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painstr on 2017-10-26
	Database: WA_DEN_Anadarko_Defn



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-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	10/26/2017 at 8:33 AM
Convergence at slot	0.22° East	Database/Source file	WA_DEN_Anadarko_Defn/CANNON_28N-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	1609.31	1735110.28	14595279.51	40°11'15.868"N	104°39'39.384"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#40 CANNON 28N-9HZ(520'FNL & 492'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	179.52°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (243 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	140.840	0.00	0.00	0.00	0.00	1735110.28	14595279.51	40°11'15.868"N	104°39'39.384"W	0.00	
26.00	0.000	140.840	26.00	0.00	0.00	0.00	1735110.28	14595279.51	40°11'15.868"N	104°39'39.384"W	0.00	
137.00	1.100	140.840	136.99	0.83	-0.83	0.67	1735110.95	14595278.69	40°11'15.860"N	104°39'39.375"W	0.99	FIRST SURFACE MWD+IFR1 SURVEY
168.00	0.620	122.920	167.99	1.16	-1.15	1.00	1735111.28	14595278.37	40°11'15.857"N	104°39'39.371"W	1.76	
200.00	0.570	87.670	199.99	1.25	-1.24	1.31	1735111.59	14595278.28	40°11'15.856"N	104°39'39.367"W	1.14	
232.00	0.660	55.060	231.99	1.14	-1.12	1.62	1735111.90	14595278.40	40°11'15.857"N	104°39'39.363"W	1.11	
264.00	0.750	12.610	263.98	0.83	-0.81	1.81	1735112.09	14595278.71	40°11'15.860"N	104°39'39.361"W	1.62	
296.00	1.490	353.360	295.98	0.21	-0.20	1.81	1735112.09	14595279.32	40°11'15.866"N	104°39'39.361"W	2.56	
327.00	1.580	349.850	326.97	-0.61	0.62	1.69	1735111.96	14595280.14	40°11'15.874"N	104°39'39.362"W	0.42	
359.00	2.200	339.650	358.95	-1.62	1.64	1.40	1735111.67	14595281.15	40°11'15.884"N	104°39'39.366"W	2.20	
391.00	3.030	338.510	390.92	-2.99	3.00	0.87	1735111.14	14595282.51	40°11'15.898"N	104°39'39.373"W	2.60	
422.00	3.740	332.180	421.86	-4.65	4.65	0.10	1735110.36	14595284.17	40°11'15.914"N	104°39'39.383"W	2.58	
454.00	4.440	324.450	453.78	-6.59	6.59	-1.11	1735109.15	14595286.09	40°11'15.933"N	104°39'39.398"W	2.78	
486.00	4.830	317.860	485.68	-8.61	8.59	-2.73	1735107.52	14595288.09	40°11'15.953"N	104°39'39.419"W	2.06	
518.00	5.710	316.980	517.54	-10.79	10.75	-4.72	1735105.52	14595290.25	40°11'15.974"N	104°39'39.445"W	2.76	
550.00	6.460	316.890	549.36	-13.29	13.23	-7.04	1735103.19	14595292.71	40°11'15.999"N	104°39'39.475"W	2.34	
580.00	7.380	312.850	579.14	-15.86	15.78	-9.60	1735100.62	14595295.25	40°11'16.024"N	104°39'39.508"W	3.47	
612.00	8.220	304.500	610.85	-18.58	18.47	-12.99	1735097.22	14595297.93	40°11'16.051"N	104°39'39.551"W	4.40	
644.00	8.390	302.040	642.51	-21.14	21.00	-16.86	1735093.35	14595300.44	40°11'16.076"N	104°39'39.601"W	1.23	
676.00	8.830	303.790	674.15	-23.78	23.61	-20.88	1735089.32	14595303.03	40°11'16.101"N	104°39'39.653"W	1.60	
707.00	9.050	301.860	704.77	-26.43	26.22	-24.93	1735085.26	14595305.63	40°11'16.127"N	104°39'39.705"W	1.20	
739.00	8.610	301.330	736.39	-29.04	28.79	-29.11	1735081.07	14595308.18	40°11'16.153"N	104°39'39.759"W	1.40	
771.00	9.010	304.150	768.02	-31.72	31.44	-33.23	1735076.94	14595310.82	40°11'16.179"N	104°39'39.812"W	1.84	
802.00	9.980	303.710	798.59	-34.61	34.30	-37.47	1735072.69	14595313.65	40°11'16.207"N	104°39'39.867"W	3.14	
834.00	10.200	304.410	830.10	-37.79	37.44	-42.12	1735068.03	14595316.78	40°11'16.238"N	104°39'39.927"W	0.79	
866.00	9.840	304.320	861.61	-40.97	40.58	-46.71	1735063.43	14595319.90	40°11'16.269"N	104°39'39.986"W	1.13	
897.00	11.070	305.900	892.09	-44.25	43.82	-51.31	1735058.82	14595323.12	40°11'16.301"N	104°39'40.045"W	4.07	
929.00	12.390	304.940	923.42	-48.06	47.59	-56.62	1735053.50	14595326.87	40°11'16.338"N	104°39'40.113"W	4.17	
960.00	13.100	305.020	953.66	-52.03	51.51	-62.22	1735047.89	14595330.76	40°11'16.377"N	104°39'40.186"W	2.29	
992.00	13.620	303.620	984.79	-56.25	55.67	-68.33	1735041.77	14595334.91	40°11'16.418"N	104°39'40.264"W	1.91	
1024.00	14.020	304.410	1015.87	-60.58	59.95	-74.66	1735035.42	14595339.16	40°11'16.460"N	104°39'40.346"W	1.38	
1055.00	14.280	304.320	1045.93	-64.91	64.23	-80.92	1735029.15	14595343.41	40°11'16.503"N	104°39'40.427"W	0.84	
1087.00	14.770	304.150	1076.90	-69.48	68.74	-87.55	1735022.50	14595347.90	40°11'16.547"N	104°39'40.512"W	1.54	
1150.00	16.220	309.330	1137.62	-79.68	78.83	-101.01	1735009.01	14595357.93	40°11'16.647"N	104°39'40.685"W	3.18	
1182.00	17.400	312.230	1168.25	-85.79	84.88	-108.01	1735001.99	14595363.95	40°11'16.707"N	104°39'40.776"W	4.52	
1213.00	18.240	314.340	1197.76	-92.35	91.38	-114.91	1734995.07	14595370.42	40°11'16.771"N	104°39'40.865"W	3.42	
1245.00	19.070	313.810	1228.08	-99.53	98.50	-122.26	1734987.69	14595377.51	40°11'16.841"N	104°39'40.959"W	2.65	
1277.00	19.780	313.200	1258.26	-106.92	105.83	-129.98	1734979.94	14595384.80	40°11'16.914"N	104°39'41.059"W	2.31	
1309.00	19.200	312.580	1288.42	-114.26	113.10	-137.80	1734972.10	14595392.04	40°11'16.986"N	104°39'41.160"W	1.92	
1340.00	19.690	312.140	1317.66	-121.27	120.05	-145.43	1734964.45	14595398.96	40°11'17.054"N	104°39'41.258"W	1.65	
1372.00	20.650	312.760	1347.69	-128.79	127.50	-153.57	1734956.28	14595406.37	40°11'17.128"N	104°39'41.363"W	3.07	
1403.00	19.200	312.140	1376.84	-135.99	134.63	-161.36	1734948.46	14595413.47	40°11'17.198"N	104°39'41.463"W	4.73	
1435.00	19.200	310.210	1407.06	-142.98	141.56	-169.28	1734940.52	14595420.37	40°11'17.267"N	104°39'41.565"W	1.98	
1467.00	18.940	308.800	1437.30	-149.70	148.21	-177.35	1734932.43	14595426.99	40°11'17.333"N	104°39'41.669"W	1.65	
1498.00	17.580	308.450	1466.74	-155.83	154.27	-184.94	1734924.83	14595433.02	40°11'17.393"N	104°39'41.767"W	4.40	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (243 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
1530.00	17.180	308.010	1497.28	-161.81	160.19	-192.44	1734917.30	14595438.90	40°11'17.451"N	104°39'41.864"W	1.32	
1562.00	17.840	307.660	1527.80	-167.78	166.09	-200.05	1734909.67	14595444.78	40°11'17.509"N	104°39'41.962"W	2.09	
1594.00	18.540	307.400	1558.20	-173.93	172.18	-207.97	1734901.73	14595450.83	40°11'17.569"N	104°39'42.064"W	2.20	
1656.00	18.190	310.470	1617.04	-186.32	184.45	-223.16	1734886.50	14595463.03	40°11'17.691"N	104°39'42.259"W	1.66	
1688.00	18.330	311.350	1647.43	-192.95	191.01	-230.74	1734878.90	14595469.57	40°11'17.756"N	104°39'42.357"W	0.97	
1719.00	18.150	310.910	1676.87	-199.40	197.39	-238.05	1734871.57	14595475.92	40°11'17.819"N	104°39'42.451"W	0.73	
1751.00	18.110	311.260	1707.28	-206.00	203.94	-245.55	1734864.04	14595482.43	40°11'17.883"N	104°39'42.548"W	0.36	
1783.00	17.970	310.300	1737.71	-212.54	210.41	-253.06	1734856.52	14595488.87	40°11'17.947"N	104°39'42.645"W	1.03	
1815.00	17.620	307.840	1768.18	-218.77	216.57	-260.65	1734848.91	14595495.01	40°11'18.008"N	104°39'42.742"W	2.59	
1847.00	17.180	307.840	1798.71	-224.70	222.44	-268.21	1734841.33	14595500.85	40°11'18.066"N	104°39'42.840"W	1.37	LAST SURFACE MWD+IFR1 SURVEY
1931.00	18.220	306.800	1878.74	-240.35	237.92	-288.52	1734820.97	14595516.24	40°11'18.219"N	104°39'43.102"W	1.29	FIRST BHGE MWD+IFR1+MSA SURVEY
2021.00	18.290	311.560	1964.21	-258.33	255.72	-310.35	1734799.07	14595533.95	40°11'18.395"N	104°39'43.383"W	1.66	
2110.00	18.750	314.180	2048.60	-277.74	274.95	-331.06	1734778.30	14595553.09	40°11'18.585"N	104°39'43.650"W	1.07	
2192.00†	19.952	315.234	2125.97	-297.02	294.07	-350.37	1734758.93	14595572.13	40°11'18.774"N	104°39'43.899"W	1.53	ENTER LANDBOX (226'FNL & 848'FEL,SEC.33) 40.1885483 -104.6621940
2200.00	20.070	315.330	2133.49	-298.98	296.02	-352.29	1734757.00	14595574.07	40°11'18.793"N	104°39'43.923"W	1.53	
2289.00	20.220	309.110	2217.05	-319.74	316.58	-374.96	1734734.25	14595594.54	40°11'18.996"N	104°39'44.215"W	2.41	
2378.00	20.710	311.320	2300.44	-340.03	336.68	-398.72	1734710.43	14595614.53	40°11'19.195"N	104°39'44.522"W	1.03	
2468.00	20.820	313.600	2384.59	-361.77	358.21	-422.25	1734686.83	14595635.97	40°11'19.408"N	104°39'44.825"W	0.91	
2557.00	21.130	312.730	2467.69	-383.76	380.01	-445.49	1734663.51	14595657.67	40°11'19.623"N	104°39'45.124"W	0.49	
2647.00	19.670	311.260	2552.05	-404.95	401.00	-468.79	1734640.14	14595678.57	40°11'19.831"N	104°39'45.425"W	1.72	
2736.00	20.320	312.970	2635.68	-425.55	421.42	-491.36	1734617.50	14595698.88	40°11'20.032"N	104°39'45.715"W	0.98	
2826.00	21.330	317.890	2719.81	-448.54	444.21	-513.77	1734595.01	14595721.59	40°11'20.258"N	104°39'46.004"W	2.24	
2915.00	20.630	318.380	2802.91	-472.44	467.94	-535.04	1734573.66	14595745.23	40°11'20.492"N	104°39'46.278"W	0.81	
3005.00	22.570	317.300	2886.58	-497.18	492.49	-557.29	1734551.33	14595769.68	40°11'20.735"N	104°39'46.565"W	2.20	
3094.00	21.620	317.580	2969.05	-522.03	517.15	-579.93	1734528.60	14595794.24	40°11'20.978"N	104°39'46.857"W	1.07	
3184.00	20.660	317.560	3052.99	-546.17	541.10	-601.83	1734506.62	14595818.10	40°11'21.215"N	104°39'47.139"W	1.07	
3273.00	19.720	317.140	3136.52	-568.94	563.70	-622.64	1734485.73	14595840.61	40°11'21.438"N	104°39'47.407"W	1.07	
3363.00	20.380	315.770	3221.07	-591.47	586.06	-643.90	1734464.40	14595862.88	40°11'21.659"N	104°39'47.681"W	0.90	
3453.00	19.390	315.440	3305.70	-613.53	607.93	-665.31	1734442.91	14595884.66	40°11'21.875"N	104°39'47.957"W	1.11	
3542.00	19.710	311.640	3389.57	-634.21	628.43	-686.90	1734421.26	14595905.07	40°11'22.078"N	104°39'48.235"W	1.47	
3632.00	19.890	308.100	3474.25	-653.94	647.96	-710.29	1734397.80	14595924.51	40°11'22.271"N	104°39'48.536"W	1.35	
3721.00	20.190	311.880	3557.87	-673.73	667.56	-733.64	1734374.38	14595944.00	40°11'22.465"N	104°39'48.837"W	1.49	
3811.00	19.840	314.760	3642.43	-695.04	688.68	-756.05	1734351.90	14595965.03	40°11'22.673"N	104°39'49.126"W	1.16	
3900.00	20.660	313.590	3725.93	-716.69	710.14	-778.14	1734329.73	14595986.40	40°11'22.885"N	104°39'49.411"W	1.03	
3990.00	22.080	313.800	3809.74	-739.54	732.80	-801.85	1734305.95	14596008.96	40°11'23.109"N	104°39'49.716"W	1.58	
4079.00	22.720	312.610	3892.03	-762.97	756.01	-826.58	1734281.15	14596032.07	40°11'23.339"N	104°39'50.035"W	0.88	
4169.00	22.440	313.080	3975.13	-786.68	779.51	-851.91	1734255.73	14596055.46	40°11'23.571"N	104°39'50.361"W	0.37	
4258.00	23.110	310.740	4057.19	-809.90	802.51	-877.55	1734230.01	14596078.36	40°11'23.798"N	104°39'50.692"W	1.27	
4348.00	21.400	309.350	4140.48	-832.05	824.45	-903.64	1734203.85	14596100.19	40°11'24.015"N	104°39'51.028"W	1.99	
4437.00	19.670	308.490	4223.83	-851.88	844.07	-927.92	1734179.51	14596119.71	40°11'24.209"N	104°39'51.341"W	1.97	
4526.00	19.120	308.180	4307.77	-870.41	862.40	-951.10	1734156.26	14596137.94	40°11'24.390"N	104°39'51.639"W	0.63	
4616.00	19.150	315.610	4392.81	-890.25	882.07	-973.02	1734134.28	14596157.51	40°11'24.584"N	104°39'51.922"W	2.70	
4705.00	21.920	315.230	4476.15	-912.67	904.30	-994.93	1734112.29	14596179.65	40°11'24.804"N	104°39'52.204"W	3.12	
4795.00	22.430	309.320	4559.50	-935.69	927.10	-1020.05	1734087.10	14596202.35	40°11'25.029"N	104°39'52.528"W	2.54	
4884.00	21.220	309.600	4642.12	-956.93	948.13	-1045.60	1734061.48	14596223.28	40°11'25.237"N	104°39'52.857"W	1.36	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (243 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
4999.00	18.480	310.980	4750.28	-982.40	973.35	-1075.40	1734031.59	14596248.37	40°11'25.486"N	104°39'53.241"W	2.42	
5088.00	16.830	311.620	4835.09	-1000.38	991.16	-1095.68	1734011.25	14596266.10	40°11'25.662"N	104°39'53.502"W	1.87	
5178.00	14.520	308.370	4921.74	-1016.20	1006.82	-1114.27	1733992.61	14596281.68	40°11'25.817"N	104°39'53.742"W	2.74	
5267.00	13.030	314.070	5008.18	-1030.24	1020.73	-1130.23	1733976.61	14596295.52	40°11'25.955"N	104°39'53.948"W	2.26	
5357.00	12.110	314.420	5096.02	-1044.02	1034.39	-1144.26	1733962.53	14596309.13	40°11'26.090"N	104°39'54.128"W	1.03	
5447.00	10.640	314.530	5184.25	-1056.56	1046.83	-1156.92	1733949.82	14596321.51	40°11'26.212"N	104°39'54.292"W	1.63	
5536.00	9.070	315.190	5271.93	-1067.39	1057.57	-1167.73	1733938.98	14596332.20	40°11'26.319"N	104°39'54.431"W	1.77	
5626.00	7.630	314.630	5360.98	-1076.70	1066.80	-1176.98	1733929.70	14596341.39	40°11'26.410"N	104°39'54.550"W	1.60	
5715.00	6.120	314.360	5449.33	-1084.23	1074.27	-1184.58	1733922.07	14596348.83	40°11'26.484"N	104°39'54.648"W	1.70	
5805.00	5.100	315.470	5538.90	-1090.49	1080.47	-1190.81	1733915.82	14596355.01	40°11'26.545"N	104°39'54.728"W	1.14	
5894.00	3.990	320.870	5627.62	-1095.75	1085.69	-1195.54	1733911.07	14596360.21	40°11'26.597"N	104°39'54.789"W	1.34	
5984.00	3.330	317.470	5717.44	-1100.14	1090.05	-1199.28	1733907.31	14596364.55	40°11'26.640"N	104°39'54.837"W	0.77	
6074.00	1.130	297.830	5807.36	-1102.50	1092.39	-1201.83	1733904.75	14596366.88	40°11'26.663"N	104°39'54.870"W	2.55	
6163.00	0.890	292.310	5896.35	-1103.19	1093.06	-1203.25	1733903.33	14596367.55	40°11'26.669"N	104°39'54.889"W	0.29	
6252.00	0.730	284.590	5985.34	-1103.60	1093.47	-1204.44	1733902.15	14596367.95	40°11'26.673"N	104°39'54.904"W	0.22	
6342.00	0.620	258.350	6075.34	-1103.66	1093.51	-1205.47	1733901.11	14596367.99	40°11'26.674"N	104°39'54.917"W	0.36	
6431.00	0.650	246.390	6164.33	-1103.37	1093.21	-1206.40	1733900.18	14596367.69	40°11'26.671"N	104°39'54.929"W	0.15	
6478.00†	2.658	188.596	6211.31	-1102.19	1092.03	-1206.81	1733899.78	14596366.50	40°11'26.659"N	104°39'54.934"W	5.06	KOP
6520.00	4.750	182.650	6253.22	-1099.49	1089.33	-1207.04	1733899.56	14596363.80	40°11'26.632"N	104°39'54.937"W	5.06	
6610.00	14.090	193.730	6341.91	-1085.11	1074.93	-1209.82	1733896.84	14596349.40	40°11'26.490"N	104°39'54.973"W	10.52	
6699.00	17.920	182.870	6427.47	-1060.93	1050.72	-1213.07	1733893.68	14596325.18	40°11'26.251"N	104°39'55.015"W	5.45	
6789.00	20.930	179.240	6512.34	-1031.02	1020.81	-1213.56	1733893.31	14596295.28	40°11'25.955"N	104°39'55.021"W	3.60	
6879.00	25.850	185.850	6594.93	-995.42	985.19	-1215.34	1733891.66	14596259.67	40°11'25.603"N	104°39'55.044"W	6.19	
6968.00	30.870	183.680	6673.23	-953.33	943.07	-1218.79	1733888.38	14596217.56	40°11'25.187"N	104°39'55.089"W	5.76	
7058.00	37.990	178.640	6747.43	-902.54	892.26	-1219.61	1733887.74	14596166.77	40°11'24.685"N	104°39'55.099"W	8.52	
7148.00	48.430	178.920	6812.93	-841.00	830.74	-1218.32	1733889.27	14596105.27	40°11'24.077"N	104°39'55.083"W	11.60	
7237.00	59.320	180.010	6865.32	-769.23	758.97	-1217.70	1733890.17	14596033.53	40°11'23.368"N	104°39'55.074"W	12.28	
7327.00	69.560	179.370	6904.10	-688.14	677.89	-1217.24	1733890.94	14595952.48	40°11'22.567"N	104°39'55.069"W	11.40	
7416.00	76.220	177.870	6930.28	-603.14	592.90	-1215.17	1733893.33	14595867.54	40°11'21.727"N	104°39'55.042"W	7.65	
7506.00	83.610	178.050	6946.02	-514.63	504.41	-1212.02	1733896.82	14595779.09	40°11'20.852"N	104°39'55.001"W	8.21	
7596.00	85.340	177.810	6954.69	-425.08	414.89	-1208.78	1733900.39	14595689.62	40°11'19.968"N	104°39'54.959"W	1.94	
7685.00	89.200	177.380	6958.93	-336.25	326.08	-1205.05	1733904.46	14595600.87	40°11'19.090"N	104°39'54.911"W	4.36	
7745.00†	89.638	177.333	6959.54	-276.30	266.15	-1202.29	1733907.45	14595540.97	40°11'18.498"N	104°39'54.876"W	0.73	LANDING (194'FNL & 1697'FEL, SEC.33) 40.1886361 -104.6652531 EXIT RADIUS HEEL (254'FNL & 1694'FEL, SEC.33) 40.1884716 -104.6652432
7774.00	89.850	177.310	6959.67	-247.32	237.18	-1200.93	1733908.92	14595512.02	40°11'18.212"N	104°39'54.858"W	0.73	
7864.00	89.170	177.860	6960.44	-157.38	147.27	-1197.14	1733913.05	14595422.15	40°11'17.323"N	104°39'54.809"W	0.97	
7954.00	87.600	178.390	6962.97	-67.44	57.35	-1194.20	1733916.34	14595332.29	40°11'16.434"N	104°39'54.771"W	1.84	
8043.00	87.630	178.680	6966.68	21.47	-31.54	-1191.92	1733918.95	14595243.44	40°11'15.556"N	104°39'54.742"W	0.33	
8133.00	88.400	178.200	6969.79	111.40	-121.45	-1189.47	1733921.74	14595153.57	40°11'14.668"N	104°39'54.710"W	1.01	
8223.00	88.580	178.180	6972.16	201.34	-211.37	-1186.63	1733924.93	14595063.69	40°11'13.779"N	104°39'54.674"W	0.20	
8312.00	88.430	178.100	6974.49	290.29	-300.30	-1183.74	1733928.15	14594974.82	40°11'12.900"N	104°39'54.636"W	0.19	
8402.00	89.140	178.230	6976.39	380.24	-390.23	-1180.86	1733931.38	14594884.93	40°11'12.011"N	104°39'54.599"W	0.80	
8491.00	89.380	177.970	6977.54	469.21	-479.17	-1177.91	1733934.66	14594796.03	40°11'11.133"N	104°39'54.561"W	0.40	
8581.00	89.820	178.240	6978.17	559.18	-569.12	-1174.94	1733937.98	14594706.13	40°11'10.244"N	104°39'54.523"W	0.57	
8671.00	88.830	179.660	6979.23	649.16	-659.10	-1173.29	1733939.97	14594616.20	40°11'09.355"N	104°39'54.501"W	1.92	
8761.00	89.110	179.850	6980.85	739.15	-749.08	-1172.90	1733940.70	14594526.25	40°11'08.465"N	104°39'54.496"W	0.38	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (243 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
8850.00	89.480	179.990	6981.95	828.14	-838.07	-1172.78	1733941.17	14594437.30	40°11'07.586"N	104°39'54.495"W	0.44	
8940.00	89.940	179.660	6982.40	918.14	-928.07	-1172.50	1733941.78	14594347.34	40°11'06.697"N	104°39'54.491"W	0.63	
9029.00	90.370	178.810	6982.16	1007.13	-1017.06	-1171.32	1733943.31	14594258.38	40°11'05.817"N	104°39'54.476"W	1.07	
9118.00	90.740	179.050	6981.30	1096.12	-1106.04	-1169.65	1733945.31	14594169.45	40°11'04.938"N	104°39'54.454"W	0.50	
9208.00	88.370	179.500	6982.00	1186.11	-1196.03	-1168.51	1733946.79	14594079.50	40°11'04.049"N	104°39'54.440"W	2.68	
9297.00	88.370	179.650	6984.53	1275.08	-1284.99	-1167.85	1733947.79	14593990.58	40°11'03.169"N	104°39'54.431"W	0.17	
9387.00	88.770	179.240	6986.77	1365.05	-1374.96	-1166.98	1733949.01	14593900.65	40°11'02.280"N	104°39'54.420"W	0.64	
9476.00	89.450	178.980	6988.16	1454.04	-1463.93	-1165.60	1733950.73	14593811.71	40°11'01.401"N	104°39'54.402"W	0.82	
9566.00	90.580	178.870	6988.13	1544.03	-1553.92	-1163.91	1733952.76	14593721.77	40°11'00.512"N	104°39'54.380"W	1.26	
9656.00	89.380	180.000	6988.17	1634.03	-1643.91	-1163.02	1733953.99	14593631.82	40°10'59.623"N	104°39'54.369"W	1.83	
9745.00	89.350	179.660	6989.15	1723.02	-1732.90	-1162.76	1733954.60	14593542.86	40°10'58.743"N	104°39'54.365"W	0.38	
9835.00	89.850	180.030	6989.78	1813.01	-1822.90	-1162.52	1733955.18	14593452.90	40°10'57.854"N	104°39'54.362"W	0.69	
9924.00	90.680	179.460	6989.37	1902.01	-1911.90	-1162.12	1733955.92	14593363.94	40°10'56.974"N	104°39'54.357"W	1.13	
10013.00	89.200	181.320	6989.46	1991.00	-2000.89	-1162.73	1733955.65	14593274.99	40°10'56.095"N	104°39'54.365"W	2.67	
10103.00	89.690	180.990	6990.33	2080.95	-2090.87	-1164.54	1733954.18	14593185.04	40°10'55.206"N	104°39'54.388"W	0.66	
10193.00	90.740	180.680	6990.00	2170.93	-2180.85	-1165.85	1733953.21	14593095.08	40°10'54.317"N	104°39'54.405"W	1.22	
10282.00	88.550	180.730	6990.55	2259.90	-2269.84	-1166.95	1733952.46	14593006.12	40°10'53.437"N	104°39'54.419"W	2.46	
10372.00	89.080	180.360	6992.41	2349.87	-2359.82	-1167.80	1733951.95	14592916.18	40°10'52.548"N	104°39'54.430"W	0.72	
10462.00	89.510	180.150	6993.52	2439.85	-2449.81	-1168.20	1733951.89	14592826.22	40°10'51.659"N	104°39'54.435"W	0.53	
10551.00	87.970	180.670	6995.47	2528.82	-2538.78	-1168.84	1733951.59	14592737.28	40°10'50.779"N	104°39'54.443"W	1.83	
10640.00	89.050	181.240	6997.79	2617.76	-2627.74	-1170.32	1733950.45	14592648.36	40°10'49.900"N	104°39'54.462"W	1.37	
10730.00	89.820	180.830	6998.67	2707.72	-2717.72	-1171.95	1733949.17	14592558.41	40°10'49.011"N	104°39'54.483"W	0.97	
10819.00	88.180	179.800	7000.23	2796.69	-2806.70	-1172.44	1733949.02	14592469.46	40°10'48.132"N	104°39'54.489"W	2.18	
10909.00	88.550	179.510	7002.80	2886.66	-2896.66	-1171.90	1733949.91	14592379.54	40°10'47.243"N	104°39'54.482"W	0.52	
10998.00	89.780	180.670	7004.09	2975.64	-2985.65	-1172.04	1733950.11	14592290.58	40°10'46.364"N	104°39'54.484"W	1.90	
11088.00	90.490	181.010	7003.88	3065.62	-3075.64	-1173.36	1733949.13	14592200.63	40°10'45.474"N	104°39'54.501"W	0.87	
11178.00	87.970	179.590	7005.09	3155.59	-3165.62	-1173.83	1733949.00	14592110.68	40°10'44.585"N	104°39'54.507"W	3.21	
11267.00	87.850	178.550	7008.34	3244.53	-3254.55	-1172.38	1733950.78	14592021.79	40°10'43.706"N	104°39'54.488"W	1.18	
11357.00	88.460	178.500	7011.23	3334.47	-3344.47	-1170.07	1733953.44	14591931.91	40°10'42.818"N	104°39'54.458"W	0.68	
11446.00	88.710	178.300	7013.43	3423.42	-3433.41	-1167.58	1733956.26	14591843.02	40°10'41.939"N	104°39'54.426"W	0.36	
11536.00	89.140	177.660	7015.12	3513.37	-3523.33	-1164.41	1733959.78	14591753.14	40°10'41.050"N	104°39'54.385"W	0.86	
11625.00	89.690	177.470	7016.03	3602.32	-3612.25	-1160.63	1733963.90	14591664.28	40°10'40.171"N	104°39'54.337"W	0.65	
11715.00	89.970	177.070	7016.30	3692.25	-3702.15	-1156.34	1733968.53	14591574.43	40°10'39.283"N	104°39'54.281"W	0.54	
11804.00	88.680	178.240	7017.34	3781.19	-3791.06	-1152.70	1733972.51	14591485.56	40°10'38.404"N	104°39'54.234"W	1.96	
11894.00	88.610	178.080	7019.47	3871.14	-3880.99	-1149.81	1733975.74	14591395.68	40°10'37.516"N	104°39'54.197"W	0.19	
11984.00	89.110	177.780	7021.26	3961.09	-3970.91	-1146.56	1733979.33	14591305.81	40°10'36.627"N	104°39'54.155"W	0.65	
12075.00	89.600	177.120	7022.29	4052.02	-4061.82	-1142.52	1733983.72	14591214.96	40°10'35.729"N	104°39'54.103"W	0.90	
12169.00	89.170	178.600	7023.30	4145.97	-4155.74	-1139.01	1733987.59	14591121.08	40°10'34.801"N	104°39'54.058"W	1.64	
12261.00	89.480	178.270	7024.38	4237.95	-4247.70	-1136.49	1733990.45	14591029.17	40°10'33.892"N	104°39'54.025"W	0.49	
12352.00	89.570	180.300	7025.13	4328.94	-4338.69	-1135.36	1733991.93	14590938.22	40°10'32.993"N	104°39'54.010"W	2.23	
12445.00	90.770	181.360	7024.86	4421.91	-4431.67	-1136.71	1733990.94	14590845.27	40°10'32.074"N	104°39'54.028"W	1.72	
12535.00	91.600	180.640	7023.00	4511.86	-4521.64	-1138.28	1733989.72	14590755.33	40°10'31.185"N	104°39'54.048"W	1.22	
12629.00	89.510	180.150	7022.09	4605.84	-4615.63	-1138.92	1733989.43	14590661.38	40°10'30.256"N	104°39'54.056"W	2.28	
12720.00	90.180	179.700	7022.33	4696.84	-4706.63	-1138.80	1733989.89	14590570.42	40°10'29.357"N	104°39'54.055"W	0.89	
12812.00	90.550	178.290	7021.75	4788.83	-4798.61	-1137.19	1733991.86	14590478.48	40°10'28.448"N	104°39'54.034"W	1.58	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (243 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
12905.00	89.350	179.760	7021.83	4881.82	-4891.59	-1135.61	1733993.79	14590385.54	40°10'27.529"N	104°39'54.013"W	2.04	
12994.00	87.720	181.180	7024.10	4970.78	-4980.55	-1136.34	1733993.40	14590296.61	40°10'26.650"N	104°39'54.023"W	2.43	
13084.00	87.380	181.040	7027.95	5060.66	-5070.45	-1138.08	1733992.01	14590206.74	40°10'25.761"N	104°39'54.045"W	0.41	
13173.00	87.910	181.190	7031.61	5149.55	-5159.36	-1139.81	1733990.62	14590117.86	40°10'24.883"N	104°39'54.067"W	0.62	
13263.00	87.500	180.880	7035.21	5239.44	-5249.27	-1141.43	1733989.34	14590027.98	40°10'23.994"N	104°39'54.088"W	0.57	
13353.00	89.600	181.280	7037.49	5329.38	-5339.22	-1143.13	1733987.98	14589938.06	40°10'23.105"N	104°39'54.110"W	2.38	
13443.00	89.820	180.990	7037.94	5419.34	-5429.20	-1144.91	1733986.55	14589848.11	40°10'22.216"N	104°39'54.133"W	0.40	
13532.00	90.460	180.800	7037.73	5508.31	-5518.19	-1146.30	1733985.50	14589759.15	40°10'21.337"N	104°39'54.151"W	0.75	
13621.00	88.680	179.630	7038.39	5597.30	-5607.18	-1146.64	1733985.50	14589670.19	40°10'20.457"N	104°39'54.155"W	2.39	
13711.00	88.860	179.630	7040.33	5687.28	-5697.16	-1146.06	1733986.43	14589580.25	40°10'19.568"N	104°39'54.147"W	0.20	
13800.00	88.650	179.670	7042.26	5776.26	-5786.14	-1145.51	1733987.31	14589491.31	40°10'18.689"N	104°39'54.140"W	0.24	
13890.00	88.490	178.950	7044.51	5866.23	-5876.10	-1144.43	1733988.73	14589401.39	40°10'17.800"N	104°39'54.126"W	0.82	
13979.00	88.060	178.870	7047.19	5955.18	-5965.05	-1142.74	1733990.77	14589312.48	40°10'16.921"N	104°39'54.105"W	0.49	
14069.00	88.250	178.160	7050.08	6045.12	-6054.97	-1140.41	1733993.44	14589222.61	40°10'16.032"N	104°39'54.074"W	0.82	
14158.00	88.340	178.530	7052.73	6134.06	-6143.89	-1137.84	1733996.35	14589133.73	40°10'15.154"N	104°39'54.041"W	0.43	
14248.00	89.010	179.990	7054.81	6224.03	-6233.86	-1136.67	1733997.85	14589043.80	40°10'14.265"N	104°39'54.026"W	1.78	
14337.00	90.120	180.080	7055.49	6313.03	-6322.86	-1136.73	1733998.14	14588954.84	40°10'13.385"N	104°39'54.027"W	1.25	
14426.00	90.220	179.320	7055.22	6402.03	-6411.85	-1136.26	1733998.94	14588865.88	40°10'12.506"N	104°39'54.021"W	0.86	
14516.00	91.320	179.030	7054.01	6492.01	-6501.83	-1134.97	1734000.58	14588775.94	40°10'11.617"N	104°39'54.004"W	1.26	
14605.00	92.400	178.860	7051.13	6580.96	-6590.77	-1133.33	1734002.56	14588687.05	40°10'10.738"N	104°39'53.983"W	1.23	
14695.00	93.450	178.560	7046.53	6670.83	-6680.63	-1131.31	1734004.92	14588597.23	40°10'09.850"N	104°39'53.957"W	1.21	
14784.00	90.740	179.340	7043.28	6759.76	-6769.55	-1129.68	1734006.89	14588508.36	40°10'08.971"N	104°39'53.936"W	3.17	
14874.00	90.950	178.700	7041.95	6849.75	-6859.52	-1128.14	1734008.77	14588418.42	40°10'08.082"N	104°39'53.916"W	0.75	
14963.00	90.830	177.610	7040.57	6938.71	-6948.46	-1125.27	1734011.98	14588329.53	40°10'07.203"N	104°39'53.879"W	1.23	
15053.00	90.860	180.830	7039.24	7028.69	-7038.43	-1124.05	1734013.54	14588239.60	40°10'06.314"N	104°39'53.863"W	3.58	
15143.00	91.880	180.550	7037.09	7118.64	-7128.40	-1125.13	1734012.81	14588149.66	40°10'05.425"N	104°39'53.877"W	1.18	
15232.00	92.520	180.000	7033.67	7207.57	-7217.33	-1125.56	1734012.72	14588060.76	40°10'04.546"N	104°39'53.883"W	0.95	
15321.00	92.960	180.800	7029.42	7296.45	-7306.23	-1126.18	1734012.44	14587971.90	40°10'03.667"N	104°39'53.890"W	1.02	
15411.00	90.740	180.310	7026.51	7386.39	-7396.17	-1127.05	1734011.91	14587881.99	40°10'02.779"N	104°39'53.902"W	2.53	
15501.00	91.820	180.100	7024.50	7476.36	-7486.15	-1127.37	1734011.93	14587792.05	40°10'01.889"N	104°39'53.906"W	1.22	
15590.00	92.090	179.460	7021.47	7565.30	-7575.09	-1127.03	1734012.61	14587703.14	40°10'01.011"N	104°39'53.901"W	0.78	
15680.00	93.420	179.090	7017.14	7655.20	-7664.98	-1125.89	1734014.09	14587613.29	40°10'00.122"N	104°39'53.887"W	1.53	
15769.00	91.480	178.780	7013.34	7744.11	-7753.88	-1124.24	1734016.08	14587524.44	40°09'59.244"N	104°39'53.865"W	2.21	
15859.00	92.060	178.370	7010.56	7834.05	-7843.81	-1122.00	1734018.66	14587434.55	40°09'58.355"N	104°39'53.836"W	0.79	
15948.00	89.690	178.440	7009.20	7923.02	-7932.76	-1119.53	1734021.48	14587345.65	40°09'57.476"N	104°39'53.804"W	2.66	
16038.00	90.120	177.720	7009.35	8012.99	-8022.71	-1116.51	1734024.84	14587255.75	40°09'56.587"N	104°39'53.766"W	0.93	
16127.00	91.110	177.820	7008.39	8101.94	-8111.63	-1113.05	1734028.64	14587166.87	40°09'55.708"N	104°39'53.721"W	1.12	
16217.00	92.030	177.680	7005.93	8191.86	-8201.53	-1109.52	1734032.51	14587077.02	40°09'54.820"N	104°39'53.675"W	1.03	
16306.00	91.290	179.360	7003.35	8280.81	-8290.46	-1107.22	1734035.15	14586988.14	40°09'53.941"N	104°39'53.646"W	2.06	
16396.00	91.910	179.080	7000.84	8370.77	-8380.41	-1105.99	1734036.71	14586898.22	40°09'53.052"N	104°39'53.630"W	0.76	
16485.00	92.460	178.490	6997.44	8459.70	-8469.33	-1104.11	1734038.94	14586809.35	40°09'52.174"N	104°39'53.605"W	0.91	
16575.00	90.950	179.620	6994.76	8549.65	-8559.27	-1102.63	1734040.76	14586719.45	40°09'51.285"N	104°39'53.586"W	2.10	
16664.00	91.570	179.080	6992.81	8638.63	-8648.24	-1101.62	1734042.11	14586630.52	40°09'50.406"N	104°39'53.573"W	0.92	
16754.00	92.650	178.900	6989.49	8728.56	-8738.17	-1100.03	1734044.04	14586540.63	40°09'49.517"N	104°39'53.553"W	1.22	
16843.00	90.800	179.440	6986.82	8817.52	-8827.11	-1098.74	1734045.67	14586451.73	40°09'48.638"N	104°39'53.536"W	2.17	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH DATA (243 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
16933.00	91.230	179.060	6985.22	8907.50	-8917.09	1097.56	1734047.19	14586361.79	40°09'47.749"N	104°39'53.521"W	0.64	
17023.00	89.080	179.380	6984.98	8997.49	-9007.08	1096.34	1734048.76	14586271.85	40°09'46.860"N	104°39'53.505"W	2.42	
17112.00	89.540	179.400	6986.05	9086.49	-9096.06	1095.39	1734050.04	14586182.90	40°09'45.980"N	104°39'53.493"W	0.52	
17202.00	89.380	180.930	6986.90	9176.47	-9186.06	1095.65	1734050.13	14586092.94	40°09'45.091"N	104°39'53.496"W	1.71	
17291.00	89.690	180.680	6987.62	9265.45	-9275.05	1096.90	1734049.22	14586003.98	40°09'44.212"N	104°39'53.512"W	0.45	
17380.00	90.830	180.840	6987.22	9354.43	-9364.04	1098.08	1734048.38	14585915.02	40°09'43.332"N	104°39'53.527"W	1.29	
17470.00	91.570	180.260	6985.33	9444.39	-9454.01	1098.95	1734047.86	14585825.08	40°09'42.443"N	104°39'53.538"W	1.04	
17543.00†	92.202	179.907	6982.93	9517.35	-9526.97	1099.05	1734048.03	14585752.15	40°09'41.722"N	104°39'53.540"W	0.99	ENTER RADIUS TOE (396'FSL & 1493'FEL,SEC.04) 40.1615894 -104.6648721
17559.00	92.340	179.830	6982.29	9533.33	-9542.96	1099.02	1734048.13	14585736.17	40°09'41.564"N	104°39'53.539"W	0.99	
17649.00	92.930	179.390	6978.16	9623.24	-9632.86	1098.40	1734049.08	14585646.30	40°09'40.676"N	104°39'53.531"W	0.82	
17738.00	90.250	179.180	6975.69	9712.19	-9721.81	1097.29	1734050.53	14585557.39	40°09'39.797"N	104°39'53.517"W	3.02	
17828.00	90.740	178.780	6974.91	9802.19	-9811.79	1095.69	1734052.48	14585467.45	40°09'38.907"N	104°39'53.496"W	0.70	
17917.00	91.970	178.510	6972.81	9891.15	-9900.74	1093.59	1734054.92	14585378.55	40°09'38.028"N	104°39'53.469"W	1.41	
18007.00	92.900	177.930	6968.98	9981.04	-9990.62	1090.79	1734058.05	14585288.72	40°09'37.140"N	104°39'53.433"W	1.22	
18096.00	91.750	176.680	6965.37	10069.90	-10079.44	1086.61	1734062.57	14585199.95	40°09'36.262"N	104°39'53.379"W	1.91	
18186.00	92.870	176.670	6961.74	10159.72	-10169.21	1081.40	1734068.13	14585110.23	40°09'35.375"N	104°39'53.312"W	1.24	
18258.00	94.040	175.970	6957.41	10231.47	-10240.93	1076.79	1734073.01	14585038.56	40°09'34.667"N	104°39'53.253"W	1.89	LAST BHGE MWD+IFR1+MSA SURVEY
18305.00	94.040	175.970	6954.09	10278.27	-10287.70	1073.49	1734076.49	14584991.82	40°09'34.204"N	104°39'53.210"W	0.00	PTB (365'FNL & 1520'FEL,SEC.09) 40.1595012 -104.6647806

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	-3755.90	1731355.31	14595414.36	40°11'17.340"N	104°40'27.779"W	polygon
SEC.33-T3N-R65W	-26.00	149.24	-3755.90	1731355.31	14595414.36	40°11'17.340"N	104°40'27.779"W	polygon
SEC.09-T2N-R65W	0.00	-1.11	134.96	1735245.19	14595278.92	40°11'15.857"N	104°39'37.645"W	polygon
CANNON 28N-9HZ BHL REV-1(366'FNL & 1554'FEL,SEC.09)	6955.00	-10288.51	-1106.87	1734043.12	14584990.88	40°09'34.196"N	104°39'53.640"W	point
CANNON 28N-9HZ HEEL REV-1(152'FNL & 1688'FEL,SEC.33)	6967.00	367.57	-1196.91	1733912.44	14595642.36	40°11'19.500"N	104°39'54.806"W	point
CANNON 28N-9HZ LANDBOX	6967.00	0.00	0.00	1735110.28	14595279.51	40°11'15.868"N	104°39'39.384"W	polygon
CANNON 28N-9HZ RADIUS 1	6967.00	517.40	-814.63	1734294.00	14595793.60	40°11'20.981"N	104°39'49.881"W	polygon
CANNON 28N-9HZ RADIUS 2	6967.00	-9924.15	-869.71	1734278.80	14585356.00	40°09'37.797"N	104°39'50.586"W	polygon
CANNON 28N-9HZ INT. TARGET@6200' VS	7039.00	-6209.86	-1141.33	1733993.11	14589067.77	40°10'14.502"N	104°39'54.086"W	point

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH COMPOSITION - Ref Wellbore: CANNON 28N-9HZ AWB Ref Wellpath: CANNON 28N-9HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	1847.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <137 - 1847>	CANNON 28N-9HZ AWB
1847.00	18258.00	Custom APC ISCWSA REV 2 MWD+IFR1+MSA (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+MSA <1931 - 18258>	CANNON 28N-9HZ AWB
18258.00	18305.00	Blind Drilling (std)	Projection to bit	CANNON 28N-9HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#40 CANNON 28N-9HZ(520'FNL & 492'FEL,SEC.33)
Area	COLORADO	Well	CANNON 28N-9HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CANNON 28N-9HZ AWB
Facility	SEC.33-T3N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
137.00	1.100	140.840	136.99	FIRST SURFACE MWD+IFR1 SURVEY
1847.00	17.180	307.840	1798.71	LAST SURFACE MWD+IFR1 SURVEY
1931.00	18.220	306.800	1878.74	FIRST BHGE MWD+IFR1+MSA SURVEY
2192.00	19.952	315.234	2125.97	ENTER LANDBOX (226'FNL & 848'FEL,SEC.33) 40.1885483 -104.6621940
6478.00	2.658	188.596	6211.31	KOP
7685.00	89.200	177.380	6958.93	LANDING (194'FNL & 1697'FEL,SEC.33) 40.1886361 -104.6652531
7745.00	89.638	177.333	6959.54	EXIT RADIUS HEEL (254'FNL & 1694'FEL,SEC.33) 40.1884716 -104.6652432
17543.00	92.202	179.907	6982.93	ENTER RADIUS TOE (396'FSL & 1493'FEL,SEC.04) 40.1615894 -104.6648721
18258.00	94.040	175.970	6957.41	LAST BHGE MWD+IFR1+MSA SURVEY
18305.00	94.040	175.970	6954.09	PTB (365'FNL & 1520'FEL,SEC.09) 40.1595012 -104.6647806