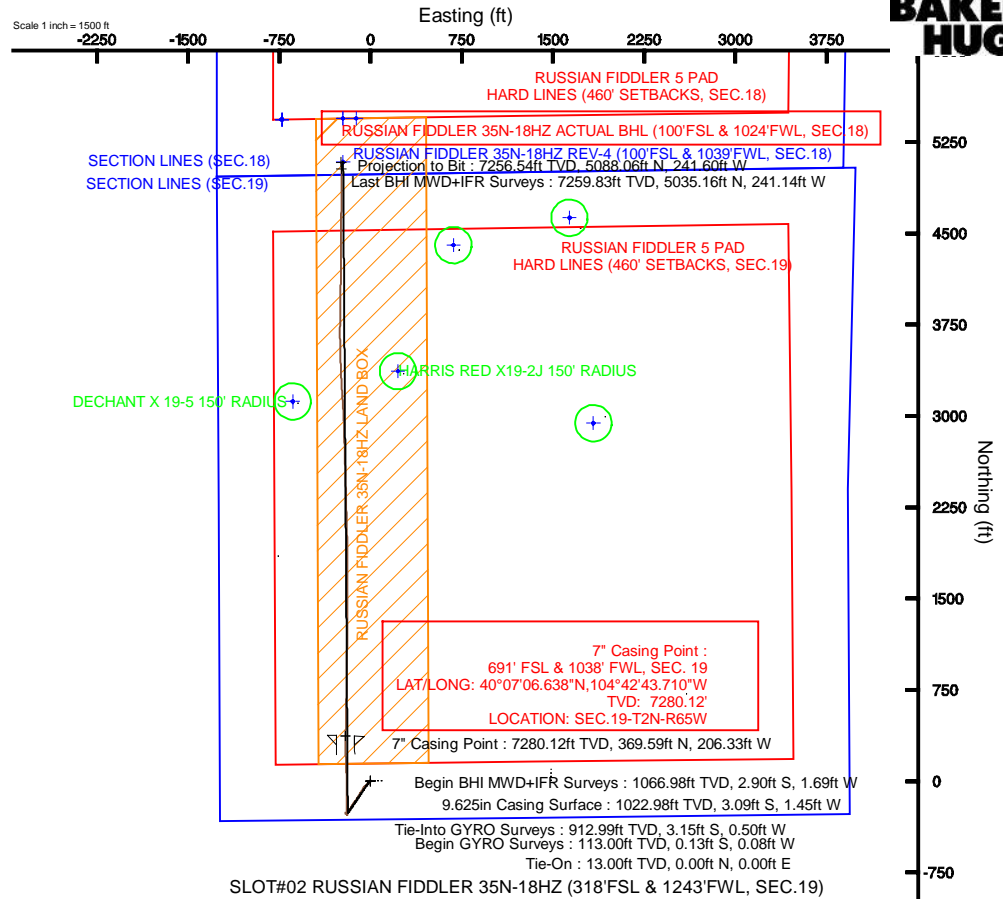
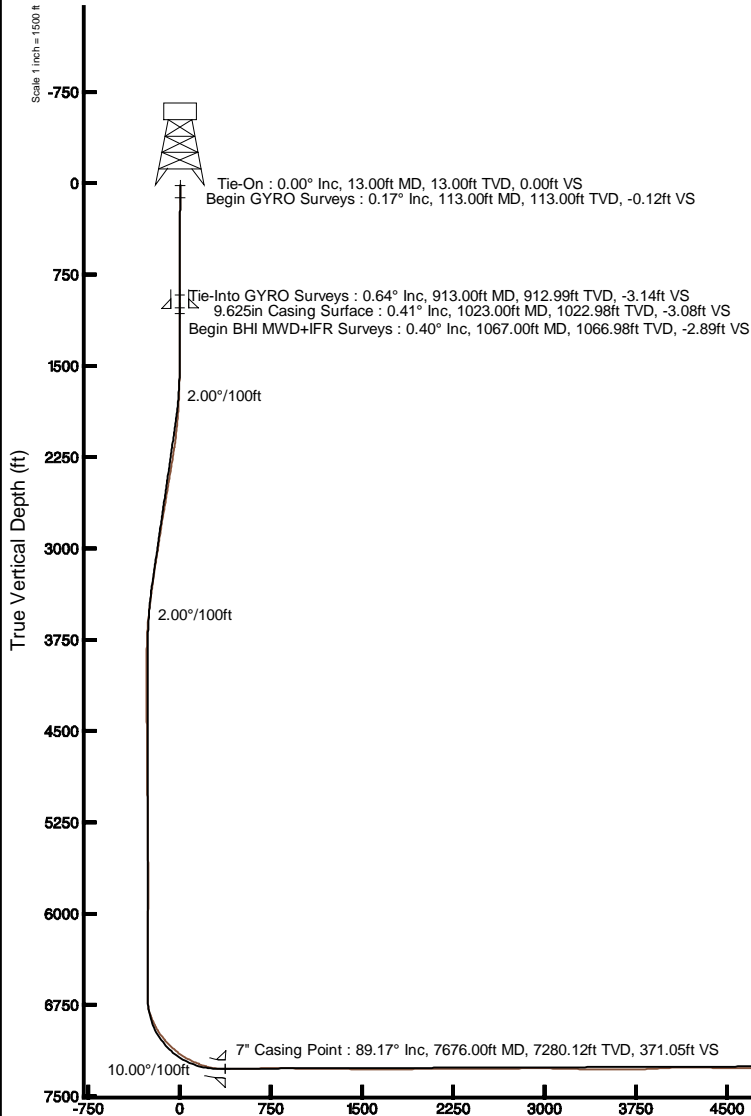


# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)  
 Field: WELD COUNTY (KERR MCGEE) Well: RUSSIAN FIDDLER 35N-18HZ  
 Facility: SEC.19-T2N-R65W Wellbore: RUSSIAN FIDDLER 35N-18HZ PWB

Plot reference wellpath is RUSSIAN FIDDLER 35N-18HZ (REV-D.0) PWP

True vertical depths are referenced to ENSIGN 145 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 145 (RKB)	North Reference: True north
ENSGN 145 (RKB) to Mean Sea Level: 5013 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot, SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precain on 5/8/2013



Vertical Section (ft)  
 Azimuth 359.59° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500 ft



# Actual Wellpath Report

RUSSIAN FIDDLER 35N-18HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35N-18HZ AWB
Facility	SEC.19-T2N-R65W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Precain
Scale	0.99996	Report Generated	5/8/2013 at 3:28:48 PM
Convergence at slot	0.51° East	Database/Source file	WellArchitectDB/RUSSIAN_FIDDLER_35N-18HZ_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-5008.56	-1254.92	3220544.49	1286628.54	40°07'02.986"N	104°42'41.054"W
Facility Reference Pt			3221754.51	1291647.91	40°07'52.481"N	104°42'24.901"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	ENSIGN 145 (RKB) to Facility Vertical Datum	5013.00ft
Horizontal Reference Pt	Slot	ENSIGN 145 (RKB) to Mean Sea Level	5013.00ft
Vertical Reference Pt	ENSIGN 145 (RKB)	ENSIGN 145 (RKB) to Mud Line at Slot (SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19))	5013.00ft
MD Reference Pt	ENSIGN 145 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.59°



# Actual Wellpath Report

RUSSIAN FIDDLER 35N-18HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35N-18HZ AWP
Facility	SEC.19-T2N-R65W		

## WELLPATH DATA (142 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	212.550	0.00	0.00	0.00	0.00	40°07'02.986"N	104°42'41.054"W	0.00	
13.00	0.000	212.550	13.00	0.00	0.00	0.00	40°07'02.986"N	104°42'41.054"W	0.00	Tie-On
113.00	0.170	212.550	113.00	-0.12	-0.13	-0.08	40°07'02.985"N	104°42'41.055"W	0.17	Begin GYRO Surveys
213.00	0.480	166.540	213.00	-0.66	-0.66	-0.06	40°07'02.980"N	104°42'41.055"W	0.38	
313.00	0.280	128.910	313.00	-1.22	-1.22	0.23	40°07'02.974"N	104°42'41.051"W	0.31	
413.00	0.400	195.270	412.99	-1.71	-1.71	0.32	40°07'02.969"N	104°42'41.050"W	0.39	
513.00	0.140	131.990	512.99	-2.13	-2.13	0.32	40°07'02.965"N	104°42'41.050"W	0.36	
613.00	0.420	209.540	612.99	-2.53	-2.53	0.23	40°07'02.961"N	104°42'41.051"W	0.41	
713.00	0.150	285.930	712.99	-2.81	-2.81	-0.07	40°07'02.958"N	104°42'41.055"W	0.41	
813.00	0.210	136.840	812.99	-2.91	-2.91	-0.07	40°07'02.957"N	104°42'41.055"W	0.35	
913.00	0.640	259.270	912.99	-3.14	-3.15	-0.50	40°07'02.955"N	104°42'41.060"W	0.77	Tie-Into GYRO Surveys
1067.00	0.400	319.110	1066.98	-2.89	-2.90	-1.69	40°07'02.957"N	104°42'41.076"W	0.36	Begin BHI MWD+IFR Surveys
1159.00	0.290	323.340	1158.98	-2.46	-2.47	-2.04	40°07'02.962"N	104°42'41.080"W	0.12	
1250.00	0.310	10.880	1249.98	-2.03	-2.04	-2.14	40°07'02.966"N	104°42'41.081"W	0.27	
1341.00	0.310	290.180	1340.98	-1.70	-1.72	-2.32	40°07'02.969"N	104°42'41.084"W	0.44	
1432.00	1.370	104.320	1431.97	-1.89	-1.90	-1.50	40°07'02.967"N	104°42'41.073"W	1.84	
1524.00	1.660	179.800	1523.95	-3.50	-3.51	-0.43	40°07'02.951"N	104°42'41.059"W	2.03	
1615.00	1.940	224.420	1614.91	-5.91	-5.92	-1.50	40°07'02.927"N	104°42'41.073"W	1.53	
1707.00	2.980	235.260	1706.82	-8.37	-8.40	-4.55	40°07'02.903"N	104°42'41.113"W	1.23	
1799.00	4.900	234.540	1798.60	-11.97	-12.04	-9.72	40°07'02.867"N	104°42'41.179"W	2.09	
1891.00	6.600	228.770	1890.14	-17.68	-17.81	-16.90	40°07'02.810"N	104°42'41.272"W	1.95	
1986.00	8.640	231.320	1984.29	-25.67	-25.87	-26.58	40°07'02.730"N	104°42'41.396"W	2.18	
2080.00	9.800	224.090	2077.08	-35.75	-36.02	-37.65	40°07'02.630"N	104°42'41.539"W	1.74	
2175.00	10.830	220.250	2170.54	-48.29	-48.64	-49.05	40°07'02.505"N	104°42'41.685"W	1.30	
2270.00	11.650	213.880	2263.72	-62.99	-63.42	-60.16	40°07'02.359"N	104°42'41.828"W	1.57	
2365.00	10.890	212.070	2356.89	-78.48	-78.99	-70.27	40°07'02.205"N	104°42'41.959"W	0.88	
2460.00	10.860	212.230	2450.19	-93.59	-94.16	-79.81	40°07'02.055"N	104°42'42.081"W	0.04	
2555.00	11.470	213.410	2543.39	-108.97	-109.62	-89.78	40°07'01.903"N	104°42'42.210"W	0.69	
2650.00	11.150	211.190	2636.54	-124.64	-125.36	-99.74	40°07'01.747"N	104°42'42.338"W	0.57	
2745.00	11.480	211.450	2729.70	-140.50	-141.28	-109.43	40°07'01.590"N	104°42'42.463"W	0.35	
2839.00	10.230	209.080	2822.01	-155.71	-156.56	-118.37	40°07'01.439"N	104°42'42.578"W	1.41	
2934.00	10.110	214.880	2915.52	-169.86	-170.77	-127.24	40°07'01.298"N	104°42'42.692"W	1.08	
3029.00	10.760	215.840	3008.95	-183.81	-184.80	-137.20	40°07'01.160"N	104°42'42.820"W	0.71	
3124.00	11.260	213.470	3102.20	-198.67	-199.73	-147.51	40°07'01.012"N	104°42'42.953"W	0.71	
3219.00	10.290	213.240	3195.53	-213.43	-214.56	-157.27	40°07'00.866"N	104°42'43.078"W	1.02	
3314.00	9.340	212.690	3289.13	-226.95	-228.15	-166.09	40°07'00.731"N	104°42'43.192"W	1.00	
3409.00	8.410	214.160	3383.00	-239.13	-240.38	-174.15	40°07'00.611"N	104°42'43.296"W	1.01	
3503.00	8.050	213.400	3476.03	-250.26	-251.57	-181.64	40°07'00.500"N	104°42'43.392"W	0.40	
3598.00	7.040	210.640	3570.21	-260.77	-262.13	-188.26	40°07'00.396"N	104°42'43.477"W	1.13	
3693.00	4.230	216.710	3664.74	-268.56	-269.95	-193.33	40°07'00.318"N	104°42'43.542"W	3.02	
3788.00	2.690	224.690	3759.56	-272.92	-274.34	-196.99	40°07'00.275"N	104°42'43.590"W	1.69	
3883.00	1.480	203.700	3854.50	-275.62	-277.05	-199.05	40°07'00.248"N	104°42'43.616"W	1.49	
3978.00	0.870	183.430	3949.48	-277.46	-278.89	-199.59	40°07'00.230"N	104°42'43.623"W	0.77	
4072.00	1.320	68.590	4043.47	-277.78	-279.21	-198.62	40°07'00.227"N	104°42'43.611"W	1.98	
4262.00	1.600	69.700	4233.41	-276.09	-277.49	-194.10	40°07'00.244"N	104°42'43.552"W	0.15	

### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35N-18HZ AWB
Facility	SEC.19-T2N-R65W		

### WELLPATH DATA (142 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4452.00	1.300	77.720	4423.35	-274.75	-276.11	-189.50	40°07'00.257"N	104°42'43.493"W	0.19	
4641.00	1.000	71.100	4612.31	-273.79	-275.12	-185.85	40°07'00.267"N	104°42'43.446"W	0.17	
4831.00	1.350	299.980	4802.29	-272.13	-273.47	-186.22	40°07'00.284"N	104°42'43.451"W	1.13	
5021.00	1.420	299.190	4992.23	-269.83	-271.20	-190.21	40°07'00.306"N	104°42'43.502"W	0.04	
5210.00	1.660	296.250	5181.17	-267.45	-268.85	-194.71	40°07'00.329"N	104°42'43.560"W	0.13	
5400.00	1.080	280.550	5371.11	-265.87	-267.30	-198.94	40°07'00.344"N	104°42'43.615"W	0.36	
5589.00	1.820	293.350	5560.05	-264.32	-265.79	-203.45	40°07'00.359"N	104°42'43.673"W	0.43	
5684.00	1.420	296.810	5655.01	-263.18	-264.66	-205.88	40°07'00.371"N	104°42'43.704"W	0.43	
5779.00	0.760	266.020	5749.99	-262.68	-264.17	-207.56	40°07'00.375"N	104°42'43.726"W	0.91	
5874.00	1.030	110.530	5844.99	-263.02	-264.51	-207.39	40°07'00.372"N	104°42'43.723"W	1.84	
6064.00	0.710	149.160	6034.97	-264.65	-266.12	-205.19	40°07'00.356"N	104°42'43.695"W	0.34	
6253.00	0.540	147.680	6223.96	-266.41	-267.88	-204.11	40°07'00.339"N	104°42'43.681"W	0.09	
6443.00	1.080	100.720	6413.94	-267.52	-268.97	-201.87	40°07'00.328"N	104°42'43.652"W	0.43	
6655.00	0.480	114.600	6625.92	-268.28	-269.71	-199.10	40°07'00.321"N	104°42'43.617"W	0.29	
6727.00	0.970	42.690	6697.91	-267.96	-269.39	-198.41	40°07'00.324"N	104°42'43.608"W	1.30	
6759.00	4.650	11.570	6729.87	-266.50	-267.92	-197.97	40°07'00.338"N	104°42'43.602"W	12.04	
6790.00	8.420	7.800	6760.66	-263.02	-264.44	-197.41	40°07'00.373"N	104°42'43.595"W	12.23	
6822.00	12.570	3.860	6792.12	-257.22	-258.64	-196.86	40°07'00.430"N	104°42'43.588"W	13.15	
6854.00	17.320	1.750	6823.03	-248.99	-250.40	-196.48	40°07'00.512"N	104°42'43.583"W	14.94	
6885.00	21.220	1.710	6852.29	-238.77	-240.18	-196.17	40°07'00.613"N	104°42'43.579"W	12.58	
6917.00	23.700	3.450	6881.86	-226.56	-227.97	-195.61	40°07'00.733"N	104°42'43.572"W	8.02	
6949.00	25.860	3.070	6910.91	-213.18	-214.58	-194.85	40°07'00.866"N	104°42'43.562"W	6.77	
6980.00	29.330	0.940	6938.38	-198.83	-200.23	-194.36	40°07'01.007"N	104°42'43.556"W	11.64	
7011.00	32.250	359.820	6965.01	-182.97	-184.36	-194.26	40°07'01.164"N	104°42'43.554"W	9.60	
7044.00	35.010	0.170	6992.48	-164.69	-166.09	-194.26	40°07'01.345"N	104°42'43.554"W	8.38	
7075.00	37.480	359.820	7017.48	-146.37	-147.76	-194.27	40°07'01.526"N	104°42'43.555"W	8.00	
7107.00	39.970	359.780	7042.45	-126.35	-127.74	-194.34	40°07'01.724"N	104°42'43.555"W	7.78	
7138.00	42.960	358.850	7065.67	-105.83	-107.22	-194.59	40°07'01.926"N	104°42'43.559"W	9.85	
7170.00	45.450	358.680	7088.61	-83.52	-84.92	-195.07	40°07'02.147"N	104°42'43.565"W	7.79	
7202.00	47.880	357.880	7110.57	-60.25	-61.65	-195.77	40°07'02.377"N	104°42'43.574"W	7.81	
7233.00	50.650	357.700	7130.80	-36.78	-38.18	-196.68	40°07'02.609"N	104°42'43.586"W	8.95	
7265.00	53.400	357.740	7150.49	-11.57	-12.98	-197.68	40°07'02.858"N	104°42'43.598"W	8.59	
7297.00	56.330	359.000	7168.90	14.59	13.17	-198.42	40°07'03.116"N	104°42'43.608"W	9.71	
7328.00	59.260	359.150	7185.42	40.82	39.40	-198.84	40°07'03.375"N	104°42'43.613"W	9.46	
7360.00	62.340	357.460	7201.03	68.74	67.31	-199.67	40°07'03.651"N	104°42'43.624"W	10.67	
7391.00	65.160	357.640	7214.74	96.52	95.09	-200.86	40°07'03.926"N	104°42'43.639"W	9.11	
7423.00	67.310	357.150	7227.64	125.79	124.34	-202.19	40°07'04.215"N	104°42'43.657"W	6.86	
7455.00	68.520	358.600	7239.67	155.42	153.97	-203.29	40°07'04.508"N	104°42'43.671"W	5.65	
7486.00	70.550	357.610	7250.51	184.46	183.00	-204.25	40°07'04.794"N	104°42'43.683"W	7.20	
7518.00	73.910	357.450	7260.27	214.90	213.44	-205.57	40°07'05.095"N	104°42'43.700"W	10.51	
7550.00	78.070	357.300	7268.02	245.92	244.45	-206.99	40°07'05.402"N	104°42'43.718"W	13.01	
7581.00	80.950	359.670	7273.66	276.39	274.91	-207.79	40°07'05.703"N	104°42'43.729"W	11.95	
7613.00	85.030	0.400	7277.56	308.15	306.67	-207.77	40°07'06.017"N	104°42'43.728"W	12.95	
7633.00	87.500	1.230	7278.87	328.10	326.62	-207.49	40°07'06.214"N	104°42'43.725"W	13.03	
7676.00†	89.169	1.863	7280.12	371.05	369.59	-206.33	40°07'06.638"N	104°42'43.710"W	4.15	7" Casing Point



# Actual Wellpath Report

RUSSIAN FIDDLER 35N-18HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35N-18HZ AWB
Facility	SEC.19-T2N-R65W		

## WELLPATH DATA (142 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7718.00	90.800	2.480	7280.13	413.01	411.55	-204.74	40°07'07.053"N	104°42'43.689"W	4.15	
7782.00	90.640	0.390	7279.32	476.97	475.53	-203.13	40°07'07.685"N	104°42'43.669"W	3.27	
7877.00	91.100	1.730	7277.88	571.92	570.50	-201.38	40°07'08.624"N	104°42'43.646"W	1.49	
7971.00	91.350	0.610	7275.87	665.86	664.45	-199.46	40°07'09.552"N	104°42'43.621"W	1.22	
8066.00	90.640	1.510	7274.22	760.82	759.42	-197.70	40°07'10.491"N	104°42'43.599"W	1.21	
8161.00	89.070	0.510	7274.46	855.78	854.40	-196.03	40°07'11.429"N	104°42'43.577"W	1.96	
8256.00	88.820	0.270	7276.21	950.76	949.38	-195.38	40°07'12.368"N	104°42'43.569"W	0.36	
8351.00	89.130	0.740	7277.91	1045.73	1044.36	-194.54	40°07'13.307"N	104°42'43.558"W	0.59	
8446.00	89.320	0.300	7279.20	1140.71	1139.35	-193.68	40°07'14.245"N	104°42'43.547"W	0.50	
8540.00	89.500	0.240	7280.16	1234.70	1233.34	-193.24	40°07'15.174"N	104°42'43.541"W	0.20	
8635.00	89.810	0.100	7280.74	1329.69	1328.34	-192.96	40°07'16.113"N	104°42'43.538"W	0.36	
8730.00	89.500	359.800	7281.31	1424.69	1423.34	-193.04	40°07'17.052"N	104°42'43.539"W	0.45	
8825.00	89.630	359.900	7282.03	1519.68	1518.34	-193.29	40°07'17.990"N	104°42'43.542"W	0.17	
8920.00	90.520	0.730	7281.91	1614.67	1613.33	-192.76	40°07'18.929"N	104°42'43.535"W	1.28	
9014.00	89.750	359.700	7281.68	1708.66	1707.33	-192.41	40°07'19.858"N	104°42'43.531"W	1.37	
9109.00	90.180	0.130	7281.74	1803.66	1802.33	-192.55	40°07'20.797"N	104°42'43.533"W	0.64	
9204.00	90.360	359.650	7281.29	1898.66	1897.33	-192.74	40°07'21.736"N	104°42'43.535"W	0.54	
9299.00	90.210	358.970	7280.82	1993.66	1992.32	-193.88	40°07'22.674"N	104°42'43.550"W	0.73	
9394.00	90.060	358.520	7280.60	2088.65	2087.30	-195.96	40°07'23.613"N	104°42'43.577"W	0.50	
9489.00	90.390	358.230	7280.22	2183.62	2182.26	-198.65	40°07'24.551"N	104°42'43.611"W	0.46	
9584.00	90.650	358.200	7279.36	2278.59	2277.21	-201.61	40°07'25.490"N	104°42'43.649"W	0.28	
9678.00	90.710	359.120	7278.25	2372.57	2371.17	-203.81	40°07'26.418"N	104°42'43.678"W	0.98	
9773.00	89.780	358.390	7277.84	2467.56	2466.15	-205.88	40°07'27.357"N	104°42'43.704"W	1.24	
9868.00	89.560	358.150	7278.39	2562.53	2561.10	-208.74	40°07'28.295"N	104°42'43.741"W	0.34	
9963.00	90.550	358.710	7278.30	2657.51	2656.07	-211.35	40°07'29.234"N	104°42'43.775"W	1.20	
10057.00	91.320	357.720	7276.76	2751.47	2750.01	-214.27	40°07'30.162"N	104°42'43.812"W	1.33	
10152.00	90.800	358.190	7275.01	2846.41	2844.93	-217.66	40°07'31.100"N	104°42'43.856"W	0.74	
10247.00	89.840	358.700	7274.47	2941.39	2939.89	-220.24	40°07'32.038"N	104°42'43.889"W	1.14	
10342.00	89.070	356.490	7275.38	3036.32	3034.80	-224.23	40°07'32.976"N	104°42'43.941"W	2.46	
10437.00	88.760	355.540	7277.18	3131.12	3129.55	-230.83	40°07'33.913"N	104°42'44.026"W	1.05	
10532.00	88.260	356.700	7279.65	3225.91	3224.30	-237.25	40°07'34.849"N	104°42'44.108"W	1.33	
10627.00	88.200	357.800	7282.58	3320.79	3319.14	-241.81	40°07'35.786"N	104°42'44.167"W	1.16	
10721.00	89.100	357.480	7284.80	3414.71	3413.03	-245.68	40°07'36.714"N	104°42'44.217"W	1.02	
10816.00	89.720	358.190	7285.77	3509.65	3507.96	-249.27	40°07'37.652"N	104°42'44.263"W	0.99	
10911.00	89.930	358.940	7286.06	3604.64	3602.93	-251.65	40°07'38.591"N	104°42'44.294"W	0.82	
11006.00	90.770	0.220	7285.48	3699.63	3697.92	-252.34	40°07'39.529"N	104°42'44.303"W	1.61	
11101.00	92.110	0.650	7283.10	3794.59	3792.89	-251.62	40°07'40.468"N	104°42'44.293"W	1.48	
11195.00	93.110	0.730	7278.82	3888.48	3886.78	-250.49	40°07'41.396"N	104°42'44.279"W	1.07	
11290.00	93.450	1.510	7273.38	3983.28	3981.61	-248.64	40°07'42.333"N	104°42'44.255"W	0.89	
11385.00	92.120	0.560	7268.77	4078.14	4076.48	-246.92	40°07'43.270"N	104°42'44.233"W	1.72	
11480.00	89.190	0.470	7267.68	4173.11	4171.46	-246.07	40°07'44.209"N	104°42'44.222"W	3.09	
11575.00	89.100	0.050	7269.10	4268.09	4266.44	-245.64	40°07'45.147"N	104°42'44.216"W	0.45	
11670.00	89.250	0.610	7270.46	4363.07	4361.43	-245.09	40°07'46.086"N	104°42'44.209"W	0.61	
11764.00	89.560	0.780	7271.44	4457.05	4455.42	-243.95	40°07'47.015"N	104°42'44.195"W	0.38	
11859.00	89.440	0.430	7272.27	4552.03	4550.41	-242.95	40°07'47.954"N	104°42'44.182"W	0.39	



# Actual Wellpath Report

RUSSIAN FIDDLER 35N-18HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35N-18HZ AWB
Facility	SEC.19-T2N-R65W		

## WELLPATH DATA (142 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11954.00	90.550	0.810	7272.28	4647.02	4645.40	-241.92	40°07'48.892"N	104°42'44.169"W	1.23	
12049.00	91.040	0.250	7270.96	4741.99	4740.39	-241.04	40°07'49.831"N	104°42'44.157"W	0.78	
12144.00	91.850	0.190	7268.56	4836.96	4835.36	-240.68	40°07'50.770"N	104°42'44.153"W	0.85	
12239.00	92.400	359.870	7265.04	4931.89	4930.29	-240.63	40°07'51.708"N	104°42'44.152"W	0.67	
12334.00	93.180	359.600	7260.42	5026.77	5025.18	-241.07	40°07'52.645"N	104°42'44.158"W	0.87	
12344.00	93.560	359.510	7259.83	5036.76	5035.16	-241.14	40°07'52.744"N	104°42'44.159"W	3.90	Last BHI MWD+IFR Surveys
12397.00	93.560	359.510	7256.54	5089.66	5088.06	-241.60	40°07'53.267"N	104°42'44.164"W	0.00	Projection to Bit

## HOLE & CASING SECTIONS - Ref Wellbore: RUSSIAN FIDDLER 35N-18HZ AWB Ref Wellpath: RUSSIAN FIDDLER 35N-18HZ 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	13.00	1023.00	1010.00	13.00	1022.98	0.00	0.00	-3.09	-1.45
9.625in Casing Surface	13.00	1023.00	1010.00	13.00	1022.98	0.00	0.00	-3.09	-1.45
8.75in Open Hole	1023.00	7687.00	6664.00	1022.98	7280.24	-3.09	-1.45	380.58	-205.95
7in Casing Intermediate	13.00	7676.00	7663.00	13.00	7280.12	0.00	0.00	369.59	-206.33
6.125in Open Hole	7676.00	12397.00	4721.00	7280.12	7256.54	369.59	-206.33	5088.06	-241.60

### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35N-18HZ AWP
Facility	SEC.19-T2N-R65W		

### TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
RUSSIAN FIDDLER 35N-18HZ LAND BOX		0.00	5439.64	-729.81	3219766.37	1292061.24	40°07'56.741"N	104°42'50.450"W	polygon
RUSSIAN FIDDLER 5 PAD HARD LINES (460' SETBACKS, SEC.18)		0.00	5439.64	-729.81	3219766.37	1292061.24	40°07'56.741"N	104°42'50.450"W	polygon
RUSSIAN FIDDLER 5 PAD HARD LINES (460' SETBACKS, SEC.19)		0.00	5439.64	-729.81	3219766.37	1292061.24	40°07'56.741"N	104°42'50.450"W	polygon
RUSSIAN FIDDLER 5 PAD SECTION LINES (SEC.18)		0.00	5439.62	-729.81	3219766.37	1292061.22	40°07'56.741"N	104°42'50.450"W	polygon
RUSSIAN FIDDLER 5 PAD SECTION LINES (SEC.19)		0.00	5439.64	-729.81	3219766.37	1292061.24	40°07'56.741"N	104°42'50.450"W	polygon
DECHANT 31-19 150' RADIUS		6954.48	4631.60	1637.28	3222140.45	1291274.32	40°07'48.755"N	104°42'19.975"W	circle
RUSSIAN FIDDLER 35N-18HZ REV-1 (460'FSL & 1146'FWL, SEC.18)		7178.00	5448.73	-118.84	3220377.21	1292075.77	40°07'56.831"N	104°42'42.584"W	point
RUSSIAN FIDDLER 35N-18HZ REV-2 (460'FSL & 1036'FWL, SEC.18)		7178.00	5448.74	-228.82	3220267.23	1292074.79	40°07'56.831"N	104°42'44.000"W	point
HARRIS RED X19-2J 150' RADIUS		7257.50	3369.46	224.81	3220739.31	1289999.73	40°07'36.283"N	104°42'38.160"W	circle
RUSSIAN FIDDLER 35N-18HZ REV-3 (460'FSL & 1036'FWL, SEC.18)		7258.00	5448.74	-228.82	3220267.23	1292074.79	40°07'56.831"N	104°42'44.000"W	point
RUSSIAN FIDDLER 35N-18HZ REV-4 (100'FSL & 1039'FWL, SEC.18)		7258.00	5088.75	-226.23	3220273.03	1291714.86	40°07'53.274"N	104°42'43.967"W	point
DECHANT X 19-3 150' RADIUS		7258.34	4406.02	682.11	3221187.36	1291040.27	40°07'46.527"N	104°42'32.273"W	circle
DECHANT X 19-5 150' RADIUS		7258.43	3120.48	-641.27	3219875.52	1289743.06	40°07'33.823"N	104°42'49.309"W	circle
DECHANT 32-19 150' RADIUS		7298.51	2942.01	1833.93	3222352.10	1289586.62	40°07'32.059"N	104°42'17.445"W	circle

### WELLPATH COMPOSITION - Ref Wellbore: RUSSIAN FIDDLER 35N-18HZ AWP Ref Wellpath: RUSSIAN FIDDLER 35N-18HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	913.00	Generic gyro - continuous (Standard)	MS ENERGY SERVICES GYRO SURVEY <113-913>	RUSSIAN FIDDLER 35N-18HZ AWP
913.00	7633.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1067-7633>	RUSSIAN FIDDLER 35N-18HZ AWP
7633.00	12344.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7718-12344>	RUSSIAN FIDDLER 35N-18HZ AWP
12344.00	12397.00	Blind Drilling (std)	Projection to bit	RUSSIAN FIDDLER 35N-18HZ AWP



# Actual Wellpath Report

RUSSIAN FIDDLER 35N-18HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 RUSSIAN FIDDLER 35N-18HZ (318'FSL & 1243'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35N-18HZ AWB
Facility	SEC.19-T2N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	212.550	13.00	Tie-On
113.00	0.170	212.550	113.00	Begin GYRO Surveys
913.00	0.640	259.270	912.99	Tie-Into GYRO Surveys
1067.00	0.400	319.110	1066.98	Begin BHI MWD+IFR Surveys
7676.00	89.169	1.863	7280.12	7" Casing Point
12344.00	93.560	359.510	7259.83	Last BHI MWD+IFR Surveys
12397.00	93.560	359.510	7256.54	Projection to Bit