

BONANZA CREEK ENERGY OPERATING

Well Name: STATE ANTELOPE 11-13HZ

Surface Location: STATE ANTELOPE 11-13HZ PAD 13-5N-62W
North American Datum 1983 , US State Plane 1983Colorado Northern Zone

Ground Elevation: 4571.0

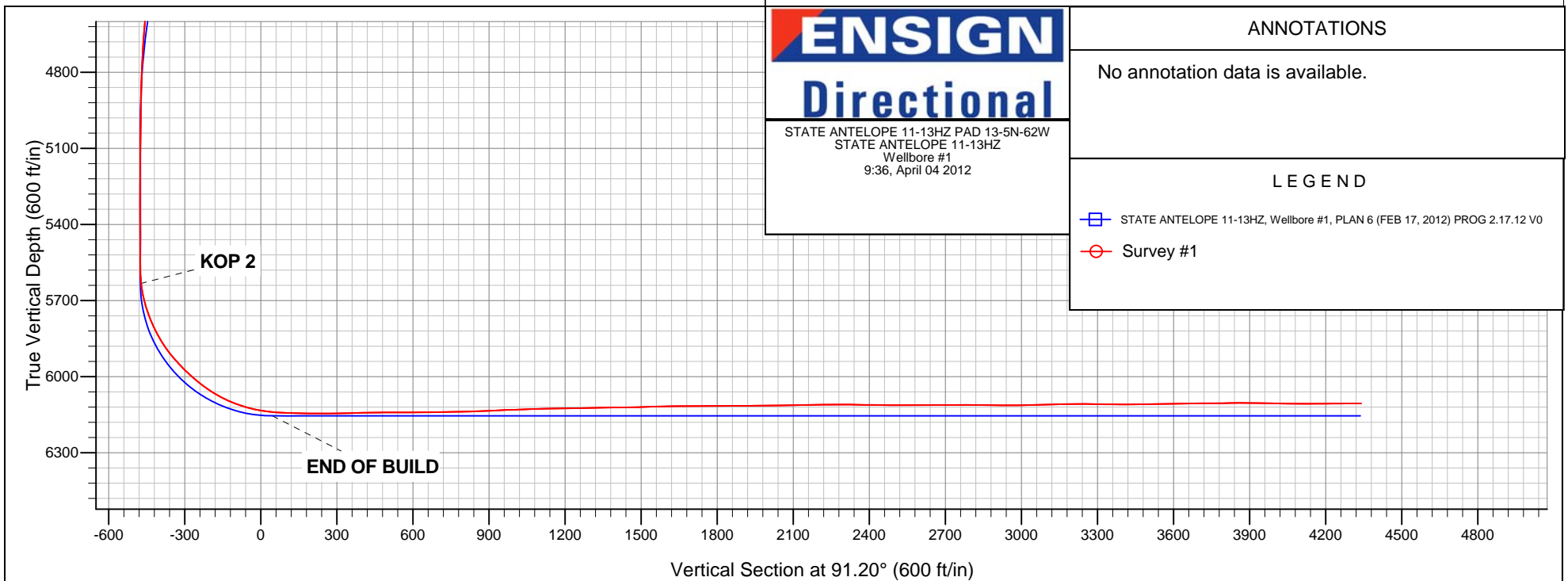
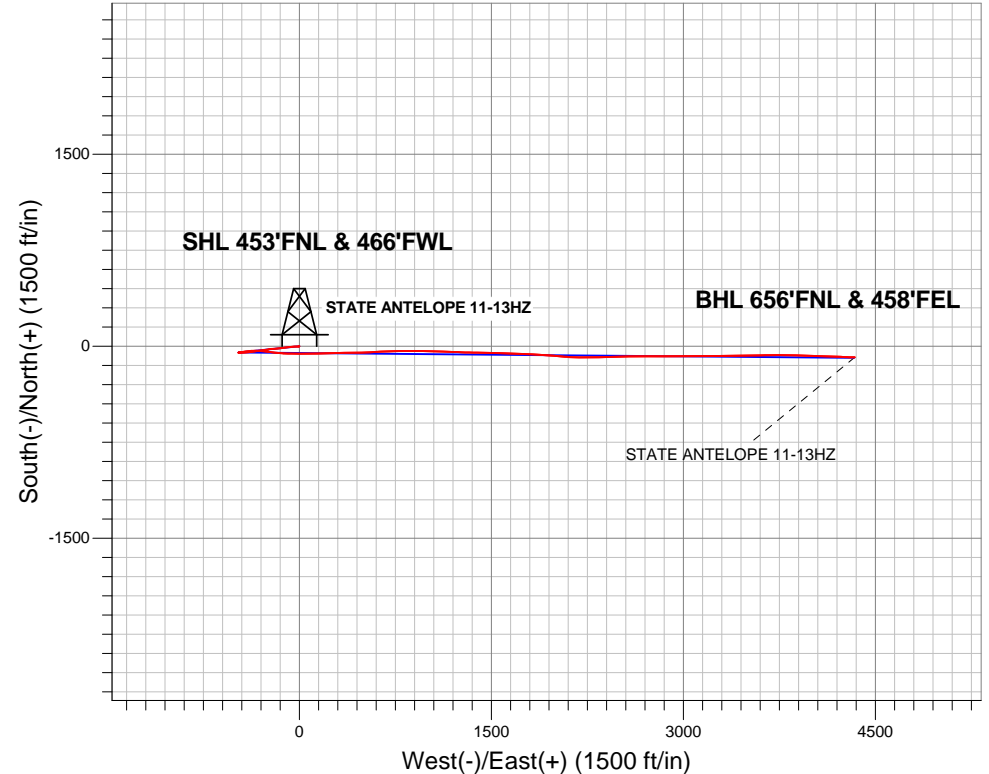
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1393345.39	3339988.90	40.406710	-104.279100	

ENSIGN RIG 12 KB 12' RKB @ 4583.0ft (ENSIGN RIG 12 KB 12')

FINAL SURVEY

Projected Bottom Hole Location
10743' MD 6106' TVD 86' S & 4338' E of SHL

90.30 degree Incl @ 91.00 degree AZM





BONANZA CREEK ENERGY OPERATING

SEC.13-T5N-R62W

STATE ANTELOPE 11-13HZ PAD 13-5N-62W

STATE ANTELOPE 11-13HZ

Wellbore #1

Survey: Survey #1

Standard Survey Report

04 April, 2012

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well STATE ANTELOPE 11-13HZ
Project:	SEC.13-T5N-R62W	TVD Reference:	RKB @ 4583.0ft (ENSIGN RIG 12 KB 12')
Site:	STATE ANTELOPE 11-13HZ PAD 13-5N-62W	MD Reference:	RKB @ 4583.0ft (ENSIGN RIG 12 KB 12')
Well:	STATE ANTELOPE 11-13HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.13-T5N-R62W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		STATE ANTELOPE 11-13HZ PAD 13-5N-62W			
Site Position:		Northing:	1,393,338.03ft	Latitude:	40.406690
From:	Lat/Long	Easting:	3,339,983.43ft	Longitude:	-104.279120
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.79 °

Well	STATE ANTELOPE 11-13HZ					
Well Position	+N-S	0.0 ft	Northing:	1,393,345.39 ft	Latitude:	40.406710
	+E-W	0.0 ft	Easting:	3,339,988.90 ft	Longitude:	-104.279100
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,571.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/28/2011	8.54	67.12	53,141
	IGRF2010	2/16/2012	8.51	67.11	53,117

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	6,155.0	0.0	0.0	91.20	

Survey Program		Date	4/4/2012	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
505.0	10,743.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard

Survey		Wellbore Data							
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
HARDLINES 460'									
505.0	0.50	246.30	505.0	-0.9	-2.0	-2.0	0.10	0.10	0.00
599.0	0.50	235.80	599.0	-1.3	-2.7	-2.7	0.10	0.00	-11.17
694.0	0.50	232.50	694.0	-1.8	-3.4	-3.4	0.03	0.00	-3.47
788.0	0.50	235.60	788.0	-2.2	-4.1	-4.0	0.03	0.00	3.30
882.0	0.60	242.80	882.0	-2.7	-4.8	-4.8	0.13	0.11	7.66
975.0	0.90	272.20	975.0	-2.9	-6.0	-5.9	0.51	0.32	31.61
1,070.0	3.10	280.10	1,069.9	-2.4	-9.3	-9.2	2.33	2.32	8.32
1,164.0	4.80	274.50	1,163.7	-1.7	-15.7	-15.7	1.85	1.81	-5.96
1,258.0	6.20	263.60	1,257.2	-1.9	-24.7	-24.6	1.85	1.49	-11.60
1,352.0	7.70	264.40	1,350.6	-3.1	-36.0	-35.9	1.60	1.60	0.85

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Site:	STATE ANTELOPE 11-13HZ PAD 13-5N-62W	MD Reference:	RKB @ 4583.0ft (ENSIGN RIG 12 KB 12')
Well:	STATE ANTELOPE 11-13HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,445.0	8.00	267.40	1,442.7	-4.0	-48.6	-48.6	0.55	0.32	3.23
1,539.0	7.60	265.30	1,535.8	-4.8	-61.4	-61.3	0.52	-0.43	-2.23
1,631.0	7.50	263.30	1,627.0	-6.0	-73.4	-73.3	0.31	-0.11	-2.17
1,724.0	7.70	265.70	1,719.2	-7.2	-85.6	-85.5	0.40	0.22	2.58
1,818.0	6.80	262.90	1,812.4	-8.3	-97.4	-97.3	1.03	-0.96	-2.98
1,910.0	6.80	258.60	1,903.8	-10.1	-108.2	-108.0	0.55	0.00	-4.67
2,004.0	7.00	259.70	1,997.1	-12.2	-119.3	-119.0	0.26	0.21	1.17
2,096.0	6.10	262.50	2,088.5	-13.9	-129.6	-129.3	1.04	-0.98	3.04
2,190.0	6.20	262.30	2,182.0	-15.2	-139.6	-139.3	0.11	0.11	-0.21
2,283.0	7.10	265.70	2,274.4	-16.3	-150.3	-150.0	1.06	0.97	3.66
2,376.0	7.60	263.40	2,366.6	-17.4	-162.2	-161.8	0.62	0.54	-2.47
2,470.0	7.60	264.60	2,459.8	-18.7	-174.5	-174.1	0.17	0.00	1.28
2,564.0	7.50	269.00	2,552.9	-19.4	-186.9	-186.4	0.62	-0.11	4.68
2,657.0	7.80	267.30	2,645.1	-19.8	-199.2	-198.8	0.40	0.32	-1.83
2,751.0	7.30	265.30	2,738.3	-20.6	-211.6	-211.1	0.60	-0.53	-2.13
2,845.0	6.70	261.10	2,831.6	-22.0	-222.9	-222.4	0.84	-0.64	-4.47
2,939.0	7.30	260.40	2,924.9	-23.8	-234.2	-233.7	0.64	0.64	-0.74
3,032.0	7.00	259.50	3,017.2	-25.8	-245.6	-245.0	0.34	-0.32	-0.97
3,125.0	6.60	264.30	3,109.5	-27.4	-256.5	-255.9	0.75	-0.43	5.16
3,219.0	7.70	260.90	3,202.8	-28.9	-268.1	-267.5	1.25	1.17	-3.62
3,313.0	8.50	263.40	3,295.9	-30.7	-281.2	-280.5	0.93	0.85	2.66
3,407.0	10.00	262.90	3,388.6	-32.5	-296.2	-295.5	1.60	1.60	-0.53
3,501.0	11.10	260.90	3,481.0	-35.0	-313.3	-312.5	1.23	1.17	-2.13
3,595.0	10.70	260.60	3,573.3	-37.8	-330.8	-330.0	0.43	-0.43	-0.32
3,689.0	10.60	261.50	3,665.7	-40.5	-348.0	-347.1	0.21	-0.11	0.96
3,781.0	9.50	263.70	3,756.3	-42.6	-363.9	-362.9	1.27	-1.20	2.39
3,875.0	8.30	262.50	3,849.2	-44.3	-378.3	-377.3	1.29	-1.28	-1.28
3,969.0	6.80	263.90	3,942.4	-45.8	-390.6	-389.5	1.61	-1.60	1.49
4,063.0	6.20	266.00	4,035.8	-46.8	-401.2	-400.1	0.69	-0.64	2.23
4,157.0	5.80	263.00	4,129.2	-47.7	-411.0	-409.9	0.54	-0.43	-3.19
4,251.0	5.80	262.00	4,222.8	-48.9	-420.4	-419.3	0.11	0.00	-1.06
4,345.0	6.30	266.20	4,316.2	-49.9	-430.2	-429.1	0.71	0.53	4.47
4,439.0	6.20	271.30	4,409.7	-50.2	-440.5	-439.3	0.60	-0.11	5.43
4,532.0	5.20	271.00	4,502.2	-50.0	-449.7	-448.5	1.08	-1.08	-0.32
4,626.0	4.70	271.70	4,595.9	-49.8	-457.8	-456.7	0.54	-0.53	0.74
4,720.0	3.70	272.00	4,689.6	-49.6	-464.7	-463.5	1.06	-1.06	0.32
4,813.0	2.60	272.90	4,782.5	-49.4	-469.8	-468.6	1.18	-1.18	0.97
4,906.0	1.30	259.70	4,875.4	-49.4	-472.9	-471.8	1.47	-1.40	-14.19
4,998.0	1.10	217.90	4,967.4	-50.3	-474.5	-473.3	0.95	-0.22	-45.43
5,092.0	0.70	230.00	5,061.4	-51.4	-475.5	-474.3	0.47	-0.43	12.87
5,185.0	0.40	228.80	5,154.4	-52.0	-476.2	-475.0	0.32	-0.32	-1.29
5,279.0	0.20	287.10	5,248.4	-52.1	-476.6	-475.4	0.36	-0.21	62.02
5,373.0	0.10	263.00	5,342.4	-52.1	-476.8	-475.6	0.12	-0.11	-25.64
5,467.0	0.10	43.70	5,436.4	-52.1	-476.8	-475.6	0.20	0.00	149.68
5,530.0	0.50	15.70	5,499.4	-51.8	-476.7	-475.5	0.66	0.63	-44.44
5,559.0	0.50	7.60	5,528.4	-51.5	-476.7	-475.5	0.24	0.00	-27.93
5,590.0	0.80	42.80	5,559.4	-51.2	-476.5	-475.3	1.57	0.97	113.55
5,621.0	2.10	60.50	5,590.4	-50.8	-475.9	-474.7	4.39	4.19	57.10
5,652.0	5.00	75.10	5,621.3	-50.1	-474.1	-472.9	9.72	9.35	47.10
5,683.0	8.70	79.50	5,652.1	-49.4	-470.5	-469.3	12.05	11.94	14.19
5,714.0	12.50	80.40	5,682.5	-48.4	-464.8	-463.7	12.27	12.26	2.90
5,746.0	15.90	80.10	5,713.6	-47.1	-457.1	-456.0	10.63	10.63	-0.94
5,777.0	19.00	82.00	5,743.1	-45.6	-447.9	-446.9	10.17	10.00	6.13
5,808.0	22.20	83.40	5,772.1	-44.2	-437.1	-436.1	10.44	10.32	4.52

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Well:	STATE ANTELOPE 11-13HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,839.0	25.60	80.80	5,800.5	-42.5	-424.7	-423.7	11.48	10.97	-8.39	
5,871.0	28.30	81.60	5,829.0	-40.3	-410.3	-409.4	8.51	8.44	2.50	
5,901.0	30.20	84.10	5,855.2	-38.5	-395.8	-394.9	7.53	6.33	8.33	
5,933.0	34.00	85.90	5,882.3	-37.0	-378.9	-378.0	12.24	11.88	5.63	
5,964.0	38.10	87.60	5,907.3	-36.0	-360.7	-359.8	13.61	13.23	5.48	
5,995.0	41.50	91.00	5,931.2	-35.8	-340.8	-340.0	13.02	10.97	10.97	
6,026.0	44.20	93.20	5,953.9	-36.5	-319.8	-318.9	9.96	8.71	7.10	
6,057.0	44.60	95.20	5,976.0	-38.1	-298.1	-297.3	4.69	1.29	6.45	
6,088.0	48.50	95.90	5,997.4	-40.3	-275.7	-274.8	12.69	12.58	2.26	
6,119.0	50.70	96.40	6,017.4	-42.8	-252.3	-251.3	7.20	7.10	1.61	
6,151.0	53.30	97.10	6,037.1	-45.8	-227.2	-226.2	8.31	8.13	2.19	
6,182.0	56.50	96.90	6,055.0	-48.9	-202.1	-201.0	10.34	10.32	-0.65	
6,213.0	60.30	96.00	6,071.2	-51.9	-175.8	-174.7	12.50	12.26	-2.90	
6,244.0	63.30	93.90	6,085.9	-54.2	-148.6	-147.4	11.37	9.68	-6.77	
6,276.0	67.30	92.70	6,099.2	-55.9	-119.6	-118.4	12.96	12.50	-3.75	
6,307.0	70.60	92.00	6,110.4	-57.1	-90.7	-89.5	10.85	10.65	-2.26	
6,338.0	73.60	91.00	6,119.9	-57.8	-61.2	-60.0	10.15	9.68	-3.23	
6,369.0	77.20	90.80	6,127.7	-58.3	-31.2	-30.0	11.63	11.61	-0.65	
6,403.9	80.85	91.04	6,134.3	-58.9	3.0	4.2	10.49	10.47	0.70	
TARGET 1 460°FNL & 460°FWL										
6,412.0	81.70	91.10	6,135.6	-59.0	11.0	12.3	10.49	10.47	0.69	
6,483.0	87.40	88.10	6,142.3	-58.5	81.7	82.9	9.06	8.03	-4.23	
6,514.0	87.90	88.30	6,143.6	-57.5	112.6	113.8	1.74	1.61	0.65	
6,546.0	88.80	88.30	6,144.5	-56.6	144.6	145.8	2.81	2.81	0.00	
6,577.0	89.10	88.50	6,145.1	-55.7	175.6	176.7	1.16	0.97	0.65	
6,608.0	89.40	88.70	6,145.5	-55.0	206.6	207.7	1.16	0.97	0.65	
6,639.0	89.50	88.50	6,145.8	-54.2	237.6	238.7	0.72	0.32	-0.65	
6,671.0	90.70	89.40	6,145.7	-53.6	269.6	270.6	4.69	3.75	2.81	
6,702.0	91.00	89.20	6,145.3	-53.2	300.6	301.6	1.16	0.97	-0.65	
6,734.0	91.40	89.20	6,144.6	-52.8	332.6	333.6	1.25	1.25	0.00	
6,765.0	92.10	89.20	6,143.6	-52.4	363.5	364.6	2.26	2.26	0.00	
6,796.0	90.70	88.70	6,142.9	-51.8	394.5	395.5	4.80	-4.52	-1.61	
6,828.0	90.90	89.20	6,142.4	-51.2	426.5	427.5	1.68	0.63	1.56	
6,859.0	91.70	89.00	6,141.7	-50.7	457.5	458.5	2.66	2.58	-0.65	
6,890.0	90.60	87.30	6,141.1	-49.7	488.5	489.4	6.53	-3.55	-5.48	
6,921.0	89.90	88.10	6,141.0	-48.5	519.5	520.4	3.43	-2.26	2.58	
6,952.0	89.80	87.40	6,141.1	-47.3	550.4	551.3	2.28	-0.32	-2.26	
6,983.0	90.00	87.60	6,141.1	-45.9	581.4	582.2	0.91	0.65	0.65	
7,013.0	90.70	88.00	6,140.9	-44.8	611.4	612.2	2.69	2.33	1.33	
7,045.0	90.40	87.10	6,140.6	-43.4	643.3	644.1	2.96	-0.94	-2.81	
7,076.0	90.00	86.70	6,140.5	-41.7	674.3	675.0	1.82	-1.29	-1.29	
7,107.0	90.70	86.60	6,140.3	-39.9	705.2	705.9	2.28	2.26	-0.32	
7,139.0	91.20	88.10	6,139.8	-38.4	737.2	737.8	4.94	1.56	4.69	
7,170.0	91.10	88.70	6,139.2	-37.6	768.2	768.8	1.96	-0.32	1.94	
7,201.0	91.20	88.70	6,138.5	-36.9	799.2	799.8	0.32	0.32	0.00	
7,232.0	92.10	90.80	6,137.7	-36.7	830.2	830.7	7.37	2.90	6.77	
7,264.0	92.20	90.40	6,136.5	-37.1	862.1	862.7	1.29	0.31	-1.25	
7,295.0	92.70	90.20	6,135.1	-37.2	893.1	893.7	1.74	1.61	-0.65	
7,325.0	92.30	91.00	6,133.8	-37.5	923.1	923.7	2.98	-1.33	2.67	
7,356.0	92.90	91.00	6,132.4	-38.1	954.0	954.6	1.94	1.94	0.00	
7,387.0	91.30	91.00	6,131.3	-38.6	985.0	985.6	5.16	-5.16	0.00	
7,418.0	91.80	90.80	6,130.4	-39.1	1,016.0	1,016.6	1.74	1.61	-0.65	
7,449.0	92.90	91.30	6,129.2	-39.7	1,047.0	1,047.6	3.90	3.55	1.61	
7,481.0	92.00	91.80	6,127.8	-40.5	1,078.9	1,079.5	3.22	-2.81	1.56	

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Well:	STATE ANTELOPE 11-13HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
7,511.0	91.50	92.20	6,126.9	-41.6	1,108.9	1,109.5	2.13	-1.67	1.33	
7,543.0	90.80	91.80	6,126.2	-42.7	1,140.9	1,141.5	2.52	-2.19	-1.25	
7,574.0	90.90	92.40	6,125.8	-43.8	1,171.8	1,172.5	1.96	0.32	1.94	
7,605.0	91.20	91.80	6,125.2	-45.0	1,202.8	1,203.5	2.16	0.97	-1.94	
7,637.0	90.60	92.00	6,124.7	-46.0	1,234.8	1,235.5	1.98	-1.88	0.63	
7,668.0	90.80	92.00	6,124.3	-47.1	1,265.8	1,266.5	0.65	0.65	0.00	
7,699.0	91.40	91.80	6,123.7	-48.1	1,296.7	1,297.5	2.04	1.94	-0.65	
7,731.0	91.80	91.70	6,122.8	-49.1	1,328.7	1,329.5	1.29	1.25	-0.31	
7,761.0	90.20	91.30	6,122.3	-49.9	1,358.7	1,359.4	5.50	-5.33	-1.33	
7,792.0	90.50	91.10	6,122.1	-50.5	1,389.7	1,390.4	1.16	0.97	-0.65	
7,823.0	91.10	91.30	6,121.7	-51.2	1,420.7	1,421.4	2.04	1.94	0.65	
7,855.0	91.00	91.10	6,121.1	-51.9	1,452.7	1,453.4	0.70	-0.31	-0.63	
7,886.0	91.50	91.50	6,120.4	-52.6	1,483.7	1,484.4	2.07	1.61	1.29	
7,917.0	91.60	91.30	6,119.6	-53.3	1,514.6	1,515.4	0.72	0.32	-0.65	
7,949.0	91.80	91.70	6,118.6	-54.2	1,546.6	1,547.4	1.40	0.63	1.25	
7,980.0	91.30	91.10	6,117.8	-54.9	1,577.6	1,578.4	2.52	-1.61	-1.94	
8,011.0	91.10	91.10	6,117.2	-55.5	1,608.6	1,609.4	0.65	-0.65	0.00	
8,042.0	91.00	91.80	6,116.6	-56.3	1,639.6	1,640.4	2.28	-0.32	2.26	
8,073.0	90.20	91.50	6,116.3	-57.2	1,670.5	1,671.4	2.76	-2.58	-0.97	
8,105.0	90.00	91.10	6,116.2	-57.9	1,702.5	1,703.4	1.40	-0.63	-1.25	
8,136.0	90.40	92.20	6,116.1	-58.8	1,733.5	1,734.4	3.78	1.29	3.55	
8,167.0	89.90	92.90	6,116.0	-60.2	1,764.5	1,765.4	2.77	-1.61	2.26	
8,198.0	90.30	93.10	6,116.0	-61.8	1,795.5	1,796.4	1.44	1.29	0.65	
8,230.0	90.00	92.90	6,115.9	-63.5	1,827.4	1,828.3	1.13	-0.94	-0.63	
8,261.0	90.60	94.10	6,115.7	-65.4	1,858.4	1,859.3	4.33	1.94	3.87	
8,292.0	90.70	94.30	6,115.4	-67.6	1,889.3	1,890.3	0.72	0.32	0.65	
8,323.0	90.50	94.50	6,115.0	-70.0	1,920.2	1,921.2	0.91	-0.65	0.65	
8,355.0	90.80	94.60	6,114.7	-72.6	1,952.1	1,953.2	0.99	0.94	0.31	
8,386.0	90.60	94.50	6,114.3	-75.0	1,983.0	1,984.1	0.72	-0.65	-0.32	
8,417.0	90.70	94.50	6,114.0	-77.5	2,013.9	2,015.1	0.32	0.32	0.00	
8,449.0	90.60	95.20	6,113.6	-80.2	2,045.8	2,047.0	2.21	-0.31	2.19	
8,480.0	90.50	94.30	6,113.3	-82.7	2,076.6	2,077.9	2.92	-0.32	-2.90	
8,511.0	90.90	92.90	6,112.9	-84.7	2,107.6	2,108.9	4.70	1.29	-4.52	
8,542.0	91.00	92.50	6,112.4	-86.1	2,138.5	2,139.9	1.33	0.32	-1.29	
8,574.0	91.60	92.40	6,111.7	-87.5	2,170.5	2,171.9	1.90	1.88	-0.31	
8,605.0	91.00	90.40	6,111.0	-88.3	2,201.5	2,202.9	6.73	-1.94	-6.45	
8,636.0	89.90	88.70	6,110.7	-88.0	2,232.5	2,233.8	6.53	-3.55	-5.48	
8,666.0	90.00	88.30	6,110.8	-87.2	2,262.5	2,263.8	1.37	0.33	-1.33	
8,698.0	90.60	88.10	6,110.6	-86.2	2,294.5	2,295.8	1.98	1.88	-0.63	
8,729.0	89.00	89.00	6,110.7	-85.4	2,325.4	2,326.7	5.92	-5.16	2.90	
8,761.0	89.30	88.80	6,111.2	-84.8	2,357.4	2,358.7	1.13	0.94	-0.63	
8,791.0	89.30	88.80	6,111.5	-84.2	2,387.4	2,388.7	0.00	0.00	0.00	
8,822.0	89.30	89.00	6,111.9	-83.6	2,418.4	2,419.6	0.65	0.00	0.65	
8,853.0	89.30	89.00	6,112.3	-83.1	2,449.4	2,450.6	0.00	0.00	0.00	
8,885.0	89.10	88.70	6,112.7	-82.4	2,481.4	2,482.6	1.13	-0.63	-0.94	
8,916.0	89.50	89.00	6,113.1	-81.8	2,512.4	2,513.6	1.61	1.29	0.97	
8,947.0	90.20	88.80	6,113.2	-81.2	2,543.4	2,544.5	2.35	2.26	-0.65	
8,978.0	91.00	89.00	6,112.9	-80.6	2,574.4	2,575.5	2.66	2.58	0.65	
9,010.0	90.80	89.20	6,112.4	-80.1	2,606.4	2,607.5	0.88	-0.63	0.63	
9,040.0	90.10	89.40	6,112.1	-79.7	2,636.4	2,637.5	2.43	-2.33	0.67	
9,071.0	90.30	89.40	6,112.0	-79.4	2,667.4	2,668.4	0.65	0.65	0.00	
9,102.0	90.50	89.40	6,111.8	-79.1	2,698.4	2,699.4	0.65	0.65	0.00	
9,134.0	89.90	89.90	6,111.7	-78.9	2,730.4	2,731.4	2.44	-1.88	1.56	
9,165.0	90.20	90.10	6,111.7	-78.9	2,761.4	2,762.4	1.16	0.97	0.65	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well STATE ANTELOPE 11-13HZ
Project:	SEC.13-T5N-R62W	TVD Reference:	RKB @ 4583.0ft (ENSIGN RIG 12 KB 12')
Site:	STATE ANTELOPE 11-13HZ PAD 13-5N-62W	MD Reference:	RKB @ 4583.0ft (ENSIGN RIG 12 KB 12')
Well:	STATE ANTELOPE 11-13HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,197.0	89.50	89.90	6,111.8	-78.9	2,793.4	2,794.4	2.28	-2.19	-0.63
9,228.0	89.00	89.90	6,112.2	-78.8	2,824.4	2,825.4	1.61	-1.61	0.00
9,259.0	89.10	90.60	6,112.7	-79.0	2,855.4	2,856.4	2.28	0.32	2.26
9,291.0	89.50	89.90	6,113.1	-79.1	2,887.4	2,888.4	2.52	1.25	-2.19
9,322.0	89.60	89.40	6,113.3	-78.9	2,918.4	2,919.4	1.64	0.32	-1.61
9,353.0	89.90	89.40	6,113.4	-78.6	2,949.3	2,950.3	0.97	0.97	0.00
9,385.0	90.70	89.40	6,113.3	-78.3	2,981.3	2,982.3	2.50	2.50	0.00
9,417.0	91.10	89.40	6,112.8	-77.9	3,013.3	3,014.3	1.25	1.25	0.00
9,448.0	91.60	89.90	6,112.0	-77.7	3,044.3	3,045.3	2.28	1.61	1.61
9,479.0	92.20	89.90	6,111.0	-77.7	3,075.3	3,076.3	1.94	1.94	0.00
9,511.0	91.50	89.90	6,110.0	-77.6	3,107.3	3,108.2	2.19	-2.19	0.00
9,542.0	91.50	89.00	6,109.2	-77.3	3,138.3	3,139.2	2.90	0.00	-2.90
9,573.0	91.40	89.00	6,108.4	-76.8	3,169.3	3,170.2	0.32	-0.32	0.00
9,605.0	90.40	89.20	6,107.9	-76.3	3,201.3	3,202.2	3.19	-3.13	0.63
9,636.0	89.30	89.90	6,108.0	-76.0	3,232.3	3,233.1	4.21	-3.55	2.26
9,667.0	89.30	90.10	6,108.3	-76.0	3,263.3	3,264.1	0.65	0.00	0.65
9,698.0	89.30	89.50	6,108.7	-75.9	3,294.3	3,295.1	1.94	0.00	-1.94
9,730.0	89.30	89.90	6,109.1	-75.8	3,326.3	3,327.1	1.25	0.00	1.25
9,761.0	89.30	89.50	6,109.5	-75.6	3,357.2	3,358.1	1.29	0.00	-1.29
9,792.0	89.60	89.50	6,109.8	-75.3	3,388.2	3,389.1	0.97	0.97	0.00
9,823.0	90.30	89.20	6,109.8	-75.0	3,419.2	3,420.1	2.46	2.26	-0.97
9,855.0	90.70	89.00	6,109.5	-74.5	3,451.2	3,452.0	1.40	1.25	-0.63
9,886.0	91.00	89.40	6,109.1	-74.0	3,482.2	3,483.0	1.61	0.97	1.29
9,917.0	91.40	89.00	6,108.4	-73.6	3,513.2	3,514.0	1.82	1.29	-1.29
9,948.0	90.60	88.10	6,107.9	-72.8	3,544.2	3,545.0	3.88	-2.58	-2.90
9,980.0	90.90	88.70	6,107.5	-71.9	3,576.2	3,576.9	2.10	0.94	1.88
10,011.0	91.50	88.00	6,106.8	-71.0	3,607.2	3,607.9	2.97	1.94	-2.26
10,042.0	90.40	88.70	6,106.3	-70.2	3,638.2	3,638.8	4.21	-3.55	2.26
10,074.0	90.70	88.80	6,106.0	-69.5	3,670.1	3,670.8	0.99	0.94	0.31
10,104.0	90.20	89.70	6,105.8	-69.1	3,700.1	3,700.8	3.43	-1.67	3.00
10,135.0	90.80	89.40	6,105.5	-68.8	3,731.1	3,731.8	2.16	1.94	-0.97
10,166.0	90.00	89.90	6,105.3	-68.6	3,762.1	3,762.7	3.04	-2.58	1.61
10,197.0	90.70	91.30	6,105.1	-69.0	3,793.1	3,793.7	5.05	2.26	4.52
10,229.0	90.70	92.40	6,104.7	-70.0	3,825.1	3,825.7	3.44	0.00	3.44
10,260.0	91.50	92.70	6,104.1	-71.4	3,856.1	3,856.7	2.76	2.58	0.97
10,292.0	89.50	90.20	6,103.8	-72.2	3,888.1	3,888.7	10.00	-6.25	-7.81
10,323.0	88.30	91.10	6,104.4	-72.5	3,919.1	3,919.7	4.84	-3.87	2.90
10,354.0	88.80	91.70	6,105.2	-73.3	3,950.0	3,950.7	2.52	1.61	1.94
10,385.0	88.70	91.70	6,105.9	-74.2	3,981.0	3,981.7	0.32	-0.32	0.00
10,417.0	89.00	91.50	6,106.5	-75.1	4,013.0	4,013.7	1.13	0.94	-0.63
10,448.0	89.70	91.50	6,106.9	-75.9	4,044.0	4,044.7	2.26	2.26	0.00
10,479.0	90.60	92.50	6,106.8	-77.0	4,075.0	4,075.7	4.34	2.90	3.23
10,511.0	89.70	92.70	6,106.7	-78.4	4,106.9	4,107.7	2.88	-2.81	0.63
10,542.0	90.00	92.50	6,106.8	-79.8	4,137.9	4,138.7	1.16	0.97	-0.65
10,572.0	90.30	92.40	6,106.7	-81.1	4,167.9	4,168.7	1.05	1.00	-0.33
10,603.0	90.00	92.00	6,106.6	-82.3	4,198.8	4,199.6	1.61	-0.97	-1.29
10,634.0	90.30	92.00	6,106.5	-83.4	4,229.8	4,230.6	0.97	0.97	0.00
10,665.0	90.70	92.20	6,106.3	-84.5	4,260.8	4,261.6	1.44	1.29	0.65
10,697.0	90.40	91.10	6,106.0	-85.5	4,292.8	4,293.6	3.56	-0.94	-3.44
10,740.2	90.31	91.01	6,105.7	-86.3	4,336.0	4,336.8	0.31	-0.22	-0.22
TARGET 2 660'FNL & 460'FEL									
10,743.0	90.30	91.00	6,105.7	-86.3	4,338.8	4,339.6	0.31	-0.22	-0.22

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well STATE ANTELOPE 11-13HZ
Project:	SEC.13-T5N-R62W	TVD Reference:	RKB @ 4583.0ft (ENSIGN RIG 12 KB 12')
Site:	STATE ANTELOPE 11-13HZ PAD 13-5N-62W	MD Reference:	RKB @ 4583.0ft (ENSIGN RIG 12 KB 12')
Well:	STATE ANTELOPE 11-13HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Checked By: _____	Approved By: _____	Date: _____
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