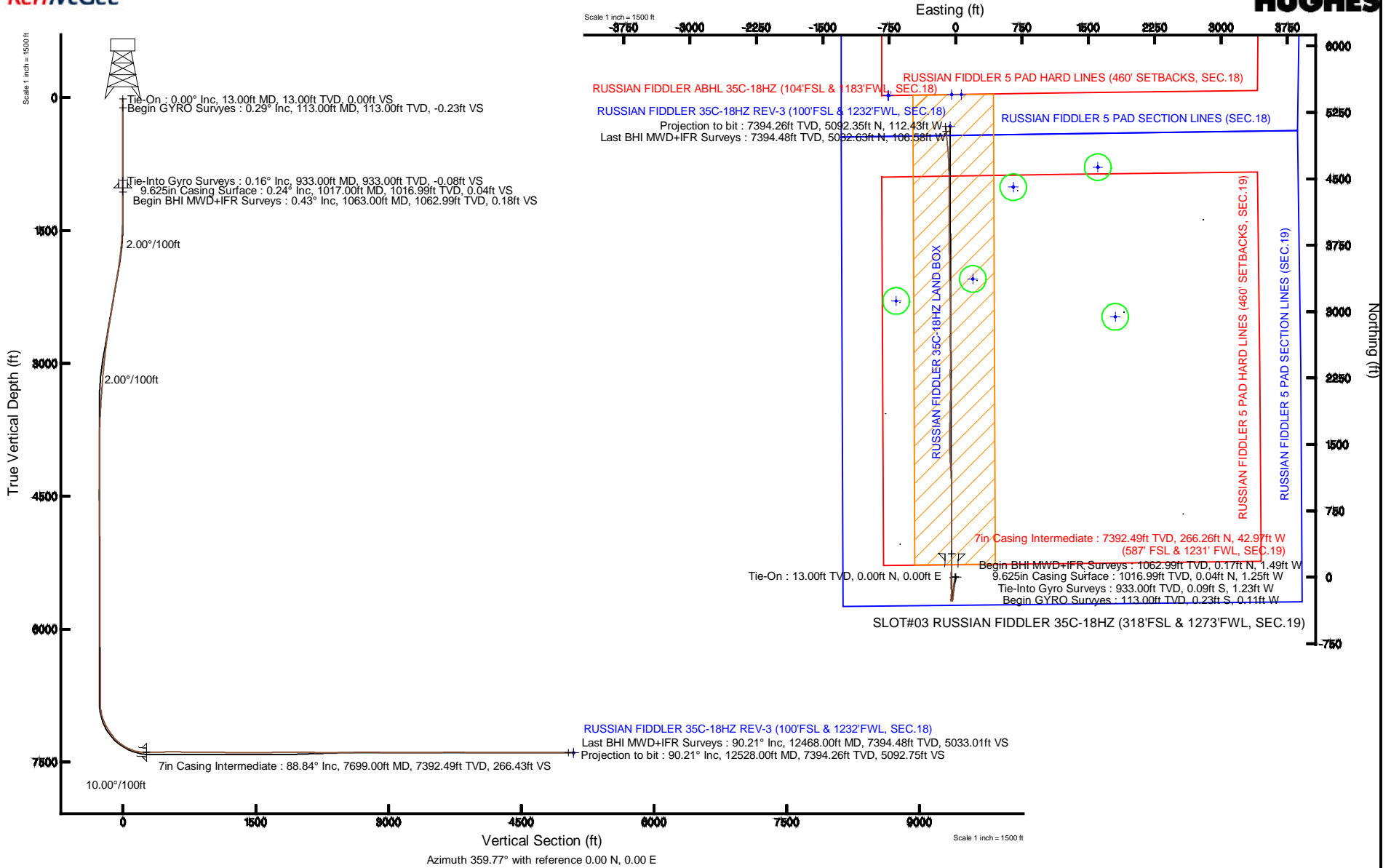


KERR-MCGEE OIL & GAS ONSHORE LP

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

Location: COLORADO Slot: SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19)
 Field: WELD COUNTY (KERR MCGEE) Well: RUSSIAN FIDDLER 35C-18HZ
 Facility: SEC.19-T2N-R65W Wellbore: RUSSIAN FIDDLER 35C-18HZ PWB

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
ENSIGN 145 (RKB) to Mean Sea Level: 5013 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precain on 06/Jul/2013





Actual Wellpath Report

RUSSIAN FIDDLER 35C-18HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35C-18HZ AWB
Facility	SEC.19-T2N-R65W		

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	0.99996	Report Generated	06/Jul/2013 at 17:51
Convergence at slot	n/a	Database/Source file	WellArchitectDB/RUSSIAN_FIDDLER_35C-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	-5008.26	-1225.01	3220574.40	1286629.11	40°07'02.989"N	104°42'40.669"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#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'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	359.77°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35C-18HZ AWB
Facility	SEC.19-T2N-R65W		

WELLPATH DATA (134 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	206.090	0.00	0.00	0.00	0.00	40°07'02.989"N	104°42'40.669"W	0.00	
13.00	0.000	206.090	13.00	0.00	0.00	0.00	40°07'02.989"N	104°42'40.669"W	0.00	Tie-On
113.00	0.290	206.090	113.00	-0.23	-0.23	-0.11	40°07'02.987"N	104°42'40.670"W	0.29	Begin GYRO Surveys
213.00	0.270	265.560	213.00	-0.47	-0.47	-0.46	40°07'02.984"N	104°42'40.675"W	0.28	
313.00	0.160	77.010	313.00	-0.46	-0.46	-0.56	40°07'02.984"N	104°42'40.676"W	0.43	
413.00	0.270	201.490	413.00	-0.65	-0.65	-0.51	40°07'02.983"N	104°42'40.676"W	0.38	
513.00	0.340	276.790	513.00	-0.83	-0.83	-0.89	40°07'02.981"N	104°42'40.680"W	0.38	
613.00	0.230	39.230	613.00	-0.64	-0.64	-1.06	40°07'02.983"N	104°42'40.683"W	0.50	
713.00	0.180	271.770	713.00	-0.48	-0.48	-1.09	40°07'02.984"N	104°42'40.683"W	0.37	
813.00	0.230	350.820	813.00	-0.27	-0.28	-1.27	40°07'02.986"N	104°42'40.685"W	0.26	
913.00	0.050	105.940	913.00	-0.09	-0.09	-1.26	40°07'02.988"N	104°42'40.685"W	0.26	
933.00	0.160	78.490	933.00	-0.08	-0.09	-1.23	40°07'02.988"N	104°42'40.685"W	0.59	Tie-Into Gyro Surveys
1063.00	0.430	297.050	1062.99	0.18	0.17	-1.49	40°07'02.991"N	104°42'40.688"W	0.43	Begin BHI MWD+IFR Surveys
1154.00	0.110	217.140	1153.99	0.26	0.26	-1.84	40°07'02.992"N	104°42'40.693"W	0.47	
1246.00	0.290	231.410	1245.99	0.05	0.04	-2.08	40°07'02.989"N	104°42'40.696"W	0.20	
1337.00	1.170	188.200	1336.98	-1.01	-1.02	-2.39	40°07'02.979"N	104°42'40.700"W	1.08	
1429.00	2.260	178.860	1428.94	-3.76	-3.77	-2.49	40°07'02.952"N	104°42'40.701"W	1.22	
1520.00	3.340	192.640	1519.83	-8.14	-8.15	-3.03	40°07'02.908"N	104°42'40.708"W	1.39	
1612.00	4.440	188.600	1611.62	-14.27	-14.28	-4.15	40°07'02.848"N	104°42'40.722"W	1.23	
1704.00	5.750	191.520	1703.25	-22.30	-22.32	-5.60	40°07'02.768"N	104°42'40.741"W	1.45	
1796.00	7.550	194.930	1794.63	-32.65	-32.68	-8.08	40°07'02.666"N	104°42'40.773"W	2.00	
1887.00	8.460	196.220	1884.74	-44.84	-44.88	-11.49	40°07'02.545"N	104°42'40.817"W	1.02	
1982.00	9.560	193.610	1978.57	-59.20	-59.26	-15.30	40°07'02.403"N	104°42'40.866"W	1.23	
2077.00	10.180	192.360	2072.17	-75.05	-75.13	-18.95	40°07'02.247"N	104°42'40.913"W	0.69	
2171.00	10.200	184.360	2164.69	-91.46	-91.54	-21.36	40°07'02.084"N	104°42'40.944"W	1.50	
2266.00	9.030	181.900	2258.35	-107.29	-107.38	-22.25	40°07'01.928"N	104°42'40.955"W	1.31	
2361.00	8.590	188.810	2352.23	-121.75	-121.84	-23.59	40°07'01.785"N	104°42'40.973"W	1.21	
2456.00	8.690	180.390	2446.16	-135.93	-136.03	-24.72	40°07'01.645"N	104°42'40.987"W	1.33	
2551.00	9.430	180.360	2539.97	-150.89	-150.99	-24.82	40°07'01.497"N	104°42'40.988"W	0.78	
2646.00	9.030	181.170	2633.74	-166.13	-166.23	-25.02	40°07'01.346"N	104°42'40.991"W	0.44	
2741.00	8.120	182.000	2727.68	-180.28	-180.39	-25.41	40°07'01.206"N	104°42'40.996"W	0.97	
2835.00	6.980	181.660	2820.86	-192.63	-192.73	-25.80	40°07'01.084"N	104°42'41.001"W	1.21	
2930.00	6.280	182.430	2915.23	-203.59	-203.69	-26.19	40°07'00.976"N	104°42'41.006"W	0.74	
3025.00	5.900	190.760	3009.69	-213.57	-213.68	-27.32	40°07'00.877"N	104°42'41.021"W	1.01	
3120.00	5.390	190.290	3104.23	-222.75	-222.87	-29.03	40°07'00.787"N	104°42'41.043"W	0.54	
3215.00	4.700	184.570	3198.86	-231.02	-231.14	-30.14	40°07'00.705"N	104°42'41.057"W	0.90	
3310.00	4.140	184.910	3293.58	-238.31	-238.43	-30.74	40°07'00.633"N	104°42'41.065"W	0.59	
3405.00	3.870	188.110	3388.35	-244.90	-245.02	-31.49	40°07'00.568"N	104°42'41.074"W	0.37	
3499.00	3.420	189.540	3482.16	-250.80	-250.93	-32.40	40°07'00.509"N	104°42'41.086"W	0.49	
3594.00	3.040	196.660	3577.01	-256.00	-256.14	-33.59	40°07'00.458"N	104°42'41.101"W	0.58	
3689.00	2.780	199.690	3671.89	-260.58	-260.72	-35.09	40°07'00.413"N	104°42'41.121"W	0.32	
3784.00	1.270	218.270	3766.82	-263.57	-263.72	-36.52	40°07'00.383"N	104°42'41.139"W	1.71	
3879.00	0.450	252.310	3861.81	-264.51	-264.65	-37.53	40°07'00.374"N	104°42'41.152"W	0.98	
4258.00	0.530	178.830	4240.80	-266.70	-266.86	-38.91	40°07'00.352"N	104°42'41.170"W	0.16	
4638.00	0.450	310.090	4620.80	-267.50	-267.66	-40.01	40°07'00.344"N	104°42'41.184"W	0.24	



Actual Wellpath Report

RUSSIAN FIDDLER 35C-18HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35C-18HZ AWB
Facility	SEC.19-T2N-R65W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5017.00	2.700	311.030	4999.63	-260.65	-260.84	-47.89	40°07'00.411"N	104°42'41.285"W	0.59	
5112.00	2.020	291.750	5094.55	-258.54	-258.75	-51.13	40°07'00.432"N	104°42'41.327"W	1.09	
5207.00	0.740	266.620	5189.52	-257.95	-258.16	-53.30	40°07'00.438"N	104°42'41.355"W	1.46	
5302.00	0.930	237.760	5284.51	-258.39	-258.61	-54.56	40°07'00.433"N	104°42'41.371"W	0.48	
5397.00	0.830	257.090	5379.50	-258.95	-259.18	-55.89	40°07'00.428"N	104°42'41.388"W	0.33	
5491.00	1.220	288.880	5473.49	-258.78	-259.00	-57.50	40°07'00.429"N	104°42'41.409"W	0.72	
5586.00	0.890	235.880	5568.47	-258.86	-259.09	-59.06	40°07'00.429"N	104°42'41.429"W	1.04	
5681.00	0.880	92.550	5663.47	-259.30	-259.54	-58.95	40°07'00.424"N	104°42'41.428"W	1.77	
5871.00	0.780	99.620	5853.45	-259.60	-259.82	-56.21	40°07'00.421"N	104°42'41.393"W	0.08	
6060.00	0.760	25.080	6042.43	-258.68	-258.90	-54.41	40°07'00.431"N	104°42'41.369"W	0.49	
6250.00	0.320	352.490	6232.43	-257.02	-257.23	-53.95	40°07'00.447"N	104°42'41.363"W	0.27	
6344.00	0.300	132.190	6326.42	-256.92	-257.14	-53.80	40°07'00.448"N	104°42'41.362"W	0.62	
6534.00	0.390	43.140	6516.42	-256.79	-257.00	-52.99	40°07'00.449"N	104°42'41.351"W	0.26	
6724.00	0.410	17.020	6706.42	-255.67	-255.88	-52.35	40°07'00.460"N	104°42'41.343"W	0.10	
6807.00	0.390	25.400	6789.42	-255.13	-255.34	-52.14	40°07'00.466"N	104°42'41.340"W	0.07	
6865.00	0.910	58.890	6847.41	-254.72	-254.92	-51.66	40°07'00.470"N	104°42'41.334"W	1.07	
6913.00	5.510	2.040	6895.33	-252.22	-252.42	-51.25	40°07'00.495"N	104°42'41.329"W	10.56	
6960.00	11.260	2.530	6941.81	-245.37	-245.57	-50.97	40°07'00.562"N	104°42'41.325"W	12.23	
7008.00	16.070	3.270	6988.43	-234.05	-234.25	-50.38	40°07'00.674"N	104°42'41.318"W	10.03	
7055.00	21.170	4.070	7032.96	-219.09	-219.28	-49.41	40°07'00.822"N	104°42'41.305"W	10.86	
7103.00	26.180	2.850	7076.91	-199.86	-200.05	-48.27	40°07'01.012"N	104°42'41.290"W	10.49	
7150.00	30.260	0.170	7118.31	-177.65	-177.84	-47.72	40°07'01.232"N	104°42'41.283"W	9.09	
7198.00	34.830	359.470	7158.77	-151.84	-152.03	-47.81	40°07'01.487"N	104°42'41.284"W	9.55	
7244.00	36.110	358.580	7196.23	-125.15	-125.34	-48.27	40°07'01.750"N	104°42'41.290"W	3.00	
7275.00	40.180	357.540	7220.60	-106.02	-106.21	-48.92	40°07'01.939"N	104°42'41.299"W	13.29	
7310.00	44.550	359.720	7246.46	-82.44	-82.64	-49.47	40°07'02.172"N	104°42'41.306"W	13.17	
7340.00	48.080	358.000	7267.18	-60.76	-60.95	-49.91	40°07'02.387"N	104°42'41.311"W	12.47	
7387.00	52.650	2.000	7297.16	-24.58	-24.78	-49.87	40°07'02.744"N	104°42'41.311"W	11.72	
7432.00	58.710	1.270	7322.52	12.54	12.35	-48.81	40°07'03.111"N	104°42'41.297"W	13.53	
7482.00	64.780	0.470	7346.18	56.56	56.37	-48.15	40°07'03.546"N	104°42'41.289"W	12.22	
7529.00	68.950	0.790	7364.64	99.76	99.58	-47.68	40°07'03.973"N	104°42'41.283"W	8.89	
7577.00	76.070	1.970	7379.06	145.50	145.31	-46.57	40°07'04.425"N	104°42'41.268"W	15.02	
7609.00	80.970	2.260	7385.42	176.82	176.64	-45.41	40°07'04.735"N	104°42'41.253"W	15.34	
7639.00	84.630	1.820	7389.18	206.55	206.38	-44.35	40°07'05.028"N	104°42'41.240"W	12.29	
7657.00	86.090	1.800	7390.64	224.48	224.31	-43.78	40°07'05.206"N	104°42'41.233"W	8.11	
7699.00†	88.842	0.423	7392.49	266.43	266.26	-42.97	40°07'05.620"N	104°42'41.222"W	7.33	7" Casing Point
7733.00	91.070	359.310	7392.52	300.42	300.26	-43.05	40°07'05.956"N	104°42'41.223"W	7.33	
7796.00	91.780	358.500	7390.95	363.40	363.23	-44.25	40°07'06.578"N	104°42'41.239"W	1.71	
7891.00	91.260	359.750	7388.43	458.35	458.18	-45.70	40°07'07.517"N	104°42'41.257"W	1.42	
7986.00	90.090	0.620	7387.31	553.34	553.17	-45.40	40°07'08.455"N	104°42'41.253"W	1.53	
8081.00	89.070	0.570	7388.01	648.33	648.16	-44.41	40°07'09.394"N	104°42'41.241"W	1.07	
8176.00	90.000	0.470	7388.78	743.32	743.15	-43.55	40°07'10.333"N	104°42'41.230"W	0.98	
8271.00	88.760	359.850	7389.81	838.31	838.14	-43.28	40°07'11.272"N	104°42'41.226"W	1.46	
8366.00	89.720	0.570	7391.07	933.29	933.13	-42.93	40°07'12.210"N	104°42'41.222"W	1.26	
8461.00	90.150	358.180	7391.18	1028.28	1028.12	-43.97	40°07'13.149"N	104°42'41.235"W	2.56	



Actual Wellpath Report

RUSSIAN FIDDLER 35C-18HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35C-18HZ AWB
Facility	SEC.19-T2N-R65W		

WELLPATH DATA (134 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8555.00	88.240	356.700	7392.50	1122.19	1122.01	-48.17	40°07'14.077"N	104°42'41.289"W	2.57	
8650.00	88.820	356.070	7394.94	1216.99	1216.79	-54.16	40°07'15.013"N	104°42'41.366"W	0.90	
8745.00	90.000	356.530	7395.91	1311.81	1311.58	-60.29	40°07'15.950"N	104°42'41.445"W	1.33	
8840.00	89.930	358.600	7395.97	1406.73	1406.49	-64.32	40°07'16.888"N	104°42'41.497"W	2.18	
8935.00	90.520	359.640	7395.60	1501.73	1501.48	-65.78	40°07'17.827"N	104°42'41.516"W	1.26	
9030.00	90.700	0.610	7394.59	1596.72	1596.47	-65.57	40°07'18.766"N	104°42'41.513"W	1.04	
9125.00	91.010	0.500	7393.17	1691.70	1691.46	-64.65	40°07'19.704"N	104°42'41.501"W	0.35	
9219.00	89.690	1.020	7392.60	1785.68	1785.44	-63.41	40°07'20.633"N	104°42'41.485"W	1.51	
9314.00	89.810	1.240	7393.01	1880.65	1880.43	-61.53	40°07'21.572"N	104°42'41.461"W	0.26	
9409.00	90.890	1.780	7392.43	1975.61	1975.39	-59.03	40°07'22.510"N	104°42'41.429"W	1.27	
9504.00	89.290	0.010	7392.28	2070.58	2070.37	-57.55	40°07'23.449"N	104°42'41.410"W	2.51	
9599.00	89.440	359.530	7393.33	2165.57	2165.36	-57.93	40°07'24.387"N	104°42'41.415"W	0.53	
9694.00	90.270	359.620	7393.57	2260.57	2260.36	-58.63	40°07'25.326"N	104°42'41.424"W	0.88	
9788.00	88.920	0.480	7394.24	2354.57	2354.35	-58.55	40°07'26.255"N	104°42'41.423"W	1.70	
9883.00	90.180	0.120	7394.98	2449.56	2449.35	-58.05	40°07'27.194"N	104°42'41.416"W	1.38	
9978.00	90.800	359.720	7394.17	2544.55	2544.34	-58.19	40°07'28.133"N	104°42'41.418"W	0.78	
10073.00	91.100	359.530	7392.60	2639.54	2639.33	-58.81	40°07'29.071"N	104°42'41.426"W	0.37	
10168.00	90.360	0.700	7391.39	2734.53	2734.32	-58.62	40°07'30.010"N	104°42'41.424"W	1.46	
10263.00	88.890	0.570	7392.01	2829.51	2829.31	-57.56	40°07'30.949"N	104°42'41.410"W	1.55	
10358.00	89.440	0.280	7393.39	2924.50	2924.29	-56.86	40°07'31.887"N	104°42'41.401"W	0.65	
10453.00	89.410	359.760	7394.35	3019.49	3019.29	-56.83	40°07'32.826"N	104°42'41.401"W	0.55	
10547.00	89.100	358.240	7395.57	3113.47	3113.26	-58.47	40°07'33.755"N	104°42'41.422"W	1.65	
10642.00	89.010	358.670	7397.14	3208.43	3208.22	-61.03	40°07'34.693"N	104°42'41.455"W	0.46	
10737.00	89.750	358.890	7398.16	3303.41	3303.19	-63.05	40°07'35.631"N	104°42'41.481"W	0.81	
10832.00	91.010	359.230	7397.53	3398.40	3398.17	-64.61	40°07'36.570"N	104°42'41.501"W	1.37	
10927.00	91.010	359.700	7395.86	3493.38	3493.15	-65.49	40°07'37.509"N	104°42'41.512"W	0.49	
11021.00	91.470	358.530	7393.82	3587.35	3587.12	-66.95	40°07'38.437"N	104°42'41.531"W	1.34	
11116.00	90.970	357.780	7391.80	3682.29	3682.05	-70.00	40°07'39.375"N	104°42'41.570"W	0.95	
11211.00	89.110	359.940	7391.74	3777.27	3777.02	-71.89	40°07'40.314"N	104°42'41.595"W	3.00	
11306.00	88.860	0.140	7393.42	3872.25	3872.00	-71.83	40°07'41.253"N	104°42'41.594"W	0.34	
11400.00	89.870	0.320	7394.46	3966.24	3965.99	-71.45	40°07'42.181"N	104°42'41.589"W	1.09	
11495.00	90.270	359.700	7394.34	4061.24	4060.99	-71.43	40°07'43.120"N	104°42'41.589"W	0.78	
11590.00	90.060	359.530	7394.07	4156.24	4155.99	-72.07	40°07'44.059"N	104°42'41.597"W	0.28	
11685.00	90.430	359.600	7393.66	4251.24	4250.99	-72.79	40°07'44.998"N	104°42'41.606"W	0.40	
11779.00	89.780	359.810	7393.49	4345.24	4344.99	-73.28	40°07'45.927"N	104°42'41.612"W	0.73	
11874.00	90.330	0.250	7393.40	4440.24	4439.98	-73.23	40°07'46.865"N	104°42'41.612"W	0.74	
11969.00	89.320	359.320	7393.69	4535.24	4534.98	-73.58	40°07'47.804"N	104°42'41.616"W	1.45	
12064.00	89.720	358.360	7394.49	4630.22	4629.96	-75.51	40°07'48.743"N	104°42'41.641"W	1.09	
12159.00	90.000	356.890	7394.72	4725.15	4724.87	-79.44	40°07'49.681"N	104°42'41.692"W	1.58	
12254.00	90.060	355.640	7394.67	4819.97	4819.67	-85.63	40°07'50.618"N	104°42'41.771"W	1.32	
12349.00	89.870	353.830	7394.73	4914.60	4914.26	-94.35	40°07'51.552"N	104°42'41.884"W	1.92	
12444.00	90.300	354.250	7394.59	5009.12	5008.75	-104.21	40°07'52.486"N	104°42'42.011"W	0.63	
12468.00	90.210	354.410	7394.48	5033.01	5032.63	-106.58	40°07'52.722"N	104°42'42.041"W	0.76	Last BHI MWD+IFR Surveys
12528.00	90.210	354.410	7394.26	5092.75	5092.35	-112.43	40°07'53.312"N	104°42'42.116"W	0.00	Projection to bit



Actual Wellpath Report

RUSSIAN FIDDLER 35C-18HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35C-18HZ AWB
Facility	SEC.19-T2N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: RUSSIAN FIDDLER 35C-18HZ AWB Ref Wellpath: RUSSIAN FIDDLER 35C-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	1028.00	1015.00	13.00	1027.99	0.00	0.00	0.06	-1.30
9.625in Casing Surface	13.00	1017.00	1004.00	13.00	1016.99	0.00	0.00	0.04	-1.25
8.75in Open Hole	1028.00	7712.00	6684.00	1027.99	7392.66	0.06	-1.30	279.26	-42.92
7in Casing Intermediate	13.00	7699.00	7686.00	13.00	7392.49	0.00	0.00	266.26	-42.97
6.125in Open Hole	7712.00	12528.00	4816.00	7392.66	7394.26	279.26	-42.92	5092.35	-112.43

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
RUSSIAN FIDDLER 35C-18HZ LAND BOX		0.00	5439.33	-759.72	3219766.36	1292061.23	40°07'56.741"N	104°42'50.450"W	polygon
RUSSIAN FIDDLER 5 PAD HARD LINES (460' SETBACKS, SEC.18)		0.00	5439.33	-759.72	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	5439.33	-759.72	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	5439.31	-759.72	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	5439.33	-759.72	3219766.37	1292061.24	40°07'56.741"N	104°42'50.450"W	polygon
DECHANT 31-19 150' RADIUS		6954.48	4631.30	1607.37	3222140.45	1291274.32	40°07'48.755"N	104°42'19.975"W	circle
HARRIS RED X19-2J 150' RADIUS		7257.50	3369.16	194.90	3220739.31	1289999.73	40°07'36.283"N	104°42'38.160"W	circle
DECHANT X 19-3 150' RADIUS		7258.34	4405.72	652.20	3221187.36	1291040.27	40°07'46.527"N	104°42'32.273"W	circle
DECHANT X 19-5 150' RADIUS		7258.43	3120.17	-671.18	3219875.52	1289743.06	40°07'33.823"N	104°42'49.309"W	circle
DECHANT 32-19 150' RADIUS		7298.51	2941.71	1804.02	3222352.10	1289586.62	40°07'32.059"N	104°42'17.445"W	circle
RUSSIAN FIDDLER 35C-18HZ BHL ON PLAT REV-1 (460'FSL & 1360'FWL, SEC.18)		7388.00	5451.37	65.17	3220591.07	1292080.61	40°07'56.860"N	104°42'39.830"W	point
RUSSIAN FIDDLER 35C-18HZ REV-2 (460'FSL & 1250'FWL, SEC.18)		7388.00	5451.37	-44.82	3220481.10	1292079.63	40°07'56.860"N	104°42'41.246"W	point
RUSSIAN FIDDLER 35C-18HZ REV-3 (100'FSL & 1232'FWL, SEC.18)		7398.00	5092.21	-63.38	3220465.73	1291720.34	40°07'53.311"N	104°42'41.485"W	point



Actual Wellpath Report

RUSSIAN FIDDLER 35C-18HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35C-18HZ AWB
Facility	SEC.19-T2N-R65W		

WELLPATH COMPOSITION - Ref Wellbore: RUSSIAN FIDDLER 35C-18HZ AWB Ref Wellpath: RUSSIAN FIDDLER 35C-18HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	933.00	Generic gyro - continuous (Standard)	MS ENERGY SERVICES GYRO <113-933>	RUSSIAN FIDDLER 35C-18HZ AWB
933.00	7657.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1033-7657>	RUSSIAN FIDDLER 35C-18HZ AWB
7657.00	12468.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7733-12468>	RUSSIAN FIDDLER 35C-18HZ AWB
12468.00	12528.00	Blind Drilling (std)	Projection to bit	RUSSIAN FIDDLER 35C-18HZ AWB



Actual Wellpath Report

RUSSIAN FIDDLER 35C-18HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RUSSIAN FIDDLER 35C-18HZ (318'FSL & 1273'FWL, SEC.19)
Area	COLORADO	Well	RUSSIAN FIDDLER 35C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RUSSIAN FIDDLER 35C-18HZ AWB
Facility	SEC.19-T2N-R65W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
13.00	0.000	206.090	13.00	Tie-On	
113.00	0.290	206.090	113.00	Begin GYRO Surveys	
933.00	0.160	78.490	933.00	Tie-Into Gyro Surveys	
1063.00	0.430	297.050	1062.99	Begin BHI MWD+IFR Surveys	
7699.00	88.842	0.423	7392.49	7" Casing Point	
12468.00	90.210	354.410	7394.48	Last BHI MWD+IFR Surveys	
12528.00	90.210	354.410	7394.26	Projection to bit	