

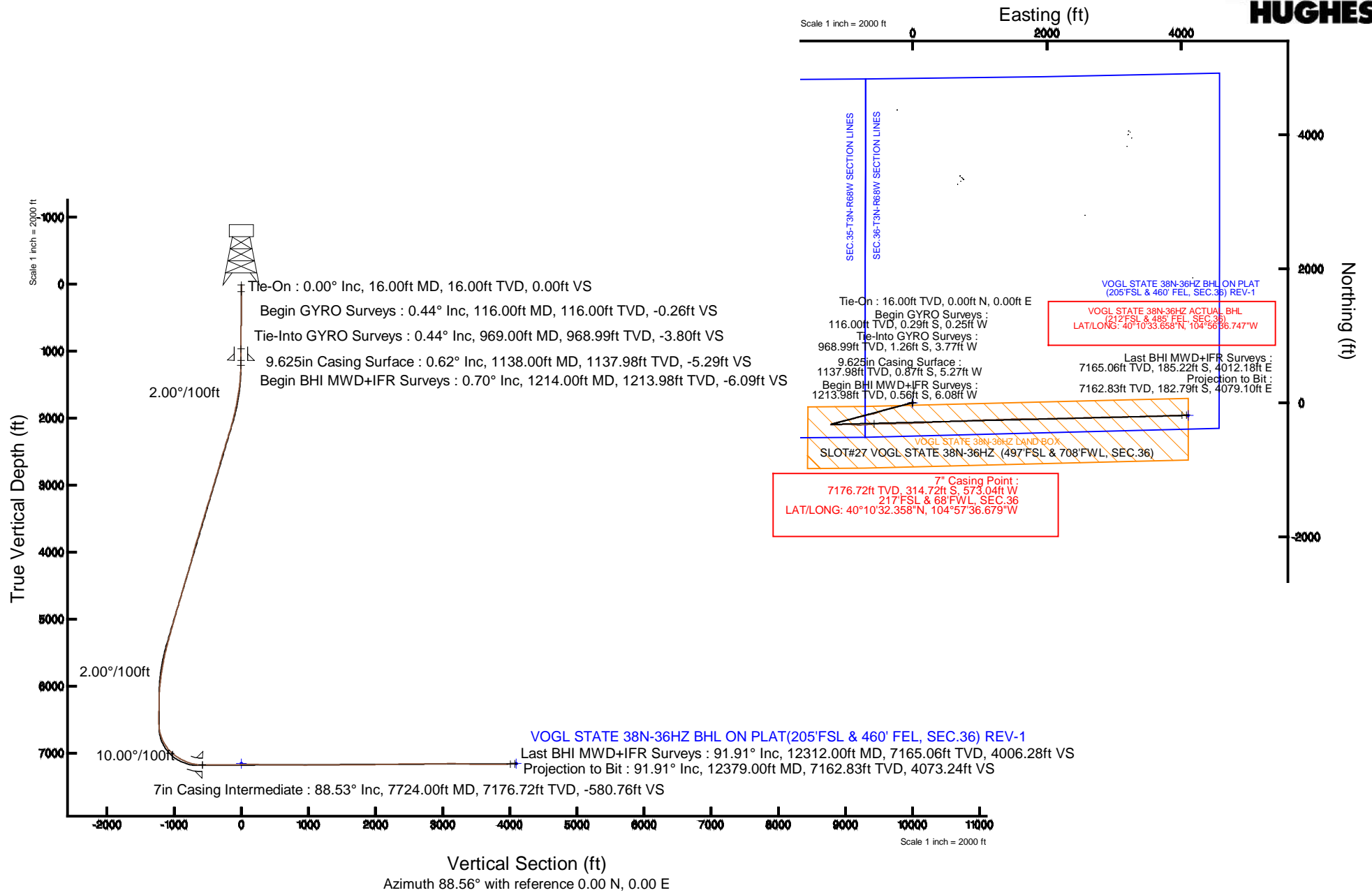
KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#27 VOGL STATE 38N-36HZ (497'FSL & 708'FWL, SEC.36)
 Field: WELD COUNTY (KERR MCGEE) Well: VOGL STATE 38N-36HZ
 Facility: SEC.36-T3N-R68W Wellbore: VOGL STATE 38N-36HZ PWB



Plot reference wellpath is VOGL STATE 38N-36HZ (REV-B.0) PWP

True vertical depths are referenced to XTREME 20 (16'KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 20 (16'KB) (RKB)	North Reference: True north
XTREME 20 (16'KB) (RKB) to Mean Sea Level: 4834 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#27 VOGL STATE 38N-36HZ (497'FSL & 708'FWL, SEC.36)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precain on 10/28/2014



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 VOGL STATE 38N-36HZ (497'FSL & 708'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 38N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 38N-36HZ AWB
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	Precain
Scale	0.999958	Report Generated	10/28/2014 at 1:08:33 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/VOGL_STATE_38N-36HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-149.16	-13.04	3151410.70	1307611.31	40°10'35.468"N	104°57'29.297"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#27 VOGL STATE 38N-36HZ (497'FSL & 708'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	88.56°

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Area	COLORADO	Well	VOGL STATE 38N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 38N-36HZ AWB
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (142 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	221.250	0.00	0.00	0.00	0.00	40°10'35.468"N	104°57'29.297"W	0.00	
16.00	0.000	221.250	16.00	0.00	0.00	0.00	40°10'35.468"N	104°57'29.297"W	0.00	Tie-On
116.00	0.440	221.250	116.00	-0.26	-0.29	-0.25	40°10'35.465"N	104°57'29.300"W	0.44	Begin GYRO Surveys
216.00	0.330	244.130	216.00	-0.78	-0.70	-0.77	40°10'35.461"N	104°57'29.307"W	0.19	
316.00	0.360	273.580	316.00	-1.36	-0.81	-1.34	40°10'35.460"N	104°57'29.314"W	0.18	
416.00	0.310	245.230	415.99	-1.92	-0.90	-1.90	40°10'35.459"N	104°57'29.321"W	0.17	
516.00	0.220	268.600	515.99	-2.36	-1.02	-2.33	40°10'35.458"N	104°57'29.327"W	0.14	
616.00	0.150	253.740	615.99	-2.68	-1.06	-2.65	40°10'35.458"N	104°57'29.331"W	0.08	
716.00	0.150	277.880	715.99	-2.93	-1.08	-2.91	40°10'35.457"N	104°57'29.334"W	0.06	
816.00	0.200	241.540	815.99	-3.22	-1.15	-3.19	40°10'35.457"N	104°57'29.338"W	0.12	
916.00	0.170	255.510	915.99	-3.52	-1.27	-3.49	40°10'35.455"N	104°57'29.342"W	0.05	
969.00	0.440	277.540	968.99	-3.80	-1.26	-3.77	40°10'35.456"N	104°57'29.346"W	0.55	Tie-Into GYRO Surveys
1214.00	0.700	292.730	1213.98	-6.09	-0.56	-6.08	40°10'35.462"N	104°57'29.375"W	0.12	Begin BHI MWD+IFR Surveys
1308.00	2.880	267.190	1307.93	-8.98	-0.45	-8.97	40°10'35.464"N	104°57'29.413"W	2.41	
1401.00	4.420	254.060	1400.74	-14.78	-1.55	-14.75	40°10'35.453"N	104°57'29.487"W	1.87	
1495.00	6.490	259.210	1494.31	-23.53	-3.54	-23.45	40°10'35.433"N	104°57'29.599"W	2.26	
1589.00	8.680	258.220	1587.48	-35.75	-5.98	-35.61	40°10'35.409"N	104°57'29.756"W	2.33	
1683.00	10.390	254.040	1680.18	-50.94	-9.76	-50.71	40°10'35.372"N	104°57'29.950"W	1.96	
1776.00	10.880	252.500	1771.58	-67.49	-14.71	-67.14	40°10'35.323"N	104°57'30.162"W	0.61	
1871.00	12.630	252.300	1864.58	-86.08	-20.56	-85.59	40°10'35.265"N	104°57'30.400"W	1.84	
1964.00	13.660	254.490	1955.15	-106.49	-26.59	-105.86	40°10'35.205"N	104°57'30.661"W	1.23	
2058.00	14.600	256.720	2046.30	-128.85	-32.28	-128.08	40°10'35.149"N	104°57'30.947"W	1.16	
2152.00	16.580	254.950	2136.84	-153.48	-38.48	-152.57	40°10'35.088"N	104°57'31.263"W	2.17	
2247.00	17.960	256.710	2227.56	-180.99	-45.37	-179.91	40°10'35.020"N	104°57'31.615"W	1.55	
2342.00	17.420	256.470	2318.06	-209.23	-52.06	-207.99	40°10'34.953"N	104°57'31.977"W	0.57	
2437.00	16.810	257.680	2408.86	-236.63	-58.32	-235.24	40°10'34.892"N	104°57'32.328"W	0.74	
2530.00	17.520	254.880	2497.71	-263.44	-64.84	-261.89	40°10'34.827"N	104°57'32.671"W	1.17	
2625.00	17.020	256.480	2588.43	-290.93	-71.82	-289.22	40°10'34.758"N	104°57'33.023"W	0.73	
2719.00	15.460	254.880	2678.68	-316.55	-78.31	-314.69	40°10'34.694"N	104°57'33.351"W	1.73	
2813.00	16.670	253.970	2769.01	-341.77	-85.30	-339.74	40°10'34.625"N	104°57'33.674"W	1.31	
2907.00	17.960	254.500	2858.74	-368.88	-92.90	-366.67	40°10'34.550"N	104°57'34.021"W	1.38	
2995.00	16.550	255.380	2942.78	-394.25	-99.69	-391.87	40°10'34.483"N	104°57'34.345"W	1.63	
3080.00	16.910	255.070	3024.18	-418.05	-105.93	-415.53	40°10'34.421"N	104°57'34.650"W	0.44	
3165.00	17.230	253.610	3105.44	-442.24	-112.66	-439.55	40°10'34.355"N	104°57'34.960"W	0.63	
3250.00	17.800	250.350	3186.50	-466.74	-120.58	-463.86	40°10'34.276"N	104°57'35.273"W	1.33	
3335.00	18.670	250.980	3267.23	-492.05	-129.39	-488.96	40°10'34.189"N	104°57'35.596"W	1.05	
3420.00	17.050	248.710	3348.13	-516.75	-138.35	-513.44	40°10'34.101"N	104°57'35.912"W	2.07	
3505.00	17.350	247.030	3429.33	-540.26	-147.82	-536.72	40°10'34.007"N	104°57'36.211"W	0.68	
3590.00	17.500	251.990	3510.44	-564.30	-156.72	-560.54	40°10'33.919"N	104°57'36.518"W	1.76	
3676.00	17.270	256.580	3592.51	-589.18	-163.68	-585.26	40°10'33.850"N	104°57'36.837"W	1.62	
3761.00	16.880	258.010	3673.77	-613.65	-169.17	-609.60	40°10'33.796"N	104°57'37.150"W	0.67	
3846.00	16.960	258.810	3755.09	-638.00	-174.14	-633.83	40°10'33.747"N	104°57'37.463"W	0.29	
3931.00	18.030	259.870	3836.15	-663.22	-178.86	-658.95	40°10'33.700"N	104°57'37.786"W	1.31	
4016.00	15.920	259.710	3917.45	-687.75	-183.25	-683.37	40°10'33.657"N	104°57'38.101"W	2.48	
4101.00	14.640	256.360	3999.44	-709.77	-187.87	-705.28	40°10'33.611"N	104°57'38.383"W	1.83	

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Area	COLORADO	Well	VOGL STATE 38N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 38N-36HZ AWP
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (142 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4186.00	13.790	255.710	4081.84	-730.14	-192.90	-725.53	40°10'33.562"N	104°57'38.644"W	1.02	
4272.00	15.490	255.110	4165.04	-751.31	-198.38	-746.57	40°10'33.507"N	104°57'38.915"W	1.98	
4357.00	17.100	255.880	4246.62	-774.54	-204.35	-769.66	40°10'33.448"N	104°57'39.212"W	1.91	
4442.00	18.470	256.030	4327.56	-799.88	-210.65	-794.84	40°10'33.386"N	104°57'39.537"W	1.61	
4527.00	17.910	253.950	4408.31	-825.67	-217.51	-820.47	40°10'33.318"N	104°57'39.867"W	1.01	
4614.00	16.480	254.140	4491.42	-850.56	-224.59	-845.20	40°10'33.249"N	104°57'40.185"W	1.64	
4699.00	16.520	251.600	4572.92	-873.80	-231.69	-868.26	40°10'33.178"N	104°57'40.483"W	0.85	
4784.00	16.530	250.080	4654.41	-896.83	-239.63	-891.10	40°10'33.100"N	104°57'40.777"W	0.51	
4869.00	17.420	256.430	4735.72	-920.74	-246.73	-914.84	40°10'33.030"N	104°57'41.083"W	2.42	
4954.00	17.630	258.140	4816.77	-945.84	-252.37	-939.80	40°10'32.974"N	104°57'41.404"W	0.65	
5040.00	16.100	259.270	4899.07	-970.41	-257.26	-964.27	40°10'32.926"N	104°57'41.719"W	1.82	
5125.00	15.120	256.510	4980.94	-992.89	-262.04	-986.63	40°10'32.878"N	104°57'42.007"W	1.45	
5210.00	15.330	258.310	5062.95	-1014.79	-266.91	-1008.41	40°10'32.830"N	104°57'42.288"W	0.61	
5295.00	15.940	255.490	5144.81	-1037.21	-272.11	-1030.71	40°10'32.779"N	104°57'42.575"W	1.15	
5380.00	15.800	259.840	5226.57	-1060.02	-277.07	-1053.40	40°10'32.730"N	104°57'42.868"W	1.41	
5465.00	15.080	257.680	5308.50	-1082.32	-281.47	-1075.60	40°10'32.686"N	104°57'43.154"W	1.08	
5550.00	15.790	254.330	5390.44	-1104.39	-286.96	-1097.53	40°10'32.632"N	104°57'43.436"W	1.34	
5636.00	14.320	252.510	5473.49	-1125.95	-293.31	-1118.95	40°10'32.569"N	104°57'43.712"W	1.80	
5721.00	11.620	254.120	5556.31	-1144.34	-298.82	-1137.21	40°10'32.515"N	104°57'43.947"W	3.20	
5806.00	10.650	257.320	5639.71	-1160.34	-302.88	-1153.11	40°10'32.475"N	104°57'44.152"W	1.35	
5892.00	9.970	248.060	5724.33	-1175.11	-307.41	-1167.77	40°10'32.430"N	104°57'44.341"W	2.08	
5977.00	9.560	250.510	5808.09	-1188.71	-312.51	-1181.24	40°10'32.379"N	104°57'44.515"W	0.69	
6062.00	7.650	254.910	5892.14	-1200.92	-316.34	-1193.36	40°10'32.342"N	104°57'44.671"W	2.38	
6147.00	6.030	258.530	5976.53	-1210.82	-318.70	-1203.20	40°10'32.318"N	104°57'44.797"W	1.97	
6232.00	4.910	246.590	6061.14	-1218.59	-321.04	-1210.92	40°10'32.295"N	104°57'44.897"W	1.87	
6317.00	2.160	250.140	6145.97	-1223.48	-323.03	-1215.76	40°10'32.276"N	104°57'44.959"W	3.24	
6402.00	1.480	227.290	6230.93	-1225.82	-324.31	-1218.07	40°10'32.263"N	104°57'44.989"W	1.16	
6487.00	0.680	235.620	6315.91	-1227.07	-325.34	-1219.30	40°10'32.253"N	104°57'45.005"W	0.96	
6572.00	1.130	246.150	6400.90	-1228.27	-325.97	-1220.48	40°10'32.246"N	104°57'45.020"W	0.56	
6657.00	0.620	64.800	6485.90	-1228.62	-326.11	-1220.83	40°10'32.245"N	104°57'45.025"W	2.06	
6742.00	0.530	59.290	6570.90	-1227.86	-325.71	-1220.08	40°10'32.249"N	104°57'45.015"W	0.12	
6785.00	4.740	93.300	6613.84	-1225.92	-325.71	-1218.13	40°10'32.249"N	104°57'44.990"W	10.03	
6827.00	8.930	90.720	6655.53	-1220.93	-325.86	-1213.14	40°10'32.248"N	104°57'44.925"W	10.00	
6870.00	13.970	92.250	6697.66	-1212.41	-326.10	-1204.61	40°10'32.245"N	104°57'44.816"W	11.74	
6912.00	17.920	92.680	6738.04	-1200.90	-326.60	-1193.08	40°10'32.240"N	104°57'44.667"W	9.41	
6955.00	22.520	92.910	6778.38	-1186.08	-327.33	-1178.24	40°10'32.233"N	104°57'44.476"W	10.70	
6997.00	26.160	92.740	6816.64	-1168.82	-328.18	-1160.96	40°10'32.225"N	104°57'44.253"W	8.67	
7040.00	30.430	91.140	6854.49	-1148.48	-328.85	-1140.59	40°10'32.218"N	104°57'43.991"W	10.08	
7082.00	32.580	89.820	6890.30	-1126.55	-329.03	-1118.65	40°10'32.216"N	104°57'43.708"W	5.38	
7125.00	37.130	86.200	6925.58	-1101.99	-328.13	-1094.10	40°10'32.225"N	104°57'43.392"W	11.62	
7167.00	41.760	84.100	6958.01	-1075.36	-325.85	-1067.53	40°10'32.248"N	104°57'43.050"W	11.47	
7210.00	47.420	84.350	6988.62	-1045.28	-322.82	-1037.51	40°10'32.278"N	104°57'42.663"W	13.17	
7252.00	49.590	87.390	7016.45	-1013.86	-320.57	-1006.14	40°10'32.300"N	104°57'42.259"W	7.49	
7295.00	54.620	90.860	7042.85	-979.95	-320.08	-972.23	40°10'32.305"N	104°57'41.822"W	13.32	
7337.00	58.250	94.920	7066.08	-945.07	-321.87	-937.29	40°10'32.287"N	104°57'41.372"W	11.81	

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Area	COLORADO	Well	VOGL STATE 38N-36HZ
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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7380.00	61.740	96.700	7087.58	-908.14	-325.65	-900.26	40°10'32.250"N	104°57'40.895"W	8.87	
7423.00	64.060	94.440	7107.17	-870.15	-329.36	-862.16	40°10'32.213"N	104°57'40.404"W	7.14	
7466.00	67.530	92.440	7124.80	-831.08	-331.70	-823.02	40°10'32.190"N	104°57'39.900"W	9.12	
7508.00	69.490	89.130	7140.19	-792.04	-332.23	-783.95	40°10'32.185"N	104°57'39.396"W	8.69	
7551.00	74.070	86.280	7153.63	-751.22	-330.58	-743.16	40°10'32.201"N	104°57'38.871"W	12.37	
7593.00	77.380	84.460	7163.99	-710.58	-327.29	-702.60	40°10'32.234"N	104°57'38.348"W	8.93	
7636.00	83.710	83.400	7171.05	-668.33	-322.81	-660.44	40°10'32.278"N	104°57'37.805"W	14.92	
7667.00	85.770	83.610	7173.89	-637.58	-319.32	-629.77	40°10'32.312"N	104°57'37.410"W	6.68	
7724.00†	88.531	87.121	7176.72	-580.76	-314.72	-573.04	40°10'32.358"N	104°57'36.679"W	7.83	7" Casing Point
7772.00	90.860	90.070	7176.98	-532.76	-313.54	-525.07	40°10'32.370"N	104°57'36.061"W	7.83	
7857.00	90.710	89.800	7175.81	-447.80	-313.45	-440.08	40°10'32.370"N	104°57'34.966"W	0.36	
7942.00	90.400	90.210	7174.99	-362.83	-313.45	-355.08	40°10'32.370"N	104°57'33.871"W	0.60	
8027.00	90.060	88.240	7174.65	-277.84	-312.30	-270.09	40°10'32.382"N	104°57'32.777"W	2.35	
8112.00	89.750	88.050	7174.79	-192.84	-309.55	-185.14	40°10'32.409"N	104°57'31.682"W	0.43	
8283.00	91.410	88.870	7173.06	-21.86	-304.96	-14.21	40°10'32.454"N	104°57'29.480"W	1.08	
8368.00	89.840	87.710	7172.13	63.13	-302.42	70.74	40°10'32.479"N	104°57'28.386"W	2.30	
8538.00	89.750	86.840	7172.74	233.09	-294.34	240.54	40°10'32.559"N	104°57'26.198"W	0.51	
8708.00	89.290	87.330	7174.16	403.02	-285.69	410.32	40°10'32.645"N	104°57'24.011"W	0.40	
8879.00	89.130	87.570	7176.52	573.97	-278.09	581.13	40°10'32.720"N	104°57'21.810"W	0.17	
8964.00	89.620	87.600	7177.45	658.96	-274.51	666.05	40°10'32.755"N	104°57'20.716"W	0.58	
9134.00	89.410	87.460	7178.89	828.92	-267.18	835.89	40°10'32.828"N	104°57'18.529"W	0.15	
9304.00	90.180	87.500	7179.50	998.89	-259.70	1005.72	40°10'32.901"N	104°57'16.341"W	0.45	
9389.00	89.960	87.680	7179.39	1083.88	-256.13	1090.64	40°10'32.937"N	104°57'15.247"W	0.33	
9474.00	91.320	88.650	7178.44	1168.87	-253.41	1175.59	40°10'32.964"N	104°57'14.152"W	1.97	
9645.00	89.130	87.950	7177.77	1339.85	-248.34	1346.50	40°10'33.014"N	104°57'11.950"W	1.34	
9730.00	89.720	88.420	7178.62	1424.85	-245.64	1431.46	40°10'33.040"N	104°57'10.856"W	0.89	
9815.00	90.860	89.550	7178.19	1509.84	-244.14	1516.44	40°10'33.055"N	104°57'09.761"W	1.89	
9900.00	91.320	89.430	7176.58	1594.81	-243.38	1601.42	40°10'33.062"N	104°57'08.666"W	0.56	
9987.00	91.690	89.880	7174.29	1681.77	-242.86	1688.39	40°10'33.067"N	104°57'07.546"W	0.67	
10073.00	89.380	89.520	7173.49	1767.74	-242.41	1774.38	40°10'33.072"N	104°57'06.438"W	2.72	
10158.00	90.000	89.030	7173.95	1852.73	-241.33	1859.37	40°10'33.082"N	104°57'05.343"W	0.93	
10243.00	90.520	88.560	7173.56	1937.73	-239.55	1944.35	40°10'33.100"N	104°57'04.248"W	0.82	
10413.00	91.440	89.050	7170.66	2107.70	-236.00	2114.28	40°10'33.135"N	104°57'02.059"W	0.61	
10498.00	90.860	88.720	7168.95	2192.68	-234.35	2199.25	40°10'33.151"N	104°57'00.965"W	0.79	
10583.00	91.010	88.610	7167.56	2277.67	-232.37	2284.22	40°10'33.171"N	104°56'59.870"W	0.22	
10669.00	91.480	88.270	7165.69	2363.65	-230.03	2370.16	40°10'33.194"N	104°56'58.763"W	0.67	
10754.00	90.400	88.320	7164.30	2448.64	-227.50	2455.11	40°10'33.219"N	104°56'57.668"W	1.27	
10924.00	89.900	88.590	7163.86	2618.63	-222.91	2625.05	40°10'33.264"N	104°56'55.479"W	0.33	
11095.00	90.060	88.420	7163.91	2789.63	-218.45	2795.99	40°10'33.308"N	104°56'53.277"W	0.14	
11265.00	91.440	89.090	7161.69	2959.61	-214.76	2965.93	40°10'33.344"N	104°56'51.088"W	0.90	
11350.00	91.170	88.780	7159.75	3044.59	-213.18	3050.89	40°10'33.360"N	104°56'49.993"W	0.48	
11435.00	90.430	88.920	7158.57	3129.58	-211.47	3135.87	40°10'33.376"N	104°56'48.898"W	0.89	
11520.00	88.050	88.570	7159.69	3214.56	-209.61	3220.83	40°10'33.395"N	104°56'47.804"W	2.83	
11605.00	87.750	88.410	7162.81	3299.51	-207.37	3305.75	40°10'33.417"N	104°56'46.710"W	0.40	
11690.00	88.420	88.270	7165.65	3384.46	-204.91	3390.66	40°10'33.441"N	104°56'45.616"W	0.81	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 VOGL STATE 38N-36HZ (497'FSL & 708'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 38N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 38N-36HZ AWB
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (142 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11860.00	88.490	88.560	7170.23	3554.40	-200.21	3560.54	40°10'33.487"N	104°56'43.427"W	0.18	
11945.00	89.930	88.460	7171.41	3639.39	-198.00	3645.50	40°10'33.509"N	104°56'42.333"W	1.70	
12030.00	89.780	87.760	7171.62	3724.38	-195.20	3730.45	40°10'33.536"N	104°56'41.238"W	0.84	
12115.00	91.390	88.170	7170.75	3809.37	-192.18	3815.39	40°10'33.566"N	104°56'40.144"W	1.95	
12285.00	91.850	87.810	7165.95	3979.29	-186.22	3985.22	40°10'33.625"N	104°56'37.956"W	0.34	
12312.00	91.910	87.920	7165.06	4006.28	-185.22	4012.18	40°10'33.634"N	104°56'37.609"W	0.46	Last BHI MWD+IFR Surveys
12379.00	91.910	87.920	7162.83	4073.24	-182.79	4079.10	40°10'33.658"N	104°56'36.747"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: VOGL STATE 38N-36HZ AWB Ref Wellpath: VOGL STATE 38N-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	1149.00	1133.00	16.00	1148.98	0.00	0.00	-0.83	-5.38
9.625in Casing Surface	16.00	1138.00	1122.00	16.00	1137.98	0.00	0.00	-0.87	-5.27
8.75in Open Hole	1149.00	7734.00	6585.00	1148.98	7176.94	-0.83	-5.38	-314.27	-563.06
7in Casing Intermediate	16.00	7724.00	7708.00	16.00	7176.72	0.00	0.00	-314.72	-573.04
6.125in Open Hole	7734.00	12379.00	4645.00	7176.94	7162.83	-314.27	-563.06	-182.79	4079.10

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	4086.58	-5315.72	3146070.35	1311665.15	40°11'15.846"N	104°58'37.790"W	polygon
SEC.36-T3N-R68W SECTION LINES		-119.00	4086.58	-5315.72	3146070.35	1311665.15	40°11'15.846"N	104°58'37.790"W	polygon
VOGL STATE 38N-36HZ BHL ON PLAT(205'FSL & 460' FEL, SEC.36) REV-1		7159.00	-189.05	4104.19	3155515.79	1307447.35	40°10'33.596"N	104°56'36.424"W	point
VOGL STATE 38N-36HZ LAND BOX		7159.00	0.00	0.00	3151410.70	1307611.31	40°10'35.468"N	104°57'29.297"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: VOGL STATE 38N-36HZ AWP Ref Wellpath: VOGL STATE 38N-36HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	969.00	Generic gyro - continuous (Standard)	MS ENERGY GYRO SURVEYS <116-969>	VOGL STATE 38N-36HZ AWB
969.00	7667.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1214-7667>	VOGL STATE 38N-36HZ AWB
7667.00	12312.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7772-12312>	VOGL STATE 38N-36HZ AWB
12312.00	12379.00	Blind Drilling (std)	Projection to bit	VOGL STATE 38N-36HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 VOGL STATE 38N-36HZ (497'FSL & 708'FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 38N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 38N-36HZ AWB
Facility	SEC.36-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	221.250	16.00	Tie-On
116.00	0.440	221.250	116.00	Begin GYRO Surveys
969.00	0.440	277.540	968.99	Tie-Into GYRO Surveys
1214.00	0.700	292.730	1213.98	Begin BHI MWD+IFR Surveys
7724.00	88.531	87.121	7176.72	7" Casing Point
12312.00	91.910	87.920	7165.06	Last BHI MWD+IFR Surveys
12379.00	91.910	87.920	7162.83	Projection to Bit