

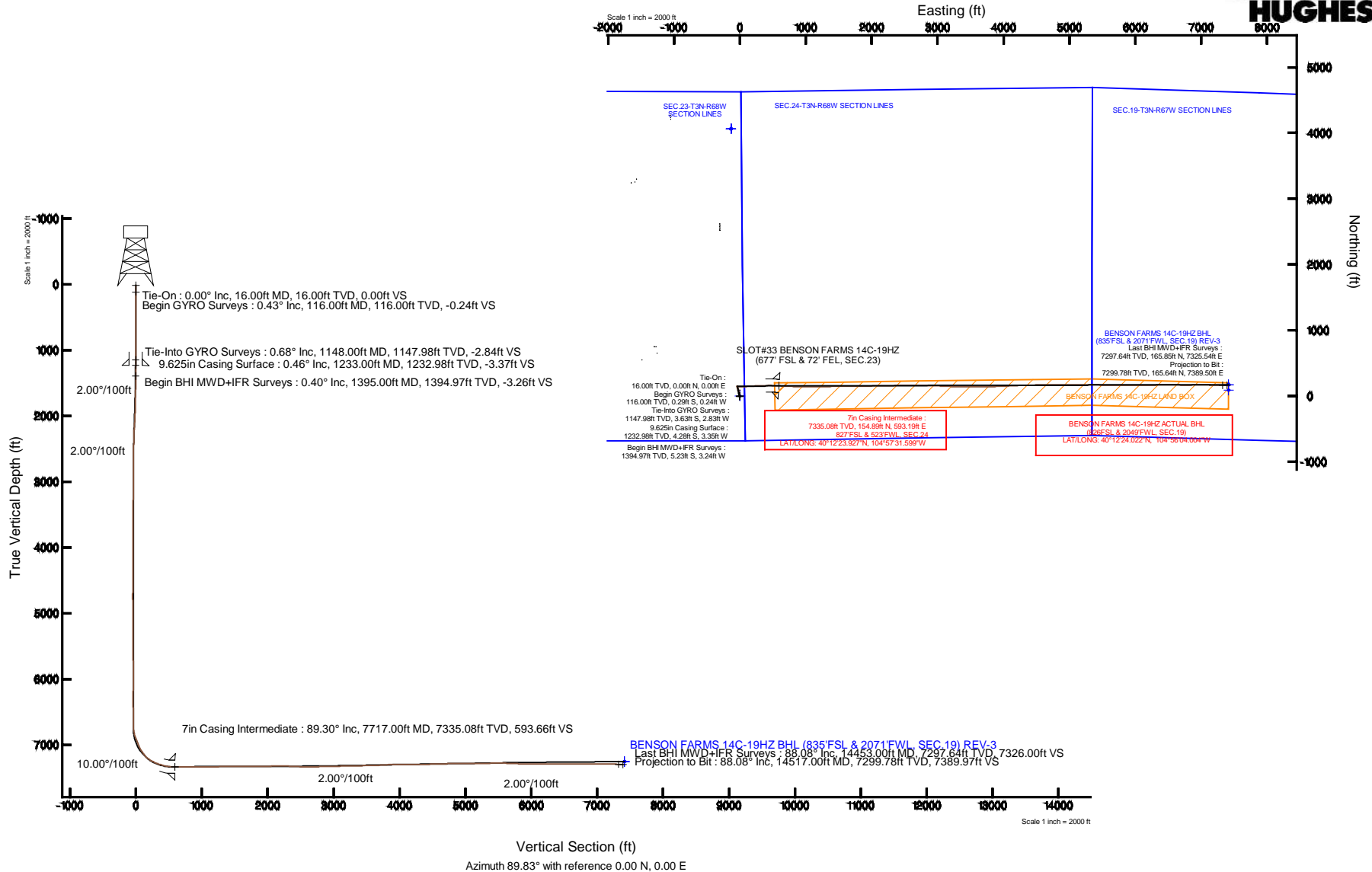
KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#33 BENSON FARMS 14C-19HZ (677' FSL & 72' FEL, SEC.23)
 Field: WELD COUNTY (KERR MCGEE) Well: BENSON FARMS 14C-19HZ
 Facility: SEC.23-T3N-R68W Wellbore: BENSON FARMS 14C-19HZ PWB



Plot reference wellpath is BENSON FARMS 14C-19HZ (REV-C.0) PWP

True vertical depths are referenced to XTREME 23 (16KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 23 (16KB) (RKB)	North Reference: True north
XTREME 23 (16KB) (RKB) to Mean Sea Level: 4977 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#33 BENSON FARMS 14C-19HZ (677' FSL & 72' FEL, SEC.23)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precin on 13/Oct/2014



Actual Wellpath Report

BENSON FARMS 14C-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#33 BENSON FARMS 14C-19HZ (677' FSL & 72' FEL, SEC.23)
Area	COLORADO	Well	BENSON FARMS 14C-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BENSON FARMS 14C-19HZ AWB
Facility	SEC.23-T3N-R68W		

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	0.999957	Report Generated	13/Oct/2014 at 15:50
Convergence at slot	n/a	Database/Source file	WellArchitectDB/BENSON_FARMS_14C-19HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4381.93	3155.99	3150572.86	1318426.41	40°12'22.396"N	104°57'39.244"W
Facility Reference Pt			3147390.98	1322789.28	40°13'05.700"N	104°58'19.920"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 23 (16'KB) (RKB) to Facility Vertical Datum	4977.00ft
Horizontal Reference Pt	Slot	XTREME 23 (16'KB) (RKB) to Mean Sea Level	4977.00ft
Vertical Reference Pt	XTREME 23 (16'KB) (RKB)	XTREME 23 (16'KB) (RKB) to Mud Line at Slot (SLOT#33 BENSON FARMS 14C-19HZ (677' FSL & 72' FEL, SEC.23))	4977.00ft
MD Reference Pt	XTREME 23 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	89.83°

Actual Wellpath Report

BENSON FARMS 14C-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION				
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Area	COLORADO	Well	BENSON FARMS 14C-19HZ	
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BENSON FARMS 14C-19HZ AWB	
Facility	SEC.23-T3N-R68W			

WELLPATH DATA (150 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	219.400	0.00	0.00	0.00	0.00	40°12'22.396"N	104°57'39.244"W	0.00	
16.00	0.000	219.400	16.00	0.00	0.00	0.00	40°12'22.396"N	104°57'39.244"W	0.00	Tie-On
116.00	0.430	219.400	116.00	-0.24	-0.29	-0.24	40°12'22.393"N	104°57'39.247"W	0.43	Begin GYRO Surveys
216.00	0.230	357.910	216.00	-0.48	-0.38	-0.48	40°12'22.392"N	104°57'39.250"W	0.62	
316.00	0.300	192.370	316.00	-0.55	-0.43	-0.55	40°12'22.392"N	104°57'39.251"W	0.53	
416.00	0.490	262.200	416.00	-1.03	-0.75	-1.03	40°12'22.389"N	104°57'39.257"W	0.48	
516.00	0.220	131.050	515.99	-1.31	-0.93	-1.31	40°12'22.387"N	104°57'39.261"W	0.66	
616.00	0.560	204.270	615.99	-1.37	-1.50	-1.36	40°12'22.381"N	104°57'39.262"W	0.54	
716.00	0.140	296.990	715.99	-1.68	-1.89	-1.67	40°12'22.377"N	104°57'39.266"W	0.58	
816.00	0.470	150.990	815.99	-1.59	-2.20	-1.58	40°12'22.374"N	104°57'39.264"W	0.59	
916.00	0.580	238.200	915.99	-1.82	-2.82	-1.81	40°12'22.368"N	104°57'39.267"W	0.73	
1016.00	0.160	314.700	1015.99	-2.35	-2.99	-2.34	40°12'22.366"N	104°57'39.274"W	0.56	
1116.00	0.570	202.440	1115.98	-2.64	-3.35	-2.63	40°12'22.363"N	104°57'39.278"W	0.65	
1148.00	0.680	225.910	1147.98	-2.84	-3.63	-2.83	40°12'22.360"N	104°57'39.280"W	0.86	Tie-Into GYRO Surveys
1395.00	0.400	131.930	1394.97	-3.26	-5.23	-3.24	40°12'22.344"N	104°57'39.286"W	0.33	Begin BHI MWD+IFR Surveys
1489.00	2.510	358.480	1488.95	-3.06	-3.39	-3.05	40°12'22.363"N	104°57'39.283"W	2.98	
1584.00	4.430	353.800	1583.77	-3.49	2.34	-3.50	40°12'22.419"N	104°57'39.289"W	2.04	
1674.00	6.550	353.590	1673.35	-4.42	10.90	-4.45	40°12'22.504"N	104°57'39.301"W	2.36	
1765.00	8.150	0.580	1763.60	-4.90	22.50	-4.96	40°12'22.618"N	104°57'39.308"W	2.01	
1857.00	8.930	348.060	1854.59	-6.27	36.01	-6.38	40°12'22.752"N	104°57'39.326"W	2.19	
1949.00	8.880	343.130	1945.48	-9.76	49.79	-9.91	40°12'22.888"N	104°57'39.372"W	0.83	
2042.00	8.510	336.770	2037.41	-14.52	62.99	-14.71	40°12'23.018"N	104°57'39.434"W	1.11	
2134.00	8.260	329.800	2128.43	-20.50	74.95	-20.72	40°12'23.137"N	104°57'39.511"W	1.14	
2226.00	8.290	341.190	2219.48	-25.92	86.94	-26.18	40°12'23.255"N	104°57'39.581"W	1.78	
2318.00	8.860	348.970	2310.46	-29.38	100.18	-29.68	40°12'23.386"N	104°57'39.627"W	1.40	
2411.00	6.960	342.840	2402.57	-32.37	112.59	-32.71	40°12'23.509"N	104°57'39.666"W	2.23	
2503.00	6.110	352.400	2493.97	-34.63	122.77	-35.00	40°12'23.609"N	104°57'39.695"W	1.50	
2596.00	5.450	355.880	2586.50	-35.58	132.08	-35.97	40°12'23.701"N	104°57'39.708"W	0.80	
2689.00	4.160	355.940	2679.17	-36.11	139.85	-36.53	40°12'23.778"N	104°57'39.715"W	1.39	
2779.00	2.580	352.800	2769.01	-36.58	145.12	-37.02	40°12'23.830"N	104°57'39.721"W	1.77	
2871.00	0.760	332.720	2860.97	-37.11	147.72	-37.56	40°12'23.856"N	104°57'39.728"W	2.05	
3056.00	0.560	307.880	3045.96	-38.38	149.36	-38.83	40°12'23.872"N	104°57'39.744"W	0.19	
3240.00	0.610	256.450	3229.95	-40.04	149.68	-40.49	40°12'23.875"N	104°57'39.766"W	0.28	
3418.00	1.160	273.800	3407.93	-42.76	149.58	-43.21	40°12'23.874"N	104°57'39.801"W	0.34	
3588.00	1.300	286.220	3577.89	-46.33	150.23	-46.78	40°12'23.881"N	104°57'39.847"W	0.18	
3673.00	0.310	13.440	3662.88	-47.20	150.73	-47.65	40°12'23.885"N	104°57'39.858"W	1.55	
3843.00	0.180	4.700	3832.88	-47.07	151.44	-47.52	40°12'23.893"N	104°57'39.857"W	0.08	
4014.00	0.100	41.250	4003.88	-46.95	151.82	-47.40	40°12'23.896"N	104°57'39.855"W	0.07	
4184.00	0.370	143.700	4173.88	-46.53	151.49	-46.98	40°12'23.893"N	104°57'39.850"W	0.24	
4355.00	0.040	181.720	4344.88	-46.20	150.99	-46.66	40°12'23.888"N	104°57'39.845"W	0.20	
4525.00	0.350	242.420	4514.88	-46.67	150.69	-47.12	40°12'23.885"N	104°57'39.851"W	0.20	
4695.00	0.520	266.320	4684.87	-47.90	150.40	-48.35	40°12'23.882"N	104°57'39.867"W	0.14	
4866.00	1.030	76.710	4855.86	-47.17	150.70	-47.63	40°12'23.885"N	104°57'39.858"W	0.90	
5036.00	0.580	72.800	5025.85	-44.86	151.31	-45.32	40°12'23.891"N	104°57'39.828"W	0.27	
5208.00	0.520	66.090	5197.84	-43.32	151.88	-43.77	40°12'23.897"N	104°57'39.808"W	0.05	

Actual Wellpath Report

BENSON FARMS 14C-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#33 BENSON FARMS 14C-19HZ (677' FSL & 72' FEL, SEC.23)
Area	COLORADO		Well	BENSON FARMS 14C-19HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	BENSON FARMS 14C-19HZ AWB
Facility	SEC.23-T3N-R68W			

WELLPATH DATA (150 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5378.00	0.240	122.750	5367.84	-42.31	152.00	-42.77	40°12'23.898"N	104°57'39.795"W	0.26	
5549.00	0.440	143.900	5538.83	-41.63	151.27	-42.08	40°12'23.891"N	104°57'39.786"W	0.14	
5721.00	0.440	110.500	5710.83	-40.62	150.51	-41.07	40°12'23.883"N	104°57'39.773"W	0.15	
5897.00	0.280	158.480	5886.82	-39.83	149.87	-40.28	40°12'23.877"N	104°57'39.763"W	0.19	
6075.00	0.610	189.950	6064.82	-39.84	148.54	-40.29	40°12'23.864"N	104°57'39.763"W	0.22	
6249.00	1.150	267.660	6238.80	-41.75	147.55	-42.19	40°12'23.854"N	104°57'39.788"W	0.68	
6419.00	1.550	117.430	6408.78	-41.41	146.42	-41.85	40°12'23.843"N	104°57'39.783"W	1.54	
6678.00	1.260	146.680	6667.71	-36.75	142.43	-37.18	40°12'23.803"N	104°57'39.723"W	0.29	
6768.00	2.510	83.060	6757.67	-34.25	141.84	-34.68	40°12'23.798"N	104°57'39.691"W	2.50	
6853.00	14.290	85.950	6841.61	-21.90	142.81	-22.33	40°12'23.807"N	104°57'39.532"W	13.86	
6938.00	23.010	91.470	6922.07	5.23	143.13	4.80	40°12'23.810"N	104°57'39.182"W	10.46	
7023.00	22.210	90.450	7000.54	37.90	142.57	37.47	40°12'23.805"N	104°57'38.761"W	1.05	
7109.00	30.010	86.380	7077.71	75.68	143.81	75.25	40°12'23.817"N	104°57'38.274"W	9.30	
7193.00	38.100	84.440	7147.25	122.53	147.65	122.09	40°12'23.855"N	104°57'37.670"W	9.72	
7278.00	51.400	87.620	7207.48	182.11	151.59	181.65	40°12'23.894"N	104°57'36.903"W	15.86	
7363.00	63.500	87.830	7253.13	253.57	154.42	253.11	40°12'23.922"N	104°57'35.982"W	14.24	
7449.00	68.990	87.800	7287.76	332.21	157.42	331.74	40°12'23.952"N	104°57'34.968"W	6.38	
7534.00	73.090	87.960	7315.37	412.53	160.39	412.05	40°12'23.981"N	104°57'33.933"W	4.83	
7577.00	80.470	90.110	7325.20	454.36	161.08	453.88	40°12'23.988"N	104°57'33.394"W	17.84	
7619.00	84.200	91.540	7330.80	495.97	160.48	495.49	40°12'23.982"N	104°57'32.858"W	9.50	
7662.00	87.930	93.930	7333.75	538.80	158.43	538.33	40°12'23.962"N	104°57'32.306"W	10.29	
7717.00†	89.303	93.466	7335.08	593.66	154.89	593.19	40°12'23.927"N	104°57'31.599"W	2.63	7" Casing Point
7777.00	90.800	92.960	7335.03	653.55	151.52	653.10	40°12'23.893"N	104°57'30.826"W	2.63	
7869.00	89.010	91.910	7335.18	745.45	147.61	745.01	40°12'23.855"N	104°57'29.642"W	2.26	
7962.00	89.660	91.080	7336.26	838.40	145.19	837.97	40°12'23.831"N	104°57'28.444"W	1.13	
8055.00	90.650	90.310	7336.01	931.39	144.06	930.96	40°12'23.819"N	104°57'27.245"W	1.35	
8146.00	90.430	90.720	7335.15	1022.38	143.24	1021.95	40°12'23.811"N	104°57'26.072"W	0.51	
8237.00	90.400	89.250	7334.49	1113.37	143.27	1112.95	40°12'23.812"N	104°57'24.900"W	1.62	
8330.00	90.310	89.810	7333.92	1206.37	144.03	1205.94	40°12'23.819"N	104°57'23.701"W	0.61	
8422.00	91.200	89.180	7332.70	1298.36	144.84	1297.93	40°12'23.827"N	104°57'22.516"W	1.19	
8606.00	90.710	89.430	7329.64	1482.33	147.07	1481.89	40°12'23.849"N	104°57'20.145"W	0.30	
8788.00	90.680	89.290	7327.43	1664.31	149.10	1663.87	40°12'23.869"N	104°57'17.799"W	0.08	
8877.00	90.220	89.080	7326.73	1753.30	150.37	1752.85	40°12'23.881"N	104°57'16.652"W	0.57	
8966.00	89.910	89.420	7326.63	1842.29	151.53	1841.85	40°12'23.893"N	104°57'15.505"W	0.52	
9010.00	89.570	89.510	7326.83	1886.29	151.95	1885.84	40°12'23.897"N	104°57'14.938"W	0.80	
9053.00	89.480	89.560	7327.19	1929.29	152.29	1928.84	40°12'23.900"N	104°57'14.384"W	0.24	
9097.00	90.700	89.050	7327.12	1973.29	152.83	1972.84	40°12'23.905"N	104°57'13.817"W	3.01	
9140.00	90.730	89.000	7326.58	2016.28	153.56	2015.83	40°12'23.913"N	104°57'13.263"W	0.14	
9183.00	90.670	89.120	7326.05	2059.27	154.27	2058.82	40°12'23.920"N	104°57'12.709"W	0.31	
9226.00	90.760	89.250	7325.52	2102.27	154.88	2101.81	40°12'23.926"N	104°57'12.155"W	0.37	
9311.00	90.760	89.420	7324.39	2187.26	155.86	2186.80	40°12'23.935"N	104°57'11.059"W	0.20	
9396.00	89.100	88.300	7324.49	2272.24	157.55	2271.78	40°12'23.952"N	104°57'09.964"W	2.36	
9482.00	86.950	86.770	7327.46	2358.11	161.25	2357.64	40°12'23.988"N	104°57'08.857"W	3.07	
9569.00	87.010	87.360	7332.04	2444.89	165.70	2444.40	40°12'24.032"N	104°57'07.739"W	0.68	
9659.00	88.050	89.590	7335.92	2534.77	168.09	2534.28	40°12'24.056"N	104°57'06.581"W	2.73	

Actual Wellpath Report

BENSON FARMS 14C-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	BENSON FARMS 14C-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BENSON FARMS 14C-19HZ AWB
Facility	SEC.23-T3N-R68W		

WELLPATH DATA (150 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9744.00	90.920	90.870	7336.68	2619.76	167.75	2619.27	40°12'24.052"N	104°57'05.485"W	3.70	
9829.00	91.190	91.550	7335.12	2704.72	165.95	2704.23	40°12'24.034"N	104°57'04.390"W	0.86	
9914.00	91.600	92.340	7333.05	2789.63	163.07	2789.16	40°12'24.006"N	104°57'03.296"W	1.05	
9999.00	91.660	92.510	7330.63	2874.51	159.48	2874.05	40°12'23.970"N	104°57'02.202"W	0.21	
10083.00	91.200	92.090	7328.54	2958.41	156.11	2957.95	40°12'23.937"N	104°57'01.120"W	0.74	
10169.00	90.860	92.180	7326.99	3044.32	152.90	3043.88	40°12'23.905"N	104°57'00.013"W	0.41	
10254.00	91.750	92.630	7325.05	3129.21	149.34	3128.78	40°12'23.870"N	104°56'58.919"W	1.17	
10339.00	91.810	92.720	7322.41	3214.07	145.37	3213.65	40°12'23.830"N	104°56'57.825"W	0.13	
10425.00	90.920	90.710	7320.37	3299.99	142.80	3299.58	40°12'23.805"N	104°56'56.717"W	2.56	
10510.00	90.300	90.230	7319.46	3384.98	142.10	3384.57	40°12'23.798"N	104°56'55.622"W	0.92	
10595.00	91.530	89.930	7318.10	3469.97	141.98	3469.56	40°12'23.797"N	104°56'54.526"W	1.49	
10681.00	91.170	89.450	7316.08	3555.94	142.45	3555.53	40°12'23.801"N	104°56'53.418"W	0.70	
10766.00	92.150	89.640	7313.61	3640.91	143.12	3640.49	40°12'23.808"N	104°56'52.323"W	1.17	
10851.00	92.890	89.140	7309.88	3725.82	144.03	3725.40	40°12'23.816"N	104°56'51.229"W	1.05	
10936.00	93.750	89.570	7304.95	3810.67	144.98	3810.26	40°12'23.826"N	104°56'50.135"W	1.13	
11022.00	92.370	88.660	7300.36	3896.54	146.31	3896.12	40°12'23.839"N	104°56'49.029"W	1.92	
11107.00	91.420	88.340	7297.55	3981.47	148.53	3981.04	40°12'23.861"N	104°56'47.934"W	1.18	
11192.00	88.490	86.580	7297.62	4066.39	152.30	4065.95	40°12'23.898"N	104°56'46.840"W	4.02	
11278.00	87.350	86.430	7300.74	4152.18	157.54	4151.73	40°12'23.949"N	104°56'45.734"W	1.34	
11363.00	89.540	88.720	7303.05	4237.08	161.13	4236.61	40°12'23.985"N	104°56'44.640"W	3.73	
11448.00	91.970	88.300	7301.93	4322.04	163.34	4321.57	40°12'24.006"N	104°56'43.545"W	2.90	
11533.00	92.900	88.160	7298.32	4406.93	165.96	4406.45	40°12'24.032"N	104°56'42.451"W	1.11	
11617.00	91.390	88.400	7295.17	4490.84	168.48	4490.35	40°12'24.057"N	104°56'41.370"W	1.82	
11703.00	90.980	88.020	7293.39	4576.78	171.17	4576.29	40°12'24.083"N	104°56'40.262"W	0.65	
11788.00	91.880	89.410	7291.27	4661.74	173.08	4661.24	40°12'24.102"N	104°56'39.167"W	1.95	
11874.00	92.830	89.570	7287.74	4747.66	173.84	4747.16	40°12'24.109"N	104°56'38.060"W	1.12	
11959.00	90.430	90.000	7285.32	4832.62	174.16	4832.12	40°12'24.112"N	104°56'36.965"W	2.87	
12044.00	89.530	90.260	7285.35	4917.62	173.97	4917.12	40°12'24.110"N	104°56'35.869"W	1.10	
12130.00	89.500	89.870	7286.08	5003.62	173.87	5003.12	40°12'24.109"N	104°56'34.761"W	0.45	
12215.00	90.890	90.340	7285.79	5088.61	173.71	5088.11	40°12'24.107"N	104°56'33.665"W	1.73	
12303.00	92.120	90.240	7283.48	5176.58	173.27	5176.08	40°12'24.103"N	104°56'32.532"W	1.40	
12388.00	89.560	90.470	7282.23	5261.56	172.74	5261.06	40°12'24.097"N	104°56'31.436"W	3.02	
12473.00	90.760	91.110	7282.00	5346.54	171.57	5346.05	40°12'24.086"N	104°56'30.341"W	1.60	
12558.00	91.230	92.090	7280.52	5431.49	169.20	5431.00	40°12'24.062"N	104°56'29.246"W	1.28	
12643.00	89.590	90.870	7279.91	5516.45	167.00	5515.97	40°12'24.040"N	104°56'28.151"W	2.40	
12728.00	88.520	91.230	7281.31	5601.41	165.44	5600.94	40°12'24.025"N	104°56'27.056"W	1.33	
12813.00	87.500	90.610	7284.26	5686.35	164.08	5685.88	40°12'24.011"N	104°56'25.961"W	1.40	
12899.00	87.440	89.780	7288.06	5772.26	163.79	5771.79	40°12'24.008"N	104°56'24.854"W	0.97	
12984.00	88.340	89.510	7291.19	5857.20	164.31	5856.73	40°12'24.013"N	104°56'23.759"W	1.11	
13069.00	89.690	89.300	7292.65	5942.18	165.20	5941.71	40°12'24.021"N	104°56'22.664"W	1.61	
13154.00	90.550	89.740	7292.47	6027.18	165.91	6026.71	40°12'24.028"N	104°56'21.568"W	1.14	
13239.00	90.310	89.560	7291.84	6112.18	166.43	6111.71	40°12'24.033"N	104°56'20.473"W	0.35	
13325.00	90.650	89.680	7291.12	6198.17	167.00	6197.70	40°12'24.039"N	104°56'19.364"W	0.42	
13410.00	89.880	89.270	7290.72	6283.17	167.78	6282.70	40°12'24.046"N	104°56'18.269"W	1.03	
13495.00	89.320	89.500	7291.32	6368.17	168.69	6367.69	40°12'24.055"N	104°56'17.174"W	0.71	

Actual Wellpath Report

BENSON FARMS 14C-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#33 BENSON FARMS 14C-19HZ (677' FSL & 72' FEL, SEC.23)
Area	COLORADO	Well	BENSON FARMS 14C-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BENSON FARMS 14C-19HZ AWP
Facility	SEC.23-T3N-R68W		

WELLPATH DATA (150 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13580.00	90.400	89.960	7291.52	6453.16	169.09	6452.69	40°12'24.059"N	104°56'16.078"W	1.38	
13665.00	89.260	90.130	7291.78	6538.16	169.02	6537.68	40°12'24.058"N	104°56'14.983"W	1.36	
13750.00	89.510	90.360	7292.69	6623.15	168.66	6622.68	40°12'24.054"N	104°56'13.887"W	0.40	
13835.00	90.920	91.080	7292.37	6708.14	167.59	6707.67	40°12'24.043"N	104°56'12.792"W	1.86	
13921.00	89.500	89.290	7292.05	6794.13	167.31	6793.66	40°12'24.040"N	104°56'11.683"W	2.66	
14006.00	89.410	89.030	7292.86	6879.12	168.56	6878.65	40°12'24.052"N	104°56'10.588"W	0.32	
14091.00	89.190	89.800	7293.90	6964.11	169.43	6963.64	40°12'24.061"N	104°56'09.493"W	0.94	
14175.00	90.640	90.520	7294.03	7048.11	169.19	7047.63	40°12'24.058"N	104°56'08.410"W	1.93	
14218.00	90.770	90.680	7293.50	7091.10	168.74	7090.63	40°12'24.053"N	104°56'07.856"W	0.48	
14260.00	90.120	90.970	7293.17	7133.09	168.14	7132.62	40°12'24.047"N	104°56'07.315"W	1.69	
14345.00	88.670	90.970	7294.07	7218.07	166.70	7217.60	40°12'24.033"N	104°56'06.219"W	1.71	
14388.00	87.960	90.340	7295.33	7261.05	166.21	7260.58	40°12'24.028"N	104°56'05.665"W	2.21	
14431.00	87.930	90.340	7296.87	7304.02	165.95	7303.55	40°12'24.025"N	104°56'05.112"W	0.07	
14453.00	88.080	90.190	7297.64	7326.00	165.85	7325.54	40°12'24.024"N	104°56'04.828"W	0.96	Last BHI MWD+IFR Surveys
14517.00	88.080	90.190	7299.78	7389.97	165.64	7389.50	40°12'24.022"N	104°56'04.004"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: BENSON FARMS 14C-19HZ AWP Ref Wellpath: BENSON FARMS 14C-19HZ 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	16.00	1244.00	1228.00	16.00	1243.98	0.00	0.00	-4.36	-3.39
9.625in Casing Surface	16.00	1233.00	1217.00	16.00	1232.98	0.00	0.00	-4.28	-3.35
8.75in Open Hole	1244.00	7725.00	6481.00	1243.98	7335.17	-4.36	-3.39	154.41	601.18
7in Casing Intermediate	16.00	7717.00	7701.00	16.00	7335.08	0.00	0.00	154.89	593.19
6.125in Open Hole	7725.00	14157.00	6432.00	7335.17	7294.18	154.41	601.18	169.33	7029.63

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#33 BENSON FARMS 14C-19HZ (677' FSL & 72' FEL, SEC.23)
Area	COLORADO	Well	BENSON FARMS 14C-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BENSON FARMS 14C-19HZ AWB
Facility	SEC.23-T3N-R68W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.19-T3N-R67W HARDLINES (460' SETBACKS)		29.00	4065.55	-135.14	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
SEC.19-T3N-R67W SECTION LINES		29.00	4065.55	-135.14	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
SEC.23-T3N-R68W HARDLINES (460' SETBACKS)		29.00	4065.55	-135.14	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
SEC.23-T3N-R68W SECTION LINES		29.00	4065.55	-135.14	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
SEC.24-T3N-R68W HARDLINES (460' SETBACKS)		29.00	4065.55	-135.14	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
SEC.24-T3N-R68W SECTION LINES		29.00	4065.55	-135.14	3150413.01	1322490.88	40°13'02.572"N	104°57'40.986"W	polygon
BENSON FARMS 14C-19HZ BHL (835'FSL & 2071'FWL, SEC.19) REV-2		7254.00	174.55	7415.64	3157986.97	1318646.03	40°12'24.110"N	104°56'03.667"W	point
BENSON FARMS 14C-19HZ BHL ON PLAT (750'FSL & 2071'FWL, SEC.19) REV-1		7254.00	89.55	7415.66	3157987.50	1318561.04	40°12'23.270"N	104°56'03.667"W	point
BENSON FARMS 14C-19HZ LAND BOX		7254.00	0.00	0.00	3150572.86	1318426.41	40°12'22.396"N	104°57'39.244"W	polygon
BENSON FARMS 14C-19HZ BHL (835'FSL & 2071'FWL, SEC.19) REV-3		7255.00	174.55	7415.64	3157986.97	1318646.03	40°12'24.110"N	104°56'03.667"W	point

WELLPATH COMPOSITION - Ref Wellbore: BENSON FARMS 14C-19HZ AWB					Ref Wellpath: BENSON FARMS 14C-19HZ AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	
16.00	1148.00	Generic gyro - continuous (Standard)	MS ENERGY GYRO SURVEYS <116-1148>		BENSON FARMS 14C-19HZ AWB	
1148.00	7662.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1395-7662>		BENSON FARMS 14C-19HZ AWB	
7662.00	14453.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7777-14453>		BENSON FARMS 14C-19HZ AWB	
14453.00	14517.00	Blind Drilling (std)	Projection to bit		BENSON FARMS 14C-19HZ AWB	

Actual Wellpath Report

BENSON FARMS 14C-19HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#33 BENSON FARMS 14C-19HZ (677' FSL & 72' FEL, SEC.23)
Area	COLORADO	Well	BENSON FARMS 14C-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BENSON FARMS 14C-19HZ AWB
Facility	SEC.23-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	219.400	16.00	Tie-On
116.00	0.430	219.400	116.00	Begin GYRO Surveys
1148.00	0.680	225.910	1147.98	Tie-Into GYRO Surveys
1395.00	0.400	131.930	1394.97	Begin BHI MWD+IFR Surveys
7717.00	89.303	93.466	7335.08	7" Casing Point
14453.00	88.080	90.190	7297.64	Last BHI MWD+IFR Surveys
14517.00	88.080	90.190	7299.78	Projection to Bit