

# BONANZA CREEK ENERGY OPERATING

Well Name: **State North Platte K-O-36HC**

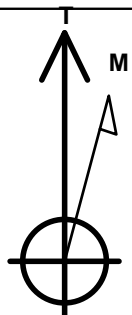
Surface Location: State North Platte K-O-36HC Pad Sec.36-T5N-R63W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
Ground Elevation: 4543.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1376726.03	3308733.91	40.362220	-104.392070	

RKB - 15' WELL @ 4558.0ft (RKB - 15')

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 470'FSL & 2580'FWL	6466.0	-4338.8	2004.0	Point
T1 531'FNL & 2608'FWL	6466.0	-163.8	2084.5	Point



Azimuths to True North  
Magnetic North: 8.40°

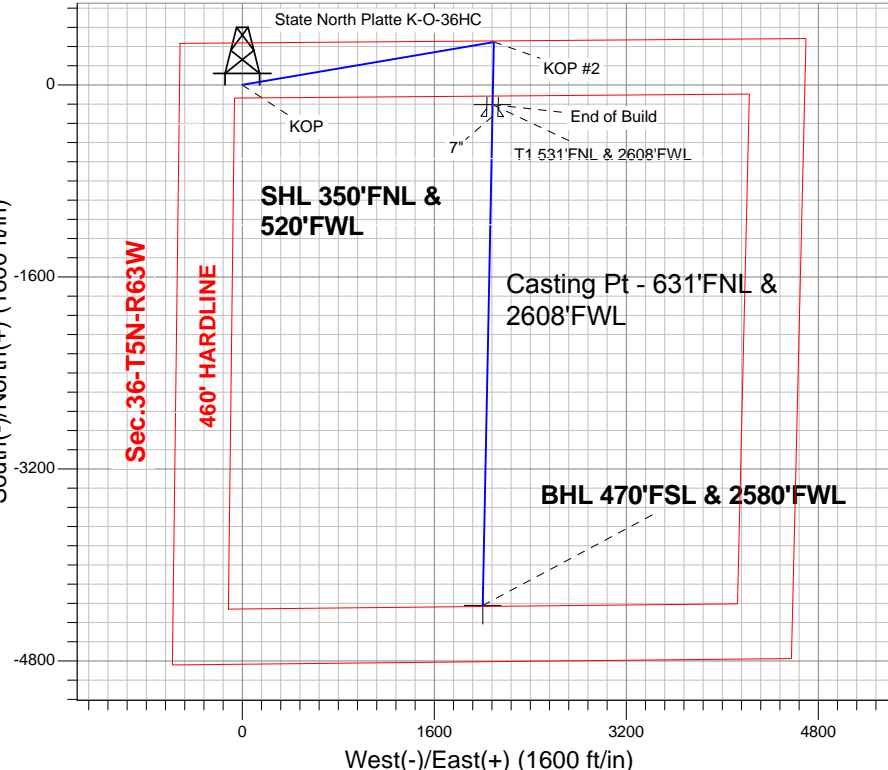
Magnetic Field  
Strength: 52946.7nT  
Dip Angle: 67.01°  
Date: 5/30/2013  
Model: IGRF2010

State North Platte K-O-36HC Pad Sec.36-T5N-R63W  
State North Platte K-O-36HC  
Plan #1 (5-30-13)  
15:25, May 30 2013

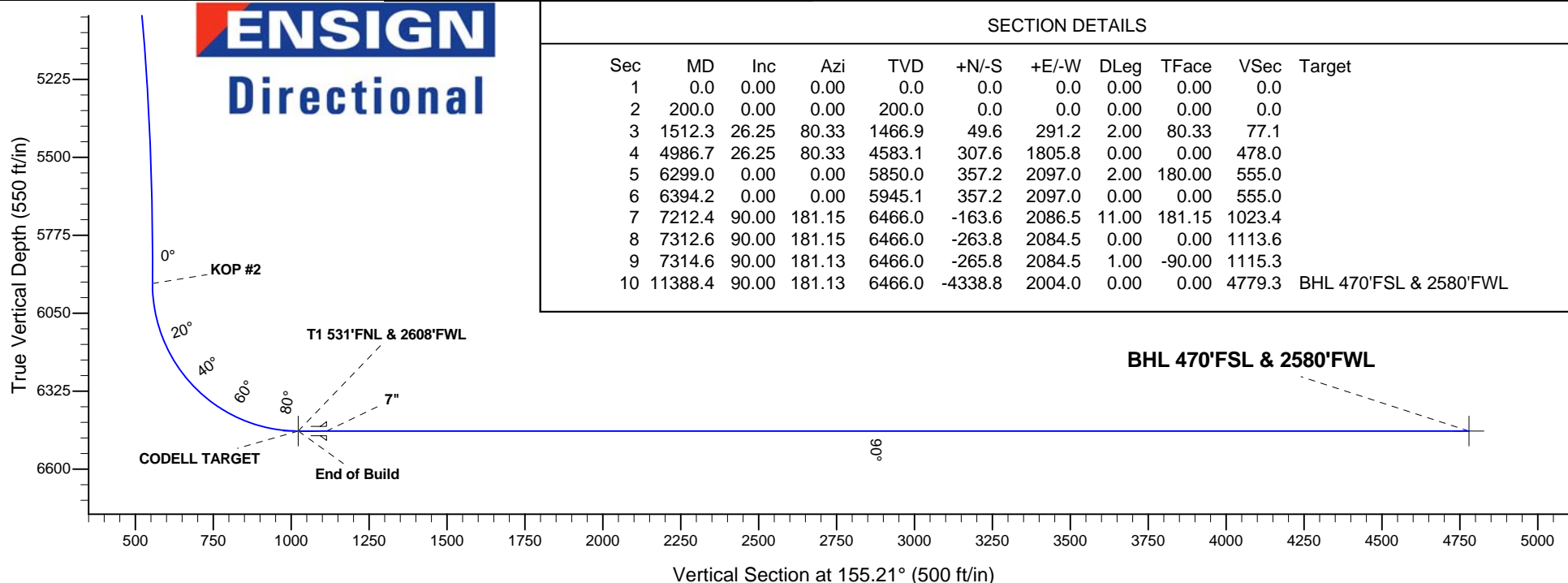
## ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP
5945.2	6394.2	KOP #2
6466.0	7212.4	End of Build

South(-)/North(+) (1600 ft/in)



**ENSIGN**  
Directional



## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1512.3	26.25	80.33	1466.9	49.6	291.2	2.00	80.33	77.1	
4	4986.7	26.25	80.33	4583.1	307.6	1805.8	0.00	0.00	478.0	
5	6299.0	0.00	0.00	5850.0	357.2	2097.0	2.00	180.00	555.0	
6	6394.2	0.00	0.00	5945.1	357.2	2097.0	0.00	0.00	555.0	
7	7212.4	90.00	181.15	6466.0	-163.6	2086.5	11.00	181.15	1023.4	
8	7312.6	90.00	181.15	6466.0	-263.8	2084.5	0.00	0.00	1113.6	
9	7314.6	90.00	181.13	6466.0	-265.8	2084.5	1.00	-90.00	1115.3	
10	11388.4	90.00	181.13	6466.0	-4338.8	2004.0	0.00	0.00	4779.3	BHL 470'FSL & 2580'FWL



## **Directional**

# **BONANZA CREEK ENERGY OPERATING**

**SEC.36-T5N-R63W**

**State North Platte K-O-36HC Pad Sec.36-T5N-R63W**

**State North Platte K-O-36HC**

**Wellbore #1**

**Plan: Plan #1 (5-30-13)**

## **Standard Planning Report**

**30 May, 2013**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Project:</b>	SEC.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site:</b>	State North Platte K-O-36HC Pad Sec.36-T5N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-30-13)		

<b>Project</b>	SEC.36-T5N-R63W		
<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 North Platte K-O-36HC Pad Sec.36-T5N-R63W											
Site Position:						Northing:			1,376,726.04 ft			Latitude:			40.362220		
From:			Lat/Long			Easting:			3,308,733.91 ft			Longitude:			-104.392070		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.72 °		

Well	State North Platte K-O-36HC					
Well Position	+N/-S	0.0 ft	Northing:	1,376,726.03 ft	Latitude:	40.362220
	+E/-W	0.0 ft	Easting:	3,308,733.91 ft	Longitude:	-104.392070
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,543.0 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	5/30/2013	8.40	67.01	52,947

<b>Design</b>	Plan #1 (5-30-13)			
<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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	155.21

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,512.3	26.25	80.33	1,466.9	49.6	291.2	2.00	2.00	0.00	80.33	
4,986.7	26.25	80.33	4,583.1	307.6	1,805.8	0.00	0.00	0.00	0.00	
6,299.0	0.00	0.00	5,850.0	357.2	2,097.0	2.00	-2.00	0.00	180.00	
6,394.2	0.00	0.00	5,945.1	357.2	2,097.0	0.00	0.00	0.00	0.00	
7,212.4	90.00	181.15	6,466.0	-163.6	2,086.5	11.00	11.00	0.00	181.15	
7,312.6	90.00	181.15	6,466.0	-263.8	2,084.5	0.00	0.00	0.00	0.00	
7,314.6	90.00	181.13	6,466.0	-265.8	2,084.5	1.00	0.00	-1.00	-90.00	
11,388.4	90.00	181.13	6,466.0	-4,338.8	2,004.0	0.00	0.00	0.00	0.00	BHL 470'FSL & 25°

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Project:</b>	SEC.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site:</b>	State North Platte K-O-36HC Pad	<b>North Reference:</b>	True
	Sec.36-T5N-R63W		
<b>Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-30-13)		

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
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
<b>KOP</b>									
300.0	2.00	80.33	300.0	0.3	1.7	0.5	2.00	2.00	0.00
400.0	4.00	80.33	399.8	1.2	6.9	1.8	2.00	2.00	0.00
500.0	6.00	80.33	499.5	2.6	15.5	4.1	2.00	2.00	0.00
600.0	8.00	80.33	598.7	4.7	27.5	7.3	2.00	2.00	0.00
700.0	10.00	80.33	697.5	7.3	42.9	11.4	2.00	2.00	0.00
800.0	12.00	80.33	795.6	10.5	61.7	16.3	2.00	2.00	0.00
900.0	14.00	80.33	893.1	14.3	83.9	22.2	2.00	2.00	0.00
1,000.0	16.00	80.33	989.6	18.6	109.4	29.0	2.00	2.00	0.00
1,100.0	18.00	80.33	1,085.3	23.5	138.2	36.6	2.00	2.00	0.00
1,200.0	20.00	80.33	1,179.8	29.0	170.3	45.1	2.00	2.00	0.00
1,300.0	22.00	80.33	1,273.2	35.0	205.6	54.4	2.00	2.00	0.00
1,400.0	24.00	80.33	1,365.2	41.6	244.2	64.6	2.00	2.00	0.00
1,500.0	26.00	80.33	1,455.8	48.7	285.8	75.6	2.00	2.00	0.00
1,512.3	26.25	80.33	1,466.9	49.6	291.2	77.1	2.00	2.00	0.00
1,600.0	26.25	80.33	1,545.5	56.1	329.4	87.2	0.00	0.00	0.00
1,700.0	26.25	80.33	1,635.2	63.5	373.0	98.7	0.00	0.00	0.00
1,800.0	26.25	80.33	1,724.9	71.0	416.6	110.3	0.00	0.00	0.00
1,900.0	26.25	80.33	1,814.6	78.4	460.2	121.8	0.00	0.00	0.00
2,000.0	26.25	80.33	1,904.3	85.8	503.8	133.3	0.00	0.00	0.00
2,100.0	26.25	80.33	1,994.0	93.2	547.4	144.9	0.00	0.00	0.00
2,200.0	26.25	80.33	2,083.7	100.7	591.0	156.4	0.00	0.00	0.00
2,300.0	26.25	80.33	2,173.4	108.1	634.6	168.0	0.00	0.00	0.00
2,400.0	26.25	80.33	2,263.1	115.5	678.1	179.5	0.00	0.00	0.00
2,500.0	26.25	80.33	2,352.8	122.9	721.7	191.0	0.00	0.00	0.00
2,600.0	26.25	80.33	2,442.4	130.4	765.3	202.6	0.00	0.00	0.00
2,700.0	26.25	80.33	2,532.1	137.8	808.9	214.1	0.00	0.00	0.00
2,800.0	26.25	80.33	2,621.8	145.2	852.5	225.6	0.00	0.00	0.00
2,900.0	26.25	80.33	2,711.5	152.6	896.1	237.2	0.00	0.00	0.00
3,000.0	26.25	80.33	2,801.2	160.1	939.7	248.7	0.00	0.00	0.00
3,100.0	26.25	80.33	2,890.9	167.5	983.3	260.3	0.00	0.00	0.00
3,200.0	26.25	80.33	2,980.6	174.9	1,026.9	271.8	0.00	0.00	0.00
3,300.0	26.25	80.33	3,070.3	182.3	1,070.5	283.3	0.00	0.00	0.00
3,400.0	26.25	80.33	3,160.0	189.8	1,114.1	294.9	0.00	0.00	0.00
3,500.0	26.25	80.33	3,249.7	197.2	1,157.7	306.4	0.00	0.00	0.00
3,600.0	26.25	80.33	3,339.3	204.6	1,201.3	318.0	0.00	0.00	0.00
3,700.0	26.25	80.33	3,429.0	212.1	1,244.9	329.5	0.00	0.00	0.00
3,800.0	26.25	80.33	3,518.7	219.5	1,288.5	341.0	0.00	0.00	0.00
3,900.0	26.25	80.33	3,608.4	226.9	1,332.1	352.6	0.00	0.00	0.00
4,000.0	26.25	80.33	3,698.1	234.3	1,375.7	364.1	0.00	0.00	0.00
4,100.0	26.25	80.33	3,787.8	241.8	1,419.3	375.6	0.00	0.00	0.00
4,200.0	26.25	80.33	3,877.5	249.2	1,462.9	387.2	0.00	0.00	0.00
4,300.0	26.25	80.33	3,967.2	256.6	1,506.5	398.7	0.00	0.00	0.00
4,400.0	26.25	80.33	4,056.9	264.0	1,550.1	410.3	0.00	0.00	0.00
4,500.0	26.25	80.33	4,146.6	271.5	1,593.6	421.8	0.00	0.00	0.00
4,600.0	26.25	80.33	4,236.2	278.9	1,637.2	433.3	0.00	0.00	0.00
4,700.0	26.25	80.33	4,325.9	286.3	1,680.8	444.9	0.00	0.00	0.00
4,800.0	26.25	80.33	4,415.6	293.7	1,724.4	456.4	0.00	0.00	0.00
4,900.0	26.25	80.33	4,505.3	301.2	1,768.0	468.0	0.00	0.00	0.00
4,986.7	26.25	80.33	4,583.1	307.6	1,805.8	478.0	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Project:</b>	SEC.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site:</b>	State North Platte K-O-36HC Pad Sec.36-T5N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-30-13)		

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)
5,000.0	25.98	80.33	4,595.0	308.6	1,811.6	479.5	2.00	-2.00	0.00
5,100.0	23.98	80.33	4,685.7	315.7	1,853.2	490.5	2.00	-2.00	0.00
5,200.0	21.98	80.33	4,777.7	322.2	1,891.7	500.7	2.00	-2.00	0.00
5,300.0	19.98	80.33	4,871.1	328.2	1,927.0	510.0	2.00	-2.00	0.00
5,400.0	17.98	80.33	4,965.6	333.7	1,959.1	518.5	2.00	-2.00	0.00
5,500.0	15.98	80.33	5,061.3	338.6	1,987.9	526.1	2.00	-2.00	0.00
5,600.0	13.98	80.33	5,157.9	342.9	2,013.3	532.9	2.00	-2.00	0.00
5,700.0	11.98	80.33	5,255.3	346.7	2,035.5	538.7	2.00	-2.00	0.00
5,800.0	9.98	80.33	5,353.5	349.9	2,054.3	543.7	2.00	-2.00	0.00
5,900.0	7.98	80.33	5,452.2	352.5	2,069.6	547.8	2.00	-2.00	0.00
6,000.0	5.98	80.33	5,551.5	354.6	2,081.6	551.0	2.00	-2.00	0.00
6,100.0	3.98	80.33	5,651.1	356.0	2,090.2	553.2	2.00	-2.00	0.00
6,200.0	1.98	80.33	5,751.0	356.9	2,095.3	554.6	2.00	-2.00	0.00
6,299.0	0.00	0.00	5,850.0	357.2	2,097.0	555.0	2.00	-2.00	0.00
6,300.0	0.00	0.00	5,851.0	357.2	2,097.0	555.0	0.00	0.00	0.00
6,394.2	0.00	0.00	5,945.2	357.2	2,097.0	555.0	0.00	0.00	0.00
<b>KOP #2</b>									
6,400.0	0.64	181.15	5,951.0	357.2	2,097.0	555.1	11.06	11.06	0.00
6,500.0	11.64	181.15	6,050.2	346.5	2,096.8	564.7	11.00	11.00	0.00
6,600.0	22.64	181.15	6,145.6	317.1	2,096.2	591.1	11.00	11.00	0.00
6,700.0	33.64	181.15	6,233.7	270.0	2,095.2	633.5	11.00	11.00	0.00
6,800.0	44.64	181.15	6,311.1	207.0	2,094.0	690.1	11.00	11.00	0.00
6,900.0	55.64	181.15	6,375.1	130.3	2,092.4	759.1	11.00	11.00	0.00
7,000.0	66.64	181.15	6,423.3	42.9	2,090.7	837.7	11.00	11.00	0.00
7,100.0	77.64	181.15	6,453.9	-52.1	2,088.8	923.2	11.00	11.00	0.00
7,200.0	88.64	181.15	6,465.9	-151.2	2,086.8	1,012.3	11.00	11.00	0.00
7,212.4	90.00	181.15	6,466.0	-163.6	2,086.5	1,023.4	11.00	11.00	0.00
<b>End of Build - CODELL TARGET</b>									
7,212.7	90.00	181.15	6,466.0	-163.9	2,086.5	1,023.7	0.00	0.00	0.00
<b>T1 531'FNL &amp; 2608'FWL</b>									
7,300.0	90.00	181.15	6,466.0	-251.2	2,084.8	1,102.2	0.00	0.00	0.00
7,312.6	90.00	181.15	6,466.0	-263.8	2,084.5	1,113.6	0.00	0.00	0.00
<b>7"</b>									
7,314.6	90.00	181.13	6,466.0	-265.8	2,084.5	1,115.3	1.00	0.00	-1.00
7,400.0	90.00	181.13	6,466.0	-351.2	2,082.8	1,192.2	0.00	0.00	0.00
7,500.0	90.00	181.13	6,466.0	-451.2	2,080.8	1,282.1	0.00	0.00	0.00
7,600.0	90.00	181.13	6,466.0	-551.1	2,078.8	1,372.0	0.00	0.00	0.00
7,700.0	90.00	181.13	6,466.0	-651.1	2,076.9	1,462.0	0.00	0.00	0.00
7,800.0	90.00	181.13	6,466.0	-751.1	2,074.9	1,551.9	0.00	0.00	0.00
7,900.0	90.00	181.13	6,466.0	-851.1	2,072.9	1,641.9	0.00	0.00	0.00
8,000.0	90.00	181.13	6,466.0	-951.1	2,070.9	1,731.8	0.00	0.00	0.00
8,100.0	90.00	181.13	6,466.0	-1,051.0	2,069.0	1,821.7	0.00	0.00	0.00
8,200.0	90.00	181.13	6,466.0	-1,151.0	2,067.0	1,911.7	0.00	0.00	0.00
8,300.0	90.00	181.13	6,466.0	-1,251.0	2,065.0	2,001.6	0.00	0.00	0.00
8,400.0	90.00	181.13	6,466.0	-1,351.0	2,063.1	2,091.5	0.00	0.00	0.00
8,500.0	90.00	181.13	6,466.0	-1,451.0	2,061.1	2,181.5	0.00	0.00	0.00
8,600.0	90.00	181.13	6,466.0	-1,550.9	2,059.1	2,271.4	0.00	0.00	0.00
8,700.0	90.00	181.13	6,466.0	-1,650.9	2,057.1	2,361.4	0.00	0.00	0.00
8,800.0	90.00	181.13	6,466.0	-1,750.9	2,055.2	2,451.3	0.00	0.00	0.00
8,900.0	90.00	181.13	6,466.0	-1,850.9	2,053.2	2,541.2	0.00	0.00	0.00
9,000.0	90.00	181.13	6,466.0	-1,950.9	2,051.2	2,631.2	0.00	0.00	0.00
9,100.0	90.00	181.13	6,466.0	-2,050.8	2,049.2	2,721.1	0.00	0.00	0.00

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)
9,200.0	90.00	181.13	6,466.0	-2,150.8	2,047.3	2,811.1	0.00	0.00	0.00
9,300.0	90.00	181.13	6,466.0	-2,250.8	2,045.3	2,901.0	0.00	0.00	0.00
9,400.0	90.00	181.13	6,466.0	-2,350.8	2,043.3	2,990.9	0.00	0.00	0.00
9,500.0	90.00	181.13	6,466.0	-2,450.8	2,041.3	3,080.9	0.00	0.00	0.00
9,600.0	90.00	181.13	6,466.0	-2,550.7	2,039.4	3,170.8	0.00	0.00	0.00
9,700.0	90.00	181.13	6,466.0	-2,650.7	2,037.4	3,260.7	0.00	0.00	0.00
9,800.0	90.00	181.13	6,466.0	-2,750.7	2,035.4	3,350.7	0.00	0.00	0.00
9,900.0	90.00	181.13	6,466.0	-2,850.7	2,033.4	3,440.6	0.00	0.00	0.00
10,000.0	90.00	181.13	6,466.0	-2,950.7	2,031.5	3,530.6	0.00	0.00	0.00
10,100.0	90.00	181.13	6,466.0	-3,050.6	2,029.5	3,620.5	0.00	0.00	0.00
10,200.0	90.00	181.13	6,466.0	-3,150.6	2,027.5	3,710.4	0.00	0.00	0.00
10,300.0	90.00	181.13	6,466.0	-3,250.6	2,025.5	3,800.4	0.00	0.00	0.00
10,400.0	90.00	181.13	6,466.0	-3,350.6	2,023.6	3,890.3	0.00	0.00	0.00
10,500.0	90.00	181.13	6,466.0	-3,450.6	2,021.6	3,980.3	0.00	0.00	0.00
10,600.0	90.00	181.13	6,466.0	-3,550.6	2,019.6	4,070.2	0.00	0.00	0.00
10,700.0	90.00	181.13	6,466.0	-3,650.5	2,017.6	4,160.1	0.00	0.00	0.00
10,800.0	90.00	181.13	6,466.0	-3,750.5	2,015.7	4,250.1	0.00	0.00	0.00
10,900.0	90.00	181.13	6,466.0	-3,850.5	2,013.7	4,340.0	0.00	0.00	0.00
11,000.0	90.00	181.13	6,466.0	-3,950.5	2,011.7	4,429.9	0.00	0.00	0.00
11,100.0	90.00	181.13	6,466.0	-4,050.5	2,009.7	4,519.9	0.00	0.00	0.00
11,200.0	90.00	181.13	6,466.0	-4,150.4	2,007.8	4,609.8	0.00	0.00	0.00
11,300.0	90.00	181.13	6,466.0	-4,250.4	2,005.8	4,699.8	0.00	0.00	0.00
11,388.4	90.00	181.13	6,466.0	-4,338.8	2,004.0	4,779.3	0.00	0.00	0.00
BHL 470'FSL & 2580'FWL									

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
BHL 470'FSL & 2580'I - plan hits target center - Point	0.00	0.00	6,466.0	-4,338.8	2,004.0	1,372,412.76	3,310,791.91	40.350310	-104.384880
T1 531'FNL & 2608'FV - plan misses target center by 2.0ft at 7212.7ft MD (6466.0 TVD, -163.9 N, 2086.5 E) - Point	0.00	0.00	6,466.0	-163.8	2,084.5	1,376,588.25	3,310,820.22	40.361770	-104.384590

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)		Name	Casing Diameter (")	Hole Diameter (")
7,312.6	6,466.0	7"		7	7-1/2

Formations					
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°) Dip Direction (°)
	7,212.4	6,466.0	CODELL TARGET		0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Project:</b>	SEC.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site:</b>	State North Platte K-O-36HC Pad	<b>North Reference:</b>	True
	Sec.36-T5N-R63W		
<b>Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-30-13)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP
6,394.2	5,945.2	357.2	2,097.0	KOP #2
7,212.4	6,466.0	-163.6	2,086.5	End of Build



## **Directional**

# **BONANZA CREEK ENERGY OPERATING**

**SEC.36-T5N-R63W**

**State North Platte K-O-36HC Pad Sec.36-T5N-R63W**

**State North Platte K-O-36HC**

**Wellbore #1**

**Plan #1 (5-30-13)**

## **Anticollision Report**

**30 May, 2013**



<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Project:</b>	SEC.36-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Reference Site:</b>	State North Platte K-O-36HC Pad Sec.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-30-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1 (5-30-13)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b> 5/30/2013			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	11,388.4	Plan #1 (5-30-13) (Wellbore #1)	MWD	MWD - Standard

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (ft)</b>	<b>Offset Measured Depth (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Offset Well - Wellbore - Design</b>						
State North Platte K-O-36HC Pad Sec.36-T5N-R63W						
State North Platte F-J-36HC - Wellbore #1 - Plan #1 (5-3	200.0	200.0	18.2	17.5	27.014	CC
State North Platte F-J-36HC - Wellbore #1 - Plan #1 (5-3	300.0	300.0	18.6	17.5	16.654	ES
State North Platte F-J-36HC - Wellbore #1 - Plan #1 (5-3	11,388.4	10,986.2	1,290.2	1,120.1	7.587	SF

<b>Offset Design</b>												
Survey Program: 0-MWD												
Reference												
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Semi Major Axis Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>
0.0	0.0	0.0	0.0	0.0	0.0	-180.00	-18.2	0.0	18.2	18.2	0.00	N/A
100.0	100.0	100.0	100.0	0.1	0.1	-180.00	-18.2	0.0	18.2	18.0	0.22	81.042
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-18.2	0.0	18.2	17.5	0.67	27.014 CC
300.0	300.0	300.0	300.0	0.6	0.6	104.97	-18.2	0.0	18.6	17.5	1.12	16.654 ES
400.0	399.8	399.8	399.8	0.8	0.8	119.14	-18.2	0.0	20.6	19.0	1.57	13.121
500.0	499.5	500.2	500.2	1.0	1.0	134.24	-17.5	1.6	24.5	22.4	2.03	12.053
600.0	598.7	600.8	600.6	1.3	1.2	146.30	-15.3	6.4	29.1	26.6	2.49	11.701
700.0	697.5	701.6	701.0	1.6	1.5	156.23	-11.6	14.4	34.4	31.4	2.94	11.676
800.0	795.6	802.6	801.3	2.0	1.7	164.67	-6.4	25.6	40.2	36.8	3.40	11.842
900.0	893.1	903.8	901.2	2.5	2.1	172.01	0.3	40.1	46.7	42.8	3.85	12.107
1,000.0	989.6	1,003.2	999.1	3.0	2.4	177.98	7.6	56.0	55.4	51.1	4.33	12.789
1,100.0	1,085.3	1,102.3	1,096.7	3.6	2.8	-177.81	14.8	71.7	68.0	63.2	4.84	14.049
1,200.0	1,179.8	1,200.9	1,193.7	4.2	3.1	-175.12	22.1	87.4	84.4	79.0	5.38	15.683
1,300.0	1,273.2	1,298.9	1,290.2	4.9	3.5	-173.50	29.2	103.0	104.2	98.3	5.93	17.568
1,400.0	1,365.2	1,396.1	1,385.9	5.7	3.9	-172.58	36.4	118.5	127.5	121.0	6.49	19.631
1,500.0	1,455.8	1,492.5	1,480.8	6.6	4.2	-172.09	43.4	133.8	154.1	147.1	7.06	21.830
1,512.3	1,466.9	1,504.3	1,492.4	6.7	4.3	-172.05	44.3	135.7	157.7	150.5	7.13	22.105
1,600.0	1,545.5	1,588.3	1,575.1	7.5	4.6	-171.89	50.4	149.0	182.8	175.2	7.68	23.819
1,700.0	1,635.2	1,684.1	1,669.4	8.4	5.0	-171.75	57.5	164.3	211.6	203.3	8.30	25.478
1,800.0	1,724.9	1,779.9	1,763.7	9.4	5.4	-171.65	64.5	179.5	240.3	231.4	8.94	26.886
1,900.0	1,814.6	1,875.6	1,858.0	10.3	5.7	-171.57	71.5	194.8	269.0	259.4	9.58	28.095
2,000.0	1,904.3	1,971.4	1,952.3	11.2	6.1	-171.50	78.5	210.0	297.7	287.5	10.22	29.142
2,100.0	1,994.0	2,067.2	2,046.6	12.2	6.5	-171.45	85.6	225.3	326.5	315.6	10.86	30.058

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Project:</b>	SEC.36-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Reference Site:</b>	State North Platte K-O-36HC Pad Sec.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-30-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design State North Platte K-O-36HC Pad Sec.36-T5N-R63W - State North Platte F-J-36HC - Wellbore #1 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
2,200.0	2,083.7	2,163.0	2,140.9	13.1	6.9	-171.40	92.6	240.5	355.2	343.7	11.51	30.864		
2,300.0	2,173.4	2,258.8	2,235.2	14.1	7.2	-171.36	99.6	255.7	383.9	371.8	12.16	31.579		
2,400.0	2,263.1	2,354.6	2,329.5	15.0	7.6	-171.33	106.6	271.0	412.7	399.8	12.81	32.216		
2,500.0	2,352.8	2,450.3	2,423.8	16.0	8.0	-171.30	113.6	286.2	441.4	427.9	13.46	32.789		
2,600.0	2,442.4	2,546.1	2,518.1	16.9	8.4	-171.27	120.7	301.5	470.1	456.0	14.12	33.306		
2,700.0	2,532.1	2,641.9	2,612.4	17.9	8.8	-171.25	127.7	316.7	498.8	484.1	14.77	33.774		
2,800.0	2,621.8	2,737.7	2,706.7	18.8	9.1	-171.23	134.7	331.9	527.6	512.1	15.43	34.200		
2,900.0	2,711.5	2,833.5	2,801.0	19.8	9.5	-171.21	141.7	347.2	556.3	540.2	16.08	34.590		
3,000.0	2,801.2	2,929.3	2,895.3	20.8	9.9	-171.20	148.7	362.4	585.0	568.3	16.74	34.947		
3,100.0	2,890.9	3,025.1	2,989.7	21.7	10.3	-171.18	155.8	377.7	613.8	596.4	17.40	35.276		
3,200.0	2,980.6	3,120.8	3,084.0	22.7	10.7	-171.17	162.8	392.9	642.5	624.4	18.06	35.580		
3,300.0	3,070.3	3,216.6	3,178.3	23.6	11.0	-171.15	169.8	408.1	671.2	652.5	18.72	35.861		
3,400.0	3,160.0	3,312.4	3,272.6	24.6	11.4	-171.14	176.8	423.4	699.9	680.6	19.38	36.122		
3,500.0	3,249.7	3,408.2	3,366.9	25.5	11.8	-171.13	183.9	438.6	728.7	708.6	20.04	36.365		
3,600.0	3,339.3	3,504.0	3,461.2	26.5	12.2	-171.12	190.9	453.9	757.4	736.7	20.70	36.592		
3,700.0	3,429.0	3,599.8	3,555.5	27.5	12.6	-171.11	197.9	469.1	786.1	764.8	21.36	36.804		
3,800.0	3,518.7	3,695.5	3,649.8	28.4	13.0	-171.11	204.9	484.4	814.9	792.8	22.02	37.003		
3,900.0	3,608.4	3,791.3	3,744.1	29.4	13.3	-171.10	211.9	499.6	843.6	820.9	22.68	37.190		
4,000.0	3,698.1	3,887.1	3,838.4	30.3	13.7	-171.09	219.0	514.8	872.3	849.0	23.35	37.365		
4,100.0	3,787.8	3,982.9	3,932.7	31.3	14.1	-171.08	226.0	530.1	901.1	877.0	24.01	37.531		
4,200.0	3,877.5	4,078.7	4,027.0	32.2	14.5	-171.08	233.0	545.3	929.8	905.1	24.67	37.687		
4,300.0	3,967.2	4,174.5	4,121.3	33.2	14.9	-171.07	240.0	560.6	958.5	933.2	25.33	37.834		
4,400.0	4,056.9	4,270.2	4,215.6	34.2	15.2	-171.07	247.0	575.8	987.2	961.2	26.00	37.974		
4,500.0	4,146.6	4,366.0	4,309.9	35.1	15.6	-171.06	254.1	591.0	1,016.0	989.3	26.66	38.106		
4,600.0	4,236.2	4,461.8	4,404.2	36.1	16.0	-171.06	261.1	606.3	1,044.7	1,017.4	27.33	38.232		
4,700.0	4,325.9	4,557.6	4,498.5	37.0	16.4	-171.05	268.1	621.5	1,073.4	1,045.4	27.99	38.351		
4,800.0	4,415.6	4,653.4	4,592.8	38.0	16.8	-171.05	275.1	636.8	1,102.2	1,073.5	28.65	38.465		
4,900.0	4,505.3	4,749.2	4,687.1	39.0	17.2	-171.04	282.2	652.0	1,130.9	1,101.6	29.32	38.573		
4,986.7	4,583.1	4,832.2	4,768.9	39.8	17.5	-171.04	288.2	665.2	1,155.8	1,125.9	29.89	38.662		
5,000.0	4,595.0	4,845.0	4,781.4	39.9	17.5	-171.05	289.2	667.3	1,159.6	1,129.6	30.00	38.658		
5,100.0	4,685.7	4,941.3	4,876.3	40.6	17.9	-171.11	296.2	682.6	1,186.2	1,155.5	30.73	38.607		
5,200.0	4,777.7	5,038.6	4,972.0	41.3	18.3	-171.14	303.4	698.1	1,209.5	1,178.1	31.42	38.494		
5,300.0	4,871.1	5,136.6	5,068.5	42.0	18.7	-171.13	310.6	713.6	1,229.4	1,197.4	32.08	38.323		
5,400.0	4,965.6	5,235.2	5,165.6	42.5	19.1	-171.09	317.8	729.3	1,246.0	1,213.3	32.70	38.099		
5,500.0	5,061.3	5,334.3	5,263.1	43.0	19.5	-171.02	325.0	745.1	1,259.1	1,225.8	33.29	37.824		
5,600.0	5,157.9	5,415.3	5,343.0	43.5	19.8	-170.94	330.8	757.7	1,269.3	1,235.5	33.75	37.603		
5,700.0	5,255.3	5,500.0	5,426.8	43.9	20.0	-170.88	336.0	768.8	1,278.3	1,244.1	34.14	37.439		
5,800.0	5,353.5	5,556.9	5,483.2	44.2	20.2	-170.85	338.8	775.0	1,285.8	1,251.4	34.39	37.385		
5,900.0	5,452.2	5,627.6	5,553.6	44.5	20.3	-170.83	341.7	781.4	1,292.3	1,257.7	34.62	37.332		
6,000.0	5,551.5	5,700.0	5,625.8	44.7	20.5	-170.81	344.0	786.2	1,297.6	1,262.8	34.78	37.311		
6,100.0	5,651.1	5,769.0	5,694.7	44.9	20.6	-170.80	345.4	789.2	1,301.7	1,266.9	34.86	37.336		
6,200.0	5,751.0	5,839.6	5,765.4	45.0	20.7	-170.81	346.1	790.8	1,304.6	1,269.7	34.89	37.389		
6,299.0	5,850.0	5,924.3	5,850.0	45.1	20.8	-90.48	346.2	791.0	1,306.0	1,271.5	34.55	37.807		
6,394.2	5,945.1	6,019.4	5,945.1	45.1	20.9	-90.48	346.2	791.0	1,306.0	1,271.2	34.83	37.500		
6,400.0	5,951.0	6,025.2	5,950.9	45.1	20.9	88.37	346.2	791.0	1,306.0	1,270.9	35.19	37.113		
6,450.0	6,000.9	6,072.2	5,997.8	45.2	20.9	88.40	344.0	791.0	1,306.0	1,270.7	35.28	37.016		
6,500.0	6,050.2	6,119.2	6,044.4	45.2	21.0	88.44	337.6	790.9	1,306.0	1,270.6	35.33	36.963		
6,550.0	6,098.6	6,166.4	6,090.4	45.2	21.0	88.49	327.0	790.7	1,305.9	1,270.6	35.34	36.953		
6,600.0	6,145.6	6,213.6	6,135.2	45.1	21.0	88.56	312.2	790.4	1,305.8	1,270.5	35.31	36.982		
6,650.0	6,190.8	6,261.0	6,178.7	45.1	20.9	88.65	293.4	790.1	1,305.7	1,270.5	35.25	37.045		
6,700.0	6,233.7	6,308.6	6,220.4	45.1	20.9	88.74	270.6	789.7	1,305.6	1,270.5	35.16	37.133		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Project:</b>	SEC.36-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Reference Site:</b>	State North Platte K-O-36HC Pad Sec.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-30-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design State North Platte K-O-36HC Pad Sec.36-T5N-R63W - State North Platte F-J-36HC - Wellbore #1 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,750.0	6,273.9	6,356.3	6,260.0	45.0	20.8	88.85	88.85	244.0	789.2	1,305.5	1,270.4	35.06	37.237	
6,800.0	6,311.1	6,404.2	6,297.1	45.0	20.7	88.96	88.96	213.8	788.7	1,305.4	1,270.4	34.95	37.346	
6,850.0	6,345.0	6,452.3	6,331.5	44.9	20.7	89.09	89.09	180.1	788.1	1,305.2	1,270.4	34.86	37.446	
6,900.0	6,375.1	6,500.0	6,362.3	44.9	20.6	89.22	89.22	143.8	787.5	1,305.1	1,270.3	34.78	37.523	
6,950.0	6,401.3	6,549.2	6,390.5	44.8	20.5	89.36	89.36	103.5	786.8	1,304.9	1,270.2	34.74	37.561	
7,000.0	6,423.3	6,598.1	6,414.7	44.8	20.5	89.51	89.51	61.0	786.1	1,304.8	1,270.0	34.75	37.543	
7,050.0	6,440.9	6,647.2	6,434.8	44.8	20.4	89.66	89.66	16.2	785.3	1,304.6	1,269.8	34.83	37.457	
7,100.0	6,453.9	6,696.6	6,450.7	44.7	20.4	89.82	89.82	-30.6	784.5	1,304.4	1,269.5	34.98	37.291	
7,150.0	6,462.3	6,746.3	6,462.1	44.7	20.4	89.97	89.97	-78.9	783.7	1,304.3	1,269.1	35.22	37.035	
7,200.0	6,465.9	6,796.4	6,469.0	44.7	20.4	90.13	90.13	-128.5	782.8	1,304.2	1,268.6	35.54	36.692	
7,212.4	6,466.0	6,808.8	6,469.9	44.7	20.4	90.17	90.17	-140.9	782.6	1,304.1	1,268.5	35.64	36.592	
7,300.0	6,466.0	6,896.7	6,471.0	44.8	20.6	90.22	90.22	-228.7	781.1	1,303.9	1,267.5	36.43	35.792	
7,312.6	6,466.0	6,909.3	6,471.0	44.8	20.6	90.22	90.22	-241.3	780.9	1,303.8	1,267.3	36.57	35.656	
7,314.6	6,466.0	6,911.3	6,471.0	44.8	20.6	90.22	90.22	-243.3	780.8	1,303.8	1,267.3	36.59	35.634	
7,400.0	6,466.0	6,997.8	6,471.0	44.9	21.0	90.22	90.22	-329.8	779.4	1,303.6	1,266.1	37.52	34.746	
7,500.0	6,466.0	7,097.8	6,471.0	45.1	21.6	90.22	90.22	-429.8	777.8	1,303.2	1,264.2	39.08	33.344	
7,600.0	6,466.0	7,197.8	6,471.0	45.3	22.3	90.22	90.22	-529.8	776.1	1,302.9	1,262.0	40.95	31.815	
7,700.0	6,466.0	7,297.8	6,471.0	45.6	23.2	90.22	90.22	-629.8	774.5	1,302.6	1,259.5	43.08	30.235	
7,800.0	6,466.0	7,397.8	6,471.0	46.0	24.3	90.22	90.22	-729.8	772.8	1,302.2	1,256.8	45.43	28.663	
7,900.0	6,466.0	7,497.8	6,471.0	46.5	25.4	90.22	90.22	-829.8	771.2	1,301.9	1,253.9	47.97	27.138	
8,000.0	6,466.0	7,597.8	6,471.0	47.0	26.7	90.22	90.22	-929.7	769.6	1,301.6	1,250.9	50.68	25.684	
8,100.0	6,466.0	7,697.8	6,471.0	47.6	28.0	90.22	90.22	-1,029.7	767.9	1,301.2	1,247.7	53.52	24.315	
8,200.0	6,466.0	7,797.8	6,471.0	48.3	29.5	90.22	90.22	-1,129.7	766.3	1,300.9	1,244.4	56.47	23.037	
8,300.0	6,466.0	7,897.8	6,471.0	49.0	30.9	90.22	90.22	-1,229.7	764.7	1,300.6	1,241.0	59.52	21.849	
8,400.0	6,466.0	7,997.8	6,471.0	49.8	32.4	90.22	90.22	-1,329.7	763.0	1,300.2	1,237.6	62.66	20.749	
8,500.0	6,466.0	8,097.8	6,471.0	50.7	34.0	90.22	90.22	-1,429.7	761.4	1,299.9	1,234.0	65.88	19.732	
8,600.0	6,466.0	8,197.8	6,471.0	51.6	35.6	90.22	90.22	-1,529.7	759.7	1,299.5	1,230.4	69.15	18.793	
8,700.0	6,466.0	8,297.8	6,471.0	52.6	37.2	90.22	90.22	-1,629.6	758.1	1,299.2	1,226.7	72.48	17.926	
8,800.0	6,466.0	8,397.8	6,471.0	53.7	38.9	90.22	90.22	-1,729.6	756.5	1,298.9	1,223.0	75.85	17.123	
8,900.0	6,466.0	8,497.8	6,471.0	54.8	40.6	90.22	90.22	-1,829.6	754.8	1,298.5	1,219.3	79.27	16.381	
9,000.0	6,466.0	8,597.8	6,471.0	55.9	42.2	90.22	90.22	-1,929.6	753.2	1,298.2	1,215.5	82.72	15.693	
9,100.0	6,466.0	8,697.8	6,471.0	57.1	44.0	90.22	90.22	-2,029.6	751.6	1,297.9	1,211.7	86.21	15.055	
9,200.0	6,466.0	8,797.8	6,471.0	58.4	45.7	90.22	90.22	-2,129.6	749.9	1,297.5	1,207.8	89.72	14.462	
9,300.0	6,466.0	8,897.8	6,471.0	59.7	47.4	90.22	90.22	-2,229.6	748.3	1,297.2	1,203.9	93.26	13.910	
9,400.0	6,466.0	8,997.8	6,471.0	61.0	49.2	90.22	90.22	-2,329.5	746.6	1,296.9	1,200.0	96.81	13.395	
9,500.0	6,466.0	9,097.8	6,471.0	62.4	51.0	90.22	90.22	-2,429.5	745.0	1,296.5	1,196.1	100.39	12.914	
9,600.0	6,466.0	9,197.8	6,471.0	63.8	52.7	90.22	90.22	-2,529.5	743.4	1,296.2	1,192.2	103.99	12.464	
9,700.0	6,466.0	9,297.8	6,471.0	65.2	54.5	90.22	90.22	-2,629.5	741.7	1,295.8	1,188.2	107.60	12.043	
9,800.0	6,466.0	9,397.8	6,471.0	66.7	56.3	90.22	90.22	-2,729.5	740.1	1,295.5	1,184.3	111.23	11.647	
9,900.0	6,466.0	9,497.8	6,471.0	68.1	58.1	90.22	90.22	-2,829.5	738.4	1,295.2	1,180.3	114.87	11.275	
10,000.0	6,466.0	9,597.8	6,471.0	69.7	59.9	90.22	90.22	-2,929.5	736.8	1,294.8	1,176.3	118.53	10.925	
10,100.0	6,466.0	9,697.8	6,471.0	71.2	61.8	90.22	90.22	-3,029.4	735.2	1,294.5	1,172.3	122.19	10.594	
10,200.0	6,466.0	9,797.8	6,471.0	72.7	63.6	90.22	90.22	-3,129.4	733.5	1,294.2	1,168.3	125.86	10.282	
10,300.0	6,466.0	9,897.8	6,471.0	74.3	65.4	90.22	90.22	-3,229.4	731.9	1,293.8	1,164.3	129.54	9.988	
10,400.0	6,466.0	9,997.8	6,471.0	75.9	67.2	90.22	90.22	-3,329.4	730.3	1,293.5	1,160.3	133.23	9.708	
10,500.0	6,466.0	10,097.8	6,471.0	77.5	69.1	90.22	90.22	-3,429.4	728.6	1,293.1	1,156.2	136.93	9.444	
10,600.0	6,466.0	10,197.8	6,471.0	79.1	70.9	90.22	90.22	-3,529.4	727.0	1,292.8	1,152.2	140.64	9.192	
10,700.0	6,466.0	10,297.8	6,471.0	80.8	72.8	90.22	90.22	-3,629.4	725.3	1,292.5	1,148.1	144.35	8.954	
10,800.0	6,466.0	10,397.8	6,471.0	82.4	74.6	90.22	90.22	-3,729.3	723.7	1,292.1	1,144.1	148.07	8.727	
10,900.0	6,466.0	10,497.8	6,471.0	84.1	76.5	90.22	90.22	-3,829.3	722.1	1,291.8	1,140.0	151.79	8.510	
11,000.0	6,466.0	10,597.8	6,471.0	85.7	78.3	90.22	90.22	-3,929.3	720.4	1,291.5	1,135.9	155.52	8.304	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

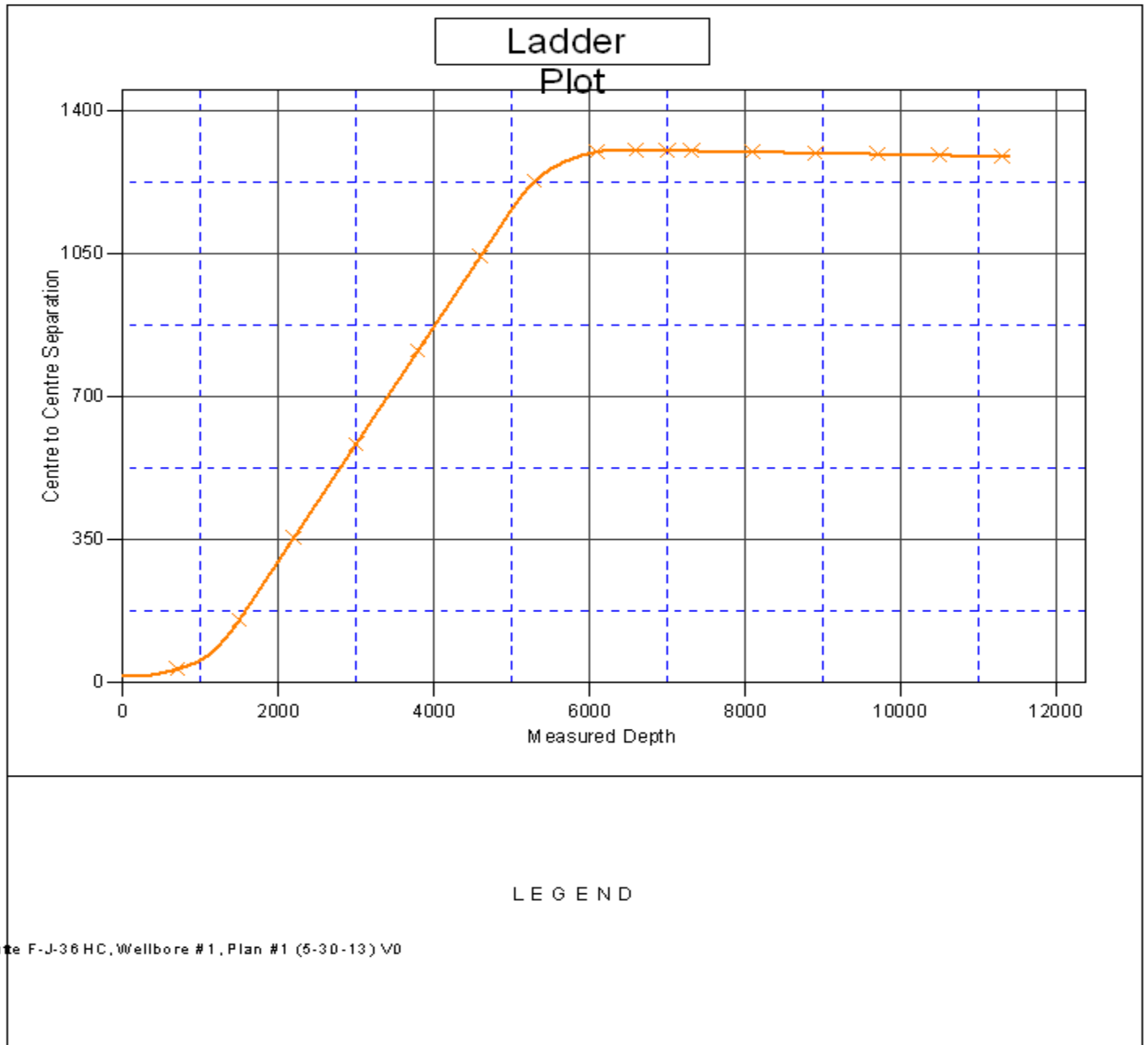
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Project:</b>	SEC.36-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Reference Site:</b>	State North Platte K-O-36HC Pad Sec.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-30-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design										State North Platte K-O-36HC Pad Sec.36-T5N-R63W - State North Platte F-J-36HC - Wellbore #1 - Pla			Offset Site Error:		0.0 ft	
Survey Program: 0-MWD													Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
11,100.0	6,466.0	10,697.8	6,471.0	87.4	80.2	90.22	-4,029.3	718.8	1,291.1	1,131.9	159.25	8.107				
11,200.0	6,466.0	10,797.8	6,471.0	89.1	82.0	90.22	-4,129.3	717.2	1,290.8	1,127.8	162.99	7.919				
11,300.0	6,466.0	10,897.8	6,471.0	90.8	83.9	90.22	-4,229.3	715.5	1,290.5	1,123.7	166.73	7.740				
11,388.4	6,466.0	10,986.2	6,471.0	92.3	85.5	90.22	-4,317.7	714.1	1,290.2	1,120.1	170.05	7.587 SF				

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Project:</b>	SEC.36-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Reference Site:</b>	State North Platte K-O-36HC Pad Sec.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-30-13)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4558.0ft (RKB - 15')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: State North Platte K-O-36HC  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.72°



<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte K-O-36HC
<b>Project:</b>	SEC.36-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Reference Site:</b>	State North Platte K-O-36HC Pad Sec.36-T5N-R63W	<b>MD Reference:</b>	WELL @ 4558.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	State North Platte K-O-36HC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-30-13)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4558.0ft (RKB - 15')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: State North Platte K-O-36HC  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.72°

