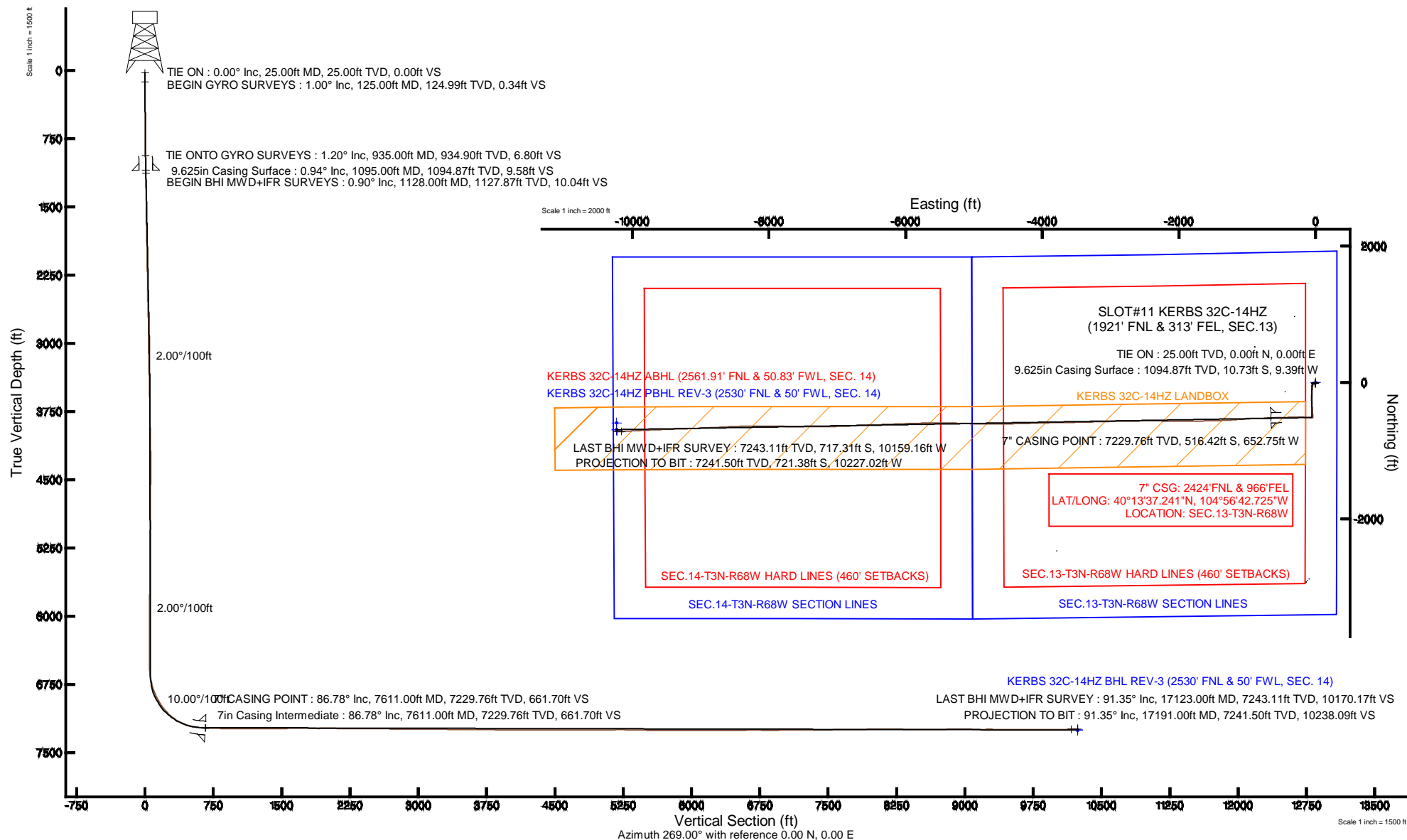


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
 Field: WELD COUNTY (KERR MCGEE) Well: KERBS 32C-14HZ
 Facility: SEC.13-T3N-R68W Wellbore: KERBS 32C-14HZ PWB

Plot reference wellpath is KERBS 32C-14HZ (REV-B.0) PWP

True vertical depths are referenced to H&P 307 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 307 (RKB)	North Reference: True north
H&P 307 (RKB) to Mean Sea Level: 4898 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 on 18/Mar/2014



Actual Wellpath Report

KERBS 32C-14HZ AWP

Page 1 of 8

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
Area	COLORADO	Well	KERBS 32C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 32C-14HZ AWB
Facility	SEC.13-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	Robiale01
Scale	0.999957	Report Generated	18/Mar/2014 at 07:49
Convergence at slot	n/a	Database/Source file	WellArchitectDB/_KERBS_32C-14HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2856.52	73.84	3155559.85	1326547.34	40°13'42.344"N	104°56'34.310"W
Facility Reference Pt			3155503.95	1323690.53	40°13'14.116"N	104°56'35.262"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	H&P 307 (RKB) to Facility Vertical Datum	4898.00ft
Horizontal Reference Pt	Slot	H&P 307 (RKB) to Mean Sea Level	4898.00ft
Vertical Reference Pt	H&P 307 (RKB)	H&P 307 (RKB) to Mud Line at Slot (SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13))	4898.00ft
MD Reference Pt	H&P 307 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.00°

Actual Wellpath Report

KERBS 32C-14HZ AWP

Page 2 of 8

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
Area	COLORADO	Well	KERBS 32C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 32C-14HZ AWP
Facility	SEC.13-T3N-R68W		

WELLPATH DATA (187 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	202.140	0.00	0.00	0.00	0.00	40°13'42.344"N	104°56'34.310"W	0.00	
25.00	0.000	202.140	25.00	0.00	0.00	0.00	40°13'42.344"N	104°56'34.310"W	0.00	TIE ON
125.00	1.000	202.140	124.99	0.34	-0.81	-0.33	40°13'42.336"N	104°56'34.314"W	1.00	BEGIN GYRO SURVEYS
225.00	0.820	171.690	224.98	0.59	-2.32	-0.55	40°13'42.321"N	104°56'34.317"W	0.51	
325.00	0.300	234.680	324.98	0.72	-3.18	-0.66	40°13'42.313"N	104°56'34.319"W	0.73	
425.00	1.220	218.110	424.97	1.61	-4.17	-1.54	40°13'42.303"N	104°56'34.330"W	0.94	
525.00	1.120	221.190	524.95	2.94	-5.75	-2.84	40°13'42.287"N	104°56'34.347"W	0.12	
625.00	1.100	210.920	624.93	4.10	-7.31	-3.97	40°13'42.272"N	104°56'34.361"W	0.20	
725.00	0.690	191.580	724.92	4.74	-8.72	-4.59	40°13'42.258"N	104°56'34.369"W	0.50	
825.00	0.460	269.230	824.91	5.27	-9.31	-5.11	40°13'42.252"N	104°56'34.376"W	0.74	
925.00	1.110	252.470	924.90	6.60	-9.61	-6.43	40°13'42.249"N	104°56'34.393"W	0.68	
935.00	1.200	255.870	934.90	6.80	-9.67	-6.63	40°13'42.248"N	104°56'34.395"W	1.13	TIE ONTO GYRO SURVEYS
1128.00	0.900	236.070	1127.87	10.04	-11.01	-9.85	40°13'42.235"N	104°56'34.437"W	0.24	BEGIN BHI MWD+IFR SURVEYS
1222.00	0.870	235.370	1221.86	11.25	-11.82	-11.05	40°13'42.227"N	104°56'34.452"W	0.03	
1412.00	0.790	210.440	1411.84	13.14	-13.77	-12.90	40°13'42.208"N	104°56'34.476"W	0.19	
1604.00	0.740	246.510	1603.82	14.97	-15.41	-14.70	40°13'42.192"N	104°56'34.500"W	0.25	
1697.00	1.720	277.100	1696.80	16.91	-15.47	-16.64	40°13'42.191"N	104°56'34.525"W	1.23	
1885.00	1.430	301.510	1884.73	21.68	-13.90	-21.44	40°13'42.207"N	104°56'34.586"W	0.38	
2072.00	1.110	305.550	2071.69	25.10	-11.63	-24.90	40°13'42.229"N	104°56'34.631"W	0.18	
2257.00	0.760	289.920	2256.66	27.69	-10.17	-27.51	40°13'42.244"N	104°56'34.665"W	0.23	
2351.00	0.830	252.270	2350.65	28.92	-10.16	-28.75	40°13'42.244"N	104°56'34.681"W	0.55	
2444.00	0.810	254.430	2443.64	30.20	-10.54	-30.02	40°13'42.240"N	104°56'34.697"W	0.04	
2538.00	1.540	284.330	2537.62	32.06	-10.41	-31.89	40°13'42.241"N	104°56'34.721"W	0.99	
2725.00	1.710	285.160	2724.55	37.17	-9.06	-37.01	40°13'42.254"N	104°56'34.787"W	0.09	
2818.00	1.310	227.500	2817.52	39.30	-9.41	-39.14	40°13'42.251"N	104°56'34.815"W	1.61	
2912.00	2.550	186.270	2911.47	40.37	-12.22	-40.16	40°13'42.223"N	104°56'34.828"W	1.90	
3005.00	4.010	185.810	3004.31	41.01	-17.51	-40.71	40°13'42.171"N	104°56'34.835"W	1.57	
3098.00	6.050	185.230	3096.95	41.93	-25.63	-41.49	40°13'42.091"N	104°56'34.845"W	2.19	
3190.00	7.070	184.390	3188.35	42.99	-36.10	-42.36	40°13'41.987"N	104°56'34.856"W	1.11	
3283.00	8.130	190.450	3280.53	44.83	-48.27	-44.00	40°13'41.867"N	104°56'34.877"W	1.43	
3376.00	9.290	189.020	3372.46	47.45	-62.15	-46.37	40°13'41.730"N	104°56'34.908"W	1.27	
3471.00	10.540	185.050	3466.04	49.70	-78.38	-48.33	40°13'41.569"N	104°56'34.933"W	1.50	
3659.00	8.410	184.600	3651.46	52.85	-109.22	-50.95	40°13'41.265"N	104°56'34.967"W	1.13	
3754.00	10.480	183.980	3745.17	54.28	-124.76	-52.11	40°13'41.111"N	104°56'34.982"W	2.18	
3943.00	9.790	184.380	3931.22	57.29	-157.93	-54.53	40°13'40.783"N	104°56'35.013"W	0.37	
4037.00	10.280	185.210	4023.78	58.94	-174.25	-55.90	40°13'40.622"N	104°56'35.031"W	0.54	
4132.00	8.810	185.860	4117.46	60.73	-189.93	-57.41	40°13'40.467"N	104°56'35.050"W	1.55	
4226.00	9.000	187.320	4210.33	62.65	-204.39	-59.08	40°13'40.324"N	104°56'35.072"W	0.31	
4321.00	10.320	180.670	4303.98	63.98	-220.27	-60.13	40°13'40.167"N	104°56'35.085"W	1.82	
4415.00	10.800	176.500	4396.39	63.84	-237.48	-59.69	40°13'39.997"N	104°56'35.080"W	0.96	
4604.00	8.580	172.010	4582.69	61.36	-269.12	-56.65	40°13'39.685"N	104°56'35.040"W	1.24	
4698.00	10.110	177.060	4675.44	60.22	-284.30	-55.25	40°13'39.535"N	104°56'35.022"W	1.85	
4792.00	11.850	177.040	4767.71	59.62	-302.18	-54.33	40°13'39.358"N	104°56'35.010"W	1.85	
4981.00	8.740	175.340	4953.65	58.04	-335.88	-52.16	40°13'39.025"N	104°56'34.982"W	1.65	
5076.00	9.890	175.490	5047.39	57.08	-351.21	-50.93	40°13'38.873"N	104°56'34.967"W	1.21	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
Area	COLORADO	Well	KERBS 32C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 32C-14HZ AWB
Facility	SEC.13-T3N-R68W		

WELLPATH DATA (187 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5170.00	10.690	176.260	5139.88	56.17	-367.96	-49.73	40°13'38.708"N	104°56'34.951"W	0.86	
5265.00	9.180	175.640	5233.45	55.30	-384.31	-48.58	40°13'38.546"N	104°56'34.936"W	1.59	
5359.00	9.930	180.120	5326.15	55.02	-399.89	-48.02	40°13'38.392"N	104°56'34.929"W	1.12	
5453.00	9.640	180.650	5418.78	55.41	-415.86	-48.13	40°13'38.234"N	104°56'34.931"W	0.32	
5548.00	10.250	178.840	5512.36	55.62	-432.27	-48.05	40°13'38.072"N	104°56'34.929"W	0.72	
5642.00	9.990	172.870	5604.90	54.72	-448.72	-46.87	40°13'37.910"N	104°56'34.914"W	1.15	
5737.00	7.990	171.290	5698.72	52.96	-463.42	-44.85	40°13'37.764"N	104°56'34.888"W	2.12	
5831.00	5.840	168.380	5792.04	51.20	-474.57	-42.89	40°13'37.654"N	104°56'34.863"W	2.32	
5926.00	5.740	173.730	5886.55	49.88	-484.02	-41.40	40°13'37.561"N	104°56'34.844"W	0.58	
6020.00	4.360	172.110	5980.18	49.02	-492.24	-40.40	40°13'37.480"N	104°56'34.831"W	1.48	
6114.00	3.280	169.190	6073.97	48.13	-498.42	-39.40	40°13'37.419"N	104°56'34.818"W	1.17	
6208.00	2.500	171.590	6167.85	47.41	-503.09	-38.60	40°13'37.373"N	104°56'34.808"W	0.84	
6303.00	1.060	208.870	6262.81	47.58	-505.91	-38.72	40°13'37.345"N	104°56'34.809"W	1.87	
6397.00	0.880	209.270	6356.80	48.37	-507.30	-39.49	40°13'37.331"N	104°56'34.819"W	0.19	
6538.00	0.580	226.990	6497.78	49.45	-508.73	-40.54	40°13'37.317"N	104°56'34.833"W	0.26	
6586.00	0.770	239.880	6545.78	49.91	-509.06	-41.00	40°13'37.314"N	104°56'34.839"W	0.50	
6633.00	3.700	270.130	6592.74	51.71	-509.21	-42.79	40°13'37.312"N	104°56'34.862"W	6.51	
6680.00	7.010	271.060	6639.53	56.09	-509.16	-47.17	40°13'37.313"N	104°56'34.918"W	7.04	
6727.00	10.460	271.600	6685.98	63.22	-508.98	-54.31	40°13'37.314"N	104°56'35.010"W	7.34	
6775.00	12.860	269.180	6732.98	72.91	-508.94	-64.01	40°13'37.315"N	104°56'35.135"W	5.10	
6822.00	16.040	267.940	6778.49	84.64	-509.25	-75.73	40°13'37.312"N	104°56'35.286"W	6.80	
6869.00	20.100	267.090	6823.16	99.21	-509.89	-90.29	40°13'37.305"N	104°56'35.474"W	8.66	
6916.00	24.340	269.700	6866.66	116.98	-510.35	-108.05	40°13'37.301"N	104°56'35.703"W	9.26	
6964.00	27.320	273.320	6909.87	137.86	-509.76	-128.94	40°13'37.307"N	104°56'35.972"W	7.02	
7011.00	31.680	272.920	6950.76	160.93	-508.51	-152.05	40°13'37.319"N	104°56'36.270"W	9.29	
7058.00	35.790	272.260	6989.84	186.98	-507.34	-178.12	40°13'37.331"N	104°56'36.606"W	8.78	
7105.00	40.230	271.410	7026.86	215.88	-506.42	-207.04	40°13'37.340"N	104°56'36.979"W	9.51	
7153.00	44.410	271.030	7062.35	248.16	-505.74	-239.34	40°13'37.346"N	104°56'37.396"W	8.72	
7200.00	49.060	270.780	7094.55	282.36	-505.20	-273.55	40°13'37.352"N	104°56'37.837"W	9.90	
7248.00	53.920	269.570	7124.43	319.90	-505.10	-311.10	40°13'37.353"N	104°56'38.321"W	10.32	
7295.00	59.620	268.240	7150.18	359.20	-505.87	-350.39	40°13'37.345"N	104°56'38.827"W	12.36	
7342.00	64.850	267.390	7172.06	400.76	-507.46	-391.93	40°13'37.329"N	104°56'39.363"W	11.24	
7389.00	70.440	266.980	7189.93	444.19	-509.60	-435.33	40°13'37.308"N	104°56'39.922"W	11.92	
7436.00	74.330	268.640	7204.15	488.97	-511.30	-480.08	40°13'37.291"N	104°56'40.499"W	8.93	
7483.00	78.610	267.820	7215.15	534.65	-512.71	-525.74	40°13'37.277"N	104°56'41.088"W	9.26	
7530.00	82.980	268.580	7222.66	581.03	-514.17	-572.10	40°13'37.263"N	104°56'41.686"W	9.43	
7547.00	83.970	268.950	7224.60	597.92	-514.53	-588.99	40°13'37.259"N	104°56'41.904"W	6.21	
7611.00†	86.778	267.661	7229.76	661.70	-516.42	-652.75	40°13'37.241"N	104°56'42.725"W	4.82	7" CASING POINT
7645.00	88.270	266.980	7231.23	695.65	-518.01	-686.68	40°13'37.225"N	104°56'43.163"W	4.82	
7740.00	88.830	267.740	7233.63	790.58	-522.38	-781.54	40°13'37.182"N	104°56'44.386"W	0.99	
7834.00	90.000	268.460	7234.59	884.56	-525.50	-875.49	40°13'37.151"N	104°56'45.597"W	1.46	
7871.00	90.060	268.420	7234.57	921.56	-526.51	-912.47	40°13'37.141"N	104°56'46.074"W	0.19	
7929.00	89.900	266.670	7234.59	979.54	-528.99	-970.42	40°13'37.116"N	104°56'46.821"W	3.03	
8023.00	89.780	266.020	7234.85	1073.43	-534.98	-1064.22	40°13'37.057"N	104°56'48.030"W	0.70	
8118.00	89.190	265.230	7235.71	1168.27	-542.23	-1158.94	40°13'36.985"N	104°56'49.252"W	1.04	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
Area	COLORADO	Well	KERBS 32C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 32C-14HZ AWP
Facility	SEC.13-T3N-R68W		

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8212.00	88.760	266.050	7237.39	1262.09	-549.37	-1252.65	40°13'36.915"N	104°56'50.460"W	0.98	
8307.00	89.750	268.500	7238.62	1357.03	-553.89	-1347.53	40°13'36.870"N	104°56'51.683"W	2.78	
8402.00	91.690	268.740	7237.43	1452.01	-556.18	-1442.49	40°13'36.847"N	104°56'52.907"W	2.06	
8496.00	91.540	268.260	7234.78	1545.97	-558.64	-1536.42	40°13'36.823"N	104°56'54.118"W	0.53	
8590.00	91.260	268.490	7232.48	1639.94	-561.30	-1630.35	40°13'36.797"N	104°56'55.329"W	0.39	
8684.00	89.720	268.950	7231.68	1733.93	-563.40	-1724.32	40°13'36.776"N	104°56'56.541"W	1.71	
8778.00	88.400	269.610	7233.22	1827.92	-564.58	-1818.30	40°13'36.764"N	104°56'57.752"W	1.57	
8873.00	90.580	271.120	7234.07	1922.88	-563.98	-1913.29	40°13'36.770"N	104°56'58.977"W	2.79	
8967.00	89.870	270.290	7233.70	2016.83	-562.82	-2007.28	40°13'36.781"N	104°57'00.189"W	1.16	
9061.00	89.500	270.250	7234.22	2110.81	-562.38	-2101.28	40°13'36.786"N	104°57'01.401"W	0.40	
9156.00	89.260	270.340	7235.24	2205.78	-561.89	-2196.27	40°13'36.790"N	104°57'02.625"W	0.27	
9250.00	89.720	271.120	7236.08	2299.73	-560.69	-2290.26	40°13'36.802"N	104°57'03.837"W	0.96	
9344.00	89.960	269.720	7236.34	2393.70	-560.00	-2384.25	40°13'36.809"N	104°57'05.049"W	1.51	
9439.00	89.720	269.830	7236.61	2488.69	-560.38	-2479.25	40°13'36.805"N	104°57'06.274"W	0.28	
9534.00	88.920	268.950	7237.74	2583.68	-561.39	-2574.24	40°13'36.795"N	104°57'07.498"W	1.25	
9628.00	89.500	269.590	7239.03	2677.67	-562.58	-2668.22	40°13'36.783"N	104°57'08.710"W	0.92	
9722.00	89.870	269.450	7239.55	2771.66	-563.37	-2762.21	40°13'36.775"N	104°57'09.922"W	0.42	
9814.00	90.030	268.850	7239.63	2863.66	-564.74	-2854.20	40°13'36.762"N	104°57'11.108"W	0.67	
9906.00	89.900	268.870	7239.68	2955.66	-566.57	-2946.19	40°13'36.743"N	104°57'12.293"W	0.14	
9998.00	89.690	268.680	7240.01	3047.66	-568.53	-3038.16	40°13'36.724"N	104°57'13.479"W	0.31	
10090.00	89.160	267.950	7240.94	3139.65	-571.24	-3130.12	40°13'36.697"N	104°57'14.665"W	0.98	
10182.00	88.730	268.560	7242.63	3231.62	-574.04	-3222.06	40°13'36.669"N	104°57'15.850"W	0.81	
10273.00	89.290	268.840	7244.20	3322.61	-576.10	-3313.02	40°13'36.649"N	104°57'17.023"W	0.69	
10365.00	90.090	268.670	7244.70	3414.60	-578.10	-3405.00	40°13'36.629"N	104°57'18.209"W	0.89	
10457.00	89.750	268.120	7244.83	3506.60	-580.68	-3496.96	40°13'36.603"N	104°57'19.394"W	0.70	
10550.00	89.560	268.130	7245.39	3599.59	-583.72	-3589.91	40°13'36.573"N	104°57'20.593"W	0.20	
10644.00	88.610	269.100	7246.89	3693.57	-585.99	-3683.87	40°13'36.551"N	104°57'21.804"W	1.44	
10737.00	89.410	269.500	7248.50	3786.55	-587.13	-3776.85	40°13'36.539"N	104°57'23.003"W	0.96	
10831.00	89.290	269.640	7249.56	3880.54	-587.84	-3870.84	40°13'36.532"N	104°57'24.214"W	0.20	
10925.00	89.590	269.260	7250.48	3974.54	-588.74	-3964.83	40°13'36.523"N	104°57'25.426"W	0.52	
11018.00	89.930	268.320	7250.87	4067.53	-590.70	-4057.81	40°13'36.503"N	104°57'26.625"W	1.07	
11112.00	90.060	267.550	7250.88	4161.52	-594.09	-4151.74	40°13'36.470"N	104°57'27.836"W	0.83	
11205.00	89.040	268.440	7251.61	4254.50	-597.34	-4244.68	40°13'36.438"N	104°57'29.034"W	1.46	
11299.00	90.400	268.560	7252.07	4348.49	-599.80	-4338.65	40°13'36.413"N	104°57'30.246"W	1.45	
11391.00	90.430	269.240	7251.40	4440.49	-601.57	-4430.63	40°13'36.395"N	104°57'31.431"W	0.74	
11485.00	90.060	268.760	7251.00	4534.49	-603.21	-4524.61	40°13'36.379"N	104°57'32.643"W	0.64	
11578.00	90.060	269.040	7250.90	4627.49	-605.00	-4617.59	40°13'36.361"N	104°57'33.842"W	0.30	
11672.00	89.840	268.680	7250.99	4721.49	-606.87	-4711.57	40°13'36.343"N	104°57'35.053"W	0.45	
11765.00	89.440	269.980	7251.57	4814.48	-607.95	-4804.56	40°13'36.332"N	104°57'36.252"W	1.46	
11859.00	90.060	271.500	7251.98	4908.43	-606.74	-4898.55	40°13'36.343"N	104°57'37.464"W	1.75	
11952.00	90.800	272.060	7251.28	5001.32	-603.85	-4991.50	40°13'36.372"N	104°57'38.662"W	1.00	
12046.00	90.830	271.740	7249.95	5095.19	-600.73	-5085.44	40°13'36.402"N	104°57'39.873"W	0.34	
12138.00	90.330	272.430	7249.01	5187.05	-597.39	-5177.38	40°13'36.435"N	104°57'41.059"W	0.93	
12230.00	89.410	271.500	7249.22	5278.92	-594.23	-5269.32	40°13'36.466"N	104°57'42.244"W	1.42	
12323.00	88.240	270.530	7251.13	5371.84	-592.59	-5362.28	40°13'36.482"N	104°57'43.443"W	1.63	

Actual Wellpath Report

KERBS 32C-14HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
Area	COLORADO	Well	KERBS 32C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 32C-14HZ AWP
Facility	SEC.13-T3N-R68W		

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12416.00	88.800	270.640	7253.53	5464.78	-591.64	-5455.25	40°13'36.492"N	104°57'44.641"W	0.61	
12509.00	89.930	269.760	7254.56	5557.75	-591.31	-5548.24	40°13'36.495"N	104°57'45.840"W	1.54	
12603.00	89.870	269.290	7254.73	5651.74	-592.09	-5642.23	40°13'36.487"N	104°57'47.052"W	0.50	
12697.00	90.090	268.740	7254.76	5745.74	-593.71	-5736.22	40°13'36.470"N	104°57'48.264"W	0.63	
12792.00	89.780	268.490	7254.87	5840.74	-596.00	-5831.19	40°13'36.448"N	104°57'49.488"W	0.42	
12886.00	90.400	268.380	7254.72	5934.74	-598.57	-5925.16	40°13'36.422"N	104°57'50.699"W	0.67	
12981.00	90.030	267.650	7254.36	6029.72	-601.86	-6020.10	40°13'36.389"N	104°57'51.923"W	0.86	
13075.00	89.470	267.700	7254.77	6123.69	-605.67	-6114.02	40°13'36.351"N	104°57'53.134"W	0.60	
13170.00	90.580	268.110	7254.73	6218.67	-609.15	-6208.95	40°13'36.317"N	104°57'54.358"W	1.25	
13264.00	89.930	267.650	7254.31	6312.66	-612.62	-6302.89	40°13'36.282"N	104°57'55.569"W	0.85	
13359.00	89.380	267.930	7254.89	6407.63	-616.29	-6397.82	40°13'36.246"N	104°57'56.793"W	0.65	
13453.00	90.430	268.110	7255.04	6501.62	-619.54	-6491.76	40°13'36.213"N	104°57'58.004"W	1.13	
13548.00	90.640	267.590	7254.15	6596.59	-623.10	-6586.69	40°13'36.178"N	104°57'59.228"W	0.59	
13642.00	89.930	266.830	7253.69	6690.55	-627.67	-6680.57	40°13'36.132"N	104°58'00.438"W	1.11	
13737.00	89.350	266.870	7254.28	6785.48	-632.89	-6775.43	40°13'36.081"N	104°58'01.661"W	0.61	
13831.00	90.180	268.150	7254.67	6879.44	-636.98	-6869.33	40°13'36.040"N	104°58'02.872"W	1.62	
13925.00	90.490	268.400	7254.12	6973.43	-639.81	-6963.29	40°13'36.012"N	104°58'04.083"W	0.42	
14020.00	90.330	268.440	7253.44	7068.42	-642.43	-7058.25	40°13'35.986"N	104°58'05.308"W	0.17	
14114.00	90.770	268.090	7252.54	7162.41	-645.27	-7152.20	40°13'35.957"N	104°58'06.519"W	0.60	
14209.00	90.490	269.850	7251.49	7257.40	-646.98	-7247.18	40°13'35.940"N	104°58'07.743"W	1.88	
14303.00	90.060	270.750	7251.04	7351.38	-646.49	-7341.18	40°13'35.945"N	104°58'08.955"W	1.06	
14397.00	90.520	270.640	7250.57	7445.33	-645.35	-7435.17	40°13'35.956"N	104°58'10.167"W	0.50	
14492.00	91.110	270.080	7249.22	7540.30	-644.75	-7530.15	40°13'35.961"N	104°58'11.391"W	0.86	
14587.00	90.120	270.890	7248.20	7635.26	-643.95	-7625.14	40°13'35.969"N	104°58'12.616"W	1.35	
14681.00	90.640	271.120	7247.57	7729.20	-642.30	-7719.13	40°13'35.985"N	104°58'13.828"W	0.60	
14776.00	91.040	270.940	7246.18	7824.13	-640.59	-7814.10	40°13'36.002"N	104°58'15.052"W	0.46	
14870.00	91.130	270.680	7244.40	7918.06	-639.26	-7908.07	40°13'36.014"N	104°58'16.264"W	0.29	
14965.00	90.090	270.610	7243.39	8013.02	-638.19	-8003.06	40°13'36.025"N	104°58'17.488"W	1.10	
15059.00	90.120	270.020	7243.22	8106.99	-637.68	-8097.06	40°13'36.029"N	104°58'18.700"W	0.63	
15153.00	90.300	269.540	7242.87	8200.98	-638.04	-8191.06	40°13'36.026"N	104°58'19.912"W	0.55	
15248.00	88.950	269.640	7243.49	8295.97	-638.72	-8286.05	40°13'36.019"N	104°58'21.137"W	1.42	
15342.00	88.300	268.640	7245.75	8389.94	-640.13	-8380.01	40°13'36.004"N	104°58'22.348"W	1.27	
15437.00	89.750	267.690	7247.37	8484.91	-643.17	-8474.95	40°13'35.974"N	104°58'23.572"W	1.82	
15531.00	90.520	267.680	7247.14	8578.89	-646.97	-8568.87	40°13'35.936"N	104°58'24.783"W	0.82	
15625.00	91.200	267.050	7245.73	8672.84	-651.29	-8662.76	40°13'35.893"N	104°58'25.993"W	0.99	
15720.00	90.370	267.250	7244.43	8767.78	-656.01	-8757.63	40°13'35.846"N	104°58'27.216"W	0.90	
15814.00	90.550	267.570	7243.68	8861.74	-660.26	-8851.53	40°13'35.804"N	104°58'28.427"W	0.39	
15909.00	89.560	267.570	7243.59	8956.71	-664.28	-8946.44	40°13'35.764"N	104°58'29.651"W	1.04	
16003.00	89.870	267.450	7244.05	9050.68	-668.37	-9040.35	40°13'35.723"N	104°58'30.861"W	0.35	
16097.00	89.870	267.810	7244.27	9144.65	-672.26	-9134.27	40°13'35.684"N	104°58'32.072"W	0.38	
16191.00	90.330	267.600	7244.10	9238.63	-676.02	-9228.20	40°13'35.647"N	104°58'33.283"W	0.54	
16286.00	89.320	268.250	7244.39	9333.61	-679.46	-9323.13	40°13'35.612"N	104°58'34.507"W	1.26	
16380.00	89.130	267.990	7245.66	9427.59	-682.54	-9417.07	40°13'35.581"N	104°58'35.718"W	0.34	
16475.00	89.290	268.010	7246.97	9522.56	-685.86	-9512.01	40°13'35.548"N	104°58'36.942"W	0.17	
16569.00	89.660	268.050	7247.83	9616.55	-689.09	-9605.95	40°13'35.516"N	104°58'38.153"W	0.40	

Actual Wellpath Report

KERBS 32C-14HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
Area	COLORADO	Well	KERBS 32C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 32C-14HZ AWB
Facility	SEC.13-T3N-R68W		

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16663.00	89.630	267.230	7248.42	9710.52	-692.96	-9699.86	40°13'35.477"N	104°58'39.364"W	0.87	
16758.00	90.120	267.470	7248.62	9805.48	-697.35	-9794.76	40°13'35.434"N	104°58'40.587"W	0.57	
16852.00	90.550	266.860	7248.07	9899.43	-702.00	-9888.65	40°13'35.387"N	104°58'41.798"W	0.79	
16947.00	90.950	266.970	7246.83	9994.36	-707.11	-9983.50	40°13'35.336"N	104°58'43.021"W	0.44	
17041.00	91.290	266.570	7244.99	10088.27	-712.41	-10077.33	40°13'35.284"N	104°58'44.230"W	0.56	
17123.00	91.350	266.570	7243.11	10170.17	-717.31	-10159.16	40°13'35.235"N	104°58'45.285"W	0.07	LAST BHI MWD+IFR SURVEY
17191.00	91.350	266.570	7241.50	10238.09	-721.38	-10227.02	40°13'35.194"N	104°58'46.160"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: KERBS 32C-14HZ AWB Ref Wellpath: KERBS 32C-14HZ 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	25.00	1105.00	1080.00	25.00	1104.87	0.00	0.00	-10.81	-9.54
9.625in Casing Surface	25.00	1095.00	1070.00	25.00	1094.87	0.00	0.00	-10.73	-9.39
8.75in Open Hole	1105.00	7613.00	6508.00	1104.87	7229.87	-10.81	-9.54	-516.50	-654.74
7in Casing Intermediate	25.00	7611.00	7586.00	25.00	7229.76	0.00	0.00	-516.42	-652.75
6.125in Open Hole	7613.00	17191.00	9578.00	7229.87	7241.50	-516.50	-654.74	-721.38	-10227.02

Actual Wellpath Report

KERBS 32C-14HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
Area	COLORADO	Well	KERBS 32C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 32C-14HZ AWB
Facility	SEC.13-T3N-R68W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.13-T3N-R68W HARD LINES (460' SETBACKS)		7074.00	1001.83	-307.76	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.13-T3N-R68W SECTION LINES		7074.00	1001.83	-307.76	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W HARD LINES (460' SETBACKS)		7074.00	1001.83	-307.76	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		7074.00	1001.83	-307.76	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
KERBS 32C-14HZ BHL REV-3 (2530' FNL & 50' FWL, SEC. 14)		7252.00	-689.47	-10227.83	3145337.01	1325793.65	40°13'35.510"N	104°58'46.171"W	point
KERBS 32C-14HZ BHL ON PLAT REV-1 (2430' FNL & 50' FWL, SEC. 14)		7253.00	-589.47	-10227.83	3145336.38	1325893.64	40°13'36.498"N	104°58'46.171"W	point
KERBS 32C-14HZ BHL REV-2 (2530' FNL & 50' FWL, SEC. 14)		7253.00	-689.47	-10227.83	3145337.01	1325793.65	40°13'35.510"N	104°58'46.171"W	point
KERBS 32C-14HZ LANDBOX		7254.00	0.00	0.00	3155559.85	1326547.33	40°13'42.344"N	104°56'34.310"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: KERBS 32C-14HZ AWB					Ref Wellpath: KERBS 32C-14HZ AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model		Log Name/Comment		Wellbore
25.00	935.00	Generic gyro - continuous (Standard)		GYRO SURVEYS <125-935>		KERBS 32C-14HZ AWB
935.00	7547.00	NaviTrak (IFR)		BHI NAVITRAK MWD+IFR 8 3/4" <1128-7547>		KERBS 32C-14HZ AWB
7547.00	17123.00	NaviTrak (IFR)		BHI NAVITRAK MWD+IFR 6 1/8" <7645-17123>		KERBS 32C-14HZ AWB
17123.00	17191.00	Blind Drilling (std)		Projection to bit		KERBS 32C-14HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 KERBS 32C-14HZ (1921' FNL & 313' FEL, SEC.13)
Area	COLORADO	Well	KERBS 32C-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 32C-14HZ AWB
Facility	SEC.13-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
25.00	0.000	202.140	25.00	TIE ON
125.00	1.000	202.140	124.99	BEGIN GYRO SURVEYS
935.00	1.200	255.870	934.90	TIE ONTO GYRO SURVEYS
1128.00	0.900	236.070	1127.87	BEGIN BHI MWD+IFR SURVEYS
7611.00	86.778	267.661	7229.76	7" CASING POINT
17123.00	91.350	266.570	7243.11	LAST BHI MWD+IFR SURVEY
17191.00	91.350	266.570	7241.50	PROJECTION TO BIT