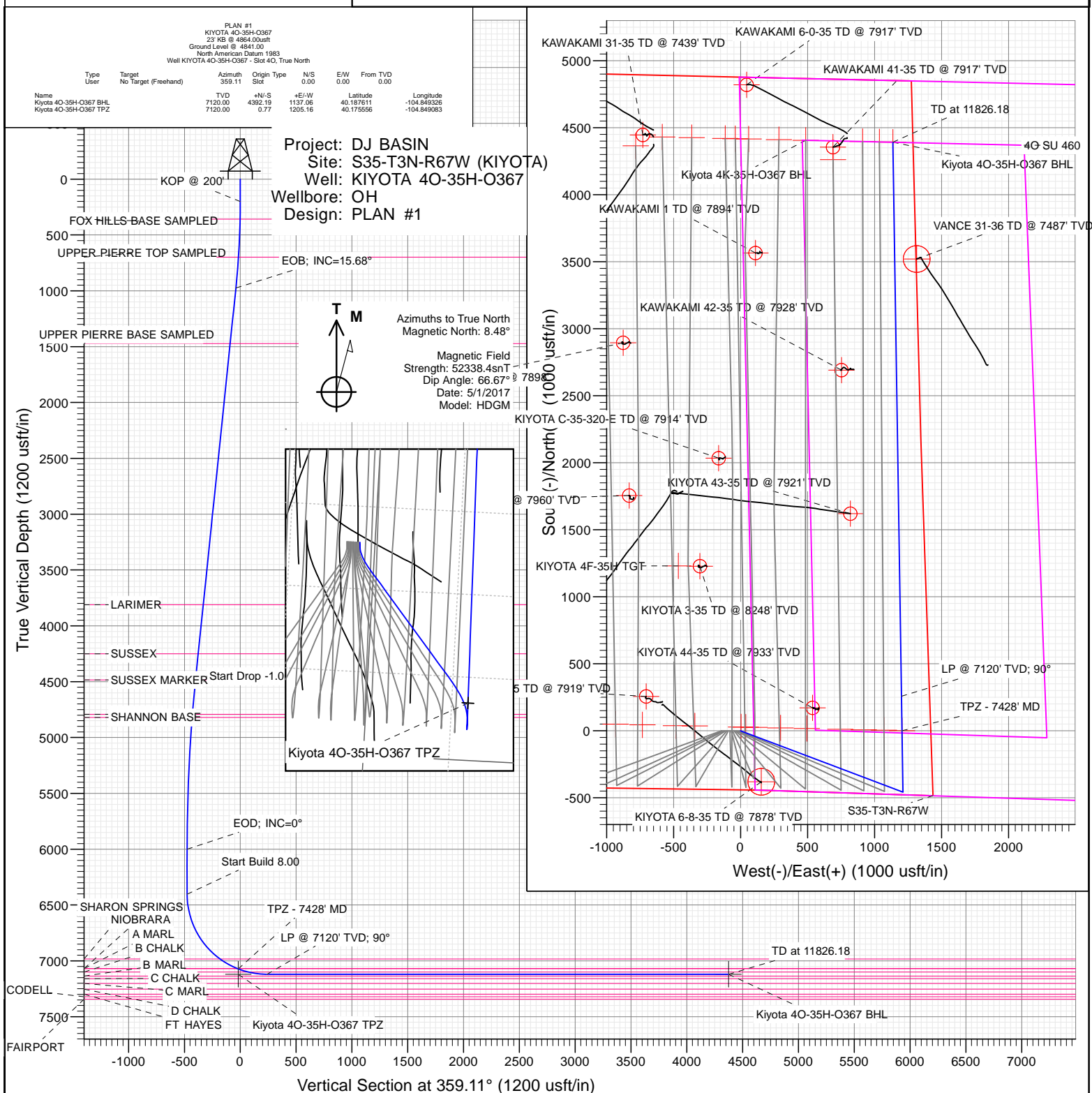




Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	983.77	15.68	110.66	974.03	-37.60	99.69	2.00	110.66	-39.14	
4	4596.03	15.68	110.66	4451.94	-382.03	1012.88	0.00	0.00	-397.72	
5	6163.57	0.00	0.00	6000.00	-457.23	1212.27	1.00	180.00	-476.00	
6	6567.37	0.00	0.00	6403.80	-457.23	1212.27	0.00	0.00	-476.00	
7	7692.37	90.00	359.11	7120.00	258.88	1201.16	8.00	359.11	240.19	
8	11826.18	90.00	359.11	7120.00	4392.19	1137.06	0.00	0.00	4374.00	Kiyota 40-35H-O367 BHL



WELL DETAILS: KIYOTA 40-35H-O367

		Ground Level:		4841.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1307455.95	3180680.54	40.175554	-104.853396	40



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4864.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4864.00usft
Site:	S35-T3N-R67W (KIYOTA)	North Reference:	True
Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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		S35-T3N-R67W (KIYOTA)			
Site Position:		Northing:	1,307,456.03 usft	Latitude:	40.175557
From:	Lat/Long	Easting:	3,180,540.51 usft	Longitude:	-104.853897
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.42 °

Well	KIYOTA 4O-35H-O367 - Slot 4O					
Well Position	+N/-S	0.00 usft	Northing:	1,307,455.95 usft	Latitude:	40.175554
	+E/-W	0.00 usft	Easting:	3,180,680.54 usft	Longitude:	-104.853396
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,841.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	5/1/2017	8.48	66.67	52,338

Design	PLAN #1			
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	359.11

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	
983.77	15.68	110.66	974.03	-37.60	99.69	2.00	2.00	0.00	110.66	
4,596.03	15.68	110.66	4,451.94	-382.03	1,012.88	0.00	0.00	0.00	0.00	
6,163.57	0.00	0.00	6,000.00	-457.23	1,212.27	1.00	-1.00	0.00	180.00	
6,567.37	0.00	0.00	6,403.80	-457.23	1,212.27	0.00	0.00	0.00	0.00	
7,692.37	90.00	359.11	7,120.00	258.88	1,201.16	8.00	8.00	0.00	359.11	
11,826.18	90.00	359.11	7,120.00	4,392.19	1,137.06	0.00	0.00	0.00	0.00	Kiyota 4O-35H-O367

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4864.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4864.00usft
Site:	S35-T3N-R67W (KIYOTA)	North Reference:	True
Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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	KOP @ 200'
300.00	2.00	110.66	299.98	-0.62	1.63	-0.64	2.00	2.00	
358.08	3.16	110.66	358.00	-1.54	4.08	-1.60	2.00	2.00	FOX HILLS BASE SAMPLED
400.00	4.00	110.66	399.84	-2.46	6.53	-2.56	2.00	2.00	
500.00	6.00	110.66	499.45	-5.54	14.68	-5.77	2.00	2.00	
600.00	8.00	110.66	598.70	-9.84	26.09	-10.24	2.00	2.00	
700.00	10.00	110.66	697.46	-15.36	40.72	-15.99	2.00	2.00	
700.54	10.01	110.66	698.00	-15.39	40.81	-16.02	2.00	2.00	UPPER PIERRE TOP SAMPLED
800.00	12.00	110.66	795.62	-22.09	58.57	-23.00	2.00	2.00	
900.00	14.00	110.66	893.05	-30.03	79.62	-31.26	2.00	2.00	
983.77	15.68	110.66	974.03	-37.60	99.69	-39.14	2.00	2.00	EOB; INC=15.68°
1,000.00	15.68	110.66	989.65	-39.15	103.79	-40.76	0.00	0.00	
1,100.00	15.68	110.66	1,085.93	-48.68	129.08	-50.68	0.00	0.00	
1,200.00	15.68	110.66	1,182.21	-58.22	154.36	-60.61	0.00	0.00	
1,300.00	15.68	110.66	1,278.50	-67.75	179.64	-70.54	0.00	0.00	
1,400.00	15.68	110.66	1,374.78	-77.29	204.92	-80.46	0.00	0.00	
1,500.00	15.68	110.66	1,471.06	-86.82	230.20	-90.39	0.00	0.00	
1,502.02	15.68	110.66	1,473.00	-87.02	230.71	-90.59	0.00	0.00	UPPER PIERRE BASE SAMPLED
1,600.00	15.68	110.66	1,567.34	-96.36	255.48	-100.31	0.00	0.00	
1,700.00	15.68	110.66	1,663.62	-105.89	280.76	-110.24	0.00	0.00	
1,800.00	15.68	110.66	1,759.90	-115.43	306.04	-120.17	0.00	0.00	
1,900.00	15.68	110.66	1,856.18	-124.96	331.32	-130.09	0.00	0.00	
2,000.00	15.68	110.66	1,952.46	-134.50	356.60	-140.02	0.00	0.00	
2,100.00	15.68	110.66	2,048.74	-144.03	381.88	-149.95	0.00	0.00	
2,200.00	15.68	110.66	2,145.02	-153.57	407.16	-159.87	0.00	0.00	
2,300.00	15.68	110.66	2,241.30	-163.10	432.44	-169.80	0.00	0.00	
2,400.00	15.68	110.66	2,337.58	-172.64	457.72	-179.73	0.00	0.00	
2,500.00	15.68	110.66	2,433.86	-182.17	483.00	-189.65	0.00	0.00	
2,599.99	15.68	110.66	2,530.14	-191.71	508.28	-199.58	0.00	0.00	
2,699.99	15.68	110.66	2,626.42	-201.24	533.56	-209.51	0.00	0.00	
2,799.99	15.68	110.66	2,722.70	-210.78	558.84	-219.43	0.00	0.00	
2,899.99	15.68	110.66	2,818.98	-220.31	584.12	-229.36	0.00	0.00	
2,999.99	15.68	110.66	2,915.27	-229.85	609.40	-239.28	0.00	0.00	
3,099.99	15.68	110.66	3,011.55	-239.38	634.68	-249.21	0.00	0.00	
3,199.99	15.68	110.66	3,107.83	-248.92	659.96	-259.14	0.00	0.00	
3,299.99	15.68	110.66	3,204.11	-258.45	685.24	-269.06	0.00	0.00	
3,399.99	15.68	110.66	3,300.39	-267.99	710.52	-278.99	0.00	0.00	
3,499.99	15.68	110.66	3,396.67	-277.52	735.80	-288.92	0.00	0.00	
3,599.99	15.68	110.66	3,492.95	-287.06	761.08	-298.84	0.00	0.00	
3,699.99	15.68	110.66	3,589.23	-296.59	786.36	-308.77	0.00	0.00	
3,799.99	15.68	110.66	3,685.51	-306.13	811.64	-318.70	0.00	0.00	
3,899.99	15.68	110.66	3,781.79	-315.66	836.92	-328.62	0.00	0.00	
3,930.33	15.68	110.66	3,811.00	-318.55	844.59	-331.63	0.00	0.00	LARIMER
3,999.99	15.68	110.66	3,878.07	-325.20	862.20	-338.55	0.00	0.00	
4,099.99	15.68	110.66	3,974.35	-334.73	887.48	-348.48	0.00	0.00	
4,199.99	15.68	110.66	4,070.63	-344.27	912.76	-358.40	0.00	0.00	
4,299.99	15.68	110.66	4,166.91	-353.80	938.05	-368.33	0.00	0.00	
4,387.33	15.68	110.66	4,251.00	-362.13	960.12	-377.00	0.00	0.00	SUSSEX
4,399.99	15.68	110.66	4,263.19	-363.34	963.33	-378.26	0.00	0.00	
4,499.99	15.68	110.66	4,359.47	-372.87	988.61	-388.18	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4864.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4864.00usft
Site:	S35-T3N-R67W (KIYOTA)	North Reference:	True
Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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
4,596.03	15.68	110.66	4,451.94	-382.03	1,012.88	-397.72	0.00	0.00	Start Drop -1.00
4,599.99	15.64	110.66	4,455.75	-382.41	1,013.88	-398.11	1.00	-1.00	
4,630.34	15.33	110.66	4,485.00	-385.26	1,021.47	-401.08	1.00	-1.00	SUSSEX MARKER
4,699.99	14.64	110.66	4,552.28	-391.62	1,038.32	-407.70	1.00	-1.00	
4,799.99	13.64	110.66	4,649.25	-400.24	1,061.17	-416.67	1.00	-1.00	
4,899.99	12.64	110.66	4,746.64	-408.26	1,082.43	-425.02	1.00	-1.00	
4,946.44	12.17	110.66	4,792.00	-411.78	1,091.76	-428.69	1.00	-1.00	SHANNON
4,975.07	11.89	110.66	4,820.00	-413.88	1,097.35	-430.88	1.00	-1.00	SHANNON BASE
4,999.99	11.64	110.66	4,844.40	-415.68	1,102.10	-432.75	1.00	-1.00	
5,099.99	10.64	110.66	4,942.52	-422.49	1,120.17	-439.84	1.00	-1.00	
5,199.99	9.64	110.66	5,040.95	-428.70	1,136.64	-446.31	1.00	-1.00	
5,299.99	8.64	110.66	5,139.68	-434.31	1,151.49	-452.14	1.00	-1.00	
5,399.99	7.64	110.66	5,238.68	-439.30	1,164.73	-457.34	1.00	-1.00	
5,499.99	6.64	110.66	5,337.90	-443.68	1,176.36	-461.90	1.00	-1.00	
5,599.99	5.64	110.66	5,437.33	-447.46	1,186.36	-465.83	1.00	-1.00	
5,699.99	4.64	110.66	5,536.92	-450.62	1,194.73	-469.12	1.00	-1.00	
5,799.99	3.64	110.66	5,636.66	-453.16	1,201.48	-471.77	1.00	-1.00	
5,899.99	2.64	110.66	5,736.51	-455.09	1,206.60	-473.78	1.00	-1.00	
5,999.99	1.64	110.66	5,836.44	-456.41	1,210.09	-475.15	1.00	-1.00	
6,099.99	0.64	110.66	5,936.42	-457.11	1,211.94	-475.88	1.00	-1.00	
6,163.57	0.00	0.00	6,000.00	-457.23	1,212.27	-476.00	1.00	-1.00	EOD; INC=0°
6,199.99	0.00	0.00	6,036.42	-457.23	1,212.27	-476.00	0.00	0.00	
6,299.99	0.00	0.00	6,136.42	-457.23	1,212.27	-476.00	0.00	0.00	
6,399.99	0.00	0.00	6,236.42	-457.23	1,212.27	-476.00	0.00	0.00	
6,499.99	0.00	0.00	6,336.42	-457.23	1,212.27	-476.00	0.00	0.00	
6,567.37	0.00	0.00	6,403.80	-457.23	1,212.27	-476.00	0.00	0.00	Start Build 8.00
6,599.99	2.61	359.11	6,436.40	-456.49	1,212.26	-475.26	8.00	8.00	
6,699.99	10.61	359.11	6,535.66	-444.99	1,212.08	-463.76	8.00	8.00	
6,799.99	18.61	359.11	6,632.35	-419.79	1,211.69	-438.56	8.00	8.00	
6,899.99	26.61	359.11	6,724.59	-381.38	1,211.09	-400.15	8.00	8.00	
6,999.99	34.61	359.11	6,810.58	-330.51	1,210.30	-349.27	8.00	8.00	
7,099.99	42.61	359.11	6,888.66	-268.17	1,209.34	-286.92	8.00	8.00	
7,199.99	50.61	359.11	6,957.30	-195.57	1,208.21	-214.31	8.00	8.00	
7,242.00	53.97	359.11	6,983.00	-162.34	1,207.70	-181.08	8.00	8.00	SHARON SPRINGS
7,299.99	58.61	359.11	7,015.17	-114.12	1,206.95	-132.86	8.00	8.00	
7,399.99	66.61	359.11	7,061.14	-25.42	1,205.57	-44.14	8.00	8.00	
7,420.46	68.25	359.11	7,069.00	-6.51	1,205.28	-25.23	8.00	8.00	NIOBRARA - A MARL
7,428.29	68.87	359.11	7,071.86	0.77	1,205.17	-17.95	8.00	8.00	TPZ - 7428' MD
7,499.99	74.61	359.11	7,094.31	68.82	1,204.11	50.11	8.00	8.00	
7,527.04	76.77	359.11	7,101.00	95.03	1,203.71	76.32	8.00	8.00	B CHALK
7,599.98	82.61	359.11	7,114.05	166.76	1,202.59	148.06	8.00	8.00	
7,692.37	90.00	359.11	7,120.00	258.88	1,201.16	240.19	8.00	8.00	LP @ 7120' TVD; 90°
7,699.98	90.00	359.11	7,120.00	266.49	1,201.05	247.80	0.00	0.00	
7,799.98	90.00	359.11	7,120.00	366.48	1,199.50	347.80	0.00	0.00	
7,899.98	90.00	359.11	7,120.00	466.47	1,197.94	447.80	0.00	0.00	
7,999.98	90.00	359.11	7,120.00	566.45	1,196.39	547.80	0.00	0.00	
8,099.98	90.00	359.11	7,120.00	666.44	1,194.84	647.80	0.00	0.00	
8,199.98	90.00	359.11	7,120.00	766.43	1,193.29	747.80	0.00	0.00	
8,299.98	90.00	359.11	7,120.00	866.42	1,191.74	847.80	0.00	0.00	
8,399.98	90.00	359.11	7,120.00	966.41	1,190.19	947.80	0.00	0.00	
8,499.98	90.00	359.11	7,120.00	1,066.39	1,188.64	1,047.80	0.00	0.00	
8,599.98	90.00	359.11	7,120.00	1,166.38	1,187.09	1,147.80	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4864.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4864.00usft
Site:	S35-T3N-R67W (KIYOTA)	North Reference:	True
Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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
8,699.98	90.00	359.11	7,120.00	1,266.37	1,185.54	1,247.80	0.00	0.00	
8,799.98	90.00	359.11	7,120.00	1,366.36	1,183.99	1,347.80	0.00	0.00	
8,899.98	90.00	359.11	7,120.00	1,466.34	1,182.44	1,447.80	0.00	0.00	
8,999.98	90.00	359.11	7,120.00	1,566.33	1,180.89	1,547.80	0.00	0.00	
9,099.98	90.00	359.11	7,120.00	1,666.32	1,179.34	1,647.80	0.00	0.00	
9,199.98	90.00	359.11	7,120.00	1,766.31	1,177.79	1,747.80	0.00	0.00	
9,299.98	90.00	359.11	7,120.00	1,866.30	1,176.23	1,847.80	0.00	0.00	
9,399.98	90.00	359.11	7,120.00	1,966.28	1,174.68	1,947.80	0.00	0.00	
9,499.98	90.00	359.11	7,120.00	2,066.27	1,173.13	2,047.80	0.00	0.00	
9,599.98	90.00	359.11	7,120.00	2,166.26	1,171.58	2,147.80	0.00	0.00	
9,699.98	90.00	359.11	7,120.00	2,266.25	1,170.03	2,247.80	0.00	0.00	
9,799.98	90.00	359.11	7,120.00	2,366.23	1,168.48	2,347.80	0.00	0.00	
9,899.98	90.00	359.11	7,120.00	2,466.22	1,166.93	2,447.80	0.00	0.00	
9,999.98	90.00	359.11	7,120.00	2,566.21	1,165.38	2,547.80	0.00	0.00	
10,099.98	90.00	359.11	7,120.00	2,666.20	1,163.83	2,647.80	0.00	0.00	
10,199.98	90.00	359.11	7,120.00	2,766.19	1,162.28	2,747.80	0.00	0.00	
10,299.98	90.00	359.11	7,120.00	2,866.17	1,160.73	2,847.80	0.00	0.00	
10,399.98	90.00	359.11	7,120.00	2,966.16	1,159.18	2,947.80	0.00	0.00	
10,499.98	90.00	359.11	7,120.00	3,066.15	1,157.63	3,047.80	0.00	0.00	
10,599.98	90.00	359.11	7,120.00	3,166.14	1,156.08	3,147.80	0.00	0.00	
10,699.98	90.00	359.11	7,120.00	3,266.12	1,154.52	3,247.80	0.00	0.00	
10,799.98	90.00	359.11	7,120.00	3,366.11	1,152.97	3,347.80	0.00	0.00	
10,899.98	90.00	359.11	7,120.00	3,466.10	1,151.42	3,447.80	0.00	0.00	
10,999.98	90.00	359.11	7,120.00	3,566.09	1,149.87	3,547.80	0.00	0.00	
11,099.98	90.00	359.11	7,120.00	3,666.08	1,148.32	3,647.80	0.00	0.00	
11,199.98	90.00	359.11	7,120.00	3,766.06	1,146.77	3,747.80	0.00	0.00	
11,299.98	90.00	359.11	7,120.00	3,866.05	1,145.22	3,847.80	0.00	0.00	
11,399.98	90.00	359.11	7,120.00	3,966.04	1,143.67	3,947.80	0.00	0.00	
11,499.98	90.00	359.11	7,120.00	4,066.03	1,142.12	4,047.80	0.00	0.00	
11,599.98	90.00	359.11	7,120.00	4,166.01	1,140.57	4,147.80	0.00	0.00	
11,699.98	90.00	359.11	7,120.00	4,266.00	1,139.02	4,247.80	0.00	0.00	
11,799.98	90.00	359.11	7,120.00	4,365.99	1,137.47	4,347.79	0.00	0.00	
11,826.18	90.00	359.11	7,120.00	4,392.19	1,137.06	4,374.00	0.00	0.00	TD at 11826.18

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Kiyota 4O-35H-O367 TP	0.00	0.00	7,120.00	0.77	1,205.16	1,307,465.51	3,181,885.67	40.175556	-104.849083
- plan misses target center by 45.12usft at 7443.38usft MD (7077.15 TVD, 14.90 N, 1204.95 E)									
- Point									
Kiyota 4O-35H-O367 BH	0.00	0.00	7,120.00	4,392.19	1,137.06	1,311,856.31	3,181,785.55	40.187611	-104.849326
- plan hits target center									
- Point									

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 4864.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 4864.00usft
Site:	S35-T3N-R67W (KIYOTA)	North Reference:	True
Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
358.08	358.00	FOX HILLS BASE SAMPLED			
700.54	698.00	UPPER PIERRE TOP SAMPLED			
1,502.02	1,473.00	UPPER PIERRE BASE SAMPLED			
3,930.33	3,811.00	LARIMER			
4,387.33	4,251.00	SUSSEX			
4,630.34	4,485.00	SUSSEX MARKER			
4,946.44	4,792.00	SHANNON			
4,975.07	4,820.00	SHANNON BASE			
7,242.00	6,983.00	SHARON SPRINGS			
7,420.46	7,069.00	A MARL			
7,420.46	7,069.00	NIOBRARA			
7,527.04	7,101.00	B CHALK			

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	KOP @ 200'
983.77	974.03	-37.60	99.69	EOB; INC=15.68°
4,596.03	4,451.94	-382.03	1,012.88	Start Drop -1.00
6,163.57	6,000.00	-457.23	1,212.27	EOD; INC=0°
6,567.37	6,403.80	-457.23	1,212.27	Start Build 8.00
7,428.29	7,071.86	0.77	1,205.17	TPZ - 7428' MD
7,692.37	7,120.00	258.88	1,201.16	LP @ 7120' TVD; 90°
11,826.18	7,120.00	4,392.19	1,137.06	TD at 11826.18

Crestone Peak Resources

DJ BASIN

S35-T3N-R67W (KIYOTA)

KIYOTA 40-35H-O367

OH

PLAN #1

Anticollision Report

05 May, 2017

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference	PLAN #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 820.40usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	5/3/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	11,826.18	PLAN #1 (OH)	MWD+HDGM	OWSG MWD + HDGM

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 40-35H-O367 - Slot 40
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 40-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance		Separation Factor	Warning
			Between Centres (usft)	Between Ellipses (usft)		
S35-T3N-R67W (KIYOTA)						
KIYOTA 4A-35H-O367 - OH - PLAN #1	200.00	200.00	140.03	139.04	141.020	CC, ES
KIYOTA 4A-35H-O367 - OH - PLAN #1	700.00	666.36	218.86	214.15	46.473	SF
KIYOTA 4B-35H-O367 - OH - PLAN #1	200.00	200.00	129.97	128.98	130.889	CC, ES
KIYOTA 4B-35H-O367 - OH - PLAN #1	700.00	675.69	194.54	189.91	42.061	SF
KIYOTA 4C-35H-O367 - OH - PLAN #1	200.00	200.00	120.00	119.01	120.850	CC, ES
KIYOTA 4C-35H-O367 - OH - PLAN #1	700.00	683.07	174.09	169.52	38.045	SF
KIYOTA 4D-35H-O367 - OH - PLAN #1	200.00	200.00	110.00	109.01	110.779	CC, ES
KIYOTA 4D-35H-O367 - OH - PLAN #1	700.00	689.30	156.77	152.21	34.406	SF
KIYOTA 4E-35H-O367 - OH - PLAN #1	200.00	200.00	100.00	99.01	100.708	CC, ES
KIYOTA 4E-35H-O367 - OH - PLAN #1	800.00	789.47	163.88	158.61	31.121	SF
KIYOTA 4F-35H-O367 - OH - PLAN #1	200.00	200.00	90.00	89.01	90.638	CC, ES
KIYOTA 4F-35H-O367 - OH - PLAN #1	800.00	788.70	169.92	164.59	31.857	SF
KIYOTA 4G-35H-O367 - OH - PLAN #1	200.00	200.00	80.00	79.01	80.567	CC, ES
KIYOTA 4G-35H-O367 - OH - PLAN #1	800.00	796.20	138.02	132.67	25.830	SF
KIYOTA 4H-35H-O367 - OH - PLAN #1	200.00	200.00	70.00	69.01	70.496	CC, ES
KIYOTA 4H-35H-O367 - OH - PLAN #1	800.00	798.86	120.55	115.23	22.650	SF
KIYOTA 4I-35H-O367 - OH - PLAN #1	200.00	200.00	60.00	59.01	60.425	CC, ES
KIYOTA 4I-35H-O367 - OH - PLAN #1	700.00	697.47	101.95	97.37	22.251	SF
KIYOTA 4J-35H-O367 - OH - PLAN #1	200.00	200.00	50.00	49.01	50.354	CC, ES
KIYOTA 4J-35H-O367 - OH - PLAN #1	600.00	598.70	76.77	72.91	19.905	SF
KIYOTA 4K-35H-O367 - OH - PLAN #1	200.00	200.00	40.00	39.01	40.283	CC, ES
KIYOTA 4K-35H-O367 - OH - PLAN #1	11,826.18	11,745.08	653.45	497.33	4.185	SF
KIYOTA 4L-35H-O367 - OH - PLAN #1	200.00	200.00	30.00	29.01	30.213	CC, ES
KIYOTA 4L-35H-O367 - OH - PLAN #1	11,703.06	11,597.90	448.69	296.29	2.944	SF
KIYOTA 4M-35H-O367 - OH - PLAN #1	200.00	200.00	20.00	19.01	20.142	CC, ES
KIYOTA 4M-35H-O367 - OH - PLAN #1	11,826.18	11,819.70	233.03	78.15	1.505	SF
KIYOTA 4N-35H-O367 - OH - PLAN #1	200.00	200.00	10.00	9.01	10.071	CC, ES
KIYOTA 4N-35H-O367 - OH - PLAN #1	11,826.18	12,002.32	232.71	127.67	2.215	SF
S35-T3N-R67W (OFFSETS)						
KAWAKAMI 1 (EXISTING) - CPR WELL - GYRO						Out of range
KAWAKAMI 31-35 (EXISTING) - CPR WELL - SURVEYS						Out of range
KAWAKAMI 32-35 (EXISTING) - CPR WELL - GYRO						Out of range
KAWAKAMI 4-0-35 (EXISTING) - CPR WELL - SURVEY						Out of range
KAWAKAMI 41-35 (EXISTING) - CPR WELL - GYRO	11,801.68	7,048.22	426.54	340.90	4.980	CC, ES, SF
KAWAKAMI 42-35 (EXISTING) - CPR WELL - GYRO	10,131.09	7,065.46	416.26	353.75	6.659	CC, ES, SF
KAWAKAMI 4-2-35 (EXISTING) - CPR WELL - SURVEY						Out of range
KAWAKAMI 6-0-35 (EXISTING) - CPR WELL - GYRO						Out of range
KIYOTA 33-35 (EXISTING) - CPR WELL - GYRO						Out of range
KIYOTA 3-35 (EXISTING) - CPR WELL - GYRO						Out of range
KIYOTA 34-35 (EXISTING) - CPR WELL - GYRO	100.00	67.75	621.64	621.46	3,499.827	CC, ES
KIYOTA 34-35 (EXISTING) - CPR WELL - GYRO	1,200.00	1,143.80	793.07	787.56	143.899	SF
KIYOTA 43-35 (EXISTING) - CPR WELL - GYRO	9,102.88	7,721.16	717.32	672.73	16.084	CC, ES
KIYOTA 43-35 (EXISTING) - CPR WELL - GYRO	9,200.00	7,714.95	723.83	678.51	15.971	SF
KIYOTA 44-35 (EXISTING) - CPR WELL - GYRO	2,275.45	2,169.30	359.98	347.10	27.943	CC
KIYOTA 44-35 (EXISTING) - CPR WELL - GYRO	2,300.00	2,192.53	360.05	347.00	27.588	ES
KIYOTA 44-35 (EXISTING) - CPR WELL - GYRO	7,700.00	7,073.27	665.37	631.71	19.767	SF
KIYOTA 4-6-35 (EXISTING) - CPR WELL - SURVEYS						Out of range
KIYOTA 6-8-35 (EXISTING) - CPR WELL - SURVEYS	202.56	188.20	617.58	616.74	742.051	CC, ES
KIYOTA 6-8-35 (EXISTING) - CPR WELL - SURVEYS	1,500.00	1,575.23	809.27	801.10	99.039	SF
KIYOTA C-35-320-E (EXISTING) - CPR WELL - GYRO						Out of range
VANCE #31-36(EXISTING) - CPR WELL - SURVEYS	10,955.17	7,193.40	169.29	85.16	2.012	CC, ES, SF

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4A-35H-O367 - OH - PLAN #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-89.55	1.10	-140.02	140.03					
100.00	100.00	100.00	100.00	0.14	0.14	-89.55	1.10	-140.02	140.03	139.75	0.28	507.305		
200.00	200.00	200.00	200.00	0.50	0.50	-89.55	1.10	-140.02	140.03	139.04	0.99	141.020	CC, ES	
300.00	299.98	295.53	295.51	0.85	0.83	159.77	0.55	-141.52	143.23	141.51	1.71	83.607		
400.00	399.84	390.48	390.34	1.20	1.17	159.72	-1.09	-145.97	152.80	150.34	2.46	62.059		
500.00	499.45	484.28	483.82	1.56	1.51	159.64	-3.76	-153.25	168.67	165.45	3.22	52.407		
600.00	598.70	576.41	575.33	1.95	1.86	159.54	-7.41	-163.20	190.74	186.77	3.97	48.052		
700.00	697.47	666.36	664.31	2.35	2.22	159.41	-11.96	-175.58	218.86	214.15	4.71	46.473	SF	
800.00	795.62	753.70	750.26	2.78	2.58	159.25	-17.29	-190.10	252.82	247.39	5.43	46.520		
900.00	893.06	838.03	832.76	3.24	2.96	159.07	-23.29	-206.44	292.43	286.29	6.14	47.632		
1,000.00	989.66	922.02	914.44	3.75	3.35	158.92	-30.04	-224.84	337.26	330.43	6.83	49.381		
1,100.00	1,085.94	1,010.61	1,000.46	4.27	3.78	159.09	-37.35	-244.73	383.62	376.13	7.49	51.193		
1,200.00	1,182.22	1,099.21	1,086.49	4.81	4.22	159.22	-44.65	-264.62	429.99	421.82	8.17	52.607		
1,300.00	1,278.50	1,187.81	1,172.51	5.36	4.67	159.32	-51.95	-284.52	476.36	467.50	8.87	53.726		
1,400.00	1,374.78	1,276.40	1,258.54	5.91	5.11	159.41	-59.25	-304.41	522.73	513.16	9.57	54.625		
1,500.00	1,471.06	1,365.00	1,344.56	6.47	5.56	159.48	-66.56	-324.30	569.10	558.82	10.28	55.357		
1,600.00	1,567.34	1,453.60	1,430.59	7.02	6.02	159.54	-73.86	-344.19	615.48	604.48	11.00	55.962		
1,700.00	1,663.62	1,542.19	1,516.61	7.58	6.47	159.60	-81.16	-364.08	661.85	650.13	11.72	56.468		
1,800.00	1,759.90	1,630.79	1,602.64	8.15	6.93	159.64	-88.46	-383.98	708.22	695.77	12.45	56.894		
1,900.00	1,856.18	1,719.38	1,688.66	8.71	7.38	159.68	-95.77	-403.87	754.60	741.42	13.18	57.258		
2,000.00	1,952.46	1,807.98	1,774.69	9.28	7.84	159.72	-103.07	-423.76	800.97	787.06	13.91	57.572		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4B-35H-O367 - OH - PLAN #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-89.52	1.08	-129.96	129.97					
100.00	100.00	100.00	100.00	0.14	0.14	-89.52	1.08	-129.96	129.97	129.69	0.28	470.861		
200.00	200.00	200.00	200.00	0.50	0.50	-89.52	1.08	-129.96	129.97	128.98	0.99	130.889 CC, ES		
300.00	299.98	299.98	299.98	0.85	0.85	160.06	1.08	-129.96	131.61	129.91	1.70	77.349		
400.00	399.84	395.70	395.68	1.20	1.19	160.45	0.42	-131.42	138.04	135.63	2.41	57.168		
500.00	499.45	490.58	490.44	1.56	1.52	160.64	-1.54	-135.73	150.74	147.59	3.15	47.875		
600.00	598.70	584.08	583.61	1.95	1.85	160.66	-4.73	-142.78	169.62	165.73	3.89	43.617		
700.00	697.47	675.69	674.61	2.35	2.20	160.53	-9.08	-152.37	194.54	189.91	4.63	42.061 SF		
800.00	795.62	764.95	762.91	2.78	2.55	160.30	-14.47	-164.25	225.34	219.99	5.35	42.101		
900.00	893.06	851.45	848.05	3.24	2.90	160.01	-20.78	-178.15	261.83	255.77	6.07	43.163		
1,000.00	989.66	940.27	935.09	3.75	3.28	159.79	-28.08	-194.25	303.20	296.44	6.76	44.844		
1,100.00	1,085.94	1,030.77	1,023.76	4.27	3.68	159.88	-35.57	-210.76	345.72	338.28	7.45	46.420		
1,200.00	1,182.22	1,121.28	1,112.43	4.81	4.09	159.95	-43.06	-227.27	388.25	380.10	8.15	47.667		
1,300.00	1,278.50	1,211.78	1,201.10	5.36	4.50	160.00	-50.55	-243.78	430.78	421.92	8.85	48.658		
1,400.00	1,374.78	1,302.29	1,289.78	5.91	4.91	160.05	-58.04	-260.29	473.30	463.73	9.57	49.458		
1,500.00	1,471.06	1,392.80	1,378.45	6.47	5.33	160.09	-65.53	-276.81	515.83	505.54	10.29	50.114		
1,600.00	1,567.34	1,483.30	1,467.12	7.02	5.75	160.12	-73.02	-293.32	558.36	547.34	11.02	50.658		
1,700.00	1,663.62	1,573.81	1,555.79	7.58	6.17	160.15	-80.51	-309.83	600.89	589.13	11.76	51.117		
1,800.00	1,759.90	1,664.31	1,644.46	8.15	6.59	160.17	-88.00	-326.34	643.42	630.92	12.49	51.506		
1,900.00	1,856.18	1,754.82	1,733.13	8.71	7.02	160.20	-95.49	-342.85	685.94	672.71	13.23	51.840		
2,000.00	1,952.46	1,845.32	1,821.80	9.28	7.44	160.22	-102.98	-359.37	728.47	714.50	13.97	52.130		
2,100.00	2,048.74	1,935.83	1,910.47	9.85	7.87	160.23	-110.46	-375.88	771.00	756.28	14.72	52.382		
2,200.00	2,145.02	2,026.34	1,999.14	10.41	8.29	160.25	-117.95	-392.39	813.53	798.06	15.47	52.604		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4C-35H-O367 - OH - PLAN #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.88	-120.00	120.00				
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.88	-120.00	120.00	119.72	0.28	434.746	
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.88	-120.00	120.00	119.01	0.99	120.850 CC, ES	
300.00	299.98	299.98	299.98	0.85	0.85	160.03	0.88	-120.00	121.64	119.94	1.70	71.490	
400.00	399.84	399.84	399.84	1.20	1.21	160.80	0.88	-120.00	126.57	124.16	2.41	52.426	
500.00	499.45	495.51	495.49	1.56	1.55	161.58	0.15	-121.42	136.28	133.15	3.13	43.576	
600.00	598.70	590.09	589.95	1.95	1.87	161.99	-1.98	-125.62	152.16	148.31	3.85	39.525	
700.00	697.47	683.07	682.61	2.35	2.20	162.09	-5.46	-132.45	174.09	169.52	4.58	38.045 SF	
800.00	795.62	773.96	772.89	2.78	2.54	161.95	-10.17	-141.72	201.93	196.63	5.30	38.110	
900.00	893.06	862.31	860.31	3.24	2.88	161.66	-16.00	-153.18	235.51	229.49	6.01	39.163	
1,000.00	989.66	949.06	945.71	3.75	3.22	161.32	-22.88	-166.71	274.53	267.81	6.72	40.836	
1,100.00	1,085.94	1,040.32	1,035.40	4.27	3.60	161.21	-30.53	-181.74	315.42	308.01	7.41	42.591	
1,200.00	1,182.22	1,131.58	1,125.09	4.81	3.99	161.13	-38.17	-196.77	356.31	348.20	8.11	43.952	
1,300.00	1,278.50	1,222.83	1,214.77	5.36	4.39	161.07	-45.81	-211.80	397.19	388.38	8.82	45.045	
1,400.00	1,374.78	1,314.09	1,304.46	5.91	4.78	161.01	-53.46	-226.83	438.08	428.54	9.54	45.934	
1,500.00	1,471.06	1,405.35	1,394.15	6.47	5.19	160.97	-61.10	-241.85	478.97	468.70	10.26	46.669	
1,600.00	1,567.34	1,496.61	1,483.84	7.02	5.59	160.93	-68.74	-256.88	519.86	508.86	10.99	47.283	
1,700.00	1,663.62	1,587.87	1,573.52	7.58	6.00	160.90	-76.39	-271.91	560.74	549.01	11.73	47.802	
1,800.00	1,759.90	1,679.13	1,663.21	8.15	6.40	160.87	-84.03	-286.94	601.63	589.16	12.47	48.247	
1,900.00	1,856.18	1,770.38	1,752.90	8.71	6.81	160.85	-91.67	-301.97	642.52	629.31	13.21	48.631	
2,000.00	1,952.46	1,861.64	1,842.59	9.28	7.22	160.83	-99.32	-317.00	683.41	669.45	13.96	48.965	
2,100.00	2,048.74	1,952.90	1,932.27	9.85	7.64	160.81	-106.96	-332.03	724.30	709.59	14.70	49.258	
2,200.00	2,145.02	2,044.16	2,021.96	10.41	8.05	160.79	-114.60	-347.06	765.18	749.73	15.45	49.518	
2,300.00	2,241.31	2,135.42	2,111.65	10.98	8.46	160.78	-122.25	-362.09	806.07	789.87	16.20	49.748	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4D-35H-O367 - OH - PLAN #1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.80	-110.00	110.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.80	-110.00	110.00	109.72	0.28	398.517		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.80	-110.00	110.00	109.01	0.99	110.779	CC, ES	
300.00	299.98	299.98	299.98	0.85	0.85	160.05	0.80	-110.00	111.64	109.94	1.70	65.612		
400.00	399.84	399.84	399.84	1.20	1.21	160.90	0.80	-110.00	116.57	114.16	2.41	48.285		
500.00	499.45	499.45	499.45	1.56	1.57	162.15	0.80	-110.00	124.84	121.71	3.13	39.836		
600.00	598.70	595.03	595.01	1.95	1.90	163.20	-0.03	-111.33	137.82	133.97	3.84	35.846		
700.00	697.47	689.30	689.16	2.35	2.22	163.66	-2.51	-115.30	156.77	152.21	4.56	34.406	SF	
800.00	795.62	781.81	781.35	2.78	2.55	163.66	-6.54	-121.74	181.54	176.27	5.27	34.445		
900.00	893.06	872.09	871.04	3.24	2.88	163.36	-12.00	-130.45	211.99	206.01	5.98	35.437		
1,000.00	989.66	959.84	957.87	3.75	3.21	162.91	-18.73	-141.21	247.91	241.21	6.69	37.043		
1,100.00	1,085.94	1,052.18	1,049.02	4.27	3.57	162.59	-26.56	-153.73	286.06	278.67	7.39	38.734		
1,200.00	1,182.22	1,144.61	1,140.26	4.81	3.94	162.35	-34.40	-166.25	324.21	316.12	8.09	40.061		
1,300.00	1,278.50	1,237.03	1,231.50	5.36	4.31	162.16	-42.23	-178.77	362.38	353.56	8.81	41.129		
1,400.00	1,374.78	1,329.46	1,322.74	5.91	4.69	162.01	-50.07	-191.29	400.54	391.00	9.54	42.002		
1,500.00	1,471.06	1,421.89	1,413.97	6.47	5.07	161.88	-57.91	-203.82	438.71	428.44	10.27	42.726		
1,600.00	1,567.34	1,514.31	1,505.21	7.02	5.46	161.77	-65.74	-216.34	476.87	465.87	11.00	43.334		
1,700.00	1,663.62	1,606.74	1,596.45	7.58	5.85	161.68	-73.58	-228.86	515.04	503.30	11.75	43.850		
1,800.00	1,759.90	1,699.17	1,687.69	8.15	6.24	161.60	-81.41	-241.38	553.21	540.72	12.49	44.293		
1,900.00	1,856.18	1,791.59	1,778.93	8.71	6.63	161.54	-89.25	-253.91	591.38	578.14	13.24	44.676		
2,000.00	1,952.46	1,884.02	1,870.17	9.28	7.02	161.48	-97.08	-266.43	629.55	615.57	13.99	45.011		
2,100.00	2,048.74	1,976.44	1,961.40	9.85	7.42	161.42	-104.92	-278.95	667.72	652.98	14.74	45.306		
2,200.00	2,145.02	2,068.87	2,052.64	10.41	7.81	161.38	-112.76	-291.47	705.89	690.40	15.49	45.567		
2,300.00	2,241.31	2,161.30	2,143.88	10.98	8.20	161.33	-120.59	-304.00	744.07	727.82	16.25	45.800		
2,400.00	2,337.59	2,253.72	2,235.12	11.55	8.60	161.29	-128.43	-316.52	782.24	765.24	17.00	46.009		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4E-35H-O367 - OH - PLAN #1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.73	-100.00	100.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.73	-100.00	100.00	99.72	0.28	362.288		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.73	-100.00	100.00	99.01	0.99	100.708	CC, ES	
300.00	299.98	299.98	299.98	0.85	0.85	160.08	0.73	-100.00	101.64	99.94	1.70	59.735		
400.00	399.84	399.84	399.84	1.20	1.21	161.01	0.73	-100.00	106.57	104.16	2.41	44.144		
500.00	499.45	499.45	499.45	1.56	1.57	162.37	0.73	-100.00	114.85	111.72	3.13	36.649		
600.00	598.70	598.70	598.70	1.95	1.93	163.98	0.73	-100.00	126.53	122.67	3.86	32.801		
700.00	697.47	694.72	694.71	2.35	2.26	165.08	-0.44	-101.04	142.57	138.01	4.56	31.235		
800.00	795.62	789.47	789.33	2.78	2.58	165.28	-3.94	-104.17	163.88	158.61	5.27	31.121	SF	
900.00	893.06	882.55	882.10	3.24	2.90	164.85	-9.65	-109.28	190.31	184.34	5.97	31.868		
1,000.00	989.66	975.90	974.88	3.75	3.23	164.17	-17.27	-116.10	221.47	214.78	6.69	33.106		
1,100.00	1,085.94	1,070.47	1,068.85	4.27	3.57	163.79	-25.21	-123.20	253.94	246.54	7.40	34.313		
1,200.00	1,182.22	1,165.04	1,162.82	4.81	3.92	163.49	-33.15	-130.30	286.42	278.29	8.12	35.261		
1,300.00	1,278.50	1,259.61	1,256.79	5.36	4.28	163.25	-41.09	-137.40	318.90	310.05	8.85	36.017		
1,400.00	1,374.78	1,354.18	1,350.76	5.91	4.64	163.05	-49.03	-144.51	351.39	341.79	9.59	36.633		
1,500.00	1,471.06	1,448.75	1,444.72	6.47	5.00	162.89	-56.97	-151.61	383.88	373.54	10.34	37.142		
1,600.00	1,567.34	1,543.32	1,538.69	7.02	5.36	162.75	-64.91	-158.71	416.37	405.28	11.08	37.568		
1,700.00	1,663.62	1,637.89	1,632.66	7.58	5.73	162.64	-72.85	-165.81	448.86	437.03	11.83	37.929		
1,800.00	1,759.90	1,732.46	1,726.63	8.15	6.09	162.54	-80.79	-172.92	481.36	468.77	12.59	38.239		
1,900.00	1,856.18	1,827.03	1,820.60	8.71	6.46	162.45	-88.73	-180.02	513.85	500.51	13.34	38.506		
2,000.00	1,952.46	1,921.60	1,914.56	9.28	6.83	162.37	-96.67	-187.12	546.35	532.25	14.10	38.739		
2,100.00	2,048.74	2,016.17	2,008.53	9.85	7.20	162.30	-104.61	-194.22	578.85	563.98	14.86	38.945		
2,200.00	2,145.02	2,110.74	2,102.50	10.41	7.57	162.24	-112.55	-201.33	611.35	595.72	15.62	39.126		
2,300.00	2,241.31	2,205.31	2,196.47	10.98	7.94	162.18	-120.49	-208.43	643.85	627.46	16.39	39.288		
2,400.00	2,337.59	2,299.88	2,290.44	11.55	8.31	162.13	-128.43	-215.53	676.35	659.19	17.15	39.433		
2,500.00	2,433.87	2,394.45	2,384.40	12.12	8.68	162.09	-136.37	-222.63	708.85	690.93	17.92	39.563		
2,600.00	2,530.15	2,489.02	2,478.37	12.69	9.05	162.05	-144.31	-229.73	741.35	722.66	18.68	39.681		
2,700.00	2,626.43	2,583.59	2,572.34	13.26	9.43	162.01	-152.25	-236.84	773.85	754.40	19.45	39.788		
2,800.00	2,722.71	2,678.16	2,666.31	13.83	9.80	161.97	-160.19	-243.94	806.35	786.13	20.22	39.886		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4F-35H-O367 - OH - PLAN #1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.66	-90.00	90.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.66	-90.00	90.00	89.72	0.28	326.059		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.66	-90.00	90.00	89.01	0.99	90.638	CC, ES	
300.00	299.98	298.39	298.37	0.85	0.84	159.20	-0.80	-90.85	92.50	90.80	1.69	54.594		
400.00	399.84	396.37	396.22	1.20	1.18	157.69	-5.15	-93.39	100.02	97.61	2.41	41.465		
500.00	499.45	494.39	493.90	1.56	1.53	155.72	-12.16	-97.48	112.50	109.36	3.14	35.827		
600.00	598.70	593.07	592.19	1.95	1.90	154.53	-19.72	-101.90	128.53	124.67	3.86	33.273		
700.00	697.47	691.21	689.94	2.35	2.27	154.15	-27.25	-106.29	147.69	143.09	4.59	32.145		
800.00	795.62	788.70	787.04	2.78	2.63	154.31	-34.72	-110.66	169.92	164.59	5.33	31.857	SF	
900.00	893.06	885.41	883.38	3.24	3.00	154.82	-42.14	-114.99	195.23	189.14	6.08	32.104		
1,000.00	989.66	981.25	978.83	3.75	3.37	155.56	-49.48	-119.28	223.58	216.74	6.84	32.691		
1,100.00	1,085.94	1,076.75	1,073.96	4.27	3.73	156.41	-56.80	-123.55	253.04	245.46	7.58	33.362		
1,200.00	1,182.22	1,172.25	1,169.08	4.81	4.09	157.09	-64.13	-127.83	282.55	274.22	8.34	33.895		
1,300.00	1,278.50	1,267.75	1,264.20	5.36	4.46	157.63	-71.45	-132.11	312.09	303.00	9.09	34.328		
1,400.00	1,374.78	1,363.25	1,359.32	5.91	4.82	158.08	-78.77	-136.38	341.65	331.80	9.85	34.686		
1,500.00	1,471.06	1,458.75	1,454.45	6.47	5.19	158.46	-86.09	-140.66	371.23	360.62	10.61	34.987		
1,600.00	1,567.34	1,554.25	1,549.57	7.02	5.56	158.78	-93.41	-144.93	400.82	389.44	11.37	35.244		
1,700.00	1,663.62	1,649.75	1,644.69	7.58	5.92	159.06	-100.73	-149.21	430.42	418.28	12.14	35.465		
1,800.00	1,759.90	1,745.24	1,739.81	8.15	6.29	159.31	-108.05	-153.49	460.02	447.12	12.90	35.657		
1,900.00	1,856.18	1,840.74	1,834.94	8.71	6.65	159.52	-115.38	-157.76	489.64	475.97	13.67	35.825		
2,000.00	1,952.46	1,936.24	1,930.06	9.28	7.02	159.71	-122.70	-162.04	519.25	504.82	14.43	35.975		
2,100.00	2,048.74	2,031.74	2,025.18	9.85	7.39	159.88	-130.02	-166.31	548.88	533.68	15.20	36.108		
2,200.00	2,145.02	2,127.24	2,120.30	10.41	7.75	160.03	-137.34	-170.59	578.51	562.54	15.97	36.227		
2,300.00	2,241.31	2,222.74	2,215.43	10.98	8.12	160.17	-144.66	-174.86	608.14	591.40	16.74	36.334		
2,400.00	2,337.59	2,318.24	2,310.55	11.55	8.49	160.29	-151.98	-179.14	637.77	620.26	17.51	36.431		
2,500.00	2,433.87	2,413.74	2,405.67	12.12	8.85	160.40	-159.31	-183.42	667.41	649.13	18.28	36.520		
2,600.00	2,530.15	2,509.24	2,500.79	12.69	9.22	160.51	-166.63	-187.69	697.04	678.00	19.04	36.600		
2,700.00	2,626.43	2,604.74	2,595.92	13.26	9.59	160.60	-173.95	-191.97	726.68	706.87	19.81	36.674		
2,800.00	2,722.71	2,700.24	2,691.04	13.83	9.95	160.69	-181.27	-196.24	756.33	735.74	20.58	36.743		
2,900.00	2,818.99	2,795.74	2,786.16	14.40	10.32	160.77	-188.59	-200.52	785.97	764.61	21.35	36.806		
3,000.00	2,915.27	2,891.24	2,881.28	14.98	10.69	160.85	-195.91	-204.80	815.61	793.49	22.12	36.864		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4G-35H-O367 - OH - PLAN #1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.58	-80.00	80.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.58	-80.00	80.00	79.72	0.28	289.830		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.58	-80.00	80.00	79.01	0.99	80.567	CC, ES	
300.00	299.98	300.08	300.06	0.85	0.84	158.94	-1.16	-79.94	81.57	79.88	1.69	48.356		
400.00	399.84	399.94	399.78	1.20	1.19	156.68	-6.39	-79.75	86.37	83.98	2.39	36.186		
500.00	499.45	499.51	499.06	1.56	1.54	154.10	-13.94	-79.48	94.54	91.43	3.11	30.403		
600.00	598.70	598.83	598.09	1.95	1.91	152.74	-21.54	-79.21	105.94	102.10	3.85	27.554		
700.00	697.47	697.77	696.74	2.35	2.28	152.39	-29.12	-78.94	120.45	115.86	4.59	26.242		
800.00	795.62	796.20	794.88	2.78	2.64	152.74	-36.65	-78.67	138.02	132.67	5.34	25.830	SF	
900.00	893.06	894.01	892.41	3.24	3.01	153.52	-44.14	-78.40	158.65	152.55	6.10	25.994		
1,000.00	989.66	991.09	989.20	3.75	3.37	154.58	-51.57	-78.14	182.36	175.48	6.87	26.529		
1,100.00	1,085.94	1,087.89	1,085.71	4.27	3.74	155.67	-58.98	-77.87	207.20	199.57	7.63	27.144		
1,200.00	1,182.22	1,184.69	1,182.23	4.81	4.10	156.53	-66.39	-77.61	232.11	223.71	8.40	27.642		
1,300.00	1,278.50	1,281.49	1,278.74	5.36	4.47	157.23	-73.80	-77.34	257.05	247.89	9.16	28.052		
1,400.00	1,374.78	1,378.28	1,375.25	5.91	4.83	157.80	-81.21	-77.08	282.02	272.09	9.93	28.396		
1,500.00	1,471.06	1,475.08	1,471.76	6.47	5.20	158.28	-88.62	-76.81	307.02	296.31	10.70	28.689		
1,600.00	1,567.34	1,571.88	1,568.28	7.02	5.56	158.68	-96.03	-76.55	332.03	320.55	11.47	28.940		
1,700.00	1,663.62	1,668.67	1,664.79	7.58	5.93	159.03	-103.44	-76.28	357.05	344.81	12.25	29.159		
1,800.00	1,759.90	1,765.47	1,761.30	8.15	6.29	159.33	-110.85	-76.02	382.09	369.07	13.02	29.350		
1,900.00	1,856.18	1,862.27	1,857.81	8.71	6.66	159.60	-118.26	-75.75	407.13	393.34	13.79	29.520		
2,000.00	1,952.46	1,959.06	1,954.33	9.28	7.02	159.84	-125.67	-75.49	432.18	417.62	14.57	29.670		
2,100.00	2,048.74	2,055.86	2,050.84	9.85	7.39	160.05	-133.08	-75.22	457.24	441.90	15.34	29.805		
2,200.00	2,145.02	2,152.66	2,147.35	10.41	7.75	160.23	-140.49	-74.96	482.30	466.19	16.12	29.927		
2,300.00	2,241.31	2,249.45	2,243.86	10.98	8.12	160.40	-147.90	-74.70	507.37	490.48	16.89	30.037		
2,400.00	2,337.59	2,346.25	2,340.38	11.55	8.49	160.56	-155.31	-74.43	532.44	514.77	17.67	30.137		
2,500.00	2,433.87	2,443.05	2,436.89	12.12	8.85	160.69	-162.72	-74.17	557.51	539.07	18.44	30.229		
2,600.00	2,530.15	2,539.85	2,533.40	12.69	9.22	160.82	-170.13	-73.90	582.59	563.37	19.22	30.313		
2,700.00	2,626.43	2,636.64	2,629.91	13.26	9.58	160.94	-177.54	-73.64	607.67	587.67	20.00	30.390		
2,800.00	2,722.71	2,733.44	2,726.43	13.83	9.95	161.05	-184.95	-73.37	632.75	611.98	20.77	30.461		
2,900.00	2,818.99	2,830.24	2,822.94	14.40	10.32	161.15	-192.36	-73.11	657.84	636.29	21.55	30.527		
3,000.00	2,915.27	2,927.03	2,919.45	14.98	10.68	161.24	-199.77	-72.84	682.92	660.59	22.33	30.588		
3,100.00	3,011.55	3,023.83	3,015.96	15.55	11.05	161.32	-207.18	-72.58	708.01	684.90	23.10	30.646		
3,200.00	3,107.83	3,120.63	3,112.48	16.12	11.41	161.40	-214.59	-72.31	733.10	709.22	23.88	30.699		
3,300.00	3,204.11	3,217.42	3,208.99	16.69	11.78	161.48	-222.00	-72.05	758.19	733.53	24.66	30.749		
3,400.00	3,300.39	3,314.22	3,305.50	17.27	12.15	161.55	-229.41	-71.78	783.28	757.84	25.43	30.795		
3,500.00	3,396.67	3,411.02	3,402.01	17.84	12.51	161.61	-236.82	-71.52	808.37	782.15	26.21	30.839		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4H-35H-O367 - OH - PLAN #1													Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.51	-70.00	70.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.51	-70.00	70.00	69.72	0.28	253.602		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.51	-70.00	70.00	69.01	0.99	70.496 CC, ES		
300.00	299.98	299.98	299.98	0.85	0.85	160.22	0.51	-70.00	71.64	69.94	1.70	42.104		
400.00	399.84	400.58	400.56	1.20	1.20	160.26	-1.20	-69.55	76.10	73.69	2.40	31.689		
500.00	499.45	501.04	500.87	1.56	1.55	158.73	-6.31	-68.22	82.92	79.81	3.11	26.686		
600.00	598.70	600.93	600.40	1.95	1.90	156.32	-14.46	-66.09	92.30	88.47	3.83	24.093		
700.00	697.47	700.10	699.18	2.35	2.26	154.83	-23.10	-63.83	104.85	100.28	4.57	22.943		
800.00	795.62	798.86	797.53	2.78	2.62	154.35	-31.71	-61.58	120.55	115.23	5.32	22.650 SF		
900.00	893.06	897.06	895.34	3.24	2.99	154.56	-40.26	-59.34	139.36	133.28	6.09	22.901		
1,000.00	989.66	994.62	992.49	3.75	3.36	155.21	-48.76	-57.12	161.23	154.37	6.86	23.503		
1,100.00	1,085.94	1,091.91	1,089.39	4.27	3.73	155.99	-57.24	-54.91	184.22	176.59	7.63	24.154		
1,200.00	1,182.22	1,189.21	1,186.29	4.81	4.10	156.60	-65.72	-52.69	207.23	198.83	8.40	24.674		
1,300.00	1,278.50	1,286.50	1,283.19	5.36	4.47	157.09	-74.20	-50.48	230.25	221.08	9.17	25.099		
1,400.00	1,374.78	1,383.80	1,380.09	5.91	4.84	157.48	-82.67	-48.26	253.29	243.34	9.95	25.452		
1,500.00	1,471.06	1,481.09	1,477.00	6.47	5.21	157.81	-91.15	-46.05	276.34	265.61	10.73	25.749		
1,600.00	1,567.34	1,578.39	1,573.90	7.02	5.58	158.09	-99.63	-43.83	299.40	287.89	11.51	26.003		
1,700.00	1,663.62	1,675.69	1,670.80	7.58	5.95	158.33	-108.11	-41.62	322.46	310.17	12.30	26.222		
1,800.00	1,759.90	1,772.98	1,767.70	8.15	6.33	158.54	-116.58	-39.40	345.53	332.45	13.08	26.412		
1,900.00	1,856.18	1,870.28	1,864.60	8.71	6.70	158.72	-125.06	-37.19	368.60	354.74	13.87	26.580		
2,000.00	1,952.46	1,967.57	1,961.50	9.28	7.07	158.89	-133.54	-34.97	391.68	377.02	14.65	26.729		
2,100.00	2,048.74	2,064.87	2,058.40	9.85	7.44	159.03	-142.02	-32.76	414.76	399.32	15.44	26.861		
2,200.00	2,145.02	2,162.17	2,155.30	10.41	7.82	159.16	-150.49	-30.54	437.84	421.61	16.23	26.980		
2,300.00	2,241.31	2,259.46	2,252.20	10.98	8.19	159.27	-158.97	-28.33	460.92	443.90	17.02	27.088		
2,400.00	2,337.59	2,356.76	2,349.10	11.55	8.56	159.37	-167.45	-26.11	484.00	466.20	17.80	27.185		
2,500.00	2,433.87	2,454.05	2,446.00	12.12	8.94	159.47	-175.93	-23.90	507.08	488.49	18.59	27.274		
2,600.00	2,530.15	2,551.35	2,542.90	12.69	9.31	159.55	-184.40	-21.68	530.17	510.79	19.38	27.355		
2,700.00	2,626.43	2,648.64	2,639.80	13.26	9.69	159.63	-192.88	-19.47	553.26	533.09	20.17	27.429		
2,800.00	2,722.71	2,745.94	2,736.70	13.83	10.06	159.71	-201.36	-17.25	576.34	555.38	20.96	27.497		
2,900.00	2,818.99	2,843.24	2,833.60	14.40	10.43	159.77	-209.83	-15.04	599.43	577.68	21.75	27.561		
3,000.00	2,915.27	2,940.53	2,930.50	14.98	10.81	159.84	-218.31	-12.82	622.52	599.98	22.54	27.619		
3,100.00	3,011.55	3,037.83	3,027.40	15.55	11.18	159.89	-226.79	-10.61	645.61	622.28	23.33	27.674		
3,200.00	3,107.83	3,135.12	3,124.30	16.12	11.56	159.95	-235.27	-8.39	668.70	644.58	24.12	27.725		
3,300.00	3,204.11	3,232.42	3,221.20	16.69	11.93	160.00	-243.74	-6.18	691.79	666.88	24.91	27.772		
3,400.00	3,300.39	3,329.72	3,318.11	17.27	12.30	160.04	-252.22	-3.96	714.88	689.18	25.70	27.816		
3,500.00	3,396.67	3,427.01	3,415.01	17.84	12.68	160.09	-260.70	-1.75	737.97	711.48	26.49	27.858		
3,600.00	3,492.96	3,524.31	3,511.91	18.41	13.05	160.13	-269.18	0.47	761.07	733.78	27.28	27.897		
3,700.00	3,589.24	3,621.60	3,608.81	18.98	13.43	160.17	-277.65	2.68	784.16	756.09	28.07	27.934		
3,800.00	3,685.52	3,718.90	3,705.71	19.56	13.80	160.20	-286.13	4.90	807.25	778.39	28.86	27.969		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 40-35H-O367 - Slot 40
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 40-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4I-35H-O367 - OH - PLAN #1													Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.44	-60.00	60.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.44	-60.00	60.00	59.72	0.28	217.373		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.44	-60.00	60.00	59.01	0.99	60.425 CC, ES		
300.00	299.98	299.98	299.98	0.85	0.85	160.30	0.44	-60.00	61.64	59.94	1.70	36.227		
400.00	399.84	399.84	399.84	1.20	1.21	161.79	0.44	-60.00	66.59	64.18	2.41	27.582		
500.00	499.45	499.45	499.45	1.56	1.57	163.83	0.44	-60.00	74.92	71.79	3.13	23.907		
600.00	598.70	598.70	598.70	1.95	1.93	166.01	0.44	-60.00	86.70	82.84	3.86	22.478		
700.00	697.47	697.47	697.47	2.35	2.28	168.07	0.44	-60.00	101.95	97.37	4.58	22.251 SF		
800.00	795.62	795.62	795.62	2.78	2.63	169.88	0.44	-60.00	120.69	115.39	5.31	22.737		
900.00	893.06	895.84	895.82	3.24	2.98	170.90	-1.03	-59.35	141.99	135.96	6.03	23.537		
1,000.00	989.66	996.38	996.22	3.75	3.31	170.82	-5.72	-57.28	164.64	157.88	6.76	24.344		
1,100.00	1,085.94	1,093.89	1,093.50	4.27	3.64	170.40	-11.96	-54.52	187.39	179.92	7.47	25.073		
1,200.00	1,182.22	1,191.26	1,190.63	4.81	3.97	170.07	-18.20	-51.77	210.15	201.95	8.19	25.646		
1,300.00	1,278.50	1,288.63	1,287.76	5.36	4.31	169.80	-24.43	-49.02	232.91	223.98	8.92	26.102		
1,400.00	1,374.78	1,386.00	1,384.89	5.91	4.66	169.58	-30.67	-46.26	255.67	246.01	9.66	26.473		
1,500.00	1,471.06	1,483.37	1,482.02	6.47	5.00	169.40	-36.91	-43.51	278.44	268.04	10.40	26.778		
1,600.00	1,567.34	1,580.74	1,579.15	7.02	5.35	169.24	-43.14	-40.76	301.21	290.07	11.14	27.033		
1,700.00	1,663.62	1,678.11	1,676.29	7.58	5.71	169.11	-49.38	-38.00	323.98	312.09	11.89	27.249		
1,800.00	1,759.90	1,775.48	1,773.42	8.15	6.06	168.99	-55.62	-35.25	346.75	334.11	12.64	27.434		
1,900.00	1,856.18	1,872.85	1,870.55	8.71	6.41	168.89	-61.86	-32.50	369.53	356.14	13.39	27.593		
2,000.00	1,952.46	1,970.22	1,967.68	9.28	6.77	168.80	-68.09	-29.74	392.30	378.16	14.15	27.731		
2,100.00	2,048.74	2,067.59	2,064.81	9.85	7.13	168.72	-74.33	-26.99	415.08	400.18	14.90	27.852		
2,200.00	2,145.02	2,164.96	2,161.94	10.41	7.48	168.65	-80.57	-24.24	437.86	422.20	15.66	27.960		
2,300.00	2,241.31	2,262.33	2,259.07	10.98	7.84	168.58	-86.80	-21.48	460.63	444.21	16.42	28.055		
2,400.00	2,337.59	2,359.70	2,356.20	11.55	8.20	168.52	-93.04	-18.73	483.41	466.23	17.18	28.140		
2,500.00	2,433.87	2,457.07	2,453.34	12.12	8.56	168.47	-99.28	-15.98	506.19	488.25	17.94	28.216		
2,600.00	2,530.15	2,554.44	2,550.47	12.69	8.92	168.42	-105.51	-13.22	528.97	510.27	18.70	28.286		
2,700.00	2,626.43	2,651.81	2,647.60	13.26	9.28	168.38	-111.75	-10.47	551.75	532.28	19.46	28.348		
2,800.00	2,722.71	2,749.18	2,744.73	13.83	9.64	168.33	-117.99	-7.71	574.53	554.30	20.23	28.405		
2,900.00	2,818.99	2,846.55	2,841.86	14.40	10.00	168.30	-124.22	-4.96	597.31	576.32	20.99	28.457		
3,000.00	2,915.27	2,943.92	2,938.99	14.98	10.36	168.26	-130.46	-2.21	620.09	598.33	21.75	28.505		
3,100.00	3,011.55	3,041.29	3,036.12	15.55	10.72	168.23	-136.70	0.55	642.87	620.35	22.52	28.549		
3,200.00	3,107.83	3,138.66	3,133.25	16.12	11.09	168.20	-142.93	3.30	665.65	642.37	23.28	28.590		
3,300.00	3,204.11	3,236.03	3,230.38	16.69	11.45	168.17	-149.17	6.05	688.43	664.38	24.05	28.628		
3,400.00	3,300.39	3,333.40	3,327.52	17.27	11.81	168.14	-155.41	8.81	711.21	686.40	24.81	28.662		
3,500.00	3,396.67	3,430.77	3,424.65	17.84	12.17	168.12	-161.64	11.56	733.99	708.41	25.58	28.695		
3,600.00	3,492.96	3,528.14	3,521.78	18.41	12.53	168.09	-167.88	14.31	756.77	730.43	26.35	28.725		
3,700.00	3,589.24	3,625.51	3,618.91	18.98	12.90	168.07	-174.12	17.07	779.55	752.44	27.11	28.754		
3,800.00	3,685.52	3,722.89	3,716.04	19.56	13.26	168.05	-180.35	19.82	802.33	774.45	27.88	28.780		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4J-35H-O367 - OH - PLAN #1													Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.36	-50.00	50.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.36	-50.00	50.00	49.72	0.28	181.144		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.36	-50.00	50.00	49.01	0.99	50.354 CC, ES		
300.00	299.98	299.98	299.98	0.85	0.85	160.41	0.36	-50.00	51.64	49.94	1.70	30.350		
400.00	399.84	399.84	399.84	1.20	1.21	162.16	0.36	-50.00	56.60	54.18	2.41	23.443		
500.00	499.45	499.45	499.45	1.56	1.57	164.47	0.36	-50.00	64.95	61.82	3.13	20.726		
600.00	598.70	598.70	598.70	1.95	1.93	166.85	0.36	-50.00	76.77	72.91	3.86	19.905 SF		
700.00	697.47	697.47	697.47	2.35	2.28	169.00	0.36	-50.00	92.07	87.49	4.58	20.097		
800.00	795.62	795.55	795.53	2.78	2.63	170.31	-0.95	-48.93	109.60	104.29	5.31	20.652		
900.00	893.06	900.12	899.95	3.24	2.97	170.47	-5.04	-45.58	127.85	121.81	6.04	21.169		
1,000.00	989.66	1,002.07	1,001.51	3.75	3.32	169.90	-11.95	-39.92	146.75	139.95	6.80	21.592		
1,100.00	1,085.94	1,101.43	1,100.23	4.27	3.67	169.02	-20.65	-32.81	164.91	157.38	7.53	21.891		
1,200.00	1,182.22	1,199.75	1,197.91	4.81	4.03	168.29	-29.35	-25.69	183.02	174.75	8.27	22.119		
1,300.00	1,278.50	1,298.07	1,295.59	5.36	4.39	167.69	-38.06	-18.57	201.15	192.12	9.03	22.287		
1,400.00	1,374.78	1,396.40	1,393.26	5.91	4.76	167.20	-46.76	-11.46	219.30	209.51	9.78	22.413		
1,500.00	1,471.06	1,494.72	1,490.94	6.47	5.13	166.77	-55.46	-4.34	237.46	226.91	10.55	22.509		
1,600.00	1,567.34	1,593.04	1,588.62	7.02	5.51	166.41	-64.16	2.78	255.63	244.31	11.32	22.584		
1,700.00	1,663.62	1,691.37	1,686.30	7.58	5.88	166.10	-72.86	9.90	273.81	261.71	12.09	22.641		
1,800.00	1,759.90	1,789.69	1,783.98	8.15	6.26	165.83	-81.56	17.02	291.99	279.12	12.87	22.687		
1,900.00	1,856.18	1,888.01	1,881.66	8.71	6.64	165.58	-90.27	24.13	310.19	296.54	13.65	22.723		
2,000.00	1,952.46	1,986.34	1,979.34	9.28	7.02	165.37	-98.97	31.25	328.38	313.95	14.43	22.751		
2,100.00	2,048.74	2,084.66	2,077.01	9.85	7.41	165.17	-107.67	38.37	346.59	331.37	15.22	22.774		
2,200.00	2,145.02	2,182.98	2,174.69	10.41	7.79	165.00	-116.37	45.49	364.79	348.79	16.01	22.792		
2,300.00	2,241.31	2,281.31	2,272.37	10.98	8.18	164.84	-125.07	52.60	383.00	366.20	16.79	22.807		
2,400.00	2,337.59	2,379.63	2,370.05	11.55	8.56	164.70	-133.78	59.72	401.21	383.63	17.58	22.819		
2,500.00	2,433.87	2,477.95	2,467.73	12.12	8.95	164.57	-142.48	66.84	419.42	401.05	18.37	22.828		
2,600.00	2,530.15	2,576.28	2,565.41	12.69	9.33	164.45	-151.18	73.96	437.63	418.47	19.16	22.836		
2,700.00	2,626.43	2,674.60	2,663.09	13.26	9.72	164.34	-159.88	81.07	455.85	435.89	19.96	22.842		
2,800.00	2,722.71	2,772.92	2,760.76	13.83	10.11	164.24	-168.58	88.19	474.07	453.32	20.75	22.846		
2,900.00	2,818.99	2,871.25	2,858.44	14.40	10.50	164.15	-177.28	95.31	492.29	470.74	21.54	22.850		
3,000.00	2,915.27	2,969.57	2,956.12	14.98	10.88	164.06	-185.99	102.43	510.51	488.17	22.34	22.853		
3,100.00	3,011.55	3,067.89	3,053.80	15.55	11.27	163.98	-194.69	109.54	528.73	505.59	23.13	22.855		
3,200.00	3,107.83	3,166.22	3,151.48	16.12	11.66	163.90	-203.39	116.66	546.95	523.02	23.93	22.857		
3,300.00	3,204.11	3,264.54	3,249.16	16.69	12.05	163.83	-212.09	123.78	565.17	540.45	24.73	22.858		
3,400.00	3,300.39	3,362.86	3,346.83	17.27	12.44	163.76	-220.79	130.90	583.40	557.87	25.52	22.858		
3,500.00	3,396.67	3,461.19	3,444.51	17.84	12.83	163.70	-229.49	138.01	601.62	575.30	26.32	22.858		
3,600.00	3,492.96	3,559.51	3,542.19	18.41	13.22	163.64	-238.20	145.13	619.85	592.73	27.12	22.858		
3,700.00	3,589.24	3,657.83	3,639.87	18.98	13.61	163.59	-246.90	152.25	638.07	610.16	27.91	22.858		
3,800.00	3,685.52	3,756.16	3,737.55	19.56	14.00	163.53	-255.60	159.37	656.30	627.59	28.71	22.858		
3,900.00	3,781.80	3,854.48	3,835.23	20.13	14.39	163.48	-264.30	166.48	674.52	645.01	29.51	22.857		
4,000.00	3,878.08	3,952.80	3,932.91	20.70	14.78	163.44	-273.00	173.60	692.75	662.44	30.31	22.856		
4,100.00	3,974.36	4,051.13	4,030.58	21.28	15.17	163.39	-281.71	180.72	710.98	679.87	31.11	22.855		
4,200.00	4,070.64	4,149.45	4,128.26	21.85	15.56	163.35	-290.41	187.84	729.21	697.30	31.91	22.854		
4,300.00	4,166.92	4,247.77	4,225.94	22.42	15.95	163.31	-299.11	194.96	747.44	714.73	32.71	22.853		
4,400.00	4,263.20	4,346.10	4,323.62	23.00	16.34	163.27	-307.81	202.07	765.66	732.16	33.51	22.852		
4,500.00	4,359.48	4,444.42	4,421.30	23.57	16.73	163.23	-316.51	209.19	783.89	749.59	34.31	22.851		
4,600.00	4,455.76	4,542.74	4,518.98	24.15	17.12	163.20	-325.21	216.31	802.12	767.02	35.11	22.849		
4,700.00	4,552.29	4,641.22	4,616.81	24.71	17.51	163.20	-333.93	223.44	819.46	783.56	35.90	22.824		

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4K-35H-O367 - OH - PLAN #1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM											Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.29	-40.00	40.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.29	-40.00	40.00	39.72	0.28	144.915	CC, ES	
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.29	-40.00	40.00	39.01	0.99	40.283		
300.00	299.98	299.98	299.98	0.85	0.85	160.57	0.29	-40.00	41.64	39.94	1.70	24.474		
400.00	399.84	399.84	399.84	1.20	1.21	162.68	0.29	-40.00	46.61	44.20	2.41	19.306		
500.00	499.45	499.45	499.45	1.56	1.57	165.34	0.29	-40.00	54.99	51.86	3.13	17.548		
600.00	598.70	598.70	598.70	1.95	1.93	167.94	0.29	-40.00	66.86	63.00	3.86	17.336		
700.00	697.47	699.94	699.92	2.35	2.28	169.61	-0.82	-38.66	80.74	76.16	4.58	17.623		
800.00	795.62	801.65	801.48	2.78	2.62	170.11	-4.23	-34.54	94.99	89.67	5.32	17.863		
900.00	893.06	903.77	903.21	3.24	2.98	169.86	-9.97	-27.61	109.56	103.49	6.08	18.034		
1,000.00	989.66	1,006.23	1,004.87	3.75	3.35	169.14	-18.05	-17.86	124.40	117.55	6.85	18.153		
1,100.00	1,085.94	1,105.14	1,102.80	4.27	3.72	168.37	-26.93	-7.15	138.98	131.39	7.59	18.306		
1,200.00	1,182.22	1,204.06	1,200.73	4.81	4.10	167.75	-35.80	3.55	153.58	145.24	8.34	18.406		
1,300.00	1,278.50	1,302.98	1,298.67	5.36	4.48	167.24	-44.67	14.26	168.19	159.09	9.11	18.472		
1,400.00	1,374.78	1,401.89	1,396.60	5.91	4.87	166.80	-53.54	24.97	182.82	172.94	9.87	18.514		
1,500.00	1,471.06	1,500.81	1,494.54	6.47	5.27	166.44	-62.41	35.68	197.45	186.80	10.65	18.541		
1,600.00	1,567.34	1,599.72	1,592.47	7.02	5.66	166.12	-71.29	46.38	212.09	200.66	11.43	18.556		
1,700.00	1,663.62	1,698.64	1,690.41	7.58	6.06	165.84	-80.16	57.09	226.73	214.52	12.21	18.564		
1,800.00	1,759.90	1,797.56	1,788.34	8.15	6.46	165.60	-89.03	67.80	241.38	228.38	13.00	18.567		
1,900.00	1,856.18	1,896.47	1,886.27	8.71	6.87	165.39	-97.90	78.50	256.03	242.24	13.79	18.566		
2,000.00	1,952.46	1,995.39	1,984.21	9.28	7.27	165.20	-106.77	89.21	270.69	256.11	14.58	18.562		
2,100.00	2,048.74	2,094.31	2,082.14	9.85	7.68	165.02	-115.65	99.92	285.35	269.97	15.38	18.557		
2,200.00	2,145.02	2,193.22	2,180.08	10.41	8.08	164.87	-124.52	110.62	300.01	283.84	16.17	18.550		
2,300.00	2,241.31	2,292.14	2,278.01	10.98	8.49	164.73	-133.39	121.33	314.67	297.70	16.97	18.542		
2,400.00	2,337.59	2,391.06	2,375.94	11.55	8.90	164.60	-142.26	132.04	329.34	311.57	17.77	18.534		
2,500.00	2,433.87	2,489.97	2,473.88	12.12	9.30	164.48	-151.13	142.74	344.00	325.43	18.57	18.525		
2,600.00	2,530.15	2,588.89	2,571.81	12.69	9.71	164.38	-160.01	153.45	358.67	339.30	19.37	18.516		
2,700.00	2,626.43	2,687.80	2,669.75	13.26	10.12	164.28	-168.88	164.16	373.34	353.17	20.17	18.508		
2,800.00	2,722.71	2,786.72	2,767.68	13.83	10.53	164.18	-177.75	174.87	388.01	367.03	20.97	18.499		
2,900.00	2,818.99	2,885.64	2,865.61	14.40	10.94	164.10	-186.62	185.57	402.68	380.90	21.78	18.490		
3,000.00	2,915.27	2,984.55	2,963.55	14.98	11.35	164.02	-195.50	196.28	417.35	394.77	22.58	18.482		
3,100.00	3,011.55	3,083.47	3,061.48	15.55	11.76	163.95	-204.37	206.99	432.02	408.64	23.39	18.473		
3,200.00	3,107.83	3,182.39	3,159.42	16.12	12.17	163.88	-213.24	217.69	446.70	422.50	24.19	18.465		
3,300.00	3,204.11	3,281.30	3,257.35	16.69	12.58	163.81	-222.11	228.40	461.37	436.37	25.00	18.457		
3,400.00	3,300.39	3,380.22	3,355.29	17.27	12.99	163.75	-230.98	239.11	476.04	450.24	25.80	18.449		
3,500.00	3,396.67	3,479.14	3,453.22	17.84	13.40	163.70	-239.86	249.81	490.72	464.11	26.61	18.442		
3,600.00	3,492.96	3,578.05	3,551.15	18.41	13.81	163.64	-248.73	260.52	505.39	477.98	27.42	18.435		
3,700.00	3,589.24	3,676.97	3,649.09	18.98	14.22	163.59	-257.60	271.23	520.07	491.84	28.22	18.428		
3,800.00	3,685.52	3,775.88	3,747.02	19.56	14.63	163.55	-266.47	281.93	534.74	505.71	29.03	18.421		
3,900.00	3,781.80	3,874.80	3,844.96	20.13	15.05	163.50	-275.34	292.64	549.42	519.58	29.84	18.414		
4,000.00	3,878.08	3,973.72	3,942.89	20.70	15.46	163.46	-284.22	303.35	564.09	533.45	30.64	18.408		
4,100.00	3,974.36	4,072.63	4,040.82	21.28	15.87	163.42	-293.09	314.06	578.77	547.32	31.45	18.402		
4,200.00	4,070.64	4,171.55	4,138.76	21.85	16.28	163.38	-301.96	324.76	593.45	561.19	32.26	18.396		
4,300.00	4,166.92	4,270.47	4,236.69	22.42	16.69	163.34	-310.83	335.47	608.12	575.06	33.07	18.390		
4,400.00	4,263.20	4,369.38	4,334.63	23.00	17.11	163.31	-319.70	346.18	622.80	588.92	33.88	18.384		
4,500.00	4,359.48	4,468.30	4,432.56	23.57	17.52	163.27	-328.58	356.88	637.48	602.79	34.69	18.379		
4,600.00	4,455.76	4,567.21	4,530.49	24.15	17.93	163.24	-337.45	367.59	652.15	616.66	35.49	18.373		
4,700.00	4,552.29	4,666.26	4,628.55	24.71	18.34	163.23	-346.33	378.31	665.94	629.64	36.30	18.344		
4,800.00	4,649.26	4,765.51	4,726.82	25.24	18.76	163.17	-355.23	389.05	678.07	640.96	37.11	18.272		
4,900.00	4,746.65	4,864.95	4,825.27	25.75	19.17	163.07	-364.15	399.82	688.54	650.63	37.91	18.160		
5,000.00	4,844.41	4,964.54	4,923.87	26.24	19.59	162.92	-373.09	410.60	697.36	658.64	38.72	18.011		
5,100.00	4,942.53	5,064.24	5,022.59	26.70	20.00	162.73	-382.03	421.39	704.52	664.99	39.52	17.826		

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 40-35H-O367 - Slot 40
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 40-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4K-35H-O367 - OH - PLAN #1												Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.00	5,040.96	5,164.04	5,121.40	27.14	20.42	162.50	-390.98	432.19	710.02	669.70	40.32	17.609	
5,300.00	5,139.69	5,261.54	5,217.94	27.56	20.82	162.23	-399.69	442.71	713.93	672.82	41.10	17.369	
5,400.00	5,238.69	5,352.35	5,307.98	27.96	21.19	162.00	-407.15	451.70	717.11	675.29	41.82	17.147	
5,500.00	5,337.91	5,443.17	5,398.22	28.34	21.55	161.79	-413.69	459.60	719.92	677.40	42.52	16.932	
5,600.00	5,437.34	5,534.00	5,488.62	28.69	21.91	161.62	-419.32	466.39	722.34	679.14	43.19	16.724	
5,700.00	5,536.93	5,624.84	5,579.16	29.03	22.25	161.47	-424.03	472.08	724.37	680.53	43.84	16.522	
5,800.00	5,636.67	5,715.70	5,669.82	29.35	22.58	161.35	-427.83	476.67	726.01	681.54	44.47	16.325	
5,900.00	5,736.52	5,806.56	5,760.57	29.65	22.90	161.27	-430.72	480.15	727.26	682.18	45.08	16.133	
6,000.00	5,836.45	5,900.00	5,853.96	29.94	23.22	161.21	-432.72	482.57	728.11	682.42	45.69	15.935	
6,100.00	5,936.43	5,988.29	5,942.23	30.21	23.51	161.17	-433.72	483.78	728.56	682.34	46.22	15.762	
6,200.00	6,036.43	6,082.49	6,036.43	30.45	23.80	-88.17	-433.91	484.00	728.64	681.87	46.77	15.578	
6,300.00	6,136.43	6,182.49	6,136.43	30.70	24.10	-88.17	-433.91	484.00	728.64	681.27	47.38	15.380	
6,400.00	6,236.43	6,282.49	6,236.43	30.94	24.41	-88.17	-433.91	484.00	728.64	680.66	47.98	15.187	
6,500.00	6,336.43	6,382.49	6,336.43	31.19	24.71	-88.17	-433.91	484.00	728.64	680.06	48.59	14.997	
6,600.00	6,436.42	6,482.47	6,436.42	31.43	25.01	-87.34	-433.91	484.00	728.61	679.41	49.20	14.808	
6,700.00	6,535.67	6,580.44	6,534.27	31.66	25.30	-87.98	-430.43	484.00	728.22	678.39	49.83	14.613	
6,800.00	6,632.36	6,678.70	6,631.08	31.85	25.57	-88.70	-414.10	484.01	727.70	677.28	50.43	14.431	
6,900.00	6,724.60	6,778.15	6,725.87	32.00	25.80	-89.45	-384.24	484.02	727.08	676.09	50.98	14.261	
7,000.00	6,810.59	6,878.87	6,816.70	32.12	26.00	-90.22	-340.93	484.05	726.36	674.85	51.51	14.102	
7,100.00	6,888.67	6,980.87	6,901.59	32.21	26.16	-90.99	-284.53	484.07	725.56	673.55	52.01	13.950	
7,200.00	6,957.31	7,084.17	6,978.52	32.25	26.30	-91.74	-215.72	484.11	724.70	672.18	52.52	13.799	
7,300.00	7,015.18	7,188.75	7,045.49	32.26	26.41	-92.47	-135.53	484.15	723.75	670.71	53.04	13.644	
7,400.00	7,061.15	7,294.53	7,100.65	32.24	26.51	-93.15	-45.38	484.19	722.74	669.12	53.62	13.478	
7,500.00	7,094.32	7,401.43	7,142.30	32.19	26.63	-93.77	52.97	484.24	721.64	667.37	54.28	13.296	
7,600.00	7,114.05	7,509.32	7,169.03	32.12	26.83	-94.32	157.39	484.29	720.46	665.44	55.03	13.093	
7,700.00	7,120.00	7,618.02	7,179.80	32.03	27.16	-94.77	265.45	484.34	719.19	663.31	55.88	12.871	
7,800.00	7,120.00	7,719.42	7,180.00	31.95	27.59	-94.80	366.85	484.39	717.61	660.77	56.84	12.625	
7,900.00	7,120.00	7,819.40	7,180.00	31.87	28.12	-94.81	466.83	484.44	716.02	658.06	57.96	12.355	
8,000.00	7,120.00	7,919.39	7,180.00	31.81	28.75	-94.82	566.82	484.49	714.43	655.21	59.22	12.064	
8,100.00	7,120.00	8,019.38	7,180.00	31.77	29.45	-94.83	666.81	484.54	712.83	652.21	60.63	11.758	
8,200.00	7,120.00	8,119.37	7,180.00	31.79	30.23	-94.84	766.79	484.59	711.24	649.08	62.16	11.442	
8,300.00	7,120.00	8,219.35	7,180.00	32.36	31.07	-94.85	866.78	484.64	709.64	645.82	63.82	11.119	
8,400.00	7,120.00	8,319.34	7,180.00	33.25	31.96	-94.86	966.77	484.69	708.05	642.46	65.59	10.795	
8,500.00	7,120.00	8,419.33	7,180.00	34.21	32.91	-94.87	1,066.76	484.74	706.46	638.99	67.47	10.471	
8,600.00	7,120.00	8,519.31	7,180.00	35.21	33.91	-94.88	1,166.74	484.79	704.86	635.42	69.44	10.151	
8,700.00	7,120.00	8,619.30	7,180.00	36.26	34.95	-94.89	1,266.73	484.84	703.27	631.77	71.49	9.837	
8,800.00	7,120.00	8,719.29	7,180.00	37.34	36.02	-94.91	1,366.72	484.88	701.67	628.04	73.63	9.530	
8,900.00	7,120.00	8,819.28	7,180.00	38.46	37.14	-94.92	1,466.70	484.93	700.08	624.24	75.84	9.231	
9,000.00	7,120.00	8,919.26	7,180.00	39.61	38.29	-94.93	1,566.69	484.98	698.49	620.37	78.12	8.941	
9,100.00	7,120.00	9,019.25	7,180.00	40.79	39.46	-94.94	1,666.68	485.03	696.89	616.43	80.46	8.662	
9,200.00	7,120.00	9,119.24	7,180.00	41.99	40.67	-94.95	1,766.67	485.08	695.30	612.44	82.85	8.392	
9,300.00	7,120.00	9,219.23	7,180.00	43.22	41.90	-94.96	1,866.65	485.13	693.70	608.40	85.30	8.133	
9,400.00	7,120.00	9,319.21	7,180.00	44.48	43.15	-94.97	1,966.64	485.18	692.11	604.32	87.79	7.883	
9,500.00	7,120.00	9,419.20	7,180.00	45.75	44.43	-94.99	2,066.63	485.23	690.52	600.19	90.33	7.644	
9,600.00	7,120.00	9,519.19	7,180.00	47.04	45.72	-95.00	2,166.61	485.28	688.92	596.02	92.91	7.415	
9,700.00	7,120.00	9,619.17	7,180.00	48.35	47.04	-95.01	2,266.60	485.33	687.33	591.81	95.52	7.196	
9,800.00	7,120.00	9,719.16	7,180.00	49.68	48.37	-95.02	2,366.59	485.38	685.74	587.57	98.17	6.986	
9,900.00	7,120.00	9,819.15	7,180.00	51.02	49.71	-95.03	2,466.58	485.42	684.14	583.30	100.84	6.784	
10,000.00	7,120.00	9,919.14	7,180.00	52.38	51.07	-95.04	2,566.56	485.47	682.55	579.00	103.55	6.592	
10,100.00	7,120.00	10,019.12	7,180.00	53.75	52.44	-95.06	2,666.55	485.52	680.95	574.67	106.28	6.407	
10,200.00	7,120.00	10,119.11	7,180.00	55.13	53.82	-95.07	2,766.54	485.57	679.36	570.33	109.04	6.231	
10,300.00	7,120.00	10,219.10	7,180.00	56.52	55.21	-95.08	2,866.53	485.62	677.77	565.95	111.81	6.062	

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4K-35H-O367 - OH - PLAN #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
10,400.00	7,120.00	10,319.08	7,180.00	57.92	56.62	-95.09	2,966.51	485.67	676.17	561.56	114.61	5.900		
10,500.00	7,120.00	10,419.07	7,180.00	59.33	58.03	-95.10	3,066.50	485.72	674.58	557.15	117.43	5.744		
10,600.00	7,120.00	10,519.06	7,180.00	60.76	59.45	-95.12	3,166.49	485.77	672.99	552.72	120.27	5.596		
10,700.00	7,120.00	10,619.05	7,180.00	62.19	60.88	-95.13	3,266.47	485.82	671.39	548.27	123.12	5.453		
10,800.00	7,120.00	10,719.03	7,180.00	63.62	62.32	-95.14	3,366.46	485.87	669.80	543.81	125.99	5.316		
10,900.00	7,120.00	10,819.02	7,180.00	65.07	63.76	-95.15	3,466.45	485.92	668.21	539.33	128.87	5.185		
11,000.00	7,120.00	10,919.01	7,180.00	66.52	65.21	-95.16	3,566.44	485.96	666.61	534.84	131.77	5.059		
11,100.00	7,120.00	11,018.99	7,180.00	67.98	66.67	-95.18	3,666.42	486.01	665.02	530.34	134.68	4.938		
11,200.00	7,120.00	11,118.98	7,180.00	69.44	68.14	-95.19	3,766.41	486.06	663.43	525.82	137.60	4.821		
11,300.00	7,120.00	11,218.97	7,180.00	70.92	69.60	-95.20	3,866.40	486.11	661.83	521.30	140.54	4.709		
11,400.00	7,120.00	11,318.96	7,180.00	72.39	71.08	-95.21	3,966.38	486.16	660.24	516.76	143.48	4.602		
11,500.00	7,120.00	11,418.94	7,180.00	73.87	72.56	-95.23	4,066.37	486.21	658.65	512.22	146.43	4.498		
11,600.00	7,120.00	11,518.93	7,180.00	75.36	74.04	-95.24	4,166.36	486.26	657.05	507.66	149.39	4.398		
11,700.00	7,120.00	11,618.92	7,180.00	76.85	75.53	-95.25	4,266.35	486.31	655.46	503.10	152.36	4.302		
11,800.00	7,120.00	11,718.91	7,180.00	78.34	77.02	-95.27	4,366.33	486.36	653.87	498.52	155.34	4.209		
11,826.18	7,120.00	11,745.08	7,180.00	78.73	77.41	-95.27	4,392.51	486.37	653.45	497.33	156.12	4.185 SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4L-35H-O367 - OH - PLAN #1													Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.22	-30.00	30.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.22	-30.00	30.00	29.72	0.28	108.686		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.22	-30.00	30.00	29.01	0.99	30.213 CC, ES		
300.00	299.98	299.98	299.98	0.85	0.85	160.84	0.22	-30.00	31.64	29.94	1.70	18.597		
400.00	399.84	399.84	399.84	1.20	1.21	163.50	0.22	-30.00	36.63	34.21	2.41	15.171		
500.00	499.45	499.45	499.45	1.56	1.57	166.61	0.22	-30.00	45.05	41.92	3.13	14.377		
600.00	598.70	600.55	600.53	1.95	1.92	168.84	-0.65	-28.46	55.35	51.49	3.86	14.345		
700.00	697.47	702.02	701.85	2.35	2.27	169.89	-3.29	-23.81	65.79	61.19	4.60	14.303		
800.00	795.62	803.85	803.28	2.78	2.63	170.24	-7.72	-16.00	76.33	70.97	5.36	14.236		
900.00	893.06	906.05	904.69	3.24	3.00	170.12	-13.96	-5.01	86.93	80.79	6.14	14.160		
1,000.00	989.66	1,008.61	1,005.94	3.75	3.40	169.70	-22.00	9.17	97.54	90.61	6.93	14.071		
1,100.00	1,085.94	1,109.27	1,104.85	4.27	3.81	169.02	-31.25	25.47	106.75	99.06	7.69	13.877		
1,200.00	1,182.22	1,208.86	1,202.65	4.81	4.23	168.42	-40.49	41.77	115.79	107.34	8.45	13.703		
1,300.00	1,278.50	1,308.44	1,300.46	5.36	4.65	167.91	-49.73	58.06	124.85	115.63	9.22	13.543		
1,400.00	1,374.78	1,408.02	1,398.26	5.91	5.09	167.47	-58.98	74.36	133.91	123.91	10.00	13.397		
1,500.00	1,471.06	1,507.61	1,496.07	6.47	5.52	167.08	-68.22	90.66	142.98	132.20	10.78	13.264		
1,600.00	1,567.34	1,607.19	1,593.87	7.02	5.97	166.74	-77.47	106.95	152.06	140.49	11.57	13.142		
1,700.00	1,663.62	1,706.78	1,691.68	7.58	6.41	166.44	-86.71	123.25	161.14	148.77	12.37	13.032		
1,800.00	1,759.90	1,806.36	1,789.48	8.15	6.86	166.17	-95.95	139.54	170.22	157.06	13.16	12.931		
1,900.00	1,856.18	1,905.94	1,887.29	8.71	7.30	165.92	-105.20	155.84	179.31	165.34	13.97	12.839		
2,000.00	1,952.46	2,005.53	1,985.09	9.28	7.75	165.70	-114.44	172.13	188.40	173.63	14.77	12.754		
2,100.00	2,048.74	2,105.11	2,082.90	9.85	8.20	165.50	-123.68	188.43	197.49	181.91	15.58	12.677		
2,200.00	2,145.02	2,204.69	2,180.70	10.41	8.66	165.32	-132.93	204.72	206.59	190.20	16.39	12.605		
2,300.00	2,241.31	2,304.28	2,278.51	10.98	9.11	165.16	-142.17	221.02	215.69	198.49	17.20	12.539		
2,400.00	2,337.59	2,403.86	2,376.31	11.55	9.56	165.00	-151.41	237.32	224.79	206.77	18.01	12.478		
2,500.00	2,433.87	2,503.44	2,474.12	12.12	10.02	164.86	-160.66	253.61	233.89	215.06	18.83	12.422		
2,600.00	2,530.15	2,603.03	2,571.92	12.69	10.47	164.73	-169.90	269.91	242.99	223.34	19.64	12.369		
2,700.00	2,626.43	2,702.61	2,669.73	13.26	10.93	164.61	-179.14	286.20	252.09	231.63	20.46	12.320		
2,800.00	2,722.71	2,802.19	2,767.54	13.83	11.39	164.50	-188.39	302.50	261.20	239.92	21.28	12.274		
2,900.00	2,818.99	2,901.78	2,865.34	14.40	11.84	164.39	-197.63	318.79	270.30	248.20	22.10	12.231		
3,000.00	2,915.27	3,001.36	2,963.15	14.98	12.30	164.30	-206.88	335.09	279.41	256.49	22.92	12.191		
3,100.00	3,011.55	3,100.94	3,060.95	15.55	12.76	164.20	-216.12	351.38	288.51	264.77	23.74	12.153		
3,200.00	3,107.83	3,200.53	3,158.76	16.12	13.22	164.12	-225.36	367.68	297.62	273.06	24.56	12.118		
3,300.00	3,204.11	3,300.11	3,256.56	16.69	13.68	164.04	-234.61	383.98	306.73	281.35	25.38	12.084		
3,400.00	3,300.39	3,399.69	3,354.37	17.27	14.13	163.96	-243.85	400.27	315.84	289.63	26.20	12.053		
3,500.00	3,396.67	3,499.28	3,452.17	17.84	14.59	163.89	-253.09	416.57	324.95	297.92	27.03	12.023		
3,600.00	3,492.96	3,598.86	3,549.98	18.41	15.05	163.82	-262.34	432.86	334.06	306.21	27.85	11.995		
3,700.00	3,589.24	3,698.44	3,647.78	18.98	15.51	163.76	-271.58	449.16	343.17	314.49	28.67	11.968		
3,800.00	3,685.52	3,798.03	3,745.59	19.56	15.97	163.69	-280.82	465.45	352.28	322.78	29.50	11.942		
3,900.00	3,781.80	3,897.61	3,843.39	20.13	16.43	163.64	-290.07	481.75	361.39	331.06	30.32	11.918		
4,000.00	3,878.08	3,997.19	3,941.20	20.70	16.89	163.58	-299.31	498.04	370.50	339.35	31.15	11.895		
4,100.00	3,974.36	4,096.78	4,039.00	21.28	17.35	163.53	-308.55	514.34	379.61	347.64	31.97	11.873		
4,200.00	4,070.64	4,196.36	4,136.81	21.85	17.81	163.48	-317.80	530.64	388.72	355.92	32.80	11.852		
4,300.00	4,166.92	4,295.94	4,234.61	22.42	18.27	163.43	-327.04	546.93	397.83	364.21	33.62	11.832		
4,400.00	4,263.20	4,395.53	4,332.42	23.00	18.73	163.38	-336.28	563.23	406.94	372.50	34.45	11.813		
4,500.00	4,359.48	4,495.11	4,430.23	23.57	19.19	163.34	-345.53	579.52	416.06	380.78	35.27	11.795		
4,600.00	4,455.76	4,594.70	4,528.03	24.15	19.65	163.30	-354.77	595.82	425.17	389.07	36.10	11.777		
4,700.00	4,552.29	4,694.35	4,625.91	24.71	20.11	163.25	-364.02	612.13	433.38	396.46	36.93	11.736		
4,800.00	4,649.26	4,794.13	4,723.91	25.24	20.57	163.13	-373.28	628.45	439.93	402.18	37.76	11.652		
4,900.00	4,746.65	4,894.00	4,821.99	25.75	21.03	162.94	-382.55	644.79	444.82	406.23	38.59	11.528		
5,000.00	4,844.41	4,993.93	4,920.13	26.24	21.49	162.69	-391.83	661.15	448.04	408.62	39.42	11.366		
5,100.00	4,942.53	5,087.44	5,012.11	26.70	21.92	162.43	-400.15	675.82	450.32	410.12	40.20	11.201		

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4L-35H-O367 - OH - PLAN #1												Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.00	5,040.96	5,180.81	5,104.21	27.14	22.33	162.20	-407.73	689.17	452.40	411.44	40.96	11.045	
5,300.00	5,139.69	5,274.18	5,196.54	27.56	22.72	161.99	-414.56	701.22	454.28	412.58	41.70	10.895	
5,400.00	5,238.69	5,367.54	5,289.08	27.96	23.10	161.81	-420.65	711.95	455.96	413.56	42.41	10.752	
5,500.00	5,337.91	5,460.89	5,381.81	28.34	23.47	161.65	-425.99	721.37	457.44	414.35	43.09	10.615	
5,600.00	5,437.34	5,554.24	5,474.69	28.69	23.82	161.51	-430.59	729.47	458.72	414.97	43.75	10.484	
5,700.00	5,536.93	5,647.59	5,567.71	29.03	24.16	161.40	-434.43	736.26	459.79	415.40	44.39	10.358	
5,800.00	5,636.67	5,740.94	5,660.84	29.35	24.49	161.31	-437.54	741.72	460.66	415.66	45.00	10.236	
5,900.00	5,736.52	5,834.28	5,754.06	29.65	24.81	161.24	-439.89	745.87	461.32	415.73	45.59	10.119	
6,000.00	5,836.45	5,927.62	5,847.34	29.94	25.11	161.19	-441.49	748.69	461.76	415.61	46.15	10.005	
6,100.00	5,936.43	6,020.95	5,940.67	30.21	25.40	161.17	-442.34	750.19	462.00	415.31	46.69	9.895	
6,200.00	6,036.43	6,116.72	6,036.43	30.45	25.68	-88.17	-442.49	750.46	462.04	414.83	47.22	9.785	
6,300.00	6,136.43	6,216.72	6,136.43	30.70	25.96	-88.17	-442.49	750.46	462.04	414.23	47.82	9.663	
6,400.00	6,236.43	6,316.72	6,236.43	30.94	26.24	-88.17	-442.49	750.46	462.04	413.63	48.41	9.544	
6,500.00	6,336.43	6,416.72	6,336.43	31.19	26.53	-88.17	-442.49	750.46	462.04	413.03	49.02	9.426	
6,600.00	6,436.42	6,515.81	6,435.50	31.43	26.81	-87.29	-441.79	750.45	462.04	412.44	49.60	9.315	
6,700.00	6,535.67	6,613.02	6,532.04	31.66	27.07	-87.33	-430.92	750.31	462.00	411.89	50.11	9.220	
6,800.00	6,632.36	6,710.31	6,626.28	31.85	27.29	-87.42	-407.07	750.01	461.90	411.33	50.57	9.134	
6,900.00	6,724.60	6,807.71	6,716.52	32.00	27.47	-87.56	-370.62	749.54	461.75	410.76	50.99	9.055	
7,000.00	6,810.59	6,905.27	6,801.12	32.12	27.62	-87.75	-322.19	748.92	461.55	410.16	51.40	8.980	
7,100.00	6,888.67	7,003.04	6,878.52	32.21	27.74	-87.98	-262.58	748.16	461.32	409.52	51.81	8.905	
7,200.00	6,957.31	7,101.06	6,947.24	32.25	27.81	-88.25	-192.80	747.27	461.06	408.82	52.25	8.825	
7,300.00	7,015.18	7,199.36	7,005.96	32.26	27.86	-88.56	-114.06	746.26	460.78	408.04	52.74	8.737	
7,400.00	7,061.15	7,297.99	7,053.49	32.24	27.88	-88.89	-27.74	745.16	460.48	407.17	53.31	8.638	
7,500.00	7,094.32	7,396.98	7,088.82	32.19	27.87	-89.24	64.63	743.98	460.18	406.21	53.97	8.526	
7,600.00	7,114.05	7,496.33	7,111.14	32.12	27.86	-89.61	161.36	742.74	459.89	405.16	54.73	8.402	
7,700.00	7,120.00	7,596.08	7,119.88	32.03	27.86	-89.99	260.63	741.47	459.61	404.02	55.59	8.268	
7,800.00	7,120.00	7,696.08	7,120.00	31.95	27.97	-90.00	360.62	740.20	459.34	402.82	56.52	8.127	
7,900.00	7,120.00	7,796.08	7,120.00	31.87	28.34	-90.00	460.62	738.92	459.06	401.46	57.61	7.969	
8,000.00	7,120.00	7,896.08	7,120.00	31.81	28.93	-90.00	560.61	737.64	458.79	399.94	58.85	7.796	
8,100.00	7,120.00	7,996.08	7,120.00	31.77	29.64	-90.00	660.60	736.36	458.52	398.29	60.23	7.613	
8,200.00	7,120.00	8,096.08	7,120.00	31.79	30.42	-90.00	760.59	735.08	458.25	396.49	61.75	7.421	
8,300.00	7,120.00	8,196.08	7,120.00	32.36	31.27	-90.00	860.58	733.81	457.97	394.57	63.40	7.224	
8,400.00	7,120.00	8,296.08	7,120.00	33.25	32.18	-90.00	960.57	732.53	457.70	392.54	65.16	7.024	
8,500.00	7,120.00	8,396.08	7,120.00	34.21	33.14	-90.00	1,060.56	731.25	457.43	390.40	67.03	6.824	
8,600.00	7,120.00	8,496.08	7,120.00	35.21	34.14	-90.00	1,160.56	729.97	457.15	388.16	68.99	6.626	
8,700.00	7,120.00	8,596.07	7,120.00	36.26	35.19	-90.00	1,260.55	728.69	456.88	385.83	71.05	6.430	
8,800.00	7,120.00	8,696.07	7,120.00	37.34	36.28	-90.00	1,360.54	727.42	456.61	383.42	73.19	6.239	
8,900.00	7,120.00	8,796.07	7,120.00	38.46	37.40	-90.00	1,460.53	726.14	456.34	380.93	75.40	6.052	
9,000.00	7,120.00	8,896.07	7,120.00	39.61	38.56	-90.00	1,560.52	724.86	456.06	378.38	77.68	5.871	
9,100.00	7,120.00	8,996.07	7,120.00	40.79	39.74	-90.00	1,660.51	723.58	455.79	375.76	80.03	5.695	
9,200.00	7,120.00	9,096.07	7,120.00	41.99	40.96	-90.00	1,760.50	722.30	455.52	373.09	82.43	5.526	
9,300.00	7,120.00	9,196.07	7,120.00	43.22	42.19	-90.00	1,860.50	721.03	455.25	370.36	84.89	5.363	
9,400.00	7,120.00	9,296.07	7,120.00	44.48	43.45	-90.00	1,960.49	719.75	454.97	367.58	87.39	5.206	
9,500.00	7,120.00	9,396.07	7,120.00	45.75	44.74	-90.00	2,060.48	718.47	454.70	364.76	89.94	5.056	
9,600.00	7,120.00	9,496.07	7,120.00	47.04	46.04	-90.00	2,160.47	717.19	454.43	361.90	92.53	4.911	
9,700.00	7,120.00	9,596.07	7,120.00	48.35	47.36	-90.00	2,260.46	715.91	454.15	359.00	95.15	4.773	
9,800.00	7,120.00	9,696.07	7,120.00	49.68	48.69	-90.00	2,360.45	714.64	453.88	356.07	97.81	4.640	
9,900.00	7,120.00	9,796.07	7,120.00	51.02	50.04	-90.00	2,460.44	713.36	453.61	353.10	100.51	4.513	
10,000.00	7,120.00	9,896.07	7,120.00	52.38	51.41	-90.00	2,560.44	712.08	453.34	350.11	103.23	4.392	
10,100.00	7,120.00	9,996.07	7,120.00	53.75	52.79	-90.00	2,660.43	710.80	453.06	347.09	105.97	4.275	
10,200.00	7,120.00	10,096.07	7,120.00	55.13	54.18	-90.00	2,760.42	709.52	452.79	344.04	108.75	4.164	
10,300.00	7,120.00	10,196.07	7,120.00	56.52	55.58	-90.00	2,860.41	708.25	452.52	340.98	111.54	4.057	

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design										S35-T3N-R67W (KIYOTA) - KIYOTA 4L-35H-O367 - OH - PLAN #1			Offset Site Error:		0.00 usft		
Survey Program:				0-MWD+HDGM											Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft) +E/-W (usft)		Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor					
10,400.00	7,120.00	10,296.07	7,120.00	57.92	56.99	-90.00	2,960.40	706.97	452.25	337.89	114.36	3.955					
10,500.00	7,120.00	10,396.07	7,120.00	59.33	58.41	-90.00	3,060.39	705.69	451.97	334.78	117.20	3.857					
10,600.00	7,120.00	10,496.07	7,120.00	60.76	59.84	-90.00	3,160.38	704.41	451.70	331.65	120.05	3.763					
10,700.00	7,120.00	10,596.07	7,120.00	62.19	61.28	-90.00	3,260.38	703.13	451.43	328.51	122.92	3.672					
10,800.00	7,120.00	10,696.07	7,120.00	63.62	62.72	-90.00	3,360.37	701.86	451.15	325.35	125.81	3.586					
10,900.00	7,120.00	10,796.07	7,120.00	65.07	64.17	-90.00	3,460.36	700.58	450.88	322.17	128.71	3.503					
11,000.00	7,120.00	10,896.07	7,120.00	66.52	65.63	-90.00	3,560.35	699.30	450.61	318.98	131.63	3.423					
11,100.00	7,120.00	10,996.07	7,120.00	67.98	67.10	-90.00	3,660.34	698.02	450.34	315.78	134.56	3.347					
11,200.00	7,120.00	11,096.07	7,120.00	69.44	68.57	-90.00	3,760.33	696.74	450.06	312.57	137.50	3.273					
11,300.00	7,120.00	11,196.06	7,120.00	70.92	70.05	-90.00	3,860.33	695.47	449.79	309.34	140.45	3.202					
11,400.00	7,120.00	11,296.06	7,120.00	72.39	71.53	-90.00	3,960.32	694.19	449.52	306.10	143.41	3.134					
11,500.00	7,120.00	11,396.06	7,120.00	73.87	73.01	-90.00	4,060.31	692.91	449.24	302.86	146.39	3.069					
11,600.00	7,120.00	11,496.06	7,120.00	75.36	74.51	-90.00	4,160.30	691.63	448.97	299.60	149.37	3.006					
11,700.00	7,120.00	11,596.06	7,120.00	76.85	76.00	-90.00	4,260.29	690.35	448.70	296.34	152.36	2.945					
11,703.06	7,120.00	11,597.90	7,120.00	76.89	76.03	-90.00	4,262.12	690.33	448.69	296.29	152.40	2.944 SF					
11,800.00	7,120.00	11,597.90	7,120.00	78.34	76.03	-90.00	4,262.12	690.33	459.05	310.54	148.51	3.091					
11,826.18	7,120.00	11,597.90	7,120.00	78.73	76.03	-90.00	4,262.12	690.33	465.28	318.71	146.57	3.174					

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4M-35H-O367 - OH - PLAN #1												Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.15	-20.00	20.00				
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.15	-20.00	20.00	19.72	0.28	72.458	
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.15	-20.00	20.00	19.01	0.99	20.142 CC, ES	
300.00	299.98	299.98	299.98	0.85	0.85	161.34	0.15	-20.00	21.65	19.94	1.70	12.722	
400.00	399.84	399.84	399.84	1.20	1.21	164.92	0.15	-20.00	26.66	24.24	2.41	11.041	
500.00	499.45	500.60	500.58	1.56	1.56	167.78	-0.61	-18.40	33.47	30.33	3.14	10.665	
600.00	598.70	601.60	601.44	1.95	1.91	169.25	-2.90	-13.60	40.38	36.49	3.88	10.396	
700.00	697.47	702.86	702.29	2.35	2.27	169.93	-6.73	-5.56	47.33	42.68	4.65	10.179	
800.00	795.62	804.36	803.01	2.78	2.65	170.11	-12.10	5.72	54.29	48.87	5.43	10.003	
900.00	893.06	906.10	903.47	3.24	3.05	169.97	-19.02	20.26	61.27	55.05	6.22	9.854	
1,000.00	989.66	1,008.08	1,003.53	3.75	3.47	169.59	-27.49	38.05	68.20	61.18	7.02	9.719	
1,100.00	1,085.94	1,108.46	1,101.50	4.27	3.92	168.97	-36.89	57.79	73.91	66.14	7.78	9.505	
1,200.00	1,182.22	1,208.30	1,198.92	4.81	4.37	168.42	-46.27	77.50	79.55	71.01	8.54	9.317	
1,300.00	1,278.50	1,308.14	1,296.34	5.36	4.84	167.94	-55.66	97.21	85.19	75.88	9.31	9.149	
1,400.00	1,374.78	1,407.98	1,393.76	5.91	5.31	167.52	-65.04	116.93	90.84	80.75	10.10	8.999	
1,500.00	1,471.06	1,507.82	1,491.18	6.47	5.78	167.15	-74.43	136.64	96.50	85.61	10.89	8.864	
1,600.00	1,567.34	1,607.65	1,588.61	7.02	6.26	166.83	-83.81	156.36	102.15	90.47	11.68	8.743	
1,700.00	1,663.62	1,707.49	1,686.03	7.58	6.74	166.53	-93.20	176.07	107.81	95.32	12.49	8.635	
1,800.00	1,759.90	1,807.33	1,783.45	8.15	7.23	166.27	-102.59	195.78	113.47	100.18	13.29	8.536	
1,900.00	1,856.18	1,907.17	1,880.87	8.71	7.71	166.03	-111.97	215.50	119.13	105.03	14.10	8.447	
2,000.00	1,952.46	2,007.01	1,978.29	9.28	8.20	165.81	-121.36	235.21	124.80	109.88	14.92	8.366	
2,100.00	2,048.74	2,106.85	2,075.71	9.85	8.69	165.61	-130.74	254.92	130.47	114.73	15.73	8.293	
2,200.00	2,145.02	2,206.68	2,173.14	10.41	9.18	165.43	-140.13	274.64	136.14	119.58	16.55	8.225	
2,300.00	2,241.31	2,306.52	2,270.56	10.98	9.67	165.26	-149.51	294.35	141.81	124.43	17.37	8.163	
2,400.00	2,337.59	2,406.36	2,367.98	11.55	10.17	165.11	-158.90	314.06	147.48	129.28	18.20	8.105	
2,500.00	2,433.87	2,506.20	2,465.40	12.12	10.66	164.96	-168.28	333.78	153.15	134.13	19.02	8.052	
2,600.00	2,530.15	2,606.04	2,562.82	12.69	11.15	164.83	-177.67	353.49	158.82	138.98	19.84	8.003	
2,700.00	2,626.43	2,705.88	2,660.24	13.26	11.65	164.71	-187.05	373.21	164.50	143.82	20.67	7.958	
2,800.00	2,722.71	2,805.71	2,757.67	13.83	12.14	164.59	-196.44	392.92	170.17	148.67	21.50	7.915	
2,900.00	2,818.99	2,905.55	2,855.09	14.40	12.63	164.48	-205.83	412.63	175.84	153.52	22.33	7.875	
3,000.00	2,915.27	3,005.39	2,952.51	14.98	13.13	164.38	-215.21	432.35	181.52	158.36	23.16	7.838	
3,100.00	3,011.55	3,105.23	3,049.93	15.55	13.63	164.29	-224.60	452.06	187.20	163.21	23.99	7.804	
3,200.00	3,107.83	3,205.07	3,147.35	16.12	14.12	164.20	-233.98	471.77	192.87	168.05	24.82	7.771	
3,300.00	3,204.11	3,304.91	3,244.77	16.69	14.62	164.11	-243.37	491.49	198.55	172.90	25.65	7.740	
3,400.00	3,300.39	3,404.74	3,342.20	17.27	15.11	164.03	-252.75	511.20	204.23	177.74	26.48	7.711	
3,500.00	3,396.67	3,504.58	3,439.62	17.84	15.61	163.96	-262.14	530.92	209.91	182.59	27.32	7.684	
3,600.00	3,492.96	3,604.42	3,537.04	18.41	16.11	163.89	-271.52	550.63	215.58	187.43	28.15	7.658	
3,700.00	3,589.24	3,704.26	3,634.46	18.98	16.60	163.82	-280.91	570.34	221.26	192.28	28.98	7.634	
3,800.00	3,685.52	3,804.10	3,731.88	19.56	17.10	163.75	-290.29	590.06	226.94	197.12	29.82	7.611	
3,900.00	3,781.80	3,903.94	3,829.30	20.13	17.60	163.69	-299.68	609.77	232.62	201.97	30.65	7.589	
4,000.00	3,878.08	4,003.77	3,926.73	20.70	18.09	163.63	-309.07	629.48	238.30	206.81	31.49	7.568	
4,100.00	3,974.36	4,103.61	4,024.15	21.28	18.59	163.58	-318.45	649.20	243.98	211.65	32.32	7.548	
4,200.00	4,070.64	4,203.45	4,121.57	21.85	19.09	163.53	-327.84	668.91	249.66	216.50	33.16	7.529	
4,300.00	4,166.92	4,303.29	4,218.99	22.42	19.59	163.48	-337.22	688.62	255.34	221.34	34.00	7.511	
4,400.00	4,263.20	4,403.13	4,316.41	23.00	20.09	163.43	-346.61	708.34	261.02	226.19	34.83	7.493	
4,500.00	4,359.48	4,502.97	4,413.83	23.57	20.58	163.38	-355.99	728.05	266.70	231.03	35.67	7.477	
4,600.00	4,455.76	4,602.80	4,511.25	24.15	21.08	163.34	-365.38	747.77	272.38	235.87	36.51	7.461	
4,700.00	4,552.29	4,702.69	4,608.72	24.71	21.58	163.25	-374.77	767.49	277.16	239.81	37.35	7.421	
4,800.00	4,649.26	4,802.63	4,706.25	25.24	22.08	163.06	-384.16	787.22	280.27	242.07	38.20	7.338	
4,900.00	4,746.65	4,900.00	4,801.32	25.75	22.56	162.80	-393.20	806.21	281.98	242.95	39.03	7.224	
5,000.00	4,844.41	4,995.68	4,895.04	26.24	23.02	162.55	-401.47	823.58	283.44	243.60	39.84	7.114	
5,100.00	4,942.53	5,091.27	4,988.99	26.70	23.46	162.32	-409.06	839.52	284.79	244.17	40.62	7.010	

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4M-35H-O367 - OH - PLAN #1												Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.00	5,040.96	5,186.86	5,083.21	27.14	23.88	162.12	-415.97	854.04	286.03	244.64	41.38	6.912	
5,300.00	5,139.69	5,282.44	5,177.68	27.56	24.28	161.94	-422.21	867.13	287.14	245.03	42.12	6.818	
5,400.00	5,238.69	5,378.01	5,272.38	27.96	24.67	161.78	-427.76	878.80	288.14	245.32	42.82	6.729	
5,500.00	5,337.91	5,473.58	5,367.26	28.34	25.04	161.63	-432.64	889.05	289.01	245.51	43.50	6.644	
5,600.00	5,437.34	5,569.13	5,462.32	28.69	25.40	161.51	-436.84	897.86	289.77	245.61	44.16	6.562	
5,700.00	5,536.93	5,664.69	5,557.52	29.03	25.73	161.41	-440.35	905.24	290.40	245.62	44.79	6.484	
5,800.00	5,636.67	5,760.24	5,652.84	29.35	26.06	161.33	-443.18	911.19	290.92	245.53	45.39	6.409	
5,900.00	5,736.52	5,855.78	5,748.26	29.65	26.37	161.27	-445.33	915.69	291.30	245.34	45.97	6.337	
6,000.00	5,836.45	5,951.33	5,843.74	29.94	26.67	161.23	-446.79	918.77	291.57	245.05	46.52	6.268	
6,100.00	5,936.43	6,046.87	5,939.26	30.21	26.95	161.21	-447.57	920.40	291.71	244.67	47.04	6.202	
6,200.00	6,036.43	6,144.03	6,036.43	30.45	27.21	-88.13	-447.70	920.69	291.74	244.18	47.56	6.134	
6,300.00	6,136.43	6,244.03	6,136.43	30.70	27.48	-88.13	-447.70	920.69	291.74	243.59	48.15	6.059	
6,400.00	6,236.43	6,344.03	6,236.43	30.94	27.75	-88.13	-447.70	920.69	291.74	242.99	48.74	5.985	
6,500.00	6,336.43	6,444.03	6,336.43	31.19	28.02	-88.13	-447.70	920.69	291.74	242.40	49.34	5.913	
6,600.00	6,436.42	6,544.02	6,436.42	31.43	28.30	-87.39	-447.70	920.69	291.70	241.74	49.96	5.839	
6,700.00	6,535.67	6,643.26	6,535.53	31.66	28.56	-88.95	-444.10	920.68	291.40	240.63	50.76	5.740	
6,800.00	6,632.36	6,743.29	6,634.04	31.85	28.80	-90.64	-427.18	920.65	291.14	239.57	51.57	5.646	
6,900.00	6,724.60	6,844.53	6,730.35	32.00	29.00	-92.33	-396.26	920.60	290.93	238.59	52.34	5.559	
7,000.00	6,810.59	6,947.00	6,822.41	32.12	29.17	-93.99	-351.46	920.52	290.79	237.74	53.05	5.481	
7,100.00	6,888.67	7,050.68	6,908.09	32.21	29.30	-95.59	-293.24	920.41	290.66	236.98	53.68	5.415	
7,200.00	6,957.31	7,155.53	6,985.29	32.25	29.38	-97.08	-222.42	920.28	290.53	236.30	54.23	5.358	
7,300.00	7,015.18	7,261.49	7,051.95	32.26	29.42	-98.45	-140.19	920.13	290.34	235.62	54.72	5.306	
7,400.00	7,061.15	7,368.44	7,106.21	32.24	29.43	-99.65	-48.14	919.96	290.03	234.85	55.19	5.256	
7,500.00	7,094.32	7,476.24	7,146.42	32.19	29.40	-100.67	51.78	919.78	289.57	233.87	55.70	5.199	
7,600.00	7,114.05	7,584.72	7,171.31	32.12	29.34	-101.47	157.26	919.59	288.89	232.59	56.31	5.131	
7,700.00	7,120.00	7,693.68	7,179.99	32.03	29.26	-102.03	265.77	919.39	287.97	230.92	57.06	5.047	
7,800.00	7,120.00	7,793.90	7,180.00	31.95	29.19	-102.08	365.98	919.21	286.64	228.61	58.03	4.939	
7,900.00	7,120.00	7,893.89	7,180.00	31.87	29.14	-102.14	465.97	919.03	285.30	226.14	59.15	4.823	
8,000.00	7,120.00	7,993.88	7,180.00	31.81	29.38	-102.20	565.97	918.85	283.96	223.54	60.42	4.700	
8,100.00	7,120.00	8,093.87	7,180.00	31.77	30.08	-102.26	665.96	918.66	282.62	220.80	61.82	4.572	
8,200.00	7,120.00	8,193.86	7,180.00	31.79	30.88	-102.32	765.95	918.48	281.28	217.94	63.35	4.440	
8,300.00	7,120.00	8,293.86	7,180.00	32.36	31.73	-102.38	865.94	918.30	279.95	214.96	64.99	4.308	
8,400.00	7,120.00	8,393.85	7,180.00	33.25	32.64	-102.44	965.93	918.12	278.61	211.87	66.73	4.175	
8,500.00	7,120.00	8,493.84	7,180.00	34.21	33.59	-102.50	1,065.92	917.94	277.27	208.69	68.58	4.043	
8,600.00	7,120.00	8,593.83	7,180.00	35.21	34.58	-102.56	1,165.91	917.76	275.94	205.42	70.52	3.913	
8,700.00	7,120.00	8,693.82	7,180.00	36.26	35.62	-102.62	1,265.90	917.57	274.60	202.06	72.54	3.786	
8,800.00	7,120.00	8,793.81	7,180.00	37.34	36.69	-102.68	1,365.89	917.39	273.27	198.63	74.63	3.661	
8,900.00	7,120.00	8,893.80	7,180.00	38.46	37.80	-102.75	1,465.88	917.21	271.93	195.13	76.80	3.541	
9,000.00	7,120.00	8,993.79	7,180.00	39.61	38.94	-102.81	1,565.87	917.03	270.59	191.57	79.03	3.424	
9,100.00	7,120.00	9,093.78	7,180.00	40.79	40.12	-102.88	1,665.86	916.85	269.26	187.94	81.32	3.311	
9,200.00	7,120.00	9,193.77	7,180.00	41.99	41.31	-102.94	1,765.85	916.66	267.93	184.27	83.66	3.203	
9,300.00	7,120.00	9,293.76	7,180.00	43.22	42.53	-103.01	1,865.84	916.48	266.59	180.54	86.05	3.098	
9,400.00	7,120.00	9,393.75	7,180.00	44.48	43.78	-103.07	1,965.83	916.30	265.26	176.77	88.49	2.998	
9,500.00	7,120.00	9,493.74	7,180.00	45.75	45.05	-103.14	2,065.82	916.12	263.93	172.96	90.96	2.901	
9,600.00	7,120.00	9,593.73	7,180.00	47.04	46.33	-103.21	2,165.81	915.94	262.59	169.11	93.48	2.809	
9,700.00	7,120.00	9,693.72	7,180.00	48.35	47.63	-103.28	2,265.80	915.75	261.26	165.23	96.03	2.721	
9,800.00	7,120.00	9,793.71	7,180.00	49.68	48.95	-103.35	2,365.79	915.57	259.93	161.32	98.61	2.636	
9,900.00	7,120.00	9,893.71	7,180.00	51.02	50.29	-103.42	2,465.78	915.39	258.60	157.38	101.22	2.555	
10,000.00	7,120.00	9,993.70	7,180.00	52.38	51.64	-103.49	2,565.77	915.21	257.27	153.41	103.86	2.477	
10,100.00	7,120.00	10,093.69	7,180.00	53.75	53.00	-103.56	2,665.77	915.03	255.93	149.41	106.52	2.403	
10,200.00	7,120.00	10,193.68	7,180.00	55.13	54.37	-103.63	2,765.76	914.85	254.60	145.40	109.20	2.331	
10,300.00	7,120.00	10,293.67	7,180.00	56.52	55.76	-103.70	2,865.75	914.66	253.27	141.36	111.91	2.263	

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4M-35H-O367 - OH - PLAN #1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
10,400.00	7,120.00	10,393.66	7,180.00	57.92	57.15	-103.78	2,965.74	914.48	251.94	137.31	114.63	2.198		
10,500.00	7,120.00	10,493.65	7,180.00	59.33	58.56	-103.85	3,065.73	914.30	250.61	133.24	117.38	2.135		
10,600.00	7,120.00	10,593.64	7,180.00	60.76	59.97	-103.93	3,165.72	914.12	249.29	129.15	120.13	2.075		
10,700.00	7,120.00	10,693.63	7,180.00	62.19	61.40	-104.00	3,265.71	913.94	247.96	125.05	122.91	2.017		
10,800.00	7,120.00	10,793.62	7,180.00	63.62	62.83	-104.08	3,365.70	913.75	246.63	120.93	125.70	1.962		
10,900.00	7,120.00	10,893.61	7,180.00	65.07	64.26	-104.16	3,465.69	913.57	245.30	116.81	128.50	1.909		
11,000.00	7,120.00	10,993.60	7,180.00	66.52	65.71	-104.24	3,565.68	913.39	243.98	112.67	131.31	1.858		
11,100.00	7,120.00	11,093.59	7,180.00	67.98	67.16	-104.32	3,665.67	913.21	242.65	108.52	134.13	1.809		
11,200.00	7,120.00	11,193.58	7,180.00	69.44	68.62	-104.40	3,765.66	913.03	241.32	104.36	136.96	1.762		
11,300.00	7,120.00	11,293.57	7,180.00	70.92	70.08	-104.48	3,865.65	912.84	240.00	100.19	139.81	1.717		
11,400.00	7,120.00	11,393.56	7,180.00	72.39	71.55	-104.56	3,965.64	912.66	238.67	96.02	142.66	1.673		
11,500.00	7,120.00	11,493.56	7,180.00	73.87	73.02	-104.64	4,065.63	912.48	237.35	91.83	145.51	1.631		
11,600.00	7,120.00	11,593.55	7,180.00	75.36	74.50	-104.73	4,165.62	912.30	236.02	87.64	148.38	1.591		
11,700.00	7,120.00	11,693.54	7,180.00	76.85	75.98	-104.81	4,265.61	912.12	234.70	83.45	151.25	1.552		
11,800.00	7,120.00	11,793.53	7,180.00	78.34	77.47	-104.90	4,365.60	911.94	233.38	79.25	154.13	1.514		
11,826.18	7,120.00	11,819.70	7,180.00	78.73	77.86	-104.92	4,391.78	911.89	233.03	78.15	154.88	1.505 SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4N-35H-O367 - OH - PLAN #1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-89.58	0.07	-10.00	10.00					
100.00	100.00	100.00	100.00	0.14	0.14	-89.58	0.07	-10.00	10.00	9.72	0.28	36.229		
200.00	200.00	200.00	200.00	0.50	0.50	-89.58	0.07	-10.00	10.00	9.01	0.99	10.071	CC, ES	
300.00	299.98	299.98	299.98	0.85	0.85	162.71	0.07	-10.00	11.65	9.95	1.70	6.849		
400.00	399.84	400.37	400.34	1.20	1.20	166.44	-0.60	-8.38	15.03	12.61	2.43	6.196		
500.00	499.45	500.87	500.71	1.56	1.56	168.41	-2.64	-3.50	18.46	15.28	3.18	5.808		
600.00	598.70	601.50	600.95	1.95	1.92	169.44	-6.04	4.63	21.91	17.96	3.95	5.548		
700.00	697.47	702.26	700.94	2.35	2.30	169.90	-10.79	16.02	25.36	20.63	4.73	5.362		
800.00	795.62	803.13	800.55	2.78	2.70	170.00	-16.91	30.66	28.81	23.29	5.52	5.221		
900.00	893.06	904.12	899.66	3.24	3.13	169.86	-24.38	48.56	32.25	25.94	6.31	5.109		
1,000.00	989.66	1,005.24	998.14	3.75	3.59	169.52	-33.21	69.70	35.63	28.52	7.12	5.007		
1,100.00	1,085.94	1,105.29	1,095.11	4.27	4.07	168.94	-42.69	92.41	38.27	30.40	7.87	4.863		
1,200.00	1,182.22	1,205.25	1,192.00	4.81	4.57	168.44	-52.17	115.10	40.90	32.27	8.63	4.737		
1,300.00	1,278.50	1,305.22	1,288.89	5.36	5.07	167.99	-61.65	137.80	43.54	34.13	9.41	4.626		
1,400.00	1,374.78	1,405.18	1,385.79	5.91	5.58	167.60	-71.13	160.50	46.18	35.98	10.20	4.527		
1,500.00	1,471.06	1,505.15	1,482.68	6.47	6.10	167.25	-80.61	183.19	48.82	37.82	11.00	4.439		
1,600.00	1,567.34	1,605.11	1,579.57	7.02	6.62	166.93	-90.09	205.89	51.46	39.66	11.80	4.361		
1,700.00	1,663.62	1,705.08	1,676.46	7.58	7.14	166.65	-99.56	228.59	54.10	41.49	12.61	4.291		
1,800.00	1,759.90	1,805.04	1,773.35	8.15	7.66	166.39	-109.04	251.28	56.74	43.32	13.42	4.228		
1,900.00	1,856.18	1,905.01	1,870.24	8.71	8.19	166.15	-118.52	273.98	59.39	45.15	14.24	4.171		
2,000.00	1,952.46	2,004.97	1,967.14	9.28	8.71	165.94	-128.00	296.68	62.03	46.97	15.06	4.119		
2,100.00	2,048.74	2,104.93	2,064.03	9.85	9.24	165.74	-137.48	319.37	64.68	48.80	15.88	4.072		
2,200.00	2,145.02	2,204.90	2,160.92	10.41	9.77	165.56	-146.96	342.07	67.33	50.62	16.71	4.029		
2,300.00	2,241.31	2,304.86	2,257.81	10.98	10.30	165.39	-156.44	364.77	69.98	52.44	17.54	3.990		
2,400.00	2,337.59	2,404.83	2,354.70	11.55	10.83	165.23	-165.91	387.46	72.63	54.25	18.37	3.953		
2,500.00	2,433.87	2,504.79	2,451.59	12.12	11.36	165.09	-175.39	410.16	75.27	56.07	19.20	3.920		
2,600.00	2,530.15	2,604.76	2,548.48	12.69	11.90	164.95	-184.87	432.86	77.92	57.89	20.04	3.889		
2,700.00	2,626.43	2,704.72	2,645.38	13.26	12.43	164.83	-194.35	455.55	80.57	59.70	20.87	3.860		
2,800.00	2,722.71	2,804.69	2,742.27	13.83	12.96	164.71	-203.83	478.25	83.22	61.52	21.71	3.834		
2,900.00	2,818.99	2,904.65	2,839.16	14.40	13.50	164.60	-213.31	500.95	85.87	63.33	22.55	3.809		
3,000.00	2,915.27	3,004.62	2,936.05	14.98	14.03	164.49	-222.79	523.64	88.52	65.14	23.38	3.786		
3,100.00	3,011.55	3,104.58	3,032.94	15.55	14.56	164.40	-232.26	546.34	91.18	66.95	24.22	3.764		
3,200.00	3,107.83	3,204.55	3,129.83	16.12	15.10	164.30	-241.74	569.03	93.83	68.76	25.06	3.744		
3,300.00	3,204.11	3,304.51	3,226.73	16.69	15.63	164.22	-251.22	591.73	96.48	70.57	25.90	3.724		
3,400.00	3,300.39	3,404.48	3,323.62	17.27	16.17	164.13	-260.70	614.43	99.13	72.38	26.75	3.706		
3,500.00	3,396.67	3,504.44	3,420.51	17.84	16.70	164.05	-270.18	637.12	101.78	74.19	27.59	3.689		
3,600.00	3,492.96	3,604.41	3,517.40	18.41	17.24	163.98	-279.66	659.82	104.43	76.00	28.43	3.673		
3,700.00	3,589.24	3,704.37	3,614.29	18.98	17.77	163.91	-289.14	682.52	107.09	77.81	29.27	3.658		
3,800.00	3,685.52	3,804.33	3,711.18	19.56	18.31	163.84	-298.61	705.21	109.74	79.62	30.12	3.644		
3,900.00	3,781.80	3,904.30	3,808.07	20.13	18.85	163.78	-308.09	727.91	112.39	81.43	30.96	3.630		
4,000.00	3,878.08	4,004.26	3,904.97	20.70	19.38	163.72	-317.57	750.61	115.04	83.24	31.81	3.617		
4,100.00	3,974.36	4,104.23	4,001.86	21.28	19.92	163.66	-327.05	773.30	117.70	85.05	32.65	3.605		
4,200.00	4,070.64	4,204.19	4,098.75	21.85	20.45	163.60	-336.53	796.00	120.35	86.85	33.50	3.593		
4,300.00	4,166.92	4,304.16	4,195.64	22.42	20.99	163.55	-346.01	818.70	123.00	88.66	34.34	3.582		
4,400.00	4,263.20	4,404.12	4,292.53	23.00	21.53	163.50	-355.48	841.39	125.66	90.47	35.19	3.571		
4,500.00	4,359.48	4,504.09	4,389.42	23.57	22.06	163.45	-364.96	864.09	128.31	92.27	36.04	3.561		
4,600.00	4,455.76	4,604.05	4,486.32	24.15	22.60	163.40	-374.44	886.79	130.96	94.08	36.88	3.551		
4,700.00	4,552.29	4,704.04	4,583.22	24.71	23.13	163.24	-383.92	909.49	132.71	94.97	37.74	3.516		
4,800.00	4,649.26	4,802.03	4,678.38	25.24	23.65	162.98	-392.95	931.09	133.49	94.89	38.60	3.458		
4,900.00	4,746.65	4,900.00	4,773.90	25.75	24.15	162.73	-401.34	951.19	134.22	94.78	39.44	3.403		
5,000.00	4,844.41	4,997.70	4,869.51	26.24	24.62	162.51	-409.08	969.73	134.89	94.64	40.25	3.351		
5,100.00	4,942.53	5,095.52	4,965.56	26.70	25.07	162.30	-416.20	986.79	135.50	94.47	41.03	3.303		

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4N-35H-O367 - OH - PLAN #1													Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,200.00	5,040.96	5,193.34	5,061.92	27.14	25.50	162.12	-422.69	1,002.33	136.07	94.28	41.79	3.256		
5,300.00	5,139.69	5,291.15	5,158.54	27.56	25.91	161.96	-428.55	1,016.34	136.58	94.06	42.52	3.212		
5,400.00	5,238.69	5,388.95	5,255.40	27.96	26.31	161.81	-433.76	1,028.83	137.04	93.81	43.22	3.171		
5,500.00	5,337.91	5,486.75	5,352.48	28.34	26.68	161.68	-438.34	1,039.80	137.44	93.54	43.90	3.131		
5,600.00	5,437.34	5,584.55	5,449.74	28.69	27.04	161.57	-442.28	1,049.23	137.78	93.24	44.55	3.093		
5,700.00	5,536.93	5,682.34	5,547.16	29.03	27.37	161.48	-445.58	1,057.13	138.07	92.90	45.17	3.057		
5,800.00	5,636.67	5,780.13	5,644.70	29.35	27.70	161.41	-448.24	1,063.49	138.31	92.54	45.76	3.022		
5,900.00	5,736.52	5,877.92	5,742.35	29.65	28.00	161.36	-450.25	1,068.32	138.48	92.15	46.33	2.989		
6,000.00	5,836.45	5,975.71	5,840.07	29.94	28.29	161.32	-451.63	1,071.61	138.61	91.73	46.87	2.957		
6,100.00	5,936.43	6,073.50	5,937.84	30.21	28.57	161.30	-452.36	1,073.36	138.67	91.29	47.38	2.926		
6,200.00	6,036.43	6,172.09	6,036.43	30.45	28.83	-88.04	-452.49	1,073.67	138.68	90.78	47.90	2.895		
6,300.00	6,136.43	6,272.09	6,136.43	30.70	29.08	-88.04	-452.49	1,073.67	138.68	90.20	48.48	2.860		
6,400.00	6,236.43	6,372.09	6,236.43	30.94	29.34	-88.04	-452.49	1,073.67	138.68	89.61	49.07	2.826		
6,500.00	6,336.43	6,472.09	6,336.43	31.19	29.60	-88.04	-452.49	1,073.67	138.68	89.02	49.67	2.792		
6,600.00	6,436.42	6,572.08	6,436.42	31.43	29.86	-87.46	-452.49	1,073.67	138.65	88.34	50.31	2.756		
6,666.81	6,502.92	6,638.58	6,502.92	31.58	30.03	-90.00	-452.49	1,073.67	138.51	87.38	51.13	2.709		
6,700.00	6,535.67	6,671.33	6,535.67	31.66	30.12	-92.18	-452.49	1,073.67	138.61	86.89	51.73	2.680		
6,800.00	6,632.36	6,768.87	6,633.21	31.85	30.37	-101.82	-452.22	1,073.67	141.78	87.43	54.36	2.608		
6,900.00	6,724.60	6,871.09	6,734.85	32.00	30.62	-112.40	-442.18	1,073.59	150.70	93.35	57.34	2.628		
7,000.00	6,810.59	6,978.14	6,838.61	32.12	30.85	-121.52	-416.29	1,073.39	163.98	104.83	59.14	2.773		
7,100.00	6,888.67	7,090.52	6,942.11	32.21	31.04	-128.99	-372.81	1,073.06	179.94	120.78	59.16	3.042		
7,200.00	6,957.31	7,208.63	7,042.15	32.25	31.19	-134.92	-310.28	1,072.59	196.85	139.51	57.34	3.433		
7,300.00	7,015.18	7,332.64	7,134.64	32.26	31.28	-139.51	-227.90	1,071.96	213.16	159.16	54.00	3.947		
7,400.00	7,061.15	7,462.39	7,214.69	32.24	31.33	-142.95	-126.01	1,071.18	227.50	177.81	49.69	4.578		
7,500.00	7,094.32	7,597.23	7,277.01	32.19	31.31	-145.39	-6.66	1,070.28	238.72	193.40	45.33	5.267		
7,600.00	7,114.05	7,736.00	7,316.66	32.12	31.23	-146.95	126.09	1,069.26	245.93	203.78	42.15	5.834		
7,700.00	7,120.00	7,876.27	7,330.00	32.03	31.12	-147.68	265.49	1,068.20	248.49	207.06	41.43	5.998		
7,800.00	7,120.00	7,976.27	7,330.00	31.95	31.04	-147.84	365.49	1,067.44	248.07	205.71	42.36	5.856		
7,900.00	7,120.00	8,076.26	7,330.00	31.87	30.97	-147.99	465.48	1,066.68	247.65	204.28	43.37	5.710		
8,000.00	7,120.00	8,176.26	7,330.00	31.81	30.91	-148.15	565.48	1,065.92	247.23	202.77	44.46	5.560		
8,100.00	7,120.00	8,276.26	7,330.00	31.77	30.90	-148.30	665.47	1,065.16	246.82	201.20	45.62	5.410		
8,200.00	7,120.00	8,376.25	7,330.00	31.79	31.64	-148.46	765.46	1,064.40	246.40	199.57	46.84	5.261		
8,300.00	7,120.00	8,476.25	7,330.00	32.36	32.49	-148.62	865.46	1,063.63	245.99	197.88	48.12	5.113		
8,400.00	7,120.00	8,576.25	7,330.00	33.25	33.39	-148.77	965.45	1,062.87	245.58	196.14	49.44	4.967		
8,500.00	7,120.00	8,676.24	7,330.00	34.21	34.33	-148.93	1,065.45	1,062.11	245.17	194.36	50.81	4.825		
8,600.00	7,120.00	8,776.24	7,330.00	35.21	35.32	-149.09	1,165.44	1,061.35	244.77	192.54	52.23	4.687		
8,700.00	7,120.00	8,876.24	7,330.00	36.26	36.35	-149.25	1,265.43	1,060.59	244.36	190.69	53.68	4.552		
8,800.00	7,120.00	8,976.23	7,330.00	37.34	37.41	-149.41	1,365.43	1,059.83	243.96	188.80	55.16	4.423		
8,900.00	7,120.00	9,076.23	7,330.00	38.46	38.51	-149.57	1,465.42	1,059.07	243.56	186.89	56.67	4.298		
9,000.00	7,120.00	9,176.23	7,330.00	39.61	39.64	-149.73	1,565.42	1,058.30	243.16	184.95	58.21	4.177		
9,100.00	7,120.00	9,276.23	7,330.00	40.79	40.81	-149.89	1,665.41	1,057.54	242.76	183.00	59.77	4.062		
9,200.00	7,120.00	9,376.22	7,330.00	41.99	42.00	-150.05	1,765.40	1,056.78	242.37	181.02	61.35	3.951		
9,300.00	7,120.00	9,476.22	7,330.00	43.22	43.21	-150.21	1,865.40	1,056.02	241.98	179.03	62.95	3.844		
9,400.00	7,120.00	9,576.22	7,330.00	44.48	44.45	-150.37	1,965.39	1,055.26	241.58	177.02	64.56	3.742		
9,500.00	7,120.00	9,676.21	7,330.00	45.75	45.71	-150.54	2,065.39	1,054.50	241.20	175.01	66.19	3.644		
9,600.00	7,120.00	9,776.21	7,330.00	47.04	46.98	-150.70	2,165.38	1,053.74	240.81	172.98	67.83	3.550		
9,700.00	7,120.00	9,876.21	7,330.00	48.35	48.28	-150.86	2,265.37	1,052.97	240.42	170.95	69.48	3.461		
9,800.00	7,120.00	9,976.20	7,330.00	49.68	49.59	-151.03	2,365.37	1,052.21	240.04	168.91	71.13	3.375		
9,900.00	7,120.00	10,076.20	7,330.00	51.02	50.92	-151.19	2,465.36	1,051.45	239.66	166.86	72.80	3.292		
10,000.00	7,120.00	10,176.20	7,330.00	52.38	52.26	-151.36	2,565.36	1,050.69	239.28	164.81	74.47	3.213		
10,100.00	7,120.00	10,276.19	7,330.00	53.75	53.62	-151.53	2,665.35	1,049.93	238.90	162.76	76.14	3.138		
10,200.00	7,120.00	10,376.19	7,330.00	55.13	54.99	-151.69	2,765.34	1,049.17	238.53	160.70	77.82	3.065		

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (KIYOTA) - KIYOTA 4N-35H-O367 - OH - PLAN #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.00	7,120.00	10,476.19	7,330.00	56.52	56.37	-151.86	2,865.34	1,048.41	238.15	158.65	79.50	2.996	
10,400.00	7,120.00	10,576.18	7,330.00	57.92	57.76	-152.03	2,965.33	1,047.64	237.78	156.59	81.19	2.929	
10,500.00	7,120.00	10,676.18	7,330.00	59.33	59.16	-152.20	3,065.33	1,046.88	237.41	154.54	82.87	2.865	
10,600.00	7,120.00	10,776.18	7,330.00	60.76	60.57	-152.36	3,165.32	1,046.12	237.05	152.49	84.56	2.803	
10,700.00	7,120.00	10,876.18	7,330.00	62.19	61.99	-152.53	3,265.31	1,045.36	236.68	150.44	86.24	2.744	
10,800.00	7,120.00	10,976.17	7,330.00	63.62	63.42	-152.70	3,365.31	1,044.60	236.32	148.39	87.93	2.688	
10,900.00	7,120.00	11,076.17	7,330.00	65.07	64.85	-152.87	3,465.30	1,043.84	235.96	146.35	89.61	2.633	
11,000.00	7,120.00	11,176.17	7,330.00	66.52	66.30	-153.04	3,565.30	1,043.08	235.60	144.31	91.29	2.581	
11,100.00	7,120.00	11,276.16	7,330.00	67.98	67.74	-153.22	3,665.29	1,042.31	235.24	142.27	92.97	2.530	
11,200.00	7,120.00	11,376.16	7,330.00	69.44	69.20	-153.39	3,765.28	1,041.55	234.89	140.24	94.64	2.482	
11,300.00	7,120.00	11,476.16	7,330.00	70.92	70.66	-153.56	3,865.28	1,040.79	234.53	138.22	96.31	2.435	
11,400.00	7,120.00	11,576.15	7,330.00	72.39	72.13	-153.73	3,965.27	1,040.03	234.18	136.20	97.98	2.390	
11,500.00	7,120.00	11,676.15	7,330.00	73.87	73.60	-153.91	4,065.27	1,039.27	233.84	134.19	99.65	2.347	
11,600.00	7,120.00	11,776.15	7,330.00	75.36	75.07	-154.08	4,165.26	1,038.51	233.49	132.18	101.31	2.305	
11,700.00	7,120.00	11,876.14	7,330.00	76.85	76.56	-154.25	4,265.25	1,037.74	233.15	130.18	102.96	2.264	
11,800.00	7,120.00	11,976.14	7,330.00	78.34	78.04	-154.43	4,365.25	1,036.98	232.80	128.19	104.61	2.225	
11,826.18	7,120.00	12,002.32	7,330.00	78.73	78.43	-154.48	4,391.43	1,036.78	232.71	127.67	105.04	2.215 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design										S35-T3N-R67W (OFFSETS) - KAWAKAMI 41-35 (EXISTING) - CPR WELL - GYRO				Offset Site Error:		0.00 usft
Survey Program: 100- GyroFlex														Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor				
11,200.00	7,120.00	7,062.70	7,061.27	69.44	9.32	-89.23	4,360.72	710.74	737.39	680.49	56.89	12.961				
11,300.00	7,120.00	7,060.39	7,058.97	70.92	9.32	-88.92	4,360.77	710.85	658.38	597.46	60.92	10.806				
11,400.00	7,120.00	7,058.04	7,056.63	72.39	9.31	-88.61	4,360.83	710.96	585.82	519.95	65.87	8.893				
11,500.00	7,120.00	7,055.66	7,054.24	73.87	9.31	-88.29	4,360.89	711.08	522.39	450.71	71.68	7.288				
11,600.00	7,120.00	7,053.23	7,051.82	75.36	9.30	-87.96	4,360.96	711.19	471.79	393.98	77.82	6.063				
11,700.00	7,120.00	7,050.77	7,049.36	76.85	9.30	-87.63	4,361.02	711.31	438.49	355.45	83.04	5.281				
11,800.00	7,120.00	7,048.26	7,046.85	78.34	9.30	-87.29	4,361.09	711.42	426.55	340.91	85.63	4.981				
11,801.68	7,120.00	7,048.22	7,046.81	78.37	9.30	-87.29	4,361.09	711.43	426.54	340.90	85.65	4.980	CC, ES, SF			
11,826.18	7,120.00	7,047.59	7,046.19	78.73	9.30	-87.21	4,361.11	711.46	427.24	341.53	85.72	4.984				

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (OFFSETS) - KAWAKAMI 42-35 (EXISTING) - CPR WELL - GYRO													Offset Site Error:	0.00 usft
Survey Program: 100- GyroFlex													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
9,500.00	7,120.00	7,068.51	7,067.11	45.75	8.80	-90.15	2,690.84	747.13	756.00	711.20	44.80	16.874		
9,600.00	7,120.00	7,068.04	7,066.64	47.04	8.80	-90.09	2,690.84	747.13	674.78	627.78	46.99	14.359		
9,700.00	7,120.00	7,067.56	7,066.16	48.35	8.80	-90.02	2,690.84	747.13	599.26	549.50	49.75	12.045		
9,800.00	7,120.00	7,067.08	7,065.68	49.68	8.80	-89.96	2,690.85	747.14	531.87	478.77	53.10	10.016		
9,900.00	7,120.00	7,066.60	7,065.20	51.02	8.79	-89.89	2,690.85	747.14	476.10	419.28	56.82	8.379		
10,000.00	7,120.00	7,066.11	7,064.71	52.38	8.79	-89.82	2,690.85	747.14	436.41	376.16	60.25	7.243		
10,100.00	7,120.00	7,065.62	7,064.22	53.75	8.79	-89.76	2,690.85	747.14	417.42	355.11	62.31	6.699		
10,131.09	7,120.00	7,065.46	7,064.07	54.18	8.79	-89.74	2,690.85	747.14	416.26	353.75	62.51	6.659 CC, ES, SF		
10,200.00	7,120.00	7,065.12	7,063.72	55.13	8.79	-89.69	2,690.86	747.15	421.92	359.80	62.12	6.792		
10,300.00	7,120.00	7,064.62	7,063.22	56.52	8.79	-89.62	2,690.86	747.15	449.22	389.35	59.87	7.503		
10,400.00	7,120.00	7,064.11	7,062.71	57.92	8.79	-89.55	2,690.86	747.15	495.56	439.00	56.56	8.762		
10,500.00	7,120.00	7,063.60	7,062.20	59.33	8.79	-89.48	2,690.86	747.15	556.20	503.06	53.14	10.467		
10,600.00	7,120.00	7,063.08	7,061.68	60.76	8.79	-89.41	2,690.87	747.16	627.01	576.88	50.12	12.509		
10,700.00	7,120.00	7,062.55	7,061.15	62.19	8.79	-89.33	2,690.87	747.16	704.92	657.27	47.65	14.795		
10,800.00	7,120.00	7,062.02	7,060.63	63.62	8.79	-89.26	2,690.87	747.16	787.84	742.17	45.67	17.249		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (OFFSETS) - KIYOTA 34-35 (EXISTING) - CPR WELL - GYRO													Offset Site Error:	0.00 usft
Survey Program: 100- GyroFlex													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-69.55	217.10	-582.36	622.23					
100.00	100.00	67.75	67.75	0.14	0.05	-69.57	217.00	-582.53	621.64	621.46	0.18	3,499.827	CC, ES	
200.00	200.00	165.70	165.70	0.50	0.18	-69.63	216.61	-583.25	622.19	621.56	0.63	981.343		
300.00	299.98	264.82	264.81	0.85	0.33	179.65	216.28	-584.20	624.71	623.60	1.11	562.546		
400.00	399.84	365.67	365.65	1.20	0.49	179.60	216.06	-585.13	630.73	629.13	1.60	394.256		
500.00	499.45	467.11	467.09	1.56	0.64	179.57	215.85	-585.76	639.96	637.88	2.08	307.047		
600.00	598.70	566.87	566.86	1.95	0.79	179.53	215.49	-586.20	652.43	649.88	2.55	255.687		
700.00	697.47	664.33	664.31	2.35	0.94	179.50	215.16	-586.68	668.42	665.39	3.03	220.920		
800.00	795.62	762.87	762.84	2.78	1.09	179.47	214.88	-587.31	687.99	684.48	3.51	196.110		
900.00	893.06	859.27	859.25	3.24	1.24	179.44	214.52	-587.84	710.86	706.87	4.00	177.920		
1,000.00	989.66	954.57	954.54	3.75	1.38	179.43	214.42	-588.55	737.34	732.83	4.51	163.642		
1,100.00	1,085.94	1,049.19	1,049.16	4.27	1.52	179.42	214.33	-589.33	765.07	760.06	5.01	152.754		
1,200.00	1,182.22	1,143.80	1,143.77	4.81	1.67	179.40	214.12	-590.44	793.07	787.56	5.51	143.899	SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (OFFSETS) - KIYOTA 43-35 (EXISTING) - CPR WELL - GYRO													Offset Site Error: 0.00 usft
Survey Program: 100- GyroFlex													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
8,800.00	7,120.00	7,740.15	7,453.26	37.34	8.24	-121.06	1,658.08	564.63	778.33	736.58	41.75	18.642	
8,900.00	7,120.00	7,733.94	7,447.86	38.46	8.23	-120.57	1,658.55	561.61	745.31	702.62	42.70	17.455	
9,000.00	7,120.00	7,727.67	7,442.41	39.61	8.21	-120.07	1,659.04	558.55	724.62	680.96	43.67	16.594	
9,100.00	7,120.00	7,721.34	7,436.92	40.79	8.19	-119.56	1,659.53	555.44	717.33	672.76	44.57	16.093	
9,102.88	7,120.00	7,721.16	7,436.76	40.82	8.19	-119.55	1,659.55	555.35	717.32	672.73	44.60	16.084 CC, ES	
9,200.00	7,120.00	7,714.95	7,431.39	41.99	8.17	-119.06	1,660.03	552.28	723.83	678.51	45.32	15.971 SF	
9,300.00	7,120.00	7,700.00	7,418.48	43.22	8.13	-117.87	1,661.21	544.83	743.83	697.87	45.96	16.184	
9,400.00	7,120.00	7,700.00	7,418.48	44.48	8.13	-117.87	1,661.21	544.83	776.11	729.99	46.12	16.827	
9,500.00	7,120.00	7,700.00	7,418.48	45.75	8.13	-117.87	1,661.21	544.83	819.39	773.33	46.06	17.789	

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 40-35H-O367 - Slot 40
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 40-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (OFFSETS) - KIYOTA 44-35 (EXISTING) - CPR WELL - GYRO												Offset Site Error:	0.00 usft
Survey Program: 100- GyroFlex												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	74.36	156.63	559.39	582.35				
100.00	100.00	58.45	58.45	0.14	0.04	74.35	156.73	559.39	580.93	580.77	0.16	3,596.738	
200.00	200.00	157.85	157.85	0.50	0.17	74.30	157.24	559.41	581.09	580.50	0.59	991.394	
300.00	299.98	258.36	258.36	0.85	0.32	-36.53	157.77	559.45	579.87	578.85	1.02	570.070	
400.00	399.84	356.56	356.55	1.20	0.47	-36.97	158.60	559.36	575.82	574.37	1.45	398.096	
500.00	499.45	452.61	452.59	1.56	0.62	-37.69	160.18	559.61	569.60	567.70	1.90	300.041	
600.00	598.70	548.40	548.36	1.95	0.75	-38.65	161.70	560.48	561.33	558.93	2.39	234.681	
700.00	697.47	644.27	644.21	2.35	0.85	-39.80	162.62	562.16	551.11	548.19	2.92	188.823	
800.00	795.62	742.07	741.98	2.78	0.93	-41.14	162.48	564.67	538.85	535.39	3.47	155.466	
900.00	893.06	841.60	841.48	3.24	1.00	-42.80	161.78	567.26	524.11	520.08	4.03	130.073	
1,000.00	989.66	939.67	939.52	3.75	1.08	-44.83	161.19	569.49	507.04	502.42	4.62	109.745	
1,100.00	1,085.94	1,036.58	1,036.40	4.27	1.17	-46.85	160.56	571.65	489.62	484.40	5.22	93.714	
1,200.00	1,182.22	1,134.26	1,134.05	4.81	1.28	-49.07	160.16	573.70	472.85	467.00	5.85	80.867	
1,300.00	1,278.50	1,232.75	1,232.54	5.36	1.40	-51.49	159.75	575.31	456.45	449.96	6.48	70.408	
1,400.00	1,374.78	1,329.55	1,329.33	5.91	1.52	-54.05	159.36	576.72	440.75	433.63	7.13	61.843	
1,500.00	1,471.06	1,427.36	1,427.12	6.47	1.63	-56.82	158.98	578.10	425.99	418.22	7.76	54.869	
1,600.00	1,567.34	1,527.20	1,526.96	7.02	1.69	-59.94	158.78	578.49	411.62	403.27	8.35	49.306	
1,700.00	1,663.62	1,623.95	1,623.71	7.58	1.67	-63.27	158.87	578.06	398.11	389.19	8.91	44.673	
1,800.00	1,759.90	1,718.71	1,718.47	8.15	1.67	-66.78	159.25	577.58	386.24	376.71	9.53	40.537	
1,900.00	1,856.18	1,813.21	1,812.96	8.71	1.71	-70.49	160.06	577.19	376.42	366.22	10.20	36.896	
2,000.00	1,952.46	1,907.90	1,907.65	9.28	1.79	-74.38	161.20	576.98	368.81	357.90	10.91	33.803	
2,100.00	2,048.74	2,002.10	2,001.83	9.85	1.89	-78.35	162.57	577.21	363.59	351.95	11.63	31.253	
2,200.00	2,145.02	2,097.83	2,097.55	10.41	2.02	-82.42	164.11	577.82	360.68	348.32	12.35	29.196	
2,275.45	2,217.67	2,169.30	2,169.00	10.84	2.12	-85.48	165.38	578.42	359.98	347.10	12.88	27.943 CC	
2,300.00	2,241.31	2,192.53	2,192.24	10.98	2.16	-86.48	165.84	578.63	360.05	347.00	13.05	27.588 ES	
2,400.00	2,337.59	2,290.85	2,290.53	11.55	2.30	-90.64	167.53	579.71	361.43	347.71	13.72	26.341	
2,500.00	2,433.87	2,388.88	2,388.55	12.12	2.45	-94.72	168.65	580.75	364.21	349.86	14.35	25.375	
2,600.00	2,530.15	2,486.55	2,486.21	12.69	2.59	-98.75	169.47	581.48	368.53	353.59	14.94	24.665	
2,700.00	2,626.43	2,583.49	2,583.15	13.26	2.74	-102.62	170.02	582.27	374.45	358.97	15.47	24.197	
2,800.00	2,722.71	2,680.85	2,680.51	13.83	2.88	-106.38	170.39	583.10	381.94	365.99	15.95	23.943	
2,900.00	2,818.99	2,777.47	2,777.12	14.40	3.01	-109.96	170.60	583.90	390.92	374.54	16.38	23.865	
3,000.00	2,915.27	2,877.18	2,876.83	14.98	3.10	-113.51	170.50	584.55	401.13	384.39	16.74	23.958	
3,100.00	3,011.55	2,980.04	2,979.68	15.55	3.11	-117.06	169.10	584.75	411.62	394.57	17.05	24.143	
3,200.00	3,107.83	3,075.88	3,075.49	16.12	3.10	-120.27	166.82	584.58	422.60	405.26	17.34	24.373	
3,300.00	3,204.11	3,169.88	3,169.47	16.69	3.07	-123.32	164.99	583.88	435.45	417.82	17.63	24.694	
3,400.00	3,300.39	3,265.26	3,264.83	17.27	3.04	-126.24	163.49	583.03	449.95	432.01	17.95	25.074	
3,500.00	3,396.67	3,358.30	3,357.86	17.84	3.01	-128.92	162.27	582.15	465.87	447.61	18.26	25.511	
3,600.00	3,492.96	3,450.95	3,450.51	18.41	2.99	-131.37	161.96	581.34	483.66	465.07	18.59	26.017	
3,700.00	3,589.24	3,545.29	3,544.84	18.98	2.98	-133.67	162.13	580.50	502.81	483.88	18.93	26.559	
3,800.00	3,685.52	3,640.53	3,640.08	19.56	2.99	-135.85	162.46	579.45	522.98	503.70	19.28	27.127	
3,900.00	3,781.80	3,736.40	3,735.94	20.13	3.00	-137.89	162.77	578.23	543.92	524.29	19.63	27.708	
4,000.00	3,878.08	3,832.71	3,832.23	20.70	3.01	-139.85	162.81	576.56	565.48	545.50	19.98	28.302	
4,100.00	3,974.36	3,928.69	3,928.20	21.28	3.02	-141.71	162.52	574.56	587.55	567.22	20.33	28.905	
4,200.00	4,070.64	4,022.78	4,022.26	21.85	3.04	-143.43	162.21	572.32	610.31	589.64	20.67	29.532	
4,300.00	4,166.92	4,115.38	4,114.82	22.42	3.07	-145.01	162.12	569.82	633.94	612.94	21.00	30.184	
4,400.00	4,263.20	4,205.96	4,205.35	23.00	3.10	-146.46	162.46	566.96	658.67	637.34	21.33	30.873	
4,500.00	4,359.48	4,300.00	4,299.34	23.57	3.15	-147.86	163.11	563.78	684.19	662.50	21.70	31.536	
4,600.00	4,455.76	4,393.99	4,393.27	24.15	3.22	-149.15	164.09	560.74	710.26	688.19	22.07	32.182	
4,700.00	4,552.29	4,487.56	4,486.79	24.71	3.29	-150.38	165.61	557.93	736.12	713.67	22.45	32.785	
4,800.00	4,649.26	4,587.68	4,586.86	25.24	3.38	-151.49	167.58	555.43	760.69	737.80	22.89	33.235	
4,900.00	4,746.65	4,692.65	4,691.80	25.75	3.49	-152.46	169.32	553.74	783.14	759.78	23.36	33.526	
5,000.00	4,844.41	4,792.78	4,791.92	26.24	3.58	-153.28	170.29	552.47	803.48	779.68	23.80	33.759	

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (OFFSETS) - KIYOTA 44-35 (EXISTING) - CPR WELL - GYRO													Offset Site Error: 0.00 usft
Survey Program: 100- GyroFlex													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
7,100.00	6,888.67	6,843.85	6,842.90	32.21	5.42	-62.95	173.49	544.66	798.05	766.73	31.32	25.479	
7,200.00	6,957.31	6,911.08	6,910.13	32.25	5.47	-69.56	173.39	544.03	759.80	728.38	31.42	24.184	
7,300.00	7,015.18	6,968.35	6,967.39	32.26	5.53	-76.28	173.30	543.43	723.12	691.55	31.58	22.901	
7,400.00	7,061.15	7,014.22	7,013.26	32.24	5.57	-82.29	173.22	542.92	691.82	659.96	31.86	21.713	
7,500.00	7,094.32	7,047.87	7,046.91	32.19	5.59	-86.83	173.12	542.56	669.75	637.43	32.33	20.719	
7,600.00	7,114.05	7,067.62	7,066.66	32.12	5.61	-89.27	173.05	542.36	660.29	627.34	32.95	20.037	
7,615.92	7,115.94	7,069.48	7,068.52	32.10	5.61	-89.44	173.04	542.34	660.10	627.04	33.07	19.963	
7,700.00	7,120.00	7,073.27	7,072.31	32.03	5.61	-89.42	173.03	542.31	665.37	631.71	33.66	19.767 SF	
7,800.00	7,120.00	7,072.87	7,071.91	31.95	5.61	-89.39	173.03	542.31	685.11	650.74	34.37	19.933	
7,900.00	7,120.00	7,072.47	7,071.51	31.87	5.61	-89.35	173.03	542.31	718.35	683.33	35.02	20.512	
8,000.00	7,120.00	7,072.07	7,071.11	31.81	5.61	-89.32	173.03	542.32	763.33	727.77	35.56	21.465	
8,100.00	7,120.00	7,071.68	7,070.71	31.77	5.61	-89.28	173.03	542.32	818.12	782.14	35.98	22.735	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (OFFSETS) - KIYOTA 6-8-35 (EXISTING) - CPR WELL - SURVEYS													Offset Site Error:	0.00 usft
Survey Program: 843-Geolink MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-71.82	192.69	-586.83	617.84					
100.00	100.00	85.34	85.34	0.14	0.15	-71.82	192.73	-586.80	617.64	617.35	0.29	2,157.961		
200.00	200.00	185.63	185.63	0.50	0.32	-71.80	192.89	-586.68	617.58	616.76	0.82	754.210		
202.56	202.56	188.20	188.20	0.51	0.33	177.54	192.90	-586.68	617.58	616.74	0.83	742.051	CC, ES	
300.00	299.98	285.91	285.91	0.85	0.50	177.57	193.16	-586.47	619.21	617.87	1.34	461.021		
400.00	399.84	386.07	386.07	1.20	0.67	177.63	193.55	-586.18	624.28	622.41	1.87	333.520		
500.00	499.45	485.99	485.99	1.56	0.84	177.71	194.05	-585.79	632.78	630.38	2.41	262.910		
600.00	598.70	585.56	585.56	1.95	1.02	177.81	194.67	-585.33	644.71	641.76	2.95	218.879		
700.00	697.47	684.66	684.65	2.35	1.19	177.93	195.39	-584.77	660.05	656.56	3.49	189.288		
800.00	795.62	783.18	783.16	2.78	1.36	178.06	196.23	-584.14	678.79	674.75	4.03	168.385		
900.00	893.06	890.79	890.76	3.24	1.55	178.21	197.17	-583.03	700.63	696.03	4.60	152.392		
1,000.00	989.66	1,003.84	1,003.76	3.75	1.75	178.29	196.17	-579.80	723.54	718.36	5.18	139.567		
1,100.00	1,085.94	1,125.47	1,125.16	4.27	1.97	178.19	191.84	-573.91	744.96	739.18	5.78	128.881		
1,200.00	1,182.22	1,240.72	1,239.95	4.81	2.20	177.97	185.11	-566.26	764.05	757.68	6.37	119.893		
1,300.00	1,278.50	1,356.69	1,355.07	5.36	2.45	177.57	175.05	-556.60	780.62	773.64	6.98	111.916		
1,400.00	1,374.78	1,465.32	1,462.70	5.91	2.71	177.18	164.61	-546.17	795.75	788.19	7.57	105.131		
1,500.00	1,471.06	1,575.23	1,571.41	6.47	3.00	176.87	154.46	-533.62	809.27	801.10	8.17	99.039	SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well KIYOTA 4O-35H-O367 - Slot 4O
Project:	DJ BASIN	TVD Reference:	23' KB @ 4864.00usft
Reference Site:	S35-T3N-R67W (KIYOTA)	MD Reference:	23' KB @ 4864.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	KIYOTA 4O-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (OFFSETS) - VANCE #31-36(EXISTING) - CPR WELL - SURVEYS													Offset Site Error: 0.00 usft	
Survey Program: 12-Geolink MWD													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
10,200.00	7,120.00	7,197.29	7,080.06	55.13	20.94	93.07	3,523.88	1,319.64	773.90	725.03	48.87	15.836		
10,300.00	7,120.00	7,196.78	7,079.55	56.52	20.94	92.90	3,523.89	1,319.66	676.68	627.30	49.38	13.704		
10,400.00	7,120.00	7,196.27	7,079.04	57.92	20.94	92.72	3,523.89	1,319.67	580.40	530.19	50.20	11.561		
10,500.00	7,120.00	7,195.76	7,078.53	59.33	20.94	92.55	3,523.89	1,319.69	485.62	434.00	51.62	9.407		
10,600.00	7,120.00	7,195.25	7,078.01	60.76	20.94	92.38	3,523.89	1,319.70	393.45	339.25	54.19	7.260		
10,700.00	7,120.00	7,194.73	7,077.50	62.19	20.94	92.20	3,523.90	1,319.72	306.22	247.14	59.08	5.183		
10,800.00	7,120.00	7,194.21	7,076.98	63.62	20.94	92.03	3,523.90	1,319.74	229.64	161.43	68.21	3.367		
10,900.00	7,120.00	7,193.69	7,076.46	65.07	20.94	91.85	3,523.90	1,319.75	178.05	97.35	80.70	2.206		
10,955.17	7,120.00	7,193.40	7,076.17	65.87	20.94	91.75	3,523.91	1,319.76	169.29	85.16	84.14	2.012 CC, ES, SF		
11,000.00	7,120.00	7,193.16	7,075.93	66.52	20.94	91.67	3,523.91	1,319.77	175.13	92.43	82.70	2.118		
11,100.00	7,120.00	7,192.64	7,075.41	67.98	20.94	91.49	3,523.91	1,319.78	222.79	150.36	72.43	3.076		
11,200.00	7,120.00	7,192.11	7,074.88	69.44	20.94	91.32	3,523.91	1,319.80	297.66	233.63	64.03	4.649		
11,300.00	7,120.00	7,191.58	7,074.35	70.92	20.94	91.14	3,523.92	1,319.82	384.14	324.96	59.19	6.491		
11,400.00	7,120.00	7,191.05	7,073.82	72.39	20.94	90.96	3,523.92	1,319.83	475.95	419.60	56.36	8.445		
11,500.00	7,120.00	7,190.51	7,073.28	73.87	20.94	90.78	3,523.92	1,319.85	570.52	515.92	54.60	10.449		
11,600.00	7,120.00	7,189.97	7,072.74	75.36	20.94	90.59	3,523.93	1,319.87	666.68	613.24	53.44	12.475		
11,700.00	7,120.00	7,189.43	7,072.20	76.85	20.93	90.41	3,523.93	1,319.88	763.82	711.18	52.64	14.511		

Cathedral Energy Services

Anticollision Report

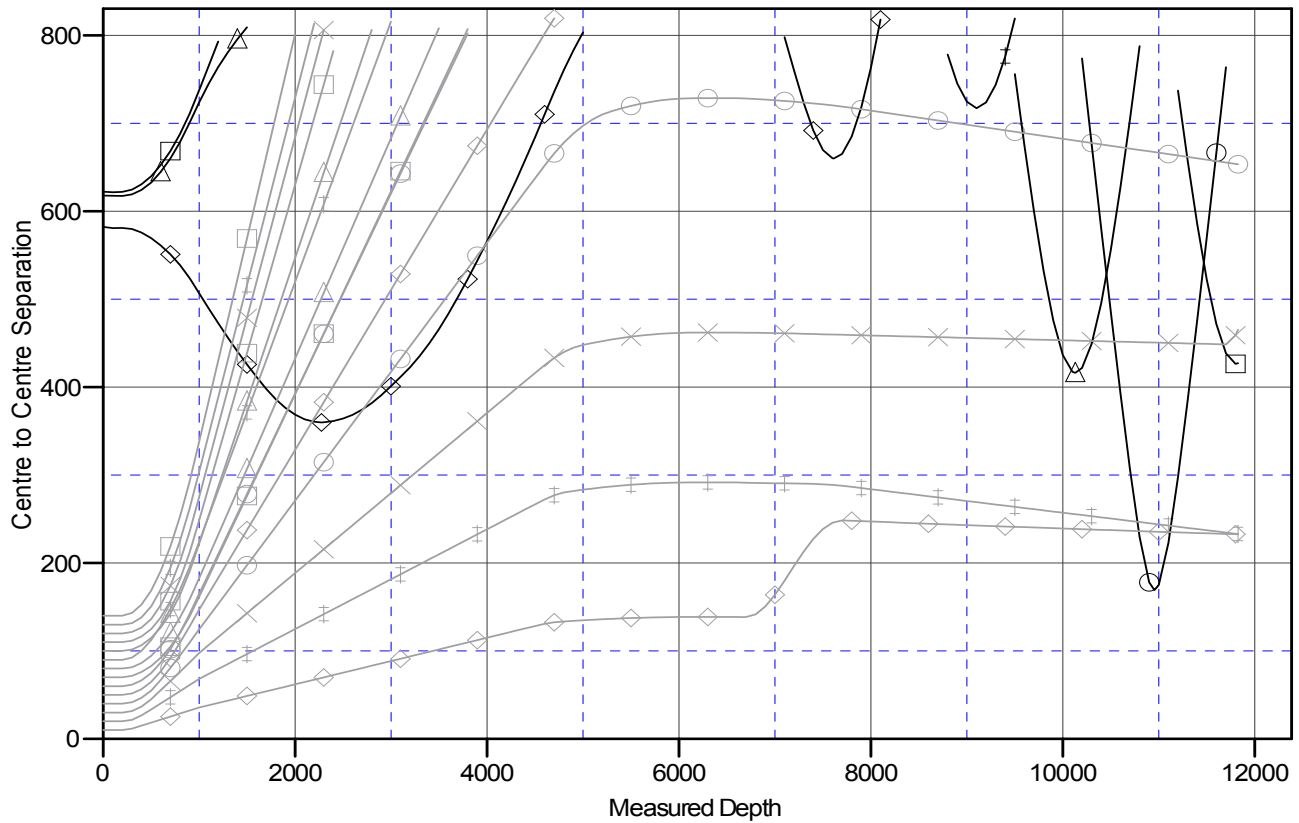
Company: Crestone Peak Resources
Project: DJ BASIN
Reference Site: S35-T3N-R67W (KIYOTA)
Site Error: 0.00usft
Reference Well: KIYOTA 4O-35H-O367
Well Error: 0.00usft
Reference Wellbore: OH
Reference Design: PLAN #1

Local Co-ordinate Reference: Well KIYOTA 4O-35H-O367 - Slot 4O
TVD Reference: 23' KB @ 4864.00usft
MD Reference: 23' KB @ 4864.00usft
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to 23' KB @ 4864.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: KIYOTA 4O-35H-O367 - Slot 4O
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.42°

Ladder Plot



LEGEND

AKAMI41-35 (EXISTING), CPR WELL, GYRO V0	—X— KIYOTA 4M-35H-O367, OH, PLAN#1 V0	—□— KIYOTA 4A-35H-O367, OH, PLAN#1 V0
TA#31-36 (EXISTING), CPR WELL, SURVEYS V0	—□— KIYOTA 4H-35H-O367, OH, PLAN#1 V0	—◇— KIYOTA 4N-35H-O367, OH, PLAN#1 V0
TA 44-35 (EXISTING), CPR WELL, GYRO V0	—○— KIYOTA 4K-35H-O367, OH, PLAN#1 V0	—X— KIYOTA 4L-35H-O367, OH, PLAN#1 V0
TA 6-8-35 (EXISTING), CPR WELL, SURVEYS V0	—◇— KIYOTA 4J-35H-O367, OH, PLAN#1 V0	—△— KIYOTA 4E-35H-O367, OH, PLAN#1 V0
AKAMI42-35 (EXISTING), CPR WELL, GYRO V0	—X— KIYOTA 4C-35H-O367, OH, PLAN#1 V0	—◇— KIYOTA 4B-35H-O367, OH, PLAN#1 V0
TA 43-35 (EXISTING), CPR WELL, GYRO V0	—△— KIYOTA 4G-35H-O367, OH, PLAN#1 V0	—◇— KIYOTA 4F-35H-O367, OH, PLAN#1 V0
TA 34-35 (EXISTING), CPR WELL, GYRO V0	—○— KIYOTA 4I-35H-O367, OH, PLAN#1 V0	—□— KIYOTA 4D-35H-O367, OH, PLAN#1 V0