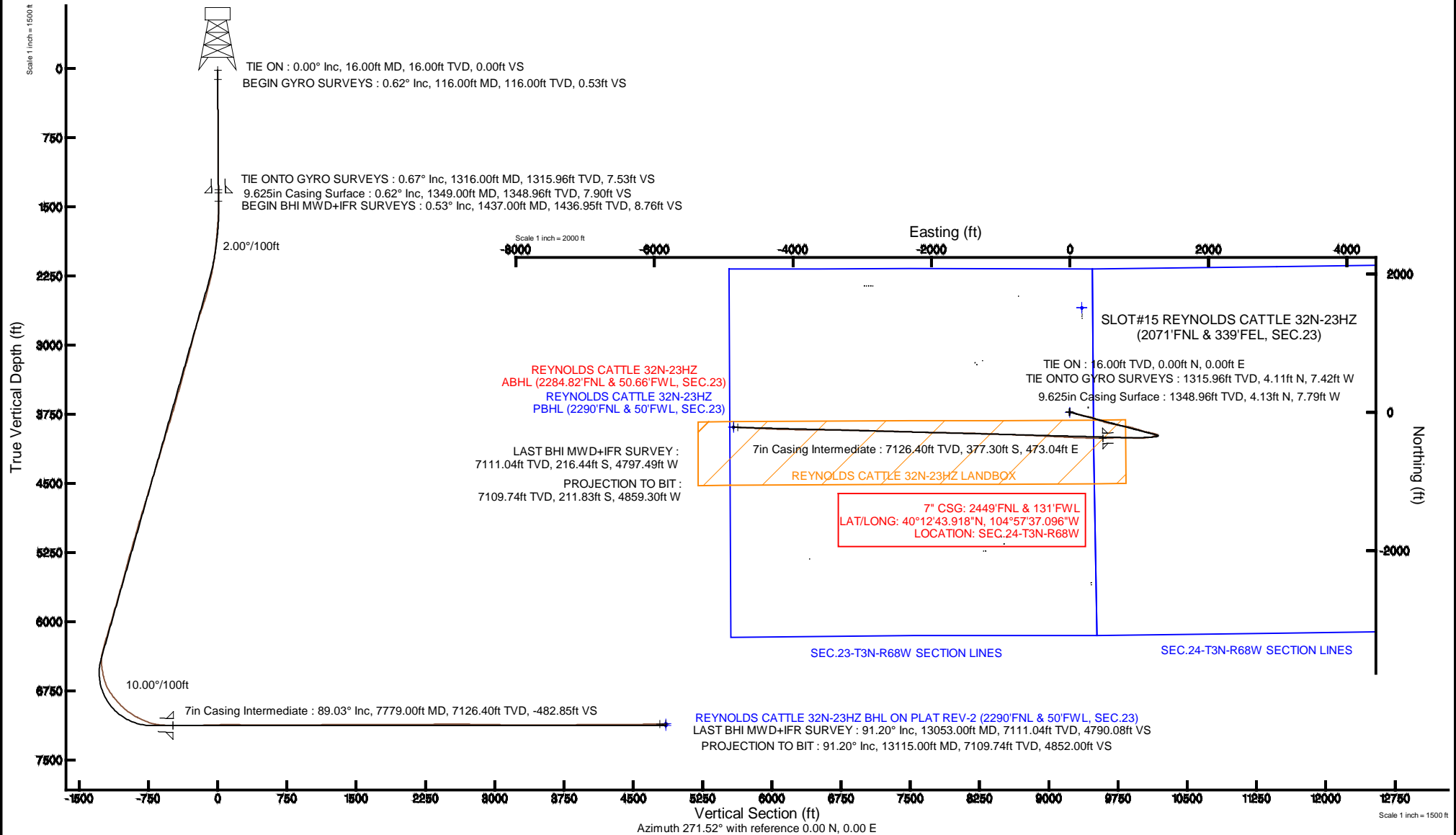


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23)
 Field: WELD COUNTY (KERR MCGEE) Well: REYNOLDS CATTLE 32N-23HZ
 Facility: SEC.23-T3N-R68W Wellbore: REYNOLDS CATTLE 32N-23HZ PWB

Plot reference wellpath is REYNOLDS CATTLE 32N-23HZ (REV-A.0) PWP

True vertical depths are referenced to XTREME 24 (16'RKB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 24 (16'RKB) (RKB)	North Reference: True north
XTREME 24 (16'RKB) (RKB) to Mean Sea Level: 4972 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: rntbld01 on 23/JUL/2014



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23)
Area	COLORADO	Well	REYNOLDS CATTLE 32N-23HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REYNOLDS CATTLE 32N-23HZ AWB
Facility	SEC.23-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	23/Jul/2014 at 12:53
Convergence at slot	n/a	Database/Source file	WellArchitectDB/REYNOLDS_CATTLE_32N-23HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1826.80	2849.30	3150250.98	1320979.55	40°12'47.646"N	104°57'43.193"W
Facility Reference Pt			3147390.98	1322789.28	40°13'05.700"N	104°58'19.920"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'RKB) (RKB) to Facility Vertical Datum	4972.00ft
Horizontal Reference Pt	Slot	XTREME 24 (16'RKB) (RKB) to Mean Sea Level	4972.00ft
Vertical Reference Pt	XTREME 24 (16'RKB) (RKB)	XTREME 24 (16'RKB) (RKB) to Mud Line at Slot (SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23))	4972.00ft
MD Reference Pt	XTREME 24 (16'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	267.50°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23)
Area	COLORADO	Well	REYNOLDS CATTLE 32N-23HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REYNOLDS CATTLE 32N-23HZ AWP
Facility	SEC.23-T3N-R68W		

WELLPATH DATA (126 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	284.130	0.00	0.00	0.00	0.00	40°12'47.646"N	104°57'43.193"W	0.00	
16.00	0.000	284.130	16.00	0.00	0.00	0.00	40°12'47.646"N	104°57'43.193"W	0.00	TIE ON
116.00	0.620	284.130	116.00	0.52	0.13	-0.52	40°12'47.647"N	104°57'43.200"W	0.62	BEGIN GYRO SURVEYS
216.00	0.340	251.100	215.99	1.32	0.17	-1.33	40°12'47.648"N	104°57'43.210"W	0.38	
316.00	0.130	246.470	315.99	1.71	0.03	-1.71	40°12'47.646"N	104°57'43.215"W	0.21	
416.00	0.270	321.290	415.99	1.96	0.17	-1.97	40°12'47.648"N	104°57'43.218"W	0.27	
516.00	0.400	347.120	515.99	2.16	0.69	-2.19	40°12'47.653"N	104°57'43.221"W	0.20	
616.00	0.740	329.170	615.99	2.53	1.58	-2.60	40°12'47.662"N	104°57'43.227"W	0.38	
716.00	0.670	294.110	715.98	3.36	2.38	-3.46	40°12'47.669"N	104°57'43.238"W	0.43	
816.00	0.520	262.580	815.97	4.33	2.56	-4.45	40°12'47.671"N	104°57'43.250"W	0.35	
916.00	0.270	255.920	915.97	5.02	2.44	-5.13	40°12'47.670"N	104°57'43.259"W	0.25	
1016.00	0.170	352.180	1015.97	5.26	2.53	-5.38	40°12'47.671"N	104°57'43.262"W	0.33	
1116.00	0.490	333.760	1115.97	5.45	3.06	-5.58	40°12'47.676"N	104°57'43.265"W	0.33	
1216.00	0.720	302.330	1215.96	6.13	3.78	-6.30	40°12'47.683"N	104°57'43.274"W	0.40	
1316.00	0.670	269.540	1315.96	7.23	4.11	-7.42	40°12'47.687"N	104°57'43.289"W	0.40	TIE ONTO GYRO SURVEYS
1437.00	0.530	292.510	1436.95	8.45	4.32	-8.64	40°12'47.689"N	104°57'43.304"W	0.23	BEGIN BHI MWD+IFR SURVEYS
1499.00	0.280	22.520	1498.95	8.64	4.57	-8.85	40°12'47.691"N	104°57'43.307"W	0.97	
1594.00	2.770	87.030	1593.91	6.25	4.90	-6.47	40°12'47.694"N	104°57'43.276"W	2.80	
1688.00	4.430	89.790	1687.72	0.35	5.04	-0.57	40°12'47.696"N	104°57'43.200"W	1.78	
1782.00	5.550	94.820	1781.36	-7.79	4.67	7.59	40°12'47.692"N	104°57'43.095"W	1.28	
1877.00	4.970	102.700	1875.97	-16.31	3.38	16.18	40°12'47.679"N	104°57'42.984"W	0.97	
1973.00	6.860	110.790	1971.45	-25.59	0.43	25.60	40°12'47.650"N	104°57'42.863"W	2.15	
2067.00	8.410	107.810	2064.62	-37.20	-3.67	37.39	40°12'47.610"N	104°57'42.711"W	1.70	
2160.00	10.460	109.270	2156.35	-51.42	-8.54	51.84	40°12'47.562"N	104°57'42.525"W	2.22	
2252.00	12.930	108.350	2246.44	-68.80	-14.53	69.49	40°12'47.502"N	104°57'42.297"W	2.69	
2345.00	14.250	110.220	2336.83	-89.08	-21.76	90.11	40°12'47.431"N	104°57'42.031"W	1.50	
2438.00	16.320	106.600	2426.54	-111.99	-29.46	113.38	40°12'47.355"N	104°57'41.732"W	2.45	
2532.00	18.340	104.900	2516.27	-138.58	-37.03	140.33	40°12'47.280"N	104°57'41.384"W	2.22	
2625.00	18.970	104.180	2604.38	-167.03	-44.50	169.12	40°12'47.206"N	104°57'41.013"W	0.72	
2718.00	19.380	102.950	2692.22	-196.38	-51.66	198.82	40°12'47.136"N	104°57'40.630"W	0.62	
2811.00	16.010	99.340	2780.81	-223.81	-57.20	226.52	40°12'47.081"N	104°57'40.273"W	3.81	
2905.00	14.470	97.780	2871.50	-248.06	-60.89	250.95	40°12'47.044"N	104°57'39.958"W	1.70	
2998.00	14.800	104.020	2961.49	-270.88	-65.34	273.99	40°12'47.000"N	104°57'39.661"W	1.73	
3089.00	15.430	105.360	3049.34	-293.55	-71.37	296.94	40°12'46.941"N	104°57'39.366"W	0.79	
3181.00	15.650	104.960	3137.98	-317.03	-77.81	320.73	40°12'46.877"N	104°57'39.059"W	0.27	
3273.00	16.600	110.270	3226.36	-340.99	-85.57	345.04	40°12'46.800"N	104°57'38.745"W	1.91	
3365.00	16.280	115.280	3314.61	-364.52	-95.63	369.03	40°12'46.701"N	104°57'38.436"W	1.58	
3457.00	16.410	109.920	3402.89	-387.94	-105.56	392.91	40°12'46.603"N	104°57'38.128"W	1.65	
3549.00	16.280	108.880	3491.18	-411.96	-114.16	417.33	40°12'46.518"N	104°57'37.814"W	0.35	
3641.00	16.780	108.330	3579.37	-436.38	-122.51	442.14	40°12'46.435"N	104°57'37.494"W	0.57	
3733.00	16.520	109.590	3667.52	-460.92	-131.07	467.07	40°12'46.351"N	104°57'37.173"W	0.48	
3825.00	16.920	107.620	3755.63	-485.61	-139.51	492.15	40°12'46.267"N	104°57'36.849"W	0.75	
3916.00	17.820	105.510	3842.48	-511.29	-147.25	518.19	40°12'46.191"N	104°57'36.514"W	1.21	
4008.00	17.790	105.000	3930.07	-538.08	-154.65	545.33	40°12'46.118"N	104°57'36.164"W	0.17	
4100.00	16.590	102.920	4017.96	-564.15	-161.22	571.71	40°12'46.053"N	104°57'35.824"W	1.47	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23)
Area	COLORADO	Well	REYNOLDS CATTLE 32N-23HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REYNOLDS CATTLE 32N-23HZ AWB
Facility	SEC.23-T3N-R68W		

WELLPATH DATA (126 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4192.00	17.240	102.790	4105.98	-589.96	-167.18	597.81	40°12'45.994"N	104°57'35.487"W	0.71	
4284.00	16.090	100.360	4194.12	-615.54	-172.49	623.64	40°12'45.941"N	104°57'35.154"W	1.46	
4376.00	17.770	102.770	4282.13	-641.51	-177.88	649.88	40°12'45.888"N	104°57'34.816"W	1.98	
4468.00	17.680	101.170	4369.76	-668.63	-183.69	677.28	40°12'45.831"N	104°57'34.463"W	0.54	
4560.00	17.340	101.050	4457.50	-695.54	-189.03	704.44	40°12'45.778"N	104°57'34.113"W	0.37	
4651.00	16.320	98.020	4544.60	-721.29	-193.41	730.41	40°12'45.735"N	104°57'33.778"W	1.48	
4742.00	16.520	97.110	4631.89	-746.62	-196.80	755.91	40°12'45.701"N	104°57'33.450"W	0.36	
4827.00	17.670	99.700	4713.13	-771.14	-200.47	780.62	40°12'45.665"N	104°57'33.131"W	1.62	
4912.00	17.610	99.810	4794.14	-796.32	-204.83	806.00	40°12'45.622"N	104°57'32.804"W	0.08	
4997.00	17.000	98.420	4875.29	-821.08	-208.84	830.96	40°12'45.582"N	104°57'32.482"W	0.87	
5082.00	16.120	99.720	4956.76	-844.81	-212.65	854.89	40°12'45.544"N	104°57'32.174"W	1.12	
5167.00	15.800	105.360	5038.49	-867.36	-217.71	877.68	40°12'45.494"N	104°57'31.880"W	1.86	
5252.00	17.300	108.620	5119.97	-890.17	-224.81	900.81	40°12'45.424"N	104°57'31.582"W	2.07	
5337.00	16.840	107.450	5201.22	-913.53	-232.54	924.54	40°12'45.348"N	104°57'31.276"W	0.68	
5422.00	15.650	107.880	5282.83	-935.85	-239.75	947.20	40°12'45.277"N	104°57'30.984"W	1.41	
5507.00	14.710	106.070	5364.86	-956.83	-246.26	968.48	40°12'45.212"N	104°57'30.710"W	1.24	
5593.00	15.500	108.040	5447.89	-977.95	-252.84	989.90	40°12'45.147"N	104°57'30.434"W	1.10	
5678.00	16.280	105.470	5529.64	-999.91	-259.53	1012.18	40°12'45.081"N	104°57'30.146"W	1.24	
5763.00	16.480	105.690	5611.19	-1022.70	-265.97	1035.27	40°12'45.017"N	104°57'29.849"W	0.25	
5848.00	16.950	108.320	5692.60	-1045.74	-273.13	1058.64	40°12'44.947"N	104°57'29.547"W	1.05	
5933.00	16.340	104.390	5774.04	-1068.76	-279.99	1081.98	40°12'44.879"N	104°57'29.247"W	1.51	
6018.00	16.310	101.840	5855.62	-1091.77	-285.41	1105.25	40°12'44.825"N	104°57'28.947"W	0.84	
6102.00	16.400	101.160	5936.22	-1114.72	-290.13	1128.42	40°12'44.779"N	104°57'28.648"W	0.25	
6187.00	15.910	101.180	6017.86	-1137.70	-294.71	1151.63	40°12'44.733"N	104°57'28.349"W	0.58	
6272.00	16.720	102.500	6099.44	-1160.83	-299.62	1174.99	40°12'44.685"N	104°57'28.048"W	1.05	
6358.00	17.240	104.250	6181.69	-1184.98	-305.43	1199.42	40°12'44.627"N	104°57'27.733"W	0.85	
6443.00	15.530	104.560	6263.23	-1207.93	-311.39	1222.65	40°12'44.569"N	104°57'27.433"W	2.01	
6528.00	13.490	104.190	6345.52	-1228.30	-316.68	1243.27	40°12'44.516"N	104°57'27.168"W	2.40	
6613.00	6.060	185.910	6429.52	-1237.19	-323.61	1252.47	40°12'44.448"N	104°57'27.049"W	16.41	
6656.00	9.690	226.830	6472.14	-1234.11	-328.35	1249.59	40°12'44.401"N	104°57'27.086"W	15.02	
6699.00	10.720	236.550	6514.47	-1227.93	-333.03	1243.62	40°12'44.355"N	104°57'27.163"W	4.66	
6784.00	14.560	244.170	6597.40	-1211.34	-342.05	1227.40	40°12'44.266"N	104°57'27.372"W	4.92	
6869.00	21.760	252.220	6678.12	-1186.29	-351.53	1202.74	40°12'44.172"N	104°57'27.690"W	8.95	
6954.00	32.510	259.160	6753.67	-1148.37	-360.66	1165.18	40°12'44.082"N	104°57'28.174"W	13.16	
7039.00	39.720	261.970	6822.30	-1098.67	-368.77	1115.79	40°12'44.002"N	104°57'28.811"W	8.70	
7124.00	43.210	268.870	6886.02	-1042.50	-373.14	1059.76	40°12'43.958"N	104°57'29.533"W	6.76	
7209.00	48.500	270.240	6945.20	-981.57	-373.58	998.79	40°12'43.954"N	104°57'30.319"W	6.33	
7294.00	56.580	271.890	6996.86	-914.29	-372.27	931.39	40°12'43.967"N	104°57'31.188"W	9.63	
7379.00	62.610	269.690	7039.86	-841.14	-371.31	858.13	40°12'43.977"N	104°57'32.132"W	7.44	
7464.00	67.470	270.490	7075.72	-764.18	-371.17	781.09	40°12'43.978"N	104°57'33.125"W	5.78	
7549.00	72.770	270.290	7104.61	-684.38	-370.63	701.19	40°12'43.983"N	104°57'34.155"W	6.24	
7588.00	80.240	268.800	7113.71	-646.51	-370.94	663.29	40°12'43.980"N	104°57'34.643"W	19.51	
7683.00	87.960	266.700	7123.47	-552.09	-374.66	568.95	40°12'43.944"N	104°57'35.860"W	8.42	
7714.00	87.810	268.270	7124.61	-521.11	-376.02	538.00	40°12'43.930"N	104°57'36.258"W	5.08	
7779.00†	89.032	269.471	7126.40	-456.16	-377.30	473.04	40°12'43.918"N	104°57'37.096"W	2.64	7" CASING POINT

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23)
Area	COLORADO	Well	REYNOLDS CATTLE 32N-23HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REYNOLDS CATTLE 32N-23HZ AWB
Facility	SEC.23-T3N-R68W		

WELLPATH DATA (126 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7806.00	89.540	269.970	7126.74	-429.18	-377.43	446.04	40°12'43.916"N	104°57'37.444"W	2.64	
7898.00	90.180	271.490	7126.96	-337.33	-376.26	354.05	40°12'43.928"N	104°57'38.629"W	1.79	
7990.00	90.890	272.090	7126.10	-245.59	-373.39	262.10	40°12'43.956"N	104°57'39.815"W	1.01	
8174.00	91.900	272.170	7121.62	-62.25	-366.55	78.28	40°12'44.024"N	104°57'42.184"W	0.55	
8351.00	90.490	273.180	7117.93	113.99	-358.29	-98.48	40°12'44.105"N	104°57'44.462"W	0.98	
8521.00	88.780	272.460	7119.02	283.25	-349.93	-268.26	40°12'44.188"N	104°57'46.651"W	1.09	
8691.00	89.720	273.270	7121.24	452.48	-341.43	-438.03	40°12'44.272"N	104°57'48.839"W	0.73	
8861.00	90.120	272.270	7121.48	621.76	-333.21	-607.83	40°12'44.353"N	104°57'51.028"W	0.63	
9032.00	89.840	271.860	7121.54	792.22	-327.05	-778.72	40°12'44.414"N	104°57'53.230"W	0.29	
9202.00	90.240	271.880	7121.42	961.73	-321.51	-948.63	40°12'44.469"N	104°57'55.420"W	0.24	
9372.00	91.320	272.470	7119.10	1131.14	-315.05	-1118.49	40°12'44.532"N	104°57'57.610"W	0.72	
9542.00	90.830	272.490	7115.92	1300.47	-307.70	-1288.30	40°12'44.605"N	104°57'59.799"W	0.29	
9626.00	90.120	271.300	7115.22	1384.22	-304.92	-1372.24	40°12'44.632"N	104°58'00.881"W	1.65	
9797.00	89.350	270.450	7116.01	1554.92	-302.31	-1543.22	40°12'44.658"N	104°58'03.085"W	0.67	
9882.00	90.730	271.570	7115.95	1639.76	-300.81	-1628.20	40°12'44.673"N	104°58'04.180"W	2.09	
10052.00	89.900	270.860	7115.02	1809.40	-297.21	-1798.16	40°12'44.708"N	104°58'06.371"W	0.64	
10138.00	89.070	270.670	7115.79	1895.25	-296.06	-1884.15	40°12'44.720"N	104°58'07.479"W	0.99	
10308.00	89.930	271.610	7117.27	2064.90	-292.68	-2054.10	40°12'44.753"N	104°58'09.670"W	0.75	
10478.00	90.980	272.070	7115.92	2234.41	-287.22	-2224.01	40°12'44.807"N	104°58'11.860"W	0.67	
10563.00	90.920	272.430	7114.51	2319.10	-283.88	-2308.93	40°12'44.840"N	104°58'12.954"W	0.43	
10733.00	90.800	271.460	7111.96	2488.57	-278.11	-2478.81	40°12'44.896"N	104°58'15.144"W	0.57	
10818.00	89.930	271.760	7111.42	2573.35	-275.73	-2563.78	40°12'44.920"N	104°58'16.239"W	1.08	
10988.00	88.520	271.900	7113.72	2742.85	-270.30	-2733.67	40°12'44.973"N	104°58'18.429"W	0.83	
11158.00	89.450	271.680	7116.73	2912.34	-264.99	-2903.56	40°12'45.026"N	104°58'20.619"W	0.56	
11328.00	89.050	271.410	7118.96	3081.91	-260.41	-3073.48	40°12'45.071"N	104°58'22.809"W	0.28	
11499.00	89.320	270.190	7121.39	3252.60	-258.02	-3244.44	40°12'45.094"N	104°58'25.013"W	0.73	
11754.00	90.710	270.280	7121.32	3507.31	-256.97	-3499.44	40°12'45.104"N	104°58'28.300"W	0.55	
12010.00	90.000	270.530	7119.74	3762.97	-255.16	-3755.42	40°12'45.122"N	104°58'31.599"W	0.29	
12180.00	90.950	271.110	7118.33	3932.68	-252.73	-3925.40	40°12'45.145"N	104°58'33.790"W	0.65	
12265.00	91.170	271.310	7116.75	4017.49	-250.94	-4010.36	40°12'45.163"N	104°58'34.885"W	0.35	
12350.00	89.440	271.280	7116.30	4102.30	-249.01	-4095.34	40°12'45.182"N	104°58'35.981"W	2.04	
12521.00	90.240	272.310	7116.78	4272.81	-243.66	-4266.25	40°12'45.235"N	104°58'38.184"W	0.76	
12691.00	90.550	272.470	7115.61	4442.19	-236.57	-4436.10	40°12'45.304"N	104°58'40.373"W	0.21	
12861.00	90.550	272.950	7113.97	4611.48	-228.53	-4605.90	40°12'45.383"N	104°58'42.562"W	0.28	
13053.00	91.200	274.270	7111.04	4802.36	-216.44	-4797.49	40°12'45.503"N	104°58'45.031"W	0.77	LAST BHI MWD+IFR SURVEY
13115.00	91.200	274.270	7109.74	4863.92	-211.83	-4859.30	40°12'45.548"N	104°58'45.828"W	0.00	PROJECTION TO BIT

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23)
Area	COLORADO	Well	REYNOLDS CATTLE 32N-23HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REYNOLDS CATTLE 32N-23HZ AWB
Facility	SEC.23-T3N-R68W		

HOLE & CASING SECTIONS - Ref Wellbore: REYNOLDS CATTLE 32N-23HZ AWB Ref Wellpath: REYNOLDS CATTLE 32N-23HZ 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	1359.00	1343.00	16.00	1358.95	0.00	0.00	4.14	-7.90
9.625in Casing Surface	16.00	1349.00	1333.00	16.00	1348.96	0.00	0.00	4.13	-7.79
8.75in Open Hole	1359.00	7789.00	6430.00	1358.95	7126.55	4.14	-7.90	-377.38	463.04
7in Casing Intermediate	16.00	7779.00	7763.00	16.00	7126.40	0.00	0.00	-377.30	473.04
6.125in Open Hole	7789.00	13115.00	5326.00	7126.55	7109.74	-377.38	463.04	-211.83	-4859.30

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.19-T3N-R67W SECTION LINES		24.00	1510.39	171.21	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
SEC.23-T3N-R68W SECTION LINES		24.00	1510.39	171.21	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
SEC.24-T3N-R68W SECTION LINES		24.00	1510.39	171.21	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
REYNOLDS CATTLE 32N-23HZ BHL ON PLAT REV-1 (2290'FNL & 50'FWL, SEC.23)		7108.00	-217.01	-4859.96	3145392.65	1320733.07	40°12'45.497"N	104°58'45.836"W	point
REYNOLDS CATTLE 32N-23HZ LANDBOX		7108.00	0.00	0.00	3150250.98	1320979.55	40°12'47.646"N	104°57'43.193"W	polygon
REYNOLDS CATTLE 32N-23HZ BHL ON PLAT REV-2 (2290'FNL & 50'FWL, SEC.23)		7128.00	-217.01	-4859.96	3145392.64	1320733.07	40°12'45.497"N	104°58'45.836"W	point

WELLPATH COMPOSITION - Ref Wellbore: REYNOLDS CATTLE 32N-23HZ AWB Ref Wellpath: REYNOLDS CATTLE 32N-23HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1316.00	Generic gyro - continuous (Standard)	MS ENERGY GYRODATA SURVEYS <116-1316>	REYNOLDS CATTLE 32N-23HZ AWB
1316.00	7588.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1437-7588>	REYNOLDS CATTLE 32N-23HZ AWB
7588.00	13053.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7683-13053>	REYNOLDS CATTLE 32N-23HZ AWB
13053.00	13115.00	Blind Drilling (std)	Projection to bit	REYNOLDS CATTLE 32N-23HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 REYNOLDS CATTLE 32N-23HZ (2071'FNL & 339'FEL, SEC.23)
Area	COLORADO	Well	REYNOLDS CATTLE 32N-23HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REYNOLDS CATTLE 32N-23HZ AWB
Facility	SEC.23-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	284.130	16.00	TIE ON
116.00	0.620	284.130	116.00	BEGIN GYRO SURVEYS
1316.00	0.670	269.540	1315.96	TIE ONTO GYRO SURVEYS
1437.00	0.530	292.510	1436.95	BEGIN BHI MWD+IFR SURVEYS
7779.00	89.032	269.471	7126.40	7" CASING POINT
13053.00	91.200	274.270	7111.04	LAST BHI MWD+IFR SURVEY
13115.00	91.200	274.270	7109.74	PROJECTION TO BIT