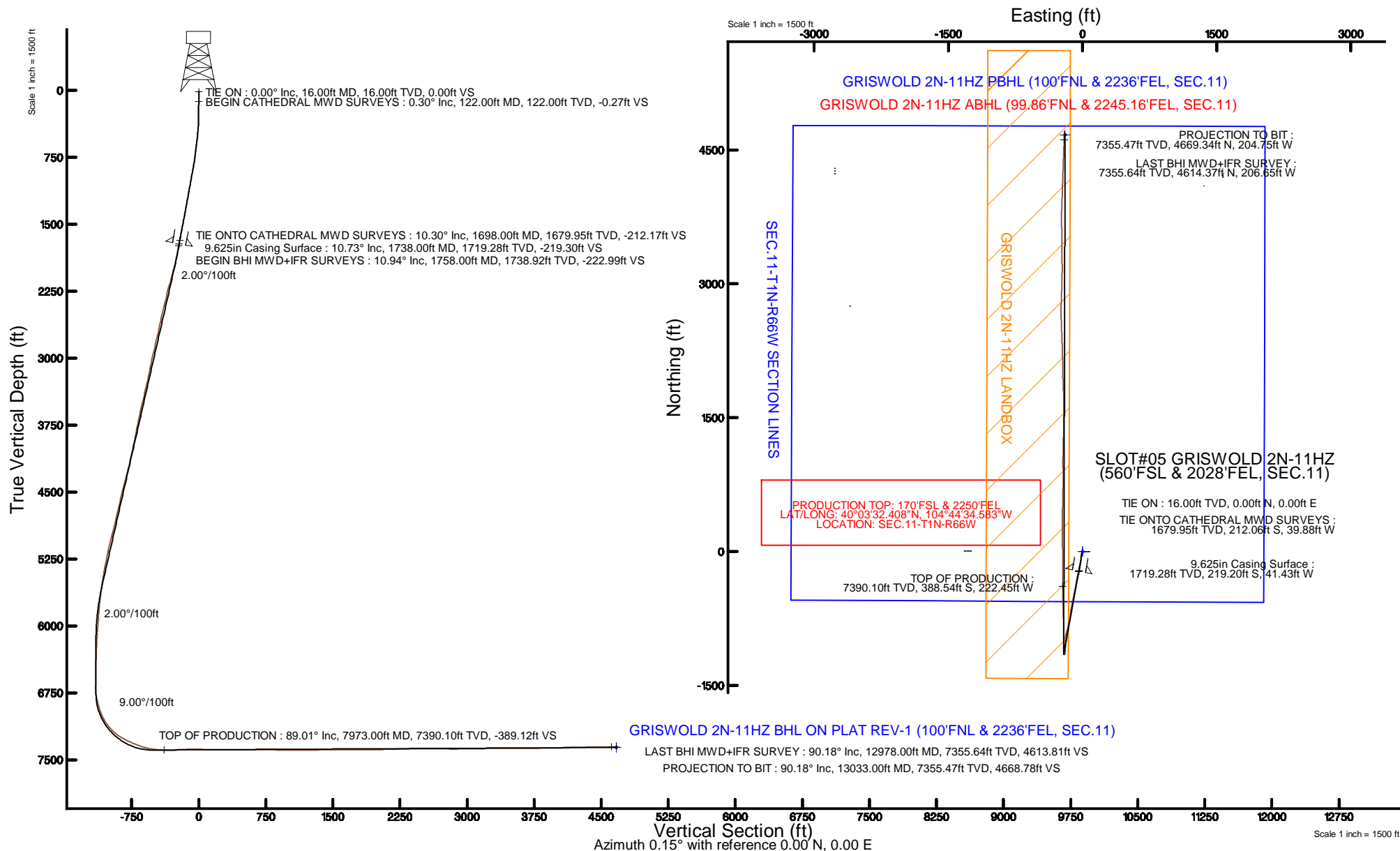


KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)

Location: COLORADO Slot: SLOT#05 GRISWOLD 2N-11HZ (560'FSL & 2028'FEL, SEC.11)
 Field: WELD COUNTY (KERR MCGEE) Well: GRISWOLD 2N-11HZ
 Facility: SEC.11-T1N-R66W Wellbore: GRISWOLD 2N-11HZ PWB

Plot reference wellpath is GRISWOLD 2N-11HZ (REV-B.0) PWP

True vertical depths are referenced to XTREME 24 (16KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 24 (16KB) (RKB)	North Reference: True north
XTREME 24 (16KB) (RKB) to Mean Sea Level: 5141 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#05 GRISWOLD 2N-11HZ (560'FSL & 2028'FEL, SEC.11)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 3/18/2015



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#05 GRISWOLD 2N-11HZ (560'FSL & 2028'FEL, SEC.11)
Area	COLORADO	Well	GRISWOLD 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GRISWOLD 2N-11HZ AWP <122-13033>
Facility	SEC.11-T1N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Robiale01
Scale	0.999962	Report Generated	3/18/2015 at 8:48:03 AM
Convergence at slot	0.49° East	Database/Source file	WellArchitectDB/GRISWOLD_2N-11HZ_AWP_122-13033_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4234.02	2770.10	3212126.21	1265634.89	40°03'36.248"N	104°44'31.722"W
Facility Reference Pt			3209320.61	1269845.23	40°04'18.091"N	104°45'07.348"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 24 (16'KB) (RKB) to Facility Vertical Datum	5141.00ft
Horizontal Reference Pt	Slot	XTREME 24 (16'KB) (RKB) to Mean Sea Level	5141.00ft
Vertical Reference Pt	XTREME 24 (16'KB) (RKB)	XTREME 24 (16'KB) (RKB) to Mud Line at Slot (SLOT#05 GRISWOLD 2N-11HZ (560'FSL & 2028'FEL, SEC.11))	5141.00ft
MD Reference Pt	XTREME 24 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	357.49°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#05 GRISWOLD 2N-11HZ (560°FSL & 2028°FEL, SEC.11)
Area	COLORADO	Well	GRISWOLD 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GRISWOLD 2N-11HZ AWP <122-13033>
Facility	SEC.11-T1N-R66W		

WELLPATH DATA (139 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	165.800	0.00	0.00	0.00	0.00	40°03'36.248"N	104°44'31.722"W	0.00	
16.00	0.000	165.800	16.00	0.00	0.00	0.00	40°03'36.248"N	104°44'31.722"W	0.00	TIE ON
122.00	0.300	165.800	122.00	-0.27	-0.27	0.07	40°03'36.245"N	104°44'31.721"W	0.28	BEGIN CATHEDRAL MWD SURVEYS
211.00	0.100	163.300	211.00	-0.58	-0.57	0.15	40°03'36.242"N	104°44'31.720"W	0.22	
297.00	1.000	202.200	296.99	-1.33	-1.34	-0.11	40°03'36.235"N	104°44'31.723"W	1.07	
385.00	3.300	196.800	384.93	-4.42	-4.47	-1.14	40°03'36.204"N	104°44'31.737"W	2.62	
474.00	5.900	204.600	473.63	-10.91	-11.08	-3.78	40°03'36.138"N	104°44'31.771"W	3.00	
569.00	6.500	199.900	568.08	-20.23	-20.58	-7.64	40°03'36.045"N	104°44'31.820"W	0.83	
663.00	7.300	191.700	661.40	-30.93	-31.43	-10.67	40°03'35.937"N	104°44'31.859"W	1.35	
760.00	8.500	188.700	757.48	-43.94	-44.55	-13.00	40°03'35.808"N	104°44'31.889"W	1.31	
854.00	9.600	186.900	850.30	-58.49	-59.20	-14.99	40°03'35.663"N	104°44'31.915"W	1.21	
950.00	10.300	185.400	944.86	-74.89	-75.69	-16.76	40°03'35.500"N	104°44'31.938"W	0.78	
1046.00	10.500	188.200	1039.28	-91.98	-92.90	-18.82	40°03'35.330"N	104°44'31.964"W	0.57	
1142.00	10.600	189.000	1133.66	-109.23	-110.27	-21.45	40°03'35.158"N	104°44'31.998"W	0.18	
1235.00	10.500	189.400	1225.09	-125.90	-127.08	-24.17	40°03'34.992"N	104°44'32.033"W	0.13	
1330.00	10.500	190.400	1318.50	-142.81	-144.14	-27.15	40°03'34.824"N	104°44'32.071"W	0.19	
1426.00	11.000	189.400	1412.81	-160.30	-161.78	-30.22	40°03'34.649"N	104°44'32.111"W	0.56	
1584.00	11.000	191.100	1567.91	-189.70	-191.44	-35.58	40°03'34.356"N	104°44'32.180"W	0.21	
1698.00	10.300	192.500	1679.95	-210.11	-212.06	-39.88	40°03'34.152"N	104°44'32.235"W	0.65	TIE ONTO CATHEDRAL MWD SURVEYS
1758.00	10.940	191.700	1738.92	-220.81	-222.88	-42.20	40°03'34.045"N	104°44'32.265"W	1.09	BEGIN BHI MWD+IFR SURVEYS
1853.00	12.150	196.520	1832.00	-239.00	-241.29	-46.87	40°03'33.864"N	104°44'32.325"W	1.63	
1948.00	14.050	195.200	1924.52	-259.44	-262.00	-52.74	40°03'33.659"N	104°44'32.400"W	2.02	
2044.00	15.440	192.390	2017.36	-282.89	-285.73	-58.54	40°03'33.424"N	104°44'32.475"W	1.63	
2139.00	15.070	191.270	2109.01	-307.11	-310.19	-63.66	40°03'33.183"N	104°44'32.541"W	0.50	
2234.00	14.790	188.830	2200.80	-330.99	-334.29	-67.94	40°03'32.944"N	104°44'32.596"W	0.72	
2329.00	14.400	189.630	2292.74	-354.43	-357.92	-71.77	40°03'32.711"N	104°44'32.645"W	0.46	
2424.00	14.090	189.390	2384.82	-377.29	-380.97	-75.64	40°03'32.483"N	104°44'32.695"W	0.33	
2519.00	13.010	190.450	2477.17	-399.03	-402.90	-79.46	40°03'32.266"N	104°44'32.744"W	1.17	
2615.00	12.540	191.120	2570.80	-419.69	-423.75	-83.43	40°03'32.060"N	104°44'32.795"W	0.51	
2710.00	12.520	193.990	2663.53	-439.58	-443.86	-87.91	40°03'31.862"N	104°44'32.853"W	0.66	
2805.00	12.880	192.300	2756.21	-459.69	-464.20	-92.66	40°03'31.661"N	104°44'32.914"W	0.54	
2899.00	13.320	190.160	2847.76	-480.39	-485.09	-96.80	40°03'31.454"N	104°44'32.967"W	0.70	
2994.00	13.720	190.940	2940.13	-502.02	-506.93	-100.87	40°03'31.238"N	104°44'33.019"W	0.46	
3089.00	11.720	195.000	3032.80	-522.18	-527.31	-105.50	40°03'31.037"N	104°44'33.079"W	2.30	
3185.00	11.480	189.370	3126.84	-540.83	-546.16	-109.58	40°03'30.851"N	104°44'33.131"W	1.20	
3280.00	12.080	190.430	3219.84	-559.77	-565.26	-112.92	40°03'30.662"N	104°44'33.174"W	0.67	
3375.00	13.310	191.440	3312.51	-580.07	-585.75	-116.89	40°03'30.459"N	104°44'33.225"W	1.32	
3470.00	13.590	191.400	3404.91	-601.52	-607.41	-121.27	40°03'30.245"N	104°44'33.282"W	0.29	
3565.00	13.940	189.120	3497.18	-623.56	-629.65	-125.29	40°03'30.026"N	104°44'33.333"W	0.68	
3660.00	12.340	192.570	3589.69	-644.57	-650.86	-129.31	40°03'29.816"N	104°44'33.385"W	1.87	
3755.00	11.620	185.980	3682.63	-663.84	-670.29	-132.51	40°03'29.624"N	104°44'33.426"W	1.63	
3851.00	11.520	181.820	3776.68	-682.96	-689.48	-133.83	40°03'29.434"N	104°44'33.443"W	0.88	
3946.00	11.070	185.240	3869.84	-701.46	-708.05	-134.96	40°03'29.251"N	104°44'33.458"W	0.85	
4041.00	11.920	188.930	3962.93	-720.11	-726.82	-137.32	40°03'29.065"N	104°44'33.488"W	1.18	
4136.00	12.760	191.100	4055.74	-739.92	-746.81	-140.86	40°03'28.868"N	104°44'33.534"W	1.01	

Actual Wellpath Report

GRISWOLD 2N-11HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#05 GRISWOLD 2N-11HZ (560'FSL & 2028'FEL, SEC.11)
Area	COLORADO	Well	GRISWOLD 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GRISWOLD 2N-11HZ AWP <122-13033>
Facility	SEC.11-T1N-R66W		

WELLPATH DATA (139 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4231.00	13.340	191.820	4148.28	-760.74	-767.83	-145.12	40°03'28.660"N	104°44'33.588"W	0.63	
4326.00	13.590	195.110	4240.67	-781.99	-789.33	-150.28	40°03'28.448"N	104°44'33.655"W	0.85	
4421.00	14.050	191.700	4332.93	-803.81	-811.40	-155.53	40°03'28.230"N	104°44'33.722"W	0.98	
4516.00	15.080	191.700	4424.87	-826.97	-834.80	-160.37	40°03'27.998"N	104°44'33.784"W	1.08	
4611.00	14.670	194.650	4516.69	-850.44	-858.54	-165.92	40°03'27.764"N	104°44'33.856"W	0.91	
4707.00	13.090	198.340	4609.88	-872.22	-880.62	-172.42	40°03'27.546"N	104°44'33.939"W	1.89	
4802.00	13.580	195.860	4702.32	-892.86	-901.56	-178.85	40°03'27.339"N	104°44'34.022"W	0.79	
4897.00	14.130	193.530	4794.56	-914.59	-923.56	-184.61	40°03'27.121"N	104°44'34.096"W	0.82	
4991.00	14.120	187.360	4885.72	-936.91	-946.09	-188.76	40°03'26.899"N	104°44'34.150"W	1.60	
5087.00	14.340	179.840	4978.79	-960.33	-969.59	-190.23	40°03'26.666"N	104°44'34.168"W	1.94	
5182.00	13.570	183.410	5070.98	-983.17	-992.48	-190.86	40°03'26.440"N	104°44'34.177"W	1.22	
5277.00	11.920	186.080	5163.64	-1003.96	-1013.37	-192.56	40°03'26.234"N	104°44'34.198"W	1.84	
5372.00	11.220	179.920	5256.71	-1022.89	-1032.37	-193.59	40°03'26.046"N	104°44'34.212"W	1.49	
5467.00	10.930	180.410	5349.94	-1041.12	-1050.61	-193.64	40°03'25.866"N	104°44'34.212"W	0.32	
5562.00	9.490	180.580	5443.44	-1057.94	-1067.45	-193.78	40°03'25.699"N	104°44'34.214"W	1.52	
5657.00	8.520	181.410	5537.26	-1072.78	-1082.32	-194.04	40°03'25.552"N	104°44'34.217"W	1.03	
5752.00	6.980	181.210	5631.39	-1085.56	-1095.13	-194.33	40°03'25.426"N	104°44'34.221"W	1.62	
5847.00	5.770	175.540	5725.80	-1096.09	-1105.66	-194.08	40°03'25.322"N	104°44'34.218"W	1.43	
5942.00	4.470	177.470	5820.42	-1104.57	-1114.12	-193.55	40°03'25.238"N	104°44'34.211"W	1.38	
6038.00	4.100	188.100	5916.16	-1111.68	-1121.25	-193.87	40°03'25.168"N	104°44'34.215"W	0.91	
6133.00	5.100	195.940	6010.85	-1119.03	-1128.68	-195.50	40°03'25.094"N	104°44'34.236"W	1.24	
6228.00	3.550	187.040	6105.58	-1125.93	-1135.66	-197.02	40°03'25.025"N	104°44'34.256"W	1.77	
6323.00	3.210	187.720	6200.41	-1131.45	-1141.21	-197.74	40°03'24.970"N	104°44'34.265"W	0.36	
6418.00	1.960	173.620	6295.32	-1135.69	-1145.46	-197.92	40°03'24.928"N	104°44'34.267"W	1.47	
6513.00	1.270	192.070	6390.28	-1138.33	-1148.11	-197.96	40°03'24.902"N	104°44'34.268"W	0.90	
6608.00	1.060	215.690	6485.26	-1140.04	-1149.85	-198.69	40°03'24.885"N	104°44'34.277"W	0.55	
6703.00	1.000	209.960	6580.24	-1141.43	-1151.28	-199.62	40°03'24.871"N	104°44'34.289"W	0.13	
6798.00	1.270	199.080	6675.22	-1143.11	-1152.99	-200.38	40°03'24.854"N	104°44'34.299"W	0.36	
6893.00	8.110	335.730	6769.94	-1137.85	-1147.87	-203.48	40°03'24.904"N	104°44'34.339"W	9.55	
6989.00	15.310	346.160	6863.89	-1119.11	-1129.36	-209.30	40°03'25.087"N	104°44'34.414"W	7.79	
7084.00	19.900	358.160	6954.44	-1090.62	-1101.00	-212.83	40°03'25.368"N	104°44'34.459"W	6.14	
7179.00	27.410	359.440	7041.40	-1052.55	-1062.92	-213.56	40°03'25.744"N	104°44'34.468"W	7.92	
7274.00	37.730	1.130	7121.35	-1001.54	-1011.85	-213.20	40°03'26.249"N	104°44'34.464"W	10.90	
7370.00	49.080	0.370	7190.98	-935.79	-946.00	-212.38	40°03'26.899"N	104°44'34.453"W	11.84	
7465.00	57.950	359.670	7247.42	-859.56	-869.70	-212.38	40°03'27.653"N	104°44'34.453"W	9.36	
7559.00	65.510	359.200	7291.90	-776.88	-786.97	-213.21	40°03'28.471"N	104°44'34.464"W	8.05	
7654.00	68.150	358.250	7329.28	-689.57	-699.67	-215.16	40°03'29.334"N	104°44'34.489"W	2.93	
7750.00	75.030	357.860	7359.58	-598.54	-608.69	-218.26	40°03'30.233"N	104°44'34.529"W	7.18	
7845.00	80.300	358.280	7379.87	-505.77	-515.97	-221.38	40°03'31.149"N	104°44'34.569"W	5.56	
7940.00	88.270	0.230	7389.32	-411.37	-421.53	-222.60	40°03'32.082"N	104°44'34.585"W	8.63	
7973.00†	89.010	0.265	7390.10	-378.42	-388.54	-222.45	40°03'32.408"N	104°44'34.583"W	2.24	TOP OF PRODUCTION
8035.00	90.400	0.330	7390.42	-316.50	-326.54	-222.13	40°03'33.021"N	104°44'34.579"W	2.24	
8130.00	92.280	0.480	7388.20	-221.65	-231.57	-221.46	40°03'33.960"N	104°44'34.570"W	1.99	
8231.00	92.610	0.000	7383.89	-120.86	-130.67	-221.04	40°03'34.957"N	104°44'34.565"W	0.58	
8326.00	89.440	358.950	7382.19	-25.94	-35.70	-221.91	40°03'35.895"N	104°44'34.576"W	3.52	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#05 GRISWOLD 2N-11HZ (560'FSL & 2028'FEL, SEC.11)
Area	COLORADO	Well	GRISWOLD 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GRISWOLD 2N-11HZ AWP <122-13033>
Facility	SEC.11-T1N-R66W		

WELLPATH DATA (139 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8421.00	87.590	357.650	7384.66	69.01	59.22	-224.72	40°03'36.833"N	104°44'34.612"W	2.38	
8516.00	88.830	359.110	7387.62	163.95	154.13	-227.41	40°03'37.771"N	104°44'34.647"W	2.02	
8611.00	89.810	0.700	7388.75	258.85	249.12	-227.57	40°03'38.710"N	104°44'34.649"W	1.97	
8706.00	90.120	1.030	7388.81	353.69	344.11	-226.13	40°03'39.649"N	104°44'34.630"W	0.48	
8801.00	89.690	0.810	7388.97	448.52	439.10	-224.61	40°03'40.587"N	104°44'34.611"W	0.51	
8896.00	89.930	1.270	7389.28	543.33	534.08	-222.88	40°03'41.526"N	104°44'34.589"W	0.55	
8992.00	90.330	1.570	7389.06	639.11	630.05	-220.50	40°03'42.474"N	104°44'34.558"W	0.52	
9087.00	90.120	0.690	7388.69	733.91	725.03	-218.63	40°03'43.413"N	104°44'34.534"W	0.95	
9182.00	89.440	359.560	7389.06	828.81	820.03	-218.42	40°03'44.352"N	104°44'34.531"W	1.39	
9277.00	89.470	359.980	7389.96	923.73	915.02	-218.80	40°03'45.290"N	104°44'34.536"W	0.44	
9372.00	89.190	359.540	7391.07	1018.65	1010.01	-219.20	40°03'46.229"N	104°44'34.541"W	0.55	
9467.00	90.950	2.000	7390.95	1113.48	1105.00	-217.93	40°03'47.168"N	104°44'34.525"W	3.18	
9562.00	90.060	1.050	7390.12	1208.24	1199.96	-215.40	40°03'48.106"N	104°44'34.492"W	1.37	
9657.00	90.430	1.190	7389.71	1303.05	1294.94	-213.54	40°03'49.045"N	104°44'34.468"W	0.42	
9847.00	89.900	0.750	7389.16	1492.70	1484.91	-210.32	40°03'50.922"N	104°44'34.427"W	0.36	
9942.00	90.610	0.270	7388.74	1587.56	1579.90	-209.48	40°03'51.861"N	104°44'34.416"W	0.90	
10037.00	90.270	359.250	7388.01	1682.48	1674.90	-209.88	40°03'52.800"N	104°44'34.421"W	1.13	
10132.00	90.890	357.850	7387.05	1777.46	1769.86	-212.28	40°03'53.738"N	104°44'34.452"W	1.61	
10226.00	89.780	357.710	7386.50	1871.45	1863.78	-215.92	40°03'54.666"N	104°44'34.499"W	1.19	
10321.00	90.240	358.540	7386.48	1966.45	1958.73	-219.03	40°03'55.605"N	104°44'34.539"W	1.00	
10416.00	91.780	358.830	7384.81	2061.41	2053.69	-221.21	40°03'56.543"N	104°44'34.567"W	1.65	
10511.00	91.690	358.620	7381.93	2156.34	2148.62	-223.32	40°03'57.481"N	104°44'34.594"W	0.24	
10606.00	91.810	358.380	7379.03	2251.28	2243.55	-225.81	40°03'58.419"N	104°44'34.626"W	0.28	
10702.00	89.780	357.780	7377.70	2347.26	2339.48	-229.02	40°03'59.367"N	104°44'34.668"W	2.20	
10797.00	89.540	357.490	7378.26	2442.26	2434.39	-232.94	40°04'00.305"N	104°44'34.718"W	0.40	
10892.00	89.540	357.820	7379.03	2537.26	2529.31	-236.83	40°04'01.243"N	104°44'34.768"W	0.35	
10987.00	90.000	359.340	7379.41	2632.24	2624.28	-239.18	40°04'02.182"N	104°44'34.798"W	1.67	
11082.00	90.090	0.000	7379.33	2727.17	2719.28	-239.73	40°04'03.120"N	104°44'34.806"W	0.70	
11176.00	89.780	2.240	7379.44	2820.97	2813.25	-237.89	40°04'04.049"N	104°44'34.782"W	2.41	
11271.00	90.310	2.010	7379.36	2915.66	2908.19	-234.37	40°04'04.987"N	104°44'34.737"W	0.61	
11366.00	91.450	1.980	7377.91	3010.36	3003.12	-231.07	40°04'05.925"N	104°44'34.694"W	1.20	
11461.00	90.950	0.550	7375.92	3105.13	3098.07	-228.97	40°04'06.864"N	104°44'34.667"W	1.59	
11556.00	90.770	359.750	7374.49	3200.01	3193.06	-228.72	40°04'07.802"N	104°44'34.664"W	0.86	
11651.00	90.740	0.010	7373.24	3294.92	3288.05	-228.92	40°04'08.741"N	104°44'34.666"W	0.28	
11746.00	90.310	359.230	7372.37	3389.85	3383.04	-229.55	40°04'09.680"N	104°44'34.675"W	0.94	
11841.00	89.910	358.910	7372.19	3484.81	3478.03	-231.09	40°04'10.619"N	104°44'34.694"W	0.54	
11936.00	90.620	359.060	7371.75	3579.78	3573.01	-232.77	40°04'11.557"N	104°44'34.716"W	0.76	
12031.00	90.520	359.030	7370.80	3674.74	3668.00	-234.36	40°04'12.496"N	104°44'34.736"W	0.11	
12126.00	90.520	0.540	7369.94	3769.66	3762.99	-234.71	40°04'13.435"N	104°44'34.741"W	1.59	
12221.00	90.650	1.970	7368.97	3864.44	3857.96	-232.63	40°04'14.373"N	104°44'34.714"W	1.51	
12317.00	90.430	2.130	7368.06	3960.14	3953.89	-229.20	40°04'15.321"N	104°44'34.670"W	0.28	
12412.00	91.170	1.770	7366.74	4054.84	4048.83	-225.97	40°04'16.259"N	104°44'34.629"W	0.87	
12507.00	91.440	2.010	7364.57	4149.53	4143.75	-222.83	40°04'17.197"N	104°44'34.588"W	0.38	
12602.00	91.540	1.870	7362.10	4244.22	4238.66	-219.62	40°04'18.135"N	104°44'34.547"W	0.18	
12698.00	91.720	2.240	7359.37	4339.87	4334.56	-216.18	40°04'19.083"N	104°44'34.503"W	0.43	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#05 GRISWOLD 2N-11HZ (560'FSL & 2028'FEL, SEC.11)
Area	COLORADO	Well	GRISWOLD 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GRISWOLD 2N-11HZ AWB <122-13033>
Facility	SEC.11-T1N-R66W		

WELLPATH DATA (139 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12793.00	90.770	1.880	7357.31	4434.55	4429.48	-212.76	40°04'20.021"N	104°44'34.459"W	1.07	
12888.00	90.550	1.860	7356.21	4529.26	4524.42	-209.66	40°04'20.959"N	104°44'34.419"W	0.23	
12978.00	90.180	1.980	7355.64	4618.99	4614.37	-206.65	40°04'21.848"N	104°44'34.380"W	0.43	LAST BHI MWD+IFR SURVEY
13033.00	90.180	1.980	7355.47	4673.82	4669.34	-204.75	40°04'22.391"N	104°44'34.356"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: GRISWOLD 2N-11HZ AWB <122-13033> Ref Wellpath: GRISWOLD 2N-11HZ 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	1748.00	1732.00	16.00	1729.10	0.00	0.00	-221.03	-41.82
9.625in Casing Surface	16.00	1738.00	1722.00	16.00	1719.28	0.00	0.00	-219.20	-41.43
8.5in Open Hole	1748.00	13033.00	11285.00	1729.10	7355.47	-221.03	-41.82	4669.34	-204.75

WELLPATH COMPOSITION - Ref Wellbore: GRISWOLD 2N-11HZ AWB <122-13033> Ref Wellpath: GRISWOLD 2N-11HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1698.00	ISCWSA MWD, Rev. 2 (Standard)	CATHEDRAL MWD SURVEYS <122-1698>	GRISWOLD 2N-11HZ AWB <122-13033>
1698.00	12978.00	NaviTrak (MAGCORR, IFR)	BHI NAVITRAK MWD+IFR 8 1/2" <1758-12978>	GRISWOLD 2N-11HZ AWB <122-13033>
12978.00	13033.00	Blind Drilling (std)	Projection to bit	GRISWOLD 2N-11HZ AWB <122-13033>

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#05 GRISWOLD 2N-11HZ (560'FSL & 2028'FEL, SEC.11)
Area	COLORADO	Well	GRISWOLD 2N-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GRISWOLD 2N-11HZ AWB <122-13033>
Facility	SEC.11-T1N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	165.800	16.00	TIE ON
122.00	0.300	165.800	122.00	BEGIN CATHEDRAL MWD SURVEYS
1698.00	10.300	192.500	1679.95	TIE ONTO CATHEDRAL MWD SURVEYS
1758.00	10.940	191.700	1738.92	BEGIN BHI MWD+IFR SURVEYS
7973.00	89.010	0.265	7390.10	TOP OF PRODUCTION
12978.00	90.180	1.980	7355.64	LAST BHI MWD+IFR SURVEY
13033.00	90.180	1.980	7355.47	PROJECTION TO BIT