

# BONANZA CREEK ENERGY OPERATING

Well Name: **NORTH PLATTE 24-21-24HZ**

Surface Location: NORTH PLATTE 24-21-24HZ Pad SEC.24-T5N-R63W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

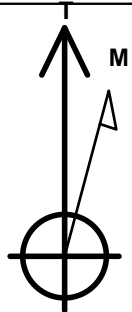
Ground Elevation: 4569.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1382732.31	3309494.72	40.378680	-104.389070	

Original Well Elev WELL @ 4584.0ft (Original Well Elev)

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE BH 460'	1.0	4360.0	-210.6	Polygon
HARDLINE SH 460'	1.0	0.0	-400.0	Polygon
BHL 460'FNL & 1650'FWL	6407.0	4360.8	189.4	Point
TARGET 1 460'FSL & 1620'FWL	6407.0	0.0	331.5	Point



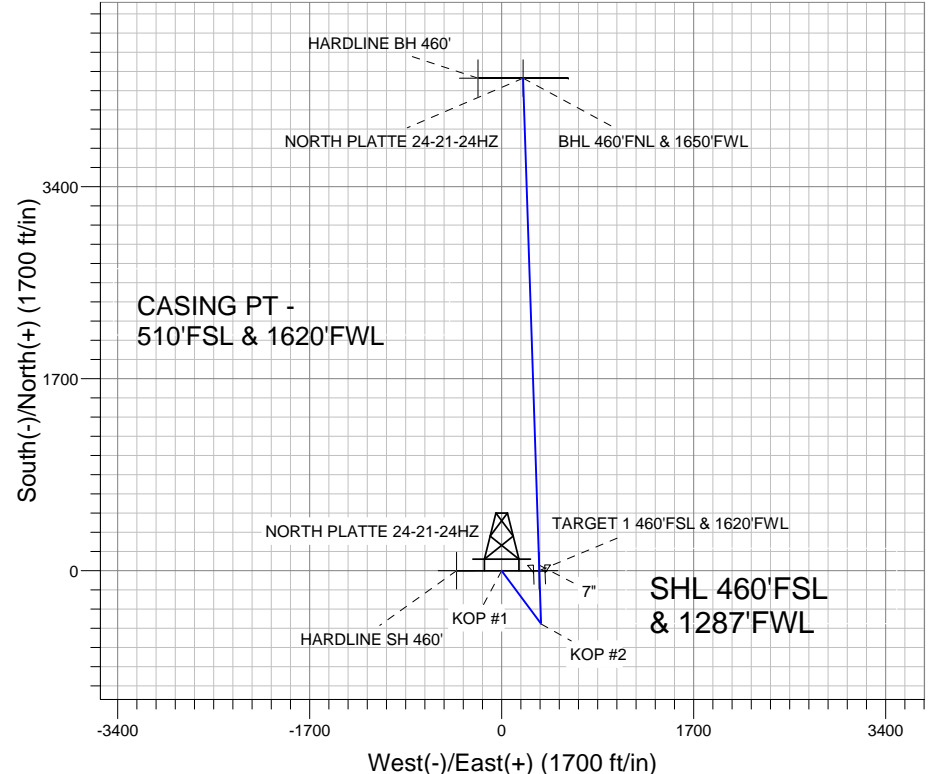
Azimuths to True North  
Magnetic North: 8.54°

Magnetic Field  
Strength: 53071.5nT  
Dip Angle: 67.07°  
Date: 4/24/2012  
Model: IGRF2010

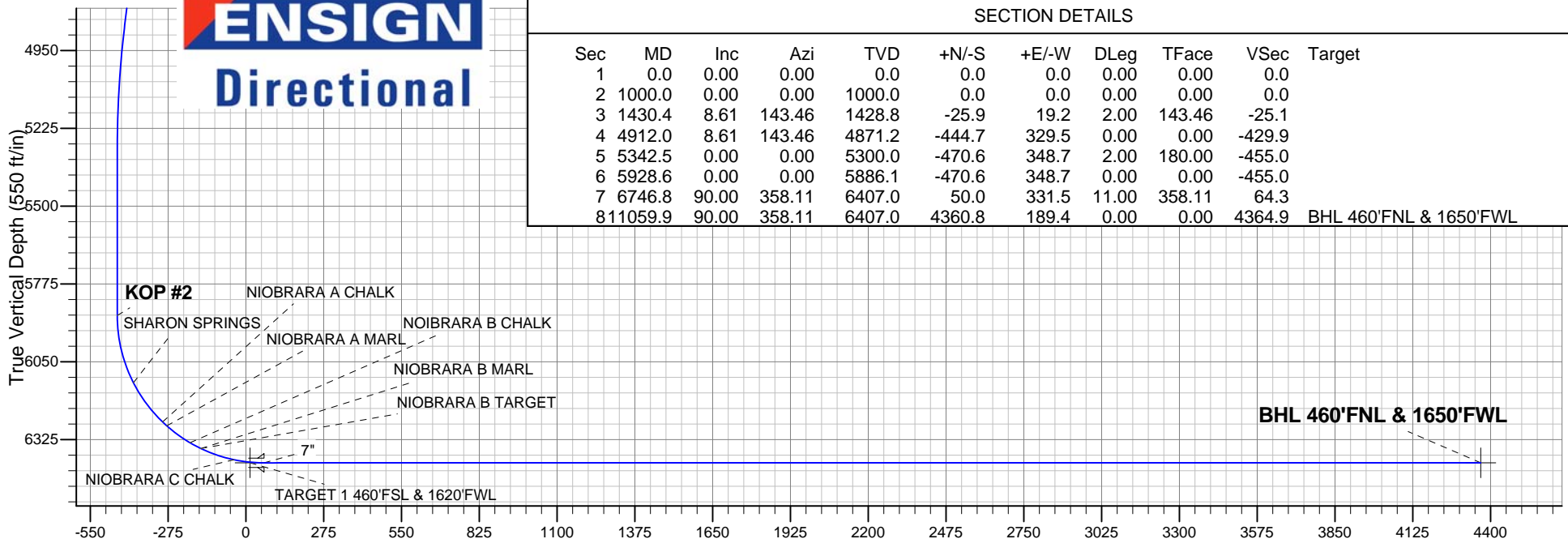
NORTH PLATTE 24-21-24HZ Pad SEC.24-T5N-R63W  
NORTH PLATTE 24-21-24HZ  
PLAN #1 (APRIL 24, 2012)  
9:15, April 25 2012

## ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
5886.1	5928.6	KOP #2



**ENSIGN**  
Directional



Vertical Section at 2.49° (550 ft/in)

## 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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1430.4	8.61	143.46	1428.8	-25.9	19.2	2.00	143.46	-25.1	
4	4912.0	8.61	143.46	4871.2	-444.7	329.5	0.00	0.00	-429.9	
5	5342.5	0.00	0.00	5300.0	-470.6	348.7	2.00	180.00	-455.0	
6	5928.6	0.00	0.00	5886.1	-470.6	348.7	0.00	0.00	-455.0	
7	6746.8	90.00	358.11	6407.0	50.0	331.5	11.00	358.11	64.3	
8	11059.9	90.00	358.11	6407.0	4360.8	189.4	0.00	0.00	4364.9	BHL 460'FNL & 1650'FWL



# **BONANZA CREEK ENERGY OPERATING**

**SEC.24-T5N-R63W**

**NORTH PLATTE 24-21-24HZ Pad SEC.24-T5N-R63W**

**NORTH PLATTE 24-21-24HZ**

**Wellbore #1**

**Plan: PLAN #1 (APRIL 24, 2012)**

## **Standard Planning Report**

**25 April, 2012**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well NORTH PLATTE 24-21-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Project:</b>	SEC.24-T5N-R63W	<b>MD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Site:</b>	NORTH PLATTE 24-21-24HZ Pad	<b>North Reference:</b>	True
	SEC.24-T5N-R63W		
<b>Well:</b>	NORTH PLATTE 24-21-24HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN #1 (APRIL 24, 2012)		

<b>Project</b>	SEC.24-T5N-R63W, Weld County, CO		
<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 NORTH PLATTE 24-21-24HZ Pad SEC.24-T5N-R63W					
Site Position:		Northing:		1,382,732.32 ft	
From:	Lat/Long	Easting:		3,309,494.72 ft	
Position Uncertainty:		Slot Radius:		Grid Convergence:	
0.0 ft		"		40.378680 °	
				-104.389070 °	
				0.72 °	

Well	NORTH PLATTE 24-21-24HZ					
Well Position	+N/-S	0.0 ft	Northing:	1,382,732.31 ft	Latitude:	40.378680
	+E/-W	0.0 ft	Easting:	3,309,494.72 ft	Longitude:	-104.389070
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,569.0 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	4/24/2012	8.54	67.07	53,072

<b>Design</b>	PLAN #1 (APRIL 24, 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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	2.49

<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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,430.4	8.61	143.46	1,428.8	-25.9	19.2	2.00	2.00	0.00	143.46	
4,912.0	8.61	143.46	4,871.2	-444.7	329.5	0.00	0.00	0.00	0.00	
5,342.5	0.00	0.00	5,300.0	-470.6	348.7	2.00	-2.00	0.00	180.00	
5,928.6	0.00	0.00	5,886.1	-470.6	348.7	0.00	0.00	0.00	0.00	
6,746.8	90.00	358.11	6,407.0	50.0	331.5	11.00	11.00	0.00	358.11	
11,059.9	90.00	358.11	6,407.0	4,360.8	189.4	0.00	0.00	0.00	0.00	BHL 460'FNL & 165°

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well NORTH PLATTE 24-21-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Project:</b>	SEC.24-T5N-R63W	<b>MD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Site:</b>	NORTH PLATTE 24-21-24HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	SEC.24-T5N-R63W	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	NORTH PLATTE 24-21-24HZ		
<b>Design:</b>	Wellbore #1		
	PLAN #1 (APRIL 24, 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
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>HARDLINE BH 460' - HARDLINE SH 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
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP #1</b>									
1,100.0	2.00	143.46	1,100.0	-1.4	1.0	-1.4	2.00	2.00	0.00
1,200.0	4.00	143.46	1,199.8	-5.6	4.2	-5.4	2.00	2.00	0.00
1,300.0	6.00	143.46	1,299.5	-12.6	9.3	-12.2	2.00	2.00	0.00
1,400.0	8.00	143.46	1,398.7	-22.4	16.6	-21.7	2.00	2.00	0.00
1,430.4	8.61	143.46	1,428.8	-25.9	19.2	-25.1	2.00	2.00	0.00
1,500.0	8.61	143.46	1,497.6	-34.3	25.4	-33.2	0.00	0.00	0.00
1,600.0	8.61	143.46	1,596.5	-46.3	34.3	-44.8	0.00	0.00	0.00
1,700.0	8.61	143.46	1,695.3	-58.4	43.2	-56.4	0.00	0.00	0.00
1,800.0	8.61	143.46	1,794.2	-70.4	52.1	-68.1	0.00	0.00	0.00
1,900.0	8.61	143.46	1,893.1	-82.4	61.1	-79.7	0.00	0.00	0.00
2,000.0	8.61	143.46	1,992.0	-94.4	70.0	-91.3	0.00	0.00	0.00
2,100.0	8.61	143.46	2,090.8	-106.5	78.9	-102.9	0.00	0.00	0.00
2,200.0	8.61	143.46	2,189.7	-118.5	87.8	-114.6	0.00	0.00	0.00
2,300.0	8.61	143.46	2,288.6	-130.5	96.7	-126.2	0.00	0.00	0.00
2,400.0	8.61	143.46	2,387.5	-142.5	105.6	-137.8	0.00	0.00	0.00
2,500.0	8.61	143.46	2,486.3	-154.6	114.5	-149.5	0.00	0.00	0.00
2,600.0	8.61	143.46	2,585.2	-166.6	123.4	-161.1	0.00	0.00	0.00
2,700.0	8.61	143.46	2,684.1	-178.6	132.4	-172.7	0.00	0.00	0.00
2,800.0	8.61	143.46	2,783.0	-190.7	141.3	-184.3	0.00	0.00	0.00
2,900.0	8.61	143.46	2,881.8	-202.7	150.2	-196.0	0.00	0.00	0.00
3,000.0	8.61	143.46	2,980.7	-214.7	159.1	-207.6	0.00	0.00	0.00
3,100.0	8.61	143.46	3,079.6	-226.7	168.0	-219.2	0.00	0.00	0.00
3,200.0	8.61	143.46	3,178.4	-238.8	176.9	-230.9	0.00	0.00	0.00
3,300.0	8.61	143.46	3,277.3	-250.8	185.8	-242.5	0.00	0.00	0.00
3,347.2	8.61	143.46	3,324.0	-256.5	190.0	-248.0	0.00	0.00	0.00
<b>PARKMAN</b>									
3,400.0	8.61	143.46	3,376.2	-262.8	194.7	-254.1	0.00	0.00	0.00
3,500.0	8.61	143.46	3,475.1	-274.8	203.6	-265.7	0.00	0.00	0.00
3,600.0	8.61	143.46	3,573.9	-286.9	212.6	-277.4	0.00	0.00	0.00
3,700.0	8.61	143.46	3,672.8	-298.9	221.5	-289.0	0.00	0.00	0.00
3,800.0	8.61	143.46	3,771.7	-310.9	230.4	-300.6	0.00	0.00	0.00
3,900.0	8.61	143.46	3,870.6	-322.9	239.3	-312.3	0.00	0.00	0.00
4,000.0	8.61	143.46	3,969.4	-335.0	248.2	-323.9	0.00	0.00	0.00
4,090.6	8.61	143.46	4,059.0	-345.9	256.3	-334.4	0.00	0.00	0.00
<b>SUSSEX</b>									
4,100.0	8.61	143.46	4,068.3	-347.0	257.1	-335.5	0.00	0.00	0.00
4,200.0	8.61	143.46	4,167.2	-359.0	266.0	-347.1	0.00	0.00	0.00
4,300.0	8.61	143.46	4,266.1	-371.1	274.9	-358.8	0.00	0.00	0.00
4,400.0	8.61	143.46	4,364.9	-383.1	283.9	-370.4	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well NORTH PLATTE 24-21-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Project:</b>	SEC.24-T5N-R63W	<b>MD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Site:</b>	NORTH PLATTE 24-21-24HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	NORTH PLATTE 24-21-24HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	PLAN #1 (APRIL 24, 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)
4,500.0	8.61	143.46	4,463.8	-395.1	292.8	-382.0	0.00	0.00	0.00
4,600.0	8.61	143.46	4,562.7	-407.1	301.7	-393.7	0.00	0.00	0.00
4,700.0	8.61	143.46	4,661.5	-419.2	310.6	-405.3	0.00	0.00	0.00
4,800.0	8.61	143.46	4,760.4	-431.2	319.5	-416.9	0.00	0.00	0.00
4,900.0	8.61	143.46	4,859.3	-443.2	328.4	-428.6	0.00	0.00	0.00
4,912.0	8.61	143.46	4,871.2	-444.7	329.5	-429.9	0.00	0.00	0.00
5,000.0	6.85	143.46	4,958.4	-454.2	336.5	-439.1	2.00	-2.00	0.00
5,100.0	4.85	143.46	5,057.8	-462.4	342.6	-447.1	2.00	-2.00	0.00
5,200.0	2.85	143.46	5,157.6	-467.8	346.6	-452.3	2.00	-2.00	0.00
5,300.0	0.85	143.46	5,257.5	-470.3	348.5	-454.8	2.00	-2.00	0.00
5,342.5	0.00	0.00	5,300.0	-470.6	348.7	-455.0	2.00	-2.00	0.00
5,400.0	0.00	0.00	5,357.5	-470.6	348.7	-455.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,457.5	-470.6	348.7	-455.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,557.5	-470.6	348.7	-455.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,657.5	-470.6	348.7	-455.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,757.5	-470.6	348.7	-455.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,857.5	-470.6	348.7	-455.0	0.00	0.00	0.00
5,928.6	0.00	0.00	5,886.1	-470.6	348.7	-455.0	0.00	0.00	0.00
<b>KOP #2</b>									
6,000.0	7.86	358.11	5,957.3	-465.7	348.5	-450.2	11.00	11.00	0.00
6,100.0	18.85	358.11	6,054.5	-442.7	347.8	-427.2	11.00	11.00	0.00
6,175.6	27.17	358.11	6,124.0	-413.1	346.8	-397.7	11.00	11.00	0.00
<b>SHARON SPRINGS</b>									
6,200.0	29.85	358.11	6,145.4	-401.5	346.4	-386.1	11.00	11.00	0.00
6,300.0	40.85	358.11	6,226.9	-343.8	344.5	-328.5	11.00	11.00	0.00
6,348.5	46.19	358.11	6,262.0	-310.4	343.4	-295.2	11.00	11.00	0.00
<b>NIOBRARA A CHALK</b>									
6,369.1	48.46	358.11	6,276.0	-295.2	342.9	-280.1	11.00	11.00	0.00
<b>NIOBRARA A MARL</b>									
6,400.0	51.85	358.11	6,295.8	-271.6	342.1	-256.5	11.00	11.00	0.00
6,471.6	59.73	358.11	6,336.0	-212.4	340.2	-197.4	11.00	11.00	0.00
<b>NIOBRARA B CHALK</b>									
6,500.0	62.85	358.11	6,349.6	-187.5	339.4	-172.6	11.00	11.00	0.00
6,514.4	64.43	358.11	6,356.0	-174.7	338.9	-159.8	11.00	11.00	0.00
<b>NIOBRARA B TARGET - NIOBRARA B MARL</b>									
6,600.0	73.85	358.11	6,386.5	-94.8	336.3	-80.1	11.00	11.00	0.00
6,639.5	78.20	358.11	6,396.0	-56.4	335.0	-41.8	11.00	11.00	0.00
<b>NIOBRARA C CHALK</b>									
6,697.1	84.54	358.11	6,404.6	0.4	333.2	14.9	11.00	11.00	0.00
<b>TARGET 1 460'FSL &amp; 1620'FWL</b>									
6,700.0	84.85	358.11	6,404.9	3.3	333.1	17.8	11.00	11.00	0.00
6,746.8	90.00	358.11	6,407.0	50.0	331.5	64.4	10.99	10.99	0.00
<b>7"</b>									
6,800.0	90.00	358.11	6,407.0	103.2	329.8	117.4	0.00	0.00	0.00
6,900.0	90.00	358.11	6,407.0	203.1	326.5	217.1	0.00	0.00	0.00
7,000.0	90.00	358.11	6,407.0	303.1	323.2	316.8	0.00	0.00	0.00
7,100.0	90.00	358.11	6,407.0	403.0	319.9	416.5	0.00	0.00	0.00
7,200.0	90.00	358.11	6,407.0	503.0	316.6	516.2	0.00	0.00	0.00
7,300.0	90.00	358.11	6,407.0	602.9	313.3	615.9	0.00	0.00	0.00
7,400.0	90.00	358.11	6,407.0	702.9	310.0	715.7	0.00	0.00	0.00
7,500.0	90.00	358.11	6,407.0	802.8	306.7	815.4	0.00	0.00	0.00
7,600.0	90.00	358.11	6,407.0	902.8	303.4	915.1	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well NORTH PLATTE 24-21-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Project:</b>	SEC.24-T5N-R63W	<b>MD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Site:</b>	NORTH PLATTE 24-21-24HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	SEC.24-T5N-R63W	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	NORTH PLATTE 24-21-24HZ		
<b>Design:</b>	Wellbore #1		
	PLAN #1 (APRIL 24, 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)
7,700.0	90.00	358.11	6,407.0	1,002.7	300.1	1,014.8	0.00	0.00	0.00
7,800.0	90.00	358.11	6,407.0	1,102.6	296.8	1,114.5	0.00	0.00	0.00
7,900.0	90.00	358.11	6,407.0	1,202.6	293.5	1,214.2	0.00	0.00	0.00
8,000.0	90.00	358.11	6,407.0	1,302.5	290.2	1,313.9	0.00	0.00	0.00
8,100.0	90.00	358.11	6,407.0	1,402.5	286.9	1,413.6	0.00	0.00	0.00
8,200.0	90.00	358.11	6,407.0	1,502.4	283.7	1,513.3	0.00	0.00	0.00
8,300.0	90.00	358.11	6,407.0	1,602.4	280.4	1,613.0	0.00	0.00	0.00
8,400.0	90.00	358.11	6,407.0	1,702.3	277.1	1,712.7	0.00	0.00	0.00
8,500.0	90.00	358.11	6,407.0	1,802.3	273.8	1,812.4	0.00	0.00	0.00
8,600.0	90.00	358.11	6,407.0	1,902.2	270.5	1,912.2	0.00	0.00	0.00
8,700.0	90.00	358.11	6,407.0	2,002.2	267.2	2,011.9	0.00	0.00	0.00
8,800.0	90.00	358.11	6,407.0	2,102.1	263.9	2,111.6	0.00	0.00	0.00
8,900.0	90.00	358.11	6,407.0	2,202.0	260.6	2,211.3	0.00	0.00	0.00
9,000.0	90.00	358.11	6,407.0	2,302.0	257.3	2,311.0	0.00	0.00	0.00
9,100.0	90.00	358.11	6,407.0	2,401.9	254.0	2,410.7	0.00	0.00	0.00
9,200.0	90.00	358.11	6,407.0	2,501.9	250.7	2,510.4	0.00	0.00	0.00
9,300.0	90.00	358.11	6,407.0	2,601.8	247.4	2,610.1	0.00	0.00	0.00
9,400.0	90.00	358.11	6,407.0	2,701.8	244.1	2,709.8	0.00	0.00	0.00
9,500.0	90.00	358.11	6,407.0	2,801.7	240.8	2,809.5	0.00	0.00	0.00
9,600.0	90.00	358.11	6,407.0	2,901.7	237.5	2,909.2	0.00	0.00	0.00
9,700.0	90.00	358.11	6,407.0	3,001.6	234.2	3,008.9	0.00	0.00	0.00
9,800.0	90.00	358.11	6,407.0	3,101.6	230.9	3,108.7	0.00	0.00	0.00
9,900.0	90.00	358.11	6,407.0	3,201.5	227.6	3,208.4	0.00	0.00	0.00
10,000.0	90.00	358.11	6,407.0	3,301.4	224.3	3,308.1	0.00	0.00	0.00
10,100.0	90.00	358.11	6,407.0	3,401.4	221.1	3,407.8	0.00	0.00	0.00
10,200.0	90.00	358.11	6,407.0	3,501.3	217.8	3,507.5	0.00	0.00	0.00
10,300.0	90.00	358.11	6,407.0	3,601.3	214.5	3,607.2	0.00	0.00	0.00
10,400.0	90.00	358.11	6,407.0	3,701.2	211.2	3,706.9	0.00	0.00	0.00
10,500.0	90.00	358.11	6,407.0	3,801.2	207.9	3,806.6	0.00	0.00	0.00
10,600.0	90.00	358.11	6,407.0	3,901.1	204.6	3,906.3	0.00	0.00	0.00
10,700.0	90.00	358.11	6,407.0	4,001.1	201.3	4,006.0	0.00	0.00	0.00
10,800.0	90.00	358.11	6,407.0	4,101.0	198.0	4,105.7	0.00	0.00	0.00
10,900.0	90.00	358.11	6,407.0	4,201.0	194.7	4,205.5	0.00	0.00	0.00
11,000.0	90.00	358.11	6,407.0	4,300.9	191.4	4,305.2	0.00	0.00	0.00
11,059.9	90.00	358.11	6,407.0	4,360.8	189.4	4,364.9	0.00	0.00	0.00
BHL 460'FNL & 1650'FWL									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well NORTH PLATTE 24-21-24HZ
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Project:</b>	SEC.24-T5N-R63W	<b>MD Reference:</b>	WELL @ 4584.0ft (Original Well Elev)
<b>Site:</b>	NORTH PLATTE 24-21-24HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	SEC.24-T5N-R63W	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	NORTH PLATTE 24-21-24HZ		
<b>Design:</b>	Wellbore #1		
	PLAN #1 (APRIL 24, 2012)		

Targets									
Target Name	- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	
- Shape		(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Latitude Longitude
TARGET 1 460'FSL &		0.00	0.00	6,407.0	0.0	331.5	1,382,736.48	3,309,826.22	40.378680 -104.387880
- plan misses target center by 2.9ft at 6697.1ft MD (6404.6 TVD, 0.4 N, 333.2 E)									
- Point									
HARDLINE BH 460'		0.00	0.00	1.0	4,360.0	-210.6	1,387,089.15	3,309,229.52	40.390648 -104.389826
- plan misses target center by 4365.1ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1				1.0	0.0	0.0	1,387,089.15	3,309,229.52	
Point 2				1.0	0.0	800.0	1,387,099.17	3,310,029.43	
BHL 460'FNL & 1650'		0.00	0.00	6,407.0	4,360.8	189.4	1,387,094.97	3,309,629.49	40.390650 -104.388390
- plan hits target center									
- Point									
HARDLINE SH 460'		0.00	0.00	1.0	0.0	-400.0	1,382,727.31	3,309,094.77	40.378680 -104.390506
- plan misses target center by 400.0ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1				1.0	0.0	0.0	1,382,727.31	3,309,094.77	
Point 2				1.0	0.0	800.0	1,382,737.33	3,309,894.67	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,746.8	6,407.0	7"	7	7-1/2	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,347.2	3,324.0	PARKMAN		0.00	
4,090.6	4,059.0	SUSSEX		0.00	
6,175.6	6,124.0	SHARON SPRINGS		0.00	
6,348.5	6,262.0	NIOBRARA A CHALK		0.00	
6,369.1	6,276.0	NIOBRARA A MARL		0.00	
6,471.6	6,336.0	NIOBRARA B CHALK		0.00	
6,514.4	6,356.0	NIOBRARA B MARL		0.00	
6,514.4	6,356.0	NIOBRARA B TARGET		0.00	
6,639.5	6,396.0	NIOBRARA C CHALK		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
1,000.0	1,000.0	0.0	0.0	KOP #1
5,928.6	5,886.1	-470.6	348.7	KOP #2