

# BONANZA CREEK ENERGY OPERATING

Well Name: **STATE ANTELOPE 14-11-24HZ**

Surface Location: STATE ANTELOPE 14-11-24HZ  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4562.0

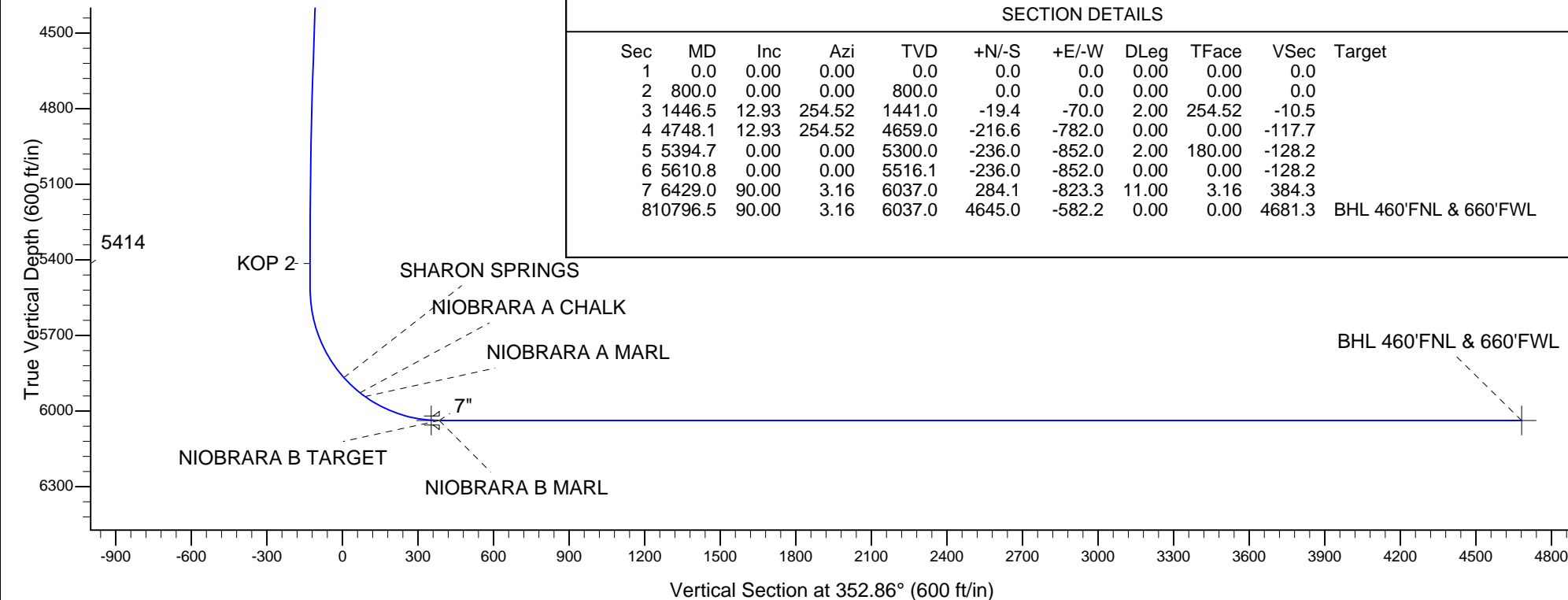
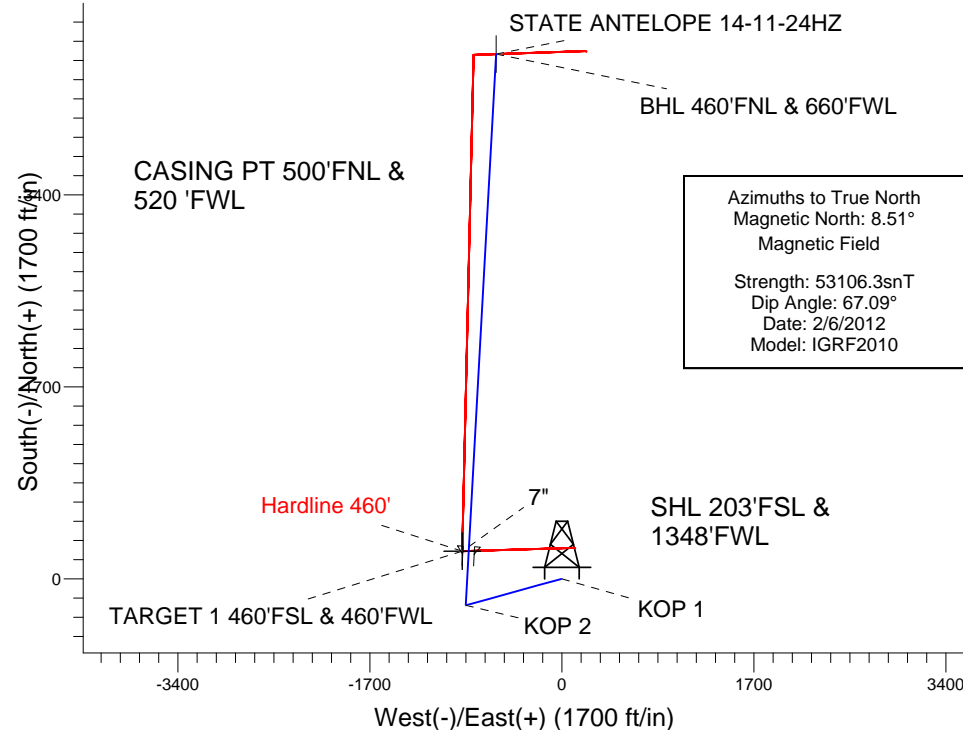
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1383343.31	3340959.70	40.379220	-104.276110	

EST KB - 15' RKB 2-6-12 @ 4577.0ft (EST KB - 15')

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Hardline 460'	-7.0	244.0	-883.0	40.379890	-104.279279	Polygon
BHL 460'FNL & 660'FWL	6037.0	4645.0	-582.2	40.391970	-104.278200	Point
TARGET 1 460'FSL & 460'FWL	6037.0	244.1	-883.2	40.379890	-104.279280	Point

STATE ANTELOPE 14-11-24HZ  
STATE ANTELOPE 14-11-24HZ  
PLAN 2 (FEB 6,2012)  
9:19, February 06 2012





## **Directional**

# **BONANZA CREEK ENERGY OPERATING**

**SEC.24-T5N-R62W**

**STATE ANTELOPE 14-11-24HZ**

**STATE ANTELOPE 14-11-24HZ**

**Wellbore #1**

**Plan: PLAN 2 (FEB 6,2012)**

## **Standard Planning Report**

**06 February, 2012**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 14-11-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Project:</b>	SEC.24-T5N-R62W	<b>MD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Site:</b>	STATE ANTELOPE 14-11-24HZ	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 14-11-24HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN 2 (FEB 6,2012)		

<b>Project</b>	SEC.24-T5N-R62W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site						STATE ANTELOPE 14-11-24HZ							
Site Position:						Northing:		1,383,343.32 ft		Latitude:		40.379220	
From:			Lat/Long			Easting:		3,340,959.70 ft		Longitude:		-104.276110	
Position Uncertainty:			0.0 ft			Slot Radius:		"		Grid Convergence:		0.79 °	

Well	STATE ANTELOPE 14-11-24HZ					
Well Position	+N-S	0.0 ft	Northing:	1,383,343.31 ft	Latitude:	40.379220
	+E-W	0.0 ft	Easting:	3,340,959.70 ft	Longitude:	-104.276110
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,562.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/8/2011	8.53	67.10	53,124
	IGRF2010	2/6/2012	8.51	67.09	53,106

<b>Design</b>	PLAN 2 (FEB 6,2012)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	352.86

<b>Plan Sections</b>										
<b>Measured Depth</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical Depth</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Dogleg Rate</b>	<b>Build Rate</b>	<b>Turn Rate</b>	<b>TFO</b>	<b>Target</b>
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,446.5	12.93	254.52	1,441.0	-19.4	-70.0	2.00	2.00	0.00	254.52	
4,748.1	12.93	254.52	4,659.0	-216.6	-782.0	0.00	0.00	0.00	0.00	
5,394.7	0.00	0.00	5,300.0	-236.0	-852.0	2.00	-2.00	0.00	180.00	
5,610.8	0.00	0.00	5,516.1	-236.0	-852.0	0.00	0.00	0.00	0.00	
6,429.0	90.00	3.16	6,037.0	284.1	-823.3	11.00	11.00	0.00	3.16	
10,796.5	90.00	3.16	6,037.0	4,645.0	-582.2	0.00	0.00	0.00	0.00	BHL 460'FNL & 66C

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 14-11-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Project:</b>	SEC.24-T5N-R62W	<b>MD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Site:</b>	STATE ANTELOPE 14-11-24HZ	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 14-11-24HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN 2 (FEB 6,2012)		

Planned 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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Hardline 460'</b>									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP 1</b>									
900.0	2.00	254.52	900.0	-0.5	-1.7	-0.3	2.00	2.00	0.00
1,000.0	4.00	254.52	999.8	-1.9	-6.7	-1.0	2.00	2.00	0.00
1,100.0	6.00	254.52	1,099.5	-4.2	-15.1	-2.3	2.00	2.00	0.00
1,200.0	8.00	254.52	1,198.7	-7.4	-26.9	-4.0	2.00	2.00	0.00
1,300.0	10.00	254.52	1,297.5	-11.6	-41.9	-6.3	2.00	2.00	0.00
1,400.0	12.00	254.52	1,395.6	-16.7	-60.3	-9.1	2.00	2.00	0.00
1,446.5	12.93	254.52	1,441.0	-19.4	-70.0	-10.5	2.00	2.00	0.00
1,500.0	12.93	254.52	1,493.2	-22.6	-81.5	-12.3	0.00	0.00	0.00
1,600.0	12.93	254.52	1,590.6	-28.6	-103.1	-15.5	0.00	0.00	0.00
1,700.0	12.93	254.52	1,688.1	-34.5	-124.7	-18.8	0.00	0.00	0.00
1,800.0	12.93	254.52	1,785.6	-40.5	-146.2	-22.0	0.00	0.00	0.00
1,900.0	12.93	254.52	1,883.0	-46.5	-167.8	-25.3	0.00	0.00	0.00
2,000.0	12.93	254.52	1,980.5	-52.5	-189.4	-28.5	0.00	0.00	0.00
2,100.0	12.93	254.52	2,078.0	-58.4	-210.9	-31.7	0.00	0.00	0.00
2,200.0	12.93	254.52	2,175.4	-64.4	-232.5	-35.0	0.00	0.00	0.00
2,300.0	12.93	254.52	2,272.9	-70.4	-254.1	-38.2	0.00	0.00	0.00
2,400.0	12.93	254.52	2,370.3	-76.3	-275.6	-41.5	0.00	0.00	0.00
2,500.0	12.93	254.52	2,467.8	-82.3	-297.2	-44.7	0.00	0.00	0.00
2,600.0	12.93	254.52	2,565.3	-88.3	-318.8	-48.0	0.00	0.00	0.00
2,700.0	12.93	254.52	2,662.7	-94.3	-340.3	-51.2	0.00	0.00	0.00
2,800.0	12.93	254.52	2,760.2	-100.2	-361.9	-54.5	0.00	0.00	0.00
2,900.0	12.93	254.52	2,857.7	-106.2	-383.4	-57.7	0.00	0.00	0.00
3,000.0	12.93	254.52	2,955.1	-112.2	-405.0	-60.9	0.00	0.00	0.00
3,100.0	12.93	254.52	3,052.6	-118.2	-426.6	-64.2	0.00	0.00	0.00
3,200.0	12.93	254.52	3,150.1	-124.1	-448.1	-67.4	0.00	0.00	0.00
3,300.0	12.93	254.52	3,247.5	-130.1	-469.7	-70.7	0.00	0.00	0.00
3,309.7	12.93	254.52	3,257.0	-130.7	-471.8	-71.0	0.00	0.00	0.00
<b>PARKMAN</b>									
3,400.0	12.93	254.52	3,345.0	-136.1	-491.3	-73.9	0.00	0.00	0.00
3,500.0	12.93	254.52	3,442.5	-142.1	-512.8	-77.2	0.00	0.00	0.00
3,600.0	12.93	254.52	3,539.9	-148.0	-534.4	-80.4	0.00	0.00	0.00
3,700.0	12.93	254.52	3,637.4	-154.0	-556.0	-83.7	0.00	0.00	0.00
3,800.0	12.93	254.52	3,734.8	-160.0	-577.5	-86.9	0.00	0.00	0.00
3,843.2	12.93	254.52	3,777.0	-162.6	-586.9	-88.3	0.00	0.00	0.00
<b>SUSSEX</b>									
3,900.0	12.93	254.52	3,832.3	-165.9	-599.1	-90.2	0.00	0.00	0.00
4,000.0	12.93	254.52	3,929.8	-171.9	-620.7	-93.4	0.00	0.00	0.00
4,100.0	12.93	254.52	4,027.2	-177.9	-642.2	-96.6	0.00	0.00	0.00
4,200.0	12.93	254.52	4,124.7	-183.9	-663.8	-99.9	0.00	0.00	0.00
4,300.0	12.93	254.52	4,222.2	-189.8	-685.4	-103.1	0.00	0.00	0.00
4,400.0	12.93	254.52	4,319.6	-195.8	-706.9	-106.4	0.00	0.00	0.00
4,500.0	12.93	254.52	4,417.1	-201.8	-728.5	-109.6	0.00	0.00	0.00
4,600.0	12.93	254.52	4,514.6	-207.8	-750.0	-112.9	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 14-11-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Project:</b>	SEC.24-T5N-R62W	<b>MD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Site:</b>	STATE ANTELOPE 14-11-24HZ	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 14-11-24HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN 2 (FEB 6,2012)		

Planned 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)
4,700.0	12.93	254.52	4,612.0	-213.7	-771.6	-116.1	0.00	0.00	0.00
4,748.1	12.93	254.52	4,659.0	-216.6	-782.0	-117.7	0.00	0.00	0.00
4,800.0	11.89	254.52	4,709.6	-219.6	-792.7	-119.3	2.00	-2.00	0.00
4,900.0	9.89	254.52	4,807.8	-224.6	-810.9	-122.0	2.00	-2.00	0.00
5,000.0	7.89	254.52	4,906.6	-228.8	-825.8	-124.3	2.00	-2.00	0.00
5,100.0	5.89	254.52	5,005.9	-232.0	-837.4	-126.0	2.00	-2.00	0.00
5,200.0	3.89	254.52	5,105.5	-234.2	-845.6	-127.3	2.00	-2.00	0.00
5,300.0	1.89	254.52	5,205.3	-235.6	-850.5	-128.0	2.00	-2.00	0.00
5,394.7	0.00	0.00	5,300.0	-236.0	-852.0	-128.2	2.00	-2.00	0.00
5,400.0	0.00	0.00	5,305.3	-236.0	-852.0	-128.2	0.00	0.00	0.00
5,500.0	0.00	0.00	5,405.3	-236.0	-852.0	-128.2	0.00	0.00	0.00
5,509.0	0.00	0.00	5,414.3	-236.0	-852.0	-128.2	0.00	0.00	0.00
<b>KOP 2</b>									
5,600.0	0.00	0.00	5,505.3	-236.0	-852.0	-128.2	0.00	0.00	0.00
5,610.8	0.00	0.00	5,516.1	-236.0	-852.0	-128.2	0.00	0.00	0.00
5,700.0	9.81	3.16	5,604.9	-228.4	-851.6	-120.7	11.00	11.00	0.00
5,800.0	20.81	3.16	5,701.2	-202.1	-850.1	-94.8	11.00	11.00	0.00
5,900.0	31.81	3.16	5,790.7	-157.9	-847.7	-51.2	11.00	11.00	0.00
5,995.8	42.35	3.16	5,867.0	-100.3	-844.5	5.5	11.00	11.00	0.00
<b>SHARON SPRINGS</b>									
6,000.0	42.81	3.16	5,870.1	-97.4	-844.3	8.3	11.00	11.00	0.00
6,084.2	52.07	3.16	5,927.0	-35.6	-840.9	69.3	11.00	11.00	0.00
<b>NIOBRARA A CHALK</b>									
6,100.0	53.81	3.16	5,936.5	-23.0	-840.2	81.7	11.00	11.00	0.00
6,109.4	54.85	3.16	5,942.0	-15.4	-839.8	89.2	11.00	11.00	0.00
<b>NIOBRARA A MARL</b>									
6,200.0	64.81	3.16	5,987.5	62.7	-835.5	166.2	11.00	11.00	0.00
6,251.3	70.46	3.16	6,007.0	110.1	-832.9	212.8	11.00	11.00	0.00
<b>NIOBRARA B CHALK</b>									
6,300.0	75.81	3.16	6,021.1	156.6	-830.3	258.6	11.00	11.00	0.00
6,386.0	85.27	3.16	6,035.2	241.2	-825.6	342.0	11.00	11.00	0.00
<b>TARGET 1 460'FSL &amp; 460'FWL</b>									
6,400.0	86.81	3.16	6,036.2	255.2	-824.8	355.8	11.00	11.00	0.00
6,429.0	90.00	3.16	6,037.0	284.1	-823.2	384.3	10.99	10.99	0.00
<b>NIOBRARA B MARL - NIOBRARA B TARGET - 7"</b>									
6,500.0	90.00	3.16	6,037.0	355.0	-819.3	454.1	0.00	0.00	0.00
6,600.0	90.00	3.16	6,037.0	454.8	-813.8	552.5	0.00	0.00	0.00
6,700.0	90.00	3.16	6,037.0	554.7	-808.3	650.9	0.00	0.00	0.00
6,800.0	90.00	3.16	6,037.0	654.5	-802.8	749.3	0.00	0.00	0.00
6,900.0	90.00	3.16	6,037.0	754.4	-797.3	847.7	0.00	0.00	0.00
7,000.0	90.00	3.16	6,037.0	854.2	-791.7	946.1	0.00	0.00	0.00
7,100.0	90.00	3.16	6,037.0	954.1	-786.2	1,044.4	0.00	0.00	0.00
7,200.0	90.00	3.16	6,037.0	1,053.9	-780.7	1,142.8	0.00	0.00	0.00
7,300.0	90.00	3.16	6,037.0	1,153.8	-775.2	1,241.2	0.00	0.00	0.00
7,400.0	90.00	3.16	6,037.0	1,253.6	-769.7	1,339.6	0.00	0.00	0.00
7,500.0	90.00	3.16	6,037.0	1,353.5	-764.1	1,438.0	0.00	0.00	0.00
7,600.0	90.00	3.16	6,037.0	1,453.3	-758.6	1,536.4	0.00	0.00	0.00
7,700.0	90.00	3.16	6,037.0	1,553.2	-753.1	1,634.8	0.00	0.00	0.00
7,800.0	90.00	3.16	6,037.0	1,653.0	-747.6	1,733.1	0.00	0.00	0.00
7,900.0	90.00	3.16	6,037.0	1,752.9	-742.1	1,831.5	0.00	0.00	0.00
8,000.0	90.00	3.16	6,037.0	1,852.7	-736.5	1,929.9	0.00	0.00	0.00
8,100.0	90.00	3.16	6,037.0	1,952.6	-731.0	2,028.3	0.00	0.00	0.00
8,200.0	90.00	3.16	6,037.0	2,052.4	-725.5	2,126.7	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 14-11-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Project:</b>	SEC.24-T5N-R62W	<b>MD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Site:</b>	STATE ANTELOPE 14-11-24HZ	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 14-11-24HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN 2 (FEB 6,2012)		

Planned 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)
8,300.0	90.00	3.16	6,037.0	2,152.2	-720.0	2,225.1	0.00	0.00	0.00
8,400.0	90.00	3.16	6,037.0	2,252.1	-714.5	2,323.5	0.00	0.00	0.00
8,500.0	90.00	3.16	6,037.0	2,351.9	-708.9	2,421.8	0.00	0.00	0.00
8,600.0	90.00	3.16	6,037.0	2,451.8	-703.4	2,520.2	0.00	0.00	0.00
8,700.0	90.00	3.16	6,037.0	2,551.6	-697.9	2,618.6	0.00	0.00	0.00
8,800.0	90.00	3.16	6,037.0	2,651.5	-692.4	2,717.0	0.00	0.00	0.00
8,900.0	90.00	3.16	6,037.0	2,751.3	-686.9	2,815.4	0.00	0.00	0.00
9,000.0	90.00	3.16	6,037.0	2,851.2	-681.3	2,913.8	0.00	0.00	0.00
9,100.0	90.00	3.16	6,037.0	2,951.0	-675.8	3,012.2	0.00	0.00	0.00
9,200.0	90.00	3.16	6,037.0	3,050.9	-670.3	3,110.5	0.00	0.00	0.00
9,300.0	90.00	3.16	6,037.0	3,150.7	-664.8	3,208.9	0.00	0.00	0.00
9,400.0	90.00	3.16	6,037.0	3,250.6	-659.3	3,307.3	0.00	0.00	0.00
9,500.0	90.00	3.16	6,037.0	3,350.4	-653.7	3,405.7	0.00	0.00	0.00
9,600.0	90.00	3.16	6,037.0	3,450.3	-648.2	3,504.1	0.00	0.00	0.00
9,700.0	90.00	3.16	6,037.0	3,550.1	-642.7	3,602.5	0.00	0.00	0.00
9,800.0	90.00	3.16	6,037.0	3,650.0	-637.2	3,700.9	0.00	0.00	0.00
9,900.0	90.00	3.16	6,037.0	3,749.8	-631.7	3,799.3	0.00	0.00	0.00
10,000.0	90.00	3.16	6,037.0	3,849.7	-626.1	3,897.6	0.00	0.00	0.00
10,100.0	90.00	3.16	6,037.0	3,949.5	-620.6	3,996.0	0.00	0.00	0.00
10,200.0	90.00	3.16	6,037.0	4,049.3	-615.1	4,094.4	0.00	0.00	0.00
10,300.0	90.00	3.16	6,037.0	4,149.2	-609.6	4,192.8	0.00	0.00	0.00
10,400.0	90.00	3.16	6,037.0	4,249.0	-604.1	4,291.2	0.00	0.00	0.00
10,500.0	90.00	3.16	6,037.0	4,348.9	-598.5	4,389.6	0.00	0.00	0.00
10,600.0	90.00	3.16	6,037.0	4,448.7	-593.0	4,488.0	0.00	0.00	0.00
10,700.0	90.00	3.16	6,037.0	4,548.6	-587.5	4,586.3	0.00	0.00	0.00
10,796.5	90.00	3.16	6,037.0	4,645.0	-582.2	4,681.3	0.00	0.00	0.00
BHL 460'FNL & 660'FWL									

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
TARGET 1 460'FSL &	0.00	0.00	6,037.0	244.1	-883.2	1,383,575.20	3,340,073.27	40.379890	-104.279280
- plan misses target center by 57.7ft at 6386.0ft MD (6035.2 TVD, 241.2 N, -825.6 E)									
- Point									
Hardline 460'	0.00	0.00	-7.0	244.0	-883.0	1,383,575.10	3,340,073.45	40.379890	-104.279279
- plan misses target center by 916.1ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			-7.0	0.0	0.0	1,383,575.10	3,340,073.45		
Point 2			-7.0	29.0	1,000.0	1,383,617.90	3,341,072.91		
Point 3			-7.0	0.0	0.0	1,383,575.10	3,340,073.45		
Point 4			-7.0	4,394.0	101.0	1,387,969.89	3,340,113.80		
Point 5			-7.0	4,429.0	1,101.0	1,388,018.68	3,341,113.17		
Point 6			-7.0	4,394.0	101.0	1,387,969.89	3,340,113.80		
Point 7			-7.0	0.0	0.0	1,383,575.10	3,340,073.45		
BHL 460'FNL & 660'F	0.00	0.00	6,037.0	4,645.0	-582.2	1,387,979.62	3,340,313.49	40.391970	-104.278200
- plan hits target center									
- Point									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 14-11-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Project:</b>	SEC.24-T5N-R62W	<b>MD Reference:</b>	RKB 2-6-12 @ 4577.0ft (EST KB - 15')
<b>Site:</b>	STATE ANTELOPE 14-11-24HZ	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 14-11-24HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN 2 (FEB 6,2012)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,429.0	6,037.0	7"	7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,309.7	3,257.0	PARKMAN		0.00		
3,843.2	3,777.0	SUSSEX		0.00		
5,995.8	5,867.0	SHARON SPRINGS		0.00		
6,084.2	5,927.0	NIOBRARA A CHALK		0.00		
6,109.4	5,942.0	NIOBRARA A MARL		0.00		
6,251.3	6,007.0	NIOBARA B CHALK		0.00		
6,429.0	6,037.0	NIOBRARA B MARL		0.00		
6,429.0	6,037.0	NIOBRARA B TARGET		0.00		
	6,092.0	NIOBRARA C CHALK		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
800.0	800.0	0.0	0.0	KOP 1	
5,509.0	5,411.6	-223.0	-868.0	KOP 2	