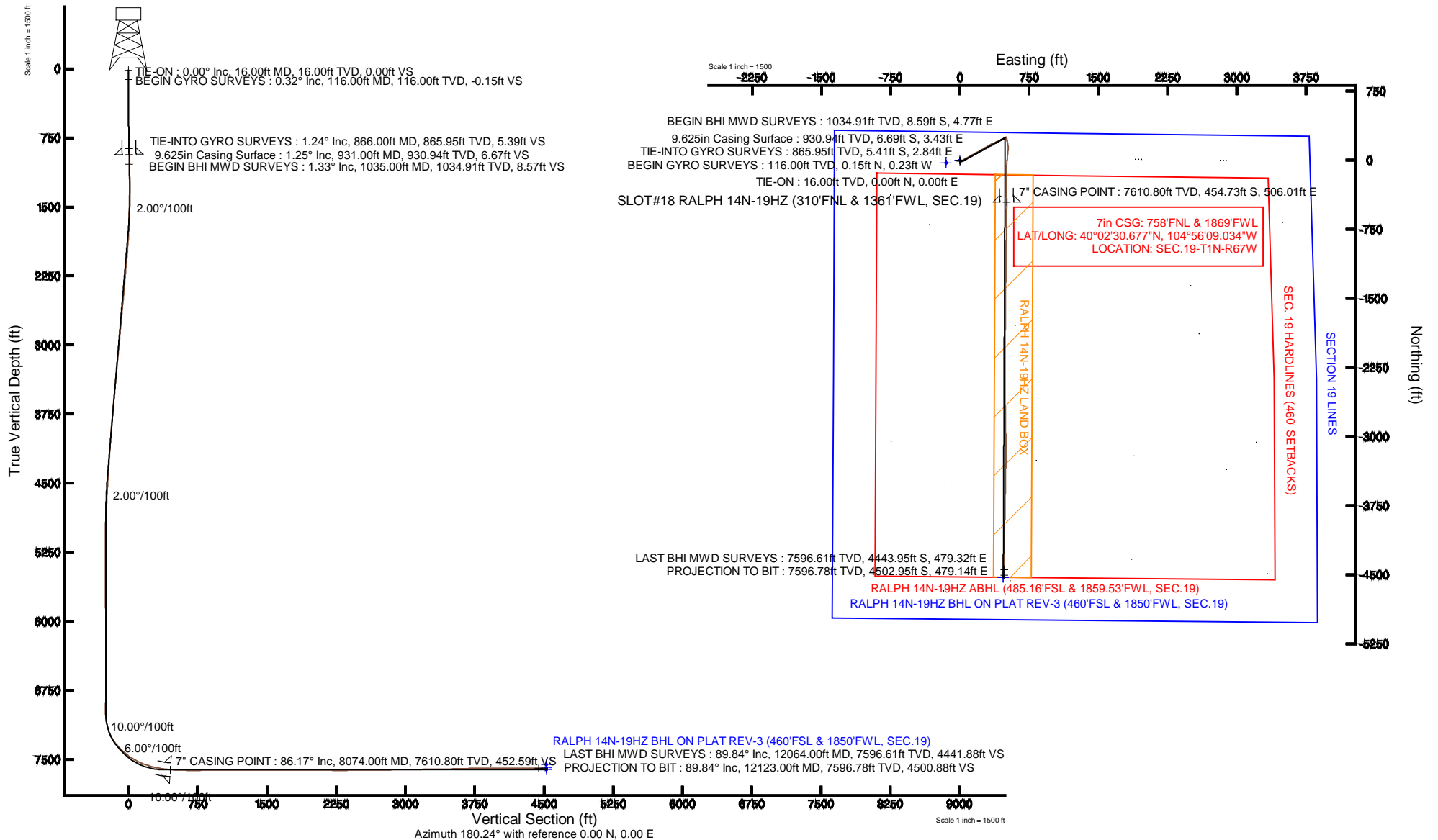


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#18 RALPH 14N-19HZ (310'FNL & 1361'FWL, SEC.19)
 Field: WELD COUNTY (KERR MCGEE) Well: RALPH 14N-19HZ
 Facility: SEC.19-T1N-R67W Wellbore: RALPH 14N-19HZ PWB

Plot reference wellpath is RALPH 14N-19HZ (REV-C.0) PWP

True vertical depths are referenced to XTREME 6 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (RKB)	North Reference: True north
XTREME 6 (RKB) to Mean Sea Level: 5135 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#18 RALPH 14N-19HZ (310'FNL & 1361'FWL, SEC.19)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 11/Jul/2013





Actual Wellpath Report

RALPH 14N-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 RALPH 14N-19HZ (310'FNL & 1361'FWL, SEC.19)
Area	COLORADO	Well	RALPH 14N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 14N-19HZ AWB
Facility	SEC.19-T1N-R67W		

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	0.999963	Report Generated	11/Jul/2013 at 10:11
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/RALPH_14N-19HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	28.33	150.18	3157443.74	1259047.41	40°02'35.171"N	104°56'15.540"W
Facility Reference Pt			3157293.75	1259018.13	40°02'34.891"N	104°56'17.471"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 6 (RKB) to Facility Vertical Datum	5135.00ft
Horizontal Reference Pt	Slot	XTREME 6 (RKB) to Mean Sea Level	5135.00ft
Vertical Reference Pt	XTREME 6 (RKB)	XTREME 6 (RKB) to Mud Line at Slot (SLOT#18 RALPH 14N-19HZ (310'FNL & 1361'FWL, SEC.19))	5135.00ft
MD Reference Pt	XTREME 6 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	173.93°



Actual Wellpath Report

RALPH 14N-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 RALPH 14N-19HZ (310'FNL & 1361'FWL, SEC.19)
Area	COLORADO	Well	RALPH 14N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 14N-19HZ AWB
Facility	SEC.19-T1N-R67W		

WELLPATH DATA (135 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	303.170	0.00	0.00	0.00	0.00	40°02'35.171"N	104°56'15.540"W	0.00	
16.00	0.000	303.170	16.00	0.00	0.00	0.00	40°02'35.171"N	104°56'15.540"W	0.00	TIE-ON
116.00	0.320	303.170	116.00	-0.18	0.15	-0.23	40°02'35.173"N	104°56'15.543"W	0.32	BEGIN GYRO SURVEYS
216.00	0.380	167.580	216.00	-0.02	-0.02	-0.40	40°02'35.171"N	104°56'15.545"W	0.65	
316.00	0.440	69.950	316.00	0.21	-0.21	0.04	40°02'35.169"N	104°56'15.540"W	0.62	
416.00	0.350	85.870	415.99	0.13	-0.06	0.70	40°02'35.170"N	104°56'15.531"W	0.14	
516.00	0.420	164.980	515.99	0.50	-0.39	1.10	40°02'35.167"N	104°56'15.526"W	0.49	
616.00	0.970	165.340	615.99	1.70	-1.56	1.41	40°02'35.156"N	104°56'15.522"W	0.55	
716.00	1.090	162.270	715.97	3.47	-3.29	1.91	40°02'35.139"N	104°56'15.515"W	0.13	
816.00	0.640	147.330	815.96	4.90	-4.66	2.51	40°02'35.125"N	104°56'15.508"W	0.50	
866.00	1.240	159.760	865.95	5.68	-5.41	2.84	40°02'35.118"N	104°56'15.503"W	1.26	TIE-INTO GYRO SURVEYS
1035.00	1.330	138.650	1034.91	9.05	-8.59	4.77	40°02'35.086"N	104°56'15.479"W	0.28	BEGIN BHI MWD SURVEYS
1065.00	1.290	134.310	1064.90	9.59	-9.09	5.24	40°02'35.081"N	104°56'15.473"W	0.36	
1156.00	1.410	135.140	1155.88	11.26	-10.60	6.77	40°02'35.066"N	104°56'15.453"W	0.13	
1248.00	1.300	144.540	1247.85	13.05	-12.25	8.17	40°02'35.050"N	104°56'15.435"W	0.27	
1339.00	2.240	54.720	1338.82	13.08	-12.07	10.22	40°02'35.052"N	104°56'15.409"W	2.84	
1431.00	2.540	52.040	1430.74	11.13	-9.77	13.30	40°02'35.074"N	104°56'15.369"W	0.35	
1523.00	2.540	50.780	1522.65	8.93	-7.23	16.48	40°02'35.100"N	104°56'15.328"W	0.06	
1615.00	3.540	75.570	1614.52	7.41	-5.23	20.81	40°02'35.119"N	104°56'15.272"W	1.77	
1706.00	4.510	69.920	1705.30	6.13	-3.31	26.89	40°02'35.138"N	104°56'15.194"W	1.15	
1798.00	5.440	62.560	1796.95	3.67	-0.05	34.16	40°02'35.170"N	104°56'15.101"W	1.22	
1889.00	6.790	55.690	1887.43	-0.45	4.97	42.43	40°02'35.220"N	104°56'14.994"W	1.68	
1974.00	8.420	57.190	1971.68	-5.63	11.17	51.82	40°02'35.281"N	104°56'14.874"W	1.93	
2060.00	9.000	57.800	2056.69	-11.42	18.17	62.80	40°02'35.351"N	104°56'14.733"W	0.68	
2144.00	9.990	58.400	2139.54	-17.45	25.49	74.57	40°02'35.423"N	104°56'14.581"W	1.18	
2229.00	10.620	63.830	2223.17	-23.32	32.80	87.87	40°02'35.495"N	104°56'14.410"W	1.36	
2315.00	10.370	61.620	2307.73	-28.98	39.98	101.80	40°02'35.566"N	104°56'14.231"W	0.55	
2400.00	10.030	59.770	2391.39	-34.92	47.34	114.92	40°02'35.639"N	104°56'14.062"W	0.56	
2485.00	10.880	62.890	2474.97	-40.83	54.72	128.46	40°02'35.712"N	104°56'13.888"W	1.20	
2570.00	10.850	60.930	2558.45	-46.83	62.27	142.59	40°02'35.786"N	104°56'13.707"W	0.44	
2655.00	10.730	60.870	2641.95	-53.05	70.01	156.50	40°02'35.863"N	104°56'13.528"W	0.14	
2739.00	10.220	60.310	2724.55	-59.10	77.50	169.80	40°02'35.937"N	104°56'13.357"W	0.62	
2824.00	11.440	63.970	2808.03	-65.00	84.94	183.93	40°02'36.010"N	104°56'13.175"W	1.65	
2909.00	11.030	61.190	2891.41	-71.02	92.56	198.63	40°02'36.086"N	104°56'12.986"W	0.80	
2993.00	10.870	61.500	2973.88	-77.15	100.21	212.63	40°02'36.161"N	104°56'12.806"W	0.20	
3078.00	10.610	59.750	3057.39	-83.41	107.97	226.43	40°02'36.238"N	104°56'12.629"W	0.49	
3163.00	10.730	61.380	3140.92	-89.65	115.71	240.14	40°02'36.314"N	104°56'12.452"W	0.38	
3248.00	10.360	59.720	3224.48	-95.82	123.35	253.68	40°02'36.390"N	104°56'12.278"W	0.56	
3333.00	11.130	62.220	3307.99	-101.98	131.03	267.54	40°02'36.466"N	104°56'12.100"W	1.06	
3418.00	10.820	60.860	3391.44	-108.14	138.74	281.77	40°02'36.542"N	104°56'11.917"W	0.48	
3503.00	10.650	59.880	3474.95	-114.47	146.56	295.53	40°02'36.619"N	104°56'11.740"W	0.29	
3588.00	10.910	61.560	3558.45	-120.73	154.34	309.40	40°02'36.696"N	104°56'11.562"W	0.48	
3673.00	10.210	59.150	3642.01	-126.95	162.03	322.94	40°02'36.772"N	104°56'11.388"W	0.97	
3758.00	10.430	59.130	3725.63	-133.33	169.84	336.01	40°02'36.849"N	104°56'11.220"W	0.26	
3843.00	10.680	66.320	3809.20	-138.94	176.95	349.83	40°02'36.920"N	104°56'11.042"W	1.58	



Actual Wellpath Report

RALPH 14N-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 RALPH 14N-19HZ (310'FNL & 1361'FWL, SEC.19)
Area	COLORADO	Well	RALPH 14N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 14N-19HZ AWB
Facility	SEC.19-T1N-R67W		

WELLPATH DATA (135 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3929.00	10.310	65.100	3893.76	-143.84	183.39	364.11	40°02'36.983"N	104°56'10.858"W	0.50	
4014.00	9.650	64.820	3977.47	-148.62	189.63	377.45	40°02'37.045"N	104°56'10.687"W	0.78	
4099.00	10.470	67.620	4061.17	-153.12	195.60	391.04	40°02'37.104"N	104°56'10.512"W	1.12	
4184.00	9.650	66.480	4144.86	-157.43	201.38	404.72	40°02'37.161"N	104°56'10.336"W	0.99	
4269.00	8.990	65.680	4228.74	-161.64	206.96	417.30	40°02'37.216"N	104°56'10.174"W	0.79	
4354.00	8.290	64.210	4312.77	-165.79	212.36	428.87	40°02'37.270"N	104°56'10.026"W	0.86	
4439.00	7.920	63.240	4396.92	-169.93	217.66	439.62	40°02'37.322"N	104°56'09.887"W	0.46	
4524.00	7.210	63.810	4481.18	-173.83	222.65	449.63	40°02'37.371"N	104°56'09.759"W	0.84	
4610.00	6.780	61.650	4566.54	-177.61	227.45	458.94	40°02'37.419"N	104°56'09.639"W	0.59	
4694.00	6.200	59.050	4650.00	-181.40	232.13	467.20	40°02'37.465"N	104°56'09.533"W	0.77	
4779.00	5.280	53.540	4734.58	-185.31	236.82	474.28	40°02'37.511"N	104°56'09.442"W	1.26	
4865.00	4.990	53.730	4820.23	-189.19	241.38	480.48	40°02'37.556"N	104°56'09.362"W	0.34	
4950.00	4.790	57.630	4904.92	-192.62	245.47	486.45	40°02'37.597"N	104°56'09.285"W	0.46	
5035.00	3.830	68.940	4989.68	-194.93	248.39	492.10	40°02'37.626"N	104°56'09.213"W	1.50	
5120.00	1.530	78.660	5074.59	-195.77	249.63	495.86	40°02'37.638"N	104°56'09.164"W	2.75	
5205.00	0.920	99.750	5159.57	-195.68	249.74	497.65	40°02'37.639"N	104°56'09.141"W	0.88	
5290.00	0.550	96.900	5244.56	-195.41	249.58	498.73	40°02'37.637"N	104°56'09.127"W	0.44	
5375.00	0.440	18.720	5329.56	-195.61	249.84	499.24	40°02'37.640"N	104°56'09.121"W	0.74	
5460.00	0.450	24.790	5414.55	-196.19	250.45	499.48	40°02'37.646"N	104°56'09.118"W	0.06	
5545.00	0.470	162.270	5499.55	-196.14	250.42	499.73	40°02'37.646"N	104°56'09.115"W	1.01	
5630.00	0.820	177.530	5584.55	-195.19	249.48	499.86	40°02'37.636"N	104°56'09.113"W	0.46	
5716.00	0.680	165.620	5670.54	-194.07	248.37	500.01	40°02'37.625"N	104°56'09.111"W	0.24	
5801.00	0.730	175.080	5755.53	-193.03	247.34	500.18	40°02'37.615"N	104°56'09.109"W	0.15	
5886.00	0.810	193.710	5840.53	-191.92	246.22	500.09	40°02'37.604"N	104°56'09.110"W	0.31	
5971.00	0.530	196.930	5925.52	-191.00	245.26	499.83	40°02'37.595"N	104°56'09.113"W	0.33	
6056.00	0.210	92.110	6010.52	-190.61	244.88	499.87	40°02'37.591"N	104°56'09.113"W	0.73	
6141.00	0.290	97.450	6095.52	-190.54	244.85	500.24	40°02'37.591"N	104°56'09.108"W	0.10	
6224.00	0.400	95.960	6178.52	-190.43	244.79	500.74	40°02'37.590"N	104°56'09.102"W	0.13	
6309.00	0.330	100.000	6263.52	-190.30	244.71	501.27	40°02'37.589"N	104°56'09.095"W	0.09	
6394.00	0.630	93.650	6348.51	-190.15	244.64	501.98	40°02'37.589"N	104°56'09.086"W	0.36	
6479.00	0.350	60.750	6433.51	-190.18	244.74	502.67	40°02'37.590"N	104°56'09.077"W	0.45	
6564.00	0.030	213.610	6518.51	-190.26	244.85	502.89	40°02'37.591"N	104°56'09.074"W	0.44	
6649.00	0.180	129.150	6603.51	-190.15	244.75	502.98	40°02'37.590"N	104°56'09.073"W	0.21	
6732.00	0.370	284.900	6686.51	-190.15	244.73	502.82	40°02'37.589"N	104°56'09.075"W	0.65	
6817.00	0.290	359.730	6771.51	-190.47	245.02	502.56	40°02'37.592"N	104°56'09.078"W	0.48	
6902.00	0.530	9.900	6856.50	-191.06	245.62	502.62	40°02'37.598"N	104°56'09.077"W	0.29	
6988.00	0.420	8.910	6942.50	-191.75	246.32	502.74	40°02'37.605"N	104°56'09.076"W	0.13	
7030.00	0.040	87.580	6984.50	-191.89	246.48	502.78	40°02'37.607"N	104°56'09.075"W	0.99	
7073.00	3.270	166.320	7027.48	-190.68	245.28	503.08	40°02'37.595"N	104°56'09.071"W	7.59	
7115.00	7.850	170.030	7069.27	-186.63	241.29	503.86	40°02'37.555"N	104°56'09.061"W	10.93	
7158.00	11.780	167.500	7111.63	-179.33	234.11	505.32	40°02'37.485"N	104°56'09.043"W	9.19	
7200.00	16.480	164.580	7152.35	-169.19	224.18	507.84	40°02'37.386"N	104°56'09.010"W	11.31	
7243.00	19.950	166.840	7193.19	-155.88	211.15	511.13	40°02'37.258"N	104°56'08.968"W	8.23	
7286.00	25.300	168.660	7232.87	-139.44	194.99	514.61	40°02'37.098"N	104°56'08.923"W	12.55	
7328.00	30.390	170.080	7269.99	-119.89	175.71	518.21	40°02'36.907"N	104°56'08.877"W	12.22	



Actual Wellpath Report

RALPH 14N-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 RALPH 14N-19HZ (310'FNL & 1361'FWL, SEC.19)
Area	COLORADO	Well	RALPH 14N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 14N-19HZ AWB
Facility	SEC.19-T1N-R67W		

WELLPATH DATA (135 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7371.00	35.510	175.750	7306.07	-96.54	152.52	521.01	40°02'36.678"N	104°56'08.841"W	13.89	
7414.00	39.450	181.280	7340.20	-70.49	126.39	521.63	40°02'36.420"N	104°56'08.833"W	12.04	
7456.00	43.650	186.900	7371.63	-43.11	98.64	519.59	40°02'36.146"N	104°56'08.859"W	13.36	
7499.00	47.240	185.770	7401.80	-13.19	68.19	516.22	40°02'35.845"N	104°56'08.903"W	8.56	
7542.00	50.930	185.150	7429.96	18.64	35.85	513.13	40°02'35.525"N	104°56'08.942"W	8.65	
7584.00	53.510	185.090	7455.68	51.21	2.79	510.17	40°02'35.199"N	104°56'08.980"W	6.14	
7627.00	56.360	184.820	7480.39	85.75	-32.27	507.13	40°02'34.852"N	104°56'09.019"W	6.65	
7670.00	60.100	183.800	7503.02	121.70	-68.72	504.39	40°02'34.492"N	104°56'09.055"W	8.93	
7712.00	63.490	182.380	7522.87	158.24	-105.67	502.40	40°02'34.127"N	104°56'09.080"W	8.60	
7755.00	67.150	181.010	7540.82	196.94	-144.72	501.25	40°02'33.741"N	104°56'09.095"W	8.99	
7796.00	71.290	179.600	7555.37	235.03	-183.04	501.06	40°02'33.362"N	104°56'09.098"W	10.60	
7838.00	74.040	178.750	7567.88	274.95	-223.12	501.63	40°02'32.966"N	104°56'09.090"W	6.83	
7880.00	75.810	178.650	7578.80	315.36	-263.67	502.56	40°02'32.565"N	104°56'09.078"W	4.22	
7923.00	77.700	178.740	7588.65	357.07	-305.51	503.51	40°02'32.152"N	104°56'09.066"W	4.40	
7966.00	80.060	179.010	7596.95	399.10	-347.69	504.34	40°02'31.735"N	104°56'09.055"W	5.52	
8008.00	81.660	178.730	7603.62	440.41	-389.15	505.15	40°02'31.325"N	104°56'09.045"W	3.87	
8035.00	83.170	179.010	7607.18	467.08	-415.91	505.68	40°02'31.061"N	104°56'09.038"W	5.69	
8074.00†	86.170	180.006	7610.80	505.72	-454.73	506.01	40°02'30.677"N	104°56'09.034"W	8.10	7" CASING POINT
8084.00	86.940	180.260	7611.40	515.64	-464.71	505.99	40°02'30.579"N	104°56'09.034"W	8.10	
8118.00	87.040	180.450	7613.19	549.38	-498.67	505.78	40°02'30.243"N	104°56'09.037"W	0.63	
8289.00	89.750	180.900	7617.98	719.12	-669.57	503.77	40°02'28.554"N	104°56'09.063"W	1.61	
8457.00	91.160	180.940	7616.64	885.86	-837.54	501.07	40°02'26.894"N	104°56'09.098"W	0.84	
8627.00	90.240	180.780	7614.57	1054.60	-1007.51	498.52	40°02'25.215"N	104°56'09.130"W	0.55	
8797.00	89.630	180.450	7614.76	1223.44	-1177.50	496.69	40°02'23.535"N	104°56'09.154"W	0.41	
8967.00	89.660	180.420	7615.81	1392.34	-1347.49	495.40	40°02'21.855"N	104°56'09.171"W	0.02	
9138.00	89.690	180.440	7616.78	1562.24	-1518.48	494.12	40°02'20.165"N	104°56'09.187"W	0.02	
9308.00	90.030	180.720	7617.20	1731.09	-1688.47	492.40	40°02'18.485"N	104°56'09.209"W	0.26	
9478.00	90.060	180.560	7617.07	1899.93	-1858.46	490.50	40°02'16.805"N	104°56'09.234"W	0.10	
9648.00	90.000	181.450	7616.98	2068.63	-2028.43	487.52	40°02'15.125"N	104°56'09.272"W	0.52	
9818.00	89.720	179.320	7617.39	2237.54	-2198.42	486.38	40°02'13.446"N	104°56'09.287"W	1.26	
9989.00	90.210	179.710	7617.50	2407.73	-2369.41	487.82	40°02'11.756"N	104°56'09.268"W	0.37	
10159.00	91.170	179.560	7615.45	2576.87	-2539.39	488.91	40°02'10.076"N	104°56'09.254"W	0.57	
10329.00	90.090	178.560	7613.58	2746.17	-2709.35	491.69	40°02'08.396"N	104°56'09.219"W	0.87	
10499.00	91.010	179.420	7611.95	2915.50	-2879.32	494.69	40°02'06.717"N	104°56'09.180"W	0.74	
10669.00	90.800	179.380	7609.26	3084.70	-3049.29	496.47	40°02'05.037"N	104°56'09.157"W	0.13	
10839.00	90.800	180.300	7606.89	3253.78	-3219.27	496.95	40°02'03.357"N	104°56'09.151"W	0.54	
11010.00	90.770	180.960	7604.55	3423.59	-3390.24	495.07	40°02'01.668"N	104°56'09.175"W	0.39	
11180.00	91.630	181.120	7600.99	3592.24	-3560.17	491.98	40°01'59.988"N	104°56'09.215"W	0.51	
11350.00	91.410	181.140	7596.48	3760.84	-3730.08	488.63	40°01'58.309"N	104°56'09.258"W	0.13	
11520.00	90.890	180.780	7593.07	3929.53	-3900.02	485.78	40°01'56.630"N	104°56'09.295"W	0.37	
11688.00	88.730	180.480	7593.62	4096.37	-4068.00	483.94	40°01'54.970"N	104°56'09.319"W	1.30	
11858.00	89.590	181.110	7596.11	4265.13	-4237.96	481.58	40°01'53.290"N	104°56'09.349"W	0.63	
12028.00	90.090	180.310	7596.59	4433.93	-4407.95	479.47	40°01'51.611"N	104°56'09.376"W	0.55	
12064.00	89.840	180.170	7596.61	4469.72	-4443.95	479.32	40°01'51.255"N	104°56'09.378"W	0.80	LAST BHI MWD SURVEYS
12123.00	89.840	180.170	7596.78	4528.37	-4502.95	479.14	40°01'50.672"N	104°56'09.380"W	0.00	PROJECTION TO BIT



Actual Wellpath Report

RALPH 14N-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 RALPH 14N-19HZ (310'FNL & 1361'FWL, SEC.19)
Area	COLORADO	Well	RALPH 14N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 14N-19HZ AWB
Facility	SEC.19-T1N-R67W		

HOLE & CASING SECTIONS - Ref Wellbore: RALPH 14N-19HZ AWB Ref Wellpath: RALPH 14N-19HZ 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	931.00	915.00	16.00	930.94	0.00	0.00	-6.69	3.43
9.625in Casing Surface	16.00	931.00	915.00	16.00	930.94	0.00	0.00	-6.69	3.43
8.75in Open Hole	931.00	8084.00	7153.00	930.94	7611.40	-6.69	3.43	-464.71	505.99
7in Casing Intermediate	16.00	8074.00	8058.00	16.00	7610.80	0.00	0.00	-454.73	506.01
6.125in Open Hole	8084.00	12123.00	4039.00	7611.40	7596.78	-464.71	505.99	-4502.95	479.14

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 19 LINES		2.00	-28.43	-150.10	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W	polygon
RALPH 14N-19HZ BHL ON PLAT REV-2 (460'FSL & 1850'FWL, SEC.19)		7555.00	-4528.11	469.61	3157942.04	1254522.55	40°01'50.423"N	104°56'09.503"W	point
RALPH 14N-19HZ BHL ON PLAT REV-1 (460'FSL & 1850'FWL, SEC.19)		7590.00	-4528.11	469.61	3157942.04	1254522.55	40°01'50.423"N	104°56'09.503"W	point
RALPH 14N-19HZ BHL ON PLAT REV-3 (460'FSL & 1850'FWL, SEC.19)		7610.00	-4528.11	469.61	3157942.04	1254522.55	40°01'50.423"N	104°56'09.503"W	point
RALPH 14N-19HZ LAND BOX		8000.00	0.00	0.00	3157443.74	1259047.41	40°02'35.171"N	104°56'15.540"W	polygon
SEC. 19 HARDLINES (460' SETBACKS)		8002.00	-28.43	-150.10	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: RALPH 14N-19HZ AWB Ref Wellpath: RALPH 14N-19HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	866.00	Generic gyro - continuous (Standard)	MS GYRO SURVEYS <116-866>	RALPH 14N-19HZ AWB
866.00	8084.00	NaviTrak (MagCorr)	BHI MWD SURVEYS 8 3/4" HOLE <1035-8084>	RALPH 14N-19HZ AWB
8084.00	12064.00	OnTrak (MagCorr)	BHI MWD SURVEYS 6 1/8" HOLE <8118-12064>	RALPH 14N-19HZ AWB
12064.00	12123.00	Blind Drilling (std)	Projection to bit	RALPH 14N-19HZ AWB



Actual Wellpath Report

RALPH 14N-19HZ AWP

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 14N-19HZ AWB
Facility	SEC.19-T1N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	303.170	16.00	TIE-ON
116.00	0.320	303.170	116.00	BEGIN GYRO SURVEYS
866.00	1.240	159.760	865.95	TIE-INTO GYRO SURVEYS
1035.00	1.330	138.650	1034.91	BEGIN BHI MWD SURVEYS
8074.00	86.170	180.006	7610.80	7" CASING POINT
12064.00	89.840	180.170	7596.61	LAST BHI MWD SURVEYS
12123.00	89.840	180.170	7596.78	PROJECTION TO BIT