



CRESTONE PEAK
RESOURCES

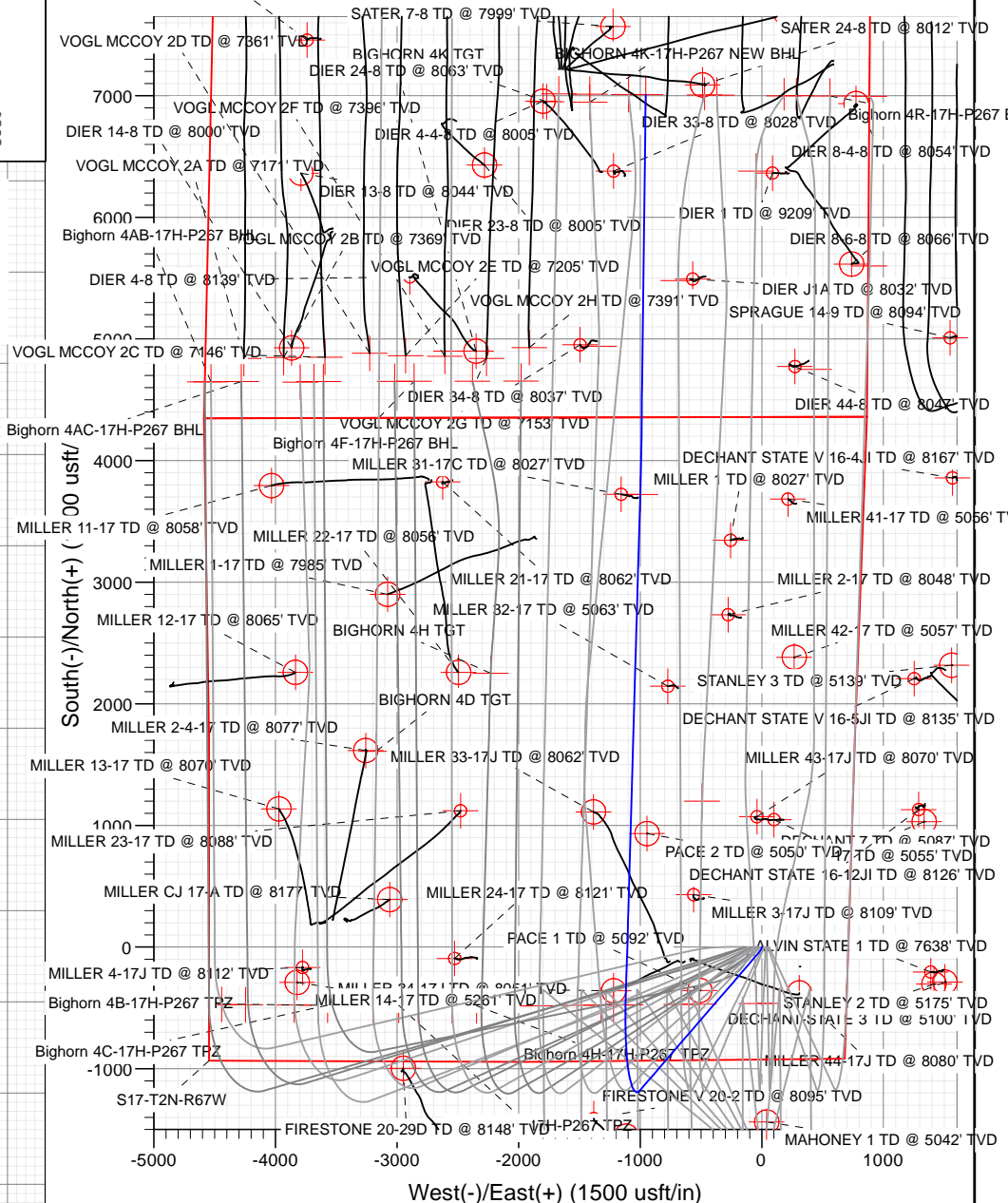
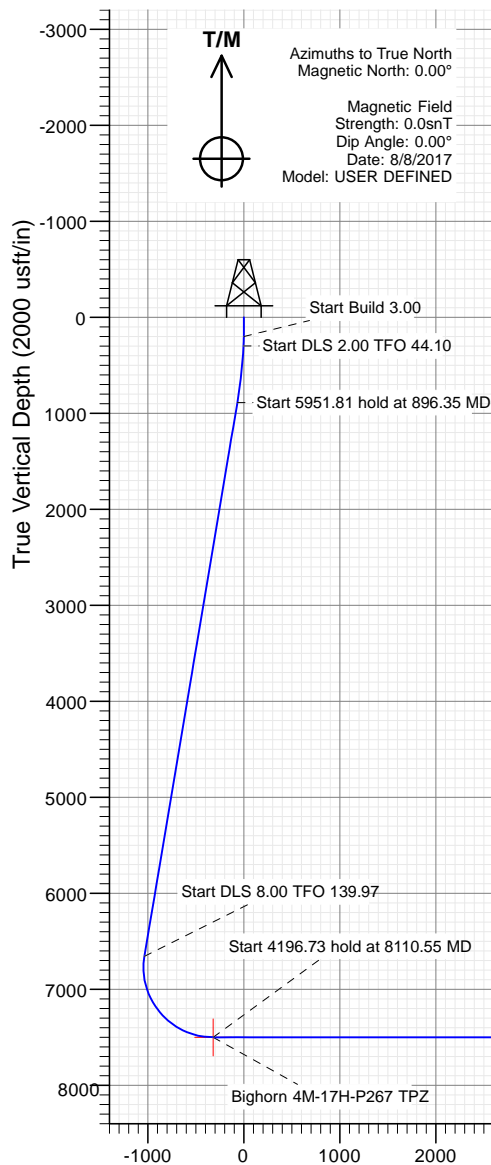
SECTION DETAILS

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	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	3.00	185.00	299.95	-2.61	-0.23	3.00	185.00	-2.55	
4	896.35	14.23	220.80	888.87	-73.91	-49.67	2.00	44.10	-66.52	
5	6848.17	14.23	220.80	6657.99	-1181.64	-1005.88	0.00	0.00	-1034.99	
6	8110.55	90.00	1.65	7500.00	-475.00	-1120.50	8.00	139.97	-319.34	Bighorn 4M-17H-P267 TPZ
7	12307.29	90.00	1.65	7500.00	3720.00	-1000.00	0.00	0.00	3820.96	BIGHORN 4M TGT
8	12375.02	90.00	3.00	7500.00	3787.68	-997.26	2.00	90.00	3887.65	
9	12489.60	90.00	0.71	7500.00	3902.19	-993.55	2.00	-90.00	4000.61	
10	15596.08	90.00	0.71	7500.00	7008.43	-955.14	0.00	0.00	7073.22	Bighorn 4M-17H-P267 BHL

PLAN #1
BIGHORN 4M-17H-P267
23 KB @ 4960.00ft
Ground Level @ 4960.00
North American Datum 1983
Well BIGHORN 4M-17H-P267, True North

Type	Target	No Target (Freehand)	Azimuth	Origin Type	N/S	E/W	From TVD
Name	TVD	+N/-S	+E/-W	Latitude	Longitude		
BIGHORN 4M TGT	7500.00	3720.00	-1000.00	40.143894	-104.911310		
Bighorn 4M-17H-P267 BHL	7500.00	7008.43	-955.14	40.152921	-104.911150		
Bighorn 4M-17H-P267 TPZ	7500.00	-475.00	-1120.50	40.132378	-104.911740		

Project: DJ BASIN
Site: BIGHORN
Well: BIGHORN 4M-17H-P267
Wellbore: OH
Design: PLAN #1



Vertical Section at 352.24° (2000 usft/in)

WELL DETAILS: BIGHORN 4M-17H-P267

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1292097.05	3165599.24	40.133682	-104.907733

CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BIGHORN 4M-17H-P267
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4983.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4983.00usft
Site:	BIGHORN	North Reference:	True
Well:	BIGHORN 4M-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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 4M-17H-P267					
Well Position	+N/-S	0.00 usft	Northing:	1,292,097.05 usft	Latitude:	40.133682
	+E/-W	0.00 usft	Easting:	3,165,599.24 usft	Longitude:	-104.907733
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 #1			
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	352.24

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	3.00	185.00	299.95	-2.61	-0.23	3.00	3.00	0.00	185.00	
896.35	14.23	220.80	888.87	-73.91	-49.67	2.00	1.88	6.00	44.10	
6,848.17	14.23	220.80	6,657.99	-1,181.64	-1,005.88	0.00	0.00	0.00	0.00	
8,110.55	90.00	1.65	7,500.00	-475.00	-1,120.50	8.00	6.00	11.16	139.97	Bighorn 4M-17H-P267
12,307.29	90.00	1.65	7,500.00	3,720.00	-1,000.00	0.00	0.00	0.00	0.00	BIGHORN 4M TGT
12,375.02	90.00	3.00	7,500.00	3,787.68	-997.26	2.00	0.00	2.00	90.00	
12,489.60	90.00	0.71	7,500.00	3,902.19	-993.55	2.00	0.00	-2.00	-90.00	
15,596.08	90.00	0.71	7,500.00	7,008.43	-955.14	0.00	0.00	0.00	0.00	Bighorn 4M-17H-P267

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BIGHORN 4M-17H-P267
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4983.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4983.00usft
Site:	BIGHORN	North Reference:	True
Well:	BIGHORN 4M-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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	3.00	185.00	299.95	-2.61	-0.23	-2.55	3.00	3.00	
400.00	4.65	202.44	399.73	-8.96	-2.00	-8.61	2.00	1.65	
500.00	6.50	210.40	499.26	-17.59	-6.41	-16.56	2.00	1.85	
600.00	8.42	214.80	598.41	-28.48	-13.46	-26.40	2.00	1.92	
700.00	10.37	217.57	697.06	-41.62	-23.12	-38.12	2.00	1.95	
800.00	12.33	219.46	795.10	-57.00	-35.39	-51.70	2.00	1.97	
896.35	14.23	220.80	888.87	-73.91	-49.67	-66.52	2.00	1.97	
900.00	14.23	220.80	892.41	-74.59	-50.26	-67.12	0.00	0.00	
1,000.00	14.23	220.80	989.34	-93.20	-66.32	-83.39	0.00	0.00	
1,100.00	14.23	220.80	1,086.27	-111.81	-82.39	-99.66	0.00	0.00	
1,200.00	14.23	220.80	1,183.20	-130.42	-98.45	-115.93	0.00	0.00	
1,300.00	14.23	220.80	1,280.13	-149.03	-114.52	-132.20	0.00	0.00	
1,400.00	14.23	220.80	1,377.06	-167.64	-130.59	-148.47	0.00	0.00	
1,500.00	14.23	220.80	1,473.99	-186.26	-146.65	-164.75	0.00	0.00	
1,600.00	14.23	220.80	1,570.92	-204.87	-162.72	-181.02	0.00	0.00	
1,700.00	14.23	220.80	1,667.85	-223.48	-178.78	-197.29	0.00	0.00	
1,800.00	14.23	220.80	1,764.78	-242.09	-194.85	-213.56	0.00	0.00	
1,900.00	14.23	220.80	1,861.71	-260.70	-210.92	-229.83	0.00	0.00	
2,000.00	14.23	220.80	1,958.64	-279.31	-226.98	-246.11	0.00	0.00	
2,100.00	14.23	220.80	2,055.57	-297.93	-243.05	-262.38	0.00	0.00	
2,200.00	14.23	220.80	2,152.50	-316.54	-259.11	-278.65	0.00	0.00	
2,300.00	14.23	220.80	2,249.43	-335.15	-275.18	-294.92	0.00	0.00	
2,400.00	14.23	220.80	2,346.36	-353.76	-291.25	-311.19	0.00	0.00	
2,500.00	14.23	220.80	2,443.29	-372.37	-307.31	-327.46	0.00	0.00	
2,600.00	14.23	220.80	2,540.22	-390.99	-323.38	-343.74	0.00	0.00	
2,700.00	14.23	220.80	2,637.16	-409.60	-339.44	-360.01	0.00	0.00	
2,800.00	14.23	220.80	2,734.09	-428.21	-355.51	-376.28	0.00	0.00	
2,900.00	14.23	220.80	2,831.02	-446.82	-371.57	-392.55	0.00	0.00	
3,000.00	14.23	220.80	2,927.95	-465.43	-387.64	-408.82	0.00	0.00	
3,100.00	14.23	220.80	3,024.88	-484.04	-403.71	-425.10	0.00	0.00	
3,200.00	14.23	220.80	3,121.81	-502.66	-419.77	-441.37	0.00	0.00	
3,300.00	14.23	220.80	3,218.74	-521.27	-435.84	-457.64	0.00	0.00	
3,400.00	14.23	220.80	3,315.67	-539.88	-451.90	-473.91	0.00	0.00	
3,500.00	14.23	220.80	3,412.60	-558.49	-467.97	-490.18	0.00	0.00	
3,600.00	14.23	220.80	3,509.53	-577.10	-484.04	-506.45	0.00	0.00	
3,700.00	14.23	220.80	3,606.46	-595.71	-500.10	-522.73	0.00	0.00	
3,800.00	14.23	220.80	3,703.39	-614.33	-516.17	-539.00	0.00	0.00	
3,900.00	14.23	220.80	3,800.32	-632.94	-532.23	-555.27	0.00	0.00	
4,000.00	14.23	220.80	3,897.25	-651.55	-548.30	-571.54	0.00	0.00	
4,100.00	14.23	220.80	3,994.18	-670.16	-564.36	-587.81	0.00	0.00	
4,200.00	14.23	220.80	4,091.11	-688.77	-580.43	-604.09	0.00	0.00	
4,300.00	14.23	220.80	4,188.04	-707.38	-596.50	-620.36	0.00	0.00	
4,400.00	14.23	220.80	4,284.97	-726.00	-612.56	-636.63	0.00	0.00	
4,500.00	14.23	220.80	4,381.90	-744.61	-628.63	-652.90	0.00	0.00	
4,600.00	14.23	220.80	4,478.83	-763.22	-644.69	-669.17	0.00	0.00	
4,700.00	14.23	220.80	4,575.76	-781.83	-660.76	-685.44	0.00	0.00	
4,800.00	14.23	220.80	4,672.69	-800.44	-676.83	-701.72	0.00	0.00	
4,900.00	14.23	220.80	4,769.62	-819.05	-692.89	-717.99	0.00	0.00	
5,000.00	14.23	220.80	4,866.55	-837.67	-708.96	-734.26	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BIGHORN 4M-17H-P267
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4983.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4983.00usft
Site:	BIGHORN	North Reference:	True
Well:	BIGHORN 4M-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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	14.23	220.80	4,963.48	-856.28	-725.02	-750.53	0.00	0.00	
5,200.00	14.23	220.80	5,060.41	-874.89	-741.09	-766.80	0.00	0.00	
5,300.00	14.23	220.80	5,157.34	-893.50	-757.16	-783.07	0.00	0.00	
5,400.00	14.23	220.80	5,254.27	-912.11	-773.22	-799.35	0.00	0.00	
5,500.00	14.23	220.80	5,351.20	-930.73	-789.29	-815.62	0.00	0.00	
5,600.00	14.23	220.80	5,448.14	-949.34	-805.35	-831.89	0.00	0.00	
5,700.00	14.23	220.80	5,545.07	-967.95	-821.42	-848.16	0.00	0.00	
5,800.00	14.23	220.80	5,642.00	-986.56	-837.48	-864.43	0.00	0.00	
5,900.00	14.23	220.80	5,738.93	-1,005.17	-853.55	-880.71	0.00	0.00	
6,000.00	14.23	220.80	5,835.86	-1,023.78	-869.62	-896.98	0.00	0.00	
6,100.00	14.23	220.80	5,932.79	-1,042.40	-885.68	-913.25	0.00	0.00	
6,200.00	14.23	220.80	6,029.72	-1,061.01	-901.75	-929.52	0.00	0.00	
6,300.00	14.23	220.80	6,126.65	-1,079.62	-917.81	-945.79	0.00	0.00	
6,400.00	14.23	220.80	6,223.58	-1,098.23	-933.88	-962.06	0.00	0.00	
6,500.00	14.23	220.80	6,320.51	-1,116.84	-949.95	-978.34	0.00	0.00	
6,600.00	14.23	220.80	6,417.44	-1,135.45	-966.01	-994.61	0.00	0.00	
6,700.00	14.23	220.80	6,514.37	-1,154.07	-982.08	-1,010.88	0.00	0.00	
6,800.00	14.23	220.80	6,611.30	-1,172.68	-998.14	-1,027.15	0.00	0.00	
6,848.17	14.23	220.80	6,657.99	-1,181.64	-1,005.88	-1,034.99	0.00	0.00	
6,900.00	11.37	234.45	6,708.54	-1,189.44	-1,014.21	-1,041.59	8.00	-5.53	
7,000.00	9.17	278.91	6,807.08	-1,193.94	-1,030.12	-1,043.90	8.00	-2.20	
7,100.00	12.88	317.19	6,905.34	-1,184.52	-1,045.60	-1,032.47	8.00	3.71	
7,200.00	19.36	334.52	7,001.41	-1,161.34	-1,060.33	-1,007.52	8.00	6.47	
7,300.00	26.65	343.03	7,093.42	-1,124.87	-1,074.02	-969.54	8.00	7.29	
7,400.00	34.24	348.04	7,179.59	-1,075.82	-1,086.42	-919.26	8.00	7.59	
7,500.00	41.97	351.39	7,258.22	-1,015.13	-1,097.27	-857.66	8.00	7.73	
7,600.00	49.78	353.86	7,327.79	-944.00	-1,106.38	-785.95	8.00	7.80	
7,700.00	57.62	355.82	7,386.95	-863.80	-1,113.55	-705.51	8.00	7.84	
7,800.00	65.49	357.46	7,434.55	-776.09	-1,118.66	-617.92	8.00	7.87	
7,900.00	73.37	358.90	7,469.66	-682.59	-1,121.60	-524.88	8.00	7.88	
8,000.00	81.27	0.24	7,491.59	-585.11	-1,122.32	-428.20	8.00	7.89	
8,100.00	89.17	1.51	7,499.92	-485.55	-1,120.79	-329.76	8.00	7.90	
8,110.55	90.00	1.65	7,500.00	-475.00	-1,120.50	-319.34	8.00	7.90	Bighorn 4M-17H-P267 TPZ
8,200.00	90.00	1.65	7,500.00	-385.59	-1,117.93	-231.10	0.00	0.00	
8,300.00	90.00	1.65	7,500.00	-285.63	-1,115.06	-132.44	0.00	0.00	
8,400.00	90.00	1.65	7,500.00	-185.67	-1,112.19	-33.79	0.00	0.00	
8,500.00	90.00	1.65	7,500.00	-85.72	-1,109.32	64.87	0.00	0.00	
8,600.00	90.00	1.65	7,500.00	14.24	-1,106.45	163.52	0.00	0.00	
8,700.00	90.00	1.65	7,500.00	114.20	-1,103.58	262.18	0.00	0.00	
8,800.00	90.00	1.65	7,500.00	214.16	-1,100.70	360.83	0.00	0.00	
8,900.00	90.00	1.65	7,500.00	314.12	-1,097.83	459.49	0.00	0.00	
9,000.00	90.00	1.65	7,500.00	414.08	-1,094.96	558.14	0.00	0.00	
9,100.00	90.00	1.65	7,500.00	514.04	-1,092.09	656.80	0.00	0.00	
9,200.00	90.00	1.65	7,500.00	614.00	-1,089.22	755.46	0.00	0.00	
9,300.00	90.00	1.65	7,500.00	713.95	-1,086.35	854.11	0.00	0.00	
9,400.00	90.00	1.65	7,500.00	813.91	-1,083.48	952.77	0.00	0.00	
9,500.00	90.00	1.65	7,500.00	913.87	-1,080.61	1,051.42	0.00	0.00	
9,600.00	90.00	1.65	7,500.00	1,013.83	-1,077.73	1,150.08	0.00	0.00	
9,700.00	90.00	1.65	7,500.00	1,113.79	-1,074.86	1,248.73	0.00	0.00	
9,800.00	90.00	1.65	7,500.00	1,213.75	-1,071.99	1,347.39	0.00	0.00	
9,900.00	90.00	1.65	7,500.00	1,313.71	-1,069.12	1,446.04	0.00	0.00	
10,000.00	90.00	1.65	7,500.00	1,413.67	-1,066.25	1,544.70	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BIGHORN 4M-17H-P267
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4983.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4983.00usft
Site:	BIGHORN	North Reference:	True
Well:	BIGHORN 4M-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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	1.65	7,500.00	1,513.62	-1,063.38	1,643.36	0.00	0.00	
10,200.00	90.00	1.65	7,500.00	1,613.58	-1,060.51	1,742.01	0.00	0.00	
10,300.00	90.00	1.65	7,500.00	1,713.54	-1,057.63	1,840.67	0.00	0.00	
10,400.00	90.00	1.65	7,500.00	1,813.50	-1,054.76	1,939.32	0.00	0.00	
10,500.00	90.00	1.65	7,500.00	1,913.46	-1,051.89	2,037.98	0.00	0.00	
10,600.00	90.00	1.65	7,500.00	2,013.42	-1,049.02	2,136.63	0.00	0.00	
10,700.00	90.00	1.65	7,500.00	2,113.38	-1,046.15	2,235.29	0.00	0.00	
10,800.00	90.00	1.65	7,500.00	2,213.34	-1,043.28	2,333.94	0.00	0.00	
10,900.00	90.00	1.65	7,500.00	2,313.30	-1,040.41	2,432.60	0.00	0.00	
11,000.00	90.00	1.65	7,500.00	2,413.25	-1,037.54	2,531.25	0.00	0.00	
11,100.00	90.00	1.65	7,500.00	2,513.21	-1,034.66	2,629.91	0.00	0.00	
11,200.00	90.00	1.65	7,500.00	2,613.17	-1,031.79	2,728.57	0.00	0.00	
11,300.00	90.00	1.65	7,500.00	2,713.13	-1,028.92	2,827.22	0.00	0.00	
11,400.00	90.00	1.65	7,500.00	2,813.09	-1,026.05	2,925.88	0.00	0.00	
11,500.00	90.00	1.65	7,500.00	2,913.05	-1,023.18	3,024.53	0.00	0.00	
11,600.00	90.00	1.65	7,500.00	3,013.01	-1,020.31	3,123.19	0.00	0.00	
11,700.00	90.00	1.65	7,500.00	3,112.97	-1,017.44	3,221.84	0.00	0.00	
11,800.00	90.00	1.65	7,500.00	3,212.92	-1,014.57	3,320.50	0.00	0.00	
11,900.00	90.00	1.65	7,500.00	3,312.88	-1,011.69	3,419.15	0.00	0.00	
12,000.00	90.00	1.65	7,500.00	3,412.84	-1,008.82	3,517.81	0.00	0.00	
12,100.00	90.00	1.65	7,500.00	3,512.80	-1,005.95	3,616.47	0.00	0.00	
12,200.00	90.00	1.65	7,500.00	3,612.76	-1,003.08	3,715.12	0.00	0.00	
12,300.00	90.00	1.65	7,500.00	3,712.72	-1,000.21	3,813.78	0.00	0.00	
12,307.29	90.00	1.65	7,500.00	3,720.00	-1,000.00	3,820.96	0.00	0.00	BIGHORN 4M TGT
12,375.02	90.00	3.00	7,500.00	3,787.68	-997.26	3,887.65	2.00	0.00	
12,400.00	90.00	2.50	7,500.00	3,812.63	-996.06	3,912.21	2.00	0.00	
12,489.60	90.00	0.71	7,500.00	3,902.19	-993.55	4,000.61	2.00	0.00	
12,500.00	90.00	0.71	7,500.00	3,912.59	-993.42	4,010.90	0.00	0.00	
12,600.00	90.00	0.71	7,500.00	4,012.58	-992.18	4,109.81	0.00	0.00	
12,700.00	90.00	0.71	7,500.00	4,112.57	-990.95	4,208.72	0.00	0.00	
12,800.00	90.00	0.71	7,500.00	4,212.57	-989.71	4,307.63	0.00	0.00	
12,900.00	90.00	0.71	7,500.00	4,312.56	-988.47	4,406.54	0.00	0.00	
13,000.00	90.00	0.71	7,500.00	4,412.55	-987.24	4,505.45	0.00	0.00	
13,100.00	90.00	0.71	7,500.00	4,512.54	-986.00	4,604.36	0.00	0.00	
13,200.00	90.00	0.71	7,500.00	4,612.54	-984.76	4,703.27	0.00	0.00	
13,300.00	90.00	0.71	7,500.00	4,712.53	-983.53	4,802.18	0.00	0.00	
13,400.00	90.00	0.71	7,500.00	4,812.52	-982.29	4,901.09	0.00	0.00	
13,500.00	90.00	0.71	7,500.00	4,912.51	-981.05	5,000.00	0.00	0.00	
13,600.00	90.00	0.71	7,500.00	5,012.51	-979.82	5,098.90	0.00	0.00	
13,700.00	90.00	0.71	7,500.00	5,112.50	-978.58	5,197.81	0.00	0.00	
13,800.00	90.00	0.71	7,500.00	5,212.49	-977.35	5,296.72	0.00	0.00	
13,900.00	90.00	0.71	7,500.00	5,312.48	-976.11	5,395.63	0.00	0.00	
14,000.00	90.00	0.71	7,500.00	5,412.47	-974.87	5,494.54	0.00	0.00	
14,100.00	90.00	0.71	7,500.00	5,512.47	-973.64	5,593.45	0.00	0.00	
14,200.00	90.00	0.71	7,500.00	5,612.46	-972.40	5,692.36	0.00	0.00	
14,300.00	90.00	0.71	7,500.00	5,712.45	-971.16	5,791.27	0.00	0.00	
14,400.00	90.00	0.71	7,500.00	5,812.44	-969.93	5,890.18	0.00	0.00	
14,500.00	90.00	0.71	7,500.00	5,912.44	-968.69	5,989.09	0.00	0.00	
14,600.00	90.00	0.71	7,500.00	6,012.43	-967.45	6,088.00	0.00	0.00	
14,700.00	90.00	0.71	7,500.00	6,112.42	-966.22	6,186.91	0.00	0.00	
14,800.00	90.00	0.71	7,500.00	6,212.41	-964.98	6,285.82	0.00	0.00	
14,900.00	90.00	0.71	7,500.00	6,312.41	-963.74	6,384.73	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well BIGHORN 4M-17H-P267
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4983.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4983.00usft
Site:	BIGHORN	North Reference:	True
Well:	BIGHORN 4M-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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
15,000.00	90.00	0.71	7,500.00	6,412.40	-962.51	6,483.64	0.00	0.00	
15,100.00	90.00	0.71	7,500.00	6,512.39	-961.27	6,582.55	0.00	0.00	
15,200.00	90.00	0.71	7,500.00	6,612.38	-960.04	6,681.46	0.00	0.00	
15,300.00	90.00	0.71	7,500.00	6,712.38	-958.80	6,780.37	0.00	0.00	
15,400.00	90.00	0.71	7,500.00	6,812.37	-957.56	6,879.28	0.00	0.00	
15,500.00	90.00	0.71	7,500.00	6,912.36	-956.33	6,978.19	0.00	0.00	
15,596.08	90.00	0.71	7,500.00	7,008.43	-955.14	7,073.22	0.00	0.00	Bighorn 4M-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 4M-17H-P267 T - plan hits target center - Point	0.00	0.00	7,500.00	-475.00	-1,120.50	1,291,614.58	3,164,481.94	40.132378	-104.911740
Bighorn 4M-17H-P267 B - plan hits target center - Point	0.00	0.00	7,500.00	7,008.43	-955.14	1,299,098.95	3,164,597.32	40.152921	-104.911150
BIGHORN 4M TGT - plan hits target center - Point	0.00	0.00	7,500.00	3,720.00	-1,000.00	1,295,810.29	3,164,574.42	40.143894	-104.911310