

Scale 1 inch = 2500



Planned Wellpath Report

NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)

Page 1 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22)
Area	COLORADO	Well	NORTH PLATTE FEDERAL 21-24-22HC
Field	WELD COUNTY	Wellbore	NORTH PLATTE FEDERAL 21-24-22HC PWB
Facility	SEC.22-T5N-R63W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Ingmjmr
Scale	0.999960	Report Generated	12/29/2017 at 2:16:18 PM
Convergence at slot	0.70° East	Database/Source file	Denver/NORTH_PLATTE_FEDERAL_21-24-22HC_PWP_REV-A.0.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-112.53	113.67	3300408.90	1387090.40	40°23'27.420"N	104°25'17.364"W
Facility Reference Pt			3300293.87	1387201.53	40°23'28.532"N	104°25'18.833"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 19 (17'KB) (RKB) to Facility Vertical Datum	4664.00ft
Horizontal Reference Pt	Slot	XTREME 19 (17'KB) (RKB) to Mean Sea Level	4664.00ft
Vertical Reference Pt	XTREME 19 (17'KB) (RKB)	XTREME 19 (17'KB) (RKB) to Mud Line at Slot (SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22))	4664.00ft
MD Reference Pt	XTREME 19 (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	189.85°



Planned Wellpath Report

NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)

Page 2 of 8



REFERENCE WELLPATH IDENTIFICATION				
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22)	
Area	COLORADO	Well	NORTH PLATTE FEDERAL 21-24-22HC	
Field	WELD COUNTY	Wellbore	NORTH PLATTE FEDERAL 21-24-22HC PWB	
Facility	SEC.22-T5N-R63W			

WELLPATH DATA (132 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	301.256	0.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
17.00	0.000	301.256	17.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	Tie On
117.00†	0.000	301.256	117.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
217.00†	0.000	301.256	217.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
317.00†	0.000	301.256	317.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
417.00†	0.000	301.256	417.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
517.00†	0.000	301.256	517.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
617.00†	0.000	301.256	617.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
717.00†	0.000	301.256	717.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
817.00†	0.000	301.256	817.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
917.00†	0.000	301.256	917.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1017.00†	0.000	301.256	1017.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1117.00†	0.000	301.256	1117.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1217.00†	0.000	301.256	1217.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1317.00†	0.000	301.256	1317.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1417.00†	0.000	301.256	1417.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1517.00†	0.000	301.256	1517.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1617.00†	0.000	301.256	1617.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1717.00†	0.000	301.256	1717.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1817.00†	0.000	301.256	1817.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
1917.00†	0.000	301.256	1917.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	
2000.00	0.000	301.256	2000.00	0.00	0.00	0.00	40°23'27.420"N	104°25'17.364"W	0.00	End of Tangent
2017.00†	0.340	301.256	2017.00	-0.02	0.03	-0.04	40°23'27.420"N	104°25'17.365"W	2.00	
2117.00†	2.340	301.256	2116.97	-0.87	1.24	-2.04	40°23'27.432"N	104°25'17.390"W	2.00	
2217.00†	4.340	301.256	2216.79	-3.00	4.26	-7.02	40°23'27.462"N	104°25'17.455"W	2.00	
2317.00†	6.340	301.256	2316.35	-6.40	9.09	-14.98	40°23'27.510"N	104°25'17.558"W	2.00	
2417.00†	8.340	301.256	2415.53	-11.06	15.72	-25.90	40°23'27.575"N	104°25'17.699"W	2.00	
2517.00†	10.340	301.256	2514.20	-16.98	24.14	-39.77	40°23'27.659"N	104°25'17.878"W	2.00	
2611.10	12.222	301.256	2606.47	-23.70	33.69	-55.51	40°23'27.753"N	104°25'18.081"W	2.00	End of Build (XS)
2617.00†	12.222	301.256	2612.24	-24.16	34.34	-56.57	40°23'27.759"N	104°25'18.095"W	0.00	



Planned Wellpath Report

NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)

Page 3 of 8



REFERENCE WELLPATH IDENTIFICATION				
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22)	
Area	COLORADO	Well	NORTH PLATTE FEDERAL 21-24-22HC	
Field	WELD COUNTY	Wellbore	NORTH PLATTE FEDERAL 21-24-22HC PWB	
Facility	SEC.22-T5N-R63W			

WELLPATH DATA (132 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	12.222	301.256	2709.98	-31.89	45.32	-74.67	40°23'27.868"N	104°25'18.329"W	0.00	
2817.00†	12.222	301.256	2807.71	-39.62	56.31	-92.77	40°23'27.976"N	104°25'18.563"W	0.00	
2917.00†	12.222	301.256	2905.44	-47.34	67.29	-110.87	40°23'28.085"N	104°25'18.797"W	0.00	
3017.00†	12.222	301.256	3003.18	-55.07	78.28	-128.96	40°23'28.193"N	104°25'19.031"W	0.00	
3117.00†	12.222	301.256	3100.91	-62.80	89.26	-147.06	40°23'28.302"N	104°25'19.265"W	0.00	
3217.00†	12.222	301.256	3198.64	-70.53	100.24	-165.16	40°23'28.411"N	104°25'19.498"W	0.00	
3317.00†	12.222	301.256	3296.38	-78.26	111.23	-183.26	40°23'28.519"N	104°25'19.732"W	0.00	
3417.00†	12.222	301.256	3394.11	-85.98	122.21	-201.35	40°23'28.628"N	104°25'19.966"W	0.00	
3493.63†	12.222	301.256	3469.00	-91.91	130.63	-215.22	40°23'28.711"N	104°25'20.145"W	0.00	Parkman
3517.00†	12.222	301.256	3491.84	-93.71	133.20	-219.45	40°23'28.736"N	104°25'20.200"W	0.00	
3617.00†	12.222	301.256	3589.58	-101.44	144.18	-237.55	40°23'28.845"N	104°25'20.434"W	0.00	
3717.00†	12.222	301.256	3687.31	-109.17	155.17	-255.64	40°23'28.953"N	104°25'20.668"W	0.00	
3817.00†	12.222	301.256	3785.04	-116.90	166.15	-273.74	40°23'29.062"N	104°25'20.902"W	0.00	
3917.00†	12.222	301.256	3882.78	-124.62	177.13	-291.84	40°23'29.170"N	104°25'21.136"W	0.00	
4017.00†	12.222	301.256	3980.51	-132.35	188.12	-309.94	40°23'29.279"N	104°25'21.370"W	0.00	
4117.00†	12.222	301.256	4078.24	-140.08	199.10	-328.03	40°23'29.387"N	104°25'21.603"W	0.00	
4217.00†	12.222	301.256	4175.98	-147.81	210.09	-346.13	40°23'29.496"N	104°25'21.837"W	0.00	
4317.00†	12.222	301.256	4273.71	-155.54	221.07	-364.23	40°23'29.605"N	104°25'22.071"W	0.00	
4417.00†	12.222	301.256	4371.45	-163.26	232.06	-382.33	40°23'29.713"N	104°25'22.305"W	0.00	
4517.00†	12.222	301.256	4469.18	-170.99	243.04	-400.42	40°23'29.822"N	104°25'22.539"W	0.00	
4617.00†	12.222	301.256	4566.91	-178.72	254.02	-418.52	40°23'29.930"N	104°25'22.773"W	0.00	
4717.00†	12.222	301.256	4664.65	-186.45	265.01	-436.62	40°23'30.039"N	104°25'23.007"W	0.00	
4817.00†	12.222	301.256	4762.38	-194.18	275.99	-454.71	40°23'30.147"N	104°25'23.241"W	0.00	
4917.00†	12.222	301.256	4860.11	-201.90	286.98	-472.81	40°23'30.256"N	104°25'23.475"W	0.00	
5017.00†	12.222	301.256	4957.85	-209.63	297.96	-490.91	40°23'30.364"N	104°25'23.708"W	0.00	
5117.00†	12.222	301.256	5055.58	-217.36	308.95	-509.01	40°23'30.473"N	104°25'23.942"W	0.00	
5217.00†	12.222	301.256	5153.31	-225.09	319.93	-527.10	40°23'30.581"N	104°25'24.176"W	0.00	
5317.00†	12.222	301.256	5251.05	-232.82	330.91	-545.20	40°23'30.690"N	104°25'24.410"W	0.00	
5417.00†	12.222	301.256	5348.78	-240.54	341.90	-563.30	40°23'30.798"N	104°25'24.644"W	0.00	
5517.00†	12.222	301.256	5446.51	-248.27	352.88	-581.40	40°23'30.907"N	104°25'24.878"W	0.00	



Planned Wellpath Report

NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)

Page 4 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22)
Area	COLORADO	Well	NORTH PLATTE FEDERAL 21-24-22HC
Field	WELD COUNTY	Wellbore	NORTH PLATTE FEDERAL 21-24-22HC PWB
Facility	SEC.22-T5N-R63W		

WELLPATH DATA (132 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5617.00†	12.222	301.256	5544.25	-256.00	363.87	-599.49	40°23'31.016"N	104°25'25.112"W	0.00	
5717.00†	12.222	301.256	5641.98	-263.73	374.85	-617.59	40°23'31.124"N	104°25'25.346"W	0.00	
5817.00†	12.222	301.256	5739.71	-271.46	385.84	-635.69	40°23'31.233"N	104°25'25.580"W	0.00	
5917.00†	12.222	301.256	5837.45	-279.18	396.82	-653.78	40°23'31.341"N	104°25'25.813"W	0.00	
6017.00†	12.222	301.256	5935.18	-286.91	407.80	-671.88	40°23'31.450"N	104°25'26.047"W	0.00	
6113.70	12.222	301.256	6029.69	-294.39	418.43	-689.38	40°23'31.555"N	104°25'26.273"W	0.00	End of Tangent (XS)
6117.00†	12.054	299.903	6032.92	-294.63	418.78	-689.98	40°23'31.558"N	104°25'26.281"W	10.00	
6217.00†	11.140	248.705	6131.12	-293.21	420.48	-708.08	40°23'31.575"N	104°25'26.515"W	10.00	
6317.00†	17.341	215.609	6228.15	-274.75	404.82	-725.80	40°23'31.420"N	104°25'26.744"W	10.00	
6352.76†	20.294	209.337	6262.00	-264.10	395.08	-731.94	40°23'31.324"N	104°25'26.824"W	10.00	Sharon Springs
6409.17†	25.270	202.432	6314.00	-243.11	375.40	-741.34	40°23'31.129"N	104°25'26.945"W	10.00	Sharon Springs "A"
6417.00†	25.981	201.674	6321.06	-239.80	372.26	-742.61	40°23'31.098"N	104°25'26.961"W	10.00	
6449.62†	28.980	198.891	6350.00	-225.00	358.14	-747.81	40°23'30.959"N	104°25'27.029"W	10.00	Sharon Springs "B"
6493.99†	33.133	195.859	6388.00	-202.32	336.30	-754.61	40°23'30.743"N	104°25'27.116"W	10.00	Niobrara "A" Chalk
6515.74†	35.192	194.609	6406.00	-190.15	324.51	-757.81	40°23'30.627"N	104°25'27.158"W	10.00	Niobrara "A" Marl
6517.00†	35.312	194.540	6407.03	-189.43	323.81	-757.99	40°23'30.620"N	104°25'27.160"W	10.00	
6596.95†	42.968	190.875	6469.00	-139.08	274.61	-768.95	40°23'30.133"N	104°25'27.302"W	10.00	Niobrara "B" Chalk
6617.00†	44.903	190.120	6483.44	-125.17	260.93	-771.49	40°23'29.998"N	104°25'27.335"W	10.00	
6639.40†	47.071	189.336	6499.00	-109.06	245.05	-774.21	40°23'29.841"N	104°25'27.370"W	10.00	Niobrara "B" Marl
6701.78†	53.133	187.411	6539.00	-61.24	197.72	-781.14	40°23'29.374"N	104°25'27.459"W	10.00	Niobrara "C" Chalk
6717.00†	54.616	186.988	6547.97	-48.96	185.53	-782.68	40°23'29.253"N	104°25'27.479"W	10.00	
6751.29†	57.962	186.090	6567.00	-20.49	157.19	-785.92	40°23'28.973"N	104°25'27.521"W	10.00	Niobrara "C" Marl
6817.00†	64.391	184.537	6598.66	36.86	99.90	-791.22	40°23'28.407"N	104°25'27.590"W	10.00	
6886.78†	71.234	183.060	6625.00	101.07	35.47	-795.48	40°23'27.770"N	104°25'27.645"W	10.00	Ft. Hays
6917.00†	74.201	182.460	6633.98	129.70	6.65	-796.87	40°23'27.486"N	104°25'27.662"W	10.00	
7001.33†	82.489	180.865	6651.00	211.38	-75.83	-799.25	40°23'26.671"N	104°25'27.693"W	10.00	Codell
7017.00†	84.029	180.577	6652.84	226.74	-91.39	-799.44	40°23'26.517"N	104°25'27.696"W	10.00	
7077.71†	90.000	179.474	6656.00	286.45	-151.99	-799.47	40°23'25.918"N	104°25'27.696"W	10.00	Codell Target
7077.71	90.000	179.474	6656.00†	286.46	-151.99	-799.47	40°23'25.918"N	104°25'27.696"W	10.00	End of 3D Arc (XS)
7117.00†	90.000	179.474	6656.00	325.10	-191.28	-799.11	40°23'25.530"N	104°25'27.691"W	0.00	



Planned Wellpath Report

NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)

Page 5 of 8



REFERENCE WELLPATH IDENTIFICATION				
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22)	
Area	COLORADO	Well	NORTH PLATTE FEDERAL 21-24-22HC	
Field	WELD COUNTY	Wellbore	NORTH PLATTE FEDERAL 21-24-22HC PWB	
Facility	SEC.22-T5N-R63W			

WELLPATH DATA (132 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7217.00†	90.000	179.474	6656.00	423.47	-291.27	-798.19	40°23'24.542"N	104°25'27.679"W	0.00	
7317.00†	90.000	179.474	6656.00	521.83	-391.27	-797.27	40°23'23.553"N	104°25'27.667"W	0.00	
7417.00†	90.000	179.474	6656.00	620.20	-491.26	-796.35	40°23'22.565"N	104°25'27.656"W	0.00	
7517.00†	90.000	179.474	6656.00	718.57	-591.26	-795.43	40°23'21.577"N	104°25'27.644"W	0.00	
7617.00†	90.000	179.474	6656.00	816.93	-691.26	-794.51	40°23'20.589"N	104°25'27.632"W	0.00	
7717.00†	90.000	179.474	6656.00	915.30	-791.25	-793.60	40°23'19.601"N	104°25'27.620"W	0.00	
7817.00†	90.000	179.474	6656.00	1013.66	-891.25	-792.68	40°23'18.613"N	104°25'27.608"W	0.00	
7917.00†	90.000	179.474	6656.00	1112.03	-991.24	-791.76	40°23'17.625"N	104°25'27.596"W	0.00	
8017.00†	90.000	179.474	6656.00	1210.40	-1091.24	-790.84	40°23'16.637"N	104°25'27.584"W	0.00	
8117.00†	90.000	179.474	6656.00	1308.76	-1191.24	-789.92	40°23'15.648"N	104°25'27.572"W	0.00	
8217.00†	90.000	179.474	6656.00	1407.13	-1291.23	-789.00	40°23'14.660"N	104°25'27.560"W	0.00	
8317.00†	90.000	179.474	6656.00	1505.49	-1391.23	-788.08	40°23'13.672"N	104°25'27.548"W	0.00	
8417.00†	90.000	179.474	6656.00	1603.86	-1491.22	-787.16	40°23'12.684"N	104°25'27.536"W	0.00	
8517.00†	90.000	179.474	6656.00	1702.23	-1591.22	-786.25	40°23'11.696"N	104°25'27.525"W	0.00	
8617.00†	90.000	179.474	6656.00	1800.59	-1691.21	-785.33	40°23'10.708"N	104°25'27.513"W	0.00	
8717.00†	90.000	179.474	6656.00	1898.96	-1791.21	-784.41	40°23'09.720"N	104°25'27.501"W	0.00	
8817.00†	90.000	179.474	6656.00	1997.32	-1891.21	-783.49	40°23'08.732"N	104°25'27.489"W	0.00	
8917.00†	90.000	179.474	6656.00	2095.69	-1991.20	-782.57	40°23'07.744"N	104°25'27.477"W	0.00	
9017.00†	90.000	179.474	6656.00	2194.06	-2091.20	-781.65	40°23'06.755"N	104°25'27.465"W	0.00	
9117.00†	90.000	179.474	6656.00	2292.42	-2191.19	-780.73	40°23'05.767"N	104°25'27.453"W	0.00	
9217.00†	90.000	179.474	6656.00	2390.79	-2291.19	-779.82	40°23'04.779"N	104°25'27.441"W	0.00	
9317.00†	90.000	179.474	6656.00	2489.15	-2391.18	-778.90	40°23'03.791"N	104°25'27.429"W	0.00	
9417.00†	90.000	179.474	6656.00	2587.52	-2491.18	-777.98	40°23'02.803"N	104°25'27.417"W	0.00	
9517.00†	90.000	179.474	6656.00	2685.89	-2591.18	-777.06	40°23'01.815"N	104°25'27.405"W	0.00	
9617.00†	90.000	179.474	6656.00	2784.25	-2691.17	-776.14	40°23'00.827"N	104°25'27.393"W	0.00	
9717.00†	90.000	179.474	6656.00	2882.62	-2791.17	-775.22	40°22'59.839"N	104°25'27.382"W	0.00	
9817.00†	90.000	179.474	6656.00	2980.98	-2891.16	-774.30	40°22'58.850"N	104°25'27.370"W	0.00	
9917.00†	90.000	179.474	6656.00	3079.35	-2991.16	-773.39	40°22'57.862"N	104°25'27.358"W	0.00	
10017.00†	90.000	179.474	6656.00	3177.72	-3091.16	-772.47	40°22'56.874"N	104°25'27.346"W	0.00	
10117.00†	90.000	179.474	6656.00	3276.08	-3191.15	-771.55	40°22'55.886"N	104°25'27.334"W	0.00	



Planned Wellpath Report

NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)

Page 6 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22)
Area	COLORADO	Well	NORTH PLATTE FEDERAL 21-24-22HC
Field	WELD COUNTY	Wellbore	NORTH PLATTE FEDERAL 21-24-22HC PWB
Facility	SEC.22-T5N-R63W		

WELLPATH DATA (132 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10217.00†	90.000	179.474	6656.00	3374.45	-3291.15	-770.63	40°22'54.898"N	104°25'27.322"W	0.00	
10317.00†	90.000	179.474	6656.00	3472.81	-3391.14	-769.71	40°22'53.910"N	104°25'27.310"W	0.00	
10417.00†	90.000	179.474	6656.00	3571.18	-3491.14	-768.79	40°22'52.922"N	104°25'27.298"W	0.00	
10517.00†	90.000	179.474	6656.00	3669.55	-3591.13	-767.87	40°22'51.934"N	104°25'27.286"W	0.00	
10617.00†	90.000	179.474	6656.00	3767.91	-3691.13	-766.95	40°22'50.945"N	104°25'27.274"W	0.00	
10717.00†	90.000	179.474	6656.00	3866.28	-3791.13	-766.04	40°22'49.957"N	104°25'27.262"W	0.00	
10817.00†	90.000	179.474	6656.00	3964.64	-3891.12	-765.12	40°22'48.969"N	104°25'27.251"W	0.00	
10917.00†	90.000	179.474	6656.00	4063.01	-3991.12	-764.20	40°22'47.981"N	104°25'27.239"W	0.00	
11017.00†	90.000	179.474	6656.00	4161.38	-4091.11	-763.28	40°22'46.993"N	104°25'27.227"W	0.00	
11117.00†	90.000	179.474	6656.00	4259.74	-4191.11	-762.36	40°22'46.005"N	104°25'27.215"W	0.00	
11217.00†	90.000	179.474	6656.00	4358.11	-4291.10	-761.44	40°22'45.017"N	104°25'27.203"W	0.00	
11308.55	90.000	179.474	6656.00 ²	4448.16	-4382.65	-760.60	40°22'44.112"N	104°25'27.192"W	0.00	End of Tangent (XS)

HOLE & CASING SECTIONS									
- Ref Wellbore: NORTH PLATTE FEDERAL 21-24-22HC PWB Ref Wellpath: NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)									
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]
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00



Planned Wellpath Report

NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)

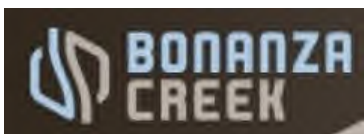
Page 7 of 8



REFERENCE WELLPATH IDENTIFICATION				
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22)	
Area	COLORADO	Well	NORTH PLATTE FEDERAL 21-24-22HC	
Field	WELD COUNTY	Wellbore	NORTH PLATTE FEDERAL 21-24-22HC PWB	
Facility	SEC.22-T5N-R63W			

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.22-T05N-R63W		-11.00	-182.11	-1484.73	3298926.55	1386890.25	40°23'25.620"N	104°25'36.552"W	polygon
SEC.22-T05N-R63W HARDLINES (460'FNL/FSL)		6615.00	-182.11	-1484.73	3298926.55	1386890.25	40°23'25.620"N	104°25'36.552"W	polygon
2) NORTH PLATTE FEDERAL 21-24-22HC BHL (470'FSL & 1925'FWL, SEC.22)	11308.55	6656.00	-4382.65	-760.60	3299701.68	1382699.00	40°22'44.112"N	104°25'27.192"W	point
NORTH PLATTE FEDERAL 21-24-22HC LP (531'FNL & 1890'FWL, SEC.22)		6656.00	-101.99	-799.47	3299610.76	1386978.69	40°23'26.412"N	104°25'27.696"W	point
1) NORTH PLATTE FEDERAL 21-24-22HC LP REV-1 (581'FNL & 1890'FWL, SEC.22)	7077.71	6656.00	-151.99	-799.47	3299611.37	1386928.70	40°23'25.918"N	104°25'27.696"W	point

SURVEY PROGRAM -				
Ref Wellbore: NORTH PLATTE FEDERAL 21-24-22HC PWB		Ref Wellpath: NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NaviTrak (Rotating+Axial Corr)		NORTH PLATTE FEDERAL 21-24-22HC PWB
1550.00	11308.55	BHI AutoTrak Curve (Axial Corr, Short spacing)		NORTH PLATTE FEDERAL 21-24-22HC PWB



Planned Wellpath Report

NORTH PLATTE FEDERAL 21-24-22HC PWP (REV-A.0)

Page 8 of 8



REFERENCE WELLPATH IDENTIFICATION				
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#19 NORTH PLATTE FEDERAL 21-24-22HC (423'FNL & 2439'FEL, SEC.22)	
Area	COLORADO	Well	NORTH PLATTE FEDERAL 21-24-22HC	
Field	WELD COUNTY	Wellbore	NORTH PLATTE FEDERAL 21-24-22HC PWB	
Facility	SEC.22-T5N-R63W			

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3493.63	12.222	301.256	3469.00	Parkman
6352.76	20.294	209.337	6262.00	Sharon Springs
6409.17	25.270	202.432	6314.00	Sharon Springs "A"
6449.62	28.980	198.891	6350.00	Sharon Springs "B"
6493.99	33.133	195.859	6388.00	Niobrara "A" Chalk
6515.74	35.192	194.609	6406.00	Niobrara "A" Marl
6596.95	42.968	190.875	6469.00	Niobrara "B" Chalk
6639.40	47.071	189.336	6499.00	Niobrara "B" Marl
6701.78	53.133	187.411	6539.00	Niobrara "C" Chalk
6751.29	57.962	186.090	6567.00	Niobrara "C" Marl
6886.78	71.234	183.060	6625.00	Ft. Hays
7001.33	82.489	180.865	6651.00	Codell
7077.71	90.000	179.474	6656.00	Codell Target

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	301.256	17.00	Tie On
2000.00	0.000	301.256	2000.00	End of Tangent
2611.10	12.222	301.256	2606.47	End of Build (XS)
6113.70	12.222	301.256	6029.69	End of Tangent (XS)
7077.71	90.000	179.474	6656.00	End of 3D Arc (XS)
11308.55	90.000	179.474	6656.00	End of Tangent (XS)