





# Actual Wellpath Report

NORTH PLATTE K21-O24-34HC AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 NORTH PLATTE K21-O24-34HC (1153'FSL & 2472'FWL, SEC.27)
Area	COLORADO	Well	NORTH PLATTE K21-O24-34HC
Field	WELD COUNTY	Wellbore	NORTH PLATTE K21-O24-34HC AWB
Facility	SEC.27-T05N-R63W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Ingmjmr
Scale	0.999959	Report Generated	11/12/2015 at 1:50:26 PM
Convergence at slot	0.70° East	Database/Source file	WA_DEN_Denver_Defn/NORTH_PLATTE_K21-O24-34HC_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	15.67	10.34	3300263.39	1378138.32	40°21'58.979"N	104°25'20.650"W
Facility Reference Pt			3300253.24	1378122.53	40°21'58.824"N	104°25'20.784"W
Field Reference Pt			3335925.10	1457282.25	40°34'56.460"N	104°17'26.016"W

## WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 22 (17'KB) (RKB) to Facility Vertical Datum	4558.00ft
Horizontal Reference Pt	Slot	XTREME 22 (17'KB) (RKB) to Mean Sea Level	4558.00ft
Vertical Reference Pt	XTREME 22 (17'KB) (RKB)	XTREME 22 (17'KB) (RKB) to Mud Line at Slot (SLOT#02 NORTH PLATTE K21-O24-34HC (1153'FSL & 2472'FWL, SEC.27))	4558.00ft
MD Reference Pt	XTREME 22 (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	182.43°



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Field	WELD COUNTY	Wellbore	NORTH PLATTE K21-O24-34HC AWB
Facility	SEC.27-T05N-R63W		

## WELLPATH DATA (102 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	245.340	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	245.340	17.00	0.00	0.00	0.00	0.00	
246.00	0.310	245.340	246.00	0.28	-0.26	-0.56	0.14	FIRST BHI MWD SURVEY
521.00	0.440	338.290	520.99	-0.34	0.41	-1.63	0.20	
992.00	0.710	26.430	991.97	-4.66	4.71	-1.00	0.11	
1181.00	0.620	177.160	1180.97	-4.71	4.73	-0.43	0.68	
1620.00	0.800	227.050	1619.94	-0.16	0.27	-2.55	0.14	
1751.00	0.620	199.270	1750.93	1.17	-1.02	-3.46	0.29	
1846.00	1.490	188.550	1845.91	2.89	-2.73	-3.81	0.94	
1940.00	2.780	227.040	1939.85	5.72	-5.49	-5.66	1.98	
2034.00	4.260	222.140	2033.67	10.03	-9.63	-9.67	1.61	
2129.00	6.440	214.680	2128.25	17.25	-16.63	-15.07	2.40	
2223.00	8.310	204.900	2221.47	27.99	-27.13	-20.93	2.39	
2317.00	9.960	194.210	2314.28	42.23	-41.17	-25.79	2.51	
2411.00	11.330	190.900	2406.66	59.32	-58.12	-29.53	1.60	
2506.00	12.680	189.430	2499.59	78.90	-77.57	-33.00	1.46	
2600.00	15.850	193.140	2590.68	101.76	-100.25	-37.61	3.51	
2694.00	18.570	193.370	2680.46	129.07	-127.32	-43.99	2.89	
2883.00	15.310	189.420	2861.24	183.40	-181.23	-55.04	1.83	
2977.00	15.430	185.370	2951.88	208.21	-205.93	-58.24	1.15	
3072.00	14.700	186.910	3043.62	232.85	-230.47	-60.87	0.88	
3165.00	15.400	193.590	3133.43	256.73	-254.19	-65.19	2.01	
3260.00	15.780	191.900	3224.94	281.84	-279.09	-70.82	0.62	
3448.00	15.760	189.840	3405.86	332.38	-329.26	-80.46	0.30	
3638.00	17.130	187.740	3588.09	385.83	-382.42	-88.64	0.79	
3827.00	14.600	188.970	3769.87	437.22	-433.53	-96.10	1.35	
3921.00	16.590	192.800	3860.41	462.19	-458.33	-100.92	2.38	
4110.00	17.030	197.640	4041.34	515.44	-511.02	-115.29	0.78	
4203.00	18.980	198.910	4129.79	543.09	-538.30	-124.31	2.14	
4392.00	16.270	193.370	4309.91	598.57	-593.15	-140.40	1.68	
4580.00	18.770	192.240	4489.18	654.24	-648.34	-152.91	1.34	
4767.00	20.920	187.500	4665.07	717.15	-710.85	-163.64	1.44	
4955.00	17.460	187.990	4842.60	778.67	-772.08	-171.95	1.84	
5143.00	14.040	200.040	5023.56	828.51	-821.46	-183.69	2.51	
5332.00	11.830	186.860	5207.79	869.69	-862.25	-193.86	1.94	
5521.00	16.500	197.350	5391.03	914.97	-907.13	-204.19	2.81	
5709.00	18.750	193.380	5570.20	970.44	-962.02	-219.14	1.36	
5898.00	19.420	194.840	5748.81	1030.95	-1021.94	-234.22	0.44	
6087.00	20.430	192.110	5926.50	1094.16	-1084.57	-249.19	0.73	
6275.00	20.980	192.420	6102.35	1159.65	-1149.52	-263.31	0.30	
6369.00	24.710	194.980	6188.97	1195.41	-1184.95	-272.01	4.11	
6463.00	28.890	190.890	6272.86	1237.07	-1226.25	-281.39	4.86	
6558.00	37.880	187.270	6352.11	1288.94	-1277.83	-289.43	9.69	
6652.00	47.700	181.590	6421.03	1352.64	-1341.38	-294.06	11.22	
6746.00	62.660	175.100	6474.59	1429.30	-1418.22	-291.44	16.88	



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Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 NORTH PLATTE K21-O24-34HC (1153'FSL & 2472'FWL, SEC.27)
Area	COLORADO	Well	NORTH PLATTE K21-O24-34HC
Field	WELD COUNTY	Wellbore	NORTH PLATTE K21-O24-34HC AWB
Facility	SEC.27-T05N-R63W		

## WELLPATH DATA (102 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6792.00	72.150	174.200	6492.25	1471.32	-1460.45	-287.47	20.71	
6841.00	79.550	174.760	6504.22	1518.35	-1507.71	-282.91	15.14	
6891.00	85.060	175.850	6510.91	1567.50	-1557.08	-278.86	11.23	
6926.00†	86.529	176.180	6513.48	1602.18	-1591.90	-276.43	4.30	7" CASING (441'FNL & 2238'FWL, SEC.34)
6942.00	87.200	176.330	6514.35	1618.07	-1607.84	-275.39	4.30	
6970.00†	87.662	176.659	6515.61	1645.89	-1635.76	-273.68	2.03	TOP (485'FNL & 2241'FWL, SEC.34)
7028.00	88.620	177.340	6517.49	1703.60	-1693.65	-270.65	2.03	
7114.00	90.430	179.980	6518.20	1789.40	-1779.61	-268.63	3.72	
7199.00	92.090	180.930	6516.33	1874.32	-1864.58	-269.31	2.25	
7285.00	91.360	180.450	6513.74	1960.24	-1950.54	-270.34	1.02	
7370.00	91.390	181.660	6511.70	2045.19	-2035.50	-271.91	1.42	
7456.00	88.460	182.540	6511.82	2131.18	-2121.43	-275.06	3.56	
7542.00	89.010	182.520	6513.71	2217.16	-2207.32	-278.86	0.64	
7627.00	89.750	182.420	6514.63	2302.15	-2292.24	-282.52	0.88	
7714.00	90.800	182.640	6514.22	2389.15	-2379.15	-286.36	1.23	
7802.00	90.800	180.860	6512.99	2477.13	-2467.10	-289.05	2.02	
7887.00	89.170	180.260	6513.01	2562.08	-2552.09	-289.88	2.04	
7972.00	89.540	179.830	6513.97	2647.00	-2637.09	-289.94	0.67	
8058.00	90.310	178.920	6514.08	2732.88	-2723.08	-289.00	1.39	
8143.00	90.920	179.740	6513.17	2817.75	-2808.07	-288.01	1.20	
8231.00	89.040	178.740	6513.20	2905.61	-2896.05	-286.84	2.42	
8316.00	89.160	177.970	6514.53	2990.38	-2981.01	-284.40	0.92	
8401.00	89.870	177.840	6515.25	3075.11	-3065.95	-281.30	0.85	
8487.00	89.900	177.340	6515.43	3160.81	-3151.87	-277.68	0.58	
8572.00	89.960	177.390	6515.53	3245.48	-3236.78	-273.77	0.09	
8658.00	89.930	176.850	6515.61	3331.11	-3322.67	-269.45	0.63	
8743.00	90.360	177.540	6515.40	3415.75	-3407.57	-265.29	0.96	
8829.00	90.610	177.360	6514.67	3501.42	-3493.48	-261.47	0.36	
8914.00	89.470	178.570	6514.61	3586.16	-3578.43	-258.45	1.96	
9000.00	89.660	180.220	6515.26	3672.04	-3664.41	-257.54	1.93	
9085.00	90.240	180.480	6515.34	3756.98	-3749.41	-258.06	0.75	
9173.00	90.730	180.490	6514.59	3844.93	-3837.41	-258.80	0.56	
9260.00	90.580	180.020	6513.60	3931.86	-3924.40	-259.19	0.57	
9345.00	90.980	179.090	6512.44	4016.74	-4009.39	-258.53	1.19	
9430.00	91.100	178.590	6510.90	4101.56	-4094.36	-256.81	0.60	
9516.00	91.320	178.010	6509.08	4187.32	-4180.30	-254.26	0.72	
9601.00	90.950	179.060	6507.40	4272.10	-4265.25	-252.09	1.31	
9686.00	90.370	179.950	6506.42	4356.99	-4350.24	-251.35	1.25	
9771.00	90.360	179.720	6505.88	4441.90	-4435.24	-251.11	0.27	
9857.00	89.500	179.390	6505.98	4527.79	-4521.24	-250.44	1.07	
9942.00	89.250	178.440	6506.91	4612.62	-4606.22	-248.83	1.16	
10028.00	89.630	180.240	6507.75	4698.49	-4692.20	-247.84	2.14	
10113.00	89.590	180.090	6508.33	4783.42	-4777.20	-248.09	0.18	
10198.00	89.560	178.820	6508.96	4868.30	-4862.19	-247.28	1.49	
10284.00	91.440	180.440	6508.21	4954.19	-4948.18	-246.72	2.89	



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Area	COLORADO	Well	NORTH PLATTE K21-O24-34HC
Field	WELD COUNTY	Wellbore	NORTH PLATTE K21-O24-34HC AWB
Facility	SEC.27-T05N-R63W		

## WELLPATH DATA (102 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10369.00	91.170	181.700	6506.27	5039.14	-5033.14	-248.31	1.52	
10455.00	88.670	180.890	6506.39	5125.12	-5119.11	-250.25	3.06	
10540.00	88.890	179.710	6508.20	5210.04	-5204.09	-250.70	1.41	
10626.00	89.910	180.090	6509.10	5295.95	-5290.08	-250.55	1.27	
10711.00	90.590	179.440	6508.73	5380.86	-5375.08	-250.20	1.11	
10797.00	90.460	181.890	6507.94	5466.80	-5461.07	-251.20	2.85	
10882.00	88.860	180.070	6508.45	5551.77	-5546.05	-252.65	2.85	
10968.00	89.480	180.400	6509.69	5637.70	-5632.03	-253.00	0.82	
11055.00	90.220	180.160	6509.92	5724.63	-5719.03	-253.43	0.89	
11142.00	90.860	180.380	6509.10	5811.57	-5806.03	-253.84	0.78	
11236.00	90.000	180.760	6508.40	5905.52	-5900.02	-254.77	1.00	LAST BHI MWD SURVEY
11291.00	90.000	180.760	6508.40	5960.49	-5955.01	-255.50	0.00	PROJECTION TO BIT (479'FSL & 2255'FWL, SEC.34)

## HOLE & CASING SECTIONS -

Ref Wellbore: NORTH PLATTE K21-O24-34HC AWB      Ref Wellpath: NORTH PLATTE K21-O24-34HC 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	17.00	1677.00	1660.00	17.00	1676.93	0.00	0.00	-0.28	-3.05
9.625in Casing Surface	17.00	1662.00	1645.00	17.00	1661.93	0.00	0.00	-0.13	-2.94
8.75in Open Hole	1677.00	6936.00	5259.00	1676.93	6514.05	-0.28	-3.05	-1601.86	-275.78
7in Casing Intermediate	17.00	6926.00	6909.00	17.00	6513.48	0.00	0.00	-1591.90	-276.43
6.125in Open Hole	6936.00	11291.00	4355.00	6514.05	6508.40	-1601.86	-275.78	-5955.01	-255.50

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.27-T05N-R63W	0.00	-15.67	-10.34	3300253.24	1378122.53	40°21'58.824"N	104°25'20.784"W	polygon
SEC.34-T05N-R63W	0.00	-15.67	-10.34	3300253.24	1378122.53	40°21'58.824"N	104°25'20.784"W	polygon
SEC.34-T05N-R63W HARDLINES (460'FSL)	6327.00	-15.67	-10.34	3300253.24	1378122.53	40°21'58.824"N	104°25'20.784"W	polygon
NORTH PLATTE K21-O24-34HC BHL ON PLAT (470'FSL & 2256'FWL, SEC.34)	6507.00	-5961.19	-252.84	3300083.02	1372174.76	40°21'00.072"N	104°25'23.916"W	point
NORTH PLATTE K21-O24-34HC EP ON PLAT	6507.00	-1680.56	-289.02	3299994.82	1376454.45	40°21'42.372"N	104°25'24.384"W	point



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## WELLPATH COMPOSITION -

Ref Wellbore: NORTH PLATTE K21-O24-34HC AWB      Ref Wellpath: NORTH PLATTE K21-O24-34HC AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1620.00	NaviTrak (MagCorr)	BHI MWD/NAVITRAK (MAGCORR) 13.5" HOLE <246-1620>	NORTH PLATTE K21-O24-34HC AWB
1620.00	6891.00	NaviTrak (MagCorr)	BHI MWD/NAVITRAK (MAGCORR) 8.75" HOLE <1751-6891>	NORTH PLATTE K21-O24-34HC AWB
6891.00	11236.00	NaviTrak (MagCorr)	BHI MWD/NAVITRAK (MAGCORR) 6.125" HOLE <6942-11236>	NORTH PLATTE K21-O24-34HC AWB
11236.00	11291.00	Blind Drilling (std)	Projection to bit	NORTH PLATTE K21-O24-34HC AWB



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Field	WELD COUNTY	Wellbore	NORTH PLATTE K21-O24-34HC AWB
Facility	SEC.27-T05N-R63W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
246.00	0.310	245.340	246.00	FIRST BHI MWD SURVEY
6926.00	86.529	176.180	6513.48	7" CASING (441'FNL & 2238'FWL, SEC.34)
6970.00	87.662	176.659	6515.61	TOP (485'FNL & 2241'FWL, SEC.34)
11236.00	90.000	180.760	6508.40	LAST BHI MWD SURVEY
11291.00	90.000	180.760	6508.40	PROJECTION TO BIT (479'FSL & 2255'FWL, SEC.34)