

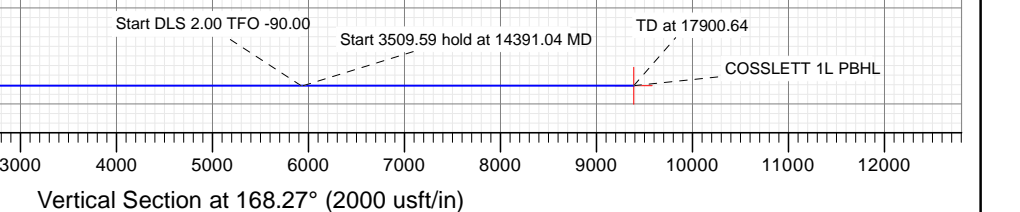
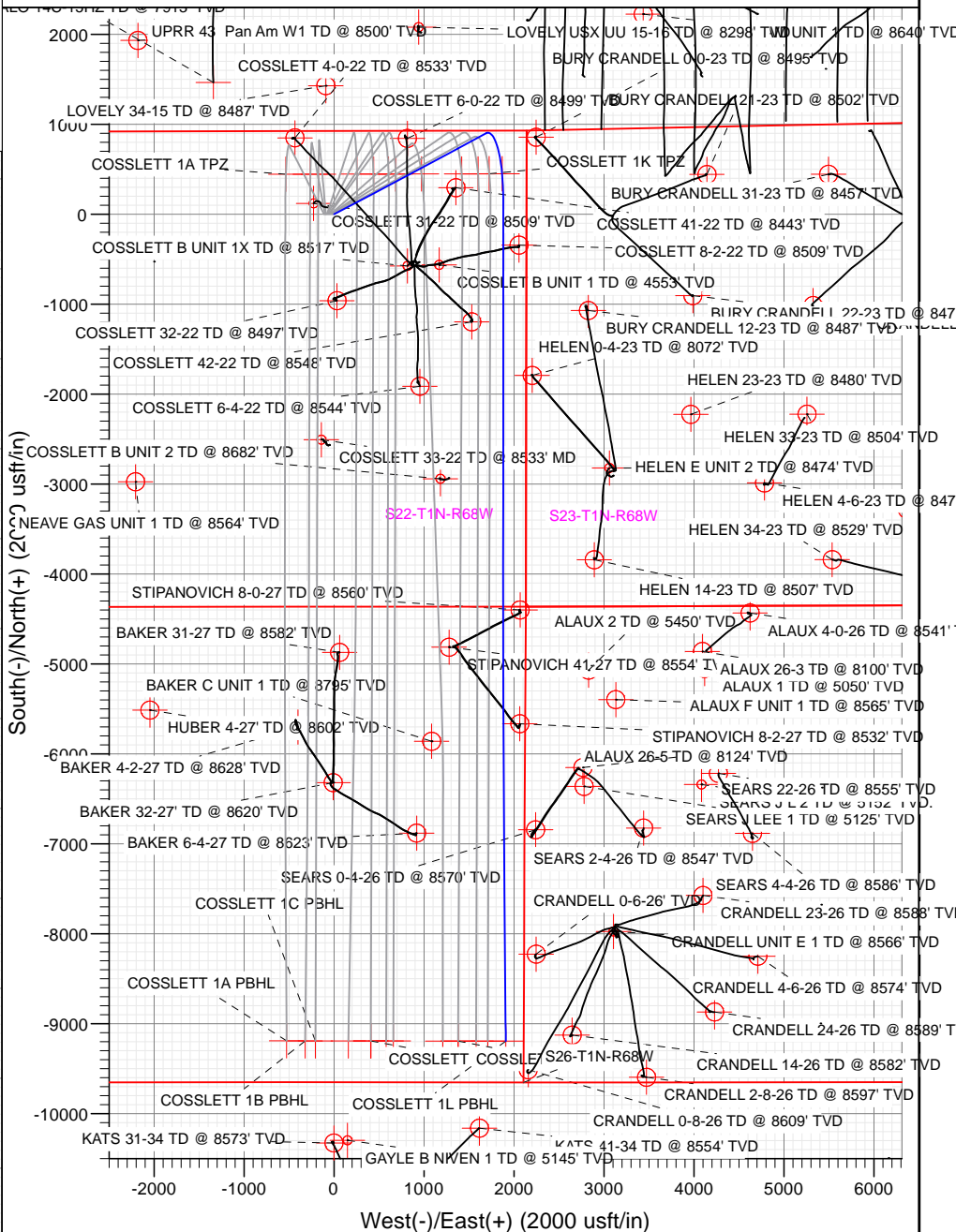
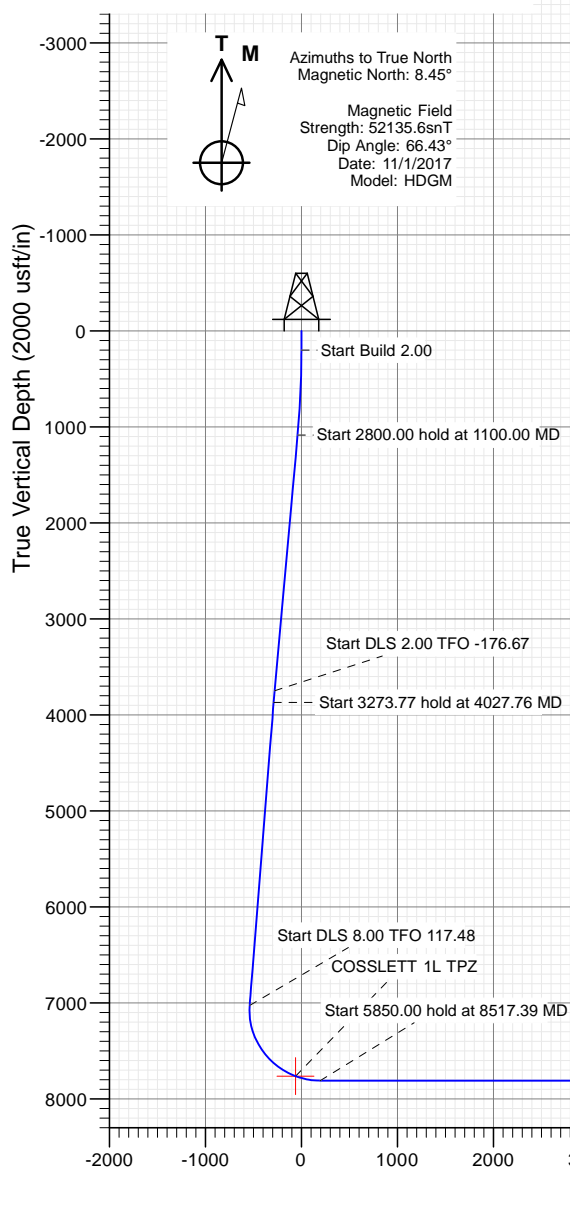


SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	1100.00	18.00	62.20	1085.27	65.39	124.03	2.00	62.20	-38.81	
4	3900.00	18.00	62.20	3748.23	468.93	889.41	0.00	0.00	-278.30	
5	4027.76	15.45	61.64	3870.57	486.22	921.85	2.00	-176.67	-288.63	
6	7301.53	15.45	61.64	7026.04	900.44	1689.33	0.00	0.00	-538.15	
7	8517.39	90.00	180.00	7810.00	190.00	1880.00	8.00	117.48	196.22	
8	14367.39	90.00	180.00	7810.00	-5660.00	1880.00	0.00	0.00	5924.02	
9	14391.04	90.00	179.53	7810.00	-5683.65	1880.10	2.00	-90.00	5947.20	
10	17900.64	90.00	179.53	7810.00	-9193.12	1909.07	0.00	0.00	9389.26	COSSLETT 1L PBHL

PLAN #3
COSSLETT 1L-22H-B168
17XXX; LR
23' KB @ 5197.00usft
Ground Level @ 5174.00
North American Datum 1983
Well COSSLETT 1L-22H-B168, True North

Type TD	Target No Target (Freehand)	Azimuth 168.27	Origin Type Slot	N/S 0.00	E/W 0.00	From TVD 0.00
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
COSSLETT 1L TPZ	7762.12	451.06	1868.35	40.04627	-104.98107	
COSSLETT 1L PBHL	7810.00	-9193.12	1909.07	40.01262	-104.980874	

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



CATHEDRAL

WELL DETAILS: COSSLETT 1L-22H-B168

			5174.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1258338.13	3143437.58	40.041389	-104.987690



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1L-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5197.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5197.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1L-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 1L-22H-B168					
Well Position	+N/-S	0.00 usft	Northing:	1,258,338.13 usft	Latitude:	40.041389
	+E/-W	0.00 usft	Easting:	3,143,437.58 usft	Longitude:	-104.987690
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	5,174.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	11/1/2017	8.45	66.43	52,135.60000000

Design	PLAN #3			
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	168.27

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	
1,100.00	18.00	62.20	1,085.27	65.39	124.03	2.00	2.00	0.00	62.20	
3,900.00	18.00	62.20	3,748.23	468.93	889.41	0.00	0.00	0.00	0.00	
4,027.76	15.45	61.64	3,870.57	486.22	921.85	2.00	-2.00	-0.44	-176.67	
7,301.53	15.45	61.64	7,026.04	900.44	1,689.33	0.00	0.00	0.00	0.00	
8,517.39	90.00	180.00	7,810.00	190.00	1,880.00	8.00	6.13	9.73	117.48	
14,367.39	90.00	180.00	7,810.00	-5,660.00	1,880.00	0.00	0.00	0.00	0.00	
14,391.04	90.00	179.53	7,810.00	-5,683.65	1,880.10	2.00	0.00	-2.00	-90.00	
17,900.64	90.00	179.53	7,810.00	-9,193.12	1,909.07	0.00	0.00	0.00	0.00	COSSLETT 1L PBHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1L-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5197.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5197.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1L-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	Start Build 2.00
300.00	2.00	62.20	299.98	0.81	1.54	-0.48	2.00	2.00	
400.00	4.00	62.20	399.84	3.25	6.17	-1.93	2.00	2.00	
500.00	6.00	62.20	499.45	7.32	13.88	-4.34	2.00	2.00	
600.00	8.00	62.20	598.70	13.00	24.66	-7.72	2.00	2.00	
700.00	10.00	62.20	697.47	20.30	38.50	-12.05	2.00	2.00	
800.00	12.00	62.20	795.62	29.20	55.38	-17.33	2.00	2.00	
900.00	14.00	62.20	893.06	39.69	75.27	-23.55	2.00	2.00	
1,000.00	16.00	62.20	989.64	51.76	98.17	-30.72	2.00	2.00	
1,100.00	18.00	62.20	1,085.27	65.39	124.03	-38.81	2.00	2.00	Start 2800.00 hold at 1100.00 MD
1,200.00	18.00	62.20	1,180.37	79.81	151.36	-47.36	0.00	0.00	
1,300.00	18.00	62.20	1,275.48	94.22	178.70	-55.92	0.00	0.00	
1,400.00	18.00	62.20	1,370.59	108.63	206.03	-64.47	0.00	0.00	
1,500.00	18.00	62.20	1,465.69	123.04	233.37	-73.02	0.00	0.00	
1,600.00	18.00	62.20	1,560.80	137.45	260.70	-81.57	0.00	0.00	
1,700.00	18.00	62.20	1,655.90	151.87	288.04	-90.13	0.00	0.00	
1,800.00	18.00	62.20	1,751.01	166.28	315.37	-98.68	0.00	0.00	
1,900.00	18.00	62.20	1,846.11	180.69	342.71	-107.23	0.00	0.00	
2,000.00	18.00	62.20	1,941.22	195.10	370.05	-115.79	0.00	0.00	
2,100.00	18.00	62.20	2,036.32	209.51	397.38	-124.34	0.00	0.00	
2,200.00	18.00	62.20	2,131.43	223.93	424.72	-132.89	0.00	0.00	
2,300.00	18.00	62.20	2,226.54	238.34	452.05	-141.45	0.00	0.00	
2,400.00	18.00	62.20	2,321.64	252.75	479.39	-150.00	0.00	0.00	
2,500.00	18.00	62.20	2,416.75	267.16	506.72	-158.55	0.00	0.00	
2,600.00	18.00	62.20	2,511.85	281.58	534.06	-167.11	0.00	0.00	
2,700.00	18.00	62.20	2,606.96	295.99	561.39	-175.66	0.00	0.00	
2,800.00	18.00	62.20	2,702.06	310.40	588.73	-184.21	0.00	0.00	
2,900.00	18.00	62.20	2,797.17	324.81	616.06	-192.77	0.00	0.00	
3,000.00	18.00	62.20	2,892.28	339.22	643.40	-201.32	0.00	0.00	
3,100.00	18.00	62.20	2,987.38	353.64	670.73	-209.87	0.00	0.00	
3,200.00	18.00	62.20	3,082.49	368.05	698.07	-218.43	0.00	0.00	
3,300.00	18.00	62.20	3,177.59	382.46	725.40	-226.98	0.00	0.00	
3,400.00	18.00	62.20	3,272.70	396.87	752.74	-235.53	0.00	0.00	
3,500.00	18.00	62.20	3,367.80	411.28	780.07	-244.09	0.00	0.00	
3,600.00	18.00	62.20	3,462.91	425.70	807.41	-252.64	0.00	0.00	
3,700.00	18.00	62.20	3,558.02	440.11	834.74	-261.19	0.00	0.00	
3,800.00	18.00	62.20	3,653.12	454.52	862.08	-269.74	0.00	0.00	
3,900.00	18.00	62.20	3,748.23	468.93	889.41	-278.30	0.00	0.00	Start DLS 2.00 TFO -176.67
4,000.00	16.00	61.78	3,843.85	482.66	915.23	-286.49	2.00	-2.00	
4,027.76	15.45	61.64	3,870.57	486.22	921.85	-288.63	2.00	-2.00	Start 3273.77 hold at 4027.76 MD
4,100.00	15.45	61.64	3,940.20	495.37	938.79	-294.14	0.00	0.00	
4,200.00	15.45	61.64	4,036.59	508.02	962.23	-301.76	0.00	0.00	
4,300.00	15.45	61.64	4,132.97	520.67	985.67	-309.38	0.00	0.00	
4,400.00	15.45	61.64	4,229.36	533.32	1,009.12	-317.00	0.00	0.00	
4,500.00	15.45	61.64	4,325.75	545.98	1,032.56	-324.62	0.00	0.00	
4,600.00	15.45	61.64	4,422.13	558.63	1,056.00	-332.25	0.00	0.00	
4,700.00	15.45	61.64	4,518.52	571.28	1,079.45	-339.87	0.00	0.00	
4,800.00	15.45	61.64	4,614.91	583.93	1,102.89	-347.49	0.00	0.00	
4,900.00	15.45	61.64	4,711.29	596.59	1,126.33	-355.11	0.00	0.00	
5,000.00	15.45	61.64	4,807.68	609.24	1,149.78	-362.73	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1L-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5197.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5197.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1L-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	15.45	61.64	4,904.07	621.89	1,173.22	-370.36	0.00	0.00	
5,200.00	15.45	61.64	5,000.45	634.54	1,196.66	-377.98	0.00	0.00	
5,300.00	15.45	61.64	5,096.84	647.20	1,220.11	-385.60	0.00	0.00	
5,400.00	15.45	61.64	5,193.22	659.85	1,243.55	-393.22	0.00	0.00	
5,500.00	15.45	61.64	5,289.61	672.50	1,266.99	-400.84	0.00	0.00	
5,600.00	15.45	61.64	5,386.00	685.15	1,290.43	-408.46	0.00	0.00	
5,700.00	15.45	61.64	5,482.38	697.81	1,313.88	-416.09	0.00	0.00	
5,800.00	15.45	61.64	5,578.77	710.46	1,337.32	-423.71	0.00	0.00	
5,900.00	15.45	61.64	5,675.16	723.11	1,360.76	-431.33	0.00	0.00	
6,000.00	15.45	61.64	5,771.54	735.76	1,384.21	-438.95	0.00	0.00	
6,100.00	15.45	61.64	5,867.93	748.42	1,407.65	-446.57	0.00	0.00	
6,200.00	15.45	61.64	5,964.32	761.07	1,431.09	-454.19	0.00	0.00	
6,300.00	15.45	61.64	6,060.70	773.72	1,454.54	-461.82	0.00	0.00	
6,400.00	15.45	61.64	6,157.09	786.37	1,477.98	-469.44	0.00	0.00	
6,500.00	15.45	61.64	6,253.47	799.03	1,501.42	-477.06	0.00	0.00	
6,600.00	15.45	61.64	6,349.86	811.68	1,524.87	-484.68	0.00	0.00	
6,700.00	15.45	61.64	6,446.25	824.33	1,548.31	-492.30	0.00	0.00	
6,800.00	15.45	61.64	6,542.63	836.98	1,571.75	-499.92	0.00	0.00	
6,900.00	15.45	61.64	6,639.02	849.64	1,595.19	-507.55	0.00	0.00	
7,000.00	15.45	61.64	6,735.41	862.29	1,618.64	-515.17	0.00	0.00	
7,100.00	15.45	61.64	6,831.79	874.94	1,642.08	-522.79	0.00	0.00	
7,200.00	15.45	61.64	6,928.18	887.60	1,665.52	-530.41	0.00	0.00	
7,300.00	15.45	61.64	7,024.57	900.25	1,688.97	-538.03	0.00	0.00	
7,301.53	15.45	61.64	7,026.04	900.44	1,689.33	-538.15	0.00	0.00	Start DLS 8.00 TFO 117.48
7,400.00	13.68	92.57	7,121.48	906.16	1,712.54	-539.03	8.00	-1.79	
7,500.00	16.11	122.64	7,218.26	898.13	1,736.08	-526.38	8.00	2.43	
7,600.00	21.39	141.61	7,313.01	876.32	1,759.12	-500.34	8.00	5.28	
7,700.00	27.94	152.71	7,403.88	841.15	1,781.22	-461.41	8.00	6.55	
7,800.00	35.06	159.73	7,489.12	793.30	1,801.95	-410.35	8.00	7.12	
7,900.00	42.47	164.59	7,567.05	733.72	1,820.91	-348.15	8.00	7.40	
8,000.00	50.02	168.23	7,636.17	663.55	1,837.72	-276.03	8.00	7.56	
8,100.00	57.67	171.15	7,695.13	584.16	1,852.06	-195.39	8.00	7.65	
8,200.00	65.38	173.60	7,742.78	497.10	1,863.65	-107.79	8.00	7.70	
8,250.17	69.26	174.71	7,762.12	451.06	1,868.36	-61.75	8.00	7.73	COSSLETT 1L TPZ NEW
8,300.00	73.12	175.77	7,778.19	404.07	1,872.26	-14.95	8.00	7.75	
8,400.00	80.88	177.76	7,800.67	306.87	1,877.73	81.34	8.00	7.76	
8,500.00	88.65	179.67	7,809.79	207.39	1,879.95	179.19	8.00	7.77	
8,517.39	90.00	180.00	7,810.00	190.00	1,880.00	196.22	8.00	7.77	Start 5850.00 hold at 8517.39 MD
8,600.00	90.00	180.00	7,810.00	107.39	1,880.00	277.10	0.00	0.00	
8,700.00	90.00	180.00	7,810.00	7.39	1,880.00	375.02	0.00	0.00	
8,800.00	90.00	180.00	7,810.00	-92.61	1,880.00	472.93	0.00	0.00	
8,900.00	90.00	180.00	7,810.00	-192.61	1,880.00	570.84	0.00	0.00	
9,000.00	90.00	180.00	7,810.00	-292.61	1,880.00	668.75	0.00	0.00	
9,100.00	90.00	180.00	7,810.00	-392.61	1,880.00	766.66	0.00	0.00	
9,200.00	90.00	180.00	7,810.00	-492.61	1,880.00	864.57	0.00	0.00	
9,300.00	90.00	180.00	7,810.00	-592.61	1,880.00	962.48	0.00	0.00	
9,400.00	90.00	180.00	7,810.00	-692.61	1,880.00	1,060.39	0.00	0.00	
9,500.00	90.00	180.00	7,810.00	-792.61	1,880.00	1,158.30	0.00	0.00	
9,600.00	90.00	180.00	7,810.00	-892.61	1,880.00	1,256.22	0.00	0.00	
9,700.00	90.00	180.00	7,810.00	-992.61	1,880.00	1,354.13	0.00	0.00	
9,800.00	90.00	180.00	7,810.00	-1,092.61	1,880.00	1,452.04	0.00	0.00	
9,900.00	90.00	180.00	7,810.00	-1,192.61	1,880.00	1,549.95	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1L-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5197.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5197.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1L-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	180.00	7,810.00	-1,292.61	1,880.00	1,647.86	0.00	0.00	
10,100.00	90.00	180.00	7,810.00	-1,392.61	1,880.00	1,745.77	0.00	0.00	
10,200.00	90.00	180.00	7,810.00	-1,492.61	1,880.00	1,843.68	0.00	0.00	
10,300.00	90.00	180.00	7,810.00	-1,592.61	1,880.00	1,941.59	0.00	0.00	
10,400.00	90.00	180.00	7,810.00	-1,692.61	1,880.00	2,039.50	0.00	0.00	
10,500.00	90.00	180.00	7,810.00	-1,792.61	1,880.00	2,137.42	0.00	0.00	
10,600.00	90.00	180.00	7,810.00	-1,892.61	1,880.00	2,235.33	0.00	0.00	
10,700.00	90.00	180.00	7,810.00	-1,992.61	1,880.00	2,333.24	0.00	0.00	
10,800.00	90.00	180.00	7,810.00	-2,092.61	1,880.00	2,431.15	0.00	0.00	
10,900.00	90.00	180.00	7,810.00	-2,192.61	1,880.00	2,529.06	0.00	0.00	
11,000.00	90.00	180.00	7,810.00	-2,292.61	1,880.00	2,626.97	0.00	0.00	
11,100.00	90.00	180.00	7,810.00	-2,392.61	1,880.00	2,724.88	0.00	0.00	
11,200.00	90.00	180.00	7,810.00	-2,492.61	1,880.00	2,822.79	0.00	0.00	
11,300.00	90.00	180.00	7,810.00	-2,592.61	1,880.00	2,920.70	0.00	0.00	
11,400.00	90.00	180.00	7,810.00	-2,692.61	1,880.00	3,018.62	0.00	0.00	
11,500.00	90.00	180.00	7,810.00	-2,792.61	1,880.00	3,116.53	0.00	0.00	
11,600.00	90.00	180.00	7,810.00	-2,892.61	1,880.00	3,214.44	0.00	0.00	
11,700.00	90.00	180.00	7,810.00	-2,992.61	1,880.00	3,312.35	0.00	0.00	
11,800.00	90.00	180.00	7,810.00	-3,092.61	1,880.00	3,410.26	0.00	0.00	
11,900.00	90.00	180.00	7,810.00	-3,192.61	1,880.00	3,508.17	0.00	0.00	
12,000.00	90.00	180.00	7,810.00	-3,292.61	1,880.00	3,606.08	0.00	0.00	
12,100.00	90.00	180.00	7,810.00	-3,392.61	1,880.00	3,703.99	0.00	0.00	
12,200.00	90.00	180.00	7,810.00	-3,492.61	1,880.00	3,801.91	0.00	0.00	
12,300.00	90.00	180.00	7,810.00	-3,592.61	1,880.00	3,899.82	0.00	0.00	
12,400.00	90.00	180.00	7,810.00	-3,692.61	1,880.00	3,997.73	0.00	0.00	
12,500.00	90.00	180.00	7,810.00	-3,792.61	1,880.00	4,095.64	0.00	0.00	
12,600.00	90.00	180.00	7,810.00	-3,892.61	1,880.00	4,193.55	0.00	0.00	
12,700.00	90.00	180.00	7,810.00	-3,992.61	1,880.00	4,291.46	0.00	0.00	
12,800.00	90.00	180.00	7,810.00	-4,092.61	1,880.00	4,389.37	0.00	0.00	
12,900.00	90.00	180.00	7,810.00	-4,192.61	1,880.00	4,487.28	0.00	0.00	
13,000.00	90.00	180.00	7,810.00	-4,292.61	1,880.00	4,585.19	0.00	0.00	
13,100.00	90.00	180.00	7,810.00	-4,392.61	1,880.00	4,683.11	0.00	0.00	
13,200.00	90.00	180.00	7,810.00	-4,492.61	1,880.00	4,781.02	0.00	0.00	
13,300.00	90.00	180.00	7,810.00	-4,592.61	1,880.00	4,878.93	0.00	0.00	
13,400.00	90.00	180.00	7,810.00	-4,692.61	1,880.00	4,976.84	0.00	0.00	
13,500.00	90.00	180.00	7,810.00	-4,792.61	1,880.00	5,074.75	0.00	0.00	
13,600.00	90.00	180.00	7,810.00	-4,892.61	1,880.00	5,172.66	0.00	0.00	
13,700.00	90.00	180.00	7,810.00	-4,992.61	1,880.00	5,270.57	0.00	0.00	
13,800.00	90.00	180.00	7,810.00	-5,092.61	1,880.00	5,368.48	0.00	0.00	
13,900.00	90.00	180.00	7,810.00	-5,192.61	1,880.00	5,466.39	0.00	0.00	
14,000.00	90.00	180.00	7,810.00	-5,292.61	1,880.00	5,564.31	0.00	0.00	
14,100.00	90.00	180.00	7,810.00	-5,392.61	1,880.00	5,662.22	0.00	0.00	
14,200.00	90.00	180.00	7,810.00	-5,492.61	1,880.00	5,760.13	0.00	0.00	
14,300.00	90.00	180.00	7,810.00	-5,592.61	1,880.00	5,858.04	0.00	0.00	
14,367.39	90.00	180.00	7,810.00	-5,660.00	1,880.00	5,924.02	0.00	0.00	Start DLS 2.00 TFO -90.00
14,391.04	90.00	179.53	7,810.00	-5,683.65	1,880.10	5,947.20	2.00	0.00	Start 3509.59 hold at 14391.04 MD
14,400.00	90.00	179.53	7,810.00	-5,692.61	1,880.17	5,955.98	0.00	0.00	
14,500.00	90.00	179.53	7,810.00	-5,792.61	1,881.00	6,054.06	0.00	0.00	
14,600.00	90.00	179.53	7,810.00	-5,892.60	1,881.82	6,152.14	0.00	0.00	
14,700.00	90.00	179.53	7,810.00	-5,992.60	1,882.65	6,250.21	0.00	0.00	
14,800.00	90.00	179.53	7,810.00	-6,092.60	1,883.47	6,348.29	0.00	0.00	
14,900.00	90.00	179.53	7,810.00	-6,192.59	1,884.30	6,446.36	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1L-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5197.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5197.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1L-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	179.53	7,810.00	-6,292.59	1,885.13	6,544.44	0.00	0.00	
15,100.00	90.00	179.53	7,810.00	-6,392.59	1,885.95	6,642.51	0.00	0.00	
15,200.00	90.00	179.53	7,810.00	-6,492.58	1,886.78	6,740.59	0.00	0.00	
15,300.00	90.00	179.53	7,810.00	-6,592.58	1,887.60	6,838.66	0.00	0.00	
15,400.00	90.00	179.53	7,810.00	-6,692.57	1,888.43	6,936.74	0.00	0.00	
15,500.00	90.00	179.53	7,810.00	-6,792.57	1,889.25	7,034.82	0.00	0.00	
15,600.00	90.00	179.53	7,810.00	-6,892.57	1,890.08	7,132.89	0.00	0.00	
15,700.00	90.00	179.53	7,810.00	-6,992.56	1,890.91	7,230.97	0.00	0.00	
15,800.00	90.00	179.53	7,810.00	-7,092.56	1,891.73	7,329.04	0.00	0.00	
15,900.00	90.00	179.53	7,810.00	-7,192.56	1,892.56	7,427.12	0.00	0.00	
16,000.00	90.00	179.53	7,810.00	-7,292.55	1,893.38	7,525.19	0.00	0.00	
16,100.00	90.00	179.53	7,810.00	-7,392.55	1,894.21	7,623.27	0.00	0.00	
16,200.00	90.00	179.53	7,810.00	-7,492.55	1,895.03	7,721.35	0.00	0.00	
16,300.00	90.00	179.53	7,810.00	-7,592.54	1,895.86	7,819.42	0.00	0.00	
16,400.00	90.00	179.53	7,810.00	-7,692.54	1,896.68	7,917.50	0.00	0.00	
16,500.00	90.00	179.53	7,810.00	-7,792.54	1,897.51	8,015.57	0.00	0.00	
16,600.00	90.00	179.53	7,810.00	-7,892.53	1,898.34	8,113.65	0.00	0.00	
16,700.00	90.00	179.53	7,810.00	-7,992.53	1,899.16	8,211.72	0.00	0.00	
16,800.00	90.00	179.53	7,810.00	-8,092.53	1,899.99	8,309.80	0.00	0.00	
16,900.00	90.00	179.53	7,810.00	-8,192.52	1,900.81	8,407.88	0.00	0.00	
17,000.00	90.00	179.53	7,810.00	-8,292.52	1,901.64	8,505.95	0.00	0.00	
17,100.00	90.00	179.53	7,810.00	-8,392.52	1,902.46	8,604.03	0.00	0.00	
17,200.00	90.00	179.53	7,810.00	-8,492.51	1,903.29	8,702.10	0.00	0.00	
17,300.00	90.00	179.53	7,810.00	-8,592.51	1,904.12	8,800.18	0.00	0.00	
17,400.00	90.00	179.53	7,810.00	-8,692.51	1,904.94	8,898.25	0.00	0.00	
17,500.00	90.00	179.53	7,810.00	-8,792.50	1,905.77	8,996.33	0.00	0.00	
17,600.00	90.00	179.53	7,810.00	-8,892.50	1,906.59	9,094.41	0.00	0.00	
17,700.00	90.00	179.53	7,810.00	-8,992.50	1,907.42	9,192.48	0.00	0.00	
17,800.00	90.00	179.53	7,810.00	-9,092.49	1,908.24	9,290.56	0.00	0.00	
17,900.00	90.00	179.53	7,810.00	-9,192.49	1,909.07	9,388.63	0.00	0.00	
17,900.64	90.00	179.53	7,810.00	-9,193.12	1,909.07	9,389.26	0.00	0.00	TD at 17900.64 - COSSLETT 1L PBHL

Targets									
Target Name									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
COSSLETT 1L TPZ NEV	0.00	0.00	7,762.12	451.06	1,868.35	1,258,799.98	3,145,303.30	40.042627	-104.981017
- plan hits target center									
- Point									
COSSLETT 1L PBHL	0.00	0.00	7,810.00	-9,193.12	1,909.07	1,249,156.19	3,145,399.74	40.016152	-104.980874
- plan hits target center									
- Point									

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well COSSLETT 1L-22H-B168
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5197.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5197.00usft
Site:	S22-T1N-R68W	North Reference:	True
Well:	COSSLETT 1L-22H-B168	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.00	200.00	0.00	0.00	Start Build 2.00
1,100.00	1,085.27	65.39	124.03	Start 2800.00 hold at 1100.00 MD
3,900.00	3,748.23	468.93	889.41	Start DLS 2.00 TFO -176.67
4,027.76	3,870.57	486.22	921.85	Start 3273.77 hold at 4027.76 MD
7,301.53	7,026.04	900.44	1,689.33	Start DLS 8.00 TFO 117.48
8,517.39	7,810.00	190.00	1,880.00	Start 5850.00 hold at 8517.39 MD
14,367.39	7,810.00	-5,660.00	1,880.00	Start DLS 2.00 TFO -90.00
14,391.04	7,810.00	-5,683.65	1,880.10	Start 3509.59 hold at 14391.04 MD
17,900.64	7,810.00	-9,193.12	1,909.07	TD at 17900.64