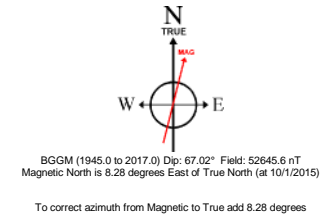
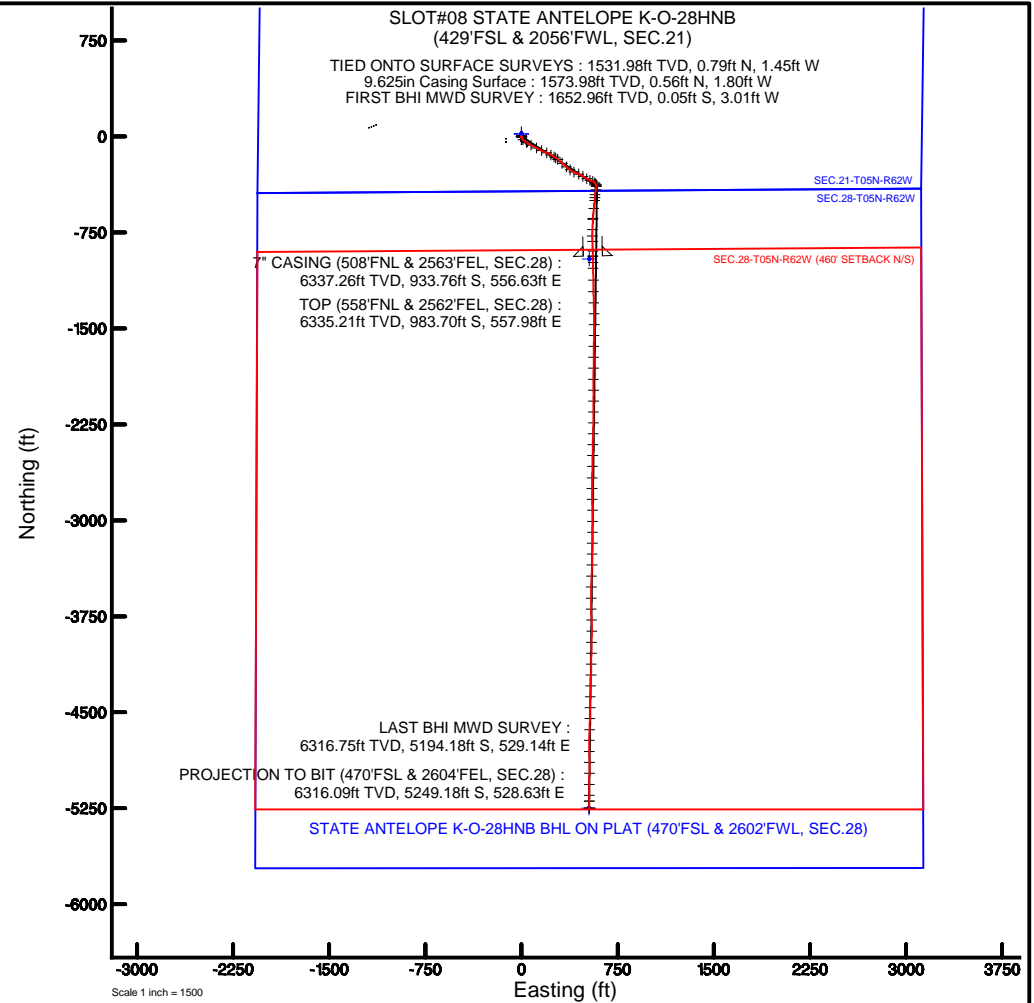
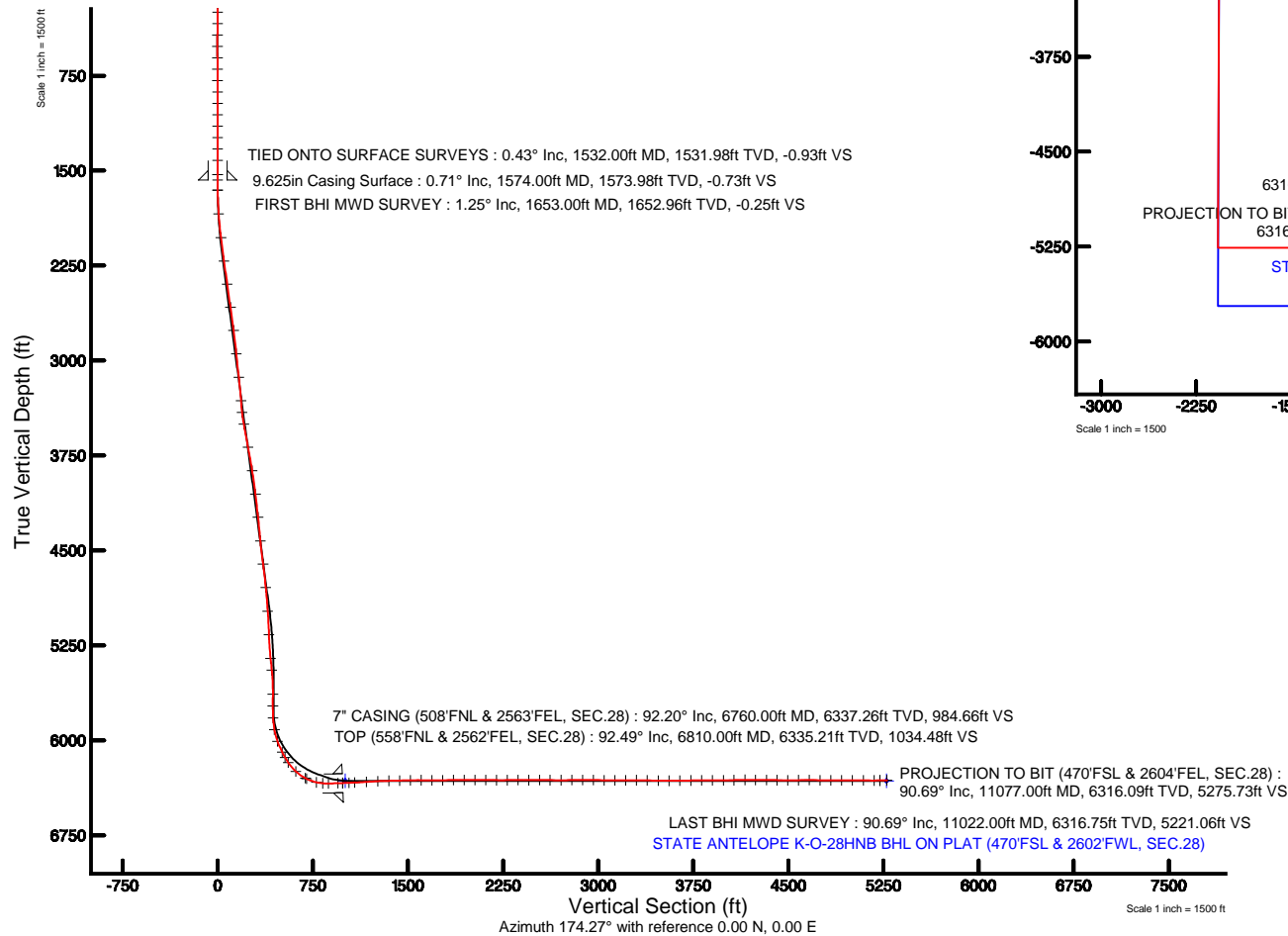


BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#08 STATE ANTELOPE K-O-28HNB (429'FSL & 2056'FWL, SEC.21)
Field: WELD COUNTY Well: STATE ANTELOPE K-O-28HNB
Facility: SEC.21-T05N-R62W Wellbore: STATE ANTELOPE K-O-28HNB PWB

Plot reference wellpath is STATE ANTELOPE K-O-28HNB PWP (REV-B.0)

True vertical depths are referenced to XTREME 22 (17KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 22 (17KB) (RKB)	North Reference: True north
XTREME 22 (17KB) (RKB) to Mean Sea Level: 4651 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#08 STATE ANTELOPE K-O-28HNB (429'FSL & 2056'FWL, SEC.21)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingnjm on 12/2/2015





Actual Wellpath Report

STATE ANTELOPE K-O-28HNB AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 STATE ANTELOPE K-O-28HNB (429'FSL & 2056'FWL, SEC.21)
Area	COLORADO	Well	STATE ANTELOPE K-O-28HNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE K-O-28HNB AWB
Facility	SEC.21-T05N-R62W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Ingmjmr
Scale	0.999959	Report Generated	12/2/2015 at 10:40:08 AM
Convergence at slot	0.76° East	Database/Source file	WA_DEN_Denver_Defn/STATE_ANTELOPE_K-O-28HNB_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-69.16	1191.12	3325726.06	1383103.57	40°22'44.854"N	104°19'50.868"W
Facility Reference Pt			3324534.18	1383157.08	40°22'45.538"N	104°20'06.259"W
Field Reference Pt			3335925.10	1457282.25	40°34'56.460"N	104°17'26.016"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 22 (17'KB) (RKB) to Facility Vertical Datum	4651.00ft
Horizontal Reference Pt	Slot	XTREME 22 (17'KB) (RKB) to Mean Sea Level	4651.00ft
Vertical Reference Pt	XTREME 22 (17'KB) (RKB)	XTREME 22 (17'KB) (RKB) to Mud Line at Slot (SLOT#08 STATE ANTELOPE K-O-28HNB (429'FSL & 2056'FWL, SEC.21))	4651.00ft
MD Reference Pt	XTREME 22 (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	174.27°



Actual Wellpath Report

STATE ANTELOPE K-O-28HNB AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 STATE ANTELOPE K-O-28HNB (429'FSL & 2056'FWL, SEC.21)
Area	COLORADO	Well	STATE ANTELOPE K-O-28HNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE K-O-28HNB AWB
Facility	SEC.21-T05N-R62W		

WELLPATH DATA (92 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
1532.00	0.430	231.360	1531.98	-0.93	0.79	-1.45	0.15	TIED ONTO SURFACE SURVEYS
1653.00	1.250	245.430	1652.96	-0.25	-0.05	-3.01	0.69	FIRST BHI MWD SURVEY
1841.00	4.700	148.040	1840.75	7.32	-7.44	-0.79	2.67	
2030.00	8.330	139.210	2028.50	25.48	-24.38	12.25	1.99	
2218.00	12.530	123.520	2213.39	49.55	-45.97	38.17	2.68	
2407.00	13.680	117.930	2397.47	74.91	-67.76	75.01	0.90	
2595.00	14.700	117.630	2579.73	100.35	-89.23	115.78	0.54	
2783.00	14.000	116.020	2761.86	125.43	-110.27	157.35	0.43	
2972.00	11.660	112.610	2946.14	146.53	-127.65	195.53	1.30	
3161.00	10.680	121.750	3131.57	166.25	-144.21	228.06	1.07	
3349.00	7.690	117.160	3317.14	183.69	-159.12	254.07	1.64	
3443.00	10.300	122.360	3409.98	192.29	-166.49	266.77	2.91	
3538.00	13.650	131.020	3502.90	205.70	-178.40	282.41	3.99	
3726.00	14.740	130.440	3685.16	239.11	-208.47	317.35	0.58	
3916.00	12.910	129.740	3869.65	271.68	-237.72	352.07	0.97	
4104.00	9.070	129.670	4054.17	297.21	-260.61	379.63	2.04	
4291.00	12.650	113.540	4237.83	317.73	-278.21	409.77	2.49	
4481.00	11.130	112.290	4423.75	336.51	-293.48	445.81	0.81	
4669.00	12.200	123.020	4607.88	357.47	-311.19	479.26	1.28	
4857.00	9.600	119.330	4792.48	378.92	-329.69	509.59	1.43	
5046.00	7.640	114.500	4979.34	394.30	-342.62	534.76	1.10	
5234.00	6.490	102.620	5165.92	403.93	-350.13	556.51	0.99	
5422.00	6.400	152.440	5352.87	417.01	-361.75	571.73	2.88	
5516.00	6.080	153.690	5446.31	426.54	-370.86	576.36	0.37	
5705.00	0.670	28.820	5634.97	435.01	-378.87	581.34	3.43	
5799.00	0.880	91.750	5728.97	434.65	-378.41	582.32	0.88	
5893.00	2.880	144.250	5822.92	436.79	-380.35	584.43	2.60	
5987.00	10.290	187.110	5916.27	447.04	-390.61	584.77	8.94	
6082.00	21.320	191.580	6007.54	471.87	-416.03	580.24	11.67	
6176.00	26.570	186.390	6093.43	508.77	-453.69	574.46	6.01	
6224.00	30.210	183.920	6135.65	531.18	-476.42	572.44	7.97	
6270.00	34.380	184.840	6174.52	555.37	-500.92	570.55	9.13	
6364.00	47.870	186.340	6245.17	615.83	-562.29	564.44	14.39	
6458.00	62.350	184.270	6298.80	691.32	-638.86	557.45	15.51	
6468.00	63.920	183.530	6303.32	700.11	-647.76	556.84	17.03	
6553.00	76.850	182.100	6331.79	779.13	-727.56	552.96	15.29	
6603.00	85.440	179.450	6339.49	828.17	-776.91	552.30	17.96	
6647.00	91.260	178.510	6340.75	871.98	-820.87	553.09	13.40	
6722.00	91.970	177.980	6338.64	946.77	-895.80	555.38	1.18	
6760.00†	92.195	178.261	6337.26	984.66	-933.76	556.63	0.95	7" CASING (508'FNL & 2563'FEL, SEC.28)
6810.00†	92.492	178.632	6335.21	1034.48	-983.70	557.98	0.95	TOP (558'FNL & 2562'FEL, SEC.28)
6857.00	92.770	178.980	6333.06	1081.29	-1030.64	558.96	0.95	
6949.00	93.910	179.250	6327.70	1172.80	-1122.47	560.38	1.27	
7040.00	92.610	178.780	6322.52	1263.34	-1213.31	561.94	1.52	
7126.00	91.120	178.650	6319.72	1349.03	-1299.24	563.87	1.74	



Actual Wellpath Report

STATE ANTELOPE K-O-28HNB AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 STATE ANTELOPE K-O-28HNB (429'FSL & 2056'FWL, SEC.21)
Area	COLORADO	Well	STATE ANTELOPE K-O-28HNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE K-O-28HNB AWB
Facility	SEC.21-T05N-R62W		

WELLPATH DATA (92 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7211.00	91.840	178.870	6317.53	1433.74	-1384.19	565.71	0.89	
7297.00	91.340	179.180	6315.14	1519.42	-1470.14	567.17	0.68	
7382.00	89.260	181.790	6314.69	1603.90	-1555.12	566.45	3.93	
7467.00	89.750	182.020	6315.43	1688.15	-1640.07	563.63	0.64	
7553.00	90.870	179.280	6314.96	1773.60	-1726.06	562.65	3.44	
7638.00	91.050	180.980	6313.54	1858.14	-1811.04	562.46	2.01	
7724.00	89.540	179.790	6313.10	1943.65	-1897.04	561.88	2.24	
7810.00	90.150	179.660	6313.33	2029.26	-1983.03	562.29	0.73	
7895.00	89.600	180.690	6313.51	2113.81	-2068.03	562.03	1.37	
7980.00	89.260	180.120	6314.36	2198.32	-2153.02	561.43	0.78	
8066.00	90.990	181.190	6314.17	2283.78	-2239.01	560.45	2.37	
8151.00	89.630	181.680	6313.71	2368.11	-2323.98	558.32	1.70	
8236.00	89.600	181.050	6314.28	2452.46	-2408.96	556.30	0.74	
8321.00	90.590	180.910	6314.14	2536.87	-2493.94	554.84	1.18	
8406.00	89.190	181.270	6314.31	2621.27	-2578.93	553.23	1.70	
8494.00	90.120	181.460	6314.84	2708.59	-2666.90	551.13	1.08	
8579.00	90.990	180.160	6314.01	2793.03	-2751.88	549.93	1.84	
8664.00	89.910	178.080	6313.35	2877.72	-2836.87	551.23	2.76	
8749.00	89.410	179.450	6313.85	2962.46	-2921.84	553.07	1.72	
8835.00	88.760	179.980	6315.22	3048.06	-3007.83	553.49	0.98	
8920.00	89.750	180.400	6316.33	3132.60	-3092.82	553.21	1.27	
9005.00	91.140	180.650	6315.67	3217.08	-3177.81	552.43	1.66	
9090.00	90.060	180.290	6314.78	3301.58	-3262.80	551.74	1.34	
9176.00	88.140	181.920	6316.13	3386.95	-3348.77	550.08	2.93	
9263.00	88.860	182.350	6318.41	3473.11	-3435.68	546.84	0.96	
9349.00	89.970	180.530	6319.28	3558.42	-3521.64	544.68	2.48	
9436.00	91.170	179.950	6318.42	3644.95	-3608.63	544.31	1.53	
9522.00	90.710	180.230	6317.01	3730.49	-3694.62	544.18	0.63	
9607.00	90.350	176.880	6316.22	3815.24	-3779.58	546.32	3.96	
9693.00	89.260	180.800	6316.51	3900.95	-3865.54	548.06	4.73	
9780.00	90.780	180.990	6316.48	3987.36	-3952.53	546.70	1.76	
9865.00	92.040	180.860	6314.39	4071.76	-4037.49	545.33	1.49	
9951.00	90.710	180.760	6312.33	4157.18	-4123.46	544.12	1.55	
10036.00	89.080	181.890	6312.48	4241.53	-4208.43	542.15	2.33	
10122.00	89.780	181.690	6313.34	4326.78	-4294.38	539.46	0.85	
10207.00	88.870	181.630	6314.34	4411.07	-4379.34	537.00	1.07	
10292.00	89.720	180.820	6315.39	4495.44	-4464.31	535.18	1.38	
10377.00	91.050	181.740	6314.82	4579.80	-4549.29	533.29	1.90	
10463.00	90.030	181.700	6314.01	4665.07	-4635.24	530.70	1.19	
10548.00	88.630	180.280	6315.00	4749.47	-4720.22	529.24	2.35	
10634.00	89.590	179.510	6316.34	4835.05	-4806.21	529.39	1.43	
10720.00	90.710	179.390	6316.11	4920.70	-4892.20	530.22	1.31	
10805.00	90.060	180.850	6315.54	5005.25	-4977.20	530.04	1.88	
10893.00	88.900	179.970	6316.34	5092.74	-5065.19	529.41	1.65	
10978.00	90.120	180.080	6317.06	5177.30	-5150.18	529.37	1.44	



Actual Wellpath Report

STATE ANTELOPE K-O-28HNB AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 STATE ANTELOPE K-O-28HNB (429'FSL & 2056'FWL, SEC.21)
Area	COLORADO	Well	STATE ANTELOPE K-O-28HNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE K-O-28HNB AWB
Facility	SEC.21-T05N-R62W		

WELLPATH DATA (92 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11022.00	90.690	180.530	6316.75	5221.06	-5194.18	529.14	1.65	LAST BHI MWD SURVEY
11077.00	90.690	180.530	6316.09	5275.73	-5249.18	528.63	0.00	PROJECTION TO BIT (470'FSL & 2604'FEL, SEC.28)

HOLE & CASING SECTIONS - Ref Wellbore: STATE ANTELOPE K-O-28HNB AWB Ref Wellpath: STATE ANTELOPE K-O-28HNB 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	1574.00	1557.00	17.00	1573.98	0.00	0.00	0.56	-1.80
9.625in Casing Surface	17.00	1574.00	1557.00	17.00	1573.98	0.00	0.00	0.56	-1.80
8.75in Open Hole	1574.00	6770.00	5196.00	1573.98	6336.87	0.56	-1.80	-943.75	556.93
7in Casing Intermediate	17.00	6760.00	6743.00	17.00	6337.26	0.00	0.00	-933.76	556.63
6.125in Open Hole	6770.00	11077.00	4307.00	6336.87	6316.09	-943.75	556.93	-5249.18	528.63

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.21-T05N-R62W 8.14.15	0.00	19.60	-0.92	3325724.88	1383123.16	40°22'45.048"N	104°19'50.880"W	polygon
SEC.28-T05N-R62W	0.00	19.60	-0.92	3325724.88	1383123.16	40°22'45.048"N	104°19'50.880"W	polygon
STATE ANTELOPE K-O-28HNB BHL ON PLAT (470'FSL & 2602'FWL, SEC.28)	6320.00	-5248.32	525.76	3326320.94	1377862.87	40°21'52.992"N	104°19'44.076"W	point
STATE ANTELOPE K-O-28HNB EP ON PLAT	6320.00	-956.75	528.45	3326267.05	1382153.92	40°22'35.400"N	104°19'44.040"W	point
SEC.28-T05N-R62W (460' SETBACK N/S)	6366.00	19.60	-0.92	3325724.88	1383123.16	40°22'45.048"N	104°19'50.880"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: STATE ANTELOPE K-O-28HNB AWB Ref Wellpath: STATE ANTELOPE K-O-28HNB AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1532.00	ISCWSA MWD, Rev. 3 (Standard)	TOTAL SURFACE SURVEYS-ADJUSTED TO KB- <99-1532>	STATE ANTELOPE K-O-28HNB AWB
1532.00	6722.00	NaviTrak (MagCorr)	BHI MWD/NAVITRAK (MAGCORR) 8.75" HOLE <1653-6722>	STATE ANTELOPE K-O-28HNB AWB
6722.00	11022.00	NaviTrak (MagCorr)	BHI MWD/NAVITRAK (MAGCORR) 6.125" HOLE <6857-11022>	STATE ANTELOPE K-O-28HNB AWB
11022.00	11077.00	Blind Drilling (std)	Projection to bit	STATE ANTELOPE K-O-28HNB AWB



Actual Wellpath Report

STATE ANTELOPE K-O-28HNB AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 STATE ANTELOPE K-O-28HNB (429'FSL & 2056'FWL, SEC.21)
Area	COLORADO	Well	STATE ANTELOPE K-O-28HNB
Field	WELD COUNTY	Wellbore	STATE ANTELOPE K-O-28HNB AWP
Facility	SEC.21-T05N-R62W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1532.00	0.430	231.360	1531.98	TIED ONTO SURFACE SURVEYS
1653.00	1.250	245.430	1652.96	FIRST BHI MWD SURVEY
6760.00	92.195	178.261	6337.26	7" CASING (508'FNL & 2563'FEL, SEC.28)
6810.00	92.492	178.632	6335.21	TOP (558'FNL & 2562'FEL, SEC.28)
11022.00	90.690	180.530	6316.75	LAST BHI MWD SURVEY
11077.00	90.690	180.530	6316.09	PROJECTION TO BIT (470'FSL & 2604'FEL, SEC.28)