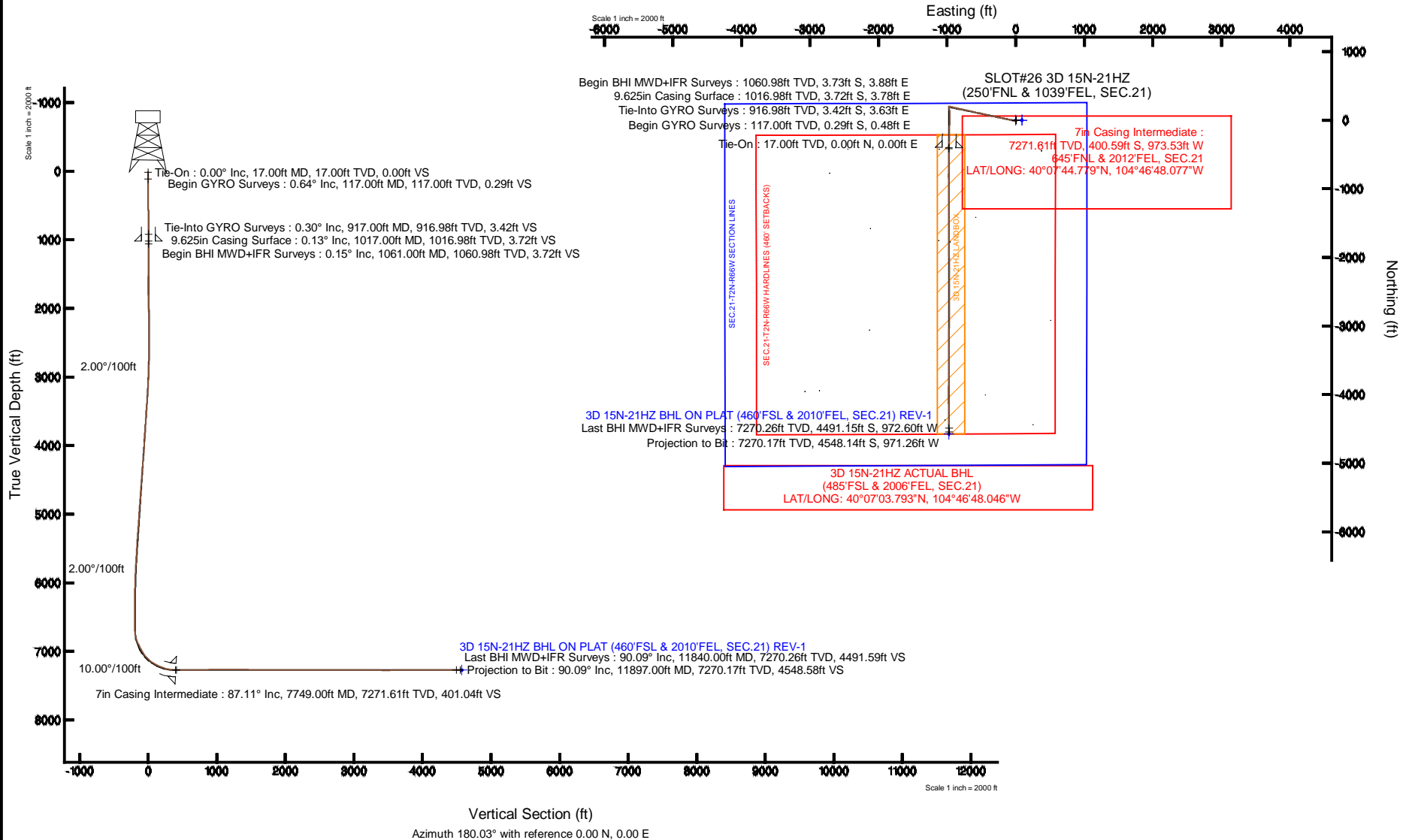


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)
 Field: WELD COUNTY (KERR MCGEE) Well: 3D 15N-21HZ
 Facility: SEC.21-T2N-R66W Wellbore: 3D 15N-21HZ PWB

Plot reference wellpath is 3D 15N-21HZ (REV-A.0) PWP

True vertical depths are referenced to XTREME 8 (17KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 8 (17KB) (RKB)	North Reference: True north
XTREME 8 (17KB) (RKB) to Mean Sea Level: 5006 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precin on 05/Feb/2014



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)
Area	COLORADO	Well	3D 15N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 15N-21HZ AWB
Facility	SEC.21-T2N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Precain
Scale	0.999959	Report Generated	05/Feb/2014 at 16:58
Convergence at slot	n/a	Database/Source file	WellArchitectDB/3D_15N-21HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	350.54	-379.13	3202290.71	1291102.66	40°07'48.738"N	104°46'35.544"W
Facility Reference Pt			3202672.68	1290755.25	40°07'45.274"N	104°46'30.663"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 8 (17'KB) (RKB) to Facility Vertical Datum	5006.00ft
Horizontal Reference Pt	Slot	XTREME 8 (17'KB) (RKB) to Mean Sea Level	5006.00ft
Vertical Reference Pt	XTREME 8 (17'KB) (RKB)	XTREME 8 (17'KB) (RKB) to Mud Line at Slot (SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21))	5006.00ft
MD Reference Pt	XTREME 8 (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	180.03°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)
Area	COLORADO	Well	3D 15N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 15N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (148 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	121.150	0.00	0.00	0.00	0.00	40°07'48.738"N	104°46'35.544"W	0.00	
17.00	0.000	121.150	17.00	0.00	0.00	0.00	40°07'48.738"N	104°46'35.544"W	0.00	Tie-On
117.00	0.640	121.150	117.00	0.29	-0.29	0.48	40°07'48.735"N	104°46'35.538"W	0.64	Begin GYRO Surveys
217.00	0.740	115.930	216.99	0.86	-0.86	1.54	40°07'48.729"N	104°46'35.524"W	0.12	
317.00	0.610	109.670	316.98	1.32	-1.32	2.62	40°07'48.725"N	104°46'35.510"W	0.15	
417.00	0.060	191.170	416.98	1.55	-1.55	3.11	40°07'48.723"N	104°46'35.504"W	0.60	
517.00	0.200	178.850	516.98	1.78	-1.78	3.10	40°07'48.720"N	104°46'35.504"W	0.14	
617.00	0.450	162.500	616.98	2.33	-2.33	3.22	40°07'48.715"N	104°46'35.502"W	0.26	
717.00	0.380	108.590	716.98	2.81	-2.81	3.66	40°07'48.710"N	104°46'35.497"W	0.38	
817.00	0.270	237.960	816.98	3.04	-3.04	3.77	40°07'48.708"N	104°46'35.495"W	0.59	
917.00	0.300	168.060	916.98	3.42	-3.42	3.63	40°07'48.704"N	104°46'35.497"W	0.33	Tie-Into GYRO Surveys
1061.00	0.150	70.880	1060.98	3.72	-3.73	3.88	40°07'48.701"N	104°46'35.494"W	0.24	Begin BHI MWD+IFR Surveys
1152.00	0.060	127.830	1151.97	3.71	-3.72	4.03	40°07'48.701"N	104°46'35.492"W	0.14	
1335.00	0.390	26.230	1334.97	3.21	-3.22	4.38	40°07'48.706"N	104°46'35.488"W	0.22	
1518.00	0.390	352.950	1517.97	2.04	-2.04	4.58	40°07'48.718"N	104°46'35.485"W	0.12	
1701.00	0.400	6.820	1700.97	0.79	-0.79	4.58	40°07'48.730"N	104°46'35.485"W	0.05	
1792.00	1.410	167.880	1791.96	1.56	-1.57	4.85	40°07'48.723"N	104°46'35.482"W	1.97	
1884.00	1.580	183.680	1883.93	3.94	-3.94	5.01	40°07'48.699"N	104°46'35.479"W	0.48	
1969.00	1.440	178.330	1968.90	6.17	-6.18	4.97	40°07'48.677"N	104°46'35.480"W	0.23	
2054.00	1.570	183.800	2053.87	8.40	-8.41	4.92	40°07'48.655"N	104°46'35.481"W	0.23	
2139.00	1.540	173.640	2138.84	10.70	-10.70	4.97	40°07'48.632"N	104°46'35.480"W	0.33	
2225.00	0.860	203.720	2224.82	12.44	-12.44	4.84	40°07'48.615"N	104°46'35.482"W	1.05	
2310.00	0.590	223.440	2309.81	13.34	-13.34	4.28	40°07'48.606"N	104°46'35.489"W	0.43	
2395.00	0.590	230.330	2394.81	13.94	-13.94	3.64	40°07'48.600"N	104°46'35.497"W	0.08	
2481.00	1.890	263.760	2480.79	14.38	-14.38	1.89	40°07'48.596"N	104°46'35.520"W	1.67	
2566.00	3.070	281.010	2565.71	14.10	-14.10	-1.74	40°07'48.599"N	104°46'35.566"W	1.63	
2651.00	3.790	288.630	2650.55	12.77	-12.76	-6.63	40°07'48.612"N	104°46'35.629"W	1.00	
2736.00	5.080	281.730	2735.30	11.11	-11.10	-12.98	40°07'48.628"N	104°46'35.711"W	1.64	
2821.00	6.860	284.360	2819.83	9.09	-9.08	-21.58	40°07'48.648"N	104°46'35.822"W	2.12	
2907.00	8.090	281.580	2905.10	6.60	-6.59	-32.49	40°07'48.673"N	104°46'35.962"W	1.49	
2992.00	9.860	282.240	2989.06	3.86	-3.84	-45.46	40°07'48.700"N	104°46'36.129"W	2.09	
3077.00	12.230	283.730	3072.48	0.19	-0.16	-61.32	40°07'48.736"N	104°46'36.333"W	2.81	
3162.00	13.780	282.550	3155.29	-4.14	4.17	-79.95	40°07'48.779"N	104°46'36.573"W	1.85	
3247.00	15.480	283.040	3237.54	-8.89	8.93	-100.88	40°07'48.826"N	104°46'36.843"W	2.01	
3332.00	17.390	282.750	3319.06	-14.24	14.30	-124.32	40°07'48.879"N	104°46'37.145"W	2.25	
3418.00	18.450	282.420	3400.89	-19.99	20.06	-150.15	40°07'48.936"N	104°46'37.477"W	1.24	
3503.00	17.720	282.830	3481.69	-25.74	25.82	-175.90	40°07'48.993"N	104°46'37.809"W	0.87	
3588.00	17.030	280.680	3562.81	-30.91	31.00	-200.74	40°07'49.044"N	104°46'38.128"W	1.11	
3673.00	17.180	283.090	3644.05	-36.05	36.15	-225.20	40°07'49.095"N	104°46'38.443"W	0.85	
3758.00	17.970	281.170	3725.08	-41.42	41.54	-250.29	40°07'49.148"N	104°46'38.766"W	1.15	
3844.00	19.280	280.220	3806.58	-46.50	46.63	-277.28	40°07'49.199"N	104°46'39.114"W	1.56	
3929.00	18.980	280.090	3886.88	-51.40	51.54	-304.70	40°07'49.247"N	104°46'39.467"W	0.36	
4014.00	18.330	279.550	3967.42	-56.03	56.18	-331.49	40°07'49.293"N	104°46'39.812"W	0.79	
4099.00	18.490	281.280	4048.07	-60.87	61.03	-357.89	40°07'49.341"N	104°46'40.152"W	0.67	
4185.00	19.020	284.270	4129.50	-66.98	67.15	-384.84	40°07'49.402"N	104°46'40.499"W	1.28	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)
Area	COLORADO	Well	3D 15N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 15N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (148 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4270.00	19.180	285.930	4209.82	-74.21	74.40	-411.69	40°07'49.473"N	104°46'40.844"W	0.67	
4355.00	19.970	285.360	4289.91	-81.88	82.08	-439.12	40°07'49.549"N	104°46'41.197"W	0.96	
4440.00	19.740	281.750	4369.86	-88.63	88.84	-467.17	40°07'49.616"N	104°46'41.558"W	1.47	
4526.00	19.070	280.690	4450.97	-94.18	94.41	-495.19	40°07'49.671"N	104°46'41.919"W	0.88	
4611.00	18.860	281.550	4531.36	-99.50	99.73	-522.30	40°07'49.724"N	104°46'42.268"W	0.41	
4696.00	19.000	282.770	4611.76	-105.29	105.54	-549.25	40°07'49.781"N	104°46'42.615"W	0.49	
4781.00	18.440	282.590	4692.27	-111.27	111.53	-575.87	40°07'49.840"N	104°46'42.958"W	0.66	
4866.00	18.220	283.500	4772.95	-117.29	117.57	-601.91	40°07'49.900"N	104°46'43.293"W	0.42	
4952.00	18.440	284.400	4854.59	-123.80	124.09	-628.16	40°07'49.964"N	104°46'43.631"W	0.42	
5037.00	18.200	282.500	4935.28	-130.01	130.30	-654.14	40°07'50.026"N	104°46'43.965"W	0.76	
5122.00	17.690	280.370	5016.15	-135.19	135.50	-679.80	40°07'50.077"N	104°46'44.296"W	0.98	
5207.00	17.790	281.240	5097.11	-140.04	140.36	-705.24	40°07'50.125"N	104°46'44.623"W	0.33	
5292.00	17.960	281.980	5178.00	-145.28	145.61	-730.80	40°07'50.177"N	104°46'44.952"W	0.33	
5377.00	18.000	283.610	5258.85	-151.07	151.42	-756.38	40°07'50.234"N	104°46'45.282"W	0.59	
5462.00	17.370	284.330	5339.84	-157.29	157.65	-781.44	40°07'50.296"N	104°46'45.604"W	0.78	
5548.00	17.440	280.450	5421.90	-162.80	163.16	-806.55	40°07'50.350"N	104°46'45.928"W	1.35	
5633.00	16.300	279.110	5503.24	-166.99	167.36	-830.86	40°07'50.392"N	104°46'46.241"W	1.42	
5718.00	14.870	282.530	5585.12	-171.23	171.62	-853.28	40°07'50.434"N	104°46'46.529"W	2.00	
5803.00	13.090	284.990	5667.60	-176.08	176.47	-873.23	40°07'50.482"N	104°46'46.786"W	2.21	
5888.00	11.920	286.710	5750.58	-181.08	181.49	-890.93	40°07'50.531"N	104°46'47.014"W	1.44	
5974.00	11.250	284.730	5834.83	-185.76	186.17	-907.55	40°07'50.578"N	104°46'47.228"W	0.91	
6059.00	11.040	282.550	5918.22	-189.63	190.05	-923.52	40°07'50.616"N	104°46'47.434"W	0.55	
6144.00	8.900	279.890	6001.94	-192.52	192.95	-937.94	40°07'50.645"N	104°46'47.619"W	2.57	
6230.00	6.380	280.920	6087.17	-194.57	195.00	-949.19	40°07'50.665"N	104°46'47.764"W	2.93	
6315.00	5.650	278.220	6171.70	-196.06	196.49	-957.97	40°07'50.680"N	104°46'47.877"W	0.92	
6400.00	3.910	280.370	6256.40	-197.17	197.61	-964.96	40°07'50.691"N	104°46'47.967"W	2.06	
6485.00	1.650	263.040	6341.29	-197.54	197.98	-969.03	40°07'50.694"N	104°46'48.019"W	2.81	
6571.00	1.540	253.520	6427.26	-197.07	197.51	-971.36	40°07'50.690"N	104°46'48.050"W	0.33	
6656.00	0.790	105.310	6512.25	-196.59	197.03	-971.89	40°07'50.685"N	104°46'48.056"W	2.65	
6741.00	0.940	107.230	6597.24	-196.23	196.67	-970.66	40°07'50.681"N	104°46'48.041"W	0.18	
6784.00	0.700	106.660	6640.24	-196.05	196.49	-970.07	40°07'50.680"N	104°46'48.033"W	0.56	
6826.00	2.130	156.350	6682.23	-195.26	195.70	-969.51	40°07'50.672"N	104°46'48.026"W	4.19	
6869.00	6.550	170.960	6725.09	-192.10	192.54	-968.81	40°07'50.641"N	104°46'48.017"W	10.51	
6911.00	11.580	174.360	6766.55	-185.54	185.98	-968.02	40°07'50.576"N	104°46'48.006"W	12.04	
6954.00	16.830	175.870	6808.23	-175.03	175.47	-967.14	40°07'50.472"N	104°46'47.995"W	12.24	
6996.00	20.410	176.030	6848.02	-161.65	162.09	-966.20	40°07'50.340"N	104°46'47.983"W	8.52	
7039.00	23.510	175.770	6887.90	-145.62	146.05	-965.05	40°07'50.181"N	104°46'47.968"W	7.21	
7082.00	26.200	177.310	6926.91	-127.58	128.02	-963.97	40°07'50.003"N	104°46'47.954"W	6.43	
7124.00	29.220	178.440	6964.09	-108.06	108.50	-963.25	40°07'49.810"N	104°46'47.945"W	7.30	
7167.00	31.110	179.150	7001.26	-86.46	86.90	-962.80	40°07'49.597"N	104°46'47.939"W	4.47	
7209.00	34.450	179.790	7036.57	-63.73	64.17	-962.60	40°07'49.372"N	104°46'47.937"W	7.99	
7252.00	38.490	180.500	7071.14	-38.18	38.61	-962.67	40°07'49.119"N	104°46'47.938"W	9.45	
7295.00	44.070	180.920	7103.44	-9.82	10.26	-963.03	40°07'48.839"N	104°46'47.942"W	12.99	
7337.00	50.390	180.990	7131.95	20.99	-20.55	-963.54	40°07'48.535"N	104°46'47.949"W	15.05	
7380.00	55.880	180.930	7157.74	55.38	-54.94	-964.12	40°07'48.195"N	104°46'47.956"W	12.77	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)
Area	COLORADO	Well	3D 15N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 15N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (148 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7423.00	59.660	182.010	7180.67	91.73	-91.29	-965.06	40°07'47.836"N	104°46'47.968"W	9.04	
7465.00	63.090	182.260	7200.79	128.57	-128.13	-966.43	40°07'47.472"N	104°46'47.986"W	8.18	
7508.00	66.100	181.750	7219.23	167.38	-166.94	-967.79	40°07'47.088"N	104°46'48.003"W	7.08	
7551.00	70.310	181.340	7235.19	207.28	-206.84	-968.86	40°07'46.694"N	104°46'48.017"W	9.83	
7593.00	73.960	181.780	7248.08	247.24	-246.80	-969.95	40°07'46.299"N	104°46'48.031"W	8.75	
7636.00	78.350	181.350	7258.36	288.96	-288.52	-971.09	40°07'45.887"N	104°46'48.046"W	10.26	
7678.00	82.150	181.220	7265.47	330.34	-329.90	-972.02	40°07'45.478"N	104°46'48.058"W	9.05	
7712.00	85.350	181.220	7269.17	364.13	-363.68	-972.74	40°07'45.144"N	104°46'48.067"W	9.41	
7749.00†	87.112	181.246	7271.61	401.04	-400.59	-973.53	40°07'44.779"N	104°46'48.077"W	4.76	7" Casing Point
7796.00	89.350	181.280	7273.06	448.00	-447.56	-974.57	40°07'44.315"N	104°46'48.090"W	4.76	
7866.00	90.150	181.000	7273.36	517.98	-517.54	-975.96	40°07'43.623"N	104°46'48.108"W	1.21	
7951.00	91.170	180.440	7272.38	602.97	-602.53	-977.03	40°07'42.784"N	104°46'48.122"W	1.37	
8036.00	91.320	180.480	7270.54	687.95	-687.51	-977.71	40°07'41.944"N	104°46'48.131"W	0.18	
8122.00	91.170	180.640	7268.67	773.92	-773.48	-978.55	40°07'41.094"N	104°46'48.142"W	0.25	
8207.00	91.160	178.790	7266.94	858.90	-858.46	-978.13	40°07'40.254"N	104°46'48.136"W	2.18	
8292.00	90.580	179.200	7265.65	943.88	-943.44	-976.64	40°07'39.415"N	104°46'48.117"W	0.84	
8377.00	90.300	179.990	7265.00	1028.87	-1028.43	-976.04	40°07'38.575"N	104°46'48.109"W	0.99	
8463.00	89.810	180.110	7264.91	1114.87	-1114.43	-976.11	40°07'37.725"N	104°46'48.110"W	0.59	
8548.00	89.620	180.220	7265.34	1199.87	-1199.43	-976.36	40°07'36.885"N	104°46'48.113"W	0.26	
8633.00	89.470	179.860	7266.01	1284.87	-1284.43	-976.42	40°07'36.045"N	104°46'48.114"W	0.46	
8719.00	90.060	180.480	7266.36	1370.87	-1370.42	-976.67	40°07'35.195"N	104°46'48.117"W	1.00	
8804.00	89.750	180.690	7266.51	1455.86	-1455.42	-977.54	40°07'34.355"N	104°46'48.128"W	0.44	
8889.00	89.810	180.230	7266.83	1540.86	-1540.42	-978.22	40°07'33.515"N	104°46'48.137"W	0.55	
8974.00	89.810	179.650	7267.11	1625.86	-1625.41	-978.13	40°07'32.675"N	104°46'48.136"W	0.68	
9059.00	90.090	179.160	7267.19	1710.85	-1710.41	-977.25	40°07'31.835"N	104°46'48.124"W	0.66	
9145.00	90.150	178.610	7267.01	1796.83	-1796.39	-975.58	40°07'30.986"N	104°46'48.103"W	0.64	
9230.00	89.780	179.060	7267.06	1881.82	-1881.37	-973.85	40°07'30.146"N	104°46'48.081"W	0.69	
9315.00	89.470	178.930	7267.62	1966.80	-1966.36	-972.36	40°07'29.306"N	104°46'48.061"W	0.40	
9400.00	90.240	178.160	7267.83	2051.77	-2051.33	-970.20	40°07'28.466"N	104°46'48.033"W	1.28	
9484.00	89.930	179.660	7267.71	2135.75	-2135.31	-968.60	40°07'27.636"N	104°46'48.013"W	1.82	
9569.00	90.000	180.080	7267.76	2220.75	-2220.31	-968.41	40°07'26.796"N	104°46'48.010"W	0.50	
9654.00	89.710	180.450	7267.97	2305.75	-2305.31	-968.80	40°07'25.956"N	104°46'48.015"W	0.55	
9740.00	89.470	179.950	7268.59	2391.75	-2391.31	-969.10	40°07'25.107"N	104°46'48.019"W	0.64	
9825.00	90.150	180.150	7268.87	2476.75	-2476.31	-969.18	40°07'24.267"N	104°46'48.020"W	0.83	
9910.00	89.870	179.710	7268.86	2561.75	-2561.31	-969.07	40°07'23.427"N	104°46'48.019"W	0.61	
9995.00	89.660	180.040	7269.20	2646.74	-2646.31	-968.89	40°07'22.587"N	104°46'48.016"W	0.46	
10081.00	89.690	180.580	7269.69	2732.74	-2732.30	-969.35	40°07'21.737"N	104°46'48.022"W	0.63	
10166.00	89.230	180.430	7270.49	2817.73	-2817.29	-970.10	40°07'20.897"N	104°46'48.032"W	0.57	
10251.00	90.000	180.840	7271.07	2902.73	-2902.29	-971.04	40°07'20.057"N	104°46'48.044"W	1.03	
10336.00	89.930	179.690	7271.12	2987.73	-2987.28	-971.44	40°07'19.217"N	104°46'48.049"W	1.36	
10422.00	89.960	181.100	7271.20	3073.72	-3073.28	-972.03	40°07'18.367"N	104°46'48.056"W	1.64	
10507.00	89.530	180.520	7271.58	3158.71	-3158.27	-973.23	40°07'17.527"N	104°46'48.072"W	0.85	
10592.00	89.750	180.420	7272.11	3243.71	-3243.27	-973.93	40°07'16.688"N	104°46'48.081"W	0.28	
10677.00	89.350	180.190	7272.78	3328.70	-3328.26	-974.38	40°07'15.848"N	104°46'48.087"W	0.54	
10763.00	89.500	180.020	7273.64	3414.70	-3414.26	-974.54	40°07'14.998"N	104°46'48.089"W	0.26	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)
Area	COLORADO	Well	3D 15N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 15N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (148 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10848.00	90.360	180.240	7273.75	3499.70	-3499.26	-974.73	40°07'14.158"N	104°46'48.091"W	1.04	
10933.00	90.360	180.360	7273.21	3584.70	-3584.25	-975.18	40°07'13.318"N	104°46'48.097"W	0.14	
11018.00	90.330	180.830	7272.70	3669.69	-3669.25	-976.06	40°07'12.478"N	104°46'48.108"W	0.55	
11104.00	89.960	180.610	7272.48	3755.68	-3755.24	-977.14	40°07'11.628"N	104°46'48.122"W	0.50	
11189.00	90.060	180.750	7272.47	3840.68	-3840.23	-978.15	40°07'10.788"N	104°46'48.135"W	0.20	
11274.00	90.640	180.510	7271.95	3925.67	-3925.23	-979.08	40°07'09.948"N	104°46'48.147"W	0.74	
11359.00	91.070	179.780	7270.68	4010.66	-4010.22	-979.30	40°07'09.108"N	104°46'48.150"W	1.00	
11445.00	90.120	179.720	7269.79	4096.65	-4096.21	-978.92	40°07'08.259"N	104°46'48.145"W	1.11	
11530.00	89.220	178.900	7270.28	4181.64	-4181.20	-977.90	40°07'07.419"N	104°46'48.131"W	1.43	
11615.00	90.210	179.150	7270.70	4266.63	-4266.19	-976.45	40°07'06.579"N	104°46'48.113"W	1.20	
11700.00	90.090	179.200	7270.48	4351.62	-4351.18	-975.23	40°07'05.739"N	104°46'48.097"W	0.15	
11840.00	90.090	178.650	7270.26	4491.59	-4491.15	-972.60	40°07'04.356"N	104°46'48.063"W	0.39	Last BHI MWD+IFR Surveys
11897.00	90.090	178.650	7270.17	4548.58	-4548.14	-971.26	40°07'03.793"N	104°46'48.046"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: 3D 15N-21HZ AWB Ref Wellpath: 3D 15N-21HZ 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	17.00	1027.00	1010.00	17.00	1026.98	0.00	0.00	-3.73	3.80
9.625in Casing Surface	17.00	1017.00	1000.00	17.00	1016.98	0.00	0.00	-3.72	3.78
8.75in Open Hole	1027.00	7762.00	6735.00	1026.98	7272.19	-3.73	3.80	-413.58	-973.82
7in Casing Intermediate	17.00	7749.00	7732.00	17.00	7271.61	0.00	0.00	-400.59	-973.53
6.125in Open Hole	7762.00	11897.00	4135.00	7272.19	7270.17	-413.58	-973.82	-4548.14	-971.26

Actual Wellpath Report

3D 15N-21HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)
Area	COLORADO	Well	3D 15N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 15N-21HZ AWB
Facility	SEC.21-T2N-R66W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
3D 15N-21HZ LANDBOX		0.00	0.00	0.00	3202290.71	1291102.66	40°07'48.738"N	104°46'35.544"W	polygon
SEC.21-T2N-R66W HARDLINES (460' SETBACKS)		0.00	0.40	90.03	3202380.72	1291103.80	40°07'48.742"N	104°46'34.385"W	polygon
SEC.21-T2N-R66W SECTION LINES		0.00	0.40	90.03	3202380.72	1291103.80	40°07'48.742"N	104°46'34.385"W	polygon
3D 15N-21HZ BHL ON PLAT (460'FSL & 2010'FEL, SEC.21) REV-1		7271.00	-4574.81	-975.55	3201352.56	1286520.23	40°07'03.529"N	104°46'48.101"W	point

WELLPATH COMPOSITION - Ref Wellbore: 3D 15N-21HZ AWB Ref Wellpath: 3D 15N-21HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	917.00	Generic gyro - continuous (Standard)	MS ENERGY SERVICES GYRO SURVEYS <117-917>	3D 15N-21HZ AWB
917.00	7712.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEY 8 3/4" HOLE <1071-7712>	3D 15N-21HZ AWB
7712.00	11840.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7796-11840>	3D 15N-21HZ AWB
11840.00	11897.00	Blind Drilling (std)	Projection to bit	3D 15N-21HZ AWB

Actual Wellpath Report

3D 15N-21HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#26 3D 15N-21HZ (250'FNL & 1039'FEL, SEC.21)
Area	COLORADO	Well	3D 15N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 15N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	121.150	17.00	Tie-On
117.00	0.640	121.150	117.00	Begin GYRO Surveys
917.00	0.300	168.060	916.98	Tie-Into GYRO Surveys
1061.00	0.150	70.880	1060.98	Begin BHI MWD+IFR Surveys
7749.00	87.112	181.246	7271.61	7" Casing Point
11840.00	90.090	178.650	7270.26	Last BHI MWD+IFR Surveys
11897.00	90.090	178.650	7270.17	Projection to Bit