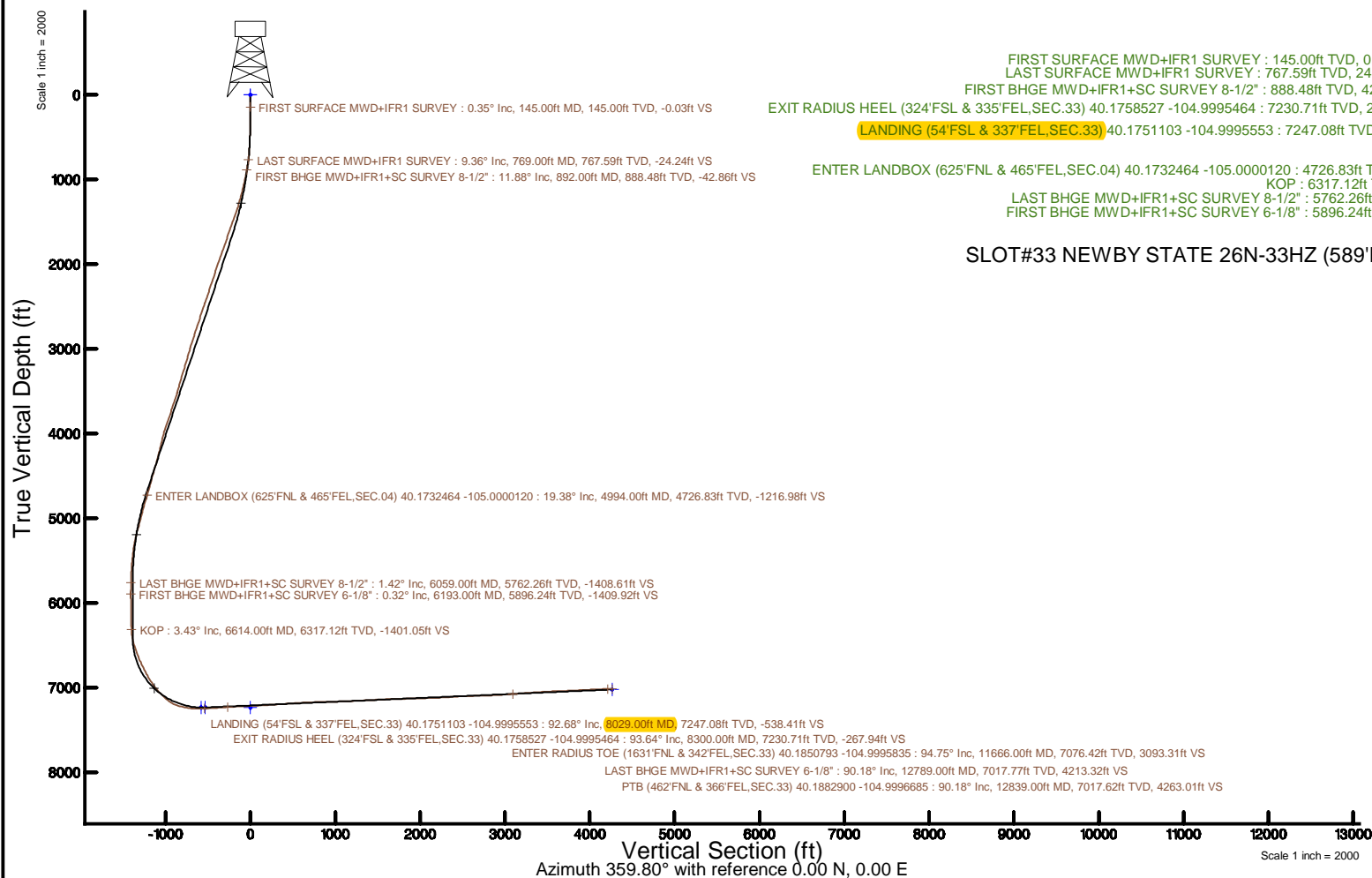


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#33 NEWBY STATE 26N-33HZ (589'FSL & 1320'FEL,SEC.33)
Field: WELD COUNTY (UTM/TRUE NORTH) Well: NEWBY STATE 26N-33HZ
Facility: SEC.33-T3N-R68W Wellbore: NEWBY STATE 26N-33HZ PWB

Plot reference wellpath is NEWBY STATE 26N-33HZ PWP Rev-C.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: 4927 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#33 NEWBY STATE 26N-33HZ (589'FSL & 1320'FEL,SEC.33)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painettr on 2018-01-11
	Database: WA_DEN_Anadarko_Defn



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 NEWBY STATE 26N-33HZ (589'FSL & 1320'FEL,SEC.33)
Area	COLORADO	Well	NEWBY STATE 26N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 26N-33HZ AWB
Facility	SEC.33-T3N-R68W		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999600	Report Generated	1/11/2018 at 1:34 PM
Convergence at slot	0.00°	Database/Source file	WA_DEN_Anadarko_Defn/NEWBY_STATE_26N-33HZ_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-674.21	2684.34	1639558.04	14591033.98	40°10'35.684"N	105°00'11.066"W
Facility Reference Pt			1636874.88	14591708.30	40°10'42.348"N	105°00'45.648"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	4927.00ft
Horizontal Reference Pt	Slot	NABORS X22 (32') (RT) to Mean Sea Level	4927.00ft
Vertical Reference Pt	NABORS X22 (32') (RT)	NABORS X22 (32') (RT) to Mud Line at Slot (SLOT#33 NEWBY STATE 26N-33HZ (589'FSL & 1320'FEL,SEC.33))	4927.00ft
MD Reference Pt	NABORS X22 (32') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.80°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 NEWBY STATE 26N-33HZ (589'FSL & 1320'FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 26N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 26N-33HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (156 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	265.360	0.00	0.00	0.00	0.00	1639558.04	14591033.98	40°10'35.684"N	105°00'11.066"W	0.00	
32.00	0.000	265.360	32.00	0.00	0.00	0.00	1639558.04	14591033.98	40°10'35.684"N	105°00'11.066"W	0.00	
145.00	0.350	265.360	145.00	-0.03	-0.03	-0.34	1639557.70	14591033.95	40°10'35.684"N	105°00'11.070"W	0.31	FIRST SURFACE MWD+IFR1 SURVEY
177.00	0.620	290.410	177.00	0.03	0.02	-0.60	1639557.44	14591034.01	40°10'35.684"N	105°00'11.074"W	1.05	
209.00	0.970	284.430	209.00	0.16	0.15	-1.03	1639557.01	14591034.13	40°10'35.686"N	105°00'11.079"W	1.12	
240.00	0.790	252.090	239.99	0.16	0.15	-1.49	1639556.56	14591034.13	40°10'35.686"N	105°00'11.085"W	1.68	
271.00	0.660	220.710	270.99	-0.04	-0.05	-1.81	1639556.24	14591033.93	40°10'35.684"N	105°00'11.089"W	1.33	
303.00	0.790	204.630	302.99	-0.38	-0.39	-2.02	1639556.03	14591033.59	40°10'35.680"N	105°00'11.092"W	0.75	
334.00	1.190	188.100	333.98	-0.89	-0.90	-2.15	1639555.89	14591033.08	40°10'35.675"N	105°00'11.094"W	1.57	
366.00	1.360	185.290	365.97	-1.60	-1.61	-2.23	1639555.81	14591032.37	40°10'35.668"N	105°00'11.095"W	0.57	
397.00	1.800	165.690	396.96	-2.44	-2.45	-2.15	1639555.90	14591031.54	40°10'35.660"N	105°00'11.094"W	2.23	
429.00	2.240	151.450	428.94	-3.48	-3.48	-1.72	1639556.32	14591030.50	40°10'35.650"N	105°00'11.088"W	2.08	
461.00	2.150	155.850	460.92	-4.58	-4.58	-1.18	1639556.86	14591029.40	40°10'35.639"N	105°00'11.081"W	0.60	
492.00	2.330	164.110	491.90	-5.71	-5.72	-0.77	1639557.27	14591028.27	40°10'35.628"N	105°00'11.076"W	1.19	
524.00	2.330	150.140	523.87	-6.91	-6.91	-0.27	1639557.77	14591027.08	40°10'35.616"N	105°00'11.069"W	1.77	
555.00	2.900	142.750	554.84	-8.08	-8.08	0.52	1639558.56	14591025.91	40°10'35.604"N	105°00'11.059"W	2.13	
587.00	3.470	139.410	586.79	-9.46	-9.46	1.64	1639559.68	14591024.53	40°10'35.591"N	105°00'11.045"W	1.87	
619.00	4.660	136.860	618.71	-11.15	-11.14	3.16	1639561.20	14591022.84	40°10'35.574"N	105°00'11.025"W	3.76	
651.00	5.750	134.670	650.57	-13.24	-13.22	5.19	1639563.23	14591020.77	40°10'35.553"N	105°00'10.999"W	3.46	
683.00	6.460	134.930	682.39	-15.64	-15.62	7.60	1639565.64	14591018.37	40°10'35.530"N	105°00'10.968"W	2.22	
714.00	7.290	136.340	713.17	-18.31	-18.27	10.20	1639568.23	14591015.72	40°10'35.503"N	105°00'10.935"W	2.73	
746.00	8.480	137.660	744.87	-21.53	-21.48	13.19	1639571.22	14591012.51	40°10'35.472"N	105°00'10.896"W	3.76	
769.00	9.360	140.730	767.59	-24.24	-24.18	15.51	1639573.55	14591009.81	40°10'35.445"N	105°00'10.866"W	4.35	LAST SURFACE MWD+IFR1 SURVEY
892.00	11.880	148.770	888.48	-42.86	-42.76	28.41	1639586.44	14590991.24	40°10'35.261"N	105°00'10.700"W	2.37	FIRST BHGE MWD+IFR1+SC SURVEY 8-1/2"
986.00	14.040	149.220	980.08	-60.97	-60.83	39.26	1639597.29	14590973.18	40°10'35.083"N	105°00'10.560"W	2.30	
1080.00	15.500	145.450	1070.97	-81.15	-80.97	52.22	1639610.24	14590953.04	40°10'34.884"N	105°00'10.393"W	1.86	
1172.00	17.080	144.800	1159.28	-102.37	-102.14	66.98	1639625.00	14590931.88	40°10'34.675"N	105°00'10.203"W	1.73	
1266.00	18.870	145.400	1248.68	-126.22	-125.93	83.57	1639641.58	14590908.10	40°10'34.440"N	105°00'09.989"W	1.91	
1359.00	21.080	144.710	1336.08	-152.32	-151.97	101.78	1639659.77	14590882.07	40°10'34.182"N	105°00'09.755"W	2.39	
1453.00	22.920	146.020	1423.24	-181.37	-180.95	121.78	1639679.76	14590853.10	40°10'33.896"N	105°00'09.497"W	2.03	
1547.00	24.200	143.130	1509.40	-212.04	-211.54	143.57	1639701.55	14590822.52	40°10'33.594"N	105°00'09.216"W	1.83	
1641.00	24.340	141.380	1595.09	-242.67	-242.09	167.22	1639725.19	14590791.99	40°10'33.292"N	105°00'08.912"W	0.78	
1735.00	24.040	139.830	1680.84	-272.52	-271.85	191.66	1639749.62	14590762.23	40°10'32.998"N	105°00'08.597"W	0.75	
1829.00	24.110	141.500	1766.67	-302.26	-301.51	215.96	1639773.91	14590732.59	40°10'32.704"N	105°00'08.284"W	0.73	
1923.00	23.720	145.320	1852.60	-332.91	-332.08	238.67	1639796.61	14590702.02	40°10'32.402"N	105°00'07.991"W	1.70	
2017.00	23.070	145.110	1938.87	-363.64	-362.74	259.97	1639817.89	14590671.38	40°10'32.099"N	105°00'07.717"W	0.70	
2111.00	22.330	144.290	2025.59	-393.32	-392.35	280.92	1639838.84	14590641.78	40°10'31.807"N	105°00'07.447"W	0.86	
2205.00	21.550	143.310	2112.78	-421.73	-420.69	301.66	1639859.57	14590613.45	40°10'31.527"N	105°00'07.180"W	0.92	
2299.00	21.400	143.830	2200.26	-449.49	-448.38	322.10	1639880.00	14590585.77	40°10'31.253"N	105°00'06.917"W	0.26	
2393.00	22.160	147.960	2287.55	-478.43	-477.25	341.63	1639899.51	14590556.91	40°10'30.968"N	105°00'06.665"W	1.82	
2487.00	22.950	148.560	2374.36	-509.16	-507.92	360.59	1639918.47	14590526.26	40°10'30.665"N	105°00'06.421"W	0.88	
2582.00	22.010	148.580	2462.14	-540.22	-538.91	379.53	1639937.40	14590495.28	40°10'30.358"N	105°00'06.177"W	0.99	
2676.00	20.300	147.580	2549.80	-569.08	-567.71	397.46	1639955.32	14590466.49	40°10'30.074"N	105°00'05.946"W	1.86	
2770.00	20.170	145.850	2638.00	-596.32	-594.88	415.30	1639973.15	14590439.32	40°10'29.805"N	105°00'05.716"W	0.65	
2864.00	22.140	145.860	2725.66	-624.46	-622.96	434.34	1639992.18	14590411.26	40°10'29.528"N	105°00'05.471"W	2.10	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 NEWBY STATE 26N-33HZ (589'FSL & 1320'FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 26N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 26N-33HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (156 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
2958.00	21.900	145.180	2812.81	-653.58	-652.01	454.29	1640012.13	14590382.22	40°10'29.241"N	105°00'05.214"W	0.37	
3052.00	21.500	144.500	2900.14	-682.07	-680.43	474.30	1640032.13	14590353.81	40°10'28.960"N	105°00'04.956"W	0.50	
3146.00	20.020	144.750	2988.04	-709.30	-707.59	493.59	1640051.41	14590326.66	40°10'28.692"N	105°00'04.707"W	1.58	
3240.00	19.800	142.490	3076.42	-735.14	-733.36	512.57	1640070.38	14590300.90	40°10'28.437"N	105°00'04.463"W	0.85	
3334.00	19.410	143.650	3164.97	-760.41	-758.57	531.52	1640089.33	14590275.70	40°10'28.188"N	105°00'04.219"W	0.59	
3428.00	21.750	145.100	3252.97	-787.35	-785.44	550.75	1640108.54	14590248.84	40°10'27.922"N	105°00'03.971"W	2.55	
3522.00	20.040	141.260	3340.79	-814.27	-812.29	570.80	1640128.58	14590222.00	40°10'27.657"N	105°00'03.713"W	2.33	
3616.00	18.950	138.990	3429.40	-838.42	-836.37	590.89	1640148.67	14590197.93	40°10'27.419"N	105°00'03.454"W	1.41	
3710.00	21.330	141.540	3517.65	-863.40	-861.28	611.54	1640169.31	14590173.03	40°10'27.173"N	105°00'03.188"W	2.70	
3804.00	21.830	142.950	3605.06	-890.80	-888.61	632.71	1640190.46	14590145.70	40°10'26.903"N	105°00'02.915"W	0.77	
3898.00	22.910	145.410	3691.98	-919.89	-917.62	653.62	1640211.37	14590116.70	40°10'26.616"N	105°00'02.646"W	1.52	
3992.00	21.550	146.990	3779.00	-949.50	-947.17	673.42	1640231.16	14590087.17	40°10'26.324"N	105°00'02.391"W	1.58	
4086.00	22.760	148.530	3866.05	-979.55	-977.15	692.31	1640250.05	14590057.20	40°10'26.028"N	105°00'02.147"W	1.43	
4180.00	20.210	147.790	3953.52	-1008.86	-1006.40	710.46	1640268.19	14590027.96	40°10'25.739"N	105°00'01.914"W	2.73	
4275.00	16.740	147.550	4043.61	-1034.36	-1031.84	726.56	1640284.27	14590002.53	40°10'25.487"N	105°00'01.706"W	3.65	
4369.00	15.770	142.280	4133.85	-1055.94	-1053.37	741.64	1640299.35	14589981.01	40°10'25.274"N	105°00'01.512"W	1.88	
4463.00	17.350	140.570	4223.95	-1076.93	-1074.30	758.35	1640316.06	14589960.09	40°10'25.068"N	105°00'01.297"W	1.76	
4557.00	19.270	143.610	4313.19	-1100.31	-1097.62	776.46	1640334.15	14589936.78	40°10'24.837"N	105°00'01.063"W	2.28	
4651.00	19.930	144.110	4401.74	-1125.84	-1123.08	795.06	1640352.74	14589911.32	40°10'24.586"N	105°00'00.824"W	0.72	
4745.00	18.930	145.570	4490.39	-1151.46	-1148.64	813.07	1640370.75	14589885.78	40°10'24.333"N	105°00'00.592"W	1.18	
4839.00	17.660	145.570	4579.64	-1175.85	-1172.98	829.75	1640387.42	14589861.45	40°10'24.092"N	105°00'00.377"W	1.35	
4933.00	18.170	148.320	4669.08	-1200.14	-1197.21	845.51	1640403.17	14589837.22	40°10'23.853"N	105°00'00.174"W	1.05	
4994.00†	19.375	149.439	4726.83	-1216.98	-1214.02	855.65	1640413.31	14589820.42	40°10'23.687"N	105°00'00.043"W	2.06	ENTER LANDBOX (625'FNL & 465'FEL, SEC.04) 40.1732464 -105.0000120
5027.00	20.030	149.990	4757.90	-1226.61	-1223.62	861.26	1640418.92	14589810.82	40°10'23.592"N	104°59'59.971"W	2.06	
5121.00	18.050	149.290	4846.75	-1253.13	-1250.09	876.75	1640434.40	14589784.37	40°10'23.330"N	104°59'59.771"W	2.12	
5215.00	15.900	149.220	4936.65	-1276.76	-1273.67	890.78	1640448.42	14589760.79	40°10'23.097"N	104°59'59.591"W	2.29	
5309.00	17.040	151.950	5026.80	-1300.02	-1296.89	903.85	1640461.48	14589737.58	40°10'22.868"N	104°59'59.422"W	1.47	
5403.00	17.710	149.520	5116.51	-1324.55	-1321.37	917.58	1640475.20	14589713.11	40°10'22.626"N	104°59'59.246"W	1.05	
5497.00	15.270	149.330	5206.64	-1347.57	-1344.34	931.14	1640488.77	14589690.15	40°10'22.399"N	104°59'59.071"W	2.60	
5591.00	12.180	147.000	5297.94	-1366.58	-1363.31	942.86	1640500.48	14589671.19	40°10'22.212"N	104°59'58.920"W	3.34	
5685.00	9.570	144.540	5390.24	-1381.29	-1377.99	952.80	1640510.41	14589656.51	40°10'22.066"N	104°59'58.792"W	2.82	
5779.00	7.230	140.840	5483.23	-1392.27	-1388.95	961.07	1640518.67	14589645.56	40°10'21.958"N	104°59'58.685"W	2.55	
5873.00	5.410	134.750	5576.66	-1400.01	-1396.65	967.95	1640525.55	14589637.86	40°10'21.882"N	104°59'58.597"W	2.06	
5967.00	3.690	142.660	5670.36	-1405.55	-1402.18	972.93	1640530.53	14589632.33	40°10'21.827"N	104°59'58.533"W	1.94	
6059.00	1.420	127.520	5762.26	-1408.61	-1405.23	975.63	1640533.23	14589629.29	40°10'21.797"N	104°59'58.498"W	2.55	LAST BHGE MWD+IFR1+SC SURVEY 8-1/2"
6193.00	0.320	143.030	5896.24	-1409.92	-1406.54	977.17	1640534.78	14589627.98	40°10'21.784"N	104°59'58.478"W	0.83	FIRST BHGE MWD+IFR1+SC SURVEY 6-1/8"
6287.00	1.330	349.190	5990.24	-1409.06	-1405.67	977.13	1640534.73	14589628.84	40°10'21.793"N	104°59'58.478"W	1.73	
6381.00	1.070	341.810	6084.22	-1407.15	-1403.77	976.65	1640534.25	14589630.74	40°10'21.812"N	104°59'58.485"W	0.32	
6475.00	0.940	343.940	6178.20	-1405.58	-1402.19	976.16	1640533.76	14589632.32	40°10'21.827"N	104°59'58.491"W	0.14	
6569.00	2.080	347.630	6272.17	-1403.17	-1399.79	975.58	1640533.18	14589634.72	40°10'21.851"N	104°59'58.498"W	1.22	
6614.00†	3.430	12.574	6317.12	-1401.05	-1397.67	975.70	1640533.30	14589636.84	40°10'21.872"N	104°59'58.497"W	3.95	KOP
6663.00	5.200	23.170	6365.98	-1397.59	-1394.20	976.89	1640534.50	14589640.31	40°10'21.906"N	104°59'58.482"W	3.95	
6757.00	13.500	5.810	6458.66	-1382.74	-1379.34	979.69	1640537.29	14589655.16	40°10'22.053"N	104°59'58.446"W	9.23	
6851.00	19.680	3.700	6548.70	-1356.01	-1352.60	981.82	1640539.42	14589681.89	40°10'22.317"N	104°59'58.418"W	6.60	
6945.00	22.980	356.590	6636.27	-1321.88	-1318.48	981.75	1640539.35	14589716.00	40°10'22.655"N	104°59'58.419"W	4.45	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 NEWBY STATE 26N-33HZ (589°FSL & 1320°FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 26N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 26N-33HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (156 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
7039.00	24.780	359.660	6722.22	-1283.86	-1280.46	980.54	1640538.15	14589754.00	40°10'23.030"N	104°59'58.434"W	2.33	
7133.00	27.690	359.590	6806.53	-1242.31	-1238.91	980.27	1640537.87	14589795.54	40°10'23.441"N	104°59'58.438"W	3.10	
7227.00	30.020	357.280	6888.86	-1196.97	-1193.57	979.00	1640536.60	14589840.85	40°10'23.889"N	104°59'58.454"W	2.75	
7321.00	35.190	359.050	6968.02	-1146.36	-1142.97	977.43	1640535.04	14589891.44	40°10'24.389"N	104°59'58.474"W	5.59	
7415.00	41.240	358.480	7041.84	-1088.25	-1084.86	976.16	1640533.77	14589949.52	40°10'24.963"N	104°59'58.491"W	6.45	
7509.00	46.920	354.510	7109.35	-1023.02	-1019.65	972.05	1640529.66	14590014.71	40°10'25.608"N	104°59'58.544"W	6.72	
7603.00	55.930	1.480	7167.95	-949.72	-946.35	969.76	1640527.38	14590087.97	40°10'26.332"N	104°59'58.573"W	11.19	
7697.00	71.750	2.060	7209.26	-865.66	-862.29	972.39	1640530.01	14590172.00	40°10'27.163"N	104°59'58.539"W	16.84	
7791.00	78.130	3.140	7233.67	-775.05	-771.66	976.52	1640534.14	14590262.59	40°10'28.058"N	104°59'58.486"W	6.88	
7885.00	84.940	1.300	7247.50	-682.22	-678.82	980.10	1640537.73	14590355.40	40°10'28.976"N	104°59'58.440"W	7.50	
7979.00	92.710	1.350	7249.43	-588.34	-584.93	982.27	1640539.90	14590449.25	40°10'29.903"N	104°59'58.412"W	8.27	
8029.00†	92.678	0.914	7247.08	-538.41	-535.00	983.26	1640540.89	14590499.16	40°10'30.397"N	104°59'58.399"W	0.87	LANDING (54°FSL & 337°FEL, SEC.33) 40.1751103 -104.9995553
8073.00	92.650	0.530	7245.03	-494.46	-491.05	983.82	1640541.45	14590543.10	40°10'30.831"N	104°59'58.392"W	0.87	
8167.00	94.040	0.760	7239.55	-400.64	-397.22	984.87	1640542.50	14590636.89	40°10'31.758"N	104°59'58.378"W	1.50	
8261.00	93.700	0.150	7233.20	-306.86	-303.44	985.62	1640543.25	14590730.63	40°10'32.685"N	104°59'58.369"W	0.74	
8300.00†	93.638	0.158	7230.71	-267.94	-264.52	985.72	1640543.36	14590769.54	40°10'33.070"N	104°59'58.367"W	0.16	EXIT RADIUS HEEL (324°FSL & 335°FEL, SEC.33) 40.1758527 -104.9995464
8355.00	93.550	0.170	7227.26	-213.05	-209.62	985.88	1640543.52	14590824.41	40°10'33.612"N	104°59'58.365"W	0.16	
8449.00	91.730	358.860	7222.93	-119.15	-115.73	985.08	1640542.73	14590918.26	40°10'34.540"N	104°59'58.375"W	2.38	
8543.00	93.390	359.450	7218.73	-25.26	-21.84	983.70	1640541.34	14591012.12	40°10'35.468"N	104°59'58.393"W	1.87	
8637.00	93.320	0.230	7213.23	68.58	72.00	983.44	1640541.08	14591105.92	40°10'36.395"N	104°59'58.396"W	0.83	
8731.00	93.170	0.410	7207.91	162.43	165.84	983.96	1640541.61	14591199.73	40°10'37.323"N	104°59'58.390"W	0.25	
8825.00	93.450	1.210	7202.48	256.25	259.68	985.29	1640542.94	14591293.52	40°10'38.250"N	104°59'58.373"W	0.90	
8919.00	93.700	0.140	7196.62	350.06	353.49	986.39	1640544.05	14591387.29	40°10'39.177"N	104°59'58.358"W	1.17	
9013.00	93.880	1.100	7190.41	443.84	447.27	987.41	1640545.07	14591481.04	40°10'40.104"N	104°59'58.345"W	1.04	
9107.00	94.440	359.890	7183.59	537.59	541.02	988.22	1640545.88	14591574.75	40°10'41.030"N	104°59'58.335"W	1.42	
9201.00	93.050	359.830	7177.45	631.38	634.82	987.99	1640545.65	14591668.51	40°10'41.957"N	104°59'58.338"W	1.48	
9295.00	92.280	359.690	7173.08	725.28	728.71	987.59	1640545.26	14591762.37	40°10'42.885"N	104°59'58.343"W	0.83	
9389.00	90.800	358.850	7170.55	819.24	822.67	986.40	1640544.07	14591856.29	40°10'43.813"N	104°59'58.358"W	1.81	
9483.00	92.100	358.750	7168.17	913.19	916.62	984.43	1640542.11	14591950.20	40°10'44.742"N	104°59'58.383"W	1.39	
9578.00	90.860	358.580	7165.72	1008.14	1011.56	982.22	1640539.90	14592045.10	40°10'45.680"N	104°59'58.412"W	1.32	
9672.00	92.070	357.690	7163.32	1102.07	1105.47	979.16	1640536.85	14592138.98	40°10'46.608"N	104°59'58.451"W	1.60	
9766.00	92.160	357.090	7159.85	1195.92	1199.31	974.88	1640532.57	14592232.78	40°10'47.535"N	104°59'58.506"W	0.65	
9860.00	93.820	358.180	7154.94	1289.72	1293.10	971.01	1640528.70	14592326.53	40°10'48.462"N	104°59'58.556"W	2.11	
9954.00	92.280	357.760	7149.94	1383.54	1386.90	967.68	1640525.38	14592420.30	40°10'49.389"N	104°59'58.599"W	1.70	
10048.00	93.750	0.390	7145.00	1477.39	1480.75	966.16	1640523.87	14592514.10	40°10'50.317"N	104°59'58.618"W	3.20	
10142.00	92.560	359.710	7139.82	1571.24	1574.61	966.25	1640523.95	14592607.92	40°10'51.244"N	104°59'58.617"W	1.46	
10236.00	92.100	359.310	7136.00	1665.16	1668.53	965.44	1640523.16	14592701.80	40°10'52.172"N	104°59'58.627"W	0.65	
10330.00	90.990	358.360	7133.47	1759.11	1762.47	963.53	1640521.25	14592795.71	40°10'53.101"N	104°59'58.652"W	1.55	
10424.00	91.630	359.770	7131.32	1853.08	1856.43	962.00	1640519.72	14592889.63	40°10'54.029"N	104°59'58.672"W	1.65	
10518.00	91.170	0.500	7129.02	1947.05	1950.40	962.22	1640519.94	14592983.56	40°10'54.958"N	104°59'58.669"W	0.92	
10612.00	91.730	0.190	7126.64	2041.01	2044.37	962.79	1640520.51	14593077.49	40°10'55.886"N	104°59'58.662"W	0.68	
10706.00	92.710	0.650	7123.00	2134.93	2138.29	963.47	1640521.20	14593171.38	40°10'56.814"N	104°59'58.653"W	1.15	
10800.00	91.970	0.440	7119.16	2228.85	2232.21	964.37	1640522.10	14593265.26	40°10'57.743"N	104°59'58.641"W	0.82	
10894.00	93.850	1.830	7114.39	2322.69	2326.06	966.23	1640523.96	14593359.08	40°10'58.670"N	104°59'58.617"W	2.49	
10989.00	94.230	0.690	7107.70	2417.43	2420.80	968.31	1640526.05	14593453.78	40°10'59.606"N	104°59'58.590"W	1.26	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 NEWBY STATE 26N-33HZ (589°FSL & 1320°FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 26N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 26N-33HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (156 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
11083.00	93.040	359.480	7101.74	2511.23	2514.61	968.45	1640526.19	14593547.55	40°11'00.533"N	104°59'58.588"W	1.80	
11177.00	90.280	358.550	7099.02	2605.17	2608.55	966.83	1640524.58	14593641.45	40°11'01.462"N	104°59'58.609"W	3.10	
11271.00	90.990	359.490	7097.97	2699.16	2702.53	965.23	1640522.97	14593735.39	40°11'02.390"N	104°59'58.630"W	1.25	
11365.00	92.680	0.940	7094.96	2793.10	2796.47	965.58	1640523.33	14593829.29	40°11'03.319"N	104°59'58.625"W	2.37	
11459.00	93.670	1.760	7089.76	2886.92	2890.30	967.79	1640525.54	14593923.08	40°11'04.246"N	104°59'58.597"W	1.37	
11552.00	92.900	1.630	7084.43	2979.72	2983.10	970.53	1640528.29	14594015.85	40°11'05.163"N	104°59'58.561"W	0.84	
11647.00	94.850	2.910	7078.01	3074.40	3077.81	974.29	1640532.04	14594110.52	40°11'06.099"N	104°59'58.513"W	2.45	
11666.00†	94.747	2.894	7076.42	3093.31	3096.72	975.25	1640533.00	14594129.42	40°11'06.286"N	104°59'58.500"W	0.55	ENTER RADIUS TOE (1631°FNL & 342°FEL, SEC.33) 40.1850793 -104.9995835
11741.00	94.340	2.830	7070.48	3167.97	3171.39	978.98	1640536.74	14594204.06	40°11'07.023"N	104°59'58.452"W	0.55	
11835.00	93.730	3.180	7063.86	3261.59	3265.02	983.89	1640541.65	14594297.66	40°11'07.949"N	104°59'58.389"W	0.75	
11929.00	94.410	1.940	7057.19	3355.24	3358.69	988.08	1640545.84	14594391.29	40°11'08.874"N	104°59'58.335"W	1.50	
12023.00	93.660	2.060	7050.58	3448.94	3452.40	991.35	1640549.12	14594484.96	40°11'09.800"N	104°59'58.293"W	0.81	
12117.00	92.310	358.000	7045.68	3542.79	3546.25	991.40	1640549.17	14594578.77	40°11'10.728"N	104°59'58.292"W	4.55	
12211.00	91.390	357.470	7042.65	3636.67	3640.13	987.69	1640545.46	14594672.61	40°11'11.656"N	104°59'58.340"W	1.13	
12305.00	93.290	357.400	7038.81	3730.51	3733.95	983.49	1640541.26	14594766.40	40°11'12.583"N	104°59'58.394"W	2.02	
12399.00	92.620	357.350	7033.96	3824.30	3827.73	979.19	1640536.97	14594860.13	40°11'13.509"N	104°59'58.449"W	0.71	
12493.00	92.930	357.480	7029.41	3918.11	3921.52	974.95	1640532.74	14594953.89	40°11'14.436"N	104°59'58.504"W	0.36	
12587.00	92.680	356.950	7024.81	4011.90	4015.30	970.39	1640528.18	14595047.63	40°11'15.363"N	104°59'58.563"W	0.62	
12681.00	92.650	357.410	7020.44	4105.70	4109.08	965.77	1640523.57	14595141.38	40°11'16.290"N	104°59'58.622"W	0.49	
12789.00	90.180	353.430	7017.77	4213.32	4216.67	957.15	1640514.95	14595248.93	40°11'17.353"N	104°59'58.733"W	4.34	LAST BHGE MWD+IFR1+SC SURVEY 6-1/8"
12839.00	90.180	353.430	7017.62	4263.01	4266.34	951.43	1640509.24	14595298.58	40°11'17.844"N	104°59'58.807"W	0.00	PTB (462°FNL & 366°FEL, SEC.33) 40.1882900 -104.9996685

TARGETS								
Name	TVD (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Shape
SEC.04-T2N-R68W	2.00	-1.42	-180.01	1639378.11	14591032.57	40°10'35.670"N	105°00'13.385"W	polygon
SEC.33-T3N-R68W	2.00	-1.42	-180.01	1639378.11	14591032.57	40°10'35.670"N	105°00'13.385"W	polygon
NEWBY STATE 26N-33HZ BHL REV-1(461°FNL & 367°FEL, SEC.33)	7023.00	4266.72	949.90	1640507.71	14595298.95	40°11'17.848"N	104°59'58.826"W	point
NEWBY STATE 26N-33HZ HEEL REV-1(51°FSL & 354°FEL, SEC.33)	7235.00	-529.63	966.57	1640524.21	14590504.53	40°10'30.450"N	104°59'58.614"W	point
NEWBY STATE 26N-33HZ LANDBOX	7235.00	0.00	0.00	1639558.04	14591033.98	40°10'35.684"N	105°00'11.066"W	polygon
NEWBY STATE 26N-33HZ RADIUS 1	7235.00	3402.63	1318.37	1640876.00	14594435.20	40°11'09.309"N	104°59'54.079"W	polygon
NEWBY STATE 26N-33HZ RADIUS 2	7235.00	-577.67	1320.31	1640877.80	14590456.50	40°10'29.975"N	104°59'54.057"W	polygon

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 NEWBY STATE 26N-33HZ (589'FSL & 1320'FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 26N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 26N-33HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH COMPOSITION - Ref Wellbore: NEWBY STATE 26N-33HZ AWB Ref Wellpath: NEWBY STATE 26N-33HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.00	769.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <145 - 769>	NEWBY STATE 26N-33HZ AWB
769.00	6059.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC 8-1/2" <892 - 6059>	NEWBY STATE 26N-33HZ AWB
6059.00	12789.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC 6-1/8" <6193 - 12789>	NEWBY STATE 26N-33HZ AWB
12789.00	12839.00	Blind Drilling (std)	Projection to bit	NEWBY STATE 26N-33HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#33 NEWBY STATE 26N-33HZ (589'FSL & 1320'FEL,SEC.33)
Area	COLORADO	Well	NEWBY STATE 26N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 26N-33HZ AWP
Facility	SEC.33-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
145.00	0.350	265.360	145.00	FIRST SURFACE MWD+IFR1 SURVEY
769.00	9.360	140.730	767.59	LAST SURFACE MWD+IFR1 SURVEY
892.00	11.880	148.770	888.48	FIRST BHGE MWD+IFR1+SC SURVEY 8-1/2"
4994.00	19.375	149.439	4726.83	ENTER LANDBOX (625'FNL & 465'FEL,SEC.04) 40.1732464 -105.0000120
6059.00	1.420	127.520	5762.26	LAST BHGE MWD+IFR1+SC SURVEY 8-1/2"
6193.00	0.320	143.030	5896.24	FIRST BHGE MWD+IFR1+SC SURVEY 6-1/8"
6614.00	3.430	12.574	6317.12	KOP
8029.00	92.678	0.914	7247.08	LANDING (54'FSL & 337'FEL,SEC.33) 40.1751103 -104.9995553
8300.00	93.638	0.158	7230.71	EXIT RADIUS HEEL (324'FSL & 335'FEL,SEC.33) 40.1758527 -104.9995464
11666.00	94.747	2.894	7076.42	ENTER RADIUS TOE (1631'FNL & 342'FEL,SEC.33) 40.1850793 -104.9995835
12789.00	90.180	353.430	7017.77	LAST BHGE MWD+IFR1+SC SURVEY 6-1/8"
12839.00	90.180	353.430	7017.62	PTB (462'FNL & 366'FEL,SEC.33) 40.1882900 -104.9996685