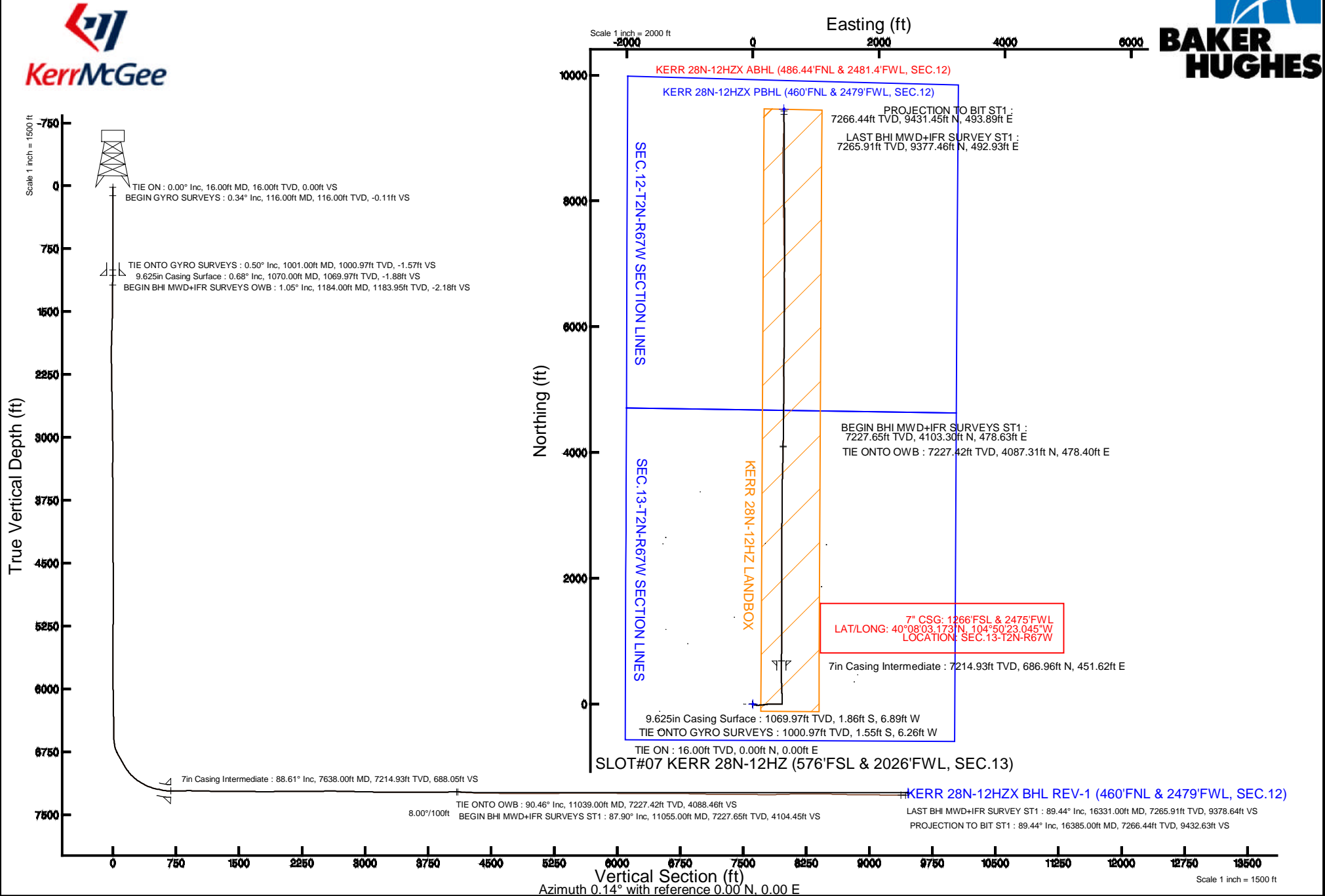


KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)

Location: COLORADO Slot: SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13)
 Field: WELD COUNTY (KERR MCGEE) Well: KERR 28N-12HZ
 Facility: SEC.13-T2N-R67W Wellbore: KERR 28N-12HZX PWB

Plot reference wellpath is KERR 28N-12HZX (REV-A.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: 4899 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 1/20/2015



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13)
Area	COLORADO	Well	KERR 28N-12HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERR 28N-12HZX AWB <11039-16385>
Facility	SEC.13-T2N-R67W	Sidetrack from	KERR 28N-12HZ AWB <116-14112> at 11039.00 MD

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	0.999959	Report Generated	1/20/2015 at 11:14:02 AM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/KERR_28N-12HZX_AWB_11039-16385_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-375.58	-1613.42	3184163.42	1291735.10	40°07'56.384"N	104°50'28.860"W
Facility Reference Pt			3185773.91	1292122.74	40°08'00.096"N	104°50'08.088"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	4899.00ft
Horizontal Reference Pt	Slot	XTREME 24 (16'KB) (RKB) to Mean Sea Level	4899.00ft
Vertical Reference Pt	XTREME 24 (16'KB) (RKB)	XTREME 24 (16'KB) (RKB) to Mud Line at Slot (SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13))	4899.00ft
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	3.00°

Actual Wellpath Report

KERR 28N-12HZX AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13)
Area	COLORADO	Well	KERR 28N-12HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERR 28N-12HZX AWB <11039-16385>
Facility	SEC.13-T2N-R67W	Sidetrack from	KERR 28N-12HZ AWB <116-14112> at 11039.00 MD

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	249.460	0.00	0.00	0.00	0.00	40°07'56.384"N	104°50'28.860"W	0.00	
16.00	0.000	249.460	16.00	0.00	0.00	0.00	40°07'56.384"N	104°50'28.860"W	0.00	TIE ON
116.00	0.344	249.460	116.00	-0.12	-0.11	-0.28	40°07'56.383"N	104°50'28.864"W	0.34	BEGIN GYRO SURVEYS
216.00	0.211	302.110	216.00	-0.15	-0.11	-0.72	40°07'56.383"N	104°50'28.869"W	0.27	
316.00	0.243	260.490	316.00	-0.11	-0.05	-1.08	40°07'56.384"N	104°50'28.874"W	0.16	
416.00	0.158	320.454	416.00	-0.05	0.02	-1.38	40°07'56.384"N	104°50'28.878"W	0.21	
516.00	0.319	269.320	516.00	0.03	0.12	-1.75	40°07'56.385"N	104°50'28.882"W	0.25	
616.00	0.479	265.124	615.99	-0.04	0.09	-2.44	40°07'56.385"N	104°50'28.891"W	0.16	
716.00	0.674	246.209	715.99	-0.36	-0.19	-3.40	40°07'56.382"N	104°50'28.904"W	0.27	
816.00	0.662	240.907	815.98	-0.94	-0.71	-4.44	40°07'56.377"N	104°50'28.917"W	0.06	
916.00	0.671	251.136	915.98	-1.46	-1.18	-5.50	40°07'56.372"N	104°50'28.931"W	0.12	
1001.00	0.495	233.641	1000.97	-1.88	-1.55	-6.26	40°07'56.369"N	104°50'28.941"W	0.29	TIE ONTO GYRO SURVEYS
1184.00	1.050	265.390	1183.95	-2.60	-2.16	-8.57	40°07'56.363"N	104°50'28.970"W	0.37	BEGIN BHI MWD+IFR SURVEYS OWB
1278.00	0.550	121.990	1277.95	-2.94	-2.47	-9.05	40°07'56.360"N	104°50'28.976"W	1.62	
1372.00	2.660	97.810	1371.91	-3.34	-3.00	-6.50	40°07'56.354"N	104°50'28.944"W	2.31	
1466.00	5.270	96.110	1465.68	-3.75	-3.76	-0.05	40°07'56.347"N	104°50'28.861"W	2.78	
1560.00	6.880	107.360	1559.15	-5.39	-5.90	9.62	40°07'56.326"N	104°50'28.736"W	2.12	
1749.00	8.040	107.260	1746.54	-11.45	-13.20	33.04	40°07'56.254"N	104°50'28.435"W	0.61	
1843.00	9.750	97.270	1839.42	-13.66	-16.15	47.22	40°07'56.224"N	104°50'28.252"W	2.45	
2032.00	10.570	88.990	2025.46	-13.64	-17.87	80.43	40°07'56.207"N	104°50'27.825"W	0.89	
2216.00	11.190	86.740	2206.15	-10.52	-16.56	115.13	40°07'56.220"N	104°50'27.378"W	0.41	
2398.00	10.450	84.130	2384.92	-6.05	-13.87	149.18	40°07'56.247"N	104°50'26.939"W	0.49	
2581.00	9.620	81.840	2565.12	-0.53	-10.00	180.82	40°07'56.285"N	104°50'26.532"W	0.50	
2765.00	10.980	81.470	2746.15	5.95	-5.22	213.37	40°07'56.332"N	104°50'26.113"W	0.74	
2949.00	10.600	90.550	2926.91	10.17	-2.78	247.63	40°07'56.356"N	104°50'25.672"W	0.95	
3132.00	9.490	88.670	3107.10	12.03	-2.59	279.54	40°07'56.358"N	104°50'25.261"W	0.63	
3316.00	8.670	92.470	3288.79	13.30	-2.84	308.56	40°07'56.356"N	104°50'24.887"W	0.55	
3499.00	8.620	88.180	3469.72	14.58	-3.00	336.05	40°07'56.354"N	104°50'24.534"W	0.35	
3683.00	9.260	88.310	3651.48	16.95	-2.12	364.63	40°07'56.363"N	104°50'24.166"W	0.35	
3869.00	7.740	89.790	3835.43	18.87	-1.64	392.12	40°07'56.368"N	104°50'23.812"W	0.83	
3963.00	7.520	87.400	3928.60	19.82	-1.33	404.59	40°07'56.371"N	104°50'23.651"W	0.41	
4056.00	6.660	90.920	4020.89	20.61	-1.15	416.06	40°07'56.373"N	104°50'23.503"W	1.04	
4149.00	6.350	91.540	4113.29	20.94	-1.37	426.60	40°07'56.370"N	104°50'23.368"W	0.34	
4242.00	5.990	90.290	4205.75	21.30	-1.53	436.59	40°07'56.369"N	104°50'23.239"W	0.41	
4335.00	5.860	87.470	4298.25	21.99	-1.35	446.18	40°07'56.371"N	104°50'23.116"W	0.34	
4428.00	4.160	75.190	4390.90	23.48	-0.28	454.19	40°07'56.381"N	104°50'23.013"W	2.15	
4521.00	3.010	63.130	4483.72	25.72	1.69	459.63	40°07'56.401"N	104°50'22.943"W	1.47	
4614.00	1.080	63.670	4576.65	27.37	3.18	462.59	40°07'56.415"N	104°50'22.904"W	2.08	
4708.00	1.060	73.450	4670.64	28.09	3.82	464.22	40°07'56.422"N	104°50'22.883"W	0.20	
4795.00	0.970	81.110	4757.62	28.51	4.17	465.72	40°07'56.425"N	104°50'22.864"W	0.19	
4884.00	0.660	73.400	4846.61	28.84	4.43	466.95	40°07'56.428"N	104°50'22.848"W	0.37	
4973.00	0.970	235.060	4935.61	28.55	4.14	466.83	40°07'56.425"N	104°50'22.850"W	1.81	
5151.00	1.020	242.470	5113.58	26.82	2.55	464.19	40°07'56.409"N	104°50'22.884"W	0.08	
5329.00	0.520	235.100	5291.57	25.52	1.35	462.12	40°07'56.397"N	104°50'22.910"W	0.29	
5506.00	0.440	232.020	5468.56	24.58	0.48	460.93	40°07'56.389"N	104°50'22.926"W	0.05	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13)
Area	COLORADO	Well	KERR 28N-12HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERR 28N-12HZX AWB <11039-16385>
Facility	SEC.13-T2N-R67W	Sidetrack from	KERR 28N-12HZ AWB <116-14112> at 11039.00 MD

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
5684.00	0.140	311.570	5646.56	24.27	0.20	460.22	40°07'56.386"N	104°50'22.935"W	0.25	
5862.00	0.070	327.210	5824.56	24.49	0.44	460.00	40°07'56.388"N	104°50'22.938"W	0.04	
6033.00	0.700	355.380	5995.55	25.61	1.56	459.86	40°07'56.399"N	104°50'22.939"W	0.37	
6203.00	0.860	22.310	6165.54	27.84	3.78	460.26	40°07'56.421"N	104°50'22.934"W	0.23	
6373.00	1.250	4.600	6335.51	30.90	6.81	460.90	40°07'56.451"N	104°50'22.926"W	0.30	
6543.00	0.520	28.240	6505.49	33.45	9.34	461.41	40°07'56.476"N	104°50'22.920"W	0.47	
6629.00	1.470	352.770	6591.48	34.89	10.77	461.46	40°07'56.490"N	104°50'22.919"W	1.27	
6714.00	10.770	3.410	6675.90	43.93	19.80	461.79	40°07'56.580"N	104°50'22.915"W	10.98	
6799.00	27.770	0.670	6755.84	71.86	47.74	462.50	40°07'56.856"N	104°50'22.906"W	20.02	
6884.00	28.160	1.750	6830.92	111.70	87.59	463.34	40°07'57.249"N	104°50'22.895"W	0.75	
6969.00	30.190	356.020	6905.15	152.98	128.97	462.47	40°07'57.658"N	104°50'22.906"W	4.06	
7054.00	36.660	356.430	6976.05	199.45	175.66	459.41	40°07'58.120"N	104°50'22.945"W	7.62	
7139.00	47.110	357.490	7039.25	255.81	232.26	456.46	40°07'58.679"N	104°50'22.983"W	12.32	
7224.00	53.830	358.070	7093.32	321.06	297.73	453.93	40°07'59.326"N	104°50'23.016"W	7.92	
7308.00	61.960	359.250	7137.92	391.95	368.80	452.30	40°08'00.029"N	104°50'23.037"W	9.75	
7394.00	71.780	359.080	7171.66	470.76	447.78	451.15	40°08'00.809"N	104°50'23.052"W	11.42	
7479.00	77.410	359.860	7194.24	552.52	529.69	450.40	40°08'01.618"N	104°50'23.061"W	6.68	
7564.00	80.960	0.480	7210.18	635.90	613.17	450.65	40°08'02.443"N	104°50'23.058"W	4.24	
7594.00	87.130	0.840	7213.29	665.70	642.99	450.99	40°08'02.738"N	104°50'23.054"W	20.60	
7638.00†	88.610	0.802	7214.93	709.63	686.96	451.62	40°08'03.173"N	104°50'23.045"W	3.37	7" CASING POINT
7723.00	91.470	0.730	7214.87	794.56	771.94	452.76	40°08'04.012"N	104°50'23.031"W	3.37	
7809.00	90.670	1.040	7213.26	880.49	857.91	454.09	40°08'04.862"N	104°50'23.014"W	1.00	
7893.00	89.260	0.400	7213.31	964.42	941.90	455.14	40°08'05.692"N	104°50'23.000"W	1.84	
7978.00	88.890	0.140	7214.69	1049.31	1026.89	455.54	40°08'06.532"N	104°50'22.995"W	0.53	
8063.00	88.340	0.160	7216.74	1134.18	1111.87	455.77	40°08'07.372"N	104°50'22.992"W	0.65	
8148.00	88.580	0.600	7219.02	1219.06	1196.83	456.33	40°08'08.211"N	104°50'22.985"W	0.59	
8234.00	89.380	0.010	7220.56	1304.95	1282.82	456.79	40°08'09.061"N	104°50'22.979"W	1.16	
8319.00	89.570	0.420	7221.33	1389.85	1367.81	457.11	40°08'09.901"N	104°50'22.975"W	0.53	
8404.00	90.400	0.220	7221.36	1474.75	1452.81	457.58	40°08'10.741"N	104°50'22.969"W	1.00	
8489.00	90.280	359.690	7220.85	1559.63	1537.81	457.51	40°08'11.581"N	104°50'22.969"W	0.64	
8574.00	88.580	359.530	7221.70	1644.47	1622.80	456.93	40°08'12.421"N	104°50'22.977"W	2.01	
8659.00	88.950	359.190	7223.53	1729.28	1707.77	455.99	40°08'13.260"N	104°50'22.989"W	0.59	
8744.00	89.940	359.610	7224.35	1814.11	1792.76	455.10	40°08'14.100"N	104°50'23.000"W	1.27	
8829.00	90.890	359.320	7223.74	1898.95	1877.76	454.30	40°08'14.940"N	104°50'23.011"W	1.17	
9013.00	91.110	0.130	7220.53	2082.62	2061.73	453.42	40°08'16.758"N	104°50'23.022"W	0.46	
9103.00	90.430	0.730	7219.32	2172.52	2151.71	454.09	40°08'17.647"N	104°50'23.013"W	1.01	
9287.00	89.720	0.510	7219.08	2356.36	2335.70	456.09	40°08'19.466"N	104°50'22.988"W	0.40	
9470.00	90.920	0.190	7218.05	2539.15	2518.69	457.20	40°08'21.274"N	104°50'22.973"W	0.68	
9562.00	89.630	0.180	7217.61	2631.04	2610.69	457.50	40°08'22.183"N	104°50'22.969"W	1.40	
9654.00	88.420	0.650	7219.18	2722.93	2702.67	458.17	40°08'23.092"N	104°50'22.961"W	1.41	
9838.00	88.890	0.400	7223.50	2906.71	2886.61	459.85	40°08'24.910"N	104°50'22.939"W	0.29	
10021.00	88.490	0.720	7227.68	3089.50	3069.55	461.64	40°08'26.718"N	104°50'22.916"W	0.28	
10204.00	88.950	0.570	7231.77	3272.29	3252.50	463.70	40°08'28.525"N	104°50'22.889"W	0.26	
10388.00	90.400	0.340	7232.81	3456.11	3436.48	465.16	40°08'30.344"N	104°50'22.870"W	0.80	
10481.00	90.800	0.580	7231.84	3549.01	3529.47	465.91	40°08'31.263"N	104°50'22.861"W	0.50	

Actual Wellpath Report

KERR 28N-12HZX AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13)
Area	COLORADO	Well	KERR 28N-12HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERR 28N-12HZX AWP <11039-16385>
Facility	SEC.13-T2N-R67W	Sidetrack from	KERR 28N-12HZ AWP <116-14112> at 11039.00 MD

WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10666.00	90.090	1.720	7230.40	3733.90	3714.43	469.62	40°08'33.090"N	104°50'22.813"W	0.73	
10853.00	90.640	1.490	7229.21	3920.84	3901.35	474.86	40°08'34.937"N	104°50'22.745"W	0.32	
11039.00	90.460	0.690	7227.42	4106.73	4087.31	478.40	40°08'36.775"N	104°50'22.700"W	0.44	TIE ONTO OWB
11055.00	87.900	1.020	7227.65	4122.72	4103.30	478.63	40°08'36.933"N	104°50'22.697"W	16.13	BEGIN BHI MWD+IFR SURVEYS ST1
11140.00	85.990	1.750	7232.18	4207.56	4188.15	480.69	40°08'37.772"N	104°50'22.670"W	2.41	
11225.00	86.760	0.770	7237.56	4292.35	4272.96	482.55	40°08'38.610"N	104°50'22.646"W	1.46	
11310.00	88.670	0.770	7240.95	4377.21	4357.88	483.69	40°08'39.449"N	104°50'22.632"W	2.25	
11395.00	89.630	0.300	7242.21	4462.12	4442.86	484.49	40°08'40.289"N	104°50'22.621"W	1.26	
11480.00	89.590	1.700	7242.79	4547.07	4527.85	485.97	40°08'41.129"N	104°50'22.602"W	1.65	
11565.00	89.810	2.310	7243.23	4632.05	4612.79	488.94	40°08'41.968"N	104°50'22.564"W	0.76	
11650.00	88.980	359.980	7244.13	4717.00	4697.77	490.64	40°08'42.808"N	104°50'22.542"W	2.91	
11735.00	88.550	0.120	7245.96	4801.86	4782.75	490.71	40°08'43.647"N	104°50'22.541"W	0.53	
11820.00	89.190	359.980	7247.64	4886.73	4867.73	490.79	40°08'44.487"N	104°50'22.540"W	0.77	
11907.00	90.490	359.520	7247.88	4973.59	4954.73	490.41	40°08'45.347"N	104°50'22.545"W	1.59	
11992.00	91.070	359.420	7246.72	5058.42	5039.71	489.62	40°08'46.187"N	104°50'22.555"W	0.69	
12079.00	90.700	358.870	7245.38	5145.21	5126.69	488.33	40°08'47.046"N	104°50'22.572"W	0.76	
12164.00	90.520	358.470	7244.47	5229.97	5211.67	486.35	40°08'47.886"N	104°50'22.597"W	0.52	
12249.00	90.800	0.720	7243.50	5314.81	5296.65	485.75	40°08'48.726"N	104°50'22.605"W	2.67	
12334.00	90.950	0.250	7242.20	5399.71	5381.64	486.47	40°08'49.566"N	104°50'22.596"W	0.58	
12419.00	91.260	359.850	7240.56	5484.59	5466.62	486.55	40°08'50.406"N	104°50'22.595"W	0.60	
12504.00	89.720	2.000	7239.83	5569.52	5551.60	487.92	40°08'51.245"N	104°50'22.577"W	3.11	
12589.00	90.370	2.440	7239.76	5654.51	5636.54	491.21	40°08'52.085"N	104°50'22.534"W	0.92	
12674.00	89.960	2.100	7239.52	5739.50	5721.47	494.58	40°08'52.924"N	104°50'22.491"W	0.63	
12844.00	88.980	359.940	7241.09	5909.38	5891.42	497.60	40°08'54.603"N	104°50'22.452"W	1.40	
12931.00	88.480	359.790	7243.02	5996.23	5978.40	497.40	40°08'55.463"N	104°50'22.455"W	0.60	
13016.00	88.270	0.690	7245.43	6081.10	6063.36	497.75	40°08'56.303"N	104°50'22.450"W	1.09	
13101.00	89.410	0.600	7247.15	6166.01	6148.34	498.71	40°08'57.142"N	104°50'22.438"W	1.35	
13186.00	91.200	0.730	7246.70	6250.93	6233.33	499.70	40°08'57.982"N	104°50'22.425"W	2.11	
13357.00	90.060	0.340	7244.82	6421.76	6404.31	501.29	40°08'59.672"N	104°50'22.404"W	0.70	
13442.00	89.780	0.270	7244.94	6506.67	6489.31	501.75	40°09'00.512"N	104°50'22.399"W	0.34	
13527.00	90.240	0.190	7244.92	6591.57	6574.31	502.09	40°09'01.352"N	104°50'22.394"W	0.55	
13612.00	89.440	359.050	7245.16	6676.42	6659.30	501.52	40°09'02.192"N	104°50'22.401"W	1.64	
13697.00	89.040	359.100	7246.29	6761.21	6744.28	500.15	40°09'03.032"N	104°50'22.419"W	0.47	
13782.00	89.040	359.390	7247.71	6846.02	6829.26	499.03	40°09'03.871"N	104°50'22.433"W	0.34	
13867.00	88.980	0.580	7249.18	6930.88	6914.25	499.01	40°09'04.711"N	104°50'22.434"W	1.40	
13952.00	87.810	358.210	7251.56	7015.68	6999.20	498.11	40°09'05.551"N	104°50'22.445"W	3.11	
14037.00	89.660	359.220	7253.44	7100.41	7084.16	496.21	40°09'06.390"N	104°50'22.470"W	2.48	
14122.00	89.630	359.270	7253.96	7185.23	7169.15	495.09	40°09'07.230"N	104°50'22.484"W	0.07	
14207.00	89.780	358.840	7254.40	7270.03	7254.14	493.69	40°09'08.070"N	104°50'22.502"W	0.54	
14292.00	89.780	358.940	7254.73	7354.81	7339.12	492.04	40°09'08.910"N	104°50'22.523"W	0.12	
14378.00	89.870	358.680	7254.99	7440.58	7425.10	490.25	40°09'09.759"N	104°50'22.546"W	0.32	
14463.00	89.230	359.920	7255.66	7525.40	7510.09	489.21	40°09'10.599"N	104°50'22.560"W	1.64	
14548.00	89.070	359.130	7256.92	7610.23	7595.08	488.51	40°09'11.439"N	104°50'22.569"W	0.95	
14633.00	88.760	359.010	7258.53	7695.02	7680.05	487.13	40°09'12.279"N	104°50'22.586"W	0.39	
14718.00	89.410	359.510	7259.89	7779.82	7765.03	486.03	40°09'13.119"N	104°50'22.601"W	0.96	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13)
Area	COLORADO	Well	KERR 28N-12HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERR 28N-12HZX AWB <11039-16385>
Facility	SEC.13-T2N-R67W	Sidetrack from	KERR 28N-12HZ AWB <116-14112> at 11039.00 MD

WELLPATH DATA (153 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14804.00	91.380	359.390	7259.29	7865.65	7851.02	485.21	40°09'13.968"N	104°50'22.611"W	2.29	
14974.00	92.000	359.550	7254.28	8035.26	8020.94	483.64	40°09'15.648"N	104°50'22.631"W	0.38	
15059.00	90.770	359.390	7252.23	8120.07	8105.91	482.85	40°09'16.487"N	104°50'22.642"W	1.46	
15144.00	91.320	359.450	7250.68	8204.89	8190.89	481.99	40°09'17.327"N	104°50'22.653"W	0.65	
15229.00	90.430	359.300	7249.38	8289.71	8275.87	481.06	40°09'18.167"N	104°50'22.664"W	1.06	
15314.00	90.460	359.680	7248.72	8374.54	8360.87	480.31	40°09'19.007"N	104°50'22.674"W	0.45	
15398.00	88.240	359.520	7249.67	8458.39	8444.85	479.72	40°09'19.837"N	104°50'22.682"W	2.65	
15483.00	88.240	359.320	7252.28	8543.18	8529.81	478.86	40°09'20.676"N	104°50'22.693"W	0.24	
15568.00	87.960	359.060	7255.10	8627.95	8614.76	477.66	40°09'21.516"N	104°50'22.708"W	0.45	
15653.00	88.920	0.760	7257.41	8712.79	8699.72	477.53	40°09'22.355"N	104°50'22.710"W	2.30	
15738.00	88.700	0.620	7259.18	8797.70	8784.69	478.55	40°09'23.195"N	104°50'22.697"W	0.31	
15823.00	90.000	2.320	7260.14	8882.66	8869.66	480.73	40°09'24.035"N	104°50'22.669"W	2.52	
15909.00	89.410	1.660	7260.59	8968.64	8955.60	483.72	40°09'24.884"N	104°50'22.630"W	1.03	
15994.00	89.130	0.970	7261.67	9053.60	9040.57	485.67	40°09'25.724"N	104°50'22.605"W	0.88	
16079.00	88.730	1.470	7263.26	9138.54	9125.54	487.48	40°09'26.563"N	104°50'22.582"W	0.75	
16163.00	89.590	1.310	7264.49	9222.50	9209.50	489.51	40°09'27.393"N	104°50'22.555"W	1.04	
16331.00	89.440	1.020	7265.91	9390.41	9377.46	492.93	40°09'29.053"N	104°50'22.511"W	0.19	LAST BHI MWD+IFR SURVEY ST1
16385.00	89.440	1.020	7266.44	9444.37	9431.45	493.89	40°09'29.586"N	104°50'22.499"W	0.00	PROJECTION TO BIT ST1

HOLE & CASING SECTIONS - Ref Wellbore: KERR 28N-12HZX AWB <11039-16385> Ref Wellpath: KERR 28N-12HZX 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	1070.00	1054.00	16.00	1069.97	0.00	0.00	-1.86	-6.89
9.625in Casing Surface	16.00	1070.00	1054.00	16.00	1069.97	0.00	0.00	-1.86	-6.89
8.75in Open Hole	1070.00	7650.00	6580.00	1069.97	7215.18	-1.86	-6.89	698.95	451.79
7in Casing Intermediate	16.00	7638.00	7622.00	16.00	7214.93	0.00	0.00	686.96	451.62
6.125in Open Hole	7650.00	11039.00	3389.00	7215.18	7227.42	698.95	451.79	4087.31	478.40
6.125in Open Hole	11039.00	16385.00	5346.00	7227.42	7266.44	4087.31	478.40	9431.45	493.89

WELLPATH COMPOSITION - Ref Wellbore: KERR 28N-12HZX AWB <11039-16385> Ref Wellpath: KERR 28N-12HZX AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1001.00	Generic gyro - northseeking (Standard)	VES GYRO SURVEYS <116-1001>	KERR 28N-12HZ AWB <116-14112>
1001.00	7594.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 8 3/4" <1184-7594>	KERR 28N-12HZ AWB <116-14112>
7594.00	11039.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 6 1/8" <7723-14060>	KERR 28N-12HZ AWB <116-14112>
11039.00	16331.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 6 1/8" <11055-16331>	KERR 28N-12HZX AWB <11039-16385>
16331.00	16385.00	Blind Drilling (std)	Projection to bit	KERR 28N-12HZX AWB <11039-16385>

Actual Wellpath Report

KERR 28N-12HZX AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (LAMBERT STATE PLANE COORD)	Slot	SLOT#07 KERR 28N-12HZ (576'FSL & 2026'FWL, SEC.13)
Area	COLORADO	Well	KERR 28N-12HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERR 28N-12HZX AWB <11039-16385>
Facility	SEC.13-T2N-R67W	Sidetrack from	KERR 28N-12HZ AWB <116-14112> at 11039.00 MD

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	249.460	16.00	TIE ON
116.00	0.344	249.460	116.00	BEGIN GYRO SURVEYS
1001.00	0.495	233.641	1000.97	TIE ONTO GYRO SURVEYS
1184.00	1.050	265.390	1183.95	BEGIN BHI MWD+IFR SURVEYS OWB
7638.00	88.610	0.802	7214.93	7" CASING POINT
11039.00	90.460	0.690	7227.42	TIE ONTO OWB
11055.00	87.900	1.020	7227.65	BEGIN BHI MWD+IFR SURVEYS ST1
16331.00	89.440	1.020	7265.91	LAST BHI MWD+IFR SURVEY ST1
16385.00	89.440	1.020	7266.44	PROJECTION TO BIT ST1