

# BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#07 STATE ANTELOPE B12-V42-2HNC (1399'FNL & 353'FWL, SEC.02)  
Field: WELD COUNTY Well: STATE ANTELOPE B12-V42-2HNC  
Facility: SEC.02-T5N-R62W Wellbore: STATE ANTELOPE B12-V42-2HNC PWB

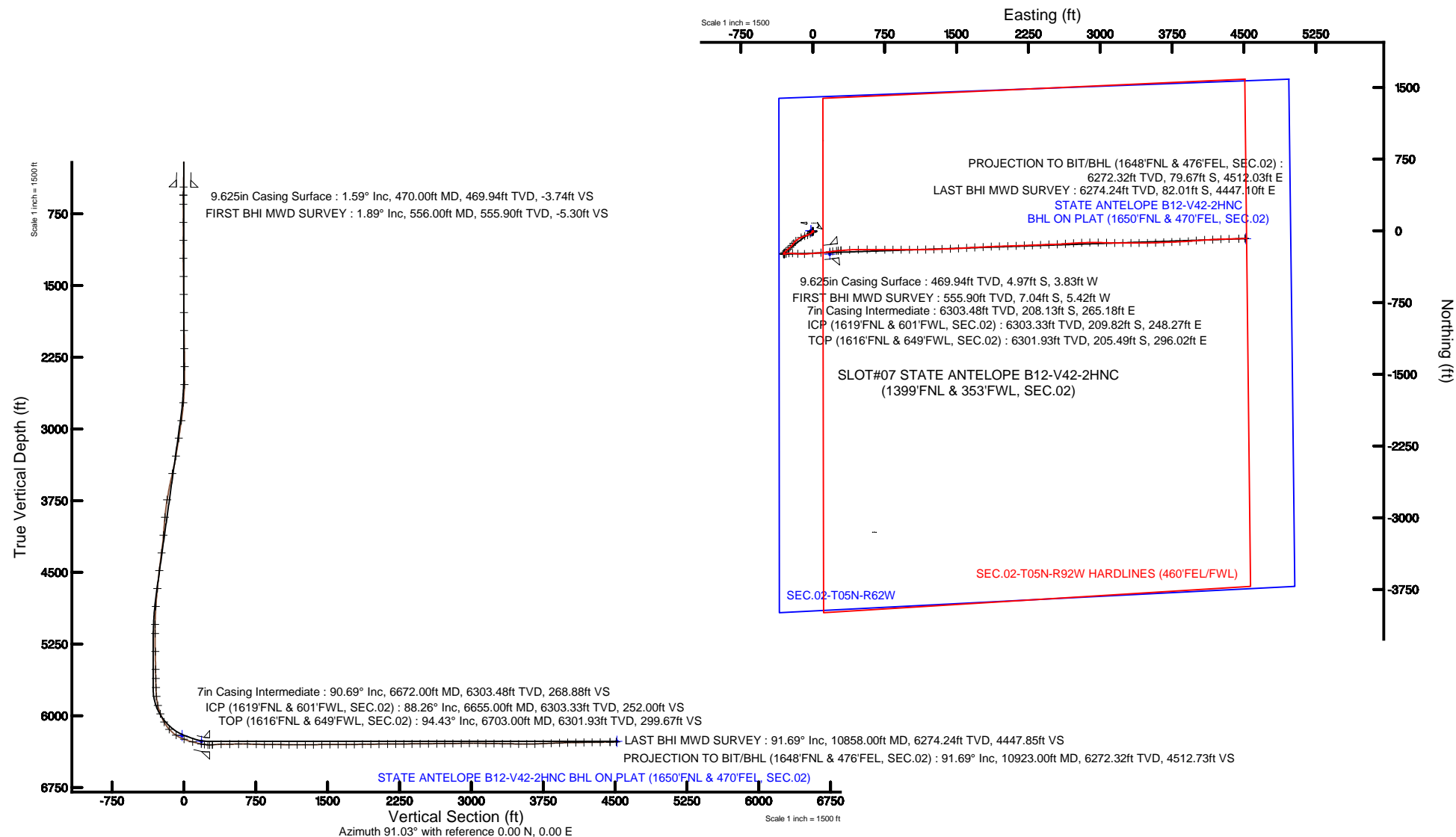
Plot reference wellpath is STATE ANTELOPE B12-V42-2HNC PWP (REV-A.0)

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: 4663 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#07 STATE ANTELOPE B12-V42-2HNC (1399'FNL & 353'FWL, SEC.02)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingmjarr on 10/16/2015



BGGM (1945.0 to 2017.0) Dip: 67.08° Field: 52700.8 nT  
Magnetic North is 8.29 degrees East of True North (at 7/14/2015)

To correct azimuth from Magnetic to True add 8.29 degrees





# Actual Wellpath Report

STATE ANTELOPE B12-V42-2HNC AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#07 STATE ANTELOPE B12-V42-2HNC (1399'FNL & 353'FWL, SEC.02)
Area	COLORADO	Well	STATE ANTELOPE B12-V42-2HNC
Field	WELD COUNTY	Wellbore	STATE ANTELOPE B12-V42-2HNC AWP
Facility	SEC.02-T5N-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	0.999962	Report Generated	10/16/2015 at 8:26:03 AM
Convergence at slot	0.78° East	Database/Source file	WA_DEN_Denver_Defn/STATE_ANTELOPE_B12-V42-2HNC_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	3152.42	-662.00	3334382.85	1402819.07	40°25'58.523"N	104°17'55.565"W
Facility Reference Pt			3335087.55	1399676.06	40°25'27.372"N	104°17'47.004"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	4663.00ft
Horizontal Reference Pt	Slot	XTREME 22 (17"KB) (RKB) to Mean Sea Level	4663.00ft
Vertical Reference Pt	XTREME 22 (17"KB) (RKB)	XTREME 22 (17"KB) (RKB) to Mud Line at Slot (SLOT#07 STATE ANTELOPE B12-V42-2HNC (1399'FNL & 353'FWL, SEC.02))	4663.00ft
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	91.03°



# Actual Wellpath Report

STATE ANTELOPE B12-V42-2HNC AWP

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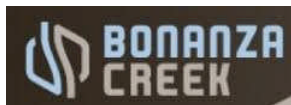


## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#07 STATE ANTELOPE B12-V42-2HNC (1399'FNL & 353'FWL, SEC.02)
Area	COLORADO	Well	STATE ANTELOPE B12-V42-2HNC
Field	WELD COUNTY	Wellbore	STATE ANTELOPE B12-V42-2HNC AWB
Facility	SEC.02-T5N-R62W		

## WELLPATH DATA (94 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	217.610	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	217.610	17.00	0.00	0.00	0.00	0.00	
556.00	1.890	217.610	555.90	-5.30	-7.04	-5.42	0.35	FIRST BHI MWD SURVEY
650.00	0.370	185.900	649.88	-6.25	-8.57	-6.40	1.69	
839.00	0.400	180.950	838.88	-6.30	-9.84	-6.48	0.02	
1028.00	0.210	199.030	1027.87	-6.40	-10.83	-6.60	0.11	
1216.00	0.620	35.730	1215.87	-5.93	-10.33	-6.12	0.44	
1405.00	0.690	67.300	1404.86	-4.31	-9.06	-4.47	0.19	
1594.00	0.800	71.590	1593.84	-2.02	-8.20	-2.17	0.07	
1782.00	0.560	75.100	1781.83	0.10	-7.55	-0.04	0.13	
1970.00	0.680	86.750	1969.82	2.10	-7.25	1.97	0.09	
2160.00	0.980	70.180	2159.80	4.74	-6.64	4.62	0.20	
2349.00	0.740	62.760	2348.78	7.32	-5.53	7.23	0.14	
2537.00	2.780	225.750	2536.72	5.18	-8.16	5.04	1.86	
2726.00	5.730	232.570	2725.18	-5.43	-17.09	-5.74	1.58	
2915.00	9.640	242.580	2912.45	-26.74	-30.12	-27.29	2.18	
3102.00	9.340	246.460	3096.89	-54.31	-43.39	-55.10	0.38	
3291.00	9.890	251.410	3283.24	-83.55	-54.69	-84.54	0.53	
3479.00	14.590	247.130	3466.92	-120.43	-69.05	-121.68	2.54	
3760.00	12.640	226.810	3740.17	-174.85	-103.87	-176.75	1.83	
3948.00	8.910	215.990	3924.84	-197.95	-129.74	-200.31	2.25	
4136.00	7.600	216.270	4110.89	-213.46	-151.54	-216.22	0.70	
4323.00	10.310	229.190	4295.61	-233.07	-172.45	-236.21	1.80	
4512.00	8.850	230.560	4481.97	-256.74	-192.74	-260.24	0.78	
4700.00	7.970	225.030	4667.95	-276.79	-211.14	-280.63	0.64	
4889.00	6.180	222.360	4855.50	-292.61	-227.92	-296.75	0.96	
5078.00	1.720	208.830	5044.01	-300.66	-237.93	-304.98	2.39	
5173.00	1.310	171.890	5138.98	-301.15	-240.25	-305.52	1.09	
5362.00	1.580	131.300	5327.92	-298.82	-244.11	-303.25	0.55	
5549.00	1.010	62.410	5514.88	-295.41	-245.05	-299.86	0.82	
5644.00	1.220	77.720	5609.86	-293.69	-244.45	-298.13	0.38	
5738.00	1.280	76.000	5703.84	-291.70	-243.98	-296.13	0.08	
5832.00	4.650	75.620	5797.70	-287.01	-242.78	-291.42	3.59	
5927.00	14.350	72.510	5891.29	-272.10	-238.27	-276.42	10.22	
6020.00	19.940	85.750	5980.15	-245.35	-233.63	-249.59	7.30	
6114.00	28.920	96.390	6065.69	-206.66	-234.98	-210.92	10.60	
6208.00	42.160	94.380	6142.01	-152.30	-239.94	-156.63	14.14	
6301.00	56.680	88.640	6202.38	-81.91	-241.41	-86.26	16.29	
6395.00	69.500	84.960	6244.84	1.48	-236.59	-2.77	14.07	
6489.00	75.630	84.530	6272.99	90.58	-228.37	86.49	6.54	
6584.00	77.800	82.970	6294.82	182.28	-218.30	178.39	2.79	
6615.00	82.530	82.600	6300.12	212.50	-214.46	208.69	15.30	
6655.00†	88.258	83.999	6303.33	252.00	-209.82	248.27	14.74	CP (1619'FNL & 601'FWL, SEC.02)
6699.00	94.560	85.530	6302.25	295.70	-205.80	292.05	14.74	
6703.00†	94.434	85.568	6301.93	299.67	-205.49	296.02	3.30	TOP (1616'FNL & 649'FWL, SEC.02)



# Actual Wellpath Report

## STATE ANTELOPE B12-V42-2HNC AWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#07 STATE ANTELOPE B12-V42-2HNC (1399'FNL & 353'FWL, SEC.02)
Area	COLORADO	Well	STATE ANTELOPE B12-V42-2HNC
Field	WELD COUNTY	Wellbore	STATE ANTELOPE B12-V42-2HNC AWB
Facility	SEC.02-T5N-R62W		

### WELLPATH DATA (94 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6792.00	91.620	86.420	6297.23	388.19	-199.29	384.67	3.30	
6883.00	89.960	89.530	6295.98	479.04	-196.07	475.59	3.87	
6975.00	90.610	90.110	6295.52	571.01	-195.78	567.59	0.95	
7067.00	89.290	90.230	6295.60	663.00	-196.06	659.59	1.44	
7160.00	88.470	90.280	6297.42	755.97	-196.47	752.57	0.88	
7245.00	89.040	90.630	6299.27	840.95	-197.15	837.54	0.79	
7330.00	89.960	90.040	6300.01	925.94	-197.64	922.54	1.29	
7416.00	89.010	89.600	6300.78	1011.92	-197.37	1008.53	1.22	
7501.00	89.600	89.170	6301.81	1096.87	-196.46	1093.52	0.86	
7587.00	90.220	89.720	6301.95	1182.84	-195.63	1179.52	0.96	
7672.00	90.550	87.680	6301.38	1267.76	-193.70	1264.49	2.43	
7757.00	90.000	88.180	6300.97	1352.64	-190.63	1349.43	0.87	
7843.00	90.280	87.690	6300.76	1438.51	-187.53	1435.37	0.66	
7928.00	90.220	86.910	6300.39	1523.33	-183.53	1520.28	0.92	
8013.00	90.490	86.080	6299.86	1608.06	-178.33	1605.12	1.03	
8099.00	90.190	87.260	6299.35	1693.81	-173.33	1690.97	1.42	
8185.00	90.400	87.260	6298.91	1779.62	-169.22	1776.87	0.24	
8270.00	91.320	87.030	6297.63	1864.42	-164.99	1861.75	1.12	
8356.00	90.430	88.240	6296.32	1950.25	-161.44	1947.67	1.75	
8443.00	90.280	88.310	6295.78	2037.15	-158.82	2034.63	0.19	
8531.00	90.280	88.100	6295.35	2125.04	-156.07	2122.58	0.24	
8616.00	90.280	88.210	6294.93	2209.94	-153.33	2207.54	0.13	
8702.00	90.580	87.750	6294.29	2295.81	-150.30	2293.48	0.64	
8787.00	90.920	86.890	6293.18	2380.62	-146.32	2378.38	1.09	
8873.00	90.370	88.780	6292.21	2466.48	-143.08	2464.31	2.29	
8960.00	90.590	87.600	6291.48	2553.37	-140.33	2551.26	1.38	
9046.00	90.310	85.730	6290.80	2639.11	-135.33	2637.11	2.20	
9131.00	90.650	86.000	6290.09	2723.77	-129.20	2721.88	0.51	
9216.00	90.680	87.770	6289.11	2808.53	-124.58	2806.75	2.08	
9302.00	90.700	89.120	6288.07	2894.44	-122.24	2892.71	1.57	
9387.00	89.720	90.870	6287.76	2979.42	-122.24	2977.70	2.36	
9475.00	90.120	92.410	6287.88	3067.41	-124.76	3065.67	1.81	
9560.00	89.200	90.240	6288.39	3152.40	-126.72	3150.64	2.77	
9645.00	89.010	90.030	6289.71	3237.38	-126.92	3235.62	0.33	
9731.00	88.980	89.880	6291.22	3323.35	-126.85	3321.61	0.18	
9816.00	89.010	89.870	6292.71	3408.32	-126.67	3406.60	0.04	
9902.00	88.820	89.430	6294.34	3494.28	-126.14	3492.58	0.56	
9987.00	90.370	87.920	6294.94	3579.20	-124.18	3577.55	2.55	
10072.00	91.630	87.700	6293.46	3664.06	-120.93	3662.47	1.50	
10158.00	92.090	87.600	6290.67	3749.86	-117.41	3748.36	0.55	
10243.00	92.580	87.250	6287.20	3834.62	-113.59	3833.20	0.71	
10329.00	92.120	85.940	6283.68	3920.29	-108.49	3918.97	1.61	
10414.00	91.720	85.060	6280.83	4004.85	-101.82	4003.66	1.14	
10500.00	90.580	86.680	6279.10	4090.48	-95.63	4089.42	2.30	
10585.00	90.460	87.250	6278.33	4175.26	-91.13	4174.30	0.69	



# Actual Wellpath Report

STATE ANTELOPE B12-V42-2HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#07 STATE ANTELOPE B12-V42-2HNC (1399'FNL & 353'FWL, SEC.02)
Area	COLORADO	Well	STATE ANTELOPE B12-V42-2HNC
Field	WELD COUNTY	Wellbore	STATE ANTELOPE B12-V42-2HNC AWB
Facility	SEC.02-T5N-R62W		

WELLPATH DATA (94 stations)									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
10670.00	90.330	88.000	6277.75	4260.11	-87.61	4259.22	0.90		
10756.00	91.070	88.620	6276.70	4346.00	-85.07	4345.17	1.12		
10858.00	91.690	87.940	6274.24	4447.85	-82.01	4447.10	0.90	LAST BHI MWD SURVEY	
10923.00	91.690	87.940	6272.32	4512.73	-79.67	4512.03	0.00	PROJECTION TO BIT/BHL (1648'FNL & 476'FEL, SEC.02)	

HOLE & CASING SECTIONS									
- Ref Wellbore: STATE ANTELOPE B12-V42-2HNC AWB					Ref Wellpath: STATE ANTELOPE B12-V42-2HNC 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	470.00	453.00	17.00	469.94	0.00	0.00	-4.97	-3.83
8.75in Open Hole	470.00	6681.00	6211.00	469.94	6303.27	-4.97	-3.83	-207.30	274.14
7in Casing Intermediate	17.00	6672.00	6655.00	17.00	6303.48	0.00	0.00	-208.13	265.18
6.125in Open Hole	6681.00	10923.00	4242.00	6303.27	6272.32	-207.30	274.14	-79.67	4512.03

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.02-T05N-R62W	1.00	0.73	-19.73	3334363.11	1402819.53	40°25'58.530"N	104°17'55.820"W	polygon
SEC.02-T05N-R92W HARDLINES (460'FEL/FWL)	6206.00	0.73	-19.73	3334363.11	1402819.53	40°25'58.530"N	104°17'55.820"W	polygon
STATE ANTELOPE B12-V42-2HNC BHL ON PLAT (1650'FNL & 470'FEL, SEC.02)	6267.00	-80.83	4518.22	3338901.57	1402799.45	40°25'57.720"N	104°16'57.137"W	point
STATE ANTELOPE B12-V42-2HNC EP (1650'FNL & 531'FWL, SEC.02)	6267.00	-244.09	178.17	3334564.30	1402577.43	40°25'56.111"N	104°17'53.261"W	point
Ex.Grace State #2-1 200'R	6924.00	908.47	3441.01	3337811.10	1403774.04	40°26'07.498"N	104°17'11.065"W	circle

WELLPATH COMPOSITION - Ref Wellbore: STATE ANTELOPE B12-V42-2HNC AWB					Ref Wellpath: STATE ANTELOPE B12-V42-2HNC AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	
17.00	6615.00	NaviTrak (Standard)	BHI MWD/NAVITRKA (STD) 8.75" HOLE <556-6615>		STATE ANTELOPE B12-V42-2HNC AWB	
6615.00	10858.00	NaviTrak (Standard)	BHI MWD/NAVITRAK (STD) 6.125" HOLE <6699-10858>		STATE ANTELOPE B12-V42-2HNC AWB	
10858.00	10923.00	Blind Drilling (std)	Projection to bit		STATE ANTELOPE B12-V42-2HNC AWB	



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Field	WELD COUNTY	Wellbore	STATE ANTELOPE B12-V42-2HNC AWB
Facility	SEC.02-T5N-R62W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
556.00	1.890	217.610	555.90	FIRST BHI MWD SURVEY
6655.00	88.258	83.999	6303.33	ICP (1619'FNL & 601'FWL, SEC.02)
6703.00	94.434	85.568	6301.93	TOP (1616'FNL & 649'FWL, SEC.02)
10858.00	91.690	87.940	6274.24	LAST BHI MWD SURVEY
10923.00	91.690	87.940	6272.32	PROJECTION TO BIT/BHL (1648'FNL & 476'FEL, SEC.02)