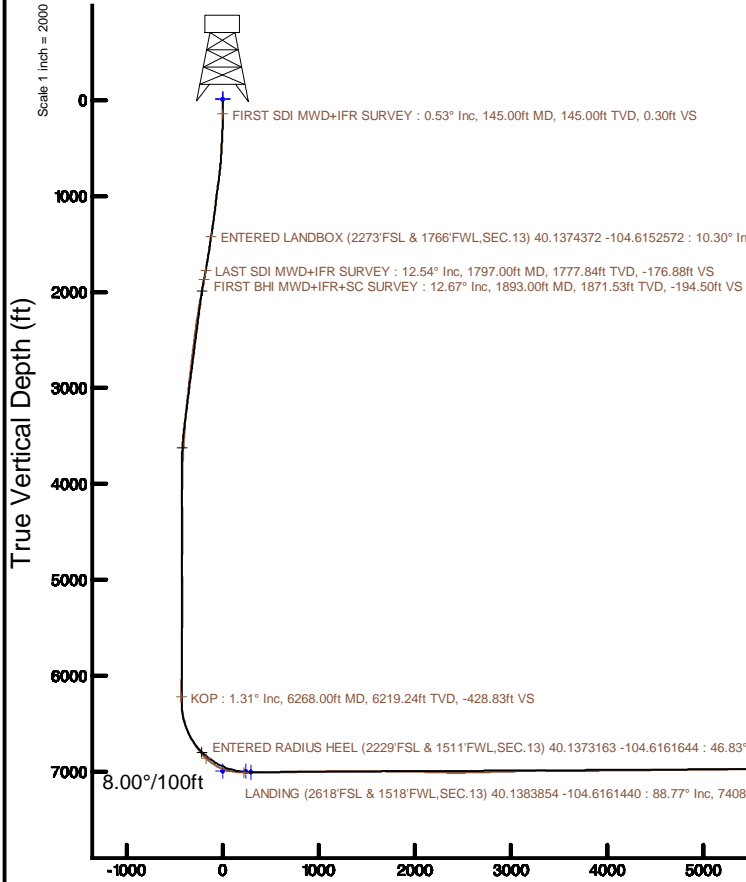
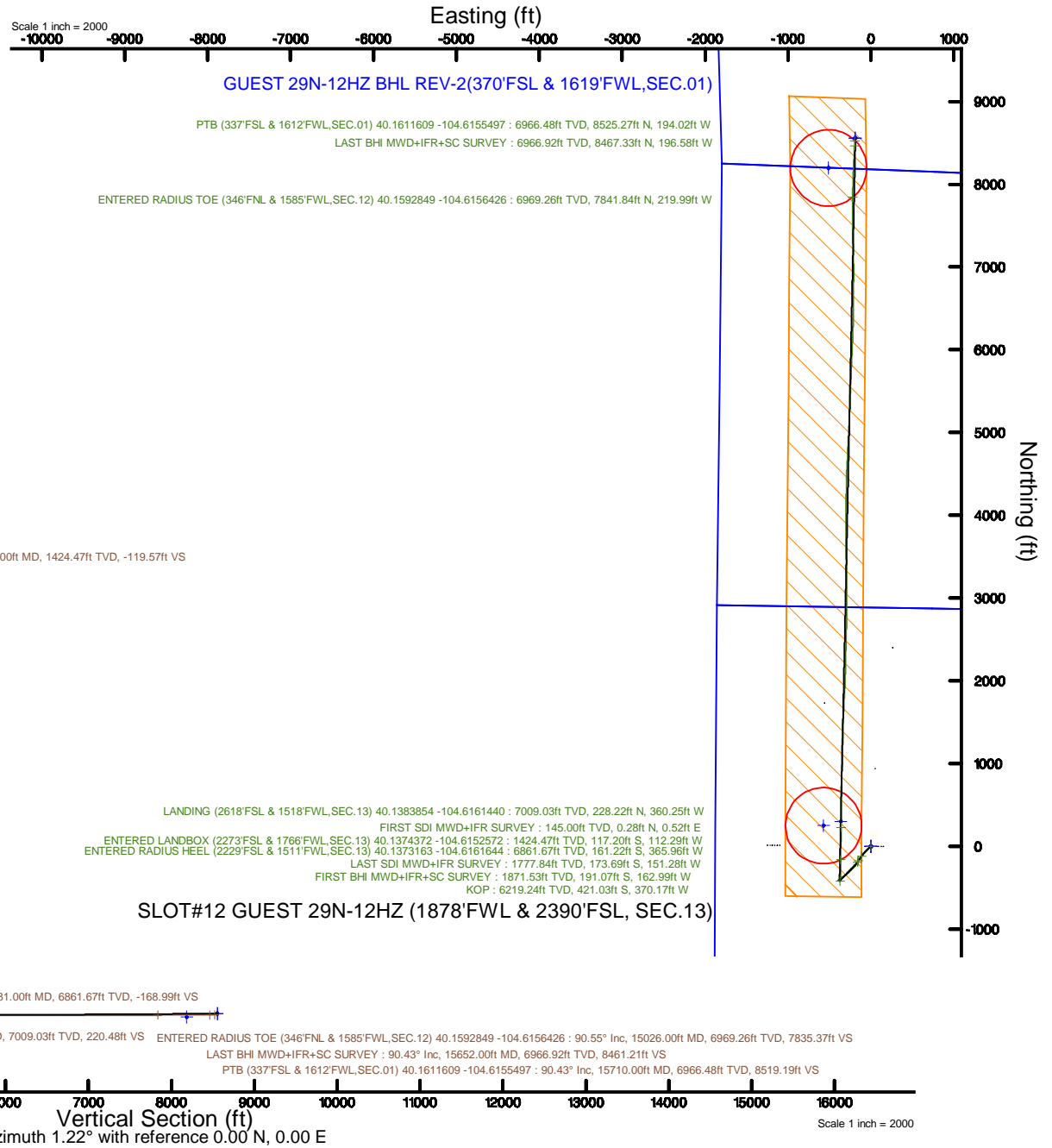


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: GUEST 29N-12HZ
 Facility: SEC.13-T2N-R65W Wellbore: GUEST 29N-12HZ PWB

Plot reference wellpath is GUEST 29N-12HZ Rev-C.0 PWP	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to Xtreme 22 (17'RKB) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to Xtreme 22 (17'RKB) (RKB)	North Reference: True north
Xtreme 22 (17'RKB) (RKB) to Mean Sea Level: 4889 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2017-03-28
	Database: WA_DEN_Anadarko_Defn



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 29N-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 29N-12HZ AWB
Facility	SEC.13-T2N-R65W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999613	Report Generated	3/28/2017 at 8:06 AM
Convergence at slot	0.25° East	Database/Source file	WA_DEN_Anadarko_Defn/GUEST_29N-12HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2154.36	-2542.84	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W
Facility Reference Pt			1750592.08	14579295.65	40°08'37.223"N	104°36'20.740"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Xtreme 22 (17'RKB) (RKB) to Facility Vertical Datum	4889.00ft
Horizontal Reference Pt	Slot	Xtreme 22 (17'RKB) (RKB) to Mean Sea Level	4889.00ft
Vertical Reference Pt	Xtreme 22 (17'RKB) (RKB)	Xtreme 22 (17'RKB) (RKB) to Mud Line at Slot (SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13))	4889.00ft
MD Reference Pt	Xtreme 22 (17'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	1.22°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 29N-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 29N-12HZ AWP
Facility	SEC.13-T2N-R65W		

WELLPATH DATA (186 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	61.240	0.00	0.00	0.00	0.00	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	0.00	
17.00	0.000	61.240	17.00	0.00	0.00	0.00	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	0.00	
145.00	0.530	61.240	145.00	0.30	0.28	0.52	1748060.33	14577131.16	40°08'15.935"N	104°36'53.473"W	0.41	FIRST SDI MWD+IFR SURVEY
229.00	0.990	220.990	228.99	-0.07	-0.08	0.38	1748060.19	14577130.80	40°08'15.931"N	104°36'53.475"W	1.78	
316.00	2.490	212.790	315.95	-2.26	-2.23	-1.13	1748058.69	14577128.64	40°08'15.910"N	104°36'53.495"W	1.74	
402.00	3.770	225.570	401.82	-5.87	-5.78	-4.16	1748055.67	14577125.08	40°08'15.875"N	104°36'53.534"W	1.69	
487.00	5.220	235.320	486.56	-10.14	-9.94	-9.34	1748050.52	14577120.90	40°08'15.834"N	104°36'53.600"W	1.92	
576.00	6.360	236.780	575.11	-15.30	-14.94	-16.79	1748043.09	14577115.86	40°08'15.784"N	104°36'53.696"W	1.29	
664.00	7.410	226.470	662.47	-22.05	-21.52	-24.99	1748034.93	14577109.25	40°08'15.719"N	104°36'53.802"W	1.84	
838.00	10.050	223.460	834.44	-41.19	-40.27	-43.57	1748016.44	14577090.43	40°08'15.534"N	104°36'54.041"W	1.54	
926.00	9.950	222.460	921.11	-52.59	-51.46	-53.98	1748006.07	14577079.20	40°08'15.424"N	104°36'54.175"W	0.23	
1013.00	9.680	223.690	1006.83	-63.64	-62.29	-64.11	1747996.00	14577068.33	40°08'15.316"N	104°36'54.305"W	0.39	
1102.00	9.150	223.580	1094.63	-74.39	-72.83	-74.15	1747986.00	14577057.75	40°08'15.212"N	104°36'54.435"W	0.60	
1188.00	10.300	222.310	1179.40	-85.24	-83.47	-84.04	1747976.16	14577047.08	40°08'15.107"N	104°36'54.562"W	1.36	
1275.00	10.050	223.280	1265.03	-96.73	-94.74	-94.48	1747965.77	14577035.76	40°08'14.996"N	104°36'54.697"W	0.35	
1361.00	10.240	217.510	1349.69	-108.47	-106.27	-104.28	1747956.03	14577024.19	40°08'14.882"N	104°36'54.823"W	1.20	
1437.00†	10.298	214.954	1424.47	-119.56	-117.20	-112.29	1747948.07	14577013.24	40°08'14.774"N	104°36'54.926"W	0.60	ENTERED LANDBOX (2273'FSL & 1766'FWL, SEC.13) 40.1374372 -104.6152572
1450.00	10.310	214.520	1437.26	-121.50	-119.11	-113.61	1747946.76	14577011.32	40°08'14.755"N	104°36'54.943"W	0.60	
1538.00	10.560	214.090	1523.80	-134.85	-132.27	-122.59	1747937.84	14576998.13	40°08'14.625"N	104°36'55.058"W	0.29	
1627.00	10.840	215.460	1611.26	-148.61	-145.83	-132.01	1747928.48	14576984.53	40°08'14.491"N	104°36'55.180"W	0.43	
1716.00	11.340	214.550	1698.60	-162.84	-159.86	-141.83	1747918.73	14576970.47	40°08'14.352"N	104°36'55.306"W	0.60	
1797.00	12.540	214.140	1777.84	-176.88	-173.69	-151.28	1747909.34	14576956.59	40°08'14.216"N	104°36'55.428"W	1.49	LAST SDI MWD+IFR SURVEY
1893.00	12.670	213.790	1871.53	-194.50	-191.07	-162.99	1747897.72	14576939.17	40°08'14.044"N	104°36'55.579"W	0.16	FIRST BHI MWD+IFR+SC SURVEY
1981.00	12.430	214.000	1957.43	-210.59	-206.94	-173.65	1747887.13	14576923.26	40°08'13.887"N	104°36'55.716"W	0.28	
2068.00	12.040	213.460	2042.45	-226.14	-222.27	-183.89	1747876.96	14576907.89	40°08'13.735"N	104°36'55.848"W	0.47	
2155.00	11.820	216.570	2127.57	-241.08	-237.00	-194.20	1747866.71	14576893.13	40°08'13.590"N	104°36'55.980"W	0.78	
2243.00	11.720	223.160	2213.73	-255.08	-250.76	-205.68	1747855.29	14576879.32	40°08'13.454"N	104°36'56.128"W	1.53	
2330.00	11.550	223.090	2298.94	-268.14	-263.57	-217.68	1747843.36	14576866.47	40°08'13.327"N	104°36'56.283"W	0.20	
2418.00	11.090	227.990	2385.23	-280.50	-275.66	-229.99	1747831.11	14576854.32	40°08'13.208"N	104°36'56.441"W	1.21	
2505.00	10.610	226.430	2470.67	-291.87	-286.78	-242.01	1747819.14	14576843.15	40°08'13.098"N	104°36'56.596"W	0.65	
2593.00	10.160	227.350	2557.23	-302.96	-297.63	-253.58	1747807.62	14576832.27	40°08'12.991"N	104°36'56.745"W	0.54	
2680.00	9.600	226.230	2642.94	-313.41	-307.84	-264.47	1747796.78	14576822.01	40°08'12.890"N	104°36'56.885"W	0.68	
2768.00	9.150	226.290	2729.76	-323.53	-317.76	-274.82	1747786.47	14576812.05	40°08'12.792"N	104°36'57.018"W	0.51	
2855.00	9.760	225.920	2815.58	-333.66	-327.67	-285.12	1747776.22	14576802.10	40°08'12.694"N	104°36'57.151"W	0.70	
2943.00	9.350	226.690	2902.36	-343.98	-337.76	-295.68	1747765.71	14576791.97	40°08'12.594"N	104°36'57.287"W	0.49	
3030.00	10.260	233.290	2988.09	-353.70	-347.24	-307.04	1747754.40	14576782.44	40°08'12.501"N	104°36'57.433"W	1.66	
3118.00	9.800	234.650	3074.75	-362.98	-356.25	-319.43	1747742.05	14576773.38	40°08'12.411"N	104°36'57.593"W	0.59	
3205.00	9.330	235.590	3160.54	-371.49	-364.52	-331.28	1747730.24	14576765.06	40°08'12.330"N	104°36'57.745"W	0.57	
3293.00	8.540	236.800	3247.47	-379.34	-372.13	-342.64	1747718.92	14576757.40	40°08'12.255"N	104°36'57.892"W	0.92	
3380.00	7.480	232.870	3333.62	-386.51	-379.09	-352.56	1747709.04	14576750.41	40°08'12.186"N	104°36'58.019"W	1.37	
3467.00	6.560	226.080	3419.97	-393.55	-385.95	-360.65	1747700.97	14576743.51	40°08'12.118"N	104°36'58.124"W	1.42	
3555.00	5.820	224.600	3507.45	-400.35	-392.62	-367.41	1747694.25	14576736.82	40°08'12.052"N	104°36'58.210"W	0.86	
3642.00	4.690	223.110	3594.09	-406.21	-398.36	-372.93	1747688.75	14576731.06	40°08'11.995"N	104°36'58.282"W	1.31	
3666.00	4.470	221.210	3618.01	-407.65	-399.78	-374.22	1747687.47	14576729.64	40°08'11.981"N	104°36'58.298"W	1.11	
3753.00	3.050	217.380	3704.82	-412.12	-404.17	-377.86	1747683.85	14576725.23	40°08'11.938"N	104°36'58.345"W	1.66	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 29N-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 29N-12HZ AWP
Facility	SEC.13-T2N-R65W		

WELLPATH DATA (186 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
3841.00	2.670	221.490	3792.71	-415.57	407.56	-380.64	1747681.09	14576721.83	40°08'11.904"N	104°36'58.381"W	0.49	
3929.00	1.430	227.860	3880.65	-417.89	-409.84	-382.81	1747678.93	14576719.54	40°08'11.882"N	104°36'58.409"W	1.43	
4016.00	1.570	227.160	3967.62	-419.47	-411.38	-384.48	1747677.26	14576717.99	40°08'11.867"N	104°36'58.430"W	0.16	
4103.00	1.610	235.370	4054.59	-421.02	-412.88	-386.36	1747675.39	14576716.48	40°08'11.852"N	104°36'58.455"W	0.27	
4191.00	0.710	288.860	4142.57	-421.57	-413.41	-387.90	1747673.86	14576715.95	40°08'11.847"N	104°36'58.474"W	1.50	
4278.00	1.140	295.440	4229.56	-421.06	-412.86	-389.19	1747672.56	14576716.49	40°08'11.852"N	104°36'58.491"W	0.51	
4365.00	1.220	297.350	4316.54	-420.29	-412.07	-390.79	1747670.96	14576717.28	40°08'11.860"N	104°36'58.512"W	0.10	
4453.00	0.110	161.440	4404.54	-419.96	-411.72	-391.60	1747670.15	14576717.63	40°08'11.863"N	104°36'58.522"W	1.48	
4540.00	0.250	346.290	4491.54	-419.85	-411.61	-391.62	1747670.13	14576717.73	40°08'11.864"N	104°36'58.522"W	0.41	
4628.00	0.250	147.380	4579.54	-419.83	-411.59	-391.56	1747670.19	14576717.76	40°08'11.865"N	104°36'58.521"W	0.56	
4715.00	0.660	141.830	4666.53	-420.37	-412.14	-391.15	1747670.60	14576717.20	40°08'11.859"N	104°36'58.516"W	0.47	
4803.00	0.510	135.530	4754.53	-421.04	-412.82	-390.56	1747671.19	14576716.53	40°08'11.852"N	104°36'58.509"W	0.19	
4890.00	0.250	106.140	4841.53	-421.36	-413.15	-390.11	1747671.65	14576716.20	40°08'11.849"N	104°36'58.503"W	0.36	
4978.00	0.290	6.750	4929.53	-421.19	-412.98	-389.90	1747671.86	14576716.37	40°08'11.851"N	104°36'58.500"W	0.47	
5065.00	1.110	322.160	5016.52	-420.31	-412.09	-390.39	1747671.36	14576717.25	40°08'11.860"N	104°36'58.506"W	1.06	
5153.00	0.760	23.680	5104.51	-419.11	-410.89	-390.67	1747671.07	14576718.46	40°08'11.872"N	104°36'58.510"W	1.14	
5240.00	0.910	72.880	5191.50	-418.36	-410.15	-389.78	1747671.96	14576719.19	40°08'11.879"N	104°36'58.499"W	0.81	
5328.00	1.450	112.720	5279.48	-418.55	-410.38	-388.09	1747673.65	14576718.98	40°08'11.877"N	104°36'58.477"W	1.08	
5415.00	1.640	109.640	5366.45	-419.35	-411.22	-385.90	1747675.85	14576718.14	40°08'11.868"N	104°36'58.449"W	0.24	
5503.00	1.230	135.340	5454.43	-420.40	-412.32	-384.05	1747677.70	14576717.06	40°08'11.857"N	104°36'58.425"W	0.86	
5590.00	1.180	135.880	5541.41	-421.68	-413.63	-382.77	1747678.98	14576715.75	40°08'11.844"N	104°36'58.408"W	0.06	
5677.00	1.250	126.720	5628.39	-422.86	-414.84	-381.39	1747680.37	14576714.55	40°08'11.833"N	104°36'58.390"W	0.24	
5765.00	1.230	125.380	5716.37	-423.95	-415.96	-379.85	1747681.92	14576713.44	40°08'11.821"N	104°36'58.371"W	0.04	
5852.00	1.400	127.820	5803.34	-425.11	-417.15	-378.25	1747683.52	14576712.25	40°08'11.810"N	104°36'58.350"W	0.21	
5940.00	1.450	116.160	5891.32	-426.22	-418.30	-376.40	1747685.37	14576711.11	40°08'11.798"N	104°36'58.326"W	0.33	
6027.00	0.960	126.550	5978.30	-427.10	-419.22	-374.82	1747686.95	14576710.20	40°08'11.789"N	104°36'58.306"W	0.61	
6115.00	1.140	117.520	6066.28	-427.92	-420.06	-373.45	1747688.32	14576709.36	40°08'11.781"N	104°36'58.288"W	0.28	
6203.00	1.380	106.160	6154.26	-428.58	-420.76	-371.66	1747690.12	14576708.67	40°08'11.774"N	104°36'58.265"W	0.39	
6268.00†	1.309	93.845	6219.24	-428.81	-421.03	-370.17	1747691.61	14576708.41	40°08'11.771"N	104°36'58.246"W	0.46	KOP
6290.00	1.300	89.450	6241.24	-428.82	-421.04	-369.67	1747692.11	14576708.40	40°08'11.771"N	104°36'58.240"W	0.46	
6377.00	5.960	8.010	6328.07	-424.30	-416.56	-368.05	1747693.71	14576712.89	40°08'11.816"N	104°36'58.219"W	6.79	
6465.00	11.650	2.720	6415.00	-410.87	-403.15	-366.99	1747694.71	14576726.30	40°08'11.948"N	104°36'58.205"W	6.52	
6552.00	16.830	359.630	6499.30	-389.48	-381.76	-366.65	1747694.95	14576747.67	40°08'12.159"N	104°36'58.201"W	6.02	
6640.00	22.620	0.260	6582.10	-359.80	-352.08	-366.66	1747694.82	14576777.35	40°08'12.453"N	104°36'58.201"W	6.58	
6728.00	28.510	358.900	6661.45	-321.86	-314.12	-366.99	1747694.33	14576815.29	40°08'12.828"N	104°36'58.205"W	6.73	
6815.00	34.410	0.300	6735.63	-276.50	-268.74	-367.26	1747693.86	14576860.65	40°08'13.276"N	104°36'58.209"W	6.83	
6903.00	40.690	0.860	6805.36	-222.90	-215.14	-366.70	1747694.19	14576914.23	40°08'13.806"N	104°36'58.201"W	7.15	
6981.00†	46.831	0.706	6861.67	-168.97	-161.22	-365.96	1747694.69	14576968.13	40°08'14.339"N	104°36'58.192"W	7.87	ENTERED RADIUS HEEL (2229'FSL & 1511'FWL, SEC.13) 40.1373163 -104.6161644
6990.00	47.540	0.690	6867.78	-162.37	-154.62	-365.88	1747694.74	14576974.73	40°08'14.404"N	104°36'58.191"W	7.87	
7078.00	56.180	359.830	6922.08	-93.24	-85.47	-365.60	1747694.73	14577043.85	40°08'15.087"N	104°36'58.187"W	9.85	
7165.00	67.310	1.240	6963.20	-16.73	-8.97	-364.84	1747695.16	14577120.33	40°08'15.843"N	104°36'58.177"W	12.87	
7253.00	77.240	2.830	6999.96	66.97	74.69	-361.83	1747697.80	14577203.97	40°08'16.670"N	104°36'58.139"W	11.41	
7340.00	83.550	359.920	7004.48	152.70	160.40	-359.79	1747699.46	14577289.65	40°08'17.517"N	104°36'58.113"W	7.97	
7408.00†	88.774	359.309	7009.03	220.50	228.22	-360.25	1747698.71	14577357.44	40°08'18.187"N	104°36'58.118"W	7.73	LANDING (2618'FSL & 1518'FWL, SEC.13) 40.1383854 -104.6161440
7428.00	90.310	359.130	7009.19	240.48	248.22	-360.52	1747698.35	14577377.43	40°08'18.385"N	104°36'58.122"W	7.73	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 29N-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 29N-12HZ AWP
Facility	SEC.13-T2N-R65W		

WELLPATH DATA (186 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
7515.00	91.050	359.130	7008.15	327.42	335.20	-361.85	1747696.66	14577464.37	40°08'19.244"N	104°36'58.139"W	0.85	
7603.00	91.750	359.900	7006.00	415.35	423.17	-362.59	1747695.53	14577552.30	40°08'20.114"N	104°36'58.149"W	1.18	
7690.00	90.990	0.860	7003.92	502.32	510.14	-362.01	1747695.73	14577639.24	40°08'20.973"N	104°36'58.141"W	1.41	
7778.00	90.550	0.620	7002.74	590.31	598.13	-360.88	1747696.49	14577727.20	40°08'21.843"N	104°36'58.127"W	0.57	
7865.00	89.600	2.280	7002.63	677.30	685.09	-358.68	1747698.31	14577814.14	40°08'22.702"N	104°36'58.098"W	2.20	
7953.00	90.620	2.390	7002.46	765.28	773.02	-355.09	1747701.51	14577902.05	40°08'23.571"N	104°36'58.052"W	1.17	
8040.00	90.400	1.160	7001.68	852.27	859.97	-352.40	1747703.83	14577988.98	40°08'24.430"N	104°36'58.017"W	1.44	
8127.00	91.730	0.930	7000.07	939.26	946.94	-350.81	1747705.04	14578075.92	40°08'25.290"N	104°36'57.997"W	1.55	
8215.00	91.660	0.810	6997.46	1027.22	1034.89	-349.47	1747705.99	14578163.84	40°08'26.159"N	104°36'57.980"W	0.16	
8302.00	91.910	1.740	6994.75	1114.17	1121.83	-347.54	1747707.55	14578250.75	40°08'27.018"N	104°36'57.955"W	1.11	
8390.00	91.360	0.990	6992.24	1202.14	1209.77	-345.44	1747709.26	14578338.66	40°08'27.887"N	104°36'57.928"W	1.06	
8477.00	89.720	1.580	6991.42	1289.13	1296.74	-343.49	1747710.84	14578425.61	40°08'28.746"N	104°36'57.903"W	2.00	
8565.00	89.170	2.220	6992.27	1377.12	1384.68	-340.57	1747713.37	14578513.53	40°08'29.616"N	104°36'57.865"W	0.96	
8652.00	90.060	2.170	6992.86	1464.10	1471.62	-337.24	1747716.33	14578600.44	40°08'30.475"N	104°36'57.822"W	1.02	
8740.00	89.880	2.920	6992.91	1552.08	1559.53	-333.34	1747719.85	14578688.34	40°08'31.343"N	104°36'57.772"W	0.88	
8827.00	88.740	2.220	6993.95	1639.05	1646.43	-329.43	1747723.38	14578775.22	40°08'32.202"N	104°36'57.722"W	1.54	
8915.00	88.340	2.730	6996.20	1727.00	1734.32	-325.64	1747726.79	14578863.09	40°08'33.071"N	104°36'57.673"W	0.74	
9002.00	88.670	2.900	6998.47	1813.93	1821.19	-321.36	1747730.69	14578949.94	40°08'33.929"N	104°36'57.618"W	0.43	
9090.00	90.090	3.000	6999.42	1901.88	1909.06	-316.84	1747734.83	14579037.80	40°08'34.797"N	104°36'57.560"W	1.62	
9177.00	90.150	2.260	6999.24	1988.86	1995.97	-312.84	1747738.45	14579124.69	40°08'35.656"N	104°36'57.508"W	0.85	
9265.00	87.380	1.330	7001.13	2076.82	2083.90	-310.09	1747740.82	14579212.60	40°08'36.525"N	104°36'57.473"W	3.32	
9352.00	87.930	1.340	7004.69	2163.75	2170.80	-308.06	1747742.47	14579299.48	40°08'37.384"N	104°36'57.447"W	0.63	
9440.00	88.640	1.430	7007.32	2251.71	2258.73	-305.94	1747744.21	14579387.38	40°08'38.253"N	104°36'57.419"W	0.81	
9528.00	89.010	1.350	7009.13	2339.69	2346.69	-303.80	1747745.96	14579475.31	40°08'39.122"N	104°36'57.392"W	0.43	
9615.00	90.000	1.360	7009.88	2426.69	2433.66	-301.75	1747747.64	14579562.26	40°08'39.982"N	104°36'57.366"W	1.14	
9703.00	90.920	1.550	7009.17	2514.68	2521.63	-299.51	1747749.50	14579650.20	40°08'40.851"N	104°36'57.337"W	1.07	
9791.00	92.030	1.560	7006.91	2602.65	2609.57	-297.12	1747751.50	14579738.11	40°08'41.720"N	104°36'57.306"W	1.26	
9878.00	91.110	0.270	7004.53	2689.61	2696.52	-295.74	1747752.51	14579825.04	40°08'42.579"N	104°36'57.288"W	1.82	
9965.00	91.690	0.120	7002.40	2776.57	2783.49	-295.44	1747752.43	14579911.98	40°08'43.439"N	104°36'57.284"W	0.69	
10053.00	92.280	359.790	6999.35	2864.50	2871.44	-295.51	1747751.98	14579999.89	40°08'44.308"N	104°36'57.285"W	0.77	
10141.00	90.620	0.650	6997.13	2952.45	2959.41	-295.17	1747751.94	14580087.82	40°08'45.177"N	104°36'57.281"W	2.12	
10228.00	91.170	0.590	6995.77	3039.44	3046.39	-294.23	1747752.50	14580174.78	40°08'46.037"N	104°36'57.269"W	0.64	
10316.00	91.750	0.050	6993.52	3127.40	3134.36	-293.74	1747752.61	14580262.71	40°08'46.906"N	104°36'57.262"W	0.90	
10403.00	92.310	359.380	6990.44	3214.31	3221.30	-294.17	1747751.80	14580349.62	40°08'47.765"N	104°36'57.268"W	1.00	
10491.00	90.180	359.790	6988.53	3302.25	3309.28	-294.81	1747750.79	14580437.55	40°08'48.635"N	104°36'57.276"W	2.46	
10578.00	88.280	359.430	6989.70	3389.20	3396.26	-295.40	1747749.82	14580524.50	40°08'49.494"N	104°36'57.284"W	2.22	
10666.00	88.550	358.450	6992.13	3477.10	3484.21	-297.03	1747747.81	14580612.41	40°08'50.363"N	104°36'57.305"W	1.15	
10753.00	90.400	359.660	6992.93	3564.03	3571.19	-298.46	1747746.00	14580699.35	40°08'51.223"N	104°36'57.323"W	2.54	
10841.00	91.540	359.460	6991.44	3651.98	3659.17	-299.14	1747744.94	14580787.29	40°08'52.092"N	104°36'57.332"W	1.32	
10928.00	90.150	359.710	6990.16	3738.93	3746.16	-299.77	1747743.94	14580874.24	40°08'52.952"N	104°36'57.340"W	1.62	
11016.00	90.220	359.080	6989.87	3826.88	3834.15	-300.70	1747742.63	14580962.20	40°08'53.821"N	104°36'57.352"W	0.72	
11104.00	91.020	358.720	6988.92	3914.80	3922.13	-302.38	1747740.56	14581050.13	40°08'54.691"N	104°36'57.374"W	1.00	
11191.00	91.020	359.990	6987.37	4001.74	4009.11	-303.36	1747739.20	14581137.07	40°08'55.550"N	104°36'57.387"W	1.46	
11279.00	91.720	1.490	6985.27	4089.71	4097.08	-302.23	1747739.96	14581225.01	40°08'56.420"N	104°36'57.372"W	1.88	
11366.00	91.050	2.300	6983.17	4176.68	4184.00	-299.35	1747742.45	14581311.91	40°08'57.279"N	104°36'57.335"W	1.21	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 29N-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 29N-12HZ AWP
Facility	SEC.13-T2N-R65W		

WELLPATH DATA (186 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
11454.00	89.720	1.720	6982.57	4264.67	4271.94	296.27	1747745.16	14581399.83	40°08'58.148"N	104°36'57.295"W	1.65	
11541.00	89.880	0.210	6982.88	4351.66	4358.93	-294.80	1747746.25	14581486.79	40°08'59.007"N	104°36'57.276"W	1.75	
11629.00	90.650	1.750	6982.47	4439.66	4446.91	-293.30	1747747.37	14581574.74	40°08'59.877"N	104°36'57.257"W	1.96	
11716.00	90.680	2.330	6981.46	4526.64	4533.85	-290.20	1747750.09	14581661.66	40°09'00.736"N	104°36'57.217"W	0.67	
11803.00	91.020	3.070	6980.17	4613.60	4620.74	-286.10	1747753.81	14581748.54	40°09'01.595"N	104°36'57.164"W	0.94	
11891.00	90.280	2.350	6979.17	4701.57	4708.64	-281.94	1747757.59	14581836.41	40°09'02.463"N	104°36'57.111"W	1.17	
11978.00	90.490	2.860	6978.59	4788.54	4795.54	-277.99	1747761.16	14581923.30	40°09'03.322"N	104°36'57.060"W	0.63	
12065.00	89.170	2.730	6978.85	4875.50	4882.44	-273.74	1747765.03	14582010.18	40°09'04.181"N	104°36'57.005"W	1.52	
12153.00	90.250	3.010	6979.29	4963.46	4970.33	-269.34	1747769.05	14582098.05	40°09'05.049"N	104°36'56.949"W	1.27	
12240.00	91.850	3.200	6977.70	5050.40	5057.18	-264.63	1747773.38	14582184.89	40°09'05.907"N	104°36'56.888"W	1.85	
12327.00	90.030	2.190	6976.27	5137.35	5144.07	-260.54	1747777.09	14582271.76	40°09'06.766"N	104°36'56.835"W	2.39	
12415.00	90.370	1.910	6975.96	5225.34	5232.01	-257.39	1747779.86	14582359.69	40°09'07.635"N	104°36'56.795"W	0.50	
12502.00	91.420	1.530	6974.60	5312.33	5318.96	-254.78	1747782.09	14582446.61	40°09'08.494"N	104°36'56.761"W	1.28	
12590.00	90.180	1.990	6973.38	5400.31	5406.91	-252.08	1747784.41	14582534.54	40°09'09.363"N	104°36'56.726"W	1.50	
12678.00	91.480	1.950	6972.10	5488.30	5494.84	-249.05	1747787.06	14582622.45	40°09'10.232"N	104°36'56.687"W	1.48	
12765.00	89.880	2.340	6971.07	5575.28	5581.77	-245.80	1747789.93	14582709.36	40°09'11.091"N	104°36'56.645"W	1.89	
12853.00	90.460	2.480	6970.81	5663.26	5669.70	-242.09	1747793.25	14582797.26	40°09'11.960"N	104°36'56.598"W	0.68	
12940.00	89.820	2.680	6970.59	5750.23	5756.61	-238.18	1747796.79	14582884.16	40°09'12.819"N	104°36'56.547"W	0.77	
13027.00	88.890	2.470	6971.57	5837.20	5843.51	-234.27	1747800.32	14582971.04	40°09'13.678"N	104°36'56.497"W	1.10	
13115.00	89.450	2.730	6972.85	5925.16	5931.41	-230.28	1747803.93	14583058.93	40°09'14.547"N	104°36'56.446"W	0.70	
13201.00	89.720	2.260	6973.47	6011.14	6017.33	-226.54	1747807.30	14583144.82	40°09'15.396"N	104°36'56.397"W	0.63	
13289.00	90.400	2.630	6973.38	6099.12	6105.25	-222.78	1747810.67	14583232.73	40°09'16.264"N	104°36'56.349"W	0.88	
13376.00	89.690	2.210	6973.31	6186.10	6192.17	-219.11	1747813.97	14583319.63	40°09'17.123"N	104°36'56.302"W	0.95	
13463.00	89.350	0.730	6974.04	6273.09	6279.13	-216.88	1747815.82	14583406.57	40°09'17.983"N	104°36'56.273"W	1.75	
13551.00	89.850	1.320	6974.65	6361.09	6367.12	-215.30	1747817.01	14583494.52	40°09'18.852"N	104°36'56.253"W	0.88	
13639.00	90.180	1.530	6974.63	6449.09	6455.09	-213.11	1747818.82	14583582.47	40°09'19.722"N	104°36'56.225"W	0.44	
13726.00	90.180	0.580	6974.36	6536.09	6542.07	-211.51	1747820.05	14583669.43	40°09'20.581"N	104°36'56.204"W	1.09	
13813.00	89.690	0.320	6974.46	6623.08	6629.07	-210.83	1747820.35	14583756.39	40°09'21.441"N	104°36'56.195"W	0.64	
13901.00	90.920	359.760	6973.99	6711.06	6717.07	-210.77	1747820.03	14583844.35	40°09'22.311"N	104°36'56.194"W	1.54	
13988.00	89.410	0.590	6973.74	6798.04	6804.06	-210.50	1747819.92	14583931.32	40°09'23.170"N	104°36'56.191"W	1.98	
14076.00	89.880	0.530	6974.28	6886.03	6892.06	-209.64	1747820.40	14584019.28	40°09'24.040"N	104°36'56.180"W	0.54	
14163.00	90.430	359.660	6974.05	6973.01	6979.06	-209.50	1747820.17	14584106.24	40°09'24.900"N	104°36'56.178"W	1.18	
14251.00	90.950	358.240	6972.99	7060.94	7067.03	-211.11	1747818.17	14584194.18	40°09'25.769"N	104°36'56.199"W	1.72	
14338.00	89.570	358.340	6972.59	7147.82	7153.99	-213.70	1747815.20	14584281.09	40°09'26.628"N	104°36'56.232"W	1.59	
14426.00	89.140	358.860	6973.58	7235.72	7241.96	-215.85	1747812.67	14584369.01	40°09'27.498"N	104°36'56.260"W	0.77	
14514.00	89.720	358.630	6974.46	7323.63	7329.93	-217.78	1747810.36	14584456.94	40°09'28.367"N	104°36'56.285"W	0.71	
14601.00	90.490	358.320	6974.30	7410.53	7416.90	-220.10	1747807.67	14584543.87	40°09'29.226"N	104°36'56.315"W	0.95	
14689.00	90.430	359.930	6973.59	7498.47	7504.88	-221.44	1747805.95	14584631.81	40°09'30.096"N	104°36'56.332"W	1.83	
14777.00	90.250	0.640	6973.07	7586.45	7592.88	-221.00	1747806.01	14584719.77	40°09'30.965"N	104°36'56.326"W	0.83	
14864.00	90.860	0.300	6972.23	7673.44	7679.87	-220.29	1747806.34	14584806.74	40°09'31.825"N	104°36'56.317"W	0.80	
14952.00	91.380	359.620	6970.51	7761.40	7767.86	-220.35	1747805.90	14584894.68	40°09'32.694"N	104°36'56.318"W	0.97	
15026.00†	90.546	0.947	6969.26	7835.38	7841.84	-219.99	1747805.95	14584968.64	40°09'33.426"N	104°36'56.313"W	2.12	ENTERED RADIUS TOE (346'FNL & 1585'FWL, SEC.12) 40.1592849 -104.6156426
15039.00	90.400	1.180	6969.16	7848.38	7854.84	-219.74	1747806.13	14584981.63	40°09'33.554"N	104°36'56.310"W	2.12	
15126.00	91.080	1.530	6968.03	7935.37	7941.81	-217.69	1747807.81	14585068.58	40°09'34.413"N	104°36'56.284"W	0.88	
15214.00	90.310	1.960	6966.97	8023.36	8029.76	-215.01	1747810.11	14585156.50	40°09'35.283"N	104°36'56.249"W	1.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 29N-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 29N-12HZ AWB
Facility	SEC.13-T2N-R65W		

WELLPATH DATA (186 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
15302.00	91.140	1.890	6965.85	8111.35	8117.70	-212.05	1747812.68	14585244.43	40°09'36.152"N	104°36'56.211"W	0.95	
15389.00	90.340	2.540	6964.73	8198.33	8204.63	-208.69	1747815.67	14585331.33	40°09'37.011"N	104°36'56.168"W	1.18	
15477.00	88.800	3.170	6965.39	8286.28	8292.51	-204.31	1747819.67	14585419.20	40°09'37.879"N	104°36'56.111"W	1.89	
15564.00	89.380	2.210	6966.77	8373.24	8379.41	-200.22	1747823.37	14585506.08	40°09'38.738"N	104°36'56.059"W	1.29	
15652.00	90.430	2.530	6966.92	8461.22	8467.33	-196.58	1747826.63	14585593.98	40°09'39.607"N	104°36'56.012"W	1.25	LAST BHI MWD+IFR+SC SURVEY
15710.00	90.430	2.530	6966.48	8519.21	8525.27	-194.02	1747828.93	14585651.91	40°09'40.179"N	104°36'55.979"W	0.00	PTB (337'FSL & 1612'FWL,SEC.01) 40.1611609 -104.6155497

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.01-T2N-R65W	-9.00	0.00	0.00	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	polygon
SEC.12-T2N-R65W	-9.00	0.00	0.00	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	polygon
SEC.13-T2N-R65W	-9.00	0.00	0.00	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	polygon
GUEST 29N-12HZ BHL REV-1(370'FSL & 1614'FWL,SEC.01)	6952.20	8558.43	-191.86	1747830.96	14585685.07	40°09'40.507"N	104°36'55.951"W	point
GUEST 29N-12HZ BHL REV-2(370'FSL & 1619'FWL,SEC.01)	6952.20	8558.43	-186.86	1747835.96	14585685.09	40°09'40.507"N	104°36'55.887"W	point
GUEST 29N-12HZ CIRCLE 1	6993.20	250.40	-570.65	1747488.30	14577378.70	40°08'18.406"N	104°37'00.828"W	polygon
GUEST 29N-12HZ CIRCLE 2	6993.20	8197.81	-511.40	1747513.10	14585323.20	40°09'36.943"N	104°37'00.067"W	polygon
GUEST 29N-12HZ LANDBOX	6993.20	0.00	0.00	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	polygon
GUEST 29N-12HZ HEEL REV-1(2589'FNL & 1513'FWL,SEC.13)	7004.20	301.46	-363.01	1747695.64	14577430.64	40°08'18.911"N	104°36'58.154"W	point

WELLPATH COMPOSITION - Ref Wellbore: GUEST 29N-12HZ AWB Ref Wellpath: GUEST 29N-12HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1797.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	SDI MWD+IFR SURVEYS <145 - 1797>	GUEST 29N-12HZ AWB
1797.00	15652.00	Custom APC ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHI APC ISCWSA REV 2 MWD+IFR1+SC <1893 - 15652>	GUEST 29N-12HZ AWB
15652.00	15710.00	Blind Drilling (std)	Projection to bit	GUEST 29N-12HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#12 GUEST 29N-12HZ (1878'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 29N-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 29N-12HZ AWB
Facility	SEC.13-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
145.00	0.530	61.240	145.00	FIRST SDI MWD+IFR SURVEY
1437.00	10.298	214.954	1424.47	ENTERED LANDBOX (2273'FSL & 1766'FWL, SEC.13) 40.1374372 -104.6152572
1797.00	12.540	214.140	1777.84	LAST SDI MWD+IFR SURVEY
1893.00	12.670	213.790	1871.53	FIRST BHI MWD+IFR+SC SURVEY
6268.00	1.309	93.845	6219.24	KOP
6981.00	46.831	0.706	6861.67	ENTERED RADIUS HEEL (2229'FSL & 1511'FWL, SEC.13) 40.1373163 -104.6161644
7408.00	88.774	359.309	7009.03	LANDING (2618'FSL & 1518'FWL, SEC.13) 40.1383854 -104.6161440
15026.00	90.546	0.947	6969.26	ENTERED RADIUS TOE (346'FNL & 1585'FWL, SEC.12) 40.1592849 -104.6156426
15652.00	90.430	2.530	6966.92	LAST BHI MWD+IFR+SC SURVEY
15710.00	90.430	2.530	6966.48	PTB (337'FSL & 1612'FWL, SEC.01) 40.1611609 -104.6155497