



Planned Wellpath Report

ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)
Page 1 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL O34-K31-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL O34-K31-20HNB PWB
Facility	SEC.20-T05N-R62W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	ingmjamr
Scale	0.999959	Report Generated	8/6/2018 at 1:09:04 PM
Convergence at slot	0.75° East	Database/Source file	Denver/ANTELOPE_FEDERAL_O34-K31-20HNB_PWP__REV-A.1_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	7.80	2331.61	3321313.76	1383357.25	40°22'47.932"N	104°20'47.836"W
Facility Reference Pt			3318982.55	1383319.35	40°22'47.856"N	104°21'17.964"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (17'KB) (RKB) to Facility Vertical Datum	4673.00ft
Horizontal Reference Pt	Slot	RIG (17'KB) (RKB) to Mean Sea Level	4673.00ft
Vertical Reference Pt	RIG (17'KB) (RKB)	RIG (17'KB) (RKB) to Ground Level at Slot (SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20))	4673.00ft
MD Reference Pt	RIG (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	1.50°



Planned Wellpath Report

ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)
Page 2 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL O34-K31-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL O34-K31-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 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	175.678	0.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
17.00	0.000	175.678	17.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	Tie On
117.00†	0.000	175.678	117.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
217.00†	0.000	175.678	217.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
317.00†	0.000	175.678	317.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
417.00†	0.000	175.678	417.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
517.00†	0.000	175.678	517.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
617.00†	0.000	175.678	617.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
717.00†	0.000	175.678	717.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
817.00†	0.000	175.678	817.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
917.00†	0.000	175.678	917.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	
1000.00	0.000	175.678	1000.00	0.00	0.00	0.00	40°22'47.932"N	104°20'47.836"W	0.00	End of Tangent
1017.00†	0.340	175.678	1017.00	-0.05	-0.05	0.00	40°22'47.932"N	104°20'47.836"W	2.00	
1117.00†	2.340	175.678	1116.97	-2.38	-2.38	0.18	40°22'47.908"N	104°20'47.834"W	2.00	
1217.00†	4.340	175.678	1216.79	-8.17	-8.19	0.62	40°22'47.851"N	104°20'47.828"W	2.00	
1317.00†	6.340	175.678	1316.35	-17.43	-17.47	1.32	40°22'47.759"N	104°20'47.819"W	2.00	
1417.00†	8.340	175.678	1415.53	-30.14	-30.21	2.28	40°22'47.633"N	104°20'47.806"W	2.00	
1517.00†	10.340	175.678	1514.20	-46.28	-46.39	3.51	40°22'47.474"N	104°20'47.791"W	2.00	
1617.00†	12.340	175.678	1612.24	-65.85	-66.00	4.99	40°22'47.280"N	104°20'47.772"W	2.00	
1717.00†	14.340	175.678	1709.54	-88.80	-89.00	6.73	40°22'47.052"N	104°20'47.749"W	2.00	
1817.00†	16.340	175.678	1805.97	-115.11	-115.38	8.72	40°22'46.792"N	104°20'47.723"W	2.00	
1917.00†	18.340	175.678	1901.42	-144.76	-145.10	10.97	40°22'46.498"N	104°20'47.694"W	2.00	
2017.00†	20.340	175.678	1995.77	-177.71	-178.12	13.46	40°22'46.172"N	104°20'47.662"W	2.00	
2076.68	21.534	175.678	2051.52	-198.93	-199.39	15.07	40°22'45.962"N	104°20'47.641"W	2.00	End of Build
2117.00†	21.534	175.678	2089.02	-213.65	-214.14	16.19	40°22'45.816"N	104°20'47.627"W	0.00	
2217.00†	21.534	175.678	2182.04	-250.16	-250.74	18.95	40°22'45.454"N	104°20'47.591"W	0.00	
2317.00†	21.534	175.678	2275.06	-286.68	-287.34	21.72	40°22'45.093"N	104°20'47.555"W	0.00	
2417.00†	21.534	175.678	2368.08	-323.19	-323.95	24.48	40°22'44.731"N	104°20'47.520"W	0.00	
2517.00†	21.534	175.678	2461.10	-359.71	-360.55	27.25	40°22'44.369"N	104°20'47.484"W	0.00	
2617.00†	21.534	175.678	2554.12	-396.23	-397.15	30.02	40°22'44.008"N	104°20'47.448"W	0.00	



Planned Wellpath Report

ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)
Page 3 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL O34-K31-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL O34-K31-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	21.534	175.678	2647.14	-432.74	-433.75	32.78	40°22'43.646"N	104°20'47.412"W	0.00	
2817.00†	21.534	175.678	2740.16	-469.26	-470.35	35.55	40°22'43.284"N	104°20'47.377"W	0.00	
2917.00†	21.534	175.678	2833.18	-505.77	-506.95	38.32	40°22'42.923"N	104°20'47.341"W	0.00	
3017.00†	21.534	175.678	2926.20	-542.29	-543.55	41.08	40°22'42.561"N	104°20'47.305"W	0.00	
3117.00†	21.534	175.678	3019.22	-578.80	-580.15	43.85	40°22'42.199"N	104°20'47.269"W	0.00	
3217.00†	21.534	175.678	3112.24	-615.32	-616.75	46.61	40°22'41.837"N	104°20'47.234"W	0.00	
3317.00†	21.534	175.678	3205.26	-651.83	-653.35	49.38	40°22'41.476"N	104°20'47.198"W	0.00	
3417.00†	21.534	175.678	3298.28	-688.35	-689.95	52.15	40°22'41.114"N	104°20'47.162"W	0.00	
3517.00†	21.534	175.678	3391.30	-724.87	-726.55	54.91	40°22'40.752"N	104°20'47.126"W	0.00	
3617.00†	21.534	175.678	3484.32	-761.38	-763.15	57.68	40°22'40.391"N	104°20'47.091"W	0.00	
3717.00†	21.534	175.678	3577.34	-797.90	-799.75	60.45	40°22'40.029"N	104°20'47.055"W	0.00	
3817.00†	21.534	175.678	3670.36	-834.41	-836.35	63.21	40°22'39.667"N	104°20'47.019"W	0.00	
3917.00†	21.534	175.678	3763.38	-870.93	-872.95	65.98	40°22'39.306"N	104°20'46.983"W	0.00	
4017.00†	21.534	175.678	3856.40	-907.44	-909.55	68.74	40°22'38.944"N	104°20'46.948"W	0.00	
4117.00†	21.534	175.678	3949.42	-943.96	-946.15	71.51	40°22'38.582"N	104°20'46.912"W	0.00	
4217.00†	21.534	175.678	4042.44	-980.48	-982.75	74.28	40°22'38.221"N	104°20'46.876"W	0.00	
4317.00†	21.534	175.678	4135.46	-1016.99	-1019.35	77.04	40°22'37.859"N	104°20'46.841"W	0.00	
4417.00†	21.534	175.678	4228.48	-1053.51	-1055.95	79.81	40°22'37.497"N	104°20'46.805"W	0.00	
4517.00†	21.534	175.678	4321.50	-1090.02	-1092.55	82.58	40°22'37.136"N	104°20'46.769"W	0.00	
4617.00†	21.534	175.678	4414.52	-1126.54	-1129.15	85.34	40°22'36.774"N	104°20'46.733"W	0.00	
4653.51	21.534	175.678	4448.48	-1139.87	-1142.52	86.35	40°22'36.642"N	104°20'46.720"W	0.00	End of Tangent
4717.00†	20.264	175.678	4507.80	-1162.40	-1165.10	88.06	40°22'36.419"N	104°20'46.698"W	2.00	
4817.00†	18.264	175.678	4602.19	-1195.22	-1198.00	90.55	40°22'36.094"N	104°20'46.666"W	2.00	
4917.00†	16.264	175.678	4697.68	-1224.74	-1227.59	92.78	40°22'35.801"N	104°20'46.637"W	2.00	
5017.00†	14.264	175.678	4794.15	-1250.93	-1253.84	94.77	40°22'35.542"N	104°20'46.612"W	2.00	
5117.00†	12.264	175.678	4891.48	-1273.76	-1276.72	96.49	40°22'35.316"N	104°20'46.589"W	2.00	
5217.00†	10.264	175.678	4989.55	-1293.19	-1296.19	97.97	40°22'35.123"N	104°20'46.570"W	2.00	
5317.00†	8.264	175.678	5088.24	-1309.20	-1312.24	99.18	40°22'34.965"N	104°20'46.555"W	2.00	
5417.00†	6.264	175.678	5187.43	-1321.78	-1324.85	100.13	40°22'34.840"N	104°20'46.542"W	2.00	
5517.00†	4.264	175.678	5287.00	-1330.91	-1334.00	100.82	40°22'34.750"N	104°20'46.533"W	2.00	



Planned Wellpath Report

ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)

Page 4 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL O34-K31-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL O34-K31-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5617.00†	2.264	175.678	5386.83	-1336.57	-1339.68	101.25	40°22'34.694"N	104°20'46.528"W	2.00	
5717.00†	0.264	175.678	5486.81	-1338.77	-1341.88	101.42	40°22'34.672"N	104°20'46.526"W	2.00	
5730.19	0.000	355.000	5500.00	-1338.80	-1341.91	101.42	40°22'34.672"N	104°20'46.526"W	2.00	End of Drop (J)
5817.00†	0.000	355.000	5586.81	-1338.80	-1341.91	101.42	40°22'34.672"N	104°20'46.526"W	0.00	
5917.00†	0.000	355.000	5686.81	-1338.80	-1341.91	101.42	40°22'34.672"N	104°20'46.526"W	0.00	
6004.38	0.000	355.000	5774.18	-1338.80	-1341.91	101.42	40°22'34.672"N	104°20'46.526"W	0.00	End of Tangent (J)
6017.00†	1.262	355.000	5786.80	-1338.66	-1341.77	101.41	40°22'34.673"N	104°20'46.526"W	10.00	
6117.00†	11.262	355.000	5886.08	-1327.83	-1330.91	100.46	40°22'34.780"N	104°20'46.538"W	10.00	
6217.00†	21.262	355.000	5981.96	-1300.05	-1303.05	98.02	40°22'35.056"N	104°20'46.569"W	10.00	
6304.38	30.000	355.000	6060.66	-1262.53	-1265.44	94.73	40°22'35.427"N	104°20'46.612"W	10.00	End of Build (DBL)
6317.00†	31.255	355.266	6071.52	-1256.14	-1259.03	94.19	40°22'35.491"N	104°20'46.619"W	10.00	
6417.00†	41.211	356.856	6152.09	-1197.36	-1200.13	90.23	40°22'36.073"N	104°20'46.670"W	10.00	
6517.00†	51.182	357.915	6221.22	-1125.47	-1128.13	87.00	40°22'36.784"N	104°20'46.712"W	10.00	
6617.00†	61.161	358.712	6276.82	-1042.63	-1045.20	84.59	40°22'37.604"N	104°20'46.743"W	10.00	
6717.00†	71.143	359.367	6317.20	-951.37	-953.86	83.08	40°22'38.506"N	104°20'46.763"W	10.00	
6817.00†	81.127	359.949	6341.13	-854.45	-856.90	82.51	40°22'39.464"N	104°20'46.770"W	10.00	
6905.87	90.000	0.438	6348.00†	-765.96	-768.39	82.81	40°22'40.339"N	104°20'46.766"W	10.00	End of 3D Arc (DBL)
6917.00†	90.000	0.438	6348.00	-754.83	-757.26	82.90	40°22'40.449"N	104°20'46.765"W	0.00	
7017.00†	90.000	0.438	6348.00	-654.85	-657.26	83.66	40°22'41.437"N	104°20'46.755"W	0.00	
7117.00†	90.000	0.438	6348.00	-554.87	-557.26	84.42	40°22'42.425"N	104°20'46.745"W	0.00	
7217.00†	90.000	0.438	6348.00	-454.88	-457.27	85.19	40°22'43.413"N	104°20'46.735"W	0.00	
7317.00†	90.000	0.438	6348.00	-354.90	-357.27	85.95	40°22'44.402"N	104°20'46.725"W	0.00	
7417.00†	90.000	0.438	6348.00	-254.92	-257.27	86.72	40°22'45.390"N	104°20'46.715"W	0.00	
7517.00†	90.000	0.438	6348.00	-154.93	-157.28	87.48	40°22'46.378"N	104°20'46.706"W	0.00	
7617.00†	90.000	0.438	6348.00	-54.95	-57.28	88.25	40°22'47.366"N	104°20'46.696"W	0.00	
7717.00†	90.000	0.438	6348.00	45.03	42.72	89.01	40°22'48.354"N	104°20'46.686"W	0.00	
7817.00†	90.000	0.438	6348.00	145.01	142.72	89.78	40°22'49.342"N	104°20'46.676"W	0.00	
7917.00†	90.000	0.438	6348.00	245.00	242.71	90.54	40°22'50.330"N	104°20'46.666"W	0.00	
8017.00†	90.000	0.438	6348.00	344.98	342.71	91.31	40°22'51.319"N	104°20'46.656"W	0.00	
8117.00†	90.000	0.438	6348.00	444.96	442.71	92.07	40°22'52.307"N	104°20'46.646"W	0.00	



Planned Wellpath Report

ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)
Page 5 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL O34-K31-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL O34-K31-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS ["/100ft]	Comments
8217.00†	90.000	0.438	6348.00	544.95	542.70	92.84	40°22'53.295"N	104°20'46.636"W	0.00	
8317.00†	90.000	0.438	6348.00	644.93	642.70	93.60	40°22'54.283"N	104°20'46.626"W	0.00	
8417.00†	90.000	0.438	6348.00	744.91	742.70	94.37	40°22'55.271"N	104°20'46.617"W	0.00	
8517.00†	90.000	0.438	6348.00	844.89	842.70	95.13	40°22'56.259"N	104°20'46.607"W	0.00	
8617.00†	90.000	0.438	6348.00	944.88	942.69	95.90	40°22'57.247"N	104°20'46.597"W	0.00	
8717.00†	90.000	0.438	6348.00	1044.86	1042.69	96.66	40°22'58.236"N	104°20'46.587"W	0.00	
8817.00†	90.000	0.438	6348.00	1144.84	1142.69	97.42	40°22'59.224"N	104°20'46.577"W	0.00	
8917.00†	90.000	0.438	6348.00	1244.83	1242.68	98.19	40°23'00.212"N	104°20'46.567"W	0.00	
9017.00†	90.000	0.438	6348.00	1344.81	1342.68	98.95	40°23'01.200"N	104°20'46.557"W	0.00	
9117.00†	90.000	0.438	6348.00	1444.79	1442.68	99.72	40°23'02.188"N	104°20'46.547"W	0.00	
9217.00†	90.000	0.438	6348.00	1544.77	1542.68	100.48	40°23'03.176"N	104°20'46.538"W	0.00	
9317.00†	90.000	0.438	6348.00	1644.76	1642.67	101.25	40°23'04.164"N	104°20'46.528"W	0.00	
9417.00†	90.000	0.438	6348.00	1744.74	1742.67	102.01	40°23'05.152"N	104°20'46.518"W	0.00	
9517.00†	90.000	0.438	6348.00	1844.72	1842.67	102.78	40°23'06.141"N	104°20'46.508"W	0.00	
9617.00†	90.000	0.438	6348.00	1944.71	1942.66	103.54	40°23'07.129"N	104°20'46.498"W	0.00	
9717.00†	90.000	0.438	6348.00	2044.69	2042.66	104.31	40°23'08.117"N	104°20'46.488"W	0.00	
9817.00†	90.000	0.438	6348.00	2144.67	2142.66	105.07	40°23'09.105"N	104°20'46.478"W	0.00	
9917.00†	90.000	0.438	6348.00	2244.65	2242.65	105.84	40°23'10.093"N	104°20'46.468"W	0.00	
10017.00†	90.000	0.438	6348.00	2344.64	2342.65	106.60	40°23'11.081"N	104°20'46.458"W	0.00	
10117.00†	90.000	0.438	6348.00	2444.62	2442.65	107.37	40°23'12.069"N	104°20'46.449"W	0.00	
10217.00†	90.000	0.438	6348.00	2544.60	2542.65	108.13	40°23'13.058"N	104°20'46.439"W	0.00	
10317.00†	90.000	0.438	6348.00	2644.59	2642.64	108.90	40°23'14.046"N	104°20'46.429"W	0.00	
10417.00†	90.000	0.438	6348.00	2744.57	2742.64	109.66	40°23'15.034"N	104°20'46.419"W	0.00	
10517.00†	90.000	0.438	6348.00	2844.55	2842.64	110.43	40°23'16.022"N	104°20'46.409"W	0.00	
10617.00†	90.000	0.438	6348.00	2944.54	2942.63	111.19	40°23'17.010"N	104°20'46.399"W	0.00	
10717.00†	90.000	0.438	6348.00	3044.52	3042.63	111.95	40°23'17.998"N	104°20'46.389"W	0.00	
10817.00†	90.000	0.438	6348.00	3144.50	3142.63	112.72	40°23'18.986"N	104°20'46.379"W	0.00	
10917.00†	90.000	0.438	6348.00	3244.48	3242.63	113.48	40°23'19.975"N	104°20'46.369"W	0.00	
11017.00†	90.000	0.438	6348.00	3344.47	3342.62	114.25	40°23'20.963"N	104°20'46.360"W	0.00	
11117.00†	90.000	0.438	6348.00	3444.45	3442.62	115.01	40°23'21.951"N	104°20'46.350"W	0.00	



Planned Wellpath Report

ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)
Page 6 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL O34-K31-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL O34-K31-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11217.00†	90.000	0.438	6348.00	3544.43	3542.62	115.78	40°23'22.939"N	104°20'46.340"W	0.00	
11317.00†	90.000	0.438	6348.00	3644.42	3642.61	116.54	40°23'23.927"N	104°20'46.330"W	0.00	
11417.00†	90.000	0.438	6348.00	3744.40	3742.61	117.31	40°23'24.915"N	104°20'46.320"W	0.00	
11517.00†	90.000	0.438	6348.00	3844.38	3842.61	118.07	40°23'25.903"N	104°20'46.310"W	0.00	
11617.00†	90.000	0.438	6348.00	3944.36	3942.60	118.84	40°23'26.891"N	104°20'46.300"W	0.00	
11717.00†	90.000	0.438	6348.00	4044.35	4042.60	119.60	40°23'27.880"N	104°20'46.290"W	0.00	
11817.00†	90.000	0.438	6348.00	4144.33	4142.60	120.37	40°23'28.868"N	104°20'46.280"W	0.00	
11917.00†	90.000	0.438	6348.00	4244.31	4242.60	121.13	40°23'29.856"N	104°20'46.271"W	0.00	
12017.00†	90.000	0.438	6348.00	4344.30	4342.59	121.90	40°23'30.844"N	104°20'46.261"W	0.00	
12117.00†	90.000	0.438	6348.00	4444.28	4442.59	122.66	40°23'31.832"N	104°20'46.251"W	0.00	
12217.00†	90.000	0.438	6348.00	4544.26	4542.59	123.43	40°23'32.820"N	104°20'46.241"W	0.00	
12317.00†	90.000	0.438	6348.00	4644.24	4642.58	124.19	40°23'33.808"N	104°20'46.231"W	0.00	
12417.00†	90.000	0.438	6348.00	4744.23	4742.58	124.95	40°23'34.797"N	104°20'46.221"W	0.00	
12468.35	90.000	0.438	6348.00 ²	4795.57	4793.93	125.35	40°23'35.304"N	104°20'46.216"W	0.00	End of Tangent

HOLE & CASING SECTIONS									
- Ref Wellbore: ANTELOPE FEDERAL O34-K31-20HNB PWB Ref Wellpath: ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)									
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	1546.63	0.00	0.00	-52.48	3.97



Planned Wellpath Report

ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)
Page 7 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL O34-K31-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL O34-K31-20HNB PWB
Facility	SEC.20-T05N-R62W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.17-T05N-R62W		-8.00	-567.98	-1492.50	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon
SEC.20-T05N-R62W		-8.00	-567.98	-1492.50	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon
2) ANTELOPE FEDERAL O34-K31-20HNB BHL (300'FSL & 2286'FEL, SEC.17)	12468.35	6348.00	4793.93	125.35	3321376.74	1388152.21	40°23'35.304"N	104°20'46.216"W	point
1) ANTELOPE FEDERAL O34-K31-20HNB LP (0'FSL & 2266'FEL, SEC.20)	6905.87	6348.00	-768.39	82.81	3321406.55	1382590.04	40°22'40.339"N	104°20'46.766"W	point
SEC.17/20-T05N-R62W (460'FNL/FSL SETBACKS)		6373.00	-567.98	-1492.50	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon

SURVEY PROGRAM -				
Ref Wellbore: ANTELOPE FEDERAL O34-K31-20HNB PWB		Ref Wellpath: ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NaviTrak (Rotating+Axial Corr)		ANTELOPE FEDERAL O34-K31-20HNB PWB
1550.00	12495.02	BHI AutoTrak Curve (Axial Corr, Short spacing)		ANTELOPE FEDERAL O34-K31-20HNB PWB



Planned Wellpath Report

ANTELOPE FEDERAL O34-K31-20HNB PWP (REV-A.1)
Page 8 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#26 ANTELOPE FEDERAL O34-K31-20HNB (769'FSL & 2357'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL O34-K31-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL O34-K31-20HNB PWB
Facility	SEC.20-T05N-R62W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	175.678	17.00	Tie On
1000.00	0.000	175.678	1000.00	End of Tangent
2076.68	21.534	175.678	2051.52	End of Build
4653.51	21.534	175.678	4448.48	End of Tangent
5730.19	0.000	355.000	5500.00	End of Drop (J)
6004.38	0.000	355.000	5774.18	End of Tangent (J)
6304.38	30.000	355.000	6060.66	End of Build (DBL)
6905.87	90.000	0.438	6348.00	End of 3D Arc (DBL)
12468.35	90.000	0.438	6348.00	End of Tangent