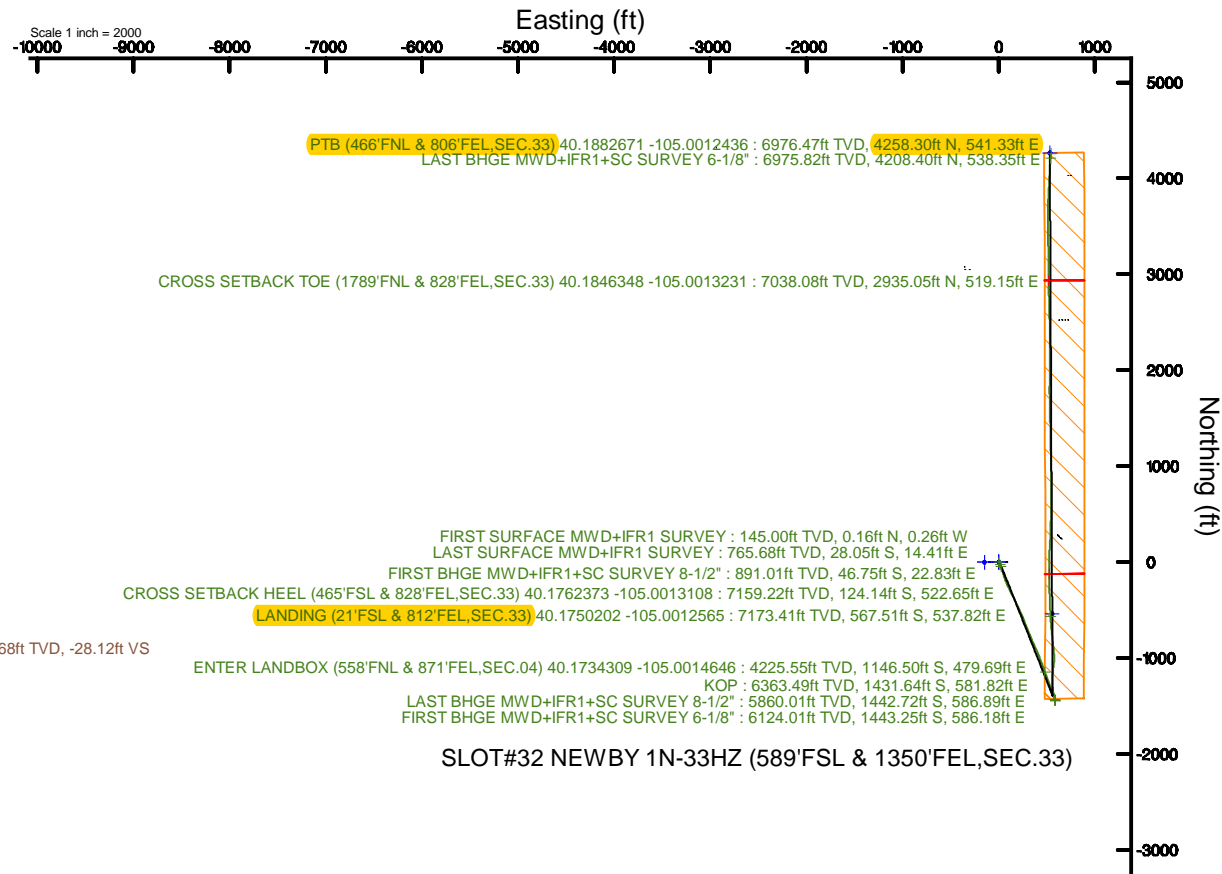
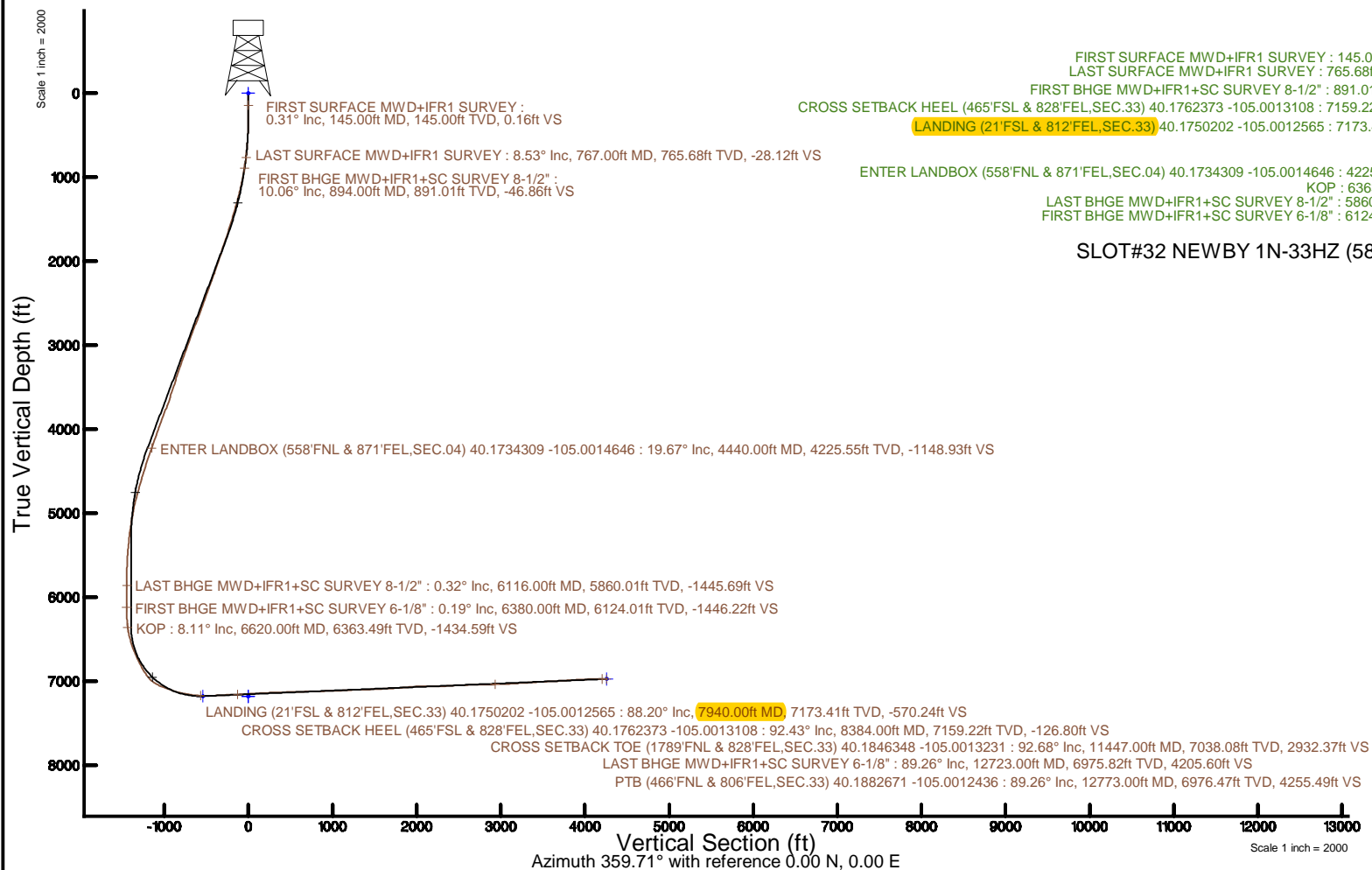


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL,SEC.33)
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: NEWBY 1N-33HZ
 Facility: SEC.33-T3N-R68W Wellbore: NEWBY 1N-33HZ PWB

Plot reference wellpath is NEWBY 1N-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#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL,SEC.33)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2018-01-11
	Database: WA_DEN_Anadarko_Defn



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL,SEC.33)
Area	COLORADO	Well	NEWBY 1N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY 1N-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 1:07 PM
Convergence at slot	0.00°	Database/Source file	WA_DEN_Anadarko_Defn/NEWBY_1N-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	-674.52	2654.38	1639528.09	14591033.68	40°10'35.681"N	105°00'11.452"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#32 NEWBY 1N-33HZ (589'FSL & 1350'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	359.71°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL, SEC.33)
Area	COLORADO	Well	NEWBY 1N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY 1N-33HZ AWP
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (154 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	300.690	0.00	0.00	0.00	0.00	1639528.09	14591033.68	40°10'35.681°N	105°00'11.452°W	0.00	
32.00	0.000	300.690	32.00	0.00	0.00	0.00	1639528.09	14591033.68	40°10'35.681°N	105°00'11.452°W	0.00	
145.00	0.310	300.690	145.00	0.16	0.16	-0.26	1639527.83	14591033.83	40°10'35.683°N	105°00'11.455°W	0.27	FIRST SURFACE MWD+IFR1 SURVEY
177.00	0.260	289.440	177.00	0.23	0.22	-0.41	1639527.69	14591033.90	40°10'35.683°N	105°00'11.457°W	0.23	
209.00	0.350	245.410	209.00	0.21	0.21	-0.56	1639527.53	14591033.89	40°10'35.683°N	105°00'11.459°W	0.76	
240.00	0.260	151.980	240.00	0.11	0.11	-0.62	1639527.48	14591033.79	40°10'35.682°N	105°00'11.460°W	1.45	
271.00	0.530	130.180	271.00	-0.05	-0.05	-0.47	1639527.62	14591033.63	40°10'35.681°N	105°00'11.458°W	0.98	
303.00	0.790	131.060	303.00	-0.29	-0.29	-0.19	1639527.90	14591033.39	40°10'35.678°N	105°00'11.455°W	0.81	
334.00	1.190	142.050	333.99	-0.68	-0.68	0.16	1639528.26	14591033.00	40°10'35.674°N	105°00'11.450°W	1.42	
366.00	1.450	137.130	365.98	-1.24	-1.24	0.64	1639528.74	14591032.44	40°10'35.669°N	105°00'11.444°W	0.89	
397.00	2.020	149.780	396.97	-2.01	-2.00	1.19	1639529.28	14591031.68	40°10'35.661°N	105°00'11.437°W	2.20	
429.00	2.550	159.630	428.94	-3.16	-3.16	1.72	1639529.81	14591030.52	40°10'35.650°N	105°00'11.430°W	2.06	
461.00	2.720	159.360	460.91	-4.55	-4.53	2.23	1639530.33	14591029.15	40°10'35.636°N	105°00'11.423°W	0.53	
492.00	3.160	152.770	491.87	-6.00	-5.98	2.88	1639530.97	14591027.70	40°10'35.622°N	105°00'11.415°W	1.79	
524.00	3.910	149.870	523.81	-7.73	-7.71	3.84	1639531.93	14591025.97	40°10'35.605°N	105°00'11.403°W	2.41	
555.00	4.350	152.070	554.73	-9.69	-9.66	4.92	1639533.01	14591024.02	40°10'35.586°N	105°00'11.389°W	1.51	
587.00	4.700	153.560	586.63	-11.94	-11.91	6.07	1639534.16	14591021.77	40°10'35.563°N	105°00'11.374°W	1.15	
619.00	4.830	152.070	618.52	-14.31	-14.27	7.28	1639535.37	14591019.41	40°10'35.540°N	105°00'11.358°W	0.56	
651.00	4.970	151.890	650.40	-16.73	-16.69	8.57	1639536.66	14591017.00	40°10'35.516°N	105°00'11.342°W	0.44	
683.00	5.490	151.540	682.27	-19.30	-19.25	9.95	1639538.04	14591014.43	40°10'35.491°N	105°00'11.324°W	1.63	
714.00	6.370	152.240	713.10	-22.14	-22.08	11.46	1639539.54	14591011.61	40°10'35.463°N	105°00'11.304°W	2.85	
746.00	7.210	153.910	744.87	-25.52	-25.45	13.17	1639541.25	14591008.23	40°10'35.429°N	105°00'11.282°W	2.70	
767.00	8.530	154.710	765.68	-28.12	-28.05	14.41	1639542.50	14591005.64	40°10'35.404°N	105°00'11.266°W	6.31	LAST SURFACE MWD+IFR1 SURVEY
894.00	10.060	156.680	891.01	-46.86	-46.75	22.83	1639550.91	14590986.95	40°10'35.219°N	105°00'11.158°W	1.23	FIRST BHGE MWD+IFR1+SC SURVEY 8-1/2"
987.00	10.980	160.700	982.44	-62.71	-62.57	28.97	1639557.05	14590971.14	40°10'35.063°N	105°00'11.079°W	1.26	
1081.00	13.170	161.750	1074.36	-81.37	-81.19	35.28	1639563.36	14590952.52	40°10'34.879°N	105°00'10.997°W	2.34	
1174.00	13.230	163.840	1164.90	-101.68	-101.47	41.56	1639569.64	14590932.25	40°10'34.678°N	105°00'10.917°W	0.52	
1267.00	15.500	166.730	1254.99	-124.03	-123.79	47.38	1639575.45	14590909.94	40°10'34.458°N	105°00'10.842°W	2.56	
1361.00	16.370	163.030	1345.38	-148.96	-148.69	54.13	1639582.19	14590885.05	40°10'34.212°N	105°00'10.755°W	1.42	
1454.00	17.160	161.220	1434.42	-174.53	-174.21	62.37	1639590.43	14590859.54	40°10'33.959°N	105°00'10.648°W	1.02	
1548.00	18.040	157.200	1524.03	-201.13	-200.76	72.48	1639600.53	14590833.00	40°10'33.697°N	105°00'10.518°W	1.60	
1642.00	19.100	156.500	1613.13	-228.71	-228.28	84.25	1639612.30	14590805.49	40°10'33.425°N	105°00'10.367°W	1.15	
1736.00	19.460	153.980	1701.86	-256.95	-256.46	97.25	1639625.29	14590777.32	40°10'33.147°N	105°00'10.199°W	0.96	
1830.00	20.740	154.870	1790.13	-286.16	-285.60	111.19	1639639.23	14590748.19	40°10'32.859°N	105°00'10.020°W	1.40	
1924.00	20.240	153.900	1878.19	-315.90	-315.27	125.41	1639653.44	14590718.53	40°10'32.566°N	105°00'09.836°W	0.64	
2018.00	20.620	152.920	1966.28	-345.32	-344.61	140.10	1639668.12	14590689.20	40°10'32.276°N	105°00'09.647°W	0.54	
2112.00	20.230	152.220	2054.37	-374.51	-373.72	155.21	1639683.22	14590660.10	40°10'31.988°N	105°00'09.453°W	0.49	
2207.00	21.140	153.420	2143.24	-404.44	-403.58	170.53	1639698.54	14590630.26	40°10'31.693°N	105°00'09.255°W	1.06	
2301.00	22.160	154.880	2230.61	-435.73	-434.79	185.64	1639713.64	14590599.06	40°10'31.384°N	105°00'09.060°W	1.23	
2395.00	21.700	155.040	2317.81	-467.61	-466.60	200.50	1639728.49	14590567.26	40°10'31.070°N	105°00'08.869°W	0.49	
2489.00	22.300	156.270	2404.96	-499.77	-498.68	215.01	1639743.00	14590535.19	40°10'30.753°N	105°00'08.682°W	0.80	
2583.00	21.650	156.370	2492.13	-532.05	-530.89	229.14	1639757.12	14590502.99	40°10'30.435°N	105°00'08.500°W	0.69	
2677.00	21.940	155.530	2579.41	-563.99	-562.76	243.36	1639771.34	14590471.14	40°10'30.120°N	105°00'08.317°W	0.45	
2771.00	21.740	156.290	2666.67	-595.99	-594.68	257.64	1639785.60	14590439.23	40°10'29.804°N	105°00'08.133°W	0.37	
2865.00	22.540	159.680	2753.74	-628.89	-627.52	270.89	1639798.85	14590406.40	40°10'29.480°N	105°00'07.962°W	1.60	

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)		Slot	SLOT#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL, SEC.33)
Area	COLORADO		Well	NEWBY 1N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)		Wellbore	NEWBY 1N-33HZ AWP
Facility	SEC.33-T3N-R68W			

WELLPATH DATA (154 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
2959.00	21.630	159.920	2840.84	-662.12	-660.69	283.10	1639811.05	14590373.25	40°10'29.152"N	105°00'07.805"W	0.97	
3053.00	21.720	159.070	2928.19	-694.70	-693.20	295.26	1639823.21	14590340.74	40°10'28.831"N	105°00'07.648"W	0.35	
3147.00	21.900	158.560	3015.47	-727.33	-725.77	307.88	1639835.82	14590308.19	40°10'28.509"N	105°00'07.486"W	0.28	
3241.00	21.980	157.720	3102.66	-759.99	-758.36	320.96	1639848.89	14590275.61	40°10'28.187"N	105°00'07.317"W	0.34	
3335.00	20.630	157.070	3190.23	-791.59	-789.89	334.08	1639862.01	14590244.09	40°10'27.875"N	105°00'07.148"W	1.46	
3429.00	19.390	155.730	3278.56	-821.13	-819.37	346.95	1639874.87	14590214.63	40°10'27.584"N	105°00'06.982"W	1.41	
3523.00	18.790	155.400	3367.39	-849.18	-847.36	359.66	1639887.58	14590186.65	40°10'27.307"N	105°00'06.819"W	0.65	
3618.00	18.280	153.710	3457.46	-876.52	-874.63	372.63	1639900.54	14590159.39	40°10'27.038"N	105°00'06.652"W	0.78	
3712.00	20.610	156.110	3546.09	-904.93	-902.98	385.86	1639913.77	14590131.05	40°10'26.758"N	105°00'06.481"W	2.62	
3806.00	20.020	157.550	3634.25	-935.00	-932.98	398.71	1639926.61	14590101.06	40°10'26.461"N	105°00'06.316"W	0.82	
3900.00	21.680	157.280	3722.09	-965.95	-963.86	411.56	1639939.45	14590070.19	40°10'26.156"N	105°00'06.150"W	1.77	
3994.00	23.150	159.010	3808.98	-999.29	-997.13	424.88	1639952.77	14590036.93	40°10'25.827"N	105°00'05.978"W	1.71	
4088.00	21.880	159.910	3895.82	-1033.05	-1030.84	437.52	1639965.40	14590003.24	40°10'25.494"N	105°00'05.816"W	1.40	
4182.00	21.030	160.070	3983.30	-1065.42	-1063.14	449.28	1639977.16	14589970.95	40°10'25.175"N	105°00'05.664"W	0.91	
4276.00	20.670	160.340	4071.15	-1096.95	-1094.62	460.62	1639988.48	14589939.48	40°10'24.864"N	105°00'05.518"W	0.40	
4370.00	19.150	159.760	4159.53	-1127.10	-1124.71	471.53	1639999.39	14589909.40	40°10'24.567"N	105°00'05.378"W	1.63	
4440.00†	19.671	159.189	4225.55	-1148.93	-1146.50	479.69	1640007.55	14589887.62	40°10'24.351"N	105°00'05.272"W	0.79	ENTER LANDBOX (558'FNL & 871'FEL, SEC.04) 40.1734309 -105.0014646
4464.00	19.850	159.000	4248.13	-1156.52	-1154.08	482.59	1640010.44	14589880.05	40°10'24.276"N	105°00'05.235"W	0.79	
4558.00	20.600	159.990	4336.34	-1187.02	-1184.52	493.96	1640021.81	14589849.62	40°10'23.976"N	105°00'05.089"W	0.88	
4652.00	18.900	159.330	4424.81	-1216.86	-1214.30	505.00	1640032.84	14589819.85	40°10'23.681"N	105°00'04.947"W	1.82	
4746.00	18.350	159.950	4513.88	-1245.06	-1242.45	515.44	1640043.28	14589791.71	40°10'23.403"N	105°00'04.812"W	0.62	
4840.00	17.300	161.410	4603.37	-1272.25	-1269.59	524.97	1640052.81	14589764.58	40°10'23.135"N	105°00'04.689"W	1.21	
4934.00	16.550	161.290	4693.30	-1298.22	-1295.52	533.72	1640061.55	14589738.66	40°10'22.879"N	105°00'04.576"W	0.80	
5028.00	15.790	160.200	4783.58	-1322.98	-1320.24	542.35	1640070.18	14589713.95	40°10'22.634"N	105°00'04.465"W	0.87	
5122.00	14.190	159.430	4874.38	-1345.85	-1343.06	550.73	1640078.55	14589691.14	40°10'22.409"N	105°00'04.357"W	1.72	
5216.00	12.200	158.850	4965.89	-1365.94	-1363.11	558.36	1640086.18	14589671.10	40°10'22.211"N	105°00'04.259"W	2.12	
5310.00	10.490	157.350	5058.05	-1383.13	-1380.27	565.24	1640093.06	14589653.94	40°10'22.041"N	105°00'04.170"W	1.85	
5405.00	9.270	156.680	5151.64	-1398.17	-1395.28	571.60	1640099.41	14589638.94	40°10'21.893"N	105°00'04.089"W	1.29	
5499.00	7.630	155.340	5244.62	-1410.83	-1407.90	577.20	1640105.01	14589626.32	40°10'21.768"N	105°00'04.016"W	1.76	
5593.00	6.070	161.670	5337.94	-1421.24	-1418.29	581.37	1640109.18	14589615.93	40°10'21.665"N	105°00'03.963"W	1.84	
5687.00	5.120	164.650	5431.50	-1430.01	-1427.06	584.04	1640111.85	14589607.18	40°10'21.579"N	105°00'03.928"W	1.06	
5781.00	4.250	163.290	5525.18	-1437.41	-1434.44	586.16	1640113.96	14589599.80	40°10'21.506"N	105°00'03.901"W	0.93	
5875.00	1.900	175.810	5619.04	-1442.30	-1439.33	587.27	1640115.08	14589594.91	40°10'21.457"N	105°00'03.887"W	2.59	
5969.00	0.710	192.840	5713.01	-1444.42	-1441.45	587.26	1640115.06	14589592.79	40°10'21.436"N	105°00'03.887"W	1.32	
6116.00	0.320	203.360	5860.01	-1445.69	-1442.72	586.89	1640114.70	14589591.52	40°10'21.424"N	105°00'03.892"W	0.27	LAST BHGE MWD+IFR1+SC SURVEY 8-1/2"
6380.00	0.190	289.000	6124.01	-1446.22	-1443.25	586.18	1640113.99	14589590.99	40°10'21.419"N	105°00'03.901"W	0.14	FIRST BHGE MWD+IFR1+SC SURVEY 6-1/8"
6474.00	1.440	333.550	6217.99	-1445.11	-1442.14	585.51	1640113.32	14589592.10	40°10'21.430"N	105°00'03.909"W	1.40	
6568.00	4.940	341.370	6311.83	-1440.20	-1437.25	583.69	1640111.50	14589596.99	40°10'21.478"N	105°00'03.933"W	3.74	
6620.00†	8.110	341.712	6363.49	-1434.59	-1431.64	581.82	1640109.63	14589602.59	40°10'21.533"N	105°00'03.957"W	6.10	KOP
6662.00	10.670	341.840	6404.93	-1428.07	-1425.13	579.68	1640107.49	14589609.10	40°10'21.598"N	105°00'03.984"W	6.10	
6757.00	16.030	346.580	6497.33	-1406.91	-1404.00	573.89	1640101.70	14589630.22	40°10'21.807"N	105°00'04.059"W	5.75	
6851.00	19.690	353.840	6586.79	-1378.50	-1375.62	569.18	1640096.99	14589658.59	40°10'22.087"N	105°00'04.120"W	4.55	
6945.00	23.230	354.340	6674.26	-1344.28	-1341.42	565.65	1640093.47	14589692.78	40°10'22.425"N	105°00'04.165"W	3.77	
7039.00	25.360	353.060	6759.93	-1305.83	-1302.98	561.39	1640089.21	14589731.20	40°10'22.805"N	105°00'04.220"W	2.33	
7133.00	28.180	358.140	6843.86	-1263.63	-1260.80	558.24	1640086.06	14589773.36	40°10'23.222"N	105°00'04.261"W	3.86	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL,SEC.33)
Area	COLORADO	Well	NEWBY 1N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY 1N-33HZ AWP
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (154 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
7227.00	36.450	3.270	6923.25	-1213.48	-1210.64	559.11	1640086.93	14589823.50	40°10'23.717"N	105°00'04.249"W	9.26	
7321.00	47.190	5.090	6993.20	-1151.09	-1148.24	563.78	1640091.60	14589885.88	40°10'24.334"N	105°00'04.189"W	11.50	
7415.00	65.190	6.910	7045.30	-1073.80	-1070.90	572.04	1640099.86	14589963.19	40°10'25.098"N	105°00'04.083"W	19.22	
7509.00	67.590	357.820	7083.01	-987.88	-984.96	575.52	1640103.35	14590049.09	40°10'25.948"N	105°00'04.038"W	9.22	
7603.00	72.610	353.440	7115.01	-899.78	-896.89	568.74	1640096.57	14590137.13	40°10'26.818"N	105°00'04.125"W	6.91	
7697.00	76.820	353.410	7139.78	-809.67	-806.83	558.36	1640086.20	14590227.15	40°10'27.708"N	105°00'04.259"W	4.48	
7791.00	80.510	354.060	7158.25	-718.02	-715.23	548.30	1640076.15	14590318.71	40°10'28.613"N	105°00'04.388"W	3.98	
7885.00	84.970	356.700	7170.13	-625.07	-622.32	540.81	1640068.66	14590411.59	40°10'29.531"N	105°00'04.485"W	5.50	
7940.00†	88.200	357.069	7173.41	-570.24	-567.51	537.82	1640065.68	14590466.38	40°10'30.073"N	105°00'04.523"W	5.91	LANDING (21'FSL & 812'FEL,SEC.33) 40.1750202 -105.0012565
7979.00	90.490	357.330	7173.85	-531.28	-528.56	535.92	1640063.78	14590505.31	40°10'30.458"N	105°00'04.548"W	5.91	
8073.00	90.520	356.900	7173.02	-437.38	-434.68	531.19	1640059.05	14590599.15	40°10'31.385"N	105°00'04.609"W	0.46	
8167.00	93.570	359.230	7169.67	-343.50	-340.81	528.02	1640055.88	14590692.98	40°10'32.313"N	105°00'04.650"W	4.08	
8261.00	92.680	358.340	7164.55	-249.65	-246.98	526.02	1640053.90	14590786.78	40°10'33.240"N	105°00'04.675"W	1.34	
8355.00	92.340	358.430	7160.43	-155.77	-153.10	523.38	1640051.25	14590880.62	40°10'34.168"N	105°00'04.709"W	0.37	
8384.00†	92.426	358.677	7159.22	-126.80	-124.14	522.65	1640050.52	14590909.57	40°10'34.454"N	105°00'04.719"W	0.90	CROSS SETBACK HEEL (465'FSL & 828'FEL,SEC.33) 40.1762373 -105.0013108
8449.00	92.620	359.230	7156.36	-61.87	-59.21	521.46	1640049.34	14590974.47	40°10'35.096"N	105°00'04.734"W	0.90	
8543.00	93.800	2.840	7151.10	31.94	34.61	523.15	1640051.04	14591068.25	40°10'36.023"N	105°00'04.712"W	4.03	
8637.00	92.680	2.930	7145.78	125.65	128.34	527.88	1640055.76	14591161.95	40°10'36.949"N	105°00'04.651"W	1.20	
8731.00	93.300	3.620	7140.88	219.33	222.05	533.24	1640061.13	14591255.63	40°10'37.875"N	105°00'04.582"W	0.99	
8825.00	92.430	1.950	7136.18	313.08	315.82	537.80	1640065.69	14591349.36	40°10'38.802"N	105°00'04.523"W	2.00	
8919.00	91.420	1.360	7133.02	406.97	409.73	540.51	1640068.40	14591443.22	40°10'39.730"N	105°00'04.489"W	1.24	
9013.00	90.680	0.070	7131.30	500.94	503.70	541.69	1640069.58	14591537.16	40°10'40.659"N	105°00'04.473"W	1.58	
9107.00	92.470	0.700	7128.72	594.89	597.66	542.32	1640070.21	14591631.08	40°10'41.587"N	105°00'04.465"W	2.02	
9201.00	91.910	0.000	7125.13	688.81	691.59	542.89	1640070.79	14591724.97	40°10'42.515"N	105°00'04.458"W	0.95	
9295.00	91.080	0.220	7122.67	782.78	785.56	543.07	1640070.97	14591818.90	40°10'43.444"N	105°00'04.455"W	0.91	
9389.00	92.340	0.130	7119.87	876.73	879.51	543.36	1640071.26	14591912.82	40°10'44.372"N	105°00'04.452"W	1.34	
9483.00	90.890	359.660	7117.22	970.69	973.47	543.19	1640071.10	14592006.74	40°10'45.301"N	105°00'04.454"W	1.62	
9578.00	92.470	359.100	7114.43	1065.65	1068.42	542.16	1640070.07	14592101.65	40°10'46.239"N	105°00'04.467"W	1.76	
9672.00	93.640	359.430	7109.42	1159.51	1162.28	540.95	1640068.87	14592195.47	40°10'47.167"N	105°00'04.483"W	1.29	
9766.00	92.340	358.760	7104.52	1253.37	1256.14	539.47	1640067.39	14592289.29	40°10'48.094"N	105°00'04.502"W	1.56	
9860.00	91.020	358.210	7101.77	1347.31	1350.06	536.99	1640064.91	14592383.18	40°10'49.022"N	105°00'04.534"W	1.52	
9954.00	92.000	358.720	7099.29	1441.25	1443.99	534.47	1640062.40	14592477.07	40°10'49.951"N	105°00'04.566"W	1.18	
10048.00	93.170	359.190	7095.05	1535.14	1537.88	532.76	1640060.69	14592570.92	40°10'50.878"N	105°00'04.588"W	1.34	
10142.00	92.040	358.800	7090.78	1629.04	1631.77	531.11	1640059.05	14592664.77	40°10'51.806"N	105°00'04.609"W	1.27	
10236.00	93.420	357.880	7086.30	1722.90	1725.62	528.39	1640056.33	14592758.58	40°10'52.734"N	105°00'04.644"W	1.76	
10330.00	95.020	1.160	7079.38	1816.63	1819.34	527.60	1640055.55	14592852.27	40°10'53.660"N	105°00'04.654"W	3.87	
10424.00	94.840	0.750	7071.30	1910.26	1912.98	529.16	1640057.11	14592945.87	40°10'54.585"N	105°00'04.634"W	0.47	
10518.00	92.680	0.540	7065.14	2004.04	2006.77	530.22	1640058.17	14593039.62	40°10'55.512"N	105°00'04.621"W	2.31	
10612.00	89.600	0.500	7063.27	2098.00	2100.73	531.07	1640059.03	14593133.55	40°10'56.440"N	105°00'04.610"W	3.28	
10706.00	90.220	359.870	7063.42	2192.00	2194.73	531.38	1640059.33	14593227.51	40°10'57.369"N	105°00'04.606"W	0.94	
10800.00	92.310	359.450	7061.34	2285.97	2288.70	530.82	1640058.78	14593321.44	40°10'58.298"N	105°00'04.613"W	2.27	
10894.00	93.610	359.330	7056.49	2379.84	2382.57	529.82	1640057.78	14593415.27	40°10'59.226"N	105°00'04.626"W	1.39	
10989.00	93.020	359.080	7050.99	2474.68	2477.40	528.50	1640056.47	14593510.07	40°11'00.163"N	105°00'04.643"W	0.67	
11083.00	92.030	359.190	7046.85	2568.58	2571.30	527.09	1640055.06	14593603.93	40°11'01.091"N	105°00'04.661"W	1.06	
11177.00	90.800	358.140	7044.53	2662.53	2665.24	524.90	1640052.87	14593697.83	40°11'02.019"N	105°00'04.689"W	1.72	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL,SEC.33)
Area	COLORADO	Well	NEWBY 1N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY 1N-33HZ AWP
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (154 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]
11271.00	90.490	357.890	7043.47	2756.48	2759.18	521.64	1640049.62	14593791.73	40°11'02.947"N	105°00'04.731"W	0.42
11365.00	92.000	359.400	7041.43	2850.44	2853.12	519.42	1640047.40	14593885.64	40°11'03.876"N	105°00'04.760"W	2.27
11447.00†	92.680	0.229	7038.08	2932.37	2935.05	519.15	1640047.14	14593967.54	40°11'04.685"N	105°00'04.763"W	1.31
11459.00	92.780	0.350	7037.51	2944.36	2947.04	519.21	1640047.20	14593979.52	40°11'04.804"N	105°00'04.762"W	1.31
11552.00	91.390	0.380	7034.13	3037.29	3039.98	519.80	1640047.80	14594072.41	40°11'05.722"N	105°00'04.755"W	1.49
11647.00	93.170	358.410	7030.35	3132.20	3134.89	518.80	1640046.80	14594167.29	40°11'06.660"N	105°00'04.767"W	2.79
11741.00	93.820	358.450	7024.62	3226.00	3228.68	516.23	1640044.23	14594261.04	40°11'07.587"N	105°00'04.801"W	0.69
11835.00	93.540	358.250	7018.58	3319.78	3322.44	513.53	1640041.54	14594354.77	40°11'08.513"N	105°00'04.835"W	0.37
11929.00	93.540	357.900	7012.78	3413.56	3416.21	510.38	1640038.39	14594448.50	40°11'09.440"N	105°00'04.876"W	0.37
12023.00	93.050	0.190	7007.38	3507.40	3510.04	508.82	1640036.83	14594542.29	40°11'10.367"N	105°00'04.896"W	2.49
12117.00	92.740	0.600	7002.63	3601.27	3603.91	509.46	1640037.48	14594636.12	40°11'11.295"N	105°00'04.888"W	0.55
12211.00	92.900	1.370	6998.00	3695.13	3697.78	511.08	1640039.10	14594729.96	40°11'12.222"N	105°00'04.867"W	0.84
12305.00	94.470	2.960	6991.96	3788.85	3791.52	514.62	1640042.64	14594823.65	40°11'13.149"N	105°00'04.821"W	2.37
12399.00	93.450	2.990	6985.47	3882.47	3885.17	519.49	1640047.51	14594917.26	40°11'14.074"N	105°00'04.758"W	1.09
12493.00	92.710	3.130	6980.42	3976.17	3978.89	524.50	1640052.52	14595010.96	40°11'15.000"N	105°00'04.694"W	0.80
12587.00	91.570	3.610	6976.91	4069.91	4072.67	530.02	1640058.04	14595104.69	40°11'15.927"N	105°00'04.623"W	1.32
12681.00	90.060	3.480	6975.57	4163.69	4166.47	535.83	1640063.86	14595198.46	40°11'16.854"N	105°00'04.548"W	1.61
12723.00	89.260	3.410	6975.82	4205.60	4208.40	538.35	1640066.38	14595240.36	40°11'17.268"N	105°00'04.515"W	1.91
12773.00	89.260	3.410	6976.47	4255.49	4258.30	541.33	1640069.36	14595290.25	40°11'17.762"N	105°00'04.477"W	0.00

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	-1.11	-150.04	1639378.11	14591032.57	40°10'35.670"N	105°00'13.385"W	polygon
SEC.33-T3N-R68W	2.00	-1.11	-150.04	1639378.11	14591032.57	40°10'35.670"N	105°00'13.385"W	polygon
NEWBY 1N-33HZ BHL REV-1(461'FNL & 816'FEL,SEC.33)	6974.00	4262.64	530.88	1640058.91	14595294.59	40°11'17.804"N	105°00'04.612"W	point
NEWBY 1N-33HZ HEEL REV-1(47'FSL & 795'FEL,SEC.33)	7179.00	-537.03	555.32	1640083.17	14590496.85	40°10'30.374"N	105°00'04.298"W	point
NEWBY 1N-33HZ LANDBOX	7181.00	0.00	0.00	1639528.09	14591033.68	40°10'35.681"N	105°00'11.452"W	polygon
NEWBY 1N-33HZ SETBACK 1	7181.00	0.00	0.00	1639528.09	14591033.68	40°10'35.681"N	105°00'11.452"W	polygon
NEWBY 1N-33HZ SETBACK 2	7181.00	0.00	0.00	1639528.09	14591033.68	40°10'35.681"N	105°00'11.452"W	polygon

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL,SEC.33)
Area	COLORADO	Well	NEWBY 1N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY 1N-33HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH COMPOSITION - Ref Wellbore: NEWBY 1N-33HZ AWB Ref Wellpath: NEWBY 1N-33HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.00	767.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <145 - 767>	NEWBY 1N-33HZ AWB
767.00	6116.00	Custom APC ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC 8-1/2" <894 - 6116>	NEWBY 1N-33HZ AWB
6116.00	12723.00	Custom APC ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC 6-1/8" <6380 - 12723>	NEWBY 1N-33HZ AWB
12723.00	12773.00	Blind Drilling (std)	Projection to bit	NEWBY 1N-33HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#32 NEWBY 1N-33HZ (589'FSL & 1350'FEL,SEC.33)
Area	COLORADO	Well	NEWBY 1N-33HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY 1N-33HZ AWP
Facility	SEC.33-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
145.00	0.310	300.690	145.00	FIRST SURFACE MWD+IFR1 SURVEY
767.00	8.530	154.710	765.68	LAST SURFACE MWD+IFR1 SURVEY
894.00	10.060	156.680	891.01	FIRST BHGE MWD+IFR1+SC SURVEY 8-1/2"
4440.00	19.671	159.189	4225.55	ENTER LANDBOX (558'FNL & 871'FEL,SEC.04) 40.1734309 -105.0014646
6116.00	0.320	203.360	5860.01	LAST BHGE MWD+IFR1+SC SURVEY 8-1/2"
6380.00	0.190	289.000	6124.01	FIRST BHGE MWD+IFR1+SC SURVEY 6-1/8"
6620.00	8.110	341.712	6363.49	KOP
7940.00	88.200	357.069	7173.41	LANDING (21'FSL & 812'FEL,SEC.33) 40.1750202 -105.0012565
8384.00	92.426	358.677	7159.22	CROSS SETBACK HEEL (465'FSL & 828'FEL,SEC.33) 40.1762373 -105.0013108
11447.00	92.680	0.229	7038.08	CROSS SETBACK TOE (1789'FNL & 828'FEL,SEC.33) 40.1846348 -105.0013231
12723.00	89.260	3.410	6975.82	LAST BHGE MWD+IFR1+SC SURVEY 6-1/8"
12773.00	89.260	3.410	6976.47	PTB (466'FNL & 806'FEL,SEC.33) 40.1882671 -105.0012436