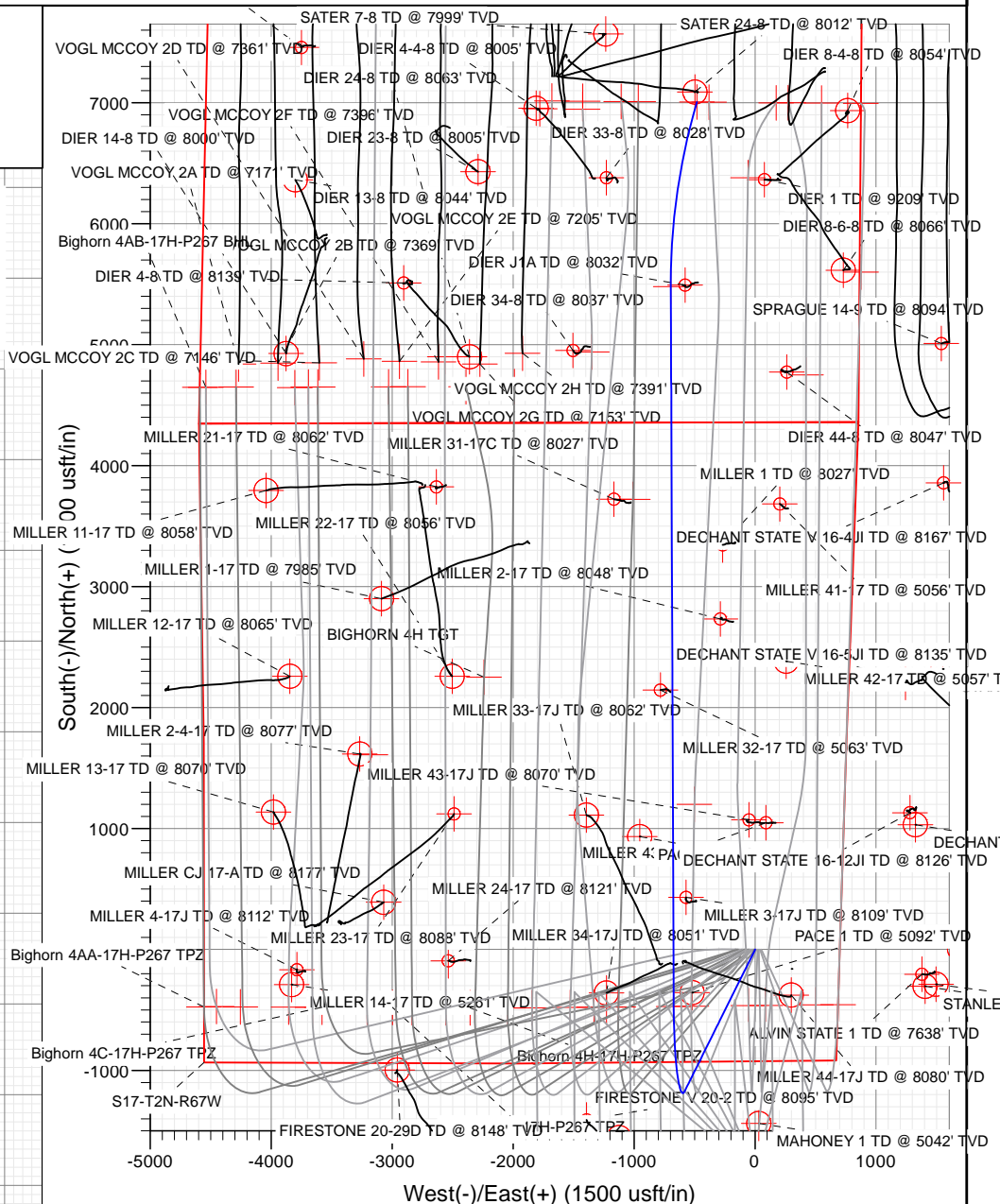
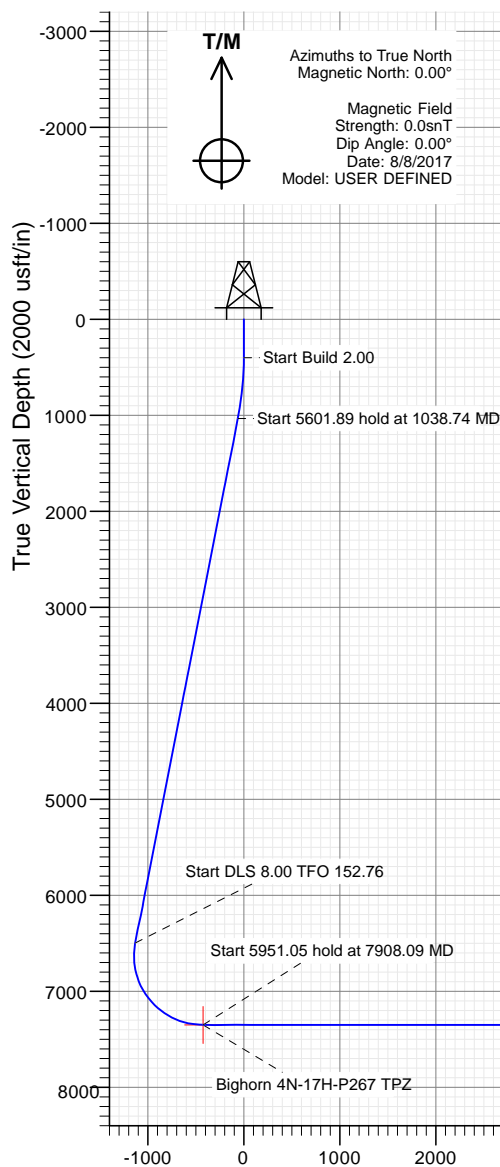




Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	
3	1038.74	12.77	206.43	1033.46	-63.50	-31.56	2.00	206.43	-61.19	
4	6640.63	12.77	206.43	6496.68	-1172.72	-582.91	0.00	0.00	-1130.03	
5	7908.09	90.00	359.77	7350.00	-471.00	-672.60	8.00	152.76	-423.82	Bighorn 4N-17H-P267 TPZ
6	13859.14	90.00	359.77	7350.00	5480.00	-696.87	0.00	0.00	5514.87	BIGHORN 4N TGT
7	15405.24	90.00	16.34	7350.00	7005.53	-481.06	1.07	90.00	7022.02	Bighorn 4N-17H-P267 BHL

Project: DJ BASIN  
Site: BIGHORN  
Well: BIGHORN 4N-17H-P267  
Wellbore: OH  
Design: PLAN #2



Start DLS 1.07 TFO 90.00

TD at 15405.24

BIGHORN 4N TGT

Bighorn 4N-17H-P267 BHL

4000 5000 6000 7000 8000 9000

Vertical Section at 356.07° (2000 usft/in)

			4960.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1292097.10	3165609.31	40.133682	-104.907697



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BIGHORN 4N-17H-P267
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4983.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4983.00usft
<b>Site:</b>	BIGHORN	<b>North Reference:</b>	True
<b>Well:</b>	BIGHORN 4N-17H-P267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

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

Site		BIGHORN			
Site Position:		Northing:	1,292,097.01 usft	Latitude:	40.133684
From:	Lat/Long	Easting:	3,165,479.29 usft	Longitude:	-104.908162
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.38 °

Well	BIGHORN 4N-17H-P267					
Well Position	+N/-S	0.00 usft	Northing:	1,292,097.10 usft	Latitude:	40.133682
	+E/-W	0.00 usft	Easting:	3,165,609.31 usft	Longitude:	-104.907697
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,960.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	8/8/2017	0.00	0.00	0.00000000

Design	PLAN #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	356.07

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,038.74	12.77	206.43	1,033.46	-63.50	-31.56	2.00	2.00	0.00	206.43	
6,640.63	12.77	206.43	6,496.68	-1,172.72	-582.91	0.00	0.00	0.00	0.00	
7,908.09	90.00	359.77	7,350.00	-471.00	-672.60	8.00	6.09	12.10	152.76	Bighorn 4N-17H-P267
13,859.14	90.00	359.77	7,350.00	5,480.00	-696.87	0.00	0.00	0.00	0.00	BIGHORN 4N TGT
15,405.24	90.00	16.34	7,350.00	7,005.53	-481.06	1.07	0.00	1.07	90.00	Bighorn 4N-17H-P267

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BIGHORN 4N-17H-P267
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4983.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4983.00usft
<b>Site:</b>	BIGHORN	<b>North Reference:</b>	True
<b>Well:</b>	BIGHORN 4N-17H-P267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	
500.00	2.00	206.43	499.98	-1.56	-0.78	-1.51	2.00	2.00	
600.00	4.00	206.43	599.84	-6.25	-3.11	-6.02	2.00	2.00	
700.00	6.00	206.43	699.45	-14.05	-6.99	-13.54	2.00	2.00	
800.00	8.00	206.43	798.70	-24.97	-12.41	-24.06	2.00	2.00	
900.00	10.00	206.43	897.47	-38.97	-19.37	-37.55	2.00	2.00	
1,000.00	12.00	206.43	995.62	-56.06	-27.86	-54.02	2.00	2.00	
1,038.74	12.77	206.43	1,033.46	-63.50	-31.56	-61.19	2.00	2.00	
1,100.00	12.77	206.43	1,093.20	-75.63	-37.59	-72.88	0.00	0.00	
1,200.00	12.77	206.43	1,190.73	-95.43	-47.44	-91.96	0.00	0.00	
1,300.00	12.77	206.43	1,288.25	-115.23	-57.28	-111.04	0.00	0.00	
1,400.00	12.77	206.43	1,385.78	-135.03	-67.12	-130.12	0.00	0.00	
1,500.00	12.77	206.43	1,483.30	-154.83	-76.96	-149.20	0.00	0.00	
1,600.00	12.77	206.43	1,580.83	-174.63	-86.80	-168.28	0.00	0.00	
1,700.00	12.77	206.43	1,678.35	-194.44	-96.65	-187.36	0.00	0.00	
1,800.00	12.77	206.43	1,775.88	-214.24	-106.49	-206.44	0.00	0.00	
1,900.00	12.77	206.43	1,873.40	-234.04	-116.33	-225.52	0.00	0.00	
2,000.00	12.77	206.43	1,970.93	-253.84	-126.17	-244.60	0.00	0.00	
2,100.00	12.77	206.43	2,068.45	-273.64	-136.02	-263.68	0.00	0.00	
2,200.00	12.77	206.43	2,165.98	-293.44	-145.86	-282.76	0.00	0.00	
2,300.00	12.77	206.43	2,263.50	-313.24	-155.70	-301.84	0.00	0.00	
2,400.00	12.77	206.43	2,361.03	-333.04	-165.54	-320.92	0.00	0.00	
2,500.00	12.77	206.43	2,458.55	-352.84	-175.38	-340.00	0.00	0.00	
2,600.00	12.77	206.43	2,556.07	-372.64	-185.23	-359.08	0.00	0.00	
2,700.00	12.77	206.43	2,653.60	-392.44	-195.07	-378.16	0.00	0.00	
2,800.00	12.77	206.43	2,751.12	-412.24	-204.91	-397.24	0.00	0.00	
2,900.00	12.77	206.43	2,848.65	-432.04	-214.75	-416.32	0.00	0.00	
3,000.00	12.77	206.43	2,946.17	-451.84	-224.60	-435.40	0.00	0.00	
3,100.00	12.77	206.43	3,043.70	-471.65	-234.44	-454.48	0.00	0.00	
3,200.00	12.77	206.43	3,141.22	-491.45	-244.28	-473.56	0.00	0.00	
3,300.00	12.77	206.43	3,238.75	-511.25	-254.12	-492.64	0.00	0.00	
3,400.00	12.77	206.43	3,336.27	-531.05	-263.96	-511.72	0.00	0.00	
3,500.00	12.77	206.43	3,433.80	-550.85	-273.81	-530.80	0.00	0.00	
3,600.00	12.77	206.43	3,531.32	-570.65	-283.65	-549.88	0.00	0.00	
3,700.00	12.77	206.43	3,628.85	-590.45	-293.49	-568.96	0.00	0.00	
3,800.00	12.77	206.43	3,726.37	-610.25	-303.33	-588.04	0.00	0.00	
3,900.00	12.77	206.43	3,823.90	-630.05	-313.18	-607.12	0.00	0.00	
4,000.00	12.77	206.43	3,921.42	-649.85	-323.02	-626.20	0.00	0.00	
4,100.00	12.77	206.43	4,018.94	-669.65	-332.86	-645.28	0.00	0.00	
4,200.00	12.77	206.43	4,116.47	-689.45	-342.70	-664.36	0.00	0.00	
4,300.00	12.77	206.43	4,213.99	-709.25	-352.54	-683.44	0.00	0.00	
4,400.00	12.77	206.43	4,311.52	-729.05	-362.39	-702.52	0.00	0.00	
4,500.00	12.77	206.43	4,409.04	-748.86	-372.23	-721.60	0.00	0.00	
4,600.00	12.77	206.43	4,506.57	-768.66	-382.07	-740.68	0.00	0.00	
4,700.00	12.77	206.43	4,604.09	-788.46	-391.91	-759.76	0.00	0.00	
4,800.00	12.77	206.43	4,701.62	-808.26	-401.76	-778.84	0.00	0.00	
4,900.00	12.77	206.43	4,799.14	-828.06	-411.60	-797.92	0.00	0.00	
5,000.00	12.77	206.43	4,896.67	-847.86	-421.44	-817.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BIGHORN 4N-17H-P267
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4983.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4983.00usft
<b>Site:</b>	BIGHORN	<b>North Reference:</b>	True
<b>Well:</b>	BIGHORN 4N-17H-P267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
5,100.00	12.77	206.43	4,994.19	-867.66	-431.28	-836.07	0.00	0.00	
5,200.00	12.77	206.43	5,091.72	-887.46	-441.12	-855.15	0.00	0.00	
5,300.00	12.77	206.43	5,189.24	-907.26	-450.97	-874.23	0.00	0.00	
5,400.00	12.77	206.43	5,286.77	-927.06	-460.81	-893.31	0.00	0.00	
5,500.00	12.77	206.43	5,384.29	-946.86	-470.65	-912.39	0.00	0.00	
5,600.00	12.77	206.43	5,481.81	-966.66	-480.49	-931.47	0.00	0.00	
5,700.00	12.77	206.43	5,579.34	-986.46	-490.34	-950.55	0.00	0.00	
5,800.00	12.77	206.43	5,676.86	-1,006.26	-500.18	-969.63	0.00	0.00	
5,900.00	12.77	206.43	5,774.39	-1,026.07	-510.02	-988.71	0.00	0.00	
6,000.00	12.77	206.43	5,871.91	-1,045.87	-519.86	-1,007.79	0.00	0.00	
6,100.00	12.77	206.43	5,969.44	-1,065.67	-529.70	-1,026.87	0.00	0.00	
6,200.00	12.77	206.43	6,066.96	-1,085.47	-539.55	-1,045.95	0.00	0.00	
6,300.00	12.77	206.43	6,164.49	-1,105.27	-549.39	-1,065.03	0.00	0.00	
6,400.00	12.77	206.43	6,262.01	-1,125.07	-559.23	-1,084.11	0.00	0.00	
6,500.00	12.77	206.43	6,359.54	-1,144.87	-569.07	-1,103.19	0.00	0.00	
6,600.00	12.77	206.43	6,457.06	-1,164.67	-578.92	-1,122.27	0.00	0.00	
6,640.63	12.77	206.43	6,496.68	-1,172.72	-582.91	-1,130.03	0.00	0.00	
6,700.00	8.82	220.74	6,555.00	-1,182.05	-588.81	-1,138.93	8.00	-6.66	
6,800.00	5.96	282.90	6,654.30	-1,186.70	-598.90	-1,142.89	8.00	-2.86	
6,900.00	11.00	328.19	6,753.27	-1,177.42	-609.00	-1,132.94	8.00	5.03	
7,000.00	18.27	341.82	6,849.99	-1,154.39	-618.94	-1,109.27	8.00	7.27	
7,100.00	25.97	347.71	6,942.58	-1,118.04	-628.51	-1,072.36	8.00	7.70	
7,200.00	33.80	351.02	7,029.22	-1,069.10	-637.52	-1,022.92	8.00	7.83	
7,300.00	41.69	353.21	7,108.24	-1,008.51	-645.81	-961.90	8.00	7.89	
7,400.00	49.60	354.80	7,178.09	-937.46	-653.21	-890.50	8.00	7.92	
7,500.00	57.54	356.06	7,237.43	-857.31	-659.57	-810.11	8.00	7.94	
7,600.00	65.49	357.11	7,285.08	-769.65	-664.78	-722.30	8.00	7.95	
7,700.00	73.44	358.03	7,320.14	-676.16	-668.72	-628.76	8.00	7.95	
7,800.00	81.40	358.88	7,341.90	-578.68	-671.34	-531.32	8.00	7.96	
7,900.00	89.36	359.70	7,349.95	-479.09	-672.56	-431.89	8.00	7.96	
7,908.09	90.00	359.77	7,350.00	-471.00	-672.60	-423.82	8.00	7.96	Bighorn 4N-17H-P267 TPZ
8,000.00	90.00	359.77	7,350.00	-379.09	-672.97	-332.10	0.00	0.00	
8,100.00	90.00	359.77	7,350.00	-279.09	-673.38	-232.30	0.00	0.00	
8,200.00	90.00	359.77	7,350.00	-179.09	-673.79	-132.51	0.00	0.00	
8,300.00	90.00	359.77	7,350.00	-79.09	-674.20	-32.72	0.00	0.00	
8,400.00	90.00	359.77	7,350.00	20.91	-674.61	67.07	0.00	0.00	
8,500.00	90.00	359.77	7,350.00	120.90	-675.01	166.86	0.00	0.00	
8,600.00	90.00	359.77	7,350.00	220.90	-675.42	266.66	0.00	0.00	
8,700.00	90.00	359.77	7,350.00	320.90	-675.83	366.45	0.00	0.00	
8,800.00	90.00	359.77	7,350.00	420.90	-676.24	466.24	0.00	0.00	
8,900.00	90.00	359.77	7,350.00	520.90	-676.65	566.03	0.00	0.00	
9,000.00	90.00	359.77	7,350.00	620.90	-677.05	665.83	0.00	0.00	
9,100.00	90.00	359.77	7,350.00	720.90	-677.46	765.62	0.00	0.00	
9,200.00	90.00	359.77	7,350.00	820.90	-677.87	865.41	0.00	0.00	
9,300.00	90.00	359.77	7,350.00	920.90	-678.28	965.20	0.00	0.00	
9,400.00	90.00	359.77	7,350.00	1,020.90	-678.68	1,064.99	0.00	0.00	
9,500.00	90.00	359.77	7,350.00	1,120.90	-679.09	1,164.79	0.00	0.00	
9,600.00	90.00	359.77	7,350.00	1,220.90	-679.50	1,264.58	0.00	0.00	
9,700.00	90.00	359.77	7,350.00	1,320.89	-679.91	1,364.37	0.00	0.00	
9,800.00	90.00	359.77	7,350.00	1,420.89	-680.32	1,464.16	0.00	0.00	
9,900.00	90.00	359.77	7,350.00	1,520.89	-680.72	1,563.95	0.00	0.00	
10,000.00	90.00	359.77	7,350.00	1,620.89	-681.13	1,663.75	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BIGHORN 4N-17H-P267
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4983.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4983.00usft
<b>Site:</b>	BIGHORN	<b>North Reference:</b>	True
<b>Well:</b>	BIGHORN 4N-17H-P267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
10,100.00	90.00	359.77	7,350.00	1,720.89	-681.54	1,763.54	0.00	0.00	
10,200.00	90.00	359.77	7,350.00	1,820.89	-681.95	1,863.33	0.00	0.00	
10,300.00	90.00	359.77	7,350.00	1,920.89	-682.35	1,963.12	0.00	0.00	
10,400.00	90.00	359.77	7,350.00	2,020.89	-682.76	2,062.92	0.00	0.00	
10,500.00	90.00	359.77	7,350.00	2,120.89	-683.17	2,162.71	0.00	0.00	
10,600.00	90.00	359.77	7,350.00	2,220.89	-683.58	2,262.50	0.00	0.00	
10,700.00	90.00	359.77	7,350.00	2,320.89	-683.99	2,362.29	0.00	0.00	
10,800.00	90.00	359.77	7,350.00	2,420.89	-684.39	2,462.08	0.00	0.00	
10,900.00	90.00	359.77	7,350.00	2,520.88	-684.80	2,561.88	0.00	0.00	
11,000.00	90.00	359.77	7,350.00	2,620.88	-685.21	2,661.67	0.00	0.00	
11,100.00	90.00	359.77	7,350.00	2,720.88	-685.62	2,761.46	0.00	0.00	
11,200.00	90.00	359.77	7,350.00	2,820.88	-686.03	2,861.25	0.00	0.00	
11,300.00	90.00	359.77	7,350.00	2,920.88	-686.43	2,961.05	0.00	0.00	
11,400.00	90.00	359.77	7,350.00	3,020.88	-686.84	3,060.84	0.00	0.00	
11,500.00	90.00	359.77	7,350.00	3,120.88	-687.25	3,160.63	0.00	0.00	
11,600.00	90.00	359.77	7,350.00	3,220.88	-687.66	3,260.42	0.00	0.00	
11,700.00	90.00	359.77	7,350.00	3,320.88	-688.06	3,360.21	0.00	0.00	
11,800.00	90.00	359.77	7,350.00	3,420.88	-688.47	3,460.01	0.00	0.00	
11,900.00	90.00	359.77	7,350.00	3,520.88	-688.88	3,559.80	0.00	0.00	
12,000.00	90.00	359.77	7,350.00	3,620.88	-689.29	3,659.59	0.00	0.00	
12,100.00	90.00	359.77	7,350.00	3,720.87	-689.70	3,759.38	0.00	0.00	
12,200.00	90.00	359.77	7,350.00	3,820.87	-690.10	3,859.17	0.00	0.00	
12,300.00	90.00	359.77	7,350.00	3,920.87	-690.51	3,958.97	0.00	0.00	
12,400.00	90.00	359.77	7,350.00	4,020.87	-690.92	4,058.76	0.00	0.00	
12,500.00	90.00	359.77	7,350.00	4,120.87	-691.33	4,158.55	0.00	0.00	
12,600.00	90.00	359.77	7,350.00	4,220.87	-691.73	4,258.34	0.00	0.00	
12,700.00	90.00	359.77	7,350.00	4,320.87	-692.14	4,358.14	0.00	0.00	
12,800.00	90.00	359.77	7,350.00	4,420.87	-692.55	4,457.93	0.00	0.00	
12,900.00	90.00	359.77	7,350.00	4,520.87	-692.96	4,557.72	0.00	0.00	
13,000.00	90.00	359.77	7,350.00	4,620.87	-693.37	4,657.51	0.00	0.00	
13,100.00	90.00	359.77	7,350.00	4,720.87	-693.77	4,757.30	0.00	0.00	
13,200.00	90.00	359.77	7,350.00	4,820.87	-694.18	4,857.10	0.00	0.00	
13,300.00	90.00	359.77	7,350.00	4,920.87	-694.59	4,956.89	0.00	0.00	
13,400.00	90.00	359.77	7,350.00	5,020.86	-695.00	5,056.68	0.00	0.00	
13,500.00	90.00	359.77	7,350.00	5,120.86	-695.41	5,156.47	0.00	0.00	
13,600.00	90.00	359.77	7,350.00	5,220.86	-695.81	5,256.27	0.00	0.00	
13,700.00	90.00	359.77	7,350.00	5,320.86	-696.22	5,356.06	0.00	0.00	
13,800.00	90.00	359.77	7,350.00	5,420.86	-696.63	5,455.85	0.00	0.00	
13,859.14	90.00	359.77	7,350.00	5,480.00	-696.87	5,514.87	0.00	0.00	BIGHORN 4N TGT
13,900.00	90.00	0.20	7,350.00	5,520.86	-696.88	5,555.63	1.07	0.00	
14,000.00	90.00	1.28	7,350.00	5,620.85	-695.59	5,655.30	1.07	0.00	
14,100.00	90.00	2.35	7,350.00	5,720.80	-692.43	5,754.80	1.07	0.00	
14,200.00	90.00	3.42	7,350.00	5,820.67	-687.40	5,854.09	1.07	0.00	
14,300.00	90.00	4.49	7,350.00	5,920.43	-680.50	5,953.14	1.07	0.00	
14,400.00	90.00	5.56	7,350.00	6,020.05	-671.73	6,051.92	1.07	0.00	
14,500.00	90.00	6.64	7,350.00	6,119.48	-661.11	6,150.39	1.07	0.00	
14,600.00	90.00	7.71	7,350.00	6,218.69	-648.63	6,248.52	1.07	0.00	
14,700.00	90.00	8.78	7,350.00	6,317.66	-634.29	6,346.27	1.07	0.00	
14,800.00	90.00	9.85	7,350.00	6,416.34	-618.11	6,443.61	1.07	0.00	
14,900.00	90.00	10.92	7,350.00	6,514.70	-600.08	6,540.50	1.07	0.00	
15,000.00	90.00	11.99	7,350.00	6,612.71	-580.21	6,636.92	1.07	0.00	
15,100.00	90.00	13.07	7,350.00	6,710.32	-558.52	6,732.82	1.07	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well BIGHORN 4N-17H-P267
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4983.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4983.00usft
<b>Site:</b>	BIGHORN	<b>North Reference:</b>	True
<b>Well:</b>	BIGHORN 4N-17H-P267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2		

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
15,200.00	90.00	14.14	7,350.00	6,807.52	-535.00	6,828.17	1.07	0.00	
15,300.00	90.00	15.21	7,350.00	6,904.25	-509.67	6,922.95	1.07	0.00	
15,400.00	90.00	16.28	7,350.00	7,000.50	-482.53	7,017.11	1.07	0.00	
15,405.24	90.00	16.34	7,350.00	7,005.53	-481.06	7,022.02	1.07	0.00	Bighorn 4N-17H-P267 BHL

### Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Bighorn 4N-17H-P267 B - plan hits target center - Point	0.00	0.00	7,350.00	7,005.53	-481.06	1,299,099.25	3,165,081.46	40.152913	-104.909418
BIGHORN 4N TGT - plan hits target center - Point	0.00	0.00	7,350.00	5,480.00	-696.87	1,297,572.32	3,164,875.85	40.148725	-104.910190
Bighorn 4N-17H-P267 T - plan hits target center - Point	0.00	0.00	7,350.00	-471.00	-672.60	1,291,621.61	3,164,939.87	40.132389	-104.910102