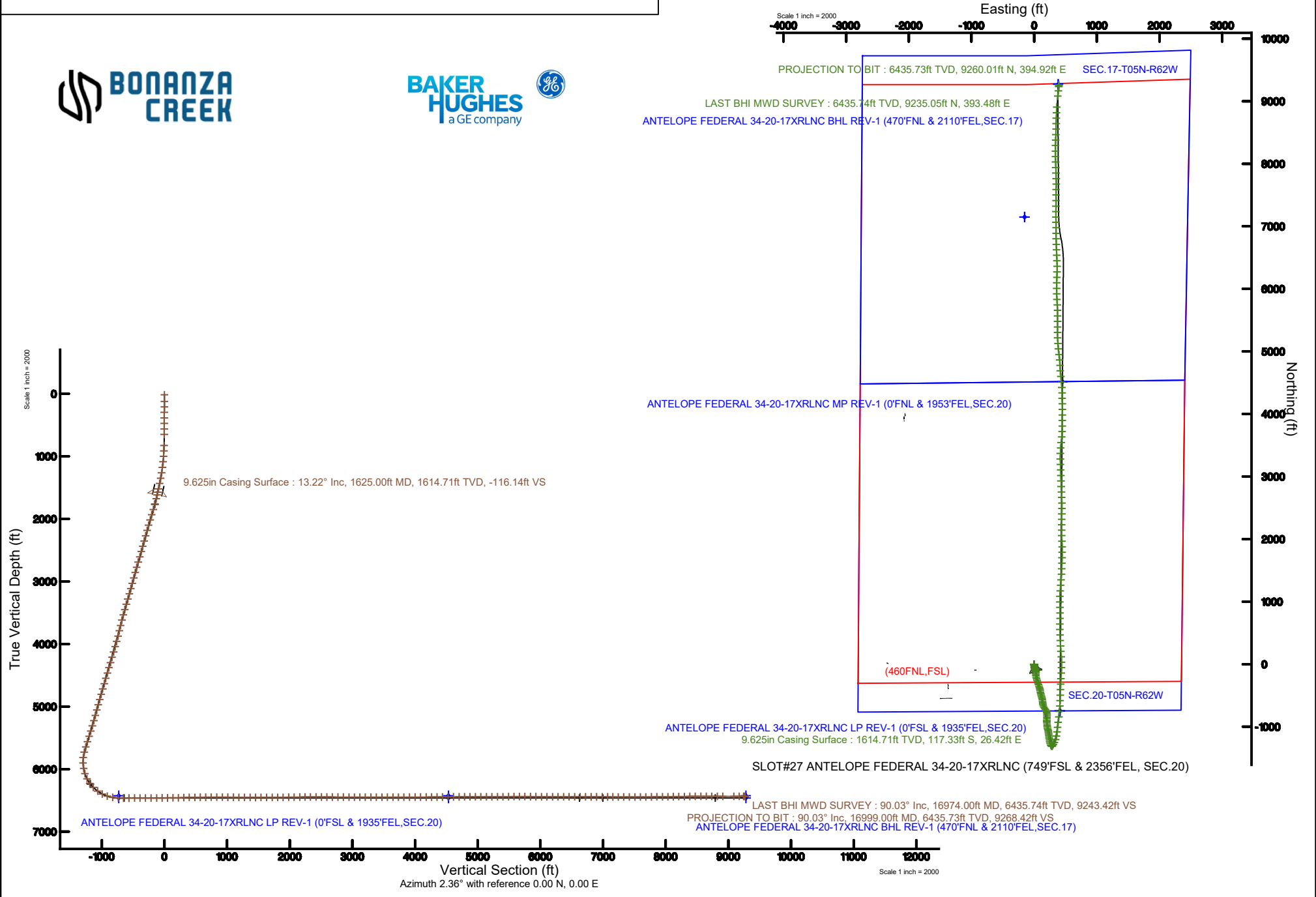


# BONANZA CREEK ENERGY

Location: COLORADO Slot: SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)  
 Field: WELD COUNTY (NAD83/TRUE) Well: ANTELOPE FEDERAL 34-20-17XRLNC  
 Facility: SEC.20-T05N-R62W Wellbore: ANTELOPE FEDERAL 34-20-17XRLNC PWB

Plot reference wellpath is ANTELOPE FEDERAL 34-20-17XRLNC (REV-D.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to AKITA 519 (4657'GL + 17'KB@4674') (RKB)	North Reference: True north
Measured depths are referenced to AKITA 519 (4657'GL + 17'KB@4674') (RKB)	Scale: True distance
AKITA 519 (4657'GL + 17'KB@4674') (RKB) to Mean Sea Level: 4674 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)): 0 feet	Created by: doddanna on 2019-07-01
Coordinates are in feet referenced to Slot.	Database: WellArchitectDB



# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 1 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Doddanna
Scale	0.999959	Report Generated	7/1/2019 at 8:35:51 AM
Convergence at slot	0.75° East	Database/Source file	WellArchitectDB/ANTELOPE_FEDERAL_34-20-17XRLNC_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-12.24	2333.00	3321315.42	1383337.24	40°22'47.734"N	104°20'47.818"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	AKITA 519 (4657'GL + 17'KB@4674') (RKB) to Facility Vertical Datum	4674.00ft
Horizontal Reference Pt	Slot	AKITA 519 (4657'GL + 17'KB@4674') (RKB) to Mean Sea Level	4674.00ft
Vertical Reference Pt	AKITA 519 (4657'GL + 17'KB@4674') (RKB)	AKITA 519 (4657'GL + 17'KB@4674') (RKB) to Ground Level at Slot (SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20))	4674.00ft
MD Reference Pt	AKITA 519 (4657'GL + 17'KB@4674') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	2.36°

# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 2 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (194 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	202.510	0.00	0.00	0.00	0.00	40°22'47.734"N	104°20'47.818"W	0.00	
17.00	0.000	202.510	17.00	0.00	0.00	0.00	40°22'47.734"N	104°20'47.818"W	0.00	
123.00	0.500	202.510	123.00	-0.43	-0.43	-0.18	40°22'47.730"N	104°20'47.820"W	0.47	
209.00	0.350	217.100	209.00	-1.00	-0.98	-0.48	40°22'47.724"N	104°20'47.824"W	0.21	
297.00	0.740	220.290	296.99	-1.67	-1.63	-1.01	40°22'47.718"N	104°20'47.831"W	0.44	
387.00	0.220	17.860	386.99	-1.96	-1.91	-1.33	40°22'47.715"N	104°20'47.835"W	1.05	
474.00	0.150	203.020	473.99	-1.91	-1.86	-1.32	40°22'47.716"N	104°20'47.835"W	0.42	
562.00	0.250	13.660	561.99	-1.83	-1.78	-1.32	40°22'47.716"N	104°20'47.835"W	0.45	
650.00	0.400	176.830	649.99	-1.95	-1.90	-1.26	40°22'47.715"N	104°20'47.834"W	0.73	
826.00	1.640	171.450	825.96	-5.03	-5.00	-0.85	40°22'47.685"N	104°20'47.829"W	0.71	
913.00	2.740	172.240	912.89	-8.30	-8.29	-0.39	40°22'47.652"N	104°20'47.823"W	1.26	
1000.00	4.190	169.750	999.73	-13.45	-13.48	0.46	40°22'47.601"N	104°20'47.812"W	1.68	
1088.00	6.180	165.370	1087.37	-21.12	-21.23	2.23	40°22'47.524"N	104°20'47.789"W	2.30	
1177.00	8.070	166.940	1175.68	-31.72	-31.95	4.85	40°22'47.418"N	104°20'47.755"W	2.13	
1265.00	9.470	166.350	1262.65	-44.63	-45.00	7.95	40°22'47.289"N	104°20'47.715"W	1.59	
1353.00	10.590	167.640	1349.30	-59.41	-59.94	11.39	40°22'47.142"N	104°20'47.671"W	1.30	
1440.00	12.220	166.750	1434.58	-76.02	-76.71	15.21	40°22'46.976"N	104°20'47.621"W	1.88	
1528.00	13.490	163.570	1520.37	-94.70	-95.62	20.25	40°22'46.789"N	104°20'47.556"W	1.65	
1582.00	13.550	163.280	1572.88	-106.64	-107.72	23.85	40°22'46.670"N	104°20'47.510"W	0.17	
1690.00	12.830	172.570	1678.04	-130.42	-131.73	29.05	40°22'46.432"N	104°20'47.443"W	2.07	
1778.00	15.860	189.200	1763.32	-152.00	-153.30	28.39	40°22'46.219"N	104°20'47.451"W	5.78	
1867.00	17.130	177.340	1848.68	-177.14	-178.41	27.05	40°22'45.971"N	104°20'47.468"W	4.04	
1954.00	17.510	166.800	1931.76	-202.52	-203.96	30.63	40°22'45.719"N	104°20'47.422"W	3.63	
2042.00	17.610	163.150	2015.66	-227.84	-229.59	37.52	40°22'45.465"N	104°20'47.333"W	1.26	
2130.00	16.680	160.180	2099.75	-252.11	-254.21	45.66	40°22'45.222"N	104°20'47.228"W	1.45	
2218.00	16.530	163.320	2184.08	-275.64	-278.08	53.53	40°22'44.986"N	104°20'47.126"W	1.03	
2307.00	16.340	160.910	2269.44	-299.26	-302.04	61.26	40°22'44.749"N	104°20'47.026"W	0.80	
2395.00	16.990	162.360	2353.75	-322.86	-325.99	69.21	40°22'44.513"N	104°20'46.924"W	0.88	
2483.00	16.720	161.290	2437.97	-346.75	-350.23	77.16	40°22'44.273"N	104°20'46.821"W	0.47	
2570.00	16.450	158.700	2521.35	-369.71	-373.56	85.65	40°22'44.043"N	104°20'46.711"W	0.90	

# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 3 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (194 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2658.00	16.670	171.220	2605.73	-393.52	-397.65	92.11	40°22'43.805"N	104°20'46.628"W	4.06	
2745.00	16.610	173.430	2689.08	-418.05	-422.34	95.43	40°22'43.561"N	104°20'46.585"W	0.73	
2834.00	16.570	168.020	2774.38	-442.91	-447.39	99.52	40°22'43.313"N	104°20'46.532"W	1.74	
2921.00	16.190	163.250	2857.86	-466.39	-471.14	105.59	40°22'43.078"N	104°20'46.454"W	1.61	
3010.00	16.130	163.780	2943.34	-489.83	-494.90	112.62	40°22'42.844"N	104°20'46.363"W	0.18	
3099.00	16.250	164.780	3028.81	-513.42	-518.78	119.35	40°22'42.608"N	104°20'46.276"W	0.34	
3186.00	15.970	166.360	3112.39	-536.53	-542.16	125.36	40°22'42.377"N	104°20'46.198"W	0.60	
3273.00	16.180	170.340	3196.00	-559.89	-565.74	130.22	40°22'42.144"N	104°20'46.135"W	1.29	
3361.00	16.140	171.600	3280.52	-583.90	-589.93	134.06	40°22'41.905"N	104°20'46.086"W	0.40	
3448.00	15.910	175.290	3364.14	-607.61	-613.77	136.81	40°22'41.669"N	104°20'46.050"W	1.20	
3536.00	15.840	172.430	3448.79	-631.41	-637.70	139.38	40°22'41.432"N	104°20'46.017"W	0.89	
3625.00	16.700	163.090	3534.24	-655.45	-661.98	144.70	40°22'41.193"N	104°20'45.948"W	3.09	
3713.00	16.300	148.640	3618.65	-677.67	-684.63	154.81	40°22'40.969"N	104°20'45.818"W	4.67	
3801.00	16.340	145.660	3703.10	-697.86	-705.40	168.22	40°22'40.763"N	104°20'45.644"W	0.95	
3890.00	16.160	149.330	3788.55	-718.28	-726.39	181.60	40°22'40.556"N	104°20'45.471"W	1.17	
3978.00	16.180	156.940	3873.08	-739.63	-748.21	192.65	40°22'40.340"N	104°20'45.329"W	2.41	
4067.00	16.130	165.410	3958.58	-762.65	-771.58	200.63	40°22'40.109"N	104°20'45.226"W	2.65	
4154.00	15.820	175.470	4042.23	-785.99	-795.11	204.61	40°22'39.877"N	104°20'45.174"W	3.20	
4242.00	16.190	182.150	4126.83	-810.17	-819.33	205.09	40°22'39.638"N	104°20'45.168"W	2.13	
4331.00	16.360	182.390	4212.26	-835.11	-844.25	204.11	40°22'39.391"N	104°20'45.181"W	0.21	
4419.00	16.560	182.170	4296.66	-860.05	-869.16	203.11	40°22'39.145"N	104°20'45.194"W	0.24	
4505.00	16.330	180.680	4379.14	-884.39	-893.50	202.51	40°22'38.905"N	104°20'45.201"W	0.56	
4593.00	16.420	178.990	4463.57	-909.17	-918.31	202.58	40°22'38.660"N	104°20'45.200"W	0.55	
4682.00	16.390	174.150	4548.95	-934.16	-943.38	204.08	40°22'38.412"N	104°20'45.181"W	1.54	
4770.00	16.480	174.160	4633.35	-958.80	-968.14	206.62	40°22'38.167"N	104°20'45.148"W	0.10	
4859.00	16.620	174.850	4718.67	-983.91	-993.38	209.04	40°22'37.918"N	104°20'45.117"W	0.27	
4947.00	16.370	168.710	4803.05	-1008.44	-1018.08	212.60	40°22'37.674"N	104°20'45.071"W	2.00	
5034.00	16.370	162.060	4886.53	-1031.86	-1041.76	218.78	40°22'37.440"N	104°20'44.991"W	2.15	
5123.00	15.680	168.040	4972.08	-1055.27	-1065.46	225.13	40°22'37.205"N	104°20'44.909"W	2.01	
5210.00	15.230	172.910	5055.94	-1077.94	-1088.31	228.98	40°22'36.980"N	104°20'44.859"W	1.58	

# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 4 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749°FSL & 2356°FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (194 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5297.00	15.910	172.610	5139.74	-1100.96	-1111.47	231.93	40°22'36.751"N	104°20'44.821"W	0.79	
5384.00	16.140	173.840	5223.36	-1124.67	-1135.32	234.76	40°22'36.515"N	104°20'44.785"W	0.47	
5472.00	17.270	170.900	5307.65	-1149.57	-1160.38	238.14	40°22'36.267"N	104°20'44.741"W	1.60	
5560.00	17.650	169.570	5391.59	-1175.38	-1186.40	242.62	40°22'36.010"N	104°20'44.683"W	0.63	
5648.00	17.470	175.600	5475.50	-1201.51	-1212.69	246.04	40°22'35.751"N	104°20'44.639"W	2.08	
5737.00	18.010	171.420	5560.27	-1228.29	-1239.62	249.12	40°22'35.484"N	104°20'44.599"W	1.55	
5825.00	18.080	163.550	5643.96	-1254.58	-1266.17	255.02	40°22'35.222"N	104°20'44.523"W	2.77	
5913.00	17.410	158.750	5727.77	-1279.57	-1291.54	263.66	40°22'34.971"N	104°20'44.411"W	1.83	
6002.00	9.950	125.030	5814.31	-1295.96	-1308.41	274.81	40°22'34.805"N	104°20'44.267"W	11.94	
6090.00	6.420	69.150	5901.53	-1298.13	-1311.03	285.65	40°22'34.779"N	104°20'44.127"W	9.39	
6178.00	10.940	27.570	5988.57	-1288.62	-1301.86	294.13	40°22'34.869"N	104°20'44.018"W	8.47	
6265.00	19.870	33.780	6072.37	-1268.49	-1282.21	306.20	40°22'35.064"N	104°20'43.862"W	10.42	
6354.00	29.220	27.150	6153.25	-1235.79	-1250.23	324.56	40°22'35.380"N	104°20'43.624"W	10.94	
6442.00	37.350	19.540	6226.79	-1190.69	-1205.87	343.33	40°22'35.818"N	104°20'43.382"W	10.37	
6530.00	46.170	9.530	6292.44	-1133.51	-1149.24	357.56	40°22'36.378"N	104°20'43.198"W	12.54	
6619.00	52.740	5.390	6350.27	-1066.20	-1082.23	366.21	40°22'37.040"N	104°20'43.086"W	8.18	
6707.00	62.030	6.460	6397.66	-992.31	-1008.58	373.89	40°22'37.767"N	104°20'42.987"W	10.61	
6795.00	72.460	7.630	6431.65	-911.54	-928.16	383.86	40°22'38.562"N	104°20'42.858"W	11.92	
6884.00	80.600	7.320	6452.36	-825.41	-842.42	395.11	40°22'39.409"N	104°20'42.713"W	9.15	
6973.00	87.820	4.560	6461.33	-737.10	-754.41	404.25	40°22'40.279"N	104°20'42.595"W	8.68	
7059.00	90.000	3.280	6462.97	-651.15	-668.64	410.13	40°22'41.127"N	104°20'42.519"W	2.94	
7146.00	89.820	1.640	6463.11	-564.16	-581.72	413.86	40°22'41.986"N	104°20'42.470"W	1.90	
7234.00	90.520	2.760	6462.85	-476.16	-493.79	417.24	40°22'42.855"N	104°20'42.427"W	1.50	
7322.00	90.120	1.900	6462.36	-388.16	-405.86	420.82	40°22'43.723"N	104°20'42.380"W	1.08	
7409.00	90.430	1.640	6461.94	-301.17	-318.91	423.51	40°22'44.583"N	104°20'42.346"W	0.47	
7498.00	90.400	3.230	6461.29	-212.17	-229.99	427.29	40°22'45.461"N	104°20'42.297"W	1.79	
7586.00	90.340	3.720	6460.72	-124.19	-142.15	432.62	40°22'46.329"N	104°20'42.228"W	0.56	
7673.00	90.180	2.150	6460.33	-37.20	-55.27	437.08	40°22'47.188"N	104°20'42.170"W	1.81	
7760.00	90.280	358.930	6459.98	49.74	31.71	437.89	40°22'48.047"N	104°20'42.160"W	3.70	
7846.00	90.650	355.660	6459.28	135.39	117.60	433.84	40°22'48.896"N	104°20'42.212"W	3.83	

# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 5 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (194 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7934.00	91.880	355.740	6457.34	222.77	205.33	427.24	40°22'49.763"N	104°20'42.297"W	1.40	
8022.00	92.090	356.770	6454.29	310.22	293.09	421.50	40°22'50.630"N	104°20'42.372"W	1.19	
8109.00	90.890	357.740	6452.03	396.84	379.96	417.33	40°22'51.489"N	104°20'42.425"W	1.77	
8197.00	90.680	357.760	6450.82	484.55	467.88	413.88	40°22'52.357"N	104°20'42.470"W	0.24	
8285.00	90.120	358.970	6450.21	572.33	555.84	411.37	40°22'53.227"N	104°20'42.502"W	1.52	
8373.00	90.310	0.970	6449.88	660.25	643.84	411.32	40°22'54.096"N	104°20'42.503"W	2.28	
8460.00	90.550	0.660	6449.23	747.22	730.82	412.56	40°22'54.956"N	104°20'42.487"W	0.45	
8548.00	90.310	0.320	6448.57	835.17	818.82	413.31	40°22'55.825"N	104°20'42.477"W	0.47	
8637.00	89.350	358.440	6448.83	924.04	907.81	412.35	40°22'56.705"N	104°20'42.490"W	2.37	
8725.00	89.510	358.970	6449.70	1011.86	995.78	410.36	40°22'57.574"N	104°20'42.515"W	0.63	
8814.00	89.600	1.740	6450.40	1100.79	1084.77	410.91	40°22'58.453"N	104°20'42.508"W	3.11	
8903.00	88.920	4.660	6451.55	1189.76	1173.61	415.88	40°22'59.331"N	104°20'42.444"W	3.37	
8992.00	90.030	4.720	6452.36	1278.68	1262.31	423.15	40°23'00.208"N	104°20'42.350"W	1.25	
9080.00	89.380	4.550	6452.81	1366.61	1350.02	430.26	40°23'01.074"N	104°20'42.258"W	0.76	
9168.00	90.310	3.370	6453.05	1454.58	1437.81	436.34	40°23'01.942"N	104°20'42.179"W	1.71	
9256.00	90.250	1.720	6452.62	1542.57	1525.71	440.25	40°23'02.811"N	104°20'42.129"W	1.88	
9345.00	90.340	1.830	6452.16	1631.57	1614.67	443.01	40°23'03.690"N	104°20'42.093"W	0.16	
9433.00	89.510	1.370	6452.28	1719.56	1702.63	445.46	40°23'04.559"N	104°20'42.062"W	1.08	
9521.00	90.860	0.550	6452.00	1807.53	1790.62	446.94	40°23'05.428"N	104°20'42.042"W	1.79	
9608.00	90.680	358.740	6450.83	1894.42	1877.61	446.40	40°23'06.288"N	104°20'42.049"W	2.09	
9697.00	90.980	357.670	6449.54	1983.17	1966.55	443.61	40°23'07.167"N	104°20'42.085"W	1.25	
9786.00	90.120	358.960	6448.68	2071.94	2055.51	440.99	40°23'08.046"N	104°20'42.119"W	1.74	
9873.00	92.060	0.290	6447.03	2158.82	2142.48	440.42	40°23'08.905"N	104°20'42.127"W	2.70	
9959.00	89.720	359.230	6445.69	2244.72	2228.46	440.06	40°23'09.755"N	104°20'42.131"W	2.99	
10046.00	89.940	0.290	6445.95	2331.63	2315.46	439.70	40°23'10.615"N	104°20'42.136"W	1.24	
10135.00	89.880	2.340	6446.09	2420.61	2404.43	441.74	40°23'11.494"N	104°20'42.109"W	2.30	
10221.00	89.910	0.800	6446.25	2506.59	2490.40	444.10	40°23'12.343"N	104°20'42.079"W	1.79	
10308.00	89.880	358.150	6446.41	2593.48	2577.39	443.30	40°23'13.203"N	104°20'42.089"W	3.05	
10396.00	89.780	357.820	6446.67	2681.22	2665.33	440.21	40°23'14.072"N	104°20'42.129"W	0.39	
10484.00	90.000	357.390	6446.84	2768.92	2753.25	436.53	40°23'14.941"N	104°20'42.177"W	0.55	

# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 6 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (194 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10572.00	89.820	357.180	6446.98	2856.57	2841.16	432.36	40°23'15.809"N	104°20'42.231"W	0.31	
10661.00	89.630	358.280	6447.40	2945.28	2930.08	428.84	40°23'16.688"N	104°20'42.276"W	1.25	
10749.00	90.120	358.990	6447.59	3033.09	3018.06	426.74	40°23'17.557"N	104°20'42.303"W	0.98	
10836.00	89.820	357.140	6447.64	3119.84	3105.00	423.80	40°23'18.417"N	104°20'42.341"W	2.15	
10923.00	90.000	358.270	6447.78	3206.55	3191.93	420.32	40°23'19.276"N	104°20'42.386"W	1.32	
11012.00	90.030	359.150	6447.75	3295.37	3280.91	418.31	40°23'20.155"N	104°20'42.412"W	0.99	
11100.00	89.910	1.580	6447.80	3383.31	3368.90	418.88	40°23'21.024"N	104°20'42.405"W	2.76	
11188.00	89.940	4.740	6447.91	3471.29	3456.76	423.73	40°23'21.892"N	104°20'42.342"W	3.59	
11276.00	89.970	6.270	6447.98	3559.15	3544.35	432.17	40°23'22.758"N	104°20'42.233"W	1.74	
11365.00	89.850	5.020	6448.12	3648.01	3632.91	440.92	40°23'23.633"N	104°20'42.120"W	1.41	
11453.00	90.650	3.640	6447.74	3735.95	3720.66	447.57	40°23'24.500"N	104°20'42.034"W	1.81	
11539.00	90.090	0.630	6447.18	3821.94	3806.59	450.77	40°23'25.349"N	104°20'41.992"W	3.56	
11628.00	90.000	359.780	6447.11	3910.87	3895.59	451.09	40°23'26.229"N	104°20'41.988"W	0.96	
11717.00	89.970	0.090	6447.14	3999.79	3984.59	450.99	40°23'27.108"N	104°20'41.990"W	0.35	
11806.00	90.060	359.200	6447.11	4088.69	4073.58	450.43	40°23'27.988"N	104°20'41.997"W	1.01	
11895.00	90.430	359.040	6446.73	4177.55	4162.57	449.07	40°23'28.867"N	104°20'42.014"W	0.45	
11982.00	89.910	359.200	6446.48	4264.41	4249.56	447.73	40°23'29.727"N	104°20'42.032"W	0.63	
12069.00	90.090	358.610	6446.48	4351.25	4336.54	446.07	40°23'30.586"N	104°20'42.053"W	0.71	
12157.00	90.030	356.140	6446.38	4438.91	4424.45	442.04	40°23'31.455"N	104°20'42.105"W	2.81	
12245.00	91.420	355.670	6445.27	4526.34	4512.21	435.76	40°23'32.322"N	104°20'42.186"W	1.67	
12334.00	90.430	352.310	6443.83	4614.37	4600.70	426.44	40°23'33.196"N	104°20'42.307"W	3.94	
12423.00	90.680	355.760	6442.97	4702.41	4689.20	417.19	40°23'34.071"N	104°20'42.426"W	3.89	
12510.00	90.280	358.920	6442.24	4789.06	4776.09	413.16	40°23'34.930"N	104°20'42.478"W	3.66	
12597.00	89.720	353.630	6442.24	4875.54	4862.87	407.51	40°23'35.787"N	104°20'42.551"W	6.11	
12686.00	90.090	352.050	6442.39	4963.31	4951.18	396.41	40°23'36.660"N	104°20'42.695"W	1.82	
12775.00	89.910	355.300	6442.39	5051.28	5039.62	386.61	40°23'37.534"N	104°20'42.821"W	3.66	
12863.00	90.400	355.780	6442.15	5138.66	5127.36	379.77	40°23'38.401"N	104°20'42.910"W	0.78	
12952.00	90.030	357.770	6441.82	5227.23	5216.21	374.76	40°23'39.279"N	104°20'42.975"W	2.27	
13040.00	90.150	0.460	6441.68	5315.08	5304.19	373.40	40°23'40.148"N	104°20'42.992"W	3.06	
13128.00	90.580	0.760	6441.12	5403.03	5392.18	374.34	40°23'41.018"N	104°20'42.980"W	0.60	

# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 7 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (194 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13216.00	90.520	0.200	6440.27	5490.98	5480.18	375.07	40°23'41.887"N	104°20'42.970"W	0.64	
13304.00	90.460	359.510	6439.52	5578.89	5568.17	374.85	40°23'42.757"N	104°20'42.973"W	0.79	
13392.00	90.310	358.020	6438.93	5666.72	5656.15	372.96	40°23'43.626"N	104°20'42.998"W	1.70	
13479.00	89.600	357.050	6439.00	5753.41	5743.07	369.21	40°23'44.485"N	104°20'43.046"W	1.38	
13567.00	89.350	356.690	6439.80	5841.00	5830.93	364.41	40°23'45.353"N	104°20'43.108"W	0.50	
13656.00	89.850	358.360	6440.43	5929.68	5919.84	360.57	40°23'46.232"N	104°20'43.158"W	1.96	
13745.00	89.510	359.900	6440.92	6018.53	6008.83	359.21	40°23'47.111"N	104°20'43.175"W	1.77	
13833.00	89.630	1.260	6441.58	6106.48	6096.82	360.11	40°23'47.981"N	104°20'43.164"W	1.55	
13921.00	89.690	2.290	6442.10	6194.47	6184.77	362.83	40°23'48.850"N	104°20'43.128"W	1.17	
14009.00	90.000	1.260	6442.34	6282.47	6272.73	365.56	40°23'49.719"N	104°20'43.093"W	1.22	
14097.00	89.940	359.890	6442.39	6370.42	6360.72	366.44	40°23'50.588"N	104°20'43.082"W	1.56	
14186.00	89.820	358.020	6442.58	6459.26	6449.70	364.82	40°23'51.468"N	104°20'43.103"W	2.11	
14274.00	90.280	356.430	6442.50	6546.91	6537.60	360.56	40°23'52.336"N	104°20'43.158"W	1.88	
14362.00	89.880	357.540	6442.38	6634.52	6625.47	355.93	40°23'53.205"N	104°20'43.218"W	1.34	
14449.00	89.630	359.060	6442.75	6721.29	6712.43	353.35	40°23'54.064"N	104°20'43.251"W	1.77	
14538.00	89.910	359.190	6443.11	6810.15	6801.42	351.99	40°23'54.943"N	104°20'43.269"W	0.35	
14625.00	89.940	359.680	6443.22	6897.04	6888.42	351.13	40°23'55.803"N	104°20'43.280"W	0.56	
14714.00	90.000	359.240	6443.27	6985.92	6977.41	350.29	40°23'56.682"N	104°20'43.290"W	0.50	
14801.00	89.910	359.080	6443.33	7072.79	7064.40	349.02	40°23'57.542"N	104°20'43.307"W	0.21	
14885.00	89.570	359.750	6443.72	7156.67	7148.40	348.16	40°23'58.372"N	104°20'43.318"W	0.89	
14972.00	89.720	0.270	6444.25	7243.60	7235.40	348.17	40°23'59.232"N	104°20'43.318"W	0.62	
15060.00	89.720	0.900	6444.68	7331.55	7323.39	349.07	40°24'00.101"N	104°20'43.306"W	0.72	
15149.00	90.000	0.480	6444.90	7420.52	7412.38	350.14	40°24'00.981"N	104°20'43.292"W	0.57	
15237.00	90.250	0.220	6444.71	7508.46	7500.38	350.68	40°24'01.850"N	104°20'43.285"W	0.41	
15324.00	90.250	0.910	6444.33	7595.42	7587.37	351.54	40°24'02.710"N	104°20'43.274"W	0.79	
15412.00	90.220	0.800	6443.97	7683.39	7675.36	352.85	40°24'03.579"N	104°20'43.257"W	0.13	
15500.00	90.550	358.090	6443.38	7771.26	7763.35	352.00	40°24'04.449"N	104°20'43.268"W	3.10	
15588.00	90.580	357.940	6442.51	7859.00	7851.29	348.95	40°24'05.318"N	104°20'43.308"W	0.17	
15677.00	90.580	357.710	6441.61	7947.72	7940.22	345.57	40°24'06.196"N	104°20'43.351"W	0.26	
15765.00	90.580	358.020	6440.72	8035.44	8028.16	342.30	40°24'07.065"N	104°20'43.394"W	0.35	

# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 8 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (194 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
15852.00	90.550	359.260	6439.86	8122.25	8115.13	340.23	40°24'07.925"N	104°20'43.420"W	1.43	
15940.00	90.770	0.440	6438.85	8210.16	8203.12	340.00	40°24'08.794"N	104°20'43.423"W	1.36	
16028.00	90.890	1.070	6437.57	8298.12	8291.10	341.16	40°24'09.664"N	104°20'43.408"W	0.73	
16115.00	90.830	2.000	6436.27	8385.10	8378.06	343.49	40°24'10.523"N	104°20'43.378"W	1.07	
16203.00	89.940	2.170	6435.67	8473.09	8466.00	346.69	40°24'11.392"N	104°20'43.337"W	1.03	
16291.00	90.060	1.300	6435.67	8561.09	8553.96	349.36	40°24'12.261"N	104°20'43.302"W	1.00	
16379.00	90.030	1.850	6435.61	8649.08	8641.92	351.78	40°24'13.130"N	104°20'43.271"W	0.63	
16466.00	90.030	1.870	6435.56	8736.08	8728.88	354.60	40°24'13.990"N	104°20'43.234"W	0.02	
16554.00	89.940	1.960	6435.58	8824.07	8816.83	357.54	40°24'14.859"N	104°20'43.196"W	0.14	
16642.00	89.720	2.540	6435.84	8912.07	8904.76	360.99	40°24'15.728"N	104°20'43.152"W	0.70	
16819.00	90.120	7.810	6436.09	9088.80	9080.98	376.95	40°24'17.469"N	104°20'42.945"W	2.99	
16906.00	90.180	6.420	6435.86	9175.50	9167.30	387.73	40°24'18.322"N	104°20'42.806"W	1.60	
16974.00	90.030	3.290	6435.74	9243.42	9235.05	393.48	40°24'18.991"N	104°20'42.732"W	4.61	LAST BHI MWD SURVEY
16999.00	90.030	3.290	6435.73	9268.42	9260.01	394.92	40°24'19.238"N	104°20'42.713"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS									
- Ref Wellbore: ANTELOPE FEDERAL 34-20-17XRLNC AWB					Ref Wellpath: ANTELOPE FEDERAL 34-20-17XRLNC 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]
9.625in Casing Surface	17.00	1625.00	1608.00	17.00	1614.71	0.00	0.00	-117.33	26.42

# Actual Wellpath Report

## ANTELOPE FEDERAL 34-20-17XRLNC AWP

Page 9 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
ANTELOPE FEDERAL 34-20-17XRLNC BHL (470'FNL & 2110'FEL,SEC.17)	6424.00	9272.04	382.71	3321577.48	1392613.08	40°24'19.357"N	104°20'42.871"W	point
ANTELOPE FEDERAL 34-20-17XRLNC LP (0'FSL & 1935'FEL,SEC.20)	6424.00	-746.53	412.12	3321737.19	1382596.16	40°22'40.357"N	104°20'42.493"W	point
ANTELOPE FEDERAL 34-20-17XRLNC MP (0'FNL & 1953'FEL,SEC.20)	6424.00	4517.77	452.42	3321709.02	1387860.32	40°23'32.377"N	104°20'41.971"W	point
ANTELOPE FEDERAL 34-20-17XRLNC BHL REV-1 (470'FNL & 2110'FEL,SEC.17)	6462.00	9272.04	382.71	3321577.48	1392613.08	40°24'19.357"N	104°20'42.871"W	point
ANTELOPE FEDERAL 34-20-17XRLNC LP REV-1 (0'FSL & 1935'FEL,SEC.20)	6462.00	-746.53	412.12	3321737.19	1382596.16	40°22'40.357"N	104°20'42.493"W	point
ANTELOPE FEDERAL 34-20-17XRLNC MP REV-1 (0'FNL & 1953'FEL,SEC.20)	6462.00	4517.77	452.42	3321709.02	1387860.32	40°23'32.377"N	104°20'41.971"W	point
SEC.17,20-T05N-R62W (460FNL,FSL)	10672.00	7148.08	-153.16	<b>3321069.31</b>	<b>1390482.42</b>	40°23'58.369"N	104°20'49.798"W	polygon
SEC.17-T05N-R62W	10673.00	7148.08	-153.16	<b>3321069.31</b>	<b>1390482.42</b>	40°23'58.369"N	104°20'49.798"W	polygon
SEC.20-T05N-R62W	10673.00	7148.08	-153.16	<b>3321069.31</b>	<b>1390482.42</b>	40°23'58.369"N	104°20'49.798"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: ANTELOPE FEDERAL 34-20-17XRLNC AWB      Ref Wellpath: ANTELOPE FEDERAL 34-20-17XRLNC AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1582.00	BHI NaviTrak (Rotating+Axial Corr)	BHI NAVITRAK (ROTATING+AXIAL CORR) <123-1582>	ANTELOPE FEDERAL 34-20-17XRLNC AWB
1582.00	16974.00	BHI AutoTrak Curve (Short)	BHI AUTOTRAK CURVE (SHORT) <1690-16974>	ANTELOPE FEDERAL 34-20-17XRLNC AWB
16974.00	16999.00	Blind Drilling (std)	Projection to bit	ANTELOPE FEDERAL 34-20-17XRLNC AWB

# Actual Wellpath Report

ANTELOPE FEDERAL 34-20-17XRLNC AWP  
Page 10 of 10



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#27 ANTELOPE FEDERAL 34-20-17XRLNC (749'FSL & 2356'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 34-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16974.00	90.030	3.290	6435.74	LAST BHI MWD SURVEY
16999.00	90.030	3.290	6435.73	PROJECTION TO BIT