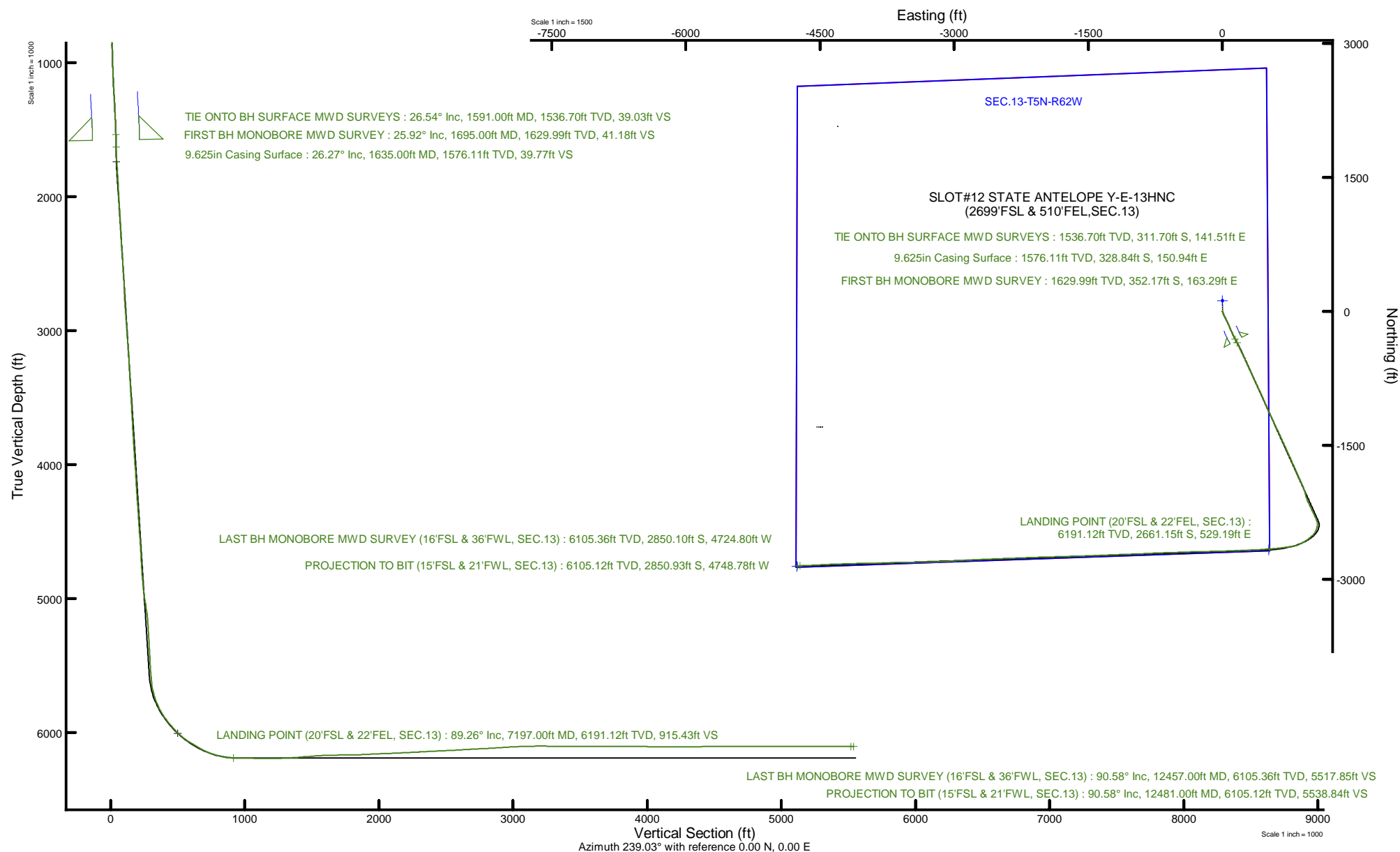


# BONANZA CREEK ENERGY

Location: COLORADO Slot: SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)  
Field: WELD COUNTY (NAD83/TRUE) Well: STATE ANTELOPE Y-E-13HNC  
Facility: SEC.13-T05N-R62W Wellbore: STATE ANTELOPE Y-E-13HNC PWB 05-123-50291

Plot reference wellpath is STATE ANTELOPE Y-E-13HNC PWP (REV-C.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17) (RKB)	North Reference: True north
Reference wellpath measured depths are referenced to RIG (17) (RKB)	Scale: True distance
RIG (17) (RKB) to Mean Sea Level: 4590 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: robale01 on 2020-03-04; Database: WellArchitectDB3





Actual Wellpath Report

STATE ANTELOPE Y-E-13HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE Y-E-13HNC
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.13-T05N-R62W	Wellbore	STATE ANTELOPE Y-E-13HNC AWB
Slot	SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	True	User	Robiale01
Scale	0.999960	Report Generated	2/26/2020 at 5:48:45 PM
Convergence at slot	0.80° East	Database	WA_DENVER

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	1295.90	4473.00	3344314.44	1391327.18	40°24'3.6216"N	104°15'49.2120"W
Facility Reference Pt			3339859.89	1389969.91	40°23'50.8200"N	104°16'47.0280"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.4000"N	104°41'53.5560"W

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (17") (RKB) to Facility Vertical Datum	4590.00ft
Horizontal Reference Pt	Slot	RIG (17") (RKB) to Mean Sea Level	4590.00ft
Vertical Reference Pt	RIG (17") (RKB)	RIG (17") (RKB) to Ground Level at Slot (SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13))	4590.00ft
MD Reference Pt	RIG (17") (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	239.03°



Actual Wellpath Report  
STATE ANTELOPE Y-E-13HNC AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE Y-E-13HNC
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.13-T05N-R62W	Wellbore	STATE ANTELOPE Y-E-13HNC AWB
Slot	SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)		

WELLPATH DATA (145 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	255.940	0.00	0.00	0.00	0.00	40°24'3.6216"N	104°15'49.2120"W	0.00	
17.00	0.000	255.940	17.00	0.00	0.00	0.00	40°24'3.6216"N	104°15'49.2120"W	0.00	
123.00	0.290	255.940	123.00	0.26	-0.07	-0.26	40°24'3.6210"N	104°15'49.2154"W	0.27	
215.00	0.770	145.850	215.00	0.45	-0.63	-0.14	40°24'3.6153"N	104°15'49.2138"W	0.99	
308.00	3.710	156.550	307.92	0.80	-3.91	1.41	40°24'3.5829"N	104°15'49.1938"W	3.18	
400.00	5.490	160.820	399.62	2.09	-10.80	4.04	40°24'3.5149"N	104°15'49.1598"W	1.97	
489.00	7.530	159.710	488.04	4.04	-20.29	7.46	40°24'3.4211"N	104°15'49.1156"W	2.30	
578.00	8.510	158.590	576.17	6.22	-31.89	11.89	40°24'3.3065"N	104°15'49.0583"W	1.11	
666.00	10.680	154.180	662.93	8.03	-45.30	17.82	40°24'3.1740"N	104°15'48.9817"W	2.60	
755.00	11.670	154.670	750.24	9.65	-60.86	25.26	40°24'3.0202"N	104°15'48.8855"W	1.12	
843.00	13.940	152.700	836.05	11.20	-78.32	33.93	40°24'2.8477"N	104°15'48.7734"W	2.63	
931.00	14.790	152.800	921.30	12.62	-97.73	43.93	40°24'2.6559"N	104°15'48.6442"W	0.97	
1020.00	17.040	154.870	1006.88	14.69	-119.64	54.66	40°24'2.4393"N	104°15'48.5055"W	2.61	
1108.00	17.860	156.550	1090.83	17.77	-143.70	65.50	40°24'2.2016"N	104°15'48.3653"W	1.09	
1197.00	19.620	157.880	1175.11	21.85	-170.06	76.56	40°24'1.9411"N	104°15'48.2224"W	2.03	
1284.00	21.500	157.180	1256.56	26.35	-198.29	88.25	40°24'1.6622"N	104°15'48.0714"W	2.18	
1372.00	23.140	155.570	1337.97	30.61	-228.90	101.65	40°24'1.3597"N	104°15'47.8981"W	1.99	
1461.00	24.480	156.150	1419.39	34.88	-261.69	116.34	40°24'1.0357"N	104°15'47.7082"W	1.53	
1548.00	25.890	152.310	1498.13	38.20	-295.00	132.46	40°24'0.7065"N	104°15'47.4999"W	2.48	
1591.00	26.540	150.810	1536.70	39.03	-311.70	141.51	40°24'0.5415"N	104°15'47.3830"W	2.16	TIE ONTO BH SURFACE MWD SURVEYS
1695.00	25.920	152.640	1629.99	41.18	-352.17	163.29	40°24'0.1416"N	104°15'47.1015"W	0.98	FIRST BH MONOBORE MWD SURVEY
1784.00	27.570	155.790	1709.47	44.83	-388.24	180.67	40°23'59.7852"N	104°15'46.8767"W	2.44	
1871.00	27.630	154.620	1786.57	49.16	-424.82	197.58	40°23'59.4236"N	104°15'46.6583"W	0.63	
1959.00	28.020	155.990	1864.40	53.65	-462.14	214.73	40°23'59.0549"N	104°15'46.4365"W	0.85	
2046.00	29.050	153.520	1940.83	57.78	-499.72	232.47	40°23'58.6836"N	104°15'46.2073"W	1.80	
2134.00	28.970	155.620	2017.80	61.89	-538.25	250.79	40°23'58.3028"N	104°15'45.9704"W	1.16	
2223.00	28.790	155.070	2095.73	66.62	-577.32	268.72	40°23'57.9167"N	104°15'45.7387"W	0.36	
2309.00	29.310	155.760	2170.91	71.26	-615.29	286.09	40°23'57.5415"N	104°15'45.5142"W	0.72	
2398.00	29.370	153.370	2248.49	75.46	-654.67	304.82	40°23'57.1524"N	104°15'45.2721"W	1.32	
2486.00	28.160	154.850	2325.63	79.20	-692.76	323.32	40°23'56.7760"N	104°15'45.0330"W	1.60	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE Y-E-13HNC
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.13-T05N-R62W	Wellbore	STATE ANTELOPE Y-E-13HNC AWB
Slot	SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)		

WELLPATH DATA (145 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2575.00	29.490	157.590	2403.61	84.58	-732.02	340.60	40°23'56.3880"N	104°15'44.8097"W	2.11	
2662.00	29.500	155.180	2479.34	90.06	-771.26	357.75	40°23'56.0002"N	104°15'44.5880"W	1.36	
2750.00	29.090	154.930	2556.08	94.58	-810.31	375.91	40°23'55.6144"N	104°15'44.3533"W	0.49	
2840.00	29.890	154.820	2634.42	99.09	-850.42	394.72	40°23'55.2181"N	104°15'44.1101"W	0.89	
2928.00	29.040	152.450	2711.04	102.57	-889.20	413.93	40°23'54.8348"N	104°15'43.8619"W	1.64	
3017.00	28.220	155.640	2789.16	106.28	-927.52	432.61	40°23'54.4561"N	104°15'43.6205"W	1.95	
3104.00	28.390	157.000	2865.76	111.51	-965.30	449.17	40°23'54.0828"N	104°15'43.4064"W	0.77	
3192.00	28.550	156.970	2943.12	117.31	-1003.91	465.57	40°23'53.7013"N	104°15'43.1945"W	0.18	
3280.00	27.680	156.530	3020.73	122.88	-1042.01	481.94	40°23'53.3248"N	104°15'42.9829"W	1.02	
3368.00	28.900	157.230	3098.22	128.58	-1080.37	498.31	40°23'52.9457"N	104°15'42.7713"W	1.44	
3455.00	29.390	155.990	3174.21	134.16	-1119.26	515.13	40°23'52.5615"N	104°15'42.5539"W	0.89	
3542.00	29.640	154.250	3249.92	138.70	-1158.13	533.17	40°23'52.1773"N	104°15'42.3208"W	1.03	
3630.00	29.590	154.640	3326.42	142.80	-1197.37	551.93	40°23'51.7896"N	104°15'42.0784"W	0.23	
3718.00	29.540	154.510	3402.97	146.99	-1236.58	570.57	40°23'51.4021"N	104°15'41.8375"W	0.09	
3807.00	29.600	155.030	3480.37	151.38	-1276.31	589.29	40°23'51.0095"N	104°15'41.5955"W	0.30	
3895.00	29.250	153.810	3557.02	155.44	-1315.31	607.95	40°23'50.6242"N	104°15'41.3543"W	0.79	
3984.00	29.350	154.870	3634.64	159.47	-1354.56	626.81	40°23'50.2362"N	104°15'41.1106"W	0.59	
4073.00	28.390	155.290	3712.58	163.99	-1393.53	644.92	40°23'49.8511"N	104°15'40.8765"W	1.10	
4161.00	28.990	155.850	3789.77	168.80	-1432.00	662.39	40°23'49.4710"N	104°15'40.6507"W	0.75	
4249.00	28.710	155.200	3866.85	173.60	-1470.64	679.98	40°23'49.0891"N	104°15'40.4234"W	0.48	
4338.00	27.710	155.260	3945.28	178.14	-1508.84	697.61	40°23'48.7117"N	104°15'40.1956"W	1.12	
4425.00	28.300	157.320	4022.09	183.31	-1546.24	714.02	40°23'48.3421"N	104°15'39.9834"W	1.30	
4512.00	29.040	155.080	4098.43	188.50	-1584.42	730.87	40°23'47.9648"N	104°15'39.7656"W	1.50	
4601.00	28.640	155.460	4176.39	193.16	-1623.41	748.83	40°23'47.5795"N	104°15'39.5335"W	0.49	
4688.00	28.780	155.960	4252.69	198.02	-1661.51	766.03	40°23'47.2031"N	104°15'39.3114"W	0.32	
4776.00	28.720	156.100	4329.84	203.18	-1700.18	783.22	40°23'46.8209"N	104°15'39.0891"W	0.10	
4864.00	29.230	156.270	4406.83	208.48	-1739.18	800.43	40°23'46.4355"N	104°15'38.8667"W	0.59	
4951.00	28.740	155.700	4482.93	213.59	-1777.69	817.59	40°23'46.0549"N	104°15'38.6450"W	0.65	
5040.00	28.960	156.630	4560.89	218.92	-1816.97	834.94	40°23'45.6668"N	104°15'38.4207"W	0.56	
5127.00	29.030	154.890	4636.98	223.86	-1855.42	852.25	40°23'45.2868"N	104°15'38.1970"W	0.97	



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STATE ANTELOPE Y-E-13HNC AWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE Y-E-13HNC
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.13-T05N-R62W	Wellbore	STATE ANTELOPE Y-E-13HNC AWB
Slot	SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)		

WELLPATH DATA (145 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5214.00	28.040	155.090	4713.41	228.17	-1893.09	869.83	40°23'44.9147"N	104°15'37.9699"W	1.14	
5302.00	26.870	156.450	4791.50	232.92	-1930.08	886.48	40°23'44.5491"N	104°15'37.7546"W	1.51	
5392.00	27.100	158.860	4871.71	239.04	-1967.84	902.00	40°23'44.1759"N	104°15'37.5540"W	1.24	
5480.00	28.160	162.650	4949.68	247.35	-2006.36	915.43	40°23'43.7953"N	104°15'37.3806"W	2.33	
5568.00	28.980	165.160	5026.96	258.16	-2046.79	927.08	40°23'43.3958"N	104°15'37.2300"W	1.65	
5656.00	30.200	164.440	5103.48	269.96	-2088.72	938.48	40°23'42.9814"N	104°15'37.0827"W	1.44	
5745.00	29.780	154.220	5180.62	277.91	-2130.22	954.10	40°23'42.5714"N	104°15'36.8807"W	5.75	
5833.00	29.740	154.560	5257.01	281.98	-2169.61	972.99	40°23'42.1821"N	104°15'36.6367"W	0.20	
5921.00	29.480	155.460	5333.52	286.51	-2209.01	991.35	40°23'41.7927"N	104°15'36.3993"W	0.59	
6009.00	29.540	154.160	5410.11	290.87	-2248.24	1009.80	40°23'41.4051"N	104°15'36.1609"W	0.73	
6098.00	29.730	154.790	5487.46	295.04	-2287.95	1028.77	40°23'41.0127"N	104°15'35.9159"W	0.41	
6187.00	29.360	156.680	5564.89	300.16	-2327.95	1046.80	40°23'40.6174"N	104°15'35.6828"W	1.13	
6275.00	23.570	165.780	5643.67	308.11	-2364.86	1059.68	40°23'40.2526"N	104°15'35.5163"W	8.02	
6362.00	24.280	188.820	5723.37	324.60	-2399.48	1061.21	40°23'39.9106"N	104°15'35.4965"W	10.71	
6403.00	28.110	192.300	5760.15	336.62	-2417.25	1057.86	40°23'39.7350"N	104°15'35.5399"W	10.06	
6491.00	33.330	205.710	5835.87	371.10	-2459.37	1042.93	40°23'39.3188"N	104°15'35.7329"W	9.76	
6580.00	37.680	221.340	5908.45	417.56	-2501.93	1014.28	40°23'38.8982"N	104°15'36.1031"W	11.28	
6668.00	42.170	232.050	5976.00	472.59	-2540.35	973.16	40°23'38.5185"N	104°15'36.6347"W	9.32	
6756.00	51.830	236.440	6035.96	536.64	-2577.74	920.90	40°23'38.1491"N	104°15'37.3101"W	11.56	
6844.00	58.920	248.290	6086.05	608.65	-2610.93	856.83	40°23'37.8212"N	104°15'38.1382"W	13.68	
6932.00	63.460	259.960	6128.56	682.85	-2631.79	782.82	40°23'37.6150"N	104°15'39.0947"W	12.70	
7021.00	72.980	262.420	6161.55	759.28	-2644.38	701.24	40°23'37.4907"N	104°15'40.1490"W	11.00	
7110.00	79.570	264.600	6182.66	837.91	-2654.12	615.39	40°23'37.3945"N	104°15'41.2586"W	7.78	
7197.00	89.260	266.070	6191.12	915.43	-2661.15	529.19	40°23'37.3251"N	104°15'42.3726"W	11.26	LANDING POINT (20'FSL & 22'FEL, SEC.13)
7286.00	89.410	265.700	6192.15	994.83	-2667.53	440.43	40°23'37.2620"N	104°15'43.5198"W	0.45	
7374.00	89.600	267.360	6192.91	1072.89	-2672.86	352.60	40°23'37.2094"N	104°15'44.6550"W	1.90	
7462.00	89.630	267.290	6193.50	1150.37	-2676.96	264.69	40°23'37.1688"N	104°15'45.7910"W	0.09	
7550.00	89.970	268.340	6193.81	1227.50	-2680.32	176.76	40°23'37.1356"N	104°15'46.9275"W	1.25	
7638.00	92.620	268.210	6191.82	1304.26	-2682.97	88.83	40°23'37.1095"N	104°15'48.0639"W	3.01	
7725.00	93.600	268.020	6187.10	1380.18	-2685.82	2.01	40°23'37.0812"N	104°15'49.1861"W	1.15	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE Y-E-13HNC
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.13-T05N-R62W	Wellbore	STATE ANTELOPE Y-E-13HNC AWB
Slot	SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)		

WELLPATH DATA (145 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7813.00	94.010	268.640	6181.26	1456.76	-2688.38	-85.76	40°23'37.0560"N	104°15'50.3204"W	0.84	
7900.00	93.570	268.260	6175.51	1532.38	-2690.73	-172.54	40°23'37.0327"N	104°15'51.4419"W	0.67	
7988.00	91.510	269.230	6171.61	1608.73	-2692.66	-260.43	40°23'37.0137"N	104°15'52.5778"W	2.59	
8076.00	90.830	268.440	6169.81	1685.07	-2694.45	-348.39	40°23'36.9960"N	104°15'53.7146"W	1.18	
8165.00	90.460	267.630	6168.81	1762.91	-2697.50	-437.33	40°23'36.9659"N	104°15'54.8641"W	1.00	
8253.00	91.420	267.560	6167.37	1840.19	-2701.19	-525.24	40°23'36.9294"N	104°15'56.0003"W	1.09	
8341.00	92.740	268.920	6164.17	1916.95	-2703.89	-613.14	40°23'36.9026"N	104°15'57.1363"W	2.15	
8429.00	92.250	267.970	6160.34	1993.54	-2706.28	-701.02	40°23'36.8790"N	104°15'58.2721"W	1.21	
8517.00	92.090	267.130	6157.01	2070.80	-2710.04	-788.87	40°23'36.8419"N	104°15'59.4075"W	0.97	
8604.00	91.850	267.190	6154.02	2147.49	-2714.34	-875.72	40°23'36.7993"N	104°16'0.5299"W	0.28	
8691.00	92.710	268.180	6150.56	2223.77	-2717.85	-962.57	40°23'36.7645"N	104°16'1.6524"W	1.51	
8778.00	93.080	268.330	6146.16	2299.60	-2720.50	-1049.42	40°23'36.7384"N	104°16'2.7749"W	0.46	
8867.00	92.490	267.670	6141.84	2377.38	-2723.60	-1138.26	40°23'36.7077"N	104°16'3.9231"W	0.99	
8955.00	92.400	267.450	6138.09	2454.63	-2727.35	-1226.10	40°23'36.6706"N	104°16'5.0583"W	0.27	
9043.00	92.400	266.980	6134.40	2532.13	-2731.62	-1313.92	40°23'36.6284"N	104°16'6.1933"W	0.53	
9132.00	92.770	268.090	6130.39	2610.26	-2735.44	-1402.75	40°23'36.5905"N	104°16'7.3413"W	1.31	
9221.00	92.680	268.350	6126.16	2687.87	-2738.20	-1491.60	40°23'36.5632"N	104°16'8.4897"W	0.31	
9308.00	92.830	268.070	6121.97	2763.75	-2740.92	-1578.46	40°23'36.5363"N	104°16'9.6122"W	0.36	
9396.00	92.830	268.150	6117.63	2840.56	-2743.82	-1666.30	40°23'36.5076"N	104°16'10.7475"W	0.09	
9484.00	92.930	268.360	6113.21	2917.27	-2746.49	-1754.15	40°23'36.4811"N	104°16'11.8829"W	0.26	
9573.00	92.890	268.540	6108.69	2994.70	-2748.90	-1843.01	40°23'36.4573"N	104°16'13.0312"W	0.21	
9661.00	91.970	268.390	6104.96	3071.27	-2751.25	-1930.89	40°23'36.4340"N	104°16'14.1671"W	1.06	
9750.00	90.650	268.240	6102.92	3148.88	-2753.87	-2019.83	40°23'36.4080"N	104°16'15.3165"W	1.49	
9838.00	89.690	268.160	6102.66	3225.72	-2756.63	-2107.79	40°23'36.3806"N	104°16'16.4533"W	1.09	
9927.00	89.320	267.780	6103.43	3303.61	-2759.79	-2196.73	40°23'36.3494"N	104°16'17.6027"W	0.60	
10016.00	89.200	267.820	6104.58	3381.62	-2763.20	-2285.65	40°23'36.3156"N	104°16'18.7520"W	0.14	
10104.00	90.060	267.510	6105.15	3458.85	-2766.79	-2373.58	40°23'36.2801"N	104°16'19.8884"W	1.04	
10192.00	90.150	268.120	6104.99	3535.98	-2770.14	-2461.51	40°23'36.2468"N	104°16'21.0249"W	0.70	
10281.00	89.910	267.780	6104.94	3613.89	-2773.33	-2550.46	40°23'36.2153"N	104°16'22.1744"W	0.47	
10369.00	89.970	267.030	6105.03	3691.32	-2777.31	-2638.36	40°23'36.1758"N	104°16'23.3105"W	0.85	





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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE Y-E-13HNC
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.13-T05N-R62W	Wellbore	STATE ANTELOPE Y-E-13HNC AWB
Slot	SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)		

WELLPATH DATA (145 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10458.00	90.180	267.310	6104.92	3769.80	-2781.70	-2727.26	40°23'36.1323"N	104°16'24.4593"W	0.39	
10547.00	90.120	267.580	6104.68	3848.08	-2785.67	-2816.17	40°23'36.0930"N	104°16'25.6084"W	0.31	
10636.00	89.080	266.680	6105.30	3926.59	-2790.13	-2905.05	40°23'36.0489"N	104°16'26.7572"W	1.55	
10725.00	89.750	265.840	6106.21	4005.73	-2795.93	-2993.86	40°23'35.9914"N	104°16'27.9049"W	1.21	
10813.00	90.030	267.670	6106.38	4083.62	-2800.91	-3081.71	40°23'35.9421"N	104°16'29.0403"W	2.10	
10900.00	89.880	267.730	6106.45	4159.96	-2804.40	-3168.64	40°23'35.9075"N	104°16'30.1638"W	0.19	
10987.00	89.970	268.920	6106.56	4235.84	-2806.95	-3255.60	40°23'35.8822"N	104°16'31.2877"W	1.37	
11074.00	89.910	269.250	6106.66	4311.14	-2808.34	-3342.59	40°23'35.8684"N	104°16'32.4119"W	0.39	
11161.00	90.460	269.120	6106.38	4386.37	-2809.57	-3429.58	40°23'35.8560"N	104°16'33.5362"W	0.65	
11249.00	90.340	269.620	6105.76	4462.32	-2810.54	-3517.57	40°23'35.8463"N	104°16'34.6734"W	0.58	
11337.00	90.180	268.780	6105.36	4538.40	-2811.77	-3605.56	40°23'35.8341"N	104°16'35.8106"W	0.97	
11427.00	89.540	266.390	6105.58	4617.45	-2815.56	-3695.48	40°23'35.7965"N	104°16'36.9727"W	2.75	
11515.00	90.150	269.040	6105.82	4694.65	-2819.07	-3783.40	40°23'35.7617"N	104°16'38.1090"W	3.09	
11603.00	89.690	268.110	6105.94	4771.21	-2821.26	-3871.37	40°23'35.7399"N	104°16'39.2459"W	1.18	
11692.00	90.180	269.350	6106.04	4848.52	-2823.23	-3960.34	40°23'35.7203"N	104°16'40.3958"W	1.50	
11781.00	90.150	269.340	6105.79	4925.35	-2824.25	-4049.34	40°23'35.7101"N	104°16'41.5460"W	0.04	
11868.00	90.280	268.830	6105.46	5000.66	-2825.64	-4136.33	40°23'35.6962"N	104°16'42.6702"W	0.60	
11957.00	89.780	267.560	6105.41	5078.38	-2828.44	-4225.28	40°23'35.6684"N	104°16'43.8199"W	1.53	
12045.00	90.150	267.900	6105.47	5155.57	-2831.93	-4313.21	40°23'35.6338"N	104°16'44.9563"W	0.57	
12131.00	90.280	267.940	6105.14	5230.87	-2835.05	-4399.15	40°23'35.6028"N	104°16'46.0670"W	0.16	
12220.00	89.720	266.930	6105.14	5309.15	-2839.03	-4488.06	40°23'35.5633"N	104°16'47.2161"W	1.30	
12308.00	89.820	267.170	6105.50	5386.84	-2843.56	-4575.94	40°23'35.5184"N	104°16'48.3519"W	0.30	
12395.00	89.970	267.450	6105.66	5463.46	-2847.64	-4662.85	40°23'35.4778"N	104°16'49.4750"W	0.37	
12457.00	90.580	268.010	6105.36	5517.85	-2850.10	-4724.80	40°23'35.4535"N	104°16'50.2756"W	1.34	LAST BH MONOBORE MWD SURVEY (16'FSL & 36'FWL, SEC.13)
12481.00‡	90.580	268.010	6105.12	5538.84	-2850.93	-4748.78	40°23'35.4452"N	104°16'50.5856"W	0.00	PROJECTION TO BIT (15'FSL & 21'FWL, SEC.13)



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE Y-E-13HNC
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.13-T05N-R62W	Wellbore	STATE ANTELOPE Y-E-13HNC AWB
Slot	SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)		

HOLE & CASING SECTIONS - Ref Wellbore: STATE ANTELOPE Y-E-13HNC AWB    Ref Wellpath: STATE ANTELOPE Y-E-13HNC AWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	17.00	1645.00	1628.00	17.00	1585.08	0.00	0.00	-332.74	153.04
9.625in Casing Surface	17.00	1635.00	1618.00	17.00	1576.11	0.00	0.00	-328.84	150.94
8.5in Open Hole	1645.00	12481.00	10836.00	1585.08	6105.12	-332.74	153.04	-2850.93	-4748.78

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.13-T5N-R62W	0.00	120.22	-0.56	3344312.21	1391447.38	40°24'4.8096"N	104°15'49.2192"W	polygon
	2D Polygon: dimensions not calculated							
STATE ANTELOPE Y-E-13HNC BHL REV-2 (10'FSL & 10'FWL,SEC.13)	6191.00	-2855.75	-4759.31	3339595.61	1388405.48	40°23'35.3976"N	104°16'50.7216"W	point
STATE ANTELOPE Y-E-13HNC LP REV-2 (10'FSL & 10'FEL,SEC.13)	6191.00	-2671.49	516.71	3344868.32	1388663.26	40°23'37.2228"N	104°15'42.5340"W	point

WELLPATH COMPOSITION - Ref Wellbore: STATE ANTELOPE Y-E-13HNC AWB    Ref Wellpath: STATE ANTELOPE Y-E-13HNC AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
17.00	1591.00	BHI NaviTrak (Rotating+Axial Corr)	BH Surface MWD Surveys <123-1591>	STATE ANTELOPE Y-E-13HNC AWB	1/9/2020
1591.00	12481.00	BH AutoTrak Curve (superseded model) (Standard)	BH ATC MONOBORE MWD SURVEYS <1695-12457>	STATE ANTELOPE Y-E-13HNC AWB	1/13/2020





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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE Y-E-13HNC
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.13-T05N-R62W	Wellbore	STATE ANTELOPE Y-E-13HNC AWB
Slot	SLOT#12 STATE ANTELOPE Y-E-13HNC (2699'FSL & 510'FEL,SEC.13)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1591.00	26.540	150.810	1536.70	TIE ONTO BH SURFACE MWD SURVEYS
1695.00	25.920	152.640	1629.99	FIRST BH MONOBORE MWD SURVEY
7197.00	89.260	266.070	6191.12	LANDING POINT (20'FSL & 22'FEL, SEC.13)
12457.00	90.580	268.010	6105.36	LAST BH MONOBORE MWD SURVEY (16'FSL & 36'FWL, SEC.13)
12481.00	90.580	268.010	6105.12	PROJECTION TO BIT (15'FSL & 21'FWL, SEC.13)