

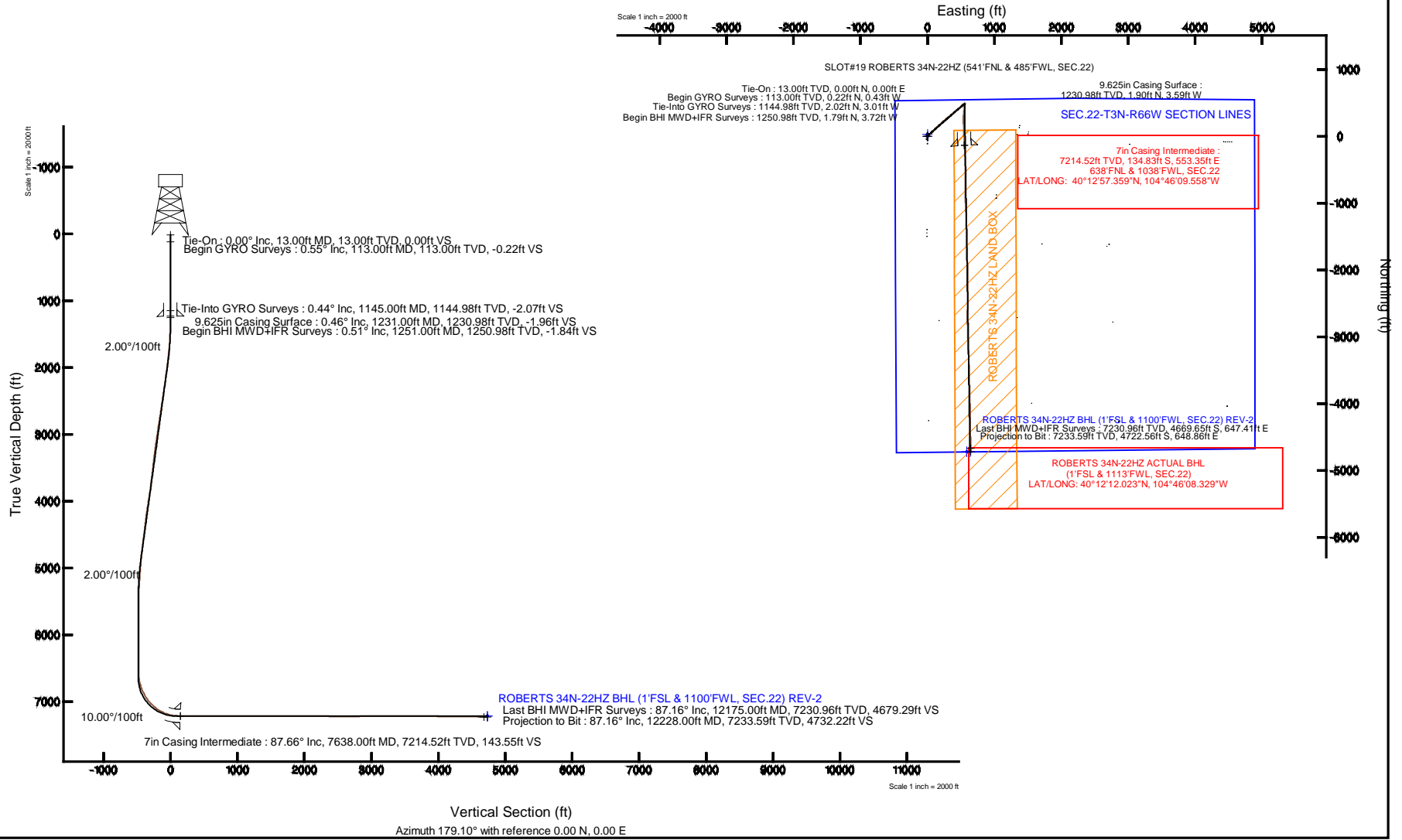
# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#19 ROBERTS 34N-22HZ (541'FNL & 485'FWL, SEC.22)  
 Field: WELD COUNTY (KERR MCGEE) Well: ROBERTS 34N-22HZ  
 Facility: SEC.22-T3N-R66W Wellbore: ROBERTS 34N-22HZ PWB



Plot reference wellpath is ROBERTS 34N-22HZ (REV-B.0) PWB

True vertical depths are referenced to ENSIGN 145 (13KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 145 (13KB) (RKB)	North Reference: True north
ENSGN 145 (13KB) (RKB) to Mean Sea Level: 4999 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#19 ROBERTS 34N-22HZ (541'FNL & 485'FWL, SEC.22)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precain on 11/Sep/2014



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 ROBERTS 34N-22HZ (541'FNL & 485'FWL, SEC.22)
Area	COLORADO	Well	ROBERTS 34N-22HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	ROBERTS 34N-22HZ AWB
Facility	SEC.22-T3N-R66W		

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	0.999957	Report Generated	11/Sep/2014 at 08:30
Convergence at slot	n/a	Database/Source file	WellArchitectDB/ROBERTS_34N-22HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	879.10	-1039.77	3203497.27	1322477.53	40°12'58.691"N	104°46'16.691"W
Facility Reference Pt			3204544.22	1321607.09	40°12'50.004"N	104°46'03.288"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	ENSIGN 145 (13'KB) (RKB) to Facility Vertical Datum	4898.00ft
Horizontal Reference Pt	Slot	ENSIGN 145 (13'KB) (RKB) to Mean Sea Level	4898.00ft
Vertical Reference Pt	ENSIGN 145 (13'KB) (RKB)	ENSIGN 145 (13'KB) (RKB) to Mud Line at Slot (SLOT#19 ROBERTS 34N-22HZ (541'FNL & 485'FWL, SEC.22))	4898.00ft
MD Reference Pt	ENSIGN 145 (13'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.10°

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Area	COLORADO	Well	ROBERTS 34N-22HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	ROBERTS 34N-22HZ AWB
Facility	SEC.22-T3N-R66W		

### WELLPATH DATA (148 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	296.780	0.00	0.00	0.00	0.00	40°12'58.691"N	104°46'16.691"W	0.00	
13.00	0.000	296.780	13.00	0.00	0.00	0.00	40°12'58.691"N	104°46'16.691"W	0.00	Tie-On
113.00	0.550	296.780	113.00	-0.22	0.22	-0.43	40°12'58.693"N	104°46'16.697"W	0.55	Begin GYRO Surveys
213.00	0.340	316.380	213.00	-0.66	0.65	-1.06	40°12'58.697"N	104°46'16.705"W	0.26	
313.00	0.240	359.810	312.99	-1.09	1.07	-1.27	40°12'58.702"N	104°46'16.707"W	0.23	
413.00	0.180	22.210	412.99	-1.45	1.43	-1.21	40°12'58.705"N	104°46'16.707"W	0.10	
513.00	0.090	325.280	512.99	-1.66	1.64	-1.19	40°12'58.707"N	104°46'16.706"W	0.15	
613.00	0.380	259.330	612.99	-1.66	1.64	-1.56	40°12'58.707"N	104°46'16.711"W	0.35	
713.00	0.470	289.090	712.99	-1.75	1.71	-2.28	40°12'58.708"N	104°46'16.720"W	0.23	
813.00	0.430	351.040	812.99	-2.26	2.22	-2.72	40°12'58.713"N	104°46'16.726"W	0.46	
913.00	0.270	76.860	912.99	-2.68	2.64	-2.55	40°12'58.717"N	104°46'16.724"W	0.49	
1013.00	0.360	190.680	1012.99	-2.42	2.39	-2.38	40°12'58.715"N	104°46'16.722"W	0.53	
1113.00	0.400	258.260	1112.98	-2.05	2.01	-2.78	40°12'58.711"N	104°46'16.727"W	0.42	
1145.00	0.440	286.560	1144.98	-2.07	2.02	-3.01	40°12'58.711"N	104°46'16.730"W	0.65	Tie-Into GYRO Surveys
1251.00	0.510	222.220	1250.98	-1.84	1.79	-3.72	40°12'58.709"N	104°46'16.739"W	0.48	Begin BHI MWD+IFR Surveys
1376.00	1.470	77.500	1375.97	-1.76	1.72	-2.52	40°12'58.708"N	104°46'16.724"W	1.53	
1469.00	3.230	50.820	1468.89	-3.62	3.63	0.67	40°12'58.727"N	104°46'16.682"W	2.18	
1563.00	5.040	50.270	1562.64	-7.85	7.95	5.90	40°12'58.770"N	104°46'16.615"W	1.93	
1657.00	7.360	43.620	1656.09	-14.73	14.95	13.23	40°12'58.839"N	104°46'16.520"W	2.58	
1750.00	9.190	49.150	1748.11	-23.75	24.12	22.96	40°12'58.929"N	104°46'16.395"W	2.14	
1844.00	10.030	51.470	1840.79	-33.57	34.13	35.04	40°12'59.028"N	104°46'16.239"W	0.98	
1938.00	10.790	52.190	1933.25	-43.85	44.62	48.40	40°12'59.132"N	104°46'16.067"W	0.82	
2031.00	12.320	49.230	2024.36	-55.44	56.44	62.79	40°12'59.249"N	104°46'15.882"W	1.76	
2125.00	11.940	47.200	2116.26	-68.36	69.59	77.52	40°12'59.379"N	104°46'15.692"W	0.61	
2218.00	11.670	46.430	2207.29	-81.16	82.61	91.39	40°12'59.507"N	104°46'15.513"W	0.34	
2312.00	11.680	45.670	2299.35	-94.14	95.81	105.09	40°12'59.638"N	104°46'15.336"W	0.16	
2467.00	11.200	42.640	2451.27	-115.84	117.85	126.51	40°12'59.856"N	104°46'15.060"W	0.50	
2558.00	11.960	44.230	2540.42	-128.89	131.11	139.07	40°12'59.987"N	104°46'14.898"W	0.91	
2648.00	12.350	44.920	2628.40	-142.18	144.60	152.37	40°13'00.120"N	104°46'14.727"W	0.46	
2738.00	13.280	47.960	2716.16	-155.69	158.34	166.84	40°13'00.256"N	104°46'14.540"W	1.28	
2828.00	13.300	49.200	2803.75	-169.13	172.03	182.36	40°13'00.391"N	104°46'14.340"W	0.32	
2918.00	13.150	48.490	2891.36	-182.43	185.58	197.86	40°13'00.525"N	104°46'14.140"W	0.25	
3008.00	13.180	48.380	2979.00	-195.79	199.18	213.20	40°13'00.659"N	104°46'13.943"W	0.04	
3098.00	12.540	48.210	3066.74	-208.87	212.50	228.15	40°13'00.791"N	104°46'13.750"W	0.71	
3188.00	12.470	48.310	3154.60	-221.62	225.48	242.69	40°13'00.919"N	104°46'13.563"W	0.08	
3278.00	11.730	47.940	3242.60	-233.98	238.07	256.74	40°13'01.044"N	104°46'13.381"W	0.83	
3368.00	10.830	49.300	3330.86	-245.42	249.71	269.95	40°13'01.159"N	104°46'13.211"W	1.04	
3458.00	9.400	52.350	3419.46	-255.23	259.71	282.18	40°13'01.257"N	104°46'13.054"W	1.70	
3548.00	10.170	51.350	3508.15	-264.49	269.17	294.20	40°13'01.351"N	104°46'12.899"W	0.88	
3638.00	11.130	50.680	3596.60	-274.75	279.63	307.13	40°13'01.454"N	104°46'12.732"W	1.08	
3728.00	11.220	49.130	3684.90	-285.77	290.87	320.47	40°13'01.565"N	104°46'12.560"W	0.35	
3818.00	11.300	53.190	3773.17	-296.57	301.88	334.15	40°13'01.674"N	104°46'12.384"W	0.89	
3908.00	12.800	51.240	3861.18	-307.86	313.41	348.98	40°13'01.788"N	104°46'12.192"W	1.73	
3998.00	14.110	46.570	3948.71	-321.39	327.19	364.72	40°13'01.924"N	104°46'11.989"W	1.89	
4088.00	14.040	46.380	4036.01	-336.21	342.26	380.59	40°13'02.073"N	104°46'11.785"W	0.09	

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Area	COLORADO		Well	ROBERTS 34N-22HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	ROBERTS 34N-22HZ AWP
Facility	SEC.22-T3N-R66W			

WELLPATH DATA (148 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4178.00	12.210	47.620	4123.65	-349.92	356.21	395.53	40°13'02.211"N	104°46'11.592"W	2.06	
4268.00	10.820	46.850	4211.84	-361.90	368.40	408.72	40°13'02.332"N	104°46'11.422"W	1.55	
4358.00	11.470	51.620	4300.14	-373.03	379.74	421.90	40°13'02.444"N	104°46'11.252"W	1.25	
4448.00	11.970	53.090	4388.27	-383.96	390.90	436.38	40°13'02.554"N	104°46'11.066"W	0.65	
4538.00	11.380	53.310	4476.41	-394.64	401.81	450.96	40°13'02.662"N	104°46'10.878"W	0.66	
4628.00	12.250	51.530	4564.50	-405.65	413.05	465.56	40°13'02.773"N	104°46'10.690"W	1.05	
4718.00	12.020	52.850	4652.49	-417.01	424.65	480.50	40°13'02.887"N	104°46'10.497"W	0.40	
4808.00	10.950	53.900	4740.68	-427.48	435.35	494.88	40°13'02.993"N	104°46'10.312"W	1.21	
4898.00	10.490	55.740	4829.11	-436.91	445.00	508.56	40°13'03.088"N	104°46'10.135"W	0.64	
4988.00	8.590	59.230	4917.87	-444.76	453.05	521.11	40°13'03.168"N	104°46'09.974"W	2.21	
5078.00	7.920	58.440	5006.93	-451.27	459.73	532.16	40°13'03.234"N	104°46'09.831"W	0.76	
5168.00	7.090	53.060	5096.16	-457.70	466.32	541.89	40°13'03.299"N	104°46'09.706"W	1.21	
5258.00	5.310	49.300	5185.63	-463.63	472.37	549.48	40°13'03.359"N	104°46'09.608"W	2.03	
5348.00	4.600	40.760	5275.30	-469.00	477.82	555.00	40°13'03.413"N	104°46'09.537"W	1.14	
5438.00	2.970	38.680	5365.10	-473.49	482.38	558.81	40°13'03.458"N	104°46'09.488"W	1.82	
5528.00	1.350	51.740	5455.03	-475.93	484.85	561.10	40°13'03.482"N	104°46'09.458"W	1.87	
5618.00	0.640	134.300	5545.02	-476.22	485.16	562.29	40°13'03.485"N	104°46'09.443"W	1.57	
5708.00	0.530	151.020	5635.02	-475.49	484.44	562.85	40°13'03.478"N	104°46'09.435"W	0.22	
5798.00	0.270	179.580	5725.01	-474.91	483.87	563.06	40°13'03.472"N	104°46'09.433"W	0.36	
5888.00	0.180	249.770	5815.01	-474.65	483.61	562.93	40°13'03.470"N	104°46'09.435"W	0.30	
5978.00	0.400	265.370	5905.01	-474.59	483.53	562.48	40°13'03.469"N	104°46'09.440"W	0.26	
6068.00	0.750	269.090	5995.01	-474.57	483.50	561.58	40°13'03.469"N	104°46'09.452"W	0.39	
6158.00	0.700	260.110	6085.00	-474.48	483.39	560.45	40°13'03.468"N	104°46'09.466"W	0.14	
6248.00	0.780	250.740	6174.99	-474.20	483.10	559.33	40°13'03.465"N	104°46'09.481"W	0.16	
6338.00	0.890	258.460	6264.98	-473.88	482.75	558.07	40°13'03.461"N	104°46'09.497"W	0.17	
6428.00	0.590	337.760	6354.98	-474.18	483.04	557.21	40°13'03.464"N	104°46'09.508"W	1.08	
6518.00	1.020	305.540	6444.97	-475.09	483.94	556.38	40°13'03.473"N	104°46'09.519"W	0.68	
6608.00	0.890	211.200	6534.96	-474.97	483.81	555.36	40°13'03.472"N	104°46'09.532"W	1.56	
6634.00	1.020	208.420	6560.96	-474.60	483.43	555.15	40°13'03.468"N	104°46'09.535"W	0.53	
6698.00	2.590	188.620	6624.92	-472.68	481.50	554.66	40°13'03.449"N	104°46'09.541"W	2.60	
6743.00	7.540	182.480	6669.73	-468.73	477.54	554.38	40°13'03.410"N	104°46'09.545"W	11.05	
6789.00	13.150	182.610	6714.97	-460.48	469.29	554.01	40°13'03.328"N	104°46'09.549"W	12.20	
6834.00	17.850	183.620	6758.32	-448.49	457.29	553.34	40°13'03.210"N	104°46'09.558"W	10.46	
6879.00	22.120	186.560	6800.60	-433.21	441.98	551.94	40°13'03.059"N	104°46'09.576"W	9.75	
6924.00	23.820	186.100	6842.03	-415.79	424.53	550.01	40°13'02.886"N	104°46'09.601"W	3.80	
6969.00	26.690	184.920	6882.73	-396.71	405.42	548.17	40°13'02.697"N	104°46'09.625"W	6.47	
7014.00	30.390	186.140	6922.25	-375.35	384.03	546.09	40°13'02.486"N	104°46'09.652"W	8.32	
7059.00	35.350	186.350	6960.04	-351.13	359.76	543.43	40°13'02.246"N	104°46'09.686"W	11.03	
7104.00	40.430	184.890	6995.54	-323.68	332.26	540.74	40°13'01.974"N	104°46'09.721"W	11.46	
7149.00	44.050	182.780	7028.85	-293.54	302.08	538.74	40°13'01.676"N	104°46'09.746"W	8.64	
7194.00	47.230	180.790	7060.31	-261.41	269.93	537.75	40°13'01.358"N	104°46'09.759"W	7.74	
7239.00	51.230	178.650	7089.69	-227.34	235.86	537.94	40°13'01.022"N	104°46'09.757"W	9.59	
7284.00	56.360	177.370	7116.26	-191.05	199.59	539.21	40°13'00.663"N	104°46'09.740"W	11.63	
7329.00	60.700	177.040	7139.75	-152.70	161.26	541.09	40°13'00.285"N	104°46'09.716"W	9.66	
7374.00	64.670	178.150	7160.40	-112.74	121.32	542.76	40°12'59.890"N	104°46'09.695"W	9.09	

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### WELLPATH DATA (148 stations) † = interpolated/extrapolated station

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7419.00	69.670	178.140	7177.85	-71.28	79.89	544.10	40°12'59.480"N	104°46'09.677"W	11.11	
7464.00	75.050	178.030	7191.48	-28.42	37.04	545.53	40°12'59.057"N	104°46'09.659"W	11.96	
7509.00	79.220	177.600	7201.50	15.43	-6.79	547.21	40°12'58.624"N	104°46'09.637"W	9.31	
7554.00	82.430	177.410	7208.67	59.83	-51.16	549.14	40°12'58.185"N	104°46'09.612"W	7.15	
7589.00	86.540	177.030	7212.04	94.64	-85.95	550.83	40°12'57.842"N	104°46'09.591"W	11.79	
7638.00†	87.659	177.068	7214.52	143.55	-134.83	553.35	40°12'57.359"N	104°46'09.558"W	2.29	7" Casing Point
7705.00	89.190	177.120	7216.36	210.48	-201.71	556.74	40°12'56.698"N	104°46'09.514"W	2.29	
7795.00	89.260	177.420	7217.58	300.43	-291.60	561.03	40°12'55.809"N	104°46'09.459"W	0.34	
7885.00	89.440	177.600	7218.60	390.39	-381.51	564.94	40°12'54.921"N	104°46'09.409"W	0.28	
7975.00	90.000	179.300	7219.04	480.38	-471.47	567.37	40°12'54.032"N	104°46'09.377"W	1.99	
8065.00	90.150	180.020	7218.92	570.37	-561.47	567.91	40°12'53.143"N	104°46'09.371"W	0.82	
8155.00	89.840	179.780	7218.93	660.36	-651.47	568.07	40°12'52.253"N	104°46'09.369"W	0.44	
8245.00	89.810	181.470	7219.20	750.33	-741.46	567.08	40°12'51.364"N	104°46'09.381"W	1.88	
8335.00	90.090	180.110	7219.28	840.28	-831.45	565.84	40°12'50.475"N	104°46'09.397"W	1.54	
8425.00	90.580	178.750	7218.75	930.28	-921.44	566.74	40°12'49.585"N	104°46'09.386"W	1.61	
8515.00	90.890	177.100	7217.60	1020.25	-1011.37	570.00	40°12'48.697"N	104°46'09.344"W	1.87	
8605.00	90.210	177.070	7216.74	1110.19	-1101.25	574.57	40°12'47.808"N	104°46'09.285"W	0.76	
8695.00	89.870	177.440	7216.67	1200.14	-1191.15	578.88	40°12'46.920"N	104°46'09.229"W	0.56	
8785.00	90.210	178.760	7216.61	1290.13	-1281.10	581.87	40°12'46.031"N	104°46'09.191"W	1.51	
8875.00	89.440	178.470	7216.88	1380.12	-1371.07	584.04	40°12'45.142"N	104°46'09.163"W	0.91	
8965.00	88.640	178.370	7218.39	1470.10	-1461.02	586.52	40°12'44.253"N	104°46'09.131"W	0.90	
9055.00	90.030	178.730	7219.44	1560.09	-1550.98	588.80	40°12'43.364"N	104°46'09.102"W	1.60	
9145.00	90.090	178.340	7219.34	1650.09	-1640.95	591.10	40°12'42.475"N	104°46'09.072"W	0.44	
9235.00	91.290	178.620	7218.26	1740.07	-1730.91	593.49	40°12'41.586"N	104°46'09.041"W	1.37	
9325.00	91.260	178.440	7216.26	1830.05	-1820.86	595.80	40°12'40.697"N	104°46'09.012"W	0.20	
9415.00	89.750	177.350	7215.46	1920.02	-1910.79	599.10	40°12'39.809"N	104°46'08.969"W	2.07	
9505.00	90.270	179.420	7215.45	2010.01	-2000.75	601.64	40°12'38.920"N	104°46'08.936"W	2.37	
9595.00	89.810	178.540	7215.38	2100.00	-2090.74	603.24	40°12'38.030"N	104°46'08.916"W	1.10	
9685.00	89.130	180.060	7216.22	2190.00	-2180.72	604.34	40°12'37.141"N	104°46'08.901"W	1.85	
9775.00	88.580	180.170	7218.02	2279.96	-2270.71	604.16	40°12'36.252"N	104°46'08.904"W	0.62	
9865.00	88.920	180.560	7219.98	2369.92	-2360.68	603.59	40°12'35.363"N	104°46'08.911"W	0.57	
9955.00	89.400	180.750	7221.30	2459.88	-2450.67	602.56	40°12'34.474"N	104°46'08.925"W	0.57	
10045.00	90.430	181.710	7221.43	2549.81	-2540.64	600.63	40°12'33.584"N	104°46'08.949"W	1.56	
10135.00	89.870	181.440	7221.20	2639.73	-2630.61	598.15	40°12'32.695"N	104°46'08.981"W	0.69	
10225.00	90.300	179.970	7221.06	2729.69	-2720.60	597.05	40°12'31.806"N	104°46'08.996"W	1.70	
10315.00	90.920	178.160	7220.10	2819.68	-2810.58	598.51	40°12'30.917"N	104°46'08.977"W	2.13	
10405.00	90.520	178.140	7218.97	2909.66	-2900.52	601.42	40°12'30.028"N	104°46'08.939"W	0.44	
10495.00	89.840	178.140	7218.69	2999.65	-2990.47	604.34	40°12'29.139"N	104°46'08.902"W	0.76	
10585.00	90.980	177.330	7218.05	3089.62	-3080.40	607.90	40°12'28.251"N	104°46'08.856"W	1.55	
10675.00	90.460	177.440	7216.92	3179.57	-3170.30	612.00	40°12'27.362"N	104°46'08.803"W	0.59	
10765.00	90.270	177.970	7216.34	3269.54	-3260.22	615.61	40°12'26.474"N	104°46'08.757"W	0.63	
10855.00	90.000	177.800	7216.13	3359.52	-3350.16	618.93	40°12'25.585"N	104°46'08.714"W	0.35	
10946.00	89.280	178.840	7216.70	3450.51	-3441.12	621.60	40°12'24.686"N	104°46'08.679"W	1.39	
11036.00	90.670	178.720	7216.74	3540.50	-3531.10	623.51	40°12'23.797"N	104°46'08.655"W	1.55	
11126.00	90.300	178.440	7215.98	3630.50	-3621.07	625.74	40°12'22.908"N	104°46'08.626"W	0.52	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 ROBERTS 34N-22HZ (541'FNL & 485'FWL, SEC.22)
Area	COLORADO	Well	ROBERTS 34N-22HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	ROBERTS 34N-22HZ AWB
Facility	SEC.22-T3N-R66W		

WELLPATH DATA (148 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11216.00	89.660	178.400	7216.01	3720.49	-3711.03	628.22	40°12'22.019"N	104°46'08.594"W	0.71	
11306.00	89.320	178.370	7216.81	3810.48	-3800.99	630.76	40°12'21.130"N	104°46'08.561"W	0.38	
11396.00	88.760	178.410	7218.32	3900.46	-3890.94	633.29	40°12'20.241"N	104°46'08.529"W	0.62	
11486.00	89.320	179.000	7219.83	3990.45	-3980.91	635.32	40°12'19.352"N	104°46'08.503"W	0.90	
11576.00	90.210	178.960	7220.20	4080.44	-4070.89	636.92	40°12'18.463"N	104°46'08.482"W	0.99	
11666.00	89.590	179.130	7220.35	4170.44	-4160.88	638.42	40°12'17.573"N	104°46'08.463"W	0.71	
11756.00	88.920	179.100	7221.52	4260.43	-4250.86	639.81	40°12'16.684"N	104°46'08.445"W	0.75	
11846.00	89.630	179.330	7222.66	4350.43	-4340.84	641.05	40°12'15.795"N	104°46'08.429"W	0.83	
11936.00	89.100	179.240	7223.66	4440.42	-4430.83	642.17	40°12'14.906"N	104°46'08.415"W	0.60	
12026.00	88.520	178.990	7225.53	4530.40	-4520.80	643.56	40°12'14.017"N	104°46'08.397"W	0.70	
12116.00	87.840	178.270	7228.39	4620.35	-4610.73	645.71	40°12'13.128"N	104°46'08.369"W	1.10	
12175.00	87.160	178.430	7230.96	4679.29	-4669.65	647.41	40°12'12.546"N	104°46'08.347"W	1.18	Last BHI MWD+IFR Surveys
12228.00	87.160	178.430	7233.59	4732.22	-4722.56	648.86	40°12'12.023"N	104°46'08.329"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: ROBERTS 34N-22HZ AWB Ref Wellpath: ROBERTS 34N-22HZ 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	13.00	1241.00	1228.00	13.00	1240.98	0.00	0.00	1.85	-3.66
9.625in Casing Surface	13.00	1231.00	1218.00	13.00	1230.98	0.00	0.00	1.90	-3.59
8.75in Open Hole	1241.00	7648.00	6407.00	1240.98	7214.91	1.85	-3.66	-144.80	553.86
7in Casing Intermediate	13.00	7638.00	7625.00	13.00	7214.52	0.00	0.00	-134.83	553.35
6.125in Open Hole	7648.00	12228.00	4580.00	7214.91	7233.59	-144.80	553.86	-4722.56	648.86

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 ROBERTS 34N-22HZ (541'FNL & 485'FWL, SEC.22)
Area	COLORADO	Well	ROBERTS 34N-22HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	ROBERTS 34N-22HZ AWB
Facility	SEC.22-T3N-R66W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
ROBERTS 34N-22HZ LAND BOX		0.00	0.00	0.00	3203497.27	1322477.53	40°12'58.691"N	104°46'16.691"W	polygon
SEC.22-T3N-R66W SECTION LINES		0.00	29.85	-0.23	3203496.79	1322507.38	40°12'58.986"N	104°46'16.694"W	polygon
ROBERTS 34N-22HZ BHL (1'FSL & 1100'FWL, SEC.22) REV-2		7218.00	-4723.16	636.61	3204172.64	1317759.98	40°12'12.017"N	104°46'08.486"W	point
ROBERTS 34N-22HZ BHL ON PLAT (1'FSL & 1050'FWL, SEC.22) REV-1		7218.00	-4723.16	586.61	3204122.65	1317759.56	40°12'12.017"N	104°46'09.131"W	point

WELLPATH COMPOSITION - Ref Wellbore: ROBERTS 34N-22HZ AWB Ref Wellpath: ROBERTS 34N-22HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	1145.00	Generic gyro - continuous (Standard)	MS ENERGY SERVICES <113-1145>	ROBERTS 34N-22HZ AWB
1145.00	7589.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1251-7589>	ROBERTS 34N-22HZ AWB
7589.00	12175.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7705-12175>	ROBERTS 34N-22HZ AWB
12175.00	12228.00	Blind Drilling (std)	Projection to bit	ROBERTS 34N-22HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 ROBERTS 34N-22HZ (541'FNL & 485'FWL, SEC.22)
Area	COLORADO	Well	ROBERTS 34N-22HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	ROBERTS 34N-22HZ AWB
Facility	SEC.22-T3N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	296.780	13.00	Tie-On
113.00	0.550	296.780	113.00	Begin GYRO Surveys
1145.00	0.440	286.560	1144.98	Tie-Into GYRO Surveys
1251.00	0.510	222.220	1250.98	Begin BHI MWD+IFR Surveys
7638.00	87.659	177.068	7214.52	7" Casing Point
12175.00	87.160	178.430	7230.96	Last BHI MWD+IFR Surveys
12228.00	87.160	178.430	7233.59	Projection to Bit