

# BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)  
Field: WELD COUNTY Well: ANTELOPE FEDERAL Y44-U41-20HNB  
Facility: SEC.20-T05N-R62W Wellbore: ANTELOPE FEDERAL Y44-U41-20HNB PWB

Plot reference wellpath is ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)

Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet  
True vertical depths are referenced to RIG (17KB) (RKB)  
Measured depths are referenced to RIG (17KB) (RKB)  
RIG (17KB) (RKB) to Mean Sea Level: 4673 feet  
Mean Sea Level to Ground level (At Slot: SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)) 0 feet  
Coordinates are in feet referenced to Slot  
North Reference: True north  
Scale: True distance  
Depths are in feet  
Created by: ingm/jamr on 2018-08-06  
Database: Denver

## Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.20-T05N-R62W			331882.546	1363319.349	40°22'47.856"N	104°21'17.964"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)	-112.12	2338.90	3321322.664	1363327.445	40°22'46.747"N	104°20'47.742"W
RIG (17KB) (RKB) to Ground level (At Slot: SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20))					4673ft	
Mean Sea Level to Ground level (At Slot: SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20))					0ft	
RIG (17KB) (RKB) to Mean Sea Level					4673ft	

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	113.000	17.00	0.00	0.00	0.00	0.00
End of Tangent	400.00	0.000	113.000	400.00	0.00	0.00	0.00	0.00
End of Build	1600.00	24.000	113.000	1565.21	-96.77	227.99	2.00	1.04
End of Tangent	1857.00	24.000	113.000	1800.00	-137.62	324.21	0.00	1.48
End of 3D Arc (S)	2116.70	27.028	122.824	2034.45	-190.28	422.48	2.00	-8.12
End of Tangent (S)	6204.12	27.028	122.824	5675.47	-1197.10	1983.32	0.00	-317.33
End of 3D Arc (S)	7251.94	90.000	358.667	6338.00	-636.75	2250.03	10.00	302.80
End of Tangent	12827.41	90.000	358.667	6338.00	4937.22	2120.31	0.00	5373.25

## Hole and Casing Sections

Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1519.36	0.00	-88.98	209.63	ANTELOPE FEDERAL Y44-U41-20HNB PWB

## Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NavTrak	BHI NavTrak (Rotating+Axial Corr)		ANTELOPE FEDERAL Y44-U41-20HNB PWB
1550.00	12963.15	BHI AutoTrak Curve	BHI AutoTrak Curve (Axial Corr, Short spacing)		ANTELOPE FEDERAL Y44-U41-20HNB PWB

## Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
12827.41	90.000	358.667	6338.00	4937.22	2120.31	3323378.42	1368201.61	40°23'35.534"N	104°20'20.339"W

End of Tangent (S) : 27.03° Inc, 6204.12ft MD, 5675.47ft TVD, -317.33ft VS

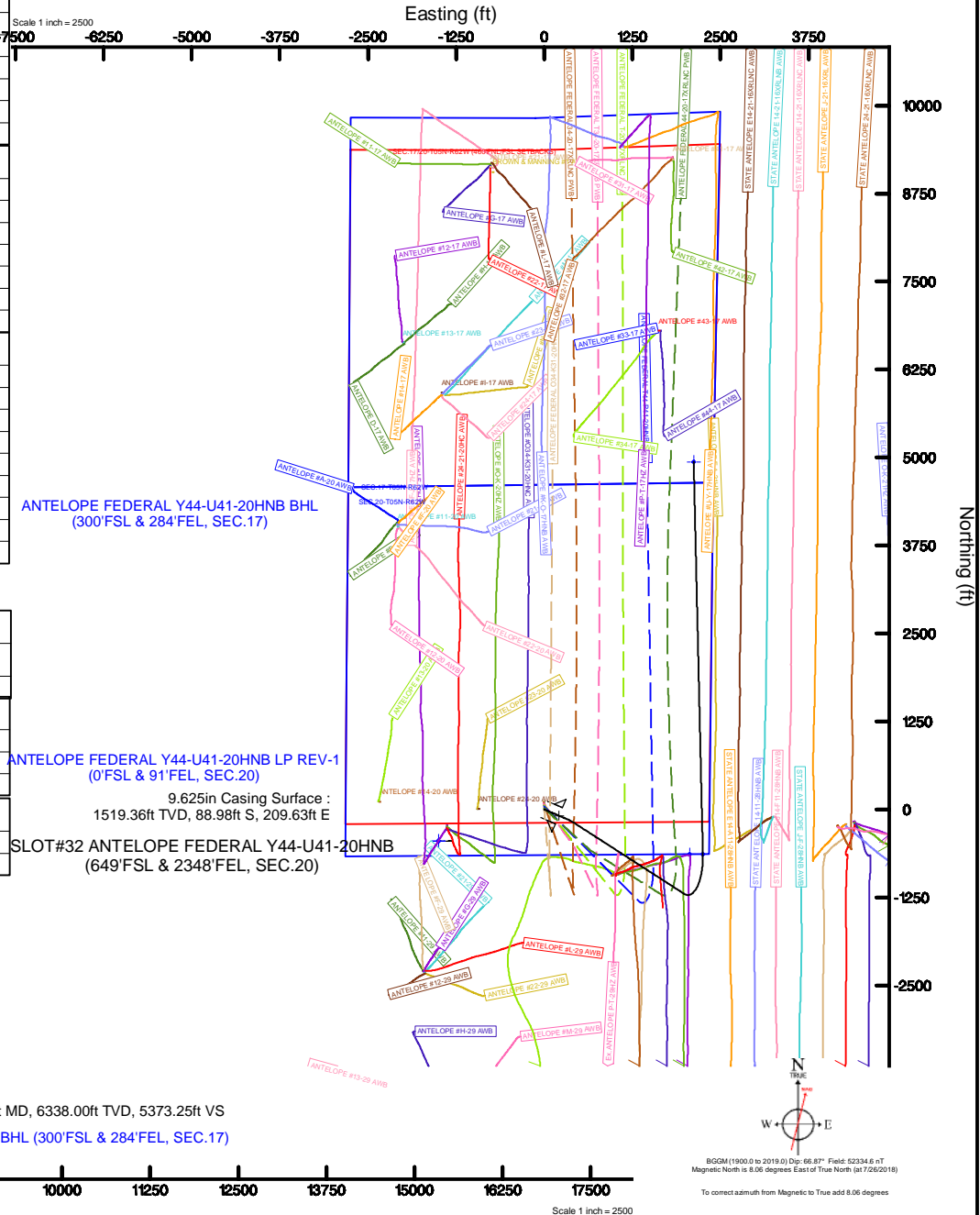
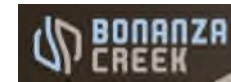
10.00°/100ft

End of 3D Arc (S) : 90.00° Inc, 7251.94ft MD, 6338.00ft TVD, 302.80ft VS

ANTELOPE FEDERAL Y44-U41-20HNB LP REV-1 (0'FSL & 91'FEL, SEC.20)

End of Tangent : 90.00° Inc, 12827.41ft MD, 6338.00ft TVD, 5373.25ft VS

ANTELOPE FEDERAL Y44-U41-20HNB BHL (300'FSL & 284'FEL, SEC.17)





# Planned Wellpath Report

ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL Y44-U41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL Y44-U41-20HNB PWB
Facility	SEC.20-T05N-R62W		

## REPORT SETUP INFORMATION

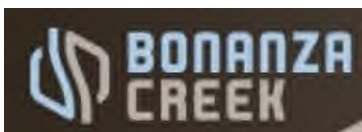
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Ingmjmr
Scale	0.999959	Report Generated	8/6/2018 at 1:08:58 PM
Convergence at slot	0.75° East	Database/Source file	Denver/ANTELOPE_FEDERAL_Y44-U41-20HNB_PWP__REV-A.1_.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-112.12	2338.90	3321322.59	1383237.45	40°22'46.747"N	104°20'47.742"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	RIG (17'KB) (RKB) to Facility Vertical Datum	4673.00ft
Horizontal Reference Pt	Slot	RIG (17'KB) (RKB) to Mean Sea Level	4673.00ft
Vertical Reference Pt	RIG (17'KB) (RKB)	RIG (17'KB) (RKB) to Ground Level at Slot (SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20))	4673.00ft
MD Reference Pt	RIG (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	23.24°



# Planned Wellpath Report

ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL Y44-U41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL Y44-U41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (137 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	113.000	0.00	0.00	0.00	0.00	40°22'46.747"N	104°20'47.742"W	0.00	
17.00	0.000	113.000	17.00	0.00	0.00	0.00	40°22'46.747"N	104°20'47.742"W	0.00	Tie On
117.00†	0.000	113.000	117.00	0.00	0.00	0.00	40°22'46.747"N	104°20'47.742"W	0.00	
217.00†	0.000	113.000	217.00	0.00	0.00	0.00	40°22'46.747"N	104°20'47.742"W	0.00	
317.00†	0.000	113.000	317.00	0.00	0.00	0.00	40°22'46.747"N	104°20'47.742"W	0.00	
400.00	0.000	113.000	400.00	0.00	0.00	0.00	40°22'46.747"N	104°20'47.742"W	0.00	End of Tangent
417.00†	0.340	113.000	417.00	0.00	-0.02	0.05	40°22'46.747"N	104°20'47.741"W	2.00	
517.00†	2.340	113.000	516.97	0.01	-0.93	2.20	40°22'46.738"N	104°20'47.714"W	2.00	
617.00†	4.340	113.000	616.79	0.03	-3.21	7.56	40°22'46.715"N	104°20'47.644"W	2.00	
717.00†	6.340	113.000	716.35	0.07	-6.85	16.13	40°22'46.679"N	104°20'47.534"W	2.00	
817.00†	8.340	113.000	815.53	0.13	-11.84	27.89	40°22'46.630"N	104°20'47.382"W	2.00	
917.00†	10.340	113.000	914.20	0.20	-18.18	42.83	40°22'46.567"N	104°20'47.189"W	2.00	
1017.00†	12.340	113.000	1012.24	0.28	-25.86	60.92	40°22'46.491"N	104°20'46.955"W	2.00	
1117.00†	14.340	113.000	1109.54	0.38	-34.88	82.16	40°22'46.402"N	104°20'46.680"W	2.00	
1217.00†	16.340	113.000	1205.97	0.49	-45.21	106.51	40°22'46.300"N	104°20'46.366"W	2.00	
1317.00†	18.340	113.000	1301.42	0.61	-56.86	133.95	40°22'46.185"N	104°20'46.011"W	2.00	
1417.00†	20.340	113.000	1395.77	0.75	-69.80	164.43	40°22'46.057"N	104°20'45.617"W	2.00	
1517.00†	22.340	113.000	1488.91	0.91	-84.01	197.93	40°22'45.917"N	104°20'45.185"W	2.00	
1600.00	24.000	113.000	1565.21	1.04	-96.77	227.99	40°22'45.791"N	104°20'44.796"W	2.00	End of Build
1617.00†	24.000	113.000	1580.74	1.07	-99.48	234.35	40°22'45.764"N	104°20'44.714"W	0.00	
1717.00†	24.000	113.000	1672.10	1.24	-115.37	271.79	40°22'45.607"N	104°20'44.230"W	0.00	
1817.00†	24.000	113.000	1763.45	1.41	-131.26	309.23	40°22'45.450"N	104°20'43.746"W	0.00	
1857.00	24.000	113.000	1800.00	1.48	-137.62	324.21	40°22'45.387"N	104°20'43.553"W	0.00	End of Tangent
1917.00†	24.640	115.466	1854.67	1.05	-147.76	346.73	40°22'45.287"N	104°20'43.262"W	2.00	
2017.00†	25.789	119.309	1945.15	-2.06	-167.38	384.52	40°22'45.093"N	104°20'42.773"W	2.00	
2116.70	27.028	122.824	2034.45	-8.12	-190.28	422.48	40°22'44.867"N	104°20'42.283"W	2.00	End of 3D Arc (S)
2117.00†	27.028	122.824	2034.72	-8.15	-190.35	422.59	40°22'44.866"N	104°20'42.282"W	0.00	
2217.00†	27.028	122.824	2123.80	-15.71	-214.98	460.78	40°22'44.623"N	104°20'41.788"W	0.00	
2317.00†	27.028	122.824	2212.87	-23.28	-239.61	498.96	40°22'44.379"N	104°20'41.295"W	0.00	
2417.00†	27.028	122.824	2301.95	-30.84	-264.25	537.15	40°22'44.136"N	104°20'40.801"W	0.00	



# Planned Wellpath Report

ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL Y44-U41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL Y44-U41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2517.00†	27.028	122.824	2391.03	-38.41	-288.88	575.34	40°22'43.892"N	104°20'40.308"W	0.00	
2617.00†	27.028	122.824	2480.11	-45.97	-313.51	613.52	40°22'43.649"N	104°20'39.814"W	0.00	
2717.00†	27.028	122.824	2569.19	-53.54	-338.14	651.71	40°22'43.405"N	104°20'39.321"W	0.00	
2817.00†	27.028	122.824	2658.27	-61.10	-362.78	689.90	40°22'43.162"N	104°20'38.828"W	0.00	
2917.00†	27.028	122.824	2747.35	-68.67	-387.41	728.08	40°22'42.919"N	104°20'38.334"W	0.00	
3017.00†	27.028	122.824	2836.43	-76.23	-412.04	766.27	40°22'42.675"N	104°20'37.841"W	0.00	
3117.00†	27.028	122.824	2925.50	-83.79	-436.67	804.46	40°22'42.432"N	104°20'37.347"W	0.00	
3217.00†	27.028	122.824	3014.58	-91.36	-461.30	842.64	40°22'42.188"N	104°20'36.854"W	0.00	
3317.00†	27.028	122.824	3103.66	-98.92	-485.94	880.83	40°22'41.945"N	104°20'36.361"W	0.00	
3417.00†	27.028	122.824	3192.74	-106.49	-510.57	919.02	40°22'41.702"N	104°20'35.867"W	0.00	
3517.00†	27.028	122.824	3281.82	-114.05	-535.20	957.20	40°22'41.458"N	104°20'35.374"W	0.00	
3617.00†	27.028	122.824	3370.90	-121.62	-559.83	995.39	40°22'41.215"N	104°20'34.880"W	0.00	
3717.00†	27.028	122.824	3459.98	-129.18	-584.47	1033.58	40°22'40.971"N	104°20'34.387"W	0.00	
3817.00†	27.028	122.824	3549.06	-136.75	-609.10	1071.76	40°22'40.728"N	104°20'33.894"W	0.00	
3917.00†	27.028	122.824	3638.13	-144.31	-633.73	1109.95	40°22'40.484"N	104°20'33.400"W	0.00	
4017.00†	27.028	122.824	3727.21	-151.88	-658.36	1148.14	40°22'40.241"N	104°20'32.907"W	0.00	
4117.00†	27.028	122.824	3816.29	-159.44	-683.00	1186.32	40°22'39.998"N	104°20'32.413"W	0.00	
4217.00†	27.028	122.824	3905.37	-167.01	-707.63	1224.51	40°22'39.754"N	104°20'31.920"W	0.00	
4317.00†	27.028	122.824	3994.45	-174.57	-732.26	1262.70	40°22'39.511"N	104°20'31.427"W	0.00	
4417.00†	27.028	122.824	4083.53	-182.14	-756.89	1300.88	40°22'39.267"N	104°20'30.933"W	0.00	
4517.00†	27.028	122.824	4172.61	-189.70	-781.53	1339.07	40°22'39.024"N	104°20'30.440"W	0.00	
4617.00†	27.028	122.824	4261.69	-197.27	-806.16	1377.26	40°22'38.780"N	104°20'29.946"W	0.00	
4717.00†	27.028	122.824	4350.76	-204.83	-830.79	1415.44	40°22'38.537"N	104°20'29.453"W	0.00	
4817.00†	27.028	122.824	4439.84	-212.40	-855.42	1453.63	40°22'38.294"N	104°20'28.960"W	0.00	
4917.00†	27.028	122.824	4528.92	-219.96	-880.05	1491.82	40°22'38.050"N	104°20'28.466"W	0.00	
5017.00†	27.028	122.824	4618.00	-227.53	-904.69	1530.00	40°22'37.807"N	104°20'27.973"W	0.00	
5117.00†	27.028	122.824	4707.08	-235.09	-929.32	1568.19	40°22'37.563"N	104°20'27.479"W	0.00	
5217.00†	27.028	122.824	4796.16	-242.66	-953.95	1606.38	40°22'37.320"N	104°20'26.986"W	0.00	
5317.00†	27.028	122.824	4885.24	-250.22	-978.58	1644.56	40°22'37.076"N	104°20'26.493"W	0.00	
5417.00†	27.028	122.824	4974.32	-257.79	-1003.22	1682.75	40°22'36.833"N	104°20'25.999"W	0.00	



# Planned Wellpath Report

ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)

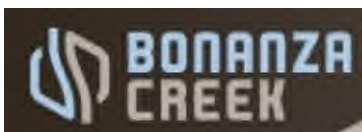
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL Y44-U41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL Y44-U41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5517.00†	27.028	122.824	5063.39	-265.35	-1027.85	1720.94	40°22'36.590"N	104°20'25.506"W	0.00	
5617.00†	27.028	122.824	5152.47	-272.92	-1052.48	1759.12	40°22'36.346"N	104°20'25.012"W	0.00	
5717.00†	27.028	122.824	5241.55	-280.48	-1077.11	1797.31	40°22'36.103"N	104°20'24.519"W	0.00	
5817.00†	27.028	122.824	5330.63	-288.05	-1101.75	1835.50	40°22'35.859"N	104°20'24.026"W	0.00	
5917.00†	27.028	122.824	5419.71	-295.61	-1126.38	1873.68	40°22'35.616"N	104°20'23.532"W	0.00	
6017.00†	27.028	122.824	5508.79	-303.18	-1151.01	1911.87	40°22'35.372"N	104°20'23.039"W	0.00	
6117.00†	27.028	122.824	5597.87	-310.74	-1175.64	1950.06	40°22'35.129"N	104°20'22.546"W	0.00	
6204.12	27.028	122.824	5675.47	-317.33	-1197.10	1983.32	40°22'34.917"N	104°20'22.116"W	0.00	End of Tangent (S)
6217.00†	26.382	120.342	5686.98	-318.17	-1200.13	1988.25	40°22'34.887"N	104°20'22.052"W	10.00	
6317.00†	23.137	97.588	5777.98	-315.61	-1213.99	2027.00	40°22'34.750"N	104°20'21.551"W	10.00	
6417.00†	23.745	72.322	5869.96	-297.08	-1210.46	2065.76	40°22'34.785"N	104°20'21.051"W	10.00	
6517.00†	27.956	51.360	5960.12	-263.13	-1189.66	2103.34	40°22'34.990"N	104°20'20.565"W	10.00	
6617.00†	34.468	36.614	6045.73	-214.80	-1152.21	2138.62	40°22'35.360"N	104°20'20.109"W	10.00	
6717.00†	42.225	26.386	6124.17	-153.57	-1099.26	2170.51	40°22'35.884"N	104°20'19.697"W	10.00	
6817.00†	50.647	18.919	6193.08	-81.28	-1032.42	2198.05	40°22'36.544"N	104°20'19.341"W	10.00	
6917.00†	59.443	13.098	6250.35	-0.14	-953.71	2220.40	40°22'37.322"N	104°20'19.052"W	10.00	
7017.00†	68.453	8.262	6294.24	87.40	-865.52	2236.88	40°22'38.193"N	104°20'18.839"W	10.00	
7117.00†	77.586	3.998	6323.43	178.66	-770.55	2247.00	40°22'39.132"N	104°20'18.708"W	10.00	
7217.00†	86.782	0.027	6337.02	270.87	-671.66	2250.43	40°22'40.109"N	104°20'18.664"W	10.00	
7251.94	90.000	358.667	6338.00 <sup>†</sup>	302.80	-636.75	2250.03	40°22'40.454"N	104°20'18.669"W	10.00	End of 3D Arc (S)
7317.00†	90.000	358.667	6338.00	361.97	-571.70	2248.52	40°22'41.097"N	104°20'18.688"W	0.00	
7417.00†	90.000	358.667	6338.00	452.91	-471.73	2246.19	40°22'42.085"N	104°20'18.718"W	0.00	
7517.00†	90.000	358.667	6338.00	543.85	-371.76	2243.87	40°22'43.072"N	104°20'18.748"W	0.00	
7617.00†	90.000	358.667	6338.00	634.79	-271.78	2241.54	40°22'44.060"N	104°20'18.778"W	0.00	
7717.00†	90.000	358.667	6338.00	725.73	-171.81	2239.21	40°22'45.048"N	104°20'18.808"W	0.00	
7817.00†	90.000	358.667	6338.00	816.68	-71.84	2236.89	40°22'46.036"N	104°20'18.838"W	0.00	
7917.00†	90.000	358.667	6338.00	907.62	28.13	2234.56	40°22'47.024"N	104°20'18.868"W	0.00	
8017.00†	90.000	358.667	6338.00	998.56	128.11	2232.23	40°22'48.012"N	104°20'18.898"W	0.00	
8117.00†	90.000	358.667	6338.00	1089.50	228.08	2229.91	40°22'49.000"N	104°20'18.928"W	0.00	
8217.00†	90.000	358.667	6338.00	1180.45	328.05	2227.58	40°22'49.988"N	104°20'18.958"W	0.00	





# Planned Wellpath Report

ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL Y44-U41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL Y44-U41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8317.00†	90.000	358.667	6338.00	1271.39	428.03	2225.25	40°22'50.976"N	104°20'18.988"W	0.00	
8417.00†	90.000	358.667	6338.00	1362.33	528.00	2222.93	40°22'51.964"N	104°20'19.018"W	0.00	
8517.00†	90.000	358.667	6338.00	1453.27	627.97	2220.60	40°22'52.951"N	104°20'19.048"W	0.00	
8617.00†	90.000	358.667	6338.00	1544.21	727.95	2218.27	40°22'53.939"N	104°20'19.078"W	0.00	
8717.00†	90.000	358.667	6338.00	1635.16	827.92	2215.95	40°22'54.927"N	104°20'19.108"W	0.00	
8817.00†	90.000	358.667	6338.00	1726.10	927.89	2213.62	40°22'55.915"N	104°20'19.138"W	0.00	
8917.00†	90.000	358.667	6338.00	1817.04	1027.86	2211.29	40°22'56.903"N	104°20'19.168"W	0.00	
9017.00†	90.000	358.667	6338.00	1907.98	1127.84	2208.97	40°22'57.891"N	104°20'19.198"W	0.00	
9117.00†	90.000	358.667	6338.00	1998.92	1227.81	2206.64	40°22'58.879"N	104°20'19.228"W	0.00	
9217.00†	90.000	358.667	6338.00	2089.87	1327.78	2204.31	40°22'59.867"N	104°20'19.257"W	0.00	
9317.00†	90.000	358.667	6338.00	2180.81	1427.76	2201.99	40°23'00.855"N	104°20'19.287"W	0.00	
9417.00†	90.000	358.667	6338.00	2271.75	1527.73	2199.66	40°23'01.843"N	104°20'19.317"W	0.00	
9517.00†	90.000	358.667	6338.00	2362.69	1627.70	2197.33	40°23'02.830"N	104°20'19.347"W	0.00	
9617.00†	90.000	358.667	6338.00	2453.63	1727.67	2195.01	40°23'03.818"N	104°20'19.377"W	0.00	
9717.00†	90.000	358.667	6338.00	2544.58	1827.65	2192.68	40°23'04.806"N	104°20'19.407"W	0.00	
9817.00†	90.000	358.667	6338.00	2635.52	1927.62	2190.35	40°23'05.794"N	104°20'19.437"W	0.00	
9917.00†	90.000	358.667	6338.00	2726.46	2027.59	2188.03	40°23'06.782"N	104°20'19.467"W	0.00	
10017.00†	90.000	358.667	6338.00	2817.40	2127.57	2185.70	40°23'07.770"N	104°20'19.497"W	0.00	
10117.00†	90.000	358.667	6338.00	2908.35	2227.54	2183.37	40°23'08.758"N	104°20'19.527"W	0.00	
10217.00†	90.000	358.667	6338.00	2999.29	2327.51	2181.05	40°23'09.746"N	104°20'19.557"W	0.00	
10317.00†	90.000	358.667	6338.00	3090.23	2427.49	2178.72	40°23'10.734"N	104°20'19.587"W	0.00	
10417.00†	90.000	358.667	6338.00	3181.17	2527.46	2176.39	40°23'11.722"N	104°20'19.617"W	0.00	
10517.00†	90.000	358.667	6338.00	3272.11	2627.43	2174.07	40°23'12.709"N	104°20'19.647"W	0.00	
10617.00†	90.000	358.667	6338.00	3363.06	2727.40	2171.74	40°23'13.697"N	104°20'19.677"W	0.00	
10717.00†	90.000	358.667	6338.00	3454.00	2827.38	2169.41	40°23'14.685"N	104°20'19.707"W	0.00	
10817.00†	90.000	358.667	6338.00	3544.94	2927.35	2167.08	40°23'15.673"N	104°20'19.737"W	0.00	
10917.00†	90.000	358.667	6338.00	3635.88	3027.32	2164.76	40°23'16.661"N	104°20'19.767"W	0.00	
11017.00†	90.000	358.667	6338.00	3726.82	3127.30	2162.43	40°23'17.649"N	104°20'19.797"W	0.00	
11117.00†	90.000	358.667	6338.00	3817.77	3227.27	2160.10	40°23'18.637"N	104°20'19.827"W	0.00	
11217.00†	90.000	358.667	6338.00	3908.71	3327.24	2157.78	40°23'19.625"N	104°20'19.857"W	0.00	



# Planned Wellpath Report

ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)

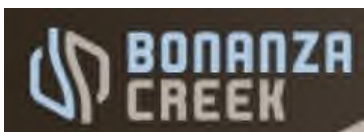
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL Y44-U41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL Y44-U41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11317.00†	90.000	358.667	6338.00	3999.65	3427.21	2155.45	40°23'20.613"N	104°20'19.887"W	0.00	
11417.00†	90.000	358.667	6338.00	4090.59	3527.19	2153.12	40°23'21.601"N	104°20'19.916"W	0.00	
11517.00†	90.000	358.667	6338.00	4181.53	3627.16	2150.80	40°23'22.588"N	104°20'19.946"W	0.00	
11617.00†	90.000	358.667	6338.00	4272.48	3727.13	2148.47	40°23'23.576"N	104°20'19.976"W	0.00	
11717.00†	90.000	358.667	6338.00	4363.42	3827.11	2146.14	40°23'24.564"N	104°20'20.006"W	0.00	
11817.00†	90.000	358.667	6338.00	4454.36	3927.08	2143.82	40°23'25.552"N	104°20'20.036"W	0.00	
11917.00†	90.000	358.667	6338.00	4545.30	4027.05	2141.49	40°23'26.540"N	104°20'20.066"W	0.00	
12017.00†	90.000	358.667	6338.00	4636.25	4127.02	2139.16	40°23'27.528"N	104°20'20.096"W	0.00	
12117.00†	90.000	358.667	6338.00	4727.19	4227.00	2136.84	40°23'28.516"N	104°20'20.126"W	0.00	
12217.00†	90.000	358.667	6338.00	4818.13	4326.97	2134.51	40°23'29.504"N	104°20'20.156"W	0.00	
12317.00†	90.000	358.667	6338.00	4909.07	4426.94	2132.18	40°23'30.492"N	104°20'20.186"W	0.00	
12417.00†	90.000	358.667	6338.00	5000.01	4526.92	2129.86	40°23'31.480"N	104°20'20.216"W	0.00	
12517.00†	90.000	358.667	6338.00	5090.96	4626.89	2127.53	40°23'32.467"N	104°20'20.246"W	0.00	
12617.00†	90.000	358.667	6338.00	5181.90	4726.86	2125.20	40°23'33.455"N	104°20'20.276"W	0.00	
12717.00†	90.000	358.667	6338.00	5272.84	4826.84	2122.88	40°23'34.443"N	104°20'20.306"W	0.00	
12817.00†	90.000	358.667	6338.00	5363.78	4926.81	2120.55	40°23'35.431"N	104°20'20.336"W	0.00	
12827.41	90.000	358.667	6338.00 <sup>2</sup>	5373.25	4937.22	2120.31	40°23'35.534"N	104°20'20.339"W	0.00	End of Tangent

HOLE & CASING SECTIONS									
- Ref Wellbore: ANTELOPE FEDERAL Y44-U41-20HNB PWB					Ref Wellpath: ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)				
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	1550.00	1533.00	17.00	1519.36	0.00	0.00	-88.98	209.63



# Planned Wellpath Report

ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)

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REFERENCE WELLPATH IDENTIFICATION				
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)	
Area	COLORADO	Well	ANTELOPE FEDERAL Y44-U41-20HNB	
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL Y44-U41-20HNB PWB	
Facility	SEC.20-T05N-R62W			

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.17-T05N-R62W		-8.00	-448.06	-1499.78	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon
SEC.20-T05N-R62W		-8.00	-448.06	-1499.78	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon
2) ANTELOPE FEDERAL Y44-U41-20HNB BHL (300'FSL & 284'FEL, SEC.17)	12827.41	6338.00	4937.22	2120.31	3323378.42	1388201.61	40°23'35.534"N	104°20'20.339"W	point
ANTELOPE FEDERAL Y44-U41-20HNB LP (0'FSL & 281'FEL, SEC.20)		6338.00	-636.75	2060.03	3323390.65	1382627.57	40°22'40.454"N	104°20'21.124"W	point
1) ANTELOPE FEDERAL Y44-U41-20HNB LP REV-1 (0'FSL & 91'FEL, SEC.20)	7251.94	6338.00	-636.75	2250.03	3323580.62	1382630.04	40°22'40.454"N	104°20'18.669"W	point
SEC.17/20-T05N-R62W (460'FNL/FSL SETBACKS)		6373.00	-448.06	-1499.78	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon

SURVEY PROGRAM -				
Ref Wellbore: ANTELOPE FEDERAL Y44-U41-20HNB PWB		Ref Wellpath: ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NaviTrak (Rotating+Axial Corr)		ANTELOPE FEDERAL Y44-U41-20HNB PWB
1550.00	12963.15	BHI AutoTrak Curve (Axial Corr, Short spacing)		ANTELOPE FEDERAL Y44-U41-20HNB PWB





# Planned Wellpath Report

ANTELOPE FEDERAL Y44-U41-20HNB PWP (REV-A.1)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#32 ANTELOPE FEDERAL Y44-U41-20HNB (649'FSL & 2348'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL Y44-U41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL Y44-U41-20HNB PWB
Facility	SEC.20-T05N-R62W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	113.000	17.00	Tie On
400.00	0.000	113.000	400.00	End of Tangent
1600.00	24.000	113.000	1565.21	End of Build
1857.00	24.000	113.000	1800.00	End of Tangent
2116.70	27.028	122.824	2034.45	End of 3D Arc (S)
6204.12	27.028	122.824	5675.47	End of Tangent (S)
7251.94	90.000	358.667	6338.00	End of 3D Arc (S)
12827.41	90.000	358.667	6338.00	End of Tangent