

BONANZA CREEK ENERGY

Location: COLORADO Slot: SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)
Field: WELD COUNTY (NAD83/TRUE) Well: STATE ANTELOPE E14-31-30XRLNB
Facility: SEC.31-T05N-R62W Wellbore: STATE ANTELOPE E14-31-30XRLNB PWB

Plot reference wellpath is STATE ANTELOPE E14-31-30XRLNB PWB (REV-D.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17) (RKB)	North Reference: True north
Reference wellpath measured depths are referenced to RIG (17) (RKB)	Scale: True distance
RIG (17) (RKB) to Mean Sea Level: 4569 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: robaird1 on 2020-02-03; Database: WellArchivedDB3

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.31-T05N-R62W			3317947.515	1376496.776	40°21'40.5720"N	104°21'32.4720"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)	-3787.65	-1925.71	3316070.784	1372684.828	40°21'3.1428"N	104°21'57.3444"W
RIG (17) (RKB) to Ground level (At Slot: SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31))					4569ft	
Mean Sea Level to Ground level (At Slot: SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31))					0ft	
RIG (17) (RKB) to Mean Sea Level					4569ft	

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1604.48	BH NavTrak (superseded model)	BH NavTrak (Rotating+Axial Corr)		STATE ANTELOPE E14-31-30XRLNB PWB
1604.48	17112.27	BH AutoTrak Curve (superseded model)	BH AutoTrak Curve (Short)		STATE ANTELOPE E14-31-30XRLNB PWB

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.06-T4N-R62W	N/A	0.00	0.36	-40.14	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W
SEC.30-T5N-R62W	N/A	0.00	0.36	-40.14	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W
SEC.31-T5N-R62W	N/A	0.00	0.36	-40.14	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W
SEC.05-T4N-R62W	N/A	16.00	0.36	-40.14	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W
STATE ANTELOPE E14-31-30XRLNB BHL (470'FNL & 416'FWL, SEC.30)	17112.27	6269.00	9212.39	-2047.24	3312905.99	1381869.88	40°22'34.1760"N	104°22'23.7964"W
STATE ANTELOPE E14-31-30XRLNB LP (10'FSL & 458'FWL, SEC.31)	7261.99	6269.00	-635.77	-2251.55	3313827.65	1372020.34	40°20'56.8593"N	104°22'26.4246"W

Hole and Casing Sections

Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local E (ft)	Start Local N (ft)	End Local E (ft)	End Local N (ft)	Wellbore
9.625in Casing Surface	17.00	1604.48	1587.48	17.00	1600.00	0.00	0.00	-33.33	-54.09	STATE ANTELOPE E14-31-30XRLNB PWB
8.5in Open Hole	1604.48	17112.27	15507.80	1600.00	6269.00	-33.33	-54.09	9212.39	-2047.24	STATE ANTELOPE E14-31-30XRLNB PWB

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	238.361	17.00	0.00	0.00	0.00	0.00
End of Tangent	1000.00	0.000	238.361	1000.00	0.00	0.00	0.00	0.00
End of Build	2535.89	30.718	238.361	2463.36	-210.85	-342.21	2.00	-131.59
End of Tangent	6201.23	30.718	238.361	5614.43	-1192.98	-1936.22	0.00	-744.54
End of 3D Arc	7261.99	90.000	1.188	6269.00	-635.77	-2251.55	10.00	-132.19
End of Tangent	17112.27	90.000	1.188	6269.00	9212.39	-2047.24	0.00	9437.12

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
17112.27	90.000	1.188	6269.00	9212.39	-2047.24	3313905.99	1381869.88	40°22'34.1760"N	104°22'23.7964"W

True Vertical Depth (ft)

Scale 1 inch = 1500'

End of Tangent : 30.72° Inc, 6201.23ft MD, 5614.43ft TVD, -744.54ft VS

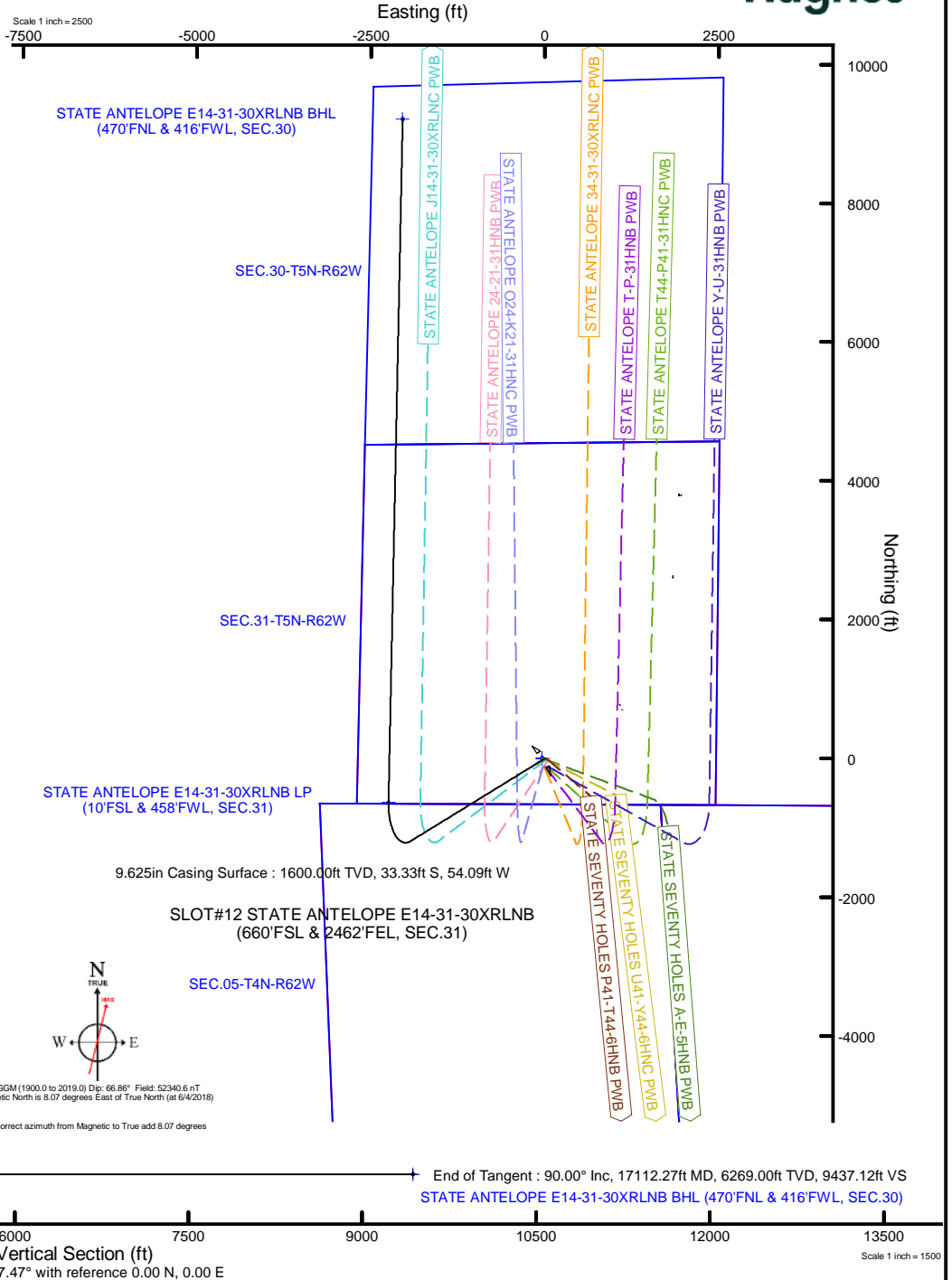
10.00°/100ft

End of 3D Arc : 90.00° Inc, 7261.99ft MD, 6269.00ft TVD, -132.19ft VS

STATE ANTELOPE E14-31-30XRLNB LP (10'FSL & 458'FWL, SEC.31)



Scale 1 inch = 2500'



STATE ANTELOPE E14-31-30XRLNB BHL
(470'FNL & 416'FWL, SEC.30)

SEC.30-T5N-R62W

SEC.31-T5N-R62W

STATE ANTELOPE E14-31-30XRLNB LP
(10'FSL & 458'FWL, SEC.31)

9.625in Casing Surface : 1600.00ft TVD, 33.33ft S, 54.09ft W

SLOT#12 STATE ANTELOPE E14-31-30XRLNB
(660'FSL & 2462'FEL, SEC.31)

SEC.05-T4N-R62W

End of Tangent : 90.00° Inc, 17112.27ft MD, 6269.00ft TVD, 9437.12ft VS
STATE ANTELOPE E14-31-30XRLNB BHL (470'FNL & 416'FWL, SEC.30)

Scale 1 inch = 1500'



Planned Wellpath Report

STATE ANTELOPE E14-31-30XRLNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE E14-31-30XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	True	User	Robiale01
Scale	0.999958	Report Generated	2/3/2020 at 11:37:52 AM
Convergence at slot	0.73° East	Database	WellArchitectDB3

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-3787.65	-1925.71	3316070.78	1372684.83	40°21'3.1428"N	104°21'57.3444"W
Facility Reference Pt			3317947.52	1376496.78	40°21'40.5720"N	104°21'32.4720"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.4000"N	104°41'53.5560"W

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (17") (RKB) to Facility Vertical Datum	4569.00ft
Horizontal Reference Pt	Slot	RIG (17") (RKB) to Mean Sea Level	4569.00ft
Vertical Reference Pt	RIG (17") (RKB)	RIG (17") (RKB) to Ground Level at Slot (SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31))	4569.00ft
MD Reference Pt	RIG (17") (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	347.47°



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Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

WELLPATH DATA (177 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	238.361	0.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
17.00	0.000	238.361	17.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	Tie On
117.00†	0.000	238.361	117.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
217.00†	0.000	238.361	217.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
317.00†	0.000	238.361	317.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
417.00†	0.000	238.361	417.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
517.00†	0.000	238.361	517.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
617.00†	0.000	238.361	617.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
717.00†	0.000	238.361	717.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
817.00†	0.000	238.361	817.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
917.00†	0.000	238.361	917.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	
1000.00	0.000	238.361	1000.00	0.00	0.00	0.00	40°21'3.1428"N	104°21'57.3444"W	0.00	End of Tangent
1017.00†	0.340	238.361	1017.00	-0.02	-0.03	-0.04	40°21'3.1425"N	104°21'57.3450"W	2.00	
1117.00†	2.340	238.361	1116.97	-0.78	-1.25	-2.03	40°21'3.1304"N	104°21'57.3707"W	2.00	
1217.00†	4.340	238.361	1216.79	-2.69	-4.31	-6.99	40°21'3.1002"N	104°21'57.4347"W	2.00	
1317.00†	6.340	238.361	1316.35	-5.74	-9.19	-14.92	40°21'3.0520"N	104°21'57.5371"W	2.00	
1417.00†	8.340	238.361	1415.53	-9.92	-15.89	-25.79	40°21'2.9858"N	104°21'57.6775"W	2.00	
1517.00†	10.340	238.361	1514.20	-15.23	-24.40	-39.61	40°21'2.9016"N	104°21'57.8560"W	2.00	
1617.00†	12.340	238.361	1612.24	-21.67	-34.72	-56.35	40°21'2.7997"N	104°21'58.0722"W	2.00	
1717.00†	14.340	238.361	1709.54	-29.22	-46.82	-75.99	40°21'2.6801"N	104°21'58.3259"W	2.00	
1817.00†	16.340	238.361	1805.97	-37.88	-60.70	-98.51	40°21'2.5430"N	104°21'58.6168"W	2.00	
1917.00†	18.340	238.361	1901.42	-47.64	-76.33	-123.89	40°21'2.3885"N	104°21'58.9445"W	2.00	
2017.00†	20.340	238.361	1995.77	-58.48	-93.70	-152.08	40°21'2.2169"N	104°21'59.3087"W	2.00	
2117.00†	22.340	238.361	2088.91	-70.39	-112.79	-183.06	40°21'2.0282"N	104°21'59.7088"W	2.00	
2217.00†	24.340	238.361	2180.72	-83.36	-133.57	-216.79	40°21'1.8229"N	104°22'0.1444"W	2.00	
2317.00†	26.340	238.361	2271.10	-97.37	-156.02	-253.22	40°21'1.6010"N	104°22'0.6150"W	2.00	
2417.00†	28.340	238.361	2359.92	-112.41	-180.11	-292.32	40°21'1.3630"N	104°22'1.1200"W	2.00	
2517.00†	30.340	238.361	2447.09	-128.45	-205.81	-334.04	40°21'1.1090"N	104°22'1.6588"W	2.00	
2535.89	30.718	238.361	2463.36	-131.59	-210.85	-342.21	40°21'1.0592"N	104°22'1.7643"W	2.00	End of Build
2617.00†	30.718	238.361	2533.09	-145.15	-232.58	-377.48	40°21'0.8445"N	104°22'2.2199"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE E14-31-30XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

WELLPATH DATA (177 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	30.718	238.361	2619.06	-161.88	-259.38	-420.97	40°21'0.5797"N	104°22'2.7816"W	0.00	
2817.00†	30.718	238.361	2705.03	-178.60	-286.17	-464.46	40°21'0.3149"N	104°22'3.3433"W	0.00	
2917.00†	30.718	238.361	2791.00	-195.32	-312.97	-507.95	40°21'0.0501"N	104°22'3.9050"W	0.00	
3017.00†	30.718	238.361	2876.97	-212.05	-339.76	-551.44	40°20'59.7853"N	104°22'4.4666"W	0.00	
3117.00†	30.718	238.361	2962.94	-228.77	-366.56	-594.92	40°20'59.5205"N	104°22'5.0283"W	0.00	
3217.00†	30.718	238.361	3048.91	-245.49	-393.35	-638.41	40°20'59.2557"N	104°22'5.5900"W	0.00	
3317.00†	30.718	238.361	3134.88	-262.21	-420.15	-681.90	40°20'58.9909"N	104°22'6.1517"W	0.00	
3417.00†	30.718	238.361	3220.85	-278.94	-446.94	-725.39	40°20'58.7261"N	104°22'6.7134"W	0.00	
3517.00†	30.718	238.361	3306.82	-295.66	-473.74	-768.88	40°20'58.4613"N	104°22'7.2751"W	0.00	
3617.00†	30.718	238.361	3392.79	-312.38	-500.53	-812.37	40°20'58.1965"N	104°22'7.8367"W	0.00	
3717.00†	30.718	238.361	3478.76	-329.11	-527.33	-855.86	40°20'57.9317"N	104°22'8.3984"W	0.00	
3817.00†	30.718	238.361	3564.73	-345.83	-554.12	-899.35	40°20'57.6669"N	104°22'8.9601"W	0.00	
3917.00†	30.718	238.361	3650.70	-362.55	-580.92	-942.83	40°20'57.4021"N	104°22'9.5218"W	0.00	
4017.00†	30.718	238.361	3736.66	-379.27	-607.71	-986.32	40°20'57.1373"N	104°22'10.0834"W	0.00	
4117.00†	30.718	238.361	3822.63	-396.00	-634.51	-1029.81	40°20'56.8725"N	104°22'10.6451"W	0.00	
4217.00†	30.718	238.361	3908.60	-412.72	-661.31	-1073.30	40°20'56.6077"N	104°22'11.2068"W	0.00	
4317.00†	30.718	238.361	3994.57	-429.44	-688.10	-1116.79	40°20'56.3429"N	104°22'11.7684"W	0.00	
4417.00†	30.718	238.361	4080.54	-446.17	-714.90	-1160.28	40°20'56.0781"N	104°22'12.3301"W	0.00	
4517.00†	30.718	238.361	4166.51	-462.89	-741.69	-1203.77	40°20'55.8133"N	104°22'12.8918"W	0.00	
4617.00†	30.718	238.361	4252.48	-479.61	-768.49	-1247.26	40°20'55.5485"N	104°22'13.4534"W	0.00	
4717.00†	30.718	238.361	4338.45	-496.33	-795.28	-1290.75	40°20'55.2837"N	104°22'14.0151"W	0.00	
4817.00†	30.718	238.361	4424.42	-513.06	-822.08	-1334.23	40°20'55.0189"N	104°22'14.5768"W	0.00	
4917.00†	30.718	238.361	4510.39	-529.78	-848.87	-1377.72	40°20'54.7541"N	104°22'15.1384"W	0.00	
5017.00†	30.718	238.361	4596.36	-546.50	-875.67	-1421.21	40°20'54.4893"N	104°22'15.7001"W	0.00	
5117.00†	30.718	238.361	4682.33	-563.23	-902.46	-1464.70	40°20'54.2245"N	104°22'16.2618"W	0.00	
5217.00†	30.718	238.361	4768.30	-579.95	-929.26	-1508.19	40°20'53.9597"N	104°22'16.8234"W	0.00	
5317.00†	30.718	238.361	4854.27	-596.67	-956.05	-1551.68	40°20'53.6949"N	104°22'17.3851"W	0.00	
5417.00†	30.718	238.361	4940.24	-613.40	-982.85	-1595.17	40°20'53.4301"N	104°22'17.9467"W	0.00	
5517.00†	30.718	238.361	5026.21	-630.12	-1009.64	-1638.66	40°20'53.1652"N	104°22'18.5084"W	0.00	
5617.00†	30.718	238.361	5112.18	-646.84	-1036.44	-1682.14	40°20'52.9004"N	104°22'19.0700"W	0.00	



Planned Wellpath Report
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE E14-31-30XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

WELLPATH DATA (177 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	30.718	238.361	5198.14	-663.56	-1063.23	-1725.63	40°20'52.6356"N	104°22'19.6317"W	0.00	
5817.00†	30.718	238.361	5284.11	-680.29	-1090.03	-1769.12	40°20'52.3708"N	104°22'20.1933"W	0.00	
5917.00†	30.718	238.361	5370.08	-697.01	-1116.82	-1812.61	40°20'52.1060"N	104°22'20.7550"W	0.00	
6017.00†	30.718	238.361	5456.05	-713.73	-1143.62	-1856.10	40°20'51.8412"N	104°22'21.3166"W	0.00	
6117.00†	30.718	238.361	5542.02	-730.46	-1170.41	-1899.59	40°20'51.5764"N	104°22'21.8783"W	0.00	
6201.23	30.718	238.361	5614.43	-744.54	-1192.98	-1936.22	40°20'51.3533"N	104°22'22.3514"W	0.00	End of Tangent
6217.00†	29.982	241.121	5628.04	-746.97	-1197.00	-1943.10	40°20'51.3136"N	104°22'22.4402"W	10.00	
6317.00†	26.884	261.198	5716.17	-752.55	-1212.57	-1987.43	40°20'51.1598"N	104°22'23.0128"W	10.00	
6417.00†	27.056	283.354	5805.52	-741.12	-1210.77	-2032.02	40°20'51.1775"N	104°22'23.5886"W	10.00	
6517.00†	30.442	303.023	5893.38	-713.03	-1191.66	-2075.50	40°20'51.3663"N	104°22'24.1502"W	10.00	
6617.00†	36.146	318.066	5977.08	-669.15	-1155.82	-2116.55	40°20'51.7204"N	104°22'24.6805"W	10.00	
6717.00†	43.250	329.132	6054.07	-610.78	-1104.35	-2153.93	40°20'52.2290"N	104°22'25.1633"W	10.00	
6817.00†	51.165	337.489	6122.01	-539.73	-1038.79	-2186.50	40°20'52.8768"N	104°22'25.5841"W	10.00	
6917.00†	59.553	344.122	6178.85	-458.13	-961.16	-2213.28	40°20'53.6439"N	104°22'25.9299"W	10.00	
7017.00†	68.222	349.682	6222.85	-368.47	-873.79	-2233.44	40°20'54.5072"N	104°22'26.1904"W	10.00	
7117.00†	77.056	354.599	6252.67	-273.48	-779.36	-2246.37	40°20'55.4404"N	104°22'26.3576"W	10.00	
7217.00†	85.975	359.175	6267.42	-176.04	-680.72	-2251.69	40°20'56.4151"N	104°22'26.4264"W	10.00	
7261.99	90.000	1.188	6269.00 ¹	-132.19	-635.77	-2251.55	40°20'56.8593"N	104°22'26.4246"W	10.00	End of 3D Arc
7317.00†	90.000	1.188	6269.00	-78.75	-580.78	-2250.41	40°20'57.4027"N	104°22'26.4099"W	0.00	
7417.00†	90.000	1.188	6269.00	18.39	-480.80	-2248.33	40°20'58.3907"N	104°22'26.3833"W	0.00	
7517.00†	90.000	1.188	6269.00	115.54	-380.82	-2246.26	40°20'59.3786"N	104°22'26.3566"W	0.00	
7617.00†	90.000	1.188	6269.00	212.69	-280.84	-2244.18	40°21'0.3666"N	104°22'26.3299"W	0.00	
7717.00†	90.000	1.188	6269.00	309.84	-180.86	-2242.11	40°21'1.3546"N	104°22'26.3033"W	0.00	
7817.00†	90.000	1.188	6269.00	406.98	-80.88	-2240.04	40°21'2.3425"N	104°22'26.2766"W	0.00	
7917.00†	90.000	1.188	6269.00	504.13	19.09	-2237.96	40°21'3.3305"N	104°22'26.2499"W	0.00	
8017.00†	90.000	1.188	6269.00	601.28	119.07	-2235.89	40°21'4.3185"N	104°22'26.2232"W	0.00	
8117.00†	90.000	1.188	6269.00	698.43	219.05	-2233.81	40°21'5.3064"N	104°22'26.1966"W	0.00	
8217.00†	90.000	1.188	6269.00	795.58	319.03	-2231.74	40°21'6.2944"N	104°22'26.1699"W	0.00	
8317.00†	90.000	1.188	6269.00	892.72	419.01	-2229.67	40°21'7.2823"N	104°22'26.1432"W	0.00	
8417.00†	90.000	1.188	6269.00	989.87	518.99	-2227.59	40°21'8.2703"N	104°22'26.1165"W	0.00	



Planned Wellpath Report
STATE ANTELOPE E14-31-30XRLNB PWP (REV-D.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE E14-31-30XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

WELLPATH DATA (177 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	1.188	6269.00	1087.02	618.97	-2225.52	40°21'9.2583"N	104°22'26.0899"W	0.00	
8617.00†	90.000	1.188	6269.00	1184.17	718.94	-2223.44	40°21'10.2462"N	104°22'26.0632"W	0.00	
8717.00†	90.000	1.188	6269.00	1281.31	818.92	-2221.37	40°21'11.2342"N	104°22'26.0365"W	0.00	
8817.00†	90.000	1.188	6269.00	1378.46	918.90	-2219.29	40°21'12.2221"N	104°22'26.0098"W	0.00	
8917.00†	90.000	1.188	6269.00	1475.61	1018.88	-2217.22	40°21'13.2101"N	104°22'25.9832"W	0.00	
9017.00†	90.000	1.188	6269.00	1572.76	1118.86	-2215.15	40°21'14.1981"N	104°22'25.9565"W	0.00	
9117.00†	90.000	1.188	6269.00	1669.90	1218.84	-2213.07	40°21'15.1860"N	104°22'25.9298"W	0.00	
9217.00†	90.000	1.188	6269.00	1767.05	1318.82	-2211.00	40°21'16.1740"N	104°22'25.9031"W	0.00	
9317.00†	90.000	1.188	6269.00	1864.20	1418.79	-2208.92	40°21'17.1619"N	104°22'25.8765"W	0.00	
9417.00†	90.000	1.188	6269.00	1961.35	1518.77	-2206.85	40°21'18.1499"N	104°22'25.8498"W	0.00	
9517.00†	90.000	1.188	6269.00	2058.49	1618.75	-2204.78	40°21'19.1379"N	104°22'25.8231"W	0.00	
9617.00†	90.000	1.188	6269.00	2155.64	1718.73	-2202.70	40°21'20.1258"N	104°22'25.7964"W	0.00	
9717.00†	90.000	1.188	6269.00	2252.79	1818.71	-2200.63	40°21'21.1138"N	104°22'25.7698"W	0.00	
9817.00†	90.000	1.188	6269.00	2349.94	1918.69	-2198.55	40°21'22.1017"N	104°22'25.7431"W	0.00	
9917.00†	90.000	1.188	6269.00	2447.09	2018.66	-2196.48	40°21'23.0897"N	104°22'25.7164"W	0.00	
10017.00†	90.000	1.188	6269.00	2544.23	2118.64	-2194.41	40°21'24.0777"N	104°22'25.6897"W	0.00	
10117.00†	90.000	1.188	6269.00	2641.38	2218.62	-2192.33	40°21'25.0656"N	104°22'25.6631"W	0.00	
10217.00†	90.000	1.188	6269.00	2738.53	2318.60	-2190.26	40°21'26.0536"N	104°22'25.6364"W	0.00	
10317.00†	90.000	1.188	6269.00	2835.68	2418.58	-2188.18	40°21'27.0415"N	104°22'25.6097"W	0.00	
10417.00†	90.000	1.188	6269.00	2932.82	2518.56	-2186.11	40°21'28.0295"N	104°22'25.5830"W	0.00	
10517.00†	90.000	1.188	6269.00	3029.97	2618.54	-2184.03	40°21'29.0175"N	104°22'25.5564"W	0.00	
10617.00†	90.000	1.188	6269.00	3127.12	2718.51	-2181.96	40°21'30.0054"N	104°22'25.5297"W	0.00	
10717.00†	90.000	1.188	6269.00	3224.27	2818.49	-2179.89	40°21'30.9934"N	104°22'25.5030"W	0.00	
10817.00†	90.000	1.188	6269.00	3321.41	2918.47	-2177.81	40°21'31.9813"N	104°22'25.4763"W	0.00	
10917.00†	90.000	1.188	6269.00	3418.56	3018.45	-2175.74	40°21'32.9693"N	104°22'25.4496"W	0.00	
11017.00†	90.000	1.188	6269.00	3515.71	3118.43	-2173.66	40°21'33.9573"N	104°22'25.4230"W	0.00	
11117.00†	90.000	1.188	6269.00	3612.86	3218.41	-2171.59	40°21'34.9452"N	104°22'25.3963"W	0.00	
11217.00†	90.000	1.188	6269.00	3710.01	3318.39	-2169.52	40°21'35.9332"N	104°22'25.3696"W	0.00	
11317.00†	90.000	1.188	6269.00	3807.15	3418.36	-2167.44	40°21'36.9211"N	104°22'25.3429"W	0.00	
11417.00†	90.000	1.188	6269.00	3904.30	3518.34	-2165.37	40°21'37.9091"N	104°22'25.3162"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE E14-31-30XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

WELLPATH DATA (177 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	1.188	6269.00	4001.45	3618.32	-2163.29	40°21'38.8971"N	104°22'25.2896"W	0.00	
11617.00†	90.000	1.188	6269.00	4098.60	3718.30	-2161.22	40°21'39.8850"N	104°22'25.2629"W	0.00	
11717.00†	90.000	1.188	6269.00	4195.74	3818.28	-2159.15	40°21'40.8730"N	104°22'25.2362"W	0.00	
11817.00†	90.000	1.188	6269.00	4292.89	3918.26	-2157.07	40°21'41.8609"N	104°22'25.2095"W	0.00	
11917.00†	90.000	1.188	6269.00	4390.04	4018.23	-2155.00	40°21'42.8489"N	104°22'25.1828"W	0.00	
12017.00†	90.000	1.188	6269.00	4487.19	4118.21	-2152.92	40°21'43.8369"N	104°22'25.1562"W	0.00	
12117.00†	90.000	1.188	6269.00	4584.33	4218.19	-2150.85	40°21'44.8248"N	104°22'25.1295"W	0.00	
12217.00†	90.000	1.188	6269.00	4681.48	4318.17	-2148.77	40°21'45.8128"N	104°22'25.1028"W	0.00	
12317.00†	90.000	1.188	6269.00	4778.63	4418.15	-2146.70	40°21'46.8007"N	104°22'25.0761"W	0.00	
12417.00†	90.000	1.188	6269.00	4875.78	4518.13	-2144.63	40°21'47.7887"N	104°22'25.0494"W	0.00	
12517.00†	90.000	1.188	6269.00	4972.92	4618.11	-2142.55	40°21'48.7767"N	104°22'25.0228"W	0.00	
12617.00†	90.000	1.188	6269.00	5070.07	4718.08	-2140.48	40°21'49.7646"N	104°22'24.9961"W	0.00	
12717.00†	90.000	1.188	6269.00	5167.22	4818.06	-2138.40	40°21'50.7526"N	104°22'24.9694"W	0.00	
12817.00†	90.000	1.188	6269.00	5264.37	4918.04	-2136.33	40°21'51.7405"N	104°22'24.9427"W	0.00	
12917.00†	90.000	1.188	6269.00	5361.52	5018.02	-2134.26	40°21'52.7285"N	104°22'24.9160"W	0.00	
13017.00†	90.000	1.188	6269.00	5458.66	5118.00	-2132.18	40°21'53.7164"N	104°22'24.8893"W	0.00	
13117.00†	90.000	1.188	6269.00	5555.81	5217.98	-2130.11	40°21'54.7044"N	104°22'24.8627"W	0.00	
13217.00†	90.000	1.188	6269.00	5652.96	5317.95	-2128.03	40°21'55.6924"N	104°22'24.8360"W	0.00	
13317.00†	90.000	1.188	6269.00	5750.11	5417.93	-2125.96	40°21'56.6803"N	104°22'24.8093"W	0.00	
13417.00†	90.000	1.188	6269.00	5847.25	5517.91	-2123.89	40°21'57.6683"N	104°22'24.7826"W	0.00	
13517.00†	90.000	1.188	6269.00	5944.40	5617.89	-2121.81	40°21'58.6562"N	104°22'24.7559"W	0.00	
13617.00†	90.000	1.188	6269.00	6041.55	5717.87	-2119.74	40°21'59.6442"N	104°22'24.7292"W	0.00	
13717.00†	90.000	1.188	6269.00	6138.70	5817.85	-2117.66	40°22'0.6322"N	104°22'24.7025"W	0.00	
13817.00†	90.000	1.188	6269.00	6235.84	5917.83	-2115.59	40°22'1.6201"N	104°22'24.6759"W	0.00	
13917.00†	90.000	1.188	6269.00	6332.99	6017.80	-2113.51	40°22'2.6081"N	104°22'24.6492"W	0.00	
14017.00†	90.000	1.188	6269.00	6430.14	6117.78	-2111.44	40°22'3.5960"N	104°22'24.6225"W	0.00	
14117.00†	90.000	1.188	6269.00	6527.29	6217.76	-2109.37	40°22'4.5840"N	104°22'24.5958"W	0.00	
14217.00†	90.000	1.188	6269.00	6624.43	6317.74	-2107.29	40°22'5.5719"N	104°22'24.5691"W	0.00	
14317.00†	90.000	1.188	6269.00	6721.58	6417.72	-2105.22	40°22'6.5599"N	104°22'24.5424"W	0.00	
14417.00†	90.000	1.188	6269.00	6818.73	6517.70	-2103.14	40°22'7.5479"N	104°22'24.5158"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE E14-31-30XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

WELLPATH DATA (177 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	1.188	6269.00	6915.88	6617.68	-2101.07	40°22'8.5358"N	104°22'24.4891"W	0.00	
14617.00†	90.000	1.188	6269.00	7013.03	6717.65	-2099.00	40°22'9.5238"N	104°22'24.4624"W	0.00	
14717.00†	90.000	1.188	6269.00	7110.17	6817.63	-2096.92	40°22'10.5117"N	104°22'24.4357"W	0.00	
14817.00†	90.000	1.188	6269.00	7207.32	6917.61	-2094.85	40°22'11.4997"N	104°22'24.4090"W	0.00	
14917.00†	90.000	1.188	6269.00	7304.47	7017.59	-2092.77	40°22'12.4876"N	104°22'24.3823"W	0.00	
15017.00†	90.000	1.188	6269.00	7401.62	7117.57	-2090.70	40°22'13.4756"N	104°22'24.3556"W	0.00	
15117.00†	90.000	1.188	6269.00	7498.76	7217.55	-2088.63	40°22'14.4636"N	104°22'24.3289"W	0.00	
15217.00†	90.000	1.188	6269.00	7595.91	7317.52	-2086.55	40°22'15.4515"N	104°22'24.3023"W	0.00	
15317.00†	90.000	1.188	6269.00	7693.06	7417.50	-2084.48	40°22'16.4395"N	104°22'24.2756"W	0.00	
15417.00†	90.000	1.188	6269.00	7790.21	7517.48	-2082.40	40°22'17.4274"N	104°22'24.2489"W	0.00	
15517.00†	90.000	1.188	6269.00	7887.35	7617.46	-2080.33	40°22'18.4154"N	104°22'24.2222"W	0.00	
15617.00†	90.000	1.188	6269.00	7984.50	7717.44	-2078.25	40°22'19.4033"N	104°22'24.1955"W	0.00	
15717.00†	90.000	1.188	6269.00	8081.65	7817.42	-2076.18	40°22'20.3913"N	104°22'24.1688"W	0.00	
15817.00†	90.000	1.188	6269.00	8178.80	7917.40	-2074.11	40°22'21.3793"N	104°22'24.1421"W	0.00	
15917.00†	90.000	1.188	6269.00	8275.95	8017.37	-2072.03	40°22'22.3672"N	104°22'24.1154"W	0.00	
16017.00†	90.000	1.188	6269.00	8373.09	8117.35	-2069.96	40°22'23.3552"N	104°22'24.0887"W	0.00	
16117.00†	90.000	1.188	6269.00	8470.24	8217.33	-2067.88	40°22'24.3431"N	104°22'24.0621"W	0.00	
16217.00†	90.000	1.188	6269.00	8567.39	8317.31	-2065.81	40°22'25.3311"N	104°22'24.0354"W	0.00	
16317.00†	90.000	1.188	6269.00	8664.54	8417.29	-2063.74	40°22'26.3190"N	104°22'24.0087"W	0.00	
16417.00†	90.000	1.188	6269.00	8761.68	8517.27	-2061.66	40°22'27.3070"N	104°22'23.9820"W	0.00	
16517.00†	90.000	1.188	6269.00	8858.83	8617.24	-2059.59	40°22'28.2950"N	104°22'23.9553"W	0.00	
16617.00†	90.000	1.188	6269.00	8955.98	8717.22	-2057.51	40°22'29.2829"N	104°22'23.9286"W	0.00	
16717.00†	90.000	1.188	6269.00	9053.13	8817.20	-2055.44	40°22'30.2709"N	104°22'23.9019"W	0.00	
16817.00†	90.000	1.188	6269.00	9150.27	8917.18	-2053.37	40°22'31.2588"N	104°22'23.8752"W	0.00	
16917.00†	90.000	1.188	6269.00	9247.42	9017.16	-2051.29	40°22'32.2468"N	104°22'23.8485"W	0.00	
17017.00†	90.000	1.188	6269.00	9344.57	9117.14	-2049.22	40°22'33.2347"N	104°22'23.8218"W	0.00	
17112.27	90.000	1.188	6269.00 ²	9437.12	9212.39	-2047.24	40°22'34.1760"N	104°22'23.7964"W	0.00	End of Tangent



Planned Wellpath Report

STATE ANTELOPE E14-31-30XRLNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE E14-31-30XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

SURVEY PROGRAM - Ref Wellbore: STATE ANTELOPE E14-31-30XRLNB PWB Ref Wellpath: STATE ANTELOPE E14-31-30XRLNB PWP (REV-D.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1604.48	BHI NaviTrak (Rotating+Axial Corr)		STATE ANTELOPE E14-31-30XRLNB PWB
1604.48	17112.27	BH AutoTrak Curve (Short)		STATE ANTELOPE E14-31-30XRLNB PWB



Planned Wellpath Report

STATE ANTELOPE E14-31-30XRLNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE ANTELOPE E14-31-30XRLNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE ANTELOPE E14-31-30XRLNB PWB
Slot	SLOT#12 STATE ANTELOPE E14-31-30XRLNB (660'FSL & 2462'FEL, SEC.31)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	238.361	17.00	Tie On
1000.00	0.000	238.361	1000.00	End of Tangent
2535.89	30.718	238.361	2463.36	End of Build
6201.23	30.718	238.361	5614.43	End of Tangent
7261.99	90.000	1.188	6269.00	End of 3D Arc
17112.27	90.000	1.188	6269.00	End of Tangent