BONANZA CREEK ENERGY OPERATING

Well Name: **North Platte U-Y-28HNB**

Surface Location: Huck 41-28 Pad Sec.28-T5N-R63W

North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

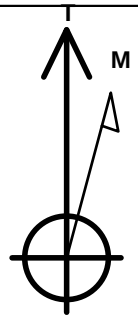
Ground Elevation: 4546.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1381838.74	3297251.85	40.376640	-104.433050	

RKB - 13' WELL @ 4559.0ft (RKB - 13')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 570'FSL & 130'FEL	6290.0	-4298.8	342.8	Point



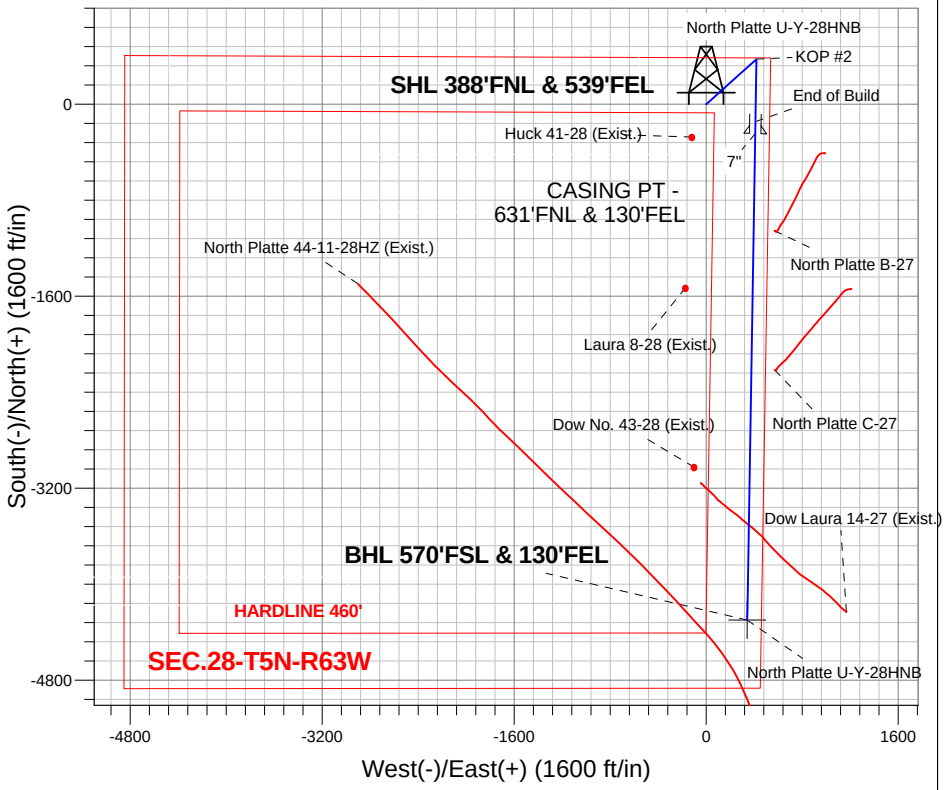
Azimuths to True North
Magnetic North: 8.46°

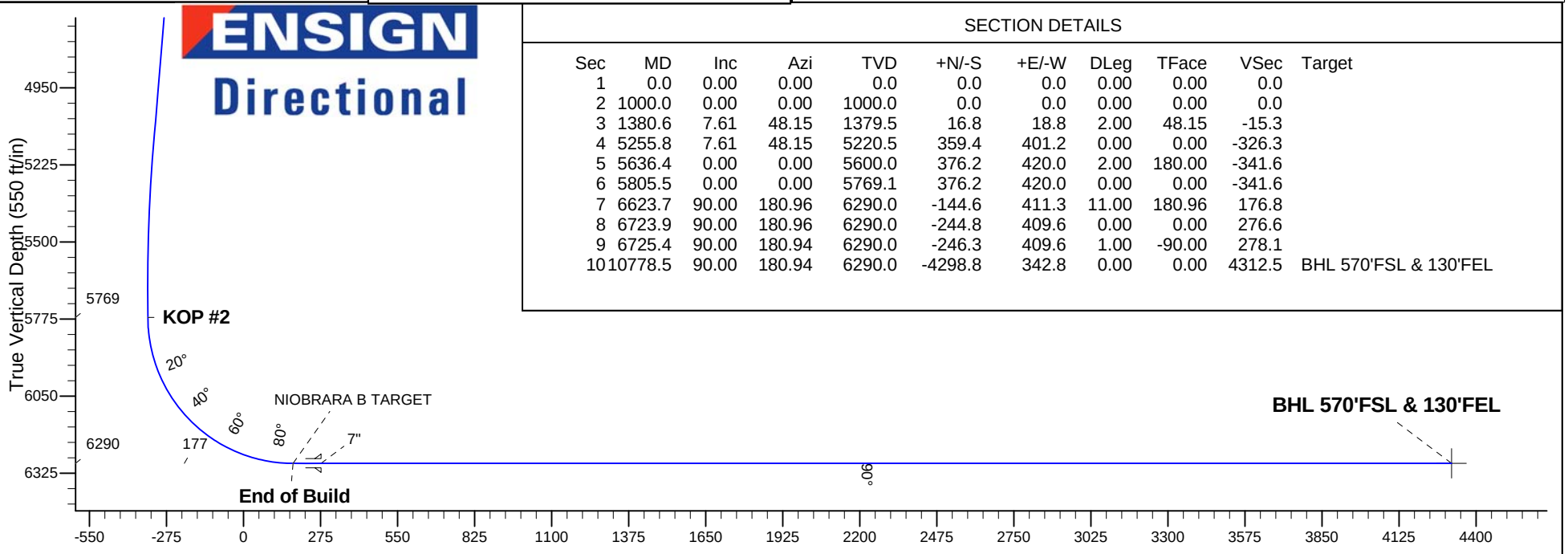
Magnetic Field
Strength: 52982.8snT
Dip Angle: 67.03°
Date: 2/6/2013
Model: IGRF2010

Huck 41-28 Pad Sec.28-T5N-R63W
North Platte U-Y-28HNB
Plan #3 (2-7-13)
16:51, February 07 2013

ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
5769.1	5805.5	KOP #2
6290.0	6623.7	End of Build





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	1380.6	7.61	48.15	1379.5	16.8	18.8	2.00	48.15	-15.3	
4	5255.8	7.61	48.15	5220.5	359.4	401.2	0.00	0.00	-326.3	
5	5636.4	0.00	0.00	5600.0	376.2	420.0	2.00	180.00	-341.6	
6	5805.5	0.00	0.00	5769.1	376.2	420.0	0.00	0.00	-341.6	
7	6623.7	90.00	180.96	6290.0	-144.6	411.3	11.00	180.96	176.8	
8	6723.9	90.00	180.96	6290.0	-244.8	409.6	0.00	0.00	276.6	
9	6725.4	90.00	180.94	6290.0	-246.3	409.6	1.00	-90.00	278.1	
10	10778.5	90.00	180.94	6290.0	-4298.8	342.8	0.00	0.00	4312.5	BHL 570'FSL & 130'FEL

BONANZA CREEK ENERGY OPERATING

SEC.28-T5N-R63W
Huck 41-28 Pad Sec.28-T5N-R63W
North Platte U-Y-28HNB

Wellbore #1

Plan: Plan #3 (2-7-13)

Standard Planning Report

07 February, 2013

Database:	Landmark	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Company:	BONANZA CREEK ENERGY OPERATING	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Project:	SEC.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**North Reference:**	True
Well:	North Platte U-Y-28HNB	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (2-7-13)		

Project SEC.28-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 Huck 41-28 Pad Sec.28-T5N-R63W

Site Position:		**Northing:**	1,381,838.75 ft	**Latitude:**	40.376640
From:	Lat/Long	**Easting:**	3,297,251.85 ft	**Longitude:**	-104.433050
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	0.69 °

Well North Platte U-Y-28HNB

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,381,838.74 ft	**Latitude:**	40.376640
	+E/-W	0.0 ft	**Easting:**	3,297,251.85 ft	**Longitude:**	-104.433050
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,546.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/6/2013	8.46	67.03	52,983

Design Plan #3 (2-7-13)

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	175.44

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,380.6	7.61	48.15	1,379.5	16.8	18.8	2.00	2.00	0.00	48.15	
5,255.8	7.61	48.15	5,220.5	359.4	401.2	0.00	0.00	0.00	0.00	
5,636.4	0.00	0.00	5,600.0	376.2	420.0	2.00	-2.00	0.00	180.00	
5,805.5	0.00	0.00	5,769.1	376.2	420.0	0.00	0.00	0.00	0.00	
6,623.7	90.00	180.96	6,290.0	-144.6	411.3	11.00	11.00	0.00	180.96	
6,723.9	90.00	180.96	6,290.0	-244.8	409.6	0.00	0.00	0.00	0.00	
6,725.4	90.00	180.94	6,290.0	-246.3	409.6	1.00	0.00	-1.00	-90.00	
10,778.5	90.00	180.94	6,290.0	-4,298.8	342.8	0.00	0.00	0.00	0.00	BHL 570'FSL & 13(

Database:	Landmark	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Company:	BONANZA CREEK ENERGY OPERATING	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Project:	SEC.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**North Reference:**	True
Well:	North Platte U-Y-28HNB	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (2-7-13)		

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
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
KOP #1									
1,100.0	2.00	48.15	1,100.0	1.2	1.3	-1.1	2.00	2.00	0.00
1,200.0	4.00	48.15	1,199.8	4.7	5.2	-4.2	2.00	2.00	0.00
1,300.0	6.00	48.15	1,299.5	10.5	11.7	-9.5	2.00	2.00	0.00
1,380.6	7.61	48.15	1,379.5	16.8	18.8	-15.3	2.00	2.00	0.00
1,400.0	7.61	48.15	1,398.7	18.6	20.7	-16.9	0.00	0.00	0.00
1,500.0	7.61	48.15	1,497.8	27.4	30.6	-24.9	0.00	0.00	0.00
1,600.0	7.61	48.15	1,596.9	36.2	40.5	-32.9	0.00	0.00	0.00
1,700.0	7.61	48.15	1,696.1	45.1	50.3	-40.9	0.00	0.00	0.00
1,800.0	7.61	48.15	1,795.2	53.9	60.2	-49.0	0.00	0.00	0.00
1,900.0	7.61	48.15	1,894.3	62.8	70.1	-57.0	0.00	0.00	0.00
2,000.0	7.61	48.15	1,993.4	71.6	79.9	-65.0	0.00	0.00	0.00
2,100.0	7.61	48.15	2,092.5	80.4	89.8	-73.0	0.00	0.00	0.00
2,200.0	7.61	48.15	2,191.7	89.3	99.7	-81.1	0.00	0.00	0.00
2,300.0	7.61	48.15	2,290.8	98.1	109.5	-89.1	0.00	0.00	0.00
2,400.0	7.61	48.15	2,389.9	106.9	119.4	-97.1	0.00	0.00	0.00
2,500.0	7.61	48.15	2,489.0	115.8	129.3	-105.1	0.00	0.00	0.00
2,600.0	7.61	48.15	2,588.1	124.6	139.1	-113.2	0.00	0.00	0.00
2,700.0	7.61	48.15	2,687.3	133.5	149.0	-121.2	0.00	0.00	0.00
2,800.0	7.61	48.15	2,786.4	142.3	158.9	-129.2	0.00	0.00	0.00
2,900.0	7.61	48.15	2,885.5	151.1	168.7	-137.2	0.00	0.00	0.00
3,000.0	7.61	48.15	2,984.6	160.0	178.6	-145.3	0.00	0.00	0.00
3,100.0	7.61	48.15	3,083.7	168.8	188.5	-153.3	0.00	0.00	0.00
3,200.0	7.61	48.15	3,182.8	177.7	198.3	-161.3	0.00	0.00	0.00
3,300.0	7.61	48.15	3,282.0	186.5	208.2	-169.4	0.00	0.00	0.00
3,400.0	7.61	48.15	3,381.1	195.3	218.1	-177.4	0.00	0.00	0.00
3,500.0	7.61	48.15	3,480.2	204.2	227.9	-185.4	0.00	0.00	0.00
3,600.0	7.61	48.15	3,579.3	213.0	237.8	-193.4	0.00	0.00	0.00
3,700.0	7.61	48.15	3,678.4	221.8	247.7	-201.5	0.00	0.00	0.00
3,800.0	7.61	48.15	3,777.6	230.7	257.5	-209.5	0.00	0.00	0.00
3,900.0	7.61	48.15	3,876.7	239.5	267.4	-217.5	0.00	0.00	0.00
4,000.0	7.61	48.15	3,975.8	248.4	277.3	-225.5	0.00	0.00	0.00
4,100.0	7.61	48.15	4,074.9	257.2	287.1	-233.6	0.00	0.00	0.00
4,200.0	7.61	48.15	4,174.0	266.0	297.0	-241.6	0.00	0.00	0.00
4,300.0	7.61	48.15	4,273.2	274.9	306.9	-249.6	0.00	0.00	0.00
4,400.0	7.61	48.15	4,372.3	283.7	316.7	-257.6	0.00	0.00	0.00
4,500.0	7.61	48.15	4,471.4	292.6	326.6	-265.7	0.00	0.00	0.00
4,600.0	7.61	48.15	4,570.5	301.4	336.5	-273.7	0.00	0.00	0.00
4,700.0	7.61	48.15	4,669.6	310.2	346.4	-281.7	0.00	0.00	0.00
4,800.0	7.61	48.15	4,768.7	319.1	356.2	-289.7	0.00	0.00	0.00
4,900.0	7.61	48.15	4,867.9	327.9	366.1	-297.8	0.00	0.00	0.00
5,000.0	7.61	48.15	4,967.0	336.7	376.0	-305.8	0.00	0.00	0.00
5,100.0	7.61	48.15	5,066.1	345.6	385.8	-313.8	0.00	0.00	0.00

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Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**North Reference:**	True
Well:	North Platte U-Y-28HNB	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (2-7-13)		

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)
5,200.0	7.61	48.15	5,165.2	354.4	395.7	-321.9	0.00	0.00	0.00
5,255.8	7.61	48.15	5,220.5	359.4	401.2	-326.3	0.00	0.00	0.00
5,300.0	6.73	48.15	5,264.4	363.0	405.3	-329.7	2.00	-2.00	0.00
5,400.0	4.73	48.15	5,363.9	369.7	412.7	-335.7	2.00	-2.00	0.00
5,500.0	2.73	48.15	5,463.7	374.0	417.6	-339.7	2.00	-2.00	0.00
5,600.0	0.73	48.15	5,563.6	376.0	419.8	-341.5	2.00	-2.00	0.00
5,636.4	0.00	0.00	5,600.0	376.2	420.0	-341.6	2.00	-2.00	0.00
5,700.0	0.00	0.00	5,663.6	376.2	420.0	-341.6	0.00	0.00	0.00
5,800.0	0.00	0.00	5,763.6	376.2	420.0	-341.6	0.00	0.00	0.00
5,805.5	0.00	0.00	5,769.1	376.2	420.0	-341.6	0.00	0.00	0.00
KOP #2									
5,900.0	10.39	180.96	5,863.1	367.7	419.9	-333.1	11.00	11.00	0.00
6,000.0	21.39	180.96	5,959.1	340.3	419.4	-305.9	11.00	11.00	0.00
6,100.0	32.39	180.96	6,048.2	295.2	418.6	-261.0	11.00	11.00	0.00
6,200.0	43.39	180.96	6,127.0	233.8	417.6	-199.9	11.00	11.00	0.00
6,300.0	54.39	180.96	6,192.6	158.6	416.4	-125.0	11.00	11.00	0.00
6,400.0	65.39	180.96	6,242.7	72.3	414.9	-39.1	11.00	11.00	0.00
6,500.0	76.39	180.96	6,275.4	-22.1	413.3	54.9	11.00	11.00	0.00
6,600.0	87.39	180.96	6,289.5	-120.9	411.7	153.2	11.00	11.00	0.00
6,623.7	90.00	180.96	6,290.0	-144.6	411.3	176.8	11.00	11.00	0.00
End of Build - NIOBRARA B TARGET									
6,700.0	90.00	180.96	6,290.0	-220.9	410.0	252.8	0.00	0.00	0.00
6,723.9	90.00	180.96	6,290.0	-244.8	409.6	276.6	0.00	0.00	0.00
7"									
6,725.4	90.00	180.94	6,290.0	-246.3	409.6	278.1	0.99	0.00	-0.99
6,800.0	90.00	180.94	6,290.0	-320.9	408.3	352.3	0.00	0.00	0.00
6,900.0	90.00	180.94	6,290.0	-420.9	406.7	451.9	0.00	0.00	0.00
7,000.0	90.00	180.94	6,290.0	-520.8	405.0	551.4	0.00	0.00	0.00
7,100.0	90.00	180.94	6,290.0	-620.8	403.4	650.9	0.00	0.00	0.00
7,200.0	90.00	180.94	6,290.0	-720.8	401.8	750.5	0.00	0.00	0.00
7,300.0	90.00	180.94	6,290.0	-820.8	400.1	850.0	0.00	0.00	0.00
7,400.0	90.00	180.94	6,290.0	-920.8	398.5	949.5	0.00	0.00	0.00
7,500.0	90.00	180.94	6,290.0	-1,020.8	396.8	1,049.1	0.00	0.00	0.00
7,600.0	90.00	180.94	6,290.0	-1,120.8	395.2	1,148.6	0.00	0.00	0.00
7,700.0	90.00	180.94	6,290.0	-1,220.7	393.5	1,248.2	0.00	0.00	0.00
7,800.0	90.00	180.94	6,290.0	-1,320.7	391.9	1,347.7	0.00	0.00	0.00
7,900.0	90.00	180.94	6,290.0	-1,420.7	390.2	1,447.2	0.00	0.00	0.00
8,000.0	90.00	180.94	6,290.0	-1,520.7	388.6	1,546.8	0.00	0.00	0.00
8,100.0	90.00	180.94	6,290.0	-1,620.7	386.9	1,646.3	0.00	0.00	0.00
8,200.0	90.00	180.94	6,290.0	-1,720.7	385.3	1,745.9	0.00	0.00	0.00
8,300.0	90.00	180.94	6,290.0	-1,820.7	383.6	1,845.4	0.00	0.00	0.00
8,400.0	90.00	180.94	6,290.0	-1,920.7	382.0	1,944.9	0.00	0.00	0.00
8,500.0	90.00	180.94	6,290.0	-2,020.6	380.3	2,044.5	0.00	0.00	0.00
8,600.0	90.00	180.94	6,290.0	-2,120.6	378.7	2,144.0	0.00	0.00	0.00
8,700.0	90.00	180.94	6,290.0	-2,220.6	377.0	2,243.6	0.00	0.00	0.00
8,800.0	90.00	180.94	6,290.0	-2,320.6	375.4	2,343.1	0.00	0.00	0.00
8,900.0	90.00	180.94	6,290.0	-2,420.6	373.7	2,442.6	0.00	0.00	0.00
9,000.0	90.00	180.94	6,290.0	-2,520.6	372.1	2,542.2	0.00	0.00	0.00
9,100.0	90.00	180.94	6,290.0	-2,620.6	370.4	2,641.7	0.00	0.00	0.00
9,200.0	90.00	180.94	6,290.0	-2,720.5	368.8	2,741.2	0.00	0.00	0.00
9,300.0	90.00	180.94	6,290.0	-2,820.5	367.1	2,840.8	0.00	0.00	0.00
9,400.0	90.00	180.94	6,290.0	-2,920.5	365.5	2,940.3	0.00	0.00	0.00
9,500.0	90.00	180.94	6,290.0	-3,020.5	363.8	3,039.9	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
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Project:	SEC.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**North Reference:**	True
Well:	North Platte U-Y-28HNB	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (2-7-13)		

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)
9,600.0	90.00	180.94	6,290.0	-3,120.5	362.2	3,139.4	0.00	0.00	0.00
9,700.0	90.00	180.94	6,290.0	-3,220.5	360.5	3,238.9	0.00	0.00	0.00
9,800.0	90.00	180.94	6,290.0	-3,320.5	358.9	3,338.5	0.00	0.00	0.00
9,900.0	90.00	180.94	6,290.0	-3,420.5	357.2	3,438.0	0.00	0.00	0.00
10,000.0	90.00	180.94	6,290.0	-3,520.4	355.6	3,537.6	0.00	0.00	0.00
10,100.0	90.00	180.94	6,290.0	-3,620.4	353.9	3,637.1	0.00	0.00	0.00
10,200.0	90.00	180.94	6,290.0	-3,720.4	352.3	3,736.6	0.00	0.00	0.00
10,300.0	90.00	180.94	6,290.0	-3,820.4	350.6	3,836.2	0.00	0.00	0.00
10,400.0	90.00	180.94	6,290.0	-3,920.4	349.0	3,935.7	0.00	0.00	0.00
10,500.0	90.00	180.94	6,290.0	-4,020.4	347.4	4,035.3	0.00	0.00	0.00
10,600.0	90.00	180.94	6,290.0	-4,120.4	345.7	4,134.8	0.00	0.00	0.00
10,700.0	90.00	180.94	6,290.0	-4,220.3	344.1	4,234.3	0.00	0.00	0.00
10,778.5	90.00	180.94	6,290.0	-4,298.8	342.8	4,312.5	0.00	0.00	0.00
BHL 570'FSL & 130'FEL									

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 570'FSL & 130'F - plan hits target center - Point	0.00	0.00	6,290.0	-4,298.8	342.8	1,377,544.51	3,297,646.29	40.364840	-104.431820

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,723.9	6,290.0	7"	7	7-1/2

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,623.7	6,290.0	NIOBRARA B TARGET		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,000.0	1,000.0	0.0	0.0	KOP #1
5,805.5	5,769.1	376.2	420.0	KOP #2
6,623.7	6,290.0	-144.6	411.3	End of Build

ENSIGN
Directional

BONANZA CREEK ENERGY OPERATING

SEC.28-T5N-R63W
Huck 41-28 Pad Sec.28-T5N-R63W
North Platte U-Y-28HNB

Wellbore #1
Plan #3 (2-7-13)

Anticollision Report

07 February, 2013

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Reference Plan #3 (2-7-13)

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	**Error Surface:**	Elliptical Conic

Warning Levels Evaluated at: 2.00 **Sigma**

Survey Tool Program **Date** 2/7/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,778.3	Plan #3 (2-7-13) (Wellbore #1)	MWD	MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
70 Ranch 11-27 Pad Sec.27-T5N-R63W						
North Platte B-27 - Wellbore #1 - Wellbore #1	7,531.0	6,366.1	177.3	133.9	4.089	CC, ES, SF
Huck 41-28 Pad Sec.28-T5N-R63W						
Dow Laura 14-27 (Exist.) - Wellbore #1 - Wellbore #1	10,693.0	6,509.6	822.7	714.8	7.620	CC
Dow Laura 14-27 (Exist.) - Wellbore #1 - Wellbore #1	10,700.0	6,509.8	822.8	714.7	7.611	ES
Dow Laura 14-27 (Exist.) - Wellbore #1 - Wellbore #1	10,778.5	6,511.8	827.2	717.6	7.548	SF
Dow No. 43-28 (Exist.) - Wellbore #1 - Wellbore #1	9,510.9	6,279.0	464.0	277.5	2.487	CC, ES, SF
Huck 41-28 (Exist.) - Wellbore #1 - Wellbore #1	1,000.0	996.0	298.3	276.3	13.527	CC
Huck 41-28 (Exist.) - Wellbore #1 - Wellbore #1	1,100.0	1,096.0	299.9	275.7	12.361	ES
Huck 41-28 (Exist.) - Wellbore #1 - Wellbore #1	6,761.1	6,286.0	528.9	387.4	3.738	SF
Laura 8-28 (Exist.) - Wellbore #1 - Wellbore #1	8,018.6	6,284.0	561.1	401.6	3.517	CC, ES, SF
North Platte 44-11-28HZ (Exist.) - Wellbore #1 - Wellbore	10,778.5	6,758.0	334.4	220.4	2.933	CC, ES, SF
Perkins 12-27 Pad Sec.27-T5N-R63W						
North Platte C-27 - Wellbore #1 - Wellbore #1	8,690.0	6,393.5	196.8	132.5	3.062	CC, ES
North Platte C-27 - Wellbore #1 - Wellbore #1	8,700.0	6,393.4	197.0	132.6	3.058	SF

Offset Design 70 Ranch 11-27 Pad Sec.27-T5N-R63W - North Platte B-27 - Wellbore #1 - Wellbore #1

Survey Program: 119-MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,550.0	6,284.8	6,367.2	6,295.0	15.6	18.9	-53.95	-1,054.7	573.5	996.7	968.7	28.04	35.546	
6,600.0	6,289.5	6,371.6	6,299.4	15.7	18.9	-79.33	-1,054.7	573.4	947.7	915.6	32.15	29.476	
6,623.7	6,290.0	6,372.0	6,299.8	15.8	18.9	-92.83	-1,054.7	573.4	924.5	892.0	32.51	28.441	
6,700.0	6,290.0	6,371.5	6,299.3	16.1	18.9	-92.67	-1,054.7	573.4	849.7	816.8	32.97	25.771	
6,723.9	6,290.0	6,371.3	6,299.1	16.3	18.9	-92.62	-1,054.7	573.4	826.3	793.2	33.14	24.932	
6,725.4	6,290.0	6,371.3	6,299.1	16.3	18.9	-92.62	-1,054.7	573.4	824.9	791.7	33.15	24.882	
6,800.0	6,290.0	6,370.8	6,298.6	16.8	18.9	-92.46	-1,054.7	573.4	752.2	718.6	33.66	22.350	
6,900.0	6,290.0	6,370.2	6,298.0	17.8	18.9	-92.25	-1,054.7	573.4	655.5	620.8	34.62	18.930	
7,000.0	6,290.0	6,369.5	6,297.3	18.9	18.9	-92.04	-1,054.7	573.4	559.8	524.1	35.75	15.661	
7,100.0	6,290.0	6,368.9	6,296.7	20.1	18.9	-91.83	-1,054.7	573.5	466.1	429.1	36.99	12.598	
7,200.0	6,290.0	6,368.2	6,296.0	21.4	18.9	-91.62	-1,054.7	573.5	375.5	337.2	38.35	9.793	
7,300.0	6,290.0	6,367.6	6,295.4	22.8	18.9	-91.41	-1,054.7	573.5	291.2	251.4	39.78	7.320	

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Offset Design 70 Ranch 11-27 Pad Sec.27-T5N-R63W - North Platte B-27 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0 ft

Survey Program: 119-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,400.0	6,290.0	6,366.9	6,294.7	24.3	18.9	-91.20	-1,054.7	573.5	220.4	179.1	41.28	5.339	
7,500.0	6,290.0	6,366.3	6,294.1	25.8	18.9	-90.99	-1,054.7	573.5	179.9	137.1	42.84	4.200	
7,531.0	6,290.0	6,366.1	6,293.9	26.3	18.9	-90.93	-1,054.7	573.5	177.3	133.9	43.34	4.089	CC, ES, SF
7,600.0	6,290.0	6,365.6	6,293.4	27.4	18.9	-90.78	-1,054.7	573.5	190.2	145.7	44.45	4.279	
7,700.0	6,290.0	6,365.0	6,292.8	29.0	18.9	-90.57	-1,054.7	573.5	244.9	198.8	46.10	5.312	
7,800.0	6,290.0	6,364.3	6,292.1	30.6	18.9	-90.36	-1,054.8	573.5	322.1	274.3	47.77	6.742	
7,900.0	6,290.0	6,363.7	6,291.5	32.3	18.9	-90.15	-1,054.8	573.5	409.3	359.8	49.48	8.273	
8,000.0	6,290.0	6,363.0	6,290.8	34.0	18.9	-89.94	-1,054.8	573.5	501.3	450.1	51.20	9.791	
8,100.0	6,290.0	6,363.0	6,290.8	35.7	18.9	-89.94	-1,054.8	573.5	595.9	543.0	52.95	11.255	
8,200.0	6,290.0	6,363.0	6,290.8	37.5	18.9	-89.94	-1,054.8	573.5	692.0	637.3	54.71	12.649	
8,300.0	6,290.0	6,361.1	6,288.9	39.2	18.9	-89.33	-1,054.8	573.6	789.1	732.6	56.49	13.969	
8,400.0	6,290.0	6,360.5	6,288.3	41.0	18.9	-89.13	-1,054.8	573.6	886.8	828.6	58.28	15.218	
8,500.0	6,290.0	6,359.9	6,287.7	42.8	18.9	-88.93	-1,054.8	573.6	985.0	924.9	60.07	16.397	

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Huck 41-28 Pad Sec.28-T5N-R63W - Dow Laura 14-27 (Exist.) - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0 ft

Survey Program: 661-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,200.0	6,290.0	6,496.4	6,236.6	74.1	32.7	-87.26	-4,226.6	1,165.9	959.1	860.4	98.67	9.720	
10,300.0	6,290.0	6,499.0	6,239.2	76.0	32.7	-87.44	-4,226.7	1,166.0	911.7	811.2	100.55	9.067	
10,400.0	6,290.0	6,501.5	6,241.7	77.9	32.7	-87.61	-4,226.8	1,166.1	873.3	770.9	102.44	8.525	
10,500.0	6,290.0	6,504.3	6,244.5	79.8	32.7	-87.81	-4,226.8	1,166.2	845.1	740.7	104.32	8.100	
10,600.0	6,290.0	6,507.1	6,247.3	81.6	32.7	-88.00	-4,226.9	1,166.3	828.0	721.8	106.21	7.796	
10,693.0	6,290.0	6,509.6	6,249.8	83.4	32.7	-88.17	-4,226.9	1,166.4	822.7	714.8	107.97	7.620	CC
10,700.0	6,290.0	6,509.8	6,250.0	83.5	32.7	-88.19	-4,226.9	1,166.4	822.8	714.7	108.10	7.611	ES
10,778.5	6,290.0	6,511.8	6,252.0	85.0	32.7	-88.33	-4,227.0	1,166.4	827.2	717.6	109.58	7.548	SF

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Huck 41-28 Pad Sec.28-T5N-R63W - Dow No. 43-28 (Exist.) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 6300-UNKNOWN

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,700.0	6,290.0	6,279.0	6,279.0	46.4	125.6	90.00	-3,023.8	-100.3	934.3	762.7	171.60	5.445	
8,800.0	6,290.0	6,279.0	6,279.0	48.2	125.6	90.00	-3,023.8	-100.3	849.0	675.5	173.43	4.895	
8,900.0	6,290.0	6,279.0	6,279.0	50.0	125.6	90.00	-3,023.8	-100.3	767.2	591.9	175.26	4.377	
9,000.0	6,290.0	6,279.0	6,279.0	51.9	125.6	90.00	-3,023.8	-100.3	690.2	513.1	177.10	3.897	
9,100.0	6,290.0	6,279.0	6,279.0	53.7	125.6	90.00	-3,023.8	-100.3	619.8	440.9	178.94	3.464	
9,200.0	6,290.0	6,279.0	6,279.0	55.5	125.6	90.00	-3,023.8	-100.3	558.6	377.8	180.79	3.090	
9,300.0	6,290.0	6,279.0	6,279.0	57.4	125.6	90.00	-3,023.8	-100.3	509.7	327.1	182.64	2.791	
9,400.0	6,290.0	6,279.0	6,279.0	59.2	125.6	90.00	-3,023.8	-100.3	477.1	292.6	184.50	2.586	
9,500.0	6,290.0	6,279.0	6,279.0	61.1	125.6	90.00	-3,023.8	-100.3	464.2	277.8	186.36	2.491	
9,510.9	6,290.0	6,279.0	6,279.0	61.3	125.6	90.00	-3,023.8	-100.3	464.0	277.5	186.56	2.487	CC, ES, SF
9,600.0	6,290.0	6,279.0	6,279.0	62.9	125.6	90.00	-3,023.8	-100.3	472.5	284.3	188.23	2.510	
9,700.0	6,290.0	6,279.0	6,279.0	64.8	125.6	90.00	-3,023.8	-100.3	501.1	311.0	190.09	2.636	
9,800.0	6,290.0	6,279.0	6,279.0	66.7	125.6	90.00	-3,023.8	-100.3	546.7	354.7	191.96	2.848	
9,900.0	6,290.0	6,279.0	6,279.0	68.5	125.6	90.00	-3,023.8	-100.3	605.6	411.7	193.84	3.124	
10,000.0	6,290.0	6,279.0	6,279.0	70.4	125.6	90.00	-3,023.8	-100.3	674.2	478.5	195.71	3.445	
10,100.0	6,290.0	6,279.0	6,279.0	72.3	125.6	90.00	-3,023.8	-100.3	749.9	552.3	197.59	3.795	
10,200.0	6,290.0	6,279.0	6,279.0	74.1	125.6	90.00	-3,023.8	-100.3	830.8	631.3	199.47	4.165	
10,300.0	6,290.0	6,279.0	6,279.0	76.0	125.6	90.00	-3,023.8	-100.3	915.4	714.1	201.35	4.546	

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Huck 41-28 Pad Sec.28-T5N-R63W - Huck 41-28 (Exist.) - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0 ft

Survey Program: 6300-UNKNOWN — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-156.32	-273.2	-119.8	298.4				
100.0	100.0	96.0	96.0	0.1	1.9	-156.32	-273.2	-119.8	298.3	296.3	2.03	146.782	
200.0	200.0	196.0	196.0	0.3	3.9	-156.32	-273.2	-119.8	298.3	294.1	4.26	70.078	
300.0	300.0	296.0	296.0	0.6	5.9	-156.32	-273.2	-119.8	298.3	291.9	6.48	46.026	
400.0	400.0	396.0	396.0	0.8	7.9	-156.32	-273.2	-119.8	298.3	289.6	8.71	34.265	
500.0	500.0	496.0	496.0	1.0	9.9	-156.32	-273.2	-119.8	298.3	287.4	10.93	27.292	
600.0	600.0	596.0	596.0	1.2	11.9	-156.32	-273.2	-119.8	298.3	285.2	13.16	22.677	
700.0	700.0	696.0	696.0	1.5	13.9	-156.32	-273.2	-119.8	298.3	283.0	15.38	19.397	
800.0	800.0	796.0	796.0	1.7	15.9	-156.32	-273.2	-119.8	298.3	280.7	17.61	16.946	
900.0	900.0	896.0	896.0	1.9	17.9	-156.32	-273.2	-119.8	298.3	278.5	19.83	15.045	
1,000.0	1,000.0	996.0	996.0	2.1	19.9	-156.32	-273.2	-119.8	298.3	276.3	22.06	13.527	CC
1,100.0	1,100.0	1,096.0	1,096.0	2.4	21.9	155.65	-273.2	-119.8	299.9	275.7	24.26	12.361	ES
1,200.0	1,199.8	1,195.8	1,195.8	2.6	23.9	156.02	-273.2	-119.8	304.7	278.3	26.44	11.525	
1,300.0	1,299.5	1,295.5	1,295.5	2.8	25.9	156.60	-273.2	-119.8	312.7	284.1	28.58	10.942	
1,380.6	1,379.5	1,375.5	1,375.5	3.0	27.5	157.21	-273.2	-119.8	321.5	291.2	30.27	10.621	
1,400.0	1,398.7	1,394.7	1,394.7	3.1	27.9	157.39	-273.2	-119.8	323.9	293.2	30.70	10.551	
1,500.0	1,497.8	1,493.8	1,493.8	3.3	29.9	158.25	-273.2	-119.8	336.1	303.3	32.89	10.220	
1,600.0	1,596.9	1,592.9	1,592.9	3.6	31.9	159.06	-273.2	-119.8	348.5	313.4	35.09	9.931	
1,700.0	1,696.1	1,692.1	1,692.1	3.9	33.8	159.81	-273.2	-119.8	360.9	323.6	37.29	9.678	
1,800.0	1,795.2	1,791.2	1,791.2	4.2	35.8	160.51	-273.2	-119.8	373.4	333.9	39.50	9.454	
1,900.0	1,894.3	1,890.3	1,890.3	4.5	37.8	161.17	-273.2	-119.8	385.9	344.2	41.70	9.255	
2,000.0	1,993.4	1,989.4	1,989.4	4.8	39.8	161.78	-273.2	-119.8	398.5	354.6	43.91	9.076	
2,100.0	2,092.5	2,088.5	2,088.5	5.1	41.8	162.36	-273.2	-119.8	411.1	365.0	46.11	8.916	
2,200.0	2,191.7	2,187.7	2,187.7	5.4	43.8	162.90	-273.2	-119.8	423.8	375.4	48.32	8.770	
2,300.0	2,290.8	2,286.8	2,286.8	5.7	45.7	163.41	-273.2	-119.8	436.4	385.9	50.52	8.639	
2,400.0	2,389.9	2,385.9	2,385.9	6.0	47.7	163.89	-273.2	-119.8	449.2	396.4	52.73	8.518	
2,500.0	2,489.0	2,485.0	2,485.0	6.3	49.7	164.35	-273.2	-119.8	461.9	407.0	54.94	8.408	
2,600.0	2,588.1	2,584.1	2,584.1	6.6	51.7	164.78	-273.2	-119.8	474.7	417.6	57.14	8.307	
2,700.0	2,687.3	2,683.3	2,683.3	6.9	53.7	165.19	-273.2	-119.8	487.5	428.2	59.35	8.214	
2,800.0	2,786.4	2,782.4	2,782.4	7.3	55.6	165.58	-273.2	-119.8	500.3	438.8	61.56	8.128	
2,900.0	2,885.5	2,881.5	2,881.5	7.6	57.6	165.95	-273.2	-119.8	513.2	449.4	63.76	8.048	
3,000.0	2,984.6	2,980.6	2,980.6	7.9	59.6	166.30	-273.2	-119.8	526.0	460.1	65.97	7.974	
3,100.0	3,083.7	3,079.7	3,079.7	8.2	61.6	166.63	-273.2	-119.8	538.9	470.7	68.18	7.905	
3,200.0	3,182.8	3,178.8	3,178.8	8.6	63.6	166.95	-273.2	-119.8	551.8	481.4	70.38	7.840	
3,300.0	3,282.0	3,278.0	3,278.0	8.9	65.6	167.25	-273.2	-119.8	564.7	492.2	72.59	7.780	
3,400.0	3,381.1	3,377.1	3,377.1	9.2	67.5	167.54	-273.2	-119.8	577.7	502.9	74.80	7.723	
3,500.0	3,480.2	3,476.2	3,476.2	9.5	69.5	167.82	-273.2	-119.8	590.6	513.6	77.00	7.670	
3,600.0	3,579.3	3,575.3	3,575.3	9.9	71.5	168.08	-273.2	-119.8	603.6	524.4	79.21	7.620	
3,700.0	3,678.4	3,674.4	3,674.4	10.2	73.5	168.34	-273.2	-119.8	616.6	535.1	81.42	7.573	
3,800.0	3,777.6	3,773.6	3,773.6	10.5	75.5	168.58	-273.2	-119.8	629.5	545.9	83.62	7.528	
3,900.0	3,876.7	3,872.7	3,872.7	10.8	77.5	168.81	-273.2	-119.8	642.5	556.7	85.83	7.486	
4,000.0	3,975.8	3,971.8	3,971.8	11.2	79.4	169.04	-273.2	-119.8	655.5	567.5	88.04	7.446	
4,100.0	4,074.9	4,070.9	4,070.9	11.5	81.4	169.25	-273.2	-119.8	668.6	578.3	90.25	7.408	
4,200.0	4,174.0	4,170.0	4,170.0	11.8	83.4	169.46	-273.2	-119.8	681.6	589.1	92.45	7.372	
4,300.0	4,273.2	4,269.2	4,269.2	12.2	85.4	169.66	-273.2	-119.8	694.6	600.0	94.66	7.338	
4,400.0	4,372.3	4,368.3	4,368.3	12.5	87.4	169.85	-273.2	-119.8	707.7	610.8	96.87	7.305	
4,500.0	4,471.4	4,467.4	4,467.4	12.8	89.3	170.04	-273.2	-119.8	720.7	621.6	99.07	7.274	
4,600.0	4,570.5	4,566.5	4,566.5	13.1	91.3	170.22	-273.2	-119.8	733.8	632.5	101.28	7.245	
4,700.0	4,669.6	4,665.6	4,665.6	13.5	93.3	170.39	-273.2	-119.8	746.8	643.3	103.49	7.216	
4,800.0	4,768.7	4,764.7	4,764.7	13.8	95.3	170.56	-273.2	-119.8	759.9	654.2	105.70	7.189	
4,900.0	4,867.9	4,863.9	4,863.9	14.1	97.3	170.72	-273.2	-119.8	773.0	665.1	107.90	7.163	
5,000.0	4,967.0	4,963.0	4,963.0	14.5	99.3	170.87	-273.2	-119.8	786.0	675.9	110.11	7.139	

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

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Huck 41-28 Pad Sec.28-T5N-R63W - Huck 41-28 (Exist.) - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0 ft

Survey Program: 6300-UNKNOWN — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,066.1	5,062.1	5,062.1	14.8	101.2	171.03	-273.2	-119.8	799.1	686.8	112.32	7.115	
5,200.0	5,165.2	5,161.2	5,161.2	15.1	103.2	171.17	-273.2	-119.8	812.2	697.7	114.52	7.092	
5,255.8	5,220.5	5,216.5	5,216.5	15.3	104.3	171.25	-273.2	-119.8	819.5	703.8	115.76	7.080	
5,300.0	5,264.4	5,260.4	5,260.4	15.4	105.2	171.33	-273.2	-119.8	825.0	708.1	116.92	7.056	
5,400.0	5,363.9	5,359.9	5,359.9	15.7	107.2	171.46	-273.2	-119.8	834.8	715.4	119.44	6.990	
5,500.0	5,463.7	5,459.7	5,459.7	15.9	109.2	171.54	-273.2	-119.8	841.3	719.4	121.83	6.905	
5,600.0	5,563.6	5,559.6	5,559.6	16.0	111.2	171.58	-273.2	-119.8	844.3	720.2	124.08	6.804	
5,636.4	5,600.0	5,596.0	5,596.0	16.1	111.9	-140.27	-273.2	-119.8	844.5	719.6	124.89	6.762	
5,700.0	5,663.6	5,659.6	5,659.6	16.2	113.2	-140.27	-273.2	-119.8	844.5	718.2	126.28	6.687	
5,805.5	5,769.1	5,765.1	5,765.1	16.3	115.3	-140.27	-273.2	-119.8	844.5	715.9	128.61	6.566	
5,850.0	5,813.6	5,809.6	5,809.6	16.4	116.2	38.96	-273.2	-119.8	843.0	713.8	129.20	6.525	
5,900.0	5,863.1	5,859.1	5,859.1	16.4	117.2	39.60	-273.2	-119.8	837.8	708.6	129.20	6.485	
5,950.0	5,911.8	5,907.8	5,907.8	16.4	118.2	40.74	-273.2	-119.8	829.1	700.5	128.58	6.448	
6,000.0	5,959.1	5,955.1	5,955.1	16.4	119.1	42.38	-273.2	-119.8	816.8	689.3	127.49	6.407	
6,050.0	6,004.7	6,000.7	6,000.7	16.3	120.0	44.57	-273.2	-119.8	801.3	675.2	126.19	6.350	
6,100.0	6,048.2	6,044.2	6,044.2	16.3	120.9	47.33	-273.2	-119.8	782.9	657.9	125.03	6.262	
6,150.0	6,089.0	6,085.0	6,085.0	16.2	121.7	50.70	-273.2	-119.8	762.0	637.6	124.42	6.124	
6,200.0	6,127.0	6,123.0	6,123.0	16.1	122.5	54.66	-273.2	-119.8	738.9	614.2	124.70	5.925	
6,250.0	6,161.6	6,157.6	6,157.6	16.0	123.2	59.18	-273.2	-119.8	714.2	588.1	126.08	5.664	
6,300.0	6,192.6	6,188.6	6,188.6	15.9	123.8	64.11	-273.2	-119.8	688.5	560.0	128.47	5.359	
6,350.0	6,219.7	6,215.7	6,215.7	15.8	124.3	69.28	-273.2	-119.8	662.4	530.9	131.46	5.038	
6,400.0	6,242.7	6,238.7	6,238.7	15.7	124.8	74.41	-273.2	-119.8	636.6	502.1	134.48	4.734	
6,450.0	6,261.3	6,257.3	6,257.3	15.7	125.1	79.21	-273.2	-119.8	612.0	475.0	137.02	4.467	
6,500.0	6,275.4	6,271.4	6,271.4	15.6	125.4	83.40	-273.2	-119.8	589.3	450.5	138.81	4.246	
6,550.0	6,284.8	6,280.8	6,280.8	15.6	125.6	86.78	-273.2	-119.8	569.4	429.5	139.88	4.071	
6,600.0	6,289.5	6,285.5	6,285.5	15.7	125.7	89.21	-273.2	-119.8	552.9	412.4	140.44	3.937	
6,623.7	6,290.0	6,286.0	6,286.0	15.8	125.7	90.00	-273.2	-119.8	546.4	405.8	140.60	3.887	
6,700.0	6,290.0	6,286.0	6,286.0	16.1	125.7	90.00	-273.2	-119.8	532.4	391.3	141.06	3.774	
6,723.9	6,290.0	6,286.0	6,286.0	16.3	125.7	90.00	-273.2	-119.8	530.2	388.9	141.24	3.754	
6,725.4	6,290.0	6,286.0	6,286.0	16.3	125.7	90.00	-273.2	-119.8	530.1	388.8	141.24	3.753	
6,761.1	6,290.0	6,286.0	6,286.0	16.5	125.7	90.00	-273.2	-119.8	528.9	387.4	141.49	3.738	SF
6,800.0	6,290.0	6,286.0	6,286.0	16.8	125.7	90.00	-273.2	-119.8	530.3	388.6	141.75	3.741	
6,900.0	6,290.0	6,286.0	6,286.0	17.8	125.7	90.00	-273.2	-119.8	546.8	404.1	142.71	3.832	
7,000.0	6,290.0	6,286.0	6,286.0	18.9	125.7	90.00	-273.2	-119.8	580.3	436.5	143.83	4.035	
7,100.0	6,290.0	6,286.0	6,286.0	20.1	125.7	90.00	-273.2	-119.8	628.1	483.1	145.07	4.330	
7,200.0	6,290.0	6,286.0	6,286.0	21.4	125.7	90.00	-273.2	-119.8	687.3	540.9	146.42	4.694	
7,300.0	6,290.0	6,286.0	6,286.0	22.8	125.7	90.00	-273.2	-119.8	755.1	607.2	147.85	5.107	
7,400.0	6,290.0	6,286.0	6,286.0	24.3	125.7	90.00	-273.2	-119.8	829.4	680.1	149.35	5.554	
7,500.0	6,290.0	6,286.0	6,286.0	25.8	125.7	90.00	-273.2	-119.8	908.7	757.8	150.90	6.022	
7,600.0	6,290.0	6,286.0	6,286.0	27.4	125.7	90.00	-273.2	-119.8	991.7	839.2	152.50	6.503	

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Huck 41-28 Pad Sec.28-T5N-R63W - Laura 8-28 (Exist.) - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0 ft

Survey Program: 6300-UNKNOWN — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,200.0	6,290.0	6,284.0	6,284.0	21.4	125.7	90.00	-1,530.1	-172.8	992.5	846.1	146.38	6.780	
7,300.0	6,290.0	6,284.0	6,284.0	22.8	125.7	90.00	-1,530.1	-172.8	911.7	763.9	147.81	6.168	
7,400.0	6,290.0	6,284.0	6,284.0	24.3	125.7	90.00	-1,530.1	-172.8	835.2	685.9	149.31	5.594	
7,500.0	6,290.0	6,284.0	6,284.0	25.8	125.7	90.00	-1,530.1	-172.8	764.1	613.2	150.86	5.065	
7,600.0	6,290.0	6,284.0	6,284.0	27.4	125.7	90.00	-1,530.1	-172.8	700.1	547.6	152.46	4.592	
7,700.0	6,290.0	6,284.0	6,284.0	29.0	125.7	90.00	-1,530.1	-172.8	645.3	491.1	154.11	4.187	
7,800.0	6,290.0	6,284.0	6,284.0	30.6	125.7	90.00	-1,530.1	-172.8	602.2	446.4	155.78	3.866	
7,900.0	6,290.0	6,284.0	6,284.0	32.3	125.7	90.00	-1,530.1	-172.8	573.5	416.0	157.48	3.642	
8,000.0	6,290.0	6,284.0	6,284.0	34.0	125.7	90.00	-1,530.1	-172.8	561.4	402.2	159.20	3.526	
8,018.6	6,290.0	6,284.0	6,284.0	34.3	125.7	90.00	-1,530.1	-172.8	561.1	401.6	159.53	3.517	CC, ES, SF
8,100.0	6,290.0	6,284.0	6,284.0	35.7	125.7	90.00	-1,530.1	-172.8	567.0	406.0	160.95	3.523	
8,200.0	6,290.0	6,284.0	6,284.0	37.5	125.7	90.00	-1,530.1	-172.8	589.7	427.0	162.71	3.624	
8,300.0	6,290.0	6,284.0	6,284.0	39.2	125.7	90.00	-1,530.1	-172.8	627.7	463.2	164.48	3.816	
8,400.0	6,290.0	6,284.0	6,284.0	41.0	125.7	90.00	-1,530.1	-172.8	678.4	512.1	166.27	4.080	
8,500.0	6,290.0	6,284.0	6,284.0	42.8	125.7	90.00	-1,530.1	-172.8	739.3	571.2	168.07	4.399	
8,600.0	6,290.0	6,284.0	6,284.0	44.6	125.7	90.00	-1,530.1	-172.8	808.0	638.1	169.88	4.756	
8,700.0	6,290.0	6,284.0	6,284.0	46.4	125.7	90.00	-1,530.1	-172.8	882.6	710.9	171.70	5.141	
8,800.0	6,290.0	6,284.0	6,284.0	48.2	125.7	90.00	-1,530.1	-172.8	961.9	788.4	173.53	5.544	

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Huck 41-28 Pad Sec.28-T5N-R63W - North Platte 44-11-28HZ (Exist.) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 549-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9,900.0	6,290.0	7,353.3	6,303.6	68.5	39.6	91.94	-4,065.1	-318.7	934.3	828.2	106.13	8.804	
10,000.0	6,290.0	7,290.6	6,303.2	70.4	38.4	92.05	-4,110.6	-275.6	864.4	757.3	107.07	8.074	
10,100.0	6,290.0	7,231.8	6,304.0	72.3	37.3	92.26	-4,154.0	-235.9	795.7	687.6	108.06	7.363	
10,200.0	6,290.0	7,154.8	6,305.9	74.1	35.9	92.70	-4,210.9	-184.2	727.3	618.6	108.80	6.685	
10,300.0	6,290.0	7,079.7	6,307.7	76.0	34.6	93.20	-4,266.2	-133.3	658.5	549.0	109.56	6.011	
10,400.0	6,290.0	7,009.1	6,309.6	77.9	33.3	93.82	-4,318.1	-85.6	589.8	479.5	110.37	5.344	
10,500.0	6,290.0	6,935.2	6,310.0	79.8	32.1	94.40	-4,372.5	-35.6	521.1	409.9	111.14	4.689	
10,600.0	6,290.0	6,865.7	6,305.9	81.6	30.9	94.33	-4,423.8	11.3	452.3	340.2	112.03	4.037	
10,700.0	6,290.0	6,804.1	6,297.7	83.5	30.0	93.30	-4,469.9	51.3	385.0	271.9	113.11	3.404	
10,778.5	6,290.0	6,758.0	6,289.2	85.0	29.3	91.81	-4,505.1	79.7	334.4	220.4	114.00	2.933	CC, ES, SF

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Perkins 12-27 Pad Sec.27-T5N-R63W - North Platte C-27 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0 ft

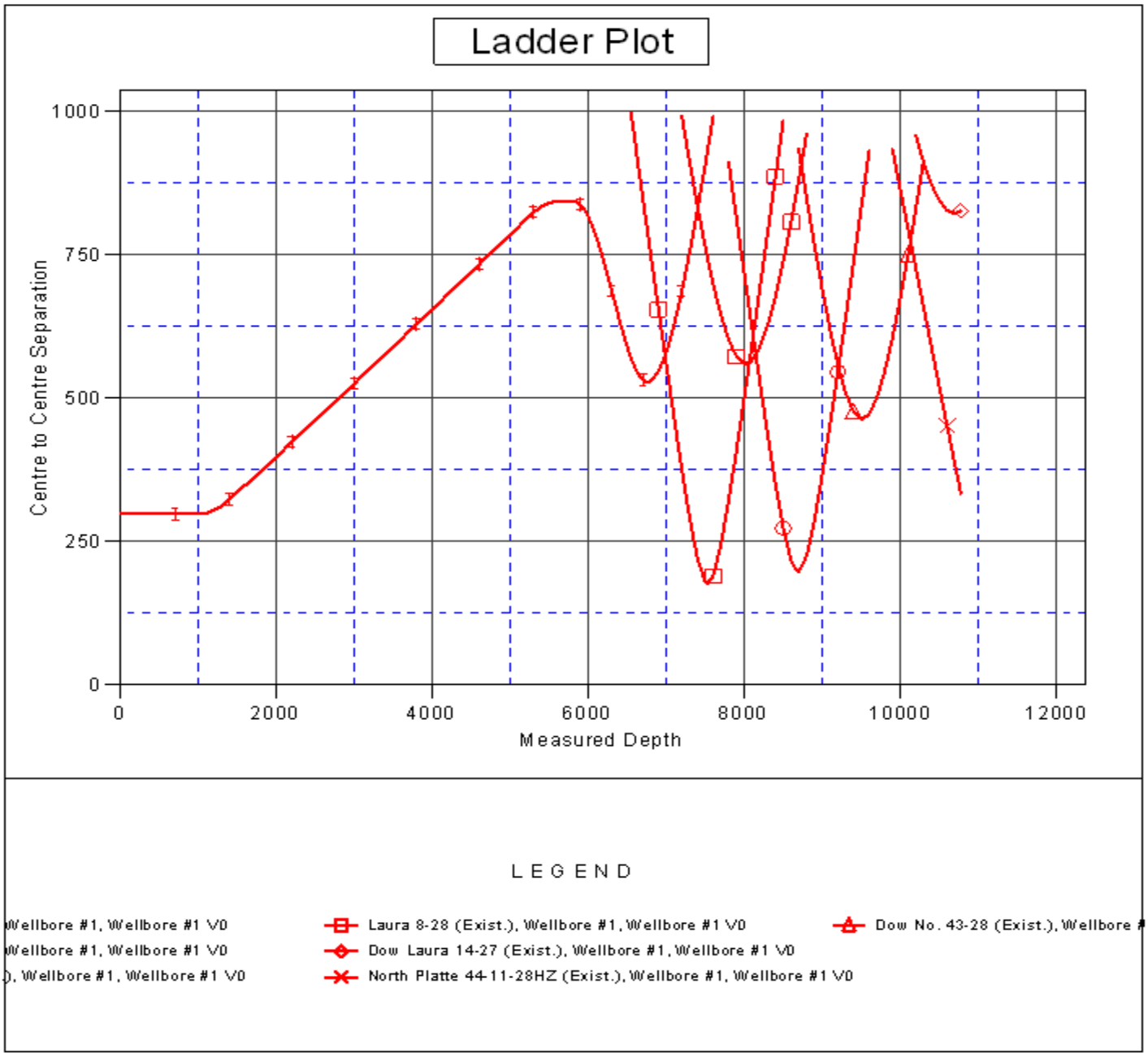
Survey Program: 146-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,800.0	6,290.0	6,399.5	6,295.8	30.6	21.1	-92.28	-2,213.8	573.9	911.5	863.0	48.48	18.802	
7,900.0	6,290.0	6,398.9	6,295.2	32.3	21.1	-92.09	-2,213.8	573.9	814.1	763.9	50.18	16.223	
8,000.0	6,290.0	6,398.2	6,294.5	34.0	21.1	-91.89	-2,213.8	573.9	717.5	665.6	51.91	13.821	
8,100.0	6,290.0	6,397.5	6,293.8	35.7	21.1	-91.69	-2,213.8	573.9	621.9	568.3	53.66	11.590	
8,200.0	6,290.0	6,396.8	6,293.1	37.5	21.1	-91.49	-2,213.8	573.9	528.0	472.6	55.43	9.526	
8,300.0	6,290.0	6,396.1	6,292.4	39.2	21.1	-91.29	-2,213.8	573.9	436.8	379.6	57.21	7.636	
8,400.0	6,290.0	6,395.4	6,291.8	41.0	21.1	-91.09	-2,213.8	573.9	350.4	291.4	59.00	5.940	
8,500.0	6,290.0	6,394.8	6,291.1	42.8	21.1	-90.89	-2,213.8	573.9	273.5	212.7	60.80	4.499	
8,600.0	6,290.0	6,394.1	6,290.4	44.6	21.1	-90.70	-2,213.9	573.9	216.4	153.8	62.62	3.456	
8,690.0	6,290.0	6,393.5	6,289.8	46.2	21.1	-90.52	-2,213.9	573.9	196.8	132.5	64.25	3.062	CC, ES
8,700.0	6,290.0	6,393.4	6,289.7	46.4	21.1	-90.50	-2,213.9	573.9	197.0	132.6	64.44	3.058	SF
8,800.0	6,290.0	6,392.7	6,289.0	48.2	21.1	-90.30	-2,213.9	573.9	225.4	159.2	66.26	3.402	
8,900.0	6,290.0	6,392.0	6,288.3	50.0	21.1	-90.10	-2,213.9	573.9	287.8	219.7	68.10	4.226	
9,000.0	6,290.0	6,391.3	6,287.6	51.9	21.1	-89.89	-2,213.9	573.9	367.2	297.2	69.94	5.250	
9,100.0	6,290.0	6,390.6	6,286.9	53.7	21.1	-89.69	-2,213.9	573.9	454.8	383.0	71.78	6.336	
9,200.0	6,290.0	6,389.9	6,286.3	55.5	21.1	-89.49	-2,213.9	574.0	546.6	473.0	73.63	7.424	
9,300.0	6,290.0	6,389.3	6,285.6	57.4	21.1	-89.29	-2,213.9	574.0	640.9	565.5	75.48	8.492	
9,400.0	6,290.0	6,388.6	6,284.9	59.2	21.1	-89.09	-2,213.9	574.0	736.7	659.4	77.33	9.527	
9,500.0	6,290.0	6,387.9	6,284.2	61.1	21.1	-88.89	-2,213.9	574.0	833.5	754.3	79.19	10.526	
9,600.0	6,290.0	6,387.2	6,283.5	62.9	21.1	-88.69	-2,213.9	574.0	931.0	850.0	81.05	11.487	

Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4559.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: North Platte U-Y-28HNB
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.69°



Company:	BONANZA CREEK ENERGY OPERATING	**Local Co-ordinate Reference:**	Well North Platte U-Y-28HNB
Project:	SEC.28-T5N-R63W	**TVD Reference:**	WELL @ 4559.0ft (RKB - 13')
Reference Site:	Huck 41-28 Pad Sec.28-T5N-R63W	**MD Reference:**	WELL @ 4559.0ft (RKB - 13')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	North Platte U-Y-28HNB	**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 #3 (2-7-13)	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4559.0ft (RKB - 13')	Coordinates are relative to: North Platte U-Y-28HNB
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: 0.69°