

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 3D 36N-21HZ (250' FNL & 1069' FEL, SEC.21)
Area	COLORADO	Well	3D 36N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 36N-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	04/Mar/2014 at 11:25
Convergence at slot	n/a	Database/Source file	WellArchitectDB/3D_36N-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	350.13	-409.04	3202260.81	1291102.01	40°07'48.734"N	104°46'35.929"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#27 3D 36N-21HZ (250' FNL & 1069' 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	198.85°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 3D 36N-21HZ (250' FNL & 1069' FEL, SEC.21)
Area	COLORADO	Well	3D 36N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 36N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (138 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	286.160	0.00	0.00	0.00	0.00	40°07'48.734"N	104°46'35.929"W	0.00	
17.00	0.000	286.160	17.00	0.00	0.00	0.00	40°07'48.734"N	104°46'35.929"W	0.00	Tie-On
117.00	0.490	286.160	117.00	0.02	0.12	-0.41	40°07'48.735"N	104°46'35.934"W	0.49	Begin GYRO Surveys
217.00	0.330	102.600	217.00	0.01	0.18	-0.54	40°07'48.736"N	104°46'35.936"W	0.82	
317.00	0.430	326.470	317.00	-0.25	0.43	-0.47	40°07'48.738"N	104°46'35.935"W	0.71	
417.00	0.700	5.700	416.99	-1.08	1.35	-0.61	40°07'48.747"N	104°46'35.937"W	0.46	
517.00	0.520	321.720	516.99	-1.92	2.31	-0.83	40°07'48.757"N	104°46'35.940"W	0.49	
617.00	0.410	284.200	616.98	-2.13	2.75	-1.46	40°07'48.761"N	104°46'35.948"W	0.32	
717.00	0.350	74.480	716.98	-2.28	2.92	-1.51	40°07'48.763"N	104°46'35.948"W	0.73	
817.00	0.410	34.180	816.98	-2.79	3.30	-1.02	40°07'48.767"N	104°46'35.942"W	0.27	
917.00	0.240	169.930	916.98	-2.96	3.39	-0.78	40°07'48.768"N	104°46'35.939"W	0.61	
973.00	0.520	36.260	972.98	-3.10	3.48	-0.61	40°07'48.768"N	104°46'35.937"W	1.26	Tie-Into GYRO Surveys
1153.00	0.190	137.920	1152.98	-3.73	3.92	0.07	40°07'48.773"N	104°46'35.928"W	0.33	Begin BHI MWD+IFR Surveys
1244.00	0.370	119.180	1243.98	-3.60	3.66	0.43	40°07'48.770"N	104°46'35.923"W	0.22	
1335.00	0.370	79.270	1334.97	-3.70	3.57	0.98	40°07'48.769"N	104°46'35.916"W	0.28	
1518.00	0.550	308.910	1517.97	-4.29	4.24	0.87	40°07'48.776"N	104°46'35.918"W	0.46	
1700.00	0.490	300.020	1699.96	-4.74	5.17	-0.48	40°07'48.785"N	104°46'35.935"W	0.06	
1883.00	0.710	298.750	1882.95	-5.09	6.11	-2.15	40°07'48.794"N	104°46'35.957"W	0.12	
1969.00	1.010	313.650	1968.94	-5.50	6.89	-3.17	40°07'48.802"N	104°46'35.970"W	0.43	
2054.00	0.470	151.510	2053.94	-5.57	7.10	-3.54	40°07'48.804"N	104°46'35.975"W	1.72	
2224.00	0.190	109.050	2223.94	-5.10	6.40	-2.94	40°07'48.797"N	104°46'35.967"W	0.21	
2309.00	0.280	119.400	2308.94	-5.06	6.25	-2.63	40°07'48.796"N	104°46'35.963"W	0.12	
2395.00	1.390	291.470	2394.93	-5.07	6.53	-3.42	40°07'48.798"N	104°46'35.973"W	1.94	
2480.00	1.550	288.840	2479.90	-5.12	7.27	-5.47	40°07'48.806"N	104°46'35.999"W	0.20	
2565.00	3.210	289.350	2564.83	-5.14	8.43	-8.80	40°07'48.817"N	104°46'36.042"W	1.95	
2650.00	4.120	283.810	2649.65	-4.89	9.95	-14.01	40°07'48.832"N	104°46'36.109"W	1.15	
2735.00	3.730	285.660	2734.45	-4.47	11.43	-19.64	40°07'48.847"N	104°46'36.182"W	0.48	
2821.00	4.410	288.850	2820.23	-4.31	13.25	-25.46	40°07'48.865"N	104°46'36.257"W	0.83	
2906.00	6.240	288.350	2904.86	-4.27	15.76	-32.94	40°07'48.890"N	104°46'36.353"W	2.15	
2991.00	8.640	290.310	2989.14	-4.40	19.43	-43.31	40°07'48.926"N	104°46'36.487"W	2.84	
3076.00	10.420	287.670	3072.97	-4.40	23.98	-56.62	40°07'48.971"N	104°46'36.658"W	2.16	
3161.00	12.610	286.400	3156.25	-3.85	28.93	-72.85	40°07'49.020"N	104°46'36.867"W	2.59	
3246.00	14.930	286.420	3238.80	-2.98	34.65	-92.26	40°07'49.076"N	104°46'37.117"W	2.73	
3331.00	17.110	284.320	3320.50	-1.53	40.84	-114.88	40°07'49.138"N	104°46'37.408"W	2.65	
3416.00	19.650	281.800	3401.16	1.21	46.86	-140.99	40°07'49.197"N	104°46'37.744"W	3.13	
3502.00	20.450	277.650	3481.95	5.90	51.81	-170.04	40°07'49.246"N	104°46'38.118"W	1.90	
3587.00	20.170	276.300	3561.66	11.97	55.40	-199.32	40°07'49.281"N	104°46'38.495"W	0.64	
3672.00	21.540	275.800	3641.09	18.68	58.58	-229.41	40°07'49.313"N	104°46'38.882"W	1.63	
3757.00	21.080	274.880	3720.28	25.89	61.46	-260.16	40°07'49.341"N	104°46'39.278"W	0.67	
3843.00	21.110	274.880	3800.52	33.36	64.09	-291.00	40°07'49.367"N	104°46'39.675"W	0.03	
3928.00	21.030	273.960	3879.83	40.98	66.45	-321.47	40°07'49.391"N	104°46'40.068"W	0.40	
4013.00	21.100	275.860	3959.15	48.34	69.06	-351.91	40°07'49.416"N	104°46'40.459"W	0.81	
4099.00	20.890	277.150	4039.45	54.93	72.55	-382.52	40°07'49.451"N	104°46'40.854"W	0.59	
4184.00	21.610	278.870	4118.67	60.71	76.85	-413.02	40°07'49.493"N	104°46'41.246"W	1.12	
4269.00	21.870	279.090	4197.62	66.11	81.77	-444.12	40°07'49.542"N	104°46'41.647"W	0.32	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 3D 36N-21HZ (250' FNL & 1069' FEL, SEC.21)
Area	COLORADO	Well	3D 36N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 36N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (138 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4354.00	22.330	276.430	4276.38	72.27	86.08	-475.80	40°07'49.585"N	104°46'42.055"W	1.30	
4440.00	20.990	275.390	4356.30	79.36	89.35	-507.37	40°07'49.617"N	104°46'42.461"W	1.62	
4525.00	20.490	275.640	4435.80	86.31	92.25	-537.33	40°07'49.646"N	104°46'42.847"W	0.60	
4610.00	18.700	274.980	4515.87	92.97	94.89	-565.71	40°07'49.672"N	104°46'43.212"W	2.12	
4695.00	19.410	275.770	4596.21	99.44	97.49	-593.34	40°07'49.697"N	104°46'43.568"W	0.89	
4781.00	19.890	276.300	4677.20	105.85	100.54	-622.10	40°07'49.727"N	104°46'43.938"W	0.60	
4866.00	20.730	276.090	4756.92	112.31	103.72	-651.43	40°07'49.759"N	104°46'44.316"W	0.99	
4951.00	20.460	277.410	4836.49	118.58	107.23	-681.12	40°07'49.794"N	104°46'44.698"W	0.63	
5036.00	19.890	276.880	4916.27	124.53	110.88	-710.21	40°07'49.830"N	104°46'45.072"W	0.70	
5122.00	18.370	276.460	4997.52	130.47	114.16	-738.20	40°07'49.862"N	104°46'45.433"W	1.77	
5207.00	19.320	277.320	5077.96	136.16	117.45	-765.45	40°07'49.895"N	104°46'45.784"W	1.16	
5292.00	19.930	277.810	5158.02	141.74	121.21	-793.75	40°07'49.932"N	104°46'46.148"W	0.74	
5377.00	21.050	277.600	5237.64	147.49	125.20	-823.24	40°07'49.971"N	104°46'46.528"W	1.32	
5462.00	19.510	276.760	5317.37	153.44	128.89	-852.47	40°07'50.008"N	104°46'46.904"W	1.84	
5547.00	19.070	276.480	5397.60	159.39	132.13	-880.36	40°07'50.040"N	104°46'47.263"W	0.53	
5633.00	18.740	277.720	5478.96	165.07	135.57	-908.01	40°07'50.074"N	104°46'47.619"W	0.60	
5718.00	19.830	279.020	5559.19	170.17	139.67	-935.78	40°07'50.114"N	104°46'47.976"W	1.38	
5803.00	20.240	280.380	5639.05	174.79	144.58	-964.48	40°07'50.163"N	104°46'48.346"W	0.73	
5888.00	19.050	280.180	5719.10	179.05	149.68	-992.60	40°07'50.213"N	104°46'48.708"W	1.40	
5974.00	19.610	276.650	5800.25	184.21	153.83	-1020.75	40°07'50.254"N	104°46'49.070"W	1.51	
6058.00	20.060	275.850	5879.27	190.43	156.93	-1049.08	40°07'50.285"N	104°46'49.435"W	0.63	
6144.00	19.560	275.800	5960.18	197.00	159.89	-1078.07	40°07'50.314"N	104°46'49.808"W	0.58	
6229.00	19.080	278.760	6040.40	202.65	163.44	-1105.96	40°07'50.349"N	104°46'50.167"W	1.28	
6314.00	19.130	275.290	6120.72	208.35	166.84	-1133.56	40°07'50.382"N	104°46'50.523"W	1.34	
6399.00	20.280	277.070	6200.74	214.62	169.94	-1162.05	40°07'50.413"N	104°46'50.889"W	1.53	
6484.00	20.360	276.660	6280.45	220.75	173.47	-1191.36	40°07'50.448"N	104°46'51.267"W	0.19	
6570.00	19.760	274.760	6361.23	227.45	176.41	-1220.70	40°07'50.477"N	104°46'51.645"W	1.03	
6655.00	20.860	275.490	6440.95	234.45	179.05	-1250.09	40°07'50.503"N	104°46'52.023"W	1.33	
6740.00	21.440	273.510	6520.22	242.05	181.45	-1280.66	40°07'50.527"N	104°46'52.416"W	1.08	
6825.00	20.600	272.730	6599.56	250.31	183.11	-1311.10	40°07'50.543"N	104°46'52.808"W	1.04	
6910.00	19.340	269.300	6679.45	259.18	183.65	-1340.11	40°07'50.548"N	104°46'53.182"W	2.02	
6953.00	18.950	255.440	6720.10	265.41	181.81	-1354.00	40°07'50.530"N	104°46'53.361"W	10.59	
6996.00	19.220	240.330	6760.76	274.56	176.55	-1366.91	40°07'50.478"N	104°46'53.527"W	11.48	
7038.00	22.570	233.470	6800.00	286.38	168.32	-1379.40	40°07'50.397"N	104°46'53.688"W	9.86	
7081.00	25.800	228.900	6839.22	301.27	157.26	-1393.09	40°07'50.288"N	104°46'53.864"W	8.68	
7123.00	28.220	224.510	6876.64	318.14	144.16	-1406.94	40°07'50.158"N	104°46'54.042"W	7.46	
7166.00	30.720	218.790	6914.08	337.63	128.35	-1420.95	40°07'50.002"N	104°46'54.223"W	8.75	
7208.00	32.790	212.340	6949.80	358.79	110.37	-1433.76	40°07'49.824"N	104°46'54.388"W	9.46	
7251.00	35.410	205.260	6985.42	382.50	89.25	-1445.31	40°07'49.616"N	104°46'54.536"W	11.05	
7294.00	39.250	200.070	7019.62	408.50	65.19	-1455.30	40°07'49.378"N	104°46'54.665"W	11.54	
7336.00	43.900	198.060	7051.03	436.36	38.85	-1464.38	40°07'49.118"N	104°46'54.782"W	11.52	
7379.00	47.710	196.810	7081.00	467.17	9.44	-1473.61	40°07'48.827"N	104°46'54.900"W	9.10	
7421.00	50.840	196.040	7108.40	498.97	-21.08	-1482.60	40°07'48.525"N	104°46'55.016"W	7.58	
7464.00	53.920	194.790	7134.64	532.96	-53.92	-1491.65	40°07'48.201"N	104°46'55.133"W	7.52	
7507.00	57.240	194.150	7158.95	568.32	-88.26	-1500.51	40°07'47.861"N	104°46'55.247"W	7.82	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 3D 36N-21HZ (250' FNL & 1069' FEL, SEC.21)
Area	COLORADO	Well	3D 36N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 36N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (138 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7549.00	60.760	193.170	7180.57	604.17	-123.24	-1509.00	40°07'47.516"N	104°46'55.356"W	8.62	
7592.00	64.070	191.530	7200.48	642.03	-160.46	-1517.14	40°07'47.148"N	104°46'55.461"W	8.41	
7635.00	66.570	188.420	7218.44	680.62	-198.93	-1523.90	40°07'46.768"N	104°46'55.548"W	8.77	
7677.00	69.780	185.020	7234.06	718.73	-237.64	-1528.45	40°07'46.385"N	104°46'55.606"W	10.72	
7720.00	73.460	183.050	7247.61	758.16	-278.34	-1531.31	40°07'45.983"N	104°46'55.643"W	9.60	
7762.00	77.740	181.700	7258.06	797.16	-318.98	-1532.99	40°07'45.581"N	104°46'55.665"W	10.66	
7805.00	82.190	180.380	7265.55	837.46	-361.30	-1533.76	40°07'45.163"N	104°46'55.674"W	10.78	
7847.00	85.640	180.530	7270.00	877.09	-403.06	-1534.09	40°07'44.750"N	104°46'55.679"W	8.22	
7886.00†	87.775	181.112	7272.24	914.11	-441.99	-1534.65	40°07'44.366"N	104°46'55.686"W	5.67	7" Casing Point
7908.00	88.980	181.440	7272.86	935.07	-463.97	-1535.13	40°07'44.149"N	104°46'55.692"W	5.67	
7951.00	89.690	181.500	7273.36	976.11	-506.95	-1536.24	40°07'43.724"N	104°46'55.706"W	1.66	
8036.00	90.300	180.840	7273.37	1057.09	-591.93	-1537.97	40°07'42.884"N	104°46'55.729"W	1.06	
8122.00	90.640	180.770	7272.66	1138.86	-677.92	-1539.18	40°07'42.034"N	104°46'55.744"W	0.40	
8207.00	90.700	180.510	7271.67	1219.60	-762.91	-1540.13	40°07'41.194"N	104°46'55.756"W	0.31	
8292.00	91.200	180.850	7270.26	1300.35	-847.89	-1541.14	40°07'40.355"N	104°46'55.769"W	0.71	
8377.00	90.890	180.540	7268.71	1381.10	-932.87	-1542.17	40°07'39.515"N	104°46'55.782"W	0.52	
8463.00	90.610	180.380	7267.58	1462.70	-1018.86	-1542.86	40°07'38.665"N	104°46'55.791"W	0.37	
8548.00	90.210	181.120	7266.98	1543.49	-1103.85	-1543.97	40°07'37.825"N	104°46'55.805"W	0.99	
8633.00	89.810	180.820	7266.96	1624.39	-1188.84	-1545.41	40°07'36.985"N	104°46'55.824"W	0.59	
8718.00	89.350	180.470	7267.58	1705.13	-1273.83	-1546.37	40°07'36.145"N	104°46'55.836"W	0.68	
8804.00	89.930	180.010	7268.13	1786.63	-1359.83	-1546.73	40°07'35.296"N	104°46'55.841"W	0.86	
8889.00	90.120	179.760	7268.09	1867.02	-1444.83	-1546.56	40°07'34.456"N	104°46'55.838"W	0.37	
8974.00	90.210	179.750	7267.84	1947.34	-1529.83	-1546.20	40°07'33.616"N	104°46'55.834"W	0.11	
9060.00	90.430	179.570	7267.36	2028.56	-1615.82	-1545.69	40°07'32.766"N	104°46'55.827"W	0.33	
9145.00	89.690	180.390	7267.27	2108.99	-1700.82	-1545.66	40°07'31.926"N	104°46'55.827"W	1.30	
9230.00	89.810	179.530	7267.65	2189.41	-1785.82	-1545.60	40°07'31.086"N	104°46'55.826"W	1.02	
9315.00	89.280	179.370	7268.32	2269.58	-1870.81	-1544.78	40°07'30.246"N	104°46'55.815"W	0.65	
9401.00	89.320	179.130	7269.37	2350.59	-1956.80	-1543.65	40°07'29.396"N	104°46'55.801"W	0.28	
9569.00	90.240	179.410	7270.02	2508.88	-2124.78	-1541.51	40°07'27.736"N	104°46'55.773"W	0.57	
9740.00	90.060	179.850	7269.57	2670.34	-2295.78	-1540.41	40°07'26.046"N	104°46'55.759"W	0.28	
9825.00	90.330	180.100	7269.28	2750.77	-2380.78	-1540.37	40°07'25.206"N	104°46'55.758"W	0.43	
9996.00	90.610	181.030	7267.88	2913.13	-2551.76	-1542.06	40°07'23.517"N	104°46'55.780"W	0.57	
10081.00	90.090	180.530	7267.36	2993.94	-2636.75	-1543.22	40°07'22.677"N	104°46'55.794"W	0.85	
10251.00	90.520	180.520	7266.45	3155.31	-2806.74	-1544.77	40°07'20.997"N	104°46'55.814"W	0.25	
10337.00	90.120	180.900	7265.97	3237.04	-2892.73	-1545.84	40°07'20.147"N	104°46'55.828"W	0.64	
10422.00	89.100	180.760	7266.55	3317.86	-2977.72	-1547.07	40°07'19.307"N	104°46'55.844"W	1.21	
10507.00	89.220	180.470	7267.80	3398.59	-3062.71	-1547.98	40°07'18.468"N	104°46'55.855"W	0.37	
10677.00	89.410	180.780	7269.83	3560.05	-3232.69	-1549.84	40°07'16.788"N	104°46'55.879"W	0.21	
10847.00	89.660	179.950	7271.21	3721.27	-3402.67	-1550.92	40°07'15.108"N	104°46'55.893"W	0.51	
11017.00	90.490	180.240	7270.99	3882.24	-3572.67	-1551.20	40°07'13.428"N	104°46'55.896"W	0.52	
11188.00	90.000	180.490	7270.25	4044.42	-3743.67	-1552.29	40°07'11.738"N	104°46'55.910"W	0.32	
11273.00	90.090	179.910	7270.19	4124.95	-3828.67	-1552.59	40°07'10.898"N	104°46'55.914"W	0.69	
11443.00	90.550	179.930	7269.24	4285.76	-3998.66	-1552.35	40°07'09.218"N	104°46'55.911"W	0.27	
11529.00	89.070	179.990	7269.52	4367.12	-4084.66	-1552.29	40°07'08.368"N	104°46'55.910"W	1.72	
11614.00	89.560	180.440	7270.54	4447.66	-4169.65	-1552.61	40°07'07.529"N	104°46'55.914"W	0.78	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 3D 36N-21HZ (250' FNL & 1069' FEL, SEC.21)
Area	COLORADO	Well	3D 36N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 36N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH DATA (138 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11784.00	90.520	180.160	7270.42	4608.83	-4339.65	-1553.50	40°07'05.849"N	104°46'55.925"W	0.59	
11940.00	90.730	180.090	7268.72	4756.56	-4495.64	-1553.84	40°07'04.307"N	104°46'55.930"W	0.14	Last BHI MWD+IFR Surveys
11996.00	90.730	180.090	7268.01	4809.58	-4551.63	-1553.93	40°07'03.754"N	104°46'55.931"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: 3D 36N-21HZ AWB Ref Wellpath: 3D 36N-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	1064.00	1047.00	17.00	1063.98	0.00	0.00	3.92	-0.19
9.625in Casing Intermediate	17.00	1054.00	1037.00	17.00	1053.98	0.00	0.00	3.89	-0.23
8.75in Open Hole	1064.00	7895.00	6831.00	1063.98	7272.55	3.92	-0.19	-450.98	-1534.83
7in Casing Intermediate	17.00	7886.00	7869.00	17.00	7272.24	0.00	0.00	-441.99	-1534.65
6.125in Open Hole	7895.00	11996.00	4101.00	7272.55	7268.01	-450.98	-1534.83	-4551.63	-1553.93

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
3D 36N-21HZ LANDBOX		0.00	13.16	0.00	3202260.70	1291115.16	40°07'48.864"N	104°46'35.929"W	polygon
SEC.21-T2N-R66W HARDLINES (460' SETBACKS)		0.00	0.81	119.93	3202380.72	1291103.80	40°07'48.742"N	104°46'34.385"W	polygon
SEC.21-T2N-R66W SECTION LINES		0.00	0.81	119.93	3202380.72	1291103.80	40°07'48.742"N	104°46'34.385"W	polygon
3D 36N21HZ BHL ON PLAT (460'FSL & 2610'FEL, SEC.21) REV-1		7271.00	-4577.36	-1545.54	3200752.72	1286512.39	40°07'03.500"N	104°46'55.823"W	point

WELLPATH COMPOSITION - Ref Wellbore: 3D 36N-21HZ AWB Ref Wellpath: 3D 36N-21HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	973.00	Generic gyro - continuous (Standard)	MS ENERGY SERVICES <117-973>	3D 36N-21HZ AWB
973.00	7847.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1153-7847>	3D 36N-21HZ AWB
7847.00	11940.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7908-11940>	3D 36N-21HZ AWB
11940.00	11996.00	Blind Drilling (std)	Projection to bit	3D 36N-21HZ AWB

Actual Wellpath Report

3D 36N-21HZ AWP

Page 6 of 6

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 3D 36N-21HZ (250' FNL & 1069' FEL, SEC.21)
Area	COLORADO	Well	3D 36N-21HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	3D 36N-21HZ AWB
Facility	SEC.21-T2N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	286.160	17.00	Tie-On
117.00	0.490	286.160	117.00	Begin GYRO Surveys
973.00	0.520	36.260	972.98	Tie-Into GYRO Surveys
1153.00	0.190	137.920	1152.98	Begin BHI MWD+IFR Surveys
7886.00	87.775	181.112	7272.24	7" Casing Point
11940.00	90.730	180.090	7268.72	Last BHI MWD+IFR Surveys
11996.00	90.730	180.090	7268.01	Projection to Bit