



CRESTONE PEAK
RESOURCES

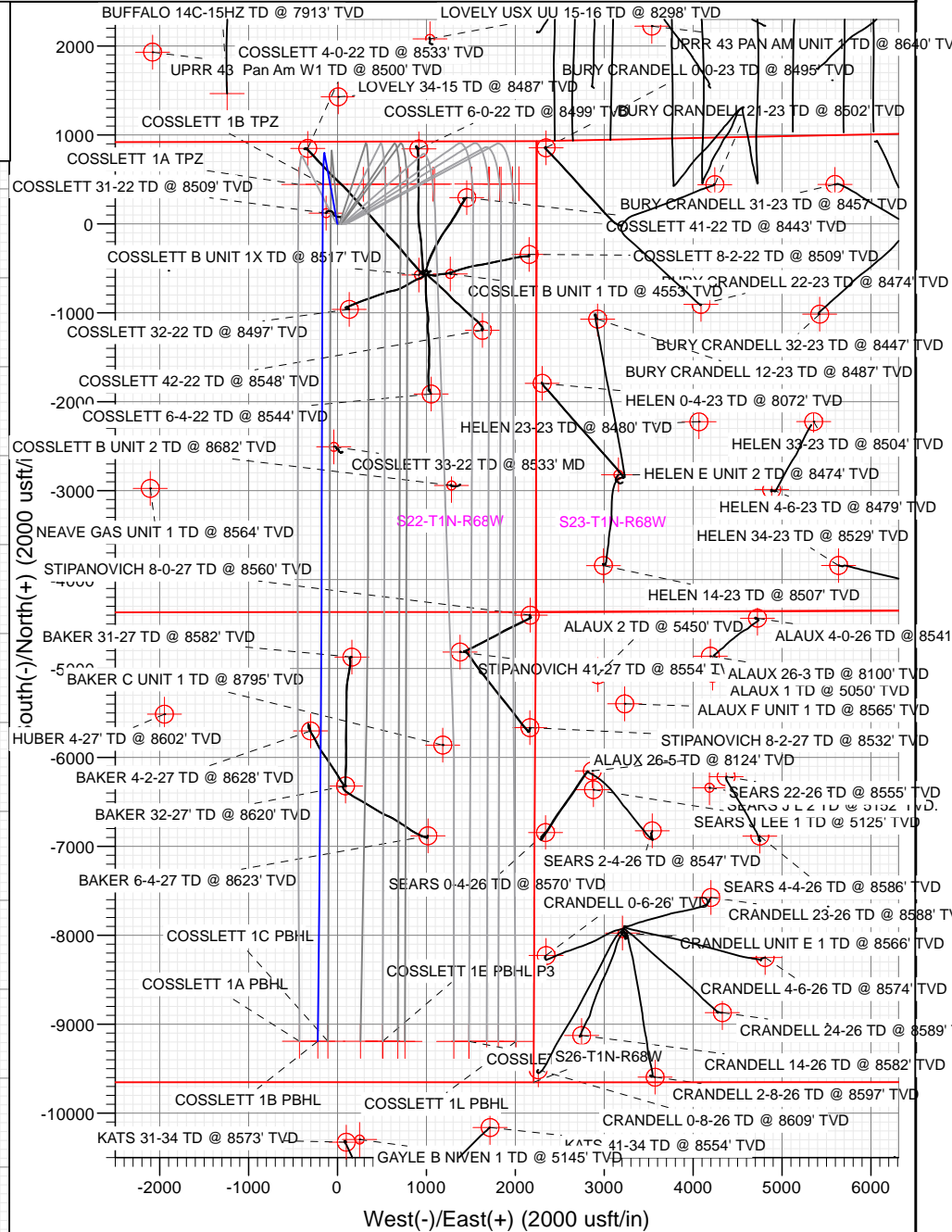
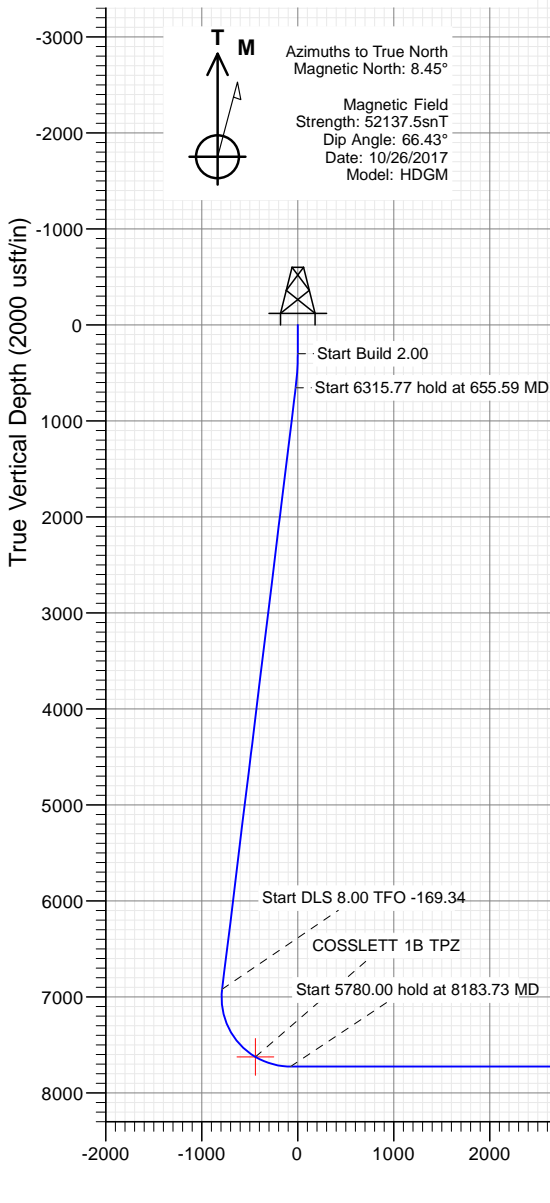
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	655.59	7.11	349.61	654.68	21.68	-3.98	2.00	349.61	-21.58	
4	6971.36	7.11	349.61	6921.85	790.78	-145.04	0.00	0.00	-787.06	
5	8183.73	90.00	180.19	7725.00	79.97	-165.80	8.00	-169.34	-75.96	
6	13963.73	90.00	180.19	7725.00	-5700.00	-185.00	0.00	0.00	5702.80	
7	13983.81	90.00	180.59	7725.00	-5720.07	-185.14	2.00	90.00	5722.87	
8	17454.92	90.00	180.59	7725.00	-9191.00	-220.99	0.00	0.00	9193.66	COSSLETT 1B PBHL

PLAN #3
COSSLETT 1B-22H-B168
17000' LR
23 KB @ 5196.00usft
Ground Level @ 5173.00
North American Datum 1983
Well COSSLETT 1B-22H-B168, True North

Type	Target	No Target (Freehand)	Azimuth	Origin Type	N/S	E/W	From TVD
Name	COSSLETT 1B TPZ		7625.34		+N/-S	+E/-W	Latitude
	COSSLETT 1B PBHL		7725.00		-9191.00	-220.99	Longitude

Project: DJ BASIN
Site: S22-T1N-R68W
Well: COSSLETT 1B-22H-B168
Wellbore: OH
Design: PLAN #3



Vertical Section at 181.38° (2000 usft/in)

WELL DETAILS: COSSLETT 1B-22H-B168

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1258338.27	3143337.63	40.041391	-104.988047

CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1B-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5196.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5196.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1B-22H-B168	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

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		S22-T1N-R68W			
Site Position:		Northing:	1,258,338.24 usft	Latitude:	40.041391
From:	Lat/Long	Easting:	3,143,327.55 usft	Longitude:	-104.988083
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.33 °

Well	COSSLETT 1B-22H-B168					
Well Position	+N/-S	0.00 usft	Northing:	1,258,338.27 usft	Latitude:	40.041391
	+E/-W	0.00 usft	Easting:	3,143,337.63 usft	Longitude:	-104.988047
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	5,173.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	10/26/2017	8.45	66.43	52,137.50000000

Design	PLAN #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	181.38

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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
655.59	7.11	349.61	654.68	21.68	-3.98	2.00	2.00	0.00	349.61	
6,971.36	7.11	349.61	6,921.85	790.78	-145.04	0.00	0.00	0.00	0.00	
8,183.73	90.00	180.19	7,725.00	79.97	-165.80	8.00	6.84	-13.97	-169.34	
13,963.73	90.00	180.19	7,725.00	-5,700.00	-185.00	0.00	0.00	0.00	0.00	
13,983.81	90.00	180.59	7,725.00	-5,720.07	-185.14	2.00	0.00	2.00	90.00	
17,454.92	90.00	180.59	7,725.00	-9,191.00	-220.99	0.00	0.00	0.00	0.00	COSSLETT 1B PBHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1B-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5196.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5196.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1B-22H-B168	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

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	2.00	349.61	399.98	1.72	-0.31	-1.71	2.00	2.00	
500.00	4.00	349.61	499.84	6.86	-1.26	-6.83	2.00	2.00	
600.00	6.00	349.61	599.45	15.44	-2.83	-15.36	2.00	2.00	
655.59	7.11	349.61	654.68	21.68	-3.98	-21.58	2.00	2.00	
700.00	7.11	349.61	698.75	27.09	-4.97	-26.96	0.00	0.00	
800.00	7.11	349.61	797.98	39.26	-7.20	-39.08	0.00	0.00	
900.00	7.11	349.61	897.21	51.44	-9.43	-51.20	0.00	0.00	
1,000.00	7.11	349.61	996.44	63.62	-11.67	-63.32	0.00	0.00	
1,100.00	7.11	349.61	1,095.67	75.80	-13.90	-75.44	0.00	0.00	
1,200.00	7.11	349.61	1,194.90	87.97	-16.14	-87.56	0.00	0.00	
1,300.00	7.11	349.61	1,294.13	100.15	-18.37	-99.68	0.00	0.00	
1,400.00	7.11	349.61	1,393.36	112.33	-20.60	-111.80	0.00	0.00	
1,500.00	7.11	349.61	1,492.59	124.51	-22.84	-123.92	0.00	0.00	
1,600.00	7.11	349.61	1,591.82	136.68	-25.07	-136.04	0.00	0.00	
1,700.00	7.11	349.61	1,691.05	148.86	-27.30	-148.16	0.00	0.00	
1,800.00	7.11	349.61	1,790.28	161.04	-29.54	-160.28	0.00	0.00	
1,900.00	7.11	349.61	1,889.51	173.22	-31.77	-172.40	0.00	0.00	
2,000.00	7.11	349.61	1,988.74	185.39	-34.00	-184.52	0.00	0.00	
2,100.00	7.11	349.61	2,087.98	197.57	-36.24	-196.64	0.00	0.00	
2,200.00	7.11	349.61	2,187.21	209.75	-38.47	-208.76	0.00	0.00	
2,300.00	7.11	349.61	2,286.44	221.93	-40.70	-220.88	0.00	0.00	
2,400.00	7.11	349.61	2,385.67	234.10	-42.94	-233.00	0.00	0.00	
2,500.00	7.11	349.61	2,484.90	246.28	-45.17	-245.12	0.00	0.00	
2,600.00	7.11	349.61	2,584.13	258.46	-47.40	-257.24	0.00	0.00	
2,700.00	7.11	349.61	2,683.36	270.64	-49.64	-269.36	0.00	0.00	
2,800.00	7.11	349.61	2,782.59	282.81	-51.87	-281.48	0.00	0.00	
2,900.00	7.11	349.61	2,881.82	294.99	-54.10	-293.60	0.00	0.00	
3,000.00	7.11	349.61	2,981.05	307.17	-56.34	-305.72	0.00	0.00	
3,100.00	7.11	349.61	3,080.28	319.35	-58.57	-317.84	0.00	0.00	
3,200.00	7.11	349.61	3,179.51	331.52	-60.80	-329.97	0.00	0.00	
3,300.00	7.11	349.61	3,278.74	343.70	-63.04	-342.09	0.00	0.00	
3,400.00	7.11	349.61	3,377.97	355.88	-65.27	-354.21	0.00	0.00	
3,500.00	7.11	349.61	3,477.20	368.05	-67.51	-366.33	0.00	0.00	
3,600.00	7.11	349.61	3,576.43	380.23	-69.74	-378.45	0.00	0.00	
3,700.00	7.11	349.61	3,675.67	392.41	-71.97	-390.57	0.00	0.00	
3,800.00	7.11	349.61	3,774.90	404.59	-74.21	-402.69	0.00	0.00	
3,900.00	7.11	349.61	3,874.13	416.76	-76.44	-414.81	0.00	0.00	
4,000.00	7.11	349.61	3,973.36	428.94	-78.67	-426.93	0.00	0.00	
4,100.00	7.11	349.61	4,072.59	441.12	-80.91	-439.05	0.00	0.00	
4,200.00	7.11	349.61	4,171.82	453.30	-83.14	-451.17	0.00	0.00	
4,300.00	7.11	349.61	4,271.05	465.47	-85.37	-463.29	0.00	0.00	
4,400.00	7.11	349.61	4,370.28	477.65	-87.61	-475.41	0.00	0.00	
4,500.00	7.11	349.61	4,469.51	489.83	-89.84	-487.53	0.00	0.00	
4,600.00	7.11	349.61	4,568.74	502.01	-92.07	-499.65	0.00	0.00	
4,700.00	7.11	349.61	4,667.97	514.18	-94.31	-511.77	0.00	0.00	
4,800.00	7.11	349.61	4,767.20	526.36	-96.54	-523.89	0.00	0.00	
4,900.00	7.11	349.61	4,866.43	538.54	-98.77	-536.01	0.00	0.00	
5,000.00	7.11	349.61	4,965.66	550.72	-101.01	-548.13	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1B-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5196.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5196.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1B-22H-B168	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

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	7.11	349.61	5,064.89	562.89	-103.24	-560.25	0.00	0.00	
5,200.00	7.11	349.61	5,164.13	575.07	-105.47	-572.37	0.00	0.00	
5,300.00	7.11	349.61	5,263.36	587.25	-107.71	-584.49	0.00	0.00	
5,400.00	7.11	349.61	5,362.59	599.43	-109.94	-596.61	0.00	0.00	
5,500.00	7.11	349.61	5,461.82	611.60	-112.17	-608.73	0.00	0.00	
5,600.00	7.11	349.61	5,561.05	623.78	-114.41	-620.85	0.00	0.00	
5,700.00	7.11	349.61	5,660.28	635.96	-116.64	-632.97	0.00	0.00	
5,800.00	7.11	349.61	5,759.51	648.14	-118.88	-645.09	0.00	0.00	
5,900.00	7.11	349.61	5,858.74	660.31	-121.11	-657.21	0.00	0.00	
6,000.00	7.11	349.61	5,957.97	672.49	-123.34	-669.33	0.00	0.00	
6,100.00	7.11	349.61	6,057.20	684.67	-125.58	-681.45	0.00	0.00	
6,200.00	7.11	349.61	6,156.43	696.85	-127.81	-693.57	0.00	0.00	
6,300.00	7.11	349.61	6,255.66	709.02	-130.04	-705.69	0.00	0.00	
6,400.00	7.11	349.61	6,354.89	721.20	-132.28	-717.81	0.00	0.00	
6,500.00	7.11	349.61	6,454.12	733.38	-134.51	-729.93	0.00	0.00	
6,600.00	7.11	349.61	6,553.35	745.56	-136.74	-742.05	0.00	0.00	
6,700.00	7.11	349.61	6,652.58	757.73	-138.98	-754.17	0.00	0.00	
6,800.00	7.11	349.61	6,751.82	769.91	-141.21	-766.29	0.00	0.00	
6,900.00	7.11	349.61	6,851.05	782.09	-143.44	-778.41	0.00	0.00	
6,971.36	7.11	349.61	6,921.85	790.78	-145.04	-787.06	0.00	0.00	
7,000.00	4.88	344.62	6,950.34	793.70	-145.68	-789.96	8.00	-7.80	
7,100.00	3.55	201.85	7,050.22	794.92	-147.96	-791.14	8.00	-1.33	
7,200.00	11.38	186.73	7,149.31	782.23	-150.28	-778.39	8.00	7.82	
7,300.00	19.34	183.93	7,245.66	755.87	-152.57	-751.98	8.00	7.97	
7,400.00	27.33	182.73	7,337.40	716.35	-154.81	-712.42	8.00	7.99	
7,500.00	35.32	182.04	7,422.76	664.45	-156.93	-660.48	8.00	7.99	
7,600.00	43.32	181.58	7,500.06	601.17	-158.92	-597.17	8.00	7.99	
7,700.00	51.31	181.24	7,567.80	527.74	-160.71	-523.72	8.00	8.00	
7,800.00	59.31	180.97	7,624.66	445.59	-162.29	-441.56	8.00	8.00	
7,801.34	59.42	180.97	7,625.34	444.44	-162.31	-440.41	8.00	8.00	COSSLETT 1B TPZ
7,900.00	67.31	180.74	7,669.54	356.33	-163.61	-352.30	8.00	8.00	
8,000.00	75.31	180.53	7,701.57	261.69	-164.66	-257.66	8.00	8.00	
8,100.00	83.30	180.34	7,720.11	163.51	-165.41	-159.49	8.00	8.00	
8,183.73	90.00	180.19	7,725.00	79.97	-165.80	-75.96	8.00	8.00	
8,200.00	90.00	180.19	7,725.00	63.70	-165.86	-59.70	0.00	0.00	
8,300.00	90.00	180.19	7,725.00	-36.30	-166.19	40.28	0.00	0.00	
8,400.00	90.00	180.19	7,725.00	-136.30	-166.52	140.26	0.00	0.00	
8,500.00	90.00	180.19	7,725.00	-236.30	-166.85	240.24	0.00	0.00	
8,600.00	90.00	180.19	7,725.00	-336.30	-167.18	340.22	0.00	0.00	
8,700.00	90.00	180.19	7,725.00	-436.30	-167.52	440.20	0.00	0.00	
8,800.00	90.00	180.19	7,725.00	-536.30	-167.85	540.18	0.00	0.00	
8,900.00	90.00	180.19	7,725.00	-636.29	-168.18	640.15	0.00	0.00	
9,000.00	90.00	180.19	7,725.00	-736.29	-168.51	740.13	0.00	0.00	
9,100.00	90.00	180.19	7,725.00	-836.29	-168.85	840.11	0.00	0.00	
9,200.00	90.00	180.19	7,725.00	-936.29	-169.18	940.09	0.00	0.00	
9,300.00	90.00	180.19	7,725.00	-1,036.29	-169.51	1,040.07	0.00	0.00	
9,400.00	90.00	180.19	7,725.00	-1,136.29	-169.84	1,140.05	0.00	0.00	
9,500.00	90.00	180.19	7,725.00	-1,236.29	-170.17	1,240.02	0.00	0.00	
9,600.00	90.00	180.19	7,725.00	-1,336.29	-170.51	1,340.00	0.00	0.00	
9,700.00	90.00	180.19	7,725.00	-1,436.29	-170.84	1,439.98	0.00	0.00	
9,800.00	90.00	180.19	7,725.00	-1,536.29	-171.17	1,539.96	0.00	0.00	
9,900.00	90.00	180.19	7,725.00	-1,636.29	-171.50	1,639.94	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1B-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5196.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5196.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1B-22H-B168	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

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
10,000.00	90.00	180.19	7,725.00	-1,736.29	-171.83	1,739.92	0.00	0.00	
10,100.00	90.00	180.19	7,725.00	-1,836.29	-172.17	1,839.90	0.00	0.00	
10,200.00	90.00	180.19	7,725.00	-1,936.29	-172.50	1,939.87	0.00	0.00	
10,300.00	90.00	180.19	7,725.00	-2,036.29	-172.83	2,039.85	0.00	0.00	
10,400.00	90.00	180.19	7,725.00	-2,136.29	-173.16	2,139.83	0.00	0.00	
10,500.00	90.00	180.19	7,725.00	-2,236.29	-173.50	2,239.81	0.00	0.00	
10,600.00	90.00	180.19	7,725.00	-2,336.29	-173.83	2,339.79	0.00	0.00	
10,700.00	90.00	180.19	7,725.00	-2,436.28	-174.16	2,439.77	0.00	0.00	
10,800.00	90.00	180.19	7,725.00	-2,536.28	-174.49	2,539.75	0.00	0.00	
10,900.00	90.00	180.19	7,725.00	-2,636.28	-174.82	2,639.72	0.00	0.00	
11,000.00	90.00	180.19	7,725.00	-2,736.28	-175.16	2,739.70	0.00	0.00	
11,100.00	90.00	180.19	7,725.00	-2,836.28	-175.49	2,839.68	0.00	0.00	
11,200.00	90.00	180.19	7,725.00	-2,936.28	-175.82	2,939.66	0.00	0.00	
11,300.00	90.00	180.19	7,725.00	-3,036.28	-176.15	3,039.64	0.00	0.00	
11,400.00	90.00	180.19	7,725.00	-3,136.28	-176.48	3,139.62	0.00	0.00	
11,500.00	90.00	180.19	7,725.00	-3,236.28	-176.82	3,239.60	0.00	0.00	
11,600.00	90.00	180.19	7,725.00	-3,336.28	-177.15	3,339.57	0.00	0.00	
11,700.00	90.00	180.19	7,725.00	-3,436.28	-177.48	3,439.55	0.00	0.00	
11,800.00	90.00	180.19	7,725.00	-3,536.28	-177.81	3,539.53	0.00	0.00	
11,900.00	90.00	180.19	7,725.00	-3,636.28	-178.15	3,639.51	0.00	0.00	
12,000.00	90.00	180.19	7,725.00	-3,736.28	-178.48	3,739.49	0.00	0.00	
12,100.00	90.00	180.19	7,725.00	-3,836.28	-178.81	3,839.47	0.00	0.00	
12,200.00	90.00	180.19	7,725.00	-3,936.28	-179.14	3,939.45	0.00	0.00	
12,300.00	90.00	180.19	7,725.00	-4,036.28	-179.47	4,039.42	0.00	0.00	
12,400.00	90.00	180.19	7,725.00	-4,136.28	-179.81	4,139.40	0.00	0.00	
12,500.00	90.00	180.19	7,725.00	-4,236.27	-180.14	4,239.38	0.00	0.00	
12,600.00	90.00	180.19	7,725.00	-4,336.27	-180.47	4,339.36	0.00	0.00	
12,700.00	90.00	180.19	7,725.00	-4,436.27	-180.80	4,439.34	0.00	0.00	
12,800.00	90.00	180.19	7,725.00	-4,536.27	-181.13	4,539.32	0.00	0.00	
12,900.00	90.00	180.19	7,725.00	-4,636.27	-181.47	4,639.30	0.00	0.00	
13,000.00	90.00	180.19	7,725.00	-4,736.27	-181.80	4,739.27	0.00	0.00	
13,100.00	90.00	180.19	7,725.00	-4,836.27	-182.13	4,839.25	0.00	0.00	
13,200.00	90.00	180.19	7,725.00	-4,936.27	-182.46	4,939.23	0.00	0.00	
13,300.00	90.00	180.19	7,725.00	-5,036.27	-182.80	5,039.21	0.00	0.00	
13,400.00	90.00	180.19	7,725.00	-5,136.27	-183.13	5,139.19	0.00	0.00	
13,500.00	90.00	180.19	7,725.00	-5,236.27	-183.46	5,239.17	0.00	0.00	
13,600.00	90.00	180.19	7,725.00	-5,336.27	-183.79	5,339.14	0.00	0.00	
13,700.00	90.00	180.19	7,725.00	-5,436.27	-184.12	5,439.12	0.00	0.00	
13,800.00	90.00	180.19	7,725.00	-5,536.27	-184.46	5,539.10	0.00	0.00	
13,900.00	90.00	180.19	7,725.00	-5,636.27	-184.79	5,639.08	0.00	0.00	
13,963.73	90.00	180.19	7,725.00	-5,700.00	-185.00	5,702.80	0.00	0.00	
13,983.81	90.00	180.59	7,725.00	-5,720.07	-185.14	5,722.87	2.00	0.00	
14,000.00	90.00	180.59	7,725.00	-5,736.27	-185.30	5,739.06	0.00	0.00	
14,100.00	90.00	180.59	7,725.00	-5,836.26	-186.34	5,839.05	0.00	0.00	
14,200.00	90.00	180.59	7,725.00	-5,936.25	-187.37	5,939.04	0.00	0.00	
14,300.00	90.00	180.59	7,725.00	-6,036.25	-188.40	6,039.03	0.00	0.00	
14,400.00	90.00	180.59	7,725.00	-6,136.24	-189.44	6,139.02	0.00	0.00	
14,500.00	90.00	180.59	7,725.00	-6,236.24	-190.47	6,239.02	0.00	0.00	
14,600.00	90.00	180.59	7,725.00	-6,336.23	-191.50	6,339.01	0.00	0.00	
14,700.00	90.00	180.59	7,725.00	-6,436.23	-192.53	6,439.00	0.00	0.00	
14,800.00	90.00	180.59	7,725.00	-6,536.22	-193.57	6,538.99	0.00	0.00	
14,900.00	90.00	180.59	7,725.00	-6,636.22	-194.60	6,638.98	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1B-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5196.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5196.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1B-22H-B168	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

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	180.59	7,725.00	-6,736.21	-195.63	6,738.97	0.00	0.00	
15,100.00	90.00	180.59	7,725.00	-6,836.21	-196.67	6,838.96	0.00	0.00	
15,200.00	90.00	180.59	7,725.00	-6,936.20	-197.70	6,938.95	0.00	0.00	
15,300.00	90.00	180.59	7,725.00	-7,036.20	-198.73	7,038.94	0.00	0.00	
15,400.00	90.00	180.59	7,725.00	-7,136.19	-199.76	7,138.93	0.00	0.00	
15,500.00	90.00	180.59	7,725.00	-7,236.19	-200.80	7,238.92	0.00	0.00	
15,600.00	90.00	180.59	7,725.00	-7,336.18	-201.83	7,338.91	0.00	0.00	
15,700.00	90.00	180.59	7,725.00	-7,436.17	-202.86	7,438.90	0.00	0.00	
15,800.00	90.00	180.59	7,725.00	-7,536.17	-203.90	7,538.89	0.00	0.00	
15,900.00	90.00	180.59	7,725.00	-7,636.16	-204.93	7,638.88	0.00	0.00	
16,000.00	90.00	180.59	7,725.00	-7,736.16	-205.96	7,738.87	0.00	0.00	
16,100.00	90.00	180.59	7,725.00	-7,836.15	-206.99	7,838.86	0.00	0.00	
16,200.00	90.00	180.59	7,725.00	-7,936.15	-208.03	7,938.86	0.00	0.00	
16,300.00	90.00	180.59	7,725.00	-8,036.14	-209.06	8,038.85	0.00	0.00	
16,400.00	90.00	180.59	7,725.00	-8,136.14	-210.09	8,138.84	0.00	0.00	
16,500.00	90.00	180.59	7,725.00	-8,236.13	-211.13	8,238.83	0.00	0.00	
16,600.00	90.00	180.59	7,725.00	-8,336.13	-212.16	8,338.82	0.00	0.00	
16,700.00	90.00	180.59	7,725.00	-8,436.12	-213.19	8,438.81	0.00	0.00	
16,800.00	90.00	180.59	7,725.00	-8,536.12	-214.22	8,538.80	0.00	0.00	
16,900.00	90.00	180.59	7,725.00	-8,636.11	-215.26	8,638.79	0.00	0.00	
17,000.00	90.00	180.59	7,725.00	-8,736.11	-216.29	8,738.78	0.00	0.00	
17,100.00	90.00	180.59	7,725.00	-8,836.10	-217.32	8,838.77	0.00	0.00	
17,200.00	90.00	180.59	7,725.00	-8,936.09	-218.36	8,938.76	0.00	0.00	
17,300.00	90.00	180.59	7,725.00	-9,036.09	-219.39	9,038.75	0.00	0.00	
17,400.00	90.00	180.59	7,725.00	-9,136.08	-220.42	9,138.74	0.00	0.00	
17,454.92	90.00	180.59	7,725.00	-9,191.00	-220.99	9,193.66	0.00	0.00	COSSLETT 1B PBHL

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
COSSLETT 1B PBHL - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	7,725.00	-9,191.00	-220.99	1,249,146.15	3,143,169.70	40.016160	-104.988836
COSSLETT 1B TPZ - plan hits target center - Point	0.00	0.00	7,625.34	444.44	-162.31	1,258,781.77	3,143,172.76	40.042611	-104.988627