

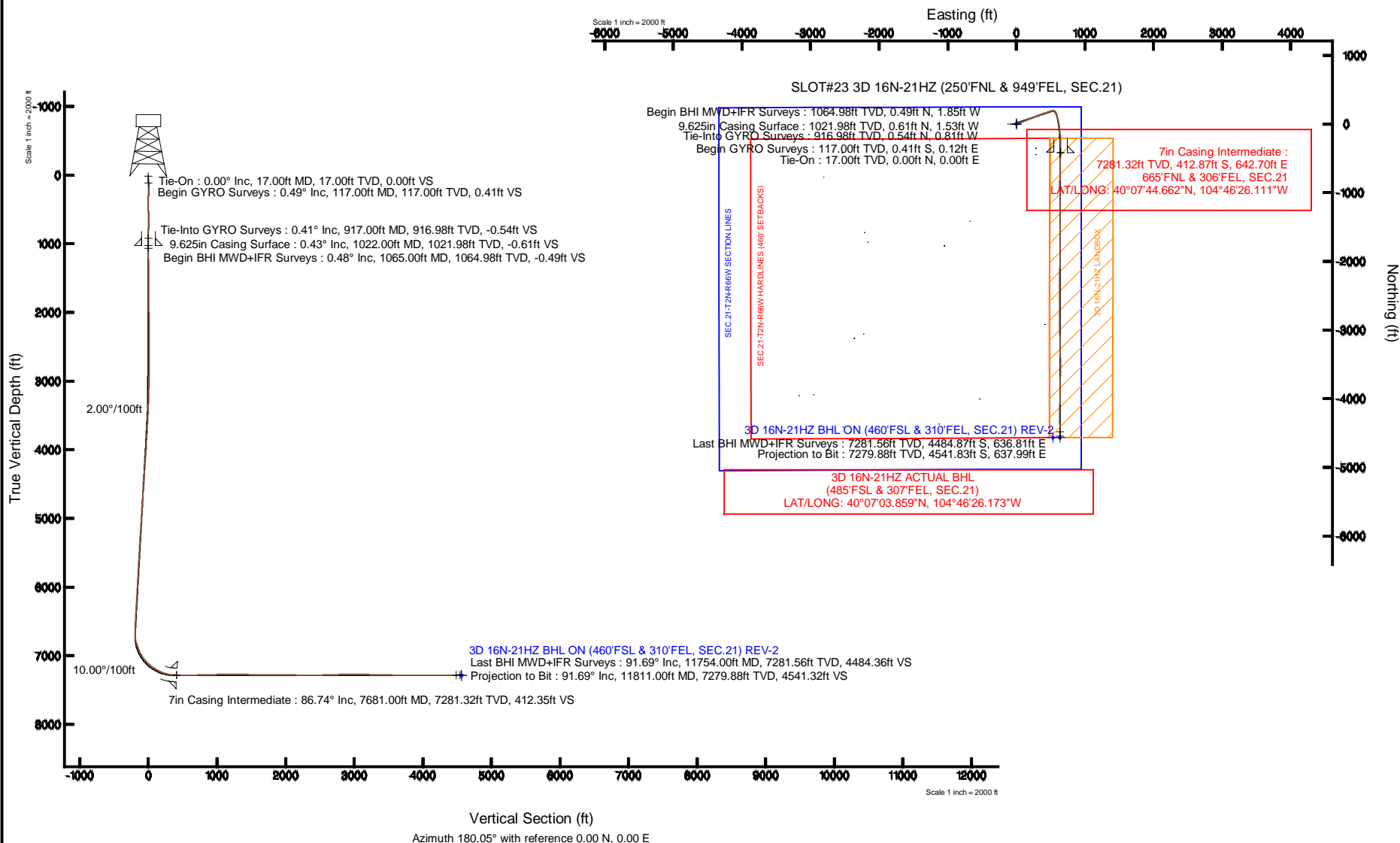
KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#23 3D 16N-21HZ (250'FNL & 949'FEL, SEC.21)
 Field: WELD COUNTY (KERR MCGEE) Well: 3D 16N-21HZ
 Facility: SEC.21-T2N-R66W Wellbore: 3D 16N-21HZ PWB



Plot reference wellpath is 3D 16N-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#23 3D 16N-21HZ (250'FNL & 949'FEL, SEC.21)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precin on 05/Feb/2014



Actual Wellpath Report

3D 16N-21HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 3D 16N-21HZ (250'FNL & 949'FEL, SEC.21)
Area	COLORADO	Well	3D 16N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 16N-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 08:33
Convergence at slot	n/a	Database/Source file	WellArchitectDB/3D_16N-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	350.94	-289.11	3202380.72	1291103.80	40°07'48.742"N	104°46'34.385"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#23 3D 16N-21HZ (250'FNL & 949'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	180.05°

Actual Wellpath Report

3D 16N-21HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 3D 16N-21HZ (250'FNL & 949'FEL, SEC.21)
Area	COLORADO	Well	3D 16N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 16N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (133 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	163.360	0.00	0.00	0.00	0.00	40°07'48.742"N	104°46'34.385"W	0.00	
17.00	0.000	163.360	17.00	0.00	0.00	0.00	40°07'48.742"N	104°46'34.385"W	0.00	Tie-On
117.00	0.490	163.360	117.00	0.41	-0.41	0.12	40°07'48.738"N	104°46'34.383"W	0.49	Begin GYRO Surveys
217.00	0.360	64.330	217.00	0.68	-0.68	0.53	40°07'48.735"N	104°46'34.378"W	0.65	
317.00	0.320	314.830	317.00	0.35	-0.35	0.61	40°07'48.739"N	104°46'34.377"W	0.56	
417.00	0.390	269.350	416.99	0.16	-0.16	0.07	40°07'48.740"N	104°46'34.384"W	0.28	
517.00	0.360	236.930	516.99	0.33	-0.33	-0.53	40°07'48.739"N	104°46'34.392"W	0.21	
617.00	0.310	215.120	616.99	0.73	-0.73	-0.95	40°07'48.735"N	104°46'34.397"W	0.14	
717.00	0.310	43.320	716.99	0.75	-0.75	-0.92	40°07'48.735"N	104°46'34.397"W	0.62	
817.00	0.560	14.390	816.99	0.08	-0.08	-0.61	40°07'48.741"N	104°46'34.393"W	0.33	
917.00	0.410	294.880	916.98	-0.54	0.54	-0.81	40°07'48.747"N	104°46'34.395"W	0.63	Tie-Into GYRO Surveys
1065.00	0.480	243.500	1064.98	-0.49	0.49	-1.85	40°07'48.747"N	104°46'34.409"W	0.26	Begin BHI MWD+IFR Surveys
1339.00	0.630	197.060	1338.97	1.46	-1.46	-3.32	40°07'48.728"N	104°46'34.428"W	0.17	
1614.00	0.530	148.800	1613.96	4.00	-4.00	-3.10	40°07'48.703"N	104°46'34.425"W	0.18	
1888.00	0.690	146.140	1887.94	6.45	-6.45	-1.53	40°07'48.678"N	104°46'34.405"W	0.06	
2147.00	0.460	158.910	2146.93	8.71	-8.71	-0.28	40°07'48.656"N	104°46'34.389"W	0.10	
2485.00	0.320	120.040	2484.92	10.45	-10.45	1.02	40°07'48.639"N	104°46'34.372"W	0.09	
2825.00	0.580	51.930	2824.91	9.86	-9.87	3.20	40°07'48.644"N	104°46'34.344"W	0.16	
3081.00	0.850	41.560	3080.89	7.64	-7.65	5.48	40°07'48.666"N	104°46'34.314"W	0.12	
3166.00	2.160	54.390	3165.86	6.24	-6.24	7.20	40°07'48.680"N	104°46'34.292"W	1.58	
3252.00	3.580	56.620	3251.75	3.81	-3.82	10.76	40°07'48.704"N	104°46'34.246"W	1.66	
3337.00	4.940	56.110	3336.51	0.31	-0.32	16.01	40°07'48.739"N	104°46'34.179"W	1.60	
3422.00	4.860	55.300	3421.20	-3.79	3.77	22.01	40°07'48.779"N	104°46'34.102"W	0.12	
3507.00	5.200	57.450	3505.88	-7.92	7.89	28.22	40°07'48.820"N	104°46'34.022"W	0.46	
3592.00	6.380	67.610	3590.44	-11.79	11.76	35.83	40°07'48.858"N	104°46'33.924"W	1.83	
3678.00	7.810	68.270	3675.78	-15.78	15.75	45.68	40°07'48.898"N	104°46'33.797"W	1.67	
3763.00	9.600	68.360	3759.80	-20.55	20.50	57.63	40°07'48.945"N	104°46'33.643"W	2.11	
3848.00	9.110	66.460	3843.67	-25.86	25.80	70.39	40°07'48.997"N	104°46'33.479"W	0.68	
3933.00	10.340	71.890	3927.45	-30.93	30.86	83.81	40°07'49.047"N	104°46'33.306"W	1.80	
4019.00	9.950	69.530	4012.10	-35.94	35.86	98.11	40°07'49.096"N	104°46'33.122"W	0.66	
4104.00	9.480	67.450	4095.88	-41.20	41.11	111.45	40°07'49.148"N	104°46'32.950"W	0.69	
4190.00	10.740	66.560	4180.55	-47.11	47.01	125.34	40°07'49.207"N	104°46'32.771"W	1.48	
4275.00	11.010	66.600	4264.02	-53.50	53.39	140.06	40°07'49.270"N	104°46'32.582"W	0.32	
4360.00	11.370	76.360	4347.41	-58.71	58.59	155.65	40°07'49.321"N	104°46'32.381"W	2.27	
4445.00	9.940	67.260	4430.95	-63.54	63.40	170.56	40°07'49.369"N	104°46'32.189"W	2.59	
4531.00	9.610	63.230	4515.70	-69.65	69.50	183.82	40°07'49.429"N	104°46'32.019"W	0.88	
4616.00	9.910	63.350	4599.47	-76.14	75.98	196.69	40°07'49.493"N	104°46'31.853"W	0.35	
4701.00	8.820	68.900	4683.34	-81.77	81.61	209.31	40°07'49.548"N	104°46'31.690"W	1.66	
4786.00	9.230	68.720	4767.29	-86.60	86.43	221.74	40°07'49.596"N	104°46'31.530"W	0.48	
4872.00	9.280	67.010	4852.17	-91.83	91.64	234.55	40°07'49.648"N	104°46'31.365"W	0.33	
4955.00	11.010	71.150	4933.87	-97.01	96.81	248.21	40°07'49.699"N	104°46'31.189"W	2.26	
5040.00	10.740	70.140	5017.34	-102.34	102.13	263.34	40°07'49.751"N	104°46'30.995"W	0.39	
5125.00	10.500	69.000	5100.89	-107.81	107.59	278.02	40°07'49.805"N	104°46'30.806"W	0.38	
5210.00	10.260	67.370	5184.50	-113.51	113.28	292.24	40°07'49.861"N	104°46'30.623"W	0.45	
5295.00	10.640	70.930	5268.09	-119.00	118.76	306.64	40°07'49.916"N	104°46'30.437"W	0.88	

Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 3D 16N-21HZ (250'FNL & 949'FEL, SEC.21)
Area	COLORADO	Well	3D 16N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 16N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (133 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5381.00	10.700	71.090	5352.60	-124.20	123.94	321.70	40°07'49.967"N	104°46'30.243"W	0.08	
5466.00	10.100	70.030	5436.20	-129.31	129.04	336.17	40°07'50.017"N	104°46'30.057"W	0.74	
5551.00	9.340	70.060	5519.98	-134.22	133.94	349.66	40°07'50.066"N	104°46'29.883"W	0.89	
5636.00	9.120	70.430	5603.88	-138.84	138.55	362.49	40°07'50.111"N	104°46'29.718"W	0.27	
5722.00	8.530	68.470	5688.86	-143.47	143.17	374.85	40°07'50.157"N	104°46'29.559"W	0.77	
5807.00	7.770	68.800	5773.00	-147.87	147.56	386.07	40°07'50.200"N	104°46'29.415"W	0.90	
5892.00	9.330	72.500	5857.06	-152.03	151.71	398.00	40°07'50.241"N	104°46'29.261"W	1.95	
5977.00	10.080	69.880	5940.84	-156.67	156.34	411.55	40°07'50.287"N	104°46'29.087"W	1.02	
6063.00	10.720	74.320	6025.43	-161.44	161.09	426.32	40°07'50.334"N	104°46'28.896"W	1.19	
6148.00	9.850	73.440	6109.06	-165.66	165.30	440.90	40°07'50.375"N	104°46'28.709"W	1.04	
6233.00	10.260	71.590	6192.76	-170.13	169.77	455.05	40°07'50.420"N	104°46'28.527"W	0.61	
6318.00	9.650	68.560	6276.48	-175.14	174.76	468.87	40°07'50.469"N	104°46'28.349"W	0.95	
6403.00	10.180	70.530	6360.21	-180.26	179.87	482.58	40°07'50.519"N	104°46'28.172"W	0.74	
6489.00	9.440	70.100	6444.95	-185.20	184.80	496.38	40°07'50.568"N	104°46'27.995"W	0.86	
6574.00	8.920	76.160	6528.86	-189.16	188.75	509.33	40°07'50.607"N	104°46'27.828"W	1.29	
6660.00	9.150	78.930	6613.80	-192.08	191.66	522.51	40°07'50.636"N	104°46'27.658"W	0.57	
6702.00	9.280	83.430	6655.25	-193.11	192.69	529.15	40°07'50.646"N	104°46'27.573"W	1.74	
6745.00	10.380	99.150	6697.63	-192.90	192.47	536.43	40°07'50.644"N	104°46'27.479"W	6.72	
6788.00	13.200	117.210	6739.73	-190.04	189.61	544.62	40°07'50.616"N	104°46'27.373"W	10.73	
6830.00	16.820	129.490	6780.30	-183.99	183.55	553.58	40°07'50.556"N	104°46'27.258"W	11.43	
6873.00	20.990	139.860	6820.99	-174.15	173.69	563.35	40°07'50.458"N	104°46'27.132"W	12.42	
6916.00	22.990	149.330	6860.87	-161.04	160.58	572.60	40°07'50.329"N	104°46'27.013"W	9.45	
6958.00	23.950	156.080	6899.40	-146.19	145.73	580.25	40°07'50.182"N	104°46'26.915"W	6.79	
7001.00	25.940	161.970	6938.39	-129.27	128.80	586.70	40°07'50.015"N	104°46'26.832"W	7.40	
7043.00	28.850	162.770	6975.68	-110.86	110.39	592.54	40°07'49.833"N	104°46'26.756"W	6.98	
7086.00	33.490	164.090	7012.46	-89.54	89.06	598.87	40°07'49.622"N	104°46'26.675"W	10.91	
7129.00	38.730	166.450	7047.19	-65.04	64.55	605.28	40°07'49.380"N	104°46'26.593"W	12.61	
7171.00	42.750	167.230	7079.01	-38.36	37.87	611.51	40°07'49.116"N	104°46'26.512"W	9.65	
7214.00	46.690	168.690	7109.56	-8.77	8.28	617.81	40°07'48.824"N	104°46'26.431"W	9.47	
7256.00	50.560	171.370	7137.31	22.25	-22.75	623.24	40°07'48.517"N	104°46'26.361"W	10.38	
7299.00	55.200	172.180	7163.26	56.18	-56.68	628.14	40°07'48.182"N	104°46'26.298"W	10.89	
7342.00	58.930	173.190	7186.63	91.96	-92.47	632.73	40°07'47.828"N	104°46'26.239"W	8.90	
7384.00	61.840	172.630	7207.39	128.19	-128.70	637.24	40°07'47.470"N	104°46'26.181"W	7.02	
7427.00	64.880	174.430	7226.66	166.37	-166.88	641.56	40°07'47.093"N	104°46'26.126"W	8.00	
7469.00	68.480	176.670	7243.29	204.81	-205.33	644.54	40°07'46.713"N	104°46'26.087"W	9.87	
7512.00	73.860	179.130	7257.17	245.46	-245.98	646.02	40°07'46.311"N	104°46'26.068"W	13.63	
7555.00	79.290	181.420	7267.15	287.27	-287.79	645.81	40°07'45.898"N	104°46'26.071"W	13.65	
7597.00	82.830	181.650	7273.67	328.74	-329.25	644.69	40°07'45.488"N	104°46'26.085"W	8.45	
7640.00	84.810	181.340	7278.30	371.47	-371.99	643.58	40°07'45.066"N	104°46'26.100"W	4.66	
7681.00†	86.743	181.124	7281.32	412.35	-412.87	642.70	40°07'44.662"N	104°46'26.111"W	4.74	7" Casing Point
7735.00	89.290	180.840	7283.19	466.31	-466.82	641.78	40°07'44.129"N	104°46'26.123"W	4.74	
7863.00	90.640	181.680	7283.27	594.27	-594.79	638.96	40°07'42.864"N	104°46'26.159"W	1.24	
7947.00	91.440	181.200	7281.74	678.23	-678.74	636.85	40°07'42.034"N	104°46'26.186"W	1.11	
8033.00	91.290	181.100	7279.69	764.19	-764.70	635.12	40°07'41.185"N	104°46'26.209"W	0.21	
8119.00	91.780	180.230	7277.39	850.16	-850.66	634.13	40°07'40.336"N	104°46'26.221"W	1.16	

Actual Wellpath Report

3D 16N-21HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	3D 16N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 16N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (133 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8204.00	91.630	179.590	7274.86	935.12	-935.63	634.26	40°07'39.496"N	104°46'26.220"W	0.77	
8289.00	90.640	179.570	7273.18	1020.10	-1020.61	634.88	40°07'38.656"N	104°46'26.212"W	1.16	
8374.00	91.010	179.380	7271.95	1105.08	-1105.59	635.66	40°07'37.816"N	104°46'26.202"W	0.49	
8460.00	89.780	179.160	7271.36	1191.07	-1191.58	636.76	40°07'36.967"N	104°46'26.188"W	1.45	
8545.00	89.590	178.770	7271.83	1276.06	-1276.57	638.29	40°07'36.127"N	104°46'26.168"W	0.51	
8630.00	89.290	179.360	7272.66	1361.04	-1361.55	639.68	40°07'35.287"N	104°46'26.150"W	0.78	
8715.00	89.590	179.360	7273.49	1446.03	-1446.54	640.63	40°07'34.447"N	104°46'26.138"W	0.35	
8801.00	89.560	179.930	7274.13	1532.02	-1532.54	641.16	40°07'33.597"N	104°46'26.131"W	0.66	
8886.00	89.440	179.950	7274.87	1617.02	-1617.54	641.25	40°07'32.757"N	104°46'26.130"W	0.14	
8971.00	89.900	180.850	7275.36	1702.02	-1702.53	640.66	40°07'31.917"N	104°46'26.138"W	1.19	
9056.00	90.180	181.240	7275.30	1787.00	-1787.52	639.11	40°07'31.078"N	104°46'26.158"W	0.56	
9141.00	89.040	180.640	7275.88	1871.99	-1872.50	637.71	40°07'30.238"N	104°46'26.176"W	1.52	
9227.00	88.610	180.850	7277.64	1957.96	-1958.48	636.60	40°07'29.388"N	104°46'26.190"W	0.56	
9312.00	89.590	180.940	7278.98	2042.94	-2043.45	635.27	40°07'28.548"N	104°46'26.207"W	1.16	
9397.00	89.040	180.640	7279.99	2127.93	-2128.44	634.10	40°07'27.708"N	104°46'26.222"W	0.74	
9481.00	89.660	180.760	7280.95	2211.92	-2212.43	633.07	40°07'26.878"N	104°46'26.236"W	0.75	
9566.00	89.660	180.990	7281.45	2296.91	-2297.42	631.77	40°07'26.039"N	104°46'26.252"W	0.27	
9651.00	89.690	179.970	7281.93	2381.90	-2382.41	631.06	40°07'25.199"N	104°46'26.261"W	1.20	
9736.00	90.520	179.720	7281.78	2466.90	-2467.41	631.29	40°07'24.359"N	104°46'26.259"W	1.02	
9822.00	91.570	179.920	7280.21	2552.88	-2553.39	631.56	40°07'23.509"N	104°46'26.255"W	1.24	
9907.00	91.720	179.680	7277.77	2637.85	-2638.36	631.86	40°07'22.669"N	104°46'26.251"W	0.33	
9992.00	91.720	180.660	7275.22	2722.81	-2723.32	631.60	40°07'21.830"N	104°46'26.255"W	1.15	
10077.00	91.140	180.480	7273.10	2807.78	-2808.29	630.76	40°07'20.990"N	104°46'26.265"W	0.71	
10163.00	91.140	179.330	7271.38	2893.76	-2894.27	630.90	40°07'20.140"N	104°46'26.264"W	1.34	
10248.00	90.400	179.010	7270.24	2978.74	-2979.25	632.13	40°07'19.301"N	104°46'26.248"W	0.95	
10333.00	89.010	178.500	7270.68	3063.72	-3064.23	633.98	40°07'18.461"N	104°46'26.224"W	1.74	
10418.00	88.670	178.990	7272.40	3148.68	-3149.19	635.84	40°07'17.621"N	104°46'26.200"W	0.70	
10503.00	89.380	178.600	7273.85	3233.64	-3234.16	637.63	40°07'16.782"N	104°46'26.177"W	0.95	
10589.00	89.010	178.720	7275.06	3319.61	-3320.12	639.64	40°07'15.932"N	104°46'26.151"W	0.45	
10674.00	88.890	178.870	7276.61	3404.58	-3405.09	641.43	40°07'15.092"N	104°46'26.128"W	0.23	
10759.00	88.360	180.480	7278.65	3489.55	-3490.06	641.91	40°07'14.253"N	104°46'26.122"W	1.99	
10844.00	88.760	179.940	7280.79	3574.52	-3575.03	641.60	40°07'13.413"N	104°46'26.126"W	0.79	
10930.00	89.470	180.210	7282.12	3660.51	-3661.02	641.48	40°07'12.563"N	104°46'26.128"W	0.88	
11015.00	89.870	181.120	7282.61	3745.50	-3746.02	640.50	40°07'11.723"N	104°46'26.140"W	1.17	
11100.00	89.040	181.180	7283.42	3830.48	-3830.99	638.79	40°07'10.884"N	104°46'26.162"W	0.98	
11185.00	89.350	181.260	7284.61	3915.45	-3915.97	636.98	40°07'10.044"N	104°46'26.186"W	0.38	
11271.00	89.930	180.890	7285.15	4001.44	-4001.95	635.37	40°07'09.194"N	104°46'26.207"W	0.80	
11356.00	89.560	180.690	7285.53	4086.43	-4086.94	634.20	40°07'08.354"N	104°46'26.222"W	0.49	
11441.00	90.090	180.420	7285.79	4171.42	-4171.93	633.37	40°07'07.514"N	104°46'26.232"W	0.70	
11526.00	90.800	179.800	7285.13	4256.42	-4256.93	633.21	40°07'06.674"N	104°46'26.234"W	1.11	
11697.00	90.770	178.640	7282.78	4427.38	-4427.90	635.54	40°07'04.985"N	104°46'26.204"W	0.68	
11754.00	91.690	178.810	7281.56	4484.36	-4484.87	636.81	40°07'04.422"N	104°46'26.188"W	1.64	Last BHI MWD+IFR Surveys
11811.00	91.690	178.810	7279.88	4541.32	-4541.83	637.99	40°07'03.859"N	104°46'26.173"W	0.00	Projection to Bit

Actual Wellpath Report

3D 16N-21HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 3D 16N-21HZ (250'FNL & 949'FEL, SEC.21)
Area	COLORADO	Well	3D 16N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 16N-21HZ AWB
Facility	SEC.21-T2N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: 3D 16N-21HZ AWB Ref Wellpath: 3D 16N-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	1041.00	1024.00	17.00	1040.98	0.00	0.00	0.57	-1.67
9.625in Casing Surface	17.00	1022.00	1005.00	17.00	1021.98	0.00	0.00	0.61	-1.53
8.75in Open Hole	1041.00	7690.00	6649.00	1040.98	7281.80	0.57	-1.67	-421.85	642.53
7in Casing Intermediate	17.00	7681.00	7664.00	17.00	7281.32	0.00	0.00	-412.87	642.70
6.125in Open Hole	7681.00	11811.00	4130.00	7281.32	7279.88	-412.87	642.70	-4541.83	637.99

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
3D 16N-21HZ LANDBOX		0.00	0.00	0.00	3202380.72	1291103.80	40°07'48.742"N	104°46'34.385"W	polygon
SEC.21-T2N-R66W HARDLINES (460' SETBACKS)		0.00	0.00	0.00	3202380.72	1291103.80	40°07'48.742"N	104°46'34.385"W	polygon
SEC.21-T2N-R66W SECTION LINES		0.00	0.00	0.00	3202380.72	1291103.80	40°07'48.742"N	104°46'34.385"W	polygon
3D 16N-21HZ BHL ON (460'FSL & 310'FEL, SEC.21) REV-2		7286.00	-4567.24	634.50	3203052.45	1286542.08	40°07'03.608"N	104°46'26.218"W	point
3D 16N-21HZ BHL ON PLAT (460'FSL & 410'FEL, SEC.21) REV-1		7286.00	-4567.24	534.50	3202952.46	1286541.27	40°07'03.608"N	104°46'27.505"W	point

WELLPATH COMPOSITION - Ref Wellbore: 3D 16N-21HZ AWB Ref Wellpath: 3D 16N-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 16N-21HZ AWB
917.00	7640.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1065-7640>	3D 16N-21HZ AWB
7640.00	11754.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7735-11754>	3D 16N-21HZ AWB
11754.00	11811.00	Blind Drilling (std)	Projection to bit	3D 16N-21HZ AWB

Actual Wellpath Report

3D 16N-21HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#23 3D 16N-21HZ (250'FNL & 949'FEL, SEC.21)
Area	COLORADO	Well	3D 16N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 16N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	163.360	17.00	Tie-On
117.00	0.490	163.360	117.00	Begin GYRO Surveys
917.00	0.410	294.880	916.98	Tie-Into GYRO Surveys
1065.00	0.480	243.500	1064.98	Begin BHI MWD+IFR Surveys
7681.00	86.743	181.124	7281.32	7" Casing Point
11754.00	91.690	178.810	7281.56	Last BHI MWD+IFR Surveys
11811.00	91.690	178.810	7279.88	Projection to Bit