

BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225°FSL & 1248°FEL, SEC.19)
Field: WELD COUNTY Well: ANTELOPE FEDERAL 34-19-18XRLNC
Facility: SEC.19-T05N-R62W Wellbore: ANTELOPE FEDERAL 34-19-18XRLNC PWB

Plot reference wellpath is ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17KB) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (17KB) (RKB)	North Reference: True north
RIG (17KB) (RKB) to Mean Sea Level: 4675 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOTH05 ANTELOPE FEDERAL 34-19-18XRLNC (225°FSL & 1248°FEL, SEC.19)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingram on 2018-01-10
	Database: Denver

Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.19-T05N-R62W				3317343.701	1362714.207	40°22'42.085"N	104°21'39.240"W
Slot	Local N (ft)	Local E (ft)		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOTH05 ANTELOPE FEDERAL 34-19-18XRLNC (225°FSL & 1248°FEL, SEC.19)	-2.13	-79.95		3317263.792	1362711.056	40°22'42.064"N	104°21'40.273"W
RIG (17KB) (RKB) to Mud line (At Slot: SLOTH05 ANTELOPE FEDERAL 34-19-18XRLNC (225°FSL & 1248°FEL, SEC.19))						4675ft	
Mean Sea Level to Mud line (At Slot: SLOTH05 ANTELOPE FEDERAL 34-19-18XRLNC (225°FSL & 1248°FEL, SEC.19))						0ft	
RIG (17KB) (RKB) to Mean Sea Level						4675ft	

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	229.093	17.00	0.00	0.00	0.00	0.00
End of Tangent	1900.00	0.000	229.093	1900.00	0.00	0.00	0.00	0.00
End of Build (XS)	2295.64	7.913	229.093	2294.39	-17.86	-20.62	2.00	-16.30
End of Tangent (XS)	5865.78	7.913	229.093	5830.53	-339.71	-392.07	0.00	-309.97
End of 3D Arc (XS)	6815.92	90.000	358.501	6450.00	229.12	-473.50	10.00	263.31
End of Tangent (XS)	16424.20	90.000	358.501	6450.00	9834.12	-724.78	0.00	9860.80

Hole and Casing Sections

Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00	ANTELOPE FEDERAL 34-19-18XRLNC PWB
8.5in Open Hole	1550.00	16424.20	14874.20	1550.00	6450.00	0.00	0.00	9834.12	-724.78	ANTELOPE FEDERAL 34-19-18XRLNC PWB

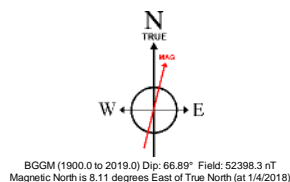
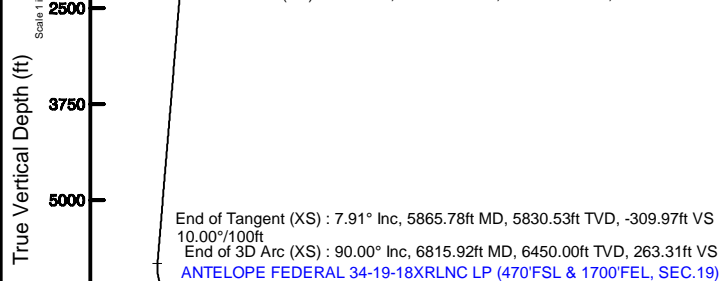
Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NavTrak	Custom BHI NavTrak (Standard Rotating+Neal Cor) (Rockies 0.03G model)		ANTELOPE FEDERAL 34-19-18XRLNC PWB
1550.00	16424.20	BHI AutoTrak Curve	Custom BHI AutoTrak Curve (Neal Cor, Short spacing) (Rockies 0.03G model)		ANTELOPE FEDERAL 34-19-18XRLNC 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
16424.20	90.000	358.501	6450.00	9834.12	-724.78	3316412.81	1392534.64	40°24'19.241"N	104°21'49.642"W

Scale 1 inch = 2500
End of Tangent : 0.00° Inc, 1900.00ft MD, 1900.00ft TVD, 0.00ft VS
2.00°/100ft
End of Build (XS) : 7.91° Inc, 2295.64ft MD, 2294.39ft TVD, -16.30ft VS



To correct azimuth from Magnetic to True add 5.11 degrees

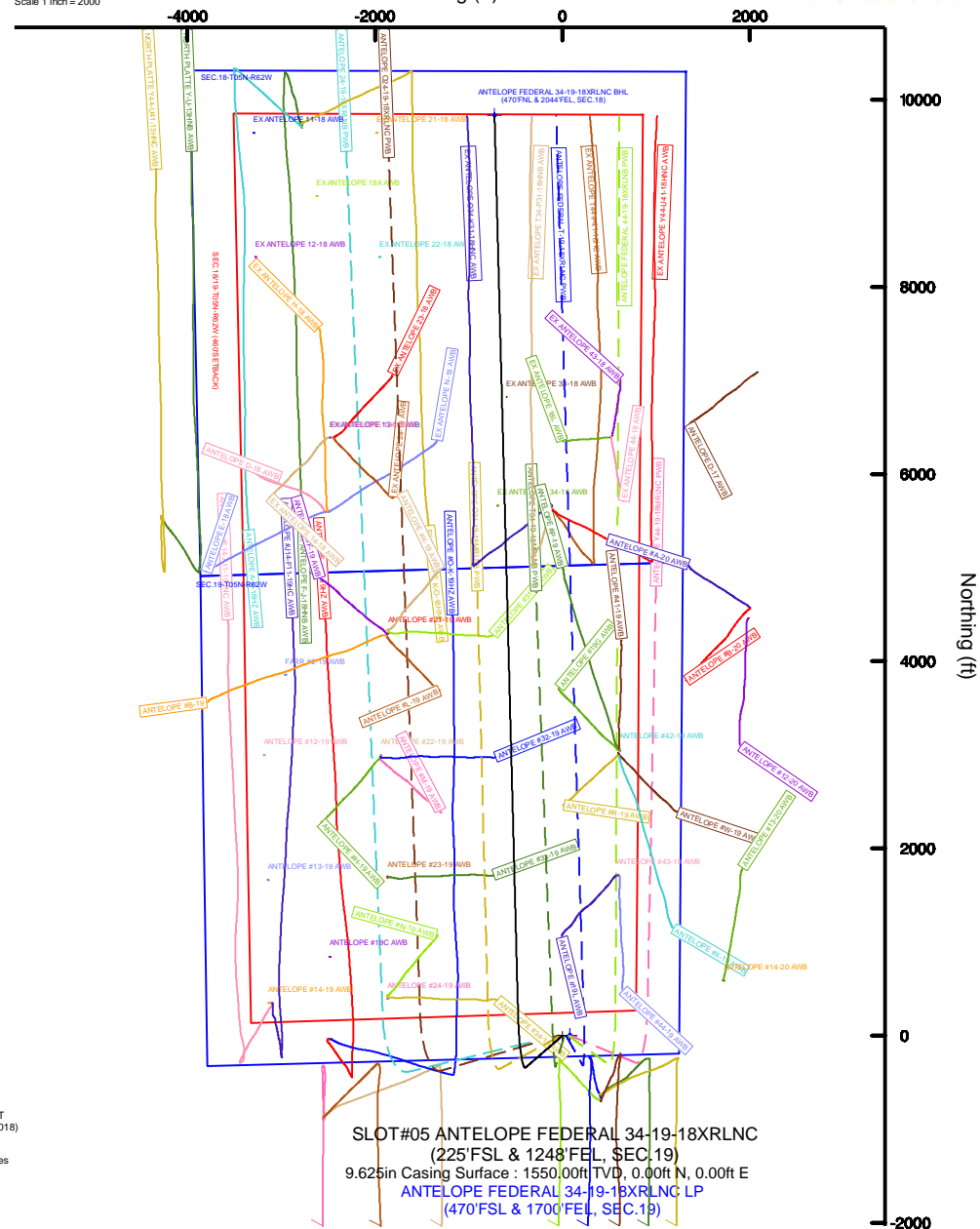
End of Tangent (XS) : 90.00° Inc, 16424.20ft MD, 6450.00ft TVD, 9860.80ft VS
ANTELOPE FEDERAL 34-19-18XRLNC BHL (470°FNL & 2044°FEL, SEC.18)

Vertical Section (ft)
Azimuth 355.78° with reference 0.00 N, 0.00 E



Scale 1 inch = 2000

Easting (ft)



SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC
(225°FSL & 1248°FEL, SEC.19)
9.625in Casing Surface : 1550.00ft TVD, 0.00ft N, 0.00ft E
ANTELOPE FEDERAL 34-19-18XRLNC LP
(470°FSL & 1700°FEL, SEC.19)



Planned Wellpath Report

ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-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	1/10/2018 at 12:12:54 PM
Convergence at slot	0.74° East	Database/Source file	Denver/ANTELOPE_FEDERAL_34-19-18XRLNC_PWP_REV-A.0.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2.13	-79.95	3317263.79	1382711.06	40°22'42.064"N	104°21'40.273"W
Facility Reference Pt			3317343.70	1382714.21	40°22'42.085"N	104°21'39.240"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	4675.00ft
Horizontal Reference Pt	Slot	RIG (17'KB) (RKB) to Mean Sea Level	4675.00ft
Vertical Reference Pt	RIG (17'KB) (RKB)	RIG (17'KB) (RKB) to Mud Line at Slot (SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19))	4675.00ft
MD Reference Pt	RIG (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	355.78°



Planned Wellpath Report

ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (171 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	229.093	0.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
17.00	0.000	229.093	17.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	Tie On
117.00†	0.000	229.093	117.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
217.00†	0.000	229.093	217.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
317.00†	0.000	229.093	317.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
417.00†	0.000	229.093	417.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
517.00†	0.000	229.093	517.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
617.00†	0.000	229.093	617.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
717.00†	0.000	229.093	717.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
817.00†	0.000	229.093	817.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
917.00†	0.000	229.093	917.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1017.00†	0.000	229.093	1017.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1117.00†	0.000	229.093	1117.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1217.00†	0.000	229.093	1217.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1317.00†	0.000	229.093	1317.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1417.00†	0.000	229.093	1417.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1517.00†	0.000	229.093	1517.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1617.00†	0.000	229.093	1617.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1717.00†	0.000	229.093	1717.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1817.00†	0.000	229.093	1817.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	
1900.00	0.000	229.093	1900.00	0.00	0.00	0.00	40°22'42.064"N	104°21'40.273"W	0.00	End of Tangent
1917.00†	0.340	229.093	1917.00	-0.03	-0.03	-0.04	40°22'42.064"N	104°21'40.273"W	2.00	
2017.00†	2.340	229.093	2016.97	-1.43	-1.56	-1.81	40°22'42.049"N	104°21'40.296"W	2.00	
2117.00†	4.340	229.093	2116.79	-4.91	-5.38	-6.21	40°22'42.011"N	104°21'40.353"W	2.00	
2217.00†	6.340	229.093	2216.35	-10.47	-11.47	-13.24	40°22'41.951"N	104°21'40.444"W	2.00	
2295.64	7.913	229.093	2294.39	-16.30	-17.86	-20.62	40°22'41.887"N	104°21'40.539"W	2.00	End of Build (XS)
2317.00†	7.913	229.093	2315.54	-18.06	-19.79	-22.84	40°22'41.868"N	104°21'40.568"W	0.00	
2417.00†	7.913	229.093	2414.59	-26.28	-28.80	-33.24	40°22'41.779"N	104°21'40.703"W	0.00	
2517.00†	7.913	229.093	2513.64	-34.51	-37.82	-43.65	40°22'41.690"N	104°21'40.837"W	0.00	
2617.00†	7.913	229.093	2612.68	-42.73	-46.83	-54.05	40°22'41.601"N	104°21'40.971"W	0.00	



Planned Wellpath Report

ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (171 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	7.913	229.093	2711.73	-50.96	-55.85	-64.46	40°22'41.512"N	104°21'41.106"W	0.00	
2817.00†	7.913	229.093	2810.78	-59.18	-64.86	-74.86	40°22'41.423"N	104°21'41.240"W	0.00	
2917.00†	7.913	229.093	2909.83	-67.41	-73.88	-85.26	40°22'41.334"N	104°21'41.375"W	0.00	
3017.00†	7.913	229.093	3008.88	-75.64	-82.89	-95.67	40°22'41.245"N	104°21'41.509"W	0.00	
3117.00†	7.913	229.093	3107.92	-83.86	-91.91	-106.07	40°22'41.156"N	104°21'41.644"W	0.00	
3217.00†	7.913	229.093	3206.97	-92.09	-100.92	-116.48	40°22'41.067"N	104°21'41.778"W	0.00	
3317.00†	7.913	229.093	3306.02	-100.31	-109.94	-126.88	40°22'40.978"N	104°21'41.912"W	0.00	
3417.00†	7.913	229.093	3405.07	-108.54	-118.95	-137.29	40°22'40.889"N	104°21'42.047"W	0.00	
3517.00†	7.913	229.093	3504.11	-116.76	-127.97	-147.69	40°22'40.799"N	104°21'42.181"W	0.00	
3617.00†	7.913	229.093	3603.16	-124.99	-136.98	-158.10	40°22'40.710"N	104°21'42.316"W	0.00	
3717.00†	7.913	229.093	3702.21	-133.22	-146.00	-168.50	40°22'40.621"N	104°21'42.450"W	0.00	
3817.00†	7.913	229.093	3801.26	-141.44	-155.01	-178.91	40°22'40.532"N	104°21'42.585"W	0.00	
3917.00†	7.913	229.093	3900.31	-149.67	-164.03	-189.31	40°22'40.443"N	104°21'42.719"W	0.00	
4017.00†	7.913	229.093	3999.35	-157.89	-173.04	-199.71	40°22'40.354"N	104°21'42.854"W	0.00	
4117.00†	7.913	229.093	4098.40	-166.12	-182.06	-210.12	40°22'40.265"N	104°21'42.988"W	0.00	
4217.00†	7.913	229.093	4197.45	-174.35	-191.07	-220.52	40°22'40.176"N	104°21'43.122"W	0.00	
4317.00†	7.913	229.093	4296.50	-182.57	-200.09	-230.93	40°22'40.087"N	104°21'43.257"W	0.00	
4417.00†	7.913	229.093	4395.54	-190.80	-209.10	-241.33	40°22'39.998"N	104°21'43.391"W	0.00	
4517.00†	7.913	229.093	4494.59	-199.02	-218.12	-251.74	40°22'39.909"N	104°21'43.526"W	0.00	
4617.00†	7.913	229.093	4593.64	-207.25	-227.13	-262.14	40°22'39.820"N	104°21'43.660"W	0.00	
4717.00†	7.913	229.093	4692.69	-215.47	-236.15	-272.55	40°22'39.730"N	104°21'43.795"W	0.00	
4817.00†	7.913	229.093	4791.74	-223.70	-245.16	-282.95	40°22'39.641"N	104°21'43.929"W	0.00	
4917.00†	7.913	229.093	4890.78	-231.93	-254.18	-293.36	40°22'39.552"N	104°21'44.063"W	0.00	
5017.00†	7.913	229.093	4989.83	-240.15	-263.19	-303.76	40°22'39.463"N	104°21'44.198"W	0.00	
5117.00†	7.913	229.093	5088.88	-248.38	-272.21	-314.16	40°22'39.374"N	104°21'44.332"W	0.00	
5217.00†	7.913	229.093	5187.93	-256.60	-281.22	-324.57	40°22'39.285"N	104°21'44.467"W	0.00	
5317.00†	7.913	229.093	5286.98	-264.83	-290.23	-334.97	40°22'39.196"N	104°21'44.601"W	0.00	
5417.00†	7.913	229.093	5386.02	-273.05	-299.25	-345.38	40°22'39.107"N	104°21'44.736"W	0.00	
5517.00†	7.913	229.093	5485.07	-281.28	-308.26	-355.78	40°22'39.018"N	104°21'44.870"W	0.00	
5617.00†	7.913	229.093	5584.12	-289.51	-317.28	-366.19	40°22'38.929"N	104°21'45.005"W	0.00	



Planned Wellpath Report

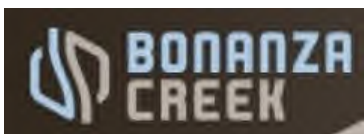
ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (171 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	7.913	229.093	5683.17	-297.73	-326.29	-376.59	40°22'38.840"N	104°21'45.139"W	0.00	
5817.00†	7.913	229.093	5782.21	-305.96	-335.31	-387.00	40°22'38.751"N	104°21'45.273"W	0.00	
5865.78	7.913	229.093	5830.53	-309.97	-339.71	-392.07	40°22'38.707"N	104°21'45.339"W	0.00	End of Tangent (XS)
5917.00†	6.130	269.515	5881.39	-311.90	-342.04	-397.47	40°22'38.684"N	104°21'45.409"W	10.00	
6017.00†	11.805	327.582	5980.30	-302.51	-333.43	-408.33	40°22'38.769"N	104°21'45.549"W	10.00	
6117.00†	20.985	342.242	6076.17	-276.02	-307.68	-419.30	40°22'39.024"N	104°21'45.691"W	10.00	
6217.00†	30.668	348.068	6166.09	-233.24	-265.56	-430.06	40°22'39.440"N	104°21'45.830"W	10.00	
6317.00†	40.496	351.277	6247.33	-175.45	-208.37	-440.28	40°22'40.005"N	104°21'45.962"W	10.00	
6417.00†	50.381	353.401	6317.41	-104.42	-137.84	-449.66	40°22'40.702"N	104°21'46.083"W	10.00	
6517.00†	60.296	354.989	6374.21	-22.30	-56.11	-457.90	40°22'41.510"N	104°21'46.190"W	10.00	
6617.00†	70.227	356.289	6416.01	68.41	34.34	-464.75	40°22'42.403"N	104°21'46.278"W	10.00	
6717.00†	80.165	357.435	6441.53	164.95	130.75	-470.02	40°22'43.356"N	104°21'46.346"W	10.00	
6815.92	90.000	358.501	6450.00†	263.31	229.12	-473.50	40°22'44.328"N	104°21'46.391"W	10.00	End of 3D Arc (XS)
6817.00†	90.000	358.501	6450.00	264.39	230.21	-473.53	40°22'44.339"N	104°21'46.392"W	0.00	
6917.00†	90.000	358.501	6450.00	364.28	330.17	-476.14	40°22'45.327"N	104°21'46.425"W	0.00	
7017.00†	90.000	358.501	6450.00	464.16	430.14	-478.76	40°22'46.314"N	104°21'46.459"W	0.00	
7117.00†	90.000	358.501	6450.00	564.05	530.10	-481.37	40°22'47.302"N	104°21'46.493"W	0.00	
7217.00†	90.000	358.501	6450.00	663.94	630.07	-483.99	40°22'48.290"N	104°21'46.527"W	0.00	
7317.00†	90.000	358.501	6450.00	763.83	730.03	-486.61	40°22'49.278"N	104°21'46.561"W	0.00	
7417.00†	90.000	358.501	6450.00	863.71	830.00	-489.22	40°22'50.266"N	104°21'46.595"W	0.00	
7517.00†	90.000	358.501	6450.00	963.60	929.97	-491.84	40°22'51.254"N	104°21'46.628"W	0.00	
7617.00†	90.000	358.501	6450.00	1063.49	1029.93	-494.45	40°22'52.241"N	104°21'46.662"W	0.00	
7717.00†	90.000	358.501	6450.00	1163.38	1129.90	-497.07	40°22'53.229"N	104°21'46.696"W	0.00	
7817.00†	90.000	358.501	6450.00	1263.26	1229.86	-499.68	40°22'54.217"N	104°21'46.730"W	0.00	
7917.00†	90.000	358.501	6450.00	1363.15	1329.83	-502.30	40°22'55.205"N	104°21'46.764"W	0.00	
8017.00†	90.000	358.501	6450.00	1463.04	1429.80	-504.91	40°22'56.193"N	104°21'46.797"W	0.00	
8117.00†	90.000	358.501	6450.00	1562.93	1529.76	-507.53	40°22'57.181"N	104°21'46.831"W	0.00	
8217.00†	90.000	358.501	6450.00	1662.81	1629.73	-510.14	40°22'58.168"N	104°21'46.865"W	0.00	
8317.00†	90.000	358.501	6450.00	1762.70	1729.69	-512.76	40°22'59.156"N	104°21'46.899"W	0.00	
8417.00†	90.000	358.501	6450.00	1862.59	1829.66	-515.37	40°23'00.144"N	104°21'46.933"W	0.00	



Planned Wellpath Report

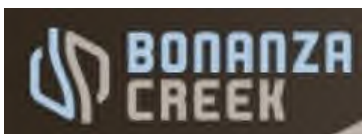
ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (171 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	358.501	6450.00	1962.48	1929.62	-517.99	40°23'01.132"N	104°21'46.967"W	0.00	
8617.00†	90.000	358.501	6450.00	2062.37	2029.59	-520.60	40°23'02.120"N	104°21'47.000"W	0.00	
8717.00†	90.000	358.501	6450.00	2162.25	2129.56	-523.22	40°23'03.108"N	104°21'47.034"W	0.00	
8817.00†	90.000	358.501	6450.00	2262.14	2229.52	-525.83	40°23'04.095"N	104°21'47.068"W	0.00	
8917.00†	90.000	358.501	6450.00	2362.03	2329.49	-528.45	40°23'05.083"N	104°21'47.102"W	0.00	
9017.00†	90.000	358.501	6450.00	2461.92	2429.45	-531.06	40°23'06.071"N	104°21'47.136"W	0.00	
9117.00†	90.000	358.501	6450.00	2561.80	2529.42	-533.68	40°23'07.059"N	104°21'47.170"W	0.00	
9217.00†	90.000	358.501	6450.00	2661.69	2629.38	-536.30	40°23'08.047"N	104°21'47.203"W	0.00	
9317.00†	90.000	358.501	6450.00	2761.58	2729.35	-538.91	40°23'09.034"N	104°21'47.237"W	0.00	
9417.00†	90.000	358.501	6450.00	2861.47	2829.32	-541.53	40°23'10.022"N	104°21'47.271"W	0.00	
9517.00†	90.000	358.501	6450.00	2961.35	2929.28	-544.14	40°23'11.010"N	104°21'47.305"W	0.00	
9617.00†	90.000	358.501	6450.00	3061.24	3029.25	-546.76	40°23'11.998"N	104°21'47.339"W	0.00	
9717.00†	90.000	358.501	6450.00	3161.13	3129.21	-549.37	40°23'12.986"N	104°21'47.372"W	0.00	
9817.00†	90.000	358.501	6450.00	3261.02	3229.18	-551.99	40°23'13.974"N	104°21'47.406"W	0.00	
9917.00†	90.000	358.501	6450.00	3360.90	3329.15	-554.60	40°23'14.961"N	104°21'47.440"W	0.00	
10017.00†	90.000	358.501	6450.00	3460.79	3429.11	-557.22	40°23'15.949"N	104°21'47.474"W	0.00	
10117.00†	90.000	358.501	6450.00	3560.68	3529.08	-559.83	40°23'16.937"N	104°21'47.508"W	0.00	
10217.00†	90.000	358.501	6450.00	3660.57	3629.04	-562.45	40°23'17.925"N	104°21'47.542"W	0.00	
10317.00†	90.000	358.501	6450.00	3760.45	3729.01	-565.06	40°23'18.913"N	104°21'47.575"W	0.00	
10417.00†	90.000	358.501	6450.00	3860.34	3828.97	-567.68	40°23'19.901"N	104°21'47.609"W	0.00	
10517.00†	90.000	358.501	6450.00	3960.23	3928.94	-570.29	40°23'20.888"N	104°21'47.643"W	0.00	
10617.00†	90.000	358.501	6450.00	4060.12	4028.91	-572.91	40°23'21.876"N	104°21'47.677"W	0.00	
10717.00†	90.000	358.501	6450.00	4160.01	4128.87	-575.52	40°23'22.864"N	104°21'47.711"W	0.00	
10817.00†	90.000	358.501	6450.00	4259.89	4228.84	-578.14	40°23'23.852"N	104°21'47.745"W	0.00	
10917.00†	90.000	358.501	6450.00	4359.78	4328.80	-580.75	40°23'24.840"N	104°21'47.778"W	0.00	
11017.00†	90.000	358.501	6450.00	4459.67	4428.77	-583.37	40°23'25.828"N	104°21'47.812"W	0.00	
11117.00†	90.000	358.501	6450.00	4559.56	4528.73	-585.99	40°23'26.815"N	104°21'47.846"W	0.00	
11217.00†	90.000	358.501	6450.00	4659.44	4628.70	-588.60	40°23'27.803"N	104°21'47.880"W	0.00	
11317.00†	90.000	358.501	6450.00	4759.33	4728.67	-591.22	40°23'28.791"N	104°21'47.914"W	0.00	
11417.00†	90.000	358.501	6450.00	4859.22	4828.63	-593.83	40°23'29.779"N	104°21'47.948"W	0.00	



Planned Wellpath Report

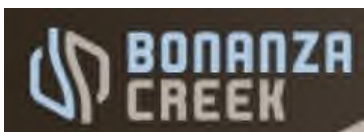
ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (171 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	358.501	6450.00	4959.11	4928.60	-596.45	40°23'30.767"N	104°21'47.981"W	0.00	
11617.00†	90.000	358.501	6450.00	5058.99	5028.56	-599.06	40°23'31.754"N	104°21'48.015"W	0.00	
11717.00†	90.000	358.501	6450.00	5158.88	5128.53	-601.68	40°23'32.742"N	104°21'48.049"W	0.00	
11817.00†	90.000	358.501	6450.00	5258.77	5228.50	-604.29	40°23'33.730"N	104°21'48.083"W	0.00	
11917.00†	90.000	358.501	6450.00	5358.66	5328.46	-606.91	40°23'34.718"N	104°21'48.117"W	0.00	
12017.00†	90.000	358.501	6450.00	5458.54	5428.43	-609.52	40°23'35.706"N	104°21'48.151"W	0.00	
12117.00†	90.000	358.501	6450.00	5558.43	5528.39	-612.14	40°23'36.694"N	104°21'48.184"W	0.00	
12217.00†	90.000	358.501	6450.00	5658.32	5628.36	-614.75	40°23'37.681"N	104°21'48.218"W	0.00	
12317.00†	90.000	358.501	6450.00	5758.21	5728.32	-617.37	40°23'38.669"N	104°21'48.252"W	0.00	
12417.00†	90.000	358.501	6450.00	5858.09	5828.29	-619.98	40°23'39.657"N	104°21'48.286"W	0.00	
12517.00†	90.000	358.501	6450.00	5957.98	5928.26	-622.60	40°23'40.645"N	104°21'48.320"W	0.00	
12617.00†	90.000	358.501	6450.00	6057.87	6028.22	-625.21	40°23'41.633"N	104°21'48.354"W	0.00	
12717.00†	90.000	358.501	6450.00	6157.76	6128.19	-627.83	40°23'42.621"N	104°21'48.387"W	0.00	
12817.00†	90.000	358.501	6450.00	6257.65	6228.15	-630.44	40°23'43.608"N	104°21'48.421"W	0.00	
12917.00†	90.000	358.501	6450.00	6357.53	6328.12	-633.06	40°23'44.596"N	104°21'48.455"W	0.00	
13017.00†	90.000	358.501	6450.00	6457.42	6428.08	-635.68	40°23'45.584"N	104°21'48.489"W	0.00	
13117.00†	90.000	358.501	6450.00	6557.31	6528.05	-638.29	40°23'46.572"N	104°21'48.523"W	0.00	
13217.00†	90.000	358.501	6450.00	6657.20	6628.02	-640.91	40°23'47.560"N	104°21'48.557"W	0.00	
13317.00†	90.000	358.501	6450.00	6757.08	6727.98	-643.52	40°23'48.548"N	104°21'48.590"W	0.00	
13417.00†	90.000	358.501	6450.00	6856.97	6827.95	-646.14	40°23'49.535"N	104°21'48.624"W	0.00	
13517.00†	90.000	358.501	6450.00	6956.86	6927.91	-648.75	40°23'50.523"N	104°21'48.658"W	0.00	
13617.00†	90.000	358.501	6450.00	7056.75	7027.88	-651.37	40°23'51.511"N	104°21'48.692"W	0.00	
13717.00†	90.000	358.501	6450.00	7156.63	7127.85	-653.98	40°23'52.499"N	104°21'48.726"W	0.00	
13817.00†	90.000	358.501	6450.00	7256.52	7227.81	-656.60	40°23'53.487"N	104°21'48.760"W	0.00	
13917.00†	90.000	358.501	6450.00	7356.41	7327.78	-659.21	40°23'54.474"N	104°21'48.793"W	0.00	
14017.00†	90.000	358.501	6450.00	7456.30	7427.74	-661.83	40°23'55.462"N	104°21'48.827"W	0.00	
14117.00†	90.000	358.501	6450.00	7556.18	7527.71	-664.44	40°23'56.450"N	104°21'48.861"W	0.00	
14217.00†	90.000	358.501	6450.00	7656.07	7627.67	-667.06	40°23'57.438"N	104°21'48.895"W	0.00	
14317.00†	90.000	358.501	6450.00	7755.96	7727.64	-669.67	40°23'58.426"N	104°21'48.929"W	0.00	
14417.00†	90.000	358.501	6450.00	7855.85	7827.61	-672.29	40°23'59.414"N	104°21'48.963"W	0.00	



Planned Wellpath Report

ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

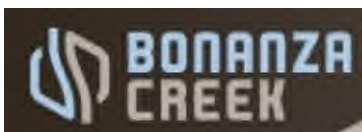
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (171 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14517.00†	90.000	358.501	6450.00	7955.74	7927.57	-674.90	40°24'00.401"N	104°21'48.996"W	0.00	
14617.00†	90.000	358.501	6450.00	8055.62	8027.54	-677.52	40°24'01.389"N	104°21'49.030"W	0.00	
14717.00†	90.000	358.501	6450.00	8155.51	8127.50	-680.14	40°24'02.377"N	104°21'49.064"W	0.00	
14817.00†	90.000	358.501	6450.00	8255.40	8227.47	-682.75	40°24'03.365"N	104°21'49.098"W	0.00	
14917.00†	90.000	358.501	6450.00	8355.29	8327.44	-685.37	40°24'04.353"N	104°21'49.132"W	0.00	
15017.00†	90.000	358.501	6450.00	8455.17	8427.40	-687.98	40°24'05.341"N	104°21'49.166"W	0.00	
15117.00†	90.000	358.501	6450.00	8555.06	8527.37	-690.60	40°24'06.328"N	104°21'49.199"W	0.00	
15217.00†	90.000	358.501	6450.00	8654.95	8627.33	-693.21	40°24'07.316"N	104°21'49.233"W	0.00	
15317.00†	90.000	358.501	6450.00	8754.84	8727.30	-695.83	40°24'08.304"N	104°21'49.267"W	0.00	
15417.00†	90.000	358.501	6450.00	8854.72	8827.26	-698.44	40°24'09.292"N	104°21'49.301"W	0.00	
15517.00†	90.000	358.501	6450.00	8954.61	8927.23	-701.06	40°24'10.280"N	104°21'49.335"W	0.00	
15617.00†	90.000	358.501	6450.00	9054.50	9027.20	-703.67	40°24'11.267"N	104°21'49.369"W	0.00	
15717.00†	90.000	358.501	6450.00	9154.39	9127.16	-706.29	40°24'12.255"N	104°21'49.402"W	0.00	
15817.00†	90.000	358.501	6450.00	9254.27	9227.13	-708.90	40°24'13.243"N	104°21'49.436"W	0.00	
15917.00†	90.000	358.501	6450.00	9354.16	9327.09	-711.52	40°24'14.231"N	104°21'49.470"W	0.00	
16017.00†	90.000	358.501	6450.00	9454.05	9427.06	-714.13	40°24'15.219"N	104°21'49.504"W	0.00	
16117.00†	90.000	358.501	6450.00	9553.94	9527.02	-716.75	40°24'16.207"N	104°21'49.538"W	0.00	
16217.00†	90.000	358.501	6450.00	9653.82	9626.99	-719.36	40°24'17.194"N	104°21'49.572"W	0.00	
16317.00†	90.000	358.501	6450.00	9753.71	9726.96	-721.98	40°24'18.182"N	104°21'49.606"W	0.00	
16417.00†	90.000	358.501	6450.00	9853.60	9826.92	-724.59	40°24'19.170"N	104°21'49.639"W	0.00	
16424.20	90.000	358.501	6450.00 ²	9860.80	9834.12	-724.78	40°24'19.241"N	104°21'49.642"W	0.00	End of Tangent (XS)

HOLE & CASING SECTIONS									
- Ref Wellbore: ANTELOPE FEDERAL 34-19-18XRLNC PWB					Ref Wellpath: ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)				
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	1550.00	0.00	0.00	0.00	0.00
8.5in Open Hole	1550.00	16424.20	14874.20	1550.00	6450.00	0.00	0.00	9834.12	-724.78



Planned Wellpath Report

ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.18-T05N-R62W		0.00	2.13	79.95	3317343.70	1382714.21	40°22'42.085"N	104°21'39.240"W	polygon
SEC.19-T05N-R62W		0.00	2.13	79.95	3317343.70	1382714.21	40°22'42.085"N	104°21'39.240"W	polygon
2) ANTELOPE FEDERAL 34-19-18XRLNC BHL (470'FNL & 2044'FEL, SEC.18)	16424.20	6450.00	9834.12	-724.78	3316412.81	1392534.64	40°24'19.241"N	104°21'49.642"W	point
1) ANTELOPE FEDERAL 34-19-18XRLNC LP (470'FSL & 1700'FEL, SEC.19)	6815.92	6450.00	229.12	-473.50	3316787.41	1382934.07	40°22'44.328"N	104°21'46.391"W	point
SEC.18/19-T05N-R62W (460'SETBACK)		6475.00	2.13	79.95	3317343.70	1382714.21	40°22'42.085"N	104°21'39.240"W	polygon

SURVEY PROGRAM -				
Ref Wellbore: ANTELOPE FEDERAL 34-19-18XRLNC PWB		Ref Wellpath: ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ANTELOPE FEDERAL 34-19-18XRLNC PWB
1550.00	16424.20	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		ANTELOPE FEDERAL 34-19-18XRLNC PWB



Planned Wellpath Report

ANTELOPE FEDERAL 34-19-18XRLNC PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 ANTELOPE FEDERAL 34-19-18XRLNC (225'FSL & 1248'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL 34-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL 34-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	229.093	17.00	Tie On
1900.00	0.000	229.093	1900.00	End of Tangent
2295.64	7.913	229.093	2294.39	End of Build (XS)
5865.78	7.913	229.093	5830.53	End of Tangent (XS)
6815.92	90.000	358.501	6450.00	End of 3D Arc (XS)
16424.20	90.000	358.501	6450.00	End of Tangent (XS)