

BONANZA CREEK ENERGY OPERATING

Well Name: **North Platte K-O-13HNC**

Surface Location: North Platte 11-14-13HNB Pad Sec.13-T5N-R63W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

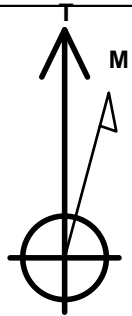
Ground Elevation: 4630.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1392316.98	3309146.25	40.405000	-104.389890	

Ensign 136 - RKB 12' WELL @ 4642.0ft (Ensign 136 - RKB 12')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 470'FSL & 2685'FEL	6338.0	-4306.1	1437.3	Point
T1 470'FNL & 2615'FWL	6338.0	127.6	1389.7	Point



Azimuths to True North
Magnetic North: 8.45°

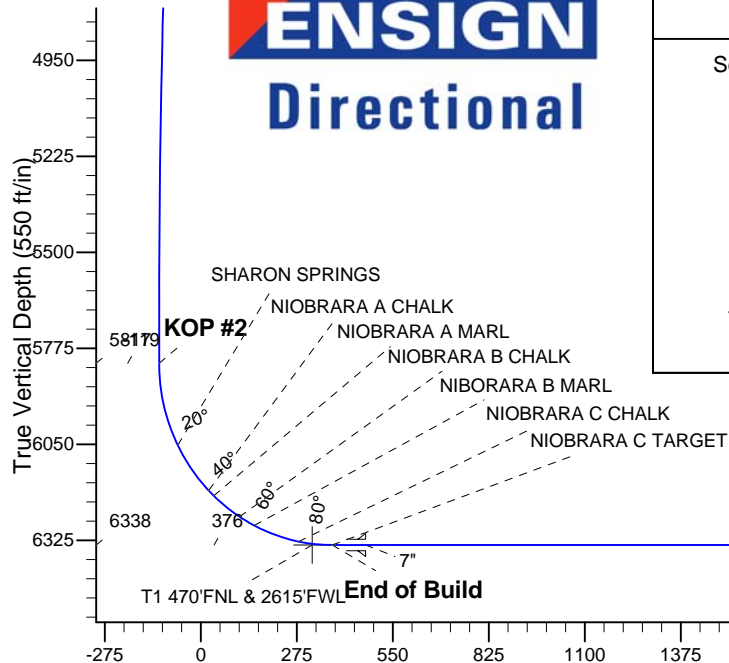
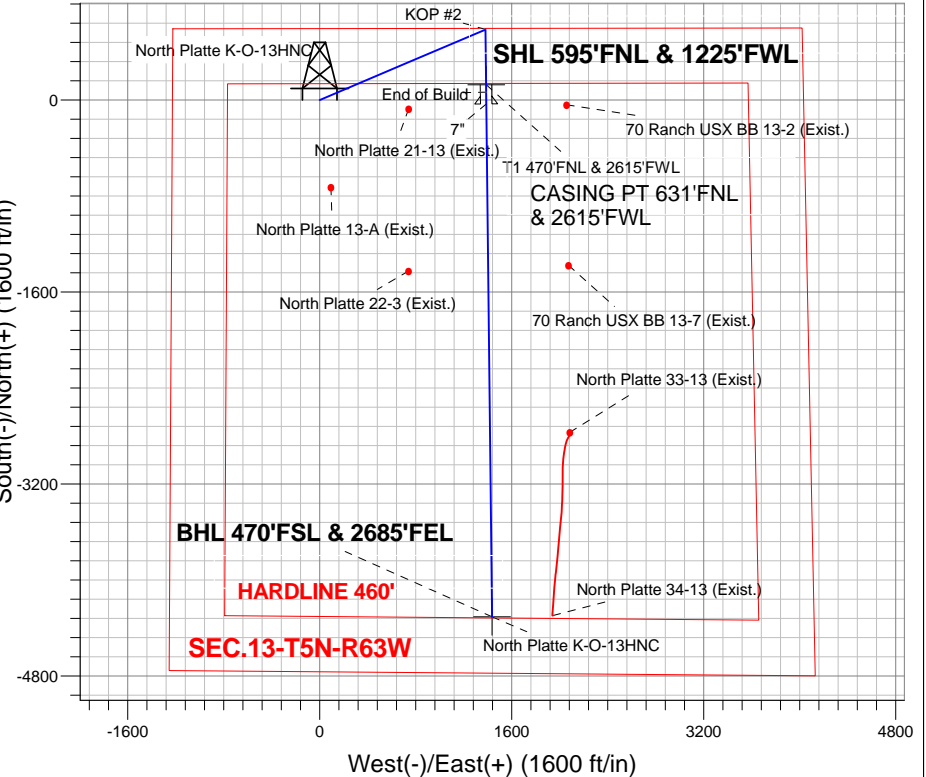
Magnetic Field
Strength: 53007.8nT
Dip Angle: 67.06°
Date: 1/15/2013
Model: IGRF2010

North Platte 11-14-13HNB Pad Sec.13-T5N-R63W
North Platte K-O-13HNC
Plan #1 (1-15-13)
11:49, January 30 2013

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP #1
5817.2	6041.8	KOP #2
6338.0	6859.9	End of Build

South(-)/North(+) (1600 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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1107.3	18.15	66.98	1092.2	55.7	131.1	2.00	66.98	-11.3	
4	5017.4	18.15	66.98	4807.8	531.9	1251.9	0.00	0.00	-108.2	
5	5924.6	0.00	0.00	5700.0	587.6	1383.0	2.00	180.00	-119.5	
6	6041.8	0.00	0.00	5817.1	587.6	1383.0	0.00	0.00	-119.5	
7	6859.9	90.00	179.38	6338.0	66.8	1388.6	11.00	179.38	376.3	
8	6960.1	90.00	179.38	6338.0	-33.4	1389.7	0.00	0.00	471.7	
9	6962.1	90.00	179.36	6338.0	-35.4	1389.7	1.00	-90.00	473.6	
10	11233.1	90.00	179.36	6338.0	-4306.1	1437.3	0.00	0.00	4539.7	BHL 470'FSL & 2685'FEL

BHL 470'FSL & 2685'FEL

Vertical Section at 161.54° (550 ft/in)



BONANZA CREEK ENERGY OPERATING

SEC.13-T5N-R63W

North Platte 11-14-13HNB Pad Sec.13-T5N-R63W

North Platte K-O-13HNC

Wellbore #1

Plan: Plan #1 (1-15-13)

Standard Planning Report

30 January, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Project:	SEC.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	North Reference:	True
Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-15-13)		

Project	SEC.13-T5N-R63W, Weld County, CO		
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		North Platte 11-14-13HNB Pad Sec.13-T5N-R63W				
Site Position:		Northing:	1,392,298.77 ft	Latitude:	40.404950	
From:	Lat/Long	Easting:	3,309,146.48 ft	Longitude:	-104.389890	
Position Uncertainty:		0.0 ft	Slot Radius:	"	Grid Convergence:	0.72 °

Well	North Platte K-O-13HNC					
Well Position	+N-S	18.2 ft	Northing:	1,392,316.98 ft	Latitude:	40.405000
	+E-W	0.0 ft	Easting:	3,309,146.25 ft	Longitude:	-104.389890
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,630.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/15/2013	8.45	67.06	53,008

Design	Plan #1 (1-15-13)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	161.54

Plan Sections										
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	
1,107.3	18.15	66.98	1,092.2	55.7	131.1	2.00	2.00	0.00	66.98	
5,017.4	18.15	66.98	4,807.8	531.9	1,251.9	0.00	0.00	0.00	0.00	
5,924.6	0.00	0.00	5,700.0	587.6	1,383.0	2.00	-2.00	0.00	180.00	
6,041.8	0.00	0.00	5,817.1	587.6	1,383.0	0.00	0.00	0.00	0.00	
6,859.9	90.00	179.38	6,338.0	66.8	1,388.6	11.00	11.00	0.00	179.38	
6,960.1	90.00	179.38	6,338.0	-33.4	1,389.7	0.00	0.00	0.00	0.00	
6,962.1	90.00	179.36	6,338.0	-35.4	1,389.7	1.00	0.00	-1.00	-90.00	
11,233.1	90.00	179.36	6,338.0	-4,306.1	1,437.3	0.00	0.00	0.00	0.00	BHL 470'FSL & 26°

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Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Project:	SEC.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site:	North Platte 11-14-13HNB Pad	North Reference:	True
	Sec.13-T5N-R63W		
Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-15-13)		

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
KOP #1									
300.0	2.00	66.98	300.0	0.7	1.6	-0.1	2.00	2.00	0.00
400.0	4.00	66.98	399.8	2.7	6.4	-0.6	2.00	2.00	0.00
500.0	6.00	66.98	499.5	6.1	14.4	-1.2	2.00	2.00	0.00
600.0	8.00	66.98	598.7	10.9	25.7	-2.2	2.00	2.00	0.00
700.0	10.00	66.98	697.5	17.0	40.1	-3.5	2.00	2.00	0.00
800.0	12.00	66.98	795.6	24.5	57.6	-5.0	2.00	2.00	0.00
900.0	14.00	66.98	893.1	33.3	78.3	-6.8	2.00	2.00	0.00
1,000.0	16.00	66.98	989.6	43.4	102.1	-8.8	2.00	2.00	0.00
1,100.0	18.00	66.98	1,085.3	54.8	129.0	-11.2	2.00	2.00	0.00
1,107.3	18.15	66.98	1,092.2	55.7	131.1	-11.3	2.00	2.00	0.00
1,200.0	18.15	66.98	1,180.3	67.0	157.7	-13.6	0.00	0.00	0.00
1,300.0	18.15	66.98	1,275.3	79.2	186.4	-16.1	0.00	0.00	0.00
1,400.0	18.15	66.98	1,370.4	91.4	215.0	-18.6	0.00	0.00	0.00
1,500.0	18.15	66.98	1,465.4	103.5	243.7	-21.1	0.00	0.00	0.00
1,600.0	18.15	66.98	1,560.4	115.7	272.4	-23.5	0.00	0.00	0.00
1,700.0	18.15	66.98	1,655.4	127.9	301.0	-26.0	0.00	0.00	0.00
1,800.0	18.15	66.98	1,750.5	140.1	329.7	-28.5	0.00	0.00	0.00
1,900.0	18.15	66.98	1,845.5	152.3	358.3	-31.0	0.00	0.00	0.00
2,000.0	18.15	66.98	1,940.5	164.4	387.0	-33.4	0.00	0.00	0.00
2,100.0	18.15	66.98	2,035.5	176.6	415.7	-35.9	0.00	0.00	0.00
2,200.0	18.15	66.98	2,130.6	188.8	444.3	-38.4	0.00	0.00	0.00
2,300.0	18.15	66.98	2,225.6	201.0	473.0	-40.9	0.00	0.00	0.00
2,400.0	18.15	66.98	2,320.6	213.1	501.7	-43.3	0.00	0.00	0.00
2,500.0	18.15	66.98	2,415.6	225.3	530.3	-45.8	0.00	0.00	0.00
2,600.0	18.15	66.98	2,510.7	237.5	559.0	-48.3	0.00	0.00	0.00
2,700.0	18.15	66.98	2,605.7	249.7	587.6	-50.8	0.00	0.00	0.00
2,800.0	18.15	66.98	2,700.7	261.9	616.3	-53.3	0.00	0.00	0.00
2,900.0	18.15	66.98	2,795.8	274.0	645.0	-55.7	0.00	0.00	0.00
3,000.0	18.15	66.98	2,890.8	286.2	673.6	-58.2	0.00	0.00	0.00
3,100.0	18.15	66.98	2,985.8	298.4	702.3	-60.7	0.00	0.00	0.00
3,200.0	18.15	66.98	3,080.8	310.6	731.0	-63.2	0.00	0.00	0.00
3,300.0	18.15	66.98	3,175.9	322.7	759.6	-65.6	0.00	0.00	0.00
3,400.0	18.15	66.98	3,270.9	334.9	788.3	-68.1	0.00	0.00	0.00
3,500.0	18.15	66.98	3,365.9	347.1	817.0	-70.6	0.00	0.00	0.00
3,556.9	18.15	66.98	3,420.0	354.0	833.3	-72.0	0.00	0.00	0.00
PARKMAN									
3,600.0	18.15	66.98	3,460.9	359.3	845.6	-73.1	0.00	0.00	0.00
3,700.0	18.15	66.98	3,556.0	371.5	874.3	-75.5	0.00	0.00	0.00
3,800.0	18.15	66.98	3,651.0	383.6	902.9	-78.0	0.00	0.00	0.00
3,900.0	18.15	66.98	3,746.0	395.8	931.6	-80.5	0.00	0.00	0.00
4,000.0	18.15	66.98	3,841.1	408.0	960.3	-83.0	0.00	0.00	0.00
4,100.0	18.15	66.98	3,936.1	420.2	988.9	-85.4	0.00	0.00	0.00
4,200.0	18.15	66.98	4,031.1	432.3	1,017.6	-87.9	0.00	0.00	0.00
4,300.0	18.15	66.98	4,126.1	444.5	1,046.3	-90.4	0.00	0.00	0.00
4,400.0	18.15	66.98	4,221.2	456.7	1,074.9	-92.9	0.00	0.00	0.00
4,500.0	18.15	66.98	4,316.2	468.9	1,103.6	-95.4	0.00	0.00	0.00
4,600.0	18.15	66.98	4,411.2	481.1	1,132.2	-97.8	0.00	0.00	0.00
4,700.0	18.15	66.98	4,506.2	493.2	1,160.9	-100.3	0.00	0.00	0.00
4,800.0	18.15	66.98	4,601.3	505.4	1,189.6	-102.8	0.00	0.00	0.00

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Project:	SEC.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site:	North Platte 11-14-13HNB Pad	North Reference:	True
Well:	Sec.13-T5N-R63W	Survey Calculation Method:	Minimum Curvature
Wellbore:	North Platte K-O-13HNC		
Design:	Wellbore #1		
	Plan #1 (1-15-13)		

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)
4,900.0	18.15	66.98	4,696.3	517.6	1,218.2	-105.3	0.00	0.00	0.00
5,000.0	18.15	66.98	4,791.3	529.8	1,246.9	-107.7	0.00	0.00	0.00
5,017.4	18.15	66.98	4,807.8	531.9	1,251.9	-108.2	0.00	0.00	0.00
5,100.0	16.49	66.98	4,886.7	541.5	1,274.5	-110.1	2.00	-2.00	0.00
5,200.0	14.49	66.98	4,983.1	552.0	1,299.1	-112.2	2.00	-2.00	0.00
5,300.0	12.49	66.98	5,080.3	561.1	1,320.6	-114.1	2.00	-2.00	0.00
5,400.0	10.49	66.98	5,178.3	568.9	1,338.9	-115.7	2.00	-2.00	0.00
5,500.0	8.49	66.98	5,276.9	575.3	1,354.1	-117.0	2.00	-2.00	0.00
5,600.0	6.49	66.98	5,376.1	580.4	1,366.1	-118.0	2.00	-2.00	0.00
5,700.0	4.49	66.98	5,475.6	584.2	1,374.9	-118.8	2.00	-2.00	0.00
5,800.0	2.49	66.98	5,575.4	586.5	1,380.5	-119.3	2.00	-2.00	0.00
5,900.0	0.49	66.98	5,675.4	587.6	1,382.9	-119.5	2.00	-2.00	0.00
5,924.6	0.00	0.00	5,700.0	587.6	1,383.0	-119.5	2.00	-2.00	0.00
6,000.0	0.00	0.00	5,775.4	587.6	1,383.0	-119.5	0.00	0.00	0.00
6,041.8	0.00	0.00	5,817.2	587.6	1,383.0	-119.5	0.00	0.00	0.00
KOP #2									
6,100.0	6.41	179.38	5,875.2	584.3	1,383.0	-116.4	11.01	11.01	0.00
6,200.0	17.41	179.38	5,972.9	563.7	1,383.3	-96.8	11.00	11.00	0.00
6,285.4	26.80	179.38	6,052.0	531.6	1,383.6	-66.2	11.00	11.00	0.00
SHARON SPRINGS									
6,300.0	28.41	179.38	6,064.9	524.9	1,383.7	-59.8	11.00	11.00	0.00
6,400.0	39.41	179.38	6,147.8	469.2	1,384.3	-6.8	11.00	11.00	0.00
6,446.0	44.47	179.38	6,182.0	438.5	1,384.6	22.5	11.00	11.00	0.00
NIOBRARA A CHALK									
6,467.5	46.83	179.38	6,197.0	423.1	1,384.8	37.1	11.00	11.00	0.00
NIOBRARA A MARL									
6,500.0	50.41	179.38	6,218.5	398.7	1,385.0	60.3	11.00	11.00	0.00
6,565.6	57.62	179.38	6,257.0	345.7	1,385.6	110.8	11.00	11.00	0.00
NIOBRARA B CHALK									
6,600.0	61.41	179.38	6,274.5	316.0	1,385.9	139.0	11.00	11.00	0.00
6,616.2	63.19	179.38	6,282.0	301.7	1,386.1	152.7	11.00	11.00	0.00
NIOBRARA B MARL									
6,700.0	72.41	179.38	6,313.6	224.2	1,386.9	226.5	11.00	11.00	0.00
6,757.7	78.75	179.38	6,328.0	168.3	1,387.5	279.6	11.00	11.00	0.00
NIOBRARA C CHALK									
6,799.6	83.36	179.38	6,334.5	127.0	1,388.0	319.0	11.00	11.00	0.00
T1 470'FNL & 2615'FWL									
6,800.0	83.41	179.38	6,334.6	126.6	1,388.0	319.4	11.00	11.00	0.00
6,859.9	90.00	179.38	6,338.0	66.8	1,388.6	376.3	11.00	11.00	0.00
End of Build - NIOBRARA C TARGET									
6,900.0	90.00	179.38	6,338.0	26.7	1,389.1	414.5	0.00	0.00	0.00
6,960.1	90.00	179.38	6,338.0	-33.4	1,389.7	471.7	0.00	0.00	0.00
7"									
6,962.1	90.00	179.36	6,338.0	-35.4	1,389.7	473.6	1.00	0.00	-1.00
7,000.0	90.00	179.36	6,338.0	-73.3	1,390.1	509.7	0.00	0.00	0.00
7,100.0	90.00	179.36	6,338.0	-173.3	1,391.3	604.9	0.00	0.00	0.00
7,200.0	90.00	179.36	6,338.0	-273.3	1,392.4	700.1	0.00	0.00	0.00
7,300.0	90.00	179.36	6,338.0	-373.3	1,393.5	795.3	0.00	0.00	0.00
7,400.0	90.00	179.36	6,338.0	-473.3	1,394.6	890.5	0.00	0.00	0.00
7,500.0	90.00	179.36	6,338.0	-573.3	1,395.7	985.7	0.00	0.00	0.00
7,600.0	90.00	179.36	6,338.0	-673.3	1,396.8	1,080.9	0.00	0.00	0.00
7,700.0	90.00	179.36	6,338.0	-773.2	1,397.9	1,176.1	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Project:	SEC.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	North Reference:	True
Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-15-13)		

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)
7,800.0	90.00	179.36	6,338.0	-873.2	1,399.1	1,271.3	0.00	0.00	0.00
7,900.0	90.00	179.36	6,338.0	-973.2	1,400.2	1,366.5	0.00	0.00	0.00
8,000.0	90.00	179.36	6,338.0	-1,073.2	1,401.3	1,461.7	0.00	0.00	0.00
8,100.0	90.00	179.36	6,338.0	-1,173.2	1,402.4	1,556.9	0.00	0.00	0.00
8,200.0	90.00	179.36	6,338.0	-1,273.2	1,403.5	1,652.1	0.00	0.00	0.00
8,300.0	90.00	179.36	6,338.0	-1,373.2	1,404.6	1,747.3	0.00	0.00	0.00
8,400.0	90.00	179.36	6,338.0	-1,473.2	1,405.7	1,842.5	0.00	0.00	0.00
8,500.0	90.00	179.36	6,338.0	-1,573.2	1,406.9	1,937.7	0.00	0.00	0.00
8,600.0	90.00	179.36	6,338.0	-1,673.2	1,408.0	2,032.9	0.00	0.00	0.00
8,700.0	90.00	179.36	6,338.0	-1,773.2	1,409.1	2,128.1	0.00	0.00	0.00
8,800.0	90.00	179.36	6,338.0	-1,873.2	1,410.2	2,223.3	0.00	0.00	0.00
8,900.0	90.00	179.36	6,338.0	-1,973.2	1,411.3	2,318.5	0.00	0.00	0.00
9,000.0	90.00	179.36	6,338.0	-2,073.2	1,412.4	2,413.7	0.00	0.00	0.00
9,100.0	90.00	179.36	6,338.0	-2,173.2	1,413.5	2,508.9	0.00	0.00	0.00
9,200.0	90.00	179.36	6,338.0	-2,273.2	1,414.7	2,604.1	0.00	0.00	0.00
9,300.0	90.00	179.36	6,338.0	-2,373.1	1,415.8	2,699.3	0.00	0.00	0.00
9,400.0	90.00	179.36	6,338.0	-2,473.1	1,416.9	2,794.5	0.00	0.00	0.00
9,500.0	90.00	179.36	6,338.0	-2,573.1	1,418.0	2,889.7	0.00	0.00	0.00
9,600.0	90.00	179.36	6,338.0	-2,673.1	1,419.1	2,984.9	0.00	0.00	0.00
9,700.0	90.00	179.36	6,338.0	-2,773.1	1,420.2	3,080.1	0.00	0.00	0.00
9,800.0	90.00	179.36	6,338.0	-2,873.1	1,421.3	3,175.3	0.00	0.00	0.00
9,900.0	90.00	179.36	6,338.0	-2,973.1	1,422.5	3,270.5	0.00	0.00	0.00
10,000.0	90.00	179.36	6,338.0	-3,073.1	1,423.6	3,365.7	0.00	0.00	0.00
10,100.0	90.00	179.36	6,338.0	-3,173.1	1,424.7	3,460.9	0.00	0.00	0.00
10,200.0	90.00	179.36	6,338.0	-3,273.1	1,425.8	3,556.1	0.00	0.00	0.00
10,300.0	90.00	179.36	6,338.0	-3,373.1	1,426.9	3,651.3	0.00	0.00	0.00
10,400.0	90.00	179.36	6,338.0	-3,473.1	1,428.0	3,746.5	0.00	0.00	0.00
10,500.0	90.00	179.36	6,338.0	-3,573.1	1,429.1	3,841.7	0.00	0.00	0.00
10,600.0	90.00	179.36	6,338.0	-3,673.1	1,430.3	3,936.9	0.00	0.00	0.00
10,700.0	90.00	179.36	6,338.0	-3,773.1	1,431.4	4,032.1	0.00	0.00	0.00
10,800.0	90.00	179.36	6,338.0	-3,873.1	1,432.5	4,127.3	0.00	0.00	0.00
10,900.0	90.00	179.36	6,338.0	-3,973.0	1,433.6	4,222.6	0.00	0.00	0.00
11,000.0	90.00	179.36	6,338.0	-4,073.0	1,434.7	4,317.8	0.00	0.00	0.00
11,100.0	90.00	179.36	6,338.0	-4,173.0	1,435.8	4,413.0	0.00	0.00	0.00
11,200.0	90.00	179.36	6,338.0	-4,273.0	1,436.9	4,508.2	0.00	0.00	0.00
11,233.1	90.00	179.36	6,338.0	-4,306.1	1,437.3	4,539.7	0.00	0.00	0.00
BHL 470'FSL & 2685'FEL									

Targets

Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
T1 470'FNL & 2615'F	- plan misses target center by 3.9ft at 6799.6ft MD (6334.5 TVD, 127.0 N, 1388.0 E)	0.00	0.00	6,338.0	127.6	1,389.7	1,392,461.91	3,310,534.21	40.405350	-104.384900
	- Point									
BHL 470'FSL & 2685'I	- plan hits target center	0.00	0.00	6,338.0	-4,306.1	1,437.3	1,388,029.37	3,310,637.30	40.393180	-104.384730
	- Point									

Database:	Landmark	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Project:	SEC.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	North Reference:	True
Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-15-13)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,960.1	6,338.0	7"	7	7-1/2	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,556.9	3,420.0	PARKMAN		0.00		
6,285.4	6,052.0	SHARON SPRINGS		0.00		
6,446.0	6,182.0	NIOBRARA A CHALK		0.00		
6,467.5	6,197.0	NIOBRARA A MARL		0.00		
6,565.6	6,257.0	NIOBRARA B CHALK		0.00		
6,616.2	6,282.0	NIOBRARA B MARL		0.00		
6,757.7	6,328.0	NIOBRARA C CHALK		0.00		
6,859.9	6,338.0	NIOBRARA C TARGET		0.00		
	6,356.0	NIOBRARA C MARL		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP #1	
6,041.8	5,817.2	587.6	1,383.0	KOP #2	
6,859.9	6,338.0	66.8	1,388.6	End of Build	



BONANZA CREEK ENERGY OPERATING

SEC.13-T5N-R63W

North Platte 11-14-13HNB Pad Sec.13-T5N-R63W

North Platte K-O-13HNC

Wellbore #1

Plan #1 (1-15-13)

Anticollision Report

30 January, 2013

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design		Existing Wells Sec.13-T5N-R63W - 70 Ranch USX BB 13-2 (Exist.) - Wellbore #1 - Wellbore #1										Offset Site Error:		0.0 ft		
Survey Program: 6500-UNKNOWN														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
5,800.0	5,575.4	5,552.4	5,552.4	31.4	111.0	65.80	-40.0	2,058.1	922.9	782.6	140.33	6.577				
5,900.0	5,675.4	5,652.4	5,652.4	31.6	113.0	65.92	-40.0	2,058.1	921.8	779.4	142.47	6.470				
5,924.6	5,700.0	5,677.0	5,677.0	31.6	113.5	132.91	-40.0	2,058.1	921.8	778.7	143.08	6.442				
6,000.0	5,775.4	5,752.4	5,752.4	31.6	115.0	132.91	-40.0	2,058.1	921.8	777.1	144.65	6.372				
6,041.8	5,817.1	5,794.1	5,794.1	31.7	115.9	132.91	-40.0	2,058.1	921.8	776.2	145.52	6.334				
6,050.0	5,825.4	5,802.4	5,802.4	31.7	116.0	-46.48	-40.0	2,058.1	921.7	776.1	145.59	6.331				
6,100.0	5,875.2	5,852.2	5,852.2	31.7	117.0	-46.80	-40.0	2,058.1	919.5	773.4	146.16	6.291				
6,150.0	5,924.6	5,901.6	5,901.6	31.7	118.0	-47.60	-40.0	2,058.1	914.1	768.1	145.96	6.263				
6,200.0	5,972.9	5,949.9	5,949.9	31.7	119.0	-48.90	-40.0	2,058.1	905.5	760.4	145.12	6.240				
6,250.0	6,019.9	5,996.9	5,996.9	31.6	119.9	-50.70	-40.0	2,058.1	894.0	750.2	143.80	6.217				
6,300.0	6,064.9	6,041.9	6,041.9	31.5	120.8	-53.02	-40.0	2,058.1	879.8	737.5	142.28	6.183				
6,350.0	6,107.7	6,084.7	6,084.7	31.4	121.7	-55.85	-40.0	2,058.1	863.2	722.3	140.86	6.128				
6,400.0	6,147.8	6,124.8	6,124.8	31.3	122.5	-59.16	-40.0	2,058.1	844.6	704.8	139.82	6.041				
6,450.0	6,184.8	6,161.8	6,161.8	31.2	123.2	-62.90	-40.0	2,058.1	824.5	685.1	139.38	5.916				
6,500.0	6,218.5	6,195.5	6,195.5	31.1	123.9	-66.96	-40.0	2,058.1	803.4	663.8	139.60	5.755				
6,550.0	6,248.5	6,225.5	6,225.5	31.0	124.5	-71.20	-40.0	2,058.1	781.9	641.6	140.37	5.571				
6,600.0	6,274.5	6,251.5	6,251.5	30.8	125.0	-75.42	-40.0	2,058.1	760.7	619.2	141.41	5.379				
6,650.0	6,296.3	6,273.3	6,273.3	30.7	125.5	-79.42	-40.0	2,058.1	740.2	597.8	142.42	5.197				
6,700.0	6,313.6	6,290.6	6,290.6	30.6	125.8	-83.00	-40.0	2,058.1	721.3	578.1	143.18	5.038				
6,750.0	6,326.4	6,303.4	6,303.4	30.5	126.1	-86.00	-40.0	2,058.1	704.6	561.0	143.61	4.906				
6,800.0	6,334.6	6,311.6	6,311.6	30.4	126.2	-88.29	-40.0	2,058.1	690.5	546.8	143.76	4.804				
6,850.0	6,337.9	6,314.9	6,314.9	30.3	126.3	-89.80	-40.0	2,058.1	679.7	536.0	143.75	4.728				
6,859.9	6,338.0	6,315.0	6,315.0	30.3	126.3	-90.00	-40.0	2,058.1	678.0	534.2	143.74	4.717				
6,900.0	6,338.0	6,315.0	6,315.0	30.3	126.3	-90.00	-40.0	2,058.1	672.4	528.6	143.79	4.676				
6,960.1	6,338.0	6,315.0	6,315.0	30.2	126.3	-90.00	-40.0	2,058.1	668.5	524.5	143.93	4.644				
6,962.1	6,338.0	6,315.0	6,315.0	30.2	126.3	-90.00	-40.0	2,058.1	668.4	524.5	143.93	4.644				
6,974.1	6,338.0	6,315.0	6,315.0	30.2	126.3	-90.00	-40.0	2,058.1	668.3	524.4	143.96	4.642 CC, ES, SF				
7,000.0	6,338.0	6,315.0	6,315.0	30.2	126.3	-90.00	-40.0	2,058.1	668.8	524.8	144.00	4.644				
7,100.0	6,338.0	6,315.0	6,315.0	30.3	126.3	-90.00	-40.0	2,058.1	680.1	535.6	144.47	4.707				
7,200.0	6,338.0	6,315.0	6,315.0	30.5	126.3	-90.00	-40.0	2,058.1	705.4	560.3	145.13	4.861				
7,300.0	6,338.0	6,315.0	6,315.0	30.8	126.3	-90.00	-40.0	2,058.1	743.5	597.6	145.96	5.094				
7,400.0	6,338.0	6,315.0	6,315.0	31.2	126.3	-90.00	-40.0	2,058.1	792.5	645.5	146.93	5.394				
7,500.0	6,338.0	6,315.0	6,315.0	31.8	126.3	-90.00	-40.0	2,058.1	850.4	702.4	148.03	5.745				
7,600.0	6,338.0	6,315.0	6,315.0	32.4	126.3	-90.00	-40.0	2,058.1	915.6	766.4	149.23	6.135				
7,700.0	6,338.0	6,315.0	6,315.0	33.2	126.3	-90.00	-40.0	2,058.1	986.7	836.1	150.54	6.554				

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design		Existing Wells Sec.13-T5N-R63W - 70 Ranch USX BB 13-7 (Exist.) - Wellbore #1 - Wellbore #1										Offset Site Error:		0.0 ft			
Survey Program: 6500-UNKNOWN														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
7,600.0	6,338.0	6,317.0	6,317.0	32.4	126.3	-90.00	-1,377.0	2,075.0	977.3	828.0	149.27	6.547					
7,700.0	6,338.0	6,317.0	6,317.0	33.2	126.3	-90.00	-1,377.0	2,075.0	907.1	756.5	150.58	6.024					
7,800.0	6,338.0	6,317.0	6,317.0	34.1	126.3	-90.00	-1,377.0	2,075.0	843.0	691.0	151.96	5.548					
7,900.0	6,338.0	6,317.0	6,317.0	35.1	126.3	-90.00	-1,377.0	2,075.0	786.4	633.0	153.40	5.126					
8,000.0	6,338.0	6,317.0	6,317.0	36.2	126.3	-90.00	-1,377.0	2,075.0	739.0	584.1	154.91	4.771					
8,100.0	6,338.0	6,317.0	6,317.0	37.4	126.3	-90.00	-1,377.0	2,075.0	702.7	546.3	156.46	4.492					
8,200.0	6,338.0	6,317.0	6,317.0	38.6	126.3	-90.00	-1,377.0	2,075.0	679.4	521.4	158.05	4.299					
8,300.0	6,338.0	6,317.0	6,317.0	39.9	126.3	-90.00	-1,377.0	2,075.0	670.3	510.7	159.68	4.198					
8,311.3	6,338.0	6,317.0	6,317.0	40.0	126.3	-90.00	-1,377.0	2,075.0	670.2	510.4	159.87	4.192 CC, ES					
8,400.0	6,338.0	6,317.0	6,317.0	41.3	126.3	-90.00	-1,377.0	2,075.0	676.1	514.7	161.34	4.190 SF					
8,500.0	6,338.0	6,317.0	6,317.0	42.7	126.3	-90.00	-1,377.0	2,075.0	696.3	533.3	163.02	4.271					
8,600.0	6,338.0	6,317.0	6,317.0	44.1	126.3	-90.00	-1,377.0	2,075.0	729.8	565.0	164.73	4.430					
8,700.0	6,338.0	6,317.0	6,317.0	45.6	126.3	-90.00	-1,377.0	2,075.0	774.8	608.3	166.46	4.655					
8,800.0	6,338.0	6,317.0	6,317.0	47.2	126.3	-90.00	-1,377.0	2,075.0	829.5	661.3	168.20	4.932					
8,900.0	6,338.0	6,317.0	6,317.0	48.7	126.3	-90.00	-1,377.0	2,075.0	892.1	722.1	169.96	5.249					
9,000.0	6,338.0	6,317.0	6,317.0	50.3	126.3	-90.00	-1,377.0	2,075.0	961.0	789.3	171.73	5.596					

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.13-T5N-R63W - North Platte 13-A (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 6500-UNKNOWN													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)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	172.56	172.56	-725.0	94.7	731.2				
100.0	100.0	92.0	92.0	0.1	1.8	172.56	172.56	-725.0	94.7	731.1	729.2	1.95	374.450	
200.0	200.0	192.0	192.0	0.3	3.8	172.56	172.56	-725.0	94.7	731.1	727.0	4.18	175.026 CC	
300.0	300.0	292.0	292.0	0.6	5.8	105.70	105.70	-725.0	94.7	731.6	725.2	6.40	114.388	
400.0	399.8	391.8	391.8	0.8	7.8	106.07	106.07	-725.0	94.7	733.0	724.4	8.62	85.052 ES	
500.0	499.5	491.5	491.5	1.0	9.8	106.67	106.67	-725.0	94.7	735.5	724.7	10.86	67.735	
600.0	598.7	590.7	590.7	1.3	11.8	107.50	107.50	-725.0	94.7	739.1	726.0	13.12	56.333	
700.0	697.5	689.5	689.5	1.7	13.8	108.54	108.54	-725.0	94.7	744.0	728.6	15.41	48.287	
800.0	795.6	787.6	787.6	2.0	15.8	109.78	109.78	-725.0	94.7	750.4	732.7	17.72	42.342	
900.0	893.1	885.1	885.1	2.5	17.7	111.19	111.19	-725.0	94.7	758.4	738.4	20.06	37.810	
1,000.0	989.6	981.6	981.6	3.0	19.6	112.76	112.76	-725.0	94.7	768.4	746.0	22.41	34.283	
1,107.3	1,092.2	1,084.2	1,084.2	3.6	21.7	114.57	114.57	-725.0	94.7	781.5	756.6	24.95	31.325	
1,200.0	1,180.3	1,172.3	1,172.3	4.2	23.4	116.39	116.39	-725.0	94.7	794.5	767.3	27.17	29.240	
1,300.0	1,275.3	1,267.3	1,267.3	4.8	25.3	118.29	118.29	-725.0	94.7	809.4	779.8	29.56	27.384	
1,400.0	1,370.4	1,362.4	1,362.4	5.4	27.2	120.12	120.12	-725.0	94.7	825.2	793.2	31.93	25.844	
1,500.0	1,465.4	1,457.4	1,457.4	6.0	29.1	121.89	121.89	-725.0	94.7	841.8	807.5	34.28	24.554	
1,600.0	1,560.4	1,552.4	1,552.4	6.7	31.0	123.59	123.59	-725.0	94.7	859.3	822.6	36.62	23.462	
1,700.0	1,655.4	1,647.4	1,647.4	7.3	32.9	125.23	125.23	-725.0	94.7	877.5	838.5	38.95	22.531	
1,800.0	1,750.5	1,742.5	1,742.5	8.0	34.8	126.81	126.81	-725.0	94.7	896.4	855.2	41.25	21.731	
1,900.0	1,845.5	1,837.5	1,837.5	8.6	36.7	128.32	128.32	-725.0	94.7	916.0	872.5	43.54	21.038	
2,000.0	1,940.5	1,932.5	1,932.5	9.3	38.7	129.77	129.77	-725.0	94.7	936.2	890.4	45.81	20.436	
2,100.0	2,035.5	2,027.5	2,027.5	9.9	40.6	131.16	131.16	-725.0	94.7	957.0	909.0	48.07	19.909	
2,200.0	2,130.6	2,122.6	2,122.6	10.6	42.5	132.50	132.50	-725.0	94.7	978.4	928.1	50.31	19.445 SF	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.13-T5N-R63W - North Platte 21-13 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 6500-UNKNOWN													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	
0.0	0.0	0.0	0.0	0.0	0.0	95.60	-72.9	743.6	747.3					
100.0	100.0	87.0	87.0	0.1	1.7	95.60	-72.9	743.6	747.2	745.3	1.85	403.309		
200.0	200.0	187.0	187.0	0.3	3.7	95.60	-72.9	743.6	747.2	743.1	4.08	183.247		
300.0	300.0	287.0	287.0	0.6	5.7	28.69	-72.9	743.6	745.6	739.3	6.29	118.472		
400.0	399.8	386.8	386.8	0.8	7.7	28.93	-72.9	743.6	741.0	732.5	8.50	87.187		
500.0	499.5	486.5	486.5	1.0	9.7	29.34	-72.9	743.6	733.4	722.7	10.69	68.580		
600.0	598.7	585.7	585.7	1.3	11.7	29.92	-72.9	743.6	722.8	709.9	12.88	56.139		
700.0	697.5	684.5	684.5	1.7	13.7	30.68	-72.9	743.6	709.3	694.2	15.04	47.155		
800.0	795.6	782.6	782.6	2.0	15.7	31.66	-72.9	743.6	692.9	675.7	17.19	40.298		
900.0	893.1	880.1	880.1	2.5	17.6	32.87	-72.9	743.6	673.7	654.4	19.34	34.842		
1,000.0	989.6	976.6	976.6	3.0	19.5	34.34	-72.9	743.6	651.9	630.4	21.48	30.354		
1,107.3	1,092.2	1,079.2	1,079.2	3.6	21.6	36.26	-72.9	743.6	625.8	602.0	23.79	26.308		
1,200.0	1,180.3	1,167.3	1,167.3	4.2	23.3	37.85	-72.9	743.6	602.4	576.4	25.95	23.210		
1,300.0	1,275.3	1,262.3	1,262.3	4.8	25.2	39.71	-72.9	743.6	577.6	549.3	28.33	20.390		
1,400.0	1,370.4	1,357.4	1,357.4	5.4	27.1	41.73	-72.9	743.6	553.5	522.7	30.75	18.003		
1,500.0	1,465.4	1,452.4	1,452.4	6.0	29.0	43.91	-72.9	743.6	530.1	496.9	33.21	15.963		
1,600.0	1,560.4	1,547.4	1,547.4	6.7	30.9	46.29	-72.9	743.6	507.6	471.9	35.72	14.209		
1,700.0	1,655.4	1,642.4	1,642.4	7.3	32.8	48.87	-72.9	743.6	486.0	447.7	38.28	12.695		
1,800.0	1,750.5	1,737.5	1,737.5	8.0	34.7	51.67	-72.9	743.6	465.5	424.6	40.90	11.382		
1,900.0	1,845.5	1,832.5	1,832.5	8.6	36.6	54.71	-72.9	743.6	446.2	402.6	43.56	10.243		
2,000.0	1,940.5	1,927.5	1,927.5	9.3	38.6	57.99	-72.9	743.6	428.3	382.1	46.28	9.256		
2,100.0	2,035.5	2,022.5	2,022.5	9.9	40.5	61.52	-72.9	743.6	412.0	363.0	49.03	8.403		
2,200.0	2,130.6	2,117.6	2,117.6	10.6	42.4	65.31	-72.9	743.6	397.5	345.7	51.82	7.671		
2,300.0	2,225.6	2,212.6	2,212.6	11.2	44.3	69.34	-72.9	743.6	385.0	330.3	54.63	7.047		
2,400.0	2,320.6	2,307.6	2,307.6	11.8	46.2	73.60	-72.9	743.6	374.6	317.2	57.44	6.522		
2,500.0	2,415.6	2,402.6	2,402.6	12.5	48.1	78.05	-72.9	743.6	366.6	306.4	60.22	6.087		
2,600.0	2,510.7	2,497.7	2,497.7	13.1	50.0	82.65	-72.9	743.6	361.1	298.2	62.96	5.736		
2,700.0	2,605.7	2,592.7	2,592.7	13.8	51.9	87.35	-72.9	743.6	358.3	292.6	65.63	5.459		
2,755.9	2,658.8	2,645.8	2,645.8	14.2	52.9	90.00	-72.9	743.6	357.8	290.8	67.08	5.335 CC		
2,800.0	2,700.7	2,687.7	2,687.7	14.4	53.8	92.09	-72.9	743.6	358.1	289.9	68.20	5.251 ES		
2,900.0	2,795.8	2,782.8	2,782.8	15.1	55.7	96.80	-72.9	743.6	360.6	290.0	70.66	5.104		
3,000.0	2,890.8	2,877.8	2,877.8	15.7	57.6	101.41	-72.9	743.6	365.8	292.8	73.01	5.010		
3,100.0	2,985.8	2,972.8	2,972.8	16.4	59.5	105.89	-72.9	743.6	373.5	298.3	75.25	4.964		
3,200.0	3,080.8	3,067.8	3,067.8	17.1	61.4	110.17	-72.9	743.6	383.6	306.3	77.38	4.958		
3,300.0	3,175.9	3,162.9	3,162.9	17.7	63.3	114.23	-72.9	743.6	395.9	316.5	79.42	4.985		
3,400.0	3,270.9	3,257.9	3,257.9	18.4	65.2	118.04	-72.9	743.6	410.2	328.8	81.38	5.041		
3,500.0	3,365.9	3,352.9	3,352.9	19.0	67.1	121.61	-72.9	743.6	426.3	343.0	83.28	5.119		
3,600.0	3,460.9	3,447.9	3,447.9	19.7	69.0	124.92	-72.9	743.6	444.0	358.9	85.14	5.215		
3,700.0	3,556.0	3,543.0	3,543.0	20.3	70.9	127.98	-72.9	743.6	463.1	376.2	86.97	5.325		
3,800.0	3,651.0	3,638.0	3,638.0	21.0	72.8	130.81	-72.9	743.6	483.5	394.7	88.78	5.446		
3,900.0	3,746.0	3,733.0	3,733.0	21.6	74.7	133.42	-72.9	743.6	505.0	414.4	90.58	5.575		
4,000.0	3,841.1	3,828.1	3,828.1	22.3	76.6	135.82	-72.9	743.6	527.4	435.0	92.38	5.709		
4,100.0	3,936.1	3,923.1	3,923.1	22.9	78.5	138.03	-72.9	743.6	550.7	456.5	94.18	5.847		
4,200.0	4,031.1	4,018.1	4,018.1	23.6	80.4	140.06	-72.9	743.6	574.7	478.7	95.99	5.987		
4,300.0	4,126.1	4,113.1	4,113.1	24.2	82.3	141.94	-72.9	743.6	599.4	501.6	97.81	6.128		
4,400.0	4,221.2	4,208.2	4,208.2	24.9	84.2	143.67	-72.9	743.6	624.7	525.0	99.64	6.269		
4,500.0	4,316.2	4,303.2	4,303.2	25.5	86.1	145.27	-72.9	743.6	650.4	549.0	101.49	6.409		
4,600.0	4,411.2	4,398.2	4,398.2	26.2	88.0	146.75	-72.9	743.6	676.7	573.3	103.35	6.548		
4,700.0	4,506.2	4,493.2	4,493.2	26.8	89.9	148.12	-72.9	743.6	703.3	598.1	105.22	6.684		
4,800.0	4,601.3	4,588.3	4,588.3	27.5	91.8	149.39	-72.9	743.6	730.3	623.2	107.10	6.818		
4,900.0	4,696.3	4,683.3	4,683.3	28.1	93.7	150.58	-72.9	743.6	757.6	648.6	109.00	6.950		

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

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.13-T5N-R63W - North Platte 21-13 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 6500-UNKNOWN													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis 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	
5,000.0	4,791.3	4,778.3	4,778.3	28.8	95.6	151.68	-72.9	743.6	785.2	674.3	110.91	7.079		
5,017.4	4,807.8	4,794.8	4,794.8	28.9	95.9	151.87	-72.9	743.6	790.0	678.7	111.24	7.101		
5,100.0	4,886.7	4,873.7	4,873.7	29.4	97.5	152.89	-72.9	743.6	812.0	698.6	113.40	7.160		
5,200.0	4,983.1	4,970.1	4,970.1	29.8	99.4	153.93	-72.9	743.6	836.0	720.1	115.98	7.209		
5,300.0	5,080.3	5,067.3	5,067.3	30.2	101.3	154.80	-72.9	743.6	857.2	738.6	118.55	7.231		
5,400.0	5,178.3	5,165.3	5,165.3	30.5	103.3	155.51	-72.9	743.6	875.3	754.3	121.08	7.229		
5,500.0	5,276.9	5,263.9	5,263.9	30.8	105.3	156.07	-72.9	743.6	890.4	766.9	123.55	7.207		
5,600.0	5,376.1	5,363.1	5,363.1	31.1	107.3	156.50	-72.9	743.6	902.4	776.4	125.96	7.164		
5,700.0	5,475.6	5,462.6	5,462.6	31.3	109.3	156.81	-72.9	743.6	911.2	782.9	128.27	7.104		
5,800.0	5,575.4	5,562.4	5,562.4	31.4	111.2	157.01	-72.9	743.6	916.8	786.3	130.48	7.026		
5,900.0	5,675.4	5,662.4	5,662.4	31.6	113.2	157.09	-72.9	743.6	919.2	786.6	132.58	6.933		
5,924.6	5,700.0	5,687.0	5,687.0	31.6	113.7	-135.93	-72.9	743.6	919.3	786.3	132.93	6.916		
6,000.0	5,775.4	5,762.4	5,762.4	31.6	115.2	-135.93	-72.9	743.6	919.3	784.7	134.53	6.833		
6,041.8	5,817.1	5,804.1	5,804.1	31.7	116.1	-135.93	-72.9	743.6	919.3	783.8	135.42	6.788		
6,050.0	5,825.4	5,812.4	5,812.4	31.7	116.2	44.70	-72.9	743.6	919.2	783.5	135.70	6.774		
6,100.0	5,875.2	5,862.2	5,862.2	31.7	117.2	45.01	-72.9	743.6	916.9	780.9	136.02	6.741		
6,150.0	5,924.6	5,911.6	5,911.6	31.7	118.2	45.81	-72.9	743.6	911.3	775.7	135.60	6.721		
6,200.0	5,972.9	5,959.9	5,959.9	31.7	119.2	47.10	-72.9	743.6	902.5	767.9	134.56	6.707		
6,250.0	6,019.9	6,006.9	6,006.9	31.6	120.1	48.89	-72.9	743.6	890.5	757.4	133.12	6.690		
6,300.0	6,064.9	6,051.9	6,051.9	31.5	121.0	51.21	-72.9	743.6	875.8	744.2	131.61	6.655		
6,350.0	6,107.7	6,094.7	6,094.7	31.4	121.9	54.05	-72.9	743.6	858.6	728.1	130.41	6.584		
6,400.0	6,147.8	6,134.8	6,134.8	31.3	122.7	57.40	-72.9	743.6	839.2	709.3	129.91	6.460		
6,450.0	6,184.8	6,171.8	6,171.8	31.2	123.4	61.21	-72.9	743.6	818.2	687.8	130.42	6.274		
6,500.0	6,218.5	6,205.5	6,205.5	31.1	124.1	65.39	-72.9	743.6	796.1	664.2	131.98	6.032		
6,550.0	6,248.5	6,235.5	6,235.5	31.0	124.7	69.79	-72.9	743.6	773.5	639.1	134.34	5.757		
6,600.0	6,274.5	6,261.5	6,261.5	30.8	125.2	74.21	-72.9	743.6	750.9	613.8	137.04	5.479		
6,650.0	6,296.3	6,283.3	6,283.3	30.7	125.7	78.45	-72.9	743.6	729.0	589.5	139.56	5.224		
6,700.0	6,313.6	6,300.6	6,300.6	30.6	126.0	82.28	-72.9	743.6	708.6	567.0	141.54	5.006		
6,750.0	6,326.4	6,313.4	6,313.4	30.5	126.3	85.52	-72.9	743.6	690.2	547.4	142.86	4.831		
6,800.0	6,334.6	6,321.6	6,321.6	30.4	126.4	88.04	-72.9	743.6	674.5	530.9	143.59	4.698		
6,850.0	6,337.9	6,324.9	6,324.9	30.3	126.5	89.76	-72.9	743.6	662.0	518.1	143.91	4.600		
6,859.9	6,338.0	6,325.0	6,325.0	30.3	126.5	90.00	-72.9	743.6	660.0	516.0	143.94	4.585		
6,900.0	6,338.0	6,325.0	6,325.0	30.3	126.5	90.00	-72.9	743.6	653.1	509.1	143.99	4.536		
6,960.1	6,338.0	6,325.0	6,325.0	30.2	126.5	90.00	-72.9	743.6	647.3	503.2	144.13	4.491		
6,962.1	6,338.0	6,325.0	6,325.0	30.2	126.5	90.00	-72.9	743.6	647.2	503.1	144.13	4.490		
6,992.4	6,338.0	6,325.0	6,325.0	30.2	126.5	90.00	-72.9	743.6	646.5	502.3	144.19	4.484		
7,000.0	6,338.0	6,325.0	6,325.0	30.2	126.5	90.00	-72.9	743.6	646.5	502.3	144.20	4.484 SF		
7,100.0	6,338.0	6,325.0	6,325.0	30.3	126.5	90.00	-72.9	743.6	655.4	510.7	144.67	4.530		
7,200.0	6,338.0	6,325.0	6,325.0	30.5	126.5	90.00	-72.9	743.6	679.0	533.7	145.33	4.672		
7,300.0	6,338.0	6,325.0	6,325.0	30.8	126.5	90.00	-72.9	743.6	716.0	569.8	146.16	4.899		
7,400.0	6,338.0	6,325.0	6,325.0	31.2	126.5	90.00	-72.9	743.6	764.3	617.2	147.13	5.195		
7,500.0	6,338.0	6,325.0	6,325.0	31.8	126.5	90.00	-72.9	743.6	822.0	673.8	148.23	5.545		
7,600.0	6,338.0	6,325.0	6,325.0	32.4	126.5	90.00	-72.9	743.6	887.2	737.8	149.43	5.937		
7,700.0	6,338.0	6,325.0	6,325.0	33.2	126.5	90.00	-72.9	743.6	958.5	807.8	150.74	6.359		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design		Existing Wells Sec.13-T5N-R63W - North Platte 22-3 (Exist.) - Wellbore #1 - Wellbore #1											Offset Site Error:	0.0 ft
Survey Program: 6500-UNKNOWN													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
7,600.0	6,338.0	6,327.0	6,327.0	32.4	126.5	90.00	-1,424.5	740.9	997.3	847.8	149.47	6.672		
7,700.0	6,338.0	6,327.0	6,327.0	33.2	126.5	90.00	-1,424.5	740.9	925.1	774.3	150.78	6.136		
7,800.0	6,338.0	6,327.0	6,327.0	34.1	126.5	90.00	-1,424.5	740.9	858.5	706.4	152.16	5.642		
7,900.0	6,338.0	6,327.0	6,327.0	35.1	126.5	90.00	-1,424.5	740.9	798.9	645.3	153.60	5.201		
8,000.0	6,338.0	6,327.0	6,327.0	36.2	126.5	90.00	-1,424.5	740.9	748.0	592.9	155.11	4.823		
8,100.0	6,338.0	6,327.0	6,327.0	37.4	126.5	90.00	-1,424.5	740.9	707.6	551.0	156.66	4.517		
8,200.0	6,338.0	6,327.0	6,327.0	38.6	126.5	90.00	-1,424.5	740.9	679.7	521.4	158.25	4.295		
8,300.0	6,338.0	6,327.0	6,327.0	39.9	126.5	90.00	-1,424.5	740.9	665.8	505.9	159.88	4.164		
8,343.8	6,338.0	6,327.0	6,327.0	40.5	126.5	90.00	-1,424.5	740.9	664.3	503.7	160.61	4.136 CC, ES		
8,400.0	6,338.0	6,327.0	6,327.0	41.3	126.5	90.00	-1,424.5	740.9	666.7	505.1	161.54	4.127 SF		
8,500.0	6,338.0	6,327.0	6,327.0	42.7	126.5	90.00	-1,424.5	740.9	682.4	519.2	163.22	4.181		
8,600.0	6,338.0	6,327.0	6,327.0	44.1	126.5	90.00	-1,424.5	740.9	712.0	547.1	164.93	4.317		
8,700.0	6,338.0	6,327.0	6,327.0	45.6	126.5	90.00	-1,424.5	740.9	753.8	587.1	166.66	4.523		
8,800.0	6,338.0	6,327.0	6,327.0	47.2	126.5	90.00	-1,424.5	740.9	805.8	637.4	168.40	4.785		
8,900.0	6,338.0	6,327.0	6,327.0	48.7	126.5	90.00	-1,424.5	740.9	866.4	696.2	170.16	5.092		
9,000.0	6,338.0	6,327.0	6,327.0	50.3	126.5	90.00	-1,424.5	740.9	933.7	761.8	171.93	5.431		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.13-T5N-R63W - North Platte 33-13 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 6700-UNKNOWN												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Offset Wellbore Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
9,000.0	6,338.0	6,292.0	6,292.0	50.3	125.8	-90.00	-2,768.7	2,086.2	968.4	797.1	171.23	5.655	
9,100.0	6,338.0	6,292.0	6,292.0	51.9	125.8	-90.00	-2,768.7	2,086.2	898.4	725.4	173.02	5.193	
9,200.0	6,338.0	6,292.0	6,292.0	53.6	125.8	-90.00	-2,768.7	2,086.2	834.6	659.8	174.81	4.774	
9,300.0	6,338.0	6,292.0	6,292.0	55.2	125.8	-90.00	-2,768.7	2,086.2	778.4	601.8	176.62	4.407	
9,400.0	6,338.0	6,292.0	6,292.0	56.9	125.8	-90.00	-2,768.7	2,086.2	731.7	553.2	178.43	4.101	
9,500.0	6,338.0	6,292.0	6,292.0	58.6	125.8	-90.00	-2,768.7	2,086.2	696.2	516.0	180.25	3.863	
9,600.0	6,338.0	6,292.0	6,292.0	60.3	125.8	-90.00	-2,768.7	2,086.2	673.9	491.8	182.08	3.701	
9,700.0	6,338.0	6,292.0	6,292.0	62.0	125.8	-90.00	-2,768.7	2,086.2	666.0	482.1	183.92	3.621	
9,703.0	6,338.0	6,292.0	6,292.0	62.0	125.8	-90.00	-2,768.7	2,086.2	666.0	482.0	183.97	3.620	CC, ES, SF
9,800.0	6,338.0	6,292.0	6,292.0	63.7	125.8	-90.00	-2,768.7	2,086.2	673.0	487.3	185.76	3.623	
9,900.0	6,338.0	6,292.0	6,292.0	65.5	125.8	-90.00	-2,768.7	2,086.2	694.5	506.9	187.60	3.702	
10,000.0	6,338.0	6,292.0	6,292.0	67.2	125.8	-90.00	-2,768.7	2,086.2	729.2	539.8	189.45	3.849	
10,100.0	6,338.0	6,292.0	6,292.0	69.0	125.8	-90.00	-2,768.7	2,086.2	775.3	584.0	191.31	4.053	
10,200.0	6,338.0	6,292.0	6,292.0	70.7	125.8	-90.00	-2,768.7	2,086.2	831.0	637.8	193.17	4.302	
10,300.0	6,338.0	6,292.0	6,292.0	72.5	125.8	-90.00	-2,768.7	2,086.2	894.4	699.4	195.03	4.586	
10,400.0	6,338.0	6,292.0	6,292.0	74.3	125.8	-90.00	-2,768.7	2,086.2	964.0	767.1	196.90	4.896	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Existing Wells Sec.13-T5N-R63W - North Platte 34-13 (Exist.) - Wellbore #1 - Wellbore #1												Offset Well Error:	0.0 ft
Survey Program: 495-MWD													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.0	6,338.0	6,559.7	6,308.4	74.3	30.0	-89.13	-4,295.8	1,941.2	969.6	868.6	101.03	9.598	
10,500.0	6,338.0	6,560.2	6,308.8	76.1	30.0	-89.18	-4,295.8	1,941.2	885.7	782.8	102.90	8.608	
10,600.0	6,338.0	6,560.6	6,309.2	77.9	30.0	-89.22	-4,295.8	1,941.2	805.5	700.8	104.76	7.689	
10,700.0	6,338.0	6,561.0	6,309.6	79.7	30.0	-89.27	-4,295.8	1,941.2	730.2	623.6	106.64	6.848	
10,800.0	6,338.0	6,561.4	6,310.0	81.5	30.0	-89.32	-4,295.8	1,941.2	661.5	552.9	108.51	6.096	
10,900.0	6,338.0	6,561.8	6,310.4	83.3	30.0	-89.36	-4,295.8	1,941.2	601.5	491.1	110.39	5.449	
11,000.0	6,338.0	6,562.2	6,310.8	85.1	30.0	-89.41	-4,295.8	1,941.2	553.3	441.1	112.27	4.929	
11,100.0	6,338.0	6,562.6	6,311.2	87.0	30.1	-89.45	-4,295.8	1,941.2	520.1	406.0	114.15	4.556	
11,200.0	6,338.0	6,563.0	6,311.6	88.8	30.1	-89.50	-4,295.8	1,941.2	504.8	388.8	116.03	4.351	
11,228.4	6,338.0	6,563.1	6,311.7	89.3	30.1	-89.51	-4,295.8	1,941.2	504.0	387.4	116.56	4.324 CC	
11,233.1	6,338.0	6,563.1	6,311.7	89.4	30.1	-89.51	-4,295.8	1,941.2	504.0	387.4	116.65	4.321 ES, SF	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Offset Design North Platte 11-14-13HNB Pad Sec.13-T5N-R63W - North Platte 11-14-13HNB - Wellbore #1 - Plan #1													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 Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
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	81.043		
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, ES		
300.0	300.0	300.0	300.0	0.6	0.6	117.86	-18.2	0.0	19.0	17.8	1.12	16.937		
400.0	399.8	399.8	399.8	0.8	0.8	130.00	-18.2	0.0	21.9	20.3	1.57	13.911		
500.0	499.5	499.5	499.5	1.0	1.0	143.54	-18.2	0.0	28.3	26.3	2.04	13.859 SF		
600.0	598.7	598.7	598.7	1.3	1.2	154.19	-18.2	0.0	38.8	36.3	2.51	15.447		
700.0	697.5	697.5	697.5	1.7	1.5	161.42	-18.2	0.0	53.3	50.4	2.98	17.907		
800.0	795.6	795.6	795.6	2.0	1.7	166.19	-18.2	0.0	71.7	68.3	3.44	20.819		
900.0	893.1	893.0	893.0	2.5	1.9	170.33	-17.0	-0.8	93.8	89.9	3.90	24.013		
1,000.0	989.6	989.0	988.9	3.0	2.1	174.69	-13.0	-3.5	119.7	115.4	4.36	27.461		
1,107.3	1,092.2	1,090.0	1,089.5	3.6	2.3	179.06	-6.0	-8.2	152.4	147.5	4.86	31.354		
1,200.0	1,180.3	1,175.9	1,174.8	4.2	2.6	-177.53	2.2	-13.7	183.3	178.0	5.33	34.424		
1,300.0	1,275.3	1,267.4	1,265.4	4.8	2.8	-174.20	13.4	-21.2	218.0	212.1	5.86	37.193		
1,400.0	1,370.4	1,360.3	1,357.0	5.4	3.1	-171.42	25.8	-29.5	253.6	247.1	6.43	39.415		
1,500.0	1,465.4	1,453.1	1,448.6	6.0	3.4	-169.32	38.3	-37.9	289.5	282.5	7.03	41.212		
1,600.0	1,560.4	1,545.9	1,540.2	6.7	3.7	-167.68	50.7	-46.2	325.8	318.1	7.63	42.669		
1,700.0	1,655.4	1,638.8	1,631.8	7.3	4.0	-166.37	63.1	-54.6	362.2	353.9	8.26	43.872		
1,800.0	1,750.5	1,731.6	1,723.5	8.0	4.3	-165.30	75.6	-62.9	398.8	389.9	8.89	44.847		
1,900.0	1,845.5	1,824.5	1,815.1	8.6	4.6	-164.41	88.0	-71.3	435.4	425.9	9.53	45.685		
2,000.0	1,940.5	1,917.3	1,906.7	9.3	4.9	-163.66	100.4	-79.6	472.2	462.0	10.18	46.392		
2,100.0	2,035.5	2,010.1	1,998.3	9.9	5.3	-163.01	112.9	-87.9	509.0	498.2	10.83	46.997		
2,200.0	2,130.6	2,103.0	2,090.0	10.6	5.6	-162.45	125.3	-96.3	545.8	534.4	11.49	47.520		
2,300.0	2,225.6	2,195.8	2,181.6	11.2	5.9	-161.96	137.8	-104.6	582.7	570.6	12.15	47.976		
2,400.0	2,320.6	2,288.6	2,273.2	11.8	6.3	-161.53	150.2	-113.0	619.7	606.9	12.81	48.375		
2,500.0	2,415.6	2,381.5	2,364.8	12.5	6.6	-161.15	162.6	-121.3	656.6	643.1	13.47	48.729		
2,600.0	2,510.7	2,474.3	2,456.4	13.1	6.9	-160.81	175.1	-129.7	693.6	679.4	14.14	49.043		
2,700.0	2,605.7	2,567.2	2,548.1	13.8	7.3	-160.50	187.5	-138.0	730.6	715.8	14.81	49.325		
2,800.0	2,700.7	2,660.0	2,639.7	14.4	7.6	-160.23	199.9	-146.3	767.6	752.1	15.48	49.578		
2,900.0	2,795.8	2,752.8	2,731.3	15.1	7.9	-159.97	212.4	-154.7	804.6	788.5	16.16	49.806		
3,000.0	2,890.8	2,845.7	2,822.9	15.7	8.3	-159.74	224.8	-163.0	841.7	824.8	16.83	50.013		
3,100.0	2,985.8	2,938.5	2,914.6	16.4	8.6	-159.53	237.2	-171.4	878.7	861.2	17.50	50.202		
3,200.0	3,080.8	3,031.4	3,006.2	17.1	9.0	-159.34	249.7	-179.7	915.8	897.6	18.18	50.374		
3,300.0	3,175.9	3,124.2	3,097.8	17.7	9.3	-159.16	262.1	-188.1	952.8	934.0	18.86	50.532		
3,400.0	3,270.9	3,217.0	3,189.4	18.4	9.6	-159.00	274.6	-196.4	989.9	970.4	19.53	50.678		

Reference Depths are relative to WELL @ 4642.0ft (Ensign 136 - RKB Coordinates are relative to: North Platte K-O-13HNC
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.72°



Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well North Platte K-O-13HNC
Project:	SEC.13-T5N-R63W	TVD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Reference Site:	North Platte 11-14-13HNB Pad Sec.13-T5N-R63W	MD Reference:	WELL @ 4642.0ft (Ensign 136 - RKB 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	North Platte K-O-13HNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-15-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4642.0ft (Ensign 136 - RKB Coordinates are relative to: North Platte K-O-13HNC
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.72°

