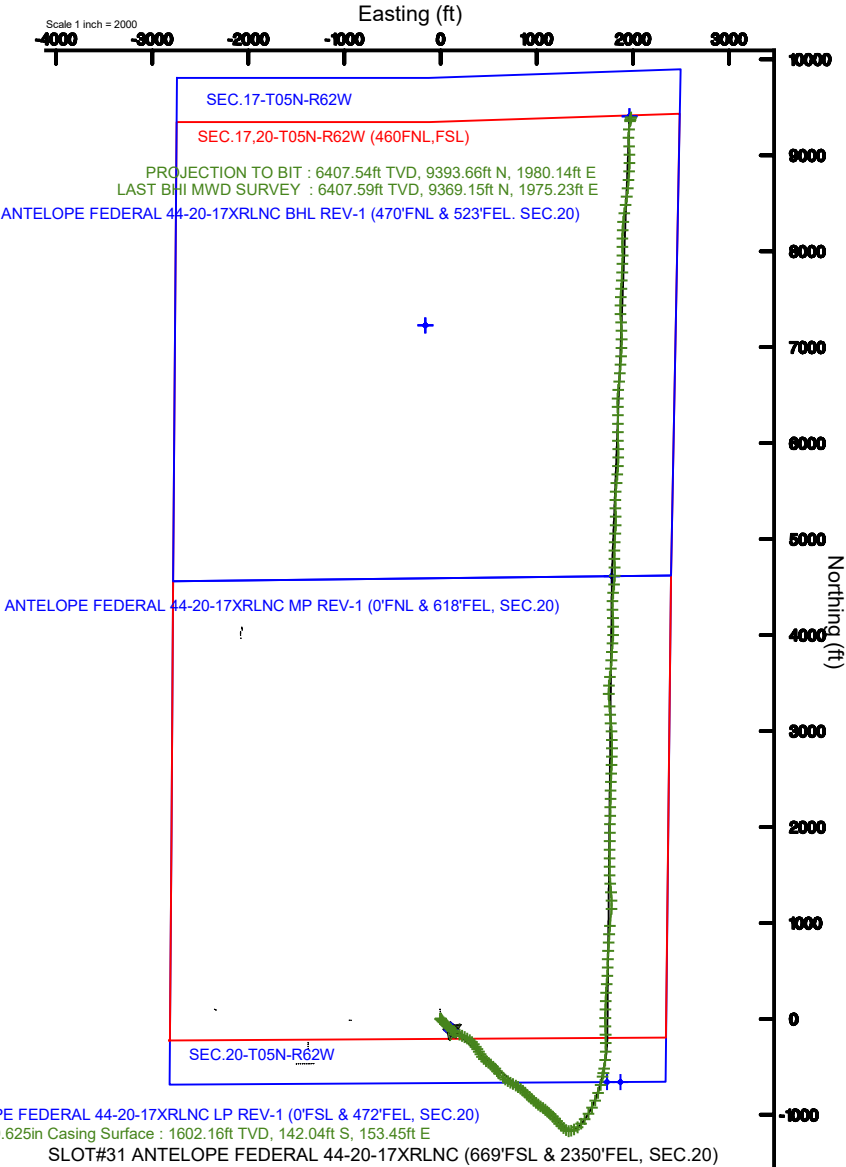
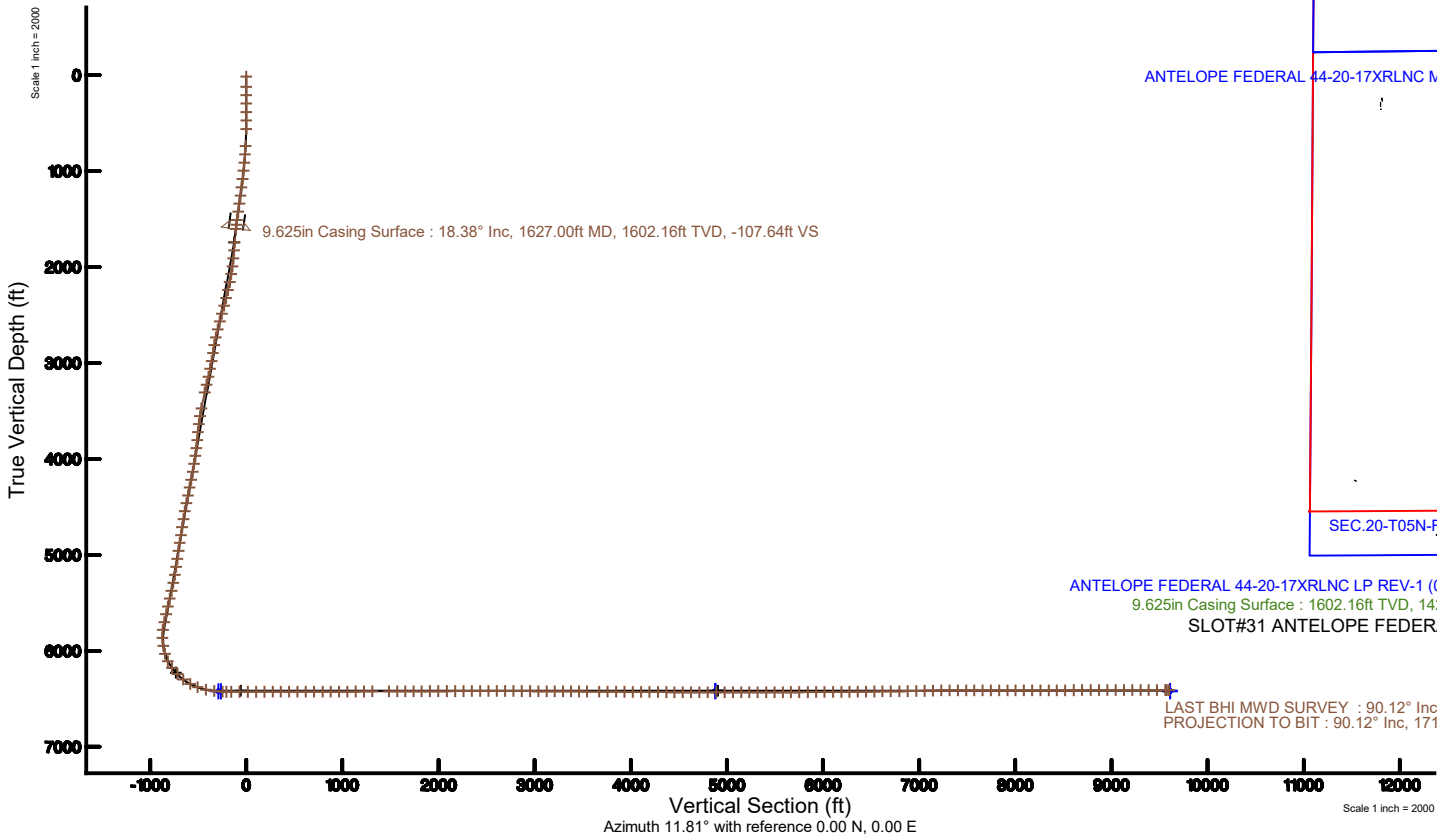


# BONANZA CREEK ENERGY

Location: COLORADO Slot: SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669°FSL & 2350°FEL, SEC.20)  
Field: WELD COUNTY (NAD83/TRUE) Well: ANTELOPE FEDERAL 44-20-17XRLNC  
Facility: SEC.20-T05N-R62W Wellbore: ANTELOPE FEDERAL 44-20-17XRLNC PWB

Plot reference wellpath is ANTELOPE FEDERAL 44-20-17XRLNC (REV-C.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to AKITA 519 (4655'GL+17'KB@4672') (RKB)	North Reference: True north
Measured depths are referenced to AKITA 519 (4655'GL+17'KB@4672') (RKB)	Scale: True distance
AKITA 519 (4655'GL+17'KB@4672') (RKB) to Mean Sea Level: 4672 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669°FSL & 2350°FEL, SEC.20)): 0 feet	Created by: doddanna on 2019-07-01
Coordinates are in feet referenced to Slot	Database: WellArchitectDB



ANTELOPE FEDERAL 44-20-17XRLNC LP REV-1 (0°FSL & 472°FEL, SEC.20)  
LAST BHI MWD SURVEY : 90.12° Inc, 17138.00ft MD, 6407.59ft TVD, 9575.08ft VS  
PROJECTION TO BIT : 90.12° Inc, 17163.00ft MD, 6407.54ft TVD, 9600.08ft VS

# Actual Wellpath Report

ANTELOPE FEDERAL 44-20-17XRLNC AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWP
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 9:20:55 AM
Convergence at slot	0.75° East	Database/Source file	WellArchitectDB/ANTELOPE_FEDERAL_44-20-17XRLNC_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-92.08	2337.81	3321321.25	1383257.47	40°22'46.945"N	104°20'47.756"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 (4655'GL+17'KB@4672') (RKB) to Facility Vertical Datum	4672.00ft
Horizontal Reference Pt	Slot	AKITA 519 (4655'GL+17'KB@4672') (RKB) to Mean Sea Level	4672.00ft
Vertical Reference Pt	AKITA 519 (4655'GL+17'KB@4672') (RKB)	AKITA 519 (4655'GL+17'KB@4672') (RKB) to Ground Level at Slot (SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20))	4672.00ft
MD Reference Pt	AKITA 519 (4655'GL+17'KB@4672') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	11.81°

# Actual Wellpath Report

## ANTELOPE FEDERAL 44-20-17XRLNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (195 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	96.000	0.00	0.00	0.00	0.00	40°22'46.945"N	104°20'47.756"W	0.00	
17.00	0.000	96.000	17.00	0.00	0.00	0.00	40°22'46.945"N	104°20'47.756"W	0.00	
123.00	0.250	96.000	123.00	0.02	-0.02	0.23	40°22'46.945"N	104°20'47.753"W	0.24	
209.00	0.220	154.080	209.00	-0.09	-0.19	0.49	40°22'46.943"N	104°20'47.750"W	0.27	
297.00	0.340	14.320	297.00	0.04	-0.09	0.63	40°22'46.944"N	104°20'47.748"W	0.60	
387.00	0.220	4.730	387.00	0.48	0.34	0.71	40°22'46.948"N	104°20'47.747"W	0.14	
474.00	0.420	98.830	474.00	0.66	0.46	1.04	40°22'46.950"N	104°20'47.743"W	0.56	
562.00	1.750	132.430	561.98	-0.01	-0.50	2.35	40°22'46.940"N	104°20'47.726"W	1.61	
738.00	4.920	146.000	737.66	-6.64	-8.57	8.55	40°22'46.860"N	104°20'47.645"W	1.84	
826.00	6.700	139.310	825.21	-12.40	-15.59	14.01	40°22'46.791"N	104°20'47.575"W	2.16	
913.00	8.760	138.830	911.41	-19.48	-24.43	21.68	40°22'46.704"N	104°20'47.476"W	2.37	
1000.00	10.360	137.550	997.20	-28.04	-35.19	31.32	40°22'46.597"N	104°20'47.351"W	1.86	
1088.00	11.940	136.490	1083.54	-37.84	-47.63	42.93	40°22'46.474"N	104°20'47.201"W	1.81	
1177.00	13.330	135.450	1170.38	-48.76	-61.62	56.47	40°22'46.336"N	104°20'47.026"W	1.58	
1265.00	14.580	132.320	1255.78	-60.01	-76.31	71.78	40°22'46.191"N	104°20'46.829"W	1.66	
1353.00	15.960	131.500	1340.67	-71.63	-91.78	89.03	40°22'46.038"N	104°20'46.606"W	1.59	
1440.00	16.800	129.880	1424.14	-83.47	-107.77	107.63	40°22'45.880"N	104°20'46.365"W	1.10	
1528.00	18.080	127.170	1508.10	-95.30	-124.17	128.28	40°22'45.718"N	104°20'46.098"W	1.72	
1584.00	18.140	125.580	1561.32	-102.54	-134.50	142.29	40°22'45.616"N	104°20'45.917"W	0.89	
1777.00	19.580	112.690	1744.04	-120.77	-164.47	196.59	40°22'45.320"N	104°20'45.216"W	2.28	
1865.00	20.300	114.630	1826.76	-126.94	-176.52	224.07	40°22'45.201"N	104°20'44.861"W	1.11	
1952.00	20.440	117.340	1908.32	-134.36	-189.78	251.28	40°22'45.070"N	104°20'44.509"W	1.10	
2041.00	20.380	122.360	1991.74	-143.96	-205.22	278.18	40°22'44.917"N	104°20'44.162"W	1.97	
2129.00	20.380	128.000	2074.24	-156.11	-222.85	303.20	40°22'44.743"N	104°20'43.838"W	2.23	
2217.00	20.300	134.390	2156.76	-171.10	-242.97	326.19	40°22'44.544"N	104°20'43.541"W	2.52	
2305.00	20.370	140.700	2239.29	-188.94	-265.50	346.80	40°22'44.321"N	104°20'43.275"W	2.49	
2393.00	20.400	144.780	2321.78	-209.01	-289.88	365.34	40°22'44.080"N	104°20'43.035"W	1.62	
2481.00	20.430	148.090	2404.26	-230.57	-315.45	382.31	40°22'43.828"N	104°20'42.816"W	1.31	
2569.00	20.500	148.680	2486.70	-252.91	-341.65	398.44	40°22'43.569"N	104°20'42.608"W	0.25	
2656.00	20.720	146.660	2568.14	-274.89	-367.53	414.81	40°22'43.313"N	104°20'42.396"W	0.86	

# Actual Wellpath Report

## ANTELOPE FEDERAL 44-20-17XRLNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (195 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2744.00	20.740	145.230	2650.44	-296.58	-393.33	432.26	40°22'43.058"N	104°20'42.171"W	0.58	
2833.00	20.980	139.200	2733.62	-317.09	-418.34	451.66	40°22'42.811"N	104°20'41.920"W	2.43	
2920.00	21.350	128.480	2814.78	-333.66	-439.99	474.24	40°22'42.597"N	104°20'41.628"W	4.46	
3009.00	20.490	123.030	2897.92	-346.58	-458.57	499.98	40°22'42.414"N	104°20'41.296"W	2.39	
3097.00	20.480	129.960	2980.37	-359.42	-476.85	524.70	40°22'42.233"N	104°20'40.976"W	2.75	
3184.00	20.590	135.490	3061.85	-375.09	-497.54	547.09	40°22'42.028"N	104°20'40.687"W	2.23	
3271.00	20.470	138.300	3143.32	-392.62	-519.81	567.94	40°22'41.808"N	104°20'40.418"W	1.14	
3359.00	20.570	141.410	3225.74	-411.63	-543.38	587.82	40°22'41.575"N	104°20'40.161"W	1.24	
3446.00	20.430	142.930	3307.23	-431.36	-567.44	606.50	40°22'41.338"N	104°20'39.919"W	0.63	
3623.00	20.700	130.920	3473.03	-466.91	-612.60	648.78	40°22'40.891"N	104°20'39.373"W	2.38	
3711.00	20.760	124.830	3555.34	-480.58	-631.70	673.34	40°22'40.703"N	104°20'39.056"W	2.45	
3799.00	20.760	121.450	3637.63	-491.92	-648.74	699.45	40°22'40.534"N	104°20'38.718"W	1.36	
3888.00	20.630	117.470	3720.89	-501.46	-664.21	726.82	40°22'40.381"N	104°20'38.365"W	1.59	
3977.00	20.630	118.280	3804.18	-510.14	-678.87	754.53	40°22'40.237"N	104°20'38.007"W	0.32	
4065.00	20.680	120.240	3886.53	-519.45	-694.04	781.61	40°22'40.087"N	104°20'37.657"W	0.79	
4153.00	20.650	123.170	3968.87	-530.02	-710.35	808.02	40°22'39.925"N	104°20'37.315"W	1.18	
4241.00	20.560	126.890	4051.24	-542.22	-728.12	833.37	40°22'39.750"N	104°20'36.988"W	1.49	
4330.00	20.360	131.730	4134.63	-556.57	-747.81	857.43	40°22'39.555"N	104°20'36.677"W	1.91	
4417.00	20.640	135.650	4216.13	-572.66	-768.85	879.44	40°22'39.347"N	104°20'36.393"W	1.61	
4504.00	20.630	134.920	4297.55	-589.58	-790.63	901.01	40°22'39.132"N	104°20'36.114"W	0.30	
4592.00	20.570	131.660	4379.92	-605.74	-811.86	923.54	40°22'38.922"N	104°20'35.823"W	1.31	
4680.00	20.380	134.010	4462.36	-621.60	-832.78	946.11	40°22'38.716"N	104°20'35.531"W	0.96	
4768.00	20.570	133.960	4544.81	-638.00	-854.16	968.26	40°22'38.504"N	104°20'35.245"W	0.22	
4857.00	20.230	129.410	4628.23	-653.45	-874.78	991.41	40°22'38.301"N	104°20'34.946"W	1.82	
4945.00	20.220	127.110	4710.80	-667.00	-893.62	1015.29	40°22'38.114"N	104°20'34.637"W	0.90	
5033.00	20.290	125.520	4793.36	-679.64	-911.66	1039.84	40°22'37.936"N	104°20'34.320"W	0.63	
5121.00	20.180	125.840	4875.93	-691.96	-929.41	1064.56	40°22'37.761"N	104°20'34.001"W	0.18	
5208.00	19.260	127.150	4957.83	-704.21	-946.86	1088.16	40°22'37.588"N	104°20'33.696"W	1.17	
5295.00	17.780	131.540	5040.32	-716.94	-964.34	1109.54	40°22'37.415"N	104°20'33.420"W	2.34	
5383.00	15.180	132.860	5124.70	-729.55	-981.09	1128.05	40°22'37.250"N	104°20'33.181"W	2.98	

# Actual Wellpath Report

## ANTELOPE FEDERAL 44-20-17XRLNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (195 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5470.00	18.860	133.180	5207.88	-742.75	-998.46	1146.66	40°22'37.078"N	104°20'32.940"W	4.23	
5559.00	21.900	133.590	5291.30	-758.99	-1019.76	1169.17	40°22'36.868"N	104°20'32.649"W	3.42	
5647.00	21.790	136.250	5372.98	-776.87	-1042.87	1192.36	40°22'36.639"N	104°20'32.350"W	1.13	
5736.00	20.170	140.320	5456.08	-795.77	-1066.61	1213.58	40°22'36.405"N	104°20'32.075"W	2.45	
5823.00	22.050	137.550	5537.24	-814.65	-1090.21	1234.18	40°22'36.172"N	104°20'31.809"W	2.45	
5911.00	21.990	135.090	5618.82	-833.35	-1114.07	1256.96	40°22'35.936"N	104°20'31.515"W	1.05	
5999.00	21.880	133.690	5700.45	-851.05	-1137.06	1280.45	40°22'35.709"N	104°20'31.211"W	0.61	
6086.00	21.580	129.810	5781.28	-867.13	-1158.50	1304.46	40°22'35.497"N	104°20'30.901"W	1.69	
6175.00	18.140	94.430	5865.27	-873.06	-1170.10	1330.95	40°22'35.382"N	104°20'30.559"W	13.82	
6263.00	18.650	66.710	5948.93	-863.19	-1165.58	1357.58	40°22'35.427"N	104°20'30.215"W	9.87	
6351.00	24.560	66.840	6030.71	-844.60	-1152.82	1387.35	40°22'35.553"N	104°20'29.830"W	6.72	
6440.00	34.080	51.050	6108.34	-814.58	-1129.78	1423.88	40°22'35.780"N	104°20'29.358"W	13.70	
6527.00	40.690	39.590	6177.51	-770.51	-1092.51	1461.00	40°22'36.149"N	104°20'28.879"W	11.01	
6616.00	45.310	38.290	6242.58	-716.49	-1045.30	1499.12	40°22'36.615"N	104°20'28.386"W	5.29	
6704.00	55.210	32.040	6298.81	-654.40	-989.95	1537.79	40°22'37.162"N	104°20'27.886"W	12.50	
6792.00	62.790	26.090	6344.13	-582.42	-924.03	1574.24	40°22'37.814"N	104°20'27.415"W	10.38	
6879.00	69.550	23.360	6379.26	-504.90	-851.78	1607.46	40°22'38.528"N	104°20'26.986"W	8.28	
6969.00	78.130	19.590	6404.30	-419.77	-771.40	1639.01	40°22'39.322"N	104°20'26.578"W	10.35	
7057.00	84.910	15.250	6417.27	-333.22	-688.42	1665.02	40°22'40.142"N	104°20'26.242"W	9.12	
7145.00	85.280	11.610	6424.80	-245.59	-603.15	1685.38	40°22'40.984"N	104°20'25.979"W	4.14	
7185.00	90.090	10.590	6426.41	-205.64	-563.94	1693.07	40°22'41.372"N	104°20'25.879"W	12.29	
7233.00	90.030	8.850	6426.36	-157.67	-516.63	1701.18	40°22'41.839"N	104°20'25.775"W	3.63	
7321.00	90.000	6.080	6426.34	-69.93	-429.39	1712.61	40°22'42.701"N	104°20'25.627"W	3.15	
7410.00	90.000	1.350	6426.34	18.16	-340.60	1718.37	40°22'43.579"N	104°20'25.552"W	5.31	
7498.00	89.940	359.900	6426.39	104.49	-252.61	1719.33	40°22'44.448"N	104°20'25.540"W	1.65	
7587.00	90.090	357.200	6426.36	191.11	-163.65	1717.08	40°22'45.327"N	104°20'25.569"W	3.04	
7674.00	90.280	358.470	6426.08	275.53	-76.71	1713.79	40°22'46.186"N	104°20'25.611"W	1.48	
7761.00	90.250	0.520	6425.68	360.53	10.28	1713.03	40°22'47.046"N	104°20'25.621"W	2.36	
7848.00	90.180	2.880	6425.35	446.17	97.24	1715.61	40°22'47.905"N	104°20'25.588"W	2.71	
7936.00	90.030	1.250	6425.19	532.90	185.18	1718.78	40°22'48.774"N	104°20'25.547"W	1.86	

# Actual Wellpath Report

## ANTELOPE FEDERAL 44-20-17XRLNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (195 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8023.00	90.150	3.170	6425.05	618.68	272.11	1722.13	40°22'49.633"N	104°20'25.503"W	2.21	
8112.00	90.120	4.780	6424.85	706.84	360.89	1728.30	40°22'50.511"N	104°20'25.423"W	1.81	
8200.00	90.060	5.440	6424.71	794.24	448.54	1736.14	40°22'51.377"N	104°20'25.322"W	0.75	
8287.00	90.250	359.150	6424.47	880.00	535.43	1739.62	40°22'52.235"N	104°20'25.277"W	7.23	
8374.00	90.180	1.000	6424.14	965.18	622.42	1739.74	40°22'53.095"N	104°20'25.275"W	2.13	
8461.00	90.090	4.080	6423.94	1051.04	709.32	1743.59	40°22'53.954"N	104°20'25.226"W	3.54	
8548.00	90.180	2.390	6423.73	1137.06	796.18	1748.50	40°22'54.812"N	104°20'25.162"W	1.95	
8636.00	90.740	4.290	6423.03	1224.10	884.03	1753.63	40°22'55.680"N	104°20'25.096"W	2.25	
8723.00	90.280	6.600	6422.25	1310.55	970.62	1761.88	40°22'56.536"N	104°20'24.989"W	2.71	
8899.00	90.060	3.770	6421.73	1485.36	1145.89	1777.79	40°22'58.268"N	104°20'24.783"W	1.61	
8987.00	90.090	357.650	6421.62	1571.67	1233.84	1778.88	40°22'59.137"N	104°20'24.769"W	6.95	
9074.00	90.180	355.020	6421.41	1655.51	1320.65	1773.32	40°22'59.995"N	104°20'24.841"W	3.02	
9163.00	90.250	354.370	6421.08	1740.57	1409.27	1765.09	40°23'00.870"N	104°20'24.947"W	0.73	
9251.00	90.340	357.410	6420.62	1825.19	1497.03	1758.78	40°23'01.738"N	104°20'25.029"W	3.46	
9339.00	90.120	0.860	6420.27	1911.03	1585.01	1757.45	40°23'02.607"N	104°20'25.046"W	3.93	
9428.00	90.000	0.740	6420.18	1998.39	1674.00	1758.70	40°23'03.486"N	104°20'25.029"W	0.19	
9517.00	90.150	0.390	6420.06	2085.69	1762.99	1759.57	40°23'04.366"N	104°20'25.018"W	0.43	
9606.00	90.150	0.710	6419.83	2172.98	1851.99	1760.43	40°23'05.245"N	104°20'25.007"W	0.36	
9695.00	90.120	0.510	6419.62	2260.28	1940.98	1761.38	40°23'06.125"N	104°20'24.995"W	0.23	
9783.00	90.460	1.010	6419.17	2346.65	2028.97	1762.54	40°23'06.994"N	104°20'24.979"W	0.69	
9871.00	90.150	0.770	6418.70	2433.06	2116.96	1763.91	40°23'07.863"N	104°20'24.962"W	0.45	
9959.00	90.090	1.500	6418.52	2519.53	2204.94	1765.65	40°23'08.733"N	104°20'24.939"W	0.83	
10047.00	89.940	1.290	6418.50	2606.09	2292.92	1767.79	40°23'09.602"N	104°20'24.911"W	0.29	
10135.00	89.660	359.960	6418.80	2692.41	2380.91	1768.75	40°23'10.472"N	104°20'24.899"W	1.54	
10223.00	89.780	2.660	6419.23	2778.93	2468.88	1770.77	40°23'11.341"N	104°20'24.873"W	3.07	
10311.00	89.720	2.570	6419.62	2865.80	2556.79	1774.78	40°23'12.210"N	104°20'24.821"W	0.12	
10400.00	89.780	3.450	6420.01	2953.75	2645.66	1779.45	40°23'13.088"N	104°20'24.760"W	0.99	
10488.00	89.480	0.990	6420.57	3040.52	2733.59	1782.86	40°23'13.957"N	104°20'24.716"W	2.82	
10575.00	89.660	359.420	6421.23	3125.73	2820.58	1783.17	40°23'14.816"N	104°20'24.712"W	1.82	
10662.00	89.630	358.640	6421.77	3210.58	2907.57	1781.70	40°23'15.676"N	104°20'24.731"W	0.90	

# Actual Wellpath Report

## ANTELOPE FEDERAL 44-20-17XRLNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (195 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10750.00	89.720	355.500	6422.27	3295.67	2995.44	1777.20	40°23'16.544"N	104°20'24.789"W	3.57	
10836.00	89.690	355.570	6422.71	3378.23	3081.18	1770.51	40°23'17.392"N	104°20'24.876"W	0.09	
10924.00	89.690	356.530	6423.19	3462.92	3168.96	1764.45	40°23'18.259"N	104°20'24.954"W	1.09	
11011.00	89.600	354.330	6423.72	3546.38	3255.68	1757.52	40°23'19.116"N	104°20'25.043"W	2.53	
11141.00	89.780	359.060	6424.43	3671.85	3385.43	1750.02	40°23'20.398"N	104°20'25.140"W	3.64	
11230.00	89.510	4.600	6424.98	3759.47	3474.34	1752.86	40°23'21.277"N	104°20'25.103"W	6.23	
11319.00	89.320	6.800	6425.89	3847.95	3562.89	1761.70	40°23'22.152"N	104°20'24.989"W	2.48	
11407.00	89.480	5.560	6426.81	3935.52	3650.38	1771.18	40°23'23.016"N	104°20'24.866"W	1.42	
11494.00	89.290	2.290	6427.74	4021.68	3737.16	1777.13	40°23'23.874"N	104°20'24.789"W	3.76	
11581.00	90.430	2.640	6427.96	4107.53	3824.07	1780.87	40°23'24.733"N	104°20'24.741"W	1.37	
11670.00	89.230	5.990	6428.22	4195.76	3912.81	1787.57	40°23'25.609"N	104°20'24.654"W	4.00	
11758.00	89.480	2.730	6429.21	4283.00	4000.53	1794.25	40°23'26.476"N	104°20'24.568"W	3.72	
11846.00	89.480	359.300	6430.01	4369.42	4088.50	1795.81	40°23'27.346"N	104°20'24.548"W	3.90	
11934.00	89.350	357.180	6430.91	4454.96	4176.45	1793.11	40°23'28.215"N	104°20'24.582"W	2.41	
12023.00	89.660	357.870	6431.68	4541.21	4265.37	1789.27	40°23'29.093"N	104°20'24.632"W	0.85	
12111.00	90.490	0.860	6431.56	4627.13	4353.35	1788.29	40°23'29.963"N	104°20'24.645"W	3.53	
12197.00	90.430	7.980	6430.87	4712.36	4439.04	1794.92	40°23'30.809"N	104°20'24.559"W	8.28	
12286.00	89.970	5.400	6430.56	4801.00	4527.42	1805.28	40°23'31.683"N	104°20'24.425"W	2.94	
12375.00	89.940	1.300	6430.63	4889.01	4616.25	1810.48	40°23'32.561"N	104°20'24.357"W	4.61	
12464.00	90.000	358.370	6430.68	4976.06	4705.24	1810.23	40°23'33.440"N	104°20'24.361"W	3.29	
12553.00	89.940	359.980	6430.72	5062.91	4794.23	1808.95	40°23'34.319"N	104°20'24.377"W	1.81	
12640.00	90.090	0.510	6430.70	5148.14	4881.23	1809.32	40°23'35.179"N	104°20'24.372"W	0.63	
12727.00	90.180	2.110	6430.50	5233.68	4968.20	1811.31	40°23'36.038"N	104°20'24.347"W	1.84	
12815.00	89.780	4.430	6430.53	5320.70	5056.05	1816.33	40°23'36.907"N	104°20'24.282"W	2.68	
12903.00	90.000	1.710	6430.70	5407.67	5143.92	1821.04	40°23'37.775"N	104°20'24.221"W	3.10	
12992.00	90.000	358.970	6430.70	5494.89	5232.91	1821.57	40°23'38.654"N	104°20'24.214"W	3.08	
13081.00	90.220	357.990	6430.53	5581.49	5321.87	1819.21	40°23'39.533"N	104°20'24.244"W	1.13	
13168.00	90.150	1.370	6430.24	5666.54	5408.86	1818.72	40°23'40.393"N	104°20'24.250"W	3.89	
13255.00	90.090	4.050	6430.06	5752.44	5495.75	1822.83	40°23'41.251"N	104°20'24.197"W	3.08	
13344.00	90.250	5.050	6429.80	5840.72	5584.47	1829.89	40°23'42.128"N	104°20'24.106"W	1.14	

# Actual Wellpath Report

## ANTELOPE FEDERAL 44-20-17XRLNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (195 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13433.00	90.310	5.570	6429.36	5929.15	5673.09	1838.13	40°23'43.004"N	104°20'23.999"W	0.59	
13521.00	90.310	3.290	6428.89	6016.42	5760.82	1844.93	40°23'43.871"N	104°20'23.911"W	2.59	
13610.00	90.400	0.690	6428.34	6104.10	5849.76	1848.02	40°23'44.750"N	104°20'23.871"W	2.92	
13698.00	90.620	358.660	6427.55	6190.13	5937.75	1847.52	40°23'45.619"N	104°20'23.878"W	2.32	
13786.00	90.710	358.950	6426.53	6275.87	6025.72	1845.68	40°23'46.488"N	104°20'23.901"W	0.35	
13874.00	90.620	359.490	6425.51	6361.75	6113.71	1844.48	40°23'47.358"N	104°20'23.917"W	0.62	
13962.00	90.650	0.200	6424.53	6447.83	6201.70	1844.25	40°23'48.227"N	104°20'23.920"W	0.81	
14050.00	90.860	0.070	6423.37	6534.01	6289.69	1844.45	40°23'49.097"N	104°20'23.917"W	0.28	
14137.00	90.650	357.970	6422.23	6618.84	6376.67	1842.97	40°23'49.956"N	104°20'23.936"W	2.43	
14225.00	90.310	1.950	6421.49	6704.94	6464.65	1842.90	40°23'50.826"N	104°20'23.937"W	4.54	
14314.00	90.490	5.880	6420.87	6793.08	6553.42	1848.98	40°23'51.703"N	104°20'23.858"W	4.42	
14403.00	90.830	4.890	6419.84	6881.51	6642.02	1857.33	40°23'52.578"N	104°20'23.750"W	1.18	
14491.00	91.260	4.570	6418.24	6968.83	6729.70	1864.59	40°23'53.445"N	104°20'23.656"W	0.61	
14579.00	91.230	3.940	6416.33	7056.05	6817.44	1871.11	40°23'54.312"N	104°20'23.572"W	0.72	
14667.00	91.360	4.140	6414.34	7143.22	6905.20	1877.31	40°23'55.179"N	104°20'23.492"W	0.27	
14755.00	91.320	1.720	6412.28	7230.13	6993.05	1881.81	40°23'56.047"N	104°20'23.433"W	2.75	
14844.00	90.430	0.620	6410.92	7317.59	7082.02	1883.63	40°23'56.926"N	104°20'23.410"W	1.59	
14932.00	89.970	357.890	6410.61	7403.48	7170.01	1882.48	40°23'57.796"N	104°20'23.424"W	3.15	
15020.00	89.940	355.360	6410.68	7488.40	7257.85	1877.30	40°23'58.664"N	104°20'23.491"W	2.88	
15107.00	89.820	357.230	6410.86	7572.23	7344.66	1871.68	40°23'59.522"N	104°20'23.564"W	2.15	
15196.00	89.850	1.320	6411.12	7659.09	7433.63	1870.55	40°24'00.401"N	104°20'23.578"W	4.60	
15283.00	89.820	3.280	6411.37	7744.89	7520.56	1874.05	40°24'01.260"N	104°20'23.533"W	2.25	
15372.00	89.970	4.110	6411.53	7833.00	7609.37	1879.78	40°24'02.137"N	104°20'23.459"W	0.95	
15459.00	89.970	3.670	6411.58	7919.17	7696.17	1885.68	40°24'02.995"N	104°20'23.383"W	0.51	
15543.00	90.150	1.770	6411.49	8002.11	7780.07	1889.67	40°24'03.824"N	104°20'23.331"W	2.27	
15630.00	90.120	2.240	6411.29	8087.84	7867.02	1892.71	40°24'04.683"N	104°20'23.292"W	0.54	
15718.00	89.690	359.030	6411.43	8174.17	7955.00	1893.69	40°24'05.553"N	104°20'23.279"W	3.68	
15807.00	90.090	359.610	6411.60	8261.06	8044.00	1892.63	40°24'06.432"N	104°20'23.292"W	0.79	
15895.00	90.090	0.190	6411.47	8347.17	8132.00	1892.48	40°24'07.302"N	104°20'23.294"W	0.66	
15982.00	90.220	1.760	6411.23	8432.61	8218.98	1893.96	40°24'08.161"N	104°20'23.275"W	1.81	



# Actual Wellpath Report

## ANTELOPE FEDERAL 44-20-17XRLNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (195 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16070.00	90.340	6.460	6410.80	8519.80	8306.73	1900.26	40°24'09.028"N	104°20'23.194"W	5.34	
16158.00	90.490	9.020	6410.16	8607.57	8393.92	1912.11	40°24'09.890"N	104°20'23.040"W	2.91	
16246.00	90.340	8.700	6409.53	8695.45	8480.86	1925.67	40°24'10.749"N	104°20'22.865"W	0.40	
16335.00	90.430	5.630	6408.93	8784.14	8569.16	1936.77	40°24'11.622"N	104°20'22.721"W	3.45	
16423.00	90.090	7.220	6408.53	8871.75	8656.60	1946.61	40°24'12.486"N	104°20'22.594"W	1.85	
16510.00	90.250	4.420	6408.27	8958.27	8743.14	1955.43	40°24'13.341"N	104°20'22.480"W	3.22	
16598.00	90.180	3.330	6407.94	9045.42	8830.94	1961.38	40°24'14.208"N	104°20'22.403"W	1.24	
16685.00	90.150	1.970	6407.69	9131.31	8917.84	1965.40	40°24'15.067"N	104°20'22.351"W	1.56	
16773.00	89.780	358.750	6407.74	9217.55	9005.83	1965.96	40°24'15.937"N	104°20'22.344"W	3.68	
16861.00	90.120	354.520	6407.82	9302.47	9093.66	1960.79	40°24'16.805"N	104°20'22.410"W	4.82	
16949.00	89.880	359.120	6407.82	9387.45	9181.50	1955.91	40°24'17.673"N	104°20'22.473"W	5.23	
17037.00	90.150	6.100	6407.80	9474.27	9269.35	1959.92	40°24'18.541"N	104°20'22.421"W	7.94	
17124.00	90.090	10.620	6407.61	9561.09	9355.41	1972.56	40°24'19.391"N	104°20'22.258"W	5.20	
17138.00	90.120	11.330	6407.59	9575.08	9369.15	1975.23	40°24'19.527"N	104°20'22.223"W	5.08	LAST BHI MWD SURVEY
17163.00	90.120	11.330	6407.54	9600.08	9393.66	1980.14	40°24'19.769"N	104°20'22.160"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS									
- Ref Wellbore: ANTELOPE FEDERAL 44-20-17XRLNC AWB					Ref Wellpath: ANTELOPE FEDERAL 44-20-17XRLNC 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	1627.00	1610.00	17.00	1602.16	0.00	0.00	-142.04	153.45

# Actual Wellpath Report

ANTELOPE FEDERAL 44-20-17XRLNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC 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 44-20-17XRLNC BHL REV-1 (470'FNL & 523'FEL, SEC.20)	6416.00	9405.90	1965.90	3323164.56	1392687.74	40°24'19.890"N	104°20'22.344"W	point
ANTELOPE FEDERAL 44-20-17XRLNC MP REV-1 (0'FNL & 618'FEL, SEC.20)	6416.00	4613.36	1782.12	3323043.15	1387893.42	40°23'32.532"N	104°20'24.724"W	point
ANTELOPE FEDERAL 44-20-17XRLNC BHL (470'FNL & 523'FEL, SEC.20)	6422.00	9405.90	1965.90	3323164.56	1392687.74	40°24'19.890"N	104°20'22.344"W	point
ANTELOPE FEDERAL 44-20-17XRLNC LP (0'FSL & 612'FEL, SEC.20)	6422.00	-658.63	1730.19	3323059.78	1382621.42	40°22'40.436"N	104°20'25.400"W	point
ANTELOPE FEDERAL 44-20-17XRLNC LP REV-1 (0'FSL & 472'FEL, SEC.20)	6422.00	-658.63	1870.19	3323199.77	1382623.24	40°22'40.436"N	104°20'23.591"W	point
ANTELOPE FEDERAL 44-20-17XRLNC MP (0'FNL & 618'FEL, SEC.20)	6422.00	4613.36	1782.12	3323043.15	1387893.42	40°23'32.532"N	104°20'24.724"W	point
SEC.17,20-T05N-R62W (460'FNL,FSL)	10670.00	7227.92	-157.95	3321069.31	1390482.42	40°23'58.369"N	104°20'49.798"W	polygon
SEC.17-T05N-R62W	10671.00	7227.92	-157.95	3321069.31	1390482.42	40°23'58.369"N	104°20'49.798"W	polygon
SEC.20-T05N-R62W	10671.00	7227.92	-157.95	3321069.31	1390482.42	40°23'58.369"N	104°20'49.798"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: ANTELOPE FEDERAL 44-20-17XRLNC AWB					Ref Wellpath: ANTELOPE FEDERAL 44-20-17XRLNC AWP
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore
17.00	1584.00	BHI NaviTrak (Rotating+Axial Corr)	BHI NAVITRAK (ROTATING+AXIAL CORR) <123-1584>		ANTELOPE FEDERAL 44-20-17XRLNC AWB
1584.00	17138.00	BHI AutoTrak Curve (Short)	BHI AUTOTRAK CURVE (SHORT) <1777-17138>		ANTELOPE FEDERAL 44-20-17XRLNC AWB
17138.00	17163.00	Blind Drilling (std)	Projection to bit		ANTELOPE FEDERAL 44-20-17XRLNC AWB

**Actual Wellpath Report**  
ANTELOPE FEDERAL 44-20-17XRLNC AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#31 ANTELOPE FEDERAL 44-20-17XRLNC (669'FSL & 2350'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL 44-20-17XRLNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	ANTELOPE FEDERAL 44-20-17XRLNC AWB
Facility	SEC.20-T05N-R62W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17138.00	90.120	11.330	6407.59	LAST BHI MWD SURVEY
17163.00	90.120	11.330	6407.54	PROJECTION TO BIT