

BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Field: WELD COUNTY Well: ANTELOPE FEDERAL T44-P41-20HNB
Facility: SEC.20-T05N-R62W Wellbore: ANTELOPE FEDERAL T44-P41-20HNB PWB

Plot reference wellpath is ANTELOPE FEDERAL T44-P41-20HNB 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#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)): 0 feet
Coordinates are in feet referenced to Slot
Database: Denver

Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.20-T05N-R62W				331892.546	1383318.349	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#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)	-72.04	2336.65	3321318.829	1383277.485	40°22'47.143"N	104°20'47.771"W	
RIG (17KB) (RKB) to Ground level (At Slot: SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20))						4673ft	
Mean Sea Level to Ground level (At Slot: SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'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	134.936	17.00	0.00	0.00	0.00	0.00
End of Tangent	600.00	0.000	134.936	600.00	0.00	0.00	0.00	0.00
End of Build (S)	1759.29	23.186	134.936	1727.91	-163.43	163.80	2.00	-109.89
End of Tangent (S)	6013.71	23.186	134.936	5638.71	-1346.52	1349.55	0.00	-905.41
End of 3D Arc (S)	7077.91	90.000	359.046	6343.00	-793.51	1550.34	10.00	-318.10
End of Tangent	12761.32	90.000	359.046	6343.00	4889.10	1455.73	0.00	5101.22

Hole and Casing Sections

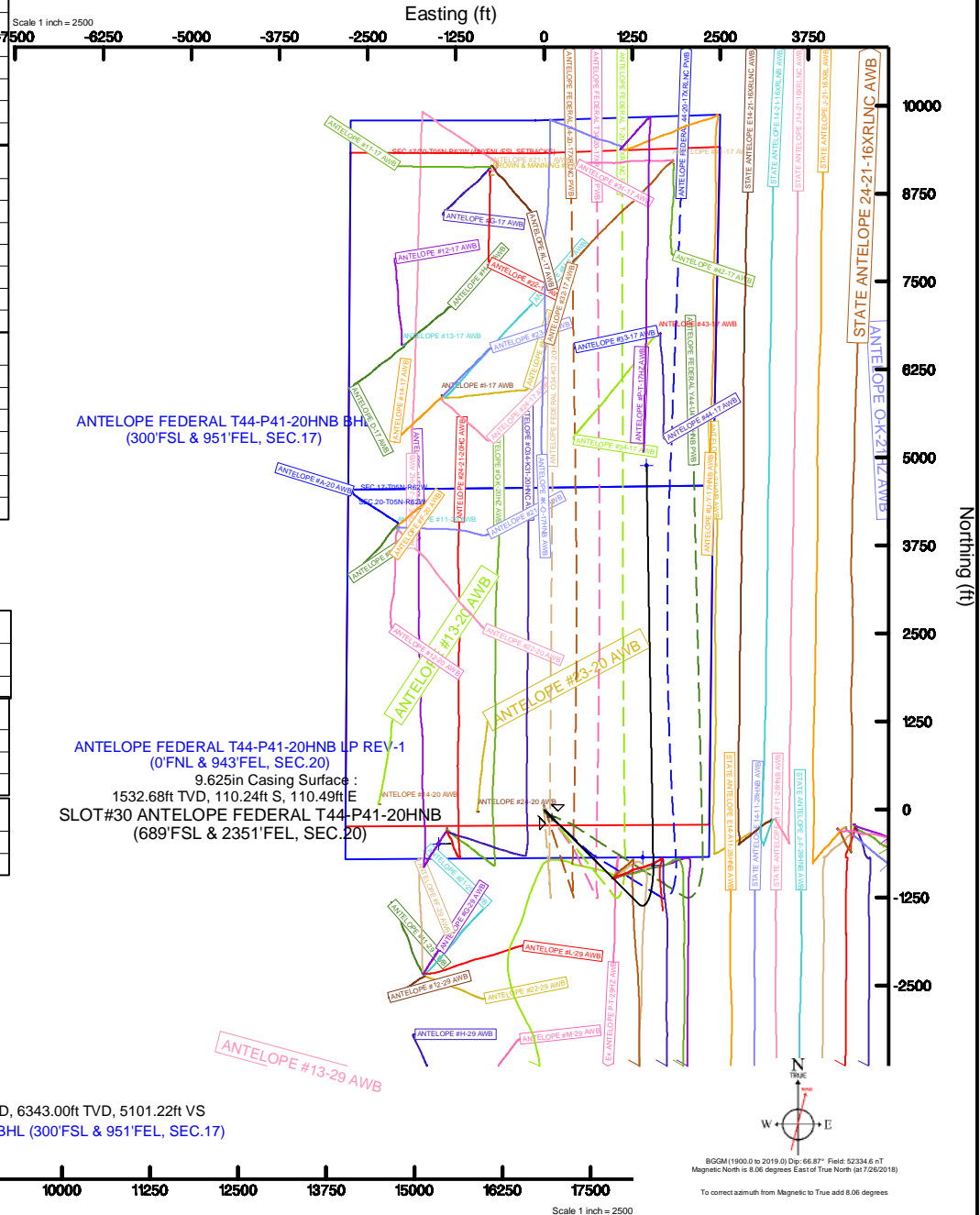
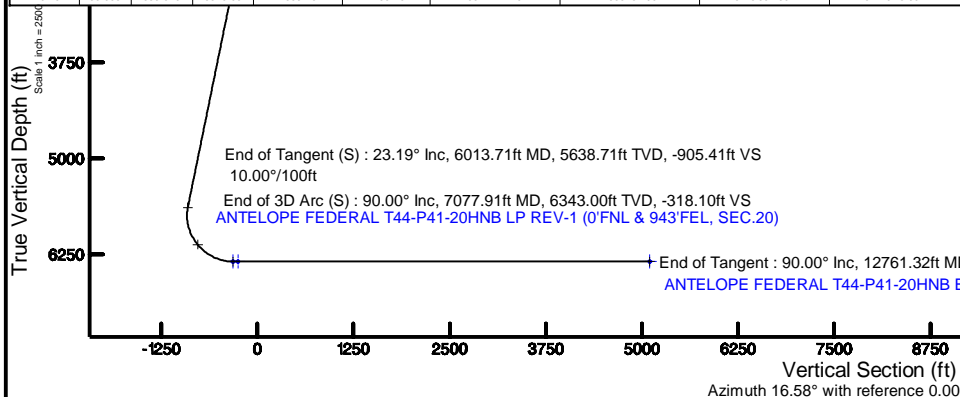
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1532.68	0.00	0.00	-110.24	ANTELOPE FEDERAL T44-P41-20HNB PWB

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 T44-P41-20HNB PWB
1550.00	12761.32	BHI AutoTrak Curve	BHI AutoTrak Curve (Axial Corr, Short spacing)		ANTELOPE FEDERAL T44-P41-20HNB 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
12761.32	90.000	359.046	6343.00	4889.10	1455.73	3322711.79	1388184.90	40°23'35.455"N	104°20'28.957"W





Planned Wellpath Report

ANTELOPE FEDERAL T44-P41-20HNB PWP (REV-A.1)

Page 1 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T44-P41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T44-P41-20HNB 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 1:09:01 PM
Convergence at slot	0.75° East	Database/Source file	Denver/ANTELOPE_FEDERAL_T44-P41-20HNB_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	-72.04	2336.65	3321319.83	1383277.49	40°22'47.143"N	104°20'47.771"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#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'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	16.58°



Planned Wellpath Report

ANTELOPE FEDERAL T44-P41-20HNB PWP (REV-A.1)

Page 2 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T44-P41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T44-P41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 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	134.936	0.00	0.00	0.00	0.00	40°22'47.143"N	104°20'47.771"W	0.00	
17.00	0.000	134.936	17.00	0.00	0.00	0.00	40°22'47.143"N	104°20'47.771"W	0.00	Tie On
117.00†	0.000	134.936	117.00	0.00	0.00	0.00	40°22'47.143"N	104°20'47.771"W	0.00	
217.00†	0.000	134.936	217.00	0.00	0.00	0.00	40°22'47.143"N	104°20'47.771"W	0.00	
317.00†	0.000	134.936	317.00	0.00	0.00	0.00	40°22'47.143"N	104°20'47.771"W	0.00	
417.00†	0.000	134.936	417.00	0.00	0.00	0.00	40°22'47.143"N	104°20'47.771"W	0.00	
517.00†	0.000	134.936	517.00	0.00	0.00	0.00	40°22'47.143"N	104°20'47.771"W	0.00	
600.00	0.000	134.936	600.00	0.00	0.00	0.00	40°22'47.143"N	104°20'47.771"W	0.00	End of Tangent
617.00†	0.340	134.936	617.00	-0.02	-0.04	0.04	40°22'47.143"N	104°20'47.771"W	2.00	
717.00†	2.340	134.936	716.97	-1.13	-1.69	1.69	40°22'47.126"N	104°20'47.749"W	2.00	
817.00†	4.340	134.936	816.79	-3.90	-5.80	5.82	40°22'47.086"N	104°20'47.696"W	2.00	
917.00†	6.340	134.936	916.35	-8.32	-12.38	12.40	40°22'47.021"N	104°20'47.611"W	2.00	
1017.00†	8.340	134.936	1015.53	-14.39	-21.40	21.45	40°22'46.932"N	104°20'47.494"W	2.00	
1117.00†	10.340	134.936	1114.20	-22.10	-32.86	32.93	40°22'46.818"N	104°20'47.345"W	2.00	
1217.00†	12.340	134.936	1212.24	-31.43	-46.75	46.85	40°22'46.681"N	104°20'47.166"W	2.00	
1317.00†	14.340	134.936	1309.54	-42.39	-63.04	63.19	40°22'46.520"N	104°20'46.955"W	2.00	
1417.00†	16.340	134.936	1405.97	-54.95	-81.73	81.91	40°22'46.335"N	104°20'46.713"W	2.00	
1517.00†	18.340	134.936	1501.42	-69.11	-102.78	103.01	40°22'46.127"N	104°20'46.440"W	2.00	
1617.00†	20.340	134.936	1595.77	-84.84	-126.17	126.45	40°22'45.896"N	104°20'46.137"W	2.00	
1717.00†	22.340	134.936	1688.91	-102.12	-151.87	152.21	40°22'45.642"N	104°20'45.804"W	2.00	
1759.29	23.186	134.936	1727.91	-109.89	-163.43	163.80	40°22'45.528"N	104°20'45.655"W	2.00	End of Build (S)
1817.00†	23.186	134.936	1780.96	-120.68	-179.48	179.88	40°22'45.369"N	104°20'45.447"W	0.00	
1917.00†	23.186	134.936	1872.88	-139.38	-207.28	207.75	40°22'45.095"N	104°20'45.087"W	0.00	
2017.00†	23.186	134.936	1964.80	-158.08	-235.09	235.62	40°22'44.820"N	104°20'44.726"W	0.00	
2117.00†	23.186	134.936	2056.73	-176.78	-262.90	263.49	40°22'44.545"N	104°20'44.366"W	0.00	
2217.00†	23.186	134.936	2148.65	-195.47	-290.71	291.36	40°22'44.270"N	104°20'44.006"W	0.00	
2317.00†	23.186	134.936	2240.57	-214.17	-318.52	319.24	40°22'43.995"N	104°20'43.646"W	0.00	
2417.00†	23.186	134.936	2332.50	-232.87	-346.33	347.11	40°22'43.721"N	104°20'43.286"W	0.00	
2517.00†	23.186	134.936	2424.42	-251.57	-374.14	374.98	40°22'43.446"N	104°20'42.926"W	0.00	
2617.00†	23.186	134.936	2516.34	-270.27	-401.94	402.85	40°22'43.171"N	104°20'42.566"W	0.00	



Planned Wellpath Report

ANTELOPE FEDERAL T44-P41-20HNB PWP (REV-A.1)

Page 3 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T44-P41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T44-P41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	23.186	134.936	2608.27	-288.97	-429.75	430.72	40°22'42.896"N	104°20'42.206"W	0.00	
2817.00†	23.186	134.936	2700.19	-307.67	-457.56	458.59	40°22'42.621"N	104°20'41.845"W	0.00	
2917.00†	23.186	134.936	2792.11	-326.37	-485.37	486.46	40°22'42.347"N	104°20'41.485"W	0.00	
3017.00†	23.186	134.936	2884.04	-345.06	-513.18	514.33	40°22'42.072"N	104°20'41.125"W	0.00	
3117.00†	23.186	134.936	2975.96	-363.76	-540.99	542.20	40°22'41.797"N	104°20'40.765"W	0.00	
3217.00†	23.186	134.936	3067.88	-382.46	-568.80	570.08	40°22'41.522"N	104°20'40.405"W	0.00	
3317.00†	23.186	134.936	3159.81	-401.16	-596.60	597.95	40°22'41.247"N	104°20'40.045"W	0.00	
3417.00†	23.186	134.936	3251.73	-419.86	-624.41	625.82	40°22'40.973"N	104°20'39.685"W	0.00	
3517.00†	23.186	134.936	3343.65	-438.56	-652.22	653.69	40°22'40.698"N	104°20'39.325"W	0.00	
3617.00†	23.186	134.936	3435.57	-457.26	-680.03	681.56	40°22'40.423"N	104°20'38.964"W	0.00	
3717.00†	23.186	134.936	3527.50	-475.95	-707.84	709.43	40°22'40.148"N	104°20'38.604"W	0.00	
3817.00†	23.186	134.936	3619.42	-494.65	-735.65	737.30	40°22'39.873"N	104°20'38.244"W	0.00	
3917.00†	23.186	134.936	3711.34	-513.35	-763.46	765.17	40°22'39.599"N	104°20'37.884"W	0.00	
4017.00†	23.186	134.936	3803.27	-532.05	-791.26	793.05	40°22'39.324"N	104°20'37.524"W	0.00	
4117.00†	23.186	134.936	3895.19	-550.75	-819.07	820.92	40°22'39.049"N	104°20'37.164"W	0.00	
4217.00†	23.186	134.936	3987.11	-569.45	-846.88	848.79	40°22'38.774"N	104°20'36.804"W	0.00	
4317.00†	23.186	134.936	4079.04	-588.15	-874.69	876.66	40°22'38.499"N	104°20'36.444"W	0.00	
4417.00†	23.186	134.936	4170.96	-606.84	-902.50	904.53	40°22'38.225"N	104°20'36.084"W	0.00	
4517.00†	23.186	134.936	4262.88	-625.54	-930.31	932.40	40°22'37.950"N	104°20'35.723"W	0.00	
4617.00†	23.186	134.936	4354.81	-644.24	-958.12	960.27	40°22'37.675"N	104°20'35.363"W	0.00	
4717.00†	23.186	134.936	4446.73	-662.94	-985.92	988.14	40°22'37.400"N	104°20'35.003"W	0.00	
4817.00†	23.186	134.936	4538.65	-681.64	-1013.73	1016.01	40°22'37.125"N	104°20'34.643"W	0.00	
4917.00†	23.186	134.936	4630.58	-700.34	-1041.54	1043.89	40°22'36.851"N	104°20'34.283"W	0.00	
5017.00†	23.186	134.936	4722.50	-719.04	-1069.35	1071.76	40°22'36.576"N	104°20'33.923"W	0.00	
5117.00†	23.186	134.936	4814.42	-737.74	-1097.16	1099.63	40°22'36.301"N	104°20'33.563"W	0.00	
5217.00†	23.186	134.936	4906.35	-756.43	-1124.97	1127.50	40°22'36.026"N	104°20'33.203"W	0.00	
5317.00†	23.186	134.936	4998.27	-775.13	-1152.78	1155.37	40°22'35.751"N	104°20'32.843"W	0.00	
5417.00†	23.186	134.936	5090.19	-793.83	-1180.58	1183.24	40°22'35.477"N	104°20'32.482"W	0.00	
5517.00†	23.186	134.936	5182.12	-812.53	-1208.39	1211.11	40°22'35.202"N	104°20'32.122"W	0.00	
5617.00†	23.186	134.936	5274.04	-831.23	-1236.20	1238.98	40°22'34.927"N	104°20'31.762"W	0.00	



Planned Wellpath Report

ANTELOPE FEDERAL T44-P41-20HNB PWP (REV-A.1)

Page 4 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T44-P41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T44-P41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	23.186	134.936	5365.96	-849.93	-1264.01	1266.86	40°22'34.652"N	104°20'31.402"W	0.00	
5817.00†	23.186	134.936	5457.89	-868.63	-1291.82	1294.73	40°22'34.377"N	104°20'31.042"W	0.00	
5917.00†	23.186	134.936	5549.81	-887.32	-1319.63	1322.60	40°22'34.103"N	104°20'30.682"W	0.00	
6013.71	23.186	134.936	5638.71	-905.41	-1346.52	1349.55	40°22'33.837"N	104°20'30.334"W	0.00	End of Tangent (S)
6017.00†	22.961	134.323	5641.73	-906.01	-1347.43	1350.47	40°22'33.828"N	104°20'30.322"W	10.00	
6117.00†	17.653	109.529	5735.66	-915.90	-1366.17	1378.79	40°22'33.643"N	104°20'29.956"W	10.00	
6217.00†	17.042	75.597	5831.35	-909.12	-1367.60	1407.34	40°22'33.628"N	104°20'29.587"W	10.00	
6317.00†	21.530	48.128	5925.91	-885.88	-1351.66	1435.27	40°22'33.786"N	104°20'29.226"W	10.00	
6417.00†	28.826	31.846	6016.45	-846.88	-1318.86	1461.72	40°22'34.110"N	104°20'28.884"W	10.00	
6517.00†	37.313	22.073	6100.24	-793.32	-1270.17	1485.89	40°22'34.591"N	104°20'28.572"W	10.00	
6617.00†	46.337	15.577	6174.71	-726.82	-1207.08	1507.05	40°22'35.215"N	104°20'28.299"W	10.00	
6717.00†	55.631	10.811	6237.62	-649.39	-1131.50	1524.55	40°22'35.961"N	104°20'28.072"W	10.00	
6817.00†	65.072	7.011	6287.05	-563.40	-1045.75	1537.86	40°22'36.809"N	104°20'27.900"W	10.00	
6917.00†	74.596	3.758	6321.49	-471.46	-952.41	1546.57	40°22'37.731"N	104°20'27.788"W	10.00	
7017.00†	84.163	0.793	6339.90	-376.35	-854.32	1550.43	40°22'38.700"N	104°20'27.738"W	10.00	
7077.91	90.000	359.046	6343.00 [†]	-318.10	-793.51	1550.34	40°22'39.301"N	104°20'27.739"W	10.00	End of 3D Arc (S)
7117.00†	90.000	359.046	6343.00	-280.83	-754.43	1549.69	40°22'39.687"N	104°20'27.747"W	0.00	
7217.00†	90.000	359.046	6343.00	-185.47	-654.45	1548.02	40°22'40.675"N	104°20'27.769"W	0.00	
7317.00†	90.000	359.046	6343.00	-90.12	-554.46	1546.36	40°22'41.664"N	104°20'27.790"W	0.00	
7417.00†	90.000	359.046	6343.00	5.23	-454.47	1544.70	40°22'42.652"N	104°20'27.812"W	0.00	
7517.00†	90.000	359.046	6343.00	100.59	-354.49	1543.03	40°22'43.640"N	104°20'27.833"W	0.00	
7617.00†	90.000	359.046	6343.00	195.94	-254.50	1541.37	40°22'44.628"N	104°20'27.854"W	0.00	
7717.00†	90.000	359.046	6343.00	291.29	-154.52	1539.70	40°22'45.616"N	104°20'27.876"W	0.00	
7817.00†	90.000	359.046	6343.00	386.65	-54.53	1538.04	40°22'46.604"N	104°20'27.897"W	0.00	
7917.00†	90.000	359.046	6343.00	482.00	45.46	1536.37	40°22'47.592"N	104°20'27.919"W	0.00	
8017.00†	90.000	359.046	6343.00	577.35	145.44	1534.71	40°22'48.580"N	104°20'27.940"W	0.00	
8117.00†	90.000	359.046	6343.00	672.71	245.43	1533.04	40°22'49.568"N	104°20'27.962"W	0.00	
8217.00†	90.000	359.046	6343.00	768.06	345.41	1531.38	40°22'50.556"N	104°20'27.983"W	0.00	
8317.00†	90.000	359.046	6343.00	863.41	445.40	1529.71	40°22'51.544"N	104°20'28.004"W	0.00	
8417.00†	90.000	359.046	6343.00	958.77	545.39	1528.05	40°22'52.532"N	104°20'28.026"W	0.00	



Planned Wellpath Report

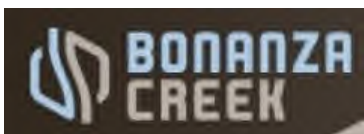
ANTELOPE FEDERAL T44-P41-20HNB PWP (REV-A.1)

Page 5 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T44-P41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T44-P41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8517.00†	90.000	359.046	6343.00	1054.12	645.37	1526.39	40°22'53.520"N	104°20'28.047"W	0.00	
8617.00†	90.000	359.046	6343.00	1149.47	745.36	1524.72	40°22'54.508"N	104°20'28.069"W	0.00	
8717.00†	90.000	359.046	6343.00	1244.83	845.35	1523.06	40°22'55.496"N	104°20'28.090"W	0.00	
8817.00†	90.000	359.046	6343.00	1340.18	945.33	1521.39	40°22'56.484"N	104°20'28.112"W	0.00	
8917.00†	90.000	359.046	6343.00	1435.53	1045.32	1519.73	40°22'57.472"N	104°20'28.133"W	0.00	
9017.00†	90.000	359.046	6343.00	1530.89	1145.30	1518.06	40°22'58.460"N	104°20'28.154"W	0.00	
9117.00†	90.000	359.046	6343.00	1626.24	1245.29	1516.40	40°22'59.448"N	104°20'28.176"W	0.00	
9217.00†	90.000	359.046	6343.00	1721.60	1345.28	1514.73	40°23'00.436"N	104°20'28.197"W	0.00	
9317.00†	90.000	359.046	6343.00	1816.95	1445.26	1513.07	40°23'01.424"N	104°20'28.219"W	0.00	
9417.00†	90.000	359.046	6343.00	1912.30	1545.25	1511.40	40°23'02.412"N	104°20'28.240"W	0.00	
9517.00†	90.000	359.046	6343.00	2007.66	1645.23	1509.74	40°23'03.400"N	104°20'28.262"W	0.00	
9617.00†	90.000	359.046	6343.00	2103.01	1745.22	1508.07	40°23'04.388"N	104°20'28.283"W	0.00	
9717.00†	90.000	359.046	6343.00	2198.36	1845.21	1506.41	40°23'05.376"N	104°20'28.304"W	0.00	
9817.00†	90.000	359.046	6343.00	2293.72	1945.19	1504.75	40°23'06.364"N	104°20'28.326"W	0.00	
9917.00†	90.000	359.046	6343.00	2389.07	2045.18	1503.08	40°23'07.352"N	104°20'28.347"W	0.00	
10017.00†	90.000	359.046	6343.00	2484.42	2145.17	1501.42	40°23'08.340"N	104°20'28.369"W	0.00	
10117.00†	90.000	359.046	6343.00	2579.78	2245.15	1499.75	40°23'09.328"N	104°20'28.390"W	0.00	
10217.00†	90.000	359.046	6343.00	2675.13	2345.14	1498.09	40°23'10.316"N	104°20'28.412"W	0.00	
10317.00†	90.000	359.046	6343.00	2770.48	2445.12	1496.42	40°23'11.304"N	104°20'28.433"W	0.00	
10417.00†	90.000	359.046	6343.00	2865.84	2545.11	1494.76	40°23'12.292"N	104°20'28.454"W	0.00	
10517.00†	90.000	359.046	6343.00	2961.19	2645.10	1493.09	40°23'13.281"N	104°20'28.476"W	0.00	
10617.00†	90.000	359.046	6343.00	3056.54	2745.08	1491.43	40°23'14.269"N	104°20'28.497"W	0.00	
10717.00†	90.000	359.046	6343.00	3151.90	2845.07	1489.76	40°23'15.257"N	104°20'28.519"W	0.00	
10817.00†	90.000	359.046	6343.00	3247.25	2945.05	1488.10	40°23'16.245"N	104°20'28.540"W	0.00	
10917.00†	90.000	359.046	6343.00	3342.60	3045.04	1486.43	40°23'17.233"N	104°20'28.562"W	0.00	
11017.00†	90.000	359.046	6343.00	3437.96	3145.03	1484.77	40°23'18.221"N	104°20'28.583"W	0.00	
11117.00†	90.000	359.046	6343.00	3533.31	3245.01	1483.11	40°23'19.209"N	104°20'28.605"W	0.00	
11217.00†	90.000	359.046	6343.00	3628.66	3345.00	1481.44	40°23'20.197"N	104°20'28.626"W	0.00	
11317.00†	90.000	359.046	6343.00	3724.02	3444.99	1479.78	40°23'21.185"N	104°20'28.647"W	0.00	
11417.00†	90.000	359.046	6343.00	3819.37	3544.97	1478.11	40°23'22.173"N	104°20'28.669"W	0.00	



Planned Wellpath Report

ANTELOPE FEDERAL T44-P41-20HNB PWP (REV-A.1)

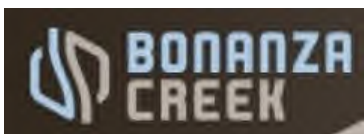
Page 6 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T44-P41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T44-P41-20HNB PWB
Facility	SEC.20-T05N-R62W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11517.00†	90.000	359.046	6343.00	3914.72	3644.96	1476.45	40°23'23.161"N	104°20'28.690"W	0.00	
11617.00†	90.000	359.046	6343.00	4010.08	3744.94	1474.78	40°23'24.149"N	104°20'28.712"W	0.00	
11717.00†	90.000	359.046	6343.00	4105.43	3844.93	1473.12	40°23'25.137"N	104°20'28.733"W	0.00	
11817.00†	90.000	359.046	6343.00	4200.78	3944.92	1471.45	40°23'26.125"N	104°20'28.755"W	0.00	
11917.00†	90.000	359.046	6343.00	4296.14	4044.90	1469.79	40°23'27.113"N	104°20'28.776"W	0.00	
12017.00†	90.000	359.046	6343.00	4391.49	4144.89	1468.12	40°23'28.101"N	104°20'28.797"W	0.00	
12117.00†	90.000	359.046	6343.00	4486.85	4244.87	1466.46	40°23'29.089"N	104°20'28.819"W	0.00	
12217.00†	90.000	359.046	6343.00	4582.20	4344.86	1464.80	40°23'30.077"N	104°20'28.840"W	0.00	
12317.00†	90.000	359.046	6343.00	4677.55	4444.85	1463.13	40°23'31.065"N	104°20'28.862"W	0.00	
12417.00†	90.000	359.046	6343.00	4772.91	4544.83	1461.47	40°23'32.053"N	104°20'28.883"W	0.00	
12517.00†	90.000	359.046	6343.00	4868.26	4644.82	1459.80	40°23'33.041"N	104°20'28.905"W	0.00	
12617.00†	90.000	359.046	6343.00	4963.61	4744.81	1458.14	40°23'34.029"N	104°20'28.926"W	0.00	
12717.00†	90.000	359.046	6343.00	5058.97	4844.79	1456.47	40°23'35.017"N	104°20'28.947"W	0.00	
12761.32	90.000	359.046	6343.00 ²	5101.22	4889.10	1455.73	40°23'35.455"N	104°20'28.957"W	0.00	End of Tangent

HOLE & CASING SECTIONS									
- Ref Wellbore: ANTELOPE FEDERAL T44-P41-20HNB PWB					Ref Wellpath: ANTELOPE FEDERAL T44-P41-20HNB 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	1532.68	0.00	0.00	-110.24	110.49



Planned Wellpath Report

ANTELOPE FEDERAL T44-P41-20HNB PWP (REV-A.1)

Page 7 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T44-P41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T44-P41-20HNB 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	-488.13	-1497.53	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon
SEC.20-T05N-R62W		-8.00	-488.13	-1497.53	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon
2) ANTELOPE FEDERAL T44-P41-20HNB BHL (300'FSL & 951'FEL, SEC.17)	12761.32	6343.00	4889.10	1455.73	3322711.79	1388184.90	40°23'35.455"N	104°20'28.957"W	point
ANTELOPE FEDERAL T44-P41-20HNB LP (0'FNL & 943'FEL, SEC.20)		6343.00	-680.51	1400.34	3322728.84	1382615.27	40°22'40.418"N	104°20'29.677"W	point
1) ANTELOPE FEDERAL T44-P41-20HNB LP REV-1 (0'FNL & 943'FEL, SEC.20)	7077.91	6343.00	-793.51	1550.34	3322880.29	1382504.24	40°22'39.301"N	104°20'27.739"W	point
SEC.17/20-T05N-R62W (460'FNL/FSL SETBACKS)		6373.00	-488.13	-1497.53	3319828.83	1382769.94	40°22'42.319"N	104°21'07.121"W	polygon

SURVEY PROGRAM -				
Ref Wellbore: ANTELOPE FEDERAL T44-P41-20HNB PWB		Ref Wellpath: ANTELOPE FEDERAL T44-P41-20HNB 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 T44-P41-20HNB PWB
1550.00	12761.32	BHI AutoTrak Curve (Axial Corr, Short spacing)		ANTELOPE FEDERAL T44-P41-20HNB PWB



Planned Wellpath Report

ANTELOPE FEDERAL T44-P41-20HNB PWP (REV-A.1)
Page 8 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#30 ANTELOPE FEDERAL T44-P41-20HNB (689'FSL & 2351'FEL, SEC.20)
Area	COLORADO	Well	ANTELOPE FEDERAL T44-P41-20HNB
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T44-P41-20HNB PWB
Facility	SEC.20-T05N-R62W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	134.936	17.00	Tie On
600.00	0.000	134.936	600.00	End of Tangent
1759.29	23.186	134.936	1727.91	End of Build (S)
6013.71	23.186	134.936	5638.71	End of Tangent (S)
7077.91	90.000	359.046	6343.00	End of 3D Arc (S)
12761.32	90.000	359.046	6343.00	End of Tangent