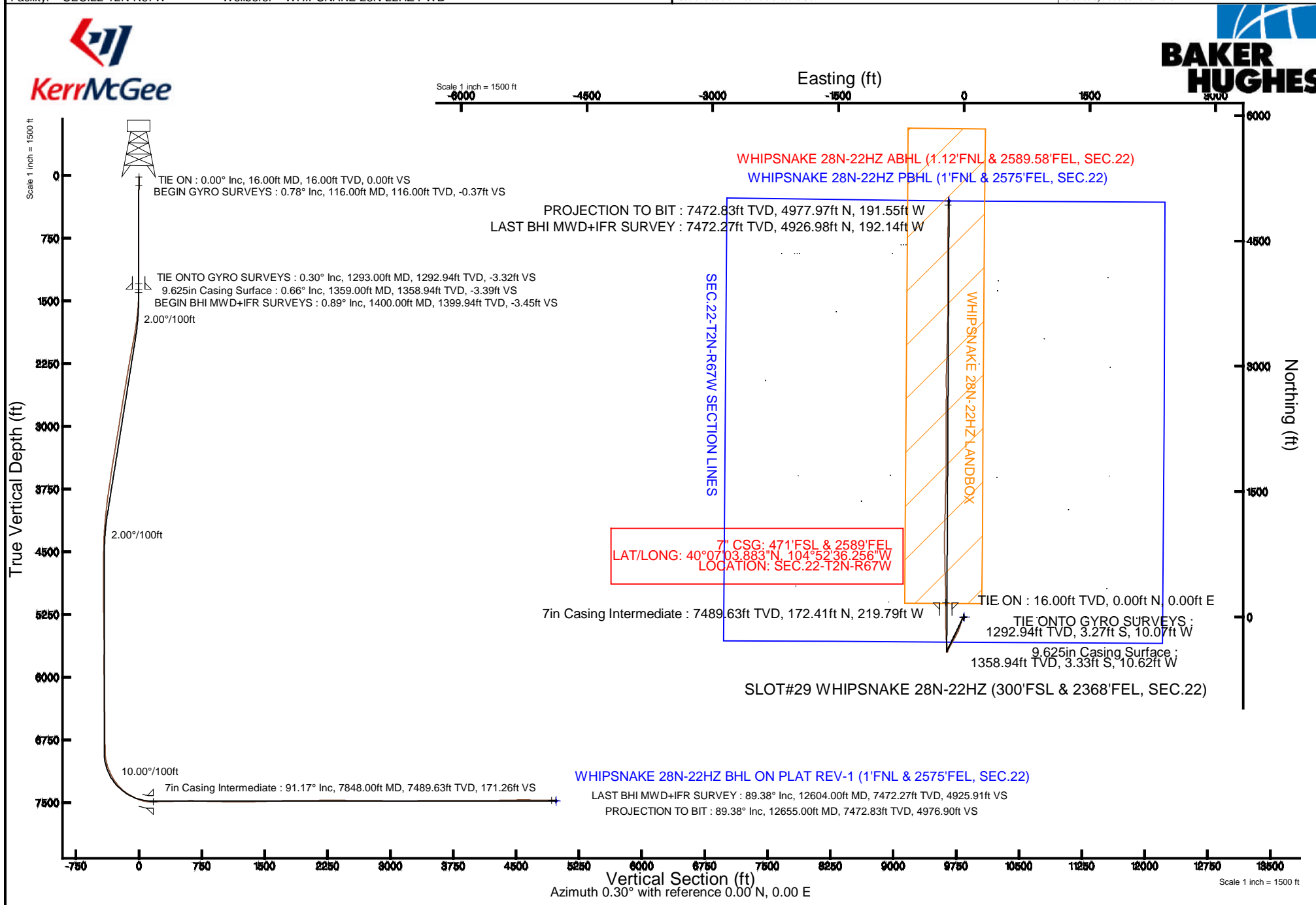


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#29 WHIPSNAKE 28N-22HZ (300'FSL & 2368'FEL, SEC.22)
 Field: WELD COUNTY (KERR MCGEE) Well: WHIPSNAKE 28N-22HZ
 Facility: SEC.22-T2N-R67W Wellbore: WHIPSNAKE 28N-22HZ PWB

Plot reference wellpath is WHIPSNAKE 28N-22HZ (REV-A.1) PWP

True vertical depths are referenced to XTREME 6 (16'KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (16'KB) (RKB)	North Reference: True north
XTREME 6 (16'KB) (RKB) to Mean Sea Level: 5003 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#29 WHIPSNAKE 28N-22HZ (300'FSL & 2368'FEL, SEC.22)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 on 9/11/2014



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 WHIPSNAKE 28N-22HZ (300'FSL & 2368'FEL, SEC.22)
Area	COLORADO	Well	WHIPSNAKE 28N-22HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WHIPSNAKE 28N-22HZ AWB
Facility	SEC.22-T2N-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	0.99996	Report Generated	9/11/2014 at 12:51:14 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/WHIPSNAKE_28N-22HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4455.01	725.78	3174527.23	1286180.33	40°07'02.179"N	104°52'33.427"W
Facility Reference Pt			3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"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 (16'KB) (RKB) to Facility Vertical Datum	5003.00ft
Horizontal Reference Pt	Slot	XTREME 6 (16'KB) (RKB) to Mean Sea Level	5003.00ft
Vertical Reference Pt	XTREME 6 (16'KB) (RKB)	XTREME 6 (16'KB) (RKB) to Mud Line at Slot (SLOT#29 WHIPSNAKE 28N-22HZ (300'FSL & 2368'FEL, SEC.22))	5003.00ft
MD Reference Pt	XTREME 6 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	357.80°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 WHIPSNAKE 28N-22HZ (300'FSL & 2368'FEL, SEC.22)
Area	COLORADO	Well	WHIPSNAKE 28N-22HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WHIPSNAKE 28N-22HZ AWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (111 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	237.740	0.00	0.00	0.00	0.00	40°07'02.179"N	104°52'33.427"W	0.00	
16.00	0.000	237.740	16.00	0.00	0.00	0.00	40°07'02.179"N	104°52'33.427"W	0.00	TIE ON
116.00	0.780	237.740	116.00	-0.34	-0.36	-0.58	40°07'02.175"N	104°52'33.434"W	0.78	BEGIN GYRO SURVEYS
216.00	0.650	232.140	215.99	-1.01	-1.07	-1.60	40°07'02.168"N	104°52'33.448"W	0.15	
316.00	0.510	230.550	315.98	-1.61	-1.71	-2.39	40°07'02.162"N	104°52'33.458"W	0.14	
416.00	0.210	265.510	415.98	-1.89	-2.00	-2.92	40°07'02.159"N	104°52'33.465"W	0.36	
516.00	0.360	325.560	515.98	-1.63	-1.76	-3.28	40°07'02.162"N	104°52'33.469"W	0.31	
616.00	0.490	295.650	615.98	-1.17	-1.31	-3.84	40°07'02.166"N	104°52'33.476"W	0.25	
716.00	0.670	277.760	715.97	-0.86	-1.05	-4.81	40°07'02.169"N	104°52'33.489"W	0.25	
816.00	0.760	255.550	815.97	-0.90	-1.14	-6.03	40°07'02.168"N	104°52'33.505"W	0.29	
916.00	0.680	249.330	915.96	-1.23	-1.51	-7.22	40°07'02.164"N	104°52'33.520"W	0.11	
1016.00	0.620	232.670	1015.95	-1.73	-2.05	-8.21	40°07'02.159"N	104°52'33.533"W	0.20	
1116.00	0.500	231.670	1115.95	-2.30	-2.65	-8.98	40°07'02.153"N	104°52'33.543"W	0.12	
1216.00	0.410	238.980	1215.94	-2.73	-3.10	-9.63	40°07'02.148"N	104°52'33.551"W	0.11	
1293.00	0.300	263.690	1292.94	-2.88	-3.27	-10.07	40°07'02.147"N	104°52'33.557"W	0.24	TIE ONTO GYRO SURVEYS
1400.00	0.890	263.270	1399.94	-2.96	-3.39	-11.17	40°07'02.145"N	104°52'33.571"W	0.55	BEGIN BHI MWD+IFR SURVEYS
1522.00	4.230	221.690	1521.80	-6.28	-6.87	-15.11	40°07'02.111"N	104°52'33.621"W	2.96	
1613.00	5.870	221.800	1612.45	-12.05	-12.84	-20.44	40°07'02.052"N	104°52'33.690"W	1.80	
1704.00	7.360	206.170	1702.85	-20.52	-21.54	-26.11	40°07'01.966"N	104°52'33.763"W	2.55	
1796.00	8.740	198.300	1793.94	-32.26	-33.47	-30.91	40°07'01.848"N	104°52'33.825"W	1.92	
1888.00	10.570	195.740	1884.63	-46.83	-48.23	-35.39	40°07'01.702"N	104°52'33.883"W	2.04	
1980.00	10.060	192.780	1975.15	-62.62	-64.19	-39.46	40°07'01.545"N	104°52'33.935"W	0.80	
2070.00	11.620	195.420	2064.52	-79.04	-80.77	-43.65	40°07'01.381"N	104°52'33.989"W	1.80	
2160.00	11.090	191.600	2151.78	-95.89	-97.80	-47.76	40°07'01.213"N	104°52'34.042"W	1.03	
2251.00	9.680	198.690	2241.29	-111.54	-113.62	-51.97	40°07'01.056"N	104°52'34.096"W	2.09	
2342.00	10.890	201.930	2330.83	-126.53	-128.84	-57.63	40°07'00.906"N	104°52'34.169"W	1.47	
2433.00	10.210	202.510	2420.29	-141.70	-144.27	-63.93	40°07'00.753"N	104°52'34.250"W	0.76	
2524.00	9.600	200.540	2509.93	-156.03	-158.82	-69.68	40°07'00.609"N	104°52'34.324"W	0.77	
2616.00	11.230	208.870	2600.42	-170.78	-173.86	-76.70	40°07'00.461"N	104°52'34.414"W	2.41	
2706.00	10.720	208.040	2688.77	-185.52	-188.92	-84.86	40°07'00.312"N	104°52'34.519"W	0.59	
2876.00	9.690	205.430	2856.08	-211.85	-215.79	-98.44	40°07'00.046"N	104°52'34.694"W	0.66	
3045.00	11.080	210.300	3022.31	-238.15	-242.66	-112.74	40°06'59.781"N	104°52'34.878"W	0.97	
3216.00	10.040	208.160	3190.41	-264.87	-269.99	-128.07	40°06'59.511"N	104°52'35.075"W	0.65	
3386.00	11.340	208.950	3357.46	-291.96	-297.68	-143.15	40°06'59.237"N	104°52'35.270"W	0.77	
3557.00	9.080	208.170	3525.74	-317.99	-324.29	-157.66	40°06'58.974"N	104°52'35.456"W	1.32	
3727.00	9.910	209.930	3693.41	-341.95	-348.79	-171.29	40°06'58.732"N	104°52'35.632"W	0.52	
3812.00	8.880	209.440	3777.27	-353.73	-360.85	-178.17	40°06'58.613"N	104°52'35.720"W	1.22	
3897.00	8.300	208.360	3861.32	-364.60	-371.96	-184.31	40°06'58.503"N	104°52'35.799"W	0.71	
3982.00	7.290	204.820	3945.53	-374.68	-382.25	-189.48	40°06'58.402"N	104°52'35.866"W	1.32	
4067.00	6.660	201.240	4029.90	-384.01	-391.74	-193.53	40°06'58.308"N	104°52'35.918"W	0.90	
4152.00	5.300	199.100	4114.44	-392.19	-400.05	-196.60	40°06'58.226"N	104°52'35.958"W	1.62	
4237.00	4.950	196.920	4199.10	-399.31	-407.26	-198.96	40°06'58.154"N	104°52'35.988"W	0.47	
4322.00	3.350	195.380	4283.87	-405.15	-413.17	-200.68	40°06'58.096"N	104°52'36.010"W	1.89	
4406.00	1.800	229.840	4367.79	-408.30	-416.39	-202.34	40°06'58.064"N	104°52'36.031"W	2.53	
4492.00	1.210	167.690	4453.76	-410.02	-418.14	-203.18	40°06'58.047"N	104°52'36.042"W	1.90	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 WHIPSAKE 28N-22HZ (300'FSL & 2368'FEL, SEC.22)
Area	COLORADO	Well	WHIPSAKE 28N-22HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WHIPSAKE 28N-22HZ AWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (111 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4576.00	1.300	195.270	4537.74	-411.80	-419.93	-203.24	40°06'58.029"N	104°52'36.043"W	0.72	
4662.00	0.490	233.650	4623.73	-412.94	-421.09	-203.79	40°06'58.018"N	104°52'36.050"W	1.12	
4832.00	0.500	274.120	4793.73	-413.27	-421.47	-205.12	40°06'58.014"N	104°52'36.067"W	0.20	
5088.00	0.520	323.850	5049.72	-412.18	-420.45	-206.92	40°06'58.024"N	104°52'36.090"W	0.17	
5344.00	0.710	332.430	5305.70	-409.78	-418.10	-208.34	40°06'58.047"N	104°52'36.109"W	0.08	
5599.00	1.650	323.680	5560.65	-405.32	-413.75	-211.24	40°06'58.090"N	104°52'36.146"W	0.37	
5684.00	0.920	135.770	5645.64	-404.81	-413.25	-211.49	40°06'58.095"N	104°52'36.149"W	3.02	
5940.00	0.710	74.960	5901.62	-405.98	-414.31	-208.53	40°06'58.085"N	104°52'36.111"W	0.33	
6196.00	0.950	41.590	6157.59	-404.10	-412.31	-205.59	40°06'58.104"N	104°52'36.073"W	0.21	
6451.00	0.770	15.430	6412.56	-400.94	-409.08	-203.73	40°06'58.136"N	104°52'36.049"W	0.17	
6704.00	0.690	27.680	6665.54	-398.00	-406.09	-202.57	40°06'58.166"N	104°52'36.034"W	0.07	
6918.00	1.090	349.060	6879.52	-394.87	-402.95	-202.36	40°06'58.197"N	104°52'36.032"W	0.33	
6961.00	4.760	351.630	6922.45	-392.69	-400.78	-202.69	40°06'58.218"N	104°52'36.036"W	8.54	
7003.00	7.920	0.050	6964.19	-388.07	-396.16	-202.94	40°06'58.264"N	104°52'36.039"W	7.82	
7046.00	12.590	1.430	7006.49	-380.43	-388.51	-202.82	40°06'58.340"N	104°52'36.038"W	10.87	
7088.00	16.930	2.220	7047.10	-369.76	-377.82	-202.47	40°06'58.445"N	104°52'36.033"W	10.34	
7131.00	19.830	356.100	7087.90	-356.22	-364.28	-202.73	40°06'58.579"N	104°52'36.036"W	8.09	
7174.00	24.100	353.310	7127.78	-340.17	-348.28	-204.25	40°06'58.737"N	104°52'36.056"W	10.22	
7216.00	26.130	351.380	7165.80	-322.43	-330.62	-206.63	40°06'58.912"N	104°52'36.087"W	5.21	
7259.00	30.780	352.400	7203.60	-302.05	-310.34	-209.51	40°06'59.112"N	104°52'36.124"W	10.87	
7302.00	32.650	354.250	7240.18	-279.52	-287.89	-212.13	40°06'59.334"N	104°52'36.157"W	4.90	
7345.00	38.560	356.100	7275.12	-254.52	-262.95	-214.20	40°06'59.580"N	104°52'36.184"W	13.97	
7387.00	43.460	357.690	7306.81	-226.98	-235.44	-215.67	40°06'59.852"N	104°52'36.203"W	11.93	
7430.00	47.270	358.110	7337.01	-196.38	-204.87	-216.79	40°07'00.154"N	104°52'36.217"W	8.89	
7472.00	51.120	358.930	7364.45	-164.60	-173.10	-217.61	40°07'00.468"N	104°52'36.228"W	9.28	
7514.00	55.900	358.150	7389.42	-130.85	-139.35	-218.47	40°07'00.802"N	104°52'36.239"W	11.48	
7557.00	60.510	357.960	7412.07	-94.31	-102.84	-219.72	40°07'01.163"N	104°52'36.255"W	10.73	
7598.00	61.630	358.530	7431.91	-58.43	-66.97	-220.81	40°07'01.517"N	104°52'36.269"W	2.99	
7640.00	65.270	0.580	7450.68	-20.89	-29.41	-221.09	40°07'01.888"N	104°52'36.273"W	9.70	
7683.00	69.220	0.800	7467.31	18.71	10.23	-220.62	40°07'02.280"N	104°52'36.267"W	9.20	
7725.00	75.480	0.310	7480.04	58.67	50.23	-220.23	40°07'02.675"N	104°52'36.262"W	14.95	
7768.00	83.820	0.440	7487.75	100.89	92.50	-219.95	40°07'03.093"N	104°52'36.258"W	19.40	
7810.00	90.000	359.970	7490.02	142.77	134.41	-219.80	40°07'03.507"N	104°52'36.256"W	14.76	
7848.00†	91.171	0.071	7489.63	180.74	172.41	-219.79	40°07'03.883"N	104°52'36.256"W	3.09	7" CASING POINT
7859.00	91.510	0.100	7489.37	191.72	183.41	-219.77	40°07'03.991"N	104°52'36.256"W	3.09	
7899.00	91.360	359.640	7488.37	231.69	223.40	-219.87	40°07'04.387"N	104°52'36.257"W	1.21	
7983.00	91.230	358.650	7486.47	315.64	307.36	-221.12	40°07'05.216"N	104°52'36.273"W	1.19	
8068.00	92.270	358.030	7483.88	400.59	392.29	-223.58	40°07'06.056"N	104°52'36.305"W	1.42	
8238.00	91.290	358.250	7478.60	570.51	562.11	-229.09	40°07'07.734"N	104°52'36.376"W	0.59	
8409.00	87.540	359.280	7480.34	741.44	733.03	-232.78	40°07'09.423"N	104°52'36.423"W	2.27	
8579.00	88.450	359.850	7486.29	911.25	902.92	-234.07	40°07'11.102"N	104°52'36.440"W	0.63	
8750.00	89.780	1.640	7488.93	1082.00	1073.88	-231.85	40°07'12.791"N	104°52'36.411"W	1.30	
8920.00	89.660	1.130	7489.76	1251.66	1243.82	-227.74	40°07'14.471"N	104°52'36.359"W	0.31	
9090.00	92.050	1.270	7487.22	1421.33	1413.75	-224.18	40°07'16.150"N	104°52'36.313"W	1.41	
9260.00	92.010	1.820	7481.20	1590.86	1583.59	-219.60	40°07'17.828"N	104°52'36.254"W	0.32	

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 WHIPSAKE 28N-22HZ (300'FSL & 2368'FEL, SEC.22)	
Area	COLORADO	Well	WHIPSAKE 28N-22HZ	
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WHIPSAKE 28N-22HZ AWB	
Facility	SEC.22-T2N-R67W			

WELLPATH DATA (111 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9429.00	90.300	0.910	7477.80	1759.49	1752.49	-215.57	40°07'19.497"N	104°52'36.202"W	1.15	
9599.00	91.170	358.760	7475.61	1929.35	1922.47	-216.06	40°07'21.177"N	104°52'36.208"W	1.36	
9770.00	90.270	0.350	7473.47	2100.25	2093.44	-217.39	40°07'22.867"N	104°52'36.225"W	1.07	
9940.00	90.430	0.150	7472.43	2270.09	2263.44	-216.65	40°07'24.547"N	104°52'36.216"W	0.15	
10111.00	89.310	0.810	7472.82	2440.90	2434.43	-215.21	40°07'26.236"N	104°52'36.197"W	0.76	
10281.00	89.470	0.570	7474.63	2610.68	2604.41	-213.17	40°07'27.916"N	104°52'36.171"W	0.17	
10451.00	89.350	359.240	7476.38	2780.55	2774.39	-213.45	40°07'29.596"N	104°52'36.175"W	0.79	
10622.00	89.220	1.760	7478.51	2951.33	2945.36	-211.96	40°07'31.285"N	104°52'36.156"W	1.48	
10792.00	90.090	1.580	7479.53	3120.94	3115.28	-207.00	40°07'32.965"N	104°52'36.092"W	0.52	
10963.00	90.580	1.290	7478.53	3291.59	3286.22	-202.72	40°07'34.654"N	104°52'36.037"W	0.33	
11133.00	90.830	1.060	7476.44	3461.28	3456.18	-199.24	40°07'36.333"N	104°52'35.992"W	0.20	
11304.00	90.120	0.200	7475.02	3632.06	3627.16	-197.36	40°07'38.023"N	104°52'35.968"W	0.65	
11474.00	90.210	1.190	7474.54	3801.84	3797.14	-195.29	40°07'39.703"N	104°52'35.941"W	0.58	
11643.00	89.290	359.980	7475.27	3970.64	3966.13	-193.57	40°07'41.373"N	104°52'35.919"W	0.90	
11813.00	90.460	359.810	7475.64	4140.52	4136.12	-193.88	40°07'43.053"N	104°52'35.923"W	0.70	
11983.00	91.320	359.550	7473.00	4310.40	4306.10	-194.83	40°07'44.732"N	104°52'35.935"W	0.53	
12154.00	91.470	0.280	7468.84	4481.24	4477.05	-195.08	40°07'46.422"N	104°52'35.938"W	0.44	
12325.00	89.190	0.830	7467.85	4652.02	4648.02	-193.43	40°07'48.111"N	104°52'35.917"W	1.37	
12494.00	88.920	359.760	7470.64	4820.84	4816.99	-192.56	40°07'49.781"N	104°52'35.906"W	0.65	
12604.00	89.380	0.670	7472.27	4930.72	4926.98	-192.14	40°07'50.868"N	104°52'35.901"W	0.93	LAST BHI MWD+IFR SURVEY
12655.00	89.380	0.670	7472.83	4981.66	4977.97	-191.55	40°07'51.372"N	104°52'35.893"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: WHIPSAKE 28N-22HZ AWB Ref Wellpath: WHIPSAKE 28N-22HZ 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	1358.94	0.00	0.00	-3.33	-10.62
9.625in Casing Surface	16.00	1359.00	1343.00	16.00	1358.94	0.00	0.00	-3.33	-10.62
8.75in Open Hole	1359.00	7858.00	6499.00	1358.94	7489.40	-3.33	-10.62	182.41	-219.78
7in Casing Intermediate	16.00	7848.00	7832.00	16.00	7489.63	0.00	0.00	172.41	-219.79
6.125in Open Hole	7858.00	12655.00	4797.00	7489.40	7472.83	182.41	-219.78	4977.97	-191.55

WELLPATH COMPOSITION - Ref Wellbore: WHIPSAKE 28N-22HZ AWB Ref Wellpath: WHIPSAKE 28N-22HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1293.00	Generic gyro - continuous (Standard)	MS GYRO SURVEYS <116-1293>	WHIPSAKE 28N-22HZ AWB
1293.00	7810.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 8 3/4" <1400-7810>	WHIPSAKE 28N-22HZ AWB
7810.00	12604.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 6 1/8" <7859-12604>	WHIPSAKE 28N-22HZ AWB
12604.00	12655.00	Blind Drilling (std)	Projection to bit	WHIPSAKE 28N-22HZ AWB

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 WHIPSNAKE 28N-22HZ (300'FSL & 2368'FEL, SEC.22)	
Area	COLORADO	Well	WHIPSNAKE 28N-22HZ	
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WHIPSNAKE 28N-22HZ AWB	
Facility	SEC.22-T2N-R67W			

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	237.740	16.00	TIE ON
116.00	0.780	237.740	116.00	BEGIN GYRO SURVEYS
1293.00	0.300	263.690	1292.94	TIE ONTO GYRO SURVEYS
1400.00	0.890	263.270	1399.94	BEGIN BHI MWD+IFR SURVEYS
7848.00	91.171	0.071	7489.63	7" CASING POINT
12604.00	89.380	0.670	7472.27	LAST BHI MWD+IFR SURVEY
12655.00	89.380	0.670	7472.83	PROJECTION TO BIT