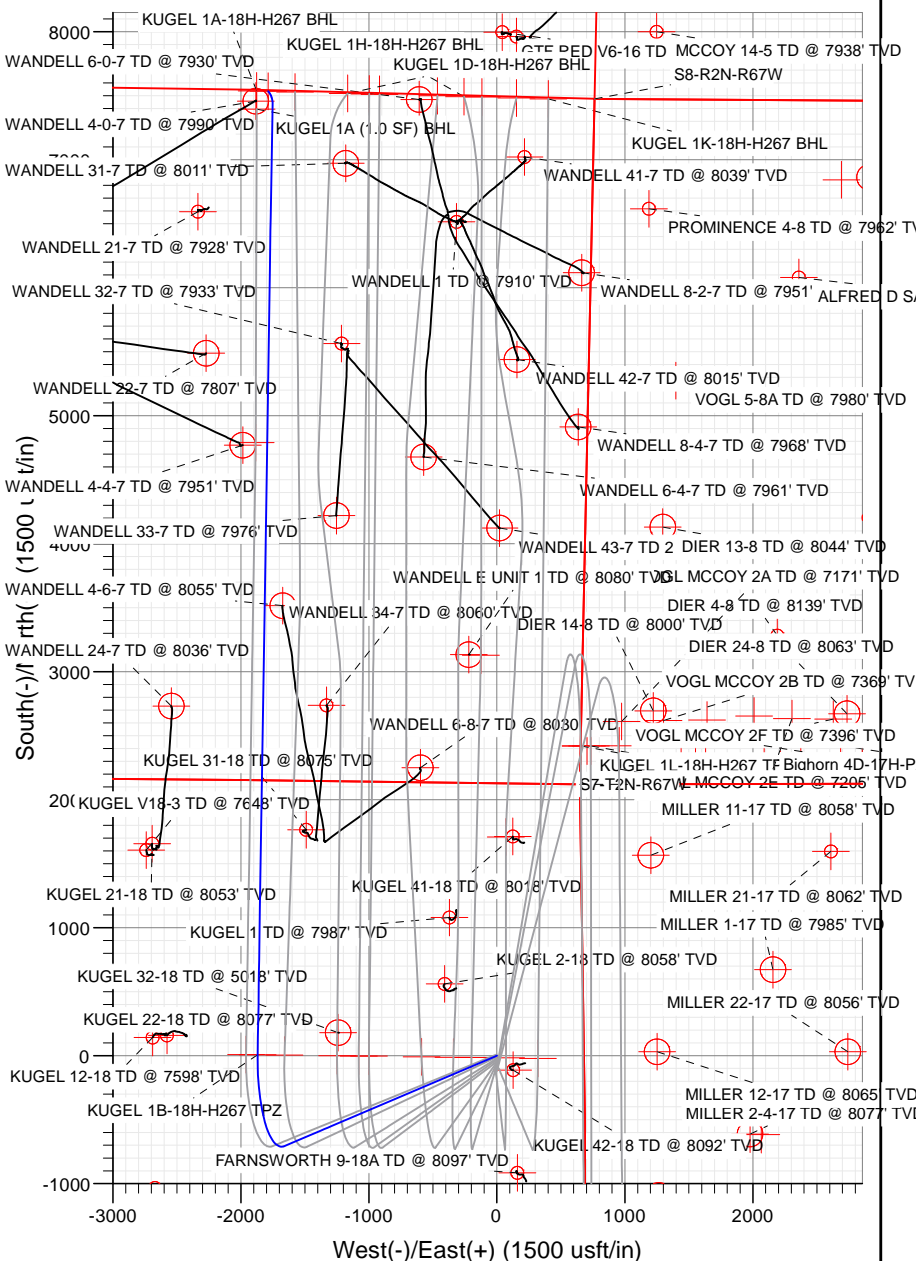
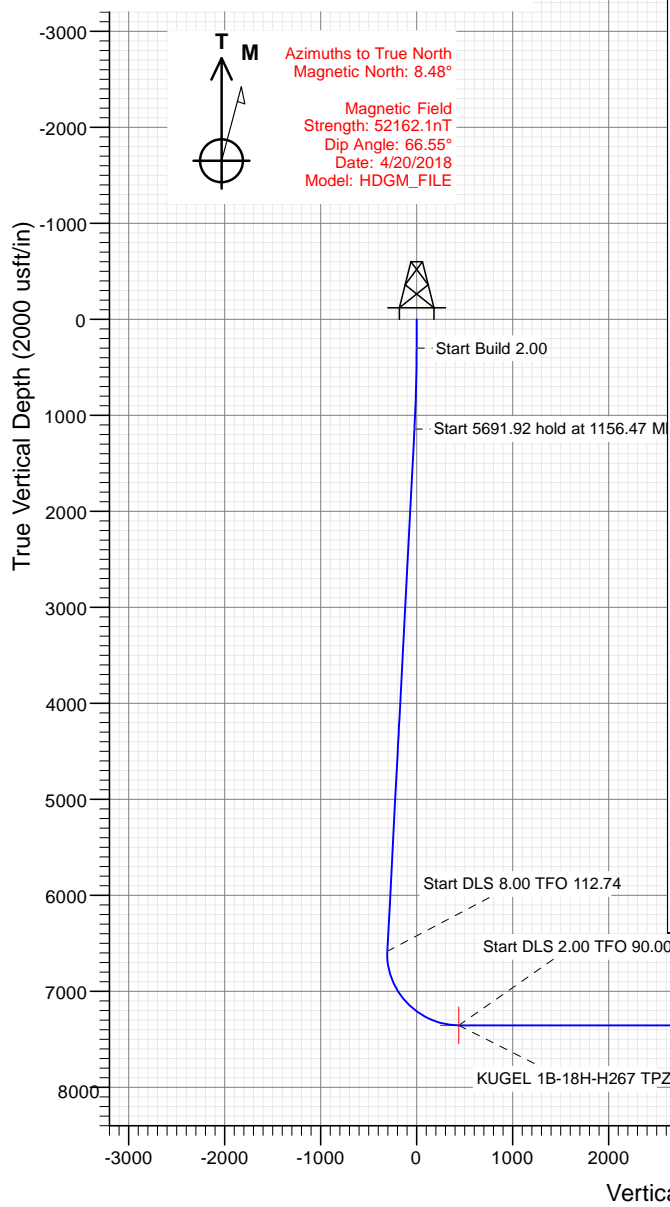




Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	1156.47	17.13	246.95	1143.77	-49.75	-116.93	2.00	246.95	-21.43	
4	6848.39	17.13	246.95	6583.20	-706.09	-1659.56	0.00	0.00	-304.13	
5	8058.30	90.00	0.63	7354.00	7.43	-1869.29	8.00	112.74	438.53	KUGEL 1B-18H-H267 TPZ
6	8071.61	90.00	0.90	7354.00	20.74	-1869.12	2.00	90.00	451.44	
7	15491.66	90.00	0.90	7354.00	7439.87	-1753.06	0.00	0.00	7643.61	
8	15593.90	90.00	320.00	7354.00	7534.19	-1786.55	40.00	-90.00	7743.11	KUGEL 1B-18H-H267 BHL

PLAN K3 (6.11)							
KUGEL 1B-18H+H267							
23 K3 @ 497.000st							
Ground Level @ 4954.00							
North American Datum 1983							
Well KUGEL 1B-18H+H267 - Slot KUGEL 1B, True North							
Type	Target	Azimuth	Origin	N/S	E/W	From TVD	
TD	No Target (Freehand)	346.66	Slot Type				
Name		+N-S	+E-W	Latitude	Longitude		
KUGEL 1B-18H+H267 BHL	TVD	7354.19	-1786.55	60.146480	-104.832649		
KUGEL 1B-18H+H267 TP2		7354.19	-1786.55	60.139818	-104.833143		

Project: DJ BASIN
Site: S18-T2N-R67W (KUGEL)
Well: KUGEL 1B-18H-H267
Wellbore: OH
Design: PLAN #3 (6.11)



WELL DETAILS: KUGEL 1B-18H-H267

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1294290.48	3160349.66	40.139798	-104.926457	KUGEL 1B



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KUGEL 1B-18H-H267 - Slot KUGEL 1B
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4977.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4977.00usft
Site:	S18-T2N-R67W (KUGEL)	North Reference:	True
Well:	KUGEL 1B-18H-H267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3 (6.11)		

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		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 1B-18H-H267 - Slot KUGEL 1B					
Well Position	+N/-S	0.00 usft	Northing:	1,294,290.48 usft	Latitude:	40.139798
	+E/-W	0.00 usft	Easting:	3,160,349.66 usft	Longitude:	-104.926457
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,954.00 usft

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

Design	PLAN #3 (6.11)			
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	346.66

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	
1,156.47	17.13	246.95	1,143.77	-49.75	-116.93	2.00	2.00	0.00	246.95	
6,848.39	17.13	246.95	6,583.20	-706.09	-1,659.56	0.00	0.00	0.00	0.00	
8,058.30	90.00	0.63	7,354.00	7.43	-1,869.29	8.00	6.02	9.40	112.74	KUGEL 1B-18H-H267
8,071.61	90.00	0.90	7,354.00	20.74	-1,869.12	2.00	0.00	2.00	90.00	
15,491.66	90.00	0.90	7,354.00	7,439.87	-1,753.06	0.00	0.00	0.00	0.00	
15,593.90	90.00	320.00	7,354.00	7,534.19	-1,786.55	40.00	0.00	-40.00	-90.00	KUGEL 1B-18H-H267

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KUGEL 1B-18H-H267 - Slot KUGEL 1B
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4977.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4977.00usft
Site:	S18-T2N-R67W (KUGEL)	North Reference:	True
Well:	KUGEL 1B-18H-H267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3 (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	2.00	246.95	399.98	-0.68	-1.61	-0.29	2.00	2.00	
500.00	4.00	246.95	499.84	-2.73	-6.42	-1.18	2.00	2.00	
600.00	6.00	246.95	599.45	-6.14	-14.44	-2.65	2.00	2.00	
700.00	8.00	246.95	698.70	-10.92	-25.65	-4.70	2.00	2.00	
800.00	10.00	246.95	797.47	-17.04	-40.05	-7.34	2.00	2.00	
900.00	12.00	246.95	895.62	-24.51	-57.61	-10.56	2.00	2.00	
1,000.00	14.00	246.95	993.06	-33.32	-78.30	-14.35	2.00	2.00	
1,100.00	16.00	246.95	1,089.64	-43.45	-102.12	-18.71	2.00	2.00	
1,156.47	17.13	246.95	1,143.77	-49.75	-116.93	-21.43	2.00	2.00	
1,200.00	17.13	246.95	1,185.37	-54.77	-128.73	-23.59	0.00	0.00	
1,300.00	17.13	246.95	1,280.93	-66.30	-155.83	-28.56	0.00	0.00	
1,400.00	17.13	246.95	1,376.50	-77.83	-182.93	-33.52	0.00	0.00	
1,500.00	17.13	246.95	1,472.06	-89.36	-210.04	-38.49	0.00	0.00	
1,600.00	17.13	246.95	1,567.62	-100.89	-237.14	-43.46	0.00	0.00	
1,700.00	17.13	246.95	1,663.19	-112.43	-264.24	-48.42	0.00	0.00	
1,800.00	17.13	246.95	1,758.75	-123.96	-291.34	-53.39	0.00	0.00	
1,900.00	17.13	246.95	1,854.32	-135.49	-318.44	-58.36	0.00	0.00	
2,000.00	17.13	246.95	1,949.88	-147.02	-345.55	-63.32	0.00	0.00	
2,100.00	17.13	246.95	2,045.44	-158.55	-372.65	-68.29	0.00	0.00	
2,200.00	17.13	246.95	2,141.01	-170.08	-399.75	-73.26	0.00	0.00	
2,300.00	17.13	246.95	2,236.57	-181.61	-426.85	-78.22	0.00	0.00	
2,400.00	17.13	246.95	2,332.14	-193.14	-453.96	-83.19	0.00	0.00	
2,500.00	17.13	246.95	2,427.70	-204.67	-481.06	-88.16	0.00	0.00	
2,600.00	17.13	246.95	2,523.27	-216.21	-508.16	-93.12	0.00	0.00	
2,700.00	17.13	246.95	2,618.83	-227.74	-535.26	-98.09	0.00	0.00	
2,800.00	17.13	246.95	2,714.39	-239.27	-562.36	-103.06	0.00	0.00	
2,900.00	17.13	246.95	2,809.96	-250.80	-589.47	-108.02	0.00	0.00	
3,000.00	17.13	246.95	2,905.52	-262.33	-616.57	-112.99	0.00	0.00	
3,100.00	17.13	246.95	3,001.09	-273.86	-643.67	-117.96	0.00	0.00	
3,200.00	17.13	246.95	3,096.65	-285.39	-670.77	-122.92	0.00	0.00	
3,300.00	17.13	246.95	3,192.21	-296.92	-697.87	-127.89	0.00	0.00	
3,400.00	17.13	246.95	3,287.78	-308.45	-724.98	-132.86	0.00	0.00	
3,500.00	17.13	246.95	3,383.34	-319.98	-752.08	-137.82	0.00	0.00	
3,600.00	17.13	246.95	3,478.91	-331.52	-779.18	-142.79	0.00	0.00	
3,700.00	17.13	246.95	3,574.47	-343.05	-806.28	-147.76	0.00	0.00	
3,800.00	17.13	246.95	3,670.04	-354.58	-833.39	-152.73	0.00	0.00	
3,900.00	17.13	246.95	3,765.60	-366.11	-860.49	-157.69	0.00	0.00	
4,000.00	17.13	246.95	3,861.16	-377.64	-887.59	-162.66	0.00	0.00	
4,100.00	17.13	246.95	3,956.73	-389.17	-914.69	-167.63	0.00	0.00	
4,200.00	17.13	246.95	4,052.29	-400.70	-941.79	-172.59	0.00	0.00	
4,300.00	17.13	246.95	4,147.86	-412.23	-968.90	-177.56	0.00	0.00	
4,400.00	17.13	246.95	4,243.42	-423.76	-996.00	-182.53	0.00	0.00	
4,500.00	17.13	246.95	4,338.99	-435.30	-1,023.10	-187.49	0.00	0.00	
4,600.00	17.13	246.95	4,434.55	-446.83	-1,050.20	-192.46	0.00	0.00	
4,700.00	17.13	246.95	4,530.11	-458.36	-1,077.30	-197.43	0.00	0.00	
4,800.00	17.13	246.95	4,625.68	-469.89	-1,104.41	-202.39	0.00	0.00	
4,900.00	17.13	246.95	4,721.24	-481.42	-1,131.51	-207.36	0.00	0.00	
5,000.00	17.13	246.95	4,816.81	-492.95	-1,158.61	-212.33	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KUGEL 1B-18H-H267 - Slot KUGEL 1B
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4977.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4977.00usft
Site:	S18-T2N-R67W (KUGEL)	North Reference:	True
Well:	KUGEL 1B-18H-H267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3 (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	17.13	246.95	4,912.37	-504.48	-1,185.71	-217.29	0.00	0.00	
5,200.00	17.13	246.95	5,007.93	-516.01	-1,212.81	-222.26	0.00	0.00	
5,300.00	17.13	246.95	5,103.50	-527.54	-1,239.92	-227.23	0.00	0.00	
5,400.00	17.13	246.95	5,199.06	-539.07	-1,267.02	-232.19	0.00	0.00	
5,500.00	17.13	246.95	5,294.63	-550.61	-1,294.12	-237.16	0.00	0.00	
5,600.00	17.13	246.95	5,390.19	-562.14	-1,321.22	-242.13	0.00	0.00	
5,700.00	17.13	246.95	5,485.76	-573.67	-1,348.33	-247.09	0.00	0.00	
5,800.00	17.13	246.95	5,581.32	-585.20	-1,375.43	-252.06	0.00	0.00	
5,900.00	17.13	246.95	5,676.88	-596.73	-1,402.53	-257.03	0.00	0.00	
6,000.00	17.13	246.95	5,772.45	-608.26	-1,429.63	-261.99	0.00	0.00	
6,100.00	17.13	246.95	5,868.01	-619.79	-1,456.73	-266.96	0.00	0.00	
6,200.00	17.13	246.95	5,963.58	-631.32	-1,483.84	-271.93	0.00	0.00	
6,300.00	17.13	246.95	6,059.14	-642.85	-1,510.94	-276.89	0.00	0.00	
6,400.00	17.13	246.95	6,154.70	-654.39	-1,538.04	-281.86	0.00	0.00	
6,500.00	17.13	246.95	6,250.27	-665.92	-1,565.14	-286.83	0.00	0.00	
6,600.00	17.13	246.95	6,345.83	-677.45	-1,592.24	-291.79	0.00	0.00	
6,700.00	17.13	246.95	6,441.40	-688.98	-1,619.35	-296.76	0.00	0.00	
6,800.00	17.13	246.95	6,536.96	-700.51	-1,646.45	-301.73	0.00	0.00	
6,848.39	17.13	246.95	6,583.20	-706.09	-1,659.56	-304.13	0.00	0.00	
6,900.00	15.98	260.91	6,632.69	-710.19	-1,673.58	-304.89	8.00	-2.23	
7,000.00	16.62	289.60	6,728.83	-707.56	-1,700.69	-296.07	8.00	0.64	
7,100.00	20.54	311.74	6,823.72	-691.06	-1,727.29	-273.88	8.00	3.92	
7,200.00	26.31	325.81	6,915.51	-661.00	-1,752.87	-238.73	8.00	5.77	
7,300.00	32.97	334.83	7,002.42	-617.98	-1,776.93	-191.32	8.00	6.66	
7,400.00	40.08	341.03	7,082.76	-562.82	-1,799.00	-132.56	8.00	7.11	
7,500.00	47.43	345.60	7,154.97	-496.61	-1,818.65	-63.60	8.00	7.35	
7,600.00	54.92	349.20	7,217.63	-420.63	-1,835.51	14.23	8.00	7.50	
7,700.00	62.51	352.18	7,269.53	-336.35	-1,849.23	99.39	8.00	7.58	
7,800.00	70.15	354.78	7,309.66	-245.43	-1,859.56	190.24	8.00	7.64	
7,900.00	77.82	357.14	7,337.23	-149.63	-1,866.29	285.01	8.00	7.67	
8,000.00	85.51	359.36	7,351.72	-50.81	-1,869.29	381.86	8.00	7.69	
8,058.30	90.00	0.63	7,354.00	7.43	-1,869.29	438.53	8.00	7.70	KUGEL 1B-18H-H267 TPZ
8,071.61	90.00	0.90	7,354.00	20.74	-1,869.12	451.44	2.00	0.00	
8,100.00	90.00	0.90	7,354.00	49.12	-1,868.67	478.95	0.00	0.00	
8,200.00	90.00	0.90	7,354.00	149.11	-1,867.11	575.88	0.00	0.00	
8,300.00	90.00	0.90	7,354.00	249.10	-1,865.54	672.81	0.00	0.00	
8,400.00	90.00	0.90	7,354.00	349.08	-1,863.98	769.74	0.00	0.00	
8,500.00	90.00	0.90	7,354.00	449.07	-1,862.42	866.67	0.00	0.00	
8,600.00	90.00	0.90	7,354.00	549.06	-1,860.85	963.60	0.00	0.00	
8,700.00	90.00	0.90	7,354.00	649.05	-1,859.29	1,060.53	0.00	0.00	
8,800.00	90.00	0.90	7,354.00	749.04	-1,857.72	1,157.45	0.00	0.00	
8,900.00	90.00	0.90	7,354.00	849.02	-1,856.16	1,254.38	0.00	0.00	
9,000.00	90.00	0.90	7,354.00	949.01	-1,854.60	1,351.31	0.00	0.00	
9,100.00	90.00	0.90	7,354.00	1,049.00	-1,853.03	1,448.24	0.00	0.00	
9,200.00	90.00	0.90	7,354.00	1,148.99	-1,851.47	1,545.17	0.00	0.00	
9,300.00	90.00	0.90	7,354.00	1,248.97	-1,849.90	1,642.10	0.00	0.00	
9,400.00	90.00	0.90	7,354.00	1,348.96	-1,848.34	1,739.03	0.00	0.00	
9,500.00	90.00	0.90	7,354.00	1,448.95	-1,846.77	1,835.96	0.00	0.00	
9,600.00	90.00	0.90	7,354.00	1,548.94	-1,845.21	1,932.89	0.00	0.00	
9,700.00	90.00	0.90	7,354.00	1,648.93	-1,843.65	2,029.82	0.00	0.00	
9,800.00	90.00	0.90	7,354.00	1,748.91	-1,842.08	2,126.75	0.00	0.00	
9,900.00	90.00	0.90	7,354.00	1,848.90	-1,840.52	2,223.67	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KUGEL 1B-18H-H267 - Slot KUGEL 1B
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4977.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4977.00usft
Site:	S18-T2N-R67W (KUGEL)	North Reference:	True
Well:	KUGEL 1B-18H-H267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3 (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
10,000.00	90.00	0.90	7,354.00	1,948.89	-1,838.95	2,320.60	0.00	0.00	
10,100.00	90.00	0.90	7,354.00	2,048.88	-1,837.39	2,417.53	0.00	0.00	
10,200.00	90.00	0.90	7,354.00	2,148.86	-1,835.83	2,514.46	0.00	0.00	
10,300.00	90.00	0.90	7,354.00	2,248.85	-1,834.26	2,611.39	0.00	0.00	
10,400.00	90.00	0.90	7,354.00	2,348.84	-1,832.70	2,708.32	0.00	0.00	
10,500.00	90.00	0.90	7,354.00	2,448.83	-1,831.13	2,805.25	0.00	0.00	
10,600.00	90.00	0.90	7,354.00	2,548.82	-1,829.57	2,902.18	0.00	0.00	
10,700.00	90.00	0.90	7,354.00	2,648.80	-1,828.01	2,999.11	0.00	0.00	
10,800.00	90.00	0.90	7,354.00	2,748.79	-1,826.44	3,096.04	0.00	0.00	
10,900.00	90.00	0.90	7,354.00	2,848.78	-1,824.88	3,192.96	0.00	0.00	
11,000.00	90.00	0.90	7,354.00	2,948.77	-1,823.31	3,289.89	0.00	0.00	
11,100.00	90.00	0.90	7,354.00	3,048.75	-1,821.75	3,386.82	0.00	0.00	
11,200.00	90.00	0.90	7,354.00	3,148.74	-1,820.19	3,483.75	0.00	0.00	
11,300.00	90.00	0.90	7,354.00	3,248.73	-1,818.62	3,580.68	0.00	0.00	
11,400.00	90.00	0.90	7,354.00	3,348.72	-1,817.06	3,677.61	0.00	0.00	
11,500.00	90.00	0.90	7,354.00	3,448.71	-1,815.49	3,774.54	0.00	0.00	
11,600.00	90.00	0.90	7,354.00	3,548.69	-1,813.93	3,871.47	0.00	0.00	
11,700.00	90.00	0.90	7,354.00	3,648.68	-1,812.37	3,968.40	0.00	0.00	
11,800.00	90.00	0.90	7,354.00	3,748.67	-1,810.80	4,065.33	0.00	0.00	
11,900.00	90.00	0.90	7,354.00	3,848.66	-1,809.24	4,162.26	0.00	0.00	
12,000.00	90.00	0.90	7,354.00	3,948.64	-1,807.67	4,259.18	0.00	0.00	
12,100.00	90.00	0.90	7,354.00	4,048.63	-1,806.11	4,356.11	0.00	0.00	
12,200.00	90.00	0.90	7,354.00	4,148.62	-1,804.54	4,453.04	0.00	0.00	
12,300.00	90.00	0.90	7,354.00	4,248.61	-1,802.98	4,549.97	0.00	0.00	
12,400.00	90.00	0.90	7,354.00	4,348.60	-1,801.42	4,646.90	0.00	0.00	
12,500.00	90.00	0.90	7,354.00	4,448.58	-1,799.85	4,743.83	0.00	0.00	
12,600.00	90.00	0.90	7,354.00	4,548.57	-1,798.29	4,840.76	0.00	0.00	
12,700.00	90.00	0.90	7,354.00	4,648.56	-1,796.72	4,937.69	0.00	0.00	
12,800.00	90.00	0.90	7,354.00	4,748.55	-1,795.16	5,034.62	0.00	0.00	
12,900.00	90.00	0.90	7,354.00	4,848.53	-1,793.60	5,131.55	0.00	0.00	
13,000.00	90.00	0.90	7,354.00	4,948.52	-1,792.03	5,228.47	0.00	0.00	
13,100.00	90.00	0.90	7,354.00	5,048.51	-1,790.47	5,325.40	0.00	0.00	
13,200.00	90.00	0.90	7,354.00	5,148.50	-1,788.90	5,422.33	0.00	0.00	
13,300.00	90.00	0.90	7,354.00	5,248.49	-1,787.34	5,519.26	0.00	0.00	
13,400.00	90.00	0.90	7,354.00	5,348.47	-1,785.78	5,616.19	0.00	0.00	
13,500.00	90.00	0.90	7,354.00	5,448.46	-1,784.21	5,713.12	0.00	0.00	
13,600.00	90.00	0.90	7,354.00	5,548.45	-1,782.65	5,810.05	0.00	0.00	
13,700.00	90.00	0.90	7,354.00	5,648.44	-1,781.08	5,906.98	0.00	0.00	
13,800.00	90.00	0.90	7,354.00	5,748.42	-1,779.52	6,003.91	0.00	0.00	
13,900.00	90.00	0.90	7,354.00	5,848.41	-1,777.96	6,100.84	0.00	0.00	
14,000.00	90.00	0.90	7,354.00	5,948.40	-1,776.39	6,197.77	0.00	0.00	
14,100.00	90.00	0.90	7,354.00	6,048.39	-1,774.83	6,294.69	0.00	0.00	
14,200.00	90.00	0.90	7,354.00	6,148.38	-1,773.26	6,391.62	0.00	0.00	
14,300.00	90.00	0.90	7,354.00	6,248.36	-1,771.70	6,488.55	0.00	0.00	
14,400.00	90.00	0.90	7,354.00	6,348.35	-1,770.13	6,585.48	0.00	0.00	
14,500.00	90.00	0.90	7,354.00	6,448.34	-1,768.57	6,682.41	0.00	0.00	
14,600.00	90.00	0.90	7,354.00	6,548.33	-1,767.01	6,779.34	0.00	0.00	
14,700.00	90.00	0.90	7,354.00	6,648.31	-1,765.44	6,876.27	0.00	0.00	
14,800.00	90.00	0.90	7,354.00	6,748.30	-1,763.88	6,973.20	0.00	0.00	
14,900.00	90.00	0.90	7,354.00	6,848.29	-1,762.31	7,070.13	0.00	0.00	
15,000.00	90.00	0.90	7,354.00	6,948.28	-1,760.75	7,167.06	0.00	0.00	
15,100.00	90.00	0.90	7,354.00	7,048.27	-1,759.19	7,263.98	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KUGEL 1B-18H-H267 - Slot KUGEL 1B
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4977.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4977.00usft
Site:	S18-T2N-R67W (KUGEL)	North Reference:	True
Well:	KUGEL 1B-18H-H267	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3 (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
15,200.00	90.00	0.90	7,354.00	7,148.25	-1,757.62	7,360.91	0.00	0.00	
15,300.00	90.00	0.90	7,354.00	7,248.24	-1,756.06	7,457.84	0.00	0.00	
15,400.00	90.00	0.90	7,354.00	7,348.23	-1,754.49	7,554.77	0.00	0.00	
15,491.66	90.00	0.90	7,354.00	7,439.87	-1,753.06	7,643.61	0.00	0.00	
15,500.00	90.00	357.56	7,354.00	7,448.22	-1,753.17	7,651.76	40.00	0.00	
15,593.90	90.00	320.00	7,354.00	7,534.19	-1,786.55	7,743.11	40.00	0.00	KUGEL 1B-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 1B-18H-H267 TI - plan hits target center - Point	0.00	0.00	7,354.00	7.43	-1,869.29	1,294,285.82	3,158,480.36	40.139818	-104.933143
KUGEL 1B-18H-H267 B - plan hits target center - Point	0.00	0.00	7,354.00	7,534.19	-1,786.55	1,301,812.95	3,158,514.41	40.160480	-104.932849