

Location:	COLORADO	Slot:	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Field:	WELD COUNTY	Well:	ANTELOPE FEDERAL T-19-18XRLNC
Facility:	SEC.19-T05N-R62W	Wellbore:	ANTELOPE FEDERAL T-19-18XRLNC PWB

Location:	COLORADO	Slot:	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Field:	WELD COUNTY	Well:	ANTELOPE FEDERAL T-19-18XRLNC
Facility:	SEC.19-T05N-R62W	Wellbore:	ANTELOPE FEDERAL T-19-18XRLNC PWB

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: SLOT#03 ANTELOPE FEDERAL T-19-18)RLNC (225FSL & 1208FEL, SEC.19): 0 feet

Depths are in feet

Coordinates are in feet referenced to Slot

Created by: ingmjmr on 2018-01-10

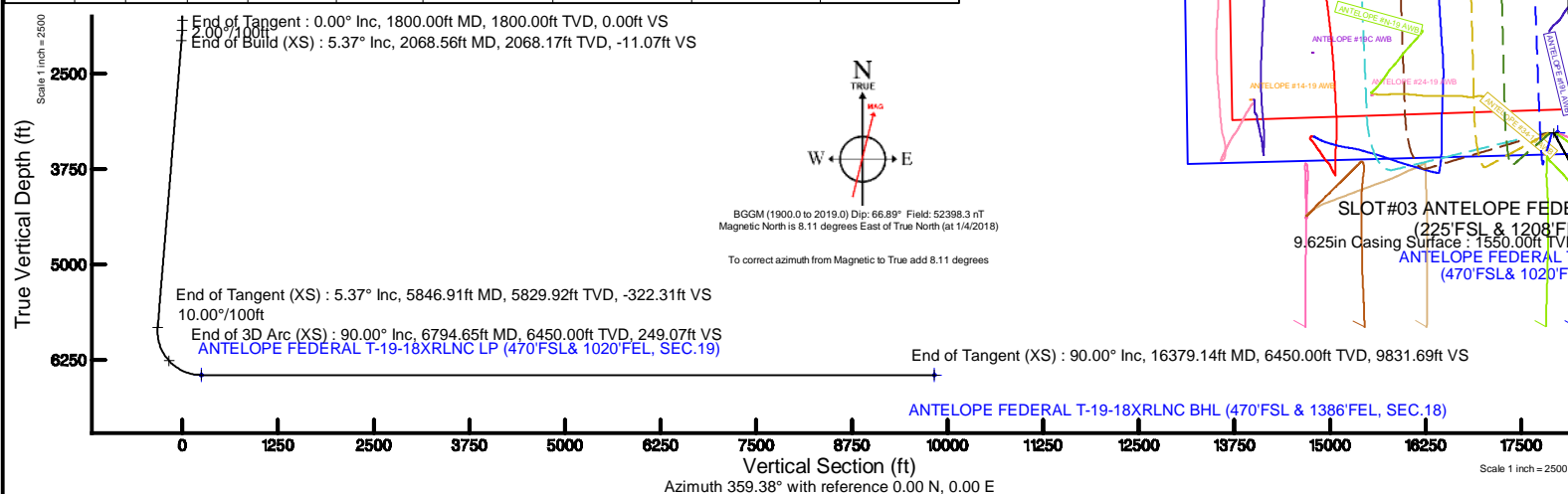
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.19-T05N-R62W				3317343.701	1362714.207	40°22'42.087"N	104°21'39.240"W
Site	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT03 ANTELOPE FEDERAL T-19-16XR/LNC (225FSL & 1208FSL, SEC.19)	-1.11	-40.09	3317303.631	1362712.579	40°22'42.074"N	104°21'39.758"W	
RD (17X8) (R09) to Mud line (A) Site: SLOT03 ANTELOPE FEDERAL T-19-16XR/LNC (225FSL & 1208FSL, SEC.19)						46791	
Mean Sea Level to Mud line (A) Site: SLOT03 ANTELOPE FEDERAL T-19-16XR/LNC (225FSL & 1208FSL, SEC.19)						01	
RD (17X8) (R09) to Mean Sea Level						46791	

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	151.021	17.00	0.00	0.00	0.00	0.00
End of Tangent	1800.00	0.000	151.021	1800.00	0.00	0.00	0.00	0.00
End of Build (XS)	2068.56	5.371	151.021	2068.17	-11.00	6.09	2.00	-11.07
End of Tangent (XS)	5846.91	5.371	151.021	5829.92	-320.40	177.45	0.00	-322.31
End of 3D Arc (XS)	6794.65	90.000	151.247	6450.00	251.11	186.64	10.00	249.07
End of Tangent (XS)	16379.14	90.000	358.247	6450.00	9831.11	-106.62	0.00	9831.69

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 T-19-18XRJNC PWB
8.5in Open Hole	1550.00	16379.14	14829.14	1550.00	6450.00	0.00	0.00	9831.11	-106.62	ANTELOPE FEDERAL T-19-18XRJNC PWB

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NavTrak	Custom BHI NavTrak (Standard Rotating/Axial Corr) (Rockies 0.03G model)		ANTELOPE FEDERAL T-19-18XRLNC PWB
1550.00	16379.59	BHI AutoTrak Curve	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03G model)		ANTELOPE FEDERAL T-19-18XRLNC PWB

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
16379.14	90.000	358.247	6450.00	9831.11	-106.62	3317070.76	1392541.09	40°24'19.222"N	104°21'41.136"W





Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-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 12:12:39 PM
Convergence at slot	0.74° East	Database/Source file	Denver/ANTELOPE_FEDERAL_T-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	-1.11	-40.09	3317303.63	1382712.58	40°22'42.074"N	104°21'39.758"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#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'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	359.38°



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

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (170 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	151.021	0.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
17.00	0.000	151.021	17.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	Tie On
117.00†	0.000	151.021	117.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
217.00†	0.000	151.021	217.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
317.00†	0.000	151.021	317.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
417.00†	0.000	151.021	417.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
517.00†	0.000	151.021	517.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
617.00†	0.000	151.021	617.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
717.00†	0.000	151.021	717.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
817.00†	0.000	151.021	817.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
917.00†	0.000	151.021	917.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1017.00†	0.000	151.021	1017.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1117.00†	0.000	151.021	1117.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1217.00†	0.000	151.021	1217.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1317.00†	0.000	151.021	1317.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1417.00†	0.000	151.021	1417.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1517.00†	0.000	151.021	1517.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1617.00†	0.000	151.021	1617.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1717.00†	0.000	151.021	1717.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	
1800.00	0.000	151.021	1800.00	0.00	0.00	0.00	40°22'42.074"N	104°21'39.758"W	0.00	End of Tangent
1817.00†	0.340	151.021	1817.00	-0.04	-0.04	0.02	40°22'42.074"N	104°21'39.758"W	2.00	
1917.00†	2.340	151.021	1916.97	-2.10	-2.09	1.16	40°22'42.053"N	104°21'39.743"W	2.00	
2017.00†	4.340	151.021	2016.79	-7.23	-7.19	3.98	40°22'42.003"N	104°21'39.707"W	2.00	
2068.56	5.371	151.021	2068.17	-11.07	-11.00	6.09	40°22'41.965"N	104°21'39.679"W	2.00	End of Build (XS)
2117.00†	5.371	151.021	2116.39	-15.06	-14.97	8.29	40°22'41.926"N	104°21'39.651"W	0.00	
2217.00†	5.371	151.021	2215.96	-23.30	-23.16	12.83	40°22'41.845"N	104°21'39.592"W	0.00	
2317.00†	5.371	151.021	2315.52	-31.53	-31.35	17.36	40°22'41.764"N	104°21'39.534"W	0.00	
2417.00†	5.371	151.021	2415.08	-39.77	-39.54	21.90	40°22'41.683"N	104°21'39.475"W	0.00	
2517.00†	5.371	151.021	2514.64	-48.01	-47.73	26.43	40°22'41.602"N	104°21'39.416"W	0.00	
2617.00†	5.371	151.021	2614.20	-56.25	-55.91	30.97	40°22'41.521"N	104°21'39.358"W	0.00	



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

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (170 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	5.371	151.021	2713.76	-64.48	-64.10	35.50	40°22'41.441"N	104°21'39.299"W	0.00	
2817.00†	5.371	151.021	2813.32	-72.72	-72.29	40.04	40°22'41.360"N	104°21'39.241"W	0.00	
2917.00†	5.371	151.021	2912.88	-80.96	-80.48	44.57	40°22'41.279"N	104°21'39.182"W	0.00	
3017.00†	5.371	151.021	3012.44	-89.20	-88.67	49.11	40°22'41.198"N	104°21'39.123"W	0.00	
3117.00†	5.371	151.021	3112.00	-97.43	-96.86	53.64	40°22'41.117"N	104°21'39.065"W	0.00	
3217.00†	5.371	151.021	3211.56	-105.67	-105.05	58.18	40°22'41.036"N	104°21'39.006"W	0.00	
3317.00†	5.371	151.021	3311.13	-113.91	-113.24	62.71	40°22'40.955"N	104°21'38.948"W	0.00	
3417.00†	5.371	151.021	3410.69	-122.15	-121.42	67.25	40°22'40.874"N	104°21'38.889"W	0.00	
3517.00†	5.371	151.021	3510.25	-130.38	-129.61	71.79	40°22'40.793"N	104°21'38.830"W	0.00	
3617.00†	5.371	151.021	3609.81	-138.62	-137.80	76.32	40°22'40.712"N	104°21'38.772"W	0.00	
3717.00†	5.371	151.021	3709.37	-146.86	-145.99	80.86	40°22'40.631"N	104°21'38.713"W	0.00	
3817.00†	5.371	151.021	3808.93	-155.10	-154.18	85.39	40°22'40.550"N	104°21'38.655"W	0.00	
3917.00†	5.371	151.021	3908.49	-163.33	-162.37	89.93	40°22'40.470"N	104°21'38.596"W	0.00	
4017.00†	5.371	151.021	4008.05	-171.57	-170.56	94.46	40°22'40.389"N	104°21'38.537"W	0.00	
4117.00†	5.371	151.021	4107.61	-179.81	-178.75	99.00	40°22'40.308"N	104°21'38.479"W	0.00	
4217.00†	5.371	151.021	4207.17	-188.05	-186.94	103.53	40°22'40.227"N	104°21'38.420"W	0.00	
4317.00†	5.371	151.021	4306.73	-196.28	-195.12	108.07	40°22'40.146"N	104°21'38.362"W	0.00	
4417.00†	5.371	151.021	4406.30	-204.52	-203.31	112.60	40°22'40.065"N	104°21'38.303"W	0.00	
4517.00†	5.371	151.021	4505.86	-212.76	-211.50	117.14	40°22'39.984"N	104°21'38.244"W	0.00	
4617.00†	5.371	151.021	4605.42	-221.00	-219.69	121.67	40°22'39.903"N	104°21'38.186"W	0.00	
4717.00†	5.371	151.021	4704.98	-229.23	-227.88	126.21	40°22'39.822"N	104°21'38.127"W	0.00	
4817.00†	5.371	151.021	4804.54	-237.47	-236.07	130.74	40°22'39.741"N	104°21'38.069"W	0.00	
4917.00†	5.371	151.021	4904.10	-245.71	-244.26	135.28	40°22'39.660"N	104°21'38.010"W	0.00	
5017.00†	5.371	151.021	5003.66	-253.95	-252.45	139.81	40°22'39.579"N	104°21'37.951"W	0.00	
5117.00†	5.371	151.021	5103.22	-262.18	-260.63	144.35	40°22'39.498"N	104°21'37.893"W	0.00	
5217.00†	5.371	151.021	5202.78	-270.42	-268.82	148.89	40°22'39.418"N	104°21'37.834"W	0.00	
5317.00†	5.371	151.021	5302.34	-278.66	-277.01	153.42	40°22'39.337"N	104°21'37.776"W	0.00	
5417.00†	5.371	151.021	5401.90	-286.90	-285.20	157.96	40°22'39.256"N	104°21'37.717"W	0.00	
5517.00†	5.371	151.021	5501.47	-295.13	-293.39	162.49	40°22'39.175"N	104°21'37.658"W	0.00	
5617.00†	5.371	151.021	5601.03	-303.37	-301.58	167.03	40°22'39.094"N	104°21'37.600"W	0.00	



Planned Wellpath Report

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

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Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (170 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	5.371	151.021	5700.59	-311.61	-309.77	171.56	40°22'39.013"N	104°21'37.541"W	0.00	
5817.00†	5.371	151.021	5800.15	-319.85	-317.96	176.10	40°22'38.932"N	104°21'37.483"W	0.00	
5846.91	5.371	151.021	5829.92	-322.31	-320.40	177.45	40°22'38.908"N	104°21'37.465"W	0.00	End of Tangent (XS)
5917.00†	3.325	46.008	5899.89	-323.80	-321.86	180.51	40°22'38.893"N	104°21'37.426"W	10.00	
6017.00†	12.476	9.457	5998.88	-311.14	-309.16	184.38	40°22'39.019"N	104°21'37.376"W	10.00	
6117.00†	22.364	4.248	6094.18	-281.48	-279.46	187.57	40°22'39.312"N	104°21'37.334"W	10.00	
6217.00†	32.318	2.145	6182.90	-235.71	-233.66	189.99	40°22'39.765"N	104°21'37.303"W	10.00	
6317.00†	42.293	0.957	6262.34	-175.22	-173.15	191.55	40°22'40.363"N	104°21'37.283"W	10.00	
6417.00†	52.276	0.153	6330.09	-101.86	-99.78	192.22	40°22'41.088"N	104°21'37.274"W	10.00	
6517.00†	62.262	359.543	6384.09	-17.84	-15.76	191.98	40°22'41.918"N	104°21'37.277"W	10.00	
6617.00†	72.252	359.035	6422.70	74.26	76.34	190.82	40°22'42.828"N	104°21'37.292"W	10.00	
6717.00†	82.242	358.582	6444.75	171.67	173.73	188.79	40°22'43.791"N	104°21'37.319"W	10.00	
6794.65	90.000	358.247	6450.00†	249.07	251.11	186.64	40°22'44.555"N	104°21'37.346"W	10.00	End of 3D Arc (XS)
6817.00†	90.000	358.247	6450.00	271.42	273.45	185.96	40°22'44.776"N	104°21'37.355"W	0.00	
6917.00†	90.000	358.247	6450.00	371.40	373.40	182.90	40°22'45.764"N	104°21'37.395"W	0.00	
7017.00†	90.000	358.247	6450.00	471.38	473.35	179.84	40°22'46.752"N	104°21'37.434"W	0.00	
7117.00†	90.000	358.247	6450.00	571.36	573.31	176.78	40°22'47.739"N	104°21'37.474"W	0.00	
7217.00†	90.000	358.247	6450.00	671.34	673.26	173.72	40°22'48.727"N	104°21'37.513"W	0.00	
7317.00†	90.000	358.247	6450.00	771.32	773.21	170.66	40°22'49.715"N	104°21'37.553"W	0.00	
7417.00†	90.000	358.247	6450.00	871.30	873.17	167.60	40°22'50.702"N	104°21'37.592"W	0.00	
7517.00†	90.000	358.247	6450.00	971.28	973.12	164.54	40°22'51.690"N	104°21'37.632"W	0.00	
7617.00†	90.000	358.247	6450.00	1071.26	1073.07	161.48	40°22'52.678"N	104°21'37.671"W	0.00	
7717.00†	90.000	358.247	6450.00	1171.24	1173.03	158.42	40°22'53.665"N	104°21'37.711"W	0.00	
7817.00†	90.000	358.247	6450.00	1271.22	1272.98	155.36	40°22'54.653"N	104°21'37.750"W	0.00	
7917.00†	90.000	358.247	6450.00	1371.20	1372.93	152.30	40°22'55.641"N	104°21'37.790"W	0.00	
8017.00†	90.000	358.247	6450.00	1471.18	1472.89	149.24	40°22'56.629"N	104°21'37.830"W	0.00	
8117.00†	90.000	358.247	6450.00	1571.16	1572.84	146.18	40°22'57.616"N	104°21'37.869"W	0.00	
8217.00†	90.000	358.247	6450.00	1671.14	1672.79	143.12	40°22'58.604"N	104°21'37.909"W	0.00	
8317.00†	90.000	358.247	6450.00	1771.12	1772.75	140.06	40°22'59.592"N	104°21'37.948"W	0.00	
8417.00†	90.000	358.247	6450.00	1871.10	1872.70	137.00	40°23'00.579"N	104°21'37.988"W	0.00	



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (170 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	358.247	6450.00	1971.08	1972.65	133.94	40°23'01.567"N	104°21'38.027"W	0.00	
8617.00†	90.000	358.247	6450.00	2071.06	2072.61	130.88	40°23'02.555"N	104°21'38.067"W	0.00	
8717.00†	90.000	358.247	6450.00	2171.05	2172.56	127.82	40°23'03.543"N	104°21'38.106"W	0.00	
8817.00†	90.000	358.247	6450.00	2271.03	2272.51	124.76	40°23'04.530"N	104°21'38.146"W	0.00	
8917.00†	90.000	358.247	6450.00	2371.01	2372.47	121.70	40°23'05.518"N	104°21'38.185"W	0.00	
9017.00†	90.000	358.247	6450.00	2470.99	2472.42	118.64	40°23'06.506"N	104°21'38.225"W	0.00	
9117.00†	90.000	358.247	6450.00	2570.97	2572.37	115.58	40°23'07.493"N	104°21'38.264"W	0.00	
9217.00†	90.000	358.247	6450.00	2670.95	2672.32	112.52	40°23'08.481"N	104°21'38.304"W	0.00	
9317.00†	90.000	358.247	6450.00	2770.93	2772.28	109.46	40°23'09.469"N	104°21'38.343"W	0.00	
9417.00†	90.000	358.247	6450.00	2870.91	2872.23	106.40	40°23'10.456"N	104°21'38.383"W	0.00	
9517.00†	90.000	358.247	6450.00	2970.89	2972.18	103.34	40°23'11.444"N	104°21'38.423"W	0.00	
9617.00†	90.000	358.247	6450.00	3070.87	3072.14	100.28	40°23'12.432"N	104°21'38.462"W	0.00	
9717.00†	90.000	358.247	6450.00	3170.85	3172.09	97.22	40°23'13.420"N	104°21'38.502"W	0.00	
9817.00†	90.000	358.247	6450.00	3270.83	3272.04	94.16	40°23'14.407"N	104°21'38.541"W	0.00	
9917.00†	90.000	358.247	6450.00	3370.81	3372.00	91.10	40°23'15.395"N	104°21'38.581"W	0.00	
10017.00†	90.000	358.247	6450.00	3470.79	3471.95	88.05	40°23'16.383"N	104°21'38.620"W	0.00	
10117.00†	90.000	358.247	6450.00	3570.77	3571.90	84.99	40°23'17.370"N	104°21'38.660"W	0.00	
10217.00†	90.000	358.247	6450.00	3670.75	3671.86	81.93	40°23'18.358"N	104°21'38.699"W	0.00	
10317.00†	90.000	358.247	6450.00	3770.73	3771.81	78.87	40°23'19.346"N	104°21'38.739"W	0.00	
10417.00†	90.000	358.247	6450.00	3870.71	3871.76	75.81	40°23'20.333"N	104°21'38.778"W	0.00	
10517.00†	90.000	358.247	6450.00	3970.69	3971.72	72.75	40°23'21.321"N	104°21'38.818"W	0.00	
10617.00†	90.000	358.247	6450.00	4070.67	4071.67	69.69	40°23'22.309"N	104°21'38.857"W	0.00	
10717.00†	90.000	358.247	6450.00	4170.65	4171.62	66.63	40°23'23.297"N	104°21'38.897"W	0.00	
10817.00†	90.000	358.247	6450.00	4270.64	4271.58	63.57	40°23'24.284"N	104°21'38.936"W	0.00	
10917.00†	90.000	358.247	6450.00	4370.62	4371.53	60.51	40°23'25.272"N	104°21'38.976"W	0.00	
11017.00†	90.000	358.247	6450.00	4470.60	4471.48	57.45	40°23'26.260"N	104°21'39.016"W	0.00	
11117.00†	90.000	358.247	6450.00	4570.58	4571.44	54.39	40°23'27.247"N	104°21'39.055"W	0.00	
11217.00†	90.000	358.247	6450.00	4670.56	4671.39	51.33	40°23'28.235"N	104°21'39.095"W	0.00	
11317.00†	90.000	358.247	6450.00	4770.54	4771.34	48.27	40°23'29.223"N	104°21'39.134"W	0.00	
11417.00†	90.000	358.247	6450.00	4870.52	4871.29	45.21	40°23'30.210"N	104°21'39.174"W	0.00	



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (170 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	358.247	6450.00	4970.50	4971.25	42.15	40°23'31.198"N	104°21'39.213"W	0.00	
11617.00†	90.000	358.247	6450.00	5070.48	5071.20	39.09	40°23'32.186"N	104°21'39.253"W	0.00	
11717.00†	90.000	358.247	6450.00	5170.46	5171.15	36.03	40°23'33.174"N	104°21'39.292"W	0.00	
11817.00†	90.000	358.247	6450.00	5270.44	5271.11	32.97	40°23'34.161"N	104°21'39.332"W	0.00	
11917.00†	90.000	358.247	6450.00	5370.42	5371.06	29.91	40°23'35.149"N	104°21'39.371"W	0.00	
12017.00†	90.000	358.247	6450.00	5470.40	5471.01	26.85	40°23'36.137"N	104°21'39.411"W	0.00	
12117.00†	90.000	358.247	6450.00	5570.38	5570.97	23.79	40°23'37.124"N	104°21'39.451"W	0.00	
12217.00†	90.000	358.247	6450.00	5670.36	5670.92	20.73	40°23'38.112"N	104°21'39.490"W	0.00	
12317.00†	90.000	358.247	6450.00	5770.34	5770.87	17.67	40°23'39.100"N	104°21'39.530"W	0.00	
12417.00†	90.000	358.247	6450.00	5870.32	5870.83	14.61	40°23'40.087"N	104°21'39.569"W	0.00	
12517.00†	90.000	358.247	6450.00	5970.30	5970.78	11.55	40°23'41.075"N	104°21'39.609"W	0.00	
12617.00†	90.000	358.247	6450.00	6070.28	6070.73	8.49	40°23'42.063"N	104°21'39.648"W	0.00	
12717.00†	90.000	358.247	6450.00	6170.26	6170.69	5.43	40°23'43.051"N	104°21'39.688"W	0.00	
12817.00†	90.000	358.247	6450.00	6270.24	6270.64	2.37	40°23'44.038"N	104°21'39.727"W	0.00	
12917.00†	90.000	358.247	6450.00	6370.23	6370.59	-0.69	40°23'45.026"N	104°21'39.767"W	0.00	
13017.00†	90.000	358.247	6450.00	6470.21	6470.55	-3.75	40°23'46.014"N	104°21'39.806"W	0.00	
13117.00†	90.000	358.247	6450.00	6570.19	6570.50	-6.81	40°23'47.001"N	104°21'39.846"W	0.00	
13217.00†	90.000	358.247	6450.00	6670.17	6670.45	-9.87	40°23'47.989"N	104°21'39.886"W	0.00	
13317.00†	90.000	358.247	6450.00	6770.15	6770.41	-12.93	40°23'48.977"N	104°21'39.925"W	0.00	
13417.00†	90.000	358.247	6450.00	6870.13	6870.36	-15.99	40°23'49.965"N	104°21'39.965"W	0.00	
13517.00†	90.000	358.247	6450.00	6970.11	6970.31	-19.05	40°23'50.952"N	104°21'40.004"W	0.00	
13617.00†	90.000	358.247	6450.00	7070.09	7070.26	-22.11	40°23'51.940"N	104°21'40.044"W	0.00	
13717.00†	90.000	358.247	6450.00	7170.07	7170.22	-25.17	40°23'52.928"N	104°21'40.083"W	0.00	
13817.00†	90.000	358.247	6450.00	7270.05	7270.17	-28.23	40°23'53.915"N	104°21'40.123"W	0.00	
13917.00†	90.000	358.247	6450.00	7370.03	7370.12	-31.29	40°23'54.903"N	104°21'40.162"W	0.00	
14017.00†	90.000	358.247	6450.00	7470.01	7470.08	-34.35	40°23'55.891"N	104°21'40.202"W	0.00	
14117.00†	90.000	358.247	6450.00	7569.99	7570.03	-37.41	40°23'56.878"N	104°21'40.241"W	0.00	
14217.00†	90.000	358.247	6450.00	7669.97	7669.98	-40.47	40°23'57.866"N	104°21'40.281"W	0.00	
14317.00†	90.000	358.247	6450.00	7769.95	7769.94	-43.53	40°23'58.854"N	104°21'40.321"W	0.00	
14417.00†	90.000	358.247	6450.00	7869.93	7869.89	-46.59	40°23'59.842"N	104°21'40.360"W	0.00	



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

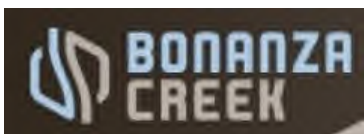
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

WELLPATH DATA (170 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	358.247	6450.00	7969.91	7969.84	-49.65	40°24'00.829"N	104°21'40.400"W	0.00	
14617.00†	90.000	358.247	6450.00	8069.89	8069.80	-52.71	40°24'01.817"N	104°21'40.439"W	0.00	
14717.00†	90.000	358.247	6450.00	8169.87	8169.75	-55.77	40°24'02.805"N	104°21'40.479"W	0.00	
14817.00†	90.000	358.247	6450.00	8269.85	8269.70	-58.83	40°24'03.792"N	104°21'40.518"W	0.00	
14917.00†	90.000	358.247	6450.00	8369.83	8369.66	-61.89	40°24'04.780"N	104°21'40.558"W	0.00	
15017.00†	90.000	358.247	6450.00	8469.82	8469.61	-64.95	40°24'05.768"N	104°21'40.597"W	0.00	
15117.00†	90.000	358.247	6450.00	8569.80	8569.56	-68.00	40°24'06.755"N	104°21'40.637"W	0.00	
15217.00†	90.000	358.247	6450.00	8669.78	8669.52	-71.06	40°24'07.743"N	104°21'40.677"W	0.00	
15317.00†	90.000	358.247	6450.00	8769.76	8769.47	-74.12	40°24'08.731"N	104°21'40.716"W	0.00	
15417.00†	90.000	358.247	6450.00	8869.74	8869.42	-77.18	40°24'09.719"N	104°21'40.756"W	0.00	
15517.00†	90.000	358.247	6450.00	8969.72	8969.38	-80.24	40°24'10.706"N	104°21'40.795"W	0.00	
15617.00†	90.000	358.247	6450.00	9069.70	9069.33	-83.30	40°24'11.694"N	104°21'40.835"W	0.00	
15717.00†	90.000	358.247	6450.00	9169.68	9169.28	-86.36	40°24'12.682"N	104°21'40.874"W	0.00	
15817.00†	90.000	358.247	6450.00	9269.66	9269.23	-89.42	40°24'13.669"N	104°21'40.914"W	0.00	
15917.00†	90.000	358.247	6450.00	9369.64	9369.19	-92.48	40°24'14.657"N	104°21'40.953"W	0.00	
16017.00†	90.000	358.247	6450.00	9469.62	9469.14	-95.54	40°24'15.645"N	104°21'40.993"W	0.00	
16117.00†	90.000	358.247	6450.00	9569.60	9569.09	-98.60	40°24'16.632"N	104°21'41.033"W	0.00	
16217.00†	90.000	358.247	6450.00	9669.58	9669.05	-101.66	40°24'17.620"N	104°21'41.072"W	0.00	
16317.00†	90.000	358.247	6450.00	9769.56	9769.00	-104.72	40°24'18.608"N	104°21'41.112"W	0.00	
16379.14	90.000	358.247	6450.00 ²	9831.69	9831.11	-106.62	40°24'19.222"N	104°21'41.136"W	0.00	End of Tangent (XS)

HOLE & CASING SECTIONS									
- Ref Wellbore: ANTELOPE FEDERAL T-19-18XRLNC PWB					Ref Wellpath: ANTELOPE FEDERAL T-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	16379.14	14829.14	1550.00	6450.00	0.00	0.00	9831.11	-106.62



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

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-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	1.11	40.09	3317343.70	1382714.21	40°22'42.085"N	104°21'39.240"W	polygon
SEC.19-T05N-R62W		0.00	1.11	40.09	3317343.70	1382714.21	40°22'42.085"N	104°21'39.240"W	polygon
2) ANTELOPE FEDERAL T-19-18XRLNC BHL (470'FSL & 1386'FEL, SEC.18)	16379.14	6450.00	9831.11	-106.62	3317070.76	1392541.09	40°24'19.222"N	104°21'41.136"W	point
1) ANTELOPE FEDERAL T-19-18XRLNC LP (470'FSL & 1020'FEL, SEC.19)	6794.65	6450.00	251.11	186.64	3317487.03	1382966.06	40°22'44.555"N	104°21'37.346"W	point
SEC.18/19-T05N-R62W (460'SETBACK)		6475.00	1.11	40.09	3317343.70	1382714.21	40°22'42.085"N	104°21'39.240"W	polygon

SURVEY PROGRAM -				
Ref Wellbore: ANTELOPE FEDERAL T-19-18XRLNC PWB		Ref Wellpath: ANTELOPE FEDERAL T-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 T-19-18XRLNC PWB
1550.00	16379.59	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		ANTELOPE FEDERAL T-19-18XRLNC PWB



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 ANTELOPE FEDERAL T-19-18XRLNC (225'FSL & 1208'FEL, SEC.19)
Area	COLORADO	Well	ANTELOPE FEDERAL T-19-18XRLNC
Field	WELD COUNTY	Wellbore	ANTELOPE FEDERAL T-19-18XRLNC PWB
Facility	SEC.19-T05N-R62W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	151.021	17.00	Tie On
1800.00	0.000	151.021	1800.00	End of Tangent
2068.56	5.371	151.021	2068.17	End of Build (XS)
5846.91	5.371	151.021	5829.92	End of Tangent (XS)
6794.65	90.000	358.247	6450.00	End of 3D Arc (XS)
16379.14	90.000	358.247	6450.00	End of Tangent (XS)