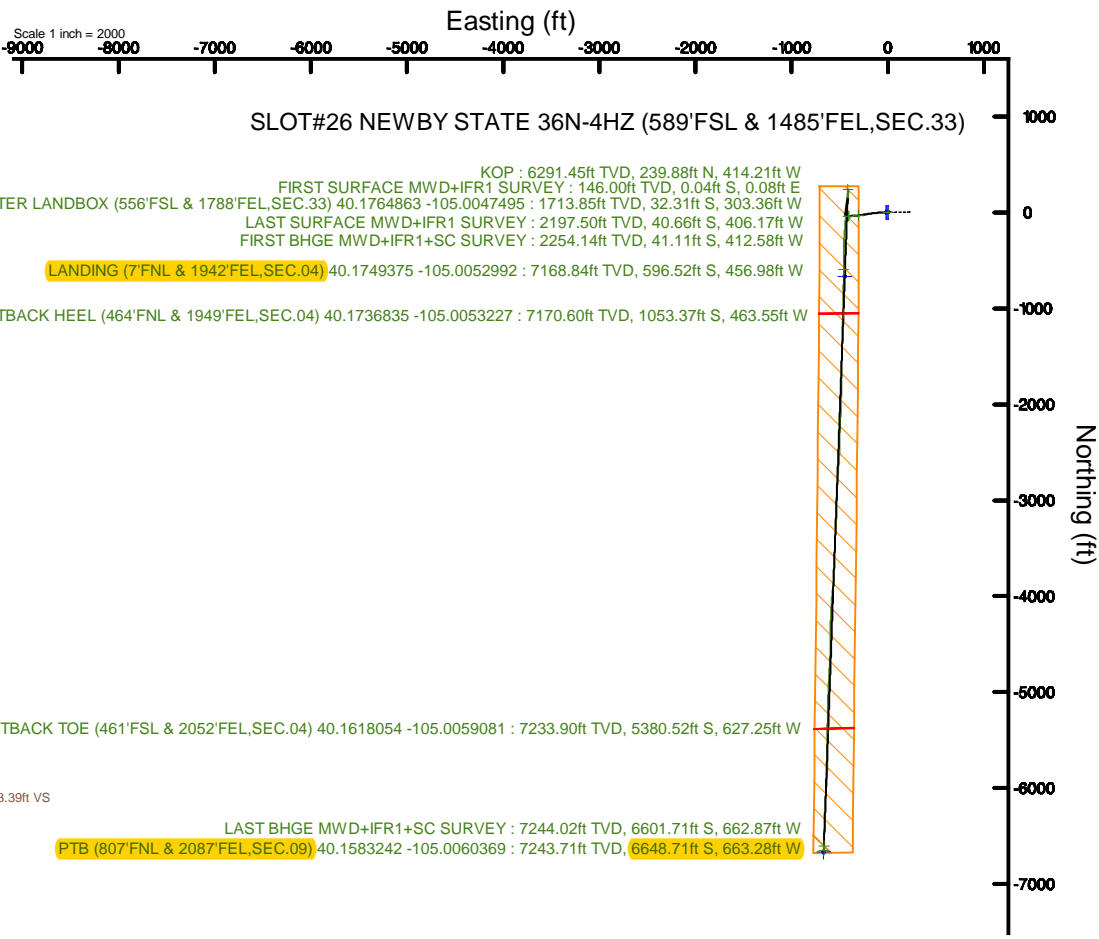
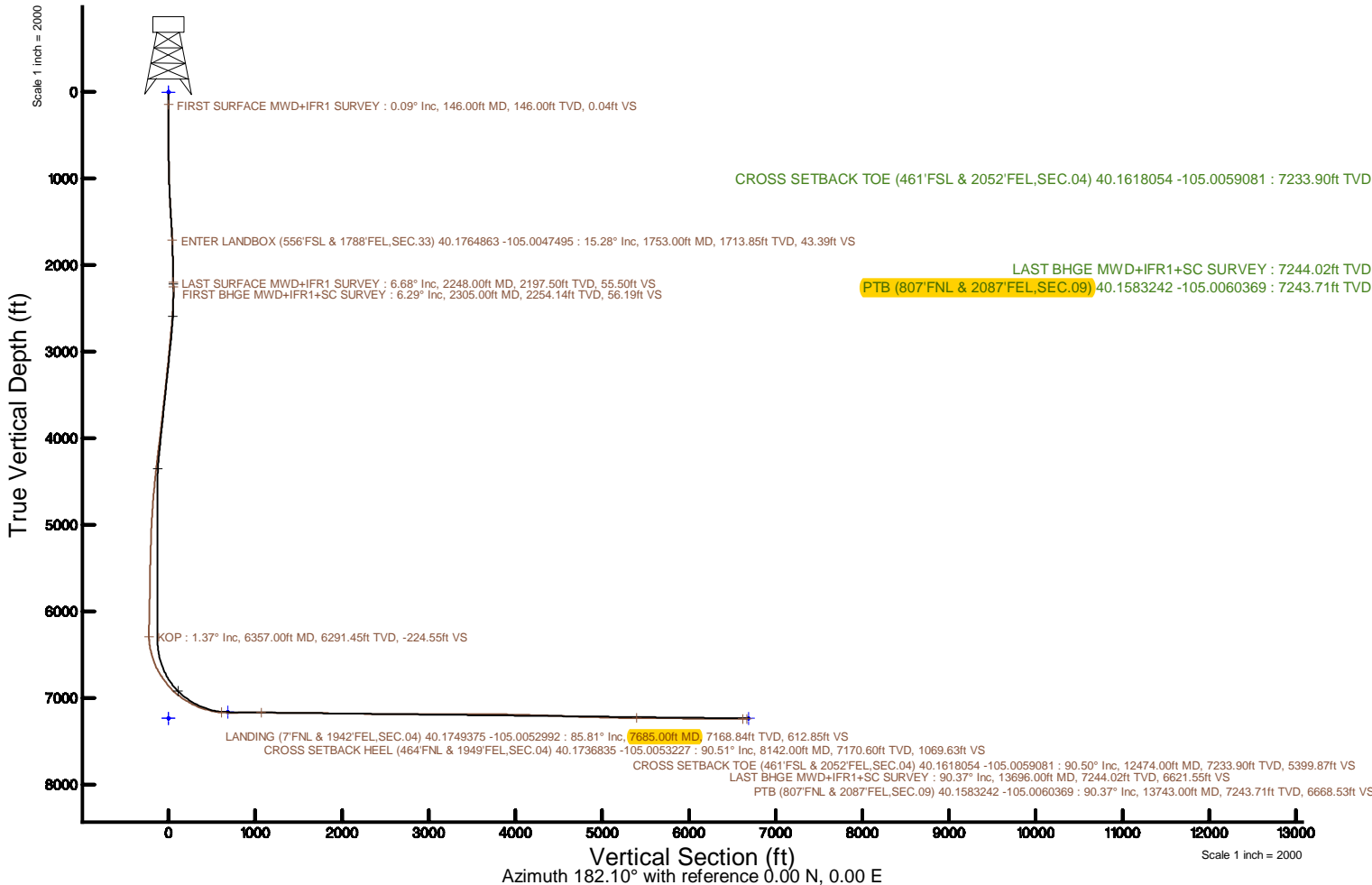


# KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO	Slot: SLOT#26 NEWBY STATE 36N-4HZ (589'FSL & 1485'FEL,SEC.33)
Field: WELD COUNTY (UTM/TRUE NORTH)	Well: NEWBY STATE 36N-4HZ
Facility: SEC.33-T3N-R68W	Wellbore: NEWBY STATE 36N-4HZ PWB
Plot reference wellpath is NEWBY STATE 36N-4HZ PWP RevA.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#26 NEWBY STATE 36N-4HZ (589'FSL & 1485'FEL,SEC.33)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2018-02-15
	Database: WA_DEN_Anadarko_Delhi



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#26 NEWBY STATE 36N-4HZ (589'FSL & 1485'FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 36N-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 36N-4HZ 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	2/15/2018 at 9:16 AM
Convergence at slot	0.00°	Database/Source file	WA_DEN_Anadarko_Defn/NEWBY_STATE_36N-4HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-675.64	2519.47	1639393.24	14591032.57	40°10'35.670"N	105°00'13.190"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#26 NEWBY STATE 36N-4HZ (589'FSL & 1485'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	182.10°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#26 NEWBY STATE 36N-4HZ (589°FSL & 1485°FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 36N-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 36N-4HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (196 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	118.760	0.00	0.00	0.00	0.00	1639393.24	14591032.57	40°10'35.670"N	105°00'13.190"W	0.00	
32.00	0.000	118.760	32.00	0.00	0.00	0.00	1639393.24	14591032.57	40°10'35.670"N	105°00'13.190"W	0.00	
146.00	0.090	118.760	146.00	0.04	-0.04	0.08	1639393.32	14591032.53	40°10'35.670"N	105°00'13.189"W	0.08	FIRST SURFACE MWD+IFR1 SURVEY
177.00	0.350	107.240	177.00	0.08	-0.08	0.19	1639393.43	14591032.49	40°10'35.669"N	105°00'13.188"W	0.85	
209.00	0.260	278.280	209.00	0.09	-0.10	0.21	1639393.45	14591032.47	40°10'35.669"N	105°00'13.187"W	1.90	
241.00	0.220	278.280	241.00	0.08	-0.08	0.08	1639393.32	14591032.49	40°10'35.669"N	105°00'13.189"W	0.12	
272.00	0.440	265.540	272.00	0.09	-0.08	-0.10	1639393.14	14591032.49	40°10'35.669"N	105°00'13.191"W	0.74	
303.00	1.140	247.080	303.00	0.23	-0.21	-0.50	1639392.74	14591032.36	40°10'35.668"N	105°00'13.196"W	2.37	
335.00	1.630	270.810	334.99	0.38	-0.33	-1.25	1639391.99	14591032.24	40°10'35.667"N	105°00'13.206"W	2.33	
366.00	2.330	264.740	365.97	0.47	-0.38	-2.32	1639390.92	14591032.19	40°10'35.666"N	105°00'13.220"W	2.35	
398.00	2.900	269.500	397.93	0.59	-0.45	-3.78	1639389.47	14591032.12	40°10'35.666"N	105°00'13.239"W	1.90	
430.00	2.500	265.540	429.90	0.70	-0.51	-5.28	1639387.96	14591032.06	40°10'35.665"N	105°00'13.258"W	1.38	
461.00	3.160	269.840	460.86	0.81	-0.56	-6.81	1639386.43	14591032.01	40°10'35.664"N	105°00'13.278"W	2.23	
492.00	4.130	267.650	491.80	0.93	-0.61	-8.78	1639384.46	14591031.96	40°10'35.664"N	105°00'13.303"W	3.16	
524.00	4.790	268.260	523.70	1.11	-0.70	-11.27	1639381.98	14591031.87	40°10'35.663"N	105°00'13.335"W	2.07	
556.00	5.450	268.700	555.57	1.29	-0.78	-14.12	1639379.12	14591031.80	40°10'35.662"N	105°00'13.372"W	2.07	
588.00	6.200	274.680	587.41	1.30	-0.67	-17.36	1639375.88	14591031.90	40°10'35.663"N	105°00'13.414"W	3.01	
620.00	6.640	273.800	619.21	1.17	-0.41	-20.93	1639372.32	14591032.17	40°10'35.666"N	105°00'13.460"W	1.41	
652.00	7.210	273.800	650.97	1.06	-0.15	-24.78	1639368.47	14591032.42	40°10'35.669"N	105°00'13.509"W	1.78	
683.00	8.440	269.750	681.68	1.09	-0.03	-29.00	1639364.25	14591032.54	40°10'35.670"N	105°00'13.564"W	4.35	
715.00	8.830	268.350	713.32	1.35	-0.11	-33.80	1639359.45	14591032.46	40°10'35.669"N	105°00'13.625"W	1.38	
747.00	9.580	266.850	744.91	1.75	-0.33	-38.91	1639354.34	14591032.24	40°10'35.667"N	105°00'13.691"W	2.46	
779.00	9.670	266.850	776.46	2.24	-0.62	-44.26	1639349.00	14591031.95	40°10'35.664"N	105°00'13.760"W	0.28	
810.00	10.020	266.240	807.00	2.76	-0.94	-49.55	1639343.71	14591031.63	40°10'35.661"N	105°00'13.828"W	1.18	
842.00	10.770	265.800	838.48	3.37	-1.34	-55.31	1639337.96	14591031.23	40°10'35.657"N	105°00'13.903"W	2.36	
874.00	11.380	265.710	869.88	4.05	-1.80	-61.44	1639331.83	14591030.78	40°10'35.652"N	105°00'13.981"W	1.91	
906.00	12.080	266.940	901.21	4.70	-2.21	-67.93	1639325.34	14591030.36	40°10'35.648"N	105°00'14.065"W	2.32	
937.00	13.100	266.850	931.47	5.31	-2.58	-74.68	1639318.59	14591030.00	40°10'35.645"N	105°00'14.152"W	3.29	
969.00	13.180	266.060	962.63	6.03	-3.03	-81.94	1639311.34	14591029.55	40°10'35.640"N	105°00'14.246"W	0.61	
1001.00	13.100	266.410	993.79	6.77	-3.51	-89.19	1639304.08	14591029.07	40°10'35.635"N	105°00'14.339"W	0.35	
1033.00	14.110	265.450	1024.89	7.58	-4.04	-96.70	1639296.58	14591028.53	40°10'35.630"N	105°00'14.436"W	3.23	
1064.00	14.500	264.660	1054.93	8.52	-4.71	-104.33	1639288.95	14591027.87	40°10'35.624"N	105°00'14.534"W	1.41	
1096.00	15.340	266.240	1085.85	9.47	-5.36	-112.55	1639280.74	14591027.22	40°10'35.617"N	105°00'14.640"W	2.92	
1128.00	15.600	264.480	1116.69	10.47	-6.05	-121.05	1639272.24	14591026.53	40°10'35.610"N	105°00'14.750"W	1.68	
1159.00	16.790	264.480	1146.46	11.62	-6.88	-129.66	1639263.63	14591025.70	40°10'35.602"N	105°00'14.860"W	3.84	
1191.00	17.140	261.840	1177.07	13.07	-7.99	-138.93	1639254.37	14591024.59	40°10'35.591"N	105°00'14.980"W	2.64	
1223.00	17.530	262.460	1207.62	14.72	-9.29	-148.37	1639244.93	14591023.29	40°10'35.578"N	105°00'15.101"W	1.35	
1255.00	17.310	261.140	1238.15	16.43	-10.66	-157.85	1639235.45	14591021.92	40°10'35.565"N	105°00'15.224"W	1.41	
1287.00	17.310	260.700	1268.70	18.28	-12.16	-167.25	1639226.05	14591020.42	40°10'35.550"N	105°00'15.345"W	0.41	
1318.00	17.750	261.840	1298.26	20.03	-13.58	-176.48	1639216.83	14591019.01	40°10'35.536"N	105°00'15.464"W	1.80	
1350.00	17.530	262.720	1328.76	21.68	-14.88	-186.09	1639207.22	14591017.70	40°10'35.523"N	105°00'15.587"W	1.08	
1382.00	17.670	261.320	1359.26	23.38	-16.23	-195.67	1639197.64	14591016.36	40°10'35.510"N	105°00'15.711"W	1.39	
1413.00	18.330	261.930	1388.74	25.12	-17.62	-205.15	1639188.17	14591014.97	40°10'35.496"N	105°00'15.833"W	2.21	
1445.00	18.330	262.200	1419.12	26.87	-19.01	-215.12	1639178.21	14591013.58	40°10'35.482"N	105°00'15.961"W	0.27	
1477.00	17.890	261.050	1449.53	28.68	-20.46	-224.96	1639168.37	14591012.13	40°10'35.468"N	105°00'16.088"W	1.77	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#26 NEWBY STATE 36N-4HZ (589'FSL & 1485'FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 36N-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 36N-4HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (196 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
1508.00	17.360	258.940	1479.08	30.64	-22.08	-234.20	1639159.13	14591010.51	40°10'35.452"N	105°00'16.207"W	2.68	
1540.00	16.830	258.150	1509.66	32.85	-23.95	-243.42	1639149.91	14591008.64	40°10'35.433"N	105°00'16.326"W	1.81	
1572.00	17.400	262.370	1540.25	34.77	-25.54	-252.70	1639140.64	14591007.05	40°10'35.418"N	105°00'16.445"W	4.27	
1603.00	17.620	263.070	1569.81	36.29	-26.72	-261.95	1639131.39	14591005.87	40°10'35.406"N	105°00'16.565"W	0.98	
1635.00	17.090	260.880	1600.35	37.97	-28.05	-271.40	1639121.95	14591004.54	40°10'35.393"N	105°00'16.686"W	2.63	
1667.00	16.440	260.350	1630.99	39.80	-29.55	-280.51	1639112.84	14591003.04	40°10'35.378"N	105°00'16.804"W	2.09	
1699.00	15.510	263.430	1661.76	41.37	-30.80	-289.22	1639104.13	14591001.79	40°10'35.366"N	105°00'16.916"W	3.93	
1730.00	15.120	264.130	1691.66	42.55	-31.69	-297.36	1639096.00	14591000.91	40°10'35.357"N	105°00'17.021"W	1.39	
1753.00†	15.278	264.065	1713.85	43.39	-32.31	-303.36	1639090.00	14591000.29	40°10'35.351"N	105°00'17.098"W	0.69	ENTER LANDBOX (556'FSL & 1788'FEL, SEC.33) 40.1764863 -105.0047495
1762.00	15.340	264.040	1722.53	43.73	-32.56	-305.72	1639087.64	14591000.04	40°10'35.348"N	105°00'17.129"W	0.69	
1794.00	15.380	263.950	1753.39	44.92	-33.44	-314.15	1639079.21	14590999.15	40°10'35.339"N	105°00'17.237"W	0.15	
1826.00	15.420	263.690	1784.24	46.15	-34.36	-322.60	1639070.77	14590998.24	40°10'35.330"N	105°00'17.346"W	0.25	
1857.00	14.500	265.450	1814.19	47.20	-35.12	-330.57	1639062.80	14590997.48	40°10'35.323"N	105°00'17.449"W	3.31	
1889.00	14.240	267.030	1845.19	48.01	-35.64	-338.49	1639054.88	14590996.96	40°10'35.318"N	105°00'17.551"W	1.47	
1921.00	13.800	266.330	1876.24	48.74	-36.09	-346.23	1639047.15	14590996.51	40°10'35.313"N	105°00'17.650"W	1.47	
1952.00	12.660	265.270	1906.41	49.52	-36.61	-353.30	1639040.08	14590996.00	40°10'35.308"N	105°00'17.742"W	3.76	
1984.00	12.440	263.430	1937.65	50.45	-37.29	-360.22	1639033.16	14590995.31	40°10'35.301"N	105°00'17.831"W	1.43	
2048.00	11.160	265.800	2000.30	52.17	-38.53	-373.25	1639020.14	14590994.07	40°10'35.289"N	105°00'17.999"W	2.14	
2080.00	10.460	265.010	2031.73	52.87	-39.01	-379.23	1639014.16	14590993.59	40°10'35.284"N	105°00'18.076"W	2.24	
2111.00	10.810	265.010	2062.19	53.57	-39.51	-384.93	1639008.46	14590993.09	40°10'35.280"N	105°00'18.149"W	1.13	
2142.00	10.240	266.060	2092.67	54.22	-39.95	-390.58	1639002.82	14590992.65	40°10'35.275"N	105°00'18.222"W	1.94	
2174.00	9.050	267.560	2124.22	54.72	-40.25	-395.93	1638997.47	14590992.35	40°10'35.272"N	105°00'18.291"W	3.80	
2206.00	8.170	268.170	2155.86	55.08	-40.43	-400.72	1638992.68	14590992.17	40°10'35.270"N	105°00'18.352"W	2.76	
2238.00	7.120	266.850	2187.57	55.41	-40.61	-404.97	1638988.43	14590991.99	40°10'35.269"N	105°00'18.407"W	3.33	
2248.00	6.680	268.790	2197.50	55.50	-40.66	-406.17	1638987.23	14590991.94	40°10'35.268"N	105°00'18.423"W	4.98	LAST SURFACE MWD+IFR1 SURVEY
2305.00	6.290	262.990	2254.14	56.19	-41.11	-412.58	1638980.82	14590991.49	40°10'35.264"N	105°00'18.505"W	1.34	FIRST BHGE MWD+IFR1+SC SURVEY
2399.00	7.160	279.860	2347.50	56.21	-40.74	-423.47	1638969.94	14590991.87	40°10'35.267"N	105°00'18.645"W	2.29	
2493.00	5.030	298.720	2440.97	53.57	-37.75	-432.85	1638960.56	14590994.85	40°10'35.297"N	105°00'18.766"W	3.08	
2587.00	3.850	324.210	2534.70	49.24	-33.21	-438.31	1638955.10	14590999.39	40°10'35.342"N	105°00'18.837"W	2.42	
2681.00	5.090	343.760	2628.41	42.79	-26.65	-441.33	1638952.09	14591005.95	40°10'35.407"N	105°00'18.876"W	2.07	
2775.00	5.490	3.940	2722.02	34.33	-18.16	-442.18	1638951.23	14591014.44	40°10'35.491"N	105°00'18.887"W	2.01	
2869.00	5.240	358.460	2815.61	25.56	-9.38	-441.99	1638951.43	14591023.21	40°10'35.577"N	105°00'18.884"W	0.61	
2963.00	5.910	11.780	2909.17	16.50	-0.35	-441.12	1638952.30	14591032.24	40°10'35.666"N	105°00'18.873"W	1.55	
3057.00	5.240	6.920	3002.72	7.45	8.65	-439.61	1638953.80	14591041.23	40°10'35.755"N	105°00'18.853"W	0.87	
3151.00	6.130	11.950	3096.26	-1.77	17.82	-438.05	1638955.36	14591050.40	40°10'35.846"N	105°00'18.833"W	1.08	
3245.00	5.270	4.100	3189.80	-11.03	27.03	-436.71	1638956.71	14591059.61	40°10'35.937"N	105°00'18.816"W	1.23	
3338.00	6.040	8.250	3282.34	-20.16	36.14	-435.70	1638957.72	14591068.71	40°10'36.027"N	105°00'18.803"W	0.94	
3433.00	5.260	3.440	3376.88	-29.48	45.43	-434.72	1638958.69	14591078.00	40°10'36.119"N	105°00'18.790"W	0.96	
3526.00	7.110	12.930	3469.34	-39.40	55.30	-433.18	1638960.24	14591087.86	40°10'36.216"N	105°00'18.771"W	2.27	
3646.00	6.410	8.490	3588.51	-53.35	69.16	-430.53	1638962.89	14591101.72	40°10'36.353"N	105°00'18.736"W	0.73	
3740.00	6.390	6.120	3681.92	-63.78	79.55	-429.19	1638964.22	14591112.11	40°10'36.456"N	105°00'18.719"W	0.28	
3834.00	6.110	4.980	3775.36	-74.00	89.73	-428.20	1638965.21	14591122.29	40°10'36.557"N	105°00'18.706"W	0.33	
3928.00	5.750	2.070	3868.86	-83.70	99.42	-427.60	1638965.82	14591131.97	40°10'36.652"N	105°00'18.699"W	0.50	
4022.00	7.660	14.370	3962.22	-94.54	110.20	-425.87	1638967.54	14591142.74	40°10'36.759"N	105°00'18.676"W	2.53	
4116.00	7.120	9.310	4055.44	-106.44	122.02	-423.38	1638970.04	14591154.56	40°10'36.876"N	105°00'18.644"W	0.90	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#26 NEWBY STATE 36N-4HZ (589'FSL & 1485'FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 36N-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 36N-4HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (196 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
4210.00	6.900	4.690	4148.73	-117.86	133.39	-421.97	1638971.44	14591165.93	40°10'36.988"N	105°00'18.626"W	0.64	
4304.00	6.900	1.330	4242.05	-129.14	144.67	-421.38	1638972.04	14591177.20	40°10'37.100"N	105°00'18.619"W	0.43	
4397.00	5.970	19.650	4334.48	-139.34	154.81	-419.62	1638973.79	14591187.33	40°10'37.200"N	105°00'18.596"W	2.41	
4491.00	6.130	9.660	4427.96	-148.98	164.36	-417.14	1638976.28	14591196.88	40°10'37.294"N	105°00'18.564"W	1.13	
4584.00	5.830	2.360	4520.45	-158.62	173.97	-416.11	1638977.31	14591206.49	40°10'37.389"N	105°00'18.551"W	0.88	
4678.00	5.980	359.950	4613.95	-168.29	183.64	-415.92	1638977.50	14591216.16	40°10'37.485"N	105°00'18.548"W	0.31	
4773.00	4.080	26.260	4708.59	-176.32	191.62	-414.42	1638978.99	14591224.13	40°10'37.564"N	105°00'18.529"W	3.10	
4867.00	3.870	19.710	4802.37	-182.40	197.61	-411.88	1638981.54	14591230.12	40°10'37.623"N	105°00'18.496"W	0.53	
4961.00	3.820	10.160	4896.16	-188.52	203.68	-410.25	1638983.16	14591236.18	40°10'37.683"N	105°00'18.475"W	0.68	
5056.00	3.910	0.010	4990.94	-194.89	210.03	-409.69	1638983.72	14591242.53	40°10'37.745"N	105°00'18.468"W	0.73	
5150.00	1.690	37.000	5084.83	-199.23	214.34	-408.86	1638984.55	14591246.84	40°10'37.788"N	105°00'18.457"W	2.93	
5243.00	1.900	12.210	5177.79	-201.87	216.94	-407.71	1638985.70	14591249.45	40°10'37.814"N	105°00'18.442"W	0.86	
5336.00	1.970	358.530	5270.73	-204.99	220.05	-407.42	1638985.99	14591252.55	40°10'37.844"N	105°00'18.439"W	0.50	
5431.00	2.170	344.870	5365.67	-208.33	223.42	-407.93	1638985.48	14591255.92	40°10'37.878"N	105°00'18.445"W	0.56	
5524.00	0.570	26.030	5458.64	-210.44	225.53	-408.19	1638985.22	14591258.03	40°10'37.899"N	105°00'18.449"W	1.91	
5619.00	0.650	359.310	5553.64	-211.41	226.50	-407.99	1638985.42	14591258.99	40°10'37.908"N	105°00'18.446"W	0.31	
5713.00	0.810	348.010	5647.63	-212.59	227.68	-408.13	1638985.28	14591260.18	40°10'37.920"N	105°00'18.448"W	0.23	
5807.00	1.320	352.930	5741.62	-214.30	229.40	-408.41	1638985.01	14591261.90	40°10'37.937"N	105°00'18.451"W	0.55	
5901.00	1.660	344.320	5835.58	-216.66	231.79	-408.91	1638984.51	14591264.28	40°10'37.961"N	105°00'18.458"W	0.43	
5994.00	1.590	336.890	5928.55	-219.11	234.27	-409.78	1638983.64	14591266.77	40°10'37.985"N	105°00'18.469"W	0.24	
6089.00	1.390	335.790	6023.51	-221.34	236.54	-410.77	1638982.65	14591269.03	40°10'38.007"N	105°00'18.482"W	0.21	
6183.00	1.210	333.370	6117.49	-223.23	238.46	-411.68	1638981.73	14591270.96	40°10'38.026"N	105°00'18.494"W	0.20	
6277.00	1.240	310.530	6211.47	-224.73	240.01	-412.90	1638980.52	14591272.50	40°10'38.042"N	105°00'18.509"W	0.52	
6357.00†	1.374	223.407	6291.45	-224.55	239.88	-414.21	1638979.20	14591272.37	40°10'38.040"N	105°00'18.526"W	2.26	KOP
6370.00	1.600	216.180	6304.45	-224.28	239.62	-414.43	1638978.99	14591272.11	40°10'38.038"N	105°00'18.529"W	2.26	
6464.00	9.500	180.540	6397.95	-215.43	230.79	-415.28	1638978.14	14591263.28	40°10'37.951"N	105°00'18.540"W	8.78	
6558.00	13.270	176.670	6490.08	-196.93	212.25	-414.72	1638978.69	14591244.76	40°10'37.767"N	105°00'18.533"W	4.09	
6651.00	20.830	184.770	6578.94	-169.74	185.08	-415.48	1638977.93	14591217.59	40°10'37.499"N	105°00'18.543"W	8.50	
6745.00	27.050	185.160	6664.82	-131.67	147.10	-418.80	1638974.62	14591179.62	40°10'37.124"N	105°00'18.585"W	6.62	
6839.00	33.840	182.830	6745.81	-84.09	99.61	-422.01	1638971.40	14591132.16	40°10'36.654"N	105°00'18.627"W	7.33	
6934.00	36.800	186.330	6823.32	-29.25	44.89	-426.46	1638966.95	14591077.46	40°10'36.114"N	105°00'18.684"W	3.77	
7028.00	43.040	186.370	6895.38	30.88	-15.03	-433.13	1638960.28	14591017.57	40°10'35.521"N	105°00'18.770"W	6.64	
7122.00	50.900	184.240	6959.48	99.43	-83.40	-439.39	1638954.02	14590949.23	40°10'34.846"N	105°00'18.851"W	8.52	
7216.00	56.680	184.100	7014.98	175.19	-159.01	-444.90	1638948.51	14590873.65	40°10'34.099"N	105°00'18.922"W	6.15	
7310.00	61.630	184.750	7063.16	255.80	-239.44	-451.14	1638942.27	14590793.24	40°10'33.304"N	105°00'19.002"W	5.30	
7403.00	68.090	181.090	7102.66	339.92	-323.47	-455.35	1638938.05	14590709.26	40°10'32.473"N	105°00'19.056"W	7.81	
7497.00	73.780	180.060	7133.36	428.69	-412.27	-456.23	1638937.17	14590620.49	40°10'31.596"N	105°00'19.067"W	6.14	
7591.00	78.410	179.570	7155.94	519.84	-503.49	-455.93	1638937.47	14590529.31	40°10'30.694"N	105°00'19.064"W	4.95	
7685.00	85.810	181.700	7168.84	612.85	-596.52	-456.98	1638936.42	14590436.31	40°10'29.775"N	105°00'19.077"W	8.19	LANDING (7'FNL & 1942'FEL, SEC.04) 40.1749375 -105.0052992
7779.00	89.910	180.830	7172.35	706.75	-690.41	-459.05	1638934.34	14590342.46	40°10'28.847"N	105°00'19.104"W	4.46	
7874.00	90.770	180.150	7171.78	801.71	-785.40	-459.87	1638933.53	14590247.50	40°10'27.909"N	105°00'19.114"W	1.15	
7968.00	89.690	180.770	7171.40	895.67	-879.40	-460.62	1638932.77	14590153.55	40°10'26.980"N	105°00'19.124"W	1.32	
8061.00	90.460	180.600	7171.28	988.64	-972.39	-461.73	1638931.65	14590060.59	40°10'26.061"N	105°00'19.138"W	0.85	
8142.00†	90.511	181.973	7170.60	1069.63	-1053.37	-463.55	1638929.83	14589979.65	40°10'25.261"N	105°00'19.162"W	1.70	CROSS SETBACK HEEL (464'FNL & 1949'FEL, SEC.04) 40.1736835 -105.0053227
8156.00	90.520	182.210	7170.47	1083.63	-1067.36	-464.06	1638929.32	14589965.66	40°10'25.122"N	105°00'19.168"W	1.70	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#26 NEWBY STATE 36N-4HZ (589°FSL & 1485°FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 36N-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 36N-4HZ AWB
Facility	SEC.33-T3N-R68W		

### WELLPATH DATA (196 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
8250.00	88.710	181.910	7171.10	1177.62	-1161.29	-467.44	1638925.94	14589871.77	40°10'24.194"N	105°00'19.212"W	1.95	
8343.00	89.010	181.820	7172.95	1270.60	-1254.22	-470.47	1638922.91	14589778.87	40°10'23.276"N	105°00'19.251"W	0.34	
8437.00	89.350	181.960	7174.30	1364.59	-1348.16	-473.57	1638919.81	14589684.97	40°10'22.347"N	105°00'19.291"W	0.39	
8530.00	89.410	181.760	7175.30	1457.59	-1441.11	-476.58	1638916.79	14589592.06	40°10'21.429"N	105°00'19.329"W	0.22	
8624.00	89.780	181.480	7175.97	1551.58	-1535.07	-479.24	1638914.13	14589498.14	40°10'20.500"N	105°00'19.364"W	0.49	
8719.00	89.410	180.690	7176.64	1646.56	-1630.05	-481.04	1638912.32	14589403.20	40°10'19.562"N	105°00'19.387"W	0.92	
8813.00	90.220	180.220	7176.94	1740.52	-1724.04	-481.79	1638911.57	14589309.24	40°10'18.633"N	105°00'19.396"W	1.00	
8907.00	88.150	181.750	7178.28	1834.49	-1818.01	-483.40	1638909.96	14589215.31	40°10'17.704"N	105°00'19.417"W	2.74	
9001.00	89.080	181.200	7180.55	1928.45	-1911.95	-485.82	1638907.53	14589121.41	40°10'16.776"N	105°00'19.448"W	1.15	
9096.00	89.690	181.070	7181.57	2023.43	-2006.93	-487.70	1638905.65	14589026.47	40°10'15.837"N	105°00'19.473"W	0.66	
9189.00	89.630	183.350	7182.12	2116.43	-2099.85	-491.29	1638902.06	14588933.59	40°10'14.919"N	105°00'19.519"W	2.45	
9283.00	88.180	182.220	7183.92	2210.40	-2193.72	-495.86	1638897.49	14588839.76	40°10'13.992"N	105°00'19.577"W	1.96	
9377.00	88.800	181.980	7186.40	2304.37	-2287.62	-499.30	1638894.05	14588745.89	40°10'13.064"N	105°00'19.622"W	0.71	
9471.00	89.200	181.530	7188.04	2398.35	-2381.56	-502.18	1638891.17	14588651.99	40°10'12.135"N	105°00'19.659"W	0.64	
9565.00	89.260	181.360	7189.30	2492.33	-2475.52	-504.55	1638888.79	14588558.06	40°10'11.207"N	105°00'19.689"W	0.19	
9659.00	90.310	184.100	7189.65	2586.32	-2569.41	-509.02	1638884.31	14588464.22	40°10'10.279"N	105°00'19.747"W	3.12	
9753.00	90.460	183.460	7189.02	2680.27	-2663.20	-515.22	1638878.12	14588370.47	40°10'09.352"N	105°00'19.827"W	0.70	
9846.00	91.200	182.950	7187.67	2773.25	-2756.04	-520.42	1638872.92	14588277.66	40°10'08.435"N	105°00'19.894"W	0.97	
9940.00	89.820	184.700	7186.84	2867.19	-2849.82	-526.69	1638866.64	14588183.92	40°10'07.508"N	105°00'19.974"W	2.37	
10035.00	89.260	182.040	7187.60	2962.16	-2944.65	-532.27	1638861.06	14588089.13	40°10'06.571"N	105°00'20.046"W	2.86	
10129.00	89.630	182.570	7188.51	3056.15	-3038.57	-536.05	1638857.28	14587995.25	40°10'05.643"N	105°00'20.095"W	0.69	
10222.00	89.230	179.780	7189.44	3149.13	-3131.53	-537.96	1638855.37	14587902.32	40°10'04.724"N	105°00'20.120"W	3.03	
10316.00	90.620	183.070	7189.56	3243.11	-3225.49	-540.30	1638853.03	14587808.40	40°10'03.796"N	105°00'20.150"W	3.80	
10410.00	91.510	182.480	7187.81	3337.08	-3319.36	-544.85	1638848.47	14587714.57	40°10'02.868"N	105°00'20.208"W	1.14	
10503.00	89.600	182.410	7186.91	3430.07	-3412.27	-548.82	1638844.50	14587621.70	40°10'01.950"N	105°00'20.259"W	2.06	
10597.00	89.720	181.690	7187.47	3524.07	-3506.20	-552.18	1638841.14	14587527.80	40°10'01.022"N	105°00'20.303"W	0.78	
10691.00	90.740	181.630	7187.09	3618.06	-3600.16	-554.90	1638838.41	14587433.88	40°10'00.093"N	105°00'20.338"W	1.09	
10786.00	88.150	182.740	7188.01	3713.05	-3695.08	-558.52	1638834.79	14587339.00	40°09'59.155"N	105°00'20.384"W	2.97	
10880.00	90.030	182.790	7189.51	3807.03	-3788.95	-563.06	1638830.25	14587245.16	40°09'58.227"N	105°00'20.443"W	2.00	
10974.00	87.630	184.580	7191.42	3900.96	-3882.73	-569.09	1638824.21	14587151.43	40°09'57.301"N	105°00'20.520"W	3.18	
11068.00	89.720	185.040	7193.60	3994.82	-3976.37	-576.97	1638816.33	14587057.83	40°09'56.375"N	105°00'20.622"W	2.28	
11162.00	88.060	183.490	7195.42	4088.73	-4070.08	-583.96	1638809.34	14586964.15	40°09'55.449"N	105°00'20.712"W	2.42	
11256.00	87.810	182.700	7198.81	4182.66	-4163.89	-589.04	1638804.27	14586870.38	40°09'54.522"N	105°00'20.777"W	0.88	
11350.00	88.300	182.400	7202.00	4276.60	-4257.74	-593.22	1638800.09	14586776.57	40°09'53.595"N	105°00'20.831"W	0.61	
11444.00	87.960	181.430	7205.06	4370.55	-4351.63	-596.35	1638796.94	14586682.71	40°09'52.667"N	105°00'20.871"W	1.09	
11538.00	88.000	180.610	7208.38	4464.47	-4445.56	-598.03	1638795.27	14586588.82	40°09'51.739"N	105°00'20.893"W	0.87	
11632.00	87.930	179.840	7211.72	4558.36	-4539.50	-598.40	1638794.90	14586494.92	40°09'50.810"N	105°00'20.898"W	0.82	
11726.00	87.320	181.910	7215.61	4652.25	-4633.40	-599.83	1638793.46	14586401.06	40°09'49.883"N	105°00'20.916"W	2.29	
11820.00	88.490	183.500	7219.05	4746.18	-4727.23	-604.26	1638789.02	14586307.27	40°09'48.955"N	105°00'20.973"W	2.10	
11915.00	88.550	183.160	7221.50	4841.13	-4822.04	-609.78	1638783.51	14586212.50	40°09'48.018"N	105°00'21.044"W	0.36	
12008.00	88.180	182.600	7224.16	4934.08	-4914.88	-614.45	1638778.83	14586119.69	40°09'47.101"N	105°00'21.104"W	0.72	
12102.00	88.370	182.780	7226.98	5028.03	-5008.74	-618.86	1638774.42	14586025.88	40°09'46.173"N	105°00'21.161"W	0.28	
12196.00	88.150	181.330	7229.84	5121.99	-5102.63	-622.23	1638771.05	14585932.02	40°09'45.246"N	105°00'21.204"W	1.56	
12290.00	88.180	180.620	7232.85	5215.92	-5196.57	-623.83	1638769.45	14585838.12	40°09'44.317"N	105°00'21.225"W	0.76	
12384.00	90.030	181.350	7234.32	5309.89	-5290.54	-625.44	1638767.83	14585744.19	40°09'43.389"N	105°00'21.246"W	2.12	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#26 NEWBY STATE 36N-4HZ (589'FSL & 1485'FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 36N-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 36N-4HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH DATA (196 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
12474.00†	90.499	180.948	7233.90	5399.87	-5380.52	-627.25	1638766.02	14585654.24	40°09'42.499"N	105°00'21.269"W	0.69	CROSS SETBACK TOE (461'FSL & 2052'FEL, SEC.04) 40.1618054 -105.0059081
12478.00	90.520	180.930	7233.87	5403.87	-5384.52	-627.31	1638765.96	14585650.25	40°09'42.460"N	105°00'21.270"W	0.69	
12571.00	90.400	179.920	7233.12	5496.83	-5477.51	-628.00	1638765.26	14585557.29	40°09'41.541"N	105°00'21.279"W	1.09	
12665.00	89.480	180.690	7233.22	5590.78	-5571.51	-628.50	1638764.76	14585463.33	40°09'40.612"N	105°00'21.285"W	1.28	
12759.00	89.820	180.240	7233.79	5684.74	-5665.50	-629.27	1638763.99	14585369.37	40°09'39.683"N	105°00'21.295"W	0.60	
12854.00	88.890	181.790	7234.86	5779.71	-5760.48	-630.95	1638762.31	14585274.44	40°09'38.745"N	105°00'21.317"W	1.90	
12947.00	88.400	181.170	7237.06	5872.68	-5853.42	-633.35	1638759.90	14585181.53	40°09'37.826"N	105°00'21.347"W	0.85	
13041.00	89.080	183.560	7239.13	5966.65	-5947.31	-637.23	1638756.02	14585087.68	40°09'36.898"N	105°00'21.397"W	2.64	
13136.00	89.410	183.120	7240.38	6061.62	-6042.14	-642.76	1638750.49	14584992.89	40°09'35.961"N	105°00'21.469"W	0.58	
13230.00	89.690	182.780	7241.12	6155.61	-6136.01	-647.60	1638745.65	14584899.05	40°09'35.034"N	105°00'21.531"W	0.47	
13324.00	89.290	182.600	7241.95	6249.60	-6229.90	-652.01	1638741.23	14584805.20	40°09'34.106"N	105°00'21.588"W	0.47	
13419.00	89.050	182.090	7243.33	6344.59	-6324.81	-655.90	1638737.34	14584710.33	40°09'33.168"N	105°00'21.638"W	0.59	
13513.00	89.880	181.700	7244.21	6438.58	-6418.76	-659.01	1638734.23	14584616.42	40°09'32.240"N	105°00'21.678"W	0.98	
13606.00	90.000	181.310	7244.31	6531.57	-6511.72	-661.45	1638731.79	14584523.49	40°09'31.321"N	105°00'21.709"W	0.44	
13696.00	90.370	180.500	7244.02	6621.55	-6601.71	-662.87	1638730.36	14584433.54	40°09'30.432"N	105°00'21.727"W	0.99	LAST BHGE MWD+IFR1+SC SURVEY
13743.00	90.370	180.500	7243.71	6668.53	-6648.71	-663.28	1638729.95	14584386.56	40°09'29.967"N	105°00'21.733"W	0.00	PTB (807'FNL & 2087'FEL, SEC.09) 40.1583242 -105.0060369

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	0.00	-15.14	1639378.11	14591032.57	40°10'35.670"N	105°00'13.385"W	polygon
SEC.33-T3N-R68W	2.00	0.00	-15.14	1639378.11	14591032.57	40°10'35.670"N	105°00'13.385"W	polygon
NEWBY STATE 36N-4HZ HEEL REV-1(74'FNL & 1932'FEL, SEC.04)	7165.00	-666.66	-447.43	1638945.96	14590366.20	40°10'29.082"N	105°00'18.954"W	point
NEWBY STATE 36N-4HZ BHL REV-1(824'FNL & 2091'FEL, SEC.09)	7238.00	-6666.27	-667.23	1638726.00	14584369.01	40°09'29.794"N	105°00'21.784"W	point
NEWBY STATE 36N-4HZ LANDBOX	7238.00	0.00	0.00	1639393.24	14591032.57	40°10'35.670"N	105°00'13.190"W	polygon
NEWBY STATE 36N-4HZ SETBACK 1	7238.00	0.00	0.00	1639393.24	14591032.57	40°10'35.670"N	105°00'13.190"W	polygon
NEWBY STATE 36N-4HZ SETBACK 2	7238.00	0.00	0.00	1639393.24	14591032.57	40°10'35.670"N	105°00'13.190"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: NEWBY STATE 36N-4HZ AWB				Ref Wellpath: NEWBY STATE 36N-4HZ AWP		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore		
32.00	2248.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <146 - 2248>	NEWBY STATE 36N-4HZ AWB		
2248.00	13696.00	Custom APC ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC <2305 - 13696>	NEWBY STATE 36N-4HZ AWB		
13696.00	13743.00	Blind Drilling (std)	Projection to bit	NEWBY STATE 36N-4HZ AWB		



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#26 NEWBY STATE 36N-4HZ (589'FSL & 1485'FEL, SEC.33)
Area	COLORADO	Well	NEWBY STATE 36N-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	NEWBY STATE 36N-4HZ AWB
Facility	SEC.33-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
146.00	0.090	118.760	146.00	FIRST SURFACE MWD+IFR1 SURVEY
1753.00	15.278	264.065	1713.85	ENTER LANDBOX (556'FSL & 1788'FEL, SEC.33) 40.1764863 -105.0047495
2248.00	6.680	268.790	2197.50	LAST SURFACE MWD+IFR1 SURVEY
2305.00	6.290	262.990	2254.14	FIRST BHGE MWD+IFR1+SC SURVEY
6357.00	1.374	223.407	6291.45	KOP
7685.00	85.810	181.700	7168.84	LANDING (7'FNL & 1942'FEL, SEC.04) 40.1749375 -105.0052992
8142.00	90.511	181.973	7170.60	CROSS SETBACK HEEL (464'FNL & 1949'FEL, SEC.04) 40.1736835 -105.0053227
12474.00	90.499	180.948	7233.90	CROSS SETBACK TOE (461'FSL & 2052'FEL, SEC.04) 40.1618054 -105.0059081
13696.00	90.370	180.500	7244.02	LAST BHGE MWD+IFR1+SC SURVEY
13743.00	90.370	180.500	7243.71	PTB (807'FNL & 2087'FEL, SEC.09) 40.1583242 -105.0060369