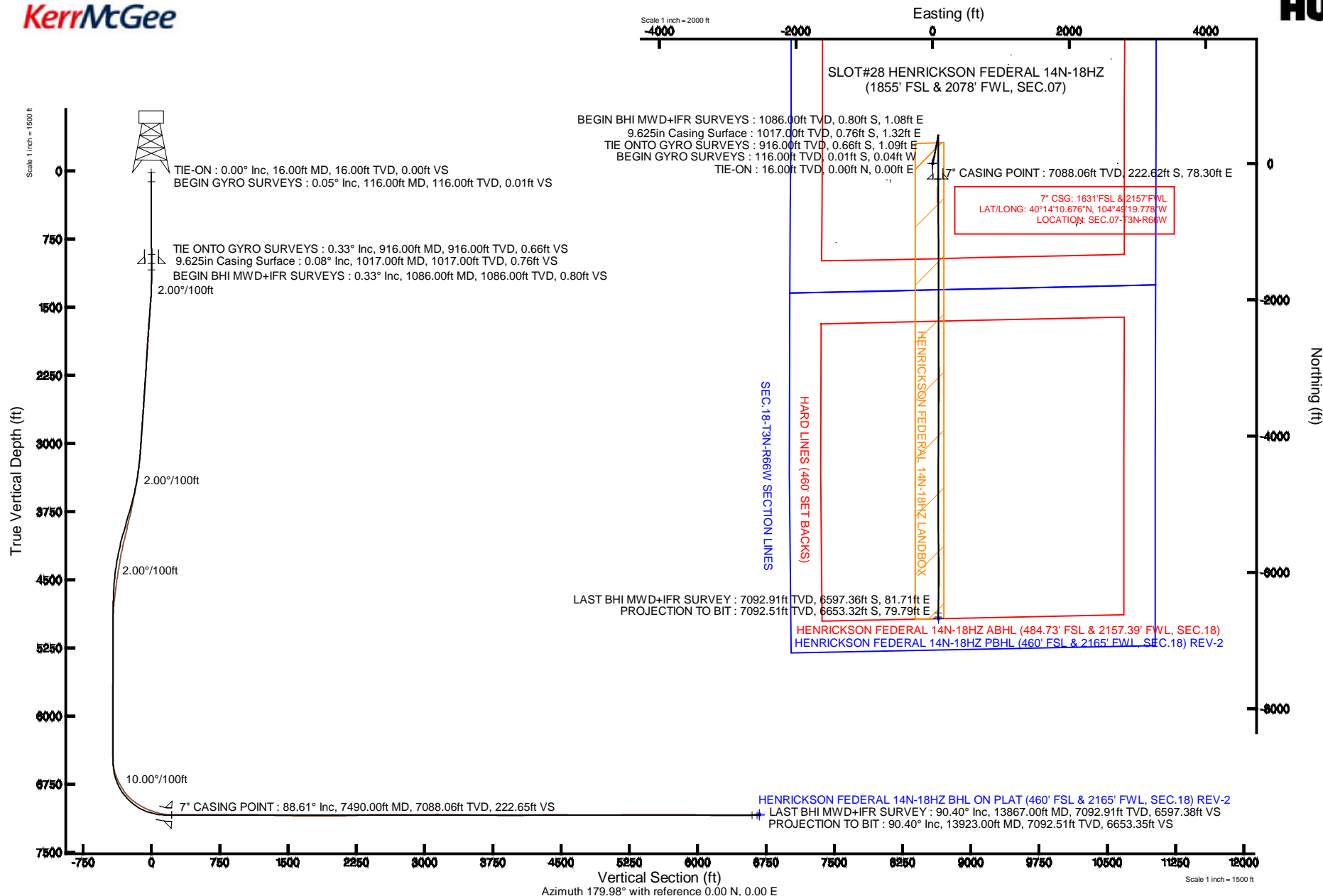


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 2078' FWL, SEC.07)
 Field: WELD COUNTY (KERR MCGEE) Well: HENRICKSON FEDERAL 14N-18HZ
 Facility: SEC.07-T3N-R66W Wellbore: HENRICKSON FEDERAL 14N-18HZ PWB

Plot reference wellpath is HENRICKSON FEDERAL 14N-18HZ (REV-C.0) PWP

True vertical depths are referenced to XTREME 20 (4810' 4794'GL + 16'KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 20 (4810' 4794'GL + 16'KB) (RKB)	North Reference: True north
XTREME 20 (4810' 4794'GL + 16'KB) (RKB) to Mean Sea Level: 4810 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 2078' FWL, SEC.07)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: nobled1 on 28/Oct/2013



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 14N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 14N-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 14:31
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/HENRICKSON_FEDERAL_14N-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	-1581.04	-1147.76	3189159.32	1329870.87	40°14'12.876"N	104°49'20.788"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	XTREME 20 (4810':4794'GL + 16'KB) (RKB) to Facility Vertical Datum	4810.00ft
Horizontal Reference Pt	Slot	XTREME 20 (4810':4794'GL + 16'KB) (RKB) to Mean Sea Level	4810.00ft
Vertical Reference Pt	XTREME 20 (4810':4794'GL + 16'KB) (RKB)	XTREME 20 (4810':4794'GL + 16'KB) (RKB) to Mud Line at Slot (SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 2078' FWL, SEC.07))	4810.00ft
MD Reference Pt	XTREME 20 (4810':4794'GL + 16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.98°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 14N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 14N-18HZ AWP
Facility	SEC.07-T3N-R66W		

WELLPATH DATA (172 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	256.070	0.00	0.00	0.00	0.00	40°14'12.876"N	104°49'20.788"W	0.00	
16.00	0.000	256.070	16.00	0.00	0.00	0.00	40°14'12.876"N	104°49'20.788"W	0.00	TIE-ON
116.00	0.050	256.070	116.00	0.01	-0.01	-0.04	40°14'12.876"N	104°49'20.788"W	0.05	BEGIN GYRO SURVEYS
216.00	0.150	0.010	216.00	-0.11	0.11	-0.08	40°14'12.877"N	104°49'20.789"W	0.17	
316.00	0.220	162.470	316.00	-0.06	0.06	-0.03	40°14'12.877"N	104°49'20.788"W	0.37	
416.00	0.060	213.040	416.00	0.17	-0.17	0.00	40°14'12.874"N	104°49'20.788"W	0.19	
516.00	0.070	184.280	516.00	0.27	-0.27	-0.03	40°14'12.873"N	104°49'20.788"W	0.03	
616.00	0.110	146.990	616.00	0.42	-0.42	0.02	40°14'12.872"N	104°49'20.787"W	0.07	
716.00	0.150	91.640	716.00	0.50	-0.50	0.20	40°14'12.871"N	104°49'20.785"W	0.13	
816.00	0.280	101.900	816.00	0.55	-0.55	0.57	40°14'12.871"N	104°49'20.780"W	0.14	
916.00	0.330	101.740	916.00	0.66	-0.66	1.09	40°14'12.869"N	104°49'20.774"W	0.05	TIE ONTO GYRO SURVEYS
1086.00	0.330	265.170	1086.00	0.80	-0.80	1.08	40°14'12.868"N	104°49'20.774"W	0.38	BEGIN BHI MWD+IFR SURVEYS
1180.00	0.320	287.870	1179.99	0.75	-0.75	0.56	40°14'12.869"N	104°49'20.780"W	0.14	
1274.00	1.320	9.690	1273.99	-0.40	0.40	0.50	40°14'12.880"N	104°49'20.781"W	1.40	
1368.00	3.100	14.410	1367.91	-3.93	3.93	1.31	40°14'12.915"N	104°49'20.771"W	1.90	
1462.00	5.010	10.410	1461.67	-10.43	10.43	2.68	40°14'12.979"N	104°49'20.753"W	2.05	
1557.00	4.820	3.370	1556.32	-18.49	18.49	3.67	40°14'13.059"N	104°49'20.740"W	0.67	
1647.00	4.520	0.690	1646.02	-25.81	25.82	3.93	40°14'13.131"N	104°49'20.737"W	0.41	
1739.00	4.350	357.900	1737.75	-32.93	32.93	3.85	40°14'13.201"N	104°49'20.738"W	0.30	
1830.00	4.140	351.100	1828.50	-39.62	39.62	3.21	40°14'13.268"N	104°49'20.746"W	0.60	
1922.00	3.410	2.810	1920.30	-45.63	45.64	2.84	40°14'13.327"N	104°49'20.751"W	1.15	
2013.00	3.110	28.460	2011.16	-50.51	50.51	4.14	40°14'13.375"N	104°49'20.734"W	1.62	
2104.00	3.170	29.600	2102.02	-54.86	54.87	6.56	40°14'13.418"N	104°49'20.703"W	0.10	
2196.00	2.900	24.310	2193.89	-59.20	59.20	8.78	40°14'13.461"N	104°49'20.674"W	0.42	
2288.00	3.770	22.590	2285.74	-64.11	64.11	10.90	40°14'13.510"N	104°49'20.647"W	0.95	
2379.00	4.140	27.430	2376.52	-69.79	69.79	13.56	40°14'13.566"N	104°49'20.613"W	0.55	
2471.00	3.560	25.110	2468.31	-75.32	75.32	16.30	40°14'13.620"N	104°49'20.577"W	0.65	
2563.00	4.430	20.890	2560.09	-81.22	81.23	18.78	40°14'13.679"N	104°49'20.545"W	1.00	
2655.00	4.660	18.900	2651.80	-88.08	88.09	21.26	40°14'13.746"N	104°49'20.513"W	0.30	
2747.00	4.700	17.880	2743.49	-95.20	95.21	23.63	40°14'13.817"N	104°49'20.483"W	0.10	
2838.00	4.600	16.800	2834.19	-102.24	102.25	25.83	40°14'13.886"N	104°49'20.455"W	0.15	
2930.00	4.500	16.180	2925.90	-109.24	109.25	27.90	40°14'13.956"N	104°49'20.428"W	0.12	
3020.00	4.240	13.050	3015.64	-115.87	115.88	29.63	40°14'14.021"N	104°49'20.405"W	0.39	
3113.00	4.970	5.400	3108.34	-123.23	123.24	30.79	40°14'14.094"N	104°49'20.391"W	1.02	
3204.00	5.980	9.450	3198.92	-131.83	131.84	31.94	40°14'14.179"N	104°49'20.376"W	1.19	
3296.00	6.970	7.310	3290.34	-142.09	142.10	33.44	40°14'14.280"N	104°49'20.356"W	1.11	
3381.00	8.740	9.660	3374.54	-153.58	153.59	35.18	40°14'14.394"N	104°49'20.334"W	2.12	
3466.00	10.320	9.400	3458.36	-167.45	167.47	37.50	40°14'14.531"N	104°49'20.304"W	1.86	
3551.00	11.230	9.220	3541.86	-183.13	183.15	40.07	40°14'14.686"N	104°49'20.271"W	1.07	
3636.00	11.380	8.530	3625.21	-199.60	199.61	42.64	40°14'14.849"N	104°49'20.238"W	0.24	
3721.00	11.660	10.850	3708.50	-216.32	216.34	45.50	40°14'15.014"N	104°49'20.201"W	0.64	
3806.00	12.600	12.710	3791.60	-233.80	233.82	49.16	40°14'15.187"N	104°49'20.154"W	1.20	
3891.00	14.370	12.140	3874.25	-253.16	253.18	53.42	40°14'15.378"N	104°49'20.099"W	2.09	
3977.00	14.200	11.760	3957.60	-273.92	273.94	57.81	40°14'15.583"N	104°49'20.042"W	0.23	
4062.00	13.590	11.540	4040.11	-293.91	293.93	61.93	40°14'15.781"N	104°49'19.989"W	0.72	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 14N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 14N-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH DATA (172 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4147.00	12.510	11.440	4122.91	-312.71	312.74	65.76	40°14'15.966"N	104°49'19.940"W	1.27	
4232.00	10.830	10.670	4206.15	-329.58	329.61	69.06	40°14'16.133"N	104°49'19.897"W	1.98	
4317.00	9.850	8.430	4289.77	-344.62	344.65	71.61	40°14'16.282"N	104°49'19.864"W	1.25	
4402.00	9.380	6.070	4373.58	-358.70	358.73	73.41	40°14'16.421"N	104°49'19.841"W	0.72	
4487.00	8.550	5.120	4457.54	-371.88	371.91	74.70	40°14'16.551"N	104°49'19.824"W	0.99	
4573.00	8.490	5.540	4542.59	-384.57	384.60	75.89	40°14'16.677"N	104°49'19.809"W	0.10	
4658.00	7.480	9.490	4626.76	-396.27	396.30	77.40	40°14'16.792"N	104°49'19.790"W	1.35	
4743.00	6.240	12.240	4711.15	-406.24	406.27	79.30	40°14'16.891"N	104°49'19.765"W	1.51	
4828.00	4.520	17.750	4795.78	-413.95	413.98	81.30	40°14'16.967"N	104°49'19.739"W	2.11	
4913.00	2.840	14.860	4880.60	-419.17	419.20	82.86	40°14'17.019"N	104°49'19.719"W	1.99	
4998.00	1.020	10.330	4965.55	-421.95	421.98	83.53	40°14'17.046"N	104°49'19.710"W	2.15	
5083.00	0.490	229.720	5050.54	-422.46	422.49	83.39	40°14'17.051"N	104°49'19.712"W	1.69	
5168.00	0.850	246.190	5135.54	-421.97	422.00	82.54	40°14'17.046"N	104°49'19.723"W	0.48	
5253.00	0.910	266.570	5220.53	-421.68	421.71	81.29	40°14'17.043"N	104°49'19.739"W	0.37	
5338.00	1.030	263.720	5305.52	-421.55	421.58	79.85	40°14'17.042"N	104°49'19.758"W	0.15	
5423.00	0.430	351.750	5390.51	-421.79	421.81	79.05	40°14'17.044"N	104°49'19.768"W	1.30	
5508.00	0.520	348.910	5475.51	-422.48	422.51	78.93	40°14'17.051"N	104°49'19.770"W	0.11	
5593.00	0.580	321.090	5560.50	-423.19	423.22	78.58	40°14'17.058"N	104°49'19.774"W	0.32	
5679.00	0.850	50.110	5646.50	-423.94	423.97	78.80	40°14'17.066"N	104°49'19.772"W	1.19	
5764.00	0.810	36.660	5731.49	-424.83	424.86	79.64	40°14'17.074"N	104°49'19.761"W	0.23	
5849.00	0.640	32.890	5816.48	-425.71	425.74	80.26	40°14'17.083"N	104°49'19.753"W	0.21	
5935.00	0.090	58.950	5902.48	-426.15	426.17	80.58	40°14'17.087"N	104°49'19.749"W	0.65	
6020.00	0.120	200.140	5987.48	-426.10	426.12	80.60	40°14'17.087"N	104°49'19.748"W	0.23	
6105.00	0.400	218.910	6072.48	-425.78	425.81	80.39	40°14'17.084"N	104°49'19.751"W	0.34	
6190.00	0.350	214.490	6157.48	-425.34	425.37	80.05	40°14'17.079"N	104°49'19.755"W	0.07	
6275.00	0.520	223.410	6242.48	-424.84	424.87	79.64	40°14'17.075"N	104°49'19.761"W	0.21	
6361.00	0.300	243.440	6328.47	-424.46	424.49	79.17	40°14'17.071"N	104°49'19.767"W	0.30	
6446.00	0.300	244.840	6413.47	-424.27	424.29	78.77	40°14'17.069"N	104°49'19.772"W	0.01	
6531.00	3.210	180.120	6498.43	-421.79	421.82	78.57	40°14'17.044"N	104°49'19.775"W	3.64	
6574.00	8.090	180.290	6541.20	-417.56	417.59	78.55	40°14'17.003"N	104°49'19.775"W	11.35	
6616.00	11.890	181.350	6582.56	-410.28	410.30	78.43	40°14'16.931"N	104°49'19.776"W	9.06	
6659.00	16.330	183.010	6624.25	-399.80	399.83	78.01	40°14'16.827"N	104°49'19.782"W	10.37	
6701.00	20.230	181.270	6664.12	-386.64	386.67	77.54	40°14'16.697"N	104°49'19.788"W	9.38	
6744.00	24.430	181.150	6703.89	-370.31	370.34	77.19	40°14'16.536"N	104°49'19.792"W	9.77	
6786.00	28.170	179.390	6741.54	-351.71	351.74	77.13	40°14'16.352"N	104°49'19.793"W	9.10	
6829.00	30.000	178.530	6779.11	-330.81	330.84	77.51	40°14'16.145"N	104°49'19.788"W	4.37	
6872.00	32.170	180.360	6815.94	-308.62	308.64	77.71	40°14'15.926"N	104°49'19.786"W	5.50	
6915.00	37.960	180.300	6851.12	-283.92	283.95	77.57	40°14'15.682"N	104°49'19.787"W	13.47	
6957.00	43.390	180.580	6882.96	-256.56	256.59	77.36	40°14'15.412"N	104°49'19.790"W	12.94	
7000.00	48.560	180.490	6912.83	-225.65	225.68	77.07	40°14'15.106"N	104°49'19.794"W	12.02	
7042.00	53.000	180.420	6939.38	-193.12	193.15	76.81	40°14'14.785"N	104°49'19.797"W	10.57	
7085.00	56.460	180.620	6964.21	-158.02	158.05	76.49	40°14'14.438"N	104°49'19.801"W	8.06	
7127.00	60.820	180.400	6986.06	-122.17	122.20	76.18	40°14'14.084"N	104°49'19.805"W	10.39	
7170.00	62.360	180.640	7006.52	-84.35	84.38	75.83	40°14'13.710"N	104°49'19.810"W	3.61	
7212.00	67.410	180.450	7024.34	-46.34	46.36	75.47	40°14'13.334"N	104°49'19.814"W	12.03	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 14N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 14N-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH DATA (172 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7255.00	70.080	179.610	7039.93	-6.27	6.29	75.45	40°14'12.938"N	104°49'19.815"W	6.47	
7297.00	71.760	179.340	7053.66	33.42	-33.40	75.82	40°14'12.546"N	104°49'19.810"W	4.05	
7340.00	75.870	179.400	7065.64	74.71	-74.68	76.27	40°14'12.138"N	104°49'19.804"W	9.56	
7382.00	77.480	179.010	7075.32	115.57	-115.55	76.84	40°14'11.734"N	104°49'19.797"W	3.94	
7425.00	82.560	178.780	7082.77	157.90	-157.87	77.66	40°14'11.316"N	104°49'19.786"W	11.83	
7446.00	84.010	178.880	7085.22	178.75	-178.72	78.08	40°14'11.110"N	104°49'19.781"W	6.92	
7490.00†	88.608	180.550	7088.06	222.65	-222.62	78.30	40°14'10.676"N	104°49'19.778"W	11.12	7" CASING POINT
7508.00	90.490	181.230	7088.20	240.64	-240.62	78.02	40°14'10.498"N	104°49'19.782"W	11.12	
7599.00	91.250	181.590	7086.82	331.60	-331.58	75.78	40°14'09.599"N	104°49'19.810"W	0.92	
7691.00	90.520	180.680	7085.39	423.57	-423.55	73.96	40°14'08.691"N	104°49'19.834"W	1.27	
7782.00	89.530	178.960	7085.35	514.57	-514.54	74.24	40°14'07.791"N	104°49'19.830"W	2.18	
7874.00	89.780	178.390	7085.91	606.54	-606.51	76.37	40°14'06.882"N	104°49'19.803"W	0.68	
7965.00	89.660	178.930	7086.35	697.52	-697.49	78.50	40°14'05.983"N	104°49'19.775"W	0.61	
8057.00	89.780	178.720	7086.80	789.50	-789.47	80.39	40°14'05.075"N	104°49'19.751"W	0.26	
8148.00	90.030	179.360	7086.95	880.48	-880.45	81.91	40°14'04.175"N	104°49'19.731"W	0.76	
8240.00	90.150	178.350	7086.81	972.46	-972.43	83.75	40°14'03.266"N	104°49'19.708"W	1.11	
8332.00	90.360	177.210	7086.40	1064.39	-1064.36	87.31	40°14'02.358"N	104°49'19.662"W	1.26	
8424.00	88.380	179.420	7087.41	1156.34	-1156.31	90.02	40°14'01.449"N	104°49'19.627"W	3.23	
8516.00	88.430	179.860	7089.97	1248.30	-1248.27	90.59	40°14'00.541"N	104°49'19.620"W	0.48	
8607.00	88.420	179.890	7092.47	1339.27	-1339.24	90.79	40°13'59.642"N	104°49'19.617"W	0.03	
8699.00	88.790	180.490	7094.71	1431.24	-1431.21	90.49	40°13'58.733"N	104°49'19.621"W	0.77	
8790.00	88.030	180.140	7097.24	1522.20	-1522.17	89.99	40°13'57.834"N	104°49'19.627"W	0.92	
8882.00	89.810	180.500	7098.97	1614.18	-1614.15	89.47	40°13'56.925"N	104°49'19.634"W	1.97	
8974.00	90.460	179.980	7098.76	1706.18	-1706.15	89.09	40°13'56.016"N	104°49'19.639"W	0.90	
9065.00	90.030	179.150	7098.37	1797.17	-1797.14	89.78	40°13'55.117"N	104°49'19.630"W	1.03	
9156.00	89.560	179.200	7098.69	1888.16	-1888.13	91.09	40°13'54.218"N	104°49'19.613"W	0.52	
9248.00	89.410	179.900	7099.52	1980.16	-1980.12	91.81	40°13'53.309"N	104°49'19.604"W	0.78	
9339.00	90.550	179.740	7099.55	2071.15	-2071.12	92.10	40°13'52.409"N	104°49'19.600"W	1.27	
9431.00	92.770	180.920	7096.89	2163.11	-2163.08	91.57	40°13'51.501"N	104°49'19.607"W	2.73	
9523.00	91.970	179.830	7093.08	2255.02	-2254.99	90.97	40°13'50.592"N	104°49'19.615"W	1.47	
9614.00	92.580	180.860	7089.47	2345.95	-2345.92	90.42	40°13'49.694"N	104°49'19.622"W	1.31	
9706.00	91.630	179.470	7086.09	2437.88	-2437.85	90.16	40°13'48.785"N	104°49'19.625"W	1.83	
9797.00	90.580	180.590	7084.33	2528.86	-2528.83	90.11	40°13'47.886"N	104°49'19.626"W	1.69	
9888.00	89.900	179.280	7083.95	2619.86	-2619.83	90.21	40°13'46.987"N	104°49'19.625"W	1.62	
9974.00	90.550	179.470	7083.62	2705.85	-2705.82	91.15	40°13'46.137"N	104°49'19.612"W	0.79	
10059.00	89.040	178.570	7083.92	2790.84	-2790.81	92.60	40°13'45.297"N	104°49'19.594"W	2.07	
10144.00	89.870	179.080	7084.73	2875.82	-2875.78	94.35	40°13'44.458"N	104°49'19.571"W	1.15	
10229.00	90.460	179.630	7084.48	2960.81	-2960.78	95.30	40°13'43.618"N	104°49'19.559"W	0.95	
10314.00	90.740	178.990	7083.59	3045.80	-3045.77	96.33	40°13'42.778"N	104°49'19.546"W	0.82	
10399.00	90.120	179.890	7082.96	3130.79	-3130.76	97.16	40°13'41.938"N	104°49'19.535"W	1.29	
10484.00	89.350	180.190	7083.35	3215.79	-3215.76	97.10	40°13'41.098"N	104°49'19.536"W	0.97	
10570.00	89.070	180.270	7084.53	3301.78	-3301.75	96.75	40°13'40.248"N	104°49'19.540"W	0.34	
10655.00	88.950	180.240	7086.00	3386.77	-3386.73	96.37	40°13'39.409"N	104°49'19.545"W	0.15	
10740.00	88.920	180.550	7087.58	3471.75	-3471.72	95.79	40°13'38.569"N	104°49'19.553"W	0.37	
10825.00	88.730	180.580	7089.33	3556.73	-3556.69	94.95	40°13'37.729"N	104°49'19.563"W	0.23	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 14N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 14N-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH DATA (172 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10910.00	88.700	180.360	7091.23	3641.70	-3641.67	94.25	40°13'36.889"N	104°49'19.572"W	0.26	
10995.00	89.660	181.050	7092.45	3726.69	-3726.65	93.21	40°13'36.049"N	104°49'19.586"W	1.39	
11080.00	89.500	180.640	7093.07	3811.67	-3811.64	91.95	40°13'35.210"N	104°49'19.602"W	0.52	
11166.00	89.750	181.210	7093.63	3897.66	-3897.63	90.57	40°13'34.360"N	104°49'19.620"W	0.72	
11251.00	89.530	180.560	7094.17	3982.65	-3982.62	89.25	40°13'33.520"N	104°49'19.637"W	0.81	
11336.00	91.290	181.340	7093.56	4067.63	-4067.60	87.84	40°13'32.680"N	104°49'19.655"W	2.26	
11421.00	91.110	180.600	7091.78	4152.60	-4152.57	86.41	40°13'31.841"N	104°49'19.674"W	0.90	
11506.00	91.780	182.030	7089.64	4237.54	-4237.51	84.46	40°13'31.001"N	104°49'19.699"W	1.86	
11591.00	91.660	181.380	7087.09	4322.47	-4322.44	81.93	40°13'30.162"N	104°49'19.731"W	0.78	
11676.00	89.930	180.260	7085.91	4407.44	-4407.42	80.71	40°13'29.322"N	104°49'19.747"W	2.42	
11761.00	89.200	179.940	7086.55	4492.44	-4492.41	80.56	40°13'28.482"N	104°49'19.749"W	0.94	
11846.00	88.760	179.190	7088.06	4577.42	-4577.40	81.21	40°13'27.642"N	104°49'19.741"W	1.02	
11932.00	88.950	180.410	7089.78	4663.41	-4663.38	81.51	40°13'26.793"N	104°49'19.737"W	1.44	
12017.00	89.280	179.890	7091.10	4748.39	-4748.37	81.29	40°13'25.953"N	104°49'19.740"W	0.72	
12102.00	90.240	180.410	7091.45	4833.39	-4833.36	81.06	40°13'25.113"N	104°49'19.743"W	1.28	
12187.00	90.150	180.340	7091.16	4918.39	-4918.36	80.51	40°13'24.273"N	104°49'19.750"W	0.13	
12272.00	89.930	181.140	7091.10	5003.38	-5003.35	79.41	40°13'23.433"N	104°49'19.764"W	0.98	
12358.00	91.320	179.060	7090.17	5089.37	-5089.34	79.26	40°13'22.583"N	104°49'19.766"W	2.91	
12443.00	91.740	180.000	7087.90	5174.34	-5174.31	79.96	40°13'21.744"N	104°49'19.757"W	1.21	
12528.00	90.450	180.040	7086.27	5259.32	-5259.29	79.93	40°13'20.904"N	104°49'19.757"W	1.52	
12613.00	91.100	179.450	7085.12	5344.31	-5344.28	80.30	40°13'20.064"N	104°49'19.752"W	1.03	
12698.00	89.530	177.900	7084.65	5429.28	-5429.25	82.27	40°13'19.225"N	104°49'19.727"W	2.60	
12783.00	90.030	177.140	7084.98	5514.20	-5514.17	85.95	40°13'18.385"N	104°49'19.680"W	1.07	
12868.00	90.000	178.130	7084.96	5599.13	-5599.10	89.46	40°13'17.546"N	104°49'19.634"W	1.17	
12953.00	90.240	178.080	7084.78	5684.08	-5684.05	92.27	40°13'16.707"N	104°49'19.598"W	0.29	
13038.00	90.730	177.600	7084.06	5769.02	-5768.99	95.47	40°13'15.867"N	104°49'19.557"W	0.81	
13124.00	89.130	177.580	7084.17	5854.94	-5854.91	99.09	40°13'15.018"N	104°49'19.510"W	1.86	
13209.00	87.620	179.710	7086.58	5939.88	-5939.84	101.10	40°13'14.179"N	104°49'19.484"W	3.07	
13294.00	87.840	181.370	7089.94	6024.80	-6024.77	100.30	40°13'13.340"N	104°49'19.495"W	1.97	
13379.00	88.670	181.280	7092.53	6109.74	-6109.71	98.33	40°13'12.500"N	104°49'19.520"W	0.98	
13465.00	88.330	182.120	7094.78	6195.67	-6195.64	95.78	40°13'11.651"N	104°49'19.553"W	1.05	
13550.00	90.430	182.710	7095.70	6280.58	-6280.55	92.20	40°13'10.812"N	104°49'19.599"W	2.57	
13635.00	90.580	180.860	7094.95	6365.53	-6365.50	89.55	40°13'09.973"N	104°49'19.633"W	2.18	
13720.00	90.520	182.180	7094.14	6450.50	-6450.47	87.30	40°13'09.133"N	104°49'19.662"W	1.55	
13806.00	90.490	182.260	7093.38	6536.43	-6536.40	83.97	40°13'08.284"N	104°49'19.705"W	0.10	
13867.00	90.400	181.970	7092.91	6597.38	-6597.36	81.71	40°13'07.681"N	104°49'19.734"W	0.50	LAST BHI MWD+IFR SURVEY
13923.00	90.400	181.970	7092.51	6653.35	-6653.32	79.79	40°13'07.128"N	104°49'19.759"W	0.00	PROJECTION TO BIT

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 14N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 14N-18HZ AWB
Facility	SEC.07-T3N-R66W		

HOLE & CASING SECTIONS -

Ref Wellbore: HENRICKSON FEDERAL 14N-18HZ AWB Ref Wellpath: HENRICKSON FEDERAL 14N-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	1017.00	1001.00	16.00	1017.00	0.00	0.00	-0.76	1.32
9.625in Casing Surface	16.00	1017.00	1001.00	16.00	1017.00	0.00	0.00	-0.76	1.32
8.75in Open Hole	1017.00	7500.00	6483.00	1017.00	7088.21	-0.76	1.32	-232.62	78.17
7in Casing Intermediate	16.00	7490.00	7474.00	16.00	7088.06	0.00	0.00	-222.62	78.30
6.125in Open Hole	7500.00	13923.00	6423.00	7088.21	7092.51	-232.62	78.17	-6653.32	79.79

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	-117.64	-1265.31	3187895.01	1329743.58	40°14'11.713"N	104°49'37.103"W	polygon
SEC.07-T3N-R66W SECTION LINES		4810.00	-117.64	-1265.31	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	-117.64	-1265.30	3187895.01	1329743.58	40°14'11.713"N	104°49'37.103"W	polygon
SEC.18-T3N-R66W SECTION LINES		4810.00	-11702.71	1488.23	3190736.85	1318180.40	40°12'17.230"N	104°49'01.607"W	polygon
HENRICKSON FEDERAL 14N-18HZ BHL ON PLAT (460' FSL & 2165' FWL, SEC.18) REV-1		7080.00	-6678.01	87.41	3189297.75	1323194.03	40°13'06.884"N	104°49'19.661"W	point
HENRICKSON FEDERAL 14N-18HZ BHL ON PLAT (460' FSL & 2165' FWL, SEC.18) REV-2		7089.00	-6678.05	87.40	3189297.74	1323193.99	40°13'06.884"N	104°49'19.661"W	point
HENRICKSON FEDERAL 14N-18HZ LANDBOX		7089.00	0.00	0.00	3189159.32	1329870.87	40°14'12.876"N	104°49'20.788"W	polygon

WELLPATH COMPOSITION -

Ref Wellbore: HENRICKSON FEDERAL 14N-18HZ AWP Ref Wellpath: HENRICKSON FEDERAL 14N-18HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	916.00	Generic gyro - continuous (Standard)	MS GYRODATA SURVEYS <116-916>	HENRICKSON FEDERAL 14N-18HZ AWP
916.00	7446.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1086-7446>	HENRICKSON FEDERAL 14N-18HZ AWP
7446.00	13867.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7508-13867>	HENRICKSON FEDERAL 14N-18HZ AWP
13867.00	13923.00	Blind Drilling (std)	Projection to bit	HENRICKSON FEDERAL 14N-18HZ AWP

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#28 HENRICKSON FEDERAL 14N-18HZ (1855' FSL & 20
Area	COLORADO	Well	HENRICKSON FEDERAL 14N-18HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HENRICKSON FEDERAL 14N-18HZ AWB
Facility	SEC.07-T3N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	256.070	16.00	TIE-ON
116.00	0.050	256.070	116.00	BEGIN GYRO SURVEYS
916.00	0.330	101.740	916.00	TIE ONTO GYRO SURVEYS
1086.00	0.330	265.170	1086.00	BEGIN BHI MWD+IFR SURVEYS
7490.00	88.608	180.550	7088.06	7" CASING POINT
13867.00	90.400	181.970	7092.91	LAST BHI MWD+IFR SURVEY
13923.00	90.400	181.970	7092.51	PROJECTION TO BIT