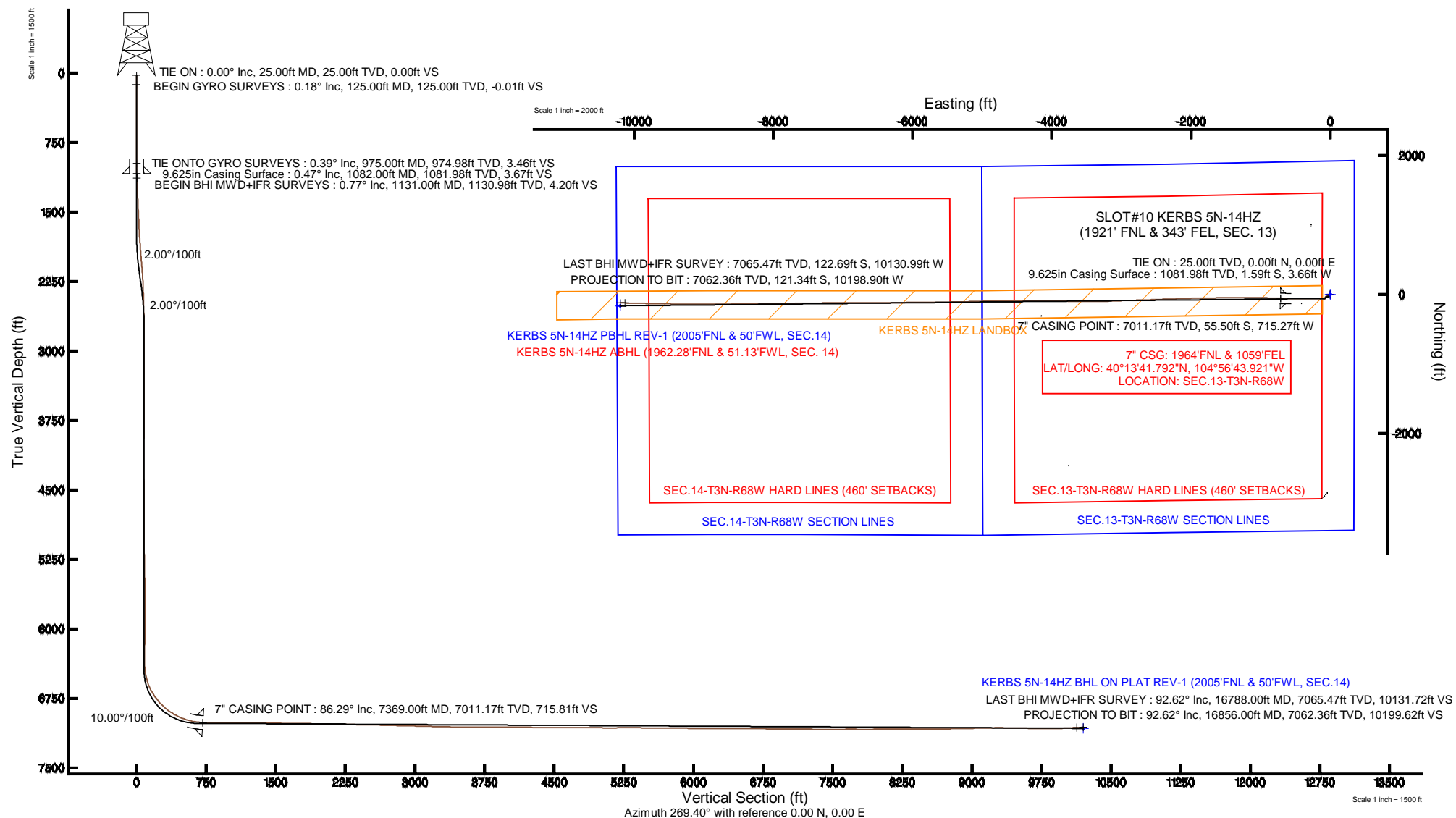


Location:	COLORADO	Slot:	SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13)
Field:	WELD COUNTY (KERR MCGEE)	Well:	KERBS 5N-14HZ
Facility:	SEC.13-T3N-R68W	Wellbore:	KERBS 5N-14HZ PWB

Plot reference wellpath is KERBS 5N-14HZ (REV-B.0) PWP	
True vertical depths are referenced to H&P 307 (25KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 307 (25KB) (RKB)	North Reference: True north
H&P 307 (25KB) (RKB) to Mean Sea Level: 4898 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLO7#10 KERBS 5N-14HZ 1921' FNL & 343' FEL, SEC. 13): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 on 03/Apr/2014



# Actual Wellpath Report

KERBS 5N-14HZ AWP

Page 1 of 7

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13)
Area	COLORADO	Well	KERBS 5N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 5N-14HZ AWP
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	03/Apr/2014 at 11:32
Convergence at slot	n/a	Database/Source file	WellArchitectDB/KERBS_5N-14HZ_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2856.22	43.67	3155529.68	1326546.84	40°13'42.341"N	104°56'34.699"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 (25'KB) (RKB) to Facility Vertical Datum	4898.00ft
Horizontal Reference Pt	Slot	H&P 307 (25'KB) (RKB) to Mean Sea Level	4898.00ft
Vertical Reference Pt	H&P 307 (25'KB) (RKB)	H&P 307 (25'KB) (RKB) to Mud Line at Slot (SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13))	4898.00ft
MD Reference Pt	H&P 307 (25'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.40°

# Actual Wellpath Report

KERBS 5N-14HZ AWP

Page 2 of 7

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13)
Area	COLORADO	Well	KERBS 5N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 5N-14HZ AWP
Facility	SEC.13-T3N-R68W		

## WELLPATH DATA (167 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	176.450	0.00	0.00	0.00	0.00	40°13'42.341"N	104°56'34.699"W	0.00	
25.00	0.000	176.450	25.00	0.00	0.00	0.00	40°13'42.341"N	104°56'34.699"W	0.00	TIE ON
125.00	0.180	176.450	125.00	-0.01	-0.16	0.01	40°13'42.339"N	104°56'34.699"W	0.18	BEGIN GYRO SURVEYS
225.00	0.530	295.880	225.00	0.40	-0.11	-0.40	40°13'42.340"N	104°56'34.704"W	0.64	
325.00	0.340	175.670	325.00	0.79	-0.21	-0.79	40°13'42.339"N	104°56'34.709"W	0.76	
425.00	0.170	66.460	425.00	0.64	-0.44	-0.63	40°13'42.337"N	104°56'34.707"W	0.43	
525.00	0.600	270.380	524.99	1.02	-0.38	-1.02	40°13'42.337"N	104°56'34.712"W	0.76	
625.00	0.620	204.890	624.99	1.78	-0.87	-1.77	40°13'42.332"N	104°56'34.722"W	0.66	
725.00	0.100	315.170	724.99	2.07	-1.30	-2.06	40°13'42.328"N	104°56'34.726"W	0.66	
825.00	0.510	277.670	824.99	2.57	-1.17	-2.56	40°13'42.329"N	104°56'34.732"W	0.43	
925.00	0.420	277.140	924.98	3.38	-1.07	-3.37	40°13'42.330"N	104°56'34.742"W	0.09	
975.00	0.390	143.710	974.98	3.46	-1.18	-3.45	40°13'42.329"N	104°56'34.743"W	1.49	TIE ONTO GYRO SURVEYS
1131.00	0.770	267.150	1130.98	4.20	-1.66	-4.18	40°13'42.325"N	104°56'34.753"W	0.66	BEGIN BHI MWD+IFR SURVEYS
1225.00	2.840	274.650	1224.93	7.15	-1.51	-7.13	40°13'42.326"N	104°56'34.791"W	2.21	
1320.00	2.870	280.170	1319.81	11.83	-0.90	-11.82	40°13'42.332"N	104°56'34.851"W	0.29	
1414.00	2.530	280.290	1413.70	16.18	-0.11	-16.18	40°13'42.340"N	104°56'34.908"W	0.36	
1508.00	2.640	286.160	1507.61	20.29	0.86	-20.30	40°13'42.350"N	104°56'34.961"W	0.30	
1602.00	2.680	284.810	1601.51	24.48	2.03	-24.50	40°13'42.361"N	104°56'35.015"W	0.08	
1694.00	3.300	255.950	1693.39	29.13	1.93	-29.15	40°13'42.360"N	104°56'35.075"W	1.75	
1786.00	4.450	243.400	1785.18	34.91	-0.31	-34.91	40°13'42.338"N	104°56'35.149"W	1.55	
1877.00	5.600	228.840	1875.83	41.46	-4.81	-41.41	40°13'42.293"N	104°56'35.233"W	1.88	
1969.00	6.840	221.740	1967.29	48.56	-11.85	-48.44	40°13'42.224"N	104°56'35.323"W	1.58	
2061.00	7.650	219.370	2058.55	56.18	-20.67	-55.97	40°13'42.137"N	104°56'35.421"W	0.94	
2153.00	6.770	218.160	2149.82	63.51	-29.67	-63.20	40°13'42.048"N	104°56'35.514"W	0.97	
2245.00	5.000	210.000	2241.34	68.95	-37.41	-68.56	40°13'41.971"N	104°56'35.583"W	2.12	
2338.00	4.450	204.380	2334.02	72.54	-44.20	-72.08	40°13'41.904"N	104°56'35.628"W	0.77	
2432.00	3.670	200.620	2427.78	75.17	-50.34	-74.64	40°13'41.844"N	104°56'35.661"W	0.88	
2525.00	2.280	211.700	2520.66	77.23	-54.70	-76.66	40°13'41.800"N	104°56'35.687"W	1.61	
2619.00	1.370	252.160	2614.61	79.31	-56.64	-78.71	40°13'41.781"N	104°56'35.714"W	1.62	
2713.00	0.690	190.080	2708.60	80.48	-57.54	-79.88	40°13'41.772"N	104°56'35.729"W	1.29	
3086.00	0.730	215.100	3081.57	82.29	-61.69	-81.64	40°13'41.731"N	104°56'35.752"W	0.08	
3460.00	0.460	134.530	3455.56	82.62	-64.70	-81.94	40°13'41.702"N	104°56'35.755"W	0.21	
3838.00	0.670	116.320	3833.54	79.58	-66.74	-78.88	40°13'41.681"N	104°56'35.716"W	0.07	
4215.00	0.300	206.210	4210.53	78.06	-68.60	-77.34	40°13'41.663"N	104°56'35.696"W	0.19	
4592.00	0.360	296.390	4587.52	79.56	-68.96	-78.84	40°13'41.660"N	104°56'35.715"W	0.12	
4970.00	0.280	297.640	4965.52	81.43	-68.01	-80.72	40°13'41.669"N	104°56'35.740"W	0.02	
5347.00	1.260	246.690	5342.48	86.06	-69.22	-85.34	40°13'41.657"N	104°56'35.799"W	0.29	
5536.00	1.450	255.020	5531.43	90.30	-70.66	-89.56	40°13'41.643"N	104°56'35.854"W	0.14	
5630.00	1.580	205.170	5625.40	92.01	-72.14	-91.26	40°13'41.628"N	104°56'35.876"W	1.36	
5724.00	0.730	51.990	5719.39	92.10	-72.94	-91.34	40°13'41.620"N	104°56'35.877"W	2.40	
5819.00	0.600	13.690	5814.38	91.50	-72.09	-90.74	40°13'41.629"N	104°56'35.869"W	0.48	
5913.00	0.450	350.220	5908.38	91.44	-71.25	-90.69	40°13'41.637"N	104°56'35.868"W	0.28	
6007.00	1.210	49.890	6002.37	90.73	-70.24	-89.99	40°13'41.647"N	104°56'35.859"W	1.12	
6291.00	0.540	35.520	6286.34	87.63	-67.22	-86.92	40°13'41.677"N	104°56'35.820"W	0.25	
6385.00	0.410	338.360	6380.33	87.49	-66.55	-86.79	40°13'41.683"N	104°56'35.818"W	0.50	

# Actual Wellpath Report

KERBS 5N-14HZ AWP

Page 3 of 7

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13)
Area	COLORADO	Well	KERBS 5N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 5N-14HZ AWP
Facility	SEC.13-T3N-R68W		

## WELLPATH DATA (167 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6432.00	4.170	280.200	6427.29	89.22	-66.09	-88.53	40°13'41.688"N	104°56'35.840"W	8.44	
6480.00	9.120	272.710	6474.95	94.74	-65.60	-94.06	40°13'41.693"N	104°56'35.912"W	10.45	
6527.00	13.910	270.220	6520.99	104.11	-65.40	-103.43	40°13'41.695"N	104°56'36.032"W	10.24	
6575.00	17.630	271.880	6567.18	117.15	-65.14	-116.47	40°13'41.697"N	104°56'36.201"W	7.81	
6622.00	22.490	274.120	6611.32	133.23	-64.26	-132.56	40°13'41.706"N	104°56'36.408"W	10.47	
6669.00	26.300	274.130	6654.11	152.57	-62.87	-151.92	40°13'41.720"N	104°56'36.658"W	8.11	
6716.00	31.190	274.800	6695.31	175.08	-61.10	-174.44	40°13'41.737"N	104°56'36.948"W	10.43	
6763.00	34.940	272.680	6734.69	200.64	-59.45	-200.03	40°13'41.754"N	104°56'37.278"W	8.35	
6810.00	40.130	271.630	6771.95	229.23	-58.39	-228.63	40°13'41.764"N	104°56'37.647"W	11.13	
6858.00	43.100	268.540	6807.83	261.10	-58.36	-260.50	40°13'41.764"N	104°56'38.057"W	7.52	
6905.00	48.710	267.860	6840.53	294.83	-59.43	-294.22	40°13'41.754"N	104°56'38.492"W	11.98	
6952.00	50.880	268.020	6870.86	330.71	-60.72	-330.09	40°13'41.741"N	104°56'38.955"W	4.62	
6999.00	55.890	268.860	6898.89	368.42	-61.74	-367.79	40°13'41.731"N	104°56'39.441"W	10.76	
7046.00	60.000	269.800	6923.83	408.24	-62.20	-407.61	40°13'41.726"N	104°56'39.954"W	8.91	
7093.00	64.600	270.120	6945.67	449.84	-62.23	-449.21	40°13'41.726"N	104°56'40.491"W	9.81	
7140.00	68.740	270.720	6964.28	492.98	-61.91	-492.36	40°13'41.729"N	104°56'41.047"W	8.89	
7187.00	71.770	271.060	6980.15	537.20	-61.22	-536.59	40°13'41.736"N	104°56'41.617"W	6.48	
7235.00	76.530	271.800	6993.26	583.33	-60.06	-582.73	40°13'41.747"N	104°56'42.212"W	10.03	
7282.00	80.910	271.820	7002.45	629.37	-58.61	-628.79	40°13'41.762"N	104°56'42.806"W	9.32	
7315.00	84.240	272.160	7006.72	662.06	-57.47	-661.49	40°13'41.773"N	104°56'43.227"W	10.14	
7369.00†	86.289	272.041	7011.17	715.81	-55.50	-715.27	40°13'41.792"N	104°56'43.921"W	3.80	7" CASING POINT
7456.00	89.590	271.850	7014.30	802.66	-52.55	-802.15	40°13'41.822"N	104°56'45.041"W	3.80	
7550.00	90.000	271.420	7014.64	896.58	-49.87	-896.11	40°13'41.848"N	104°56'46.252"W	0.63	
7644.00	90.090	270.980	7014.56	990.54	-47.90	-990.09	40°13'41.867"N	104°56'47.464"W	0.48	
7739.00	90.180	270.600	7014.34	1085.51	-46.59	-1085.08	40°13'41.880"N	104°56'48.689"W	0.41	
7833.00	89.780	269.800	7014.37	1179.50	-46.26	-1179.08	40°13'41.884"N	104°56'49.900"W	0.95	
7928.00	89.530	269.640	7014.94	1274.50	-46.72	-1274.07	40°13'41.879"N	104°56'51.125"W	0.31	
8022.00	89.160	269.850	7016.02	1368.49	-47.14	-1368.07	40°13'41.875"N	104°56'52.337"W	0.45	
8116.00	89.590	269.550	7017.04	1462.48	-47.63	-1462.06	40°13'41.870"N	104°56'53.549"W	0.56	
8211.00	88.860	269.270	7018.33	1557.47	-48.61	-1557.05	40°13'41.860"N	104°56'54.773"W	0.82	
8305.00	89.440	269.240	7019.72	1651.46	-49.83	-1651.03	40°13'41.848"N	104°56'55.985"W	0.62	
8400.00	88.920	268.970	7021.08	1746.45	-51.32	-1746.00	40°13'41.833"N	104°56'57.210"W	0.62	
8494.00	89.160	268.610	7022.66	1840.43	-53.30	-1839.97	40°13'41.814"N	104°56'58.421"W	0.46	
8588.00	88.700	269.020	7024.41	1934.41	-55.25	-1933.93	40°13'41.794"N	104°56'59.633"W	0.66	
8683.00	88.580	268.430	7026.67	2029.37	-57.36	-2028.88	40°13'41.773"N	104°57'00.857"W	0.63	
8777.00	89.130	268.180	7028.55	2123.34	-60.14	-2122.82	40°13'41.746"N	104°57'02.068"W	0.64	
8871.00	88.700	267.980	7030.33	2217.30	-63.29	-2216.75	40°13'41.715"N	104°57'03.279"W	0.50	
8966.00	88.860	268.200	7032.35	2312.25	-66.45	-2311.68	40°13'41.683"N	104°57'04.503"W	0.29	
9060.00	89.380	267.810	7033.79	2406.21	-69.73	-2405.61	40°13'41.651"N	104°57'05.714"W	0.69	
9155.00	88.790	267.940	7035.31	2501.16	-73.25	-2500.53	40°13'41.616"N	104°57'06.938"W	0.64	
9249.00	88.390	268.010	7037.62	2595.11	-76.57	-2594.44	40°13'41.583"N	104°57'08.148"W	0.43	
9343.00	88.790	267.900	7039.94	2689.05	-79.92	-2688.36	40°13'41.550"N	104°57'09.359"W	0.44	
9438.00	88.120	268.330	7042.50	2783.99	-83.04	-2783.27	40°13'41.519"N	104°57'10.583"W	0.84	
9533.00	88.920	268.430	7044.95	2878.94	-85.73	-2878.20	40°13'41.492"N	104°57'11.807"W	0.85	
9627.00	88.110	268.060	7047.39	2972.89	-88.61	-2972.12	40°13'41.464"N	104°57'13.018"W	0.95	

# Actual Wellpath Report

KERBS 5N-14HZ AWP

Page 4 of 7

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13)
Area	COLORADO	Well	KERBS 5N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 5N-14HZ AWP
Facility	SEC.13-T3N-R68W		

## WELLPATH DATA (167 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9719.00	88.240	267.970	7050.32	3064.82	-91.79	-3064.02	40°13'41.432"N	104°57'14.202"W	0.17	
9811.00	88.700	267.740	7052.77	3156.75	-95.23	-3155.92	40°13'41.398"N	104°57'15.387"W	0.56	
9903.00	88.580	268.550	7054.96	3248.70	-98.21	-3247.85	40°13'41.368"N	104°57'16.572"W	0.89	
9994.00	88.390	269.340	7057.36	3339.67	-99.89	-3338.80	40°13'41.352"N	104°57'17.745"W	0.89	
10086.00	88.950	269.550	7059.50	3431.64	-100.78	-3430.77	40°13'41.343"N	104°57'18.931"W	0.65	
10178.00	89.870	270.750	7060.45	3523.63	-100.54	-3522.76	40°13'41.345"N	104°57'20.117"W	1.64	
10269.00	90.460	270.720	7060.18	3614.60	-99.37	-3613.75	40°13'41.356"N	104°57'21.290"W	0.65	
10361.00	89.720	271.180	7060.04	3706.56	-97.84	-3705.74	40°13'41.371"N	104°57'22.476"W	0.95	
10455.00	90.300	271.360	7060.02	3800.51	-95.76	-3799.72	40°13'41.392"N	104°57'23.687"W	0.65	
10548.00	89.630	271.680	7060.08	3893.45	-93.29	-3892.68	40°13'41.416"N	104°57'24.886"W	0.80	
10642.00	89.220	270.900	7061.02	3987.39	-91.18	-3986.65	40°13'41.437"N	104°57'26.098"W	0.94	
10736.00	90.240	271.390	7061.47	4081.35	-89.30	-4080.63	40°13'41.455"N	104°57'27.309"W	1.20	
10829.00	89.130	271.310	7061.98	4174.29	-87.11	-4173.60	40°13'41.477"N	104°57'28.508"W	1.20	
10923.00	89.230	271.120	7063.32	4268.23	-85.12	-4267.57	40°13'41.496"N	104°57'29.719"W	0.23	
11016.00	88.890	270.240	7064.85	4361.20	-84.01	-4360.55	40°13'41.507"N	104°57'30.918"W	1.01	
11110.00	89.260	269.600	7066.37	4455.18	-84.14	-4454.54	40°13'41.506"N	104°57'32.130"W	0.79	
11203.00	89.780	269.650	7067.15	4548.17	-84.75	-4547.53	40°13'41.499"N	104°57'33.329"W	0.56	
11296.00	90.520	268.740	7066.90	4641.17	-86.06	-4640.52	40°13'41.486"N	104°57'34.528"W	1.26	
11389.00	90.240	268.510	7066.28	4734.16	-88.29	-4733.49	40°13'41.464"N	104°57'35.726"W	0.39	
11483.00	89.840	268.300	7066.22	4828.15	-90.91	-4827.46	40°13'41.438"N	104°57'36.938"W	0.48	
11576.00	89.070	268.290	7067.10	4921.12	-93.67	-4920.41	40°13'41.410"N	104°57'38.136"W	0.83	
11670.00	89.470	268.020	7068.30	5015.09	-96.70	-5014.35	40°13'41.380"N	104°57'39.347"W	0.51	
11763.00	90.060	267.950	7068.68	5108.07	-99.97	-5107.30	40°13'41.348"N	104°57'40.546"W	0.64	
11857.00	90.670	267.960	7068.08	5202.03	-103.32	-5201.23	40°13'41.315"N	104°57'41.757"W	0.65	
11950.00	90.030	268.130	7067.52	5295.01	-106.50	-5294.18	40°13'41.283"N	104°57'42.955"W	0.71	
12043.00	89.500	269.060	7067.90	5387.99	-108.78	-5387.15	40°13'41.260"N	104°57'44.154"W	1.15	
12136.00	89.530	269.500	7068.68	5480.99	-109.95	-5480.14	40°13'41.249"N	104°57'45.352"W	0.47	
12228.00	90.300	269.410	7068.82	5572.99	-110.82	-5572.13	40°13'41.240"N	104°57'46.538"W	0.84	
12322.00	88.850	269.290	7069.52	5666.98	-111.89	-5666.12	40°13'41.229"N	104°57'47.750"W	1.55	
12415.00	88.820	269.170	7071.41	5759.96	-113.14	-5759.09	40°13'41.216"N	104°57'48.949"W	0.13	
12509.00	89.900	269.310	7072.46	5853.96	-114.38	-5853.08	40°13'41.204"N	104°57'50.161"W	1.16	
12604.00	88.860	269.550	7073.49	5948.95	-115.33	-5948.07	40°13'41.194"N	104°57'51.385"W	1.12	
12698.00	88.460	269.630	7075.69	6042.92	-116.00	-6042.04	40°13'41.187"N	104°57'52.597"W	0.43	
12792.00	89.410	269.600	7077.43	6136.91	-116.63	-6136.02	40°13'41.181"N	104°57'53.808"W	1.01	
12886.00	89.810	269.570	7078.07	6230.90	-117.31	-6230.01	40°13'41.174"N	104°57'55.020"W	0.43	
12981.00	90.460	269.320	7077.85	6325.90	-118.23	-6325.01	40°13'41.165"N	104°57'56.245"W	0.73	
13075.00	90.270	269.840	7077.25	6419.90	-118.92	-6419.00	40°13'41.158"N	104°57'57.457"W	0.59	
13169.00	91.170	270.290	7076.07	6513.88	-118.82	-6512.99	40°13'41.158"N	104°57'58.669"W	1.07	
13264.00	90.000	269.830	7075.10	6608.87	-118.72	-6607.99	40°13'41.159"N	104°57'59.893"W	1.32	
13358.00	88.520	269.600	7076.31	6702.86	-119.18	-6701.98	40°13'41.154"N	104°58'01.105"W	1.59	
13452.00	88.700	269.800	7078.59	6796.83	-119.68	-6795.95	40°13'41.149"N	104°58'02.317"W	0.29	
13546.00	89.410	269.820	7080.14	6890.81	-119.99	-6889.93	40°13'41.146"N	104°58'03.528"W	0.76	
13641.00	90.550	270.070	7080.18	6985.81	-120.08	-6984.93	40°13'41.145"N	104°58'04.753"W	1.23	
13736.00	90.030	269.800	7079.70	7080.80	-120.19	-7079.93	40°13'41.143"N	104°58'05.978"W	0.62	
13830.00	88.730	269.080	7080.71	7174.79	-121.10	-7173.92	40°13'41.134"N	104°58'07.190"W	1.58	

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13)
Area	COLORADO	Well	KERBS 5N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 5N-14HZ AWP
Facility	SEC.13-T3N-R68W		

## WELLPATH DATA (167 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13925.00	88.610	268.950	7082.92	7269.77	-122.74	-7268.88	40°13'41.118"N	104°58'08.414"W	0.19	
14019.00	89.290	269.050	7084.64	7363.75	-124.38	-7362.85	40°13'41.101"N	104°58'09.625"W	0.73	
14113.00	90.000	268.970	7085.22	7457.74	-126.00	-7456.83	40°13'41.085"N	104°58'10.837"W	0.76	
14208.00	90.950	268.900	7084.43	7552.74	-127.77	-7551.81	40°13'41.067"N	104°58'12.062"W	1.00	
14302.00	90.610	269.310	7083.16	7646.73	-129.24	-7645.79	40°13'41.052"N	104°58'13.273"W	0.57	
14396.00	89.470	269.870	7083.09	7740.72	-129.91	-7739.78	40°13'41.045"N	104°58'14.485"W	1.35	
14491.00	89.810	269.770	7083.69	7835.72	-130.21	-7834.78	40°13'41.042"N	104°58'15.710"W	0.37	
14585.00	90.430	269.800	7083.49	7929.72	-130.56	-7928.78	40°13'41.038"N	104°58'16.922"W	0.66	
14680.00	91.570	269.710	7081.83	8024.70	-130.97	-8023.76	40°13'41.034"N	104°58'18.146"W	1.20	
14774.00	91.290	269.930	7079.49	8118.67	-131.26	-8117.73	40°13'41.031"N	104°58'19.358"W	0.38	
14869.00	88.950	269.270	7079.29	8213.66	-131.92	-8212.72	40°13'41.024"N	104°58'20.583"W	2.56	
14963.00	89.500	269.130	7080.56	8307.65	-133.24	-8306.71	40°13'41.011"N	104°58'21.794"W	0.60	
15058.00	90.400	269.160	7080.64	8402.65	-134.65	-8401.69	40°13'40.996"N	104°58'23.019"W	0.95	
15152.00	90.580	269.610	7079.84	8496.64	-135.66	-8495.69	40°13'40.986"N	104°58'24.231"W	0.52	
15247.00	89.810	269.510	7079.51	8591.64	-136.39	-8590.68	40°13'40.978"N	104°58'25.455"W	0.82	
15341.00	90.460	269.550	7079.29	8685.64	-137.16	-8684.68	40°13'40.971"N	104°58'26.667"W	0.69	
15435.00	90.860	269.680	7078.21	8779.63	-137.79	-8778.67	40°13'40.964"N	104°58'27.879"W	0.45	
15530.00	90.610	269.260	7076.99	8874.62	-138.67	-8873.66	40°13'40.955"N	104°58'29.104"W	0.51	
15624.00	92.060	269.410	7074.80	8968.60	-139.76	-8967.62	40°13'40.944"N	104°58'30.315"W	1.55	
15719.00	91.940	269.820	7071.49	9063.54	-140.40	-9062.56	40°13'40.937"N	104°58'31.539"W	0.45	
15813.00	90.640	270.170	7069.37	9157.51	-140.41	-9156.54	40°13'40.937"N	104°58'32.751"W	1.43	
15908.00	91.010	270.280	7068.00	9252.49	-140.04	-9251.53	40°13'40.940"N	104°58'33.975"W	0.41	
16002.00	88.550	271.130	7068.36	9346.45	-138.88	-9345.51	40°13'40.951"N	104°58'35.187"W	2.77	
16097.00	88.420	270.890	7070.87	9441.38	-137.21	-9440.46	40°13'40.967"N	104°58'36.411"W	0.29	
16191.00	89.590	270.990	7072.51	9535.33	-135.66	-9534.43	40°13'40.982"N	104°58'37.623"W	1.25	
16286.00	88.360	271.090	7074.21	9630.28	-133.94	-9629.40	40°13'40.999"N	104°58'38.847"W	1.30	
16380.00	88.950	271.140	7076.41	9724.21	-132.11	-9723.36	40°13'41.017"N	104°58'40.059"W	0.63	
16475.00	90.180	271.330	7077.13	9819.15	-130.06	-9818.33	40°13'41.036"N	104°58'41.283"W	1.31	
16569.00	91.690	271.340	7075.60	9913.09	-127.88	-9912.29	40°13'41.058"N	104°58'42.494"W	1.61	
16663.00	93.080	271.490	7071.69	10006.94	-125.56	-10006.18	40°13'41.080"N	104°58'43.705"W	1.49	
16788.00	92.620	271.140	7065.47	10131.72	-122.69	-10130.99	40°13'41.108"N	104°58'45.314"W	0.46	LAST BHI MWD+IFR SURVEY
16856.00	92.620	271.140	7062.36	10199.62	-121.34	-10198.90	40°13'41.121"N	104°58'46.190"W	0.00	PROJECTION TO BIT



# Actual Wellpath Report

KERBS 5N-14HZ AWP

Page 6 of 7

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13)
Area	COLORADO	Well	KERBS 5N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 5N-14HZ AWP
Facility	SEC.13-T3N-R68W		

## HOLE & CASING SECTIONS - Ref Wellbore: KERBS 5N-14HZ AWP Ref Wellpath: KERBS 5N-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	1093.00	1068.00	25.00	1092.98	0.00	0.00	-1.62	-3.75
9.625in Casing Surface	25.00	1082.00	1057.00	25.00	1081.98	0.00	0.00	-1.59	-3.66
8.75in Open Hole	1093.00	7379.00	6286.00	1092.98	7011.79	-1.62	-3.75	-55.14	-725.24
7in Casing Intermediate	25.00	7369.00	7344.00	25.00	7011.17	0.00	0.00	-55.50	-715.27
6.125in Open Hole	7379.00	16856.00	9477.00	7011.79	7062.36	-55.14	-725.24	-121.34	-10198.90

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
KERBS 5N-14HZ BHL ON PLAT REV-1 (2005'FNL & 50'FWL, SEC.14)		7074.00	-164.06	-10200.03	3145331.34	1326318.72	40°13'40.699"N	104°58'46.204"W	point
KERBS 5N-14HZ LANDBOX		7074.00	0.00	0.00	3155529.68	1326546.84	40°13'42.341"N	104°56'34.699"W	polygon
SEC.13-T3N-R68W HARD LINES (460' SETBACKS)		7074.00	1002.13	-277.59	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.13-T3N-R68W SECTION LINES		7074.00	1002.13	-277.59	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	1002.13	-277.59	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		7074.00	1002.13	-277.59	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon

## WELLPATH COMPOSITION - Ref Wellbore: KERBS 5N-14HZ AWP Ref Wellpath: KERBS 5N-14HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	975.00	Generic gyro - continuous (Standard)	GYRO SURVEYS <125-975)	KERBS 5N-14HZ AWP
975.00	7315.00	NaviTrak (IFR)	BHI NAVITRAK MWD+IFR 8 3/4" <1131-7315>	KERBS 5N-14HZ AWP
7315.00	16788.00	NaviTrak (IFR)	BHI NAVITRAK MWD+IFR 6 1/8" <7456-16788>	KERBS 5N-14HZ AWP
16788.00	16856.00	Blind Drilling (std)	Projection to bit	KERBS 5N-14HZ AWP

# Actual Wellpath Report

KERBS 5N-14HZ AWP

Page 7 of 7

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 KERBS 5N-14HZ (1921' FNL & 343' FEL, SEC. 13)
Area	COLORADO	Well	KERBS 5N-14HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	KERBS 5N-14HZ AWP
Facility	SEC.13-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
25.00	0.000	176.450	25.00	TIE ON
125.00	0.180	176.450	125.00	BEGIN GYRO SURVEYS
975.00	0.390	143.710	974.98	TIE ONTO GYRO SURVEYS
1131.00	0.770	267.150	1130.98	BEGIN BHI MWD+IFR SURVEYS
7369.00	86.289	272.041	7011.17	7" CASING POINT
16788.00	92.620	271.140	7065.47	LAST BHI MWD+IFR SURVEY
16856.00	92.620	271.140	7062.36	PROJECTION TO BIT