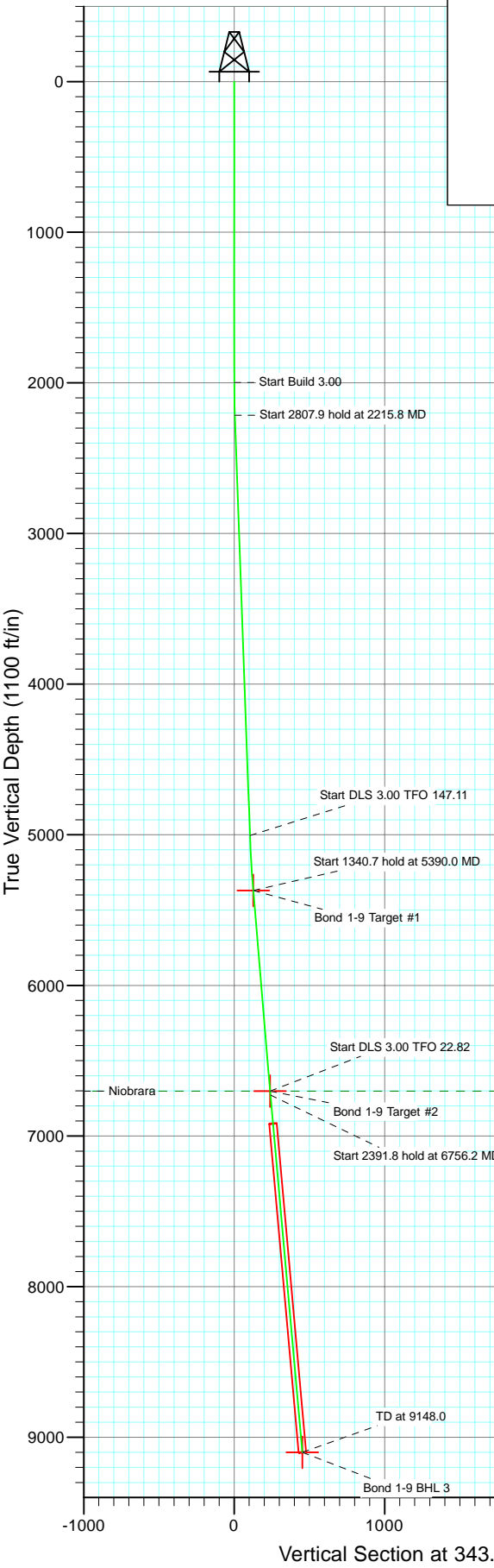


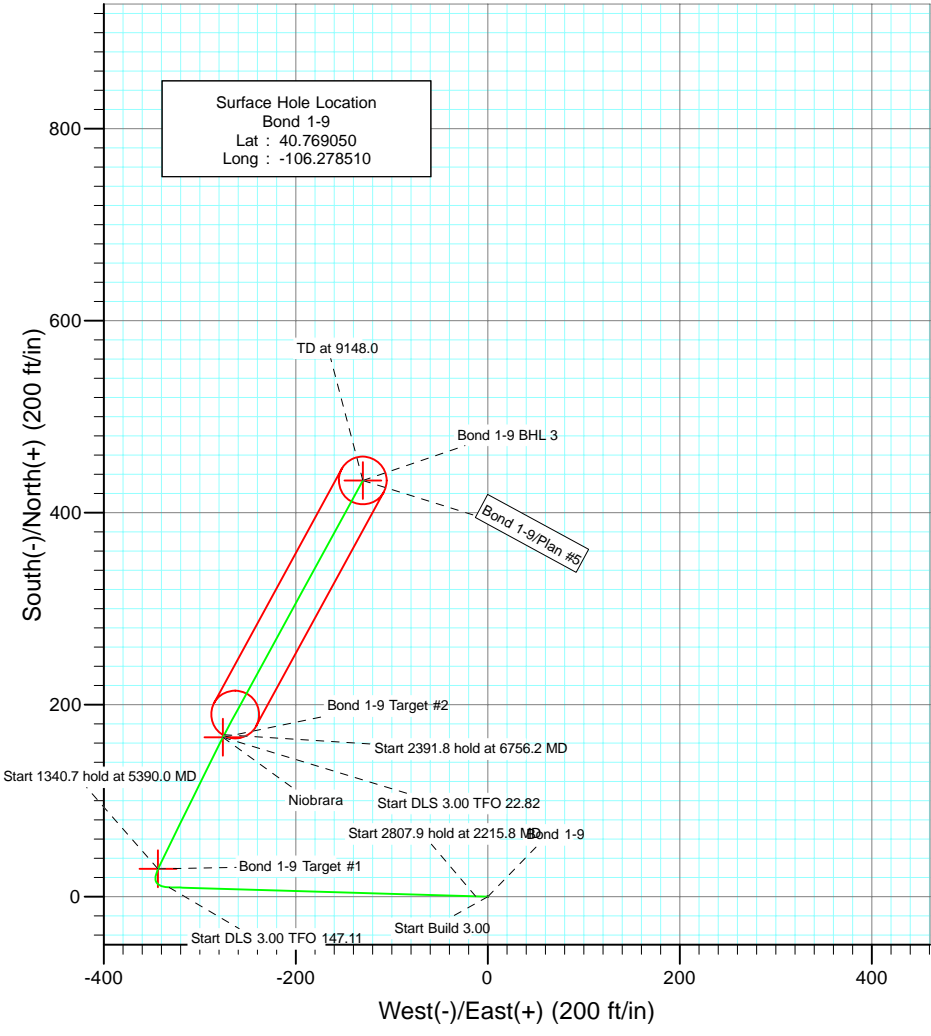
Bonanza Creek Energy Operating Company, LLC



Project: Jackson County, CO
Site: SWNW Sec 9-T9N-R79W
Well: Bond 1-9
Wellbore: DD
Design: Plan #5



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1998.0	0.00	0.00	1998.0	0.0	0.0	0.00	0.00	0.0	
3	2215.8	6.53	271.69	2215.4	0.4	-12.4	3.00	271.69	3.9	
4	5023.7	6.53	271.69	5005.0	9.8	-331.8	0.00	0.00	104.8	
5	5390.0	6.53	26.25	5370.0	29.2	-343.5	3.00	147.11	126.7	Bond 1-9 Target #1
6	6730.7	6.53	26.25	6702.0	166.0	-276.0	0.00	0.00	238.4	Bond 1-9 Target #2
7	6756.2	7.25	28.60	6727.3	168.7	-274.6	3.00	22.82	240.6	
8	9148.0	7.25	28.60	9100.0	433.6	-130.2	0.00	0.00	452.7	Bond 1-9 BHL 3



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
6702.2	6730.9	Niobrara
<div><div><div>TM</div><div></div></div><div>Azimuths to True North Magnetic North: 9.76° Magnetic Field Strength: 53235.9snT Dip Angle: 67.12° Date: 8/23/2010 Model: IGRF200510</div></div>		
Plan #5 Bond 1-9 Job #85xxx; KR		
KBE @ 8102.2ft (Original Well Elev) North American Datum 1983 Well Bond 1-9, True North		
Type	Target	Azimuth
User	Bond 1-9 BHL	343.29
		Slot
		Origin Type N/S
		0.0
		E/W From TVD
		0.0
Name	TVD	+N/-S
Bond 1-9 Target #1	5370.0	29.2
Bond 1-9 Target #2	6702.0	166.0
Bond 1-9 BHL 3	9100.0	433.6
		+E/-W
		-343.5
		-276.0
		-130.2
		Latitude
		40.769130
		40.769506
		40.770240
		Longitude
		-106.279750
		-106.279506
		-106.278980

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Bond 1-9
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 8102.2ft (Original Well Elev)
Project:	Jackson County, CO	MD Reference:	KBE @ 8102.2ft (Original Well Elev)
Site:	SWNW Sec 9-T9N-R79W	North Reference:	True
Well:	Bond 1-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #5		

Project	Jackson County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		SWNW Sec 9-T9N-R79W			
Site Position:		Northing:	1,523,992.33 ft	Latitude:	40.769130
From:	Lat/Long	Easting:	2,784,022.43 ft	Longitude:	-106.279750
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-0.50 °

Well	Bond 1-9					
Well Position	+N/-S	0.0 ft	Northing:	1,523,960.16 ft	Latitude:	40.769050
	+E/-W	0.0 ft	Easting:	2,784,365.63 ft	Longitude:	-106.278510
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,113.7 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	8/23/2010	9.76	67.12	53,236

Design	Plan #5				
Audit Notes:					
Version:	Phase:	PLAN		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	343.29	

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	
1,998.0	0.00	0.00	1,998.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,215.8	6.53	271.69	2,215.4	0.4	-12.4	3.00	3.00	0.00	271.69	
5,023.7	6.53	271.69	5,005.0	9.8	-331.8	0.00	0.00	0.00	0.00	
5,390.0	6.53	26.25	5,370.0	29.2	-343.5	3.00	0.00	31.28	147.11	Bond 1-9 Target #1
6,730.7	6.53	26.25	6,702.0	166.0	-276.0	0.00	0.00	0.00	0.00	Bond 1-9 Target #2
6,756.2	7.25	28.60	6,727.3	168.7	-274.6	3.00	2.79	9.23	22.82	
9,148.0	7.25	28.60	9,100.0	433.6	-130.2	0.00	0.00	0.00	0.00	Bond 1-9 BHL 3

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Bond 1-9
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 8102.2ft (Original Well Elev)
Project:	Jackson County, CO	MD Reference:	KBE @ 8102.2ft (Original Well Elev)
Site:	SWNW Sec 9-T9N-R79W	North Reference:	True
Well:	Bond 1-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #5		

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)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
1,998.0	0.00	0.00	1,998.0	0.0	0.0	0.0	0.00	0.00	Start Build 3.00
2,000.0	0.06	271.69	2,000.0	0.0	0.0	0.0	3.00	3.00	
2,100.0	3.06	271.69	2,100.0	0.1	-2.7	0.9	3.00	3.00	
2,200.0	6.06	271.69	2,199.6	0.3	-10.7	3.4	3.00	3.00	
2,215.8	6.53	271.69	2,215.4	0.4	-12.4	3.9	3.00	3.00	Start 2807.9 hold at 2215.8 MD
2,300.0	6.53	271.69	2,299.0	0.6	-22.0	6.9	0.00	0.00	
2,400.0	6.53	271.69	2,398.3	1.0	-33.4	10.5	0.00	0.00	
2,500.0	6.53	271.69	2,497.7	1.3	-44.7	14.1	0.00	0.00	
2,600.0	6.53	271.69	2,597.0	1.7	-56.1	17.7	0.00	0.00	
2,700.0	6.53	271.69	2,696.4	2.0	-67.5	21.3	0.00	0.00	
2,800.0	6.53	271.69	2,795.7	2.3	-78.9	24.9	0.00	0.00	
2,900.0	6.53	271.69	2,895.1	2.7	-90.2	28.5	0.00	0.00	
3,000.0	6.53	271.69	2,994.4	3.0	-101.6	32.1	0.00	0.00	
3,100.0	6.53	271.69	3,093.8	3.3	-113.0	35.7	0.00	0.00	
3,200.0	6.53	271.69	3,193.1	3.7	-124.4	39.3	0.00	0.00	
3,300.0	6.53	271.69	3,292.5	4.0	-135.7	42.9	0.00	0.00	
3,400.0	6.53	271.69	3,391.8	4.3	-147.1	46.5	0.00	0.00	
3,500.0	6.53	271.69	3,491.2	4.7	-158.5	50.1	0.00	0.00	
3,600.0	6.53	271.69	3,590.5	5.0	-169.9	53.7	0.00	0.00	
3,700.0	6.53	271.69	3,689.9	5.3	-181.2	57.2	0.00	0.00	
3,800.0	6.53	271.69	3,789.2	5.7	-192.6	60.8	0.00	0.00	
3,900.0	6.53	271.69	3,888.6	6.0	-204.0	64.4	0.00	0.00	
4,000.0	6.53	271.69	3,987.9	6.4	-215.4	68.0	0.00	0.00	
4,100.0	6.53	271.69	4,087.3	6.7	-226.7	71.6	0.00	0.00	
4,200.0	6.53	271.69	4,186.6	7.0	-238.1	75.2	0.00	0.00	
4,300.0	6.53	271.69	4,286.0	7.4	-249.5	78.8	0.00	0.00	
4,400.0	6.53	271.69	4,385.3	7.7	-260.9	82.4	0.00	0.00	
4,500.0	6.53	271.69	4,484.7	8.0	-272.2	86.0	0.00	0.00	
4,600.0	6.53	271.69	4,584.0	8.4	-283.6	89.6	0.00	0.00	
4,700.0	6.53	271.69	4,683.4	8.7	-295.0	93.2	0.00	0.00	
4,800.0	6.53	271.69	4,782.7	9.0	-306.4	96.8	0.00	0.00	
4,900.0	6.53	271.69	4,882.1	9.4	-317.7	100.4	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Bond 1-9
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 8102.2ft (Original Well Elev)
Project:	Jackson County, CO	MD Reference:	KBE @ 8102.2ft (Original Well Elev)
Site:	SWNW Sec 9-T9N-R79W	North Reference:	True
Well:	Bond 1-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #5		

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)	Comments / Formations
5,000.0	6.53	271.69	4,981.4	9.7	-329.1	104.0	0.00	0.00	
5,023.7	6.53	271.69	5,005.0	9.8	-331.8	104.8	0.00	0.00	Start DLS 3.00 TFO 147.11
5,100.0	4.78	286.79	5,080.9	10.8	-339.2	107.9	3.00	-2.30	
5,200.0	3.55	325.65	5,180.7	14.6	-344.9	113.2	3.00	-1.23	
5,300.0	4.51	7.27	5,280.4	21.1	-346.2	119.7	3.00	0.96	
5,390.0	6.53	26.25	5,370.0	29.2	-343.5	126.7	3.00	2.25	Start 1340.7 hold at 5390.0 MD - Bond 1-9 Target #2
5,400.0	6.53	26.25	5,380.0	30.2	-343.0	127.5	0.00	0.00	
5,500.0	6.53	26.25	5,479.3	40.4	-337.9	135.9	0.00	0.00	
5,600.0	6.53	26.25	5,578.7	50.6	-332.9	144.2	0.00	0.00	
5,700.0	6.53	26.25	5,678.0	60.8	-327.9	152.5	0.00	0.00	
5,800.0	6.53	26.25	5,777.4	71.0	-322.8	160.9	0.00	0.00	
5,900.0	6.53	26.25	5,876.7	81.2	-317.8	169.2	0.00	0.00	
6,000.0	6.53	26.25	5,976.1	91.4	-312.8	177.5	0.00	0.00	
6,100.0	6.53	26.25	6,075.4	101.6	-307.7	185.8	0.00	0.00	
6,200.0	6.53	26.25	6,174.8	111.8	-302.7	194.2	0.00	0.00	
6,300.0	6.53	26.25	6,274.1	122.0	-297.7	202.5	0.00	0.00	
6,400.0	6.53	26.25	6,373.5	132.2	-292.6	210.8	0.00	0.00	
6,500.0	6.53	26.25	6,472.8	142.5	-287.6	219.2	0.00	0.00	
6,600.0	6.53	26.25	6,572.2	152.7	-282.6	227.5	0.00	0.00	
6,700.0	6.53	26.25	6,671.5	162.9	-277.5	235.8	0.00	0.00	
6,730.7	6.53	26.25	6,702.0	166.0	-276.0	238.4	0.00	0.00	Start DLS 3.00 TFO 22.82 - Bond 1-9 Target #2
6,730.9	6.53	26.25	6,702.2	166.0	-276.0	238.4	0.00	0.00	Niobrara
6,756.2	7.25	28.60	6,727.3	168.7	-274.6	240.6	3.02	2.81	Start 2391.8 hold at 6756.2 MD
6,800.0	7.25	28.60	6,770.8	173.6	-271.9	244.4	0.00	0.00	
6,900.0	7.25	28.60	6,870.0	184.6	-265.9	253.3	0.00	0.00	
7,000.0	7.25	28.60	6,969.2	195.7	-259.9	262.2	0.00	0.00	
7,100.0	7.25	28.60	7,068.4	206.8	-253.8	271.1	0.00	0.00	
7,200.0	7.25	28.60	7,167.6	217.9	-247.8	279.9	0.00	0.00	
7,300.0	7.25	28.60	7,266.8	228.9	-241.8	288.8	0.00	0.00	
7,400.0	7.25	28.60	7,366.0	240.0	-235.7	297.7	0.00	0.00	
7,500.0	7.25	28.60	7,465.2	251.1	-229.7	306.5	0.00	0.00	
7,600.0	7.25	28.60	7,564.4	262.2	-223.6	315.4	0.00	0.00	
7,700.0	7.25	28.60	7,663.6	273.2	-217.6	324.3	0.00	0.00	
7,800.0	7.25	28.60	7,762.8	284.3	-211.6	333.1	0.00	0.00	
7,900.0	7.25	28.60	7,862.0	295.4	-205.5	342.0	0.00	0.00	
8,000.0	7.25	28.60	7,961.2	306.4	-199.5	350.9	0.00	0.00	
8,100.0	7.25	28.60	8,060.4	317.5	-193.5	359.7	0.00	0.00	
8,200.0	7.25	28.60	8,159.6	328.6	-187.4	368.6	0.00	0.00	
8,300.0	7.25	28.60	8,258.8	339.7	-181.4	377.5	0.00	0.00	
8,400.0	7.25	28.60	8,358.0	350.7	-175.3	386.4	0.00	0.00	
8,500.0	7.25	28.60	8,457.2	361.8	-169.3	395.2	0.00	0.00	
8,600.0	7.25	28.60	8,556.4	372.9	-163.3	404.1	0.00	0.00	
8,700.0	7.25	28.60	8,655.6	384.0	-157.2	413.0	0.00	0.00	
8,800.0	7.25	28.60	8,754.8	395.0	-151.2	421.8	0.00	0.00	
8,900.0	7.25	28.60	8,854.0	406.1	-145.2	430.7	0.00	0.00	
9,000.0	7.25	28.60	8,953.2	417.2	-139.1	439.6	0.00	0.00	
9,100.0	7.25	28.60	9,052.4	428.3	-133.1	448.4	0.00	0.00	
9,148.0	7.25	28.60	9,100.0	433.6	-130.2	452.7	0.00	0.00	TD at 9148.0 - Bond 1-9 BHL 3

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Bond 1-9
Company:	Bonanza Creek Energy Operating Company, LLC	TVD Reference:	KBE @ 8102.2ft (Original Well Elev)
Project:	Jackson County, CO	MD Reference:	KBE @ 8102.2ft (Original Well Elev)
Site:	SWNW Sec 9-T9N-R79W	North Reference:	True
Well:	Bond 1-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #5		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Bond 1-9 Target #2	-7.49	0.00	6,702.0	166.0	-276.0	1,524,128.57	2,784,091.10	40.769506	-106.279506
- plan hits target center									
- Point									
Bond 1-9 Target #1	-7.49	0.00	5,370.0	29.2	-343.5	1,523,992.33	2,784,022.43	40.769130	-106.279750
- plan hits target center									
- Point									
Bond 1-9 BHL 3	7.25	208.60	9,100.0	433.6	-130.2	1,524,394.85	2,784,239.26	40.770240	-106.278980
- plan hits target center									
- Circle (radius 25.0)									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
6,730.9	6,702.2	Niobrara		0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	Comment	
1,998.0	1,998.0	0.0	0.0	Start Build 3.00	
2,215.8	2,215.4	0.4	-12.4	Start 2807.9 hold at 2215.8 MD	
5,023.7	5,005.0	9.8	-331.8	Start DLS 3.00 TFO 147.11	
5,390.0	5,370.0	29.2	-343.5	Start 1340.7 hold at 5390.0 MD	
6,730.7	6,702.0	166.0	-276.0	Start DLS 3.00 TFO 22.82	
6,756.2	6,727.3	168.7	-274.6	Start 2391.8 hold at 6756.2 MD	
9,148.0	9,100.0	433.6	-130.2	TD at 9148.0	