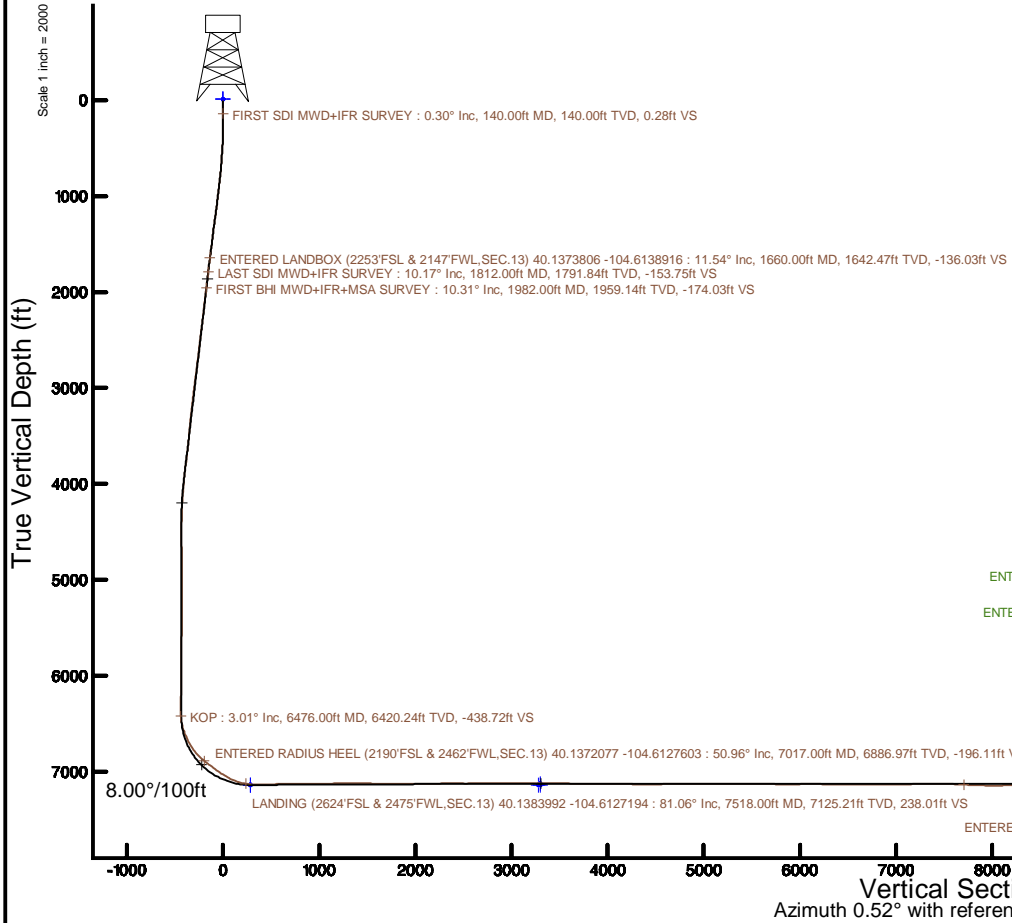
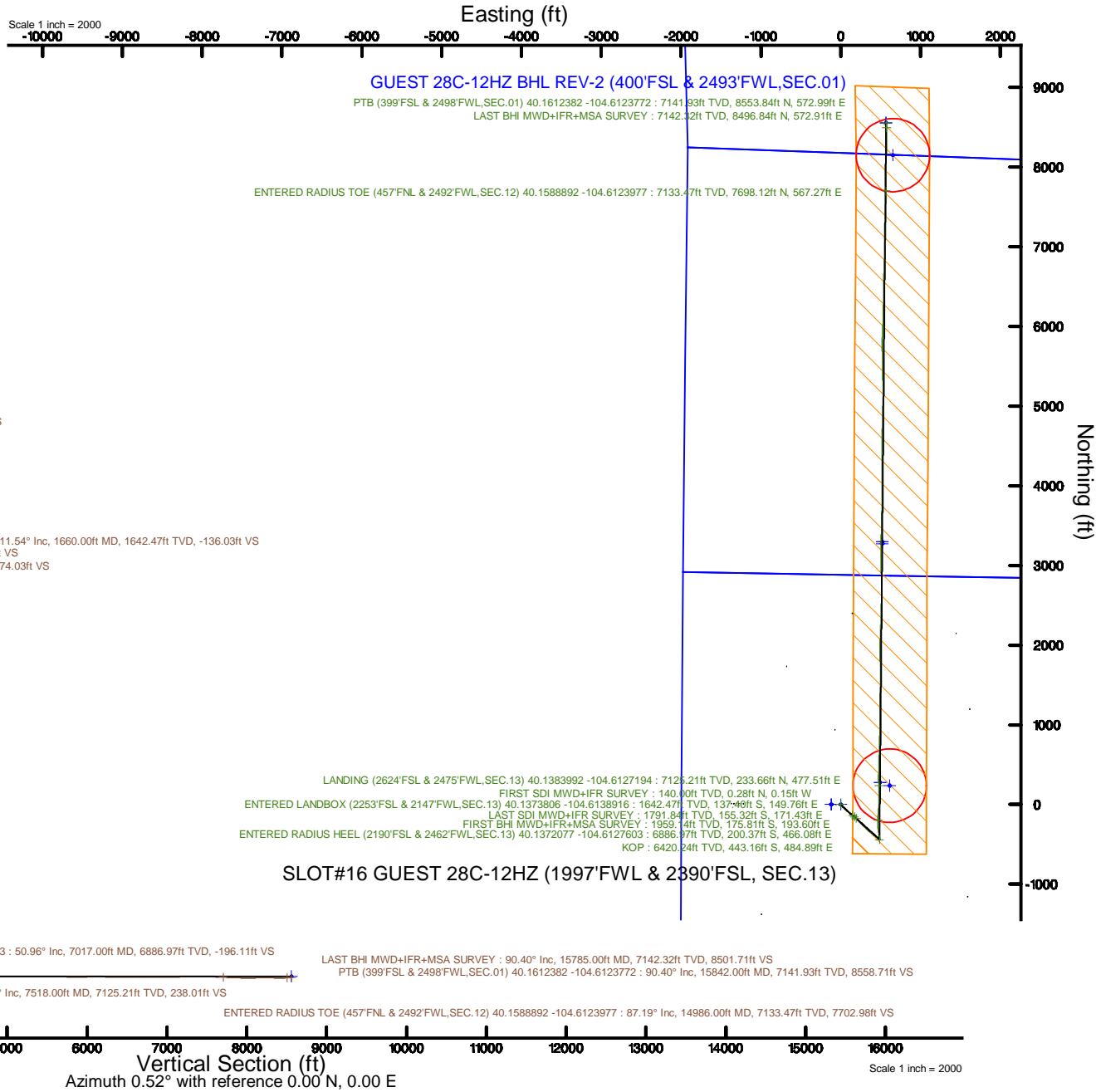


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: GUEST 28C-12HZ
 Facility: SEC.13-T2N-R65W Wellbore: GUEST 28C-12HZ PWB

Plot reference wellpath is GUEST 28C-12HZ Rev-C.0 PWP	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to Xtreme 22 (17RKB) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to Xtreme 22 (17RKB) (RKB)	North Reference: True north
Xtreme 22 (17RKB) (RKB) to Mean Sea Level: 4889 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)); 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2017-04-11
	Database: WA_DEN_Anadarko_Defn



LANDING (2624'FSL & 2475'FWL, SEC.13) 40.1383992 -104.6127194 : 7125.21ft TVD, 233.66ft N, 477.51ft E
 FIRST SDI MWD+IFR SURVEY : 140.00ft TVD, 0.28ft N, 0.15ft W
 ENTERED LANDBOX (2253'FSL & 2147'FWL, SEC.13) 40.1373806 -104.6138916 : 1642.47ft TVD, 137.48ft S, 149.76ft E
 LAST SDI MWD+IFR SURVEY : 1791.84ft TVD, 155.32ft S, 171.43ft E
 FIRST BHI MWD+IFR+MSA SURVEY : 1959.14ft TVD, 175.81ft S, 183.60ft E
 ENTERED RADIUS HEEL (2190'FSL & 2462'FWL, SEC.13) 40.1372077 -104.6127603 : 6886.97ft TVD, 200.37ft S, 466.08ft E
 KOP : 6420.24ft TVD, 443.16ft S, 484.89ft E

LAST BHI MWD+IFR+MSA SURVEY : 90.40° Inc, 15785.00ft MD, 7142.32ft TVD, 8501.71ft VS
 PTB (399'FSL & 2498'FWL, SEC.01) 40.1612382 -104.6123772 : 90.40° Inc, 15842.00ft MD, 7141.93ft TVD, 8558.71ft VS

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 28C-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 28C-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	4/11/2017 at 8:25 AM
Convergence at slot	0.25° East	Database/Source file	WA_DEN_Anadarko_Defn/GUEST_28C-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	-2154.77	-2423.07	1748179.53	14577130.99	40°08'15.928"N	104°36'51.938"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#16 GUEST 28C-12HZ (1997'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	0.52°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 28C-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 28C-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	332.230	0.00	0.00	0.00	0.00	1748179.53	14577130.99	40°08'15.928"N	104°36'51.938"W	0.00	
17.00	0.000	332.230	17.00	0.00	0.00	0.00	1748179.53	14577130.99	40°08'15.928"N	104°36'51.938"W	0.00	
140.00	0.300	332.230	140.00	0.28	0.28	-0.15	1748179.37	14577131.27	40°08'15.931"N	104°36'51.940"W	0.24	FIRST SDI MWD+IFR SURVEY
269.00	0.400	147.510	269.00	0.20	0.20	-0.07	1748179.46	14577131.19	40°08'15.930"N	104°36'51.939"W	0.54	
353.00	1.880	145.310	352.98	-1.17	-1.18	0.88	1748180.41	14577129.82	40°08'15.916"N	104°36'51.927"W	1.76	
440.00	3.210	142.140	439.89	-4.24	-4.27	3.18	1748182.73	14577126.73	40°08'15.886"N	104°36'51.897"W	1.54	
526.00	4.280	145.900	525.71	-8.77	-8.83	6.46	1748186.02	14577122.19	40°08'15.841"N	104°36'51.855"W	1.28	
615.00	5.710	139.110	614.37	-14.83	-14.93	11.22	1748190.81	14577116.11	40°08'15.780"N	104°36'51.794"W	1.74	
704.00	7.290	134.330	702.79	-22.06	-22.22	18.16	1748197.77	14577108.85	40°08'15.708"N	104°36'51.704"W	1.88	
877.00	9.970	130.520	873.82	-39.28	-39.63	37.40	1748217.08	14577091.54	40°08'15.536"N	104°36'51.456"W	1.58	
966.00	10.370	131.020	961.42	-49.44	-49.89	49.30	1748229.02	14577081.33	40°08'15.435"N	104°36'51.303"W	0.46	
1052.00	10.410	132.810	1046.01	-59.69	-60.25	60.84	1748240.60	14577071.03	40°08'15.333"N	104°36'51.155"W	0.38	
1141.00	10.690	131.400	1133.51	-70.51	-71.17	72.93	1748252.73	14577060.16	40°08'15.225"N	104°36'50.999"W	0.43	
1226.00	11.060	133.760	1216.98	-81.25	-82.02	84.73	1748264.58	14577049.36	40°08'15.117"N	104°36'50.847"W	0.68	
1311.00	11.090	134.440	1300.40	-92.51	-93.39	96.46	1748276.35	14577038.06	40°08'15.005"N	104°36'50.696"W	0.16	
1400.00	11.380	131.450	1387.69	-104.20	-105.19	109.15	1748289.09	14577026.31	40°08'14.888"N	104°36'50.533"W	0.73	
1489.00	11.180	127.610	1474.98	-115.15	-116.27	122.57	1748302.55	14577015.29	40°08'14.779"N	104°36'50.360"W	0.87	
1578.00	11.890	127.380	1562.18	-125.86	-127.10	136.69	1748316.71	14577004.53	40°08'14.672"N	104°36'50.178"W	0.80	
1660.00†	11.536	129.109	1642.47	-136.04	-137.40	149.76	1748329.82	14576994.29	40°08'14.570"N	104°36'50.010"W	0.61	ENTERED LANDBOX (2253'FSL & 2147'FWL, SEC.13) 40.1373806 -104.6138916
1666.00	11.510	129.240	1648.35	-136.79	-138.16	150.69	1748330.76	14576993.54	40°08'14.563"N	104°36'49.998"W	0.61	
1755.00	10.260	129.630	1735.75	-147.34	-148.83	163.67	1748343.78	14576982.92	40°08'14.457"N	104°36'49.831"W	1.41	
1812.00	10.170	130.190	1791.84	-153.76	-155.32	171.43	1748351.56	14576976.47	40°08'14.393"N	104°36'49.731"W	0.24	LAST SDI MWD+IFR SURVEY
1982.00	10.310	135.240	1959.14	-174.04	-175.81	193.60	1748373.82	14576956.09	40°08'14.191"N	104°36'49.445"W	0.53	FIRST BHI MWD+IFR+MSA SURVEY
2070.00	9.620	136.590	2045.81	-184.88	-186.74	204.20	1748384.46	14576945.21	40°08'14.083"N	104°36'49.309"W	0.83	
2157.00	9.080	135.830	2131.65	-194.99	-196.94	213.98	1748394.28	14576935.05	40°08'13.982"N	104°36'49.183"W	0.64	
2244.00	8.700	133.710	2217.61	-204.38	-206.42	223.52	1748403.85	14576925.62	40°08'13.888"N	104°36'49.060"W	0.58	
2332.00	10.110	134.550	2304.42	-214.30	-216.43	233.84	1748414.21	14576915.65	40°08'13.789"N	104°36'48.927"W	1.61	
2419.00	10.180	135.540	2390.06	-225.05	-227.28	244.66	1748425.08	14576904.86	40°08'13.682"N	104°36'48.788"W	0.22	
2507.00	9.540	134.930	2476.76	-235.65	-237.98	255.27	1748435.73	14576894.21	40°08'13.576"N	104°36'48.651"W	0.74	
2594.00	8.790	133.730	2562.65	-245.25	-247.67	265.18	1748445.68	14576884.57	40°08'13.481"N	104°36'48.524"W	0.89	
2682.00	10.610	134.340	2649.39	-255.46	-257.98	275.83	1748456.37	14576874.31	40°08'13.379"N	104°36'48.387"W	2.07	
2769.00	10.660	134.960	2734.90	-266.64	-269.26	287.26	1748467.84	14576863.08	40°08'13.267"N	104°36'48.239"W	0.14	
2857.00	10.190	135.680	2821.44	-277.86	-280.58	298.45	1748479.08	14576851.81	40°08'13.155"N	104°36'48.095"W	0.55	
2944.00	9.890	135.580	2907.11	-288.61	-291.42	309.06	1748489.73	14576841.02	40°08'13.048"N	104°36'47.959"W	0.35	
3032.00	10.690	131.600	2993.70	-299.32	-302.24	320.45	1748501.16	14576830.26	40°08'12.941"N	104°36'47.812"W	1.22	
3119.00	11.090	131.390	3079.13	-310.10	-313.13	332.77	1748513.52	14576819.43	40°08'12.834"N	104°36'47.654"W	0.46	
3207.00	10.310	131.660	3165.60	-320.82	-323.96	345.00	1748525.79	14576808.65	40°08'12.727"N	104°36'47.496"W	0.89	
3294.00	9.070	131.320	3251.36	-330.42	-333.66	355.97	1748536.80	14576799.00	40°08'12.631"N	104°36'47.355"W	1.43	
3381.00	9.380	122.990	3337.23	-338.71	-342.05	367.06	1748547.93	14576790.66	40°08'12.548"N	104°36'47.212"W	1.57	
3469.00	10.640	124.340	3423.89	-347.08	-350.54	379.79	1748560.68	14576782.24	40°08'12.464"N	104°36'47.048"W	1.46	
3556.00	9.970	123.040	3509.49	-355.60	-359.18	392.73	1748573.66	14576773.66	40°08'12.379"N	104°36'46.881"W	0.82	
3644.00	10.690	128.580	3596.06	-364.72	-368.42	405.50	1748586.46	14576764.47	40°08'12.287"N	104°36'46.717"W	1.39	
3732.00	9.970	129.730	3682.64	-374.57	-378.38	417.74	1748598.74	14576754.57	40°08'12.189"N	104°36'46.559"W	0.85	
3819.00	10.610	132.580	3768.24	-384.70	-388.61	429.43	1748610.47	14576744.39	40°08'12.088"N	104°36'46.409"W	0.94	
3907.00	10.150	131.930	3854.80	-395.25	-399.27	441.16	1748622.54	14576733.79	40°08'11.982"N	104°36'46.258"W	0.54	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 28C-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 28C-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
3994.00	9.260	132.300	3940.55	-404.99	-409.11	452.04	1748633.16	14576724.00	40°08'11.885"N	104°36'46.118"W	1.03	
4081.00	7.740	129.460	4026.59	-413.34	-417.54	461.74	1748642.90	14576715.61	40°08'11.802"N	104°36'45.993"W	1.81	
4168.00	5.910	133.590	4112.97	-420.08	-424.36	469.51	1748650.69	14576708.84	40°08'11.734"N	104°36'45.893"W	2.18	
4256.00	3.930	132.120	4200.65	-425.17	-429.50	475.03	1748656.23	14576703.72	40°08'11.684"N	104°36'45.822"W	2.25	
4343.00	2.580	134.710	4287.50	-428.52	-432.88	478.63	1748659.85	14576700.36	40°08'11.650"N	104°36'45.775"W	1.56	
4431.00	2.070	131.260	4375.43	-430.94	-435.32	481.23	1748662.46	14576697.93	40°08'11.626"N	104°36'45.742"W	0.60	
4518.00	0.580	109.470	4462.41	-432.10	-436.50	482.83	1748664.06	14576696.75	40°08'11.614"N	104°36'45.721"W	1.78	
4544.00	0.590	87.420	4488.40	-432.14	-435.54	483.09	1748664.32	14576696.71	40°08'11.614"N	104°36'45.718"W	0.86	
4631.00	0.620	61.080	4575.40	-431.88	-436.29	483.95	1748665.17	14576696.97	40°08'11.616"N	104°36'45.707"W	0.32	
4718.00	0.800	30.840	4662.39	-431.13	-435.54	484.67	1748665.89	14576697.72	40°08'11.624"N	104°36'45.698"W	0.47	
4806.00	0.880	357.290	4750.38	-429.92	-434.34	484.95	1748666.17	14576698.92	40°08'11.636"N	104°36'45.694"W	0.56	
4893.00	0.620	197.870	4837.38	-429.71	-434.12	484.78	1748665.99	14576699.14	40°08'11.638"N	104°36'45.696"W	1.70	
4980.00	0.680	207.470	4924.38	-430.61	-435.03	484.40	1748665.62	14576698.23	40°08'11.629"N	104°36'45.701"W	0.14	
5068.00	0.540	252.580	5012.37	-431.21	-435.62	483.76	1748664.98	14576697.64	40°08'11.623"N	104°36'45.709"W	0.55	
5155.00	0.710	279.720	5099.37	-431.25	-435.65	482.84	1748664.06	14576697.61	40°08'11.623"N	104°36'45.721"W	0.39	
5243.00	0.670	62.280	5187.36	-430.92	-435.32	482.76	1748663.98	14576697.94	40°08'11.626"N	104°36'45.722"W	1.49	
5330.00	0.730	56.540	5274.36	-430.37	-434.77	483.67	1748664.89	14576698.48	40°08'11.631"N	104°36'45.711"W	0.11	
5418.00	0.840	17.490	5362.35	-429.44	-433.85	484.33	1748665.54	14576699.41	40°08'11.641"N	104°36'45.702"W	0.61	
5505.00	0.880	128.460	5449.34	-429.24	-433.66	485.04	1748666.26	14576699.61	40°08'11.643"N	104°36'45.693"W	1.63	
5593.00	1.140	155.930	5537.33	-430.45	-434.88	485.93	1748667.15	14576698.39	40°08'11.630"N	104°36'45.681"W	0.62	
5680.00	0.920	163.540	5624.32	-431.90	-436.34	486.48	1748667.71	14576696.93	40°08'11.616"N	104°36'45.674"W	0.30	
5768.00	0.950	156.010	5712.31	-433.24	-437.68	486.98	1748668.21	14576695.59	40°08'11.603"N	104°36'45.668"W	0.14	
5855.00	0.780	159.690	5799.30	-434.45	-438.90	487.48	1748668.71	14576694.38	40°08'11.591"N	104°36'45.662"W	0.21	
5943.00	0.540	170.980	5887.29	-435.42	-439.87	487.75	1748668.99	14576693.41	40°08'11.581"N	104°36'45.658"W	0.31	
6030.00	0.590	197.260	5974.29	-436.26	-440.70	487.68	1748668.92	14576692.58	40°08'11.573"N	104°36'45.659"W	0.30	
6118.00	0.280	217.460	6062.28	-436.86	-441.30	487.42	1748668.66	14576691.97	40°08'11.567"N	104°36'45.662"W	0.39	
6205.00	0.520	206.480	6149.28	-437.39	-441.82	487.11	1748668.36	14576691.45	40°08'11.562"N	104°36'45.666"W	0.29	
6292.00	0.800	194.940	6236.27	-438.33	-442.77	486.78	1748668.03	14576690.51	40°08'11.553"N	104°36'45.671"W	0.35	
6380.00	1.050	203.380	6324.26	-439.67	-444.10	486.30	1748667.56	14576689.17	40°08'11.539"N	104°36'45.677"W	0.32	
6467.00	2.100	325.440	6411.24	-439.10	-443.52	485.08	1748666.34	14576689.75	40°08'11.545"N	104°36'45.692"W	3.22	
6476.00†	3.013	337.360	6420.24	-438.74	-443.16	484.89	1748666.15	14576690.10	40°08'11.549"N	104°36'45.695"W	11.69	KOP
6555.00	12.040	355.850	6498.48	-428.60	-433.01	483.50	1748664.71	14576700.25	40°08'11.649"N	104°36'45.713"W	11.69	
6642.00	20.080	359.890	6582.02	-404.58	-408.98	482.81	1748663.92	14576724.26	40°08'11.886"N	104°36'45.722"W	9.32	
6730.00	26.090	352.810	6662.95	-370.26	-374.64	480.36	1748661.32	14576758.58	40°08'12.226"N	104°36'45.753"W	7.51	
6818.00	32.090	351.250	6739.82	-327.98	-332.30	474.37	1748655.15	14576800.88	40°08'12.644"N	104°36'45.830"W	6.87	
6905.00	40.710	353.340	6809.78	-276.92	-281.18	467.55	1748648.11	14576851.95	40°08'13.149"N	104°36'45.918"W	10.01	
6992.00	49.790	1.890	6871.02	-215.38	-219.61	465.35	1748645.64	14576913.48	40°08'13.758"N	104°36'45.946"W	12.54	
7017.00†	50.957	2.467	6886.97	-196.13	-200.37	466.08	1748646.29	14576932.72	40°08'13.948"N	104°36'45.937"W	5.00	ENTERED RADIUS HEEL (2190'FSL & 2462'FWL, SEC.13) 40.1372077 -104.6127603
7080.00	53.910	3.840	6925.37	-146.26	-150.52	468.84	1748648.84	14576982.56	40°08'14.441"N	104°36'45.901"W	5.00	
7167.00	53.470	4.350	6976.89	-76.29	-80.59	473.85	1748653.54	14577052.49	40°08'15.132"N	104°36'45.837"W	0.69	
7255.00	58.080	2.610	7026.37	-3.64	-7.98	478.23	1748657.60	14577125.08	40°08'15.849"N	104°36'45.780"W	5.49	
7343.00	62.710	0.560	7069.84	72.83	68.47	480.32	1748659.36	14577201.52	40°08'16.605"N	104°36'45.754"W	5.64	
7430.00	71.010	358.580	7104.00	152.74	148.39	479.67	1748658.37	14577281.40	40°08'17.394"N	104°36'45.762"W	9.77	
7518.00	81.060	358.510	7125.21	237.98	233.66	477.51	1748655.83	14577366.62	40°08'18.237"N	104°36'45.790"W	11.42	LANDING (2624'FSL & 2475'FWL, SEC.13) 40.1383992 -104.6127194
7605.00	88.330	359.620	7133.25	324.52	320.21	476.10	1748654.05	14577453.14	40°08'19.092"N	104°36'45.808"W	8.45	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 28C-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 28C-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
7693.00	91.140	1.330	7133.66	412.51	408.20	476.83	1748654.40	14577541.09	40°08'19.962"N	104°36'45.798"W	3.74	
7780.00	92.650	2.150	7130.78	499.44	495.11	479.47	1748656.66	14577627.98	40°08'20.821"N	104°36'45.764"W	1.97	
7868.00	91.420	1.410	7127.66	587.36	583.01	482.20	1748659.01	14577715.85	40°08'21.689"N	104°36'45.729"W	1.63	
7955.00	90.030	1.450	7126.55	674.34	669.97	484.37	1748660.80	14577802.79	40°08'22.549"N	104°36'45.701"W	1.60	
8043.00	90.340	1.600	7126.27	762.32	757.94	486.71	1748662.76	14577890.73	40°08'23.418"N	104°36'45.671"W	0.39	
8130.00	91.290	1.600	7125.03	849.30	844.89	489.14	1748664.81	14577977.67	40°08'24.277"N	104°36'45.640"W	1.09	
8218.00	90.830	0.660	7123.40	937.28	932.86	490.88	1748666.16	14578065.61	40°08'25.147"N	104°36'45.617"W	1.19	
8305.00	89.780	0.720	7122.94	1024.27	1019.85	491.93	1748666.83	14578152.57	40°08'26.006"N	104°36'45.604"W	1.21	
8393.00	90.520	0.540	7122.71	1112.27	1107.85	492.89	1748667.42	14578240.53	40°08'26.876"N	104°36'45.591"W	0.87	
8480.00	91.420	0.260	7121.24	1199.26	1194.83	493.50	1748667.65	14578327.48	40°08'27.735"N	104°36'45.584"W	1.08	
8568.00	89.780	1.110	7120.32	1287.25	1282.82	494.55	1748668.32	14578415.44	40°08'28.605"N	104°36'45.570"W	2.10	
8655.00	90.120	0.610	7120.39	1374.25	1369.81	495.86	1748669.25	14578502.40	40°08'29.464"N	104°36'45.553"W	0.69	
8742.00	88.890	1.210	7121.14	1461.24	1456.79	497.24	1748670.25	14578589.35	40°08'30.324"N	104°36'45.535"W	1.57	
8830.00	89.480	0.700	7122.40	1549.23	1544.77	498.71	1748671.34	14578677.30	40°08'31.193"N	104°36'45.516"W	0.89	
8917.00	90.400	359.790	7122.49	1636.23	1631.76	499.08	1748671.33	14578764.27	40°08'32.053"N	104°36'45.512"W	1.49	
9005.00	88.950	359.290	7122.99	1724.21	1719.76	498.37	1748670.24	14578852.22	40°08'32.923"N	104°36'45.521"W	1.74	
9092.00	89.230	357.600	7124.37	1811.14	1806.71	496.01	1748667.51	14578939.13	40°08'33.782"N	104°36'45.551"W	1.97	
9180.00	90.150	359.140	7124.84	1899.07	1894.67	493.51	1748664.62	14579027.04	40°08'34.651"N	104°36'45.583"W	2.04	
9267.00	90.430	0.780	7124.40	1986.06	1981.67	493.45	1748664.18	14579114.01	40°08'35.511"N	104°36'45.584"W	1.91	
9355.00	89.450	2.080	7124.50	2074.05	2069.64	495.64	1748666.00	14579201.95	40°08'36.380"N	104°36'45.556"W	1.85	
9442.00	90.460	2.270	7124.56	2161.01	2156.57	498.95	1748668.92	14579288.87	40°08'37.239"N	104°36'45.513"W	1.18	
9530.00	91.600	2.490	7122.98	2248.95	2244.48	502.60	1748672.19	14579376.75	40°08'38.108"N	104°36'45.466"W	1.32	
9617.00	90.520	1.790	7121.37	2335.90	2331.40	505.85	1748675.06	14579463.66	40°08'38.967"N	104°36'45.424"W	1.48	
9705.00	89.170	1.250	7121.61	2423.88	2419.37	508.18	1748677.01	14579551.60	40°08'39.836"N	104°36'45.394"W	1.65	
9792.00	89.780	0.680	7122.41	2510.88	2506.35	509.65	1748678.10	14579638.55	40°08'40.696"N	104°36'45.375"W	0.96	
9880.00	91.110	0.180	7121.73	2598.87	2594.35	510.31	1748678.38	14579726.51	40°08'41.565"N	104°36'45.367"W	1.61	
9967.00	91.110	1.130	7120.04	2686.85	2681.32	511.30	1748679.00	14579813.46	40°08'42.425"N	104°36'45.354"W	1.09	
10055.00	89.380	359.790	7119.66	2773.85	2769.31	512.01	1748679.32	14579901.42	40°08'43.295"N	104°36'45.345"W	2.49	
10143.00	89.200	358.650	7120.75	2861.82	2857.30	510.81	1748677.74	14579989.36	40°08'44.164"N	104°36'45.360"W	1.31	
10230.00	89.880	358.300	7121.45	2948.76	2944.26	508.49	1748675.05	14580076.28	40°08'45.023"N	104°36'45.390"W	0.88	
10318.00	90.770	358.430	7120.95	3036.69	3032.22	505.98	1748672.16	14580164.20	40°08'45.893"N	104°36'45.422"W	1.02	
10406.00	90.250	359.760	7120.17	3124.66	3120.21	504.59	1748670.39	14580252.14	40°08'46.762"N	104°36'45.440"W	1.62	
10493.00	89.810	1.240	7120.12	3211.66	3207.20	505.35	1748670.77	14580339.10	40°08'47.622"N	104°36'45.430"W	1.77	
10580.00	90.650	0.960	7119.78	3298.65	3294.18	507.02	1748672.06	14580426.06	40°08'48.481"N	104°36'45.409"W	1.02	
10668.00	89.230	2.200	7119.87	3386.63	3382.15	509.45	1748674.11	14580514.00	40°08'49.351"N	104°36'45.378"W	2.14	
10756.00	90.190	1.700	7120.31	3474.60	3470.09	512.44	1748676.72	14580601.92	40°08'50.220"N	104°36'45.339"W	1.23	
10843.00	88.400	1.070	7121.38	3561.58	3557.06	514.55	1748678.44	14580688.86	40°08'51.079"N	104°36'45.312"W	2.18	
10930.00	88.830	0.790	7123.49	3648.55	3644.02	515.96	1748679.48	14580775.79	40°08'51.938"N	104°36'45.294"W	0.59	
11018.00	89.940	0.590	7124.43	3736.55	3732.01	517.02	1748680.15	14580863.75	40°08'52.808"N	104°36'45.280"W	1.28	
11106.00	91.360	0.060	7123.43	3824.54	3820.00	517.52	1748680.27	14580951.71	40°08'53.677"N	104°36'45.274"W	1.72	
11193.00	89.820	0.750	7122.54	3911.53	3906.99	518.13	1748680.51	14581038.67	40°08'54.537"N	104°36'45.266"W	1.94	
11281.00	89.850	0.850	7122.79	3999.53	3994.98	519.36	1748681.36	14581126.63	40°08'55.407"N	104°36'45.250"W	0.12	
11368.00	90.400	359.980	7122.60	4086.53	4081.98	519.99	1748681.61	14581213.59	40°08'56.266"N	104°36'45.242"W	1.18	
11456.00	87.320	0.900	7124.35	4174.50	4169.94	520.67	1748681.90	14581301.53	40°08'57.136"N	104°36'45.233"W	3.65	
11543.00	86.270	0.560	7129.21	4261.36	4256.80	521.77	1748682.63	14581388.36	40°08'57.994"N	104°36'45.219"W	1.27	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 28C-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 28C-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 (ft/100ft)	Comments
11631.00	89.010	0.260	7132.84	4349.28	4344.71	522.40	1748682.88	14581476.24	40°08'58.863"N	104°36'45.211"W	3.13	
11718.00	91.200	0.020	7132.68	4436.27	4431.71	522.61	1748682.71	14581563.20	40°08'59.722"N	104°36'45.208"W	2.53	
11806.00	91.940	359.200	7130.27	4524.22	4519.67	522.02	1748681.74	14581651.12	40°09'00.592"N	104°36'45.216"W	1.25	
11894.00	91.200	0.200	7127.86	4612.18	4607.64	521.56	1748680.89	14581739.05	40°09'01.461"N	104°36'45.221"W	1.41	
11981.00	90.520	0.920	7126.55	4699.17	4694.62	522.41	1748681.37	14581826.01	40°09'02.321"N	104°36'45.210"W	1.14	
12069.00	89.200	1.560	7126.77	4787.16	4782.60	524.31	1748682.89	14581913.95	40°09'03.190"N	104°36'45.186"W	1.67	
12156.00	89.940	1.540	7127.42	4874.14	4869.56	526.66	1748684.86	14582000.90	40°09'04.049"N	104°36'45.156"W	0.85	
12244.00	90.460	1.180	7127.11	4962.13	4957.54	528.75	1748686.57	14582088.84	40°09'04.919"N	104°36'45.129"W	0.72	
12331.00	91.230	0.980	7125.83	5049.12	5044.51	530.39	1748687.83	14582175.79	40°09'05.778"N	104°36'45.107"W	0.91	
12418.00	91.450	1.910	7123.79	5136.08	5131.46	532.58	1748689.65	14582262.71	40°09'06.637"N	104°36'45.079"W	1.10	
12506.00	88.400	358.600	7123.91	5224.06	5219.44	532.98	1748689.66	14582350.66	40°09'07.507"N	104°36'45.074"W	5.11	
12593.00	88.770	357.820	7126.06	5310.96	5306.37	530.26	1748686.56	14582437.54	40°09'08.366"N	104°36'45.109"W	0.99	
12680.00	90.400	359.000	7126.69	5397.89	5393.33	527.85	1748683.77	14582524.45	40°09'09.225"N	104°36'45.140"W	2.31	
12768.00	91.850	359.590	7124.96	5485.85	5481.30	526.76	1748682.31	14582612.39	40°09'10.095"N	104°36'45.154"W	1.78	
12855.00	89.080	359.370	7124.25	5572.83	5568.28	525.97	1748681.14	14582699.34	40°09'10.954"N	104°36'45.164"W	3.19	
12942.00	88.180	358.020	7126.33	5659.76	5655.23	523.99	1748678.79	14582786.24	40°09'11.813"N	104°36'45.190"W	1.86	
13030.00	88.180	359.440	7129.13	5747.67	5743.17	522.04	1748676.46	14582874.13	40°09'12.682"N	104°36'45.215"W	1.61	
13117.00	89.780	0.950	7130.68	5834.65	5830.15	522.34	1748676.38	14582961.08	40°09'13.542"N	104°36'45.211"W	2.53	
13205.00	90.490	2.370	7130.47	5922.63	5918.11	524.89	1748678.54	14583049.01	40°09'14.411"N	104°36'45.178"W	1.80	
13293.00	91.390	2.670	7129.03	6010.56	6006.01	528.76	1748682.03	14583136.90	40°09'15.280"N	104°36'45.128"W	1.08	
13380.00	90.680	2.260	7127.46	6097.49	6092.91	532.50	1748685.39	14583223.78	40°09'16.139"N	104°36'45.080"W	0.94	
13467.00	88.520	1.110	7128.06	6184.47	6179.87	535.06	1748687.57	14583310.71	40°09'16.998"N	104°36'45.047"W	2.81	
13555.00	89.200	0.550	7129.81	6272.45	6267.84	536.33	1748688.46	14583398.66	40°09'17.867"N	104°36'45.031"W	1.00	
13642.00	89.230	0.350	7131.01	6359.44	6354.83	537.01	1748688.77	14583485.61	40°09'18.727"N	104°36'45.022"W	0.23	
13730.00	89.750	0.680	7131.79	6447.44	6442.82	537.81	1748689.18	14583573.58	40°09'19.596"N	104°36'45.012"W	0.70	
13816.00	90.960	0.970	7131.26	6533.43	6528.81	539.04	1748690.04	14583659.53	40°09'20.446"N	104°36'44.996"W	1.45	
13904.00	89.880	2.050	7130.61	6621.41	6616.77	541.36	1748691.98	14583747.47	40°09'21.315"N	104°36'44.966"W	1.74	
13991.00	90.120	2.330	7130.61	6708.38	6703.71	544.69	1748694.93	14583834.39	40°09'22.174"N	104°36'44.923"W	0.42	
14078.00	90.560	2.240	7130.09	6795.33	6790.64	548.16	1748698.02	14583921.30	40°09'23.033"N	104°36'44.878"W	0.52	
14166.00	88.490	1.820	7130.82	6883.29	6878.57	551.27	1748700.75	14584009.21	40°09'23.902"N	104°36'44.838"W	2.40	
14253.00	89.720	1.630	7132.18	6970.26	6965.52	553.89	1748702.99	14584096.14	40°09'24.762"N	104°36'44.804"W	1.43	
14341.00	90.740	0.910	7131.83	7058.25	7053.50	555.84	1748704.56	14584184.09	40°09'25.631"N	104°36'44.779"W	1.42	
14428.00	92.410	0.600	7129.44	7145.22	7140.46	556.99	1748705.33	14584271.02	40°09'26.490"N	104°36'44.764"W	1.95	
14516.00	91.360	0.980	7126.54	7233.17	7228.40	558.20	1748706.16	14584358.93	40°09'27.359"N	104°36'44.749"W	1.27	
14603.00	89.820	0.630	7125.65	7320.16	7315.38	559.42	1748707.00	14584445.88	40°09'28.219"N	104°36'44.733"W	1.82	
14690.00	90.430	0.490	7125.46	7407.16	7402.38	560.27	1748707.48	14584532.85	40°09'29.079"N	104°36'44.722"W	0.72	
14778.00	89.480	1.410	7125.53	7495.15	7490.36	561.73	1748708.55	14584620.80	40°09'29.948"N	104°36'44.703"W	1.50	
14866.00	87.560	1.810	7127.80	7583.10	7578.29	564.20	1748710.64	14584708.71	40°09'30.817"N	104°36'44.671"W	2.23	
14953.00	87.130	1.430	7131.83	7669.99	7665.17	566.66	1748712.72	14584795.56	40°09'31.676"N	104°36'44.640"W	0.66	
14986.00†	87.190	0.680	7133.47	7702.95	7698.12	567.27	1748713.19	14584828.50	40°09'32.001"N	104°36'44.632"W	2.28	ENTERED RADIUS TOE (457'FNL & 2492'FWL, SEC.12) 40.1588892 -104.6123977
15041.00	87.290	359.430	7136.11	7757.88	7753.05	567.32	1748713.00	14584883.42	40°09'32.544"N	104°36'44.631"W	2.28	
15128.00	88.120	0.470	7139.60	7844.81	7839.98	567.24	1748712.55	14584970.31	40°09'33.403"N	104°36'44.632"W	1.53	
15216.00	88.180	359.850	7142.44	7932.76	7927.94	567.49	1748712.41	14585058.23	40°09'34.272"N	104°36'44.629"W	0.71	
15304.00	89.880	0.280	7143.93	8020.74	8015.92	567.59	1748712.13	14585146.18	40°09'35.142"N	104°36'44.628"W	1.99	
15392.00	91.940	1.270	7142.53	8108.72	8103.90	568.78	1748712.94	14585234.12	40°09'36.011"N	104°36'44.612"W	2.60	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 28C-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 28C-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
15479.00	90.220	0.340	7140.89	8195.70	8190.87	570.00	1748713.78	14585321.07	40°09'36.871"N	104°36'44.596"W	2.25	
15566.00	88.860	0.630	7141.59	8282.70	8277.86	570.74	1748714.14	14585408.03	40°09'37.730"N	104°36'44.587"W	1.60	
15654.00	89.850	0.830	7142.58	8370.69	8365.85	571.86	1748714.88	14585495.98	40°09'38.600"N	104°36'44.572"W	1.15	
15741.00	90.190	0.340	7142.55	8457.69	8452.84	572.75	1748715.39	14585582.95	40°09'39.459"N	104°36'44.561"W	0.69	
15785.00	90.400	0.080	7142.32	8501.69	8496.84	572.91	1748715.36	14585626.93	40°09'39.894"N	104°36'44.559"W	0.76	LAST BHI MWD+IFR+MSA SURVEY
15842.00	90.400	0.080	7141.93	8558.69	8553.84	572.99	1748715.19	14585683.90	40°09'40.458"N	104°36'44.558"W	0.00	PTB (399'FSL & 2498'FWL,SEC.01) 40.1612382 -104.6123772

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	0.41	-119.76	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	polygon
SEC.12-T2N-R65W	-9.00	0.41	-119.76	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	polygon
SEC.13-T2N-R65W	-9.00	0.41	-119.76	1748059.81	14577130.87	40°08'15.932"N	104°36'53.480"W	polygon
GUEST 28C-12HZ BHL REV-2 (400'FSL & 2493'FWL,SEC.01)	7123.00	8554.90	567.69	1748709.90	14585684.94	40°09'40.468"N	104°36'44.626"W	point
GUEST 28C-12HZ INTERMEDIATE TARGET @3300'VS REV-3	7123.00	3295.39	519.70	1748684.73	14580427.32	40°08'48.493"N	104°36'45.246"W	point
GUEST 28C-12HZ HEEL REV-2 (2595'FNL & 2488'FWL,SEC.13)	7137.00	279.50	492.17	1748670.29	14577412.51	40°08'18.690"N	104°36'45.601"W	point
GUEST 28C-12HZ HEEL REV-1 (2595'FNL & 2488'FWL,SEC.13)	7137.20	279.50	492.17	1748670.29	14577412.51	40°08'18.690"N	104°36'45.601"W	point
GUEST 28C-12HZ INTERMEDIATE TARGET @3300'VS REV-1	7137.20	3272.79	519.48	1748684.61	14580404.73	40°08'48.270"N	104°36'45.249"W	point
GUEST 28C-12HZ INTERMEDIATE TARGET @3300'VS REV-2	7137.20	3295.39	519.70	1748684.73	14580427.32	40°08'48.493"N	104°36'45.246"W	point
GUEST 28C-12HZ CIRCLE 1	7212.20	236.05	612.54	1748790.80	14577369.60	40°08'18.261"N	104°36'44.051"W	polygon
GUEST 28C-12HZ CIRCLE 2	7212.20	8149.33	652.97	1748796.90	14585279.90	40°09'36.460"N	104°36'43.528"W	polygon
GUEST 28C-12HZ LANDBOX	7212.20	0.00	0.00	1748179.53	14577130.99	40°08'15.928"N	104°36'51.938"W	polygon
GUEST 28C-12HZ BHL REV-1 (400'FSL & 2493'FWL,SEC.01)	7223.20	8554.90	567.69	1748709.90	14585684.94	40°09'40.468"N	104°36'44.626"W	point

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 28C-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 28C-12HZ AWB
Facility	SEC.13-T2N-R65W		

WELLPATH COMPOSITION - Ref Wellbore: GUEST 28C-12HZ AWB Ref Wellpath: GUEST 28C-12HZ AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model		Log Name/Comment	Wellbore
17.00	1812.00	Custom APC	ISCWSA REV 2 MWD+IFR1 (approximation)	SDI MWD+IFR SURVEYS <140 - 1812>	GUEST 28C-12HZ AWB
1812.00	15785.00	Custom APC	ISCWSA REV 2 MWD+IFR1+MSA (approximation)	BHI APC ISCWSA REV 2 MWD+IFR1+MSA <1982 - 15785>	GUEST 28C-12HZ AWB
15785.00	15842.00	Blind Drilling	(std)	Projection to bit	GUEST 28C-12HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#16 GUEST 28C-12HZ (1997'FWL & 2390'FSL, SEC.13)
Area	COLORADO	Well	GUEST 28C-12HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	GUEST 28C-12HZ AWB
Facility	SEC.13-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
140.00	0.300	332.230	140.00	FIRST SDI MWD+IFR SURVEY
1660.00	11.536	129.109	1642.47	ENTERED LANDBOX (2253'FSL & 2147'FWL, SEC.13) 40.1373806 -104.6138916
1812.00	10.170	130.190	1791.84	LAST SDI MWD+IFR SURVEY
1982.00	10.310	135.240	1959.14	FIRST BHI MWD+IFR+MSA SURVEY
6476.00	3.013	337.360	6420.24	KOP
7017.00	50.957	2.467	6886.97	ENTERED RADIUS HEEL (2190'FSL & 2462'FWL, SEC.13) 40.1372077 -104.6127603
7518.00	81.060	358.510	7125.21	LANDING (2624'FSL & 2475'FWL, SEC.13) 40.1383992 -104.6127194
14986.00	87.190	0.680	7133.47	ENTERED RADIUS TOE (457'FNL & 2492'FWL, SEC.12) 40.1588892 -104.6123977
15785.00	90.400	0.080	7142.32	LAST BHI MWD+IFR+MSA SURVEY
15842.00	90.400	0.080	7141.93	PTB (399'FSL & 2498'FWL, SEC.01) 40.1612382 -104.6123772