

Location:	COLORADO	Slot:	SLOT#29 VOGL STATE 16C-36HZ (556'FSL & 713' FWL, SEC.36)
Field:	WELD COUNTY (KERR MCGEE)	Well:	VOGL STATE 16C-36HZ
Facility:	SEC.36-T3N-R68W	Wellbore:	VOGL STATE 16C-36HZ PWB

Plot reference wellpath is VOGL STATE 16C-36HZ (REV-A.0) PWP

True vertical depths are referenced to XTREME 20 (16'KB) (RKB)

Measured deaths are referenced to XTREME 20 (16KB) (R&R)

XTREME 20 (16'KB) (RKB) to Mean Sea Level: 4834 feet

Mean Sea Level to Mud line (At Slot: SLOT#29 VOGL STATE 16C-36HZ (556'FSL & 713' FWL, SEC.36)): 0 feet

Coordinates are in feet referenced to Slot

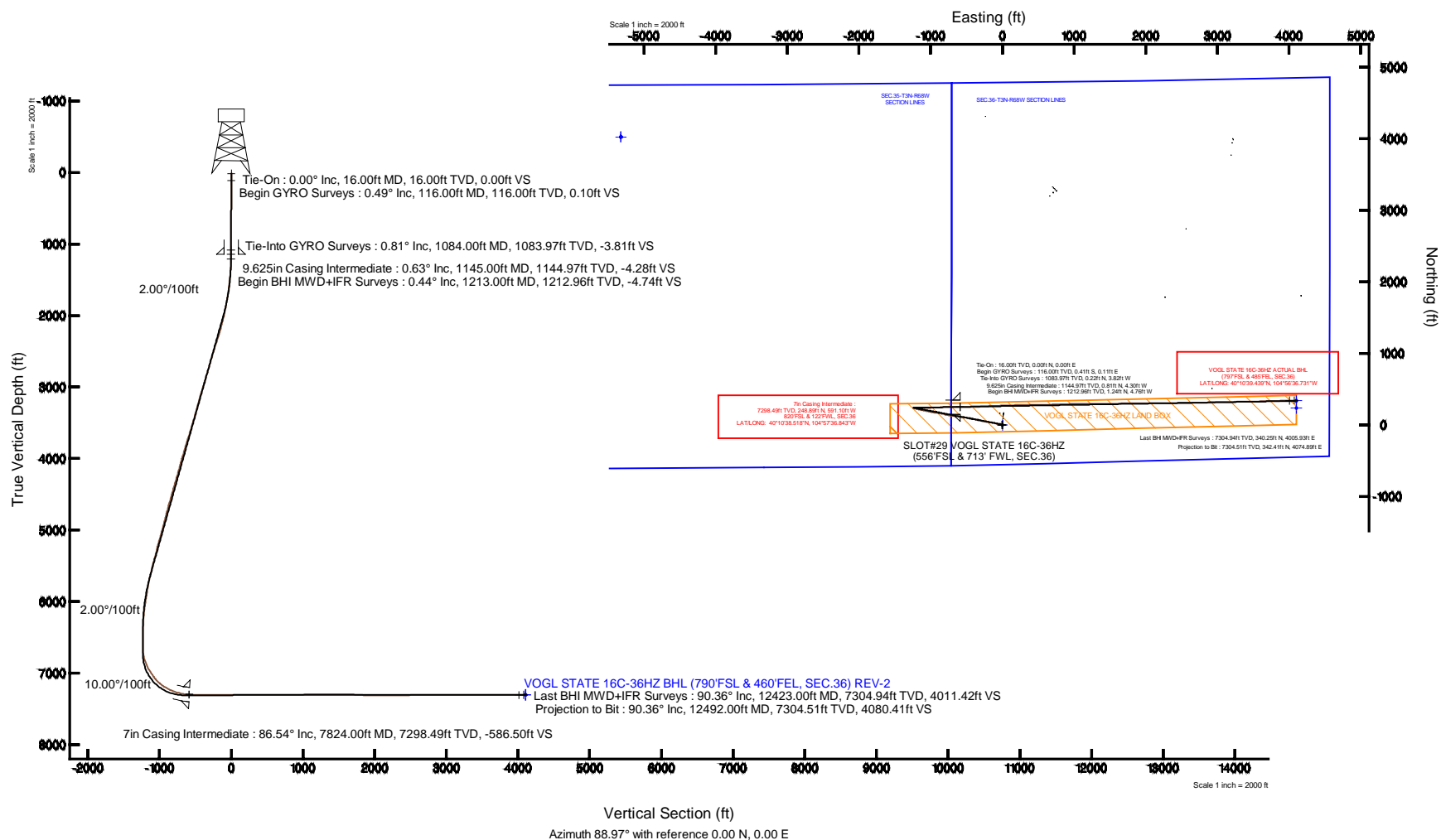
Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

North Reference: True north

Scale: True distance

Depths are in feet

Created by: precain on 14/Oct/2014



Actual Wellpath Report

VOGL STATE 16C-36HZ AWP

Page 1 of 7

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 VOGL STATE 16C-36HZ (556'FSL & 713' FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 16C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 16C-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	14/Oct/2014 at 12:20
Convergence at slot	n/a	Database/Source file	WellArchitectDB/VOGL_STATE_16C-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	-89.35	-7.68	3151415.69	1307671.15	40°10'36.059"N	104°57'29.228"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#29 VOGL STATE 16C-36HZ (556'FSL & 713' 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	88.97°

Actual Wellpath Report

VOGL STATE 16C-36HZ AWP

Page 2 of 7

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 VOGL STATE 16C-36HZ (556'FSL & 713' FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 16C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 16C-36HZ AWP
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (153 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	165.400	0.00	0.00	0.00	0.00	40°10'36.059"N	104°57'29.228"W	0.00	
16.00	0.000	165.400	16.00	0.00	0.00	0.00	40°10'36.059"N	104°57'29.228"W	0.00	Tie-On
116.00	0.490	165.400	116.00	0.10	-0.41	0.11	40°10'36.055"N	104°57'29.227"W	0.49	Begin GYRO Surveys
216.00	0.350	163.460	216.00	0.28	-1.12	0.30	40°10'36.048"N	104°57'29.224"W	0.14	
316.00	0.240	225.790	315.99	0.21	-1.56	0.24	40°10'36.044"N	104°57'29.225"W	0.32	
416.00	0.440	231.550	415.99	-0.25	-1.94	-0.21	40°10'36.040"N	104°57'29.231"W	0.20	
516.00	0.290	256.400	515.99	-0.80	-2.24	-0.76	40°10'36.037"N	104°57'29.238"W	0.21	
616.00	0.380	274.660	615.99	-1.38	-2.27	-1.33	40°10'36.037"N	104°57'29.245"W	0.14	
716.00	0.420	268.600	715.99	-2.07	-2.26	-2.03	40°10'36.037"N	104°57'29.254"W	0.06	
816.00	0.290	330.020	815.99	-2.56	-2.05	-2.52	40°10'36.039"N	104°57'29.261"W	0.38	
916.00	0.530	332.580	915.98	-2.89	-1.42	-2.86	40°10'36.045"N	104°57'29.265"W	0.24	
1016.00	0.650	331.460	1015.98	-3.36	-0.51	-3.35	40°10'36.054"N	104°57'29.271"W	0.12	
1084.00	0.810	323.490	1083.97	-3.81	0.22	-3.82	40°10'36.061"N	104°57'29.277"W	0.28	Tie-Into GYRO Surveys
1213.00	0.440	306.000	1212.96	-4.74	1.24	-4.76	40°10'36.071"N	104°57'29.289"W	0.32	Begin BHI MWD+IFR Surveys
1307.00	2.960	298.070	1306.92	-7.15	2.60	-7.20	40°10'36.085"N	104°57'29.321"W	2.69	
1400.00	4.510	286.190	1399.72	-12.74	4.75	-12.83	40°10'36.106"N	104°57'29.393"W	1.85	
1494.00	6.180	287.180	1493.30	-21.07	7.27	-21.21	40°10'36.131"N	104°57'29.501"W	1.78	
1589.00	7.090	280.470	1587.67	-31.68	9.85	-31.86	40°10'36.156"N	104°57'29.638"W	1.26	
1682.00	8.540	279.560	1679.80	-44.09	12.04	-44.31	40°10'36.178"N	104°57'29.799"W	1.56	
1776.00	9.110	276.350	1772.69	-58.33	14.02	-58.59	40°10'36.198"N	104°57'29.983"W	0.80	
1870.00	10.410	284.820	1865.33	-73.88	17.01	-74.20	40°10'36.227"N	104°57'30.184"W	2.06	
1964.00	12.540	283.220	1957.45	-91.94	21.52	-92.35	40°10'36.272"N	104°57'30.418"W	2.29	
2057.00	13.660	280.760	2048.03	-112.48	25.88	-112.96	40°10'36.315"N	104°57'30.683"W	1.35	
2152.00	15.950	280.360	2139.87	-136.26	30.32	-136.83	40°10'36.359"N	104°57'30.991"W	2.41	
2246.00	16.990	280.740	2230.01	-162.36	35.20	-163.03	40°10'36.407"N	104°57'31.328"W	1.11	
2341.00	17.660	279.330	2320.70	-190.13	40.13	-190.88	40°10'36.456"N	104°57'31.687"W	0.83	
2436.00	17.880	279.570	2411.17	-218.64	44.89	-219.48	40°10'36.503"N	104°57'32.056"W	0.24	
2529.00	17.250	278.380	2499.83	-246.27	49.27	-247.20	40°10'36.546"N	104°57'32.413"W	0.78	
2624.00	16.940	281.640	2590.63	-273.67	54.12	-274.70	40°10'36.594"N	104°57'32.767"W	1.06	
2718.00	16.900	283.480	2680.57	-300.26	60.06	-301.39	40°10'36.653"N	104°57'33.111"W	0.57	
2813.00	16.980	282.970	2771.44	-327.09	66.40	-328.34	40°10'36.715"N	104°57'33.458"W	0.18	
2906.00	16.700	281.680	2860.46	-353.30	72.15	-354.66	40°10'36.772"N	104°57'33.797"W	0.50	
2994.00	16.700	284.470	2944.75	-377.82	77.87	-379.28	40°10'36.828"N	104°57'34.114"W	0.91	
3079.00	17.270	282.950	3026.04	-401.83	83.75	-403.41	40°10'36.887"N	104°57'34.425"W	0.85	
3164.00	17.370	280.430	3107.19	-426.51	88.87	-428.18	40°10'36.937"N	104°57'34.744"W	0.89	
3249.00	15.260	278.820	3188.76	-449.97	92.88	-451.72	40°10'36.977"N	104°57'35.047"W	2.54	
3334.00	15.660	278.700	3270.68	-472.29	96.34	-474.11	40°10'37.011"N	104°57'35.336"W	0.47	
3419.00	16.190	279.090	3352.42	-495.27	99.94	-497.15	40°10'37.047"N	104°57'35.633"W	0.64	
3504.00	15.900	278.600	3434.11	-518.41	103.56	-520.37	40°10'37.082"N	104°57'35.932"W	0.38	
3590.00	17.040	279.410	3516.58	-542.42	107.38	-544.45	40°10'37.120"N	104°57'36.242"W	1.35	
3675.00	16.890	276.930	3597.88	-566.89	110.90	-568.99	40°10'37.155"N	104°57'36.558"W	0.87	
3760.00	17.770	276.820	3679.02	-591.97	113.93	-594.13	40°10'37.185"N	104°57'36.882"W	1.04	
3845.00	17.500	277.100	3760.03	-617.47	117.05	-619.69	40°10'37.216"N	104°57'37.211"W	0.33	
3930.00	17.120	276.470	3841.18	-642.53	120.04	-644.80	40°10'37.245"N	104°57'37.535"W	0.50	
4016.00	15.640	276.200	3923.68	-666.58	122.72	-668.90	40°10'37.272"N	104°57'37.845"W	1.72	

Actual Wellpath Report

VOGL STATE 16C-36HZ AWP

Page 3 of 7

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 VOGL STATE 16C-36HZ (556'FSL & 713' FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 16C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 16C-36HZ AWP
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4100.00	15.380	273.590	4004.63	-688.91	124.64	-691.28	40°10'37.291"N	104°57'38.134"W	0.89	
4185.00	15.380	276.420	4086.58	-711.33	126.61	-713.73	40°10'37.310"N	104°57'38.423"W	0.88	
4270.00	15.990	282.590	4168.42	-733.88	130.42	-736.36	40°10'37.348"N	104°57'38.714"W	2.09	
4355.00	17.550	284.950	4249.81	-757.58	136.28	-760.17	40°10'37.406"N	104°57'39.021"W	2.00	
4440.00	17.430	285.800	4330.88	-782.09	143.05	-784.80	40°10'37.473"N	104°57'39.339"W	0.33	
4526.00	16.290	286.170	4413.18	-805.94	149.92	-808.78	40°10'37.540"N	104°57'39.647"W	1.33	
4611.00	16.120	280.630	4494.81	-828.88	155.41	-831.83	40°10'37.595"N	104°57'39.944"W	1.83	
4696.00	15.350	279.420	4576.62	-851.50	159.43	-854.52	40°10'37.634"N	104°57'40.237"W	0.98	
4781.00	15.630	278.000	4658.54	-873.88	162.87	-876.96	40°10'37.668"N	104°57'40.526"W	0.55	
4866.00	15.390	277.700	4740.44	-896.33	165.97	-899.48	40°10'37.699"N	104°57'40.816"W	0.30	
4951.00	14.270	276.630	4822.61	-917.86	168.69	-921.06	40°10'37.726"N	104°57'41.094"W	1.36	
5036.00	14.830	277.840	4904.88	-938.99	171.39	-942.24	40°10'37.752"N	104°57'41.367"W	0.75	
5121.00	15.650	282.440	4986.89	-960.89	175.34	-964.22	40°10'37.792"N	104°57'41.650"W	1.72	
5207.00	16.320	280.240	5069.57	-984.02	179.99	-987.44	40°10'37.837"N	104°57'41.949"W	1.05	
5294.00	15.540	279.330	5153.23	-1007.48	184.05	-1010.96	40°10'37.878"N	104°57'42.252"W	0.94	
5379.00	14.950	283.450	5235.24	-1029.29	188.45	-1032.86	40°10'37.921"N	104°57'42.534"W	1.45	
5465.00	14.970	280.980	5318.32	-1050.90	193.14	-1054.56	40°10'37.967"N	104°57'42.814"W	0.74	
5550.00	15.020	279.760	5400.43	-1072.45	197.10	-1076.19	40°10'38.007"N	104°57'43.093"W	0.38	
5635.00	14.280	281.690	5482.67	-1093.50	201.09	-1097.31	40°10'38.046"N	104°57'43.365"W	1.04	
5720.00	14.330	283.760	5565.03	-1113.89	205.72	-1117.79	40°10'38.092"N	104°57'43.629"W	0.60	
5805.00	13.240	280.870	5647.58	-1133.59	210.06	-1137.57	40°10'38.135"N	104°57'43.883"W	1.52	
5890.00	10.610	286.310	5730.74	-1150.59	214.09	-1154.64	40°10'38.174"N	104°57'44.103"W	3.36	
5975.00	11.520	286.940	5814.16	-1166.13	218.76	-1170.27	40°10'38.221"N	104°57'44.305"W	1.08	
6059.00	9.620	281.170	5896.74	-1180.97	222.56	-1185.18	40°10'38.258"N	104°57'44.497"W	2.59	
6145.00	9.170	286.610	5981.58	-1194.53	225.92	-1198.80	40°10'38.291"N	104°57'44.672"W	1.16	
6230.00	8.030	284.270	6065.63	-1206.71	229.31	-1211.05	40°10'38.325"N	104°57'44.830"W	1.40	
6315.00	5.670	286.940	6150.02	-1216.43	232.00	-1220.82	40°10'38.351"N	104°57'44.956"W	2.80	
6400.00	3.880	282.870	6234.72	-1223.21	233.87	-1227.64	40°10'38.370"N	104°57'45.044"W	2.14	
6485.00	2.960	290.790	6319.56	-1228.04	235.29	-1232.49	40°10'38.384"N	104°57'45.106"W	1.21	
6570.00	1.330	313.070	6404.50	-1230.79	236.74	-1235.27	40°10'38.398"N	104°57'45.142"W	2.12	
6655.00	0.400	55.320	6489.50	-1231.25	237.58	-1235.74	40°10'38.406"N	104°57'45.148"W	1.73	
6740.00	0.800	334.490	6574.49	-1231.25	238.29	-1235.76	40°10'38.413"N	104°57'45.148"W	0.98	
6825.00	0.340	3.570	6659.49	-1231.48	239.07	-1236.00	40°10'38.421"N	104°57'45.151"W	0.62	
6868.00	3.860	99.080	6702.46	-1230.04	238.97	-1234.56	40°10'38.420"N	104°57'45.133"W	9.09	
6910.00	9.160	96.840	6744.17	-1225.33	238.35	-1229.84	40°10'38.414"N	104°57'45.072"W	12.63	
6953.00	14.520	98.650	6786.24	-1216.62	237.13	-1221.11	40°10'38.402"N	104°57'44.960"W	12.49	
6995.00	18.420	97.800	6826.51	-1204.87	235.44	-1209.32	40°10'38.385"N	104°57'44.808"W	9.30	
7038.00	23.050	98.340	6866.71	-1189.84	233.29	-1194.25	40°10'38.364"N	104°57'44.614"W	10.78	
7080.00	26.160	93.160	6904.90	-1172.49	231.59	-1176.87	40°10'38.347"N	104°57'44.390"W	9.00	
7123.00	29.140	89.560	6942.99	-1152.56	231.15	-1156.93	40°10'38.343"N	104°57'44.133"W	7.94	
7165.00	32.510	87.730	6979.05	-1131.05	231.67	-1135.42	40°10'38.348"N	104°57'43.856"W	8.33	
7208.00	34.440	86.650	7014.92	-1107.34	232.84	-1111.73	40°10'38.360"N	104°57'43.550"W	4.70	
7250.00	37.440	86.340	7048.92	-1082.72	234.35	-1087.13	40°10'38.375"N	104°57'43.234"W	7.16	
7293.00	40.250	87.350	7082.40	-1055.77	235.83	-1060.20	40°10'38.389"N	104°57'42.887"W	6.70	
7335.00	43.850	86.610	7113.59	-1027.66	237.32	-1032.12	40°10'38.404"N	104°57'42.525"W	8.65	

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7378.00	49.170	86.310	7143.17	-996.51	239.25	-1000.99	40°10'38.423"N	104°57'42.124"W	12.38	
7420.00	54.510	85.140	7169.11	-963.55	241.72	-968.07	40°10'38.447"N	104°57'41.700"W	12.90	
7463.00	59.400	85.130	7192.55	-927.60	244.77	-932.17	40°10'38.478"N	104°57'41.237"W	11.37	
7505.00	62.430	88.680	7212.97	-890.93	246.74	-895.53	40°10'38.497"N	104°57'40.765"W	10.32	
7548.00	63.710	90.160	7232.45	-852.59	247.12	-857.20	40°10'38.501"N	104°57'40.271"W	4.28	
7590.00	68.040	89.810	7249.61	-814.28	247.14	-818.88	40°10'38.501"N	104°57'39.778"W	10.34	
7633.00	72.630	89.350	7264.07	-773.80	247.43	-778.40	40°10'38.504"N	104°57'39.256"W	10.72	
7675.00	74.540	90.240	7275.94	-733.52	247.58	-738.11	40°10'38.505"N	104°57'38.737"W	4.98	
7718.00	79.260	89.490	7285.69	-691.65	247.68	-696.24	40°10'38.506"N	104°57'38.198"W	11.11	
7771.00	83.220	88.980	7293.76	-639.28	248.38	-643.87	40°10'38.513"N	104°57'37.523"W	7.53	
7824.00†	86.535	89.913	7298.49	-586.50	248.89	-591.10	40°10'38.518"N	104°57'36.843"W	6.50	7" Casing Point
7857.00	88.600	90.490	7299.89	-553.54	248.77	-558.13	40°10'38.517"N	104°57'36.418"W	6.50	
7942.00	88.850	89.270	7301.78	-468.58	248.95	-473.15	40°10'38.519"N	104°57'35.324"W	1.46	
8027.00	89.440	87.710	7303.05	-383.59	251.19	-388.19	40°10'38.541"N	104°57'34.229"W	1.96	
8112.00	90.430	86.670	7303.14	-298.64	255.36	-303.30	40°10'38.582"N	104°57'33.135"W	1.69	
8197.00	90.640	86.370	7302.35	-213.72	260.52	-218.46	40°10'38.633"N	104°57'32.042"W	0.43	
8283.00	89.690	87.070	7302.10	-127.79	265.44	-132.60	40°10'38.682"N	104°57'30.936"W	1.37	
8367.00	89.720	88.020	7302.54	-43.81	269.03	-48.68	40°10'38.718"N	104°57'29.855"W	1.13	
8452.00	89.440	87.740	7303.16	41.17	272.18	36.26	40°10'38.749"N	104°57'28.761"W	0.47	
8537.00	89.590	88.130	7303.88	126.15	275.24	121.20	40°10'38.779"N	104°57'27.667"W	0.49	
8622.00	90.730	89.110	7303.64	211.15	277.29	206.17	40°10'38.799"N	104°57'26.572"W	1.77	
8707.00	90.670	89.260	7302.60	296.14	278.50	291.16	40°10'38.811"N	104°57'25.477"W	0.19	
8792.00	90.580	89.050	7301.68	381.14	279.75	376.14	40°10'38.823"N	104°57'24.382"W	0.27	
8877.00	90.490	89.350	7300.88	466.13	280.94	461.13	40°10'38.835"N	104°57'23.287"W	0.37	
8962.00	90.610	89.090	7300.07	551.13	282.09	546.12	40°10'38.847"N	104°57'22.192"W	0.34	
9048.00	90.300	89.160	7299.38	637.12	283.41	632.11	40°10'38.860"N	104°57'21.085"W	0.37	
9133.00	90.150	89.060	7299.05	722.12	284.73	717.10	40°10'38.873"N	104°57'19.990"W	0.21	
9218.00	89.380	87.580	7299.40	807.11	287.22	802.06	40°10'38.897"N	104°57'18.895"W	1.96	
9303.00	90.060	88.100	7299.81	892.09	290.42	886.99	40°10'38.929"N	104°57'17.801"W	1.01	
9388.00	90.730	89.690	7299.23	977.09	292.06	971.97	40°10'38.945"N	104°57'16.706"W	2.03	
9473.00	91.040	89.860	7297.91	1062.07	292.40	1056.96	40°10'38.948"N	104°57'15.611"W	0.42	
9558.00	90.430	89.700	7296.82	1147.05	292.72	1141.95	40°10'38.951"N	104°57'14.516"W	0.74	
9643.00	88.630	89.560	7297.52	1232.04	293.27	1226.95	40°10'38.957"N	104°57'13.421"W	2.12	
9728.00	90.360	90.170	7298.27	1317.02	293.47	1311.94	40°10'38.959"N	104°57'12.326"W	2.16	
9813.00	89.960	90.100	7298.03	1402.01	293.27	1396.94	40°10'38.957"N	104°57'11.231"W	0.48	
9898.00	90.030	89.580	7298.04	1487.00	293.51	1481.94	40°10'38.959"N	104°57'10.136"W	0.62	
9984.00	90.460	88.070	7297.67	1572.99	295.27	1567.91	40°10'38.976"N	104°57'09.028"W	1.83	
10069.00	89.660	86.930	7297.58	1657.96	298.98	1652.83	40°10'39.013"N	104°57'07.934"W	1.64	
10154.00	86.150	87.860	7300.69	1742.86	302.84	1737.67	40°10'39.051"N	104°57'06.841"W	4.27	
10239.00	87.030	89.410	7305.75	1827.70	304.86	1822.50	40°10'39.071"N	104°57'05.749"W	2.09	
10324.00	88.890	90.650	7308.77	1912.63	304.82	1907.44	40°10'39.070"N	104°57'04.654"W	2.63	
10410.00	90.030	90.550	7309.58	1998.59	303.92	1993.43	40°10'39.062"N	104°57'03.547"W	1.33	
10495.00	90.030	90.360	7309.54	2083.56	303.24	2078.42	40°10'39.055"N	104°57'02.452"W	0.22	
10580.00	89.500	89.980	7309.89	2168.54	302.99	2163.42	40°10'39.052"N	104°57'01.357"W	0.77	
10665.00	90.980	89.790	7309.53	2253.53	303.16	2248.42	40°10'39.054"N	104°57'00.261"W	1.76	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 VOGL STATE 16C-36HZ (556'FSL & 713' FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 16C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 16C-36HZ AWP
Facility	SEC.36-T3N-R68W		

WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10750.00	90.980	89.710	7308.08	2338.51	303.53	2333.41	40°10'39.057"N	104°56'59.167"W	0.09	
10835.00	90.730	89.870	7306.81	2423.49	303.84	2418.39	40°10'39.060"N	104°56'58.072"W	0.35	
10920.00	90.210	89.090	7306.11	2508.48	304.61	2503.39	40°10'39.068"N	104°56'56.977"W	1.10	
11006.00	90.430	89.450	7305.63	2594.48	305.71	2589.38	40°10'39.079"N	104°56'55.869"W	0.49	
11091.00	89.660	88.890	7305.56	2679.48	306.94	2674.37	40°10'39.091"N	104°56'54.774"W	1.12	
11176.00	90.830	89.160	7305.20	2764.47	308.39	2759.35	40°10'39.105"N	104°56'53.679"W	1.41	
11261.00	90.060	88.440	7304.54	2849.47	310.17	2844.33	40°10'39.122"N	104°56'52.584"W	1.24	
11346.00	90.030	88.420	7304.47	2934.47	312.50	2929.30	40°10'39.145"N	104°56'51.490"W	0.04	
11431.00	89.900	88.230	7304.53	3019.46	314.98	3014.26	40°10'39.170"N	104°56'50.395"W	0.27	
11516.00	89.720	88.060	7304.81	3104.45	317.73	3099.22	40°10'39.197"N	104°56'49.301"W	0.29	
11601.00	90.030	88.640	7304.99	3189.45	320.18	3184.18	40°10'39.221"N	104°56'48.206"W	0.77	
11686.00	90.330	88.990	7304.73	3274.45	321.94	3269.16	40°10'39.238"N	104°56'47.111"W	0.54	
11771.00	90.060	89.060	7304.44	3359.45	323.38	3354.15	40°10'39.252"N	104°56'46.016"W	0.33	
11941.00	89.840	88.480	7304.59	3529.44	327.03	3524.11	40°10'39.288"N	104°56'43.827"W	0.36	
12111.00	90.150	88.620	7304.60	3699.44	331.33	3694.06	40°10'39.331"N	104°56'41.637"W	0.20	
12281.00	89.630	88.290	7304.93	3869.43	335.92	3863.99	40°10'39.376"N	104°56'39.448"W	0.36	
12423.00	90.360	88.210	7304.94	4011.42	340.25	4005.93	40°10'39.418"N	104°56'37.619"W	0.52	Last BHI MWD+IFR Surveys
12492.00	90.360	88.210	7304.51	4080.41	342.41	4074.89	40°10'39.439"N	104°56'36.731"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: VOGL STATE 16C-36HZ AWP Ref Wellpath: VOGL STATE 16C-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	1161.00	1145.00	16.00	1160.97	0.00	0.00	0.93	-4.42
9.625in Casing Intermediate	16.00	1145.00	1129.00	16.00	1144.97	0.00	0.00	0.81	-4.30
8.75in Open Hole	1161.00	7834.00	6673.00	1160.97	7299.04	0.93	-4.42	248.89	-581.11
7in Casing Intermediate	16.00	7824.00	7808.00	16.00	7298.49	0.00	0.00	248.89	-591.10
6.125in Open Hole	7834.00	12492.00	4658.00	7299.04	7304.51	248.89	-581.11	342.41	4074.89

Actual Wellpath Report

VOGL STATE 16C-36HZ AWP

Page 6 of 7

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 VOGL STATE 16C-36HZ (556'FSL & 713' FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 16C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 16C-36HZ AWB
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	4026.78	-5321.07	3146070.35	1311665.15	40°11'15.846"N	104°58'37.790"W	polygon
SEC.36-T3N-R68W SECTION LINES		-119.00	4026.78	-5321.07	3146070.35	1311665.15	40°11'15.846"N	104°58'37.790"W	polygon
VOGL STATE 16C-36HZ BHL (790'FSL & 460'FEL, SEC.36) REV-2		7301.00	336.38	4099.88	3155513.25	1308032.56	40°10'39.380"N	104°56'36.409"W	point
VOGL STATE 16C-36HZ BHL ON PLAT (690'FSL & 460'FEL, SEC.36) REV-1		7301.00	236.38	4099.88	3155513.86	1307932.57	40°10'38.392"N	104°56'36.409"W	point
VOGL STATE 16C-36HZ LAND BOX		7301.00	0.00	0.00	3151415.69	1307671.15	40°10'36.059"N	104°57'29.228"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: VOGL STATE 16C-36HZ AWB					Ref Wellpath: VOGL STATE 16C-36HZ AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	
16.00	1084.00	Generic gyro - continuous (Standard)	MS ENERGY GYRO SURVEYS <116-1084>		VOGL STATE 16C-36HZ AWB	
1084.00	7771.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1213-7771>		VOGL STATE 16C-36HZ AWB	
7771.00	12423.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7857-12423>		VOGL STATE 16C-36HZ AWB	
12423.00	12492.00	Blind Drilling (std)	Projection to bit		VOGL STATE 16C-36HZ AWB	

Actual Wellpath Report

VOGL STATE 16C-36HZ AWP

Page 7 of 7

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 VOGL STATE 16C-36HZ (556'FSL & 713' FWL, SEC.36)
Area	COLORADO	Well	VOGL STATE 16C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	VOGL STATE 16C-36HZ AWB
Facility	SEC.36-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	165.400	16.00	Tie-On
116.00	0.490	165.400	116.00	Begin GYRO Surveys
1084.00	0.810	323.490	1083.97	Tie-Into GYRO Surveys
1213.00	0.440	306.000	1212.96	Begin BHI MWD+IFR Surveys
7824.00	86.535	89.913	7298.49	7" Casing Point
12423.00	90.360	88.210	7304.94	Last BHI MWD+IFR Surveys
12492.00	90.360	88.210	7304.51	Projection to Bit