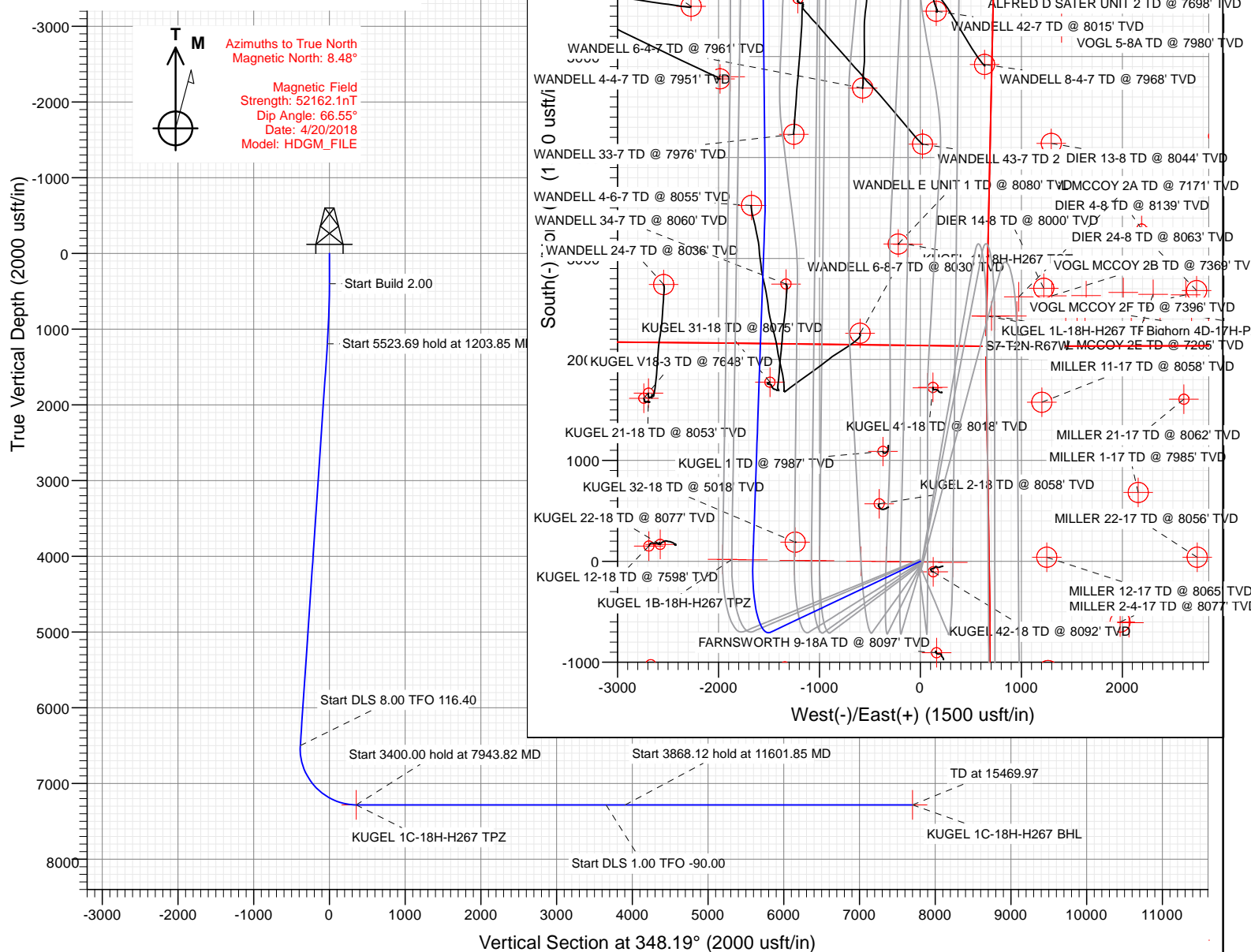




SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	
3	1203.85	16.08	244.68	1193.34	-47.92	-101.28	2.00	244.68	-26.17	
4	6727.54	16.08	244.68	6501.01	-702.09	-1484.01	0.00	0.00	-383.42	
5	7943.82	90.00	2.00	7283.00	14.85	-1659.33	8.00	116.40	354.23	KUGEL 1C-18H-H267 TPZ
6	11343.82	90.00	2.00	7283.00	3412.78	-1540.68	0.00	0.00	3655.90	
7	11601.85	90.00	359.42	7283.00	3670.78	-1537.48	1.00	-90.00	3907.78	
8	15469.97	90.00	359.42	7283.00	7538.70	-1576.66	0.00	0.00	7701.81	KUGEL 1C-18H-H267 BHL

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KUGEL 1C-18H-H267 BHL	7283.00	7538.70	-1576.66	40.160465	-104.932098
KUGEL 1C-18H-H267 TP2	7283.00	14.85	-1659.33	40.139811	-104.932392

Project: DJ BASIN  
Site: S18-T2N-R67W (KUGEL)  
Well: KUGEL 1C-18H-H267  
Wellbore: OH  
Design: PLAN #2 (6.11)



# CATHEDRAL

WELL DETAILS: KUGEL 1C-18H-H267

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1294280.49	3160349.73	40.139770	-104.926457	KUGEL 1C



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well KUGEL 1C-18H-H267 - Slot KUGEL 1C
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site:</b>	S18-T2N-R67W (KUGEL)	<b>North Reference:</b>	True
<b>Well:</b>	KUGEL 1C-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2 (6.11)		

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

Site		S18-T2N-R67W (KUGEL)			
Site Position:		Northing:	1,294,180.28 usft	Latitude:	40.139495
From:	Lat/Long	Easting:	3,160,365.72 usft	Longitude:	-104.926402
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.37 °

Well	KUGEL 1C-18H-H267 - Slot KUGEL 1C					
Well Position	+N/-S	0.00 usft	Northing:	1,294,280.49 usft	Latitude:	40.139770
	+E/-W	0.00 usft	Easting:	3,160,349.73 usft	Longitude:	-104.926457
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,954.00 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	HDGM_FILE	4/20/2018	8.48	66.55	52,162.10000000

<b>Design</b>	PLAN #2 (6.11)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	348.19

<b>Plan Sections</b>										
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	
1,203.85	16.08	244.68	1,193.34	-47.92	-101.28	2.00	2.00	0.00	244.68	
6,727.54	16.08	244.68	6,501.01	-702.09	-1,484.01	0.00	0.00	0.00	0.00	
7,943.82	90.00	2.00	7,283.00	14.85	-1,659.33	8.00	6.08	9.65	116.40	KUGEL 1C-18H-H267
11,343.82	90.00	2.00	7,283.00	3,412.78	-1,540.68	0.00	0.00	0.00	0.00	
11,601.85	90.00	359.42	7,283.00	3,670.78	-1,537.48	1.00	0.00	-1.00	-90.00	
15,469.97	90.00	359.42	7,283.00	7,538.70	-1,576.66	0.00	0.00	0.00	0.00	KUGEL 1C-18H-H267

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well KUGEL 1C-18H-H267 - Slot KUGEL 1C
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site:</b>	S18-T2N-R67W (KUGEL)	<b>North Reference:</b>	True
<b>Well:</b>	KUGEL 1C-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2 (6.11)		

### 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	244.68	499.98	-0.75	-1.58	-0.41	2.00	2.00	
600.00	4.00	244.68	599.84	-2.98	-6.31	-1.63	2.00	2.00	
700.00	6.00	244.68	699.45	-6.71	-14.19	-3.67	2.00	2.00	
800.00	8.00	244.68	798.70	-11.92	-25.20	-6.51	2.00	2.00	
900.00	10.00	244.68	897.47	-18.61	-39.34	-10.16	2.00	2.00	
1,000.00	12.00	244.68	995.62	-26.77	-56.59	-14.62	2.00	2.00	
1,100.00	14.00	244.68	1,093.06	-36.39	-76.92	-19.87	2.00	2.00	
1,200.00	16.00	244.68	1,189.64	-47.46	-100.32	-25.92	2.00	2.00	
1,203.85	16.08	244.68	1,193.34	-47.92	-101.28	-26.17	2.00	2.00	
1,300.00	16.08	244.68	1,285.73	-59.30	-125.35	-32.39	0.00	0.00	
1,400.00	16.08	244.68	1,381.82	-71.15	-150.38	-38.85	0.00	0.00	
1,500.00	16.08	244.68	1,477.91	-82.99	-175.41	-45.32	0.00	0.00	
1,600.00	16.08	244.68	1,574.00	-94.83	-200.45	-51.79	0.00	0.00	
1,700.00	16.08	244.68	1,670.09	-106.67	-225.48	-58.26	0.00	0.00	
1,800.00	16.08	244.68	1,766.18	-118.52	-250.51	-64.72	0.00	0.00	
1,900.00	16.08	244.68	1,862.27	-130.36	-275.54	-71.19	0.00	0.00	
2,000.00	16.08	244.68	1,958.36	-142.20	-300.58	-77.66	0.00	0.00	
2,100.00	16.08	244.68	2,054.44	-154.05	-325.61	-84.13	0.00	0.00	
2,200.00	16.08	244.68	2,150.53	-165.89	-350.64	-90.60	0.00	0.00	
2,300.00	16.08	244.68	2,246.62	-177.73	-375.68	-97.06	0.00	0.00	
2,400.00	16.08	244.68	2,342.71	-189.58	-400.71	-103.53	0.00	0.00	
2,500.00	16.08	244.68	2,438.80	-201.42	-425.74	-110.00	0.00	0.00	
2,600.00	16.08	244.68	2,534.89	-213.26	-450.77	-116.47	0.00	0.00	
2,700.00	16.08	244.68	2,630.98	-225.11	-475.81	-122.93	0.00	0.00	
2,800.00	16.08	244.68	2,727.07	-236.95	-500.84	-129.40	0.00	0.00	
2,900.00	16.08	244.68	2,823.16	-248.79	-525.87	-135.87	0.00	0.00	
3,000.00	16.08	244.68	2,919.25	-260.63	-550.91	-142.34	0.00	0.00	
3,100.00	16.08	244.68	3,015.33	-272.48	-575.94	-148.80	0.00	0.00	
3,200.00	16.08	244.68	3,111.42	-284.32	-600.97	-155.27	0.00	0.00	
3,300.00	16.08	244.68	3,207.51	-296.16	-626.00	-161.74	0.00	0.00	
3,400.00	16.08	244.68	3,303.60	-308.01	-651.04	-168.21	0.00	0.00	
3,500.00	16.08	244.68	3,399.69	-319.85	-676.07	-174.68	0.00	0.00	
3,600.00	16.08	244.68	3,495.78	-331.69	-701.10	-181.14	0.00	0.00	
3,700.00	16.08	244.68	3,591.87	-343.54	-726.13	-187.61	0.00	0.00	
3,800.00	16.08	244.68	3,687.96	-355.38	-751.17	-194.08	0.00	0.00	
3,900.00	16.08	244.68	3,784.05	-367.22	-776.20	-200.55	0.00	0.00	
4,000.00	16.08	244.68	3,880.14	-379.06	-801.23	-207.01	0.00	0.00	
4,100.00	16.08	244.68	3,976.23	-390.91	-826.27	-213.48	0.00	0.00	
4,200.00	16.08	244.68	4,072.31	-402.75	-851.30	-219.95	0.00	0.00	
4,300.00	16.08	244.68	4,168.40	-414.59	-876.33	-226.42	0.00	0.00	
4,400.00	16.08	244.68	4,264.49	-426.44	-901.36	-232.89	0.00	0.00	
4,500.00	16.08	244.68	4,360.58	-438.28	-926.40	-239.35	0.00	0.00	
4,600.00	16.08	244.68	4,456.67	-450.12	-951.43	-245.82	0.00	0.00	
4,700.00	16.08	244.68	4,552.76	-461.97	-976.46	-252.29	0.00	0.00	
4,800.00	16.08	244.68	4,648.85	-473.81	-1,001.50	-258.76	0.00	0.00	
4,900.00	16.08	244.68	4,744.94	-485.65	-1,026.53	-265.22	0.00	0.00	
5,000.00	16.08	244.68	4,841.03	-497.50	-1,051.56	-271.69	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 KUGEL 1C-18H-H267 - Slot KUGEL 1C
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site:</b>	S18-T2N-R67W (KUGEL)	<b>North Reference:</b>	True
<b>Well:</b>	KUGEL 1C-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2 (6.11)		

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	16.08	244.68	4,937.12	-509.34	-1,076.59	-278.16	0.00	0.00	
5,200.00	16.08	244.68	5,033.20	-521.18	-1,101.63	-284.63	0.00	0.00	
5,300.00	16.08	244.68	5,129.29	-533.02	-1,126.66	-291.09	0.00	0.00	
5,400.00	16.08	244.68	5,225.38	-544.87	-1,151.69	-297.56	0.00	0.00	
5,500.00	16.08	244.68	5,321.47	-556.71	-1,176.73	-304.03	0.00	0.00	
5,600.00	16.08	244.68	5,417.56	-568.55	-1,201.76	-310.50	0.00	0.00	
5,700.00	16.08	244.68	5,513.65	-580.40	-1,226.79	-316.97	0.00	0.00	
5,800.00	16.08	244.68	5,609.74	-592.24	-1,251.82	-323.43	0.00	0.00	
5,900.00	16.08	244.68	5,705.83	-604.08	-1,276.86	-329.90	0.00	0.00	
6,000.00	16.08	244.68	5,801.92	-615.93	-1,301.89	-336.37	0.00	0.00	
6,100.00	16.08	244.68	5,898.01	-627.77	-1,326.92	-342.84	0.00	0.00	
6,200.00	16.08	244.68	5,994.09	-639.61	-1,351.96	-349.30	0.00	0.00	
6,300.00	16.08	244.68	6,090.18	-651.46	-1,376.99	-355.77	0.00	0.00	
6,400.00	16.08	244.68	6,186.27	-663.30	-1,402.02	-362.24	0.00	0.00	
6,500.00	16.08	244.68	6,282.36	-675.14	-1,427.05	-368.71	0.00	0.00	
6,600.00	16.08	244.68	6,378.45	-686.98	-1,452.09	-375.17	0.00	0.00	
6,700.00	16.08	244.68	6,474.54	-698.83	-1,477.12	-381.64	0.00	0.00	
6,727.54	16.08	244.68	6,501.01	-702.09	-1,484.01	-383.42	0.00	0.00	
6,800.00	14.44	265.95	6,570.96	-707.02	-1,502.11	-384.55	8.00	-2.26	
6,900.00	15.73	296.65	6,667.67	-701.81	-1,526.70	-374.41	8.00	1.30	
7,000.00	20.30	318.18	6,762.84	-682.77	-1,550.43	-350.92	8.00	4.56	
7,100.00	26.49	331.08	6,854.64	-650.28	-1,572.81	-314.53	8.00	6.19	
7,200.00	33.41	339.16	6,941.27	-604.95	-1,593.42	-265.95	8.00	6.92	
7,300.00	40.69	344.68	7,021.05	-547.69	-1,611.86	-206.12	8.00	7.28	
7,400.00	48.17	348.75	7,092.42	-479.59	-1,627.77	-136.21	8.00	7.48	
7,500.00	55.76	351.96	7,153.99	-402.00	-1,640.84	-57.58	8.00	7.59	
7,600.00	63.42	354.64	7,204.58	-316.41	-1,650.81	28.24	8.00	7.66	
7,700.00	71.13	356.98	7,243.18	-224.49	-1,657.49	119.58	8.00	7.70	
7,800.00	78.86	359.11	7,269.06	-128.03	-1,660.75	214.65	8.00	7.73	
7,900.00	86.60	1.13	7,281.70	-28.92	-1,660.53	311.63	8.00	7.75	
7,943.82	90.00	2.00	7,283.00	14.85	-1,659.33	354.23	8.00	7.75	KUGEL 1C-18H-H267 TPZ
8,000.00	90.00	2.00	7,283.00	71.00	-1,657.37	408.79	0.00	0.00	
8,100.00	90.00	2.00	7,283.00	170.94	-1,653.88	505.89	0.00	0.00	
8,200.00	90.00	2.00	7,283.00	270.88	-1,650.39	603.00	0.00	0.00	
8,300.00	90.00	2.00	7,283.00	370.82	-1,646.90	700.11	0.00	0.00	
8,400.00	90.00	2.00	7,283.00	470.76	-1,643.41	797.22	0.00	0.00	
8,500.00	90.00	2.00	7,283.00	570.70	-1,639.92	894.33	0.00	0.00	
8,600.00	90.00	2.00	7,283.00	670.64	-1,636.43	991.44	0.00	0.00	
8,700.00	90.00	2.00	7,283.00	770.58	-1,632.94	1,088.54	0.00	0.00	
8,800.00	90.00	2.00	7,283.00	870.52	-1,629.45	1,185.65	0.00	0.00	
8,900.00	90.00	2.00	7,283.00	970.46	-1,625.96	1,282.76	0.00	0.00	
9,000.00	90.00	2.00	7,283.00	1,070.40	-1,622.47	1,379.87	0.00	0.00	
9,100.00	90.00	2.00	7,283.00	1,170.33	-1,618.98	1,476.98	0.00	0.00	
9,200.00	90.00	2.00	7,283.00	1,270.27	-1,615.49	1,574.08	0.00	0.00	
9,300.00	90.00	2.00	7,283.00	1,370.21	-1,612.00	1,671.19	0.00	0.00	
9,400.00	90.00	2.00	7,283.00	1,470.15	-1,608.51	1,768.30	0.00	0.00	
9,500.00	90.00	2.00	7,283.00	1,570.09	-1,605.02	1,865.41	0.00	0.00	
9,600.00	90.00	2.00	7,283.00	1,670.03	-1,601.53	1,962.52	0.00	0.00	
9,700.00	90.00	2.00	7,283.00	1,769.97	-1,598.04	2,059.63	0.00	0.00	
9,800.00	90.00	2.00	7,283.00	1,869.91	-1,594.56	2,156.73	0.00	0.00	
9,900.00	90.00	2.00	7,283.00	1,969.85	-1,591.07	2,253.84	0.00	0.00	
10,000.00	90.00	2.00	7,283.00	2,069.79	-1,587.58	2,350.95	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 KUGEL 1C-18H-H267 - Slot KUGEL 1C
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site:</b>	S18-T2N-R67W (KUGEL)	<b>North Reference:</b>	True
<b>Well:</b>	KUGEL 1C-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2 (6.11)		

### 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	2.00	7,283.00	2,169.73	-1,584.09	2,448.06	0.00	0.00	
10,200.00	90.00	2.00	7,283.00	2,269.66	-1,580.60	2,545.17	0.00	0.00	
10,300.00	90.00	2.00	7,283.00	2,369.60	-1,577.11	2,642.27	0.00	0.00	
10,400.00	90.00	2.00	7,283.00	2,469.54	-1,573.62	2,739.38	0.00	0.00	
10,500.00	90.00	2.00	7,283.00	2,569.48	-1,570.13	2,836.49	0.00	0.00	
10,600.00	90.00	2.00	7,283.00	2,669.42	-1,566.64	2,933.60	0.00	0.00	
10,700.00	90.00	2.00	7,283.00	2,769.36	-1,563.15	3,030.71	0.00	0.00	
10,800.00	90.00	2.00	7,283.00	2,869.30	-1,559.66	3,127.81	0.00	0.00	
10,900.00	90.00	2.00	7,283.00	2,969.24	-1,556.17	3,224.92	0.00	0.00	
11,000.00	90.00	2.00	7,283.00	3,069.18	-1,552.68	3,322.03	0.00	0.00	
11,100.00	90.00	2.00	7,283.00	3,169.12	-1,549.19	3,419.14	0.00	0.00	
11,200.00	90.00	2.00	7,283.00	3,269.06	-1,545.70	3,516.25	0.00	0.00	
11,300.00	90.00	2.00	7,283.00	3,368.99	-1,542.21	3,613.36	0.00	0.00	
11,343.82	90.00	2.00	7,283.00	3,412.78	-1,540.68	3,655.90	0.00	0.00	
11,400.00	90.00	1.44	7,283.00	3,468.94	-1,538.99	3,710.53	1.00	0.00	
11,500.00	90.00	0.44	7,283.00	3,568.93	-1,537.35	3,808.06	1.00	0.00	
11,600.00	90.00	359.44	7,283.00	3,668.93	-1,537.46	3,905.96	1.00	0.00	
11,601.85	90.00	359.42	7,283.00	3,670.78	-1,537.48	3,907.78	1.00	0.00	
11,700.00	90.00	359.42	7,283.00	3,768.92	-1,538.47	4,004.05	0.00	0.00	
11,800.00	90.00	359.42	7,283.00	3,868.92	-1,539.49	4,102.13	0.00	0.00	
11,900.00	90.00	359.42	7,283.00	3,968.91	-1,540.50	4,200.22	0.00	0.00	
12,000.00	90.00	359.42	7,283.00	4,068.91	-1,541.51	4,298.30	0.00	0.00	
12,100.00	90.00	359.42	7,283.00	4,168.90	-1,542.53	4,396.39	0.00	0.00	
12,200.00	90.00	359.42	7,283.00	4,268.90	-1,543.54	4,494.47	0.00	0.00	
12,300.00	90.00	359.42	7,283.00	4,368.89	-1,544.55	4,592.56	0.00	0.00	
12,400.00	90.00	359.42	7,283.00	4,468.89	-1,545.56	4,690.64	0.00	0.00	
12,500.00	90.00	359.42	7,283.00	4,568.88	-1,546.58	4,788.72	0.00	0.00	
12,600.00	90.00	359.42	7,283.00	4,668.87	-1,547.59	4,886.81	0.00	0.00	
12,700.00	90.00	359.42	7,283.00	4,768.87	-1,548.60	4,984.89	0.00	0.00	
12,800.00	90.00	359.42	7,283.00	4,868.86	-1,549.62	5,082.98	0.00	0.00	
12,900.00	90.00	359.42	7,283.00	4,968.86	-1,550.63	5,181.06	0.00	0.00	
13,000.00	90.00	359.42	7,283.00	5,068.85	-1,551.64	5,279.15	0.00	0.00	
13,100.00	90.00	359.42	7,283.00	5,168.85	-1,552.65	5,377.23	0.00	0.00	
13,200.00	90.00	359.42	7,283.00	5,268.84	-1,553.67	5,475.32	0.00	0.00	
13,300.00	90.00	359.42	7,283.00	5,368.84	-1,554.68	5,573.40	0.00	0.00	
13,400.00	90.00	359.42	7,283.00	5,468.83	-1,555.69	5,671.49	0.00	0.00	
13,500.00	90.00	359.42	7,283.00	5,568.83	-1,556.71	5,769.57	0.00	0.00	
13,600.00	90.00	359.42	7,283.00	5,668.82	-1,557.72	5,867.65	0.00	0.00	
13,700.00	90.00	359.42	7,283.00	5,768.82	-1,558.73	5,965.74	0.00	0.00	
13,800.00	90.00	359.42	7,283.00	5,868.81	-1,559.75	6,063.82	0.00	0.00	
13,900.00	90.00	359.42	7,283.00	5,968.81	-1,560.76	6,161.91	0.00	0.00	
14,000.00	90.00	359.42	7,283.00	6,068.80	-1,561.77	6,259.99	0.00	0.00	
14,100.00	90.00	359.42	7,283.00	6,168.80	-1,562.78	6,358.08	0.00	0.00	
14,200.00	90.00	359.42	7,283.00	6,268.79	-1,563.80	6,456.16	0.00	0.00	
14,300.00	90.00	359.42	7,283.00	6,368.79	-1,564.81	6,554.25	0.00	0.00	
14,400.00	90.00	359.42	7,283.00	6,468.78	-1,565.82	6,652.33	0.00	0.00	
14,500.00	90.00	359.42	7,283.00	6,568.78	-1,566.84	6,750.42	0.00	0.00	
14,600.00	90.00	359.42	7,283.00	6,668.77	-1,567.85	6,848.50	0.00	0.00	
14,700.00	90.00	359.42	7,283.00	6,768.77	-1,568.86	6,946.58	0.00	0.00	
14,800.00	90.00	359.42	7,283.00	6,868.76	-1,569.87	7,044.67	0.00	0.00	
14,900.00	90.00	359.42	7,283.00	6,968.76	-1,570.89	7,142.75	0.00	0.00	
15,000.00	90.00	359.42	7,283.00	7,068.75	-1,571.90	7,240.84	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 KUGEL 1C-18H-H267 - Slot KUGEL 1C
<b>Company:</b>	Crestone Peak Resources	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Project:</b>	DJ BASIN	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site:</b>	S18-T2N-R67W (KUGEL)	<b>North Reference:</b>	True
<b>Well:</b>	KUGEL 1C-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #2 (6.11)		

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
15,100.00	90.00	359.42	7,283.00	7,168.75	-1,572.91	7,338.92	0.00	0.00	
15,200.00	90.00	359.42	7,283.00	7,268.74	-1,573.93	7,437.01	0.00	0.00	
15,300.00	90.00	359.42	7,283.00	7,368.74	-1,574.94	7,535.09	0.00	0.00	
15,400.00	90.00	359.42	7,283.00	7,468.73	-1,575.95	7,633.18	0.00	0.00	
15,469.97	90.00	359.42	7,283.00	7,538.70	-1,576.66	7,701.81	0.00	0.00	KUGEL 1C-18H-H267 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
KUGEL 1C-18H-H267 T - plan hits target center - Point	0.00	0.00	7,283.00	14.85	-1,659.33	1,294,284.61	3,158,690.33	40.139811	-104.932392
KUGEL 1C-18H-H267 B - plan hits target center - Point	0.00	0.00	7,283.00	7,538.70	-1,576.66	1,301,808.83	3,158,724.34	40.160465	-104.932098