

BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)
Field: WELD COUNTY Well: STATE ANTELOPE T-28-21XRLNB
Facility: SEC.28-T5N-R62W Wellbore: STATE ANTELOPE T-28-21XRLNB PWB

Plot reference wellpath is STATE ANTELOPE T-28-21XRLNB (REV-B.0) PWP

True vertical depths are referenced to CADE 22 (RKB) Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

Measured depths are referenced to CADE 22 (RKB) North Reference: True north

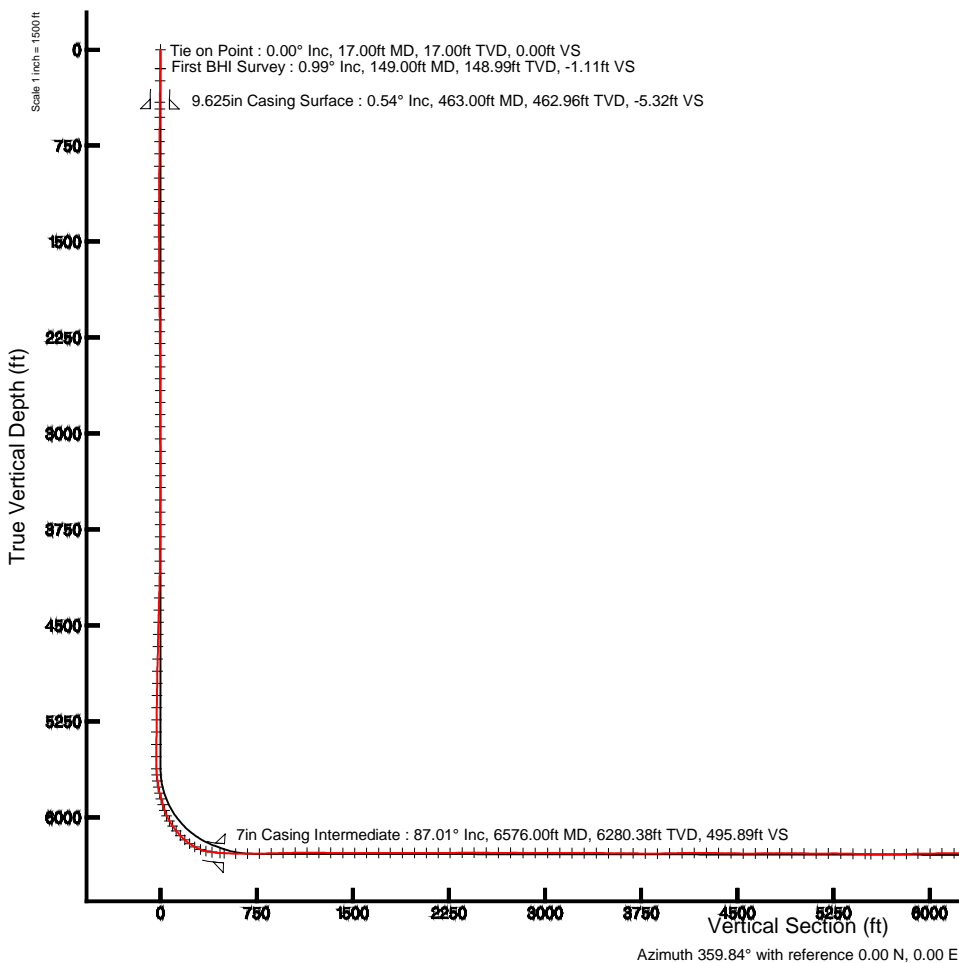
CADE 22 (RKB) to Mean Sea Level: 4644 feet Scale: True distance

Mean Sea Level to Mud line (At Slot: SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)): 0 feet Depths are in feet

Coordinates are in feet referenced to Slot Created by: guenaler on 7/28/2013

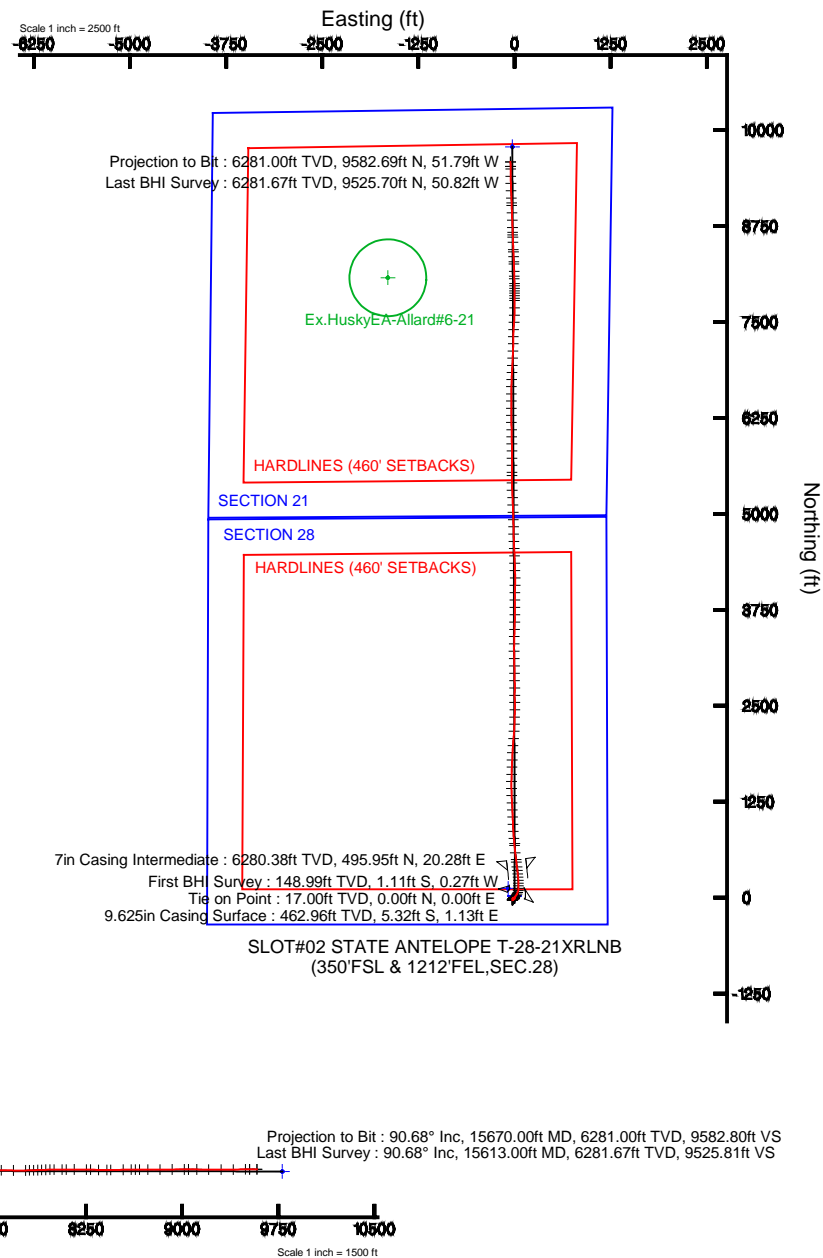
Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.28-T5N-R62W			3327718.187	1377782.991	40°21'52.020"N	104°19'26.040"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)	-21.86	0.00	3327718.477	1377781.135	40°21'51.804"N	104°19'26.040"W
CADE 22 (RKB) to Mud line (At Slot: SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28))					4644ft	
Mean Sea Level to Mud line (At Slot: SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28))					0ft	
CADE 22 (RKB) to Mean Sea Level					4644ft	



BGMM (1945.0 to 2014.0) Dip: 67.00° Field: 52846.8 nT
Magnetic North is 8.42 degrees East of True North (at 6/14/2013)

To correct azimuth from Magnetic to True add 8.42 degrees





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STATE ANTELOPE T-28-21XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)
Area	COLORADO	Well	STATE ANTELOPE T-28-21XRLNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE T-28-21XRLNB AWB
Facility	SEC.28-T5N-R62W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Guenaler
Scale	0.999959	Report Generated	7/29/2013 at 4:59:43 PM
Convergence at slot	n/a	Database/Source file	WA_Denver/STATE_ANTELOPE_T-28-21XRLNB_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-21.86	0.00	3327718.48	1377761.14	40°21'51.804"N	104°19'26.040"W
Facility Reference Pt			3327718.19	1377782.99	40°21'52.020"N	104°19'26.040"W
Field Reference Pt			3327718.19	1377782.99	40°21'52.020"N	104°19'26.040"W

WELLPATH DATUM

Calculation method	Minimum curvature	CADE 22 (RKB) to Facility Vertical Datum	4644.00ft
Horizontal Reference Pt	Slot	CADE 22 (RKB) to Mean Sea Level	4644.00ft
Vertical Reference Pt	CADE 22 (RKB)	CADE 22 (RKB) to Mud Line at Slot (SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28))	4644.00ft
MD Reference Pt	CADE 22 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.69°



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Field	WELD COUNTY	Wellbore	STATE ANTELOPE T-28-21XRLNB AWB
Facility	SEC.28-T5N-R62W		

WELLPATH DATA (188 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	193.680	0.00	0.00	0.00	0.00	40°21'51.804"N	104°19'26.040"W	0.00	
17.00	0.000	193.680	17.00	0.00	0.00	0.00	40°21'51.804"N	104°19'26.040"W	0.00	Tie on Point
149.00	0.990	193.680	148.99	-1.11	-1.11	-0.27	40°21'51.793"N	104°19'26.043"W	0.75	First BHI Survey
244.00	0.970	155.600	243.98	-2.64	-2.64	-0.13	40°21'51.778"N	104°19'26.042"W	0.67	
412.00	0.690	150.460	411.96	-4.82	-4.81	0.95	40°21'51.756"N	104°19'26.028"W	0.17	
530.00	0.560	217.140	529.96	-5.90	-5.89	0.96	40°21'51.746"N	104°19'26.028"W	0.59	
625.00	0.550	224.950	624.95	-6.59	-6.58	0.35	40°21'51.739"N	104°19'26.035"W	0.08	
720.00	0.550	177.040	719.95	-7.36	-7.36	0.06	40°21'51.731"N	104°19'26.039"W	0.47	
815.00	0.290	205.570	814.95	-8.03	-8.03	-0.02	40°21'51.725"N	104°19'26.040"W	0.34	
911.00	0.620	190.590	910.94	-8.76	-8.76	-0.22	40°21'51.717"N	104°19'26.043"W	0.36	
1003.00	0.360	230.220	1002.94	-9.43	-9.44	-0.54	40°21'51.711"N	104°19'26.047"W	0.45	
1095.00	0.480	221.250	1094.94	-9.91	-9.91	-1.01	40°21'51.706"N	104°19'26.053"W	0.15	
1187.00	0.910	215.380	1186.93	-10.79	-10.80	-1.69	40°21'51.697"N	104°19'26.062"W	0.47	
1280.00	0.710	261.290	1279.92	-11.47	-11.49	-2.69	40°21'51.690"N	104°19'26.075"W	0.71	
1372.00	0.880	267.890	1371.91	-11.58	-11.60	-3.96	40°21'51.689"N	104°19'26.091"W	0.21	
1465.00	0.830	283.900	1464.90	-11.43	-11.46	-5.33	40°21'51.691"N	104°19'26.109"W	0.26	
1559.00	1.290	310.800	1558.89	-10.57	-10.61	-6.79	40°21'51.699"N	104°19'26.128"W	0.71	
1651.00	0.550	276.060	1650.88	-9.84	-9.89	-8.01	40°21'51.706"N	104°19'26.143"W	0.97	
1744.00	0.660	279.840	1743.87	-9.70	-9.75	-8.98	40°21'51.708"N	104°19'26.156"W	0.13	
1836.00	0.700	278.210	1835.86	-9.52	-9.58	-10.06	40°21'51.709"N	104°19'26.170"W	0.05	
1928.00	0.870	335.990	1927.86	-8.80	-8.86	-10.90	40°21'51.716"N	104°19'26.181"W	0.84	
2021.00	0.940	335.480	2020.84	-7.46	-7.52	-11.51	40°21'51.730"N	104°19'26.189"W	0.08	
2112.00	1.200	315.310	2111.83	-6.09	-6.16	-12.48	40°21'51.743"N	104°19'26.201"W	0.50	
2205.00	0.720	315.790	2204.82	-4.98	-5.05	-13.58	40°21'51.754"N	104°19'26.215"W	0.52	
2297.00	0.400	14.850	2296.81	-4.25	-4.33	-13.90	40°21'51.761"N	104°19'26.220"W	0.67	
2389.00	0.600	61.860	2388.81	-3.72	-3.79	-13.39	40°21'51.767"N	104°19'26.213"W	0.48	
2481.00	0.350	35.880	2480.81	-3.26	-3.33	-12.80	40°21'51.771"N	104°19'26.205"W	0.35	
2573.00	0.430	64.820	2572.80	-2.89	-2.96	-12.32	40°21'51.775"N	104°19'26.199"W	0.23	
2665.00	0.790	91.050	2664.80	-2.76	-2.82	-11.38	40°21'51.776"N	104°19'26.187"W	0.49	
2757.00	0.770	85.750	2756.79	-2.74	-2.79	-10.13	40°21'51.776"N	104°19'26.171"W	0.08	



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STATE ANTELOPE T-28-21XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)
Area	COLORADO	Well	STATE ANTELOPE T-28-21XRLNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE T-28-21XRLNB AWB
Facility	SEC.28-T5N-R62W		

WELLPATH DATA (188 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2852.00	0.800	73.560	2851.78	-2.51	-2.55	-8.85	40°21'51.779"N	104°19'26.154"W	0.18	
2948.00	0.680	77.950	2947.77	-2.20	-2.25	-7.65	40°21'51.782"N	104°19'26.139"W	0.14	
3043.00	0.500	29.530	3042.77	-1.73	-1.77	-6.90	40°21'51.787"N	104°19'26.129"W	0.54	
3139.00	0.180	334.240	3138.77	-1.23	-1.27	-6.76	40°21'51.791"N	104°19'26.127"W	0.44	
3234.00	0.350	356.120	3233.77	-0.81	-0.84	-6.84	40°21'51.796"N	104°19'26.128"W	0.21	
3329.00	0.250	306.230	3328.76	-0.39	-0.43	-7.03	40°21'51.800"N	104°19'26.131"W	0.28	
3424.00	0.740	235.000	3423.76	-0.62	-0.66	-7.70	40°21'51.797"N	104°19'26.139"W	0.74	
3520.00	0.620	214.130	3519.75	-1.40	-1.45	-8.50	40°21'51.790"N	104°19'26.150"W	0.28	
3616.00	0.220	209.490	3615.75	-1.99	-2.04	-8.88	40°21'51.784"N	104°19'26.155"W	0.42	
3712.00	0.310	215.600	3711.75	-2.36	-2.41	-9.12	40°21'51.780"N	104°19'26.158"W	0.10	
3807.00	0.810	216.380	3806.75	-3.11	-3.16	-9.67	40°21'51.773"N	104°19'26.165"W	0.53	
3903.00	0.790	231.190	3902.74	-4.06	-4.12	-10.59	40°21'51.763"N	104°19'26.177"W	0.22	
3999.00	0.860	222.420	3998.73	-5.00	-5.07	-11.59	40°21'51.754"N	104°19'26.190"W	0.15	
4094.00	1.770	238.410	4093.70	-6.29	-6.36	-13.32	40°21'51.741"N	104°19'26.212"W	1.02	
4190.00	2.040	231.790	4189.65	-8.11	-8.19	-15.93	40°21'51.723"N	104°19'26.246"W	0.36	
4285.00	2.660	226.760	4284.57	-10.65	-10.75	-18.86	40°21'51.698"N	104°19'26.284"W	0.69	
4381.00	1.920	228.250	4380.49	-13.23	-13.35	-21.68	40°21'51.672"N	104°19'26.320"W	0.77	
4476.00	2.340	217.420	4475.43	-15.82	-15.95	-24.05	40°21'51.646"N	104°19'26.351"W	0.61	
4572.00	1.120	187.020	4571.38	-18.30	-18.44	-25.36	40°21'51.622"N	104°19'26.368"W	1.55	
4667.00	1.270	201.590	4666.36	-20.20	-20.34	-25.86	40°21'51.603"N	104°19'26.374"W	0.36	
4763.00	1.530	208.390	4762.33	-22.31	-22.45	-26.86	40°21'51.582"N	104°19'26.387"W	0.32	
4858.00	1.110	217.950	4857.31	-24.14	-24.29	-28.03	40°21'51.564"N	104°19'26.402"W	0.50	
4954.00	1.230	205.700	4953.29	-25.80	-25.96	-29.04	40°21'51.548"N	104°19'26.415"W	0.29	
5049.00	1.110	211.600	5048.27	-27.50	-27.66	-29.97	40°21'51.531"N	104°19'26.427"W	0.18	
5143.00	0.850	171.670	5142.25	-28.96	-29.12	-30.34	40°21'51.516"N	104°19'26.432"W	0.76	
5239.00	0.770	133.740	5238.25	-30.11	-30.27	-29.78	40°21'51.505"N	104°19'26.425"W	0.55	
5335.00	1.000	119.520	5334.23	-30.98	-31.13	-28.58	40°21'51.496"N	104°19'26.409"W	0.33	
5431.00	0.910	110.530	5430.22	-31.67	-31.81	-27.14	40°21'51.490"N	104°19'26.391"W	0.18	
5527.00	0.880	131.390	5526.21	-32.43	-32.57	-25.87	40°21'51.482"N	104°19'26.374"W	0.34	
5622.00	2.610	55.400	5621.17	-31.69	-31.82	-23.54	40°21'51.490"N	104°19'26.344"W	2.68	



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Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)
Area	COLORADO	Well	STATE ANTELOPE T-28-21XRLNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE T-28-21XRLNB AWB
Facility	SEC.28-T5N-R62W		

WELLPATH DATA (188 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5670.00	6.100	36.020	5669.03	-29.02	-29.14	-21.14	40°21'51.516"N	104°19'26.313"W	7.79	
5718.00	9.020	37.360	5716.60	-23.99	-24.08	-17.36	40°21'51.566"N	104°19'26.264"W	6.09	
5766.00	12.430	36.180	5763.76	-16.85	-16.92	-12.02	40°21'51.637"N	104°19'26.195"W	7.12	
5814.00	15.470	35.840	5810.34	-7.53	-7.56	-5.22	40°21'51.729"N	104°19'26.107"W	6.34	
5862.00	18.160	33.810	5856.28	3.83	3.85	2.69	40°21'51.842"N	104°19'26.005"W	5.74	
5909.00	20.340	34.610	5900.65	16.60	16.66	11.40	40°21'51.969"N	104°19'25.893"W	4.67	
5957.00	23.350	35.840	5945.20	31.12	31.24	21.71	40°21'52.113"N	104°19'25.759"W	6.34	
6004.00	26.980	28.120	5987.74	48.03	48.20	32.20	40°21'52.280"N	104°19'25.624"W	10.40	
6051.00	32.030	20.850	6028.65	69.05	69.27	41.67	40°21'52.489"N	104°19'25.502"W	13.15	
6098.00	35.150	10.930	6067.82	93.97	94.23	48.68	40°21'52.735"N	104°19'25.411"W	13.41	
6145.00	38.180	1.110	6105.55	121.79	122.07	51.53	40°21'53.010"N	104°19'25.374"W	14.03	
6194.00	43.520	359.120	6142.61	153.82	154.10	51.56	40°21'53.327"N	104°19'25.374"W	11.22	
6243.00	48.850	359.590	6176.52	189.17	189.45	51.17	40°21'53.676"N	104°19'25.379"W	10.90	
6291.00	54.350	355.820	6206.33	226.73	227.00	49.62	40°21'54.047"N	104°19'25.399"W	13.00	
6339.00	62.120	354.490	6231.58	267.38	267.63	46.15	40°21'54.449"N	104°19'25.444"W	16.36	
6387.00	69.740	353.830	6251.14	310.97	311.20	41.69	40°21'54.879"N	104°19'25.501"W	15.92	
6433.00	77.290	353.580	6264.19	354.81	355.01	36.86	40°21'55.312"N	104°19'25.564"W	16.42	
6480.00	82.720	353.390	6272.34	400.81	400.98	31.61	40°21'55.766"N	104°19'25.632"W	11.56	
6545.00	86.280	353.110	6278.57	465.09	465.22	24.00	40°21'56.401"N	104°19'25.730"W	5.49	
6667.00	89.160	352.920	6283.42	586.15	586.21	9.18	40°21'57.597"N	104°19'25.921"W	2.37	
6760.00	90.180	355.210	6283.96	678.69	678.70	-0.44	40°21'58.511"N	104°19'26.046"W	2.70	
6852.00	90.460	355.060	6283.44	770.40	770.37	-8.24	40°21'59.417"N	104°19'26.146"W	0.35	
6945.00	91.700	356.360	6281.69	863.16	863.09	-15.19	40°22'00.333"N	104°19'26.236"W	1.93	
7038.00	91.450	357.480	6279.13	956.01	955.92	-20.19	40°22'01.250"N	104°19'26.301"W	1.23	
7132.00	90.860	357.600	6277.24	1049.93	1049.81	-24.22	40°22'02.178"N	104°19'26.353"W	0.64	
7225.00	89.690	358.060	6276.79	1142.87	1142.74	-27.74	40°22'03.096"N	104°19'26.398"W	1.35	
7318.00	89.850	357.030	6277.17	1235.81	1235.65	-31.73	40°22'04.014"N	104°19'26.450"W	1.12	
7411.00	89.450	357.310	6277.73	1328.72	1328.54	-36.32	40°22'04.932"N	104°19'26.509"W	0.53	
7504.00	90.030	358.910	6278.16	1421.68	1421.48	-39.39	40°22'05.851"N	104°19'26.549"W	1.83	
7597.00	90.090	1.490	6278.06	1514.66	1514.48	-39.06	40°22'06.770"N	104°19'26.545"W	2.77	



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7690.00	89.850	1.380	6278.11	1607.62	1607.45	-36.73	40°22'07.688"N	104°19'26.515"W	0.28	
7784.00	89.780	2.160	6278.41	1701.56	1701.40	-33.83	40°22'08.617"N	104°19'26.477"W	0.83	
7876.00	89.850	2.380	6278.71	1793.46	1793.33	-30.19	40°22'09.525"N	104°19'26.430"W	0.25	
7970.00	89.910	2.850	6278.91	1887.34	1887.23	-25.90	40°22'10.453"N	104°19'26.375"W	0.50	
8064.00	89.780	3.930	6279.16	1981.14	1981.06	-20.34	40°22'11.380"N	104°19'26.303"W	1.16	
8157.00	89.750	5.530	6279.54	2073.78	2073.74	-12.67	40°22'12.296"N	104°19'26.204"W	1.72	
8250.00	90.430	3.570	6279.40	2166.44	2166.44	-5.29	40°22'13.212"N	104°19'26.108"W	2.23	
8344.00	91.110	1.960	6278.13	2260.29	2260.32	-0.76	40°22'14.140"N	104°19'26.050"W	1.86	
8437.00	90.520	1.380	6276.81	2353.23	2353.27	1.95	40°22'15.058"N	104°19'26.015"W	0.89	
8531.00	89.880	0.340	6276.48	2447.21	2447.26	3.36	40°22'15.987"N	104°19'25.997"W	1.30	
8626.00	89.290	359.350	6277.17	2542.20	2542.26	3.10	40°22'16.926"N	104°19'26.000"W	1.21	
8720.00	89.940	0.020	6277.80	2636.20	2636.25	2.59	40°22'17.855"N	104°19'26.007"W	0.99	
8815.00	90.460	0.550	6277.47	2731.19	2731.25	3.06	40°22'18.793"N	104°19'26.000"W	0.78	
8911.00	89.010	358.200	6277.91	2827.18	2827.23	2.01	40°22'19.742"N	104°19'26.014"W	2.88	
9006.00	90.370	359.420	6278.43	2922.16	2922.21	0.04	40°22'20.680"N	104°19'26.039"W	1.92	
9104.00	89.630	358.490	6278.43	3020.15	3020.19	-1.75	40°22'21.649"N	104°19'26.063"W	1.21	
9199.00	89.480	358.620	6279.17	3115.13	3115.15	-4.14	40°22'22.587"N	104°19'26.094"W	0.21	
9294.00	89.880	359.640	6279.70	3210.12	3210.14	-5.58	40°22'23.526"N	104°19'26.112"W	1.15	
9390.00	90.060	1.180	6279.75	3306.11	3306.14	-4.90	40°22'24.474"N	104°19'26.103"W	1.62	
9484.00	90.060	1.910	6279.65	3400.06	3400.10	-2.36	40°22'25.403"N	104°19'26.071"W	0.78	
9579.00	89.110	1.110	6280.34	3495.01	3495.06	0.14	40°22'26.341"N	104°19'26.038"W	1.31	
9675.00	89.910	2.270	6281.16	3590.95	3591.02	2.97	40°22'27.289"N	104°19'26.002"W	1.47	
9770.00	89.100	359.100	6281.98	3685.92	3685.99	4.11	40°22'28.228"N	104°19'25.987"W	3.44	
9865.00	89.600	0.000	6283.06	3780.91	3780.98	3.36	40°22'29.166"N	104°19'25.997"W	1.08	
9960.00	90.600	0.730	6282.89	3875.90	3875.98	3.97	40°22'30.105"N	104°19'25.989"W	1.30	
10056.00	90.900	0.920	6281.63	3971.87	3971.96	5.35	40°22'31.054"N	104°19'25.971"W	0.37	
10152.00	91.110	1.200	6279.95	4067.83	4067.93	7.12	40°22'32.002"N	104°19'25.948"W	0.36	
10248.00	90.560	359.710	6278.55	4163.81	4163.91	7.89	40°22'32.950"N	104°19'25.938"W	1.65	
10343.00	89.260	358.010	6278.70	4258.79	4258.89	6.00	40°22'33.889"N	104°19'25.963"W	2.25	
10439.00	89.160	358.370	6280.02	4354.75	4354.83	2.96	40°22'34.837"N	104°19'26.002"W	0.39	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)
Area	COLORADO	Well	STATE ANTELOPE T-28-21XRLNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE T-28-21XRLNB AWB
Facility	SEC.28-T5N-R62W		

WELLPATH DATA (188 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10535.00	89.160	357.860	6281.43	4450.70	4450.77	-0.19	40°22'35.785"N	104°19'26.042"W	0.53	
10631.00	89.040	356.750	6282.94	4546.61	4546.65	-4.71	40°22'36.733"N	104°19'26.101"W	1.16	
10725.00	91.210	358.490	6282.73	4640.54	4640.56	-8.61	40°22'37.661"N	104°19'26.151"W	2.96	
10819.00	90.280	358.980	6281.51	4734.51	4734.53	-10.68	40°22'38.589"N	104°19'26.178"W	1.12	
10915.00	90.400	358.390	6280.94	4830.50	4830.50	-12.89	40°22'39.537"N	104°19'26.207"W	0.63	
11010.00	89.380	358.820	6281.12	4925.48	4925.47	-15.20	40°22'40.476"N	104°19'26.236"W	1.17	
11105.00	89.140	357.610	6282.35	5020.44	5020.41	-18.16	40°22'41.414"N	104°19'26.275"W	1.30	
11199.00	89.780	357.960	6283.24	5114.38	5114.34	-21.79	40°22'42.342"N	104°19'26.322"W	0.78	
11295.00	90.900	357.310	6282.67	5210.32	5210.25	-25.75	40°22'43.290"N	104°19'26.373"W	1.35	
11391.00	89.090	357.240	6282.68	5306.23	5306.14	-30.32	40°22'44.238"N	104°19'26.432"W	1.89	
11486.00	88.240	358.840	6284.89	5401.16	5401.05	-33.57	40°22'45.176"N	104°19'26.474"W	1.91	
11582.00	89.260	0.930	6286.98	5497.13	5497.02	-33.76	40°22'46.124"N	104°19'26.476"W	2.42	
11626.00	89.200	0.650	6287.57	5541.11	5541.02	-33.15	40°22'46.559"N	104°19'26.468"W	0.65	
11718.00	89.630	359.840	6288.51	5633.10	5633.01	-32.76	40°22'47.468"N	104°19'26.463"W	1.00	
11810.00	90.560	359.900	6288.36	5725.10	5725.01	-32.97	40°22'48.377"N	104°19'26.466"W	1.01	
11903.00	91.940	359.750	6286.33	5818.08	5817.98	-33.25	40°22'49.295"N	104°19'26.470"W	1.49	
11995.00	90.400	358.810	6284.45	5910.05	5909.95	-34.41	40°22'50.204"N	104°19'26.485"W	1.96	
12088.00	91.140	358.660	6283.20	6003.03	6002.92	-36.46	40°22'51.123"N	104°19'26.511"W	0.81	
12182.00	90.810	359.180	6281.60	6097.01	6096.89	-38.23	40°22'52.052"N	104°19'26.534"W	0.66	
12275.00	89.510	359.160	6281.34	6190.00	6189.88	-39.58	40°22'52.970"N	104°19'26.551"W	1.40	
12368.00	89.590	359.360	6282.08	6283.00	6282.87	-40.78	40°22'53.889"N	104°19'26.567"W	0.23	
12461.00	90.680	0.240	6281.86	6375.99	6375.87	-41.10	40°22'54.808"N	104°19'26.571"W	1.51	
12555.00	91.060	359.960	6280.43	6469.98	6469.85	-40.94	40°22'55.737"N	104°19'26.569"W	0.50	
12647.00	90.090	0.220	6279.51	6561.97	6561.85	-40.80	40°22'56.646"N	104°19'26.567"W	1.09	
12741.00	90.550	1.360	6278.98	6655.95	6655.84	-39.50	40°22'57.575"N	104°19'26.550"W	1.31	
12834.00	89.690	2.100	6278.79	6748.89	6748.79	-36.69	40°22'58.493"N	104°19'26.514"W	1.22	
12927.00	90.000	3.110	6279.04	6841.77	6841.69	-32.47	40°22'59.411"N	104°19'26.460"W	1.14	
13019.00	89.810	2.630	6279.19	6933.63	6933.58	-27.86	40°23'00.319"N	104°19'26.400"W	0.56	
13113.00	88.460	2.740	6280.61	7027.49	7027.46	-23.46	40°23'01.247"N	104°19'26.343"W	1.44	
13207.00	88.050	1.980	6283.47	7121.34	7121.34	-19.59	40°23'02.175"N	104°19'26.293"W	0.92	



Actual Wellpath Report

STATE ANTELOPE T-28-21XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)
Area	COLORADO	Well	STATE ANTELOPE T-28-21XRLNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE T-28-21XRLNB AWB
Facility	SEC.28-T5N-R62W		

WELLPATH DATA (188 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13300.00	89.080	1.080	6285.80	7214.26	7214.27	-17.10	40°23'03.093"N	104°19'26.261"W	1.47	
13393.00	90.090	1.050	6286.47	7307.23	7307.25	-15.38	40°23'04.012"N	104°19'26.239"W	1.09	
13487.00	89.720	2.840	6286.63	7401.15	7401.20	-12.19	40°23'04.940"N	104°19'26.197"W	1.94	
13581.00	90.000	4.580	6286.86	7494.92	7494.99	-6.10	40°23'05.867"N	104°19'26.119"W	1.87	
13674.00	88.790	1.820	6287.84	7587.73	7587.83	-0.91	40°23'06.785"N	104°19'26.052"W	3.24	
13770.00	88.670	0.150	6289.97	7683.68	7683.79	0.74	40°23'07.733"N	104°19'26.030"W	1.74	
13864.00	90.990	359.860	6290.25	7777.67	7777.79	0.74	40°23'08.662"N	104°19'26.030"W	2.49	
13896.00	91.700	0.150	6289.50	7809.66	7809.78	0.75	40°23'08.978"N	104°19'26.030"W	2.40	
13928.00	92.100	0.260	6288.44	7841.64	7841.76	0.86	40°23'09.294"N	104°19'26.029"W	1.30	
13959.00	92.190	0.050	6287.28	7872.62	7872.74	0.95	40°23'09.600"N	104°19'26.028"W	0.74	
13991.00	92.160	0.020	6286.06	7904.59	7904.71	0.97	40°23'09.916"N	104°19'26.028"W	0.13	
14023.00	91.370	359.220	6285.08	7936.58	7936.70	0.75	40°23'10.232"N	104°19'26.030"W	3.51	
14055.00	90.710	358.970	6284.50	7968.57	7968.69	0.25	40°23'10.548"N	104°19'26.037"W	2.21	
14086.00	90.120	358.690	6284.27	7999.57	7999.68	-0.38	40°23'10.854"N	104°19'26.045"W	2.11	
14149.00	90.280	358.280	6284.05	8062.55	8062.66	-2.05	40°23'11.477"N	104°19'26.066"W	0.70	
14181.00	90.800	358.540	6283.75	8094.54	8094.64	-2.94	40°23'11.793"N	104°19'26.078"W	1.82	
14245.00	90.890	358.430	6282.81	8158.52	8158.61	-4.63	40°23'12.425"N	104°19'26.100"W	0.22	
14340.00	88.550	357.720	6283.27	8253.47	8253.55	-7.82	40°23'13.363"N	104°19'26.141"W	2.57	
14371.00	88.520	357.850	6284.06	8284.45	8284.52	-9.02	40°23'13.669"N	104°19'26.157"W	0.43	
14435.00	89.140	357.750	6285.37	8348.40	8348.46	-11.48	40°23'14.301"N	104°19'26.188"W	0.98	
14499.00	90.310	357.710	6285.68	8412.36	8412.41	-14.01	40°23'14.933"N	104°19'26.221"W	1.83	
14530.00	90.280	357.580	6285.52	8443.34	8443.38	-15.28	40°23'15.239"N	104°19'26.238"W	0.43	
14626.00	90.650	357.530	6284.74	8539.27	8539.29	-19.38	40°23'16.186"N	104°19'26.290"W	0.39	
14690.00	90.090	358.200	6284.32	8603.23	8603.24	-21.76	40°23'16.818"N	104°19'26.321"W	1.36	
14722.00	89.630	357.990	6284.40	8635.22	8635.22	-22.83	40°23'17.134"N	104°19'26.335"W	1.58	
14754.00	89.850	358.170	6284.55	8667.21	8667.21	-23.90	40°23'17.451"N	104°19'26.349"W	0.89	
14818.00	90.620	358.110	6284.29	8731.18	8731.17	-25.98	40°23'18.083"N	104°19'26.376"W	1.21	
14914.00	90.340	357.520	6283.48	8827.13	8827.10	-29.64	40°23'19.030"N	104°19'26.423"W	0.68	
15010.00	90.590	357.950	6282.70	8923.07	8923.02	-33.43	40°23'19.978"N	104°19'26.472"W	0.52	
15105.00	89.940	357.830	6282.26	9018.02	9017.95	-36.93	40°23'20.916"N	104°19'26.517"W	0.70	



Actual Wellpath Report

STATE ANTELOPE T-28-21XRLNB AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)
Area	COLORADO	Well	STATE ANTELOPE T-28-21XRLNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE T-28-21XRLNB AWB
Facility	SEC.28-T5N-R62W		

WELLPATH DATA (188 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
15137.00	90.220	358.200	6282.22	9050.01	9049.93	-38.04	40°23'21.232"N	104°19'26.532"W	1.45	
15201.00	89.350	357.820	6282.46	9113.98	9113.89	-40.26	40°23'21.865"N	104°19'26.560"W	1.48	
15295.00	88.800	357.630	6283.98	9207.91	9207.81	-43.99	40°23'22.793"N	104°19'26.608"W	0.62	
15390.00	90.580	358.920	6284.49	9302.87	9302.76	-46.85	40°23'23.731"N	104°19'26.645"W	2.31	
15485.00	91.020	359.390	6283.16	9397.86	9397.74	-48.25	40°23'24.669"N	104°19'26.664"W	0.68	
15580.00	90.400	358.400	6281.99	9492.84	9492.71	-50.08	40°23'25.608"N	104°19'26.687"W	1.23	
15613.00	90.680	359.030	6281.67	9525.84	9525.70	-50.82	40°23'25.934"N	104°19'26.697"W	2.09	Last BHI Survey
15670.00	90.680	359.030	6281.00	9582.83	9582.69	-51.79	40°23'26.497"N	104°19'26.709"W	0.00	Projection to Bit

HOLE & CASING SECTIONS -										
Ref Wellbore: STATE ANTELOPE T-28-21XRLNB AWB					Ref Wellpath: STATE ANTELOPE T-28-21XRLNB 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	463.00	446.00	17.00	462.96	0.00	0.00	-5.32	1.13	
8.06in Open Hole	463.00	5900.00	5437.00	462.96	5892.20	-5.32	1.13	14.11	9.65	
7in Casing Intermediate	17.00	6576.00	6559.00	17.00	6280.38	0.00	0.00	495.95	20.28	
6.125in Open Hole	6576.00	15670.00	9094.00	6280.38	6281.00	495.95	20.28	9582.69	-51.79	

WELLPATH COMPOSITION -				
Ref Wellbore: STATE ANTELOPE T-28-21XRLNB AWB		Ref Wellpath: STATE ANTELOPE T-28-21XRLNB AWP		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	6545.00	NaviTrak (Standard)	BHI/Navitrak MWD 8.75" HOLE <17'-6545'>	STATE ANTELOPE T-28-21XRLNB AWB
6545.00	15613.00	NaviTrak (Standard)	BHI/Navitrak MWD 6.125" HOLE <6667'-15613'>	STATE ANTELOPE T-28-21XRLNB AWB
15613.00	15670.00	Blind Drilling (std)	Projection to bit	STATE ANTELOPE T-28-21XRLNB AWB



Actual Wellpath Report
STATE ANTELOPE T-28-21XRLNB AWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 STATE ANTELOPE T-28-21XRLNB (350'FSL & 1212'FEL,SEC.28)
Area	COLORADO	Well	STATE ANTELOPE T-28-21XRLNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE T-28-21XRLNB AWB
Facility	SEC.28-T5N-R62W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	193.680	17.00	Tie on Point
149.00	0.990	193.680	148.99	First BHI Survey
15613.00	90.680	359.030	6281.67	Last BHI Survey
15670.00	90.680	359.030	6281.00	Projection to Bit