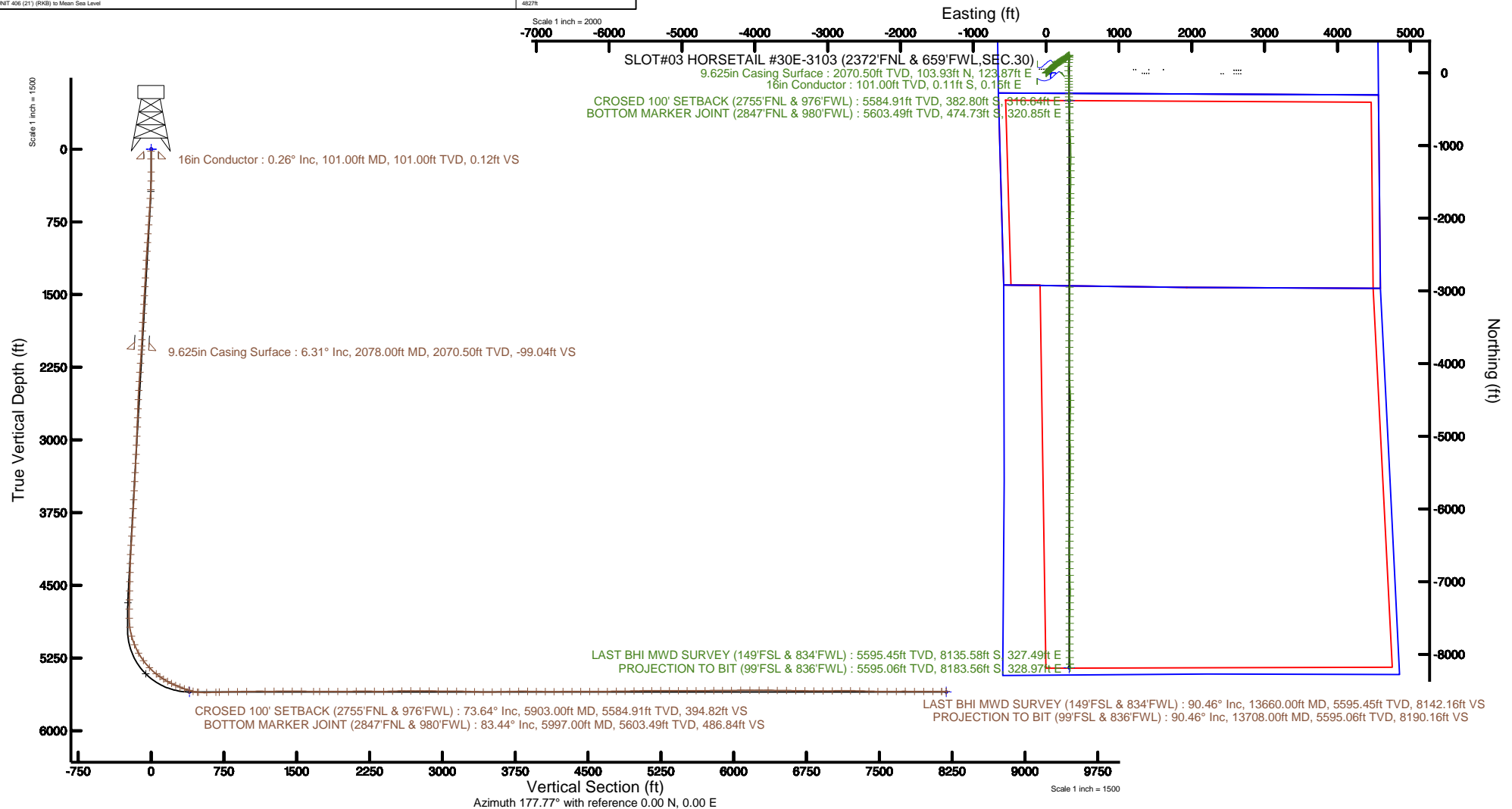


Location:	COLORADO	Slot:	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL,SEC.30)
Field:	WELD COUNTY	Well:	HORSETAIL #30E-3103
Facility:	SEC.30-T10N-R57W	Wellbore:	HORSETAIL #30E-3103 PWB

Plot reference wellpath is HORSETAIL #306-3103 (REV-A-0) PWP	Grid System: NAD83 / Lambert Conformal Spher. Northern Zone (R20) US feet
True vertical depths are referenced to UNIT 406 (21) (RKB)	* = Wellpath was transformed from a different geoidic datum
Measured depths are referenced to UNIT 406 (21) (RKB)	North Reference: True north
UNIT 406 (21) (RKB) to Mean Sea Level: 4827 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOTH03 HORSETAIL #306-3103 (2372FT & 659FWLSEC.30): 0 feet	Depths are in feet
Coordinates are in feet referenced to Grid	Created by: cookdam on 2017-01-19
	Database: WA_DEN_Denver_Dein



Facility Name				Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
SEC.30-T10N-R5FW				3470345.811	1542643.145	40°48'38.047"N	103°48'02.880"W
Spot		Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
		0.00	-59.98	3470289.844	1542641.996	40°48'38.047"N	103°48'03.660"W
SLOT#03 HORSETAIL #30E (1/2327FNL & 659FWL,SEC.30) UNIT 406 (21) (RKB) to Mud line (At Slot: SLOT#03 HORSETAIL #30E-1/03 (2327FNL & 659FWL,SEC.30))							482728
Mean Sea Level to Mud line (At Slot: SLOT#03 HORSETAIL #30E-1/03 (2327FNL & 659FWL,SEC.30))							0ft
UNIT 406 (21) (RKB) to Mean Sea Level							482728







# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 1 of 9



## REFERENCE WELLPATH IDENTIFICATION

Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL,SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Cookdanm
Scale	1.000005	Report Generated	1/19/17 at 11:42:10 AM
Convergence at slot	1.10° East	Database/Source file	WA_DEN_Denver_Defn/HORSETAIL_#30E-3103_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	-59.98	3470289.84	1542642.00	40°48'38.040"N	103°48'03.660"W
Facility Reference Pt			3470349.81	1542643.15	40°48'38.040"N	103°48'02.880"W
Field Reference Pt			3471270.16	1558347.59	40°51'13.010"N	103°47'46.990"W

## WELLPATH DATUM

Calculation method	Minimum curvature	UNIT 406 (21') (RKB) to Facility Vertical Datum	4827.00ft
Horizontal Reference Pt	Slot	UNIT 406 (21') (RKB) to Mean Sea Level	4827.00ft
Vertical Reference Pt	UNIT 406 (21') (RKB)	UNIT 406 (21') (RKB) to Mud Line at Slot (SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL,SEC.30))	4827.00ft
MD Reference Pt	UNIT 406 (21') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	177.77°





# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 2 of 9



## REFERENCE WELLPATH IDENTIFICATION

Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL,SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

## WELLPATH DATA (155 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	127.790	0.00	0.00	0.00	0.00	0.00	
21.00	0.000	127.790	21.00	0.00	0.00	0.00	0.00	
237.00	0.710	127.790	236.99	0.86	-0.82	1.06	0.33	
328.00	2.340	58.270	327.96	0.31	-0.19	3.08	2.41	
419.00	4.030	51.570	418.82	-2.50	2.78	7.17	1.90	
510.00	5.730	48.650	509.49	-7.25	7.77	13.08	1.89	
601.00	5.940	50.190	600.02	-12.99	13.78	20.11	0.29	
693.00	5.430	46.650	691.56	-18.76	19.82	26.93	0.67	
784.00	5.200	43.050	782.17	-24.49	25.79	32.88	0.45	
876.00	5.430	37.970	873.78	-30.75	32.26	38.40	0.57	
967.00	5.480	47.650	964.37	-36.84	38.59	44.26	1.01	
1058.00	5.220	45.380	1054.97	-42.43	44.42	50.42	0.37	
1150.00	5.170	43.210	1146.59	-48.16	50.38	56.24	0.22	
1241.00	5.400	52.880	1237.21	-53.48	55.95	62.46	1.01	
1333.00	5.440	54.070	1328.80	-58.38	61.13	69.44	0.13	
1424.00	5.870	54.690	1419.35	-63.31	66.35	76.73	0.48	
1516.00	6.160	53.620	1510.85	-68.65	71.99	84.55	0.34	
1607.00	5.960	54.000	1601.34	-74.02	77.67	92.30	0.22	
1699.00	5.400	49.090	1692.89	-79.38	83.31	99.44	0.81	
1792.00	4.880	45.770	1785.51	-84.76	88.93	105.58	0.64	
1883.00	3.710	46.060	1876.26	-89.31	93.68	110.47	1.29	
1973.00	4.760	54.780	1966.01	-93.28	97.85	115.62	1.37	
2040.00	5.880	53.290	2032.72	-96.74	101.51	120.64	1.68	
2124.00	6.840	52.500	2116.20	-102.06	107.12	128.06	1.15	
2218.00	6.790	51.480	2209.54	-108.58	113.99	136.85	0.14	
2312.00	6.180	46.870	2302.94	-115.19	120.91	144.89	0.85	
2406.00	5.220	45.310	2396.47	-121.39	127.38	151.62	1.03	
2500.00	4.990	46.500	2490.10	-126.97	133.20	157.63	0.27	
2595.00	4.760	60.800	2584.76	-131.48	137.97	164.06	1.30	
2690.00	4.360	56.430	2679.46	-135.15	141.89	170.51	0.56	





# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 3 of 9



## REFERENCE WELLPATH IDENTIFICATION

Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL,SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

## WELLPATH DATA (155 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2784.00	4.060	58.860	2773.20	-138.62	145.58	176.34	0.37	
2878.00	5.680	59.310	2866.86	-142.44	149.68	183.19	1.72	
2973.00	5.140	59.250	2961.44	-146.72	154.25	190.89	0.57	
3067.00	4.080	49.570	3055.13	-150.79	158.58	197.05	1.39	
3161.00	4.230	53.070	3148.89	-154.84	162.83	202.37	0.31	
3255.00	6.260	61.420	3242.49	-159.08	167.36	209.64	2.30	
3350.00	6.140	59.990	3336.93	-163.75	172.38	218.59	0.21	
3444.00	6.230	59.600	3430.39	-168.50	177.48	227.34	0.11	
3538.00	6.460	60.920	3523.81	-173.30	182.63	236.36	0.29	
3632.00	6.280	61.030	3617.23	-178.00	187.69	245.48	0.19	
3726.00	6.460	57.170	3710.65	-183.01	193.04	254.42	0.49	
3821.00	5.210	48.750	3805.16	-188.44	198.79	262.16	1.59	
3915.00	4.220	38.250	3898.84	-193.76	204.32	267.51	1.39	
4010.00	5.340	47.850	3993.51	-199.26	210.03	272.95	1.44	
4104.00	5.160	48.050	4087.12	-204.77	215.79	279.34	0.19	
4199.00	4.910	53.120	4181.75	-209.81	221.09	285.76	0.54	
4292.00	4.720	60.020	4274.42	-213.85	225.39	292.26	0.65	
4386.00	4.700	68.430	4368.11	-216.93	228.73	299.19	0.73	
4481.00	4.400	74.390	4462.81	-219.06	231.15	306.32	0.59	
4575.00	2.590	50.100	4556.63	-221.19	233.48	311.43	2.45	
4669.00	2.050	57.510	4650.56	-223.34	235.74	314.47	0.66	
4764.00	1.470	55.550	4745.51	-224.85	237.35	316.91	0.61	
4858.00	1.230	119.500	4839.49	-224.96	237.53	318.78	1.54	
4952.00	7.000	187.260	4933.23	-218.77	231.35	318.94	7.06	
5047.00	15.280	178.740	5026.37	-200.51	213.06	318.48	8.86	
5140.00	23.260	185.170	5114.10	-170.00	182.46	317.09	8.87	
5235.00	29.140	188.150	5199.30	-128.60	140.85	312.12	6.34	
5329.00	37.450	184.630	5277.81	-77.62	89.61	306.56	9.07	
5423.00	42.870	176.610	5349.67	-17.19	29.12	306.14	7.96	
5518.00	51.370	177.550	5414.26	52.35	-40.34	309.64	8.98	





# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 4 of 9



## REFERENCE WELLPATH IDENTIFICATION

Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL, SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

## WELLPATH DATA (155 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5565.00	55.470	178.410	5442.26	90.08	-78.05	310.97	8.85	
5612.00	57.490	178.910	5468.21	129.26	-117.22	311.88	4.39	
5659.00	61.910	179.670	5491.92	169.81	-157.79	312.38	9.51	
5706.00	63.020	179.930	5513.65	211.46	-199.46	312.52	2.41	
5753.00	67.320	179.440	5533.38	254.09	-242.11	312.76	9.20	
5801.00	68.020	179.820	5551.62	298.46	-286.51	313.05	1.63	
5848.00	71.110	178.200	5568.03	342.49	-330.54	313.81	7.32	
5895.00	72.780	175.920	5582.59	387.16	-375.16	316.11	5.82	
5903.00†	73.637	176.208	5584.91	394.82	-382.80	316.64	11.25	CROSED 100' SETBACK (2755'FNL & 976'FWL)
5942.00	77.820	177.580	5594.52	432.60	-420.53	318.68	11.25	
5989.00	82.580	177.780	5602.52	478.90	-466.79	320.55	10.14	
5997.00†	83.442	177.932	5603.49	486.84	-474.73	320.85	10.94	BOTTOM MARKER JOINT (2847'FNL & 980'FWL)
6083.00	92.710	179.550	5606.37	572.69	-560.56	322.73	10.94	
6178.00	91.290	179.010	5603.06	667.59	-655.49	323.93	1.60	
6212.00	91.360	178.800	5602.27	701.58	-689.48	324.58	0.65	
6307.00	91.940	178.170	5599.54	796.53	-784.41	327.09	0.90	
6401.00	90.740	177.910	5597.34	890.50	-878.32	330.30	1.31	
6496.00	91.170	177.370	5595.75	985.49	-973.23	334.21	0.73	
6684.00	89.600	180.050	5594.49	1173.43	-1161.15	338.44	1.65	
6778.00	90.370	182.410	5594.52	1267.26	-1255.12	336.43	2.64	
6871.00	90.060	179.600	5594.17	1360.10	-1348.10	334.79	3.04	
6966.00	89.940	179.280	5594.17	1455.06	-1443.10	335.72	0.36	
7060.00	89.910	180.690	5594.29	1548.98	-1537.09	335.75	1.50	
7186.00	89.570	180.320	5594.86	1674.84	-1663.09	334.64	0.40	
7247.00	89.320	179.740	5595.45	1735.79	-1724.08	334.60	1.04	
7341.00	89.510	181.110	5596.41	1829.68	-1818.07	333.91	1.47	
7435.00	90.370	180.870	5596.51	1923.53	-1912.06	332.28	0.95	
7530.00	90.950	180.390	5595.42	2018.41	-2007.05	331.24	0.79	
7624.00	91.420	179.650	5593.47	2112.31	-2101.02	331.21	0.93	
7718.00	89.410	179.980	5592.79	2206.25	-2195.02	331.51	2.17	





# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 5 of 9



## REFERENCE WELLPATH IDENTIFICATION

Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL,SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

## WELLPATH DATA (155 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7812.00	88.180	180.380	5594.77	2300.14	-2288.99	331.21	1.38	
7907.00	90.950	181.780	5595.49	2394.97	-2383.96	329.42	3.27	
8000.00	91.850	181.410	5593.22	2487.73	-2476.90	326.84	1.05	
8094.00	91.510	179.360	5590.46	2581.59	-2570.85	326.21	2.21	
8188.00	89.690	179.240	5589.48	2675.55	-2664.83	327.35	1.94	
8283.00	88.770	180.670	5590.75	2770.47	-2759.82	327.43	1.79	
8377.00	90.400	181.610	5591.43	2864.30	-2853.80	325.56	2.00	
8471.00	88.610	180.290	5592.25	2958.14	-2947.77	324.00	2.37	
8566.00	89.480	179.930	5593.83	3053.05	-3042.76	323.82	0.99	
8660.00	90.520	180.730	5593.83	3146.95	-3136.76	323.28	1.40	
8754.00	88.000	180.300	5595.04	3240.83	-3230.74	322.43	2.72	
8845.00	87.940	179.580	5598.27	3331.71	-3321.68	322.53	0.79	
8935.00	89.780	180.760	5600.06	3421.60	-3411.66	322.26	2.43	
9026.00	90.490	180.840	5599.84	3512.48	-3502.65	320.99	0.79	
9117.00	91.200	180.280	5598.50	3603.36	-3593.63	320.10	0.99	
9208.00	91.790	179.890	5596.13	3694.25	-3684.60	319.96	0.78	
9299.00	90.620	180.140	5594.21	3785.16	-3775.58	319.94	1.31	
9391.00	88.920	179.980	5594.58	3877.08	-3867.57	319.84	1.86	
9483.00	89.350	179.920	5595.97	3969.01	-3959.56	319.92	0.47	
9574.00	89.010	179.080	5597.27	4059.95	-4050.55	320.72	1.00	
9665.00	90.590	179.150	5597.59	4150.93	-4141.53	322.12	1.74	
9757.00	90.620	178.350	5596.62	4242.91	-4233.51	324.13	0.87	
9848.00	90.280	177.980	5595.91	4333.90	-4324.46	327.04	0.55	
9939.00	89.720	176.990	5595.91	4424.90	-4415.37	331.04	1.25	
10031.00	89.570	178.960	5596.48	4516.89	-4507.30	334.29	2.15	
10122.00	90.770	181.760	5596.21	4607.79	-4598.29	333.72	3.35	
10214.00	90.800	181.330	5594.95	4699.58	-4690.25	331.24	0.47	
10306.00	90.770	181.080	5593.69	4791.41	-4782.22	329.30	0.27	
10397.00	90.650	180.820	5592.56	4882.26	-4873.20	327.79	0.31	
10490.00	91.140	180.510	5591.10	4975.13	-4966.18	326.71	0.62	





# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 6 of 9



## REFERENCE WELLPATH IDENTIFICATION

Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL,SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

## WELLPATH DATA (155 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10582.00	91.140	178.640	5589.27	5067.06	-5058.16	327.40	2.03	
10672.00	90.950	178.310	5587.63	5157.04	-5148.11	329.79	0.42	
10763.00	89.880	180.590	5586.97	5247.99	-5239.10	330.66	2.77	
10854.00	89.380	179.910	5587.56	5338.90	-5330.09	330.27	0.93	
10945.00	89.540	179.790	5588.42	5429.84	-5421.09	330.51	0.22	
11037.00	89.850	180.860	5588.91	5521.74	-5513.08	329.98	1.21	
11128.00	90.220	180.630	5588.85	5612.62	-5604.08	328.80	0.48	
11220.00	91.230	181.660	5587.69	5704.45	-5696.05	326.96	1.57	
11311.00	90.030	181.090	5586.69	5795.27	-5787.01	324.78	1.46	
11402.00	90.460	180.800	5586.30	5886.12	-5878.00	323.28	0.57	
11494.00	90.800	179.800	5585.29	5978.03	-5969.99	322.80	1.15	
11589.00	91.480	179.570	5583.40	6072.96	-6064.97	323.32	0.76	
11683.00	89.140	179.840	5582.89	6166.89	-6158.96	323.80	2.51	
11778.00	89.410	180.910	5584.09	6261.79	-6253.95	323.18	1.16	
11872.00	90.340	180.400	5584.30	6355.67	-6347.94	322.11	1.13	
11967.00	88.920	180.150	5584.91	6450.57	-6442.94	321.65	1.52	
12062.00	89.380	180.500	5586.32	6545.47	-6537.93	321.11	0.61	
12156.00	89.050	179.370	5587.61	6639.39	-6631.91	321.22	1.25	
12250.00	88.920	179.110	5589.27	6733.34	-6725.89	322.46	0.31	
12344.00	88.890	179.240	5591.07	6827.30	-6819.86	323.82	0.14	
12439.00	90.650	178.910	5591.45	6922.27	-6914.85	325.35	1.88	
12532.00	91.350	178.620	5589.83	7015.24	-7007.81	327.36	0.81	
12627.00	90.430	179.490	5588.35	7110.20	-7102.78	328.92	1.33	
12721.00	89.380	180.880	5588.51	7204.12	-7196.78	328.62	1.85	
12815.00	88.340	181.150	5590.38	7297.95	-7290.75	326.95	1.14	
12910.00	88.550	180.470	5592.95	7392.78	-7385.70	325.61	0.75	
13004.00	88.710	180.250	5595.20	7486.65	-7479.67	325.02	0.29	
13098.00	90.590	179.910	5595.78	7580.57	-7573.67	324.89	2.03	
13193.00	90.550	180.170	5594.83	7675.49	-7668.66	324.82	0.28	
13286.00	89.970	180.700	5594.41	7768.39	-7761.66	324.12	0.84	





# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 7 of 9



## REFERENCE WELLPATH IDENTIFICATION

Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL, SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

## WELLPATH DATA (155 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
13381.00	89.170	180.470	5595.12	7863.27	-7856.65	323.15	0.88	
13475.00	89.600	179.590	5596.13	7957.19	-7950.64	323.10	1.04	
13569.00	90.400	178.360	5596.13	8051.17	-8044.62	324.78	1.56	
13660.00	90.460	178.230	5595.45	8142.16	-8135.58	327.49	0.16	LAST BHI MWD SURVEY (149'FSL & 834'FWL)
13708.00	90.460	178.230	5595.06	8190.16	-8183.56	328.97	0.00	PROJECTION TO BIT (99'FSL & 836'FWL)

## HOLE & CASING SECTIONS - Ref Wellbore: HORSETAIL #30E-3103 AWB Ref Wellpath: HORSETAIL #30E-3103 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]
16in Conductor	21.00	101.00	80.00	21.00	101.00	0.00	0.00	-0.11	0.15
13.5in Open Hole	21.00	2040.00	2019.00	21.00	2032.72	0.00	0.00	101.51	120.64
9.625in Casing Surface	21.00	2078.00	2057.00	21.00	2070.50	0.00	0.00	103.93	123.87
8.5in Open Hole	2040.00	13708.00	11668.00	2032.72	5595.06	101.51	120.64	-8183.56	328.97





# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 8 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL,SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC. 30-T10N-R57W NORTHERN	0.00	0.00	59.98	3470349.81	1542643.15	40°48'38.040"N	103°48'02.880"W	polygon
SEC. 30-T10N-R57W SOUTHERN	0.00	0.00	59.98	3470349.81	1542643.15	40°48'38.040"N	103°48'02.880"W	polygon
SEC. 31-T10N-R57W	0.00	0.00	59.98	3470349.81	1542643.15	40°48'38.040"N	103°48'02.880"W	polygon
HORSETAIL #30E-3103 BHL ON PLAT (NIO-A, 100'FSL & 825'FWL,SEC.31,REV-1)	5600.00	-8184.42	318.45	3470765.04	1534465.16	40°47'17.170"N	103°47'59.520"W	point
HORSETAIL #30E-3103 LANDING REV-1 (2541'FSL & 978'FWL,SEC.30)	5600.00	-383.00	318.45	3470615.58	1542265.17	40°48'34.256"N	103°47'59.519"W	point
HORSETAIL #30E SOUTHERN SETBACKS (100' N/S/E 100' & 500' W)	5606.00	0.00	59.98	3470349.81	1542643.15	40°48'38.040"N	103°48'02.880"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: HORSETAIL #30E-3103 AWB				Ref Wellpath: HORSETAIL #30E-3103 AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore
21.00	2040.00	Custom BHI NaviTrak (IFR1, Standard Rotating, SAG) (Rockies 0.03Gt model)	BHI NAVITRAK MWD ROCKIES GT, SURCON IFR SAG 13 1/2"<237-2040>		HORSETAIL #30E-3103 AWB
2040.00	13660.00	Custom BHI NaviTrak (IFR1, Standard Rotating, SAG) (Rockies 0.03Gt model)	BHI NAVITRAK MWD ROCKIES GT, SURCON IFR SAG <2124-13660>		HORSETAIL #30E-3103 AWB
13660.00	13708.00	Blind Drilling (std)	Projection to bit		HORSETAIL #30E-3103 AWB





# Actual Wellpath Report

HORSETAIL #30E-3103 AWP

Page 9 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	WHITING OIL & GAS CORPORATION	Slot	SLOT#03 HORSETAIL #30E-3103 (2372'FNL & 659'FWL, SEC.30)
Area	COLORADO	Well	HORSETAIL #30E-3103
Field	WELD COUNTY	Wellbore	HORSETAIL #30E-3103 AWB
Facility	SEC.30-T10N-R57W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
5903.00	73.637	176.208	5584.91	CROSED 100' SETBACK (2755'FNL & 976'FWL)
5997.00	83.442	177.932	5603.49	BOTTOM MARKER JOINT (2847'FNL & 980'FWL)
13660.00	90.460	178.230	5595.45	LAST BHI MWD SURVEY (149'FSL & 834'FWL)
13708.00	90.460	178.230	5595.06	PROJECTION TO BIT (99'FSL & 836'FWL)