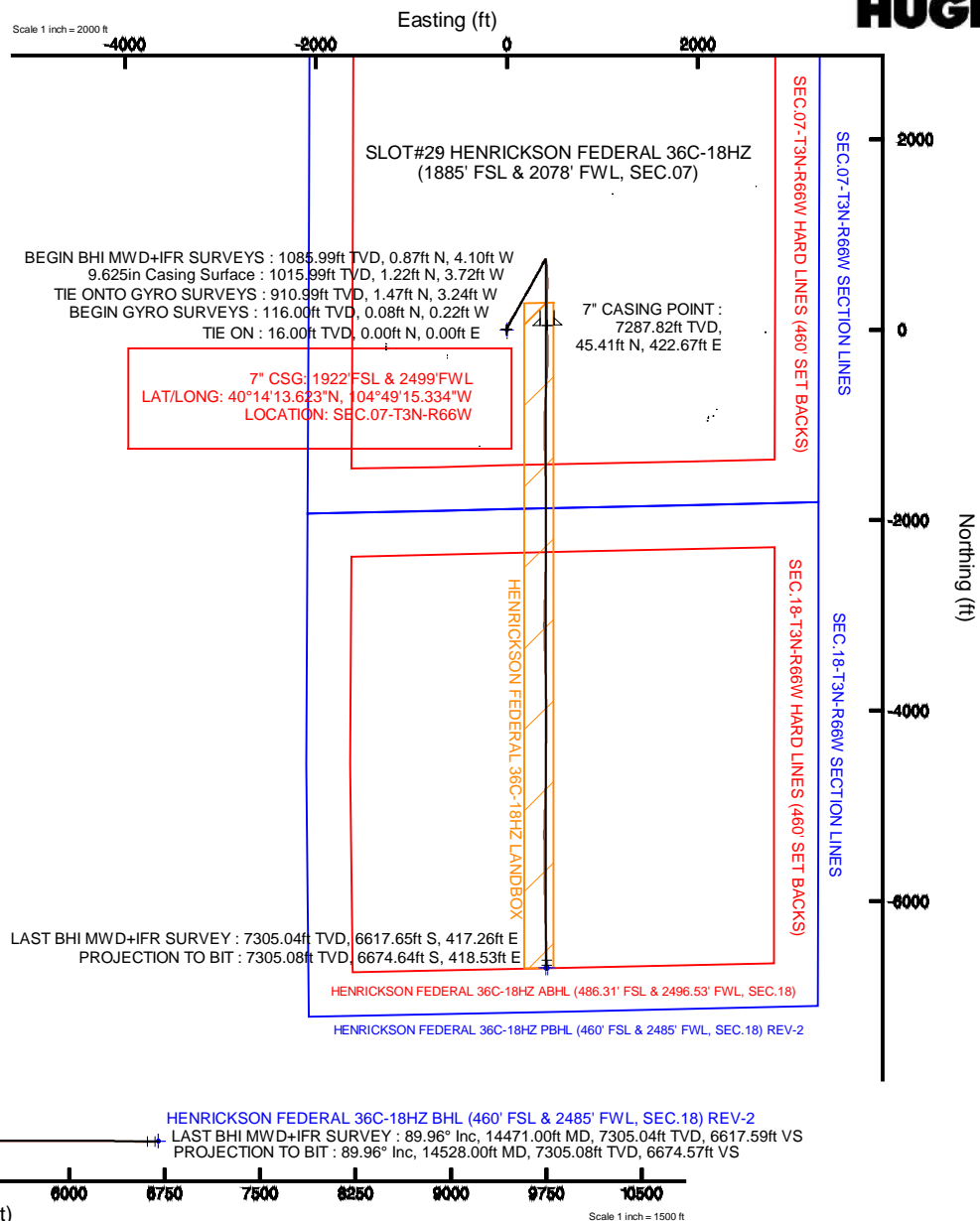
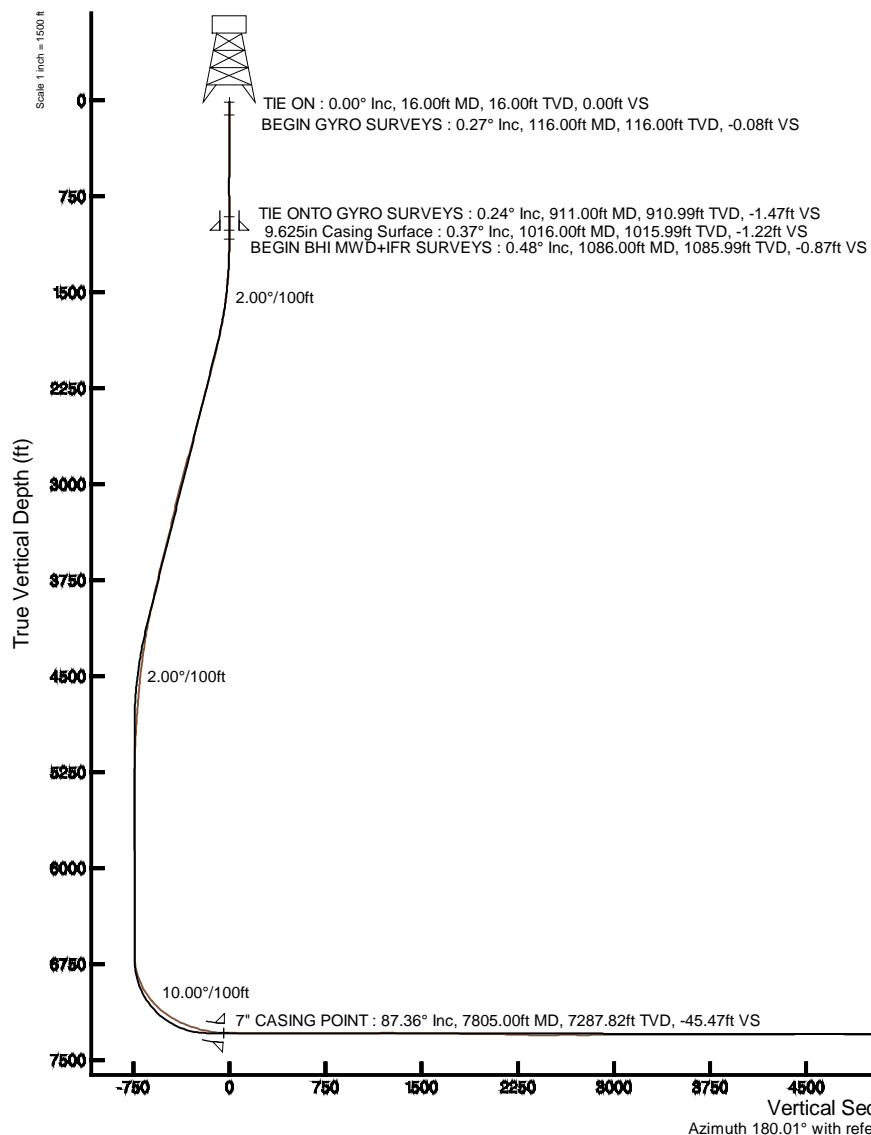


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 2078' FWL, SEC.07)
 Field: WELD COUNTY (KERR MCGEE) Well: HENRICKSON FEDERAL 36C-18HZ
 Facility: SEC.07-T3N-R66W Wellbore: HENRICKSON FEDERAL 36C-18HZ PWB

Plot reference wellpath is HENRICKSON FEDERAL 36C-18HZ (REV-B.0) PWP

True vertical depths are referenced to (4810' 4794GL + 16KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to (4810' 4794GL + 16KB) (RKB)	North Reference: True north
(4810' 4794GL + 16KB) (RKB) to Mean Sea Level: 4810 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 2078' FWL, SEC.07)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: rbsale01 on 01/Nov/2013



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 36C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 36C-18HZ AWB
Facility	SEC.07-T3N-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	Robiale01
Scale	0.999957	Report Generated	23/Oct/2013 at 14:48
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/HENRICKSON_FEDERAL_36C-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	-1550.81	-1147.48	3189159.37	1329901.11	40°14'13.175"N	104°49'20.784"W
Facility Reference Pt			3190294.85	1331460.62	40°14'28.500"N	104°49'05.988"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	(4810': 4794'GL + 16'KB) (RKB) to Facility Vertical Datum	4810.00ft
Horizontal Reference Pt	Slot	(4810': 4794'GL + 16'KB) (RKB) to Mean Sea Level	4810.00ft
Vertical Reference Pt	(4810': 4794'GL + 16'KB) (RKB)	(4810': 4794'GL + 16'KB) (RKB) to Mud Line at Slot (SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 2078' FWL, SEC.07))	4810.00ft
MD Reference Pt	(4810': 4794'GL + 16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	180.01°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 36C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 36C-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH DATA (171 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	289.190	0.00	0.00	0.00	0.00	40°14'13.175"N	104°49'20.784"W	0.00	
16.00	0.000	289.190	16.00	0.00	0.00	0.00	40°14'13.175"N	104°49'20.784"W	0.00	TIE ON
116.00	0.270	289.190	116.00	-0.08	0.08	-0.22	40°14'13.176"N	104°49'20.787"W	0.27	BEGIN GYRO SURVEYS
216.00	0.460	323.230	216.00	-0.48	0.48	-0.69	40°14'13.180"N	104°49'20.793"W	0.28	
316.00	0.500	315.470	315.99	-1.11	1.11	-1.23	40°14'13.186"N	104°49'20.800"W	0.08	
416.00	0.080	212.380	415.99	-1.36	1.36	-1.58	40°14'13.188"N	104°49'20.804"W	0.52	
516.00	0.340	299.500	515.99	-1.45	1.45	-1.87	40°14'13.189"N	104°49'20.808"W	0.35	
616.00	0.090	9.640	615.99	-1.67	1.67	-2.12	40°14'13.191"N	104°49'20.811"W	0.32	
716.00	0.150	235.600	715.99	-1.67	1.68	-2.21	40°14'13.191"N	104°49'20.813"W	0.22	
816.00	0.430	263.330	815.99	-1.56	1.56	-2.69	40°14'13.190"N	104°49'20.819"W	0.31	
911.00	0.240	257.930	910.99	-1.47	1.47	-3.24	40°14'13.189"N	104°49'20.826"W	0.20	TIE ONTO GYRO SURVEYS
1086.00	0.480	223.520	1085.99	-0.87	0.87	-4.10	40°14'13.183"N	104°49'20.837"W	0.18	BEGIN BHI MWD+IFR SURVEYS
1180.00	1.390	29.220	1179.98	-1.58	1.58	-3.82	40°14'13.190"N	104°49'20.833"W	1.98	
1274.00	2.990	40.500	1273.91	-4.44	4.44	-1.67	40°14'13.219"N	104°49'20.806"W	1.75	
1368.00	4.600	34.610	1367.70	-9.40	9.40	2.06	40°14'13.268"N	104°49'20.757"W	1.76	
1462.00	6.210	21.390	1461.28	-17.24	17.24	6.06	40°14'13.345"N	104°49'20.706"W	2.15	
1557.00	7.700	16.840	1555.58	-28.12	28.12	9.78	40°14'13.453"N	104°49'20.658"W	1.67	
1647.00	9.770	23.460	1644.53	-40.90	40.89	14.57	40°14'13.579"N	104°49'20.596"W	2.55	
1739.00	11.380	22.230	1734.97	-56.46	56.46	21.11	40°14'13.733"N	104°49'20.512"W	1.77	
1830.00	12.840	26.360	1823.94	-73.83	73.83	28.99	40°14'13.904"N	104°49'20.410"W	1.86	
1922.00	15.080	28.480	1913.22	-93.52	93.51	39.24	40°14'14.099"N	104°49'20.278"W	2.50	
2013.00	15.990	31.990	2000.90	-114.56	114.55	51.53	40°14'14.307"N	104°49'20.120"W	1.44	
2104.00	17.490	31.780	2088.04	-136.81	136.80	65.37	40°14'14.527"N	104°49'19.941"W	1.65	
2196.00	16.920	31.590	2175.92	-159.97	159.96	79.66	40°14'14.756"N	104°49'19.757"W	0.62	
2288.00	16.410	30.190	2264.06	-182.61	182.60	93.21	40°14'14.979"N	104°49'19.582"W	0.71	
2379.00	15.890	27.450	2351.47	-204.78	204.76	105.42	40°14'15.198"N	104°49'19.425"W	1.01	
2471.00	16.780	29.730	2439.75	-227.49	227.47	117.81	40°14'15.423"N	104°49'19.265"W	1.19	
2563.00	16.300	28.600	2527.94	-250.36	250.34	130.58	40°14'15.649"N	104°49'19.100"W	0.63	
2655.00	17.430	29.720	2615.99	-273.66	273.64	143.59	40°14'15.879"N	104°49'18.933"W	1.28	
2747.00	17.570	29.830	2703.73	-297.68	297.65	157.33	40°14'16.116"N	104°49'18.755"W	0.16	
2838.00	18.100	30.610	2790.36	-321.76	321.74	171.36	40°14'16.354"N	104°49'18.574"W	0.64	
2930.00	18.140	30.540	2877.79	-346.40	346.37	185.91	40°14'16.598"N	104°49'18.387"W	0.05	
3021.00	16.900	31.010	2964.57	-369.94	369.91	199.92	40°14'16.830"N	104°49'18.206"W	1.37	
3113.00	16.490	31.240	3052.69	-392.57	392.53	213.59	40°14'17.054"N	104°49'18.030"W	0.45	
3204.00	15.350	30.850	3140.20	-413.95	413.92	226.46	40°14'17.265"N	104°49'17.864"W	1.26	
3296.00	14.840	33.850	3229.03	-434.19	434.16	239.27	40°14'17.465"N	104°49'17.699"W	1.01	
3380.00	14.310	27.360	3310.33	-452.35	452.31	250.03	40°14'17.644"N	104°49'17.560"W	2.04	
3466.00	14.920	27.810	3393.55	-471.58	471.54	260.08	40°14'17.835"N	104°49'17.430"W	0.72	
3551.00	15.790	22.790	3475.51	-491.93	491.88	269.67	40°14'18.036"N	104°49'17.307"W	1.87	
3636.00	15.750	24.670	3557.32	-513.07	513.03	278.96	40°14'18.245"N	104°49'17.187"W	0.60	
3721.00	15.600	30.840	3639.16	-533.37	533.33	289.64	40°14'18.445"N	104°49'17.049"W	1.97	
3807.00	15.860	32.930	3721.94	-553.17	553.12	301.95	40°14'18.641"N	104°49'16.890"W	0.72	
3891.00	14.690	32.600	3802.97	-571.78	571.73	313.93	40°14'18.825"N	104°49'16.736"W	1.40	
3977.00	14.850	32.080	3886.13	-590.30	590.25	325.66	40°14'19.008"N	104°49'16.585"W	0.24	
4062.00	14.560	28.030	3968.35	-608.96	608.91	336.46	40°14'19.192"N	104°49'16.445"W	1.26	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 36C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 36C-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH DATA (171 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4147.00	12.650	25.960	4050.96	-626.77	626.71	345.56	40°14'19.368"N	104°49'16.328"W	2.32	
4232.00	10.920	22.410	4134.17	-642.58	642.53	352.70	40°14'19.524"N	104°49'16.236"W	2.21	
4317.00	9.420	22.970	4217.83	-656.43	656.37	358.49	40°14'19.661"N	104°49'16.161"W	1.77	
4402.00	8.870	22.170	4301.75	-668.90	668.85	363.68	40°14'19.784"N	104°49'16.095"W	0.66	
4487.00	7.920	17.600	4385.84	-680.56	680.50	367.92	40°14'19.899"N	104°49'16.040"W	1.36	
4573.00	7.370	24.160	4471.07	-691.24	691.18	371.97	40°14'20.005"N	104°49'15.988"W	1.20	
4658.00	6.370	37.070	4555.47	-699.98	699.92	377.04	40°14'20.091"N	104°49'15.922"W	2.16	
4743.00	6.240	40.710	4639.95	-707.24	707.18	382.90	40°14'20.163"N	104°49'15.847"W	0.49	
4828.00	6.270	44.500	4724.45	-714.05	713.99	389.16	40°14'20.230"N	104°49'15.766"W	0.49	
4913.00	5.340	32.240	4809.01	-720.71	720.65	394.53	40°14'20.296"N	104°49'15.697"W	1.82	
4998.00	3.950	24.870	4893.73	-726.71	726.65	397.87	40°14'20.355"N	104°49'15.654"W	1.78	
5083.00	3.600	24.280	4978.55	-731.80	731.74	400.20	40°14'20.406"N	104°49'15.624"W	0.41	
5168.00	2.080	20.950	5063.44	-735.68	735.61	401.85	40°14'20.444"N	104°49'15.602"W	1.80	
5253.00	1.820	5.730	5148.39	-738.46	738.40	402.53	40°14'20.472"N	104°49'15.593"W	0.68	
5338.00	1.770	7.770	5233.35	-741.10	741.04	402.85	40°14'20.498"N	104°49'15.589"W	0.10	
5423.00	0.460	324.420	5318.33	-742.68	742.62	402.83	40°14'20.513"N	104°49'15.590"W	1.73	
5509.00	0.250	202.940	5404.33	-742.79	742.73	402.55	40°14'20.514"N	104°49'15.593"W	0.73	
5594.00	0.120	224.770	5489.33	-742.56	742.49	402.42	40°14'20.512"N	104°49'15.595"W	0.17	
5849.00	0.550	153.430	5744.33	-741.27	741.21	402.78	40°14'20.499"N	104°49'15.590"W	0.21	
6105.00	0.120	221.330	6000.32	-739.97	739.91	403.15	40°14'20.486"N	104°49'15.586"W	0.20	
6361.00	0.160	92.500	6256.32	-739.75	739.69	403.33	40°14'20.484"N	104°49'15.583"W	0.10	
6616.00	0.200	156.240	6511.32	-739.33	739.27	403.86	40°14'20.480"N	104°49'15.576"W	0.08	
6702.00	0.580	122.990	6597.32	-738.96	738.89	404.29	40°14'20.476"N	104°49'15.571"W	0.50	
6787.00	0.870	133.240	6682.31	-738.28	738.22	405.12	40°14'20.470"N	104°49'15.560"W	0.37	
6831.00	4.860	161.680	6726.25	-736.28	736.22	405.95	40°14'20.450"N	104°49'15.549"W	9.35	
6872.00	9.580	162.860	6766.91	-731.37	731.31	407.50	40°14'20.401"N	104°49'15.529"W	11.52	
6914.00	14.070	163.570	6808.01	-723.13	723.07	409.98	40°14'20.320"N	104°49'15.497"W	10.70	
6957.00	18.480	165.170	6849.28	-711.52	711.46	413.20	40°14'20.205"N	104°49'15.456"W	10.31	
7002.00	24.200	170.190	6891.18	-695.53	695.46	416.60	40°14'20.047"N	104°49'15.412"W	13.33	
7042.00	28.030	172.530	6927.09	-678.12	678.06	419.22	40°14'19.875"N	104°49'15.378"W	9.91	
7085.00	32.260	175.310	6964.27	-656.66	656.59	421.47	40°14'19.663"N	104°49'15.349"W	10.36	
7128.00	35.100	177.420	7000.05	-632.86	632.80	422.97	40°14'19.428"N	104°49'15.330"W	7.14	
7171.00	38.370	178.820	7034.51	-607.16	607.10	423.80	40°14'19.174"N	104°49'15.319"W	7.85	
7213.00	42.280	178.460	7066.52	-580.00	579.93	424.45	40°14'18.906"N	104°49'15.311"W	9.33	
7256.00	48.350	177.580	7096.74	-549.46	549.39	425.52	40°14'18.604"N	104°49'15.297"W	14.19	
7298.00	53.200	179.160	7123.30	-516.95	516.88	426.43	40°14'18.283"N	104°49'15.285"W	11.91	
7341.00	57.070	179.960	7147.87	-481.67	481.61	426.69	40°14'17.934"N	104°49'15.282"W	9.13	
7383.00	59.410	181.530	7169.98	-445.97	445.90	426.22	40°14'17.581"N	104°49'15.288"W	6.41	
7426.00	60.400	181.350	7191.54	-408.78	408.71	425.29	40°14'17.214"N	104°49'15.300"W	2.33	
7468.00	65.660	180.460	7210.58	-371.37	371.30	424.70	40°14'16.844"N	104°49'15.308"W	12.67	
7511.00	69.510	180.390	7226.98	-331.62	331.56	424.41	40°14'16.451"N	104°49'15.311"W	8.95	
7553.00	71.560	180.620	7240.97	-292.03	291.96	424.06	40°14'16.060"N	104°49'15.316"W	4.91	
7596.00	72.440	181.440	7254.26	-251.14	251.07	423.32	40°14'15.656"N	104°49'15.325"W	2.73	
7638.00	76.690	181.650	7265.43	-210.68	210.61	422.23	40°14'15.256"N	104°49'15.340"W	10.13	
7681.00	79.310	180.280	7274.37	-168.63	168.56	421.52	40°14'14.840"N	104°49'15.349"W	6.84	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 36C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 36C-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH DATA (171 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7724.00	82.770	180.080	7281.07	-126.16	126.09	421.39	40°14'14.421"N	104°49'15.350"W	8.06	
7758.00	85.000	178.890	7284.69	-92.36	92.29	421.70	40°14'14.087"N	104°49'15.346"W	7.42	
7805.00†	87.355	178.730	7287.82	-45.47	45.41	422.67	40°14'13.623"N	104°49'15.334"W	5.02	7" CASING POINT
7849.00	89.560	178.580	7289.01	-1.51	1.44	423.70	40°14'13.189"N	104°49'15.321"W	5.02	
7940.00	89.310	177.620	7289.91	89.44	-89.51	426.72	40°14'12.290"N	104°49'15.282"W	1.09	
8032.00	90.060	179.550	7290.41	181.40	-181.47	428.99	40°14'11.381"N	104°49'15.252"W	2.25	
8123.00	89.440	180.370	7290.81	272.40	-272.47	429.05	40°14'10.482"N	104°49'15.252"W	1.13	
8214.00	89.350	181.940	7291.77	363.38	-363.44	427.22	40°14'09.583"N	104°49'15.275"W	1.73	
8306.00	89.690	183.690	7292.54	455.26	-455.32	422.70	40°14'08.675"N	104°49'15.334"W	1.94	
8398.00	89.660	183.490	7293.06	547.08	-547.14	416.94	40°14'07.768"N	104°49'15.408"W	0.22	
8489.00	90.330	184.330	7293.07	637.86	-637.93	410.74	40°14'06.871"N	104°49'15.488"W	1.18	
8581.00	90.060	183.530	7292.76	729.65	-729.71	404.43	40°14'05.964"N	104°49'15.569"W	0.92	
8673.00	89.560	181.980	7293.06	821.54	-821.60	400.01	40°14'05.056"N	104°49'15.626"W	1.77	
8765.00	89.750	180.210	7293.62	913.52	-913.58	398.25	40°14'04.147"N	104°49'15.649"W	1.93	
8857.00	90.210	180.900	7293.65	1005.51	-1005.57	397.36	40°14'03.238"N	104°49'15.661"W	0.90	
8948.00	92.120	180.340	7291.80	1096.48	-1096.55	396.38	40°14'02.339"N	104°49'15.673"W	2.19	
9040.00	91.010	178.540	7289.29	1188.44	-1188.50	397.28	40°14'01.430"N	104°49'15.662"W	2.30	
9131.00	88.950	179.280	7289.32	1279.42	-1279.48	399.01	40°14'00.531"N	104°49'15.639"W	2.41	
9223.00	90.150	178.540	7290.04	1371.39	-1371.46	400.76	40°13'59.622"N	104°49'15.617"W	1.53	
9315.00	89.720	178.010	7290.14	1463.35	-1463.42	403.53	40°13'58.713"N	104°49'15.581"W	0.74	
9406.00	90.060	179.090	7290.32	1554.32	-1554.38	405.83	40°13'57.814"N	104°49'15.551"W	1.24	
9497.00	89.530	178.310	7290.64	1645.30	-1645.36	407.89	40°13'56.915"N	104°49'15.525"W	1.04	
9589.00	88.020	178.680	7292.61	1737.24	-1737.30	410.31	40°13'56.007"N	104°49'15.494"W	1.69	
9680.00	88.940	180.550	7295.03	1828.20	-1828.26	410.92	40°13'55.108"N	104°49'15.486"W	2.29	
9772.00	90.240	180.890	7295.68	1920.19	-1920.25	409.76	40°13'54.199"N	104°49'15.501"W	1.46	
9864.00	88.980	179.630	7296.31	2012.18	-2012.25	409.35	40°13'53.290"N	104°49'15.506"W	1.94	
9955.00	88.920	180.130	7297.98	2103.17	-2103.23	409.54	40°13'52.391"N	104°49'15.504"W	0.55	
10047.00	87.680	179.160	7300.71	2195.12	-2195.19	410.11	40°13'51.482"N	104°49'15.496"W	1.71	
10138.00	88.790	180.230	7303.51	2286.07	-2286.14	410.59	40°13'50.583"N	104°49'15.490"W	1.69	
10229.00	89.350	180.510	7304.99	2377.06	-2377.12	410.00	40°13'49.684"N	104°49'15.498"W	0.69	
10315.00	89.840	182.070	7305.59	2463.03	-2463.10	408.07	40°13'48.835"N	104°49'15.523"W	1.90	
10400.00	91.040	181.360	7304.94	2547.99	-2548.05	405.52	40°13'47.995"N	104°49'15.556"W	1.64	
10485.00	90.060	181.340	7304.13	2632.96	-2633.03	403.52	40°13'47.155"N	104°49'15.581"W	1.15	
10570.00	89.260	181.470	7304.63	2717.93	-2718.00	401.44	40°13'46.316"N	104°49'15.608"W	0.95	
10656.00	90.640	180.860	7304.71	2803.91	-2803.98	399.69	40°13'45.466"N	104°49'15.631"W	1.75	
10741.00	91.530	182.220	7303.10	2888.87	-2888.93	397.40	40°13'44.627"N	104°49'15.660"W	1.91	
10826.00	90.210	181.060	7301.81	2973.82	-2973.88	394.97	40°13'43.787"N	104°49'15.692"W	2.07	
10911.00	90.030	182.090	7301.63	3058.79	-3058.85	392.64	40°13'42.947"N	104°49'15.722"W	1.23	
10996.00	90.000	178.360	7301.60	3143.77	-3143.83	392.30	40°13'42.108"N	104°49'15.726"W	4.39	
11081.00	90.300	178.220	7301.38	3228.73	-3228.79	394.84	40°13'41.268"N	104°49'15.693"W	0.39	
11166.00	88.860	178.350	7302.01	3313.69	-3313.75	397.38	40°13'40.429"N	104°49'15.661"W	1.70	
11252.00	89.720	177.990	7303.07	3399.64	-3399.70	400.13	40°13'39.579"N	104°49'15.625"W	1.08	
11337.00	90.430	178.660	7302.96	3484.60	-3484.66	402.61	40°13'38.740"N	104°49'15.593"W	1.15	
11422.00	90.360	178.500	7302.37	3569.57	-3569.63	404.72	40°13'37.900"N	104°49'15.566"W	0.21	
11507.00	90.550	178.760	7301.70	3654.54	-3654.61	406.75	40°13'37.060"N	104°49'15.540"W	0.38	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 36C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 36C-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH DATA (171 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11592.00	90.610	178.500	7300.84	3739.51	-3739.58	408.78	40°13'36.221"N	104°49'15.514"W	0.31	
11677.00	89.870	178.470	7300.48	3824.48	-3824.55	411.03	40°13'35.381"N	104°49'15.485"W	0.87	
11762.00	89.410	178.890	7301.02	3909.46	-3909.52	412.99	40°13'34.541"N	104°49'15.460"W	0.73	
11847.00	89.320	178.290	7301.96	3994.43	-3994.49	415.08	40°13'33.702"N	104°49'15.433"W	0.71	
11933.00	89.810	180.020	7302.61	4080.41	-4080.48	416.35	40°13'32.852"N	104°49'15.416"W	2.09	
12018.00	90.430	181.170	7302.43	4165.40	-4165.47	415.47	40°13'32.012"N	104°49'15.428"W	1.54	
12103.00	90.800	181.010	7301.52	4250.38	-4250.45	413.85	40°13'31.172"N	104°49'15.449"W	0.47	
12188.00	90.670	181.160	7300.43	4335.36	-4335.43	412.24	40°13'30.332"N	104°49'15.469"W	0.23	
12273.00	90.950	181.490	7299.23	4420.33	-4420.40	410.27	40°13'29.493"N	104°49'15.495"W	0.51	
12358.00	90.640	180.920	7298.05	4505.30	-4505.37	408.49	40°13'28.653"N	104°49'15.518"W	0.76	
12443.00	90.640	180.670	7297.10	4590.29	-4590.35	407.31	40°13'27.813"N	104°49'15.533"W	0.29	
12528.00	89.010	180.400	7297.36	4675.28	-4675.35	406.51	40°13'26.973"N	104°49'15.543"W	1.94	
12614.00	88.950	180.300	7298.89	4761.27	-4761.33	405.99	40°13'26.124"N	104°49'15.550"W	0.14	
12699.00	89.810	181.180	7299.81	4846.25	-4846.32	404.89	40°13'25.284"N	104°49'15.564"W	1.45	
12784.00	90.090	181.850	7299.88	4931.22	-4931.29	402.64	40°13'24.444"N	104°49'15.593"W	0.85	
12869.00	90.450	182.590	7299.48	5016.16	-5016.22	399.35	40°13'23.605"N	104°49'15.636"W	0.97	
12954.00	89.780	182.180	7299.31	5101.09	-5101.15	395.81	40°13'22.766"N	104°49'15.681"W	0.92	
13039.00	90.000	181.040	7299.48	5186.05	-5186.11	393.43	40°13'21.926"N	104°49'15.712"W	1.37	
13124.00	89.290	180.730	7300.00	5271.04	-5271.10	392.11	40°13'21.086"N	104°49'15.729"W	0.91	
13209.00	89.960	178.770	7300.56	5356.03	-5356.09	392.48	40°13'20.246"N	104°49'15.724"W	2.44	
13294.00	90.000	179.280	7300.59	5441.02	-5441.08	393.93	40°13'19.406"N	104°49'15.706"W	0.60	
13379.00	89.930	180.000	7300.64	5526.02	-5526.08	394.46	40°13'18.566"N	104°49'15.699"W	0.85	
13464.00	90.550	180.670	7300.29	5611.01	-5611.08	393.97	40°13'17.727"N	104°49'15.705"W	1.07	
13549.00	89.250	180.270	7300.43	5696.01	-5696.07	393.27	40°13'16.887"N	104°49'15.714"W	1.60	
13634.00	89.900	178.650	7301.06	5781.00	-5781.06	394.07	40°13'16.047"N	104°49'15.704"W	2.05	
13720.00	89.840	178.030	7301.26	5866.96	-5867.02	396.56	40°13'15.197"N	104°49'15.672"W	0.72	
13805.00	89.070	177.480	7302.07	5951.89	-5951.95	399.89	40°13'14.358"N	104°49'15.629"W	1.11	
13890.00	89.560	179.270	7303.08	6036.85	-6036.91	402.30	40°13'13.518"N	104°49'15.598"W	2.18	
13975.00	90.120	179.640	7303.32	6121.84	-6121.91	403.11	40°13'12.679"N	104°49'15.587"W	0.79	
14061.00	90.270	177.900	7303.03	6207.82	-6207.88	404.96	40°13'11.829"N	104°49'15.564"W	2.03	
14146.00	90.330	178.980	7302.58	6292.78	-6292.85	407.27	40°13'10.989"N	104°49'15.534"W	1.27	
14231.00	89.320	176.660	7302.84	6377.71	-6377.78	410.50	40°13'10.150"N	104°49'15.492"W	2.98	
14316.00	89.220	178.300	7303.93	6462.62	-6462.69	414.24	40°13'09.311"N	104°49'15.444"W	1.93	
14401.00	89.620	179.270	7304.79	6547.60	-6547.66	416.04	40°13'08.471"N	104°49'15.421"W	1.23	
14471.00	89.960	178.730	7305.04	6617.59	-6617.65	417.26	40°13'07.780"N	104°49'15.405"W	0.91	LAST BHI MWD+IFR SURVEY
14528.00	89.960	178.730	7305.08	6674.57	-6674.64	418.53	40°13'07.216"N	104°49'15.389"W	0.00	PROJECTION TO BIT

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 36C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 36C-18HZ AWB
Facility	SEC.07-T3N-R66W		

HOLE & CASING SECTIONS -

Ref Wellbore: HENRICKSON FEDERAL 36C-18HZ AWB Ref Wellpath: HENRICKSON FEDERAL 36C-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	16.00	1016.00	1000.00	16.00	1015.99	0.00	0.00	1.22	-3.72
9.625in Casing Surface	16.00	1016.00	1000.00	16.00	1015.99	0.00	0.00	1.22	-3.72
8.75in Open Hole	1016.00	7815.00	6799.00	1015.99	7288.24	1.22	-3.72	35.42	422.89
7in Casing Intermediate	16.00	7805.00	7789.00	16.00	7287.82	0.00	0.00	45.41	422.67
6.125in Open Hole	7815.00	14528.00	6713.00	7288.24	7305.08	35.42	422.89	-6674.64	418.53

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.07-T3N-R66W HARD LINES (460' SET BACKS)		4810.00	-147.87	-1265.59	3187895.01	1329743.58	40°14'11.713"N	104°49'37.103"W	polygon
SEC.07-T3N-R66W SECTION LINES		4810.00	-147.87	-1265.59	3187895.01	1329743.58	40°14'11.713"N	104°49'37.103"W	polygon
SEC.18-T3N-R66W HARD LINES (460' SET BACKS)		4810.00	-147.87	-1265.58	3187895.01	1329743.58	40°14'11.713"N	104°49'37.103"W	polygon
SEC.18-T3N-R66W SECTION LINES		4810.00	-11732.95	1487.95	3190736.85	1318180.40	40°12'17.230"N	104°49'01.607"W	polygon
HENRICKSON FEDERAL 36C-18HZ LANDBOX		7300.00	0.00	0.00	3189159.37	1329901.11	40°14'13.175"N	104°49'20.784"W	polygon
HENRICKSON FEDERAL 36C-18HZ BHL (460' FSL & 2485' FWL, SEC.18) REV-2		7300.00	-6700.95	407.00	3189617.54	1323203.77	40°13'06.956"N	104°49'15.537"W	point
HENRICKSON FEDERAL 36C-18HZ BHL ON PLAT (460' FSL & 2505' FWL, SEC.18) REV-1		7300.00	-6700.95	427.00	3189637.54	1323203.92	40°13'06.956"N	104°49'15.280"W	point

WELLPATH COMPOSITION -

Ref Wellbore: HENRICKSON FEDERAL 36C-18HZ AWB Ref Wellpath: HENRICKSON FEDERAL 36C-18HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	911.00	Generic gyro - continuous (Standard)	MS ENERGY SERVICES GYRO SURVEYS <116-911>	HENRICKSON FEDERAL 36C-18HZ
911.00	7758.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1086-7758>	HENRICKSON FEDERAL 36C-18HZ
7758.00	14471.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7849-14471>	HENRICKSON FEDERAL 36C-18HZ
14471.00	14528.00	Blind Drilling (std)	Projection to bit	HENRICKSON FEDERAL 36C-18HZ



Actual Wellpath Report

HENRICKSON FEDERAL 36C-18HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#29 HENRICKSON FEDERAL 36C-18HZ (1885' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 36C-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 36C-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	289.190	16.00	TIE ON
116.00	0.270	289.190	116.00	BEGIN GYRO SURVEYS
911.00	0.240	257.930	910.99	TIE ONTO GYRO SURVEYS
1086.00	0.480	223.520	1085.99	BEGIN BHI MWD+IFR SURVEYS
7805.00	87.355	178.730	7287.82	7" CASING POINT
14471.00	89.960	178.730	7305.04	LAST BHI MWD+IFR SURVEY
14528.00	89.960	178.730	7305.08	PROJECTION TO BIT