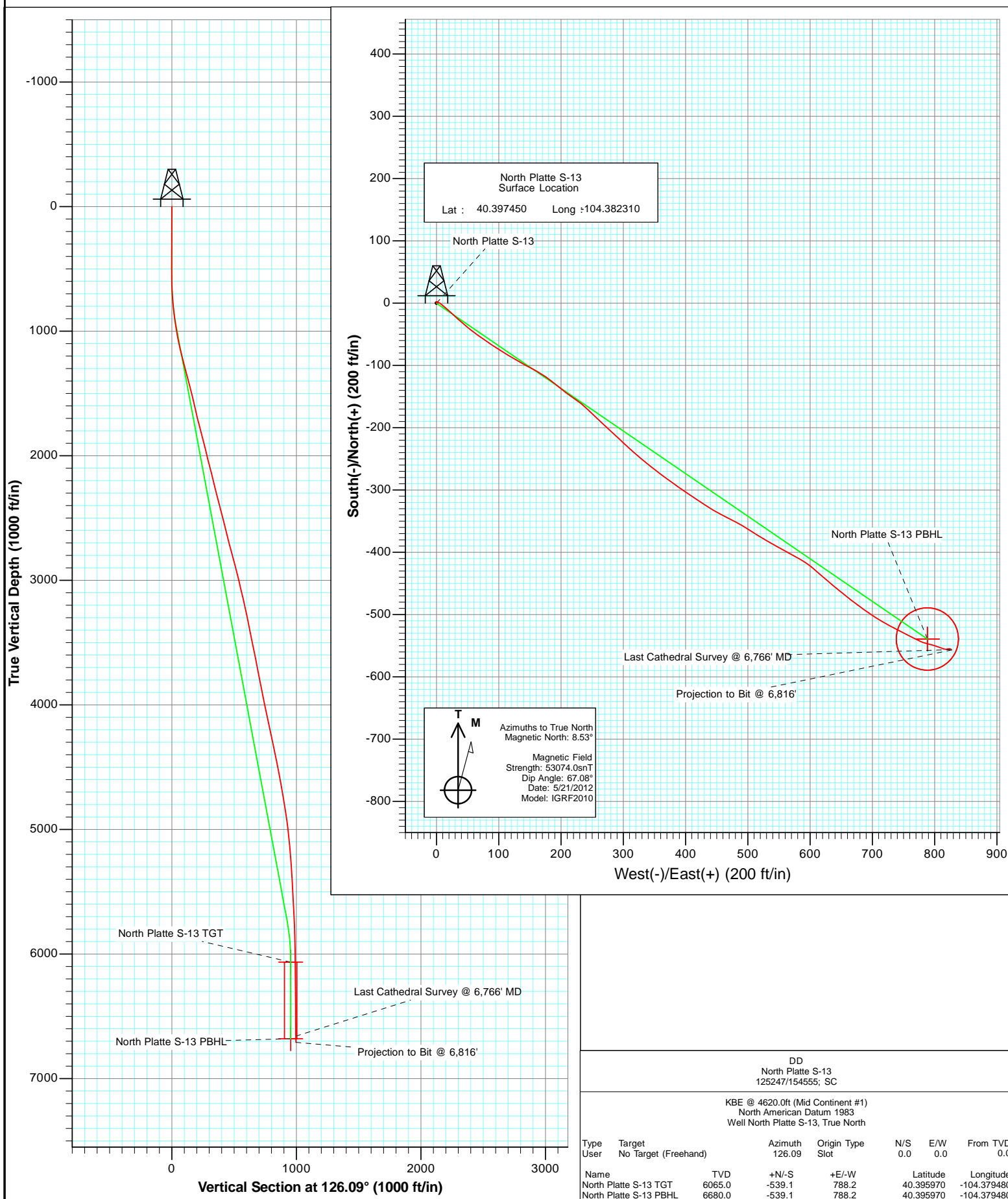


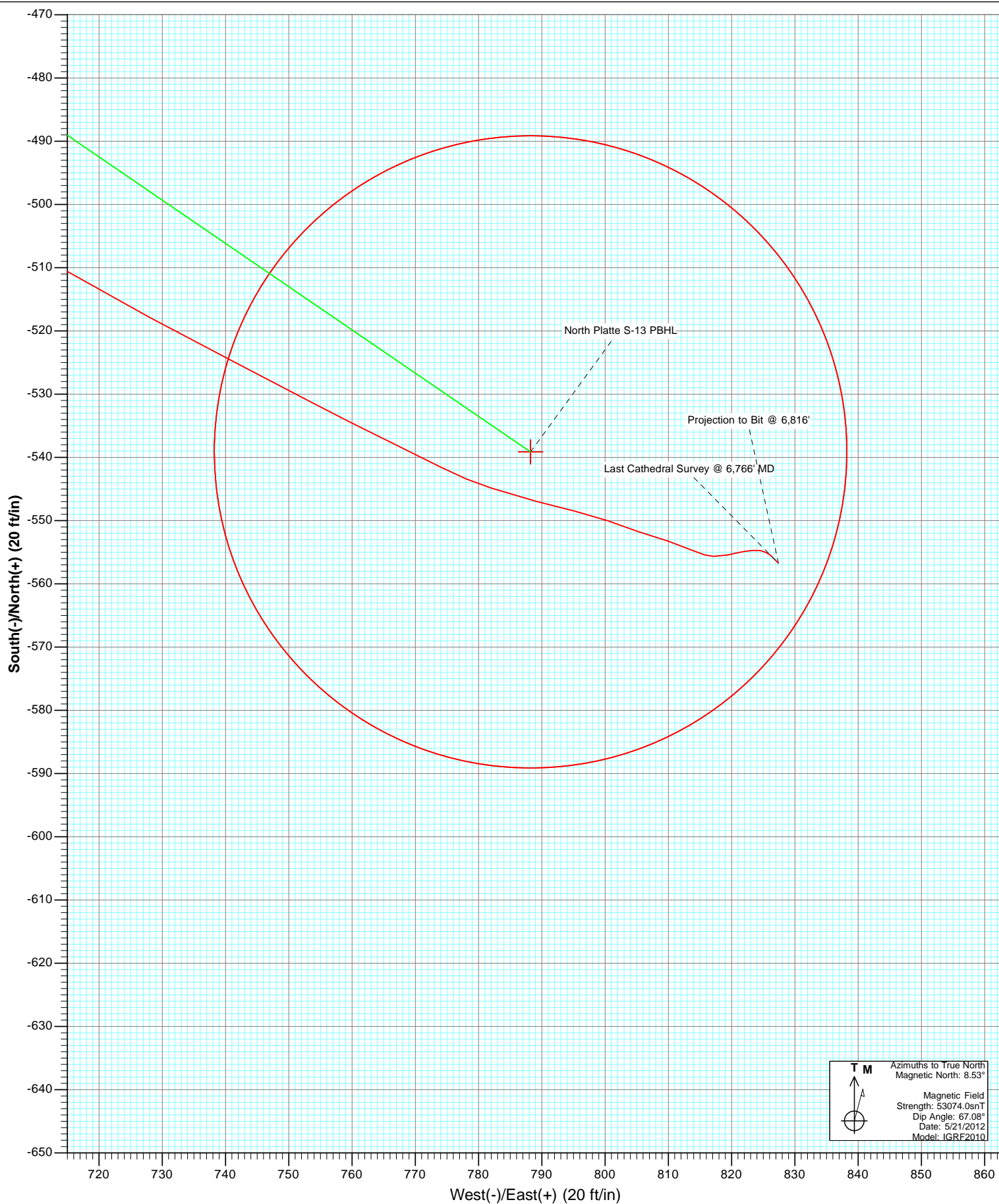


Project: Weld County
Site: North Platte 33-13 Pad
Well: North Platte S-13
Wellbore: DD
Plan: FINAL





Project: Weld County
Site: North Platte 33-13 Pad
Well: North Platte S-13
Wellbore: DD
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Cathedral Energy Services

Survey Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well North Platte S-13
Project:	Weld County	TVD Reference:	KBE @ 4620.0ft (Mid Continent #1)
Site:	North Platte 33-13 Pad	MD Reference:	KBE @ 4620.0ft (Mid Continent #1)
Well:	North Platte S-13	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

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

Site		North Platte 33-13 Pad			
Site Position:		Northing:	1,389,596.06 ft	Latitude:	40.397450
From:	Lat/Long	Easting:	3,311,298.33 ft	Longitude:	-104.382310
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.72 °

Well		North Platte S-13				
Well Position	+N/-S	0.0 ft	Northing:	1,389,596.04 ft	Latitude:	40.397450
	+E/-W	0.0 ft	Easting:	3,311,298.33 ft	Longitude:	-104.382310
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,610.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/21/2012	8.53	67.08	53,074

Design	DD				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	126.09	

Survey Program	Date	7/24/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
495.0	6,816.0	Survey #1 (DD)	MWD	Geolink MWD	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
495.0	0.50	343.60	495.0	2.1	-0.6	-1.7	0.10	0.10		
589.0	1.50	94.80	589.0	2.4	0.5	-1.0	1.86	1.06		
683.0	3.10	121.30	682.9	0.9	3.9	2.6	2.00	1.70		
778.0	5.10	130.80	777.7	-3.2	9.3	9.4	2.22	2.11		
872.0	7.00	129.90	871.1	-9.6	16.8	19.2	2.02	2.02		
967.0	9.00	133.50	965.2	-18.4	26.7	32.4	2.17	2.11		
1,061.0	11.00	130.80	1,057.8	-29.3	38.8	48.6	2.18	2.13		
1,156.0	13.30	129.20	1,150.6	-42.1	54.1	68.6	2.45	2.42		
1,250.0	14.90	123.80	1,241.8	-55.7	72.6	91.4	2.20	1.70		
1,345.0	14.80	124.00	1,333.6	-69.3	92.8	115.8	0.12	-0.11		
1,439.0	14.40	121.70	1,424.6	-82.1	112.7	139.4	0.75	-0.43		
1,533.0	14.00	119.40	1,515.7	-93.9	132.5	162.4	0.74	-0.43		

Cathedral Energy Services

Survey Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well North Platte S-13
Project:	Weld County	TVD Reference:	KBE @ 4620.0ft (Mid Continent #1)
Site:	North Platte 33-13 Pad	MD Reference:	KBE @ 4620.0ft (Mid Continent #1)
Well:	North Platte S-13	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
1,627.0	13.10	117.10	1,607.1	-104.3	151.9	184.2	1.12	-0.96	
1,722.0	13.40	123.20	1,699.6	-115.2	170.7	205.8	1.50	0.32	
1,816.0	15.20	128.90	1,790.7	-128.9	189.4	229.0	2.43	1.91	
1,910.0	14.20	127.30	1,881.6	-143.7	208.2	252.8	1.15	-1.06	
2,004.0	13.40	125.10	1,972.9	-156.9	226.3	275.3	1.02	-0.85	
2,099.0	14.90	133.50	2,065.0	-171.6	244.1	298.4	2.67	1.58	
2,193.0	14.10	133.80	2,156.0	-187.9	261.2	321.7	0.85	-0.85	
2,288.0	13.40	132.70	2,248.3	-203.4	277.6	344.1	0.79	-0.74	
2,383.0	15.20	132.80	2,340.3	-219.3	294.8	367.4	1.89	1.89	
2,477.0	14.70	131.80	2,431.2	-235.6	312.8	391.5	0.60	-0.53	
2,571.0	14.00	129.90	2,522.2	-250.9	330.4	414.7	0.90	-0.74	
2,666.0	13.30	128.80	2,614.5	-265.1	347.7	437.1	0.79	-0.74	
2,760.0	15.70	125.90	2,705.5	-279.3	366.4	460.6	2.67	2.55	
2,855.0	15.00	125.40	2,797.2	-294.0	386.9	485.8	0.75	-0.74	
2,949.0	14.20	124.10	2,888.1	-307.5	406.3	509.5	0.92	-0.85	
3,043.0	13.80	123.50	2,979.3	-320.1	425.2	532.2	0.45	-0.43	
3,137.0	12.70	120.90	3,070.8	-331.6	443.4	553.7	1.33	-1.17	
3,232.0	13.80	116.90	3,163.3	-342.1	462.5	575.3	1.51	1.16	
3,326.0	12.20	117.40	3,254.9	-351.8	481.3	596.2	1.71	-1.70	
3,421.0	11.30	123.20	3,347.9	-361.5	498.0	615.4	1.56	-0.95	
3,515.0	11.20	121.50	3,440.1	-371.3	513.5	633.7	0.37	-0.11	
3,610.0	11.50	120.20	3,533.2	-380.9	529.6	652.3	0.42	0.32	
3,704.0	11.80	119.40	3,625.3	-390.3	546.0	671.2	0.36	0.32	
3,799.0	11.20	118.50	3,718.4	-399.5	562.6	690.0	0.66	-0.63	
3,894.0	10.50	118.50	3,811.7	-408.0	578.3	707.7	0.74	-0.74	
3,988.0	11.50	124.10	3,904.0	-417.3	593.6	725.5	1.56	1.06	
4,083.0	12.30	130.70	3,996.9	-429.3	609.1	745.1	1.66	0.84	
4,177.0	12.20	131.20	4,088.8	-442.3	624.2	765.0	0.16	-0.11	
4,272.0	11.50	130.70	4,181.8	-455.1	638.9	784.4	0.74	-0.74	
4,367.0	12.30	127.90	4,274.7	-467.5	654.1	804.0	1.04	0.84	
4,461.0	11.30	127.50	4,366.7	-479.3	669.3	823.2	1.07	-1.06	
4,555.0	11.80	125.60	4,458.8	-490.5	684.4	842.0	0.67	0.53	
4,649.0	10.90	123.80	4,551.0	-501.0	699.6	860.5	1.03	-0.96	
4,744.0	9.90	120.30	4,644.4	-510.1	714.1	877.6	1.24	-1.05	
4,838.0	9.50	117.90	4,737.1	-517.8	728.0	893.3	0.61	-0.43	
4,932.0	9.00	117.70	4,829.9	-524.9	741.3	908.2	0.53	-0.53	
5,026.0	8.10	117.50	4,922.8	-531.4	753.7	922.1	0.96	-0.96	
5,121.0	6.90	116.00	5,017.0	-536.9	764.8	934.3	1.28	-1.26	
5,216.0	5.60	116.90	5,111.4	-541.5	774.0	944.5	1.37	-1.37	
5,311.0	4.80	107.50	5,206.0	-544.8	782.0	952.8	1.23	-0.84	
5,406.0	4.20	105.40	5,300.8	-547.0	789.1	959.9	0.65	-0.63	
5,500.0	3.40	102.40	5,394.5	-548.5	795.2	965.6	0.88	-0.85	
5,594.0	3.30	110.60	5,488.4	-550.0	800.4	970.8	0.52	-0.11	
5,688.0	3.00	108.20	5,582.2	-551.7	805.3	975.7	0.35	-0.32	
5,783.0	2.90	107.10	5,677.1	-553.2	809.9	980.4	0.12	-0.11	
5,877.0	2.50	114.90	5,771.0	-554.8	814.1	984.6	0.58	-0.43	
5,972.0	1.50	89.40	5,866.0	-555.6	817.2	987.7	1.38	-1.05	
6,066.0	1.20	78.40	5,959.9	-555.4	819.4	989.3	0.42	-0.32	
6,159.0	0.80	75.40	6,052.9	-555.1	821.0	990.4	0.43	-0.43	
6,254.0	0.70	85.00	6,147.9	-554.9	822.2	991.2	0.17	-0.11	
6,348.0	0.80	81.70	6,241.9	-554.7	823.4	992.1	0.12	0.11	
6,443.0	0.60	103.10	6,336.9	-554.7	824.6	993.1	0.34	-0.21	
6,536.0	0.60	115.20	6,429.9	-555.0	825.5	994.0	0.14	0.00	

Cathedral Energy Services

Survey Report

Company:	Bonanza Creek Energy Operating Company, LLC	Local Co-ordinate Reference:	Well North Platte S-13
Project:	Weld County	TVD Reference:	KBE @ 4620.0ft (Mid Continent #1)
Site:	North Platte 33-13 Pad	MD Reference:	KBE @ 4620.0ft (Mid Continent #1)
Well:	North Platte S-13	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
6,631.0	0.40	130.30	6,524.9	-555.5	826.2	994.8	0.25	-0.21	
6,725.0	0.50	137.20	6,618.9	-556.0	826.7	995.6	0.12	0.11	
6,766.0	0.70	136.30	6,659.9	-556.3	827.0	996.0	0.49	0.49	Last Cathedral Survey @ 6,766' MD
6,816.0	0.70	136.30	6,709.9	-556.7	827.4	996.6	0.00	0.00	Projection to Bit @ 6,816'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
North Platte S-13 TGT	0.00	0.00	6,065.0	-539.1	788.2	1,389,066.89	3,312,093.29	40.395970	-104.379480
- hit/miss target									
- Shape									
- actual wellpath misses target center by 36.5ft at 6170.7ft MD (6064.6 TVD, -555.0 N, 821.1 E)									
- Point									
North Platte S-13 PBHL	0.00	0.00	6,680.0	-539.1	788.2	1,389,066.89	3,312,093.29	40.395970	-104.379480
- actual wellpath misses target center by 46.9ft at 6766.0ft MD (6659.9 TVD, -556.3 N, 827.0 E)									
- Circle (radius 50.0)									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
6,766.0	6,659.9	-556.3	827.0	Last Cathedral Survey @ 6,766' MD	
6,816.0	6,709.9	-556.7	827.4	Projection to Bit @ 6,816'	

Checked By: _____ Approved By: _____ Date: _____