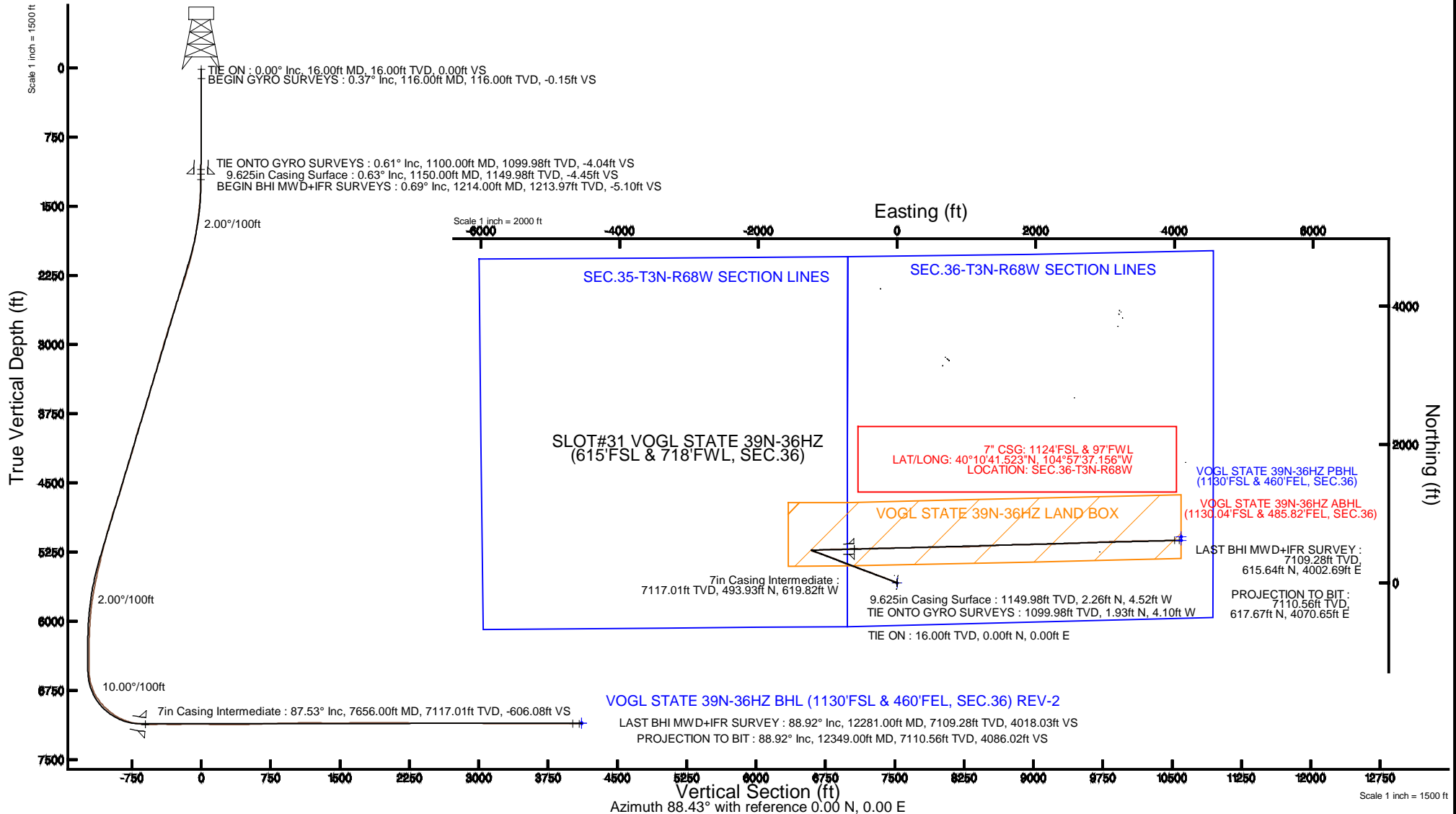


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)
 Field: WELD COUNTY (KERR MCGEE) Well: VOGL STATE 39N-36HZ
 Facility: SEC.36-T3N-R68W Wellbore: VOGL STATE 39N-36HZ PWB

Plot reference wellpath is VOGL STATE 39N-36HZ (REV-B.0) PWB

True vertical depths are referenced to XTREME 20 (16KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 20 (16KB) (RKB)	North Reference: True north
XTREME 20 (16KB) (RKB) to Mean Sea Level: 4834 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 9/30/2014



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 39N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 39N-36HZ AWP
Facility	SEC.36-T3N-R68W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Robiale01
Scale	0.999958	Report Generated	9/30/2014 at 1:49:16 PM
Convergence at slot	n/a	Database/Source file	AINALEN_DB/VOGL_STATE_39N-36HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-30.36	-3.26	3151419.75	1307730.17	40°10'36.642"N	104°57'29.171"W
Facility Reference Pt			3151422.83	1307760.54	40°10'36.942"N	104°57'29.129"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	XTREME 20 (16'KB) (RKB) to Facility Vertical Datum	4834.00ft
Horizontal Reference Pt	Slot	XTREME 20 (16'KB) (RKB) to Mean Sea Level	4834.00ft
Vertical Reference Pt	XTREME 20 (16'KB) (RKB)	XTREME 20 (16'KB) (RKB) to Mud Line at Slot (SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36))	4834.00ft
MD Reference Pt	XTREME 20 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	88.43°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 39N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 39N-36HZ AWP
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (143 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	207.080	0.00	0.00	0.00	0.00	40°10'36.642"N	104°57'29.171"W	0.00	
16.00	0.000	207.080	16.00	0.00	0.00	0.00	40°10'36.642"N	104°57'29.171"W	0.00	TIE ON
116.00	0.370	207.080	116.00	-0.15	-0.29	-0.15	40°10'36.639"N	104°57'29.173"W	0.37	BEGIN GYRO SURVEYS
216.00	0.280	207.580	216.00	-0.43	-0.79	-0.41	40°10'36.634"N	104°57'29.176"W	0.09	
316.00	0.150	282.180	316.00	-0.67	-0.98	-0.65	40°10'36.632"N	104°57'29.179"W	0.28	
416.00	0.110	287.500	416.00	-0.89	-0.92	-0.87	40°10'36.633"N	104°57'29.182"W	0.04	
516.00	0.180	302.160	516.00	-1.11	-0.81	-1.09	40°10'36.634"N	104°57'29.185"W	0.08	
616.00	0.260	285.320	616.00	-1.46	-0.67	-1.44	40°10'36.635"N	104°57'29.190"W	0.10	
716.00	0.390	299.660	715.99	-1.97	-0.44	-1.96	40°10'36.638"N	104°57'29.196"W	0.15	
816.00	0.470	327.270	815.99	-2.47	0.07	-2.48	40°10'36.643"N	104°57'29.203"W	0.22	
916.00	0.410	322.180	915.99	-2.90	0.70	-2.92	40°10'36.649"N	104°57'29.209"W	0.07	
1016.00	0.560	314.660	1015.98	-3.45	1.33	-3.48	40°10'36.655"N	104°57'29.216"W	0.16	
1100.00	0.610	314.130	1099.98	-4.04	1.93	-4.10	40°10'36.661"N	104°57'29.224"W	0.06	TIE ONTO GYRO SURVEYS
1214.00	0.690	291.290	1213.97	-5.10	2.60	-5.17	40°10'36.668"N	104°57'29.238"W	0.24	BEGIN BHI MWD+IFR SURVEYS
1308.00	2.100	294.030	1307.94	-7.17	3.51	-7.27	40°10'36.677"N	104°57'29.265"W	1.50	
1401.00	4.470	293.550	1400.78	-11.99	5.65	-12.15	40°10'36.698"N	104°57'29.328"W	2.55	
1495.00	6.050	296.430	1494.39	-19.68	9.32	-19.95	40°10'36.734"N	104°57'29.428"W	1.70	
1589.00	7.160	291.420	1587.76	-29.45	13.66	-29.84	40°10'36.777"N	104°57'29.555"W	1.33	
1683.00	8.470	292.350	1680.89	-41.17	18.43	-41.69	40°10'36.824"N	104°57'29.708"W	1.40	
1776.00	10.020	294.200	1772.67	-54.72	24.35	-55.41	40°10'36.883"N	104°57'29.885"W	1.70	
1871.00	12.080	290.260	1865.91	-71.39	31.19	-72.27	40°10'36.950"N	104°57'30.102"W	2.31	
1964.00	13.700	293.040	1956.56	-90.44	38.87	-91.54	40°10'37.026"N	104°57'30.350"W	1.86	
2058.00	15.500	290.640	2047.53	-112.19	47.65	-113.54	40°10'37.113"N	104°57'30.634"W	2.02	
2152.00	16.940	288.560	2137.78	-136.68	56.44	-138.28	40°10'37.200"N	104°57'30.952"W	1.65	
2247.00	18.100	293.190	2228.38	-163.08	66.66	-164.96	40°10'37.301"N	104°57'31.296"W	1.91	
2342.00	19.270	293.280	2318.37	-190.71	78.66	-192.93	40°10'37.419"N	104°57'31.656"W	1.23	
2437.00	20.210	290.150	2407.79	-220.18	90.51	-222.74	40°10'37.536"N	104°57'32.040"W	1.49	
2530.00	19.360	290.490	2495.30	-249.39	101.44	-252.26	40°10'37.644"N	104°57'32.421"W	0.92	
2625.00	19.120	289.480	2584.99	-278.50	112.14	-281.67	40°10'37.750"N	104°57'32.800"W	0.43	
2719.00	18.570	290.700	2673.95	-306.72	122.57	-310.19	40°10'37.853"N	104°57'33.167"W	0.72	
2813.00	19.360	292.200	2762.85	-334.83	133.74	-338.62	40°10'37.964"N	104°57'33.533"W	0.99	
2907.00	17.930	292.370	2851.92	-362.32	145.14	-366.42	40°10'38.076"N	104°57'33.892"W	1.52	
2997.00	17.800	287.660	2937.58	-387.97	154.58	-392.35	40°10'38.170"N	104°57'34.226"W	1.61	
3082.00	17.620	286.730	3018.55	-412.45	162.23	-417.05	40°10'38.245"N	104°57'34.544"W	0.39	
3167.00	17.570	289.830	3099.58	-436.61	170.28	-441.44	40°10'38.325"N	104°57'34.858"W	1.10	
3252.00	16.490	288.790	3180.85	-459.87	178.52	-464.93	40°10'38.406"N	104°57'35.161"W	1.32	
3338.00	16.320	288.210	3263.35	-482.68	186.23	-487.96	40°10'38.482"N	104°57'35.457"W	0.27	
3423.00	17.550	290.870	3344.66	-505.77	194.53	-511.28	40°10'38.564"N	104°57'35.758"W	1.71	
3508.00	18.120	290.620	3425.58	-529.85	203.75	-535.62	40°10'38.655"N	104°57'36.071"W	0.68	
3593.00	17.440	291.470	3506.52	-553.81	213.07	-559.85	40°10'38.747"N	104°57'36.384"W	0.86	
3678.00	17.890	293.000	3587.51	-577.41	222.83	-583.72	40°10'38.844"N	104°57'36.691"W	0.76	
3764.00	17.160	289.950	3669.52	-601.23	232.32	-607.81	40°10'38.938"N	104°57'37.001"W	1.36	
3848.00	18.600	288.550	3749.46	-625.33	240.81	-632.16	40°10'39.022"N	104°57'37.315"W	1.79	
3933.00	19.990	289.590	3829.68	-651.61	249.99	-658.70	40°10'39.112"N	104°57'37.657"W	1.68	
4018.00	18.300	289.410	3909.98	-677.63	259.30	-684.97	40°10'39.204"N	104°57'37.996"W	1.99	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 39N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 39N-36HZ AWP
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (143 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4188.00	16.140	289.620	4072.35	-724.58	276.11	-732.41	40°10'39.370"N	104°57'38.607"W	1.27	
4273.00	15.800	290.080	4154.07	-746.36	284.05	-754.40	40°10'39.449"N	104°57'38.890"W	0.43	
4358.00	18.720	293.370	4235.23	-769.49	293.43	-777.80	40°10'39.542"N	104°57'39.191"W	3.62	
4443.00	20.290	295.210	4315.35	-795.01	305.12	-803.66	40°10'39.657"N	104°57'39.525"W	1.98	
4529.00	18.900	296.220	4396.37	-820.65	317.63	-829.64	40°10'39.781"N	104°57'39.859"W	1.66	
4613.00	17.140	294.640	4476.25	-843.79	328.80	-853.10	40°10'39.891"N	104°57'40.162"W	2.17	
4699.00	17.640	292.640	4558.32	-867.05	339.10	-876.65	40°10'39.993"N	104°57'40.465"W	0.91	
4784.00	18.830	291.330	4639.05	-891.43	349.05	-901.31	40°10'40.091"N	104°57'40.783"W	1.48	
4869.00	20.890	290.200	4718.99	-918.14	359.27	-928.32	40°10'40.192"N	104°57'41.131"W	2.47	
4954.00	19.600	289.720	4798.74	-945.50	369.31	-955.96	40°10'40.291"N	104°57'41.487"W	1.53	
5039.00	17.900	289.030	4879.22	-971.02	378.38	-981.73	40°10'40.381"N	104°57'41.819"W	2.02	
5124.00	15.990	290.810	4960.53	-994.07	386.80	-1005.03	40°10'40.464"N	104°57'42.119"W	2.33	
5212.00	16.180	291.110	5045.08	-1016.59	395.53	-1027.79	40°10'40.550"N	104°57'42.412"W	0.24	
5297.00	16.510	289.960	5126.65	-1038.76	403.91	-1050.19	40°10'40.633"N	104°57'42.701"W	0.54	
5382.00	16.050	289.540	5208.24	-1060.95	411.97	-1072.62	40°10'40.713"N	104°57'42.990"W	0.56	
5467.00	13.290	288.430	5290.46	-1081.10	418.99	-1092.97	40°10'40.782"N	104°57'43.252"W	3.26	
5552.00	13.380	288.750	5373.17	-1099.50	425.24	-1111.55	40°10'40.844"N	104°57'43.491"W	0.14	
5637.00	14.310	287.770	5455.70	-1118.64	431.60	-1130.87	40°10'40.907"N	104°57'43.740"W	1.13	
5722.00	11.830	285.010	5538.49	-1136.91	437.07	-1149.29	40°10'40.961"N	104°57'43.977"W	3.01	
5808.00	12.030	287.010	5622.64	-1153.85	441.97	-1166.37	40°10'41.009"N	104°57'44.198"W	0.53	
5893.00	10.350	290.330	5706.02	-1169.33	447.22	-1182.00	40°10'41.061"N	104°57'44.399"W	2.12	
5978.00	9.270	291.410	5789.77	-1182.72	452.37	-1195.54	40°10'41.112"N	104°57'44.573"W	1.29	
6063.00	6.210	288.160	5873.99	-1193.35	456.30	-1206.28	40°10'41.151"N	104°57'44.712"W	3.64	
6148.00	4.910	292.510	5958.59	-1201.00	459.13	-1214.01	40°10'41.179"N	104°57'44.811"W	1.61	
6233.00	3.600	306.620	6043.35	-1206.42	462.11	-1219.51	40°10'41.208"N	104°57'44.882"W	1.96	
6319.00	3.440	321.450	6129.19	-1210.10	465.74	-1223.29	40°10'41.244"N	104°57'44.931"W	1.07	
6404.00	3.670	331.720	6214.03	-1212.85	470.13	-1226.17	40°10'41.288"N	104°57'44.968"W	0.80	
6489.00	3.610	337.880	6298.86	-1215.02	475.01	-1228.46	40°10'41.336"N	104°57'44.998"W	0.47	
6574.00	2.130	347.820	6383.75	-1216.25	479.03	-1229.81	40°10'41.375"N	104°57'45.015"W	1.83	
6659.00	0.210	174.990	6468.73	-1216.53	480.42	-1230.13	40°10'41.389"N	104°57'45.019"W	2.75	
6702.00	0.610	187.840	6511.73	-1216.56	480.11	-1230.15	40°10'41.386"N	104°57'45.019"W	0.95	
6744.00	3.640	109.850	6553.70	-1215.36	479.44	-1228.93	40°10'41.380"N	104°57'45.003"W	8.48	
6787.00	8.490	101.020	6596.45	-1210.98	478.37	-1224.52	40°10'41.369"N	104°57'44.947"W	11.45	
6830.00	12.450	100.030	6638.73	-1203.34	476.95	-1216.84	40°10'41.355"N	104°57'44.848"W	9.22	
6873.00	15.990	99.250	6680.40	-1192.98	475.19	-1206.43	40°10'41.338"N	104°57'44.714"W	8.24	
6915.00	19.100	94.830	6720.44	-1180.47	473.68	-1193.87	40°10'41.323"N	104°57'44.552"W	8.05	
6958.00	24.010	90.420	6760.43	-1164.72	473.03	-1178.10	40°10'41.316"N	104°57'44.349"W	12.02	
7000.00	28.230	87.720	6798.13	-1146.24	473.36	-1159.62	40°10'41.319"N	104°57'44.111"W	10.44	
7043.00	34.230	86.770	6834.88	-1123.96	474.45	-1137.36	40°10'41.330"N	104°57'43.824"W	14.00	
7085.00	38.440	87.260	6868.71	-1099.09	475.74	-1112.52	40°10'41.343"N	104°57'43.504"W	10.05	
7128.00	42.000	87.240	6901.54	-1071.33	477.07	-1084.79	40°10'41.356"N	104°57'43.146"W	8.28	
7170.00	45.800	86.660	6931.80	-1042.23	478.62	-1055.71	40°10'41.372"N	104°57'42.772"W	9.10	
7213.00	48.520	85.810	6961.03	-1010.72	480.70	-1024.25	40°10'41.392"N	104°57'42.367"W	6.49	
7255.00	51.860	84.940	6987.92	-978.51	483.31	-992.10	40°10'41.418"N	104°57'41.952"W	8.11	
7298.00	56.230	86.250	7013.16	-943.76	485.97	-957.40	40°10'41.444"N	104°57'41.505"W	10.46	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 39N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 39N-36HZ AWP
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (143 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7340.00	59.640	88.410	7035.46	-908.18	487.61	-921.86	40°10'41.460"N	104°57'41.047"W	9.21	
7383.00	64.070	90.490	7055.74	-870.28	487.96	-883.96	40°10'41.464"N	104°57'40.559"W	11.15	
7425.00	68.390	90.860	7072.66	-831.88	487.51	-845.53	40°10'41.459"N	104°57'40.064"W	10.32	
7468.00	73.530	89.530	7086.68	-791.27	487.38	-804.90	40°10'41.458"N	104°57'39.541"W	12.31	
7510.00	78.230	87.960	7096.93	-750.55	488.27	-764.19	40°10'41.467"N	104°57'39.016"W	11.76	
7553.00	80.910	87.230	7104.71	-708.27	490.05	-721.94	40°10'41.485"N	104°57'38.472"W	6.45	
7606.00	82.150	87.700	7112.52	-655.86	492.37	-669.57	40°10'41.508"N	104°57'37.797"W	2.50	
7656.00†	87.534	88.690	7117.01	-606.08	493.93	-619.82	40°10'41.523"N	104°57'37.156"W	10.95	7" CASING POINT
7684.00	90.550	89.240	7117.48	-578.09	494.44	-591.83	40°10'41.528"N	104°57'36.796"W	10.95	
7769.00	90.330	88.780	7116.83	-493.10	495.91	-506.85	40°10'41.543"N	104°57'35.701"W	0.60	
7854.00	89.900	88.730	7116.66	-408.10	497.76	-421.87	40°10'41.561"N	104°57'34.606"W	0.51	
7940.00	89.500	88.760	7117.11	-322.10	499.64	-335.89	40°10'41.579"N	104°57'33.498"W	0.47	
8025.00	90.710	88.800	7116.95	-237.10	501.45	-250.91	40°10'41.597"N	104°57'32.404"W	1.42	
8195.00	90.030	88.810	7115.85	-67.11	504.99	-80.95	40°10'41.632"N	104°57'30.214"W	0.40	
8365.00	89.260	89.010	7116.91	102.88	508.23	89.01	40°10'41.664"N	104°57'28.024"W	0.47	
8536.00	89.780	88.670	7118.34	273.87	511.69	259.97	40°10'41.699"N	104°57'25.822"W	0.36	
8621.00	89.500	88.700	7118.87	358.86	513.64	344.95	40°10'41.718"N	104°57'24.727"W	0.33	
8791.00	92.000	89.150	7116.65	528.83	516.83	514.89	40°10'41.749"N	104°57'22.538"W	1.49	
8960.00	92.060	89.360	7110.66	697.71	519.02	683.77	40°10'41.771"N	104°57'20.362"W	0.13	
9131.00	91.200	89.020	7105.80	868.62	521.44	854.68	40°10'41.795"N	104°57'18.160"W	0.54	
9301.00	91.380	89.090	7101.97	1038.57	524.24	1024.61	40°10'41.822"N	104°57'15.971"W	0.11	
9471.00	89.630	86.720	7100.47	1208.53	530.46	1194.48	40°10'41.884"N	104°57'13.782"W	1.73	
9556.00	89.100	87.050	7101.41	1293.50	535.08	1279.34	40°10'41.929"N	104°57'12.689"W	0.73	
9641.00	88.820	87.060	7102.96	1378.46	539.44	1364.22	40°10'41.972"N	104°57'11.595"W	0.33	
9811.00	91.140	87.800	7103.02	1548.42	547.07	1534.03	40°10'42.048"N	104°57'09.408"W	1.43	
9897.00	91.190	87.820	7101.27	1634.40	550.35	1619.95	40°10'42.080"N	104°57'08.301"W	0.06	
9982.00	90.490	88.770	7100.02	1719.39	552.88	1704.91	40°10'42.105"N	104°57'07.206"W	1.39	
10067.00	90.370	88.920	7099.38	1804.38	554.59	1789.89	40°10'42.122"N	104°57'06.112"W	0.23	
10152.00	91.100	88.880	7098.29	1889.37	556.23	1874.86	40°10'42.138"N	104°57'05.017"W	0.86	
10237.00	89.530	88.820	7097.83	1974.37	557.93	1959.84	40°10'42.155"N	104°57'03.922"W	1.85	
10322.00	89.440	89.130	7098.59	2059.36	559.45	2044.82	40°10'42.170"N	104°57'02.827"W	0.38	
10407.00	88.980	89.040	7099.76	2144.34	560.81	2129.81	40°10'42.183"N	104°57'01.732"W	0.55	
10492.00	88.520	88.580	7101.62	2229.32	562.57	2214.77	40°10'42.200"N	104°57'00.638"W	0.77	
10578.00	89.040	88.190	7103.45	2315.30	565.00	2300.71	40°10'42.224"N	104°56'59.530"W	0.76	
10663.00	89.870	87.580	7104.26	2400.29	568.13	2385.65	40°10'42.255"N	104°56'58.436"W	1.21	
10748.00	90.120	87.290	7104.26	2485.28	571.94	2470.56	40°10'42.293"N	104°56'57.342"W	0.45	
10833.00	90.270	87.790	7103.97	2570.27	575.59	2555.48	40°10'42.329"N	104°56'56.248"W	0.61	
10918.00	89.630	87.120	7104.05	2655.26	579.36	2640.40	40°10'42.366"N	104°56'55.154"W	1.09	
11003.00	89.900	87.400	7104.40	2740.24	583.42	2725.30	40°10'42.406"N	104°56'54.060"W	0.46	
11089.00	90.030	87.520	7104.45	2826.22	587.23	2811.22	40°10'42.443"N	104°56'52.953"W	0.21	
11174.00	89.500	87.570	7104.80	2911.21	590.88	2896.14	40°10'42.479"N	104°56'51.859"W	0.63	
11344.00	88.520	87.550	7107.73	3081.17	598.11	3065.96	40°10'42.551"N	104°56'49.672"W	0.58	
11428.00	88.820	88.510	7109.68	3165.14	601.00	3149.88	40°10'42.579"N	104°56'48.590"W	1.20	
11513.00	90.670	89.420	7110.06	3250.13	602.53	3234.86	40°10'42.594"N	104°56'47.495"W	2.43	
11598.00	90.800	89.030	7108.97	3335.12	603.68	3319.85	40°10'42.605"N	104°56'46.401"W	0.48	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 39N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 39N-36HZ AWP
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (143 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11683.00	90.490	89.020	7108.02	3420.11	605.13	3404.83	40°10'42.620"N	104°56'45.306"W	0.36	
11769.00	89.190	88.610	7108.26	3506.10	606.91	3490.81	40°10'42.637"N	104°56'44.198"W	1.59	
11854.00	90.270	89.770	7108.66	3591.09	608.11	3575.80	40°10'42.649"N	104°56'43.103"W	1.86	
11939.00	90.400	89.290	7108.16	3676.07	608.81	3660.79	40°10'42.656"N	104°56'42.008"W	0.59	
12024.00	90.670	89.360	7107.37	3761.06	609.81	3745.78	40°10'42.665"N	104°56'40.913"W	0.33	
12194.00	89.070	88.400	7107.75	3931.05	613.13	3915.74	40°10'42.698"N	104°56'38.723"W	1.10	
12281.00	88.920	88.290	7109.28	4018.03	615.64	4002.69	40°10'42.723"N	104°56'37.603"W	0.21	LAST BHI MWD+IFR SURVEY
12349.00	88.920	88.290	7110.56	4086.02	617.67	4070.65	40°10'42.743"N	104°56'36.728"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: VOGL STATE 39N-36HZ AWP Ref Wellpath: VOGL STATE 39N-36HZ AWP										
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]	
13.5in Open Hole	16.00	1166.00	1150.00	16.00	1165.98	0.00	0.00	2.36	-4.67	
9.625in Casing Surface	16.00	1150.00	1134.00	16.00	1149.98	0.00	0.00	2.26	-4.52	
8.75in Open Hole	1166.00	7667.00	6501.00	1165.98	7117.37	2.36	-4.67	494.16	-608.83	
7in Casing Intermediate	16.00	7656.00	7640.00	16.00	7117.01	0.00	0.00	493.93	-619.82	
6.125in Open Hole	7667.00	12349.00	4682.00	7117.37	7110.56	494.16	-608.83	617.67	4070.65	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 39N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 39N-36HZ AWP
Facility	SEC.36-T3N-R68W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.35-T3N-R68W SECTION LINES		-119.00	3967.78	-5325.50	3146070.35	1311665.15	40°11'15.846"N	104°58'37.790"W	polygon
SEC.36-T3N-R68W SECTION LINES		-119.00	3967.78	-5325.50	3146070.35	1311665.15	40°11'15.846"N	104°58'37.790"W	polygon
VOGL STATE 39N-36HZ BHL (1130'FSL & 460'FEL, SEC.36) REV-2		7104.00	617.71	4096.47	3155512.19	1308372.87	40°10'42.743"N	104°56'36.395"W	point
VOGL STATE 39N-36HZ BHL ON PLAT (1180'FSL & 460'FEL, SEC.36) REV-1		7104.00	667.71	4096.47	3155511.89	1308422.87	40°10'43.237"N	104°56'36.395"W	point
VOGL STATE 39N-36HZ LAND BOX		7104.00	0.00	0.00	3151419.75	1307730.17	40°10'36.642"N	104°57'29.171"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: VOGL STATE 39N-36HZ AWP Ref Wellpath: VOGL STATE 39N-36HZ AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
16.00	1100.00	Generic gyro - continuous (Standard)	MS ENERGY GYRO <116-1100>	VOGL STATE 39N-36HZ AWP	
1100.00	7606.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1214-7606>	VOGL STATE 39N-36HZ AWP	
7606.00	12281.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7684-12281>	VOGL STATE 39N-36HZ AWP	
12281.00	12349.00	Blind Drilling (std)	Projection to bit	VOGL STATE 39N-36HZ AWP	



Actual Wellpath Report

VOGL STATE 39N-36HZ AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 VOGL STATE 39N-36HZ (615'FSL & 718'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 39N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 39N-36HZ AWB
Facility	SEC.36-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	207.080	16.00	TIE ON
116.00	0.370	207.080	116.00	BEGIN GYRO SURVEYS
1100.00	0.610	314.130	1099.98	TIE ONTO GYRO SURVEYS
1214.00	0.690	291.290	1213.97	BEGIN BHI MWD+IFR SURVEYS
7656.00	87.534	88.690	7117.01	7" CASING POINT
12281.00	88.920	88.290	7109.28	LAST BHI MWD+IFR SURVEY
12349.00	88.920	88.290	7110.56	PROJECTION TO BIT