

# **Crestone Peak Resources**

**DJ BASIN**

**S18-T2N-R67W (KUGEL)**

**KUGEL 1A-18H-H267**

**OH**

**PLAN #3 (6.11)**

## **Anticollision Summary Report**

**12 June, 2018**

# Cathedral Energy Services

## Anticollision Summary Report

<b>Company:</b>	Crestone Peak Resources	<b>Local Co-ordinate Reference:</b>	Well KUGEL 1A-18H-H267 - Slot KUGEL 1A
<b>Project:</b>	DJ BASIN	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Reference Site:</b>	S18-T2N-R67W (KUGEL)	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	KUGEL 1A-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	PLAN #3 (6.11)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	PLAN #3 (6.11)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.00usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum ellipse separation of 1,000.00 usft	<b>Error Surface:</b>	Pedal Curve
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	6/12/2018		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	2,000.00	PLAN #3 (6.11) (OH)	VESSI_GYROFLEX	VESSI Gyroflex Gyro
2,001.00	15,752.51	PLAN #3 (6.11) (OH)	MWD+HDGM	OWSG MWD + HDGM

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S18-T2N-R67W (KUGEL)						
BRETT 1 - HS RESOURCES - NO SURVEYS	2,976.47	2,867.62	1,001.75	984.71	58.772	CC
BRETT 1 - HS RESOURCES - NO SURVEYS	3,100.00	2,985.61	1,002.42	984.33	55.424	ES
BRETT 1 - HS RESOURCES - NO SURVEYS	5,200.00	4,991.38	1,198.85	1,163.14	33.574	SF
BRETT 2 - HS RESOURCES WELL - NO SURVEYS	5,519.24	5,035.00	2,064.71	2,026.52	54.055	CC, ES
BRETT 2 - HS RESOURCES WELL - NO SURVEYS	5,800.00	5,035.00	2,083.72	2,044.46	53.078	SF
BRETT 3 - KMG WELL - NO SURVEY	3,754.83	3,623.06	2,482.99	2,459.03	103.641	CC
BRETT 3 - KMG WELL - NO SURVEY	4,000.00	3,857.23	2,484.05	2,457.85	94.824	ES
BRETT 3 - KMG WELL - NO SURVEY	5,700.00	5,040.00	2,586.81	2,547.20	65.300	SF
BRETT 4 - KMG WELL - GYRO	6,553.89	6,284.13	425.72	387.08	11.016	CC
BRETT 4 - KMG WELL - GYRO	6,600.00	6,326.67	426.02	387.03	10.927	ES
BRETT 4 - KMG WELL - GYRO	6,800.00	6,514.77	433.99	393.72	10.777	SF
DREW 1 - KMG WELL - GYRO	7,364.06	7,037.97	1,474.43	1,439.93	42.730	CC, ES
DREW 1 - KMG WELL - GYRO	7,800.00	7,372.31	1,577.05	1,538.35	40.750	SF
DREW GAS UNIT-TRUE 1 - KMG WELL - GYRO	5,676.95	5,463.87	1,459.99	1,428.07	45.747	CC
DREW GAS UNIT-TRUE 1 - KMG WELL - GYRO	6,000.00	5,780.21	1,461.01	1,426.61	42.470	ES
DREW GAS UNIT-TRUE 1 - KMG WELL - GYRO	7,100.00	6,824.63	1,519.28	1,477.00	35.934	SF
FARNSWORTH 9-18A - KMG WELL - GYRO	1,553.42	1,529.16	994.84	989.37	182.064	CC
FARNSWORTH 9-18A - KMG WELL - GYRO	1,600.00	1,574.73	994.91	989.25	175.991	ES
FARNSWORTH 9-18A - KMG WELL - GYRO	7,100.00	6,789.96	1,938.70	1,903.48	55.047	SF
GTF RED V 6-16JI - KMG WELL - GYRO	15,752.51	7,396.06	2,074.60	1,934.64	14.824	CC, ES, SF
GTF RED V 6-4D - KMG WELL - GYRO	15,752.51	7,377.11	1,177.81	1,068.74	10.798	CC, ES, SF
GTF RED V6-16 - KMG WELL - GYRO	15,752.51	7,381.99	1,971.82	1,832.30	14.133	CC, ES, SF
HSR-OWEN 15-18A - KMG WELL - SURVEYS	4,201.77	3,836.48	830.37	812.05	45.341	CC, ES
HSR-OWEN 15-18A - KMG WELL - SURVEYS	5,000.00	4,492.70	879.04	854.78	36.246	SF
KUGEL 1 - EXTRACTION WELL - GYRO	309.21	294.34	1,171.23	1,170.37	1,363.675	CC
KUGEL 1 - EXTRACTION WELL - GYRO	400.00	383.29	1,171.47	1,170.29	998.155	ES
KUGEL 1 - EXTRACTION WELL - GYRO	9,500.00	7,486.08	1,582.02	1,535.63	34.102	SF
KUGEL 1-18 - CPR WELL - GYRO	9,115.67	7,483.25	1,226.43	1,183.86	28.809	CC, ES
KUGEL 1-18 - CPR WELL - GYRO	9,600.00	7,483.04	1,318.60	1,267.74	25.926	SF
KUGEL 12-18 - KMG WELL - GYRO	8,348.70	7,480.04	730.76	692.87	19.289	CC, ES
KUGEL 12-18 - KMG WELL - GYRO	8,600.00	7,473.39	772.73	731.60	18.786	SF
KUGEL 1B-18H-H267 - OH - PLAN #3 (6.11)	356.19	356.12	9.27	8.23	8.905	CC
KUGEL 1B-18H-H267 - OH - PLAN #3 (6.11)	6,900.00	6,904.59	49.43	-1.06	0.979	Level 1, ES, SF
KUGEL 1C-18H-H267 - OH - PLAN #2 (6.11)	407.74	407.56	18.51	17.28	15.126	CC, ES
KUGEL 1C-18H-H267 - OH - PLAN #2 (6.11)	15,745.37	15,469.97	372.55	160.50	1.757	SF
KUGEL 1D-18H-H267 - OH - PLAN #2 (6.11)	454.95	454.61	27.77	26.37	19.957	CC, ES

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Cathedral Energy Services

## Anticollision Summary Report

<b>Company:</b>	Crestone Peak Resources	<b>Local Co-ordinate Reference:</b>	Well KUGEL 1A-18H-H267 - Slot KUGEL 1A
<b>Project:</b>	DJ BASIN	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Reference Site:</b>	S18-T2N-R67W (KUGEL)	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	KUGEL 1A-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	PLAN #3 (6.11)	<b>Offset TVD Reference:</b>	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S18-T2N-R67W (KUGEL)						
KUGEL 1D-18H-H267 - OH - PLAN #2 (6.11)	15,400.00	15,094.97	596.54	362.98	2.554	SF
KUGEL 1E-18H-H267 - OH - PLAN #2 (6.11)	494.43	492.92	37.02	35.49	24.210	CC
KUGEL 1E-18H-H267 - OH - PLAN #2 (6.11)	500.00	498.45	37.03	35.48	23.906	ES
KUGEL 1E-18H-H267 - OH - PLAN #2 (6.11)	15,752.51	15,554.78	879.89	627.33	3.484	SF
KUGEL 1F-18H-H267 - OH - PLAN #2 (6.11)	200.00	199.00	49.98	49.49	101.743	CC, ES
KUGEL 1F-18H-H267 - OH - PLAN #2 (6.11)	15,752.51	15,316.84	984.74	738.53	4.000	SF
KUGEL 1G-18H-H267 - OH - PLAN #2 (6.11)	560.60	558.65	55.53	53.77	31.465	CC, ES
KUGEL 1G-18H-H267 - OH - PLAN #2 (6.11)	15,752.51	15,342.96	1,378.05	1,126.83	5.485	SF
KUGEL 1H-18H-H267 - OH - PLAN #3 (6.11)	200.00	199.00	69.98	69.49	142.456	CC, ES
KUGEL 1H-18H-H267 - OH - PLAN #3 (6.11)	15,752.51	15,255.58	1,634.72	1,383.91	6.518	SF
KUGEL 1I-18H-H267 - OH - PLAN #3 (6.11)	616.49	614.03	74.04	72.08	37.691	CC, ES
KUGEL 1I-18H-H267 - OH - PLAN #3 (6.11)	15,752.51	15,456.99	1,759.51	1,506.07	6.943	SF
KUGEL 1J-18H-H267 - OH - PLAN #2 (6.11)	200.00	199.00	89.97	89.48	183.149	CC, ES
KUGEL 1J-18H-H267 - OH - PLAN #2 (6.11)	15,500.00	14,900.00	1,968.52	1,728.18	8.190	SF
KUGEL 1K-18H-H267 - OH - PLAN #2 (6.11)	200.00	199.00	99.97	99.48	203.506	CC, ES
KUGEL 1K-18H-H267 - OH - PLAN #2 (6.11)	15,752.51	15,227.83	2,289.96	2,037.69	9.077	SF
KUGEL 1L-18H-H267 - OH - PLAN #2 (6.11)	763.64	767.84	77.59	75.07	30.804	CC, ES
KUGEL 1L-18H-H267 - OH - PLAN #2 (6.11)	11,700.00	7,930.02	2,578.96	2,475.20	24.855	SF
KUGEL 1M-18H-H267 - OH - PLAN #2 (6.11)	766.74	772.26	80.48	77.94	31.712	CC, ES
KUGEL 1M-18H-H267 - OH - PLAN #2 (6.11)	11,700.00	7,871.82	2,682.24	2,579.42	26.088	SF
KUGEL 1N-18H-H267 - OH - PLAN #2 (6.11)	736.41	743.70	81.16	78.71	33.226	CC, ES
KUGEL 1N-18H-H267 - OH - PLAN #2 (6.11)	11,700.00	7,650.00	2,923.82	2,824.62	29.475	SF
KUGEL 21-18 - CPR WELL - GYRO	9,854.54	7,474.85	761.73	709.91	14.699	CC, ES
KUGEL 21-18 - CPR WELL - GYRO	10,100.00	7,479.39	800.29	742.71	13.898	SF
KUGEL 2-18 - CPR WELL - GYRO	954.09	925.77	597.21	594.06	189.564	CC
KUGEL 2-18 - CPR WELL - GYRO	1,000.00	970.20	597.33	594.01	180.322	ES
KUGEL 2-18 - CPR WELL - GYRO	9,000.00	7,470.97	1,550.15	1,508.70	37.395	SF
KUGEL 22-18 - CPR WELL - GYRO	8,377.67	7,471.84	610.75	572.64	16.025	CC, ES
KUGEL 22-18 - CPR WELL - GYRO	8,600.00	7,464.24	649.92	608.60	15.728	SF
KUGEL 31-18 - CPR WELL - GYRO	9,981.46	7,466.79	425.50	372.27	7.993	CC, ES, SF
KUGEL 32-18 - EXTRACTION WELL - NO SURVEYS	4,287.24	4,121.58	626.61	597.81	21.756	CC
KUGEL 32-18 - EXTRACTION WELL - NO SURVEYS	4,400.00	4,229.28	627.50	597.68	21.039	ES
KUGEL 32-18 - EXTRACTION WELL - NO SURVEYS	5,200.00	4,993.38	682.44	646.08	18.768	SF
KUGEL 41-18 - CPR WELL - GYRO	100.00	57.93	1,668.15	1,668.03	10,000.000	CC
KUGEL 41-18 - CPR WELL - GYRO	200.00	154.86	1,668.21	1,667.79	3,961.455	ES
KUGEL 41-18 - CPR WELL - GYRO	10,300.00	7,447.97	2,085.07	2,029.91	37.801	SF
KUGEL 42-18 - CPR WELL - GYRO	201.54	182.63	231.84	231.37	495.523	CC, ES
KUGEL 42-18 - CPR WELL - GYRO	8,600.00	7,418.04	2,123.97	2,085.58	55.319	SF
KUGEL V18-3 - KMG WELL - GYRO	9,805.80	7,457.10	804.04	752.76	15.678	CC, ES
KUGEL V18-3 - KMG WELL - GYRO	10,000.00	7,460.37	827.16	771.24	14.791	SF
LINCOLN 2 - LINCOLN 2 - HS RESOURCES WELL	5,710.93	5,010.00	1,544.29	1,511.32	46.836	CC, ES
LINCOLN 2 - LINCOLN 2 - HS RESOURCES WELL	5,800.00	5,010.00	1,546.86	1,513.82	46.813	SF
LISA 1 - KMG WELL - GYRO	7,445.63	7,113.00	905.15	870.80	26.354	CC, ES
LISA 1 - KMG WELL - GYRO	7,700.00	7,308.39	942.64	905.83	25.606	SF
LISA 2 - KMG WELL - GYRO	7,208.63	6,906.74	1,779.94	1,742.47	47.508	CC, ES
LISA 2 - KMG WELL - GYRO	7,500.00	7,178.46	1,834.70	1,794.58	45.733	SF
ROCKY MOUNTAIN FUEL 12 - HS RESOURCES WELL	5,707.89	5,100.00	3,139.82	3,100.30	79.438	CC, ES
ROCKY MOUNTAIN FUEL 12 - HS RESOURCES WELL	6,400.00	5,100.00	3,215.20	3,172.94	76.078	SF
ROCKY MTN FUEL D 8 - HS RESOURCES WELL - NO	5,930.01	5,026.00	3,401.79	3,363.18	88.117	CC, ES
ROCKY MTN FUEL D 8 - HS RESOURCES WELL - NO	6,600.00	5,026.00	3,467.14	3,426.19	84.672	SF
STREAR V 06-23D - KMG WELL - GYRO	15,752.51	7,449.31	1,825.53	1,710.64	15.890	CC, ES, SF
STREAR V 06-63HN - KMG WELL - SURVEYS	15,752.51	9,324.49	1,226.54	1,105.20	10.108	CC, ES, SF
WANDELL 1 - CPR WELL - GYRO	14,737.65	7,440.94	1,564.40	1,440.62	12.639	CC, ES

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

# Cathedral Energy Services

## Anticollision Summary Report

<b>Company:</b>	Crestone Peak Resources	<b>Local Co-ordinate Reference:</b>	Well KUGEL 1A-18H-H267 - Slot KUGEL 1A
<b>Project:</b>	DJ BASIN	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Reference Site:</b>	S18-T2N-R67W (KUGEL)	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	KUGEL 1A-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	PLAN #3 (6.11)	<b>Offset TVD Reference:</b>	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S18-T2N-R67W (KUGEL)						
WANDELL 1 - CPR WELL - GYRO	14,800.00	7,440.80	1,565.64	1,441.59	12.621	SF
WANDELL 21-7 - CPR WELL - GYRO	14,813.86	7,397.80	456.41	331.56	3.656	CC, ES
WANDELL 21-7 - CPR WELL - GYRO	14,900.00	7,395.77	464.46	337.23	3.651	SF
WANDELL 22-7 - CPR WELL - SURVEYS	13,698.88	7,729.12	391.49	278.96	3.479	CC
WANDELL 22-7 - CPR WELL - SURVEYS	13,700.00	7,729.13	391.49	278.90	3.477	ES, SF
WANDELL 24-7 - CPR WELL - SURVEYS	10,934.78	7,613.76	628.19	545.16	7.566	CC, ES
WANDELL 24-7 - CPR WELL - SURVEYS	11,000.00	7,614.23	631.57	546.48	7.423	SF
WANDELL 31-7 - CPR WELL - SURVEYS	15,189.19	7,540.98	693.04	548.13	4.783	CC, ES, SF
WANDELL 32-7 - CPR WELL - GYRO	13,781.81	7,426.21	662.11	553.29	6.084	CC, ES, SF
WANDELL 33-7 - CPR WELL - SURVEYS	12,443.69	7,603.17	639.44	531.64	5.932	CC, ES, SF
WANDELL 34-7 - CPR WELL - GYRO	10,960.38	7,606.07	584.45	516.95	8.658	CC, ES, SF
WANDELL 4-0-7 - CPR WELL - SURVEYS	15,671.92	7,689.26	7.01	-144.03	0.046	Level 1, CC, ES, SF
WANDELL 41-7 - CPR WELL - SURVEYS	15,235.75	7,518.37	2,096.49	1,964.97	15.940	CC, ES
WANDELL 41-7 - CPR WELL - SURVEYS	15,400.00	7,521.48	2,102.91	1,970.38	15.867	SF
WANDELL 42-7 - CPR WELL - SURVEYS	13,654.94	7,602.35	2,040.30	1,915.30	16.322	CC, ES
WANDELL 42-7 - CPR WELL - SURVEYS	13,800.00	7,602.91	2,045.45	1,919.75	16.272	SF
WANDELL 43-7 - CPR WELL - SURVEYS	12,365.82	7,825.95	1,917.64	1,807.39	17.394	CC, ES, SF
WANDELL 4-4-7 - CPR WELL - SURVEYS	12,983.21	7,770.73	104.89	-3.13	0.971	Level 1, CC
WANDELL 4-4-7 - CPR WELL - SURVEYS	13,000.00	7,770.85	106.22	-6.51	0.942	Level 1, ES, SF
WANDELL 4-6-7 - CPR WELL - SURVEYS	11,700.00	7,814.98	231.45	127.19	2.220	SF
WANDELL 4-6-7 - CPR WELL - SURVEYS	11,732.69	7,815.12	229.13	126.26	2.227	CC, ES
WANDELL 6-0-7 - CPR WELL - SURVEYS	15,688.98	7,525.60	1,270.86	1,116.38	8.227	CC, ES
WANDELL 6-0-7 - CPR WELL - SURVEYS	15,700.00	7,525.72	1,270.91	1,116.41	8.226	SF
WANDELL 6-4-7 - CPR WELL - SURVEYS	12,913.17	7,823.85	1,313.11	1,191.10	10.762	CC, ES, SF
WANDELL 6-8-7 - CPR WELL - SURVEYS	10,484.10	7,600.85	1,323.76	1,248.67	17.631	CC, ES
WANDELL 6-8-7 - CPR WELL - SURVEYS	10,600.00	7,601.64	1,328.82	1,253.14	17.559	SF
WANDELL 8-2-7 - CPR WELL - SURVEYS	14,339.31	7,611.78	2,547.25	2,414.53	19.193	CC, ES
WANDELL 8-2-7 - CPR WELL - SURVEYS	14,600.00	7,613.42	2,560.56	2,426.31	19.073	SF
WANDELL 8-4-7 - CPR WELL - SURVEYS	13,129.75	7,825.45	2,517.66	2,392.76	20.158	CC, ES
WANDELL 8-4-7 - CPR WELL - SURVEYS	13,300.00	7,826.17	2,523.41	2,397.85	20.097	SF
WANDELL E UNIT 1 - CPR WELL - NO SURVEYS	11,375.07	7,457.00	1,690.38	1,614.08	22.154	CC, ES
WANDELL E UNIT 1 - CPR WELL - NO SURVEYS	11,500.00	7,457.00	1,694.99	1,618.08	22.038	SF

# Cathedral Energy Services

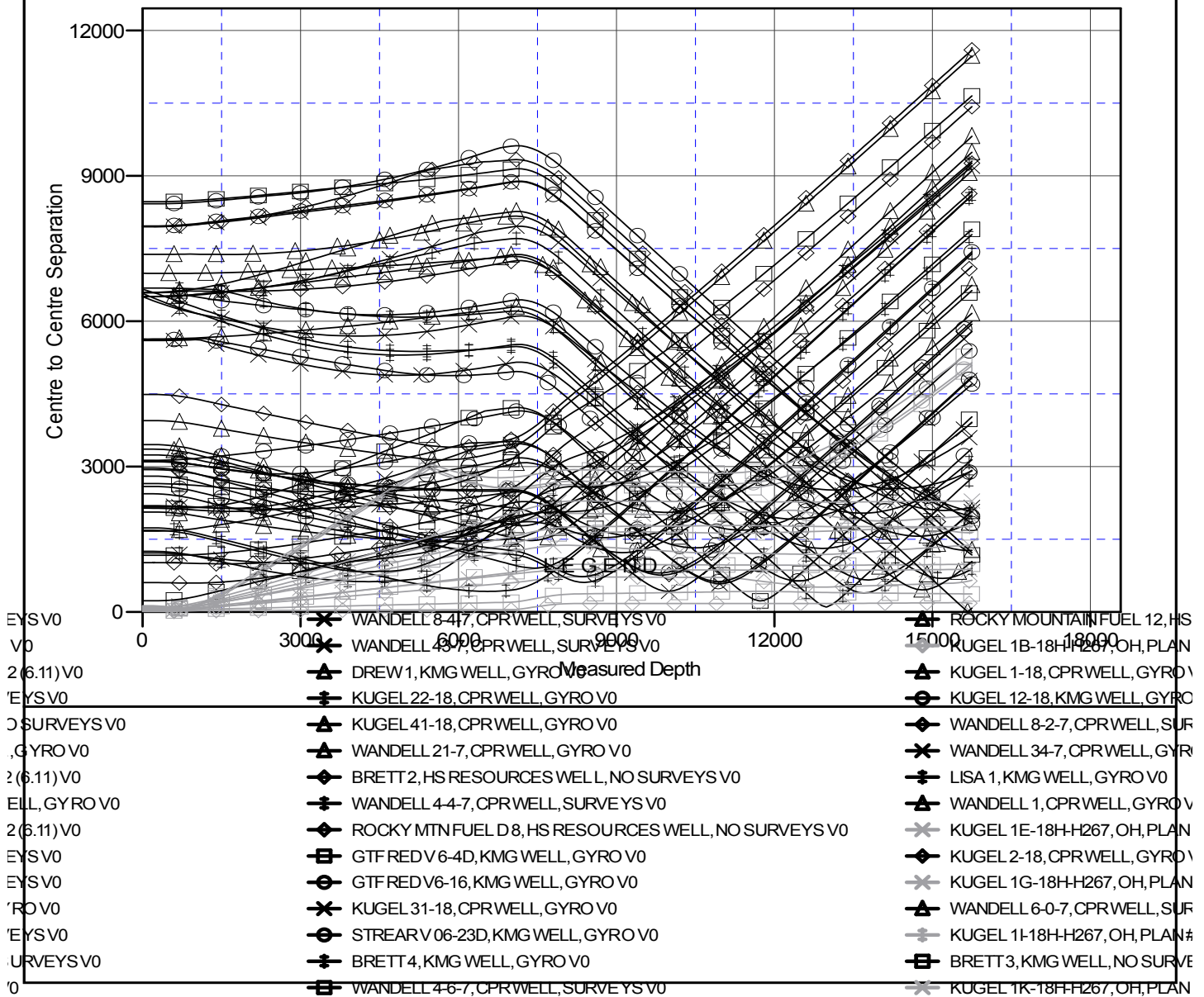
## Anticollision Summary Report

<b>Company:</b>	Crestone Peak Resources	<b>Local Co-ordinate Reference:</b>	Well KUGEL 1A-18H-H267 - Slot KUGEL 1A
<b>Project:</b>	DJ BASIN	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Reference Site:</b>	S18-T2N-R67W (KUGEL)	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	KUGEL 1A-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	PLAN #3 (6.11)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to 23' KB @ 4977.00usft  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000

Coordinates are relative to: KUGEL 1A-18H-H267 - Slot KUGEL 1A  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.37°

### Ladder Plot



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

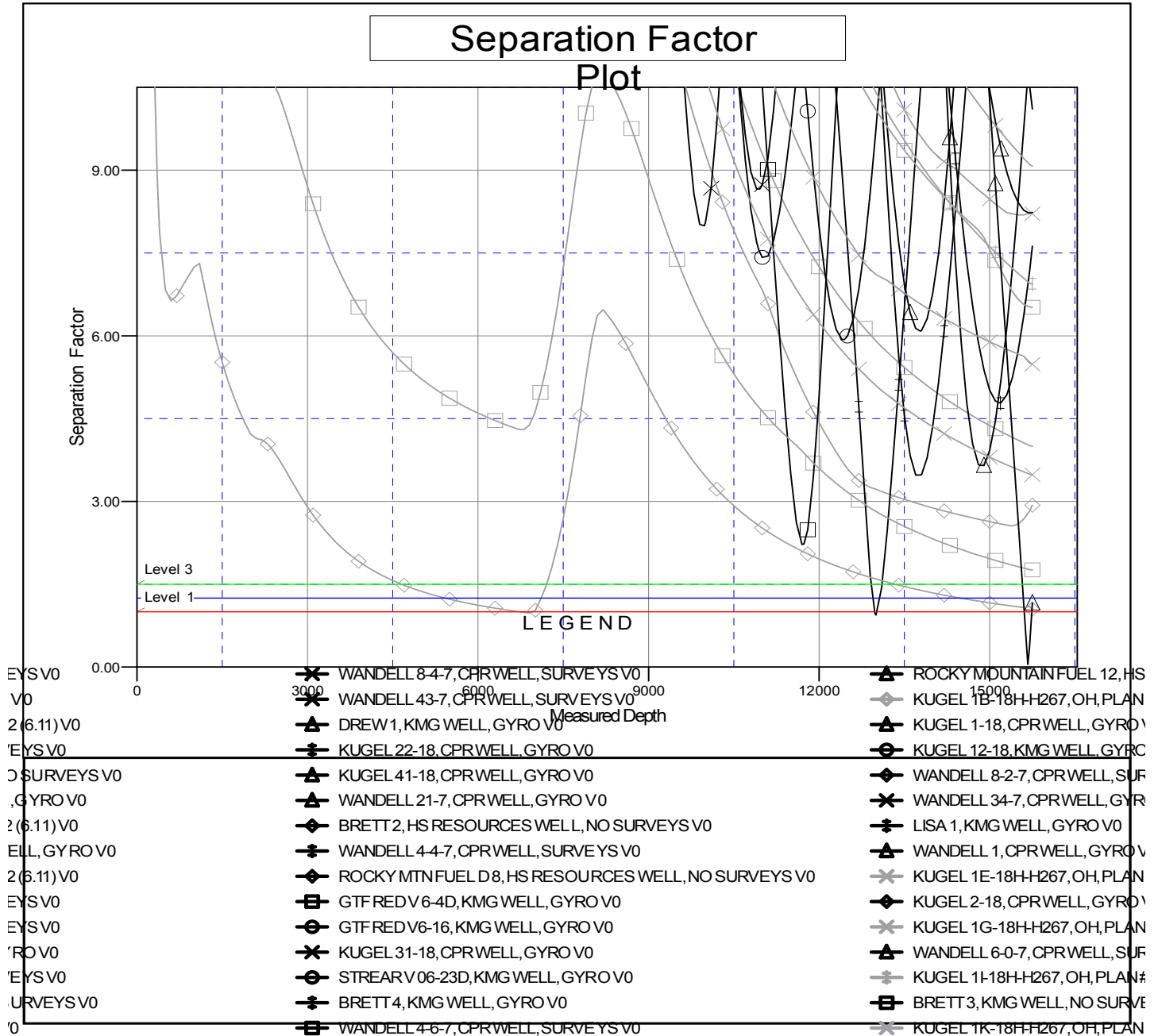
# Cathedral Energy Services

## Anticollision Summary Report

<b>Company:</b>	Crestone Peak Resources	<b>Local Co-ordinate Reference:</b>	Well KUGEL 1A-18H-H267 - Slot KUGEL 1A
<b>Project:</b>	DJ BASIN	<b>TVD Reference:</b>	23' KB @ 4977.00usft
<b>Reference Site:</b>	S18-T2N-R67W (KUGEL)	<b>MD Reference:</b>	23' KB @ 4977.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	KUGEL 1A-18H-H267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	PLAN #3 (6.11)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to 23' KB @ 4977.00usft  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000

Coordinates are relative to: KUGEL 1A-18H-H267 - Slot KUGEL 1A  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.37°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation