



CRESTONE PEAK
RESOURCES

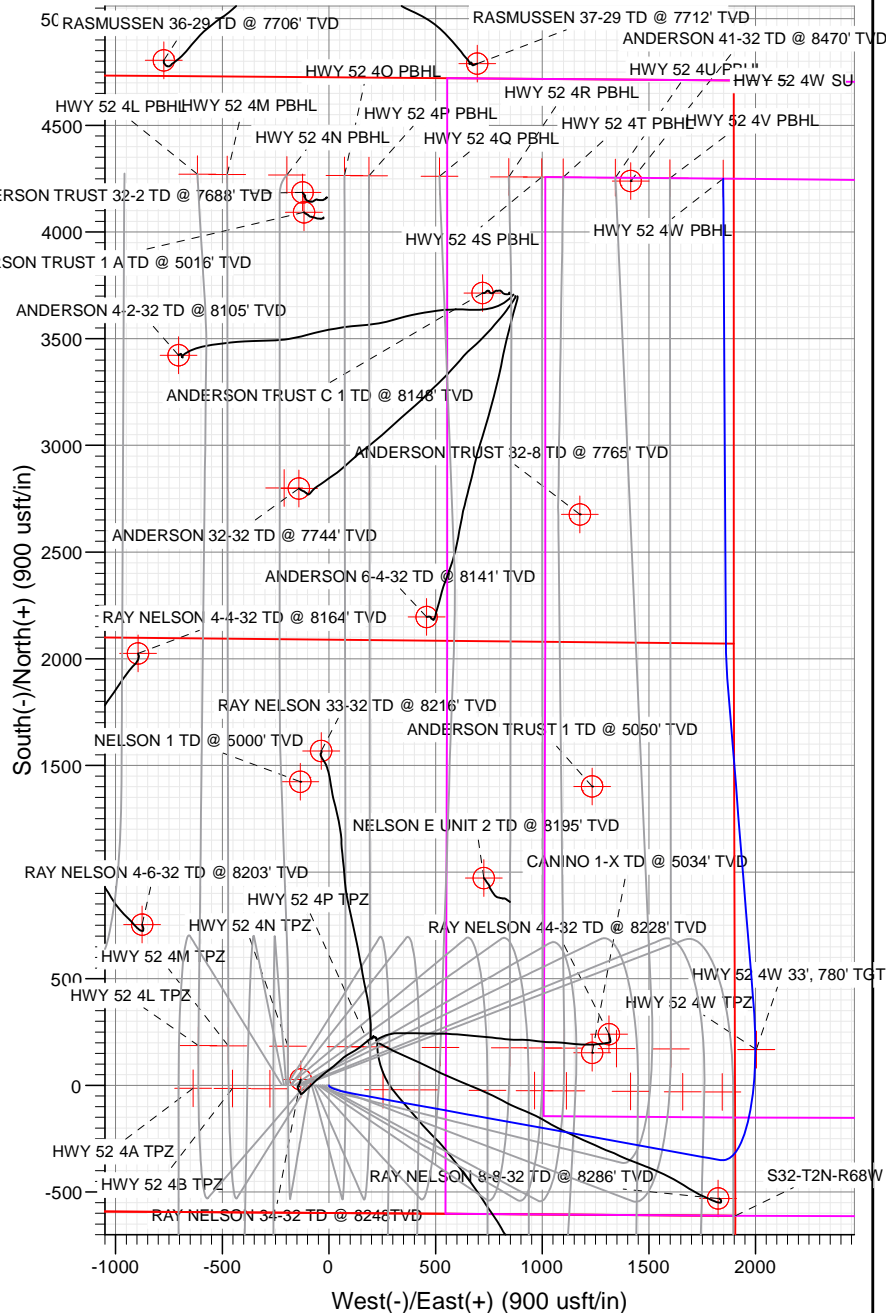
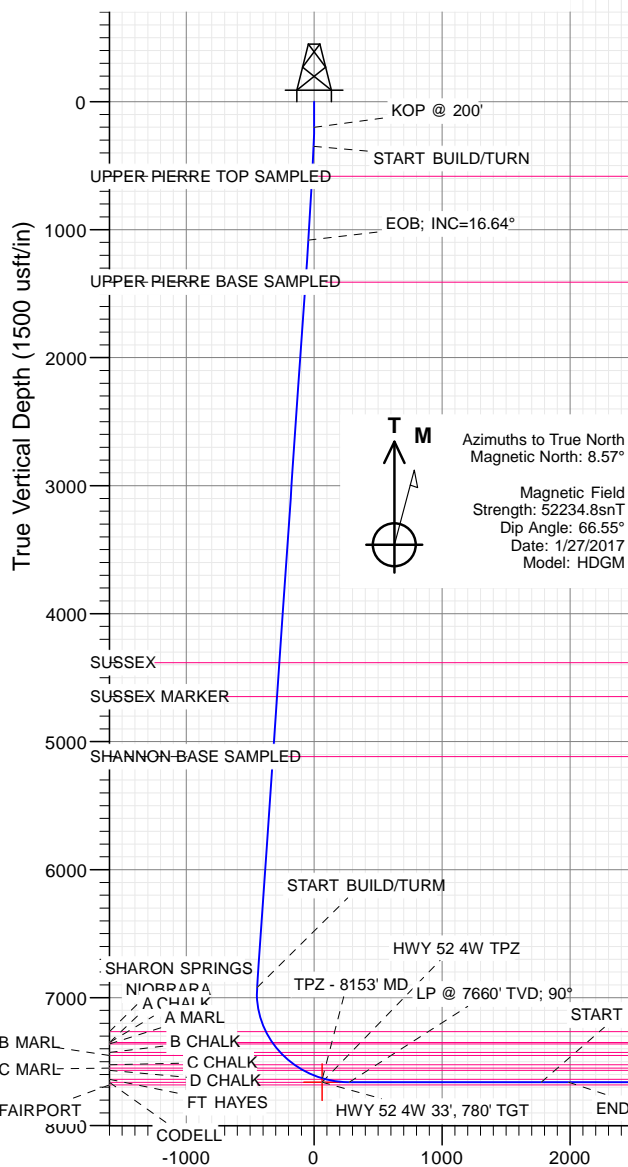
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	350.00	3.00	150.00	349.93	-3.40	1.96	2.00	150.00	-3.50	
4	1093.81	16.64	100.26	1081.77	-39.43	117.16	2.00	-58.36	-45.50	
5	7188.78	16.64	100.26	6921.42	-350.25	1834.87	0.00	0.00	-445.80	
6	8366.42	90.00	355.40	7660.00	378.83	1990.30	8.00	-104.26	274.15	
7	9866.42	90.00	355.40	7660.00	1874.00	1870.00	0.00	0.00	1773.56	
8	10079.75	90.00	359.67	7660.00	2087.08	1860.82	2.00	90.00	1986.84	
9	12243.22	90.00	359.67	7660.00	4250.51	1848.23	0.00	0.00	4147.96	HWY 52 4W PBHL

PLAN #3
HWY52 4W-32H-O268
17000; LR
23 KB @ 5015.00usft
Ground Level @ 4992.00
North American Datum 1983
Well HWY52 4W-32H-O268, True North

Type	Target	Azimuth	Origin	Type	N/S	E/W	From	TVD
User	No Target (Freehand)	357.00	Slot	0.00	0.00	0.00	0.00	0.00
Name								
HWY 52 4W 33' 780' TGT								
HWY 52 4W PBHL								
HWY 52 4W TPZ								

Project: DJ BASIN
Site: S32-T2N-R68W
Well: HWY52 4W-32H-O268
Wellbore: OH
Design: PLAN #3



Vertical Section at 357.00° (1500 usft/in)

WELL DETAILS: HWY52 4W-32H-O268

+N/-S	+E/-W	Northing	Ground Level:	4992.00	Latitude	Longitude
0.00	0.00	1275752.59	Easting	3133038.14	40.089353	-105.024499

CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5015.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5015.00usft
Site:	S32-T2N-R68W	North Reference:	True
Well:	HWY52 4W-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

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

Site		S32-T2N-R68W			
Site Position:		Northing:	1,275,752.56 usft	Latitude:	40.089356
From:	Lat/Long	Easting:	3,132,818.22 usft	Longitude:	-105.025285
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.31 °

Well	HWY52 4W-32H-O268					
Well Position	+N/-S	0.00 usft	Northing:	1,275,752.59 usft	Latitude:	40.089353
	+E/-W	0.00 usft	Easting:	3,133,038.14 usft	Longitude:	-105.024499
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,992.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	1/27/2017	8.57	66.55	52,235

Design	PLAN #3			
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	357.00

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	
350.00	3.00	150.00	349.93	-3.40	1.96	2.00	2.00	0.00	150.00	
1,093.81	16.64	100.26	1,081.77	-39.43	117.16	2.00	1.83	-6.69	-58.36	
7,188.78	16.64	100.26	6,921.42	-350.25	1,834.87	0.00	0.00	0.00	0.00	
8,366.42	90.00	355.40	7,660.00	378.83	1,990.30	8.00	6.23	-8.90	-104.26	
9,866.42	90.00	355.40	7,660.00	1,874.00	1,870.00	0.00	0.00	0.00	0.00	
10,079.75	90.00	359.67	7,660.00	2,087.08	1,860.82	2.00	0.00	2.00	90.00	
12,243.22	90.00	359.67	7,660.00	4,250.51	1,848.23	0.00	0.00	0.00	0.00	HWY 52 4W PBHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5015.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5015.00usft
Site:	S32-T2N-R68W	North Reference:	True
Well:	HWY52 4W-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	KOP @ 200'
300.00	2.00	150.00	299.98	-1.52	0.87	-1.55	2.00	2.00	
350.00	3.00	150.00	349.93	-3.40	1.96	-3.50	2.00	2.00	START BUILD/TURN
400.00	3.63	136.41	399.85	-5.68	3.71	-5.86	2.00	1.25	
500.00	5.24	120.79	499.55	-10.31	9.81	-10.80	2.00	1.61	
583.91	6.75	113.80	583.00	-14.26	17.61	-15.16	2.00	1.80	UPPER PIERRE TOP SAMPLED
600.00	7.05	112.81	598.97	-15.03	19.39	-16.02	2.00	1.86	
700.00	8.94	108.14	698.00	-19.83	32.44	-21.49	2.00	1.89	
800.00	10.88	105.10	796.50	-24.70	48.93	-27.23	2.00	1.93	
900.00	12.83	102.97	894.36	-29.65	68.86	-33.21	2.00	1.95	
1,000.00	14.79	101.40	991.47	-34.67	92.19	-39.44	2.00	1.96	
1,093.81	16.64	100.26	1,081.77	-39.43	117.16	-45.50	2.00	1.97	EOB; INC=16.64°
1,100.00	16.64	100.26	1,087.70	-39.74	118.90	-45.91	0.00	0.00	
1,200.00	16.64	100.26	1,183.51	-44.84	147.08	-52.48	0.00	0.00	
1,300.00	16.64	100.26	1,279.32	-49.94	175.26	-59.04	0.00	0.00	
1,400.00	16.64	100.26	1,375.13	-55.04	203.45	-65.61	0.00	0.00	
1,436.39	16.64	100.26	1,410.00	-56.90	213.70	-68.00	0.00	0.00	UPPER PIERRE BASE SAMPLED
1,500.00	16.64	100.26	1,470.94	-60.14	231.63	-72.18	0.00	0.00	
1,600.00	16.64	100.26	1,566.75	-65.24	259.81	-78.75	0.00	0.00	
1,700.00	16.64	100.26	1,662.56	-70.34	287.99	-85.31	0.00	0.00	
1,800.00	16.64	100.26	1,758.38	-75.44	316.18	-91.88	0.00	0.00	
1,900.00	16.64	100.26	1,854.19	-80.54	344.36	-98.45	0.00	0.00	
2,000.00	16.64	100.26	1,950.00	-85.64	372.54	-105.02	0.00	0.00	
2,100.00	16.64	100.26	2,045.81	-90.74	400.72	-111.58	0.00	0.00	
2,200.00	16.64	100.26	2,141.62	-95.84	428.91	-118.15	0.00	0.00	
2,300.00	16.64	100.26	2,237.43	-100.94	457.09	-124.72	0.00	0.00	
2,400.00	16.64	100.26	2,333.24	-106.04	485.27	-131.29	0.00	0.00	
2,500.00	16.64	100.26	2,429.05	-111.14	513.45	-137.86	0.00	0.00	
2,600.00	16.64	100.26	2,524.86	-116.24	541.64	-144.42	0.00	0.00	
2,700.00	16.64	100.26	2,620.67	-121.34	569.82	-150.99	0.00	0.00	
2,800.00	16.64	100.26	2,716.49	-126.44	598.00	-157.56	0.00	0.00	
2,900.00	16.64	100.26	2,812.30	-131.54	626.18	-164.13	0.00	0.00	
3,000.00	16.64	100.26	2,908.11	-136.64	654.37	-170.69	0.00	0.00	
3,100.00	16.64	100.26	3,003.92	-141.74	682.55	-177.26	0.00	0.00	
3,200.00	16.64	100.26	3,099.73	-146.84	710.73	-183.83	0.00	0.00	
3,300.00	16.64	100.26	3,195.54	-151.94	738.91	-190.40	0.00	0.00	
3,400.00	16.64	100.26	3,291.35	-157.04	767.10	-196.96	0.00	0.00	
3,500.00	16.64	100.26	3,387.16	-162.14	795.28	-203.53	0.00	0.00	
3,600.00	16.64	100.26	3,482.97	-167.24	823.46	-210.10	0.00	0.00	
3,700.00	16.64	100.26	3,578.78	-172.33	851.64	-216.67	0.00	0.00	
3,800.00	16.64	100.26	3,674.60	-177.43	879.83	-223.23	0.00	0.00	
3,900.00	16.64	100.26	3,770.41	-182.53	908.01	-229.80	0.00	0.00	
4,000.00	16.64	100.26	3,866.22	-187.63	936.19	-236.37	0.00	0.00	
4,100.00	16.64	100.26	3,962.03	-192.73	964.37	-242.94	0.00	0.00	
4,200.00	16.64	100.26	4,057.84	-197.83	992.56	-249.50	0.00	0.00	
4,300.00	16.64	100.26	4,153.65	-202.93	1,020.74	-256.07	0.00	0.00	
4,400.00	16.64	100.26	4,249.46	-208.03	1,048.92	-262.64	0.00	0.00	
4,500.00	16.64	100.26	4,345.27	-213.13	1,077.10	-269.21	0.00	0.00	
4,538.33	16.64	100.26	4,382.00	-215.09	1,087.91	-271.72	0.00	0.00	SUSSEX
4,600.00	16.64	100.26	4,441.08	-218.23	1,105.29	-275.77	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5015.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5015.00usft
Site:	S32-T2N-R68W	North Reference:	True
Well:	HWY52 4W-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
4,700.00	16.64	100.26	4,536.89	-223.33	1,133.47	-282.34	0.00	0.00	
4,800.00	16.64	100.26	4,632.70	-228.43	1,161.65	-288.91	0.00	0.00	
4,815.96	16.64	100.26	4,648.00	-229.24	1,166.15	-289.96	0.00	0.00	SUSSEX MARKER
4,900.00	16.64	100.26	4,728.52	-233.53	1,189.83	-295.48	0.00	0.00	
5,000.00	16.64	100.26	4,824.33	-238.63	1,218.02	-302.04	0.00	0.00	
5,100.00	16.64	100.26	4,920.14	-243.73	1,246.20	-308.61	0.00	0.00	
5,200.00	16.64	100.26	5,015.95	-248.83	1,274.38	-315.18	0.00	0.00	
5,300.00	16.64	100.26	5,111.76	-253.93	1,302.56	-321.75	0.00	0.00	
5,304.43	16.64	100.26	5,116.00	-254.15	1,303.81	-322.04	0.00	0.00	SHANNON BASE SAMPLED
5,400.00	16.64	100.26	5,207.57	-259.03	1,330.75	-328.32	0.00	0.00	
5,500.00	16.64	100.26	5,303.38	-264.13	1,358.93	-334.88	0.00	0.00	
5,600.00	16.64	100.26	5,399.19	-269.23	1,387.11	-341.45	0.00	0.00	
5,700.00	16.64	100.26	5,495.00	-274.33	1,415.29	-348.02	0.00	0.00	
5,800.00	16.64	100.26	5,590.81	-279.43	1,443.48	-354.59	0.00	0.00	
5,900.00	16.64	100.26	5,686.63	-284.53	1,471.66	-361.15	0.00	0.00	
6,000.00	16.64	100.26	5,782.44	-289.63	1,499.84	-367.72	0.00	0.00	
6,100.00	16.64	100.26	5,878.25	-294.73	1,528.02	-374.29	0.00	0.00	
6,200.00	16.64	100.26	5,974.06	-299.83	1,556.21	-380.86	0.00	0.00	
6,300.00	16.64	100.26	6,069.87	-304.93	1,584.39	-387.42	0.00	0.00	
6,400.00	16.64	100.26	6,165.68	-310.02	1,612.57	-393.99	0.00	0.00	
6,500.00	16.64	100.26	6,261.49	-315.12	1,640.75	-400.56	0.00	0.00	
6,600.00	16.64	100.26	6,357.30	-320.22	1,668.94	-407.13	0.00	0.00	
6,700.00	16.64	100.26	6,453.11	-325.32	1,697.12	-413.69	0.00	0.00	
6,800.00	16.64	100.26	6,548.92	-330.42	1,725.30	-420.26	0.00	0.00	
6,900.00	16.64	100.26	6,644.73	-335.52	1,753.48	-426.83	0.00	0.00	
7,000.00	16.64	100.26	6,740.55	-340.62	1,781.67	-433.40	0.00	0.00	
7,100.00	16.64	100.26	6,836.36	-345.72	1,809.85	-439.96	0.00	0.00	
7,188.78	16.64	100.26	6,921.42	-350.25	1,834.87	-445.80	0.00	0.00	START BUILD/TURM
7,200.00	16.44	97.18	6,932.17	-350.73	1,838.03	-446.44	8.00	-1.77	
7,300.00	16.77	68.95	7,028.16	-347.32	1,865.57	-444.47	8.00	0.32	
7,400.00	20.41	46.36	7,123.05	-330.08	1,891.69	-428.62	8.00	3.64	
7,500.00	26.00	31.72	7,215.00	-299.35	1,915.87	-399.20	8.00	5.60	
7,556.53	29.63	25.93	7,265.00	-276.23	1,928.51	-376.77	8.00	6.42	SHARON SPRINGS
7,600.00	32.56	22.30	7,302.22	-255.73	1,937.65	-356.79	8.00	6.74	
7,656.80	36.52	18.36	7,349.00	-225.53	1,948.78	-327.21	8.00	6.97	NIORARA - A CHALK
7,671.83	37.59	17.44	7,361.00	-216.91	1,951.56	-318.75	8.00	7.10	A MARL
7,700.00	39.61	15.83	7,383.01	-200.07	1,956.59	-302.20	8.00	7.16	
7,758.97	43.90	12.87	7,427.00	-162.04	1,966.28	-264.72	8.00	7.27	B CHALK
7,794.46	46.51	11.31	7,452.00	-137.42	1,971.54	-240.41	8.00	7.36	B MARL
7,800.00	46.92	11.08	7,455.80	-133.46	1,972.33	-236.49	8.00	7.40	
7,900.00	54.38	7.35	7,519.17	-57.18	1,984.56	-160.96	8.00	7.46	
7,908.35	55.01	7.07	7,524.00	-50.42	1,985.41	-154.26	8.00	7.52	C CHALK
7,955.84	58.60	5.56	7,550.00	-10.93	1,989.77	-115.04	8.00	7.55	C MARL
7,989.72	61.16	4.55	7,567.00	18.26	1,992.35	-86.03	8.00	7.58	D CHALK
8,000.00	61.94	4.26	7,571.90	27.27	1,993.05	-77.07	8.00	7.59	
8,100.00	69.56	1.58	7,612.94	118.25	1,997.62	13.55	8.00	7.62	
8,153.26	73.64	0.27	7,629.75	168.77	1,998.43	63.96	8.00	7.65	TPZ - 8153' MD
8,180.72	75.74	359.61	7,637.00	195.26	1,998.40	90.41	8.00	7.66	FT HAYES
8,200.00	77.22	359.16	7,641.51	214.00	1,998.20	109.13	8.00	7.67	
8,300.00	84.90	356.88	7,657.04	312.64	1,994.77	207.82	8.00	7.68	
8,366.42	90.00	355.40	7,660.00	378.83	1,990.30	274.15	8.00	7.68	LP @ 7660' TVD; 90°
8,400.00	90.00	355.40	7,660.00	412.30	1,987.61	307.71	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5015.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5015.00usft
Site:	S32-T2N-R68W	North Reference:	True
Well:	HWY52 4W-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
8,500.00	90.00	355.40	7,660.00	511.97	1,979.59	407.67	0.00	0.00	
8,600.00	90.00	355.40	7,660.00	611.65	1,971.57	507.63	0.00	0.00	
8,700.00	90.00	355.40	7,660.00	711.33	1,963.55	607.60	0.00	0.00	
8,800.00	90.00	355.40	7,660.00	811.01	1,955.53	707.56	0.00	0.00	
8,900.00	90.00	355.40	7,660.00	910.69	1,947.51	807.52	0.00	0.00	
9,000.00	90.00	355.40	7,660.00	1,010.36	1,939.49	907.48	0.00	0.00	
9,100.00	90.00	355.40	7,660.00	1,110.04	1,931.47	1,007.44	0.00	0.00	
9,200.00	90.00	355.40	7,660.00	1,209.72	1,923.45	1,107.40	0.00	0.00	
9,300.00	90.00	355.40	7,660.00	1,309.40	1,915.43	1,207.36	0.00	0.00	
9,400.00	90.00	355.40	7,660.00	1,409.07	1,907.41	1,307.32	0.00	0.00	
9,500.00	90.00	355.40	7,660.00	1,508.75	1,899.39	1,407.28	0.00	0.00	
9,600.00	90.00	355.40	7,660.00	1,608.43	1,891.37	1,507.24	0.00	0.00	
9,700.00	90.00	355.40	7,660.00	1,708.11	1,883.35	1,607.21	0.00	0.00	
9,800.00	90.00	355.40	7,660.00	1,807.79	1,875.33	1,707.17	0.00	0.00	
9,866.42	90.00	355.40	7,660.00	1,874.00	1,870.00	1,773.56	0.00	0.00	START TURN
9,900.00	90.00	356.07	7,660.00	1,907.48	1,867.50	1,807.13	2.00	0.00	
10,000.00	90.00	358.07	7,660.00	2,007.34	1,862.39	1,907.13	2.00	0.00	
10,079.75	90.00	359.67	7,660.00	2,087.08	1,860.82	1,986.84	2.00	0.00	END OF TURN
10,100.00	90.00	359.67	7,660.00	2,107.33	1,860.70	2,007.06	0.00	0.00	
10,200.00	90.00	359.67	7,660.00	2,207.32	1,860.12	2,106.95	0.00	0.00	
10,300.00	90.00	359.67	7,660.00	2,307.32	1,859.54	2,206.84	0.00	0.00	
10,400.00	90.00	359.67	7,660.00	2,407.32	1,858.96	2,306.73	0.00	0.00	
10,500.00	90.00	359.67	7,660.00	2,507.32	1,858.38	2,406.63	0.00	0.00	
10,600.00	90.00	359.67	7,660.00	2,607.32	1,857.79	2,506.52	0.00	0.00	
10,700.00	90.00	359.67	7,660.00	2,707.32	1,857.21	2,606.41	0.00	0.00	
10,800.00	90.00	359.67	7,660.00	2,807.31	1,856.63	2,706.30	0.00	0.00	
10,900.00	90.00	359.67	7,660.00	2,907.31	1,856.05	2,806.19	0.00	0.00	
11,000.00	90.00	359.67	7,660.00	3,007.31	1,855.47	2,906.09	0.00	0.00	
11,100.00	90.00	359.67	7,660.00	3,107.31	1,854.88	3,005.98	0.00	0.00	
11,200.00	90.00	359.67	7,660.00	3,207.31	1,854.30	3,105.87	0.00	0.00	
11,300.00	90.00	359.67	7,660.00	3,307.31	1,853.72	3,205.76	0.00	0.00	
11,400.00	90.00	359.67	7,660.00	3,407.30	1,853.14	3,305.65	0.00	0.00	
11,500.00	90.00	359.67	7,660.00	3,507.30	1,852.56	3,405.54	0.00	0.00	
11,600.00	90.00	359.67	7,660.00	3,607.30	1,851.98	3,505.44	0.00	0.00	
11,700.00	90.00	359.67	7,660.00	3,707.30	1,851.39	3,605.33	0.00	0.00	
11,800.00	90.00	359.67	7,660.00	3,807.30	1,850.81	3,705.22	0.00	0.00	
11,900.00	90.00	359.67	7,660.00	3,907.29	1,850.23	3,805.11	0.00	0.00	
12,000.00	90.00	359.67	7,660.00	4,007.29	1,849.65	3,905.00	0.00	0.00	
12,100.00	90.00	359.67	7,660.00	4,107.29	1,849.07	4,004.89	0.00	0.00	
12,200.00	90.00	359.67	7,660.00	4,207.29	1,848.48	4,104.79	0.00	0.00	
12,243.22	90.00	359.67	7,660.00	4,250.51	1,848.23	4,147.96	0.00	0.00	TD at 12243.22

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Company:	Crestone Peak Resources	TVD Reference:	23' KB @ 5015.00usft
Project:	DJ BASIN	MD Reference:	23' KB @ 5015.00usft
Site:	S32-T2N-R68W	North Reference:	True
Well:	HWY52 4W-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #3		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
HWY 52 4W 33', 780' TC	0.00	0.00	7,660.00	167.81	2,003.05	1,275,931.15	3,135,040.26	40.089813	-105.017340
- plan misses target center by 29.69usft at 8160.32usft MD (7631.71 TVD, 175.55 N, 1998.45 E)									
- Point									
HWY 52 4W PBHL	0.00	0.00	7,660.00	4,250.51	1,848.23	1,280,012.96	3,134,863.55	40.101021	-105.017892
- plan hits target center									
- Point									
HWY 52 4W TPZ	0.00	0.00	7,660.00	168.06	2,002.98	1,275,931.40	3,135,040.19	40.089814	-105.017340
- plan misses target center by 29.62usft at 8160.56usft MD (7631.77 TVD, 175.78 N, 1998.45 E)									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
583.91	583.00	UPPER PIERRE TOP SAMPLED			
1,436.39	1,410.00	UPPER PIERRE BASE SAMPLED			
4,538.33	4,382.00	SUSSEX			
4,815.96	4,648.00	SUSSEX MARKER			
5,304.43	5,116.00	SHANNON BASE SAMPLED			
7,556.53	7,265.00	SHARON SPRINGS			
7,656.80	7,349.00	A CHALK			
7,656.80	7,349.00	NIOBRARA			
7,671.83	7,361.00	A MARL			
7,758.97	7,427.00	B CHALK			
7,794.46	7,452.00	B MARL			
7,908.35	7,524.00	C CHALK			
7,955.84	7,550.00	C MARL			
7,989.72	7,567.00	D CHALK			
8,180.72	7,637.00	FT HAYES			

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
200.00	200.00	0.00	0.00	KOP @ 200'	
350.00	349.93	-3.40	1.96	START BUILD/TURN	
1,093.81	1,081.77	-39.43	117.16	EOB; INC=16.64°	
7,188.78	6,921.42	-350.25	1,834.87	START BUILD/TURN	
8,153.26	7,629.75	168.77	1,998.43	TPZ - 8153' MD	
8,366.42	7,660.00	378.83	1,990.30	LP @ 7660' TVD; 90°	
9,866.42	7,660.00	1,874.00	1,870.00	START TURN	
10,079.75	7,660.00	2,087.08	1,860.82	END OF TURN	
12,243.22	7,660.00	4,250.51	1,848.23	TD at 12243.22	

Crestone Peak Resources

DJ BASIN

S32-T2N-R68W

HWY52 4W-32H-O268

OH

PLAN #3

Anticollision Report

23 February, 2017

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Reference	PLAN #3		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,500.00usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	2/23/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	12,243.21	PLAN #3 (OH)	MWD+HDGM	OWSG MWD + HDGM

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	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)		
S32-T2N-R68W						
Anderson 32-32 - CPR WELL - SURVEYS						Out of range
Anderson 41-32 - CPR - NO SURVEYS	12,234.41	7,540.00	433.93	343.77	4.813	CC, ES, SF
Anderson 4-2-32 - CPR WELL - SURVEYS						Out of range
Anderson 6-4-32 - CPR WELL - SURVEYS	10,198.21	7,818.87	1,393.83	1,315.73	17.846	CC
Anderson 6-4-32 - CPR WELL - SURVEYS	10,200.00	7,818.86	1,393.84	1,315.73	17.845	ES, SF
Anderson Trust 1 - KPK - NO SURVEYS						Out of range
Anderson Trust 1 A - CPR WELL - SURVEYS						Out of range
Anderson Trust 32-2 - CPR WELL - GYRO						Out of range
Anderson Trust 32-8 - CPR - NO SURVEYS	10,672.71	7,618.00	681.01	612.53	9.946	CC, ES, SF
Anderson Trust C 1 - CPR WELL - GYRO	11,717.44	7,569.86	1,116.93	1,039.64	14.452	CC, ES
Anderson Trust C 1 - CPR WELL - GYRO	11,800.00	7,568.36	1,119.98	1,042.38	14.434	SF
Anderson Trust C Unit 2 - CPR WELL - GYRO						Out of range
Brown 22-5 - CPR WELL - SURVEYS						Out of range
Brown 31-5 - CPR WELL - SURVEYS						Out of range
Brown 41-5 - CPR WELL - SURVEYS	1,769.74	1,739.03	44.31	32.36	3.706	CC, ES, SF
Brown 5-3 - CPR WELL - GYRO						Out of range
Brown C Unit 1 - CPR WELL - GYRO						Out of range
Brown C Unit 2 - CPR WELL - GYRO						Out of range
Canino 1-X - HUGHES CW - NO SURVEYS	4,810.37	4,594.64	387.49	353.18	11.296	CC, ES
Canino 1-X - HUGHES CW - NO SURVEYS	5,100.00	4,872.14	396.27	360.15	10.972	SF
Champlin 86 Amoco F 6 - KPK - NO SURVEYS						Out of range
Champlin Amoco 86 F 7 - KPK WELL - SURVEYS						Out of range
Foster 33-5 - CPR WELL - SURVEYS						Out of range
Foster 43-5 - CPR WELL - SURVEYS						Out of range
Foster 4-5 - CPR WELL - SURVEYS						Out of range
Foster 4-6-5 - CPR WELL - SURVEYS						Out of range
Foster 6-4-5 - CPR - SURVEYS						Out of range
Foster 6-4-5X - CPR WELL - SURVEYS						Out of range
Foster 6-8-5 - CPR WELL - SURVEYS						Out of range
Foster 8-8-5 - CPR WELL - SURVEYS						Out of range
Foster E Unit 1 - CPR - GYRO						Out of range
Gene 11-5 - KERR-MCGEE - SURVEYS						Out of range
HWY52 4A-32H-O268 - OH - PLAN #2	200.00	200.00	219.92	218.92	221.473	CC, ES
HWY52 4A-32H-O268 - OH - PLAN #2	3,900.00	3,644.37	1,462.76	1,434.90	52.502	SF
HWY52 4B-32H-O268 - OH - PLAN #2	200.00	200.00	210.12	209.13	211.611	CC, ES
HWY52 4B-32H-O268 - OH - PLAN #2	4,400.00	4,176.39	1,474.92	1,442.76	45.865	SF
HWY52 4C-32H-O268 - OH - PLAN #2	200.00	200.00	200.05	199.06	201.467	CC, ES
HWY52 4C-32H-O268 - OH - PLAN #2	4,600.00	4,380.98	1,487.39	1,453.47	43.851	SF
HWY52 4D-32H-O268 - OH - PLAN #2	200.00	200.00	189.98	188.99	191.324	CC, ES
HWY52 4D-32H-O268 - OH - PLAN #2	5,600.00	5,438.03	1,485.42	1,441.72	33.994	SF
HWY52 4E-32H-O268 - OH - PLAN #2	200.00	200.00	180.19	179.19	181.462	CC, ES
HWY52 4E-32H-O268 - OH - PLAN #2	5,900.00	5,749.97	1,476.81	1,429.60	31.282	SF
HWY52 4F-32H-O268 - OH - PLAN #2	200.00	200.00	170.11	169.12	171.318	CC, ES
HWY52 4F-32H-O268 - OH - PLAN #2	7,600.00	8,295.18	1,221.74	1,161.36	20.234	SF
HWY52 4G-32H-O268 - OH - PLAN #2	200.00	200.00	160.04	159.05	161.173	CC, ES
HWY52 4G-32H-O268 - OH - PLAN #2	7,800.00	8,329.30	1,060.42	999.28	17.342	SF
HWY52 4H-32H-O268 - OH - PLAN #2	200.00	200.00	149.97	148.97	151.030	CC, ES
HWY52 4H-32H-O268 - OH - PLAN #2	7,579.32	8,209.51	806.29	745.83	13.337	SF
HWY52 4I-32H-O268 - OH - PLAN #2	200.00	200.00	140.17	139.18	141.168	CC, ES
HWY52 4I-32H-O268 - OH - PLAN #2	7,750.00	8,325.28	535.99	473.81	8.619	SF
HWY52 4J-32H-O268 - OH - PLAN #2	200.00	200.00	130.10	129.11	131.024	CC, ES
HWY52 4J-32H-O268 - OH - PLAN #2	8,100.00	8,230.57	245.49	181.69	3.848	SF
HWY52 4K-32H-O268 - OH - PLAN #2	7,776.40	8,311.04	75.57	12.29	1.194	Level 2, CC, ES, SF

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	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)		
S32-T2N-R68W						
HWY52 4L-32H-O268 - OH - PLAN #2	200.00	200.00	109.96	108.97	110.737	CC, ES
HWY52 4L-32H-O268 - OH - PLAN #2	800.00	784.70	189.68	184.35	35.546	SF
HWY52 4M-32H-O268 - OH - PLAN #2	200.00	200.00	100.17	99.17	100.875	CC, ES
HWY52 4M-32H-O268 - OH - PLAN #2	800.00	788.57	172.84	167.51	32.420	SF
HWY52 4N-32H-O268 - OH - PLAN #2	200.00	200.00	90.09	89.10	90.730	CC, ES
HWY52 4N-32H-O268 - OH - PLAN #2	800.00	795.08	144.57	139.28	27.345	SF
HWY52 4O-32H-O268 - OH - PLAN #2	100.00	100.00	80.02	79.74	289.903	CC
HWY52 4O-32H-O268 - OH - PLAN #2	300.00	300.74	80.44	78.75	47.677	ES
HWY52 4O-32H-O268 - OH - PLAN #2	800.00	799.50	119.39	114.05	22.324	SF
HWY52 4P-32H-O268 - OH - PLAN #2	200.00	200.00	69.95	68.95	70.443	CC, ES
HWY52 4P-32H-O268 - OH - PLAN #2	700.00	698.00	104.36	99.79	22.834	SF
HWY52 4Q-32H-O268 - OH - PLAN #2	200.00	200.00	60.16	59.16	60.581	CC, ES
HWY52 4Q-32H-O268 - OH - PLAN #2	12,243.22	11,916.32	1,347.68	1,199.80	9.114	SF
HWY52 4R-32H-O268 - OH - PLAN #2	200.00	200.00	50.08	49.09	50.438	CC, ES
HWY52 4R-32H-O268 - OH - PLAN #2	12,243.22	12,079.13	1,012.38	862.64	6.761	SF
HWY52 4S-32H-O268 - OH - PLAN #2	200.00	200.00	40.01	39.02	40.294	CC, ES
HWY52 4S-32H-O268 - OH - PLAN #2	12,243.22	12,245.46	850.12	696.83	5.546	SF
HWY52 4T-32H-O268 - OH - PLAN #2	200.00	200.00	29.94	28.95	30.151	CC, ES
HWY52 4T-32H-O268 - OH - PLAN #2	12,243.22	12,046.42	783.03	639.05	5.439	SF
HWY52 4U-32H-O268 - OH - PLAN #2	200.00	200.00	20.14	19.15	20.287	CC, ES
HWY52 4U-32H-O268 - OH - PLAN #2	12,243.22	12,004.06	519.79	375.23	3.596	SF
HWY52 4V-32H-O268 - OH - PLAN #2	200.00	200.00	10.07	9.08	10.144	CC, ES
HWY52 4V-32H-O268 - OH - PLAN #2	12,243.22	12,133.17	336.40	221.86	2.937	SF
Nelson 1 - TEXAS TEA - NO SURVEYS	200.00	154.00	1,429.61	1,428.84	1,851.541	CC, ES
Nelson 1 - TEXAS TEA - NO SURVEYS	1,200.00	1,137.51	1,494.88	1,488.27	226.412	SF
Nelson E Unit 1 - CPR WELL - GYRO						Out of range
Nelson E Unit 2 - CPR WELL - GYRO	2,992.36	2,847.48	1,025.50	1,008.00	58.625	CC
Nelson E Unit 2 - CPR WELL - GYRO	3,100.00	2,946.70	1,026.14	1,007.93	56.344	ES
Nelson E Unit 2 - CPR WELL - GYRO	9,100.00	7,587.34	1,204.39	1,160.17	27.236	SF
Osarkson 2-8-33 - CPR WELL - SURVEYS	7,732.95	7,518.00	1,418.33	1,360.10	24.358	CC, ES
Osarkson 2-8-33 - CPR WELL - SURVEYS	7,950.00	7,646.95	1,441.93	1,382.11	24.105	SF
Oskarson 23-33 - CPR WELL - GYRO						Out of range
Oskarson 4 - HRM - NO SURVEYS	5,681.21	5,100.00	1,333.18	1,299.47	39.549	CC, ES
Oskarson 4 - HRM - NO SURVEYS	5,700.00	5,100.00	1,333.32	1,299.56	39.500	SF
Oskarson 4-4-33 - CPR WELL - SURVEYS						Out of range
Oskarson 4-6-33 - CPR WELL - SURVEYS						Out of range
Oskarson 4-8-33 - CPR WELL - SURVEYS						Out of range
Oskarson E Unit 1 - CPR WELL - GYRO	8,278.75	7,621.48	804.89	764.91	20.135	CC, ES
Oskarson E Unit 1 - CPR WELL - GYRO	8,500.00	7,630.43	840.37	798.28	19.968	SF
Paquette 14-5 - KERR-MCGEE - GYRO						Out of range
Rasmussen 10-29 - KMG WELL - SURVEYS						Out of range
Rasmussen 16-29 - KMG WELL - SURVEYS	12,243.22	7,782.75	1,399.74	1,308.78	15.388	CC, ES, SF
Rasmussen 19-29 - KMG WELL - SURVEYS						Out of range
Rasmussen 20-29 - CPR WELL - SURVEYS						Out of range
Rasmussen 22-29 - KMG WELL - SURVEYS						Out of range
Rasmussen 23-29 - KMG WELL - KMG WELL						Out of range
Rasmussen 25-29 - KMG WELL - SURVEYS						Out of range
Rasmussen 36-29 - KMG WELL - SURVEYS						Out of range
Rasmussen 37-29 - KMG WELL - SURVEYS	12,243.22	7,749.64	1,274.19	1,170.28	12.263	CC, ES, SF
Rasmussen 39-29 - KMG WELL - SURVEYS						Out of range
Rasmussen Fed 35-29 - KMG WELL - SURVEYS						Out of range
Ray Nelson 13-32 - CPR WELL - SURVEYS						Out of range
Ray Nelson 14-32 - CPR WELL - SURVEYS						Out of range

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	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)		
S32-T2N-R68W						
Ray Nelson 23-32 - CPR WELL - GYRO						Out of range
Ray Nelson 24-32 - CPR WELL - SURVEYS						Out of range
Ray Nelson 2-4-32 - CPR WELL - SURVEYS						Out of range
Ray Nelson 33-32 - CPR WELL - SURVEYS	1,107.17	1,066.00	271.09	265.05	44.853	CC, ES
Ray Nelson 33-32 - CPR WELL - SURVEYS	1,500.00	1,401.74	321.11	312.53	37.410	SF
Ray Nelson 34-32 - CPR WELL - SURVEYS	1,277.08	1,236.83	275.49	268.24	38.030	CC
Ray Nelson 34-32 - CPR WELL - SURVEYS	1,300.00	1,258.42	275.58	268.18	37.219	ES
Ray Nelson 34-32 - CPR WELL - SURVEYS	1,900.00	1,827.99	335.10	323.89	29.901	SF
Ray Nelson 44-32 - CPR WELL - SURVEYS	167.03	146.03	305.64	305.03	501.095	CC
Ray Nelson 44-32 - CPR WELL - SURVEYS	200.00	175.91	305.81	305.02	390.216	ES
Ray Nelson 44-32 - CPR WELL - SURVEYS	5,200.00	5,118.06	446.86	397.37	9.028	SF
Ray Nelson 4-4-32 - CPR WELL - SURVEYS						Out of range
Ray Nelson 4-6-32 - CPR WELL - SURVEYS						Out of range
Ray Nelson 8-8-32 - CPR WELL - SURVEYS	7,227.03	7,236.32	191.12	118.69	2.639	CC
Ray Nelson 8-8-32 - CPR WELL - SURVEYS	7,250.00	7,258.30	191.59	118.54	2.623	ES, SF
SEC Four 12-4 - KMG WELL - SURVEYS						Out of range
SEC Four 13-4 - KMG WELL - SURVEYS						Out of range
SEC Four 14-4 - KMG WELL - SURVEYS						Out of range
SEC Four 21-4 - KMG WELL - SURVEYS						Out of range
SEC Four 22-4 - KMG WELL - SURVEYS						Out of range
SEC Four 31-4 - KMG WELL - SURVEYS						Out of range
SEC Four 32-4 - KMG WELL - SURVEYS						Out of range
SEC Four 33-4 - KMG WELL - SURVEYS						Out of range
SEC Four 3-4 - KMG WELL - SURVEYS						Out of range
SEC Four 35-4 - KMG WELL - SURVEYS						Out of range
SEC Four 4-4 - KMG WELL - SURVEYS	7,406.44	7,276.09	1,261.95	1,210.92	24.733	CC, ES
SEC Four 4-4 - KMG WELL - SURVEYS	7,600.00	7,433.84	1,288.50	1,235.13	24.145	SF
SEC Four 5-4 - KMG WELL - SURVEYS						Out of range
SEC Four 6-4 - KMG WELL - SURVEYS						Out of range
Tallgrass 1-8 - KMG - SURVEYS						Out of range
Tallgrass 2-8 - KMG - SURVEYS						Out of range
Tallgrass 3-8 - KMG - SURVEYS						Out of range
Tallgrass 4-8 - KMG - SURVEYS						Out of range
Tallgrass 5-8 - KMG - NO SURVEYS						Out of range

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	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)		
S32-T2N-R68W (File/Hwy 52)						
File 3A-32H-K268 - Hz - FINAL						Out of range
File 3A-32H-K268 - Hz - Plan #7						Out of range
File 3B-32H-K268 - Hz - FINAL						Out of range
File 3B-32H-K268 - Hz - Plan #4						Out of range
File 3C-32H-K268 - Hz - FINAL						Out of range
File 3C-32H-K268 - Hz - Plan #4						Out of range
File 3D-32H-K268 - Hz - FINAL						Out of range
File 3D-32H-K268 - Hz - Plan #4						Out of range
File 3E-32H-K268 - Hz - FINAL						Out of range
File 3E-32H-K268 - Hz - Plan #3						Out of range
File 3F-32H-K268 - Hz - FINAL						Out of range
File 3F-32H-K268 - Hz - Plan #3						Out of range
File 3G-32H-K268 - Hz - FINAL						Out of range
File 3G-32H-K268 - Hz - Plan #6						Out of range
File 3H-32H-K268 - Hz - FINAL						Out of range
File 3H-32H-K268 - Hz - Plan #3						Out of range
File 3I-32H-K268 - Hz - FINAL						Out of range
File 3I-32H-K268 - Hz - Plan #5						Out of range
File 3J-32H-K268 - Hz - FINAL						Out of range
File 3J-32H-K268 - Hz - Plan #3						Out of range
File 3K-32H-K268 - Hz - FINAL						Out of range
File 3K-32H-K268 - Hz - Plan #3						Out of range
File 3L-32H-K268 - Hz - FINAL						Out of range
File 3L-32H-K268 - Hz - Plan #4						Out of range
File 3M-32H-K268 - Hz - FINAL						Out of range
File 3M-32H-K268 - Hz - Plan #4						Out of range
File 3N-32H-K268 - Hz - FINAL						Out of range
File 3N-32H-K268 - Hz - Plan #3						Out of range
File 3O-32H-K268 - Hz - FINAL						Out of range
File 3O-32H-K268 - Hz - Plan #3						Out of range
File 3P-32H-K268 - Hz - FINAL						Out of range
File 3P-32H-K268 - Hz - Plan #5						Out of range

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Anderson 41-32 - CPR - NO SURVEYS													Offset Site Error: 0.00 usft
Survey Program: 8470-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	
10,800.00	7,660.00	7,540.00	7,540.00	57.83	13.51	-90.00	4,239.18	1,414.36	1,498.61	1,438.30	60.31	24.848	
10,900.00	7,660.00	7,540.00	7,540.00	59.14	13.51	-90.00	4,239.18	1,414.36	1,403.20	1,342.22	60.97	23.014	
11,000.00	7,660.00	7,540.00	7,540.00	60.46	13.51	-90.00	4,239.18	1,414.36	1,308.46	1,246.72	61.75	21.191	
11,100.00	7,660.00	7,540.00	7,540.00	61.80	13.51	-90.00	4,239.18	1,414.36	1,214.57	1,151.91	62.66	19.382	
11,200.00	7,660.00	7,540.00	7,540.00	63.15	13.51	-90.00	4,239.18	1,414.36	1,121.74	1,057.98	63.76	17.593	
11,300.00	7,660.00	7,540.00	7,540.00	64.51	13.51	-90.00	4,239.18	1,414.36	1,030.26	965.17	65.09	15.829	
11,400.00	7,660.00	7,540.00	7,540.00	65.88	13.51	-90.00	4,239.18	1,414.36	940.50	873.81	66.70	14.101	
11,500.00	7,660.00	7,540.00	7,540.00	67.26	13.51	-90.00	4,239.18	1,414.36	853.03	784.37	68.66	12.423	
11,600.00	7,660.00	7,540.00	7,540.00	68.65	13.51	-90.00	4,239.18	1,414.36	768.62	697.55	71.07	10.814	
11,700.00	7,660.00	7,540.00	7,540.00	70.05	13.51	-90.00	4,239.18	1,414.36	688.40	614.39	74.01	9.301	
11,800.00	7,660.00	7,540.00	7,540.00	71.46	13.51	-90.00	4,239.18	1,414.36	614.01	536.49	77.52	7.920	
11,900.00	7,660.00	7,540.00	7,540.00	72.87	13.51	-90.00	4,239.18	1,414.36	547.84	466.32	81.52	6.721	
12,000.00	7,660.00	7,540.00	7,540.00	74.30	13.51	-90.00	4,239.18	1,414.36	493.20	407.59	85.61	5.761	
12,100.00	7,660.00	7,540.00	7,540.00	75.73	13.51	-90.00	4,239.18	1,414.36	454.27	365.32	88.95	5.107	
12,200.00	7,660.00	7,540.00	7,540.00	77.16	13.51	-90.00	4,239.18	1,414.36	435.29	344.97	90.32	4.819	
12,234.41	7,660.00	7,540.00	7,540.00	77.66	13.51	-90.00	4,239.18	1,414.36	433.93	343.77	90.16	4.813 CC, ES, SF	
12,243.22	7,660.00	7,540.00	7,540.00	77.78	13.51	-90.00	4,239.18	1,414.36	434.02	343.96	90.06	4.819	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Anderson 6-4-32 - CPR WELL - SURVEYS													Offset Site Error:	0.00 usft
Survey Program: 71-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		
9,700.00	7,660.00	7,820.09	7,576.88	45.45	30.51	-88.70	2,197.42	466.67	1,499.12	1,424.34	74.79	20.045		
9,800.00	7,660.00	7,819.92	7,576.71	46.26	30.51	-88.69	2,197.42	466.67	1,461.88	1,386.19	75.69	19.314		
9,866.42	7,660.00	7,819.81	7,576.60	46.85	30.51	-88.69	2,197.42	466.67	1,440.46	1,364.20	76.25	18.891		
9,900.00	7,660.00	7,819.74	7,576.53	47.17	30.50	-88.69	2,197.42	466.68	1,430.86	1,354.34	76.52	18.699		
10,000.00	7,660.00	7,819.51	7,576.30	48.18	30.50	-88.69	2,197.42	466.68	1,408.95	1,331.72	77.23	18.243		
10,079.75	7,660.00	7,819.26	7,576.05	49.05	30.50	-88.69	2,197.42	466.69	1,398.86	1,321.18	77.67	18.009		
10,100.00	7,660.00	7,819.19	7,575.98	49.27	30.50	-88.68	2,197.42	466.69	1,397.29	1,319.52	77.77	17.968		
10,198.21	7,660.00	7,818.87	7,575.66	50.39	30.50	-88.67	2,197.42	466.70	1,393.83	1,315.73	78.10	17.846 CC		
10,200.00	7,660.00	7,818.86	7,575.65	50.41	30.50	-88.67	2,197.42	466.70	1,393.84	1,315.73	78.11	17.845 ES, SF		
10,300.00	7,660.00	7,818.53	7,575.32	51.58	30.50	-88.66	2,197.42	466.70	1,397.55	1,319.30	78.25	17.861		
10,400.00	7,660.00	7,818.19	7,574.98	52.79	30.50	-88.64	2,197.43	466.71	1,408.37	1,330.19	78.18	18.015		
10,500.00	7,660.00	7,817.86	7,574.65	54.02	30.50	-88.63	2,197.43	466.72	1,426.13	1,348.22	77.91	18.305		
10,600.00	7,660.00	7,817.53	7,574.32	55.27	30.50	-88.62	2,197.43	466.73	1,450.59	1,373.13	77.46	18.726		
10,700.00	7,660.00	7,817.20	7,573.99	56.54	30.50	-88.60	2,197.43	466.73	1,481.41	1,404.55	76.86	19.274		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Anderson Trust 32-8 - CPR - NO SURVEYS													Offset Site Error:	0.00 usft
Survey Program: 7765-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		
9,400.00	7,660.00	7,618.00	7,618.00	43.80	13.63	-90.00	2,676.06	1,176.38	1,462.76	1,405.33	57.43	25.469		
9,500.00	7,660.00	7,618.00	7,618.00	44.22	13.63	-90.00	2,676.06	1,176.38	1,373.08	1,315.24	57.84	23.739		
9,600.00	7,660.00	7,618.00	7,618.00	44.77	13.63	-90.00	2,676.06	1,176.38	1,284.93	1,226.61	58.32	22.031		
9,700.00	7,660.00	7,618.00	7,618.00	45.45	13.63	-90.00	2,676.06	1,176.38	1,198.64	1,139.75	58.89	20.353		
9,800.00	7,660.00	7,618.00	7,618.00	46.26	13.63	-90.00	2,676.06	1,176.38	1,114.65	1,055.08	59.56	18.713		
9,866.42	7,660.00	7,618.00	7,618.00	46.85	13.63	-90.00	2,676.06	1,176.38	1,060.39	1,000.31	60.08	17.650		
9,900.00	7,660.00	7,618.00	7,618.00	47.17	13.63	-90.00	2,676.06	1,176.38	1,033.62	973.26	60.36	17.123		
10,000.00	7,660.00	7,618.00	7,618.00	48.18	13.63	-90.00	2,676.06	1,176.38	958.02	896.69	61.34	15.619		
10,079.75	7,660.00	7,618.00	7,618.00	49.05	13.63	-90.00	2,676.06	1,176.38	902.98	840.73	62.24	14.507		
10,100.00	7,660.00	7,618.00	7,618.00	49.27	13.63	-90.00	2,676.06	1,176.38	889.81	827.32	62.49	14.239		
10,200.00	7,660.00	7,618.00	7,618.00	50.41	13.63	-90.00	2,676.06	1,176.38	828.99	765.21	63.78	12.998		
10,300.00	7,660.00	7,618.00	7,618.00	51.58	13.63	-90.00	2,676.06	1,176.38	776.33	711.20	65.12	11.921		
10,400.00	7,660.00	7,618.00	7,618.00	52.79	13.63	-90.00	2,676.06	1,176.38	733.58	667.16	66.42	11.044		
10,500.00	7,660.00	7,618.00	7,618.00	54.02	13.63	-90.00	2,676.06	1,176.38	702.57	635.04	67.52	10.405		
10,600.00	7,660.00	7,618.00	7,618.00	55.27	13.63	-90.00	2,676.06	1,176.38	684.88	616.63	68.25	10.035		
10,672.71	7,660.00	7,618.00	7,618.00	56.19	13.63	-90.00	2,676.06	1,176.38	681.01	612.53	68.47	9.946 CC, ES, SF		
10,700.00	7,660.00	7,618.00	7,618.00	56.54	13.63	-90.00	2,676.06	1,176.38	681.55	613.07	68.48	9.953		
10,800.00	7,660.00	7,618.00	7,618.00	57.83	13.63	-90.00	2,676.06	1,176.38	692.80	624.63	68.17	10.163		
10,900.00	7,660.00	7,618.00	7,618.00	59.14	13.63	-90.00	2,676.06	1,176.38	717.94	650.53	67.40	10.651		
11,000.00	7,660.00	7,618.00	7,618.00	60.46	13.63	-90.00	2,676.06	1,176.38	755.57	689.24	66.33	11.391		
11,100.00	7,660.00	7,618.00	7,618.00	61.80	13.63	-90.00	2,676.06	1,176.38	803.96	738.84	65.11	12.347		
11,200.00	7,660.00	7,618.00	7,618.00	63.15	13.63	-90.00	2,676.06	1,176.38	861.28	797.40	63.88	13.482		
11,300.00	7,660.00	7,618.00	7,618.00	64.51	13.63	-90.00	2,676.06	1,176.38	925.88	863.16	62.73	14.761		
11,400.00	7,660.00	7,618.00	7,618.00	65.88	13.63	-90.00	2,676.06	1,176.38	996.35	934.67	61.68	16.152		
11,500.00	7,660.00	7,618.00	7,618.00	67.26	13.63	-90.00	2,676.06	1,176.38	1,071.53	1,010.76	60.77	17.633		
11,600.00	7,660.00	7,618.00	7,618.00	68.65	13.63	-90.00	2,676.06	1,176.38	1,150.49	1,090.51	59.98	19.181		
11,700.00	7,660.00	7,618.00	7,618.00	70.05	13.63	-90.00	2,676.06	1,176.38	1,232.52	1,173.21	59.30	20.783		
11,800.00	7,660.00	7,618.00	7,618.00	71.46	13.63	-90.00	2,676.06	1,176.38	1,317.02	1,258.29	58.73	22.425		
11,900.00	7,660.00	7,618.00	7,618.00	72.87	13.63	-90.00	2,676.06	1,176.38	1,403.57	1,345.33	58.24	24.099		
12,000.00	7,660.00	7,618.00	7,618.00	74.30	13.63	-90.00	2,676.06	1,176.38	1,491.80	1,433.97	57.83	25.798		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Anderson Trust C 1 - 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		
10,800.00	7,660.00	7,585.78	7,584.08	57.83	8.34	-89.65	3,717.95	734.29	1,445.32	1,382.57	62.75	23.031		
10,900.00	7,660.00	7,584.10	7,582.40	59.14	8.34	-89.56	3,717.98	734.32	1,384.03	1,319.50	64.53	21.449		
11,000.00	7,660.00	7,582.41	7,580.72	60.46	8.33	-89.47	3,718.01	734.36	1,327.44	1,261.05	66.38	19.997		
11,100.00	7,660.00	7,580.71	7,579.01	61.80	8.33	-89.39	3,718.04	734.39	1,276.18	1,207.89	68.29	18.688		
11,200.00	7,660.00	7,578.99	7,577.29	63.15	8.33	-89.30	3,718.07	734.43	1,230.93	1,160.74	70.19	17.536		
11,300.00	7,660.00	7,577.26	7,575.56	64.51	8.33	-89.21	3,718.11	734.46	1,192.36	1,120.33	72.04	16.552		
11,400.00	7,660.00	7,575.51	7,573.81	65.88	8.33	-89.12	3,718.14	734.50	1,161.15	1,087.42	73.73	15.748		
11,500.00	7,660.00	7,573.74	7,572.05	67.26	8.32	-89.03	3,718.17	734.54	1,137.89	1,062.68	75.21	15.130		
11,600.00	7,660.00	7,571.96	7,570.27	68.65	8.32	-88.94	3,718.20	734.57	1,123.09	1,046.71	76.38	14.704		
11,700.00	7,660.00	7,570.17	7,568.48	70.05	8.32	-88.85	3,718.24	734.61	1,117.07	1,039.88	77.19	14.472		
11,717.44	7,660.00	7,569.86	7,568.16	70.30	8.32	-88.83	3,718.24	734.61	1,116.93	1,039.64	77.29	14.452 CC, ES		
11,800.00	7,660.00	7,568.36	7,566.67	71.46	8.32	-88.75	3,718.27	734.64	1,119.98	1,042.38	77.59	14.434 SF		
11,900.00	7,660.00	7,566.53	7,564.84	72.87	8.31	-88.66	3,718.31	734.68	1,131.75	1,054.16	77.59	14.586		
12,000.00	7,660.00	7,564.69	7,563.00	74.30	8.31	-88.56	3,718.34	734.72	1,152.10	1,074.90	77.20	14.923		
12,100.00	7,660.00	7,562.83	7,561.14	75.73	8.31	-88.47	3,718.38	734.76	1,180.61	1,104.12	76.49	15.436		
12,200.00	7,660.00	7,560.95	7,559.26	77.16	8.31	-88.37	3,718.41	734.79	1,216.68	1,141.18	75.50	16.114		
12,243.22	7,660.00	7,560.13	7,558.45	77.78	8.31	-88.33	3,718.43	734.81	1,234.45	1,159.44	75.01	16.457		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Brown 41-5 - CPR WELL - SURVEYS													Offset Site Error: 0.00 usft	
Survey Program: 41-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	47.77	202.92	223.55	302.65					
100.00	100.00	77.03	77.03	0.14	0.11	47.84	202.88	224.04	302.26	302.00	0.25	1,200.499		
200.00	200.00	176.65	176.65	0.50	0.28	47.97	202.86	225.04	302.99	302.21	0.78	387.743		
300.00	299.98	277.65	277.63	0.84	0.46	-102.16	202.61	226.18	304.02	302.72	1.30	233.537		
350.00	349.93	331.61	331.59	1.02	0.55	-102.48	202.15	226.52	304.44	302.87	1.57	194.051		
400.00	399.85	386.43	386.40	1.19	0.65	-89.31	200.75	226.55	303.86	302.01	1.85	164.270		
500.00	499.55	495.03	494.81	1.55	0.86	-74.56	194.66	226.28	298.56	296.12	2.44	122.487		
600.00	598.97	604.18	603.34	1.93	1.12	-67.26	183.12	226.66	287.87	284.79	3.07	93.647		
700.00	698.00	710.22	708.03	2.32	1.44	-63.00	166.35	227.58	271.49	267.74	3.75	72.453		
800.00	796.50	805.79	802.04	2.73	1.75	-60.50	149.25	229.45	252.10	247.71	4.39	57.381		
900.00	894.36	902.76	897.25	3.17	2.09	-59.17	131.24	233.13	231.18	226.08	5.10	45.334		
1,000.00	991.47	1,003.46	995.78	3.64	2.49	-58.86	111.02	237.79	207.52	201.64	5.88	35.284		
1,093.81	1,081.77	1,096.89	1,086.25	4.12	2.92	-58.74	88.41	243.52	181.55	174.86	6.69	27.148		
1,100.00	1,087.70	1,103.00	1,092.12	4.15	2.95	-58.76	86.80	243.96	179.72	172.98	6.75	26.645		
1,200.00	1,183.51	1,195.70	1,181.11	4.69	3.41	-58.71	62.16	252.04	151.04	143.40	7.64	19.782		
1,300.00	1,279.32	1,289.62	1,270.81	5.25	3.90	-57.39	36.65	263.17	124.02	115.41	8.61	14.397		
1,400.00	1,375.13	1,383.07	1,359.79	5.81	4.40	-54.40	11.70	277.07	99.53	89.88	9.66	10.306		
1,500.00	1,470.94	1,478.39	1,450.24	6.38	4.92	-48.52	-13.00	294.19	78.34	67.58	10.76	7.283		
1,600.00	1,566.75	1,575.09	1,541.52	6.96	5.47	-37.22	-38.55	313.33	59.96	48.19	11.76	5.096		
1,700.00	1,662.56	1,671.66	1,632.56	7.54	6.04	-18.70	-63.29	333.94	47.34	35.10	12.25	3.866		
1,769.74	1,729.38	1,739.03	1,695.68	7.95	6.46	-0.68	-80.94	349.52	44.31	32.36	11.96	3.706 CC, ES, SF		
1,800.00	1,758.38	1,768.20	1,722.86	8.12	6.65	7.74	-88.89	356.52	44.93	33.23	11.70	3.840		
1,900.00	1,854.19	1,864.85	1,812.38	8.71	7.30	32.70	-116.79	379.94	54.88	43.76	11.12	4.936		
2,000.00	1,950.00	1,962.43	1,902.69	9.30	7.95	49.32	-145.85	402.77	72.32	60.60	11.73	6.168		
2,100.00	2,045.81	2,062.26	1,995.71	9.88	8.57	58.16	-172.68	427.08	90.86	77.86	13.00	6.991		
2,200.00	2,141.62	2,157.45	2,084.48	10.48	9.21	63.65	-198.04	450.27	110.48	96.20	14.28	7.734		
2,300.00	2,237.43	2,257.59	2,177.74	11.07	9.85	67.39	-224.58	475.27	130.82	115.19	15.63	8.371		
2,400.00	2,333.24	2,355.89	2,269.66	11.66	10.48	69.96	-249.22	499.92	150.09	133.20	16.89	8.888		
2,500.00	2,429.05	2,452.76	2,360.13	12.25	11.09	72.10	-274.34	523.74	170.40	152.29	18.11	9.409		
2,600.00	2,524.86	2,551.39	2,452.93	12.85	11.70	74.64	-299.75	545.40	190.48	171.06	19.42	9.809		
2,700.00	2,620.67	2,648.40	2,544.54	13.44	12.29	77.11	-324.87	565.07	210.91	190.18	20.74	10.171		
2,800.00	2,716.49	2,737.11	2,627.68	14.04	12.89	78.65	-349.11	584.30	233.17	211.32	21.85	10.673		
2,900.00	2,812.30	2,828.19	2,711.62	14.64	13.55	79.58	-377.45	605.40	259.33	236.40	22.92	11.312		
3,000.00	2,908.11	2,925.27	2,800.58	15.23	14.26	80.13	-408.28	629.08	286.21	262.14	24.07	11.890		
3,100.00	3,003.92	3,025.56	2,892.82	15.83	14.97	80.66	-439.28	653.35	312.25	287.00	25.25	12.367		
3,200.00	3,099.73	3,123.40	2,983.60	16.43	15.63	81.48	-468.68	674.94	337.51	311.08	26.42	12.774		
3,300.00	3,195.54	3,217.79	3,071.36	17.03	16.27	82.26	-496.88	695.23	362.69	335.13	27.55	13.163		
3,400.00	3,291.35	3,302.75	3,149.73	17.62	16.89	82.82	-524.09	713.54	390.05	361.55	28.51	13.683		
3,500.00	3,387.16	3,397.36	3,236.33	18.22	17.58	83.33	-556.24	733.98	419.44	389.82	29.61	14.164		
3,600.00	3,482.97	3,513.06	3,343.61	18.82	18.34	84.07	-592.32	757.93	446.10	415.03	31.07	14.360		
3,700.00	3,578.78	3,626.58	3,450.53	19.42	19.01	84.98	-623.34	780.03	469.08	436.64	32.44	14.461		
3,800.00	3,674.60	3,745.45	3,564.89	20.02	19.56	86.63	-650.68	797.27	488.52	454.65	33.86	14.427		
3,900.00	3,770.41	3,858.08	3,675.20	20.62	19.97	88.81	-670.56	808.13	503.64	468.38	35.26	14.284		
4,000.00	3,866.22	3,962.55	3,777.73	21.22	20.36	90.73	-687.86	818.24	518.35	481.79	36.56	14.177		
4,100.00	3,962.03	4,080.06	3,893.37	21.82	20.75	92.68	-704.22	831.13	530.70	492.79	37.91	13.998		
4,200.00	4,057.84	4,175.59	3,987.53	22.42	21.08	94.18	-715.92	842.23	541.70	502.61	39.09	13.856		
4,300.00	4,153.65	4,260.46	4,070.84	23.02	21.42	95.33	-728.14	852.87	554.83	514.66	40.18	13.810		
4,400.00	4,249.46	4,350.28	4,158.55	23.62	21.81	96.32	-742.98	865.24	569.91	528.65	41.26	13.813		
4,500.00	4,345.27	4,436.96	4,242.59	24.22	22.23	97.04	-759.78	878.24	587.40	545.11	42.28	13.892		
4,600.00	4,441.08	4,551.41	4,353.62	24.82	22.74	97.90	-780.82	896.35	603.80	560.25	43.55	13.865		
4,700.00	4,536.89	4,639.21	4,439.08	25.42	23.14	98.62	-796.05	909.48	619.74	575.17	44.57	13.905		
4,800.00	4,632.70	4,722.32	4,519.30	26.02	23.57	99.11	-813.35	922.59	638.61	593.08	45.53	14.025		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Brown 41-5 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 41-Geolink MWD												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
4,900.00	4,728.52	4,810.63	4,603.73	26.62	24.08	99.37	-833.73	938.49	658.92	612.38	46.54	14.158	
5,000.00	4,824.33	4,891.11	4,679.74	27.22	24.59	99.37	-854.65	954.69	681.24	633.82	47.42	14.367	
5,100.00	4,920.14	4,974.36	4,757.87	27.82	25.11	99.35	-878.48	970.73	706.22	657.93	48.29	14.623	
5,200.00	5,015.95	5,069.64	4,847.83	28.42	25.68	99.52	-905.38	986.89	731.67	682.33	49.35	14.827	
5,300.00	5,111.76	5,167.33	4,940.29	29.02	26.25	99.78	-933.05	1,002.01	757.74	707.31	50.44	15.024	
5,400.00	5,207.57	5,278.89	5,046.41	29.62	26.88	100.12	-962.93	1,019.12	782.46	730.72	51.74	15.123	
5,500.00	5,303.38	5,369.25	5,132.11	30.22	27.43	100.28	-987.05	1,034.55	806.49	753.74	52.75	15.289	
5,600.00	5,399.19	5,489.32	5,246.31	30.82	28.08	100.52	-1,018.06	1,054.77	829.82	775.71	54.11	15.335	
5,700.00	5,495.00	5,595.95	5,348.80	31.42	28.61	100.92	-1,042.64	1,070.92	851.22	795.93	55.28	15.397	
5,800.00	5,590.81	5,710.62	5,460.06	32.02	29.11	101.59	-1,066.23	1,085.47	871.37	814.86	56.51	15.420	
5,900.00	5,686.63	5,804.15	5,551.44	32.62	29.49	102.28	-1,083.46	1,095.40	890.45	832.94	57.51	15.483	
6,000.00	5,782.44	5,890.69	5,636.06	33.22	29.82	102.96	-1,099.81	1,103.27	910.71	852.30	58.41	15.592	
6,100.00	5,878.25	5,972.55	5,716.26	33.82	30.12	103.71	-1,115.41	1,108.36	932.48	873.26	59.22	15.747	
6,200.00	5,974.06	6,051.23	5,793.31	34.42	30.42	104.49	-1,131.00	1,111.40	956.15	896.17	59.98	15.941	
6,300.00	6,069.87	6,189.85	5,929.15	35.03	30.89	105.78	-1,157.93	1,117.06	979.97	918.55	61.42	15.955	
6,400.00	6,165.68	6,351.88	6,089.46	35.63	31.32	107.33	-1,178.95	1,127.00	996.92	934.04	62.88	15.854	
6,500.00	6,261.49	6,453.56	6,190.62	36.23	31.55	108.44	-1,187.98	1,131.84	1,011.62	947.80	63.82	15.852	
6,600.00	6,357.30	6,562.59	6,299.01	36.83	31.82	109.51	-1,197.40	1,139.01	1,025.50	960.68	64.81	15.823	
6,700.00	6,453.11	6,695.85	6,431.36	37.43	32.12	110.69	-1,207.83	1,150.27	1,038.20	972.34	65.86	15.763	
6,800.00	6,548.92	6,794.76	6,529.82	38.03	32.33	111.64	-1,212.66	1,158.49	1,048.63	981.89	66.74	15.711	
6,900.00	6,644.73	6,871.09	6,605.80	38.63	32.49	112.37	-1,217.10	1,164.13	1,060.58	993.07	67.52	15.709	
7,000.00	6,740.55	6,962.87	6,697.21	39.23	32.67	113.25	-1,223.09	1,169.79	1,074.08	1,005.76	68.31	15.723	
7,100.00	6,836.36	7,065.73	6,799.78	39.83	32.85	114.30	-1,228.91	1,174.89	1,087.86	1,018.74	69.12	15.738	
7,188.78	6,921.42	7,156.91	6,890.78	40.37	32.99	115.27	-1,233.05	1,178.84	1,099.91	1,030.10	69.81	15.755	
7,200.00	6,932.17	7,168.07	6,901.92	40.44	33.01	118.41	-1,233.51	1,179.30	1,101.50	1,031.60	69.90	15.759	
7,250.00	6,980.19	7,217.80	6,951.57	40.72	33.09	133.01	-1,235.46	1,181.27	1,110.21	1,039.96	70.25	15.805	
7,300.00	7,028.16	7,267.37	7,001.08	40.99	33.16	147.37	-1,237.27	1,183.13	1,121.50	1,050.95	70.56	15.895	
7,350.00	7,075.86	7,316.03	7,049.68	41.24	33.23	160.15	-1,238.91	1,184.89	1,135.30	1,064.47	70.83	16.029	
7,400.00	7,123.05	7,362.87	7,096.46	41.47	33.29	170.82	-1,240.42	1,186.47	1,151.56	1,080.49	71.06	16.204	
7,450.00	7,169.51	7,409.46	7,143.01	41.68	33.35	179.49	-1,241.84	1,187.93	1,170.19	1,098.92	71.27	16.419	
7,500.00	7,215.00	7,455.81	7,189.32	41.87	33.41	-173.46	-1,243.12	1,189.28	1,191.08	1,119.63	71.45	16.671	
7,550.00	7,259.31	7,500.74	7,234.22	42.04	33.46	-167.62	-1,244.25	1,190.48	1,214.13	1,142.53	71.60	16.957	
7,600.00	7,302.22	7,544.06	7,277.52	42.19	33.51	-162.66	-1,245.27	1,191.60	1,239.27	1,167.55	71.72	17.278	
7,650.00	7,343.52	7,584.32	7,317.76	42.32	33.56	-158.29	-1,246.17	1,192.59	1,266.43	1,194.61	71.82	17.633	
7,700.00	7,383.01	7,621.48	7,354.90	42.44	33.60	-154.30	-1,246.99	1,193.42	1,295.58	1,223.69	71.89	18.022	
7,750.00	7,420.50	7,657.52	7,390.92	42.54	33.64	-150.55	-1,247.80	1,194.14	1,326.62	1,254.69	71.94	18.442	
7,800.00	7,455.80	7,695.90	7,429.28	42.63	33.68	-147.01	-1,248.56	1,194.88	1,359.38	1,287.40	71.97	18.887	
7,850.00	7,488.75	7,731.88	7,465.26	42.70	33.72	-143.50	-1,249.14	1,195.54	1,393.69	1,321.70	71.99	19.359	
7,900.00	7,519.17	7,763.07	7,496.44	42.76	33.75	-139.84	-1,249.56	1,196.09	1,429.49	1,357.52	71.98	19.861	
7,950.00	7,546.94	7,790.99	7,524.35	42.81	33.78	-135.97	-1,249.91	1,196.57	1,466.71	1,394.77	71.94	20.388	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Canino 1-X - HUGHES CW - NO SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 5034-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	82.96	152.34	1,233.57	1,243.87				
100.00	100.00	52.00	52.00	0.14	0.09	82.96	152.34	1,233.57	1,242.94	1,242.71	0.23	5,371.118	
200.00	200.00	152.00	152.00	0.50	0.27	82.96	152.34	1,233.57	1,242.94	1,242.17	0.77	1,616.067	
300.00	299.98	251.98	251.98	0.84	0.45	-67.13	152.34	1,233.57	1,242.26	1,240.97	1.29	960.563	
350.00	349.93	301.93	301.93	1.02	0.54	-67.24	152.34	1,233.57	1,241.42	1,239.86	1.55	798.444	
400.00	399.85	351.85	351.85	1.19	0.63	-53.79	152.34	1,233.57	1,239.97	1,238.15	1.82	680.947	
500.00	499.55	451.55	451.55	1.55	0.81	-38.47	152.34	1,233.57	1,234.52	1,232.16	2.36	522.589	
600.00	598.97	550.97	550.97	1.93	0.99	-30.85	152.34	1,233.57	1,225.66	1,222.75	2.91	420.809	
700.00	698.00	650.00	650.00	2.32	1.17	-26.57	152.34	1,233.57	1,213.41	1,209.94	3.47	349.894	
800.00	796.50	748.50	748.50	2.73	1.34	-23.98	152.34	1,233.57	1,197.79	1,193.77	4.03	297.357	
900.00	894.36	846.36	846.36	3.17	1.52	-22.36	152.34	1,233.57	1,178.84	1,174.25	4.59	256.617	
1,000.00	991.47	943.47	943.47	3.64	1.69	-21.35	152.34	1,233.57	1,156.60	1,151.43	5.17	223.894	
1,093.81	1,081.77	1,033.77	1,033.77	4.12	1.85	-20.80	152.34	1,233.57	1,132.77	1,127.06	5.71	198.396	
1,100.00	1,087.70	1,039.70	1,039.70	4.15	1.86	-20.84	152.34	1,233.57	1,131.10	1,125.35	5.75	196.691	
1,200.00	1,183.51	1,135.51	1,135.51	4.69	2.04	-21.36	152.34	1,233.57	1,104.24	1,097.91	6.33	174.550	
1,300.00	1,279.32	1,231.32	1,231.32	5.25	2.21	-21.91	152.34	1,233.57	1,077.46	1,070.56	6.91	155.932	
1,400.00	1,375.13	1,327.13	1,327.13	5.81	2.38	-22.49	152.34	1,233.57	1,050.79	1,043.29	7.50	140.092	
1,500.00	1,470.94	1,422.94	1,422.94	6.38	2.55	-23.10	152.34	1,233.57	1,024.22	1,016.13	8.10	126.473	
1,600.00	1,566.75	1,518.75	1,518.75	6.96	2.72	-23.74	152.34	1,233.57	997.77	989.07	8.70	114.652	
1,700.00	1,662.56	1,614.56	1,614.56	7.54	2.89	-24.42	152.34	1,233.57	971.44	962.13	9.31	104.306	
1,800.00	1,758.38	1,710.38	1,710.38	8.12	3.07	-25.13	152.34	1,233.57	945.25	935.32	9.93	95.183	
1,900.00	1,854.19	1,806.19	1,806.19	8.71	3.24	-25.88	152.34	1,233.57	919.20	908.65	10.56	87.084	
2,000.00	1,950.00	1,902.00	1,902.00	9.30	3.41	-26.68	152.34	1,233.57	893.31	882.12	11.19	79.851	
2,100.00	2,045.81	1,997.81	1,997.81	9.88	3.58	-27.52	152.34	1,233.57	867.59	855.77	11.83	73.358	
2,200.00	2,141.62	2,093.62	2,093.62	10.48	3.75	-28.41	152.34	1,233.57	842.07	829.59	12.48	67.499	
2,300.00	2,237.43	2,189.43	2,189.43	11.07	3.92	-29.36	152.34	1,233.57	816.75	803.61	13.13	62.192	
2,400.00	2,333.24	2,285.24	2,285.24	11.66	4.10	-30.36	152.34	1,233.57	791.65	777.85	13.80	57.365	
2,500.00	2,429.05	2,381.05	2,381.05	12.25	4.27	-31.43	152.34	1,233.57	766.80	752.32	14.48	52.960	
2,600.00	2,524.86	2,476.86	2,476.86	12.85	4.44	-32.57	152.34	1,233.57	742.23	727.06	15.17	48.928	
2,700.00	2,620.67	2,572.67	2,572.67	13.44	4.61	-33.79	152.34	1,233.57	717.96	702.08	15.87	45.229	
2,800.00	2,716.49	2,668.49	2,668.49	14.04	4.78	-35.08	152.34	1,233.57	694.02	677.43	16.59	41.828	
2,900.00	2,812.30	2,764.30	2,764.30	14.64	4.95	-36.47	152.34	1,233.57	670.45	653.12	17.33	38.694	
3,000.00	2,908.11	2,860.11	2,860.11	15.23	5.13	-37.95	152.34	1,233.57	647.29	629.21	18.08	35.803	
3,100.00	3,003.92	2,955.92	2,955.92	15.83	5.30	-39.54	152.34	1,233.57	624.58	605.73	18.85	33.134	
3,200.00	3,099.73	3,051.73	3,051.73	16.43	5.47	-41.25	152.34	1,233.57	602.38	582.74	19.64	30.668	
3,300.00	3,195.54	3,147.54	3,147.54	17.03	5.64	-43.07	152.34	1,233.57	580.75	560.29	20.46	28.390	
3,400.00	3,291.35	3,243.35	3,243.35	17.62	5.81	-45.04	152.34	1,233.57	559.74	538.45	21.29	26.288	
3,500.00	3,387.16	3,339.16	3,339.16	18.22	5.99	-47.14	152.34	1,233.57	539.44	517.28	22.15	24.349	
3,600.00	3,482.97	3,434.97	3,434.97	18.82	6.16	-49.40	152.34	1,233.57	519.92	496.88	23.04	22.565	
3,700.00	3,578.78	3,530.78	3,530.78	19.42	6.33	-51.82	152.34	1,233.57	501.28	477.32	23.95	20.927	
3,800.00	3,674.60	3,626.60	3,626.60	20.02	6.50	-54.42	152.34	1,233.57	483.62	458.73	24.89	19.431	
3,900.00	3,770.41	3,722.41	3,722.41	20.62	6.67	-57.19	152.34	1,233.57	467.04	441.20	25.85	18.069	
4,000.00	3,866.22	3,818.22	3,818.22	21.22	6.84	-60.15	152.34	1,233.57	451.68	424.86	26.82	16.839	
4,100.00	3,962.03	3,914.03	3,914.03	21.82	7.02	-63.29	152.34	1,233.57	437.65	409.84	27.81	15.736	
4,200.00	4,057.84	4,009.84	4,009.84	22.42	7.19	-66.62	152.34	1,233.57	425.10	396.29	28.81	14.758	
4,300.00	4,153.65	4,105.65	4,105.65	23.02	7.36	-70.13	152.34	1,233.57	414.14	384.35	29.79	13.900	
4,400.00	4,249.46	4,201.46	4,201.46	23.62	7.53	-73.80	152.34	1,233.57	404.92	374.16	30.77	13.162	
4,500.00	4,345.27	4,297.27	4,297.27	24.22	7.70	-77.60	152.34	1,233.57	397.55	365.85	31.71	12.538	
4,600.00	4,441.08	4,393.08	4,393.08	24.82	7.87	-81.53	152.34	1,233.57	392.14	359.54	32.61	12.027	
4,700.00	4,536.89	4,488.89	4,488.89	25.42	8.05	-85.53	152.34	1,233.57	388.78	355.33	33.45	11.623	
4,800.00	4,632.70	4,584.70	4,584.70	26.02	8.22	-89.58	152.34	1,233.57	387.50	353.27	34.23	11.321	
4,810.37	4,642.64	4,594.64	4,594.64	26.08	8.24	-90.00	152.34	1,233.57	387.49	353.18	34.30	11.296 CC, ES	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Canino 1-X - HUGHES CW - NO SURVEYS													Offset Site Error:	0.00 usft
Survey Program: 5034-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		
4,900.00	4,728.52	4,680.52	4,680.52	26.62	8.39	-93.63	152.34	1,233.57	388.34	353.40	34.93	11.117		
5,000.00	4,824.33	4,776.33	4,776.33	27.22	8.56	-97.65	152.34	1,233.57	391.28	355.71	35.56	11.003		
5,100.00	4,920.14	4,872.14	4,872.14	27.82	8.73	-101.59	152.34	1,233.57	396.27	360.15	36.12	10.972 SF		
5,200.00	5,015.95	4,967.95	4,967.95	28.42	8.90	-105.43	152.34	1,233.57	403.24	366.63	36.60	11.017		
5,300.00	5,111.76	5,034.00	5,034.00	29.02	9.02	-107.99	152.34	1,233.57	413.16	376.36	36.79	11.230		
5,400.00	5,207.57	5,034.00	5,034.00	29.62	9.02	-107.99	152.34	1,233.57	440.94	405.67	35.27	12.500		
5,500.00	5,303.38	5,034.00	5,034.00	30.22	9.02	-107.99	152.34	1,233.57	488.02	455.36	32.66	14.941		
5,600.00	5,399.19	5,034.00	5,034.00	30.82	9.02	-107.99	152.34	1,233.57	549.46	519.69	29.77	18.458		
5,700.00	5,495.00	5,034.00	5,034.00	31.42	9.02	-107.99	152.34	1,233.57	621.00	593.94	27.05	22.954		
5,800.00	5,590.81	5,034.00	5,034.00	32.02	9.02	-107.99	152.34	1,233.57	699.55	674.86	24.69	28.335		
5,900.00	5,686.63	5,034.00	5,034.00	32.62	9.02	-107.99	152.34	1,233.57	783.01	760.32	22.69	34.510		
6,000.00	5,782.44	5,034.00	5,034.00	33.22	9.02	-107.99	152.34	1,233.57	869.97	848.95	21.02	41.392		
6,100.00	5,878.25	5,034.00	5,034.00	33.82	9.02	-107.99	152.34	1,233.57	959.47	939.84	19.62	48.897		
6,200.00	5,974.06	5,034.00	5,034.00	34.42	9.02	-107.99	152.34	1,233.57	1,050.86	1,032.41	18.45	56.947		
6,300.00	6,069.87	5,034.00	5,034.00	35.03	9.02	-107.99	152.34	1,233.57	1,143.70	1,126.23	17.47	65.469		
6,400.00	6,165.68	5,034.00	5,034.00	35.63	9.02	-107.99	152.34	1,233.57	1,237.65	1,221.02	16.64	74.393		
6,500.00	6,261.49	5,034.00	5,034.00	36.23	9.02	-107.99	152.34	1,233.57	1,332.49	1,316.56	15.93	83.652		
6,600.00	6,357.30	5,034.00	5,034.00	36.83	9.02	-107.99	152.34	1,233.57	1,428.02	1,412.70	15.33	93.182		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4A-32H-O268 - OH - PLAN #2												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	-89.70	1.14	-219.91	219.92				
100.00	100.00	100.00	100.00	0.14	0.14	-89.70	1.14	-219.91	219.92	219.64	0.28	796.726	
200.00	200.00	200.00	200.00	0.50	0.50	-89.70	1.14	-219.91	219.92	218.92	0.99	221.473 CC, ES	
300.00	299.98	295.98	295.96	0.84	0.84	120.99	2.50	-220.76	221.70	220.01	1.69	130.878	
350.00	349.93	343.77	343.70	1.02	1.02	121.84	4.21	-221.81	223.98	221.93	2.05	109.219	
400.00	399.85	391.32	391.18	1.19	1.19	136.53	6.57	-223.27	227.47	225.06	2.41	94.268	
500.00	499.55	485.56	485.09	1.55	1.53	154.65	13.24	-227.38	238.79	235.64	3.15	75.820	
600.00	598.97	578.59	577.49	1.93	1.88	165.36	22.39	-233.03	256.08	252.18	3.89	65.784	
700.00	698.00	675.37	673.45	2.32	2.25	172.67	33.06	-239.61	278.22	273.61	4.61	60.356	
800.00	796.50	771.38	768.65	2.73	2.63	177.87	43.65	-246.14	304.16	298.84	5.32	57.149	
900.00	894.36	866.52	862.99	3.17	3.00	-178.28	54.14	-252.61	333.69	327.66	6.03	55.307	
1,000.00	991.47	960.66	956.34	3.64	3.37	-175.36	64.52	-259.02	366.64	359.89	6.74	54.373	
1,093.81	1,081.77	1,047.98	1,042.92	4.12	3.72	-173.23	74.15	-264.96	400.52	393.12	7.41	54.067	
1,100.00	1,087.70	1,053.70	1,048.60	4.15	3.74	-173.19	74.78	-265.35	402.85	395.39	7.46	54.013	
1,200.00	1,183.51	1,146.23	1,140.34	4.69	4.11	-172.51	84.98	-271.64	440.51	432.36	8.15	54.025	
1,300.00	1,279.32	1,238.75	1,232.09	5.25	4.48	-171.94	95.18	-277.94	478.21	469.35	8.86	53.999	
1,400.00	1,375.13	1,331.28	1,323.83	5.81	4.85	-171.45	105.38	-284.23	515.95	506.38	9.56	53.948	
1,500.00	1,470.94	1,423.80	1,415.58	6.38	5.22	-171.03	115.59	-290.53	553.71	543.43	10.28	53.883	
1,600.00	1,566.75	1,516.32	1,507.32	6.96	5.59	-170.66	125.79	-296.82	591.50	580.50	10.99	53.810	
1,700.00	1,662.56	1,608.85	1,599.06	7.54	5.96	-170.34	135.99	-303.12	629.30	617.59	11.71	53.733	
1,800.00	1,758.38	1,701.37	1,690.81	8.12	6.33	-170.05	146.19	-309.41	667.12	654.69	12.43	53.654	
1,900.00	1,854.19	1,793.89	1,782.55	8.71	6.70	-169.79	156.39	-315.71	704.95	691.79	13.16	53.575	
2,000.00	1,950.00	1,886.42	1,874.29	9.30	7.07	-169.56	166.60	-322.00	742.80	728.91	13.88	53.498	
2,100.00	2,045.81	1,978.94	1,966.04	9.88	7.44	-169.36	176.80	-328.30	780.65	766.04	14.61	53.423	
2,200.00	2,141.62	2,071.47	2,057.78	10.48	7.81	-169.17	187.00	-334.59	818.51	803.17	15.34	53.350	
2,300.00	2,237.43	2,163.99	2,149.53	11.07	8.18	-169.00	197.20	-340.89	856.38	840.30	16.07	53.281	
2,400.00	2,333.24	2,256.51	2,241.27	11.66	8.55	-168.84	207.41	-347.18	894.25	877.45	16.80	53.214	
2,500.00	2,429.05	2,349.04	2,333.01	12.25	8.92	-168.69	217.61	-353.48	932.13	914.59	17.54	53.150	
2,600.00	2,524.86	2,441.56	2,424.76	12.85	9.29	-168.56	227.81	-359.77	970.01	951.74	18.27	53.088	
2,700.00	2,620.67	2,534.08	2,516.50	13.44	9.67	-168.44	238.01	-366.06	1,007.90	988.89	19.01	53.030	
2,800.00	2,716.49	2,626.61	2,608.24	14.04	10.04	-168.32	248.21	-372.36	1,045.79	1,026.05	19.74	52.974	
2,900.00	2,812.30	2,719.13	2,699.99	14.64	10.41	-168.22	258.42	-378.65	1,083.69	1,063.21	20.48	52.921	
3,000.00	2,908.11	2,811.65	2,791.73	15.23	10.78	-168.12	268.62	-384.95	1,121.58	1,100.37	21.21	52.870	
3,100.00	3,003.92	2,904.18	2,883.48	15.83	11.15	-168.02	278.82	-391.24	1,159.49	1,137.53	21.95	52.822	
3,200.00	3,099.73	2,996.70	2,975.22	16.43	11.52	-167.94	289.02	-397.54	1,197.39	1,174.70	22.69	52.775	
3,300.00	3,195.54	3,089.23	3,066.96	17.03	11.89	-167.86	299.23	-403.83	1,235.29	1,211.87	23.43	52.731	
3,400.00	3,291.35	3,181.75	3,158.71	17.62	12.26	-167.78	309.43	-410.13	1,273.20	1,249.04	24.16	52.688	
3,500.00	3,387.16	3,274.27	3,250.45	18.22	12.64	-167.71	319.63	-416.42	1,311.11	1,286.21	24.90	52.648	
3,600.00	3,482.97	3,366.80	3,342.20	18.82	13.01	-167.64	329.83	-422.72	1,349.02	1,323.38	25.64	52.609	
3,700.00	3,578.78	3,459.32	3,433.94	19.42	13.38	-167.57	340.03	-429.01	1,386.93	1,360.55	26.38	52.572	
3,800.00	3,674.60	3,551.84	3,525.68	20.02	13.75	-167.51	350.24	-435.31	1,424.85	1,397.73	27.12	52.536	
3,900.00	3,770.41	3,644.37	3,617.43	20.62	14.12	-167.46	360.44	-441.60	1,462.76	1,434.90	27.86	52.502 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4B-32H-O268 - OH - PLAN #2													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	-89.69	1.12	-210.12	210.12					
100.00	100.00	100.00	100.00	0.14	0.14	-89.69	1.12	-210.12	210.12	209.85	0.28	761.249		
200.00	200.00	200.00	200.00	0.50	0.50	-89.69	1.12	-210.12	210.12	209.13	0.99	211.611	CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	120.70	1.12	-210.12	211.01	209.31	1.70	124.382		
350.00	349.93	349.13	349.12	1.02	1.03	121.29	1.53	-210.20	212.23	210.18	2.05	103.745		
400.00	399.85	398.12	398.10	1.19	1.21	135.77	2.77	-210.45	214.34	211.94	2.40	89.317		
500.00	499.55	495.49	495.34	1.55	1.56	153.72	7.65	-211.45	222.02	218.91	3.12	71.239		
600.00	598.97	591.68	591.17	1.93	1.91	164.53	15.66	-213.07	234.61	230.76	3.84	61.031		
700.00	698.00	688.69	687.61	2.32	2.27	172.20	25.99	-215.17	252.02	247.45	4.57	55.101		
800.00	796.50	785.72	784.06	2.73	2.63	177.77	36.41	-217.29	273.43	268.12	5.30	51.571		
900.00	894.36	882.03	879.79	3.17	3.00	-178.06	46.75	-219.39	298.56	292.53	6.03	49.529		
1,000.00	991.47	977.50	974.68	3.64	3.36	-174.87	57.00	-221.47	327.21	320.46	6.75	48.453		
1,093.81	1,081.77	1,066.20	1,062.85	4.12	3.70	-172.55	66.53	-223.40	357.16	349.73	7.43	48.046		
1,100.00	1,087.70	1,072.02	1,068.64	4.15	3.72	-172.49	67.15	-223.53	359.23	351.75	7.48	47.995		
1,200.00	1,183.51	1,166.10	1,162.14	4.69	4.08	-171.64	77.26	-225.58	392.74	384.54	8.20	47.904		
1,300.00	1,279.32	1,260.17	1,255.65	5.25	4.44	-170.92	87.36	-227.63	426.31	417.39	8.92	47.801		
1,400.00	1,375.13	1,354.24	1,349.15	5.81	4.80	-170.30	97.46	-229.68	459.93	450.28	9.64	47.692		
1,500.00	1,470.94	1,448.31	1,442.66	6.38	5.17	-169.77	107.56	-231.73	493.59	483.22	10.37	47.581		
1,600.00	1,566.75	1,542.38	1,536.16	6.96	5.53	-169.31	117.67	-233.78	527.28	516.18	11.11	47.473		
1,700.00	1,662.56	1,636.45	1,629.67	7.54	5.89	-168.90	127.77	-235.84	561.01	549.16	11.84	47.368		
1,800.00	1,758.38	1,730.53	1,723.17	8.12	6.26	-168.54	137.87	-237.89	594.75	582.17	12.58	47.267		
1,900.00	1,854.19	1,824.60	1,816.68	8.71	6.62	-168.22	147.97	-239.94	628.51	615.19	13.32	47.170		
2,000.00	1,950.00	1,918.67	1,910.18	9.30	6.98	-167.93	158.07	-241.99	662.29	648.23	14.07	47.079		
2,100.00	2,045.81	2,012.74	2,003.69	9.88	7.35	-167.66	168.18	-244.04	696.09	681.27	14.81	46.992		
2,200.00	2,141.62	2,106.81	2,097.20	10.48	7.71	-167.43	178.28	-246.09	729.89	714.33	15.56	46.910		
2,300.00	2,237.43	2,200.89	2,190.70	11.07	8.07	-167.21	188.38	-248.14	763.71	747.40	16.31	46.832		
2,400.00	2,333.24	2,294.96	2,284.21	11.66	8.44	-167.01	198.48	-250.20	797.53	780.47	17.06	46.759		
2,500.00	2,429.05	2,389.03	2,377.71	12.25	8.80	-166.83	208.59	-252.25	831.36	813.55	17.81	46.689		
2,600.00	2,524.86	2,483.10	2,471.22	12.85	9.17	-166.66	218.69	-254.30	865.20	846.64	18.56	46.624		
2,700.00	2,620.67	2,577.17	2,564.72	13.44	9.53	-166.50	228.79	-256.35	899.04	879.73	19.31	46.562		
2,800.00	2,716.49	2,671.24	2,658.23	14.04	9.89	-166.36	238.89	-258.40	932.89	912.83	20.06	46.503		
2,900.00	2,812.30	2,765.32	2,751.73	14.64	10.26	-166.23	249.00	-260.45	966.75	945.93	20.81	46.447		
3,000.00	2,908.11	2,859.39	2,845.24	15.23	10.62	-166.10	259.10	-262.50	1,000.61	979.04	21.57	46.394		
3,100.00	3,003.92	2,953.46	2,938.74	15.83	10.99	-165.98	269.20	-264.56	1,034.47	1,012.15	22.32	46.344		
3,200.00	3,099.73	3,047.53	3,032.25	16.43	11.35	-165.87	279.30	-266.61	1,068.33	1,045.26	23.08	46.296		
3,300.00	3,195.54	3,141.60	3,125.75	17.03	11.72	-165.77	289.41	-268.66	1,102.20	1,078.37	23.83	46.250		
3,400.00	3,291.35	3,235.67	3,219.26	17.62	12.08	-165.68	299.51	-270.71	1,136.08	1,111.49	24.59	46.207		
3,500.00	3,387.16	3,329.75	3,312.76	18.22	12.44	-165.58	309.61	-272.76	1,169.95	1,144.61	25.34	46.166		
3,600.00	3,482.97	3,423.82	3,406.27	18.82	12.81	-165.50	319.71	-274.81	1,203.83	1,177.73	26.10	46.126		
3,700.00	3,578.78	3,517.89	3,499.77	19.42	13.17	-165.42	329.82	-276.86	1,237.71	1,210.86	26.86	46.088		
3,800.00	3,674.60	3,611.96	3,593.28	20.02	13.54	-165.34	339.92	-278.91	1,271.59	1,243.98	27.61	46.052		
3,900.00	3,770.41	3,706.03	3,686.78	20.62	13.90	-165.27	350.02	-280.97	1,305.48	1,277.11	28.37	46.018		
4,000.00	3,866.22	3,800.11	3,780.29	21.22	14.27	-165.20	360.12	-283.02	1,339.36	1,310.24	29.13	45.985		
4,100.00	3,962.03	3,894.18	3,873.80	21.82	14.63	-165.13	370.22	-285.07	1,373.25	1,343.37	29.88	45.953		
4,200.00	4,057.84	3,988.25	3,967.30	22.42	15.00	-165.07	380.33	-287.12	1,407.14	1,376.50	30.64	45.923		
4,300.00	4,153.65	4,082.32	4,060.81	23.02	15.36	-165.01	390.43	-289.17	1,441.03	1,409.63	31.40	45.893		
4,400.00	4,249.46	4,176.39	4,154.31	23.62	15.72	-164.95	400.53	-291.22	1,474.92	1,442.76	32.16	45.865	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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4C-32H-O268 - OH - PLAN #2													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	-89.68	1.10	-200.05	200.05					
100.00	100.00	100.00	100.00	0.14	0.14	-89.68	1.10	-200.05	200.05	199.77	0.28	724.759		
200.00	200.00	200.00	200.00	0.50	0.50	-89.68	1.10	-200.05	200.05	199.06	0.99	201.467	CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	120.73	1.10	-200.05	200.94	199.24	1.70	118.445		
350.00	349.93	349.93	349.93	1.02	1.03	121.24	1.10	-200.05	202.06	200.01	2.05	98.661		
400.00	399.85	399.85	399.85	1.19	1.21	135.44	1.10	-200.05	203.87	201.46	2.40	84.809		
500.00	499.55	498.57	498.55	1.55	1.57	152.67	2.79	-200.18	210.40	207.28	3.12	67.444		
600.00	598.97	596.41	596.26	1.93	1.92	162.97	7.81	-200.56	221.15	217.31	3.84	57.576		
700.00	698.00	693.01	692.50	2.32	2.27	170.44	16.03	-201.19	236.43	231.86	4.56	51.797		
800.00	796.50	789.70	788.60	2.73	2.63	176.38	26.66	-202.00	256.26	250.97	5.29	48.434		
900.00	894.36	886.23	884.53	3.17	2.98	-179.08	37.40	-202.83	280.01	273.99	6.02	46.525		
1,000.00	991.47	981.97	979.67	3.64	3.35	-175.59	48.06	-203.64	307.41	300.67	6.75	45.570		
1,093.81	1,081.77	1,070.97	1,068.11	4.12	3.68	-173.04	57.96	-204.40	336.26	328.83	7.43	45.260		
1,100.00	1,087.70	1,076.81	1,073.91	4.15	3.71	-172.96	58.61	-204.45	338.26	330.78	7.48	45.220		
1,200.00	1,183.51	1,171.21	1,167.73	4.69	4.07	-171.90	69.11	-205.25	370.64	362.44	8.20	45.211		
1,300.00	1,279.32	1,265.62	1,261.54	5.25	4.43	-171.01	79.62	-206.06	403.12	394.20	8.92	45.180		
1,400.00	1,375.13	1,360.02	1,355.36	5.81	4.79	-170.24	90.13	-206.86	435.68	426.03	9.65	45.135		
1,500.00	1,470.94	1,454.43	1,449.17	6.38	5.15	-169.59	100.63	-207.67	468.30	457.91	10.39	45.081		
1,600.00	1,566.75	1,548.83	1,542.99	6.96	5.51	-169.02	111.14	-208.47	500.96	489.83	11.13	45.022		
1,700.00	1,662.56	1,643.24	1,636.80	7.54	5.88	-168.52	121.64	-209.27	533.66	521.79	11.87	44.962		
1,800.00	1,758.38	1,737.64	1,730.62	8.12	6.24	-168.08	132.15	-210.08	566.40	553.78	12.61	44.900		
1,900.00	1,854.19	1,832.05	1,824.43	8.71	6.61	-167.68	142.65	-210.88	599.16	585.80	13.36	44.839		
2,000.00	1,950.00	1,926.45	1,918.25	9.30	6.97	-167.33	153.16	-211.69	631.95	617.83	14.11	44.780		
2,100.00	2,045.81	2,020.86	2,012.06	9.88	7.34	-167.01	163.66	-212.49	664.75	649.89	14.86	44.722		
2,200.00	2,141.62	2,115.26	2,105.88	10.48	7.70	-166.72	174.17	-213.29	697.57	681.95	15.62	44.666		
2,300.00	2,237.43	2,209.67	2,199.70	11.07	8.07	-166.46	184.67	-214.10	730.41	714.03	16.37	44.613		
2,400.00	2,333.24	2,304.07	2,293.51	11.66	8.43	-166.22	195.18	-214.90	763.25	746.12	17.13	44.561		
2,500.00	2,429.05	2,398.48	2,387.33	12.25	8.80	-166.00	205.68	-215.71	796.11	778.23	17.89	44.512		
2,600.00	2,524.86	2,492.88	2,481.14	12.85	9.16	-165.79	216.19	-216.51	828.98	810.34	18.64	44.465		
2,700.00	2,620.67	2,587.29	2,574.96	13.44	9.53	-165.61	226.70	-217.31	861.86	842.45	19.40	44.419		
2,800.00	2,716.49	2,681.69	2,668.77	14.04	9.89	-165.43	237.20	-218.12	894.74	874.58	20.16	44.376		
2,900.00	2,812.30	2,776.10	2,762.59	14.64	10.26	-165.27	247.71	-218.92	927.63	906.71	20.92	44.335		
3,000.00	2,908.11	2,870.50	2,856.40	15.23	10.63	-165.12	258.21	-219.73	960.53	938.85	21.68	44.296		
3,100.00	3,003.92	2,964.91	2,950.22	15.83	10.99	-164.98	268.72	-220.53	993.43	970.99	22.45	44.258		
3,200.00	3,099.73	3,059.31	3,044.03	16.43	11.36	-164.85	279.22	-221.33	1,026.34	1,003.13	23.21	44.223		
3,300.00	3,195.54	3,153.72	3,137.85	17.03	11.72	-164.73	289.73	-222.14	1,059.25	1,035.28	23.97	44.188		
3,400.00	3,291.35	3,248.12	3,231.66	17.62	12.09	-164.61	300.23	-222.94	1,092.17	1,067.44	24.73	44.155		
3,500.00	3,387.16	3,342.52	3,325.48	18.22	12.46	-164.50	310.74	-223.75	1,125.09	1,099.59	25.50	44.124		
3,600.00	3,482.97	3,436.93	3,419.29	18.82	12.82	-164.40	321.24	-224.55	1,158.01	1,131.75	26.26	44.094		
3,700.00	3,578.78	3,531.33	3,513.11	19.42	13.19	-164.30	331.75	-225.36	1,190.94	1,163.91	27.03	44.065		
3,800.00	3,674.60	3,625.74	3,606.92	20.02	13.56	-164.21	342.25	-226.16	1,223.87	1,196.08	27.79	44.037		
3,900.00	3,770.41	3,720.14	3,700.74	20.62	13.92	-164.12	352.76	-226.96	1,256.80	1,228.25	28.56	44.011		
4,000.00	3,866.22	3,814.55	3,794.55	21.22	14.29	-164.04	363.27	-227.77	1,289.74	1,260.42	29.32	43.985		
4,100.00	3,962.03	3,908.95	3,888.37	21.82	14.65	-163.96	373.77	-228.57	1,322.68	1,292.59	30.09	43.961		
4,200.00	4,057.84	4,003.36	3,982.18	22.42	15.02	-163.89	384.28	-229.38	1,355.62	1,324.76	30.85	43.937		
4,300.00	4,153.65	4,097.76	4,076.00	23.02	15.39	-163.82	394.78	-230.18	1,388.56	1,356.94	31.62	43.914		
4,400.00	4,249.46	4,192.17	4,169.81	23.62	15.75	-163.75	405.29	-230.98	1,421.50	1,389.11	32.39	43.892		
4,500.00	4,345.27	4,286.57	4,263.63	24.22	16.12	-163.68	415.79	-231.79	1,454.45	1,421.29	33.15	43.871		
4,600.00	4,441.08	4,380.98	4,357.44	24.82	16.49	-163.62	426.30	-232.59	1,487.39	1,453.47	33.92	43.851	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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4D-32H-O268 - OH - PLAN #2												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	-89.67	1.09	-189.98	189.98				
100.00	100.00	100.00	100.00	0.14	0.14	-89.67	1.09	-189.98	189.98	189.70	0.28	688.268	
200.00	200.00	200.00	200.00	0.50	0.50	-89.67	1.09	-189.98	189.98	188.99	0.99	191.324 CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	120.77	1.09	-189.98	190.87	189.17	1.70	112.508	
350.00	349.93	349.93	349.93	1.02	1.03	121.31	1.09	-189.98	191.99	189.94	2.05	93.743	
400.00	399.85	399.85	399.85	1.19	1.21	135.53	1.09	-189.98	193.80	191.40	2.40	80.621	
500.00	499.55	499.55	499.55	1.55	1.57	152.38	1.09	-189.98	200.11	196.99	3.12	64.083	
600.00	598.97	598.38	598.36	1.93	1.93	161.91	2.77	-189.98	210.12	206.28	3.85	54.641	
700.00	698.00	699.32	699.17	2.32	2.29	168.85	7.87	-189.65	223.81	219.23	4.58	48.908	
800.00	796.50	803.15	802.66	2.73	2.66	174.54	15.66	-186.85	239.29	233.96	5.32	44.941	
900.00	894.36	906.62	905.47	3.17	3.04	179.53	25.82	-181.19	256.37	250.29	6.08	42.157	
1,000.00	991.47	1,004.14	1,002.16	3.64	3.40	-176.35	36.59	-174.44	276.20	269.38	6.82	40.516	
1,093.81	1,081.77	1,094.87	1,092.12	4.12	3.75	-173.26	46.61	-168.16	298.18	290.67	7.51	39.682	
1,100.00	1,087.70	1,100.84	1,098.03	4.15	3.77	-173.15	47.27	-167.74	299.74	292.17	7.56	39.621	
1,200.00	1,183.51	1,197.22	1,193.59	4.69	4.14	-171.54	57.91	-161.07	324.99	316.68	8.31	39.128	
1,300.00	1,279.32	1,293.60	1,289.15	5.25	4.51	-170.16	68.56	-154.39	350.45	341.39	9.06	38.697	
1,400.00	1,375.13	1,389.99	1,384.71	5.81	4.89	-168.96	79.20	-147.72	376.07	366.26	9.81	38.317	
1,500.00	1,470.94	1,486.37	1,480.27	6.38	5.26	-167.92	89.84	-141.04	401.83	391.25	10.58	37.978	
1,600.00	1,566.75	1,582.75	1,575.83	6.96	5.64	-167.00	100.49	-134.36	427.70	416.34	11.35	37.675	
1,700.00	1,662.56	1,679.13	1,671.39	7.54	6.02	-166.19	111.13	-127.69	453.66	441.53	12.13	37.401	
1,800.00	1,758.38	1,775.51	1,766.95	8.12	6.40	-165.47	121.78	-121.01	479.69	466.78	12.91	37.154	
1,900.00	1,854.19	1,871.90	1,862.51	8.71	6.78	-164.81	132.42	-114.34	505.79	492.10	13.70	36.928	
2,000.00	1,950.00	1,968.28	1,958.07	9.30	7.16	-164.23	143.07	-107.66	531.95	517.46	14.49	36.723	
2,100.00	2,045.81	2,064.66	2,053.63	9.88	7.54	-163.70	153.71	-100.99	558.15	542.87	15.28	36.534	
2,200.00	2,141.62	2,161.04	2,149.19	10.48	7.92	-163.21	164.36	-94.31	584.39	568.32	16.07	36.361	
2,300.00	2,237.43	2,257.42	2,244.75	11.07	8.31	-162.77	175.00	-87.64	610.67	593.80	16.87	36.201	
2,400.00	2,333.24	2,353.81	2,340.31	11.66	8.69	-162.36	185.64	-80.96	636.98	619.32	17.67	36.053	
2,500.00	2,429.05	2,450.19	2,435.87	12.25	9.07	-161.99	196.29	-74.28	663.32	644.85	18.47	35.915	
2,600.00	2,524.86	2,546.57	2,531.43	12.85	9.45	-161.64	206.93	-67.61	689.68	670.41	19.27	35.787	
2,700.00	2,620.67	2,642.95	2,626.99	13.44	9.84	-161.32	217.58	-60.93	716.07	695.99	20.08	35.668	
2,800.00	2,716.49	2,739.33	2,722.55	14.04	10.22	-161.02	228.22	-54.26	742.47	721.59	20.88	35.557	
2,900.00	2,812.30	2,835.72	2,818.10	14.64	10.61	-160.75	238.87	-47.58	768.89	747.20	21.69	35.453	
3,000.00	2,908.11	2,932.10	2,913.66	15.23	10.99	-160.49	249.51	-40.91	795.33	772.83	22.50	35.355	
3,100.00	3,003.92	3,028.48	3,009.22	15.83	11.37	-160.25	260.16	-34.23	821.78	798.47	23.30	35.263	
3,200.00	3,099.73	3,124.86	3,104.78	16.43	11.76	-160.02	270.80	-27.55	848.24	824.13	24.11	35.176	
3,300.00	3,195.54	3,221.25	3,200.34	17.03	12.14	-159.81	281.45	-20.88	874.72	849.79	24.92	35.095	
3,400.00	3,291.35	3,317.63	3,295.90	17.62	12.53	-159.61	292.09	-14.20	901.20	875.47	25.74	35.018	
3,500.00	3,387.16	3,414.01	3,391.46	18.22	12.91	-159.42	302.73	-7.53	927.70	901.15	26.55	34.945	
3,600.00	3,482.97	3,510.39	3,487.02	18.82	13.30	-159.24	313.38	-0.85	954.20	926.84	27.36	34.876	
3,700.00	3,578.78	3,606.77	3,582.58	19.42	13.68	-159.07	324.02	5.82	980.71	952.54	28.17	34.810	
3,800.00	3,674.60	3,703.16	3,678.14	20.02	14.07	-158.91	334.67	12.50	1,007.23	978.25	28.99	34.748	
3,900.00	3,770.41	3,799.54	3,773.70	20.62	14.45	-158.76	345.31	19.18	1,033.76	1,003.96	29.80	34.689	
4,000.00	3,866.22	3,895.92	3,869.26	21.22	14.84	-158.61	355.96	25.85	1,060.29	1,029.68	30.62	34.632	
4,100.00	3,962.03	3,992.30	3,964.82	21.82	15.22	-158.47	366.60	32.53	1,086.83	1,055.40	31.43	34.578	
4,200.00	4,057.84	4,088.68	4,060.38	22.42	15.61	-158.34	377.25	39.20	1,113.38	1,081.13	32.25	34.527	
4,300.00	4,153.65	4,185.07	4,155.94	23.02	15.99	-158.22	387.89	45.88	1,139.93	1,106.86	33.06	34.478	
4,400.00	4,249.46	4,281.45	4,251.50	23.62	16.38	-158.10	398.54	52.55	1,166.48	1,132.60	33.88	34.431	
4,500.00	4,345.27	4,377.83	4,347.06	24.22	16.76	-157.99	409.18	59.23	1,193.04	1,158.34	34.70	34.386	
4,600.00	4,441.08	4,474.21	4,442.62	24.82	17.15	-157.88	419.82	65.90	1,219.60	1,184.09	35.51	34.343	
4,700.00	4,536.89	4,570.60	4,538.18	25.42	17.53	-157.77	430.47	72.58	1,246.17	1,209.84	36.33	34.302	
4,800.00	4,632.70	4,666.98	4,633.74	26.02	17.92	-157.67	441.11	79.26	1,272.74	1,235.59	37.15	34.262	
4,900.00	4,728.52	4,763.36	4,729.30	26.62	18.30	-157.58	451.76	85.93	1,299.32	1,261.35	37.97	34.224	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design													S32-T2N-R68W - HWY52 4D-32H-O268 - OH - PLAN #2		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						
5,000.00	4,824.33	4,859.74	4,824.86	27.22	18.69	-157.49	462.40	92.61	1,325.89	1,287.11	38.78	34.187						
5,100.00	4,920.14	4,956.12	4,920.42	27.82	19.07	-157.40	473.05	99.28	1,352.47	1,312.87	39.60	34.152						
5,200.00	5,015.95	5,052.51	5,015.98	28.42	19.46	-157.31	483.69	105.96	1,379.06	1,338.64	40.42	34.118						
5,300.00	5,111.76	5,148.89	5,111.54	29.02	19.84	-157.23	494.34	112.63	1,405.64	1,364.40	41.24	34.085						
5,400.00	5,207.57	5,245.27	5,207.10	29.62	20.23	-157.15	504.98	119.31	1,432.23	1,390.17	42.06	34.054						
5,500.00	5,303.38	5,341.65	5,302.66	30.22	20.62	-157.08	515.63	125.99	1,458.82	1,415.95	42.88	34.023						
5,600.00	5,399.19	5,438.03	5,398.21	30.82	21.00	-157.00	526.27	132.66	1,485.42	1,441.72	43.70	33.994 SF						

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4E-32H-O268 - OH - PLAN #2													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	-89.66	1.07	-180.18	180.19					
100.00	100.00	100.00	100.00	0.14	0.14	-89.66	1.07	-180.18	180.19	179.91	0.28	652.791		
200.00	200.00	200.00	200.00	0.50	0.50	-89.66	1.07	-180.18	180.19	179.19	0.99	181.462 CC, ES		
300.00	299.98	299.98	299.98	0.84	0.85	120.80	1.07	-180.18	181.07	179.38	1.70	106.736		
350.00	349.93	349.93	349.93	1.02	1.03	121.37	1.07	-180.18	182.20	180.15	2.05	88.963		
400.00	399.85	399.85	399.85	1.19	1.21	135.63	1.07	-180.18	184.01	181.61	2.40	76.549		
500.00	499.55	499.55	499.55	1.55	1.57	152.54	1.07	-180.18	190.33	187.21	3.12	60.952		
600.00	598.97	598.97	598.97	1.93	1.93	161.67	1.07	-180.18	200.22	196.37	3.85	52.035		
700.00	698.00	702.05	702.03	2.32	2.30	167.78	2.50	-179.06	212.71	208.12	4.59	46.368		
800.00	796.50	804.84	804.66	2.73	2.66	172.81	6.82	-175.66	226.94	221.61	5.33	42.574		
900.00	894.36	907.14	906.55	3.17	3.03	177.35	14.00	-170.02	243.15	237.07	6.08	40.010		
1,000.00	991.47	1,008.81	1,007.42	3.64	3.41	-178.39	23.97	-162.20	261.55	254.72	6.83	38.302		
1,093.81	1,081.77	1,100.55	1,098.16	4.12	3.75	-174.84	34.64	-153.82	281.39	273.86	7.53	37.392		
1,100.00	1,087.70	1,106.54	1,104.08	4.15	3.77	-174.70	35.34	-153.27	282.81	275.23	7.58	37.330		
1,200.00	1,183.51	1,203.28	1,199.74	4.69	4.15	-172.64	46.63	-144.39	305.92	297.61	8.32	36.784		
1,300.00	1,279.32	1,300.01	1,295.41	5.25	4.52	-170.87	57.93	-135.52	329.37	320.30	9.07	36.313		
1,400.00	1,375.13	1,396.75	1,391.07	5.81	4.90	-169.33	69.23	-126.65	353.07	343.24	9.83	35.901		
1,500.00	1,470.94	1,493.49	1,486.74	6.38	5.29	-167.98	80.52	-117.77	376.99	366.38	10.61	35.536		
1,600.00	1,566.75	1,590.23	1,582.41	6.96	5.67	-166.80	91.82	-108.90	401.08	389.69	11.39	35.210		
1,700.00	1,662.56	1,686.97	1,678.07	7.54	6.06	-165.74	103.12	-100.03	425.31	413.13	12.18	34.918		
1,800.00	1,758.38	1,783.71	1,773.74	8.12	6.45	-164.81	114.41	-91.16	449.67	436.69	12.98	34.655		
1,900.00	1,854.19	1,880.44	1,869.40	8.71	6.84	-163.96	125.71	-82.28	474.13	460.35	13.78	34.416		
2,000.00	1,950.00	1,977.18	1,965.07	9.30	7.24	-163.20	137.01	-73.41	498.67	484.09	14.58	34.198		
2,100.00	2,045.81	2,073.92	2,060.73	9.88	7.63	-162.51	148.30	-64.54	523.29	507.90	15.39	33.999		
2,200.00	2,141.62	2,170.66	2,156.40	10.48	8.02	-161.89	159.60	-55.66	547.98	531.77	16.20	33.816		
2,300.00	2,237.43	2,267.40	2,252.07	11.07	8.42	-161.31	170.90	-46.79	572.72	555.70	17.02	33.647		
2,400.00	2,333.24	2,364.13	2,347.73	11.66	8.81	-160.79	182.19	-37.92	597.51	579.67	17.84	33.492		
2,500.00	2,429.05	2,460.87	2,443.40	12.25	9.21	-160.30	193.49	-29.04	622.34	603.68	18.66	33.348		
2,600.00	2,524.86	2,557.61	2,539.06	12.85	9.60	-159.86	204.79	-20.17	647.22	627.73	19.49	33.214		
2,700.00	2,620.67	2,654.35	2,634.73	13.44	10.00	-159.44	216.09	-11.30	672.12	651.81	20.31	33.089		
2,800.00	2,716.49	2,751.09	2,730.39	14.04	10.39	-159.06	227.38	-2.43	697.06	675.92	21.14	32.973		
2,900.00	2,812.30	2,847.83	2,826.06	14.64	10.79	-158.70	238.68	6.45	722.03	700.06	21.97	32.865		
3,000.00	2,908.11	2,944.56	2,921.73	15.23	11.19	-158.37	249.98	15.32	747.02	724.22	22.80	32.763		
3,100.00	3,003.92	3,041.30	3,017.39	15.83	11.58	-158.05	261.27	24.19	772.03	748.40	23.63	32.667		
3,200.00	3,099.73	3,138.04	3,113.06	16.43	11.98	-157.76	272.57	33.07	797.06	772.60	24.47	32.578		
3,300.00	3,195.54	3,234.78	3,208.72	17.03	12.38	-157.49	283.87	41.94	822.11	796.81	25.30	32.493		
3,400.00	3,291.35	3,331.52	3,304.39	17.62	12.78	-157.23	295.16	50.81	847.18	821.04	26.14	32.413		
3,500.00	3,387.16	3,428.25	3,400.05	18.22	13.18	-156.98	306.46	59.69	872.26	845.29	26.97	32.338		
3,600.00	3,482.97	3,524.99	3,495.72	18.82	13.57	-156.75	317.76	68.56	897.36	869.55	27.81	32.267		
3,700.00	3,578.78	3,621.73	3,591.39	19.42	13.97	-156.54	329.05	77.43	922.47	893.82	28.65	32.199		
3,800.00	3,674.60	3,718.47	3,687.05	20.02	14.37	-156.33	340.35	86.31	947.59	918.11	29.49	32.135		
3,900.00	3,770.41	3,815.21	3,782.72	20.62	14.77	-156.13	351.65	95.18	972.73	942.40	30.33	32.074		
4,000.00	3,866.22	3,911.95	3,878.38	21.22	15.17	-155.95	362.94	104.05	997.87	966.70	31.17	32.016		
4,100.00	3,962.03	4,008.68	3,974.05	21.82	15.57	-155.77	374.24	112.92	1,023.02	991.01	32.01	31.961		
4,200.00	4,057.84	4,105.42	4,069.71	22.42	15.97	-155.60	385.54	121.80	1,048.18	1,015.33	32.85	31.908		
4,300.00	4,153.65	4,202.16	4,165.38	23.02	16.36	-155.44	396.83	130.67	1,073.35	1,039.66	33.69	31.858		
4,400.00	4,249.46	4,298.90	4,261.05	23.62	16.76	-155.29	408.13	139.54	1,098.53	1,063.99	34.53	31.810		
4,500.00	4,345.27	4,395.64	4,356.71	24.22	17.16	-155.15	419.43	148.42	1,123.71	1,088.33	35.38	31.764		
4,600.00	4,441.08	4,492.38	4,452.38	24.82	17.56	-155.01	430.73	157.29	1,148.90	1,112.68	36.22	31.720		
4,700.00	4,536.89	4,589.11	4,548.04	25.42	17.96	-154.87	442.02	166.16	1,174.10	1,137.03	37.06	31.678		
4,800.00	4,632.70	4,685.85	4,643.71	26.02	18.36	-154.74	453.32	175.04	1,199.30	1,161.39	37.91	31.637		
4,900.00	4,728.52	4,782.59	4,739.37	26.62	18.76	-154.62	464.62	183.91	1,224.50	1,185.75	38.75	31.598		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design													S32-T2N-R68W - HWY52 4E-32H-O268 - OH - PLAN #2		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					
5,000.00	4,824.33	4,879.33	4,835.04	27.22	19.16	-154.50	475.91	192.78	1,249.72	1,210.12	39.60	31.561					
5,100.00	4,920.14	4,976.07	4,930.71	27.82	19.56	-154.39	487.21	201.66	1,274.93	1,234.49	40.44	31.525					
5,200.00	5,015.95	5,072.80	5,026.37	28.42	19.96	-154.28	498.51	210.53	1,300.16	1,258.87	41.29	31.491					
5,300.00	5,111.76	5,169.54	5,122.04	29.02	20.36	-154.18	509.80	219.40	1,325.38	1,283.25	42.13	31.458					
5,400.00	5,207.57	5,266.28	5,217.70	29.62	20.76	-154.08	521.10	228.27	1,350.61	1,307.63	42.98	31.426					
5,500.00	5,303.38	5,363.02	5,313.37	30.22	21.16	-153.98	532.40	237.15	1,375.84	1,332.02	43.82	31.395					
5,600.00	5,399.19	5,459.76	5,409.03	30.82	21.55	-153.89	543.69	246.02	1,401.08	1,356.41	44.67	31.365					
5,700.00	5,495.00	5,556.50	5,504.70	31.42	21.95	-153.79	554.99	254.89	1,426.32	1,380.80	45.52	31.336					
5,800.00	5,590.81	5,653.23	5,600.37	32.02	22.35	-153.71	566.29	263.77	1,451.56	1,405.20	46.36	31.308					
5,900.00	5,686.63	5,749.97	5,696.03	32.62	22.75	-153.62	577.58	272.64	1,476.81	1,429.60	47.21	31.282 SF					

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4F-32H-O268 - OH - PLAN #2													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	-89.64	1.05	-170.11	170.11					
100.00	100.00	100.00	100.00	0.14	0.14	-89.64	1.05	-170.11	170.11	169.84	0.28	616.301		
200.00	200.00	200.00	200.00	0.50	0.50	-89.64	1.05	-170.11	170.11	169.12	0.99	171.318 CC, ES		
300.00	299.98	299.85	299.83	0.84	0.86	121.43	2.79	-170.11	171.04	169.34	1.70	100.870		
350.00	349.93	349.56	349.49	1.02	1.04	122.74	4.95	-170.11	172.28	170.23	2.05	84.161		
400.00	399.85	402.10	401.94	1.19	1.23	138.04	7.89	-169.67	173.92	171.51	2.41	72.026		
500.00	499.55	507.04	506.59	1.55	1.61	157.35	14.88	-166.15	177.90	174.72	3.18	56.015		
600.00	598.97	611.70	610.66	1.93	1.99	169.32	23.34	-159.13	182.96	179.01	3.95	46.318		
700.00	698.00	716.05	714.00	2.32	2.39	178.20	33.24	-148.63	189.36	184.63	4.73	40.031		
800.00	796.50	816.62	813.20	2.73	2.79	-174.73	43.89	-135.90	197.86	192.37	5.48	36.073		
900.00	894.36	915.15	910.34	3.17	3.20	-169.26	54.40	-123.22	210.28	204.04	6.24	33.711		
1,000.00	991.47	1,013.35	1,007.16	3.64	3.60	-165.04	64.88	-110.59	226.44	219.43	7.01	32.299		
1,093.81	1,081.77	1,105.08	1,097.60	4.12	3.99	-162.03	74.67	-98.78	244.74	236.99	7.75	31.577		
1,100.00	1,087.70	1,111.12	1,103.56	4.15	4.01	-161.93	75.31	-98.01	246.04	238.24	7.80	31.530		
1,200.00	1,183.51	1,208.67	1,199.73	4.69	4.42	-160.52	85.72	-85.46	267.18	258.58	8.60	31.074		
1,300.00	1,279.32	1,306.21	1,295.90	5.25	4.83	-159.31	96.13	-72.90	288.44	279.04	9.41	30.668		
1,400.00	1,375.13	1,403.76	1,392.07	5.81	5.24	-158.27	106.53	-60.35	309.81	299.59	10.22	30.305		
1,500.00	1,470.94	1,501.30	1,488.25	6.38	5.66	-157.37	116.94	-47.80	331.27	320.22	11.05	29.980		
1,600.00	1,566.75	1,598.85	1,584.42	6.96	6.07	-156.57	127.35	-35.25	352.80	340.91	11.88	29.687		
1,700.00	1,662.56	1,696.39	1,680.59	7.54	6.49	-155.87	137.76	-22.70	374.38	361.66	12.72	29.424		
1,800.00	1,758.38	1,793.94	1,776.76	8.12	6.91	-155.24	148.16	-10.15	396.01	382.44	13.57	29.185		
1,900.00	1,854.19	1,891.48	1,872.94	8.71	7.32	-154.68	158.57	2.40	417.69	403.27	14.42	28.968		
2,000.00	1,950.00	1,989.03	1,969.11	9.30	7.74	-154.17	168.98	14.95	439.39	424.12	15.27	28.771		
2,100.00	2,045.81	2,086.57	2,065.28	9.88	8.16	-153.71	179.39	27.50	461.13	445.00	16.13	28.590		
2,200.00	2,141.62	2,184.12	2,161.46	10.48	8.58	-153.29	189.80	40.06	482.89	465.91	16.99	28.425		
2,300.00	2,237.43	2,281.66	2,257.63	11.07	8.99	-152.91	200.20	52.61	504.68	486.83	17.85	28.272		
2,400.00	2,333.24	2,379.21	2,353.80	11.66	9.41	-152.56	210.61	65.16	526.49	507.77	18.71	28.132		
2,500.00	2,429.05	2,476.75	2,449.97	12.25	9.83	-152.24	221.02	77.71	548.31	528.73	19.58	28.002		
2,600.00	2,524.86	2,574.30	2,546.15	12.85	10.25	-151.94	231.43	90.26	570.15	549.70	20.45	27.882		
2,700.00	2,620.67	2,671.84	2,642.32	13.44	10.67	-151.66	241.83	102.81	592.00	570.68	21.32	27.770		
2,800.00	2,716.49	2,769.39	2,738.49	14.04	11.09	-151.41	252.24	115.36	613.86	591.67	22.19	27.665		
2,900.00	2,812.30	2,866.93	2,834.66	14.64	11.51	-151.17	262.65	127.91	635.74	612.68	23.06	27.568		
3,000.00	2,908.11	2,964.48	2,930.84	15.23	11.93	-150.94	273.06	140.46	657.62	633.69	23.93	27.477		
3,100.00	3,003.92	3,062.02	3,027.01	15.83	12.34	-150.73	283.47	153.01	679.51	654.71	24.81	27.391		
3,200.00	3,099.73	3,159.57	3,123.18	16.43	12.76	-150.54	293.87	165.57	701.41	675.73	25.68	27.311		
3,300.00	3,195.54	3,257.11	3,219.36	17.03	13.18	-150.36	304.28	178.12	723.32	696.77	26.56	27.236		
3,400.00	3,291.35	3,354.66	3,315.53	17.62	13.60	-150.18	314.69	190.67	745.24	717.80	27.43	27.164		
3,500.00	3,387.16	3,452.20	3,411.70	18.22	14.02	-150.02	325.10	203.22	767.16	738.85	28.31	27.097		
3,600.00	3,482.97	3,549.75	3,507.87	18.82	14.44	-149.87	335.51	215.77	789.09	759.90	29.19	27.034		
3,700.00	3,578.78	3,647.29	3,604.05	19.42	14.86	-149.72	345.91	228.32	811.02	780.95	30.07	26.974		
3,800.00	3,674.60	3,744.84	3,700.22	20.02	15.28	-149.58	356.32	240.87	832.96	802.01	30.95	26.916		
3,900.00	3,770.41	3,842.38	3,796.39	20.62	15.70	-149.45	366.73	253.42	854.90	823.07	31.83	26.862		
4,000.00	3,866.22	3,939.93	3,892.56	21.22	16.12	-149.33	377.14	265.97	876.84	844.14	32.70	26.811		
4,100.00	3,962.03	4,037.47	3,988.74	21.82	16.54	-149.21	387.54	278.52	898.79	865.21	33.58	26.762		
4,200.00	4,057.84	4,135.02	4,084.91	22.42	16.96	-149.10	397.95	291.08	920.74	886.28	34.47	26.715		
4,300.00	4,153.65	4,232.57	4,181.08	23.02	17.38	-148.99	408.36	303.63	942.70	907.35	35.35	26.671		
4,400.00	4,249.46	4,330.11	4,277.26	23.62	17.80	-148.89	418.77	316.18	964.66	928.43	36.23	26.628		
4,500.00	4,345.27	4,427.66	4,373.43	24.22	18.22	-148.79	429.18	328.73	986.62	949.51	37.11	26.587		
4,600.00	4,441.08	4,525.20	4,469.60	24.82	18.64	-148.69	439.58	341.28	1,008.58	970.59	37.99	26.548		
4,700.00	4,536.89	4,622.75	4,565.77	25.42	19.06	-148.60	449.99	353.83	1,030.55	991.68	38.87	26.511		
4,800.00	4,632.70	4,720.29	4,661.95	26.02	19.48	-148.52	460.40	366.38	1,052.52	1,012.76	39.75	26.475		
4,900.00	4,728.52	4,817.84	4,758.12	26.62	19.90	-148.44	470.81	378.93	1,074.49	1,033.85	40.64	26.441		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4F-32H-O268 - OH - PLAN #2													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	
5,000.00	4,824.33	4,915.38	4,854.29	27.22	20.32	-148.36	481.21	391.48	1,096.46	1,054.94	41.52	26.408		
5,100.00	4,920.14	5,012.93	4,950.46	27.82	20.74	-148.28	491.62	404.03	1,118.44	1,076.04	42.40	26.376		
5,200.00	5,015.95	5,110.47	5,046.64	28.42	21.16	-148.21	502.03	416.59	1,140.42	1,097.13	43.29	26.346		
5,300.00	5,111.76	5,208.02	5,142.81	29.02	21.58	-148.14	512.44	429.14	1,162.39	1,118.22	44.17	26.317		
5,400.00	5,207.57	5,305.56	5,238.98	29.62	22.00	-148.07	522.85	441.69	1,184.37	1,139.32	45.05	26.288		
5,500.00	5,303.38	5,403.11	5,335.16	30.22	22.42	-148.00	533.25	454.24	1,206.36	1,160.42	45.94	26.261		
5,600.00	5,399.19	5,500.65	5,431.33	30.82	22.84	-147.94	543.66	466.79	1,228.34	1,181.52	46.82	26.235		
5,700.00	5,495.00	5,598.20	5,527.50	31.42	23.26	-147.88	554.07	479.34	1,250.32	1,202.62	47.70	26.210		
5,800.00	5,590.81	5,695.74	5,623.67	32.02	23.68	-147.82	564.48	491.89	1,272.31	1,223.72	48.59	26.185		
5,900.00	5,686.63	5,793.29	5,719.85	32.62	24.10	-147.77	574.89	504.44	1,294.30	1,244.82	49.47	26.161		
6,000.00	5,782.44	5,890.83	5,816.02	33.22	24.52	-147.71	585.29	516.99	1,316.28	1,265.93	50.36	26.139		
6,100.00	5,878.25	5,988.38	5,912.19	33.82	24.94	-147.66	595.70	529.54	1,338.27	1,287.03	51.24	26.116		
6,200.00	5,974.06	6,085.92	6,008.36	34.42	25.36	-147.61	606.11	542.10	1,360.26	1,308.14	52.13	26.095		
6,300.00	6,069.87	6,183.47	6,104.54	35.03	25.78	-147.56	616.52	554.65	1,382.25	1,329.24	53.01	26.074		
6,400.00	6,165.68	6,281.01	6,200.71	35.63	26.21	-147.51	626.92	567.20	1,404.25	1,350.35	53.90	26.054		
6,500.00	6,261.49	6,378.56	6,296.88	36.23	26.63	-147.46	637.33	579.75	1,426.24	1,371.46	54.78	26.035		
6,600.00	6,357.30	6,476.10	6,393.06	36.83	27.05	-147.42	647.74	592.30	1,448.23	1,392.57	55.67	26.016		
6,700.00	6,453.11	6,565.05	6,480.00	37.43	30.39	-172.10	-324.23	743.33	1,461.14	1,414.82	46.32	31.547		
6,800.00	6,548.92	6,660.12	6,560.00	38.03	30.41	-171.87	-329.29	743.32	1,409.45	1,360.89	48.56	29.023		
6,900.00	6,644.73	6,755.19	6,650.00	38.63	30.44	-171.63	-334.36	743.32	1,363.14	1,312.34	50.80	26.833		
7,000.00	6,740.55	6,850.25	6,750.00	39.23	30.47	-171.39	-339.43	743.31	1,322.76	1,269.78	52.98	24.969		
7,100.00	6,836.36	6,946.32	6,850.00	39.83	30.50	-171.16	-344.49	743.30	1,288.87	1,233.84	55.03	23.421		
7,188.78	6,921.42	7,031.82	6,930.00	40.37	30.52	-170.95	-348.99	743.30	1,264.64	1,207.94	56.70	22.304		
7,200.00	6,932.17	7,042.30	6,950.00	40.44	30.52	-173.65	-349.47	743.30	1,261.98	1,205.08	56.90	22.180		
7,250.00	6,980.19	7,090.32	6,990.00	40.72	30.52	-173.55	-349.49	743.30	1,251.11	1,193.39	57.72	21.675		
7,300.00	7,028.16	7,138.85	7,050.00	40.99	30.50	-160.72	-346.03	743.30	1,241.91	1,183.47	58.44	21.251		
7,350.00	7,075.86	7,186.93	7,090.00	41.24	30.47	-149.19	-339.10	743.31	1,234.44	1,175.39	59.05	20.905		
7,400.00	7,123.05	7,233.58	7,140.00	41.47	30.41	-139.54	-328.75	743.32	1,228.69	1,169.15	59.54	20.635		
7,450.00	7,169.51	7,279.86	7,180.00	41.68	30.34	-131.66	-315.03	743.34	1,224.64	1,164.72	59.92	20.438		
7,500.00	7,215.00	7,325.83	7,230.00	41.87	30.25	-125.21	-298.00	743.36	1,222.22	1,162.04	60.18	20.309		
7,550.00	7,259.31	7,371.57	7,270.00	42.04	30.15	-119.81	-277.74	743.38	1,221.30	1,160.97	60.33	20.243		
7,557.80	7,266.11	7,378.12	7,275.00	42.06	30.13	-119.04	-274.29	743.38	1,221.29	1,160.94	60.34	20.238		
7,600.00	7,302.22	7,414.18	7,320.00	42.19	30.04	-115.17	-254.36	743.41	1,221.74	1,161.36	60.38	20.234 SF		
7,650.00	7,343.52	7,455.79	7,360.00	42.32	29.92	-111.10	-227.96	743.44	1,223.36	1,163.01	60.35	20.271		
7,700.00	7,383.01	7,495.50	7,400.00	42.44	29.81	-107.44	-198.68	743.47	1,225.96	1,165.72	60.24	20.351		
7,750.00	7,420.50	7,532.48	7,430.00	42.54	29.72	-104.12	-166.65	743.51	1,229.31	1,169.25	60.06	20.467		
7,800.00	7,455.80	7,572.87	7,470.00	42.63	29.63	-101.09	-132.04	743.55	1,233.19	1,173.34	59.85	20.604		
7,850.00	7,488.75	7,605.84	7,500.00	42.70	29.59	-98.31	-95.02	743.59	1,237.36	1,177.76	59.61	20.759		
7,900.00	7,519.17	7,636.58	7,530.00	42.76	29.58	-95.79	-55.75	743.64	1,241.59	1,182.26	59.34	20.925		
7,950.00	7,546.94	7,663.78	7,559.96	42.81	29.58	-93.55	-15.95	743.68	1,245.67	1,186.59	59.08	21.083		
8,000.00	7,571.90	7,688.29	7,588.79	42.84	29.60	-91.66	18.51	743.56	1,249.58	1,190.72	58.86	21.229		
8,050.00	7,593.93	7,715.36	7,615.03	42.87	29.63	-89.97	52.32	743.24	1,253.32	1,194.68	58.64	21.374		
8,100.00	7,612.94	7,734.00	7,631.01	42.88	29.67	-88.35	90.35	742.63	1,256.83	1,198.44	58.39	21.525		
8,150.00	7,628.82	7,750.97	7,646.06	42.89	29.70	-87.11	117.93	742.02	1,260.02	1,201.81	58.21	21.645		
8,200.00	7,641.51	7,763.40	7,658.98	42.89	29.73	-85.91	149.70	741.13	1,262.88	1,204.86	58.02	21.765		
8,250.00	7,650.93	7,770.00	7,668.51	42.88	29.77	-84.74	187.66	739.81	1,265.37	1,207.56	57.81	21.889		
8,300.00	7,657.04	7,775.32	7,672.90	42.87	29.80	-83.99	211.11	738.85	1,267.35	1,209.63	57.73	21.954		
8,350.00	7,659.82	7,778.00	7,675.27	42.85	29.82	-83.36	234.89	737.75	1,268.90	1,211.22	57.68	21.999		
8,366.42	7,660.00	7,783.43	7,680.17	42.84	29.84	-83.04	250.28	736.97	1,269.26	1,211.66	57.60	22.035		
8,400.00	7,660.00	7,782.62	7,680.00	42.83	29.86	-82.67	269.39	735.93	1,270.18	1,212.62	57.56	22.068		
8,500.00	7,660.00	7,780.00	7,670.19	42.81	29.91	-81.42	325.36	732.37	1,275.31	1,217.91	57.40	22.220		
8,600.00	7,660.00	7,780.00	7,670.19	42.80	29.94	-80.28	368.16	729.07	1,284.32	1,226.97	57.35	22.395		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4F-32H-O268 - OH - PLAN #2													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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)	Uncertainty Axis	Factor		
8,700.00	7,660.00	7,600.00	7,416.05	42.81	29.97	-79.03	409.05	725.40	1,297.65	1,240.35	57.30	22.646		
8,800.00	7,660.00	7,550.00	7,384.77	42.83	29.98	-77.67	447.83	721.37	1,315.60	1,258.35	57.24	22.982		
8,900.00	7,660.00	7,514.93	7,361.26	42.88	29.98	-76.66	473.68	718.33	1,338.31	1,280.88	57.44	23.301		
9,000.00	7,660.00	7,478.30	7,335.41	42.96	29.98	-75.57	499.40	714.99	1,365.96	1,308.33	57.62	23.704		
9,100.00	7,660.00	7,450.00	7,314.55	43.08	29.97	-74.70	518.34	712.30	1,398.51	1,340.52	57.99	24.118		
9,200.00	7,660.00	7,415.28	7,287.99	43.25	29.96	-73.60	540.42	708.86	1,435.82	1,377.58	58.24	24.652		
9,300.00	7,660.00	7,400.00	7,275.96	43.48	29.95	-73.11	549.72	707.30	1,477.89	1,419.01	58.88	25.100		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4G-32H-O268 - OH - PLAN #2													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	-89.72	0.77	-160.04	160.04					
100.00	100.00	100.00	100.00	0.14	0.14	-89.72	0.77	-160.04	160.04	159.76	0.28	579.805		
200.00	200.00	200.00	200.00	0.50	0.50	-89.72	0.77	-160.04	160.04	159.05	0.99	161.173 CC, ES		
300.00	299.98	299.98	299.98	0.84	0.85	120.80	0.77	-160.04	160.93	159.23	1.70	94.860		
350.00	349.93	349.93	349.93	1.02	1.03	121.44	0.77	-160.04	162.05	160.01	2.05	79.126		
400.00	399.85	399.85	399.85	1.19	1.21	135.79	0.77	-160.04	163.87	161.47	2.40	68.170		
500.00	499.55	499.55	499.55	1.55	1.57	152.85	0.77	-160.04	170.21	167.09	3.12	54.508		
600.00	598.97	598.97	598.97	1.93	1.93	162.09	0.77	-160.04	180.12	176.27	3.85	46.813		
700.00	698.00	698.00	698.00	2.32	2.28	167.83	0.77	-160.04	193.57	189.00	4.57	42.323		
800.00	796.50	802.01	801.98	2.73	2.65	172.08	1.82	-158.56	209.25	203.93	5.32	39.341		
900.00	894.36	906.21	906.03	3.17	3.02	175.83	5.06	-153.99	225.83	219.76	6.07	37.193		
1,000.00	991.47	1,010.41	1,009.80	3.64	3.40	179.31	10.48	-146.33	243.45	236.62	6.83	35.630		
1,093.81	1,081.77	1,108.09	1,106.71	4.12	3.76	-177.56	17.55	-136.36	261.04	253.48	7.55	34.555		
1,100.00	1,087.70	1,114.53	1,113.08	4.15	3.78	-177.42	18.08	-135.61	262.23	254.62	7.61	34.476		
1,200.00	1,183.51	1,218.81	1,215.98	4.69	4.18	-175.09	27.86	-121.81	280.44	272.06	8.38	33.470		
1,300.00	1,279.32	1,319.75	1,315.03	5.25	4.58	-172.63	39.11	-105.94	297.12	287.97	9.15	32.475		
1,400.00	1,375.13	1,417.64	1,411.00	5.81	4.98	-170.45	50.24	-90.23	314.03	304.11	9.92	31.655		
1,500.00	1,470.94	1,515.52	1,506.97	6.38	5.39	-168.50	61.38	-74.52	331.35	320.64	10.71	30.940		
1,600.00	1,566.75	1,613.40	1,602.93	6.96	5.80	-166.73	72.51	-58.80	349.00	337.49	11.51	30.311		
1,700.00	1,662.56	1,711.28	1,698.90	7.54	6.22	-165.14	83.65	-43.09	366.95	354.62	12.33	29.754		
1,800.00	1,758.38	1,809.16	1,794.87	8.12	6.64	-163.69	94.79	-27.38	385.15	371.98	13.16	29.257		
1,900.00	1,854.19	1,907.05	1,890.84	8.71	7.07	-162.37	105.92	-11.67	403.57	389.56	14.01	28.811		
2,000.00	1,950.00	2,004.93	1,986.81	9.30	7.50	-161.17	117.06	4.05	422.17	407.31	14.86	28.411		
2,100.00	2,045.81	2,102.81	2,082.78	9.88	7.93	-160.07	128.19	19.76	440.95	425.23	15.72	28.048		
2,200.00	2,141.62	2,200.69	2,178.75	10.48	8.37	-159.06	139.33	35.47	459.86	443.27	16.59	27.720		
2,300.00	2,237.43	2,298.57	2,274.72	11.07	8.80	-158.13	150.47	51.18	478.91	461.44	17.47	27.420		
2,400.00	2,333.24	2,396.46	2,370.68	11.66	9.24	-157.27	161.60	66.90	498.07	479.72	18.35	27.147		
2,500.00	2,429.05	2,494.34	2,466.65	12.25	9.68	-156.47	172.74	82.61	517.33	498.09	19.23	26.896		
2,600.00	2,524.86	2,592.22	2,562.62	12.85	10.12	-155.73	183.87	98.32	536.68	516.55	20.13	26.666		
2,700.00	2,620.67	2,690.10	2,658.59	13.44	10.56	-155.05	195.01	114.03	556.11	535.08	21.02	26.453		
2,800.00	2,716.49	2,787.98	2,754.56	14.04	11.00	-154.40	206.14	129.74	575.61	553.69	21.92	26.257		
2,900.00	2,812.30	2,885.87	2,850.53	14.64	11.44	-153.80	217.28	145.46	595.18	572.35	22.83	26.075		
3,000.00	2,908.11	2,983.75	2,946.50	15.23	11.88	-153.24	228.42	161.17	614.80	591.07	23.73	25.906		
3,100.00	3,003.92	3,081.63	3,042.47	15.83	12.33	-152.71	239.55	176.88	634.48	609.84	24.64	25.749		
3,200.00	3,099.73	3,179.51	3,138.43	16.43	12.77	-152.22	250.69	192.59	654.21	628.66	25.55	25.602		
3,300.00	3,195.54	3,277.39	3,234.40	17.03	13.22	-151.75	261.82	208.31	673.98	647.52	26.47	25.465		
3,400.00	3,291.35	3,375.27	3,330.37	17.62	13.66	-151.31	272.96	224.02	693.80	666.41	27.38	25.337		
3,500.00	3,387.16	3,473.16	3,426.34	18.22	14.11	-150.90	284.09	239.73	713.65	685.34	28.30	25.216		
3,600.00	3,482.97	3,571.04	3,522.31	18.82	14.55	-150.50	295.23	255.44	733.53	704.31	29.22	25.103		
3,700.00	3,578.78	3,668.92	3,618.28	19.42	15.00	-150.13	306.37	271.16	753.45	723.30	30.14	24.997		
3,800.00	3,674.60	3,766.80	3,714.25	20.02	15.44	-149.78	317.50	286.87	773.39	742.33	31.06	24.897		
3,900.00	3,770.41	3,864.68	3,810.21	20.62	15.89	-149.44	328.64	302.58	793.36	761.38	31.99	24.802		
4,000.00	3,866.22	3,962.57	3,906.18	21.22	16.33	-149.12	339.77	318.29	813.36	780.45	32.91	24.712		
4,100.00	3,962.03	4,060.45	4,002.15	21.82	16.78	-148.82	350.91	334.00	833.38	799.54	33.84	24.627		
4,200.00	4,057.84	4,158.33	4,098.12	22.42	17.23	-148.53	362.04	349.72	853.42	818.65	34.77	24.547		
4,300.00	4,153.65	4,256.21	4,194.09	23.02	17.68	-148.25	373.18	365.43	873.48	837.79	35.69	24.471		
4,400.00	4,249.46	4,354.09	4,290.06	23.62	18.12	-147.99	384.32	381.14	893.56	856.94	36.62	24.398		
4,500.00	4,345.27	4,451.98	4,386.03	24.22	18.57	-147.74	395.45	396.85	913.66	876.11	37.55	24.329		
4,600.00	4,441.08	4,549.86	4,482.00	24.82	19.02	-147.50	406.59	412.57	933.77	895.29	38.48	24.264		
4,700.00	4,536.89	4,647.74	4,577.96	25.42	19.47	-147.27	417.72	428.28	953.90	914.49	39.42	24.201		
4,800.00	4,632.70	4,745.62	4,673.93	26.02	19.91	-147.04	428.86	443.99	974.05	933.70	40.35	24.141		
4,900.00	4,728.52	4,843.50	4,769.90	26.62	20.36	-146.83	440.00	459.70	994.20	952.92	41.28	24.084		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4G-32H-O268 - OH - PLAN #2												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
5,000.00	4,824.33	4,941.39	4,865.87	27.22	20.81	-146.63	451.13	475.42	1,014.37	972.16	42.21	24.029	
5,100.00	4,920.14	5,039.27	4,961.84	27.82	21.26	-146.43	462.27	491.13	1,034.55	991.41	43.15	23.977	
5,200.00	5,015.95	5,137.15	5,057.81	28.42	21.71	-146.24	473.40	506.84	1,054.75	1,010.66	44.08	23.927	
5,300.00	5,111.76	5,235.03	5,153.78	29.02	22.15	-146.06	484.54	522.55	1,074.95	1,029.93	45.02	23.879	
5,400.00	5,207.57	5,332.91	5,249.75	29.62	22.60	-145.89	495.67	538.27	1,095.16	1,049.21	45.95	23.833	
5,500.00	5,303.38	5,430.80	5,345.71	30.22	23.05	-145.72	506.81	553.98	1,115.39	1,068.50	46.89	23.788	
5,600.00	5,399.19	5,528.68	5,441.68	30.82	23.50	-145.55	517.95	569.69	1,135.62	1,087.79	47.82	23.746	
5,700.00	5,495.00	5,626.56	5,537.65	31.42	23.95	-145.40	529.08	585.40	1,155.86	1,107.10	48.76	23.705	
5,800.00	5,590.81	5,724.44	5,633.62	32.02	24.40	-145.25	540.22	601.11	1,176.11	1,126.41	49.70	23.665	
5,900.00	5,686.63	5,822.32	5,729.59	32.62	24.85	-145.10	551.35	616.83	1,196.36	1,145.73	50.63	23.627	
6,000.00	5,782.44	5,920.21	5,825.56	33.22	25.30	-144.96	562.49	632.54	1,216.62	1,165.05	51.57	23.591	
6,100.00	5,878.25	6,018.09	5,921.53	33.82	25.74	-144.82	573.62	648.25	1,236.89	1,184.38	52.51	23.556	
6,200.00	5,974.06	6,115.97	6,017.50	34.42	26.19	-144.69	584.76	663.96	1,257.17	1,203.72	53.45	23.521	
6,300.00	6,069.87	6,213.85	6,113.46	35.03	26.64	-144.56	595.90	679.68	1,277.45	1,223.07	54.39	23.489	
6,400.00	6,165.68	6,311.73	6,209.43	35.63	27.09	-144.44	607.03	695.39	1,297.74	1,242.42	55.32	23.457	
6,500.00	6,261.49	6,409.62	6,305.40	36.23	27.54	-144.31	618.17	711.10	1,318.04	1,261.77	56.26	23.426	
6,600.00	6,357.30	6,507.50	6,401.37	36.83	27.99	-144.20	629.30	726.81	1,338.34	1,281.13	57.20	23.396	
6,700.00	6,453.11	6,605.38	6,497.34	37.43	28.44	-144.08	640.44	742.53	1,358.64	1,300.50	58.14	23.368	
6,800.00	6,548.92	6,703.26	6,593.31	38.03	28.89	-143.97	651.57	758.24	1,378.95	1,319.87	59.08	23.340	
6,900.00	6,644.73	6,801.13	6,685.00	38.63	29.34	-143.85	662.70	773.95	1,399.26	1,339.18	60.02	23.312	
7,000.00	6,740.55	6,898.95	6,785.00	39.23	29.79	-143.74	673.83	789.66	1,419.57	1,358.49	60.96	23.284	
7,100.00	6,836.36	6,996.77	6,885.00	39.83	30.24	-143.62	684.96	805.37	1,439.88	1,377.80	61.90	23.256	
7,188.78	6,921.42	7,084.83	6,975.00	40.43	30.69	-143.51	696.09	821.08	1,460.19	1,396.91	62.84	23.228	
7,200.00	6,932.17	7,096.58	6,985.00	40.44	31.96	-173.99	-350.73	936.97	1,174.16	1,120.01	54.15	21.682	
7,250.00	6,980.19	7,144.60	7,035.00	40.72	31.96	-173.98	-350.76	936.97	1,154.97	1,099.65	55.32	20.877	
7,300.00	7,028.16	7,192.57	7,085.00	40.99	31.95	-161.88	-347.31	936.97	1,137.43	1,081.02	56.41	20.164	
7,350.00	7,075.86	7,240.54	7,135.00	41.24	31.92	-151.03	-340.40	936.97	1,121.69	1,064.29	57.40	19.542	
7,400.00	7,123.05	7,288.51	7,185.00	41.47	31.89	-142.00	-330.07	936.97	1,107.83	1,049.55	58.28	19.008	
7,450.00	7,169.51	7,335.97	7,235.00	41.68	31.84	-134.70	-316.36	936.97	1,095.90	1,036.85	59.05	18.559	
7,500.00	7,215.00	7,383.44	7,285.00	41.87	31.78	-128.76	-299.34	936.97	1,085.89	1,026.20	59.69	18.192	
7,550.00	7,259.31	7,430.91	7,335.00	42.04	31.72	-123.83	-279.10	936.97	1,077.75	1,017.54	60.22	17.898	
7,600.00	7,302.22	7,478.38	7,385.00	42.19	31.66	-119.60	-255.73	936.97	1,071.39	1,010.78	60.62	17.675	
7,650.00	7,343.52	7,525.85	7,435.00	42.32	31.60	-115.88	-229.34	936.97	1,066.67	1,005.77	60.89	17.517	
7,700.00	7,383.01	7,573.32	7,485.00	42.44	31.55	-112.53	-200.07	936.97	1,063.40	1,002.34	61.06	17.415	
7,750.00	7,420.50	7,620.79	7,535.00	42.54	31.50	-109.46	-168.05	936.97	1,061.40	1,000.25	61.15	17.358	
7,800.00	7,455.80	7,668.26	7,585.00	42.63	31.46	-106.62	-133.45	936.97	1,060.42	999.28	61.15	17.342 SF	
7,837.60	7,480.81	7,693.77	7,605.00	42.68	31.45	-104.62	-105.83	936.97	1,060.23	999.13	61.10	17.352	
7,850.00	7,488.75	7,701.71	7,615.00	42.70	31.44	-103.99	-96.43	936.97	1,060.25	999.17	61.08	17.358	
7,900.00	7,519.17	7,732.13	7,645.00	42.76	31.43	-101.57	-57.18	936.97	1,060.63	999.65	60.98	17.392	
7,950.00	7,546.94	7,759.90	7,672.50	42.81	31.44	-99.38	-16.27	936.96	1,061.33	1,000.48	60.85	17.442	
8,000.00	7,571.90	7,784.86	7,700.00	42.84	31.45	-97.42	23.22	936.71	1,062.21	1,001.50	60.72	17.495	
8,050.00	7,593.93	7,806.89	7,722.50	42.87	31.47	-95.64	61.58	936.13	1,063.23	1,002.67	60.56	17.555	
8,100.00	7,612.94	7,828.92	7,745.00	42.88	31.50	-94.02	98.84	935.24	1,064.34	1,003.94	60.40	17.621	
8,150.00	7,628.82	7,850.95	7,767.22	42.89	31.53	-92.55	135.00	934.06	1,065.49	1,005.25	60.24	17.688	
8,200.00	7,641.51	7,863.64	7,780.00	42.89	31.56	-91.22	170.07	932.61	1,066.63	1,006.55	60.07	17.755	
8,250.00	7,650.93	7,873.06	7,790.00	42.88	31.59	-90.03	204.07	930.91	1,067.71	1,007.79	59.92	17.820	
8,300.00	7,657.04	7,880.17	7,800.00	42.87	31.62	-88.90	239.46	928.81	1,068.68	1,008.93	59.76	17.884	
8,350.00	7,659.82	7,882.95	7,802.78	42.85	31.64	-88.04	268.83	926.81	1,069.50	1,009.84	59.66	17.927	
8,366.42	7,660.00	7,883.13	7,803.13	42.84	31.65	-87.77	279.06	926.05	1,069.73	1,010.10	59.63	17.941	
8,400.00	7,660.00	7,884.24	7,804.24	42.83	31.66	-87.24	299.39	924.45	1,070.37	1,010.81	59.56	17.970	
8,500.00	7,660.00	7,880.94	7,777.84	42.81	31.70	-85.61	354.50	919.43	1,074.94	1,015.57	59.37	18.106	
8,600.00	7,660.00	7,763.75	7,546.08	42.80	31.72	-83.93	401.76	914.23	1,083.97	1,024.79	59.19	18.315	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design													S32-T2N-R68W - HWY52 4G-32H-O268 - OH - PLAN #2		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						
8,700.00	7,660.00	7,712.45	7,514.51	42.81	31.73	-82.28	441.85	909.06	1,098.06	1,039.00	59.05	18.594						
8,800.00	7,660.00	7,666.64	7,483.99	42.83	31.73	-80.70	475.63	904.06	1,117.60	1,058.60	59.00	18.942						
8,900.00	7,660.00	7,625.79	7,455.02	42.88	31.72	-79.23	504.04	899.32	1,142.84	1,083.78	59.05	19.353						
9,000.00	7,660.00	7,600.00	7,435.93	42.96	31.72	-78.27	521.08	896.19	1,173.91	1,114.47	59.44	19.749						
9,100.00	7,660.00	7,550.00	7,397.25	43.08	31.69	-76.36	552.11	889.86	1,210.48	1,151.14	59.34	20.399						
9,200.00	7,660.00	7,527.74	7,379.36	43.25	31.67	-75.50	565.03	886.93	1,252.50	1,192.64	59.86	20.923						
9,300.00	7,660.00	7,500.00	7,356.52	43.48	31.64	-74.41	580.32	883.19	1,299.67	1,239.40	60.27	21.563						
9,400.00	7,660.00	7,478.14	7,338.13	43.80	31.61	-73.54	591.74	880.18	1,351.60	1,290.79	60.81	22.225						
9,500.00	7,660.00	7,450.00	7,313.96	44.22	31.58	-72.42	605.59	876.22	1,407.94	1,346.74	61.20	23.004						
9,600.00	7,660.00	7,450.00	7,313.96	44.77	31.58	-72.42	605.59	876.22	1,468.31	1,406.16	62.16	23.622						

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4H-32H-O268 - OH - PLAN #2												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	-89.71	0.75	-149.97	149.97				
100.00	100.00	100.00	100.00	0.14	0.14	-89.71	0.75	-149.97	149.97	149.69	0.28	543.314	
200.00	200.00	200.00	200.00	0.50	0.50	-89.71	0.75	-149.97	149.97	148.97	0.99	151.030 CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	120.85	0.75	-149.97	150.86	149.16	1.70	88.923	
350.00	349.93	349.93	349.93	1.02	1.03	121.53	0.75	-149.97	151.99	149.94	2.05	74.209	
400.00	399.85	399.85	399.85	1.19	1.21	135.93	0.75	-149.97	153.81	151.40	2.40	63.983	
500.00	499.55	499.55	499.55	1.55	1.57	153.08	0.75	-149.97	160.16	157.03	3.12	51.289	
600.00	598.97	598.97	598.97	1.93	1.93	162.39	0.75	-149.97	170.09	166.24	3.85	44.207	
700.00	698.00	703.55	703.53	2.32	2.30	168.53	1.57	-148.28	182.07	177.47	4.59	39.633	
800.00	796.50	808.34	808.16	2.73	2.67	173.38	4.07	-143.16	194.59	189.23	5.35	36.362	
900.00	894.36	913.24	912.61	3.17	3.05	177.57	8.25	-134.59	207.75	201.64	6.12	33.958	
1,000.00	991.47	1,018.19	1,016.71	3.64	3.44	-178.60	14.11	-122.58	221.69	214.79	6.89	32.166	
1,093.81	1,081.77	1,116.66	1,113.86	4.12	3.81	-175.21	21.12	-108.20	235.55	227.92	7.63	30.882	
1,100.00	1,087.70	1,123.15	1,120.25	4.15	3.84	-175.06	21.63	-107.15	236.49	228.81	7.68	30.796	
1,200.00	1,183.51	1,228.30	1,223.27	4.69	4.27	-172.47	30.83	-88.29	250.41	241.94	8.47	29.552	
1,300.00	1,279.32	1,330.02	1,322.26	5.25	4.71	-169.74	41.10	-67.23	262.56	253.29	9.27	28.332	
1,400.00	1,375.13	1,428.58	1,418.07	5.81	5.15	-167.27	51.23	-46.46	274.94	264.87	10.07	27.312	
1,500.00	1,470.94	1,523.04	1,509.92	6.38	5.58	-165.08	61.21	-26.79	288.14	277.27	10.86	26.522	
1,600.00	1,566.75	1,621.33	1,605.56	6.96	6.03	-162.92	72.44	-7.08	302.82	291.10	11.71	25.854	
1,700.00	1,662.56	1,719.62	1,701.20	7.54	6.49	-160.95	83.68	12.62	317.88	305.30	12.58	25.266	
1,800.00	1,758.38	1,817.92	1,796.84	8.12	6.95	-159.17	94.92	32.32	333.28	319.81	13.47	24.746	
1,900.00	1,854.19	1,916.21	1,892.47	8.71	7.42	-157.54	106.15	52.02	348.97	334.60	14.37	24.284	
2,000.00	1,950.00	2,014.50	1,988.11	9.30	7.89	-156.05	117.39	71.72	364.92	349.63	15.29	23.871	
2,100.00	2,045.81	2,112.79	2,083.75	9.88	8.36	-154.68	128.63	91.43	381.09	364.87	16.22	23.502	
2,200.00	2,141.62	2,211.08	2,179.39	10.48	8.83	-153.43	139.87	111.13	397.45	380.30	17.15	23.170	
2,300.00	2,237.43	2,309.37	2,275.03	11.07	9.31	-152.27	151.10	130.83	413.99	395.88	18.10	22.870	
2,400.00	2,333.24	2,407.66	2,370.67	11.66	9.79	-151.21	162.34	150.53	430.67	411.61	19.06	22.599	
2,500.00	2,429.05	2,505.95	2,466.31	12.25	10.27	-150.22	173.58	170.24	447.49	427.47	20.02	22.353	
2,600.00	2,524.86	2,604.25	2,561.94	12.85	10.75	-149.31	184.81	189.94	464.44	443.45	20.99	22.129	
2,700.00	2,620.67	2,702.54	2,657.58	13.44	11.23	-148.46	196.05	209.64	481.48	459.52	21.96	21.925	
2,800.00	2,716.49	2,800.83	2,753.22	14.04	11.71	-147.66	207.29	229.34	498.63	475.69	22.94	21.737	
2,900.00	2,812.30	2,899.12	2,848.86	14.64	12.20	-146.92	218.53	249.04	515.86	491.94	23.92	21.565	
3,000.00	2,908.11	2,997.41	2,944.50	15.23	12.68	-146.23	229.76	268.75	533.18	508.27	24.91	21.407	
3,100.00	3,003.92	3,095.70	3,040.14	15.83	13.16	-145.58	241.00	288.45	550.56	524.66	25.90	21.261	
3,200.00	3,099.73	3,193.99	3,135.77	16.43	13.65	-144.97	252.24	308.15	568.01	541.12	26.89	21.126	
3,300.00	3,195.54	3,292.28	3,231.41	17.03	14.14	-144.40	263.47	327.85	585.51	557.63	27.88	21.000	
3,400.00	3,291.35	3,390.58	3,327.05	17.62	14.62	-143.86	274.71	347.56	603.07	574.19	28.88	20.884	
3,500.00	3,387.16	3,488.87	3,422.69	18.22	15.11	-143.35	285.95	367.26	620.68	590.80	29.88	20.775	
3,600.00	3,482.97	3,587.16	3,518.33	18.82	15.60	-142.87	297.18	386.96	638.33	607.46	30.88	20.674	
3,700.00	3,578.78	3,685.45	3,613.97	19.42	16.08	-142.41	308.42	406.66	656.03	624.15	31.88	20.579	
3,800.00	3,674.60	3,783.74	3,709.61	20.02	16.57	-141.98	319.66	426.37	673.76	640.88	32.88	20.491	
3,900.00	3,770.41	3,882.03	3,805.24	20.62	17.06	-141.57	330.90	446.07	691.53	657.65	33.89	20.408	
4,000.00	3,866.22	3,980.32	3,900.88	21.22	17.55	-141.18	342.13	465.77	709.33	674.44	34.89	20.330	
4,100.00	3,962.03	4,078.61	3,996.52	21.82	18.03	-140.81	353.37	485.47	727.16	691.27	35.90	20.256	
4,200.00	4,057.84	4,176.91	4,092.16	22.42	18.52	-140.46	364.61	505.17	745.02	708.12	36.91	20.187	
4,300.00	4,153.65	4,275.20	4,187.80	23.02	19.01	-140.12	375.84	524.88	762.91	724.99	37.91	20.122	
4,400.00	4,249.46	4,373.49	4,283.44	23.62	19.50	-139.80	387.08	544.58	780.82	741.89	38.92	20.060	
4,500.00	4,345.27	4,471.78	4,379.07	24.22	19.99	-139.50	398.32	564.28	798.75	758.82	39.93	20.002	
4,600.00	4,441.08	4,570.07	4,474.71	24.82	20.48	-139.20	409.56	583.98	816.70	775.76	40.95	19.946	
4,700.00	4,536.89	4,668.36	4,570.35	25.42	20.97	-138.92	420.79	603.69	834.68	792.72	41.96	19.894	
4,800.00	4,632.70	4,766.65	4,665.99	26.02	21.46	-138.66	432.03	623.39	852.67	809.70	42.97	19.844	
4,900.00	4,728.52	4,864.94	4,761.63	26.62	21.95	-138.40	443.27	643.09	870.68	826.70	43.98	19.796	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4H-32H-O268 - OH - PLAN #2												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	
5,000.00	4,824.33	4,963.24	4,857.27	27.22	22.44	-138.15	454.50	662.79	888.70	843.71	45.00	19.751	
5,100.00	4,920.14	5,061.53	4,952.91	27.82	22.93	-137.91	465.74	682.49	906.74	860.74	46.01	19.708	
5,200.00	5,015.95	5,159.82	5,048.54	28.42	23.42	-137.69	476.98	702.20	924.80	877.78	47.02	19.667	
5,300.00	5,111.76	5,258.11	5,144.18	29.02	23.91	-137.47	488.22	721.90	942.87	894.83	48.04	19.628	
5,400.00	5,207.57	5,356.40	5,239.82	29.62	24.40	-137.26	499.45	741.60	960.95	911.90	49.05	19.590	
5,500.00	5,303.38	5,454.69	5,335.46	30.22	24.89	-137.05	510.69	761.30	979.04	928.98	50.07	19.554	
5,600.00	5,399.19	5,552.98	5,431.10	30.82	25.38	-136.86	521.93	781.01	997.15	946.07	51.08	19.520	
5,700.00	5,495.00	5,651.27	5,526.74	31.42	25.87	-136.67	533.16	800.71	1,015.27	963.17	52.10	19.487	
5,800.00	5,590.81	5,749.57	5,622.37	32.02	26.36	-136.49	544.40	820.41	1,033.39	980.28	53.12	19.456	
5,900.00	5,686.63	5,847.86	5,718.01	32.62	26.85	-136.31	555.64	840.11	1,051.53	997.40	54.13	19.425	
6,000.00	5,782.44	5,946.15	5,813.65	33.22	27.34	-136.14	566.88	859.82	1,069.67	1,014.53	55.15	19.396	
6,100.00	5,878.25	6,044.44	5,909.29	33.82	27.83	-135.98	578.11	879.52	1,087.83	1,031.66	56.17	19.368	
6,200.00	5,974.06	6,142.73	6,004.93	34.42	28.32	-135.82	589.35	899.22	1,105.99	1,048.81	57.18	19.341	
6,300.00	6,069.87	6,241.02	6,100.57	35.03	28.81	-135.66	600.59	918.92	1,124.16	1,065.96	58.20	19.315	
6,400.00	6,165.68	6,339.31	6,196.21	35.63	29.30	-135.52	611.82	938.62	1,142.34	1,083.12	59.22	19.290	
6,500.00	6,261.49	6,437.60	6,291.84	36.23	29.79	-135.37	623.06	958.33	1,160.53	1,100.29	60.24	19.266	
6,600.00	6,357.30	6,535.89	6,387.48	36.83	30.29	-135.23	634.30	978.03	1,178.72	1,117.46	61.25	19.243	
6,700.00	6,453.11	6,631.35	6,483.00	37.43	30.79	-135.08	645.54	997.15	1,196.90	1,135.64	62.26	19.220	
6,800.00	6,548.92	6,726.44	6,578.11	38.03	31.29	-134.93	656.78	1,015.27	1,215.07	1,153.81	63.27	19.197	
6,900.00	6,644.73	6,822.55	6,673.30	38.63	31.79	-134.78	668.02	1,033.39	1,233.24	1,171.93	64.28	19.174	
7,000.00	6,740.55	6,918.66	6,769.01	39.23	32.29	-134.63	679.26	1,051.53	1,251.41	1,190.00	65.29	19.151	
7,100.00	6,836.36	7,014.77	6,864.22	39.83	32.79	-134.48	690.50	1,069.67	1,269.58	1,208.17	66.30	19.128	
7,188.78	6,921.42	7,099.03	6,946.27	40.37	33.29	-134.33	701.74	1,087.83	1,287.75	1,226.34	67.31	19.105	
7,200.00	6,932.17	7,099.35	6,945.00	40.44	32.97	-134.43	701.74	1,087.83	1,287.75	1,226.34	67.31	19.105	
7,250.00	6,980.19	7,147.37	6,990.00	40.72	32.97	-134.43	701.74	1,087.83	1,287.75	1,226.34	67.31	19.105	
7,300.00	7,028.16	7,195.34	7,038.00	40.99	32.96	-134.68	709.39	1,105.99	1,305.92	1,244.50	68.32	19.082	
7,350.00	7,075.86	7,243.31	7,085.00	41.24	32.95	-134.30	717.04	1,124.16	1,324.09	1,262.67	69.33	19.059	
7,400.00	7,123.05	7,290.50	7,132.00	41.47	32.94	-133.66	724.69	1,142.34	1,342.26	1,280.84	70.34	19.036	
7,450.00	7,169.51	7,336.96	7,178.00	41.68	32.93	-132.66	732.34	1,160.53	1,360.43	1,298.99	71.35	19.013	
7,500.00	7,215.00	7,383.42	7,223.00	41.87	32.91	-131.66	740.00	1,178.72	1,378.60	1,317.16	72.36	18.990	
7,550.00	7,259.31	7,429.89	7,267.00	42.04	32.90	-130.66	747.65	1,196.90	1,396.77	1,335.33	73.37	18.967	
7,579.32	7,284.66	7,455.00	7,292.00	42.13	32.90	-130.66	747.65	1,196.90	1,396.77	1,335.33	73.37	18.967	
7,600.00	7,302.22	7,473.00	7,310.00	42.19	32.89	-130.66	747.65	1,196.90	1,396.77	1,335.33	73.37	18.967	
7,650.00	7,343.52	7,514.30	7,351.00	42.32	32.88	-130.43	755.30	1,215.07	1,414.94	1,353.50	74.38	18.944	
7,700.00	7,383.01	7,554.59	7,390.00	42.44	32.88	-130.16	762.95	1,233.24	1,433.11	1,371.67	75.39	18.921	
7,750.00	7,420.50	7,594.88	7,427.00	42.54	32.89	-129.19	770.60	1,251.41	1,451.28	1,389.84	76.40	18.898	
7,800.00	7,455.80	7,635.17	7,462.00	42.63	32.90	-128.19	778.25	1,269.58	1,469.45	1,407.99	77.41	18.875	
7,850.00	7,488.75	7,675.46	7,495.00	42.70	32.91	-127.19	785.90	1,287.75	1,487.62	1,426.16	78.42	18.852	
7,900.00	7,519.17	7,707.44	7,525.00	42.76	32.93	-126.19	793.55	1,305.92	1,505.79	1,444.33	79.43	18.829	
7,950.00	7,546.94	7,739.42	7,552.00	42.81	32.96	-125.19	801.20	1,324.09	1,523.96	1,462.50	80.44	18.806	
8,000.00	7,571.90	7,771.40	7,577.00	42.84	32.98	-124.19	808.85	1,342.26	1,542.13	1,480.67	81.45	18.783	
8,050.00	7,593.93	7,803.38	7,599.00	42.87	33.00	-123.19	816.50	1,360.43	1,560.30	1,498.84	82.46	18.760	
8,100.00	7,612.94	7,835.36	7,618.00	42.88	33.03	-122.19	824.15	1,378.60	1,578.47	1,516.99	83.47	18.737	
8,150.00	7,628.82	7,867.34	7,634.00	42.89	33.06	-121.19	831.80	1,396.77	1,596.64	1,535.16	84.48	18.714	
8,200.00	7,641.51	7,899.32	7,647.00	42.89	33.08	-120.19	839.45	1,414.94	1,614.81	1,553.33	85.49	18.691	
8,250.00	7,650.93	7,911.30	7,657.00	42.88	33.11	-119.19	847.10	1,433.11	1,632.98	1,571.50	86.50	18.668	
8,300.00	7,657.04	7,923.28	7,663.00	42.87	33.13	-118.19	854.75	1,451.28	1,651.15	1,589.67	87.51	18.645	
8,350.00	7,659.82	7,935.26	7,665.00	42.85	33.16	-117.19	862.40	1,469.45	1,669.32	1,607.84	88.52	18.622	
8,366.42	7,660.00	7,939.15	7,665.00	42.84	33.16	-117.19	862.40	1,469.45	1,669.32	1,607.84	88.52	18.622	
8,400.00	7,660.00	7,943.13	7,665.00	42.83	33.18	-116.19	870.05	1,487.62	1,687.49	1,625.99	89.53	18.599	
8,500.00	7,660.00	7,947.11	7,665.00	42.81	33.22	-115.19	877.70	1,505.79	1,705.66	1,644.16	90.54	18.576	
8,600.00	7,660.00	7,951.09	7,665.00	42.80	33.24	-114.19	885.35	1,523.96	1,723.83	1,662.33	91.55	18.553	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design													S32-T2N-R68W - HWY52 4H-32H-O268 - OH - PLAN #2		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				
8,700.00	7,660.00	7,573.55	7,313.77	42.81	33.26	-67.54	380.67	1,149.85	944.09	891.83	52.26	18.064					
8,800.00	7,660.00	7,532.10	7,288.39	42.83	33.27	-66.09	413.27	1,146.49	975.11	922.56	52.54	18.559					
8,900.00	7,660.00	7,500.00	7,267.50	42.88	33.27	-64.94	437.47	1,143.58	1,012.07	958.82	53.25	19.006					
9,000.00	7,660.00	7,450.00	7,232.92	42.96	33.26	-63.09	473.21	1,138.55	1,054.72	1,001.34	53.38	19.759					
9,100.00	7,660.00	7,427.90	7,216.88	43.08	33.25	-62.26	488.22	1,136.13	1,102.53	1,047.96	54.57	20.205					
9,200.00	7,660.00	7,400.00	7,196.01	43.25	33.24	-61.21	506.44	1,132.91	1,155.35	1,099.81	55.54	20.804					
9,300.00	7,660.00	7,372.62	7,174.86	43.48	33.22	-60.18	523.51	1,129.58	1,212.65	1,156.16	56.49	21.465					
9,400.00	7,660.00	7,350.00	7,156.93	43.80	33.21	-59.33	537.00	1,126.70	1,274.01	1,216.46	57.55	22.137					
9,500.00	7,660.00	7,326.33	7,137.73	44.22	33.18	-58.44	550.48	1,123.57	1,339.01	1,280.51	58.50	22.889					
9,600.00	7,660.00	7,300.00	7,115.88	44.77	33.16	-57.46	564.72	1,119.95	1,407.30	1,348.00	59.29	23.734					
9,700.00	7,660.00	7,300.00	7,115.88	45.45	33.16	-57.46	564.72	1,119.95	1,478.58	1,417.86	60.72	24.352					

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4I-32H-O268 - OH - PLAN #2													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	-89.70	0.73	-140.17	140.17					
100.00	100.00	100.00	100.00	0.14	0.14	-89.70	0.73	-140.17	140.17	139.90	0.28	507.837		
200.00	200.00	200.00	200.00	0.50	0.50	-89.70	0.73	-140.17	140.17	139.18	0.99	141.168 CC, ES		
300.00	299.98	299.98	299.98	0.84	0.85	120.90	0.73	-140.17	141.06	139.37	1.70	83.152		
350.00	349.93	349.93	349.93	1.02	1.03	121.63	0.73	-140.17	142.20	140.15	2.05	69.429		
400.00	399.85	399.85	399.85	1.19	1.21	136.08	0.73	-140.17	144.02	141.62	2.40	59.912		
500.00	499.55	499.55	499.55	1.55	1.57	153.33	0.73	-140.17	150.39	147.27	3.12	48.161		
600.00	598.97	603.89	603.86	1.93	1.94	163.13	1.55	-138.48	158.81	154.94	3.87	41.060		
700.00	698.00	708.29	708.11	2.32	2.31	170.03	4.03	-133.36	167.81	163.19	4.63	36.275		
800.00	796.50	812.69	812.07	2.73	2.69	175.61	8.17	-124.83	177.53	172.14	5.39	32.923		
900.00	894.36	917.03	915.56	3.17	3.08	-179.48	13.95	-112.91	188.12	181.96	6.16	30.522		
1,000.00	991.47	1,021.27	1,018.40	3.64	3.48	-174.96	21.36	-97.61	199.73	192.78	6.94	28.763		
1,093.81	1,081.77	1,118.94	1,114.13	4.12	3.88	-170.96	29.78	-80.24	211.66	203.97	7.69	27.526		
1,100.00	1,087.70	1,125.37	1,120.42	4.15	3.91	-170.77	30.38	-78.99	212.48	204.74	7.74	27.445		
1,200.00	1,183.51	1,229.43	1,221.58	4.69	4.37	-167.55	41.01	-57.06	224.71	216.15	8.56	26.252		
1,300.00	1,279.32	1,328.73	1,317.56	5.25	4.83	-164.38	52.12	-34.15	236.07	226.70	9.38	25.175		
1,400.00	1,375.13	1,427.27	1,412.79	5.81	5.30	-161.52	63.15	-11.38	248.07	237.84	10.23	24.259		
1,500.00	1,470.94	1,525.81	1,508.03	6.38	5.78	-158.92	74.18	11.38	260.63	249.52	11.11	23.465		
1,600.00	1,566.75	1,624.35	1,603.27	6.96	6.27	-156.57	85.21	34.15	273.67	261.65	12.02	22.773		
1,700.00	1,662.56	1,722.89	1,698.50	7.54	6.77	-154.43	96.24	56.91	287.12	274.17	12.95	22.169		
1,800.00	1,758.38	1,821.43	1,793.74	8.12	7.27	-152.48	107.28	79.68	300.94	287.04	13.91	21.639		
1,900.00	1,854.19	1,919.97	1,888.98	8.71	7.77	-150.70	118.31	102.45	315.08	300.20	14.88	21.172		
2,000.00	1,950.00	2,018.51	1,984.22	9.30	8.28	-149.08	129.34	125.21	329.49	313.62	15.87	20.760		
2,100.00	2,045.81	2,117.05	2,079.45	9.88	8.79	-147.59	140.37	147.98	344.13	327.26	16.87	20.395		
2,200.00	2,141.62	2,215.59	2,174.69	10.48	9.30	-146.23	151.41	170.74	358.99	341.10	17.89	20.071		
2,300.00	2,237.43	2,314.13	2,269.93	11.07	9.81	-144.97	162.44	193.51	374.03	355.12	18.91	19.781		
2,400.00	2,333.24	2,412.67	2,365.16	11.66	10.33	-143.81	173.47	216.27	389.24	369.30	19.94	19.521		
2,500.00	2,429.05	2,511.21	2,460.40	12.25	10.85	-142.73	184.50	239.04	404.59	383.61	20.98	19.287		
2,600.00	2,524.86	2,609.75	2,555.64	12.85	11.36	-141.74	195.54	261.80	420.07	398.05	22.02	19.077		
2,700.00	2,620.67	2,708.29	2,650.88	13.44	11.88	-140.81	206.57	284.57	435.66	412.60	23.07	18.886		
2,800.00	2,716.49	2,806.83	2,746.11	14.04	12.40	-139.95	217.60	307.33	451.36	427.24	24.12	18.713		
2,900.00	2,812.30	2,905.37	2,841.35	14.64	12.92	-139.15	228.63	330.10	467.16	441.98	25.18	18.555		
3,000.00	2,908.11	3,003.91	2,936.59	15.23	13.45	-138.40	239.66	352.86	483.03	456.80	26.24	18.411		
3,100.00	3,003.92	3,102.45	3,031.82	15.83	13.97	-137.70	250.70	375.63	498.98	471.69	27.30	18.279		
3,200.00	3,099.73	3,200.99	3,127.06	16.43	14.49	-137.04	261.73	398.39	515.00	486.64	28.36	18.158		
3,300.00	3,195.54	3,299.53	3,222.30	17.03	15.01	-136.42	272.76	421.16	531.09	501.66	29.43	18.047		
3,400.00	3,291.35	3,398.07	3,317.54	17.62	15.54	-135.84	283.79	443.92	547.23	516.73	30.50	17.944		
3,500.00	3,387.16	3,496.61	3,412.77	18.22	16.06	-135.29	294.83	466.69	563.42	531.85	31.57	17.849		
3,600.00	3,482.97	3,595.14	3,508.01	18.82	16.58	-134.77	305.86	489.45	579.66	547.02	32.64	17.760		
3,700.00	3,578.78	3,693.68	3,603.25	19.42	17.11	-134.28	316.89	512.22	595.94	562.23	33.71	17.679		
3,800.00	3,674.60	3,792.22	3,698.48	20.02	17.63	-133.81	327.92	534.98	612.27	577.49	34.78	17.602		
3,900.00	3,770.41	3,890.76	3,793.72	20.62	18.16	-133.37	338.96	557.75	628.63	592.77	35.86	17.531		
4,000.00	3,866.22	3,989.30	3,888.96	21.22	18.68	-132.95	349.99	580.52	645.03	608.09	36.93	17.465		
4,100.00	3,962.03	4,087.84	3,984.20	21.82	19.21	-132.56	361.02	603.28	661.46	623.45	38.01	17.402		
4,200.00	4,057.84	4,186.38	4,079.43	22.42	19.73	-132.18	372.05	626.05	677.91	638.83	39.09	17.344		
4,300.00	4,153.65	4,284.92	4,174.67	23.02	20.26	-131.82	383.09	648.81	694.40	654.23	40.16	17.289		
4,400.00	4,249.46	4,383.46	4,269.91	23.62	20.79	-131.47	394.12	671.58	710.91	669.67	41.24	17.237		
4,500.00	4,345.27	4,482.00	4,365.14	24.22	21.31	-131.15	405.15	694.34	727.44	685.12	42.32	17.189		
4,600.00	4,441.08	4,580.54	4,460.38	24.82	21.84	-130.83	416.18	717.11	744.00	700.60	43.40	17.143		
4,700.00	4,536.89	4,679.08	4,555.62	25.42	22.36	-130.53	427.21	739.87	760.58	716.10	44.48	17.100		
4,800.00	4,632.70	4,777.62	4,650.86	26.02	22.89	-130.24	438.25	762.64	777.18	731.62	45.56	17.059		
4,900.00	4,728.52	4,876.16	4,746.09	26.62	23.42	-129.97	449.28	785.40	793.79	747.15	46.64	17.020		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4I-32H-O268 - OH - PLAN #2													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		
5,000.00	4,824.33	4,974.70	4,841.33	27.22	23.94	-129.71	460.31	808.17	810.42	762.70	47.72	16.983		
5,100.00	4,920.14	5,073.24	4,936.57	27.82	24.47	-129.45	471.34	830.93	827.07	778.27	48.80	16.948		
5,200.00	5,015.95	5,171.78	5,031.80	28.42	25.00	-129.21	482.38	853.70	843.73	793.85	49.88	16.915		
5,300.00	5,111.76	5,270.32	5,127.04	29.02	25.53	-128.98	493.41	876.46	860.41	809.45	50.96	16.883		
5,400.00	5,207.57	5,368.86	5,222.28	29.62	26.05	-128.75	504.44	899.23	877.10	825.06	52.04	16.853		
5,500.00	5,303.38	5,467.40	5,317.52	30.22	26.58	-128.53	515.47	921.99	893.81	840.68	53.13	16.825		
5,600.00	5,399.19	5,565.94	5,412.75	30.82	27.11	-128.33	526.51	944.76	910.52	856.32	54.21	16.797		
5,700.00	5,495.00	5,664.48	5,507.99	31.42	27.63	-128.12	537.54	967.52	927.25	871.96	55.29	16.771		
5,800.00	5,590.81	5,763.02	5,603.23	32.02	28.16	-127.93	548.57	990.29	943.99	887.62	56.37	16.746		
5,900.00	5,686.63	5,861.56	5,698.46	32.62	28.69	-127.74	559.60	1,013.05	960.74	903.28	57.45	16.722		
6,000.00	5,782.44	5,960.10	5,793.70	33.22	29.22	-127.56	570.63	1,035.82	977.49	918.96	58.54	16.699		
6,100.00	5,878.25	6,058.64	5,888.94	33.82	29.74	-127.39	581.67	1,058.59	994.26	934.64	59.62	16.677		
6,200.00	5,974.06	6,157.18	5,984.18	34.42	30.27	-127.22	592.70	1,081.35	1,011.03	950.33	60.70	16.656		
6,300.00	6,069.87	6,255.72	6,079.41	35.03	30.80	-127.05	603.73	1,104.12	1,027.82	966.04	61.78	16.636		
6,400.00	6,165.68	6,354.26	6,174.65	35.63	31.33	-126.90	614.76	1,126.88	1,044.61	981.74	62.87	16.616		
6,500.00	6,261.49	6,452.80	6,269.89	36.23	31.86	-126.74	625.80	1,149.65	1,061.41	997.46	63.95	16.598		
6,600.00	6,357.30	6,551.34	6,365.12	36.83	32.38	-126.60	636.83	1,172.41	1,078.22	1,013.18	65.03	16.580		
6,700.00	6,453.11	6,649.88	6,460.36	37.43	32.91	-126.45	647.86	1,195.18	1,095.03	1,028.91	66.11	16.563		
6,800.00	6,548.92	6,745.36	6,550.00	38.03	33.44	-126.30	658.89	1,217.95	1,116.84	1,049.78	67.19	16.546		
6,900.00	6,644.73	6,841.17	6,645.00	38.63	33.97	-126.15	669.92	1,240.72	1,137.71	1,070.65	68.27	16.529		
7,000.00	6,740.55	6,937.00	6,740.00	39.23	34.50	-126.00	680.95	1,263.49	1,158.58	1,091.56	69.35	16.512		
7,100.00	6,836.36	7,032.83	6,835.00	39.83	35.03	-125.85	691.98	1,286.26	1,179.41	1,112.47	70.43	16.495		
7,188.78	6,921.42	7,117.25	6,920.00	40.37	35.56	-125.70	703.01	1,309.03	1,200.24	1,133.36	71.51	16.478		
7,200.00	6,932.17	7,027.00	6,930.00	40.44	35.64	-125.68	704.05	1,310.07	1,201.28	1,134.40	71.55	16.474		
7,250.00	6,980.19	7,075.00	6,980.00	40.72	35.92	-125.56	708.21	1,314.23	1,205.44	1,138.56	71.83	16.462		
7,300.00	7,028.16	7,123.00	7,030.00	40.99	36.20	-125.44	712.37	1,318.39	1,209.60	1,142.72	72.11	16.450		
7,350.00	7,075.86	7,170.00	7,075.00	41.24	36.48	-125.32	716.53	1,322.55	1,213.76	1,146.88	72.39	16.438		
7,400.00	7,123.05	7,217.00	7,125.00	41.47	36.76	-125.20	720.69	1,326.71	1,217.92	1,151.04	72.67	16.426		
7,450.00	7,169.51	7,264.00	7,170.00	41.68	36.99	-125.08	724.85	1,330.87	1,222.08	1,155.20	72.95	16.414		
7,500.00	7,215.00	7,311.00	7,215.00	41.87	37.22	-124.96	728.99	1,335.03	1,226.24	1,159.36	73.23	16.402		
7,550.00	7,259.31	7,355.31	7,260.00	42.04	37.45	-124.84	733.13	1,339.19	1,230.40	1,163.52	73.51	16.390		
7,600.00	7,302.22	7,400.00	7,305.00	42.19	37.68	-124.72	737.27	1,343.35	1,234.56	1,167.68	73.79	16.378		
7,650.00	7,343.52	7,441.52	7,345.00	42.32	37.91	-124.60	741.41	1,347.51	1,238.72	1,171.84	74.07	16.366		
7,700.00	7,383.01	7,481.01	7,385.00	42.44	38.14	-124.48	745.55	1,351.67	1,242.88	1,175.99	74.35	16.354		
7,750.00	7,420.50	7,518.50	7,425.00	42.54	38.37	-124.36	749.69	1,355.83	1,247.04	1,180.15	74.63	16.342		
7,800.00	7,455.80	7,553.80	7,460.00	42.63	38.60	-124.24	753.83	1,359.99	1,251.20	1,184.31	74.91	16.330		
7,804.74	7,459.03	7,557.03	7,463.74	42.64	38.64	-124.20	754.27	1,360.43	1,251.64	1,184.75	74.95	16.326		
7,850.00	7,488.75	7,586.75	7,490.00	42.70	38.68	-124.12	756.11	1,362.27	1,253.48	1,186.59	75.07	16.314		
7,900.00	7,519.17	7,617.17	7,520.00	42.76	38.72	-124.04	757.95	1,364.11	1,255.32	1,188.43	75.19	16.302		
7,950.00	7,546.94	7,644.94	7,547.50	42.81	38.76	-123.96	759.79	1,365.95	1,257.16	1,190.27	75.31	16.290		
8,000.00	7,571.90	7,669.90	7,572.50	42.84	38.79	-123.92	760.99	1,366.99	1,257.99	1,191.11	75.35	16.286		
8,050.00	7,593.93	7,691.93	7,595.00	42.87	38.82	-123.88	762.19	1,368.03	1,258.83	1,191.95	75.39	16.282		
8,100.00	7,612.94	7,710.94	7,615.00	42.88	38.83	-123.86	763.39	1,368.99	1,259.67	1,192.79	75.43	16.278		
8,150.00	7,628.82	7,726.82	7,630.00	42.89	38.84	-123.84	764.59	1,369.95	1,260.51	1,193.63	75.47	16.274		
8,200.00	7,641.51	7,739.51	7,642.50	42.89	38.85	-123.82	765.79	1,370.91	1,261.35	1,194.47	75.51	16.270		
8,250.00	7,650.93	7,748.93	7,652.50	42.88	38.84	-123.80	766.99	1,371.87	1,262.19	1,195.31	75.55	16.266		
8,300.00	7,657.04	7,755.04	7,658.50	42.87	38.83	-123.78	768.19	1,372.83	1,263.03	1,196.15	75.59	16.262		
8,350.00	7,659.82	7,757.82	7,660.00	42.85	38.81	-123.76	769.39	1,373.79	1,263.87	1,196.99	75.63	16.258		
8,366.42	7,660.00	7,758.00	7,661.42	42.84	38.80	-123.74	769.59	1,374.75	1,264.71	1,197.83	75.67	16.254		
8,400.00	7,660.00	7,758.00	7,661.42	42.83	38.79	-123.72	770.79	1,375.71	1,265.55	1,198.67	75.71	16.250		
8,500.00	7,660.00	7,758.00	7,661.42	42.81	38.77	-123.70	771.99	1,376.67	1,266.39	1,199.51	75.75	16.246		
8,600.00	7,660.00	7,758.00	7,661.42	42.80	38.76	-123.68	773.19	1,377.63	1,267.23	1,200.35	75.79	16.242		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4I-32H-O268 - OH - PLAN #2												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
8,700.00	7,660.00	7,700.00	7,402.36	42.81	36.58	-65.60	425.84	1,416.59	668.61	615.41	53.20	12.568	
8,800.00	7,660.00	7,662.53	7,378.54	42.83	36.56	-63.77	454.26	1,411.25	709.03	654.80	54.23	13.075	
8,900.00	7,660.00	7,621.87	7,351.10	42.88	36.54	-61.75	483.61	1,405.06	756.35	701.16	55.18	13.706	
9,000.00	7,660.00	7,585.26	7,325.05	42.96	36.51	-59.94	508.63	1,399.15	809.87	753.49	56.38	14.363	
9,100.00	7,660.00	7,550.00	7,298.81	43.08	36.48	-58.22	531.42	1,393.17	868.92	811.32	57.60	15.086	
9,200.00	7,660.00	7,522.59	7,277.68	43.25	36.45	-56.90	548.20	1,388.34	932.80	873.71	59.09	15.786	
9,300.00	7,660.00	7,500.00	7,259.81	43.48	36.42	-55.83	561.39	1,384.24	1,000.91	940.29	60.62	16.511	
9,400.00	7,660.00	7,471.46	7,236.67	43.80	36.37	-54.50	577.22	1,378.92	1,072.60	1,010.90	61.71	17.382	
9,500.00	7,660.00	7,450.00	7,218.88	44.22	36.34	-53.52	588.50	1,374.82	1,147.44	1,084.53	62.92	18.238	
9,600.00	7,660.00	7,429.36	7,201.47	44.77	36.30	-52.61	598.83	1,370.80	1,224.97	1,160.99	63.98	19.145	
9,700.00	7,660.00	7,400.00	7,176.22	45.45	36.25	-51.33	612.61	1,364.95	1,304.95	1,240.32	64.63	20.192	
9,800.00	7,660.00	7,400.00	7,176.22	46.26	36.25	-51.33	612.61	1,364.95	1,386.71	1,320.69	66.02	21.003	
9,866.42	7,660.00	7,400.00	7,176.22	46.85	36.25	-51.33	612.61	1,364.95	1,442.29	1,375.46	66.83	21.580	
9,900.00	7,660.00	7,378.96	7,157.80	47.17	36.20	-49.77	621.84	1,360.68	1,470.36	1,403.69	66.67	22.055	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4J-32H-O268 - OH - PLAN #2													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	-89.68	0.72	-130.10	130.10					
100.00	100.00	100.00	100.00	0.14	0.14	-89.68	0.72	-130.10	130.10	129.83	0.28	471.347		
200.00	200.00	200.00	200.00	0.50	0.50	-89.68	0.72	-130.10	130.10	129.11	0.99	131.024 CC, ES		
300.00	299.98	299.98	299.98	0.84	0.85	120.96	0.72	-130.10	130.99	129.30	1.70	77.215		
350.00	349.93	349.93	349.93	1.02	1.03	121.75	0.72	-130.10	132.13	130.08	2.05	64.513		
400.00	399.85	399.85	399.85	1.19	1.21	136.27	0.72	-130.10	133.96	131.56	2.40	55.726		
500.00	499.55	504.07	504.05	1.55	1.58	154.05	1.42	-128.35	138.73	135.58	3.15	44.082		
600.00	598.97	608.27	608.09	1.93	1.95	164.62	3.55	-123.08	143.97	140.06	3.91	36.814		
700.00	698.00	712.41	711.79	2.32	2.33	172.27	7.09	-114.32	149.84	145.16	4.68	32.006		
800.00	796.50	816.45	814.99	2.73	2.72	178.58	12.03	-102.08	156.52	151.06	5.46	28.692		
900.00	894.36	920.36	917.50	3.17	3.13	-175.81	18.37	-86.40	164.16	157.92	6.24	26.328		
1,000.00	991.47	1,024.10	1,019.17	3.64	3.56	-170.63	26.07	-67.32	172.92	165.89	7.02	24.615		
1,093.81	1,081.77	1,121.24	1,113.64	4.12	4.00	-166.06	34.54	-46.36	182.28	174.48	7.79	23.391		
1,100.00	1,087.70	1,127.64	1,119.84	4.15	4.03	-165.83	35.14	-44.88	182.93	175.08	7.85	23.313		
1,200.00	1,183.51	1,231.01	1,219.41	4.69	4.52	-161.98	45.54	-19.12	192.57	183.86	8.70	22.127		
1,300.00	1,279.32	1,329.90	1,314.13	5.25	5.03	-158.23	56.17	7.21	201.78	192.21	9.57	21.076		
1,400.00	1,375.13	1,428.63	1,408.70	5.81	5.55	-154.82	66.79	33.50	211.79	201.29	10.49	20.180		
1,500.00	1,470.94	1,527.36	1,503.27	6.38	6.08	-151.72	77.41	59.79	222.48	211.02	11.46	19.415		
1,600.00	1,566.75	1,626.09	1,597.84	6.96	6.62	-148.91	88.03	86.08	233.76	221.29	12.46	18.760		
1,700.00	1,662.56	1,724.82	1,692.42	7.54	7.17	-146.37	98.64	112.37	245.54	232.05	13.49	18.198		
1,800.00	1,758.38	1,823.55	1,786.99	8.12	7.71	-144.05	109.26	138.66	257.77	243.22	14.55	17.717		
1,900.00	1,854.19	1,922.28	1,881.56	8.71	8.27	-141.95	119.88	164.95	270.38	254.76	15.63	17.303		
2,000.00	1,950.00	2,021.01	1,976.13	9.30	8.82	-140.04	130.50	191.24	283.32	266.60	16.72	16.946		
2,100.00	2,045.81	2,119.75	2,070.70	9.88	9.38	-138.29	141.12	217.53	296.54	278.72	17.83	16.636		
2,200.00	2,141.62	2,218.48	2,165.28	10.48	9.94	-136.70	151.73	243.82	310.02	291.08	18.94	16.367		
2,300.00	2,237.43	2,317.21	2,259.85	11.07	10.51	-135.23	162.35	270.11	323.71	303.64	20.07	16.132		
2,400.00	2,333.24	2,415.94	2,354.42	11.66	11.07	-133.89	172.97	296.40	337.59	316.39	21.20	15.926		
2,500.00	2,429.05	2,514.67	2,448.99	12.25	11.64	-132.65	183.59	322.69	351.64	329.31	22.33	15.745		
2,600.00	2,524.86	2,613.40	2,543.57	12.85	12.21	-131.50	194.21	348.98	365.84	342.37	23.47	15.585		
2,700.00	2,620.67	2,712.13	2,638.14	13.44	12.77	-130.45	204.82	375.27	380.18	355.56	24.62	15.444		
2,800.00	2,716.49	2,810.86	2,732.71	14.04	13.34	-129.47	215.44	401.56	394.63	368.87	25.76	15.317		
2,900.00	2,812.30	2,909.59	2,827.28	14.64	13.91	-128.55	226.06	427.85	409.19	382.28	26.91	15.205		
3,000.00	2,908.11	3,008.33	2,921.86	15.23	14.48	-127.70	236.68	454.14	423.84	395.78	28.06	15.104		
3,100.00	3,003.92	3,107.06	3,016.43	15.83	15.05	-126.91	247.30	480.43	438.58	409.37	29.21	15.013		
3,200.00	3,099.73	3,205.79	3,111.00	16.43	15.62	-126.17	257.91	506.72	453.40	423.03	30.37	14.931		
3,300.00	3,195.54	3,304.52	3,205.57	17.03	16.19	-125.48	268.53	533.01	468.28	436.76	31.52	14.856		
3,400.00	3,291.35	3,403.25	3,300.14	17.62	16.77	-124.82	279.15	559.30	483.23	450.56	32.67	14.789		
3,500.00	3,387.16	3,501.98	3,394.72	18.22	17.34	-124.21	289.77	585.59	498.24	464.41	33.83	14.728		
3,600.00	3,482.97	3,600.71	3,489.29	18.82	17.91	-123.63	300.39	611.88	513.30	478.31	34.98	14.672		
3,700.00	3,578.78	3,699.44	3,583.86	19.42	18.49	-123.09	311.00	638.17	528.41	492.27	36.14	14.621		
3,800.00	3,674.60	3,798.17	3,678.43	20.02	19.06	-122.58	321.62	664.46	543.56	506.26	37.30	14.574		
3,900.00	3,770.41	3,896.91	3,773.01	20.62	19.63	-122.09	332.24	690.75	558.75	520.30	38.45	14.531		
4,000.00	3,866.22	3,995.64	3,867.58	21.22	20.21	-121.63	342.86	717.04	573.98	534.37	39.61	14.492		
4,100.00	3,962.03	4,094.37	3,962.15	21.82	20.78	-121.20	353.48	743.33	589.24	548.48	40.76	14.455		
4,200.00	4,057.84	4,193.10	4,056.72	22.42	21.35	-120.78	364.09	769.62	604.53	562.62	41.92	14.421		
4,300.00	4,153.65	4,291.83	4,151.30	23.02	21.93	-120.39	374.71	795.91	619.86	576.78	43.08	14.390		
4,400.00	4,249.46	4,390.56	4,245.87	23.62	22.50	-120.01	385.33	822.20	635.21	590.98	44.23	14.361		
4,500.00	4,345.27	4,489.29	4,340.44	24.22	23.08	-119.65	395.95	848.49	650.59	605.20	45.39	14.334		
4,600.00	4,441.08	4,588.02	4,435.01	24.82	23.65	-119.31	406.57	874.78	665.99	619.44	46.54	14.309		
4,700.00	4,536.89	4,686.76	4,529.58	25.42	24.23	-118.99	417.18	901.07	681.41	633.71	47.70	14.286		
4,800.00	4,632.70	4,785.49	4,624.16	26.02	24.80	-118.68	427.80	927.36	696.85	648.00	48.85	14.264		
4,900.00	4,728.52	4,884.22	4,718.73	26.62	25.38	-118.38	438.42	953.65	712.32	662.31	50.01	14.243		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4J-32H-O268 - OH - PLAN #2												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	
5,000.00	4,824.33	4,982.95	4,813.30	27.22	25.95	-118.10	449.04	979.94	727.80	676.63	51.17	14.224	
5,100.00	4,920.14	5,081.68	4,907.87	27.82	26.53	-117.82	459.66	1,006.23	743.29	690.97	52.32	14.206	
5,200.00	5,015.95	5,180.41	5,002.45	28.42	27.10	-117.56	470.27	1,032.52	758.81	705.33	53.48	14.190	
5,300.00	5,111.76	5,279.14	5,097.02	29.02	27.68	-117.31	480.89	1,058.82	774.33	719.70	54.63	14.174	
5,400.00	5,207.57	5,377.87	5,191.59	29.62	28.26	-117.07	491.51	1,085.11	789.87	734.09	55.79	14.159	
5,500.00	5,303.38	5,476.60	5,286.16	30.22	28.83	-116.84	502.13	1,111.40	805.43	748.49	56.94	14.145	
5,600.00	5,399.19	5,575.34	5,380.74	30.82	29.41	-116.61	512.75	1,137.69	821.00	762.90	58.10	14.132	
5,700.00	5,495.00	5,674.07	5,475.31	31.42	29.98	-116.40	523.36	1,163.98	836.58	777.32	59.25	14.119	
5,800.00	5,590.81	5,772.80	5,569.88	32.02	30.56	-116.19	533.98	1,190.27	852.17	791.76	60.41	14.107	
5,900.00	5,686.63	5,871.53	5,664.45	32.62	31.14	-115.99	544.60	1,216.56	867.77	806.21	61.56	14.096	
6,000.00	5,782.44	5,970.26	5,759.02	33.22	31.71	-115.80	555.22	1,242.85	883.38	820.66	62.71	14.086	
6,100.00	5,878.25	6,068.99	5,853.60	33.82	32.29	-115.61	565.84	1,269.14	899.00	835.13	63.87	14.076	
6,200.00	5,974.06	6,167.72	5,948.17	34.42	32.86	-115.43	576.45	1,295.43	914.63	849.60	65.02	14.066	
6,300.00	6,069.87	6,266.45	6,042.74	35.03	33.44	-115.26	587.07	1,321.72	930.26	864.09	66.18	14.057	
6,400.00	6,165.68	6,365.19	6,137.31	35.63	34.02	-115.09	597.69	1,348.01	945.91	878.58	67.33	14.048	
6,500.00	6,261.49	6,463.92	6,231.89	36.23	34.59	-114.93	608.31	1,374.30	961.56	893.08	68.49	14.040	
6,600.00	6,357.30	6,562.65	6,326.46	36.83	35.17	-114.77	618.93	1,400.59	977.22	907.58	69.64	14.033	
6,700.00	6,453.11	6,661.38	6,421.03	37.43	35.75	-114.62	629.54	1,426.88	992.89	922.10	70.79	14.025	
6,800.00	6,548.92	6,760.11	6,515.60	38.03	36.32	-114.47	640.16	1,453.17	1,008.56	936.62	71.95	14.018	
6,900.00	6,644.73	6,858.84	6,610.18	38.63	36.90	-114.33	650.78	1,479.46	1,024.24	951.14	73.10	14.011	
7,000.00	6,740.55	6,959.52	6,705.00	39.23	40.97	179.12	-339.93	1,752.25	944.91	921.46	23.45	40.295	
7,100.00	6,836.36	7,059.96	6,785.00	39.83	40.97	178.28	-344.37	1,752.14	850.60	825.20	25.41	33.480	
7,188.78	6,921.42	7,101.90	6,885.00	40.37	40.98	177.53	-348.31	1,752.05	768.06	740.51	27.55	27.882	
7,200.00	6,932.17	7,020.31	6,785.00	40.44	40.98	178.30	-348.72	1,752.04	757.72	729.87	27.85	27.208	
7,250.00	6,980.19	7,070.02	6,785.00	40.72	40.98	-177.12	-348.43	1,752.05	711.86	682.59	29.27	24.317	
7,300.00	7,028.16	7,098.25	6,785.00	40.99	40.97	-171.52	-344.66	1,752.14	666.57	635.73	30.84	21.617	
7,350.00	7,075.86	7,091.04	6,785.00	41.24	40.96	-166.00	-337.45	1,752.31	622.15	589.60	32.55	19.111	
7,400.00	7,123.05	7,080.41	6,785.00	41.47	40.95	-161.15	-326.82	1,752.55	578.93	544.48	34.45	16.806	
7,450.00	7,169.51	7,066.41	6,785.00	41.68	40.94	-157.01	-312.83	1,752.88	537.21	500.68	36.53	14.705	
7,500.00	7,215.00	7,049.12	6,785.00	41.87	40.93	-153.38	-295.55	1,753.29	497.34	458.52	38.82	12.812	
7,550.00	7,259.31	7,028.62	6,785.00	42.04	40.91	-150.03	-275.05	1,753.77	459.64	418.33	41.31	11.128	
7,600.00	7,302.22	7,005.01	6,785.00	42.19	40.90	-146.76	-251.44	1,754.32	424.44	380.46	43.98	9.650	
7,650.00	7,343.52	6,978.40	6,785.00	42.32	40.89	-143.43	-224.84	1,754.94	392.05	345.24	46.82	8.374	
7,700.00	7,383.01	6,948.92	6,785.00	42.44	40.88	-139.92	-195.37	1,755.63	362.77	313.03	49.74	7.293	
7,750.00	7,420.50	6,916.72	6,785.00	42.54	40.87	-136.19	-163.18	1,756.38	336.83	284.17	52.66	6.396	
7,800.00	7,455.80	6,881.95	6,785.00	42.63	40.86	-132.19	-128.43	1,757.20	314.39	258.92	55.47	5.668	
7,850.00	7,488.75	6,844.79	6,785.00	42.70	40.87	-127.95	-91.27	1,758.07	295.48	237.47	58.01	5.094	
7,900.00	7,519.17	6,805.41	6,785.00	42.76	40.88	-123.50	-51.90	1,758.99	280.02	219.86	60.15	4.655	
7,950.00	7,546.94	6,761.70	6,784.64	42.81	40.89	-118.64	-8.20	1,759.91	267.64	205.83	61.82	4.330	
8,000.00	7,571.90	6,716.46	6,781.87	42.84	40.91	-113.37	36.94	1,760.20	257.69	194.62	63.07	4.086	
8,050.00	7,593.93	6,672.82	6,776.59	42.87	40.92	-108.03	80.26	1,759.76	250.25	186.49	63.77	3.924	
8,100.00	7,612.94	6,630.57	6,769.07	42.88	40.94	-102.66	121.81	1,758.66	245.49	181.69	63.80	3.848 SF	
8,150.00	7,628.82	6,589.54	6,759.52	42.89	40.96	-97.31	161.67	1,756.97	243.42	180.27	63.16	3.854	
8,164.07	7,632.72	6,578.19	6,756.49	42.89	40.96	-95.82	172.59	1,756.39	243.32	180.45	62.87	3.870	
8,200.00	7,641.51	6,550.00	6,748.25	42.89	40.97	-92.11	199.50	1,754.75	243.97	182.02	61.96	3.938	
8,250.00	7,650.93	6,510.58	6,735.04	42.88	40.98	-87.00	236.53	1,751.98	246.95	186.57	60.38	4.090	
8,300.00	7,657.04	6,472.41	6,720.39	42.87	40.98	-82.18	271.63	1,748.76	252.08	193.38	58.70	4.294	
8,350.00	7,659.82	6,434.98	6,704.30	42.85	40.99	-77.67	305.22	1,745.12	259.02	201.87	57.15	4.532	
8,366.42	7,660.00	6,422.83	6,709.72	42.84	40.99	-76.26	315.93	1,743.83	261.64	204.93	56.71	4.614	
8,400.00	7,660.00	6,400.00	6,709.72	42.83	40.99	-73.98	335.79	1,741.28	267.86	211.82	56.04	4.780	
8,500.00	7,660.00	6,331.35	6,701.22	42.81	40.97	-66.96	393.22	1,732.56	294.88	240.56	54.32	5.428	
8,600.00	7,660.00	6,271.90	6,701.43	42.80	40.93	-60.99	439.86	1,723.80	334.36	279.84	54.53	6.132	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4J-32H-O268 - OH - PLAN #2												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
8,700.00	7,660.00	7,819.57	7,480.96	42.81	40.89	-56.08	478.26	1,715.21	384.77	328.58	56.19	6.848	
8,800.00	7,660.00	7,773.64	7,448.55	42.83	40.84	-52.13	509.76	1,707.02	444.10	385.53	58.56	7.583	
8,900.00	7,660.00	7,733.30	7,418.55	42.88	40.79	-48.97	535.60	1,699.36	510.46	449.39	61.07	8.359	
9,000.00	7,660.00	7,700.00	7,392.76	42.96	40.73	-46.58	555.59	1,692.73	582.35	518.75	63.60	9.157	
9,100.00	7,660.00	7,666.50	7,365.95	43.08	40.67	-44.39	574.43	1,685.78	658.56	593.07	65.49	10.056	
9,200.00	7,660.00	7,650.00	7,352.44	43.25	40.64	-43.38	583.23	1,682.27	738.41	670.43	67.98	10.862	
9,300.00	7,660.00	7,614.09	7,322.40	43.48	40.56	-41.34	601.26	1,674.42	820.68	751.86	68.83	11.924	
9,400.00	7,660.00	7,600.00	7,310.38	43.80	40.53	-40.60	607.90	1,671.27	905.47	834.96	70.51	12.841	
9,500.00	7,660.00	7,572.29	7,286.39	44.22	40.45	-39.22	620.25	1,664.95	991.96	920.70	71.26	13.919	
9,600.00	7,660.00	7,550.00	7,266.78	44.77	40.40	-38.19	629.48	1,659.76	1,080.10	1,008.03	72.06	14.988	
9,700.00	7,660.00	7,550.00	7,266.78	45.45	40.40	-38.19	629.48	1,659.76	1,169.64	1,096.21	73.43	15.928	
9,800.00	7,660.00	7,523.78	7,243.36	46.26	40.32	-37.07	639.53	1,653.55	1,260.00	1,186.23	73.77	17.080	
9,866.42	7,660.00	7,500.00	7,221.85	46.85	40.24	-36.12	647.86	1,647.82	1,320.89	1,247.10	73.78	17.902	
9,900.00	7,660.00	7,500.00	7,221.85	47.17	40.24	-34.88	647.86	1,647.82	1,351.62	1,277.51	74.11	18.237	
10,000.00	7,660.00	7,500.00	7,221.85	48.18	40.24	-30.70	647.86	1,647.82	1,444.37	1,369.42	74.95	19.272	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4K-32H-O268 - OH - PLAN #2													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	-89.66	0.70	-120.03	120.03					
100.00	100.00	100.00	100.00	0.14	0.14	-89.66	0.70	-120.03	120.03	119.75	0.28	434.856		
200.00	200.00	200.00	200.00	0.50	0.50	-89.66	0.70	-120.03	120.03	119.04	0.99	120.881		
300.00	299.98	299.98	299.98	0.84	0.85	121.03	0.70	-120.03	120.92	119.22	1.70	71.278		
350.00	349.93	351.97	351.96	1.02	1.04	122.02	0.87	-119.59	121.64	119.58	2.06	59.056		
400.00	399.85	403.92	403.89	1.19	1.22	136.92	1.37	-118.27	122.25	119.81	2.44	50.192		
500.00	499.55	507.71	507.53	1.55	1.60	155.63	3.38	-113.00	123.82	120.62	3.20	38.657		
600.00	598.97	611.34	610.73	1.93	1.97	167.22	6.73	-104.24	126.08	122.10	3.98	31.694		
700.00	698.00	714.77	713.33	2.32	2.36	175.97	11.39	-92.03	129.23	124.48	4.75	27.200		
800.00	796.50	817.98	815.16	2.73	2.77	-176.58	17.35	-76.40	133.51	127.98	5.53	24.157		
900.00	894.36	920.93	916.08	3.17	3.21	-169.82	24.60	-57.41	139.14	132.83	6.31	22.054		
1,000.00	991.47	1,023.60	1,015.93	3.64	3.68	-163.55	33.12	-35.11	146.28	139.16	7.12	20.537		
1,093.81	1,081.77	1,119.62	1,108.49	4.12	4.15	-158.05	42.23	-11.23	154.49	146.56	7.93	19.481		
1,100.00	1,087.70	1,125.95	1,114.55	4.15	4.18	-157.76	42.87	-9.56	155.07	147.09	7.99	19.416		
1,200.00	1,183.51	1,226.83	1,210.81	4.69	4.72	-153.07	53.63	18.63	164.14	155.24	8.90	18.439		
1,300.00	1,279.32	1,325.54	1,304.79	5.25	5.26	-148.77	64.41	46.87	173.81	163.95	9.87	17.617		
1,400.00	1,375.13	1,424.26	1,398.76	5.81	5.82	-144.93	75.19	75.11	184.36	173.47	10.89	16.932		
1,500.00	1,470.94	1,522.97	1,492.73	6.38	6.39	-141.51	85.97	103.34	195.65	183.70	11.95	16.366		
1,600.00	1,566.75	1,621.69	1,586.71	6.96	6.97	-138.48	96.75	131.58	207.56	194.50	13.06	15.898		
1,700.00	1,662.56	1,720.40	1,680.68	7.54	7.55	-135.77	107.52	159.82	219.98	205.80	14.18	15.512		
1,800.00	1,758.38	1,819.12	1,774.65	8.12	8.13	-133.36	118.30	188.06	232.84	217.52	15.33	15.192		
1,900.00	1,854.19	1,917.83	1,868.62	8.71	8.72	-131.20	129.08	216.30	246.07	229.59	16.49	14.927		
2,000.00	1,950.00	2,016.54	1,962.60	9.30	9.31	-129.26	139.86	244.54	259.61	241.95	17.65	14.705		
2,100.00	2,045.81	2,115.26	2,056.57	9.88	9.91	-127.52	150.64	272.77	273.41	254.58	18.83	14.520		
2,200.00	2,141.62	2,213.97	2,150.54	10.48	10.50	-125.94	161.42	301.01	287.44	267.43	20.01	14.364		
2,300.00	2,237.43	2,312.69	2,244.51	11.07	11.10	-124.51	172.20	329.25	301.66	280.46	21.20	14.232		
2,400.00	2,333.24	2,411.40	2,338.49	11.66	11.70	-123.21	182.98	357.49	316.05	293.67	22.38	14.121		
2,500.00	2,429.05	2,510.11	2,432.46	12.25	12.30	-122.02	193.76	385.73	330.59	307.02	23.57	14.025		
2,600.00	2,524.86	2,608.83	2,526.43	12.85	12.90	-120.93	204.54	413.97	345.25	320.49	24.76	13.944		
2,700.00	2,620.67	2,707.54	2,620.41	13.44	13.50	-119.93	215.32	442.20	360.03	334.08	25.95	13.873		
2,800.00	2,716.49	2,806.26	2,714.38	14.04	14.10	-119.01	226.10	470.44	374.91	347.77	27.14	13.813		
2,900.00	2,812.30	2,904.97	2,808.35	14.64	14.70	-118.16	236.88	498.68	389.87	361.54	28.33	13.760		
3,000.00	2,908.11	3,003.68	2,902.32	15.23	15.30	-117.38	247.65	526.92	404.92	375.39	29.52	13.715		
3,100.00	3,003.92	3,102.40	2,996.30	15.83	15.91	-116.64	258.43	555.16	420.03	389.31	30.72	13.675		
3,200.00	3,099.73	3,201.11	3,090.27	16.43	16.51	-115.96	269.21	583.40	435.20	403.30	31.91	13.640		
3,300.00	3,195.54	3,299.83	3,184.24	17.03	17.11	-115.33	279.99	611.63	450.43	417.34	33.10	13.610		
3,400.00	3,291.35	3,398.54	3,278.22	17.62	17.72	-114.74	290.77	639.87	465.71	431.43	34.29	13.583		
3,500.00	3,387.16	3,497.26	3,372.19	18.22	18.32	-114.18	301.55	668.11	481.04	445.57	35.48	13.560		
3,600.00	3,482.97	3,595.97	3,466.16	18.82	18.93	-113.66	312.33	696.35	496.41	459.74	36.67	13.539		
3,700.00	3,578.78	3,694.68	3,560.13	19.42	19.53	-113.17	323.11	724.59	511.82	473.96	37.85	13.521		
3,800.00	3,674.60	3,793.40	3,654.11	20.02	20.14	-112.71	333.89	752.83	527.26	488.21	39.04	13.504		
3,900.00	3,770.41	3,892.11	3,748.08	20.62	20.74	-112.27	344.67	781.06	542.73	502.50	40.23	13.490		
4,000.00	3,866.22	3,990.83	3,842.05	21.22	21.35	-111.86	355.45	809.30	558.23	516.81	41.42	13.477		
4,100.00	3,962.03	4,089.54	3,936.02	21.82	21.96	-111.47	366.23	837.54	573.76	531.15	42.61	13.466		
4,200.00	4,057.84	4,188.25	4,030.00	22.42	22.56	-111.11	377.01	865.78	589.31	545.52	43.79	13.456		
4,300.00	4,153.65	4,286.97	4,123.97	23.02	23.17	-110.76	387.78	894.02	604.89	559.90	44.98	13.447		
4,400.00	4,249.46	4,385.68	4,217.94	23.62	23.77	-110.42	398.56	922.26	620.48	574.31	46.17	13.440		
4,500.00	4,345.27	4,484.40	4,311.92	24.22	24.38	-110.11	409.34	950.49	636.10	588.74	47.35	13.433		
4,600.00	4,441.08	4,583.11	4,405.89	24.82	24.99	-109.81	420.12	978.73	651.73	603.19	48.54	13.426		
4,700.00	4,536.89	4,681.83	4,499.86	25.42	25.59	-109.52	430.90	1,006.97	667.38	617.65	49.73	13.421		
4,800.00	4,632.70	4,780.54	4,593.83	26.02	26.20	-109.25	441.68	1,035.21	683.04	632.13	50.91	13.416		
4,900.00	4,728.52	4,879.25	4,687.81	26.62	26.81	-108.99	452.46	1,063.45	698.72	646.63	52.10	13.412		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4K-32H-O268 - OH - PLAN #2												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	
5,000.00	4,824.33	4,977.97	4,781.78	27.22	27.42	-108.74	463.24	1,091.69	714.42	661.13	53.28	13.408	
5,100.00	4,920.14	5,076.68	4,875.75	27.82	28.02	-108.50	474.02	1,119.92	730.12	675.65	54.47	13.405	
5,200.00	5,015.95	5,175.40	4,969.73	28.42	28.63	-108.27	484.80	1,148.16	745.84	690.19	55.65	13.402	
5,300.00	5,111.76	5,274.11	5,063.70	29.02	29.24	-108.05	495.58	1,176.40	761.57	704.73	56.84	13.399	
5,400.00	5,207.57	5,372.82	5,157.67	29.62	29.85	-107.84	506.36	1,204.64	777.31	719.29	58.02	13.397	
5,500.00	5,303.38	5,471.54	5,251.64	30.22	30.45	-107.64	517.14	1,232.88	793.06	733.85	59.20	13.395	
5,600.00	5,399.19	5,570.25	5,345.62	30.82	31.06	-107.44	527.91	1,261.12	808.81	748.43	60.39	13.394	
5,700.00	5,495.00	5,668.97	5,439.59	31.42	31.67	-107.26	538.69	1,289.35	824.58	763.01	61.57	13.392	
5,800.00	5,590.81	5,767.68	5,533.56	32.02	32.28	-107.08	549.47	1,317.59	840.36	777.60	62.76	13.391	
5,900.00	5,686.63	5,866.39	5,627.53	32.62	32.88	-106.90	560.25	1,345.83	856.14	792.20	63.94	13.390	
6,000.00	5,782.44	5,965.11	5,721.51	33.22	33.49	-106.74	571.03	1,374.07	871.93	806.81	65.12	13.389	
6,100.00	5,878.25	6,063.82	5,815.48	33.82	34.10	-106.58	581.81	1,402.31	887.73	821.42	66.31	13.389	
6,200.00	5,974.06	6,162.54	5,909.45	34.42	34.71	-106.42	592.59	1,430.55	903.53	836.04	67.49	13.388	
6,300.00	6,069.87	6,261.25	6,003.43	35.03	35.31	-106.27	603.37	1,458.78	919.34	850.67	68.67	13.388	
6,400.00	6,165.68	6,359.97	6,097.40	35.63	35.92	-106.13	614.15	1,487.02	935.16	865.30	69.85	13.387	
6,500.00	6,261.49	6,458.68	6,191.37	36.23	36.53	-105.99	624.93	1,515.26	950.98	879.94	71.04	13.387	
6,600.00	6,357.30	6,557.39	6,285.34	36.83	37.14	-105.85	635.71	1,543.50	966.81	894.59	72.22	13.387	
6,700.00	6,453.11	6,656.11	6,379.32	37.43	37.75	-105.72	646.49	1,571.74	982.64	909.24	73.40	13.387	
6,800.00	6,548.92	6,751.36	6,475.00	38.03	38.35	-105.59	657.27	1,600.00	998.87	924.97	74.58	13.386	
6,900.00	6,644.73	6,849.46	6,570.00	38.63	38.95	-105.46	668.09	1,628.24	1,015.10	940.20	75.76	13.385	
7,000.00	6,740.55	6,945.68	6,665.00	39.23	39.55	-105.33	678.91	1,656.48	1,031.33	955.43	76.94	13.384	
7,100.00	6,836.36	7,041.89	6,760.00	39.83	40.15	-105.20	689.73	1,684.72	1,047.56	970.66	78.12	13.383	
7,188.78	6,921.42	7,127.91	6,845.00	40.37	40.69	-105.07	700.55	1,712.96	1,063.79	985.89	79.30	13.382	
7,200.00	6,932.17	7,038.66	6,855.00	40.44	40.76	-105.06	703.37	1,716.80	1,067.61	989.71	79.62	13.382	
7,250.00	6,980.19	7,086.68	6,903.00	40.72	41.04	-104.93	714.19	1,745.04	1,083.84	1,005.94	80.80	13.381	
7,300.00	7,028.16	7,134.65	6,950.00	40.99	41.31	-104.80	725.01	1,773.28	1,099.97	1,022.07	81.98	13.380	
7,350.00	7,075.86	7,182.35	6,997.00	41.24	41.56	-104.67	735.83	1,801.52	1,116.10	1,038.20	83.16	13.379	
7,400.00	7,123.05	7,230.54	7,044.00	41.47	41.79	-104.54	746.65	1,823.76	1,132.33	1,054.43	84.34	13.378	
7,450.00	7,169.51	7,277.00	7,091.00	41.68	42.00	-104.41	757.47	1,846.00	1,148.56	1,070.66	85.52	13.377	
7,500.00	7,215.00	7,323.49	7,138.00	41.87	42.19	-104.28	768.29	1,868.24	1,164.79	1,086.89	86.70	13.376	
7,550.00	7,259.31	7,369.98	7,185.00	42.04	42.36	-104.15	779.11	1,890.48	1,181.02	1,103.12	87.88	13.375	
7,600.00	7,302.22	7,416.87	7,232.00	42.19	42.51	-104.02	790.93	1,912.72	1,197.25	1,119.35	89.06	13.374	
7,650.00	7,343.52	7,458.17	7,279.00	42.32	42.64	-103.89	801.75	1,935.00	1,213.48	1,135.58	90.24	13.373	
7,700.00	7,383.01	7,499.46	7,326.00	42.44	42.76	-103.76	812.57	1,957.24	1,229.71	1,151.81	91.42	13.372	
7,750.00	7,420.50	7,540.75	7,373.00	42.54	42.86	-103.63	823.39	1,979.48	1,245.94	1,168.04	92.60	13.371	
7,776.40	7,439.42	7,559.67	7,392.92	42.59	42.91	-103.60	828.21	1,985.54	1,251.90	1,174.00	92.92	13.370	
7,800.00	7,455.80	7,576.05	7,408.30	42.63	42.95	-103.57	833.03	1,991.60	1,257.86	1,179.96	93.30	13.369	
7,850.00	7,488.75	7,608.90	7,441.65	42.70	43.02	-103.44	843.85	2,013.84	1,274.09	1,196.19	94.48	13.368	
7,900.00	7,519.17	7,639.32	7,472.07	42.76	43.08	-103.41	848.67	2,019.90	1,279.95	1,202.05	94.86	13.367	
7,950.00	7,546.94	7,666.09	7,498.14	42.81	43.13	-103.38	853.49	2,025.96	1,285.81	1,207.91	95.24	13.366	
8,000.00	7,571.90	7,691.05	7,523.10	42.84	43.16	-103.35	858.31	2,032.02	1,291.77	1,213.87	95.62	13.365	
8,050.00	7,593.93	7,713.08	7,545.03	42.87	43.19	-103.32	863.13	2,038.08	1,297.73	1,219.83	96.00	13.364	
8,100.00	7,612.94	7,732.09	7,564.04	42.88	43.20	-103.31	867.95	2,044.14	1,303.69	1,225.79	96.38	13.363	
8,150.00	7,628.82	7,748.97	7,580.92	42.89	43.21	-103.30	872.77	2,050.20	1,309.65	1,231.75	96.76	13.362	
8,200.00	7,641.51	7,761.66	7,593.61	42.89	43.22	-103.29	877.59	2,056.26	1,315.61	1,237.71	97.14	13.361	
8,250.00	7,650.93	7,771.08	7,603.03	42.88	43.21	-103.28	882.41	2,062.32	1,321.57	1,243.67	97.52	13.360	
8,300.00	7,657.04	7,777.19	7,609.14	42.87	43.20	-103.27	887.23	2,068.38	1,327.53	1,249.63	97.90	13.359	
8,350.00	7,659.82	7,780.97	7,612.92	42.85	43.18	-103.25	892.05	2,074.44	1,333.49	1,255.59	98.28	13.358	
8,366.42	7,660.00	7,781.15	7,613.10	42.84	43.17	-103.24	896.87	2,080.50	1,339.45	1,261.55	98.66	13.357	
8,400.00	7,660.00	7,781.15	7,613.10	42.83	43.16	-103.23	901.69	2,086.56	1,345.41	1,267.51	99.04	13.356	
8,500.00	7,660.00	7,781.15	7,613.10	42.81	43.14	-103.21	906.51	2,092.62	1,351.37	1,273.47	99.42	13.355	
8,600.00	7,660.00	7,781.15	7,613.10	42.80	43.13	-103.20	911.33	2,098.68	1,357.33	1,279.43	99.80	13.354	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4K-32H-O268 - OH - PLAN #2													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		
8,700.00	7,660.00	7,700.00	7,300.49	42.81	42.26	-20.96	423.54	1,848.54	474.66	424.92	49.74	9.543		
8,800.00	7,660.00	7,663.98	7,278.01	42.83	42.22	-20.43	450.86	1,841.79	537.18	482.15	55.02	9.763		
8,900.00	7,660.00	7,623.01	7,250.89	42.88	42.16	-19.89	480.46	1,833.64	604.51	546.10	58.42	10.348		
9,000.00	7,660.00	7,586.12	7,225.11	42.96	42.11	-19.46	505.68	1,825.89	675.82	614.50	61.32	11.022		
9,100.00	7,660.00	7,550.00	7,198.71	43.08	42.05	-19.10	529.00	1,817.96	750.52	686.94	63.58	11.805		
9,200.00	7,660.00	7,522.94	7,178.20	43.25	41.99	-18.86	545.55	1,811.80	828.08	762.17	65.91	12.564		
9,300.00	7,660.00	7,500.00	7,160.36	43.48	41.95	-18.67	558.93	1,806.44	908.14	840.18	67.95	13.364		
9,400.00	7,660.00	7,471.40	7,137.56	43.80	41.88	-18.46	574.77	1,799.59	990.27	920.99	69.28	14.294		
9,500.00	7,660.00	7,450.00	7,120.11	44.22	41.83	-18.32	586.00	1,794.34	1,074.24	1,003.58	70.66	15.203		
9,600.00	7,660.00	7,428.97	7,102.66	44.77	41.77	-18.19	596.49	1,789.10	1,159.79	1,088.00	71.79	16.156		
9,700.00	7,660.00	7,400.00	7,078.15	45.45	41.69	-18.03	610.07	1,781.73	1,246.82	1,174.40	72.42	17.217		
9,800.00	7,660.00	7,400.00	7,078.15	46.26	41.69	-18.03	610.07	1,781.73	1,334.86	1,260.96	73.89	18.065		
9,866.42	7,660.00	7,383.23	7,063.73	46.85	41.64	-17.94	617.45	1,777.40	1,393.93	1,319.71	74.21	18.783		
9,900.00	7,660.00	7,378.19	7,059.36	47.17	41.62	-16.63	619.60	1,776.09	1,424.00	1,349.54	74.46	19.124		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4L-32H-O268 - OH - PLAN #2													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	-89.64	0.68	-109.96	109.96					
100.00	100.00	100.00	100.00	0.14	0.14	-89.64	0.68	-109.96	109.96	109.68	0.28	398.366		
200.00	200.00	200.00	200.00	0.50	0.50	-89.64	0.68	-109.96	109.96	108.97	0.99	110.737 CC, ES		
300.00	299.98	297.53	297.51	0.84	0.84	120.43	-0.57	-111.04	111.95	110.25	1.69	66.076		
350.00	349.93	346.22	346.16	1.02	1.01	120.51	-2.14	-112.40	114.43	112.38	2.05	55.753		
400.00	399.85	394.81	394.66	1.19	1.18	134.07	-4.33	-114.29	118.11	115.70	2.41	48.910		
500.00	499.55	491.40	490.89	1.55	1.52	148.83	-10.52	-119.64	129.74	126.58	3.16	41.068		
600.00	598.97	589.56	588.51	1.93	1.89	155.49	-18.39	-126.44	146.24	142.36	3.88	37.674		
700.00	698.00	687.50	685.90	2.32	2.27	159.17	-26.27	-133.25	166.25	161.64	4.61	36.086		
800.00	796.50	784.70	782.54	2.73	2.64	161.50	-34.08	-140.00	189.68	184.35	5.34	35.546 SF		
900.00	894.36	881.02	878.31	3.17	3.01	163.12	-41.83	-146.70	216.50	210.43	6.07	35.667		
1,000.00	991.47	976.36	973.11	3.64	3.39	164.36	-49.50	-153.32	246.65	239.84	6.81	36.242		
1,093.81	1,081.77	1,064.79	1,061.05	4.12	3.73	165.29	-56.61	-159.47	277.93	270.43	7.50	37.070		
1,100.00	1,087.70	1,070.59	1,066.81	4.15	3.75	165.28	-57.07	-159.87	280.09	272.54	7.55	37.100		
1,200.00	1,183.51	1,164.31	1,160.00	4.69	4.12	165.23	-64.61	-166.38	314.97	306.69	8.27	38.063		
1,300.00	1,279.32	1,258.03	1,253.19	5.25	4.49	165.18	-72.15	-172.90	349.85	340.84	9.01	38.843		
1,400.00	1,375.13	1,351.75	1,346.38	5.81	4.85	165.15	-79.68	-179.41	384.73	374.98	9.74	39.485		
1,500.00	1,470.94	1,445.47	1,439.57	6.38	5.22	165.12	-87.22	-185.93	419.61	409.12	10.48	40.023		
1,600.00	1,566.75	1,539.19	1,532.76	6.96	5.59	165.09	-94.76	-192.44	454.49	443.26	11.23	40.479		
1,700.00	1,662.56	1,632.91	1,625.95	7.54	5.96	165.07	-102.29	-198.95	489.37	477.39	11.97	40.869		
1,800.00	1,758.38	1,726.63	1,719.13	8.12	6.32	165.05	-109.83	-205.47	524.25	511.52	12.72	41.207		
1,900.00	1,854.19	1,820.35	1,812.32	8.71	6.69	165.04	-117.37	-211.98	559.13	545.65	13.47	41.502		
2,000.00	1,950.00	1,914.07	1,905.51	9.30	7.06	165.02	-124.90	-218.49	594.01	579.78	14.22	41.762		
2,100.00	2,045.81	2,007.79	1,998.70	9.88	7.43	165.01	-132.44	-225.01	628.89	613.91	14.98	41.992		
2,200.00	2,141.62	2,101.51	2,091.89	10.48	7.80	165.00	-139.98	-231.52	663.77	648.04	15.73	42.197		
2,300.00	2,237.43	2,195.23	2,185.08	11.07	8.17	164.99	-147.51	-238.03	698.65	682.16	16.48	42.382		
2,400.00	2,333.24	2,288.95	2,278.27	11.66	8.54	164.98	-155.05	-244.55	733.53	716.29	17.24	42.548		
2,500.00	2,429.05	2,382.67	2,371.46	12.25	8.90	164.97	-162.59	-251.06	768.41	750.41	18.00	42.699		
2,600.00	2,524.86	2,476.39	2,464.64	12.85	9.27	164.96	-170.12	-257.57	803.29	784.53	18.75	42.836		
2,700.00	2,620.67	2,570.11	2,557.83	13.44	9.64	164.95	-177.66	-264.09	838.17	818.66	19.51	42.962		
2,800.00	2,716.49	2,663.83	2,651.02	14.04	10.01	164.95	-185.20	-270.60	873.05	852.78	20.27	43.077		
2,900.00	2,812.30	2,757.55	2,744.21	14.64	10.38	164.94	-192.74	-277.11	907.93	886.90	21.03	43.183		
3,000.00	2,908.11	2,851.27	2,837.40	15.23	10.75	164.94	-200.27	-283.63	942.81	921.02	21.78	43.281		
3,100.00	3,003.92	2,944.99	2,930.59	15.83	11.12	164.93	-207.81	-290.14	977.69	955.14	22.54	43.372		
3,200.00	3,099.73	3,038.70	3,023.78	16.43	11.49	164.93	-215.35	-296.66	1,012.57	989.27	23.30	43.456		
3,300.00	3,195.54	3,132.42	3,116.96	17.03	11.86	164.92	-222.88	-303.17	1,047.45	1,023.39	24.06	43.534		
3,400.00	3,291.35	3,226.14	3,210.15	17.62	12.22	164.92	-230.42	-309.68	1,082.33	1,057.51	24.82	43.608		
3,500.00	3,387.16	3,319.86	3,303.34	18.22	12.59	164.91	-237.96	-316.20	1,117.21	1,091.63	25.58	43.676		
3,600.00	3,482.97	3,413.58	3,396.53	18.82	12.96	164.91	-245.49	-322.71	1,152.09	1,125.75	26.34	43.740		
3,700.00	3,578.78	3,507.30	3,489.72	19.42	13.33	164.91	-253.03	-329.22	1,186.97	1,159.87	27.10	43.800		
3,800.00	3,674.60	3,601.02	3,582.91	20.02	13.70	164.90	-260.57	-335.74	1,221.85	1,193.99	27.86	43.857		
3,900.00	3,770.41	3,694.74	3,676.10	20.62	14.07	164.90	-268.10	-342.25	1,256.73	1,228.11	28.62	43.910		
4,000.00	3,866.22	3,788.46	3,769.29	21.22	14.44	164.90	-275.64	-348.76	1,291.61	1,262.23	29.38	43.961		
4,100.00	3,962.03	3,882.18	3,862.47	21.82	14.81	164.89	-283.18	-355.28	1,326.49	1,296.35	30.14	44.008		
4,200.00	4,057.84	3,975.90	3,955.66	22.42	15.18	164.89	-290.71	-361.79	1,361.37	1,330.47	30.90	44.053		
4,300.00	4,153.65	4,069.62	4,048.85	23.02	15.55	164.89	-298.25	-368.30	1,396.25	1,364.58	31.66	44.096		
4,400.00	4,249.46	4,163.34	4,142.04	23.62	15.92	164.89	-305.79	-374.82	1,431.13	1,398.70	32.42	44.137		
4,500.00	4,345.27	4,257.06	4,235.23	24.22	16.29	164.88	-313.32	-381.33	1,466.01	1,432.82	33.19	44.175		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4M-32H-O268 - OH - PLAN #2												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	-89.62	0.67	-100.16	100.17	99.89	0.28	362.889	
100.00	100.00	100.00	100.00	0.14	0.14	-89.62	0.67	-100.16	100.17	99.17	0.99	100.875 CC, ES	
200.00	200.00	200.00	200.00	0.50	0.50	-89.62	0.67	-100.16	100.17	100.26	1.69	60.346	
300.00	299.98	298.17	298.15	0.84	0.84	120.38	-0.76	-101.06	101.95	102.13	2.04	50.984	
350.00	349.93	347.19	347.13	1.02	1.01	120.37	-2.54	-102.17	104.17	105.10	2.40	44.763	
400.00	399.85	396.13	395.98	1.19	1.18	133.79	-5.02	-103.72	107.50	114.98	3.13	37.677	
500.00	499.55	493.84	493.33	1.55	1.53	148.11	-12.06	-108.13	118.11	129.02	3.86	34.412	
600.00	598.97	592.69	591.72	1.93	1.90	154.64	-20.16	-113.20	132.88	146.55	4.59	32.897	
700.00	698.00	690.97	689.54	2.32	2.27	158.25	-28.22	-118.24	151.15	167.51	5.33	32.420 SF	
800.00	796.50	788.57	786.68	2.73	2.64	160.55	-36.22	-123.25	172.84	191.86	6.07	32.598	
900.00	894.36	885.36	883.01	3.17	3.01	162.18	-44.15	-128.21	197.93	219.55	6.81	33.218	
1,000.00	991.47	981.22	978.43	3.64	3.38	163.44	-52.01	-133.13	226.36	248.53	7.51	34.079	
1,093.81	1,081.77	1,070.21	1,067.00	4.12	3.72	164.40	-59.30	-137.69	256.05	250.54	7.57	34.115	
1,100.00	1,087.70	1,076.05	1,072.81	4.15	3.75	164.40	-59.78	-137.99	258.10	282.98	8.30	35.098	
1,200.00	1,183.51	1,170.38	1,166.70	4.69	4.11	164.39	-67.52	-142.83	291.28	315.43	9.04	35.898	
1,300.00	1,279.32	1,264.72	1,260.59	5.25	4.48	164.38	-75.25	-147.67	324.47	347.87	9.78	36.559	
1,400.00	1,375.13	1,359.05	1,354.49	5.81	4.84	164.37	-82.98	-152.51	357.65	380.30	10.53	37.115	
1,500.00	1,470.94	1,453.38	1,448.38	6.38	5.20	164.37	-90.72	-157.35	390.83	412.73	11.28	37.587	
1,600.00	1,566.75	1,547.72	1,542.27	6.96	5.57	164.36	-98.45	-162.19	424.01	445.16	12.03	37.993	
1,700.00	1,662.56	1,642.05	1,636.16	7.54	5.94	164.36	-106.18	-167.03	457.19	477.59	12.79	38.345	
1,800.00	1,758.38	1,736.39	1,730.05	8.12	6.30	164.35	-113.91	-171.87	490.38	510.01	13.54	38.654	
1,900.00	1,854.19	1,830.72	1,823.95	8.71	6.67	164.35	-121.65	-176.71	523.56	542.44	14.30	38.926	
2,000.00	1,950.00	1,925.06	1,917.84	9.30	7.03	164.35	-129.38	-181.54	556.74	574.86	15.06	39.168	
2,100.00	2,045.81	2,019.39	2,011.73	9.88	7.40	164.34	-137.11	-186.38	589.92	607.28	15.82	39.384	
2,200.00	2,141.62	2,113.72	2,105.62	10.48	7.76	164.34	-144.85	-191.22	623.10	639.70	16.58	39.579	
2,300.00	2,237.43	2,208.06	2,199.51	11.07	8.13	164.34	-152.58	-196.06	656.29	672.13	17.34	39.755	
2,400.00	2,333.24	2,302.39	2,293.41	11.66	8.50	164.34	-160.31	-200.90	689.47	704.55	18.10	39.915	
2,500.00	2,429.05	2,396.73	2,387.30	12.25	8.86	164.34	-168.04	-205.74	722.65	736.96	18.87	40.060	
2,600.00	2,524.86	2,491.06	2,481.19	12.85	9.23	164.33	-175.78	-210.58	755.83	769.38	19.63	40.194	
2,700.00	2,620.67	2,585.40	2,575.08	13.44	9.59	164.33	-183.51	-215.42	789.01	801.80	20.39	40.316	
2,800.00	2,716.49	2,679.73	2,668.98	14.04	9.96	164.33	-191.24	-220.26	822.20	834.22	21.16	40.430	
2,900.00	2,812.30	2,774.06	2,762.87	14.64	10.33	164.33	-198.98	-225.10	855.38	866.64	21.92	40.534	
3,000.00	2,908.11	2,868.40	2,856.76	15.23	10.69	164.33	-206.71	-229.94	888.56	899.06	22.69	40.631	
3,100.00	3,003.92	2,962.73	2,950.65	15.83	11.06	164.33	-214.44	-234.78	921.74	931.47	23.45	40.721	
3,200.00	3,099.73	3,057.07	3,044.54	16.43	11.42	164.33	-222.17	-239.62	954.92	963.89	24.22	40.805	
3,300.00	3,195.54	3,151.40	3,138.44	17.03	11.79	164.33	-229.91	-244.45	988.11	996.31	24.98	40.884	
3,400.00	3,291.35	3,245.74	3,232.33	17.62	12.16	164.33	-237.64	-249.29	1,021.29	1,028.72	25.75	40.957	
3,500.00	3,387.16	3,340.07	3,326.22	18.22	12.52	164.32	-245.37	-254.13	1,054.47	1,061.14	26.51	41.026	
3,600.00	3,482.97	3,434.40	3,420.11	18.82	12.89	164.32	-253.11	-258.97	1,087.65	1,093.56	27.28	41.091	
3,700.00	3,578.78	3,528.74	3,514.00	19.42	13.26	164.32	-260.84	-263.81	1,120.83	1,125.97	28.04	41.152	
3,800.00	3,674.60	3,623.07	3,607.90	20.02	13.62	164.32	-268.57	-268.65	1,154.02	1,158.39	28.81	41.210	
3,900.00	3,770.41	3,717.41	3,701.79	20.62	13.99	164.32	-276.30	-273.49	1,187.20	1,190.81	29.57	41.264	
4,000.00	3,866.22	3,811.74	3,795.68	21.22	14.35	164.32	-284.04	-278.33	1,220.38	1,223.22	30.34	41.316	
4,100.00	3,962.03	3,906.08	3,889.57	21.82	14.72	164.32	-291.77	-283.17	1,253.56	1,255.64	31.11	41.364	
4,200.00	4,057.84	4,000.41	3,983.47	22.42	15.09	164.32	-299.50	-288.01	1,286.74	1,288.05	31.87	41.411	
4,300.00	4,153.65	4,094.74	4,077.36	23.02	15.45	164.32	-307.24	-292.85	1,319.93	1,320.47	32.64	41.455	
4,400.00	4,249.46	4,189.08	4,171.25	23.62	15.82	164.32	-314.97	-297.69	1,353.11	1,352.88	33.41	41.496	
4,500.00	4,345.27	4,283.41	4,265.14	24.22	16.19	164.32	-322.70	-302.52	1,386.29	1,385.30	34.17	41.536	
4,600.00	4,441.08	4,377.75	4,359.03	24.82	16.55	164.32	-330.44	-307.36	1,419.47	1,417.71	34.94	41.574	
4,700.00	4,536.89	4,472.08	4,452.93	25.42	16.92	164.32	-338.17	-312.20	1,452.66	1,450.13	35.71	41.610	
4,800.00	4,632.70	4,566.42	4,546.82	26.02	17.29	164.32	-345.90	-317.04	1,485.84				

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4N-32H-O268 - OH - PLAN #2												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	-89.74	0.40	-90.09	90.09				
100.00	100.00	100.00	100.00	0.14	0.14	-89.74	0.40	-90.09	90.09	89.82	0.28	326.393	
200.00	200.00	200.00	200.00	0.50	0.50	-89.74	0.40	-90.09	90.09	89.10	0.99	90.730 CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	121.19	0.40	-90.09	90.98	89.29	1.70	53.631	
350.00	349.93	349.72	349.72	1.02	1.03	122.06	-0.02	-90.16	92.19	90.15	2.04	45.197	
400.00	399.85	399.47	399.45	1.19	1.20	136.19	-1.30	-90.38	94.19	91.80	2.39	39.453	
500.00	499.55	498.80	498.64	1.55	1.54	151.31	-6.39	-91.25	101.14	98.05	3.09	32.752	
600.00	598.97	597.89	597.40	1.93	1.89	157.31	-14.40	-92.62	112.02	108.21	3.81	29.394	
700.00	698.00	696.77	695.91	2.32	2.24	160.25	-22.79	-94.05	126.54	121.99	4.55	27.838	
800.00	796.50	795.08	793.86	2.73	2.61	161.99	-31.13	-95.47	144.57	139.28	5.29	27.345 SF	
900.00	894.36	892.71	891.13	3.17	2.97	163.19	-39.41	-96.88	166.06	160.03	6.03	27.523	
1,000.00	991.47	989.55	987.60	3.64	3.33	164.13	-47.62	-98.29	190.96	184.17	6.78	28.147	
1,093.81	1,081.77	1,079.55	1,077.27	4.12	3.67	164.87	-55.25	-99.59	217.37	209.87	7.49	29.014	
1,100.00	1,087.70	1,085.46	1,083.16	4.15	3.70	164.86	-55.76	-99.67	219.21	211.66	7.54	29.057	
1,200.00	1,183.51	1,180.94	1,178.29	4.69	4.06	164.66	-63.85	-101.06	248.92	240.63	8.29	30.030	
1,300.00	1,279.32	1,276.42	1,273.41	5.25	4.42	164.50	-71.95	-102.44	278.63	269.59	9.04	30.822	
1,400.00	1,375.13	1,371.90	1,368.54	5.81	4.78	164.37	-80.05	-103.82	308.35	298.56	9.80	31.478	
1,500.00	1,470.94	1,467.39	1,463.67	6.38	5.14	164.27	-88.15	-105.20	338.07	327.52	10.56	32.029	
1,600.00	1,566.75	1,562.87	1,558.79	6.96	5.50	164.18	-96.25	-106.58	367.79	356.47	11.32	32.498	
1,700.00	1,662.56	1,658.35	1,653.92	7.54	5.87	164.10	-104.34	-107.96	397.51	385.43	12.08	32.901	
1,800.00	1,758.38	1,753.83	1,749.05	8.12	6.23	164.04	-112.44	-109.35	427.23	414.38	12.85	33.251	
1,900.00	1,854.19	1,849.31	1,844.17	8.71	6.60	163.98	-120.54	-110.73	456.95	443.33	13.62	33.558	
2,000.00	1,950.00	1,944.79	1,939.30	9.30	6.96	163.93	-128.64	-112.11	486.67	472.29	14.39	33.829	
2,100.00	2,045.81	2,040.27	2,034.42	9.88	7.32	163.89	-136.73	-113.49	516.39	501.24	15.16	34.070	
2,200.00	2,141.62	2,135.75	2,129.55	10.48	7.69	163.85	-144.83	-114.87	546.12	530.19	15.93	34.286	
2,300.00	2,237.43	2,231.23	2,224.68	11.07	8.05	163.82	-152.93	-116.25	575.84	559.14	16.70	34.480	
2,400.00	2,333.24	2,326.71	2,319.80	11.66	8.42	163.78	-161.03	-117.64	605.56	588.09	17.47	34.655	
2,500.00	2,429.05	2,422.19	2,414.93	12.25	8.78	163.76	-169.13	-119.02	635.28	617.03	18.25	34.814	
2,600.00	2,524.86	2,517.67	2,510.06	12.85	9.15	163.73	-177.22	-120.40	665.00	645.98	19.02	34.960	
2,700.00	2,620.67	2,613.15	2,605.18	13.44	9.51	163.71	-185.32	-121.78	694.73	674.93	19.80	35.093	
2,800.00	2,716.49	2,708.63	2,700.31	14.04	9.88	163.68	-193.42	-123.16	724.45	703.88	20.57	35.215	
2,900.00	2,812.30	2,804.11	2,795.43	14.64	10.24	163.66	-201.52	-124.54	754.17	732.82	21.35	35.328	
3,000.00	2,908.11	2,899.59	2,890.56	15.23	10.61	163.65	-209.62	-125.93	783.89	761.77	22.12	35.432	
3,100.00	3,003.92	2,995.07	2,985.69	15.83	10.97	163.63	-217.71	-127.31	813.62	790.72	22.90	35.529	
3,200.00	3,099.73	3,090.55	3,080.81	16.43	11.34	163.61	-225.81	-128.69	843.34	819.66	23.68	35.619	
3,300.00	3,195.54	3,186.03	3,175.94	17.03	11.70	163.60	-233.91	-130.07	873.06	848.61	24.45	35.703	
3,400.00	3,291.35	3,281.51	3,271.07	17.62	12.07	163.58	-242.01	-131.45	902.79	877.56	25.23	35.782	
3,500.00	3,387.16	3,376.99	3,366.19	18.22	12.43	163.57	-250.10	-132.83	932.51	906.50	26.01	35.855	
3,600.00	3,482.97	3,472.47	3,461.32	18.82	12.80	163.56	-258.20	-134.22	962.23	935.45	26.79	35.924	
3,700.00	3,578.78	3,567.95	3,556.45	19.42	13.16	163.55	-266.30	-135.60	991.96	964.39	27.56	35.989	
3,800.00	3,674.60	3,663.43	3,651.57	20.02	13.53	163.54	-274.40	-136.98	1,021.68	993.34	28.34	36.050	
3,900.00	3,770.41	3,758.91	3,746.70	20.62	13.89	163.53	-282.50	-138.36	1,051.40	1,022.28	29.12	36.108	
4,000.00	3,866.22	3,854.39	3,841.82	21.22	14.26	163.52	-290.59	-139.74	1,081.13	1,051.23	29.90	36.162	
4,100.00	3,962.03	3,949.87	3,936.95	21.82	14.62	163.51	-298.69	-141.13	1,110.85	1,080.17	30.67	36.214	
4,200.00	4,057.84	4,045.35	4,032.08	22.42	14.99	163.50	-306.79	-142.51	1,140.57	1,109.12	31.45	36.262	
4,300.00	4,153.65	4,140.84	4,127.20	23.02	15.35	163.49	-314.89	-143.89	1,170.30	1,138.06	32.23	36.309	
4,400.00	4,249.46	4,236.32	4,222.33	23.62	15.72	163.48	-322.98	-145.27	1,200.02	1,167.01	33.01	36.353	
4,500.00	4,345.27	4,331.80	4,317.46	24.22	16.08	163.48	-331.08	-146.65	1,229.74	1,195.95	33.79	36.395	
4,600.00	4,441.08	4,427.28	4,412.58	24.82	16.45	163.47	-339.18	-148.03	1,259.47	1,224.90	34.57	36.435	
4,700.00	4,536.89	4,522.76	4,507.71	25.42	16.81	163.46	-347.28	-149.42	1,289.19	1,253.84	35.35	36.473	
4,800.00	4,632.70	4,618.24	4,602.83	26.02	17.18	163.46	-355.38	-150.80	1,318.91	1,282.79	36.13	36.509	
4,900.00	4,728.52	4,713.72	4,697.96	26.62	17.55	163.45	-363.47	-152.18	1,348.64	1,311.73	36.90	36.544	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4N-32H-O268 - OH - PLAN #2												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
5,000.00	4,824.33	4,809.20	4,793.09	27.22	17.91	163.44	-371.57	-153.56	1,378.36	1,340.68	37.68	36.577	
5,100.00	4,920.14	4,904.68	4,888.21	27.82	18.28	163.44	-379.67	-154.94	1,408.08	1,369.62	38.46	36.608	
5,200.00	5,015.95	5,000.16	4,983.34	28.42	18.64	163.43	-387.77	-156.32	1,437.81	1,398.56	39.24	36.639	
5,300.00	5,111.76	5,095.64	5,078.47	29.02	19.01	163.43	-395.87	-157.71	1,467.53	1,427.51	40.02	36.668	
5,400.00	5,207.57	5,191.12	5,173.59	29.62	19.37	163.42	-403.96	-159.09	1,497.25	1,456.45	40.80	36.696	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4O-32H-O268 - OH - PLAN #2												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	-89.72	0.39	-80.02	80.02				
100.00	100.00	100.00	100.00	0.14	0.14	-89.72	0.39	-80.02	80.02	79.74	0.28	289.903 CC	
200.00	200.00	200.00	200.00	0.50	0.50	-89.72	0.39	-80.02	80.02	79.03	0.99	80.587	
300.00	299.98	300.74	300.72	0.84	0.84	120.14	-1.33	-79.56	80.44	78.75	1.69	47.677 ES	
350.00	349.93	351.10	351.03	1.02	1.02	119.96	-3.46	-78.99	80.96	78.93	2.04	39.779	
400.00	399.85	401.45	401.28	1.19	1.20	133.04	-6.45	-78.19	81.92	79.53	2.39	34.310	
500.00	499.55	501.58	501.09	1.55	1.55	146.49	-14.30	-76.10	86.01	82.90	3.11	27.663	
600.00	598.97	601.25	600.40	1.93	1.92	152.57	-22.36	-73.95	93.63	89.79	3.85	24.342	
700.00	698.00	700.59	699.40	2.32	2.29	155.86	-30.39	-71.80	104.78	100.19	4.59	22.808	
800.00	796.50	799.50	797.96	2.73	2.67	158.01	-38.39	-69.66	119.39	114.05	5.35	22.324 SF	
900.00	894.36	897.85	895.97	3.17	3.04	159.64	-46.34	-67.54	137.43	131.32	6.11	22.499	
1,000.00	991.47	995.53	993.30	3.64	3.41	160.99	-54.24	-65.43	158.85	151.98	6.87	23.115	
1,093.81	1,081.77	1,086.43	1,083.88	4.12	3.75	162.10	-61.59	-63.47	181.99	174.40	7.59	23.969	
1,100.00	1,087.70	1,092.41	1,089.84	4.15	3.77	162.11	-62.08	-63.34	183.62	175.97	7.65	24.017	
1,200.00	1,183.51	1,188.90	1,185.99	4.69	4.14	162.25	-69.88	-61.26	209.85	201.45	8.41	24.968	
1,300.00	1,279.32	1,285.40	1,282.15	5.25	4.50	162.36	-77.68	-59.17	236.09	226.92	9.17	25.746	
1,400.00	1,375.13	1,381.89	1,378.31	5.81	4.87	162.45	-85.48	-57.09	262.33	252.39	9.94	26.395	
1,500.00	1,470.94	1,478.39	1,474.46	6.38	5.24	162.52	-93.29	-55.01	288.57	277.86	10.71	26.944	
1,600.00	1,566.75	1,574.88	1,570.62	6.96	5.61	162.58	-101.09	-52.92	314.81	303.32	11.48	27.413	
1,700.00	1,662.56	1,671.38	1,666.78	7.54	5.97	162.63	-108.89	-50.84	341.05	328.79	12.26	27.818	
1,800.00	1,758.38	1,767.88	1,762.94	8.12	6.34	162.67	-116.70	-48.76	367.29	354.25	13.04	28.173	
1,900.00	1,854.19	1,864.37	1,859.09	8.71	6.71	162.71	-124.50	-46.67	393.53	379.71	13.82	28.484	
2,000.00	1,950.00	1,960.87	1,955.25	9.30	7.08	162.74	-132.30	-44.59	419.77	405.17	14.60	28.760	
2,100.00	2,045.81	2,057.36	2,051.41	9.88	7.44	162.77	-140.10	-42.51	446.01	430.63	15.38	29.007	
2,200.00	2,141.62	2,153.86	2,147.56	10.48	7.81	162.79	-147.91	-40.42	472.25	456.09	16.16	29.229	
2,300.00	2,237.43	2,250.35	2,243.72	11.07	8.18	162.82	-155.71	-38.34	498.49	481.55	16.94	29.428	
2,400.00	2,333.24	2,346.85	2,339.88	11.66	8.55	162.84	-163.51	-36.25	524.73	507.00	17.72	29.610	
2,500.00	2,429.05	2,443.34	2,436.04	12.25	8.91	162.86	-171.31	-34.17	550.97	532.46	18.50	29.775	
2,600.00	2,524.86	2,539.84	2,532.19	12.85	9.28	162.87	-179.12	-32.09	577.21	557.92	19.29	29.926	
2,700.00	2,620.67	2,636.34	2,628.35	13.44	9.65	162.89	-186.92	-30.00	603.45	583.38	20.07	30.065	
2,800.00	2,716.49	2,732.83	2,724.51	14.04	10.02	162.90	-194.72	-27.92	629.69	608.83	20.86	30.193	
2,900.00	2,812.30	2,829.33	2,820.66	14.64	10.38	162.92	-202.53	-25.84	655.93	634.29	21.64	30.311	
3,000.00	2,908.11	2,925.82	2,916.82	15.23	10.75	162.93	-210.33	-23.75	682.17	659.74	22.42	30.421	
3,100.00	3,003.92	3,022.32	3,012.98	15.83	11.12	162.94	-218.13	-21.67	708.41	685.20	23.21	30.522	
3,200.00	3,099.73	3,118.81	3,109.14	16.43	11.49	162.95	-225.93	-19.59	734.65	710.66	23.99	30.617	
3,300.00	3,195.54	3,215.31	3,205.29	17.03	11.86	162.96	-233.74	-17.50	760.89	736.11	24.78	30.706	
3,400.00	3,291.35	3,311.81	3,301.45	17.62	12.22	162.97	-241.54	-15.42	787.13	761.57	25.57	30.789	
3,500.00	3,387.16	3,408.30	3,397.61	18.22	12.59	162.98	-249.34	-13.34	813.37	787.02	26.35	30.867	
3,600.00	3,482.97	3,504.80	3,493.76	18.82	12.96	162.98	-257.14	-11.25	839.61	812.48	27.14	30.940	
3,700.00	3,578.78	3,601.29	3,589.92	19.42	13.33	162.99	-264.95	-9.17	865.85	837.93	27.92	31.009	
3,800.00	3,674.60	3,697.79	3,686.08	20.02	13.70	163.00	-272.75	-7.09	892.09	863.38	28.71	31.074	
3,900.00	3,770.41	3,794.28	3,782.24	20.62	14.06	163.00	-280.55	-5.00	918.33	888.84	29.50	31.135	
4,000.00	3,866.22	3,890.78	3,878.39	21.22	14.43	163.01	-288.36	-2.92	944.57	914.29	30.28	31.193	
4,100.00	3,962.03	3,987.28	3,974.55	21.82	14.80	163.02	-296.16	-0.84	970.82	939.75	31.07	31.248	
4,200.00	4,057.84	4,083.77	4,070.71	22.42	15.17	163.02	-303.96	1.25	997.06	965.20	31.85	31.301	
4,300.00	4,153.65	4,180.27	4,166.86	23.02	15.54	163.03	-311.76	3.33	1,023.30	990.66	32.64	31.350	
4,400.00	4,249.46	4,276.76	4,263.02	23.62	15.91	163.03	-319.57	5.42	1,049.54	1,016.11	33.43	31.397	
4,500.00	4,345.27	4,373.26	4,359.18	24.22	16.27	163.04	-327.37	7.50	1,075.78	1,041.56	34.21	31.442	
4,600.00	4,441.08	4,469.75	4,455.34	24.82	16.64	163.04	-335.17	9.58	1,102.02	1,067.02	35.00	31.485	
4,700.00	4,536.89	4,566.25	4,551.49	25.42	17.01	163.05	-342.97	11.67	1,128.26	1,092.47	35.79	31.526	
4,800.00	4,632.70	4,662.75	4,647.65	26.02	17.38	163.05	-350.78	13.75	1,154.50	1,117.93	36.58	31.565	
4,900.00	4,728.52	4,759.24	4,743.81	26.62	17.75	163.05	-358.58	15.83	1,180.74	1,143.38	37.36	31.603	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4O-32H-O268 - OH - PLAN #2													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	
5,000.00	4,824.33	4,855.74	4,839.96	27.22	18.11	163.06	-366.38	17.92	1,206.98	1,168.83	38.15	31.638	
5,100.00	4,920.14	4,952.23	4,936.12	27.82	18.48	163.06	-374.19	20.00	1,233.22	1,194.29	38.94	31.673	
5,200.00	5,015.95	5,048.73	5,032.28	28.42	18.85	163.06	-381.99	22.08	1,259.46	1,219.74	39.72	31.706	
5,300.00	5,111.76	5,145.22	5,128.43	29.02	19.22	163.07	-389.79	24.17	1,285.70	1,245.19	40.51	31.737	
5,400.00	5,207.57	5,241.72	5,224.59	29.62	19.59	163.07	-397.59	26.25	1,311.95	1,270.65	41.30	31.767	
5,500.00	5,303.38	5,338.22	5,320.75	30.22	19.95	163.07	-405.40	28.33	1,338.19	1,296.10	42.09	31.796	
5,600.00	5,399.19	5,434.71	5,416.91	30.82	20.32	163.08	-413.20	30.42	1,364.43	1,321.55	42.87	31.824	
5,700.00	5,495.00	5,531.21	5,513.06	31.42	20.69	163.08	-421.00	32.50	1,390.67	1,347.01	43.66	31.851	
5,800.00	5,590.81	5,627.70	5,609.22	32.02	21.06	163.08	-428.80	34.58	1,416.91	1,372.46	44.45	31.877	
5,900.00	5,686.63	5,724.20	5,705.38	32.62	21.43	163.09	-436.61	36.67	1,443.15	1,397.91	45.24	31.902	
6,000.00	5,782.44	5,820.69	5,801.53	33.22	21.80	163.09	-444.41	38.75	1,469.39	1,423.37	46.02	31.927	
6,100.00	5,878.25	5,917.19	5,897.69	33.82	22.16	163.09	-452.21	40.83	1,495.63	1,448.82	46.81	31.950	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4P-32H-O268 - OH - PLAN #2												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	-89.69	0.37	-69.95	69.95				
100.00	100.00	100.00	100.00	0.14	0.14	-89.69	0.37	-69.95	69.95	69.67	0.28	253.412	
200.00	200.00	200.00	200.00	0.50	0.50	-89.69	0.37	-69.95	69.95	68.95	0.99	70.443	CC, ES
300.00	299.98	299.98	299.98	0.84	0.85	121.51	0.37	-69.95	70.84	69.15	1.70	41.760	
350.00	349.93	349.93	349.93	1.02	1.03	122.97	0.37	-69.95	72.01	69.96	2.05	35.157	
400.00	399.85	399.85	399.85	1.19	1.21	138.23	0.37	-69.95	73.90	71.50	2.40	30.740	
500.00	499.55	499.55	499.55	1.55	1.57	156.75	0.37	-69.95	80.47	77.35	3.12	25.771	
600.00	598.97	598.97	598.97	1.93	1.93	166.87	0.37	-69.95	90.65	86.81	3.85	23.570	
700.00	698.00	698.00	698.00	2.32	2.28	172.94	0.37	-69.95	104.36	99.79	4.57	22.834	SF
800.00	796.50	796.50	796.50	2.73	2.63	176.75	0.37	-69.95	121.50	116.20	5.29	22.949	
900.00	894.36	894.36	894.36	3.17	2.99	179.21	0.37	-69.95	142.02	136.00	6.02	23.598	
1,000.00	991.47	994.64	994.62	3.64	3.33	-179.64	-1.06	-69.32	165.01	158.26	6.74	24.473	
1,093.81	1,081.77	1,088.84	1,088.70	4.12	3.64	-179.79	-5.33	-67.46	187.87	180.45	7.42	25.316	
1,100.00	1,087.70	1,095.05	1,094.90	4.15	3.66	-179.90	-5.72	-67.30	189.42	181.94	7.47	25.355	
1,200.00	1,183.51	1,195.53	1,195.01	4.69	4.00	178.12	-13.59	-63.86	213.56	205.36	8.20	26.051	
1,300.00	1,279.32	1,292.46	1,291.44	5.25	4.34	176.28	-22.59	-59.94	237.10	228.18	8.92	26.582	
1,400.00	1,375.13	1,389.40	1,387.88	5.81	4.68	174.76	-31.59	-56.02	260.83	251.18	9.65	27.022	
1,500.00	1,470.94	1,486.33	1,484.31	6.38	5.02	173.50	-40.60	-52.10	284.71	274.32	10.40	27.388	
1,600.00	1,566.75	1,583.26	1,580.74	6.96	5.38	172.44	-49.60	-48.17	308.70	297.55	11.15	27.694	
1,700.00	1,662.56	1,680.19	1,677.18	7.54	5.73	171.52	-58.60	-44.25	332.77	320.87	11.90	27.954	
1,800.00	1,758.38	1,777.12	1,773.61	8.12	6.09	170.73	-67.60	-40.33	356.92	344.25	12.67	28.175	
1,900.00	1,854.19	1,874.06	1,870.04	8.71	6.45	170.05	-76.60	-36.41	381.12	367.68	13.44	28.365	
2,000.00	1,950.00	1,970.99	1,966.48	9.30	6.81	169.44	-85.60	-32.48	405.36	391.15	14.21	28.530	
2,100.00	2,045.81	2,067.92	2,062.91	9.88	7.18	168.90	-94.61	-28.56	429.64	414.66	14.98	28.674	
2,200.00	2,141.62	2,164.85	2,159.34	10.48	7.54	168.42	-103.61	-24.64	453.96	438.19	15.76	28.799	
2,300.00	2,237.43	2,261.79	2,255.78	11.07	7.91	167.99	-112.61	-20.72	478.30	461.76	16.54	28.911	
2,400.00	2,333.24	2,358.72	2,352.21	11.66	8.28	167.60	-121.61	-16.79	502.66	485.34	17.33	29.009	
2,500.00	2,429.05	2,455.65	2,448.64	12.25	8.65	167.24	-130.61	-12.87	527.05	508.94	18.11	29.097	
2,600.00	2,524.86	2,552.58	2,545.08	12.85	9.02	166.92	-139.62	-8.95	551.45	532.55	18.90	29.176	
2,700.00	2,620.67	2,649.51	2,641.51	13.44	9.39	166.62	-148.62	-5.03	575.87	556.18	19.69	29.247	
2,800.00	2,716.49	2,746.45	2,737.94	14.04	9.76	166.35	-157.62	-1.10	600.30	579.82	20.48	29.311	
2,900.00	2,812.30	2,843.38	2,834.38	14.64	10.13	166.10	-166.62	2.82	624.74	603.47	21.27	29.369	
3,000.00	2,908.11	2,940.31	2,930.81	15.23	10.50	165.87	-175.62	6.74	649.19	627.13	22.06	29.422	
3,100.00	3,003.92	3,037.24	3,027.24	15.83	10.87	165.65	-184.63	10.67	673.66	650.80	22.86	29.470	
3,200.00	3,099.73	3,134.17	3,123.68	16.43	11.25	165.45	-193.63	14.59	698.13	674.47	23.65	29.515	
3,300.00	3,195.54	3,231.11	3,220.11	17.03	11.62	165.27	-202.63	18.51	722.60	698.15	24.45	29.556	
3,400.00	3,291.35	3,328.04	3,316.55	17.62	12.00	165.09	-211.63	22.43	747.09	721.84	25.25	29.593	
3,500.00	3,387.16	3,424.97	3,412.98	18.22	12.37	164.93	-220.63	26.36	771.58	745.54	26.04	29.628	
3,600.00	3,482.97	3,521.90	3,509.41	18.82	12.74	164.78	-229.64	30.28	796.07	769.23	26.84	29.660	
3,700.00	3,578.78	3,618.84	3,605.85	19.42	13.12	164.64	-238.64	34.20	820.57	792.94	27.64	29.690	
3,800.00	3,674.60	3,715.77	3,702.28	20.02	13.49	164.50	-247.64	38.12	845.08	816.64	28.44	29.718	
3,900.00	3,770.41	3,812.70	3,798.71	20.62	13.87	164.37	-256.64	42.05	869.59	840.35	29.24	29.744	
4,000.00	3,866.22	3,909.63	3,895.15	21.22	14.24	164.25	-265.64	45.97	894.10	864.07	30.04	29.768	
4,100.00	3,962.03	4,006.56	3,991.58	21.82	14.62	164.14	-274.64	49.89	918.62	887.78	30.84	29.791	
4,200.00	4,057.84	4,103.50	4,088.01	22.42	15.00	164.03	-283.65	53.81	943.14	911.50	31.64	29.812	
4,300.00	4,153.65	4,200.43	4,184.45	23.02	15.37	163.93	-292.65	57.74	967.66	935.23	32.44	29.832	
4,400.00	4,249.46	4,297.36	4,280.88	23.62	15.75	163.83	-301.65	61.66	992.19	958.95	33.24	29.851	
4,500.00	4,345.27	4,394.29	4,377.31	24.22	16.12	163.73	-310.65	65.58	1,016.72	982.68	34.04	29.868	
4,600.00	4,441.08	4,491.23	4,473.75	24.82	16.50	163.65	-319.65	69.50	1,041.25	1,006.41	34.84	29.885	
4,700.00	4,536.89	4,588.16	4,570.18	25.42	16.88	163.56	-328.66	73.43	1,065.78	1,030.14	35.64	29.901	
4,800.00	4,632.70	4,685.09	4,666.61	26.02	17.25	163.48	-337.66	77.35	1,090.32	1,053.87	36.45	29.916	
4,900.00	4,728.52	4,782.02	4,763.05	26.62	17.63	163.40	-346.66	81.27	1,114.85	1,077.61	37.25	29.930	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4P-32H-O268 - OH - PLAN #2										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
5,000.00	4,824.33	4,878.95	4,859.48	27.22	18.01	163.33	-355.66	85.20	1,139.39	1,101.34	38.05	29.943	
5,100.00	4,920.14	4,975.89	4,955.92	27.82	18.38	163.26	-364.66	89.12	1,163.93	1,125.08	38.85	29.956	
5,200.00	5,015.95	5,072.82	5,052.35	28.42	18.76	163.19	-373.67	93.04	1,188.48	1,148.82	39.66	29.968	
5,300.00	5,111.76	5,169.75	5,148.78	29.02	19.14	163.13	-382.67	96.96	1,213.02	1,172.56	40.46	29.980	
5,400.00	5,207.57	5,266.68	5,245.22	29.62	19.52	163.06	-391.67	100.89	1,237.57	1,196.30	41.26	29.991	
5,500.00	5,303.38	5,363.61	5,341.65	30.22	19.89	163.00	-400.67	104.81	1,262.11	1,220.04	42.07	30.001	
5,600.00	5,399.19	5,460.55	5,438.08	30.82	20.27	162.94	-409.67	108.73	1,286.66	1,243.79	42.87	30.011	
5,700.00	5,495.00	5,557.48	5,534.52	31.42	20.65	162.89	-418.68	112.65	1,311.21	1,267.53	43.68	30.021	
5,800.00	5,590.81	5,654.41	5,630.95	32.02	21.03	162.84	-427.68	116.58	1,335.76	1,291.28	44.48	30.030	
5,900.00	5,686.63	5,751.34	5,727.38	32.62	21.40	162.78	-436.68	120.50	1,360.31	1,315.03	45.29	30.038	
6,000.00	5,782.44	5,848.28	5,823.82	33.22	21.78	162.73	-445.68	124.42	1,384.86	1,338.77	46.09	30.047	
6,100.00	5,878.25	5,945.21	5,920.25	33.82	22.16	162.69	-454.68	128.34	1,409.42	1,362.52	46.90	30.055	
6,200.00	5,974.06	6,042.14	6,016.68	34.42	22.54	162.64	-463.68	132.27	1,433.97	1,386.27	47.70	30.062	
6,300.00	6,069.87	6,139.07	6,113.12	35.03	22.91	162.59	-472.69	136.19	1,458.53	1,410.02	48.51	30.070	
6,400.00	6,165.68	6,236.00	6,209.55	35.63	23.29	162.55	-481.69	140.11	1,483.08	1,433.77	49.31	30.077	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4Q-32H-O268 - OH - PLAN #2												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	-89.66	0.35	-60.15	60.16				
100.00	100.00	100.00	100.00	0.14	0.14	-89.66	0.35	-60.15	60.16	59.88	0.28	217.935	
200.00	200.00	200.00	200.00	0.50	0.50	-89.66	0.35	-60.15	60.16	59.16	0.99	60.581 CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	121.74	0.35	-60.15	61.06	59.36	1.70	35.989	
350.00	349.93	349.93	349.93	1.02	1.03	123.42	0.35	-60.15	62.23	60.18	2.05	30.383	
400.00	399.85	399.85	399.85	1.19	1.21	138.93	0.35	-60.15	64.15	61.74	2.40	26.681	
500.00	499.55	499.55	499.55	1.55	1.57	157.79	0.35	-60.15	70.77	67.65	3.12	22.666	
600.00	598.97	598.97	598.97	1.93	1.93	168.04	0.35	-60.15	81.02	77.17	3.85	21.067	
700.00	698.00	698.00	698.00	2.32	2.28	174.08	0.35	-60.15	94.76	90.19	4.57	20.739	
800.00	796.50	796.50	796.50	2.73	2.63	177.80	0.35	-60.15	111.93	106.63	5.29	21.146	
900.00	894.36	898.07	898.05	3.17	2.98	179.70	-0.88	-59.02	131.13	125.11	6.02	21.778	
1,000.00	991.47	1,000.17	1,000.00	3.64	3.33	-179.96	-4.79	-55.42	150.85	144.10	6.75	22.333	
1,093.81	1,081.77	1,096.20	1,095.67	4.12	3.66	179.43	-10.91	-49.80	169.94	162.48	7.46	22.782	
1,100.00	1,087.70	1,102.55	1,101.98	4.15	3.68	179.29	-11.40	-49.35	171.22	163.71	7.51	22.797	
1,200.00	1,183.51	1,203.36	1,202.06	4.69	4.04	177.13	-20.31	-41.15	190.73	182.47	8.26	23.102	
1,300.00	1,279.32	1,301.29	1,299.21	5.25	4.39	175.31	-29.43	-32.76	209.98	200.99	8.99	23.347	
1,400.00	1,375.13	1,399.22	1,396.35	5.81	4.75	173.79	-38.55	-24.38	229.40	219.66	9.74	23.541	
1,500.00	1,470.94	1,497.15	1,493.49	6.38	5.12	172.51	-47.67	-15.99	248.96	238.45	10.51	23.698	
1,600.00	1,566.75	1,595.08	1,590.64	6.96	5.50	171.42	-56.79	-7.60	268.61	257.34	11.27	23.824	
1,700.00	1,662.56	1,693.01	1,687.78	7.54	5.87	170.47	-65.91	0.78	288.35	276.30	12.05	23.927	
1,800.00	1,758.38	1,790.94	1,784.92	8.12	6.25	169.65	-75.02	9.17	308.15	295.32	12.83	24.012	
1,900.00	1,854.19	1,888.87	1,882.06	8.71	6.63	168.93	-84.14	17.56	328.01	314.39	13.62	24.082	
2,000.00	1,950.00	1,986.80	1,979.21	9.30	7.02	168.29	-93.26	25.95	347.91	333.50	14.41	24.140	
2,100.00	2,045.81	2,084.73	2,076.35	9.88	7.40	167.72	-102.38	34.33	367.85	352.64	15.21	24.188	
2,200.00	2,141.62	2,182.66	2,173.49	10.48	7.79	167.20	-111.50	42.72	387.82	371.81	16.01	24.229	
2,300.00	2,237.43	2,280.58	2,270.63	11.07	8.17	166.74	-120.62	51.11	407.81	391.01	16.81	24.263	
2,400.00	2,333.24	2,378.51	2,367.78	11.66	8.56	166.32	-129.74	59.49	427.83	410.22	17.61	24.292	
2,500.00	2,429.05	2,476.44	2,464.92	12.25	8.95	165.94	-138.86	67.88	447.87	429.46	18.42	24.317	
2,600.00	2,524.86	2,574.37	2,562.06	12.85	9.34	165.59	-147.98	76.27	467.93	448.70	19.23	24.338	
2,700.00	2,620.67	2,672.30	2,659.21	13.44	9.73	165.27	-157.10	84.65	488.00	467.97	20.04	24.356	
2,800.00	2,716.49	2,770.23	2,756.35	14.04	10.13	164.97	-166.21	93.04	508.09	487.24	20.85	24.372	
2,900.00	2,812.30	2,868.16	2,853.49	14.64	10.52	164.70	-175.33	101.43	528.19	506.53	21.66	24.385	
3,000.00	2,908.11	2,966.09	2,950.63	15.23	10.91	164.45	-184.45	109.82	548.30	525.82	22.47	24.397	
3,100.00	3,003.92	3,064.02	3,047.78	15.83	11.30	164.21	-193.57	118.20	568.42	545.13	23.29	24.407	
3,200.00	3,099.73	3,161.95	3,144.92	16.43	11.70	163.99	-202.69	126.59	588.54	564.44	24.11	24.415	
3,300.00	3,195.54	3,259.88	3,242.06	17.03	12.09	163.79	-211.81	134.98	608.68	583.76	24.92	24.423	
3,400.00	3,291.35	3,357.81	3,339.20	17.62	12.49	163.60	-220.93	143.36	628.82	603.08	25.74	24.430	
3,500.00	3,387.16	3,455.74	3,436.35	18.22	12.88	163.42	-230.05	151.75	648.97	622.41	26.56	24.435	
3,600.00	3,482.97	3,553.67	3,533.49	18.82	13.28	163.25	-239.17	160.14	669.12	641.75	27.38	24.440	
3,700.00	3,578.78	3,651.60	3,630.63	19.42	13.67	163.09	-248.29	168.52	689.28	661.08	28.20	24.445	
3,800.00	3,674.60	3,749.53	3,727.78	20.02	14.07	162.94	-257.40	176.91	709.45	680.43	29.02	24.448	
3,900.00	3,770.41	3,847.46	3,824.92	20.62	14.46	162.80	-266.52	185.30	729.61	699.78	29.84	24.452	
4,000.00	3,866.22	3,945.39	3,922.06	21.22	14.86	162.66	-275.64	193.69	749.79	719.13	30.66	24.454	
4,100.00	3,962.03	4,043.32	4,019.20	21.82	15.25	162.54	-284.76	202.07	769.96	738.48	31.48	24.457	
4,200.00	4,057.84	4,141.25	4,116.35	22.42	15.65	162.42	-293.88	210.46	790.14	757.84	32.30	24.459	
4,300.00	4,153.65	4,239.18	4,213.49	23.02	16.04	162.30	-303.00	218.85	810.33	777.20	33.13	24.461	
4,400.00	4,249.46	4,337.11	4,310.63	23.62	16.44	162.19	-312.12	227.23	830.51	796.56	33.95	24.462	
4,500.00	4,345.27	4,435.04	4,407.77	24.22	16.84	162.09	-321.24	235.62	850.70	815.93	34.77	24.464	
4,600.00	4,441.08	4,532.97	4,504.92	24.82	17.23	161.99	-330.36	244.01	870.89	835.29	35.60	24.465	
4,700.00	4,536.89	4,630.90	4,602.06	25.42	17.63	161.90	-339.47	252.39	891.08	854.66	36.42	24.466	
4,800.00	4,632.70	4,728.83	4,699.20	26.02	18.03	161.81	-348.59	260.78	911.28	874.03	37.25	24.466	
4,900.00	4,728.52	4,826.75	4,796.35	26.62	18.42	161.72	-357.71	269.17	931.48	893.41	38.07	24.467	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4Q-32H-O268 - OH - PLAN #2												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
5,000.00	4,824.33	4,924.68	4,893.49	27.22	18.82	161.64	-366.83	277.55	951.68	912.78	38.90	24.467	
5,100.00	4,920.14	5,022.61	4,990.63	27.82	19.22	161.56	-375.95	285.94	971.88	932.16	39.72	24.468	
5,200.00	5,015.95	5,120.54	5,087.77	28.42	19.61	161.48	-385.07	294.33	992.08	951.53	40.55	24.468	
5,300.00	5,111.76	5,218.47	5,184.92	29.02	20.01	161.41	-394.19	302.72	1,012.29	970.91	41.37	24.468	
5,400.00	5,207.57	5,316.40	5,282.06	29.62	20.41	161.34	-403.31	311.10	1,032.49	990.29	42.20	24.468	
5,500.00	5,303.38	5,414.33	5,379.20	30.22	20.81	161.27	-412.43	319.49	1,052.70	1,009.68	43.02	24.468	
5,600.00	5,399.19	5,512.26	5,476.34	30.82	21.20	161.21	-421.55	327.88	1,072.91	1,029.06	43.85	24.468	
5,700.00	5,495.00	5,610.19	5,573.49	31.42	21.60	161.15	-430.66	336.26	1,093.12	1,048.44	44.68	24.468	
5,800.00	5,590.81	5,708.12	5,670.63	32.02	22.00	161.09	-439.78	344.65	1,113.33	1,067.83	45.50	24.467	
5,900.00	5,686.63	5,806.05	5,767.77	32.62	22.40	161.03	-448.90	353.04	1,133.54	1,087.21	46.33	24.467	
6,000.00	5,782.44	5,903.98	5,864.92	33.22	22.79	160.97	-458.02	361.42	1,153.76	1,106.60	47.16	24.467	
6,100.00	5,878.25	6,001.91	5,962.06	33.82	23.19	160.92	-467.14	369.81	1,173.97	1,125.99	47.98	24.466	
6,200.00	5,974.06	6,099.84	6,059.20	34.42	23.59	160.86	-476.26	378.20	1,194.19	1,145.38	48.81	24.466	
6,300.00	6,069.87	6,197.77	6,156.34	35.03	23.99	160.81	-485.38	386.59	1,214.40	1,164.77	49.64	24.466	
6,400.00	6,165.68	6,295.70	6,253.49	35.63	24.38	160.77	-494.50	394.97	1,234.62	1,184.16	50.46	24.465	
6,500.00	6,261.49	6,393.63	6,350.63	36.23	24.78	160.72	-503.62	403.36	1,254.84	1,203.55	51.29	24.465	
6,600.00	6,357.30	6,491.56	6,447.77	36.83	25.18	160.67	-512.74	411.75	1,275.06	1,222.94	52.12	24.464	
6,700.00	6,453.11	6,589.49	6,544.91	37.43	25.58	160.63	-521.85	420.13	1,295.28	1,242.33	52.95	24.463	
6,800.00	6,548.92	6,687.42	6,642.06	38.03	25.98	160.59	-530.97	428.52	1,315.50	1,261.72	53.78	24.463	
6,900.00	6,644.73	6,782.07	6,781.93	38.63	26.49	160.99	-533.13	440.96	1,334.39	1,279.63	54.76	24.369	
7,000.00	6,740.55	6,969.28	6,920.00	39.23	26.87	162.54	-507.87	454.15	1,350.00	1,294.63	55.37	24.381	
7,100.00	6,836.36	7,094.13	7,035.84	39.83	27.14	164.77	-463.27	465.98	1,363.67	1,307.95	55.71	24.476	
7,188.78	6,921.42	7,188.40	7,117.18	40.37	27.29	166.96	-416.57	474.80	1,375.68	1,319.76	55.92	24.599	
7,200.00	6,932.17	7,199.27	7,126.14	40.44	27.31	170.30	-410.51	475.81	1,377.26	1,321.31	55.95	24.617	
7,250.00	6,980.19	7,246.44	7,163.93	40.72	27.37	-174.25	-382.63	480.11	1,384.45	1,328.40	56.05	24.700	
7,300.00	7,028.16	7,291.73	7,198.42	40.99	27.42	-159.12	-353.56	484.16	1,391.89	1,335.74	56.15	24.790	
7,350.00	7,075.86	7,335.40	7,229.87	41.24	27.46	-145.65	-323.52	487.96	1,399.48	1,343.25	56.24	24.884	
7,400.00	7,123.05	7,377.65	7,258.50	41.47	27.49	-134.40	-292.66	491.55	1,407.18	1,350.86	56.33	24.983	
7,450.00	7,169.51	7,418.66	7,284.50	41.68	27.52	-125.26	-261.13	494.91	1,414.90	1,358.50	56.40	25.085	
7,500.00	7,215.00	7,458.58	7,308.04	41.87	27.55	-117.86	-229.06	498.08	1,422.58	1,366.10	56.48	25.189	
7,550.00	7,259.31	7,497.53	7,329.26	42.04	27.57	-111.82	-196.53	501.06	1,430.13	1,373.59	56.54	25.295	
7,600.00	7,302.22	7,535.63	7,348.27	42.19	27.59	-106.82	-163.64	503.85	1,437.49	1,380.90	56.59	25.400	
7,650.00	7,343.52	7,572.96	7,365.18	42.32	27.61	-102.61	-130.46	506.46	1,444.59	1,387.95	56.64	25.506	
7,700.00	7,383.01	7,609.61	7,380.08	42.44	27.63	-99.04	-97.08	508.89	1,451.35	1,394.68	56.67	25.609	
7,750.00	7,420.50	7,650.00	7,394.51	42.54	27.66	-95.90	-59.44	511.43	1,457.73	1,401.02	56.71	25.703	
7,800.00	7,455.80	7,681.10	7,404.16	42.63	27.69	-93.32	-29.93	513.27	1,463.64	1,406.91	56.72	25.804	
7,850.00	7,488.75	7,716.07	7,413.47	42.70	27.73	-91.02	3.71	515.22	1,469.03	1,412.29	56.74	25.891	
7,900.00	7,519.17	7,750.00	7,420.93	42.76	27.77	-89.03	36.77	516.98	1,473.86	1,417.11	56.75	25.971	
7,950.00	7,546.94	7,784.65	7,426.93	42.81	27.83	-87.28	70.85	518.64	1,478.07	1,421.30	56.77	26.036	
8,000.00	7,571.90	7,818.35	7,431.18	42.84	27.90	-85.78	104.24	520.13	1,481.62	1,424.83	56.79	26.089	
8,050.00	7,593.93	7,850.00	7,433.75	42.87	27.97	-84.51	135.76	521.40	1,484.47	1,427.66	56.81	26.129	
8,100.00	7,612.94	7,884.71	7,434.96	42.88	28.07	-83.40	170.42	522.66	1,486.58	1,429.72	56.86	26.143	
8,150.00	7,628.82	7,928.76	7,435.00	42.89	28.22	-82.38	214.45	524.12	1,487.78	1,430.81	56.98	26.113	
8,200.00	7,641.51	7,977.08	7,435.00	42.89	28.40	-81.61	262.74	525.72	1,487.69	1,430.54	57.15	26.032	
8,250.00	7,650.93	8,026.09	7,435.00	42.88	28.62	-81.14	311.72	527.34	1,486.22	1,428.83	57.39	25.895	
8,300.00	7,657.04	8,075.55	7,435.00	42.87	28.86	-80.95	361.16	528.97	1,483.31	1,425.60	57.71	25.702	
8,350.00	7,659.82	8,125.23	7,435.00	42.85	29.13	-81.08	410.81	530.62	1,478.93	1,420.83	58.11	25.451	
8,366.42	7,660.00	8,141.55	7,435.00	42.84	29.23	-81.18	427.13	531.16	1,477.18	1,418.92	58.26	25.356	
8,400.00	7,660.00	8,174.91	7,435.00	42.83	29.42	-81.16	460.47	532.26	1,473.42	1,414.85	58.57	25.156	
8,500.00	7,660.00	8,274.27	7,435.00	42.81	30.05	-81.09	559.77	535.55	1,462.24	1,402.63	59.62	24.527	
8,600.00	7,660.00	8,373.63	7,435.00	42.80	30.75	-81.02	659.08	538.83	1,451.07	1,390.26	60.81	23.863	
8,700.00	7,660.00	8,472.99	7,435.00	42.81	31.51	-80.95	758.38	542.12	1,439.89	1,377.76	62.14	23.174	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4Q-32H-O268 - OH - PLAN #2												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
8,800.00	7,660.00	8,572.35	7,435.00	42.83	32.33	-80.88	857.68	545.41	1,428.72	1,365.13	63.59	22.467	
8,900.00	7,660.00	8,671.70	7,435.00	42.88	33.19	-80.81	956.99	548.70	1,417.55	1,352.38	65.17	21.752	
9,000.00	7,660.00	8,771.06	7,435.00	42.96	34.11	-80.74	1,056.29	551.98	1,406.38	1,339.52	66.86	21.036	
9,100.00	7,660.00	8,870.42	7,435.00	43.08	35.07	-80.66	1,155.59	555.27	1,395.21	1,326.57	68.65	20.325	
9,200.00	7,660.00	8,969.78	7,435.00	43.25	36.07	-80.58	1,254.90	558.56	1,384.05	1,313.52	70.53	19.623	
9,300.00	7,660.00	9,069.14	7,435.00	43.48	37.11	-80.51	1,354.20	561.84	1,372.89	1,300.38	72.50	18.936	
9,400.00	7,660.00	9,168.49	7,435.00	43.80	38.18	-80.43	1,453.50	565.13	1,361.73	1,287.17	74.56	18.265	
9,500.00	7,660.00	9,267.85	7,435.00	44.22	39.28	-80.35	1,552.81	568.42	1,350.57	1,273.89	76.68	17.613	
9,600.00	7,660.00	9,367.21	7,435.00	44.77	40.42	-80.27	1,652.11	571.70	1,339.42	1,260.54	78.87	16.982	
9,700.00	7,660.00	9,466.57	7,435.00	45.45	41.58	-80.19	1,751.42	574.99	1,328.27	1,247.14	81.13	16.372	
9,800.00	7,660.00	9,565.93	7,435.00	46.26	42.76	-80.10	1,850.72	578.28	1,317.12	1,233.68	83.44	15.785	
9,866.42	7,660.00	9,631.92	7,435.00	46.85	43.56	-80.05	1,916.68	580.46	1,309.72	1,224.71	85.00	15.408	
9,900.00	7,660.00	9,665.31	7,435.00	47.17	43.97	-80.03	1,950.04	581.57	1,306.17	1,220.36	85.80	15.223	
10,000.00	7,660.00	9,764.95	7,435.00	48.18	45.20	-79.99	2,049.63	584.86	1,297.88	1,209.68	88.21	14.714	
10,079.75	7,660.00	9,844.59	7,435.00	49.05	46.20	-79.98	2,129.23	587.50	1,293.74	1,203.59	90.15	14.352	
10,100.00	7,660.00	9,864.82	7,435.00	49.27	46.46	-79.97	2,149.45	588.17	1,292.96	1,202.32	90.64	14.265	
10,200.00	7,660.00	9,949.70	7,435.00	50.41	47.54	-79.95	2,234.29	590.77	1,289.42	1,196.61	92.81	13.893	
10,300.00	7,660.00	10,019.00	7,435.00	51.58	48.43	-79.94	2,303.58	591.41	1,287.94	1,193.27	94.68	13.604	
10,311.85	7,660.00	10,027.21	7,435.00	51.73	48.54	-79.94	2,311.79	591.37	1,287.93	1,193.03	94.90	13.571	
10,400.00	7,660.00	10,100.00	7,435.00	52.79	49.50	-79.95	2,384.57	590.02	1,288.93	1,192.11	96.82	13.313	
10,500.00	7,660.00	10,174.02	7,435.00	54.02	50.49	-79.96	2,458.54	587.26	1,291.80	1,192.98	98.82	13.073	
10,600.00	7,660.00	10,273.97	7,435.00	55.27	51.84	-79.99	2,558.41	583.42	1,295.00	1,193.55	101.45	12.764	
10,700.00	7,660.00	10,373.92	7,435.00	56.54	53.21	-80.01	2,658.29	579.59	1,298.21	1,194.09	104.12	12.468	
10,800.00	7,660.00	10,473.87	7,435.00	57.83	54.59	-80.04	2,758.16	575.76	1,301.41	1,194.59	106.82	12.183	
10,900.00	7,660.00	10,573.81	7,435.00	59.14	55.98	-80.06	2,858.04	571.93	1,304.62	1,195.07	109.54	11.910	
11,000.00	7,660.00	10,673.76	7,435.00	60.46	57.38	-80.09	2,957.91	568.09	1,307.82	1,195.53	112.29	11.647	
11,100.00	7,660.00	10,773.71	7,435.00	61.80	58.80	-80.11	3,057.78	564.26	1,311.02	1,195.97	115.06	11.394	
11,200.00	7,660.00	10,873.65	7,435.00	63.15	60.22	-80.14	3,157.66	560.43	1,314.23	1,196.38	117.85	11.152	
11,300.00	7,660.00	10,973.60	7,435.00	64.51	61.66	-80.16	3,257.53	556.60	1,317.43	1,196.77	120.66	10.919	
11,400.00	7,660.00	11,073.55	7,435.00	65.88	63.10	-80.19	3,357.40	552.76	1,320.64	1,197.15	123.49	10.694	
11,500.00	7,660.00	11,173.49	7,435.00	67.26	64.55	-80.21	3,457.28	548.93	1,323.85	1,197.51	126.33	10.479	
11,600.00	7,660.00	11,273.44	7,435.00	68.65	66.01	-80.23	3,557.15	545.10	1,327.05	1,197.85	129.20	10.272	
11,700.00	7,660.00	11,373.39	7,435.00	70.05	67.48	-80.26	3,657.02	541.27	1,330.26	1,198.18	132.07	10.072	
11,800.00	7,660.00	11,473.34	7,435.00	71.46	68.95	-80.28	3,756.90	537.43	1,333.46	1,198.50	134.97	9.880	
11,900.00	7,660.00	11,573.28	7,435.00	72.87	70.43	-80.30	3,856.77	533.60	1,336.67	1,198.80	137.87	9.695	
12,000.00	7,660.00	11,673.23	7,435.00	74.30	71.92	-80.33	3,956.64	529.77	1,339.88	1,199.09	140.79	9.517	
12,100.00	7,660.00	11,773.18	7,435.00	75.73	73.41	-80.35	4,056.52	525.94	1,343.08	1,199.37	143.71	9.345	
12,200.00	7,660.00	11,873.12	7,435.00	77.16	74.90	-80.37	4,156.39	522.10	1,346.29	1,199.64	146.65	9.180	
12,243.22	7,660.00	11,916.32	7,435.00	77.78	75.50	-80.38	4,199.56	520.45	1,347.68	1,199.80	147.88	9.114 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4R-32H-O268 - OH - PLAN #2													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	-89.61	0.33	-50.08	50.08					
100.00	100.00	100.00	100.00	0.14	0.14	-89.61	0.33	-50.08	50.08	49.81	0.28	181.445		
200.00	200.00	200.00	200.00	0.50	0.50	-89.61	0.33	-50.08	50.08	49.09	0.99	50.438 CC, ES		
300.00	299.98	299.98	299.98	0.84	0.85	122.06	0.33	-50.08	50.99	49.29	1.70	30.055		
350.00	349.93	349.93	349.93	1.02	1.03	124.07	0.33	-50.08	52.18	50.13	2.05	25.474		
400.00	399.85	399.85	399.85	1.19	1.21	139.92	0.33	-50.08	54.12	51.72	2.40	22.512		
500.00	499.55	499.55	499.55	1.55	1.57	159.21	0.33	-50.08	60.83	57.71	3.12	19.483		
600.00	598.97	598.97	598.97	1.93	1.93	169.58	0.33	-50.08	71.15	67.30	3.85	18.503		
700.00	698.00	698.00	698.00	2.32	2.28	175.54	0.33	-50.08	84.95	80.38	4.57	18.594		
800.00	796.50	799.81	799.79	2.73	2.63	178.74	-0.64	-48.64	100.55	95.26	5.30	18.983		
900.00	894.36	902.18	902.01	3.17	2.98	179.97	-3.67	-44.18	116.24	110.21	6.04	19.259		
1,000.00	991.47	1,004.99	1,004.42	3.64	3.34	179.96	-8.78	-36.66	132.07	125.28	6.79	19.441		
1,093.81	1,081.77	1,101.80	1,100.49	4.12	3.69	179.19	-15.47	-26.81	147.14	139.62	7.52	19.571		
1,100.00	1,087.70	1,108.20	1,106.82	4.15	3.71	179.05	-15.97	-26.06	148.14	140.57	7.57	19.569		
1,200.00	1,183.51	1,209.71	1,207.08	4.69	4.09	176.85	-24.89	-12.94	162.97	154.64	8.33	19.564		
1,300.00	1,279.32	1,308.50	1,304.57	5.25	4.48	174.99	-33.87	0.30	177.50	168.42	9.08	19.547		
1,400.00	1,375.13	1,407.29	1,402.05	5.81	4.87	173.41	-42.86	13.54	192.19	182.34	9.84	19.521		
1,500.00	1,470.94	1,506.07	1,499.53	6.38	5.27	172.05	-51.85	26.78	207.00	196.38	10.62	19.490		
1,600.00	1,566.75	1,604.86	1,597.01	6.96	5.67	170.87	-60.84	40.02	221.91	210.50	11.41	19.456		
1,700.00	1,662.56	1,703.65	1,694.49	7.54	6.08	169.84	-69.83	53.26	236.89	224.70	12.20	19.419		
1,800.00	1,758.38	1,802.43	1,791.97	8.12	6.49	168.94	-78.82	66.50	251.95	238.95	13.00	19.381		
1,900.00	1,854.19	1,901.22	1,889.46	8.71	6.90	168.14	-87.81	79.74	267.06	253.25	13.81	19.343		
2,000.00	1,950.00	2,000.01	1,986.94	9.30	7.31	167.42	-96.80	92.98	282.21	267.59	14.62	19.305		
2,100.00	2,045.81	2,098.79	2,084.42	9.88	7.73	166.78	-105.79	106.22	297.41	281.97	15.43	19.268		
2,200.00	2,141.62	2,197.58	2,181.90	10.48	8.15	166.19	-114.78	119.46	312.63	296.38	16.26	19.233		
2,300.00	2,237.43	2,296.37	2,279.38	11.07	8.57	165.67	-123.77	132.70	327.89	310.81	17.08	19.198		
2,400.00	2,333.24	2,395.15	2,376.86	11.66	8.99	165.19	-132.76	145.94	343.17	325.26	17.91	19.165		
2,500.00	2,429.05	2,493.94	2,474.35	12.25	9.41	164.75	-141.75	159.18	358.47	339.73	18.74	19.133		
2,600.00	2,524.86	2,592.73	2,571.83	12.85	9.83	164.34	-150.73	172.42	373.79	354.22	19.57	19.102		
2,700.00	2,620.67	2,691.51	2,669.31	13.44	10.26	163.97	-159.72	185.66	389.13	368.72	20.40	19.073		
2,800.00	2,716.49	2,790.30	2,766.79	14.04	10.68	163.63	-168.71	198.90	404.48	383.24	21.24	19.045		
2,900.00	2,812.30	2,889.09	2,864.27	14.64	11.11	163.31	-177.70	212.14	419.84	397.77	22.08	19.018		
3,000.00	2,908.11	2,987.87	2,961.76	15.23	11.53	163.01	-186.69	225.38	435.22	412.30	22.92	18.993		
3,100.00	3,003.92	3,086.66	3,059.24	15.83	11.96	162.74	-195.68	238.62	450.61	426.85	23.76	18.968		
3,200.00	3,099.73	3,185.45	3,156.72	16.43	12.38	162.48	-204.67	251.86	466.00	441.41	24.60	18.945		
3,300.00	3,195.54	3,284.23	3,254.20	17.03	12.81	162.24	-213.66	265.10	481.41	455.97	25.44	18.923		
3,400.00	3,291.35	3,383.02	3,351.68	17.62	13.23	162.01	-222.65	278.34	496.82	470.54	26.28	18.901		
3,500.00	3,387.16	3,481.80	3,449.16	18.22	13.66	161.80	-231.64	291.58	512.24	485.11	27.13	18.881		
3,600.00	3,482.97	3,580.59	3,546.65	18.82	14.09	161.60	-240.63	304.81	527.67	499.69	27.98	18.862		
3,700.00	3,578.78	3,679.38	3,644.13	19.42	14.52	161.41	-249.62	318.05	543.10	514.28	28.82	18.843		
3,800.00	3,674.60	3,778.16	3,741.61	20.02	14.94	161.23	-258.60	331.29	558.54	528.87	29.67	18.825		
3,900.00	3,770.41	3,876.95	3,839.09	20.62	15.37	161.06	-267.59	344.53	573.98	543.47	30.52	18.808		
4,000.00	3,866.22	3,975.74	3,936.57	21.22	15.80	160.90	-276.58	357.77	589.43	558.07	31.37	18.791		
4,100.00	3,962.03	4,074.52	4,034.06	21.82	16.23	160.75	-285.57	371.01	604.88	572.67	32.22	18.776		
4,200.00	4,057.84	4,173.31	4,131.54	22.42	16.66	160.61	-294.56	384.25	620.34	587.27	33.07	18.760		
4,300.00	4,153.65	4,272.10	4,229.02	23.02	17.09	160.47	-303.55	397.49	635.80	601.88	33.92	18.746		
4,400.00	4,249.46	4,370.88	4,326.50	23.62	17.52	160.34	-312.54	410.73	651.26	616.50	34.77	18.732		
4,500.00	4,345.27	4,469.67	4,423.98	24.22	17.94	160.22	-321.53	423.97	666.73	631.11	35.62	18.718		
4,600.00	4,441.08	4,568.46	4,521.46	24.82	18.37	160.10	-330.52	437.21	682.20	645.73	36.47	18.705		
4,700.00	4,536.89	4,667.24	4,618.95	25.42	18.80	159.98	-339.51	450.45	697.67	660.35	37.32	18.693		
4,800.00	4,632.70	4,766.03	4,716.43	26.02	19.23	159.87	-348.50	463.69	713.15	674.97	38.18	18.681		
4,900.00	4,728.52	4,864.82	4,813.91	26.62	19.66	159.77	-357.49	476.93	728.62	689.59	39.03	18.669		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4R-32H-O268 - OH - PLAN #2												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
5,000.00	4,824.33	4,963.60	4,911.39	27.22	20.09	159.67	-366.48	490.17	744.10	704.22	39.88	18.658	
5,100.00	4,920.14	5,062.39	5,008.87	27.82	20.52	159.57	-375.46	503.41	759.58	718.85	40.73	18.647	
5,200.00	5,015.95	5,161.18	5,106.35	28.42	20.95	159.48	-384.45	516.65	775.07	733.48	41.59	18.637	
5,300.00	5,111.76	5,259.96	5,203.84	29.02	21.38	159.39	-393.44	529.89	790.55	748.11	42.44	18.627	
5,400.00	5,207.57	5,358.75	5,301.32	29.62	21.81	159.31	-402.43	543.13	806.04	762.74	43.30	18.617	
5,500.00	5,303.38	5,457.54	5,398.80	30.22	22.24	159.23	-411.42	556.37	821.53	777.38	44.15	18.607	
5,600.00	5,399.19	5,556.32	5,496.28	30.82	22.67	159.15	-420.41	569.61	837.02	792.01	45.01	18.598	
5,700.00	5,495.00	5,655.11	5,593.76	31.42	23.10	159.07	-429.40	582.85	852.51	806.65	45.86	18.589	
5,800.00	5,590.81	5,753.90	5,691.25	32.02	23.53	159.00	-438.39	596.09	868.00	821.29	46.72	18.581	
5,900.00	5,686.63	5,852.68	5,788.73	32.62	23.96	158.93	-447.38	609.33	883.50	835.93	47.57	18.572	
6,000.00	5,782.44	5,951.47	5,886.21	33.22	24.39	158.86	-456.37	622.57	898.99	850.57	48.43	18.564	
6,100.00	5,878.25	6,050.26	5,983.69	33.82	24.82	158.80	-465.36	635.80	914.49	865.21	49.28	18.556	
6,200.00	5,974.06	6,149.04	6,081.17	34.42	25.25	158.73	-474.35	649.04	929.99	879.85	50.14	18.549	
6,300.00	6,069.87	6,247.83	6,178.65	35.03	25.68	158.67	-483.33	662.28	945.49	894.49	50.99	18.541	
6,400.00	6,165.68	6,346.62	6,276.14	35.63	26.11	158.61	-492.32	675.52	960.99	909.14	51.85	18.534	
6,500.00	6,261.49	6,445.40	6,373.62	36.23	26.54	158.55	-501.31	688.76	976.49	923.78	52.71	18.527	
6,600.00	6,357.30	6,544.19	6,471.10	36.83	26.97	158.50	-510.30	702.00	991.99	938.43	53.56	18.520	
6,700.00	6,453.11	6,642.98	6,568.58	37.43	27.40	158.44	-519.29	715.24	1,007.49	953.07	54.42	18.514	
6,800.00	6,548.92	6,741.76	6,666.06	38.03	27.83	158.39	-528.28	728.48	1,022.99	967.72	55.28	18.507	
6,900.00	6,644.73	6,841.60	6,764.59	38.63	28.27	158.34	-537.36	741.86	1,038.50	982.36	56.14	18.498	
7,000.00	6,740.55	6,939.13	6,860.64	39.23	28.79	159.02	-535.98	760.37	1,052.07	995.06	57.00	18.456	
7,100.00	6,836.36	7,108.84	7,026.51	39.83	29.16	160.90	-510.67	777.54	1,062.56	1,005.16	57.40	18.512	
7,188.78	6,921.42	7,211.93	7,122.05	40.37	29.38	163.20	-474.47	790.60	1,070.60	1,013.07	57.53	18.608	
7,200.00	6,932.17	7,224.06	7,132.93	40.44	29.41	166.54	-469.31	792.09	1,071.61	1,014.07	57.54	18.622	
7,250.00	6,980.19	7,276.82	7,179.17	40.72	29.50	-178.05	-444.72	798.43	1,076.26	1,018.67	57.59	18.689	
7,300.00	7,028.16	7,327.60	7,221.86	40.99	29.57	-162.95	-417.88	804.28	1,081.13	1,023.50	57.63	18.759	
7,350.00	7,075.86	7,376.59	7,261.16	41.24	29.62	-149.50	-389.15	809.68	1,086.19	1,028.52	57.68	18.832	
7,400.00	7,123.05	7,423.99	7,297.24	41.47	29.67	-138.26	-358.83	814.65	1,091.42	1,033.69	57.73	18.906	
7,450.00	7,169.51	7,469.96	7,330.27	41.68	29.70	-129.13	-327.20	819.20	1,096.75	1,038.97	57.79	18.980	
7,500.00	7,215.00	7,514.64	7,360.37	41.87	29.72	-121.73	-294.45	823.36	1,102.15	1,044.31	57.84	19.054	
7,550.00	7,259.31	7,558.17	7,387.71	42.04	29.74	-115.68	-260.79	827.14	1,107.56	1,049.66	57.90	19.129	
7,600.00	7,302.22	7,600.00	7,412.01	42.19	29.74	-110.67	-226.92	830.52	1,112.93	1,054.98	57.96	19.203	
7,650.00	7,343.52	7,642.21	7,434.52	42.32	29.74	-106.43	-191.35	833.65	1,118.21	1,060.20	58.00	19.278	
7,700.00	7,383.01	7,682.92	7,454.21	42.44	29.74	-102.83	-155.84	836.39	1,123.32	1,065.28	58.05	19.352	
7,750.00	7,420.50	7,722.86	7,471.56	42.54	29.72	-99.71	-119.96	838.82	1,128.24	1,070.15	58.08	19.424	
7,800.00	7,455.80	7,762.10	7,486.66	42.63	29.71	-97.01	-83.80	840.95	1,132.89	1,074.78	58.11	19.495	
7,850.00	7,488.75	7,800.00	7,499.35	42.70	29.69	-94.66	-48.14	842.74	1,137.23	1,079.10	58.13	19.563	
7,900.00	7,519.17	7,838.75	7,510.37	42.76	29.66	-92.57	-11.03	844.31	1,141.21	1,083.06	58.15	19.625	
7,950.00	7,546.94	7,876.27	7,519.14	42.81	29.63	-90.75	25.42	845.58	1,144.79	1,086.62	58.17	19.680	
8,000.00	7,571.90	7,913.30	7,525.92	42.84	29.61	-89.16	61.82	846.57	1,147.92	1,089.73	58.19	19.728	
8,050.00	7,593.93	7,950.00	7,530.80	42.87	29.58	-87.78	98.18	847.30	1,150.56	1,092.34	58.21	19.765	
8,100.00	7,612.94	7,986.11	7,533.79	42.88	29.54	-86.58	134.16	847.78	1,152.67	1,094.42	58.25	19.788	
8,150.00	7,628.82	8,021.96	7,534.97	42.89	29.51	-85.57	169.98	848.01	1,154.23	1,095.93	58.30	19.797	
8,200.00	7,641.51	8,068.22	7,535.00	42.89	29.47	-84.63	216.24	848.11	1,155.02	1,096.60	58.42	19.773	
8,250.00	7,650.93	8,117.30	7,535.00	42.88	29.43	-83.98	265.32	848.20	1,154.62	1,096.02	58.60	19.703	
8,300.00	7,657.04	8,166.86	7,535.00	42.87	29.40	-83.65	314.88	848.30	1,152.95	1,094.07	58.88	19.583	
8,350.00	7,659.82	8,216.66	7,535.00	42.85	29.57	-83.66	364.68	848.39	1,149.96	1,090.74	59.23	19.415	
8,366.42	7,660.00	8,233.03	7,535.00	42.84	29.66	-83.73	381.05	848.43	1,148.70	1,089.33	59.37	19.348	
8,400.00	7,660.00	8,266.50	7,535.00	42.83	29.84	-83.72	414.52	848.49	1,145.95	1,086.28	59.67	19.205	
8,500.00	7,660.00	8,366.16	7,535.00	42.81	30.47	-83.67	514.18	848.69	1,137.79	1,077.12	60.66	18.755	
8,600.00	7,660.00	8,465.82	7,535.00	42.80	31.16	-83.63	613.84	848.88	1,129.62	1,067.81	61.81	18.276	
8,700.00	7,660.00	8,565.48	7,535.00	42.81	31.91	-83.58	713.50	849.07	1,121.46	1,058.36	63.10	17.773	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4R-32H-O268 - OH - PLAN #2												Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)			
8,800.00	7,660.00	8,665.15	7,535.00	42.83	32.71	-83.53	813.16	849.27	1,113.30	1,048.78	64.52	17.255	
8,900.00	7,660.00	8,764.81	7,535.00	42.88	33.56	-83.48	912.83	849.46	1,105.14	1,039.07	66.07	16.727	
9,000.00	7,660.00	8,864.47	7,535.00	42.96	34.46	-83.43	1,012.49	849.66	1,096.98	1,029.24	67.73	16.196	
9,100.00	7,660.00	8,964.13	7,535.00	43.08	35.41	-83.39	1,112.15	849.85	1,088.82	1,019.31	69.50	15.666	
9,200.00	7,660.00	9,063.79	7,535.00	43.25	36.39	-83.34	1,211.81	850.05	1,080.66	1,009.28	71.38	15.140	
9,300.00	7,660.00	9,163.46	7,535.00	43.48	37.42	-83.28	1,311.47	850.24	1,072.50	999.16	73.34	14.624	
9,400.00	7,660.00	9,263.12	7,535.00	43.80	38.48	-83.23	1,411.14	850.43	1,064.34	988.95	75.39	14.118	
9,500.00	7,660.00	9,362.78	7,535.00	44.22	39.57	-83.18	1,510.80	850.63	1,056.18	978.67	77.51	13.626	
9,600.00	7,660.00	9,462.44	7,535.00	44.77	40.70	-83.13	1,610.46	850.82	1,048.03	968.31	79.71	13.147	
9,700.00	7,660.00	9,562.10	7,535.00	45.45	41.85	-83.07	1,710.12	851.02	1,039.87	957.89	81.98	12.685	
9,800.00	7,660.00	9,661.77	7,535.00	46.26	43.03	-83.02	1,809.78	851.21	1,031.72	947.42	84.30	12.238	
9,866.42	7,660.00	9,727.96	7,535.00	46.85	43.83	-82.98	1,875.98	851.34	1,026.30	940.43	85.88	11.951	
9,900.00	7,660.00	9,761.44	7,535.00	47.17	44.24	-82.97	1,909.46	851.41	1,023.76	937.08	86.68	11.811	
10,000.00	7,660.00	9,861.30	7,535.00	48.18	45.47	-82.95	2,009.31	851.60	1,018.50	929.40	89.10	11.431	
10,079.75	7,660.00	9,941.03	7,535.00	49.05	46.46	-82.94	2,089.05	851.76	1,016.78	925.73	91.05	11.167	
10,100.00	7,660.00	9,961.28	7,535.00	49.27	46.72	-82.94	2,109.29	851.80	1,016.62	925.08	91.55	11.105	
10,200.00	7,660.00	10,061.27	7,535.00	50.41	47.99	-82.93	2,209.29	851.99	1,015.85	921.82	94.03	10.803	
10,300.00	7,660.00	10,161.27	7,535.00	51.58	49.28	-82.93	2,309.29	852.19	1,015.08	918.53	96.55	10.513	
10,400.00	7,660.00	10,261.27	7,535.00	52.79	50.58	-82.92	2,409.28	852.38	1,014.31	915.20	99.11	10.234	
10,500.00	7,660.00	10,361.26	7,535.00	54.02	51.90	-82.92	2,509.28	852.57	1,013.54	911.83	101.71	9.965	
10,600.00	7,660.00	10,461.26	7,535.00	55.27	53.24	-82.91	2,609.28	852.77	1,012.77	908.44	104.33	9.707	
10,700.00	7,660.00	10,561.26	7,535.00	56.54	54.58	-82.90	2,709.27	852.96	1,012.00	905.02	106.98	9.459	
10,800.00	7,660.00	10,661.25	7,535.00	57.83	55.94	-82.90	2,809.27	853.16	1,011.23	901.56	109.66	9.221	
10,900.00	7,660.00	10,761.25	7,535.00	59.14	57.31	-82.89	2,909.27	853.35	1,010.46	898.09	112.37	8.992	
11,000.00	7,660.00	10,861.25	7,535.00	60.46	58.70	-82.89	3,009.26	853.55	1,009.69	894.59	115.09	8.773	
11,100.00	7,660.00	10,961.25	7,535.00	61.80	60.09	-82.88	3,109.26	853.74	1,008.92	891.07	117.84	8.561	
11,200.00	7,660.00	11,061.24	7,535.00	63.15	61.49	-82.88	3,209.26	853.94	1,008.14	887.53	120.61	8.359	
11,300.00	7,660.00	11,161.24	7,535.00	64.51	62.90	-82.87	3,309.25	854.13	1,007.37	883.97	123.40	8.164	
11,400.00	7,660.00	11,261.24	7,535.00	65.88	64.31	-82.87	3,409.25	854.33	1,006.60	880.40	126.20	7.976	
11,500.00	7,660.00	11,361.23	7,535.00	67.26	65.74	-82.86	3,509.25	854.52	1,005.83	876.81	129.03	7.796	
11,600.00	7,660.00	11,461.23	7,535.00	68.65	67.17	-82.86	3,609.24	854.72	1,005.06	873.20	131.86	7.622	
11,700.00	7,660.00	11,561.23	7,535.00	70.05	68.61	-82.85	3,709.24	854.91	1,004.29	869.58	134.71	7.455	
11,735.63	7,660.00	11,589.24	7,535.00	70.55	69.01	-82.85	3,737.25	854.88	1,004.13	868.63	135.50	7.410	
11,800.00	7,660.00	11,639.91	7,535.00	71.46	69.75	-82.85	3,787.91	854.15	1,004.66	867.73	136.93	7.337	
11,900.00	7,660.00	11,735.96	7,535.00	72.87	71.16	-82.86	3,883.94	851.90	1,006.39	866.70	139.70	7.204	
12,000.00	7,660.00	11,835.95	7,535.00	74.30	72.63	-82.88	3,983.90	849.56	1,008.14	865.53	142.61	7.069	
12,100.00	7,660.00	11,935.93	7,535.00	75.73	74.10	-82.89	4,083.86	847.22	1,009.88	864.35	145.53	6.939	
12,200.00	7,660.00	12,035.91	7,535.00	77.16	75.59	-82.90	4,183.81	844.89	1,011.62	863.16	148.46	6.814	
12,243.22	7,660.00	12,079.13	7,535.00	77.78	76.23	-82.91	4,227.01	843.88	1,012.38	862.64	149.73	6.761 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4S-32H-O268 - OH - PLAN #2												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	-89.54	0.32	-40.01	40.01				
100.00	100.00	100.00	100.00	0.14	0.14	-89.54	0.32	-40.01	40.01	39.73	0.28	144.954	
200.00	200.00	200.00	200.00	0.50	0.50	-89.54	0.32	-40.01	40.01	39.02	0.99	40.294 CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	122.55	0.32	-40.01	40.92	39.23	1.70	24.122	
350.00	349.93	349.93	349.93	1.02	1.03	125.03	0.32	-40.01	42.14	40.09	2.05	20.571	
400.00	399.85	399.85	399.85	1.19	1.21	141.35	0.32	-40.01	44.13	41.72	2.40	18.352	
500.00	499.55	499.55	499.55	1.55	1.57	161.18	0.32	-40.01	50.94	47.82	3.12	16.316	
600.00	598.97	598.97	598.97	1.93	1.93	171.61	0.32	-40.01	61.35	57.50	3.84	15.957	
700.00	698.00	700.51	700.49	2.32	2.28	177.03	-0.57	-38.49	73.53	68.96	4.57	16.085	
800.00	796.50	802.50	802.33	2.73	2.63	179.41	-3.28	-33.83	85.69	80.38	5.31	16.132	
900.00	894.36	904.87	904.30	3.17	2.99	179.98	-7.84	-26.00	97.85	91.78	6.07	16.119	
1,000.00	991.47	1,007.58	1,006.21	3.64	3.36	179.39	-14.24	-14.99	110.11	103.27	6.84	16.091	
1,093.81	1,081.77	1,104.17	1,101.57	4.12	3.73	178.12	-21.94	-1.77	121.82	114.24	7.58	16.074	
1,100.00	1,087.70	1,110.30	1,107.60	4.15	3.75	177.96	-22.48	-0.84	122.61	114.98	7.63	16.075	
1,200.00	1,183.51	1,209.34	1,205.12	4.69	4.15	175.63	-31.19	14.11	135.41	127.03	8.37	16.174	
1,300.00	1,279.32	1,308.38	1,302.64	5.25	4.55	173.70	-39.89	29.07	148.39	139.25	9.13	16.247	
1,400.00	1,375.13	1,407.42	1,400.16	5.81	4.96	172.09	-48.60	44.02	161.51	151.60	9.91	16.300	
1,500.00	1,470.94	1,506.46	1,497.67	6.38	5.38	170.71	-57.30	58.97	174.73	164.04	10.70	16.337	
1,600.00	1,566.75	1,605.50	1,595.19	6.96	5.80	169.53	-66.01	73.93	188.05	176.55	11.49	16.363	
1,700.00	1,662.56	1,704.54	1,692.71	7.54	6.22	168.51	-74.71	88.88	201.43	189.13	12.30	16.380	
1,800.00	1,758.38	1,803.58	1,790.23	8.12	6.65	167.62	-83.42	103.84	214.86	201.75	13.11	16.390	
1,900.00	1,854.19	1,902.62	1,887.74	8.71	7.08	166.83	-92.12	118.79	228.34	214.42	13.93	16.395	
2,000.00	1,950.00	2,001.66	1,985.26	9.30	7.51	166.13	-100.83	133.75	241.86	227.11	14.75	16.397	
2,100.00	2,045.81	2,100.70	2,082.78	9.88	7.94	165.50	-109.53	148.70	255.41	239.83	15.58	16.395	
2,200.00	2,141.62	2,199.75	2,180.30	10.48	8.37	164.93	-118.24	163.66	268.99	252.58	16.41	16.392	
2,300.00	2,237.43	2,298.79	2,277.81	11.07	8.81	164.42	-126.94	178.61	282.59	265.35	17.24	16.387	
2,400.00	2,333.24	2,397.83	2,375.33	11.66	9.24	163.96	-135.65	193.56	296.21	278.13	18.08	16.381	
2,500.00	2,429.05	2,496.87	2,472.85	12.25	9.68	163.54	-144.35	208.52	309.85	290.93	18.92	16.374	
2,600.00	2,524.86	2,595.91	2,570.37	12.85	10.12	163.15	-153.06	223.47	323.50	303.74	19.77	16.367	
2,700.00	2,620.67	2,694.95	2,667.88	13.44	10.56	162.80	-161.76	238.43	337.17	316.56	20.61	16.359	
2,800.00	2,716.49	2,793.99	2,765.40	14.04	10.99	162.47	-170.47	253.38	350.85	329.39	21.46	16.351	
2,900.00	2,812.30	2,893.03	2,862.92	14.64	11.43	162.17	-179.17	268.34	364.54	342.23	22.30	16.343	
3,000.00	2,908.11	2,992.07	2,960.44	15.23	11.87	161.88	-187.88	283.29	378.24	355.08	23.15	16.335	
3,100.00	3,003.92	3,091.11	3,057.96	15.83	12.31	161.62	-196.58	298.24	391.94	367.94	24.01	16.327	
3,200.00	3,099.73	3,190.15	3,155.47	16.43	12.75	161.38	-205.29	313.20	405.66	380.80	24.86	16.320	
3,300.00	3,195.54	3,289.20	3,252.99	17.03	13.19	161.15	-213.99	328.15	419.38	393.67	25.71	16.312	
3,400.00	3,291.35	3,388.24	3,350.51	17.62	13.63	160.94	-222.70	343.11	433.10	406.54	26.56	16.304	
3,500.00	3,387.16	3,487.28	3,448.03	18.22	14.08	160.74	-231.41	358.06	446.83	419.42	27.42	16.297	
3,600.00	3,482.97	3,586.32	3,545.54	18.82	14.52	160.55	-240.11	373.02	460.57	432.30	28.27	16.289	
3,700.00	3,578.78	3,685.36	3,643.06	19.42	14.96	160.37	-248.82	387.97	474.31	445.18	29.13	16.282	
3,800.00	3,674.60	3,784.40	3,740.58	20.02	15.40	160.20	-257.52	402.93	488.06	458.07	29.99	16.275	
3,900.00	3,770.41	3,883.44	3,838.10	20.62	15.84	160.05	-266.23	417.88	501.81	470.96	30.85	16.268	
4,000.00	3,866.22	3,982.48	3,935.61	21.22	16.28	159.90	-274.93	432.83	515.56	483.86	31.70	16.262	
4,100.00	3,962.03	4,081.52	4,033.13	21.82	16.73	159.75	-283.64	447.79	529.32	496.76	32.56	16.255	
4,200.00	4,057.84	4,180.56	4,130.65	22.42	17.17	159.62	-292.34	462.74	543.08	509.66	33.42	16.249	
4,300.00	4,153.65	4,279.60	4,228.17	23.02	17.61	159.49	-301.05	477.70	556.84	522.56	34.28	16.243	
4,400.00	4,249.46	4,378.65	4,325.68	23.62	18.05	159.37	-309.75	492.65	570.61	535.47	35.14	16.237	
4,500.00	4,345.27	4,477.69	4,423.20	24.22	18.50	159.25	-318.46	507.61	584.38	548.37	36.00	16.231	
4,600.00	4,441.08	4,576.73	4,520.72	24.82	18.94	159.14	-327.16	522.56	598.15	561.28	36.86	16.226	
4,700.00	4,536.89	4,675.77	4,618.24	25.42	19.38	159.04	-335.87	537.51	611.92	574.19	37.73	16.220	
4,800.00	4,632.70	4,774.81	4,715.76	26.02	19.83	158.93	-344.57	552.47	625.69	587.10	38.59	16.215	
4,900.00	4,728.52	4,873.85	4,813.27	26.62	20.27	158.84	-353.28	567.42	639.47	600.02	39.45	16.210	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4S-32H-O268 - OH - PLAN #2												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
5,000.00	4,824.33	4,972.89	4,910.79	27.22	20.71	158.74	-361.98	582.38	653.24	612.93	40.31	16.205	
5,100.00	4,920.14	5,071.93	5,008.31	27.82	21.16	158.66	-370.69	597.33	667.02	625.85	41.17	16.200	
5,200.00	5,015.95	5,170.97	5,105.83	28.42	21.60	158.57	-379.39	612.29	680.80	638.77	42.04	16.195	
5,300.00	5,111.76	5,270.01	5,203.34	29.02	22.04	158.49	-388.10	627.24	694.59	651.69	42.90	16.191	
5,400.00	5,207.57	5,369.05	5,300.86	29.62	22.49	158.41	-396.80	642.20	708.37	664.61	43.76	16.186	
5,500.00	5,303.38	5,468.10	5,398.38	30.22	22.93	158.33	-405.51	657.15	722.15	677.53	44.63	16.182	
5,600.00	5,399.19	5,567.14	5,495.90	30.82	23.37	158.26	-414.21	672.10	735.94	690.45	45.49	16.178	
5,700.00	5,495.00	5,666.18	5,593.41	31.42	23.82	158.19	-422.92	687.06	749.73	703.37	46.35	16.174	
5,800.00	5,590.81	5,765.22	5,690.93	32.02	24.26	158.12	-431.62	702.01	763.52	716.30	47.22	16.170	
5,900.00	5,686.63	5,864.26	5,788.45	32.62	24.71	158.06	-440.33	716.97	777.30	729.22	48.08	16.166	
6,000.00	5,782.44	5,963.30	5,885.97	33.22	25.15	157.99	-449.03	731.92	791.09	742.15	48.95	16.162	
6,100.00	5,878.25	6,062.34	5,983.48	33.82	25.59	157.93	-457.74	746.88	804.89	755.07	49.81	16.159	
6,200.00	5,974.06	6,161.38	6,081.00	34.42	26.04	157.87	-466.44	761.83	818.68	768.00	50.68	16.155	
6,300.00	6,069.87	6,260.42	6,178.52	35.03	26.48	157.82	-475.15	776.78	832.47	780.93	51.54	16.151	
6,400.00	6,165.68	6,359.46	6,276.04	35.63	26.92	157.76	-483.85	791.74	846.26	793.86	52.41	16.148	
6,500.00	6,261.49	6,458.51	6,373.56	36.23	27.37	157.71	-492.56	806.69	860.06	806.79	53.27	16.145	
6,600.00	6,357.30	6,557.55	6,471.07	36.83	27.81	157.66	-501.27	821.65	873.85	819.72	54.14	16.142	
6,700.00	6,453.11	6,656.59	6,568.59	37.43	28.26	157.61	-509.97	836.60	887.65	832.65	55.00	16.138	
6,800.00	6,548.92	6,755.63	6,666.11	38.03	28.70	157.56	-518.68	851.56	901.44	845.58	55.87	16.135	
6,900.00	6,644.73	6,854.67	6,763.63	38.63	29.15	157.51	-527.38	866.51	915.24	858.51	56.73	16.132	
7,000.00	6,740.55	6,953.71	6,861.14	39.23	29.59	157.47	-536.09	881.47	929.04	871.44	57.60	16.129	
7,100.00	6,836.36	7,079.06	6,984.84	39.83	30.12	157.80	-540.63	900.43	941.85	883.35	58.51	16.098	
7,188.78	6,921.42	7,196.16	7,099.51	40.37	30.50	159.23	-525.67	917.98	950.36	891.43	58.93	16.128	
7,200.00	6,932.17	7,210.41	7,113.26	40.44	30.54	162.49	-522.57	920.08	951.28	892.33	58.95	16.136	
7,250.00	6,980.19	7,272.84	7,172.66	40.72	30.71	177.58	-505.71	929.17	955.29	896.25	59.04	16.179	
7,300.00	7,028.16	7,333.49	7,228.77	40.99	30.84	-167.60	-484.38	937.74	959.12	900.03	59.09	16.231	
7,350.00	7,075.86	7,392.42	7,281.39	41.24	30.96	-154.40	-459.14	945.77	962.79	903.67	59.12	16.286	
7,400.00	7,123.05	7,449.68	7,330.39	41.47	31.05	-143.38	-430.49	953.25	966.31	907.17	59.14	16.339	
7,450.00	7,169.51	7,505.34	7,375.70	41.68	31.12	-134.45	-398.94	960.15	969.68	910.52	59.17	16.389	
7,500.00	7,215.00	7,559.49	7,417.34	41.87	31.18	-127.23	-364.92	966.49	972.92	913.71	59.20	16.433	
7,550.00	7,259.31	7,612.21	7,455.31	42.04	31.21	-121.34	-328.84	972.27	976.00	916.74	59.26	16.470	
7,600.00	7,302.22	7,663.58	7,489.70	42.19	31.24	-116.46	-291.05	977.49	978.92	919.59	59.33	16.499	
7,650.00	7,343.52	7,713.69	7,520.59	42.32	31.25	-112.36	-251.88	982.18	981.68	922.26	59.42	16.521	
7,700.00	7,383.01	7,762.62	7,548.06	42.44	31.26	-108.86	-211.61	986.34	984.25	924.73	59.52	16.537	
7,750.00	7,420.50	7,810.46	7,572.23	42.54	31.25	-105.84	-170.50	989.99	986.62	926.99	59.63	16.546	
7,800.00	7,455.80	7,857.27	7,593.20	42.63	31.24	-103.21	-128.79	993.16	988.77	929.03	59.74	16.550	
7,850.00	7,488.75	7,903.13	7,611.10	42.70	31.22	-100.90	-86.65	995.85	990.68	930.82	59.86	16.549	
7,900.00	7,519.17	7,948.11	7,626.03	42.76	31.19	-98.87	-44.29	998.09	992.33	932.34	59.99	16.543	
7,950.00	7,546.94	7,992.28	7,638.10	42.81	31.16	-97.07	-1.85	999.88	993.69	933.58	60.11	16.532	
8,000.00	7,571.90	8,035.68	7,647.42	42.84	31.12	-95.49	40.51	1,001.26	994.74	934.51	60.23	16.515	
8,050.00	7,593.93	8,078.39	7,654.10	42.87	31.09	-94.09	82.68	1,002.24	995.47	935.12	60.36	16.494	
8,100.00	7,612.94	8,120.45	7,658.25	42.88	31.05	-92.87	124.53	1,002.82	995.85	935.37	60.48	16.465	
8,150.00	7,628.82	8,161.92	7,659.94	42.89	31.02	-91.81	165.95	1,003.03	995.87	935.26	60.61	16.430	
8,200.00	7,641.51	8,208.77	7,660.00	42.89	30.98	-90.87	212.80	1,002.98	995.39	934.61	60.78	16.377	
8,250.00	7,650.93	8,257.85	7,660.00	42.88	30.94	-90.22	261.88	1,002.92	994.10	933.08	61.02	16.292	
8,300.00	7,657.04	8,307.42	7,660.00	42.87	30.91	-89.90	311.45	1,002.86	991.91	930.60	61.31	16.178	
8,350.00	7,659.82	8,357.23	7,660.00	42.85	30.90	-89.92	361.26	1,002.80	988.76	927.06	61.70	16.025	
8,366.42	7,660.00	8,373.61	7,660.00	42.84	30.90	-90.00	377.64	1,002.78	987.52	925.67	61.84	15.968	
8,400.00	7,660.00	8,407.08	7,660.00	42.83	30.92	-90.00	411.11	1,002.74	984.86	922.71	62.15	15.846	
8,500.00	7,660.00	8,506.77	7,660.00	42.81	31.25	-90.00	510.80	1,002.62	976.96	913.78	63.18	15.463	
8,600.00	7,660.00	8,606.45	7,660.00	42.80	31.88	-90.00	610.48	1,002.50	969.06	904.71	64.35	15.058	
8,700.00	7,660.00	8,706.14	7,660.00	42.81	32.60	-90.00	710.17	1,002.38	961.16	895.49	65.67	14.636	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4S-32H-O268 - OH - PLAN #2													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		
8,800.00	7,660.00	8,805.83	7,660.00	42.83	33.37	-90.00	809.86	1,002.26	953.26	886.15	67.12	14.203		
8,900.00	7,660.00	8,905.52	7,660.00	42.88	34.21	-90.00	909.55	1,002.14	945.36	876.68	68.68	13.764		
9,000.00	7,660.00	9,005.20	7,660.00	42.96	35.09	-90.00	1,009.23	1,002.02	937.46	867.10	70.37	13.323		
9,100.00	7,660.00	9,104.89	7,660.00	43.08	36.02	-90.00	1,108.92	1,001.90	929.57	857.41	72.16	12.883		
9,200.00	7,660.00	9,204.58	7,660.00	43.25	36.99	-90.00	1,208.61	1,001.78	921.67	847.62	74.04	12.448		
9,300.00	7,660.00	9,304.27	7,660.00	43.48	38.00	-90.00	1,308.30	1,001.66	913.77	837.74	76.02	12.019		
9,400.00	7,660.00	9,403.95	7,660.00	43.80	39.05	-90.00	1,407.98	1,001.54	905.87	827.78	78.09	11.601		
9,500.00	7,660.00	9,503.64	7,660.00	44.22	40.13	-90.00	1,507.67	1,001.42	897.97	817.74	80.23	11.192		
9,600.00	7,660.00	9,603.33	7,660.00	44.77	41.24	-90.00	1,607.36	1,001.30	890.07	807.62	82.44	10.796		
9,700.00	7,660.00	9,703.02	7,660.00	45.45	42.38	-90.00	1,707.05	1,001.18	882.17	797.44	84.72	10.412		
9,800.00	7,660.00	9,802.70	7,660.00	46.26	43.54	-90.00	1,806.73	1,001.06	874.27	787.20	87.07	10.042		
9,866.42	7,660.00	9,868.92	7,660.00	46.85	44.33	-90.00	1,872.95	1,000.98	869.02	780.37	88.65	9.802		
9,900.00	7,660.00	9,902.41	7,660.00	47.17	44.73	-90.00	1,906.44	1,000.94	866.56	777.10	89.46	9.686		
10,000.00	7,660.00	10,002.28	7,660.00	48.18	45.95	-90.00	2,006.31	1,000.82	861.57	769.69	91.89	9.376		
10,079.75	7,660.00	10,082.01	7,660.00	49.05	46.94	-90.00	2,086.04	1,000.72	860.10	766.26	93.84	9.165		
10,100.00	7,660.00	10,102.26	7,660.00	49.27	47.19	-90.00	2,106.29	1,000.70	860.00	765.67	94.34	9.116		
10,200.00	7,660.00	10,202.26	7,660.00	50.41	48.45	-90.00	2,206.29	1,000.58	859.54	762.72	96.82	8.878		
10,300.00	7,660.00	10,302.26	7,660.00	51.58	49.73	-90.00	2,306.29	1,000.46	859.08	759.74	99.34	8.648		
10,400.00	7,660.00	10,402.26	7,660.00	52.79	51.02	-90.00	2,406.29	1,000.34	858.62	756.72	101.90	8.426		
10,500.00	7,660.00	10,502.26	7,660.00	54.02	52.33	-90.00	2,506.28	1,000.22	858.16	753.67	104.49	8.213		
10,600.00	7,660.00	10,602.25	7,660.00	55.27	53.65	-90.00	2,606.28	1,000.10	857.70	750.58	107.12	8.007		
10,700.00	7,660.00	10,702.25	7,660.00	56.54	54.99	-90.00	2,706.28	999.98	857.24	747.47	109.77	7.809		
10,800.00	7,660.00	10,802.25	7,660.00	57.83	56.34	-90.00	2,806.28	999.86	856.77	744.32	112.45	7.619		
10,900.00	7,660.00	10,902.25	7,660.00	59.14	57.70	-90.00	2,906.28	999.74	856.31	741.16	115.16	7.436		
11,000.00	7,660.00	11,002.25	7,660.00	60.46	59.08	-90.00	3,006.28	999.62	855.85	737.97	117.89	7.260		
11,100.00	7,660.00	11,102.25	7,660.00	61.80	60.46	-90.00	3,106.28	999.49	855.39	734.75	120.64	7.091		
11,200.00	7,660.00	11,202.25	7,660.00	63.15	61.86	-90.00	3,206.28	999.37	854.93	731.52	123.41	6.927		
11,300.00	7,660.00	11,302.25	7,660.00	64.51	63.26	-90.00	3,306.28	999.25	854.47	728.26	126.20	6.771		
11,400.00	7,660.00	11,402.25	7,660.00	65.88	64.67	-90.00	3,406.27	999.13	854.01	724.99	129.01	6.620		
11,500.00	7,660.00	11,502.24	7,660.00	67.26	66.09	-90.00	3,506.27	999.01	853.55	721.71	131.84	6.474		
11,600.00	7,660.00	11,602.24	7,660.00	68.65	67.51	-90.00	3,606.27	998.89	853.08	718.40	134.68	6.334		
11,700.00	7,660.00	11,702.24	7,660.00	70.05	68.95	-90.00	3,706.27	998.77	852.62	715.08	137.54	6.199		
11,800.00	7,660.00	11,802.24	7,660.00	71.46	70.39	-90.00	3,806.27	998.65	852.16	711.75	140.41	6.069		
11,900.00	7,660.00	11,902.24	7,660.00	72.87	71.83	-90.00	3,906.27	998.53	851.70	708.41	143.29	5.944		
12,000.00	7,660.00	12,002.24	7,660.00	74.30	73.28	-90.00	4,006.27	998.41	851.24	705.05	146.19	5.823		
12,100.00	7,660.00	12,102.24	7,660.00	75.73	74.74	-90.00	4,106.27	998.29	850.78	701.68	149.10	5.706		
12,200.00	7,660.00	12,202.24	7,660.00	77.16	76.20	-90.00	4,206.26	998.17	850.32	698.30	152.02	5.593		
12,243.22	7,660.00	12,245.46	7,660.00	77.78	76.84	-90.00	4,249.48	998.12	850.12	696.83	153.28	5.546 SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4T-32H-O268 - OH - PLAN #2												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	-89.42	0.30	-29.94	29.94				
100.00	100.00	100.00	100.00	0.14	0.14	-89.42	0.30	-29.94	29.94	29.66	0.28	108.464	
200.00	200.00	200.00	200.00	0.50	0.50	-89.42	0.30	-29.94	29.94	28.95	0.99	30.151	CC, ES
300.00	299.98	299.98	299.98	0.84	0.85	123.36	0.30	-29.94	30.86	29.17	1.70	18.192	
350.00	349.93	349.93	349.93	1.02	1.03	126.59	0.30	-29.94	32.11	30.07	2.05	15.677	
400.00	399.85	399.85	399.85	1.19	1.21	143.62	0.30	-29.94	34.17	31.77	2.40	14.211	
500.00	499.55	499.55	499.55	1.55	1.57	164.10	0.30	-29.94	41.14	38.02	3.12	13.177	
600.00	598.97	600.72	600.69	1.93	1.92	174.05	-0.53	-28.38	49.95	46.10	3.85	12.979	
700.00	698.00	702.22	702.05	2.32	2.27	178.50	-3.07	-23.65	58.68	54.08	4.59	12.780	
800.00	796.50	804.02	803.45	2.73	2.63	179.96	-7.31	-15.73	67.32	61.97	5.35	12.579	
900.00	894.36	906.07	904.71	3.17	3.00	179.61	-13.26	-4.61	75.98	69.86	6.12	12.406	
1,000.00	991.47	1,008.33	1,005.67	3.64	3.40	178.07	-20.94	9.71	84.81	77.90	6.91	12.277	
1,093.81	1,081.77	1,102.78	1,098.44	4.12	3.78	176.07	-29.31	25.34	93.86	86.23	7.63	12.306	
1,100.00	1,087.70	1,108.92	1,104.47	4.15	3.81	175.88	-29.86	26.38	94.55	86.87	7.68	12.318	
1,200.00	1,183.51	1,208.18	1,201.89	4.69	4.23	173.13	-38.81	43.08	105.79	97.35	8.44	12.541	
1,300.00	1,279.32	1,307.43	1,299.32	5.25	4.65	170.90	-47.75	59.78	117.22	108.01	9.21	12.722	
1,400.00	1,375.13	1,406.68	1,396.75	5.81	5.09	169.08	-56.70	76.48	128.80	118.79	10.01	12.867	
1,500.00	1,470.94	1,505.93	1,494.17	6.38	5.53	167.55	-65.65	93.19	140.49	129.67	10.82	12.986	
1,600.00	1,566.75	1,605.18	1,591.60	6.96	5.97	166.27	-74.59	109.89	152.25	140.62	11.64	13.082	
1,700.00	1,662.56	1,704.43	1,689.02	7.54	6.41	165.16	-83.54	126.59	164.09	151.62	12.47	13.161	
1,800.00	1,758.38	1,803.68	1,786.45	8.12	6.86	164.21	-92.49	143.29	175.97	162.67	13.30	13.227	
1,900.00	1,854.19	1,902.93	1,883.88	8.71	7.31	163.37	-101.43	160.00	187.90	173.76	14.15	13.282	
2,000.00	1,950.00	2,002.19	1,981.30	9.30	7.76	162.64	-110.38	176.70	199.87	184.87	15.00	13.328	
2,100.00	2,045.81	2,101.44	2,078.73	9.88	8.21	161.99	-119.33	193.40	211.86	196.01	15.85	13.367	
2,200.00	2,141.62	2,200.69	2,176.15	10.48	8.66	161.40	-128.27	210.10	223.87	207.17	16.71	13.400	
2,300.00	2,237.43	2,299.94	2,273.58	11.07	9.12	160.88	-137.22	226.81	235.91	218.34	17.57	13.429	
2,400.00	2,333.24	2,399.19	2,371.00	11.66	9.57	160.41	-146.17	243.51	247.96	229.53	18.43	13.453	
2,500.00	2,429.05	2,498.44	2,468.43	12.25	10.03	159.98	-155.11	260.21	260.03	240.73	19.30	13.475	
2,600.00	2,524.86	2,597.69	2,565.86	12.85	10.49	159.59	-164.06	276.91	272.11	251.95	20.17	13.494	
2,700.00	2,620.67	2,696.94	2,663.28	13.44	10.94	159.23	-173.00	293.62	284.21	263.17	21.04	13.510	
2,800.00	2,716.49	2,796.20	2,760.71	14.04	11.40	158.91	-181.95	310.32	296.31	274.40	21.91	13.525	
2,900.00	2,812.30	2,895.45	2,858.13	14.64	11.86	158.61	-190.90	327.02	308.42	285.64	22.78	13.537	
3,000.00	2,908.11	2,994.70	2,955.56	15.23	12.32	158.33	-199.84	343.72	320.54	296.88	23.66	13.549	
3,100.00	3,003.92	3,093.95	3,052.99	15.83	12.78	158.07	-208.79	360.43	332.67	308.13	24.53	13.559	
3,200.00	3,099.73	3,193.20	3,150.41	16.43	13.24	157.83	-217.74	377.13	344.80	319.39	25.41	13.568	
3,300.00	3,195.54	3,292.45	3,247.84	17.03	13.69	157.60	-226.68	393.83	356.94	330.65	26.29	13.576	
3,400.00	3,291.35	3,391.70	3,345.26	17.62	14.15	157.39	-235.63	410.53	369.08	341.91	27.17	13.584	
3,500.00	3,387.16	3,490.95	3,442.69	18.22	14.61	157.20	-244.58	427.24	381.23	353.18	28.05	13.590	
3,600.00	3,482.97	3,590.21	3,540.11	18.82	15.07	157.01	-253.52	443.94	393.38	364.45	28.93	13.596	
3,700.00	3,578.78	3,689.46	3,637.54	19.42	15.53	156.84	-262.47	460.64	405.54	375.72	29.81	13.602	
3,800.00	3,674.60	3,788.71	3,734.97	20.02	15.99	156.68	-271.42	477.34	417.70	387.00	30.70	13.607	
3,900.00	3,770.41	3,887.96	3,832.39	20.62	16.45	156.52	-280.36	494.05	429.86	398.28	31.58	13.612	
4,000.00	3,866.22	3,987.21	3,929.82	21.22	16.92	156.38	-289.31	510.75	442.02	409.56	32.46	13.616	
4,100.00	3,962.03	4,086.46	4,027.24	21.82	17.38	156.24	-298.25	527.45	454.19	420.84	33.35	13.620	
4,200.00	4,057.84	4,185.71	4,124.67	22.42	17.84	156.11	-307.20	544.15	466.36	432.13	34.23	13.623	
4,300.00	4,153.65	4,284.96	4,222.10	23.02	18.30	155.99	-316.15	560.86	478.53	443.42	35.12	13.626	
4,400.00	4,249.46	4,384.21	4,319.52	23.62	18.76	155.87	-325.09	577.56	490.71	454.70	36.00	13.629	
4,500.00	4,345.27	4,483.47	4,416.95	24.22	19.22	155.76	-334.04	594.26	502.88	465.99	36.89	13.632	
4,600.00	4,441.08	4,582.72	4,514.37	24.82	19.68	155.65	-342.99	610.96	515.06	477.29	37.78	13.635	
4,700.00	4,536.89	4,681.97	4,611.80	25.42	20.14	155.55	-351.93	627.67	527.24	488.58	38.66	13.637	
4,800.00	4,632.70	4,781.22	4,709.22	26.02	20.61	155.45	-360.88	644.37	539.42	499.88	39.55	13.639	
4,900.00	4,728.52	4,880.47	4,806.65	26.62	21.07	155.36	-369.83	661.07	551.61	511.17	40.44	13.641	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4T-32H-O268 - OH - PLAN #2												Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)			
5,000.00	4,824.33	4,979.72	4,904.08	27.22	21.53	155.27	-378.77	677.77	563.79	522.47	41.32	13.643	
5,100.00	4,920.14	5,078.97	5,001.50	27.82	21.99	155.19	-387.72	694.48	575.98	533.77	42.21	13.645	
5,200.00	5,015.95	5,178.22	5,098.93	28.42	22.45	155.10	-396.67	711.18	588.16	545.07	43.10	13.647	
5,300.00	5,111.76	5,277.48	5,196.35	29.02	22.91	155.03	-405.61	727.88	600.35	556.37	43.99	13.648	
5,400.00	5,207.57	5,376.73	5,293.78	29.62	23.38	154.95	-414.56	744.58	612.54	567.67	44.88	13.650	
5,500.00	5,303.38	5,475.98	5,391.20	30.22	23.84	154.88	-423.50	761.29	624.73	578.97	45.76	13.651	
5,600.00	5,399.19	5,575.23	5,488.63	30.82	24.30	154.81	-432.45	777.99	636.92	590.27	46.65	13.652	
5,700.00	5,495.00	5,674.48	5,586.06	31.42	24.76	154.74	-441.40	794.69	649.11	601.57	47.54	13.653	
5,800.00	5,590.81	5,773.73	5,683.48	32.02	25.22	154.68	-450.34	811.39	661.31	612.88	48.43	13.655	
5,900.00	5,686.63	5,872.98	5,780.91	32.62	25.69	154.62	-459.29	828.10	673.50	624.18	49.32	13.656	
6,000.00	5,782.44	5,972.23	5,878.33	33.22	26.15	154.56	-468.24	844.80	685.70	635.49	50.21	13.657	
6,100.00	5,878.25	6,071.49	5,975.76	33.82	26.61	154.50	-477.18	861.50	697.89	646.79	51.10	13.657	
6,200.00	5,974.06	6,170.74	6,073.19	34.42	27.07	154.44	-486.13	878.20	710.09	658.10	51.99	13.658	
6,300.00	6,069.87	6,269.99	6,170.61	35.03	27.53	154.39	-495.08	894.91	722.28	669.40	52.88	13.659	
6,400.00	6,165.68	6,369.24	6,268.04	35.63	28.00	154.34	-504.02	911.61	734.48	680.71	53.77	13.660	
6,500.00	6,261.49	6,468.49	6,365.46	36.23	28.46	154.29	-512.97	928.31	746.68	692.02	54.66	13.661	
6,600.00	6,357.30	6,567.74	6,462.89	36.83	28.92	154.24	-521.92	945.01	758.88	703.33	55.55	13.661	
6,700.00	6,453.11	6,666.99	6,560.31	37.43	29.38	154.19	-530.86	961.72	771.07	714.63	56.44	13.662	
6,800.00	6,548.92	6,766.24	6,657.74	38.03	29.85	154.15	-539.81	978.42	783.27	725.94	57.33	13.663	
6,900.00	6,644.73	6,901.49	6,790.86	38.63	30.41	154.89	-540.43	1,001.11	793.35	735.19	58.15	13.642	
7,000.00	6,740.55	7,032.12	6,917.41	39.23	30.82	157.26	-516.96	1,022.42	799.27	740.95	58.32	13.704	
7,100.00	6,836.36	7,148.59	7,025.09	39.83	31.09	160.65	-476.71	1,040.32	803.09	744.93	58.17	13.807	
7,188.78	6,921.42	7,237.75	7,102.38	40.37	31.24	164.02	-434.24	1,053.01	806.91	748.92	57.98	13.916	
7,200.00	6,932.17	7,248.11	7,111.01	40.44	31.26	167.44	-428.68	1,054.42	807.52	749.56	57.96	13.932	
7,250.00	6,980.19	7,293.20	7,147.61	40.72	31.32	-176.77	-403.03	1,060.37	810.77	752.88	57.89	14.006	
7,300.00	7,028.16	7,336.69	7,181.33	40.99	31.36	-161.29	-376.14	1,065.82	814.80	756.97	57.83	14.089	
7,350.00	7,075.86	7,378.76	7,212.38	41.24	31.39	-147.45	-348.19	1,070.80	819.53	761.75	57.79	14.182	
7,400.00	7,123.05	7,419.61	7,240.93	41.47	31.42	-135.82	-319.33	1,075.34	824.89	767.14	57.74	14.285	
7,450.00	7,169.51	7,459.38	7,267.12	41.68	31.44	-126.30	-289.70	1,079.48	830.76	773.07	57.69	14.400	
7,500.00	7,215.00	7,500.00	7,292.16	41.87	31.45	-118.46	-257.97	1,083.39	837.08	779.45	57.63	14.525	
7,550.00	7,259.31	7,536.18	7,312.94	42.04	31.45	-112.09	-228.54	1,086.60	843.71	786.17	57.55	14.662	
7,600.00	7,302.22	7,573.41	7,332.77	42.19	31.45	-106.69	-197.18	1,089.63	850.58	793.15	57.44	14.809	
7,650.00	7,343.52	7,609.97	7,350.65	42.32	31.44	-102.10	-165.41	1,092.33	857.59	800.29	57.30	14.967	
7,700.00	7,383.01	7,650.00	7,368.38	42.44	31.43	-98.02	-129.61	1,094.95	864.64	807.48	57.15	15.128	
7,750.00	7,420.50	7,681.37	7,380.87	42.54	31.41	-94.70	-100.90	1,096.76	871.62	814.66	56.95	15.304	
7,800.00	7,455.80	7,716.32	7,393.32	42.63	31.39	-91.67	-68.29	1,098.51	878.46	821.72	56.75	15.481	
7,850.00	7,488.75	7,750.00	7,403.82	42.70	31.37	-89.02	-36.33	1,099.95	885.09	828.57	56.52	15.660	
7,900.00	7,519.17	7,784.99	7,413.15	42.76	31.35	-86.64	-2.63	1,101.16	891.41	835.11	56.30	15.834	
7,950.00	7,546.94	7,818.77	7,420.61	42.81	31.32	-84.54	30.31	1,102.06	897.36	841.29	56.07	16.005	
8,000.00	7,571.90	7,850.00	7,426.13	42.84	31.30	-82.74	61.03	1,102.66	902.87	847.03	55.84	16.169	
8,050.00	7,593.93	7,885.44	7,430.80	42.87	31.27	-81.08	96.16	1,103.06	907.87	852.22	55.65	16.314	
8,100.00	7,612.94	7,918.38	7,433.59	42.88	31.24	-79.66	128.97	1,103.18	912.31	856.84	55.47	16.446	
8,150.00	7,628.82	7,950.00	7,434.87	42.89	31.21	-78.46	160.57	1,103.04	916.15	860.82	55.33	16.557	
8,200.00	7,641.51	7,993.45	7,435.00	42.89	31.17	-77.29	204.01	1,102.58	919.18	863.93	55.25	16.637	
8,250.00	7,650.93	8,042.54	7,435.00	42.88	31.13	-76.39	253.10	1,102.03	920.69	865.41	55.28	16.656	
8,300.00	7,657.04	8,092.12	7,435.00	42.87	31.11	-75.87	302.68	1,101.48	920.53	865.12	55.41	16.613	
8,350.00	7,659.82	8,141.97	7,435.00	42.85	31.08	-75.74	352.52	1,100.92	918.63	862.95	55.68	16.499	
8,366.42	7,660.00	8,158.35	7,435.00	42.84	31.08	-75.77	368.90	1,100.74	917.63	861.83	55.79	16.446	
8,400.00	7,660.00	8,191.85	7,435.00	42.83	31.08	-75.74	402.40	1,100.37	915.38	859.33	56.05	16.332	
8,500.00	7,660.00	8,291.61	7,435.00	42.81	31.17	-75.63	502.15	1,099.25	908.68	851.76	56.93	15.963	
8,600.00	7,660.00	8,391.37	7,435.00	42.80	31.55	-75.52	601.91	1,098.14	901.99	844.03	57.96	15.562	
8,700.00	7,660.00	8,491.13	7,435.00	42.81	32.20	-75.41	701.66	1,097.03	895.31	836.16	59.14	15.138	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4T-32H-O268 - OH - PLAN #2												Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)			
8,800.00	7,660.00	8,590.89	7,435.00	42.83	32.96	-75.30	801.42	1,095.91	888.62	828.16	60.46	14.697	
8,900.00	7,660.00	8,690.65	7,435.00	42.88	33.79	-75.19	901.17	1,094.80	881.94	820.03	61.91	14.245	
9,000.00	7,660.00	8,790.42	7,435.00	42.96	34.68	-75.07	1,000.93	1,093.69	875.26	811.78	63.48	13.788	
9,100.00	7,660.00	8,890.18	7,435.00	43.08	35.62	-74.95	1,100.68	1,092.58	868.59	803.43	65.16	13.330	
9,200.00	7,660.00	8,989.94	7,435.00	43.25	36.60	-74.83	1,200.44	1,091.46	861.92	794.98	66.94	12.875	
9,300.00	7,660.00	9,089.70	7,435.00	43.48	37.62	-74.71	1,300.19	1,090.35	855.25	786.43	68.82	12.427	
9,400.00	7,660.00	9,189.46	7,435.00	43.80	38.68	-74.59	1,399.95	1,089.24	848.59	777.81	70.78	11.989	
9,500.00	7,660.00	9,289.22	7,435.00	44.22	39.78	-74.46	1,499.70	1,088.12	841.93	769.11	72.82	11.562	
9,600.00	7,660.00	9,388.98	7,435.00	44.77	40.90	-74.34	1,599.46	1,087.01	835.28	760.35	74.93	11.147	
9,700.00	7,660.00	9,488.74	7,435.00	45.45	42.06	-74.21	1,699.21	1,085.90	828.63	751.52	77.11	10.747	
9,800.00	7,660.00	9,588.50	7,435.00	46.26	43.24	-74.08	1,798.97	1,084.79	821.98	742.64	79.34	10.360	
9,866.42	7,660.00	9,654.77	7,435.00	46.85	44.04	-73.99	1,865.23	1,084.05	817.57	736.72	80.85	10.112	
9,900.00	7,660.00	9,688.28	7,435.00	47.17	44.44	-73.96	1,898.74	1,083.67	815.53	733.90	81.63	9.991	
10,000.00	7,660.00	9,788.19	7,435.00	48.18	45.67	-73.90	1,998.64	1,082.56	811.69	727.72	83.98	9.666	
10,064.47	7,660.00	9,852.66	7,435.00	48.88	46.48	-73.89	2,063.10	1,081.84	811.00	725.47	85.52	9.483	
10,079.75	7,660.00	9,867.94	7,435.00	49.05	46.67	-73.89	2,078.39	1,081.67	811.04	725.14	85.89	9.442	
10,100.00	7,660.00	9,888.19	7,435.00	49.27	46.93	-73.90	2,098.63	1,081.44	811.14	724.75	86.38	9.390	
10,200.00	7,660.00	9,988.19	7,435.00	50.41	48.20	-73.91	2,198.62	1,080.33	811.65	722.81	88.84	9.136	
10,300.00	7,660.00	10,088.18	7,435.00	51.58	49.49	-73.92	2,298.62	1,079.21	812.16	720.83	91.33	8.892	
10,400.00	7,660.00	10,188.18	7,435.00	52.79	50.80	-73.93	2,398.61	1,078.10	812.68	718.81	93.86	8.658	
10,500.00	7,660.00	10,288.18	7,435.00	54.02	52.12	-73.94	2,498.60	1,076.98	813.19	716.76	96.43	8.433	
10,600.00	7,660.00	10,388.18	7,435.00	55.27	53.46	-73.95	2,598.59	1,075.87	813.70	714.68	99.02	8.218	
10,700.00	7,660.00	10,498.81	7,435.00	56.54	54.95	-73.95	2,709.22	1,074.90	814.03	712.06	101.97	7.983	
10,800.00	7,660.00	10,608.81	7,435.00	57.83	56.44	-73.91	2,819.21	1,076.34	812.17	707.30	104.87	7.744	
10,900.00	7,660.00	10,708.79	7,435.00	59.14	57.80	-73.87	2,919.18	1,077.86	810.15	702.65	107.50	7.536	
11,000.00	7,660.00	10,808.77	7,435.00	60.46	59.18	-73.83	3,019.14	1,079.39	808.12	697.98	110.14	7.337	
11,100.00	7,660.00	10,908.75	7,435.00	61.80	60.56	-73.79	3,119.11	1,080.91	806.10	693.29	112.81	7.146	
11,200.00	7,660.00	11,008.72	7,435.00	63.15	61.95	-73.75	3,219.07	1,082.43	804.08	688.59	115.49	6.962	
11,300.00	7,660.00	11,108.70	7,435.00	64.51	63.35	-73.70	3,319.04	1,083.96	802.06	683.86	118.19	6.786	
11,400.00	7,660.00	11,208.68	7,435.00	65.88	64.76	-73.66	3,419.01	1,085.48	800.04	679.13	120.91	6.617	
11,500.00	7,660.00	11,308.66	7,435.00	67.26	66.17	-73.62	3,518.97	1,087.01	798.02	674.37	123.64	6.454	
11,600.00	7,660.00	11,408.63	7,435.00	68.65	67.59	-73.58	3,618.94	1,088.53	796.00	669.61	126.38	6.298	
11,700.00	7,660.00	11,508.61	7,435.00	70.05	69.02	-73.53	3,718.91	1,090.05	793.98	664.83	129.14	6.148	
11,800.00	7,660.00	11,608.59	7,435.00	71.46	70.46	-73.49	3,818.87	1,091.58	791.96	660.05	131.91	6.004	
11,900.00	7,660.00	11,708.57	7,435.00	72.87	71.90	-73.45	3,918.84	1,093.10	789.94	655.25	134.69	5.865	
12,000.00	7,660.00	11,808.55	7,435.00	74.30	73.34	-73.40	4,018.80	1,094.63	787.92	650.44	137.47	5.731	
12,100.00	7,660.00	11,908.52	7,435.00	75.73	74.79	-73.36	4,118.77	1,096.15	785.90	645.63	140.27	5.603	
12,200.00	7,660.00	12,008.50	7,435.00	77.16	76.23	-73.32	4,218.74	1,097.68	783.88	640.83	143.05	5.480	
12,243.22	7,660.00	12,046.42	7,435.00	77.78	76.69	-73.30	4,256.66	1,098.25	783.03	639.05	143.97	5.439 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4U-32H-O268 - OH - PLAN #2													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	-89.88	0.04	-20.14	20.14					
100.00	100.00	100.00	100.00	0.14	0.14	-89.88	0.04	-20.14	20.14	19.87	0.28	72.982		
200.00	200.00	200.00	200.00	0.50	0.50	-89.88	0.04	-20.14	20.14	19.15	0.99	20.287	CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	124.21	0.04	-20.14	21.07	19.38	1.70	12.422		
350.00	349.93	349.93	349.93	1.02	1.03	128.81	0.04	-20.14	22.37	20.33	2.05	10.921		
400.00	399.85	399.85	399.85	1.19	1.21	147.02	0.04	-20.14	24.53	22.12	2.40	10.199		
500.00	499.55	500.46	500.44	1.55	1.56	166.53	-1.31	-19.01	30.21	27.09	3.12	9.679		
600.00	598.97	601.24	601.08	1.93	1.90	172.61	-5.37	-15.60	36.36	32.51	3.85	9.437		
700.00	698.00	702.22	701.67	2.32	2.26	172.68	-11.77	-9.74	43.09	38.49	4.60	9.359		
800.00	796.50	803.54	802.35	2.73	2.63	172.30	-18.32	-0.44	50.13	44.75	5.38	9.319		
900.00	894.36	905.14	902.93	3.17	3.02	172.15	-24.66	12.46	57.27	51.10	6.17	9.285		
1,000.00	991.47	1,007.02	1,003.26	3.64	3.43	172.22	-30.79	28.96	64.44	57.47	6.97	9.251		
1,093.81	1,081.77	1,102.83	1,097.05	4.12	3.84	172.45	-36.34	47.73	71.15	63.43	7.72	9.215		
1,100.00	1,087.70	1,109.16	1,103.23	4.15	3.87	172.41	-36.70	49.08	71.59	63.82	7.77	9.210		
1,200.00	1,183.51	1,209.88	1,201.21	4.69	4.33	171.86	-42.33	71.67	77.50	68.95	8.54	9.070		
1,300.00	1,279.32	1,309.71	1,298.30	5.25	4.79	171.41	-47.90	94.28	83.20	73.89	9.31	8.938		
1,400.00	1,375.13	1,409.55	1,395.38	5.81	5.27	171.02	-53.46	116.89	88.91	78.83	10.09	8.816		
1,500.00	1,470.94	1,509.38	1,492.46	6.38	5.75	170.67	-59.03	139.49	94.62	83.75	10.87	8.705		
1,600.00	1,566.75	1,609.22	1,589.54	6.96	6.24	170.37	-64.60	162.10	100.34	88.68	11.66	8.604		
1,700.00	1,662.56	1,709.05	1,686.63	7.54	6.73	170.09	-70.16	184.70	106.06	93.60	12.46	8.513		
1,800.00	1,758.38	1,808.89	1,783.71	8.12	7.23	169.85	-75.73	207.31	111.78	98.52	13.26	8.429		
1,900.00	1,854.19	1,908.72	1,880.79	8.71	7.73	169.63	-81.30	229.91	117.50	103.43	14.07	8.353		
2,000.00	1,950.00	2,008.56	1,977.87	9.30	8.23	169.43	-86.87	252.52	123.22	108.35	14.88	8.283		
2,100.00	2,045.81	2,108.39	2,074.96	9.88	8.74	169.24	-92.43	275.13	128.95	113.26	15.69	8.219		
2,200.00	2,141.62	2,208.23	2,172.04	10.48	9.24	169.08	-98.00	297.73	134.67	118.17	16.50	8.160		
2,300.00	2,237.43	2,308.06	2,269.12	11.07	9.75	168.92	-103.57	320.34	140.40	123.08	17.32	8.105		
2,400.00	2,333.24	2,407.90	2,366.21	11.66	10.26	168.78	-109.13	342.94	146.13	127.99	18.14	8.055		
2,500.00	2,429.05	2,507.73	2,463.29	12.25	10.77	168.65	-114.70	365.55	151.86	132.90	18.96	8.009		
2,600.00	2,524.86	2,607.57	2,560.37	12.85	11.28	168.53	-120.27	388.15	157.59	137.80	19.78	7.965		
2,700.00	2,620.67	2,707.41	2,657.45	13.44	11.79	168.41	-125.84	410.76	163.32	142.71	20.61	7.925		
2,800.00	2,716.49	2,807.24	2,754.54	14.04	12.30	168.31	-131.40	433.37	169.05	147.62	21.43	7.887		
2,900.00	2,812.30	2,907.08	2,851.62	14.64	12.81	168.21	-136.97	455.97	174.78	152.52	22.26	7.852		
3,000.00	2,908.11	3,006.91	2,948.70	15.23	13.32	168.12	-142.54	478.58	180.51	157.43	23.09	7.819		
3,100.00	3,003.92	3,106.75	3,045.78	15.83	13.84	168.03	-148.10	501.18	186.24	162.33	23.91	7.788		
3,200.00	3,099.73	3,206.58	3,142.87	16.43	14.35	167.95	-153.67	523.79	191.98	167.24	24.74	7.759		
3,300.00	3,195.54	3,306.42	3,239.95	17.03	14.87	167.87	-159.24	546.39	197.71	172.14	25.57	7.732		
3,400.00	3,291.35	3,406.25	3,337.03	17.62	15.38	167.80	-164.80	569.00	203.44	177.04	26.40	7.706		
3,500.00	3,387.16	3,506.09	3,434.12	18.22	15.89	167.73	-170.37	591.61	209.18	181.95	27.23	7.681		
3,600.00	3,482.97	3,605.92	3,531.20	18.82	16.41	167.67	-175.94	614.21	214.91	186.85	28.06	7.658		
3,700.00	3,578.78	3,705.76	3,628.28	19.42	16.92	167.61	-181.51	636.82	220.65	191.75	28.89	7.636		
3,800.00	3,674.60	3,805.59	3,725.36	20.02	17.44	167.55	-187.07	659.42	226.38	196.65	29.73	7.615		
3,900.00	3,770.41	3,905.43	3,822.45	20.62	17.95	167.49	-192.64	682.03	232.12	201.56	30.56	7.596		
4,000.00	3,866.22	4,005.26	3,919.53	21.22	18.47	167.44	-198.21	704.63	237.85	206.46	31.39	7.577		
4,100.00	3,962.03	4,105.10	4,016.61	21.82	18.99	167.39	-203.77	727.24	243.59	211.36	32.22	7.559		
4,200.00	4,057.84	4,204.93	4,113.69	22.42	19.50	167.34	-209.34	749.85	249.32	216.26	33.06	7.542		
4,300.00	4,153.65	4,304.77	4,210.78	23.02	20.02	167.30	-214.91	772.45	255.06	221.16	33.89	7.526		
4,400.00	4,249.46	4,404.60	4,307.86	23.62	20.53	167.25	-220.48	795.06	260.79	226.07	34.73	7.510		
4,500.00	4,345.27	4,504.44	4,404.94	24.22	21.05	167.21	-226.04	817.66	266.53	230.97	35.56	7.495		
4,600.00	4,441.08	4,604.27	4,502.03	24.82	21.57	167.17	-231.61	840.27	272.26	235.87	36.39	7.481		
4,700.00	4,536.89	4,704.11	4,599.11	25.42	22.08	167.13	-237.18	862.87	278.00	240.77	37.23	7.467		
4,800.00	4,632.70	4,803.94	4,696.19	26.02	22.60	167.10	-242.74	885.48	283.74	245.67	38.06	7.454		
4,900.00	4,728.52	4,903.78	4,793.27	26.62	23.12	167.06	-248.31	908.09	289.47	250.57	38.90	7.441		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4U-32H-O268 - OH - PLAN #2												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
5,000.00	4,824.33	5,003.61	4,890.36	27.22	23.63	167.03	-253.88	930.69	295.21	255.47	39.74	7.429	
5,100.00	4,920.14	5,103.45	4,987.44	27.82	24.15	166.99	-259.44	953.30	300.95	260.37	40.57	7.418	
5,200.00	5,015.95	5,203.28	5,084.52	28.42	24.67	166.96	-265.01	975.90	306.68	265.28	41.41	7.407	
5,300.00	5,111.76	5,303.12	5,181.60	29.02	25.19	166.93	-270.58	998.51	312.42	270.18	42.24	7.396	
5,400.00	5,207.57	5,402.96	5,278.69	29.62	25.70	166.90	-276.15	1,021.11	318.16	275.08	43.08	7.385	
5,500.00	5,303.38	5,502.79	5,375.77	30.22	26.22	166.87	-281.71	1,043.72	323.89	279.98	43.91	7.375	
5,600.00	5,399.19	5,602.63	5,472.85	30.82	26.74	166.85	-287.28	1,066.33	329.63	284.88	44.75	7.366	
5,700.00	5,495.00	5,702.46	5,569.94	31.42	27.25	166.82	-292.85	1,088.93	335.37	289.78	45.59	7.356	
5,800.00	5,590.81	5,802.30	5,667.02	32.02	27.77	166.80	-298.41	1,111.54	341.10	294.68	46.42	7.347	
5,900.00	5,686.63	5,902.13	5,764.10	32.62	28.29	166.77	-303.98	1,134.14	346.84	299.58	47.26	7.339	
6,000.00	5,782.44	6,001.97	5,861.18	33.22	28.81	166.75	-309.55	1,156.75	352.58	304.48	48.10	7.330	
6,100.00	5,878.25	6,101.80	5,958.27	33.82	29.32	166.72	-315.11	1,179.35	358.31	309.38	48.93	7.322	
6,200.00	5,974.06	6,201.64	6,055.35	34.42	29.84	166.70	-320.68	1,201.96	364.05	314.28	49.77	7.314	
6,300.00	6,069.87	6,301.47	6,152.43	35.03	30.36	166.68	-326.25	1,224.57	369.79	319.18	50.61	7.307	
6,400.00	6,165.68	6,401.31	6,249.51	35.63	30.88	166.66	-331.82	1,247.17	375.53	324.08	51.45	7.299	
6,500.00	6,261.49	6,501.14	6,346.60	36.23	31.39	166.64	-337.38	1,269.78	381.26	328.98	52.28	7.292	
6,600.00	6,357.30	6,600.98	6,443.68	36.83	31.91	166.62	-342.95	1,292.38	387.00	333.88	53.12	7.285	
6,700.00	6,453.11	6,700.81	6,540.76	37.43	32.43	166.60	-348.52	1,314.99	392.74	338.78	53.96	7.279	
6,800.00	6,548.92	6,800.65	6,637.84	38.03	32.95	166.58	-354.08	1,337.59	398.48	343.68	54.80	7.272	
6,900.00	6,644.73	6,900.48	6,734.93	38.63	33.47	166.56	-359.65	1,360.20	404.21	348.58	55.63	7.266	
7,000.00	6,740.55	7,000.69	6,832.43	39.23	33.98	166.72	-363.99	1,382.85	409.93	353.50	56.43	7.264	
7,100.00	6,836.36	7,100.00	6,928.94	39.83	34.44	168.46	-356.81	1,404.77	415.68	358.81	56.87	7.310	
7,188.78	6,921.42	7,183.55	7,008.84	40.37	34.76	171.30	-340.23	1,422.45	421.71	364.71	56.99	7.399	
7,200.00	6,932.17	7,193.77	7,018.48	40.44	34.80	174.74	-337.54	1,424.55	422.59	365.59	57.00	7.414	
7,250.00	6,980.19	7,238.84	7,060.51	40.72	34.95	-169.43	-324.06	1,433.64	426.78	369.73	57.05	7.480	
7,300.00	7,028.16	7,283.15	7,100.96	40.99	35.09	-153.95	-308.19	1,442.27	431.30	374.17	57.13	7.550	
7,350.00	7,075.86	7,326.76	7,139.79	41.24	35.22	-140.17	-290.11	1,450.42	436.08	378.87	57.20	7.623	
7,400.00	7,123.05	7,369.73	7,176.95	41.47	35.33	-128.64	-269.97	1,458.10	441.04	383.77	57.27	7.701	
7,450.00	7,169.51	7,412.10	7,212.40	41.68	35.43	-119.27	-247.91	1,465.31	446.12	388.80	57.33	7.782	
7,500.00	7,215.00	7,453.93	7,246.11	41.87	35.52	-111.68	-224.09	1,472.03	451.25	393.91	57.35	7.869	
7,550.00	7,259.31	7,495.26	7,278.05	42.04	35.59	-105.49	-198.61	1,478.27	456.36	399.03	57.33	7.960	
7,600.00	7,302.22	7,536.14	7,308.19	42.19	35.66	-100.37	-171.62	1,484.04	461.38	404.11	57.27	8.056	
7,650.00	7,343.52	7,576.61	7,336.52	42.32	35.72	-96.10	-143.21	1,489.32	466.25	409.09	57.16	8.157	
7,700.00	7,383.01	7,616.70	7,363.01	42.44	35.77	-92.48	-113.52	1,494.13	470.91	413.90	57.01	8.260	
7,750.00	7,420.50	7,656.45	7,387.65	42.54	35.81	-89.40	-82.63	1,498.46	475.31	418.50	56.81	8.366	
7,800.00	7,455.80	7,700.00	7,412.70	42.63	35.85	-86.69	-47.27	1,502.68	479.43	422.72	56.71	8.455	
7,850.00	7,488.75	7,735.06	7,431.33	42.70	35.87	-84.50	-17.71	1,505.68	483.14	426.81	56.33	8.577	
7,900.00	7,519.17	7,773.99	7,450.33	42.76	35.90	-82.56	16.13	1,508.58	486.48	430.42	56.06	8.678	
7,950.00	7,546.94	7,812.69	7,467.43	42.81	35.92	-80.90	50.76	1,511.01	489.39	433.60	55.79	8.772	
8,000.00	7,571.90	7,850.00	7,482.18	42.84	35.93	-79.51	84.97	1,512.91	491.84	436.34	55.50	8.862	
8,050.00	7,593.93	7,889.56	7,495.90	42.87	35.94	-78.31	122.04	1,514.46	493.79	438.49	55.30	8.930	
8,100.00	7,612.94	7,927.77	7,507.24	42.88	35.94	-77.35	158.51	1,515.48	495.23	440.12	55.11	8.986	
8,150.00	7,628.82	7,965.87	7,516.66	42.89	35.94	-76.58	195.41	1,516.03	496.14	441.17	54.97	9.025	
8,200.00	7,641.51	8,000.00	7,523.46	42.89	35.94	-76.02	228.86	1,516.14	496.52	441.67	54.85	9.052	
8,250.00	7,650.93	8,041.81	7,529.66	42.88	35.94	-75.59	270.19	1,515.77	496.31	441.39	54.92	9.037	
8,300.00	7,657.04	8,079.70	7,533.25	42.87	35.94	-75.36	307.90	1,514.95	495.56	440.53	55.03	9.006	
8,350.00	7,659.82	8,117.57	7,534.89	42.85	35.94	-75.30	345.71	1,513.67	494.23	439.01	55.23	8.949	
8,366.42	7,660.00	8,130.43	7,535.00	42.84	35.94	-75.32	358.56	1,513.14	493.68	438.36	55.32	8.925	
8,400.00	7,660.00	8,163.42	7,535.00	42.83	35.94	-75.29	391.52	1,511.70	492.49	436.96	55.53	8.869	
8,500.00	7,660.00	8,263.35	7,535.00	42.81	35.96	-75.18	491.36	1,507.34	488.94	432.69	56.25	8.692	
8,600.00	7,660.00	8,363.29	7,535.00	42.80	36.01	-75.07	591.19	1,502.98	485.40	428.26	57.14	8.495	
8,700.00	7,660.00	8,463.22	7,535.00	42.81	36.12	-74.96	691.03	1,498.62	481.86	423.68	58.19	8.281	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4U-32H-O268 - OH - PLAN #2												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
8,800.00	7,660.00	8,563.15	7,535.00	42.83	36.28	-74.84	790.87	1,494.26	478.32	418.94	59.38	8.055	
8,900.00	7,660.00	8,663.08	7,535.00	42.88	36.53	-74.73	890.71	1,489.90	474.79	414.07	60.72	7.820	
9,000.00	7,660.00	8,763.02	7,535.00	42.96	36.89	-74.61	990.54	1,485.54	471.25	409.07	62.18	7.579	
9,100.00	7,660.00	8,862.95	7,535.00	43.08	37.37	-74.49	1,090.38	1,481.19	467.72	403.96	63.77	7.335	
9,200.00	7,660.00	8,962.88	7,535.00	43.25	37.97	-74.37	1,190.22	1,476.83	464.19	398.73	65.46	7.091	
9,300.00	7,660.00	9,062.82	7,535.00	43.48	38.70	-74.25	1,290.06	1,472.47	460.66	393.40	67.26	6.849	
9,400.00	7,660.00	9,162.75	7,535.00	43.80	39.52	-74.12	1,389.90	1,468.11	457.14	387.98	69.15	6.610	
9,500.00	7,660.00	9,262.68	7,535.00	44.22	40.43	-73.99	1,489.73	1,463.75	453.61	382.48	71.13	6.377	
9,600.00	7,660.00	9,362.61	7,535.00	44.77	41.40	-73.87	1,589.57	1,459.39	450.09	376.90	73.19	6.150	
9,700.00	7,660.00	9,462.55	7,535.00	45.45	42.43	-73.73	1,689.41	1,455.03	446.57	371.26	75.32	5.929	
9,800.00	7,660.00	9,562.48	7,535.00	46.26	43.52	-73.60	1,789.25	1,450.67	443.06	365.55	77.51	5.716	
9,866.42	7,660.00	9,628.86	7,535.00	46.85	44.26	-73.51	1,855.56	1,447.78	440.72	361.72	79.00	5.579	
9,900.00	7,660.00	9,662.42	7,535.00	47.17	44.64	-73.48	1,889.09	1,446.31	439.73	359.97	79.77	5.513	
9,971.43	7,660.00	9,733.84	7,535.00	47.89	45.46	-73.45	1,960.44	1,443.20	438.88	357.44	81.43	5.389	
10,000.00	7,660.00	9,762.41	7,535.00	48.18	45.80	-73.46	1,988.99	1,441.95	439.01	356.90	82.12	5.346	
10,079.75	7,660.00	9,842.14	7,535.00	49.05	46.74	-73.52	2,068.64	1,438.47	440.84	356.77	84.07	5.244	
10,100.00	7,660.00	9,862.37	7,535.00	49.27	46.99	-73.54	2,088.85	1,437.59	441.58	357.00	84.57	5.221	
10,200.00	7,660.00	9,962.30	7,535.00	50.41	48.21	-73.68	2,188.69	1,433.23	445.20	358.11	87.09	5.112	
10,300.00	7,660.00	10,062.23	7,535.00	51.58	49.45	-73.82	2,288.52	1,428.87	448.83	359.18	89.65	5.006	
10,400.00	7,660.00	10,162.16	7,535.00	52.79	50.72	-73.95	2,388.35	1,424.52	452.46	360.21	92.25	4.905	
10,500.00	7,660.00	10,262.09	7,535.00	54.02	52.01	-74.08	2,488.19	1,420.16	456.10	361.21	94.88	4.807	
10,600.00	7,660.00	10,362.01	7,535.00	55.27	53.32	-74.21	2,588.02	1,415.80	459.74	362.18	97.55	4.713	
10,700.00	7,660.00	10,461.94	7,535.00	56.54	54.64	-74.34	2,687.85	1,411.44	463.38	363.12	100.25	4.622	
10,800.00	7,660.00	10,561.87	7,535.00	57.83	55.99	-74.46	2,787.69	1,407.08	467.02	364.03	102.98	4.535	
10,900.00	7,660.00	10,661.80	7,535.00	59.14	57.34	-74.59	2,887.52	1,402.72	470.66	364.92	105.74	4.451	
11,000.00	7,660.00	10,761.73	7,535.00	60.46	58.72	-74.71	2,987.35	1,398.36	474.31	365.79	108.52	4.371	
11,100.00	7,660.00	10,861.66	7,535.00	61.80	60.10	-74.83	3,087.19	1,394.00	477.95	366.64	111.32	4.294	
11,200.00	7,660.00	10,961.58	7,535.00	63.15	61.50	-74.95	3,187.02	1,389.65	481.60	367.46	114.14	4.219	
11,300.00	7,660.00	11,061.51	7,535.00	64.51	62.90	-75.06	3,286.85	1,385.29	485.26	368.27	116.98	4.148	
11,400.00	7,660.00	11,161.44	7,535.00	65.88	64.32	-75.18	3,386.69	1,380.93	488.91	369.06	119.85	4.079	
11,500.00	7,660.00	11,261.37	7,535.00	67.26	65.75	-75.29	3,486.52	1,376.57	492.57	369.84	122.72	4.014	
11,600.00	7,660.00	11,361.30	7,535.00	68.65	67.19	-75.40	3,586.35	1,372.21	496.22	370.60	125.62	3.950	
11,700.00	7,660.00	11,461.23	7,535.00	70.05	68.63	-75.51	3,686.19	1,367.85	499.88	371.35	128.53	3.889	
11,800.00	7,660.00	11,561.16	7,535.00	71.46	70.08	-75.62	3,786.02	1,363.49	503.54	372.09	131.45	3.831	
11,900.00	7,660.00	11,661.08	7,535.00	72.87	71.54	-75.72	3,885.85	1,359.14	507.21	372.82	134.39	3.774	
12,000.00	7,660.00	11,761.01	7,535.00	74.30	73.01	-75.83	3,985.69	1,354.78	510.87	373.53	137.34	3.720	
12,100.00	7,660.00	11,860.94	7,535.00	75.73	74.48	-75.93	4,085.52	1,350.42	514.54	374.24	140.30	3.667	
12,200.00	7,660.00	11,960.87	7,535.00	77.16	75.96	-76.03	4,185.35	1,346.06	518.21	374.93	143.27	3.617	
12,243.22	7,660.00	12,004.06	7,535.00	77.78	76.61	-76.08	4,228.50	1,344.18	519.79	375.23	144.56	3.596 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4V-32H-O268 - OH - PLAN #2													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	-89.86	0.02	-10.07	10.07					
100.00	100.00	100.00	100.00	0.14	0.14	-89.86	0.02	-10.07	10.07	9.80	0.28	36.491		
200.00	200.00	200.00	200.00	0.50	0.50	-89.86	0.02	-10.07	10.07	9.08	0.99	10.144	CC, ES	
300.00	299.98	299.98	299.98	0.84	0.85	127.97	0.02	-10.07	11.05	9.36	1.70	6.514		
350.00	349.93	350.14	350.14	1.02	1.03	135.71	-0.13	-9.66	12.08	10.03	2.05	5.886		
400.00	399.85	400.33	400.31	1.19	1.21	156.31	-0.60	-8.43	13.17	10.74	2.42	5.438		
500.00	499.55	500.78	500.62	1.55	1.56	179.72	-2.47	-3.50	15.48	12.31	3.17	4.877		
600.00	598.97	601.33	600.77	1.93	1.92	-170.08	-5.59	4.73	17.52	13.58	3.94	4.445		
700.00	698.00	701.95	700.63	2.32	2.30	-166.87	-9.95	16.25	19.14	14.42	4.72	4.053		
800.00	796.50	802.61	800.04	2.73	2.70	-168.19	-15.56	31.05	20.39	14.88	5.51	3.701		
900.00	894.36	903.31	898.86	3.17	3.12	-172.96	-22.40	49.12	21.51	15.21	6.30	3.414		
1,000.00	991.47	1,004.02	996.95	3.64	3.58	179.53	-30.47	70.42	22.85	15.75	7.10	3.218		
1,093.81	1,081.77	1,097.78	1,087.82	4.12	4.03	171.72	-38.66	92.05	25.84	18.02	7.82	3.303		
1,100.00	1,087.70	1,103.96	1,093.81	4.15	4.07	171.20	-39.20	93.47	26.16	18.28	7.87	3.322		
1,200.00	1,183.51	1,203.76	1,190.51	4.69	4.56	164.36	-47.93	116.51	31.52	22.82	8.70	3.622		
1,300.00	1,279.32	1,303.55	1,287.22	5.25	5.06	159.56	-56.66	139.55	37.19	27.62	9.57	3.885		
1,400.00	1,375.13	1,403.35	1,383.93	5.81	5.57	156.04	-65.39	162.59	43.06	32.58	10.48	4.109		
1,500.00	1,470.94	1,503.15	1,480.64	6.38	6.09	153.38	-74.11	185.63	49.05	37.64	11.41	4.299		
1,600.00	1,566.75	1,602.95	1,577.35	6.96	6.61	151.29	-82.84	208.67	55.12	42.76	12.36	4.461		
1,700.00	1,662.56	1,702.74	1,674.06	7.54	7.13	149.63	-91.57	231.70	61.25	47.93	13.32	4.600		
1,800.00	1,758.38	1,802.54	1,770.77	8.12	7.65	148.26	-100.30	254.74	67.42	53.13	14.28	4.720		
1,900.00	1,854.19	1,902.34	1,867.48	8.71	8.18	147.13	-109.02	277.78	73.62	58.36	15.26	4.824		
2,000.00	1,950.00	2,002.14	1,964.19	9.30	8.71	146.17	-117.75	300.82	79.85	63.61	16.25	4.915		
2,100.00	2,045.81	2,101.94	2,060.89	9.88	9.23	145.35	-126.48	323.86	86.10	68.87	17.23	4.996		
2,200.00	2,141.62	2,201.73	2,157.60	10.48	9.76	144.64	-135.21	346.90	92.36	74.14	18.23	5.068		
2,300.00	2,237.43	2,301.53	2,254.31	11.07	10.29	144.03	-143.93	369.94	98.64	79.41	19.22	5.132		
2,400.00	2,333.24	2,401.33	2,351.02	11.66	10.82	143.48	-152.66	392.98	104.92	84.70	20.22	5.189		
2,500.00	2,429.05	2,501.13	2,447.73	12.25	11.36	143.00	-161.39	416.02	111.21	89.99	21.22	5.241		
2,600.00	2,524.86	2,600.92	2,544.44	12.85	11.89	142.57	-170.12	439.05	117.51	95.29	22.22	5.288		
2,700.00	2,620.67	2,700.72	2,641.15	13.44	12.42	142.18	-178.84	462.09	123.82	100.59	23.23	5.331		
2,800.00	2,716.49	2,800.52	2,737.86	14.04	12.95	141.83	-187.57	485.13	130.13	105.90	24.23	5.370		
2,900.00	2,812.30	2,900.32	2,834.57	14.64	13.49	141.52	-196.30	508.17	136.44	111.21	25.24	5.406		
3,000.00	2,908.11	3,000.11	2,931.28	15.23	14.02	141.23	-205.03	531.21	142.76	116.52	26.25	5.440		
3,100.00	3,003.92	3,099.91	3,027.98	15.83	14.56	140.96	-213.75	554.25	149.09	121.83	27.25	5.470		
3,200.00	3,099.73	3,199.71	3,124.69	16.43	15.09	140.72	-222.48	577.29	155.41	127.15	28.26	5.499		
3,300.00	3,195.54	3,299.51	3,221.40	17.03	15.62	140.50	-231.21	600.33	161.74	132.47	29.27	5.525		
3,400.00	3,291.35	3,399.31	3,318.11	17.62	16.16	140.29	-239.94	623.37	168.07	137.79	30.28	5.550		
3,500.00	3,387.16	3,499.10	3,414.82	18.22	16.69	140.10	-248.67	646.40	174.40	143.11	31.30	5.573		
3,600.00	3,482.97	3,598.90	3,511.53	18.82	17.23	139.92	-257.39	669.44	180.74	148.43	32.31	5.594		
3,700.00	3,578.78	3,698.70	3,608.24	19.42	17.76	139.75	-266.12	692.48	187.07	153.75	33.32	5.614		
3,800.00	3,674.60	3,798.50	3,704.95	20.02	18.30	139.60	-274.85	715.52	193.41	159.07	34.33	5.633		
3,900.00	3,770.41	3,898.29	3,801.66	20.62	18.84	139.45	-283.58	738.56	199.75	164.40	35.35	5.651		
4,000.00	3,866.22	3,998.09	3,898.36	21.22	19.37	139.31	-292.30	761.60	206.09	169.72	36.36	5.668		
4,100.00	3,962.03	4,097.89	3,995.07	21.82	19.91	139.18	-301.03	784.64	212.43	175.05	37.38	5.683		
4,200.00	4,057.84	4,197.69	4,091.78	22.42	20.44	139.06	-309.76	807.68	218.77	180.38	38.39	5.698		
4,300.00	4,153.65	4,297.48	4,188.49	23.02	20.98	138.95	-318.49	830.72	225.11	185.71	39.41	5.713		
4,400.00	4,249.46	4,397.28	4,285.20	23.62	21.52	138.84	-327.21	853.75	231.46	191.03	40.42	5.726		
4,500.00	4,345.27	4,497.08	4,381.91	24.22	22.05	138.74	-335.94	876.79	237.80	196.36	41.44	5.739		
4,600.00	4,441.08	4,596.88	4,478.62	24.82	22.59	138.64	-344.67	899.83	244.15	201.69	42.45	5.751		
4,700.00	4,536.89	4,696.67	4,575.33	25.42	23.12	138.55	-353.40	922.87	250.49	207.02	43.47	5.763		
4,800.00	4,632.70	4,796.47	4,672.04	26.02	23.66	138.46	-362.12	945.91	256.84	212.35	44.49	5.774		
4,900.00	4,728.52	4,896.27	4,768.74	26.62	24.20	138.38	-370.85	968.95	263.18	217.68	45.50	5.784		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4V-32H-O268 - OH - PLAN #2												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
5,000.00	4,824.33	4,996.07	4,865.45	27.22	24.73	138.30	-379.58	991.99	269.53	223.01	46.52	5.794	
5,100.00	4,920.14	5,095.87	4,962.16	27.82	25.27	138.22	-388.31	1,015.03	275.88	228.35	47.53	5.804	
5,200.00	5,015.95	5,195.66	5,058.87	28.42	25.81	138.15	-397.03	1,038.06	282.23	233.68	48.55	5.813	
5,300.00	5,111.76	5,295.46	5,155.58	29.02	26.34	138.08	-405.76	1,061.10	288.58	239.01	49.57	5.822	
5,400.00	5,207.57	5,395.26	5,252.29	29.62	26.88	138.02	-414.49	1,084.14	294.93	244.34	50.59	5.830	
5,500.00	5,303.38	5,495.06	5,349.00	30.22	27.42	137.95	-423.22	1,107.18	301.28	249.67	51.60	5.838	
5,600.00	5,399.19	5,594.85	5,445.71	30.82	27.95	137.89	-431.94	1,130.22	307.63	255.01	52.62	5.846	
5,700.00	5,495.00	5,694.65	5,542.42	31.42	28.49	137.83	-440.67	1,153.26	313.98	260.34	53.64	5.854	
5,800.00	5,590.81	5,794.45	5,639.12	32.02	29.03	137.78	-449.40	1,176.30	320.33	265.67	54.66	5.861	
5,900.00	5,686.63	5,894.25	5,735.83	32.62	29.57	137.72	-458.13	1,199.34	326.68	271.00	55.67	5.868	
6,000.00	5,782.44	5,994.04	5,832.54	33.22	30.10	137.67	-466.85	1,222.38	333.03	276.34	56.69	5.875	
6,100.00	5,878.25	6,093.84	5,929.25	33.82	30.64	137.62	-475.58	1,245.41	339.38	281.67	57.71	5.881	
6,200.00	5,974.06	6,193.64	6,025.96	34.42	31.18	137.57	-484.31	1,268.45	345.73	287.01	58.73	5.887	
6,300.00	6,069.87	6,293.44	6,122.67	35.03	31.71	137.53	-493.04	1,291.49	352.08	292.34	59.74	5.893	
6,400.00	6,165.68	6,393.24	6,219.38	35.63	32.25	137.48	-501.76	1,314.53	358.44	297.67	60.76	5.899	
6,500.00	6,261.49	6,493.03	6,316.09	36.23	32.79	137.44	-510.49	1,337.57	364.79	303.01	61.78	5.905	
6,600.00	6,357.30	6,592.83	6,412.80	36.83	33.33	137.40	-519.22	1,360.61	371.14	308.34	62.80	5.910	
6,700.00	6,453.11	6,692.63	6,509.51	37.43	33.86	137.36	-527.95	1,383.65	377.49	313.68	63.82	5.915	
6,800.00	6,548.92	6,792.43	6,606.21	38.03	34.40	137.32	-536.67	1,406.69	383.85	319.01	64.84	5.920	
6,900.00	6,644.73	6,903.24	6,713.67	38.63	34.99	137.40	-545.38	1,432.28	389.82	323.95	65.87	5.918	
7,000.00	6,740.55	7,042.19	6,848.37	39.23	35.62	139.92	-536.79	1,464.35	388.33	322.62	65.71	5.910	
7,100.00	6,836.36	7,170.63	6,969.32	39.83	36.07	145.42	-505.23	1,493.11	378.74	314.64	64.11	5.908	
7,188.78	6,921.42	7,271.04	7,058.90	40.37	36.33	152.11	-465.39	1,514.39	367.24	304.89	62.34	5.891	
7,200.00	6,932.17	7,282.78	7,069.00	40.44	36.36	155.86	-459.90	1,516.79	365.83	303.69	62.14	5.887	
7,250.00	6,980.19	7,333.73	7,111.75	40.72	36.47	173.16	-434.12	1,526.94	360.40	299.08	61.32	5.877	
7,300.00	7,028.16	7,382.65	7,151.02	40.99	36.55	-169.79	-406.50	1,536.26	356.44	295.74	60.70	5.872	
7,350.00	7,075.86	7,429.77	7,187.03	41.24	36.62	-154.34	-377.35	1,544.79	354.00	293.76	60.24	5.876	
7,400.00	7,123.05	7,475.28	7,219.97	41.47	36.67	-141.08	-346.94	1,552.60	353.07	293.17	59.91	5.894	
7,405.88	7,128.56	7,480.54	7,223.66	41.50	36.68	-139.66	-343.29	1,553.47	353.06	293.19	59.87	5.897	
7,450.00	7,169.51	7,519.38	7,250.04	41.68	36.72	-129.91	-315.48	1,559.72	353.63	293.99	59.64	5.930	
7,500.00	7,215.00	7,562.22	7,277.38	41.87	36.75	-120.50	-283.15	1,566.19	355.57	296.21	59.36	5.990	
7,550.00	7,259.31	7,603.94	7,302.16	42.04	36.77	-112.46	-250.11	1,572.05	358.79	299.77	59.02	6.079	
7,600.00	7,302.22	7,644.65	7,324.50	42.19	36.79	-105.51	-216.50	1,577.33	363.13	304.57	58.56	6.201	
7,650.00	7,343.52	7,684.47	7,344.52	42.32	36.80	-99.41	-182.41	1,582.05	368.44	310.47	57.97	6.356	
7,700.00	7,383.01	7,723.49	7,362.31	42.44	36.80	-94.02	-147.95	1,586.25	374.56	317.33	57.23	6.545	
7,750.00	7,420.50	7,761.78	7,377.98	42.54	36.79	-89.21	-113.20	1,589.94	381.31	324.97	56.34	6.768	
7,800.00	7,455.80	7,800.00	7,391.79	42.63	36.79	-84.87	-77.72	1,593.18	388.53	333.20	55.33	7.022	
7,850.00	7,488.75	7,836.51	7,403.25	42.70	36.78	-81.04	-43.17	1,595.87	396.05	341.85	54.20	7.307	
7,900.00	7,519.17	7,873.06	7,412.99	42.76	36.76	-77.56	-8.02	1,598.14	403.74	350.73	53.01	7.616	
7,950.00	7,546.94	7,909.14	7,420.88	42.81	36.75	-74.43	27.14	1,599.98	411.45	359.66	51.80	7.944	
8,000.00	7,571.90	7,950.00	7,427.73	42.84	36.73	-71.40	67.39	1,601.56	419.11	368.45	50.66	8.273	
8,050.00	7,593.93	7,980.08	7,431.34	42.87	36.71	-69.11	97.24	1,602.38	426.46	377.04	49.43	8.628	
8,100.00	7,612.94	8,015.02	7,433.99	42.88	36.69	-66.87	132.07	1,602.97	433.54	385.19	48.35	8.967	
8,150.00	7,628.82	8,053.55	7,435.00	42.89	36.67	-64.75	170.58	1,603.17	440.24	392.86	47.38	9.292	
8,200.00	7,641.51	8,096.49	7,435.00	42.89	36.65	-62.85	213.51	1,603.11	445.80	399.24	46.56	9.575	
8,250.00	7,650.93	8,145.57	7,435.00	42.88	36.62	-61.32	262.60	1,603.05	449.23	403.27	45.96	9.774	
8,300.00	7,657.04	8,195.13	7,435.00	42.87	36.61	-60.31	312.16	1,602.99	450.32	404.72	45.61	9.874	
8,350.00	7,659.82	8,244.95	7,435.00	42.85	36.60	-59.82	361.98	1,602.93	448.98	403.45	45.53	9.861	
8,366.42	7,660.00	8,261.32	7,435.00	42.84	36.60	-59.77	378.35	1,602.91	447.99	402.43	45.56	9.833	
8,400.00	7,660.00	8,294.79	7,435.00	42.83	36.60	-59.60	411.82	1,602.87	445.70	400.05	45.65	9.763	
8,500.00	7,660.00	8,394.48	7,435.00	42.81	36.62	-59.08	511.51	1,602.75	438.90	392.85	46.04	9.532	
8,600.00	7,660.00	8,494.17	7,435.00	42.80	36.69	-58.54	611.20	1,602.62	432.14	385.55	46.58	9.277	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4V-32H-O268 - OH - PLAN #2												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	
8,700.00	7,660.00	8,593.86	7,435.00	42.81	36.81	-57.99	710.89	1,602.50	425.42	378.16	47.26	9.002	
8,800.00	7,660.00	8,693.54	7,435.00	42.83	37.01	-57.42	810.57	1,602.38	418.73	370.68	48.05	8.714	
8,900.00	7,660.00	8,793.23	7,435.00	42.88	37.31	-56.83	910.26	1,602.26	412.10	363.14	48.96	8.418	
9,000.00	7,660.00	8,892.92	7,435.00	42.96	37.73	-56.22	1,009.95	1,602.13	405.50	355.54	49.96	8.116	
9,100.00	7,660.00	8,992.61	7,435.00	43.08	38.29	-55.59	1,109.64	1,602.01	398.96	347.90	51.05	7.815	
9,200.00	7,660.00	9,092.29	7,435.00	43.25	38.97	-54.93	1,209.32	1,601.89	392.46	340.24	52.22	7.516	
9,300.00	7,660.00	9,191.98	7,435.00	43.48	39.77	-54.26	1,309.01	1,601.77	386.02	332.57	53.44	7.223	
9,400.00	7,660.00	9,291.67	7,435.00	43.80	40.65	-53.57	1,408.70	1,601.64	379.63	324.90	54.72	6.937	
9,500.00	7,660.00	9,391.36	7,435.00	44.22	41.60	-52.85	1,508.39	1,601.52	373.30	317.25	56.04	6.661	
9,600.00	7,660.00	9,491.05	7,435.00	44.77	42.61	-52.10	1,608.07	1,601.40	367.02	309.63	57.39	6.395	
9,700.00	7,660.00	9,590.73	7,435.00	45.45	43.67	-51.33	1,707.76	1,601.28	360.82	302.06	58.76	6.141	
9,800.00	7,660.00	9,690.42	7,435.00	46.26	44.76	-50.54	1,807.45	1,601.15	354.68	294.54	60.14	5.898	
9,866.42	7,660.00	9,756.64	7,435.00	46.85	45.51	-49.99	1,873.67	1,601.07	350.64	289.58	61.06	5.743	
9,900.00	7,660.00	9,790.12	7,435.00	47.17	45.89	-49.76	1,907.15	1,601.03	348.76	287.22	61.54	5.668	
10,000.00	7,660.00	9,889.99	7,435.00	48.18	47.06	-49.27	2,007.02	1,600.91	344.96	281.77	63.19	5.459	
10,079.75	7,660.00	9,969.73	7,435.00	49.05	48.01	-49.13	2,086.76	1,600.81	343.85	279.08	64.77	5.309	
10,100.00	7,660.00	9,989.98	7,435.00	49.27	48.25	-49.12	2,107.01	1,600.78	343.78	278.58	65.20	5.273	
10,200.00	7,660.00	10,089.98	7,435.00	50.41	49.46	-49.07	2,207.00	1,600.66	343.43	276.10	67.33	5.100	
10,300.00	7,660.00	10,189.98	7,435.00	51.58	50.70	-49.02	2,307.00	1,600.54	343.08	273.58	69.50	4.936	
10,400.00	7,660.00	10,289.97	7,435.00	52.79	51.96	-48.97	2,407.00	1,600.42	342.74	271.04	71.69	4.781	
10,500.00	7,660.00	10,389.97	7,435.00	54.02	53.24	-48.92	2,507.00	1,600.29	342.39	268.48	73.91	4.633	
10,600.00	7,660.00	10,489.97	7,435.00	55.27	54.53	-48.87	2,607.00	1,600.17	342.05	265.90	76.14	4.492	
10,700.00	7,660.00	10,589.97	7,435.00	56.54	55.84	-48.82	2,707.00	1,600.05	341.70	263.30	78.40	4.359	
10,800.00	7,660.00	10,689.97	7,435.00	57.83	57.17	-48.77	2,807.00	1,599.92	341.35	260.69	80.67	4.232	
10,900.00	7,660.00	10,789.97	7,435.00	59.14	58.50	-48.71	2,907.00	1,599.80	341.01	258.06	82.95	4.111	
11,000.00	7,660.00	10,889.97	7,435.00	60.46	59.85	-48.66	3,007.00	1,599.68	340.67	255.42	85.25	3.996	
11,100.00	7,660.00	10,989.97	7,435.00	61.80	61.22	-48.61	3,106.99	1,599.56	340.32	252.76	87.56	3.887	
11,200.00	7,660.00	11,089.97	7,435.00	63.15	62.59	-48.56	3,206.99	1,599.43	339.98	250.09	89.88	3.782	
11,300.00	7,660.00	11,189.96	7,435.00	64.51	63.97	-48.51	3,306.99	1,599.31	339.63	247.42	92.21	3.683	
11,400.00	7,660.00	11,289.96	7,435.00	65.88	65.36	-48.46	3,406.99	1,599.19	339.29	244.74	94.55	3.588	
11,500.00	7,660.00	11,389.96	7,435.00	67.26	66.76	-48.41	3,506.99	1,599.06	338.95	242.04	96.90	3.498	
11,600.00	7,660.00	11,489.96	7,435.00	68.65	68.17	-48.36	3,606.99	1,598.94	338.60	239.34	99.26	3.411	
11,700.00	7,660.00	11,589.96	7,435.00	70.05	69.59	-48.30	3,706.99	1,598.82	338.26	236.64	101.62	3.329	
11,800.00	7,660.00	11,689.96	7,435.00	71.46	71.01	-48.25	3,806.99	1,598.69	337.92	233.93	103.99	3.250	
11,900.00	7,660.00	11,789.96	7,435.00	72.87	72.44	-48.20	3,906.99	1,598.57	337.58	231.21	106.36	3.174	
12,000.00	7,660.00	11,889.96	7,435.00	74.30	73.88	-48.15	4,006.98	1,598.45	337.23	228.49	108.74	3.101	
12,100.00	7,660.00	11,989.96	7,435.00	75.73	75.32	-48.10	4,106.98	1,598.33	336.89	225.77	111.12	3.032	
12,200.00	7,660.00	12,089.96	7,435.00	77.16	76.77	-48.04	4,206.98	1,598.20	336.55	223.04	113.51	2.965	
12,243.22	7,660.00	12,133.17	7,435.00	77.78	77.40	-48.02	4,250.20	1,598.15	336.40	221.86	114.54	2.937 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Nelson 1 - TEXAS TEA - NO SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 5000-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	-5.40	1,423.26	-134.57	1,430.35				
100.00	100.00	54.00	54.00	0.14	0.10	-5.40	1,423.26	-134.57	1,429.61	1,429.38	0.23	6,092.176	
200.00	200.00	154.00	154.00	0.50	0.28	-5.40	1,423.26	-134.57	1,429.61	1,428.84	0.77	1,851.541	CC, ES
300.00	299.98	253.98	253.98	0.84	0.45	-155.42	1,423.26	-134.57	1,431.20	1,429.90	1.30	1,103.082	
350.00	349.93	303.93	303.93	1.02	0.54	-155.44	1,423.26	-134.57	1,433.18	1,431.62	1.56	917.543	
400.00	399.85	353.85	353.85	1.19	0.63	-141.88	1,423.26	-134.57	1,435.62	1,433.79	1.83	786.051	
500.00	499.55	453.55	453.55	1.55	0.81	-126.42	1,423.26	-134.57	1,440.82	1,438.46	2.36	610.460	
600.00	598.97	552.97	552.97	1.93	0.99	-118.74	1,423.26	-134.57	1,446.50	1,443.60	2.91	497.927	
700.00	698.00	652.00	652.00	2.32	1.17	-114.47	1,423.26	-134.57	1,452.72	1,449.25	3.46	419.477	
800.00	796.50	750.50	750.50	2.73	1.34	-111.96	1,423.26	-134.57	1,459.55	1,455.51	4.04	361.377	
900.00	894.36	848.36	848.36	3.17	1.52	-110.46	1,423.26	-134.57	1,467.09	1,462.45	4.64	316.385	
1,000.00	991.47	945.47	945.47	3.64	1.69	-109.62	1,423.26	-134.57	1,475.46	1,470.20	5.26	280.352	
1,093.81	1,081.77	1,035.77	1,035.77	4.12	1.85	-109.25	1,423.26	-134.57	1,484.19	1,478.31	5.88	252.423	
1,100.00	1,087.70	1,041.70	1,041.70	4.15	1.86	-109.31	1,423.26	-134.57	1,484.80	1,478.88	5.92	250.732	
1,200.00	1,183.51	1,137.51	1,137.51	4.69	2.04	-110.31	1,423.26	-134.57	1,494.88	1,488.27	6.60	226.412	SF

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Nelson E Unit 2 - 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	44.64	859.37	848.56	1,209.16				
100.00	100.00	41.21	41.21	0.14	0.03	44.64	859.36	848.57	1,207.71	1,207.56	0.15	7,807.084	
200.00	200.00	141.14	141.14	0.50	0.09	44.64	859.28	848.61	1,207.68	1,207.12	0.57	2,126.567	
201.21	201.21	142.33	142.33	0.50	0.09	-105.36	859.28	848.61	1,207.68	1,207.11	0.57	2,108.024	
300.00	299.98	240.00	240.00	0.84	0.15	-105.44	859.46	848.47	1,208.18	1,207.20	0.98	1,236.152	
350.00	349.93	289.27	289.27	1.02	0.18	-105.53	859.59	848.40	1,208.82	1,207.63	1.18	1,023.158	
400.00	399.85	338.72	338.72	1.19	0.24	-92.10	859.74	848.36	1,209.30	1,207.90	1.40	865.260	
500.00	499.55	437.49	437.49	1.55	0.36	-76.89	860.05	848.35	1,208.59	1,206.73	1.86	650.644	
600.00	598.97	538.34	538.34	1.93	0.48	-69.50	860.30	848.47	1,205.64	1,203.30	2.34	515.963	
700.00	698.00	639.88	639.88	2.32	0.59	-65.59	860.44	848.24	1,200.17	1,197.37	2.80	428.870	
800.00	796.50	736.90	736.90	2.73	0.71	-63.46	860.91	847.74	1,192.65	1,189.38	3.26	365.704	
900.00	894.36	835.32	835.31	3.17	0.86	-62.43	861.37	847.28	1,183.16	1,179.40	3.76	314.416	
1,000.00	991.47	933.21	933.19	3.64	1.00	-62.14	861.97	846.51	1,171.73	1,167.44	4.29	273.024	
1,093.81	1,081.77	1,022.96	1,022.95	4.12	1.13	-62.35	862.63	845.66	1,159.50	1,154.68	4.82	240.632	
1,100.00	1,087.70	1,028.89	1,028.88	4.15	1.14	-62.43	862.68	845.60	1,158.65	1,153.79	4.86	238.594	
1,200.00	1,183.51	1,125.58	1,125.56	4.69	1.28	-63.74	863.48	844.54	1,145.21	1,139.76	5.45	210.297	
1,300.00	1,279.32	1,223.57	1,223.53	5.25	1.42	-65.10	864.24	843.15	1,132.17	1,126.12	6.05	187.123	
1,400.00	1,375.13	1,317.84	1,317.78	5.81	1.56	-66.45	865.10	841.60	1,119.78	1,113.11	6.67	167.939	
1,500.00	1,470.94	1,412.22	1,412.14	6.38	1.70	-67.84	866.13	839.94	1,108.16	1,100.86	7.30	151.771	
1,600.00	1,566.75	1,507.24	1,507.13	6.96	1.85	-69.27	867.28	838.15	1,097.30	1,089.35	7.95	138.039	
1,700.00	1,662.56	1,600.50	1,600.37	7.54	1.99	-70.70	868.56	836.33	1,087.30	1,078.69	8.61	126.297	
1,800.00	1,758.38	1,694.79	1,694.63	8.12	2.14	-72.18	869.99	834.52	1,078.21	1,068.93	9.28	116.153	
1,900.00	1,854.19	1,792.96	1,792.78	8.71	2.29	-73.74	871.36	832.65	1,069.83	1,059.87	9.97	107.353	
2,000.00	1,950.00	1,889.32	1,889.12	9.30	2.43	-75.27	872.43	830.92	1,062.08	1,051.42	10.65	99.706	
2,100.00	2,045.81	1,985.49	1,985.27	9.88	2.58	-76.81	873.29	829.41	1,055.05	1,043.71	11.34	93.010	
2,200.00	2,141.62	2,080.06	2,079.82	10.48	2.73	-78.34	874.07	828.06	1,048.84	1,036.79	12.04	87.103	
2,300.00	2,237.43	2,174.53	2,174.29	11.07	2.87	-79.87	874.90	826.82	1,043.54	1,030.79	12.75	81.855	
2,400.00	2,333.24	2,274.21	2,273.95	11.66	3.02	-81.50	875.67	825.50	1,038.99	1,025.54	13.46	77.210	
2,500.00	2,429.05	2,372.92	2,372.65	12.25	3.16	-83.13	876.01	824.02	1,034.85	1,020.70	14.15	73.128	
2,600.00	2,524.86	2,469.74	2,469.46	12.85	3.29	-84.74	876.12	822.60	1,031.37	1,016.53	14.84	69.521	
2,700.00	2,620.67	2,566.54	2,566.25	13.44	3.42	-86.34	876.07	821.29	1,028.63	1,013.12	15.51	66.307	
2,800.00	2,716.49	2,659.98	2,659.68	14.04	3.54	-87.90	876.02	819.93	1,026.73	1,010.54	16.19	63.408	
2,900.00	2,812.30	2,757.47	2,757.16	14.64	3.67	-89.54	876.14	818.52	1,025.87	1,009.00	16.87	60.802	
2,992.36	2,900.78	2,847.48	2,847.16	15.19	3.79	-91.05	875.90	817.06	1,025.50	1,008.00	17.49	58.625 CC	
3,000.00	2,908.11	2,854.64	2,854.32	15.23	3.80	-91.17	875.88	816.94	1,025.50	1,007.96	17.54	58.455	
3,100.00	3,003.92	2,946.70	2,946.36	15.83	3.92	-92.73	875.77	815.35	1,026.14	1,007.93	18.21	56.344 ES	
3,200.00	3,099.73	3,038.68	3,038.33	16.43	4.06	-94.28	876.05	813.67	1,028.05	1,009.17	18.89	54.428	
3,300.00	3,195.54	3,133.08	3,132.71	17.03	4.20	-95.88	876.50	811.85	1,031.02	1,011.45	19.57	52.683	
3,400.00	3,291.35	3,228.51	3,228.12	17.62	4.34	-97.50	877.00	809.83	1,034.93	1,014.68	20.25	51.111	
3,500.00	3,387.16	3,324.66	3,324.25	18.22	4.49	-99.12	877.41	807.69	1,039.63	1,018.71	20.92	49.694	
3,600.00	3,482.97	3,418.83	3,418.38	18.82	4.63	-100.69	877.84	805.57	1,045.24	1,023.66	21.58	48.428	
3,700.00	3,578.78	3,513.63	3,513.16	19.42	4.78	-102.25	878.32	803.58	1,051.77	1,029.53	22.24	47.283	
3,800.00	3,674.60	3,607.16	3,606.67	20.02	4.92	-103.77	878.90	801.70	1,059.26	1,036.36	22.90	46.255	
3,900.00	3,770.41	3,702.39	3,701.88	20.62	5.07	-105.31	879.54	799.52	1,067.64	1,044.09	23.55	45.332	
4,000.00	3,866.22	3,799.46	3,798.90	21.22	5.21	-106.87	880.04	798.84	1,076.76	1,052.57	24.19	44.512	
4,100.00	3,962.03	3,892.60	3,892.01	21.82	5.35	-108.37	880.46	794.00	1,086.69	1,061.88	24.81	43.800	
4,200.00	4,057.84	3,984.42	3,983.78	22.42	5.49	-109.81	881.09	791.25	1,097.65	1,072.22	25.43	43.170	
4,300.00	4,153.65	4,076.64	4,075.96	23.02	5.64	-111.22	882.02	788.66	1,109.65	1,083.61	26.04	42.608	
4,400.00	4,249.46	4,171.02	4,170.31	23.62	5.78	-112.62	883.18	786.27	1,122.56	1,095.89	26.67	42.096	
4,500.00	4,345.27	4,263.06	4,262.31	24.22	5.93	-113.95	884.48	784.24	1,136.26	1,108.98	27.28	41.647	
4,600.00	4,441.08	4,356.57	4,355.78	24.82	6.07	-115.26	886.08	782.14	1,150.92	1,123.01	27.90	41.248	
4,700.00	4,536.89	4,451.12	4,450.30	25.42	6.21	-116.53	887.83	780.43	1,166.22	1,137.70	28.52	40.887	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Nelson E Unit 2 - CPR WELL - GYRO												Offset Site Error:	0.00 usft
Survey Program: 100- GyroFlex												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
4,800.00	4,632.70	4,543.90	4,543.04	26.02	6.35	-117.76	889.63	778.60	1,182.26	1,153.13	29.13	40.583	
4,900.00	4,728.52	4,637.42	4,636.53	26.62	6.48	-118.95	891.74	776.96	1,199.08	1,169.34	29.74	40.322	
5,000.00	4,824.33	4,731.88	4,730.94	27.22	6.62	-120.13	893.81	775.08	1,216.47	1,186.13	30.34	40.096	
5,100.00	4,920.14	4,824.73	4,823.75	27.82	6.75	-121.25	896.10	773.47	1,234.54	1,203.61	30.93	39.914	
5,200.00	5,015.95	4,920.29	4,919.27	28.42	6.89	-122.36	898.64	771.92	1,253.22	1,221.70	31.53	39.752	
5,300.00	5,111.76	5,021.47	5,020.41	29.02	7.03	-123.51	900.89	770.23	1,272.02	1,239.88	32.13	39.584	
5,400.00	5,207.57	5,115.60	5,114.51	29.62	7.17	-124.55	902.85	768.66	1,291.14	1,258.44	32.71	39.474	
5,500.00	5,303.38	5,210.36	5,209.23	30.22	7.31	-125.57	904.89	767.09	1,310.77	1,277.49	33.28	39.386	
5,600.00	5,399.19	5,306.81	5,305.64	30.82	7.45	-126.58	906.98	765.59	1,330.77	1,296.91	33.85	39.310	
5,700.00	5,495.00	5,403.56	5,402.36	31.42	7.59	-127.54	909.13	764.40	1,351.06	1,316.64	34.42	39.248	
5,800.00	5,590.81	5,499.12	5,497.89	32.02	7.72	-128.47	911.19	763.23	1,371.66	1,336.68	34.98	39.208	
5,900.00	5,686.63	5,597.75	5,596.50	32.62	7.86	-129.41	913.12	761.93	1,392.50	1,356.94	35.55	39.168	
6,000.00	5,782.44	5,693.93	5,692.65	33.22	8.00	-130.30	914.86	760.70	1,413.53	1,377.42	36.10	39.151	
6,100.00	5,878.25	5,789.84	5,788.54	33.82	8.15	-131.17	916.48	759.40	1,434.84	1,398.19	36.65	39.150	
6,200.00	5,974.06	5,883.86	5,882.54	34.42	8.29	-131.99	918.11	758.14	1,456.48	1,419.30	37.18	39.170	
6,300.00	6,069.87	5,978.69	5,977.34	35.03	8.42	-132.79	920.00	757.12	1,478.49	1,440.77	37.72	39.198	
8,150.00	7,628.82	7,528.20	7,526.30	42.89	10.63	-78.15	955.60	737.93	1,488.20	1,443.79	44.41	33.511	
8,200.00	7,641.51	7,542.36	7,540.45	42.89	10.65	-80.49	955.98	737.68	1,463.29	1,418.95	44.34	33.004	
8,250.00	7,650.93	7,553.28	7,551.37	42.88	10.67	-82.86	956.27	737.49	1,438.22	1,393.97	44.25	32.499	
8,300.00	7,657.04	7,560.89	7,558.97	42.87	10.68	-85.21	956.48	737.36	1,413.20	1,369.03	44.16	31.998	
8,350.00	7,659.82	7,565.14	7,563.22	42.85	10.69	-87.50	956.59	737.29	1,388.39	1,344.32	44.07	31.502	
8,366.42	7,660.00	7,565.80	7,563.88	42.84	10.69	-88.23	956.61	737.27	1,380.32	1,336.28	44.04	31.340	
8,400.00	7,660.00	7,566.77	7,564.85	42.83	10.69	-88.28	956.64	737.26	1,364.18	1,320.20	43.98	31.017	
8,500.00	7,660.00	7,569.68	7,567.76	42.81	10.69	-88.42	956.72	737.21	1,320.00	1,276.17	43.83	30.117	
8,600.00	7,660.00	7,572.60	7,570.68	42.80	10.70	-88.56	956.80	737.16	1,282.11	1,238.38	43.73	29.320	
8,700.00	7,660.00	7,575.53	7,573.61	42.81	10.70	-88.70	956.88	737.11	1,251.08	1,207.38	43.69	28.633	
8,800.00	7,660.00	7,578.47	7,576.54	42.83	10.71	-88.84	956.96	737.06	1,227.42	1,183.69	43.73	28.070	
8,900.00	7,660.00	7,581.42	7,579.49	42.88	10.71	-88.98	957.04	737.01	1,211.57	1,167.74	43.83	27.641	
9,000.00	7,660.00	7,584.37	7,582.45	42.96	10.72	-89.12	957.12	736.96	1,203.85	1,159.85	44.00	27.360	
9,043.41	7,660.00	7,585.66	7,583.73	43.01	10.72	-89.18	957.16	736.94	1,203.06	1,158.97	44.10	27.281	
9,100.00	7,660.00	7,587.34	7,585.41	43.08	10.72	-89.26	957.20	736.91	1,204.39	1,160.17	44.22	27.236 SF	
9,200.00	7,660.00	7,590.32	7,588.39	43.25	10.73	-89.40	957.29	736.86	1,213.20	1,168.73	44.48	27.276	
9,300.00	7,660.00	7,593.31	7,591.38	43.48	10.73	-89.54	957.37	736.81	1,230.10	1,185.34	44.76	27.485	
9,400.00	7,660.00	7,596.31	7,594.37	43.80	10.73	-89.68	957.45	736.76	1,254.76	1,209.71	45.04	27.858	
9,500.00	7,660.00	7,599.32	7,597.38	44.22	10.74	-89.83	957.54	736.72	1,286.72	1,241.40	45.33	28.388	
9,600.00	7,660.00	7,602.17	7,600.23	44.77	10.74	-89.96	957.61	736.67	1,325.48	1,279.87	45.60	29.065	
9,700.00	7,660.00	7,604.96	7,603.02	45.45	10.75	-90.10	957.69	736.62	1,370.44	1,324.57	45.87	29.875	
9,800.00	7,660.00	7,607.73	7,605.78	46.26	10.75	-90.23	957.77	736.58	1,421.02	1,374.89	46.13	30.803	
9,866.42	7,660.00	7,609.56	7,607.61	46.85	10.75	-90.32	957.82	736.55	1,457.44	1,411.14	46.30	31.478	
9,900.00	7,660.00	7,610.48	7,608.53	47.17	10.76	-90.36	957.84	736.53	1,476.81	1,430.42	46.38	31.840	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Osarkson 2-8-33 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 77-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
7,250.00	6,980.19	7,102.65	6,983.73	40.72	28.83	14.79	-536.25	3,339.91	1,499.60	1,443.94	55.66	26.941	
7,300.00	7,028.16	7,152.19	7,033.26	40.99	28.96	29.51	-535.64	3,339.30	1,485.86	1,429.90	55.96	26.553	
7,350.00	7,075.86	7,199.39	7,080.45	41.24	29.09	42.67	-535.11	3,338.69	1,472.92	1,416.67	56.24	26.189	
7,400.00	7,123.05	7,245.07	7,126.13	41.47	29.22	53.70	-534.65	3,338.13	1,460.96	1,404.44	56.51	25.852	
7,450.00	7,169.51	7,290.07	7,171.13	41.68	29.35	62.69	-534.25	3,337.61	1,450.13	1,393.36	56.77	25.546	
7,500.00	7,215.00	7,334.16	7,215.21	41.87	29.47	69.99	-533.91	3,337.15	1,440.59	1,383.58	57.01	25.268	
7,550.00	7,259.31	7,376.92	7,257.97	42.04	29.59	75.97	-533.62	3,336.73	1,432.51	1,375.25	57.25	25.020	
7,600.00	7,302.22	7,418.28	7,299.33	42.19	29.71	80.92	-533.37	3,336.37	1,426.07	1,368.57	57.50	24.801	
7,650.00	7,343.52	7,458.11	7,339.15	42.32	29.82	85.05	-533.17	3,336.06	1,421.46	1,363.70	57.76	24.611	
7,700.00	7,383.01	7,496.18	7,377.22	42.44	29.93	88.52	-532.99	3,335.80	1,418.86	1,360.83	58.03	24.451	
7,732.95	7,407.95	7,518.00	7,399.04	42.51	29.99	90.43	-532.91	3,335.66	1,418.33	1,360.10	58.23	24.358 CC, ES	
7,750.00	7,420.50	7,531.58	7,412.62	42.54	30.03	91.40	-532.86	3,335.59	1,418.45	1,360.12	58.33	24.319	
7,800.00	7,455.80	7,563.84	7,444.88	42.63	30.13	93.74	-532.76	3,335.46	1,420.42	1,361.77	58.66	24.216	
7,850.00	7,488.75	7,593.92	7,474.96	42.70	30.22	95.62	-532.70	3,335.40	1,424.93	1,365.91	59.02	24.145	
7,900.00	7,519.17	7,621.67	7,502.71	42.76	30.30	97.07	-532.67	3,335.39	1,432.07	1,372.67	59.40	24.108	
7,950.00	7,546.94	7,646.95	7,527.99	42.81	30.37	98.09	-532.66	3,335.42	1,441.93	1,382.11	59.82	24.105 SF	
8,000.00	7,571.90	7,669.65	7,550.68	42.84	30.44	98.70	-532.67	3,335.49	1,454.55	1,394.29	60.26	24.137	
8,050.00	7,593.93	7,693.00	7,574.04	42.87	30.51	99.01	-532.70	3,335.59	1,469.93	1,409.22	60.71	24.211	
8,100.00	7,612.94	7,709.60	7,590.63	42.88	30.56	98.74	-532.72	3,335.67	1,488.01	1,426.81	61.20	24.315	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Oskarson 4 - HRM - NO SURVEYS													Offset Site Error:	0.00 usft
Survey Program: 5100-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		
4,900.00	4,728.52	4,691.52	4,691.52	26.62	8.41	-24.95	121.12	2,637.25	1,490.24	1,461.41	28.83	51.690		
5,000.00	4,824.33	4,787.33	4,787.33	27.22	8.58	-25.42	121.12	2,637.25	1,464.12	1,434.62	29.50	49.632		
5,100.00	4,920.14	4,883.14	4,883.14	27.82	8.75	-25.90	121.12	2,637.25	1,438.11	1,407.93	30.17	47.659		
5,200.00	5,015.95	4,978.95	4,978.95	28.42	8.92	-26.41	121.12	2,637.25	1,412.19	1,381.34	30.86	45.768		
5,300.00	5,111.76	5,074.76	5,074.76	29.02	9.10	-26.93	121.12	2,637.25	1,386.38	1,354.84	31.54	43.952		
5,400.00	5,207.57	5,100.00	5,100.00	29.62	9.14	-27.07	121.12	2,637.25	1,362.52	1,330.22	32.30	42.187		
5,500.00	5,303.38	5,100.00	5,100.00	30.22	9.14	-27.07	121.12	2,637.25	1,345.44	1,312.49	32.95	40.833		
5,600.00	5,399.19	5,100.00	5,100.00	30.82	9.14	-27.07	121.12	2,637.25	1,335.65	1,302.21	33.44	39.940		
5,681.21	5,477.00	5,100.00	5,100.00	31.31	9.14	-27.07	121.12	2,637.25	1,333.18	1,299.47	33.71	39.549 CC, ES		
5,700.00	5,495.00	5,100.00	5,100.00	31.42	9.14	-27.07	121.12	2,637.25	1,333.32	1,299.56	33.75	39.500 SF		
5,800.00	5,590.81	5,100.00	5,100.00	32.02	9.14	-27.07	121.12	2,637.25	1,338.47	1,304.58	33.88	39.501		
5,900.00	5,686.63	5,100.00	5,100.00	32.62	9.14	-27.07	121.12	2,637.25	1,351.02	1,317.19	33.83	39.933		
6,000.00	5,782.44	5,100.00	5,100.00	33.22	9.14	-27.07	121.12	2,637.25	1,370.77	1,337.16	33.61	40.785		
6,100.00	5,878.25	5,100.00	5,100.00	33.82	9.14	-27.07	121.12	2,637.25	1,397.41	1,364.18	33.24	42.045		
6,200.00	5,974.06	5,100.00	5,100.00	34.42	9.14	-27.07	121.12	2,637.25	1,430.57	1,397.83	32.73	43.704		
6,300.00	6,069.87	5,100.00	5,100.00	35.03	9.14	-27.07	121.12	2,637.25	1,469.79	1,437.66	32.13	45.748		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Oskarson E Unit 1 - 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	
5,800.00	5,590.81	5,577.38	5,575.81	32.02	6.97	-34.22	296.36	2,817.56	1,489.93	1,457.65	32.28	46.150		
5,900.00	5,686.63	5,676.64	5,675.03	32.62	7.10	-34.97	298.18	2,815.53	1,464.89	1,431.96	32.93	44.484		
6,000.00	5,782.44	5,769.41	5,767.77	33.22	7.23	-35.67	299.50	2,813.63	1,439.92	1,406.32	33.60	42.854		
6,100.00	5,878.25	5,859.91	5,858.25	33.82	7.35	-36.38	300.92	2,812.03	1,415.48	1,381.21	34.27	41.300		
6,200.00	5,974.06	5,951.73	5,950.03	34.42	7.46	-37.16	303.09	2,810.38	1,391.58	1,356.64	34.94	39.829		
6,300.00	6,069.87	6,048.14	6,046.39	35.03	7.57	-37.99	305.45	2,808.73	1,368.07	1,332.47	35.60	38.428		
6,400.00	6,165.68	6,142.72	6,140.96	35.63	7.69	-38.80	306.76	2,807.41	1,344.66	1,308.38	36.27	37.071		
6,500.00	6,261.49	6,236.16	6,234.38	36.23	7.81	-39.62	308.18	2,806.39	1,321.83	1,284.88	36.95	35.772		
6,600.00	6,357.30	6,332.74	6,330.94	36.83	7.92	-40.52	309.85	2,804.97	1,299.07	1,261.45	37.63	34.527		
6,700.00	6,453.11	6,420.63	6,418.81	37.43	8.02	-41.34	311.32	2,804.11	1,277.01	1,238.69	38.32	33.326		
6,800.00	6,548.92	6,510.94	6,509.10	38.03	8.11	-42.22	313.05	2,803.62	1,255.75	1,216.76	38.99	32.206		
6,900.00	6,644.73	6,607.64	6,605.78	38.63	8.19	-43.20	315.16	2,803.14	1,235.00	1,195.35	39.65	31.147		
7,000.00	6,740.55	6,713.58	6,711.69	39.23	8.31	-44.29	316.87	2,802.25	1,214.04	1,173.73	40.32	30.113		
7,100.00	6,836.36	6,805.35	6,803.46	39.83	8.42	-45.25	317.89	2,801.57	1,193.27	1,152.24	41.03	29.081		
7,188.78	6,921.42	6,885.04	6,883.14	40.37	8.51	-46.11	319.03	2,801.17	1,175.46	1,133.80	41.67	28.212		
7,200.00	6,932.17	6,895.11	6,893.21	40.44	8.52	-43.12	319.20	2,801.13	1,173.22	1,131.47	41.74	28.105		
7,250.00	6,980.19	6,942.40	6,940.49	40.72	8.56	-29.09	320.02	2,800.97	1,162.19	1,120.14	42.05	27.639		
7,300.00	7,028.16	6,990.03	6,988.12	40.99	8.59	-15.06	320.71	2,800.93	1,149.45	1,107.15	42.30	27.176		
7,350.00	7,075.86	7,038.42	7,036.50	41.24	8.62	-2.35	321.30	2,800.97	1,135.00	1,092.52	42.48	26.717		
7,400.00	7,123.05	7,086.57	7,084.65	41.47	8.66	8.51	321.82	2,801.00	1,118.87	1,076.26	42.61	26.256		
7,450.00	7,169.51	7,134.40	7,132.48	41.68	8.69	17.64	322.30	2,801.02	1,101.13	1,058.43	42.69	25.791		
7,500.00	7,215.00	7,181.39	7,179.46	41.87	8.73	25.42	322.75	2,800.98	1,081.87	1,039.15	42.72	25.323		
7,550.00	7,259.31	7,226.93	7,225.00	42.04	8.77	32.25	323.16	2,800.89	1,061.26	1,018.55	42.71	24.851		
7,600.00	7,302.22	7,270.89	7,268.96	42.19	8.82	38.45	323.56	2,800.76	1,039.50	996.86	42.64	24.378		
7,650.00	7,343.52	7,313.26	7,311.33	42.32	8.87	44.23	323.96	2,800.58	1,016.81	974.29	42.53	23.909		
7,700.00	7,383.01	7,353.93	7,352.00	42.44	8.92	49.75	324.42	2,800.32	993.47	951.10	42.37	23.447		
7,750.00	7,420.50	7,392.70	7,390.76	42.54	8.97	55.06	324.95	2,799.97	969.76	927.60	42.16	22.999		
7,800.00	7,455.80	7,425.57	7,423.63	42.63	9.01	60.05	325.47	2,799.65	946.09	904.16	41.93	22.564		
7,850.00	7,488.75	7,455.57	7,453.62	42.70	9.04	64.78	325.99	2,799.47	922.94	881.28	41.66	22.155		
7,900.00	7,519.17	7,483.49	7,481.53	42.76	9.07	69.24	326.52	2,799.40	900.68	859.33	41.36	21.777		
7,950.00	7,546.94	7,509.88	7,507.92	42.81	9.09	73.43	327.04	2,799.41	879.75	838.72	41.03	21.439		
8,000.00	7,571.90	7,534.91	7,532.95	42.84	9.10	77.31	327.54	2,799.46	860.54	819.84	40.70	21.146		
8,050.00	7,593.93	7,557.12	7,555.15	42.87	9.12	80.75	327.98	2,799.52	843.49	803.11	40.38	20.888		
8,100.00	7,612.94	7,576.39	7,574.41	42.88	9.13	83.68	328.35	2,799.60	829.07	788.96	40.12	20.667		
8,150.00	7,628.82	7,592.63	7,590.66	42.89	9.14	86.08	328.66	2,799.68	817.71	777.78	39.93	20.479		
8,200.00	7,641.51	7,606.22	7,604.24	42.89	9.15	87.94	328.91	2,799.75	809.77	769.92	39.85	20.323		
8,250.00	7,650.93	7,616.92	7,614.94	42.88	9.16	89.23	329.10	2,799.80	805.54	765.66	39.89	20.196		
8,278.75	7,654.85	7,621.48	7,619.50	42.87	9.16	89.69	329.18	2,799.82	804.89	764.91	39.98	20.135 CC, ES		
8,300.00	7,657.04	7,624.11	7,622.12	42.87	9.16	89.90	329.22	2,799.83	805.25	765.18	40.07	20.096		
8,350.00	7,659.82	7,627.80	7,625.82	42.85	9.16	89.93	329.28	2,799.85	808.97	768.58	40.40	20.025		
8,366.42	7,660.00	7,628.26	7,626.28	42.84	9.16	89.81	329.29	2,799.85	811.07	770.54	40.54	20.009		
8,400.00	7,660.00	7,628.81	7,626.83	42.83	9.16	89.85	329.30	2,799.86	816.48	775.63	40.86	19.984		
8,500.00	7,660.00	7,630.43	7,628.45	42.81	9.16	89.96	329.33	2,799.86	840.37	798.28	42.09	19.968 SF		
8,600.00	7,660.00	7,632.02	7,630.04	42.80	9.16	90.08	329.35	2,799.87	875.09	831.53	43.56	20.090		
8,700.00	7,660.00	7,633.59	7,631.61	42.81	9.16	90.19	329.38	2,799.88	919.42	874.34	45.09	20.393		
8,800.00	7,660.00	7,635.13	7,633.15	42.83	9.17	90.30	329.40	2,799.88	972.06	925.52	46.54	20.887		
8,900.00	7,660.00	7,636.65	7,634.67	42.88	9.17	90.41	329.43	2,799.89	1,031.72	983.88	47.84	21.565		
9,000.00	7,660.00	7,638.15	7,636.16	42.96	9.17	90.51	329.45	2,799.89	1,097.27	1,048.29	48.98	22.403		
9,100.00	7,660.00	7,639.62	7,637.63	43.08	9.17	90.62	329.47	2,799.90	1,167.71	1,117.76	49.94	23.380		
9,200.00	7,660.00	7,641.06	7,639.08	43.25	9.17	90.72	329.50	2,799.91	1,242.21	1,191.45	50.76	24.473		
9,300.00	7,660.00	7,642.49	7,640.51	43.48	9.17	90.82	329.52	2,799.91	1,320.08	1,268.64	51.44	25.662		
9,400.00	7,660.00	7,643.89	7,641.91	43.80	9.17	90.92	329.54	2,799.92	1,400.76	1,348.75	52.01	26.932		

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design												S32-T2N-R68W - Oskarson E Unit 1 - 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				
9,500.00	7,660.00	7,645.28	7,643.29	44.22	9.17	91.02	329.56	2,799.92	1,483.80	1,431.31	52.49	28.269					

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design											S32-T2N-R68W - Rasmussen 16-29 - KMG WELL - SURVEYS		Offset Site Error:		0.00 usft
Survey Program:				153-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		Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor			
							+N/-S (usft)	+E/-W (usft)							
12,200.00	7,660.00	7,784.30	7,648.90	77.16	33.70	-94.75	5,485.99	1,192.52	1,438.15	1,347.88	90.26	15.933			
12,243.22	7,660.00	7,782.75	7,647.34	77.78	33.70	-94.61	5,486.05	1,192.51	1,399.74	1,308.78	90.96	15.388	CC, ES, SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Rasmussen 37-29 - KMG WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 15-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
11,900.00	7,660.00	7,747.50	7,608.40	72.87	31.45	-90.67	4,789.10	693.55	1,454.53	1,358.99	95.55	15.223	
12,000.00	7,660.00	7,748.13	7,609.03	74.30	31.45	-90.70	4,789.10	693.56	1,395.69	1,297.79	97.90	14.256	
12,100.00	7,660.00	7,748.75	7,609.65	75.73	31.46	-90.73	4,789.11	693.57	1,341.74	1,241.39	100.35	13.371	
12,200.00	7,660.00	7,749.37	7,610.27	77.16	31.46	-90.76	4,789.11	693.58	1,293.27	1,190.44	102.83	12.576	
12,243.22	7,660.00	7,749.64	7,610.54	77.78	31.46	-90.77	4,789.11	693.58	1,274.19	1,170.28	103.91	12.263	CC, ES, SF

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 33-32 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 926-Geolink MWD												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	42.87	225.15	209.00	307.85				
100.00	100.00	80.59	80.59	0.14	0.14	42.87	225.09	208.94	307.12	306.85	0.28	1,108.968	
200.00	200.00	181.35	181.35	0.50	0.32	42.86	224.88	208.70	306.80	305.99	0.81	379.402	
256.03	256.02	237.79	237.79	0.69	0.42	-107.24	224.69	208.48	306.68	305.58	1.10	279.012	
300.00	299.98	282.08	282.08	0.84	0.50	-107.46	224.50	208.27	306.76	305.43	1.33	231.187	
350.00	349.93	332.41	332.41	1.02	0.59	-107.86	224.25	207.98	307.05	305.46	1.59	193.711	
400.00	399.85	382.70	382.70	1.19	0.67	-94.83	223.96	207.65	307.14	305.30	1.85	166.264	
500.00	499.55	483.13	483.12	1.55	0.85	-80.73	223.25	206.86	305.60	303.22	2.38	128.238	
600.00	598.97	583.23	583.21	1.93	1.03	-74.87	222.38	205.88	301.93	298.99	2.93	102.965	
700.00	698.00	682.85	682.82	2.32	1.20	-72.94	221.36	204.72	296.44	292.94	3.50	84.786	
800.00	796.50	781.86	781.82	2.73	1.38	-73.34	220.18	203.39	289.58	285.50	4.08	70.983	
900.00	894.36	880.12	880.06	3.17	1.55	-75.42	218.86	201.89	281.94	277.25	4.69	60.136	
1,000.00	991.47	973.66	973.57	3.64	1.71	-78.75	217.89	200.12	274.66	269.33	5.33	51.568	
1,093.81	1,081.77	1,054.76	1,054.62	4.12	1.85	-82.81	219.36	197.82	271.16	265.20	5.95	45.554	
1,100.00	1,087.70	1,059.96	1,059.82	4.15	1.86	-83.16	219.54	197.70	271.11	265.12	5.99	45.225	
1,107.17	1,094.57	1,066.00	1,065.85	4.19	1.87	-83.56	219.77	197.57	271.09	265.05	6.04	44.853 CC, ES	
1,200.00	1,183.51	1,144.11	1,143.82	4.69	2.00	-88.69	224.22	196.45	274.26	267.58	6.68	41.080	
1,300.00	1,279.32	1,229.80	1,229.13	5.25	2.15	-94.08	232.18	195.87	284.48	277.14	7.34	38.761	
1,400.00	1,375.13	1,316.92	1,315.64	5.81	2.32	-99.01	242.49	196.26	300.22	292.24	7.98	37.619	
1,500.00	1,470.94	1,401.74	1,399.55	6.38	2.51	-103.42	254.84	196.18	321.11	312.53	8.58	37.410 SF	
1,600.00	1,566.75	1,487.42	1,483.91	6.96	2.72	-107.30	269.83	196.15	346.80	337.64	9.17	37.833	
1,700.00	1,662.56	1,571.97	1,566.88	7.54	2.96	-110.69	286.03	195.63	375.84	366.11	9.73	38.633	
1,800.00	1,758.38	1,651.85	1,644.79	8.12	3.23	-113.50	303.63	194.28	409.03	398.78	10.25	39.905	
1,900.00	1,854.19	1,734.75	1,725.17	8.71	3.53	-116.04	323.82	192.27	445.56	434.77	10.79	41.296	
2,000.00	1,950.00	1,819.48	1,807.07	9.30	3.87	-118.28	345.36	189.77	484.02	472.68	11.35	42.658	
2,100.00	2,045.81	1,898.38	1,882.92	9.88	4.22	-120.06	366.93	187.08	524.90	513.03	11.87	44.232	
2,200.00	2,141.62	1,983.42	1,964.37	10.48	4.61	-121.71	391.14	183.84	567.38	554.94	12.45	45.584	
2,300.00	2,237.43	2,061.00	2,038.43	11.07	4.99	-123.12	413.86	179.57	611.61	598.65	12.96	47.176	
2,400.00	2,333.24	2,130.22	2,104.06	11.66	5.36	-124.29	435.23	174.49	658.26	644.85	13.41	49.076	
2,500.00	2,429.05	2,221.90	2,190.58	12.25	5.86	-125.61	464.77	167.56	706.42	692.34	14.08	50.174	
2,600.00	2,524.86	2,316.90	2,280.44	12.85	6.38	-126.65	495.18	162.55	753.59	738.79	14.80	50.906	
2,700.00	2,620.67	2,399.86	2,358.90	13.44	6.83	-127.41	521.84	158.69	800.72	785.30	15.42	51.931	
2,800.00	2,716.49	2,486.63	2,440.99	14.04	7.32	-128.21	549.46	153.51	848.35	832.27	16.07	52.777	
2,900.00	2,812.30	2,570.88	2,520.67	14.64	7.80	-128.90	576.38	148.40	896.21	879.50	16.71	53.622	
3,000.00	2,908.11	2,651.11	2,596.40	15.23	8.26	-129.50	602.34	143.30	944.65	927.33	17.32	54.530	
3,100.00	3,003.92	2,731.31	2,671.89	15.83	8.74	-130.02	628.93	138.15	993.81	975.87	17.94	55.383	
3,200.00	3,099.73	2,818.34	2,753.64	16.43	9.26	-130.51	658.27	132.67	1,043.39	1,024.76	18.63	56.004	
3,300.00	3,195.54	2,909.63	2,839.61	17.03	9.80	-131.03	688.36	126.45	1,092.73	1,073.37	19.36	56.449	
3,400.00	3,291.35	3,005.27	2,929.88	17.62	10.35	-131.54	719.28	119.96	1,141.63	1,121.51	20.12	56.739	
3,500.00	3,387.16	3,098.58	3,018.24	18.22	10.88	-132.03	748.53	113.43	1,189.95	1,169.08	20.86	57.037	
3,600.00	3,482.97	3,189.60	3,104.53	18.82	11.40	-132.47	776.86	107.36	1,237.98	1,216.39	21.59	57.344	
3,700.00	3,578.78	3,295.99	3,205.65	19.42	11.98	-132.95	809.20	100.50	1,285.43	1,262.98	22.44	57.278	
3,800.00	3,674.60	3,425.78	3,330.19	20.02	12.63	-133.58	844.82	92.43	1,330.50	1,307.04	23.47	56.700	
3,900.00	3,770.41	3,539.85	3,440.33	20.62	13.17	-134.10	873.93	86.62	1,373.66	1,349.31	24.35	56.418	
4,000.00	3,866.22	3,647.15	3,544.36	21.22	13.66	-134.59	899.75	81.71	1,415.50	1,390.32	25.18	56.218	
4,100.00	3,962.03	3,744.24	3,638.59	21.82	14.10	-134.96	922.90	78.40	1,456.60	1,430.65	25.94	56.147	
4,200.00	4,057.84	3,830.46	3,722.17	22.42	14.50	-135.24	943.96	76.10	1,497.74	1,471.11	26.64	56.232	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 34-32 - CPR WELL - SURVEYS													Offset Site Error: 0.00 usft	
Survey Program: 103-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	44.11	224.80	217.95	313.75					
100.00	100.00	78.72	78.72	0.14	0.12	44.14	224.82	218.16	313.27	313.02	0.26	1,216.017		
200.00	200.00	178.29	178.29	0.50	0.29	44.24	224.79	218.93	313.79	313.01	0.78	400.713		
300.00	299.98	279.65	279.64	0.84	0.46	-105.88	224.40	219.87	314.64	313.33	1.30	241.102		
350.00	349.93	330.10	330.09	1.02	0.55	-106.16	224.04	220.26	315.25	313.68	1.57	201.403		
400.00	399.85	380.43	380.41	1.19	0.64	-93.01	223.63	220.59	315.64	313.81	1.83	172.553		
500.00	499.55	480.06	480.04	1.55	0.81	-78.65	222.86	221.16	314.70	312.34	2.37	132.987		
600.00	598.97	579.00	578.98	1.93	0.99	-72.50	222.33	221.68	311.87	308.95	2.92	106.948		
700.00	698.00	678.32	678.30	2.32	1.16	-70.26	221.92	222.06	307.24	303.76	3.48	88.249		
800.00	796.50	776.66	776.64	2.73	1.33	-70.32	221.73	222.21	301.25	297.19	4.06	74.113		
900.00	894.36	874.53	874.51	3.17	1.50	-72.02	221.67	222.20	294.41	289.73	4.67	63.003		
1,000.00	991.47	972.01	971.99	3.64	1.67	-75.10	221.81	221.82	287.37	282.06	5.31	54.078		
1,093.81	1,081.77	1,062.57	1,062.55	4.12	1.83	-79.02	221.72	221.35	281.17	275.22	5.95	47.250		
1,100.00	1,087.70	1,068.47	1,068.45	4.15	1.84	-79.37	221.72	221.31	280.81	274.81	5.99	46.846		
1,200.00	1,183.51	1,163.89	1,163.86	4.69	2.01	-85.09	221.77	220.55	276.56	269.86	6.70	41.288		
1,277.08	1,257.36	1,236.83	1,236.79	5.12	2.13	-89.59	221.97	219.71	275.49	268.24	7.24	38.030 CC		
1,300.00	1,279.32	1,258.42	1,258.39	5.25	2.17	-90.93	222.07	219.48	275.58	268.18	7.40	37.219 ES		
1,400.00	1,375.13	1,353.33	1,353.29	5.81	2.34	-96.75	222.68	218.49	278.13	270.03	8.10	34.332		
1,500.00	1,470.94	1,448.05	1,448.00	6.38	2.50	-102.43	223.46	217.38	283.98	275.20	8.78	32.355		
1,600.00	1,566.75	1,543.90	1,543.83	6.96	2.67	-108.00	224.29	215.85	292.86	283.44	9.43	31.063		
1,700.00	1,662.56	1,639.41	1,639.32	7.54	2.84	-113.25	224.89	214.02	304.37	294.32	10.05	30.291		
1,800.00	1,758.38	1,733.58	1,733.48	8.12	3.00	-117.98	225.76	212.55	318.57	307.93	10.64	29.947		
1,900.00	1,854.19	1,827.99	1,827.87	8.71	3.17	-122.25	227.00	211.43	335.10	323.89	11.21	29.901 SF		
2,000.00	1,950.00	1,922.46	1,922.32	9.30	3.33	-126.10	228.71	210.19	353.88	342.12	11.76	30.096		
2,100.00	2,045.81	2,020.85	2,020.69	9.88	3.51	-129.70	230.17	209.22	373.75	361.43	12.32	30.346		
2,200.00	2,141.62	2,121.13	2,120.96	10.48	3.68	-133.03	230.71	208.50	393.98	381.10	12.87	30.606		
2,300.00	2,237.43	2,219.01	2,218.85	11.07	3.85	-135.99	230.25	208.26	414.26	400.85	13.41	30.891		
2,400.00	2,333.24	2,313.62	2,313.46	11.66	4.02	-138.61	229.71	207.93	435.49	421.56	13.93	31.268		
2,500.00	2,429.05	2,413.01	2,412.84	12.25	4.19	-141.12	228.94	207.58	457.41	442.95	14.46	31.624		
2,600.00	2,524.86	2,501.00	2,500.81	12.85	4.34	-143.26	227.44	206.79	479.85	464.91	14.94	32.126		
2,700.00	2,620.67	2,588.42	2,588.16	13.44	4.50	-145.41	225.70	203.80	504.54	489.15	15.39	32.782		
2,800.00	2,716.49	2,689.19	2,688.72	14.04	4.68	-147.93	222.40	198.21	530.64	514.73	15.91	33.357		
2,900.00	2,812.30	2,785.33	2,784.57	14.64	4.86	-150.25	217.66	192.58	556.79	540.39	16.40	33.953		
3,000.00	2,908.11	2,876.03	2,874.82	15.23	5.04	-152.47	211.61	185.88	583.89	567.04	16.86	34.639		
3,100.00	3,003.92	2,965.36	2,963.66	15.83	5.22	-154.50	205.71	178.55	612.49	595.18	17.31	35.379		
3,200.00	3,099.73	3,053.12	3,050.72	16.43	5.41	-156.49	198.78	170.02	642.39	624.62	17.76	36.163		
3,300.00	3,195.54	3,138.43	3,134.92	17.03	5.61	-158.51	190.23	159.34	674.26	656.06	18.20	37.050		
3,400.00	3,291.35	3,231.48	3,226.71	17.62	5.83	-160.57	180.61	147.48	707.05	688.36	18.70	37.818		
3,500.00	3,387.16	3,316.24	3,310.43	18.22	6.04	-162.21	172.77	136.89	740.84	721.70	19.15	38.691		
3,600.00	3,482.97	3,394.25	3,387.45	18.82	6.24	-163.58	166.38	126.23	776.62	757.06	19.56	39.706		
3,700.00	3,578.78	3,473.64	3,465.44	19.42	6.47	-165.00	158.81	113.48	814.40	794.41	19.99	40.746		
3,800.00	3,674.60	3,561.54	3,551.59	20.02	6.73	-166.52	149.81	98.53	853.30	832.81	20.49	41.640		
3,900.00	3,770.41	3,643.09	3,631.32	20.62	6.99	-167.87	140.99	83.82	893.39	872.43	20.96	42.630		
4,000.00	3,866.22	3,748.40	3,734.00	21.22	7.34	-169.60	127.22	64.97	933.14	911.49	21.65	43.107		
4,100.00	3,962.03	3,837.23	3,820.32	21.82	7.65	-171.05	113.87	48.81	973.18	950.98	22.21	43.824		
4,200.00	4,057.84	3,928.78	3,909.18	22.42	7.99	-172.49	98.95	32.57	1,013.02	990.22	22.80	44.425		
4,300.00	4,153.65	4,002.84	3,980.90	23.02	8.27	-173.59	86.94	18.58	1,054.36	1,031.11	23.25	45.353		
4,400.00	4,249.46	4,089.90	4,065.28	23.62	8.60	-174.76	73.64	1.78	1,096.72	1,072.90	23.82	46.052		
4,500.00	4,345.27	4,190.14	4,162.63	24.22	8.98	-175.96	58.99	-17.13	1,139.23	1,114.72	24.51	46.484		
4,600.00	4,441.08	4,296.45	4,266.36	24.82	9.37	-177.06	44.19	-35.04	1,180.32	1,155.07	25.25	46.747		
4,700.00	4,536.89	4,413.92	4,381.45	25.42	9.77	-178.10	29.19	-53.17	1,220.74	1,194.66	26.08	46.807		
4,800.00	4,632.70	4,506.96	4,472.80	26.02	10.09	-178.87	17.05	-66.00	1,259.75	1,233.04	26.71	47.170		

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 34-32 - CPR WELL - SURVEYS													Offset Site Error: 0.00 usft
Survey Program: 103-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	
4,900.00	4,728.52	4,590.79	4,555.02	26.62	10.39	-179.53	5.80	-77.85	1,299.17	1,271.91	27.26	47.654	
5,000.00	4,824.33	4,707.51	4,669.73	27.22	10.77	179.64	-9.20	-93.29	1,338.01	1,309.94	28.07	47.663	
5,100.00	4,920.14	4,835.90	4,796.67	27.82	11.13	178.97	-22.34	-107.21	1,375.30	1,346.36	28.93	47.532	
5,200.00	5,015.95	4,962.64	4,922.75	28.42	11.43	178.56	-31.17	-116.51	1,409.72	1,379.98	29.74	47.408	
5,300.00	5,111.76	5,068.55	5,028.37	29.02	11.65	178.33	-36.34	-122.58	1,443.05	1,412.68	30.37	47.508	
5,400.00	5,207.57	5,178.21	5,137.87	29.62	11.85	178.21	-39.64	-127.22	1,475.22	1,444.20	31.02	47.563	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 44-32 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 134-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	46.03	212.40	220.19	306.66				
100.00	100.00	79.73	79.73	0.14	0.13	46.08	212.13	220.31	305.84	305.58	0.26	1,157.499	
167.03	167.03	146.03	146.02	0.38	0.23	46.20	211.54	220.60	305.64	305.03	0.61	501.095 CC	
200.00	200.00	175.91	175.90	0.50	0.28	46.25	211.44	220.90	305.81	305.02	0.78	390.216 ES	
300.00	299.98	266.22	266.18	0.84	0.45	-103.88	212.67	222.91	308.78	307.46	1.32	234.493	
350.00	349.93	312.13	312.03	1.02	0.54	-104.12	213.97	224.77	311.74	310.16	1.58	196.927	
400.00	399.85	359.16	358.98	1.19	0.63	-90.89	215.50	227.14	315.02	313.17	1.85	170.659	
500.00	499.55	450.70	450.24	1.55	0.83	-76.13	219.02	233.27	321.44	319.06	2.39	134.603	
600.00	598.97	543.55	542.57	1.93	1.06	-69.21	223.45	241.96	328.11	325.17	2.94	111.607	
700.00	698.00	637.03	635.31	2.32	1.32	-65.80	228.41	252.62	334.43	330.92	3.51	95.256	
800.00	796.50	729.14	726.39	2.73	1.60	-64.14	233.78	265.30	340.64	336.53	4.12	82.765	
900.00	894.36	826.81	822.55	3.17	1.93	-63.48	239.09	281.48	346.43	341.66	4.77	72.640	
1,000.00	991.47	932.19	926.23	3.64	2.29	-63.65	242.92	299.95	349.53	344.04	5.49	63.618	
1,093.81	1,081.77	1,026.64	1,019.05	4.12	2.63	-64.20	244.37	317.34	349.80	343.54	6.25	55.946	
1,100.00	1,087.70	1,032.38	1,024.68	4.15	2.65	-64.29	244.40	318.47	349.76	343.46	6.31	55.467	
1,119.81	1,106.68	1,050.78	1,042.69	4.26	2.73	-64.59	244.48	322.21	349.72	343.24	6.48	53.986	
1,200.00	1,183.51	1,125.39	1,115.37	4.69	3.05	-65.52	244.43	339.10	350.39	343.20	7.18	48.775	
1,300.00	1,279.32	1,219.00	1,205.91	5.25	3.50	-66.34	244.53	362.83	353.05	344.94	8.11	43.553	
1,400.00	1,375.13	1,316.03	1,299.20	5.81	3.99	-66.89	244.76	389.51	357.10	348.03	9.08	39.350	
1,500.00	1,470.94	1,417.24	1,396.27	6.38	4.51	-67.32	244.68	418.16	361.37	351.28	10.09	35.811	
1,600.00	1,566.75	1,522.12	1,496.77	6.96	5.05	-67.60	243.28	448.15	364.77	353.64	11.13	32.761	
1,700.00	1,662.56	1,617.25	1,588.20	7.54	5.54	-68.00	242.22	474.36	367.79	355.66	12.13	30.309	
1,800.00	1,758.38	1,714.59	1,681.67	8.12	6.06	-68.46	242.44	501.54	372.18	359.01	13.17	28.270	
1,900.00	1,854.19	1,813.57	1,776.46	8.71	6.60	-68.81	242.73	530.02	377.08	362.87	14.22	26.523	
2,000.00	1,950.00	1,920.77	1,879.05	9.30	7.17	-69.03	241.52	561.09	380.90	365.57	15.32	24.855	
2,100.00	2,045.81	2,022.24	1,976.37	9.88	7.71	-69.26	239.44	589.75	383.53	367.13	16.40	23.393	
2,200.00	2,141.62	2,123.15	2,073.36	10.48	8.23	-69.61	237.75	617.55	386.13	368.66	17.47	22.102	
2,300.00	2,237.43	2,226.39	2,172.56	11.07	8.78	-69.90	235.21	646.04	388.10	369.52	18.57	20.894	
2,400.00	2,333.24	2,325.95	2,268.25	11.66	9.28	-70.16	232.33	673.35	389.62	369.98	19.64	19.839	
2,500.00	2,429.05	2,426.97	2,365.64	12.25	9.79	-70.60	229.99	700.08	391.15	370.42	20.73	18.869	
2,600.00	2,524.86	2,527.87	2,462.87	12.85	10.30	-70.98	227.15	726.90	392.32	370.50	21.82	17.981	
2,700.00	2,620.67	2,628.72	2,560.33	13.44	10.79	-71.54	224.98	752.72	393.62	370.71	22.91	17.182	
2,800.00	2,716.49	2,731.09	2,659.36	14.04	11.28	-72.11	222.04	778.50	394.10	370.09	24.01	16.415	
2,900.00	2,812.30	2,832.25	2,757.56	14.64	11.73	-72.87	219.57	802.67	394.41	369.32	25.10	15.717	
3,000.00	2,908.11	2,937.00	2,859.67	15.23	12.18	-73.90	216.95	825.89	393.95	367.74	26.21	15.030	
3,071.94	2,977.03	3,005.08	2,926.08	15.66	12.47	-74.60	215.19	840.75	393.53	366.54	26.98	14.583	
3,100.00	3,003.92	3,031.16	2,951.52	15.83	12.58	-74.87	214.72	846.47	393.60	366.31	27.29	14.424	
3,200.00	3,099.73	3,122.78	3,040.55	16.43	13.02	-75.68	213.77	868.06	395.28	366.92	28.36	13.938	
3,300.00	3,195.54	3,220.87	3,135.63	17.03	13.49	-76.45	213.66	892.19	398.33	368.87	29.46	13.522	
3,400.00	3,291.35	3,322.52	3,234.07	17.62	13.98	-77.18	213.22	917.51	401.28	370.70	30.59	13.120	
3,500.00	3,387.16	3,429.95	3,338.10	18.22	14.49	-77.88	211.88	944.32	403.59	371.85	31.74	12.714	
3,600.00	3,482.97	3,532.55	3,437.49	18.82	14.98	-78.49	208.50	969.52	403.87	371.00	32.87	12.286	
3,700.00	3,578.78	3,635.00	3,536.79	19.42	15.46	-79.11	204.98	994.48	403.99	369.99	34.00	11.881	
3,710.43	3,588.77	3,644.53	3,546.03	19.48	15.50	-79.17	204.63	996.80	403.98	369.87	34.11	11.843	
3,800.00	3,674.60	3,724.68	3,623.83	20.02	15.87	-79.76	202.89	1,015.94	405.04	369.99	35.05	11.555	
3,900.00	3,770.41	3,821.70	3,718.07	20.62	16.32	-80.56	202.37	1,039.02	407.79	371.64	36.15	11.280	
4,000.00	3,866.22	3,923.30	3,816.87	21.22	16.77	-81.49	202.48	1,062.71	411.10	373.83	37.27	11.031	
4,100.00	3,962.03	4,032.36	3,923.05	21.82	17.26	-82.46	200.49	1,087.50	412.44	374.00	38.43	10.731	
4,200.00	4,057.84	4,129.33	4,017.24	22.42	17.71	-83.15	197.69	1,110.40	413.17	373.62	39.54	10.448	
4,300.00	4,153.65	4,226.53	4,111.15	23.02	18.21	-83.60	195.40	1,135.35	415.05	374.38	40.67	10.206	
4,400.00	4,249.46	4,325.99	4,207.06	23.62	18.70	-83.96	193.10	1,161.56	417.20	375.42	41.77	9.987	
4,500.00	4,345.27	4,425.47	4,303.75	24.22	19.12	-84.74	191.73	1,184.89	419.47	376.61	42.85	9.789	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 44-32 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 134-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	
4,600.00	4,441.08	4,523.89	4,400.06	24.82	19.51	-85.92	191.40	1,205.16	422.11	378.20	43.91	9.613	
4,700.00	4,536.89	4,624.15	4,498.41	25.42	19.89	-87.27	191.26	1,224.63	424.86	379.89	44.97	9.448	
4,800.00	4,632.70	4,720.51	4,593.12	26.02	20.24	-88.69	191.62	1,242.40	428.14	382.17	45.97	9.313	
4,900.00	4,728.52	4,818.59	4,689.77	26.62	20.56	-90.33	193.03	1,258.97	432.49	385.55	46.95	9.212	
5,000.00	4,824.33	4,919.27	4,789.34	27.22	20.85	-92.27	194.50	1,273.79	436.93	389.05	47.88	9.125	
5,100.00	4,920.14	5,018.54	4,887.84	27.82	21.10	-94.44	195.98	1,286.09	441.66	392.92	48.74	9.061	
5,200.00	5,015.95	5,118.06	4,986.87	28.42	21.31	-96.90	197.45	1,295.85	446.86	397.37	49.50	9.028 SF	
5,300.00	5,111.76	5,216.92	5,085.47	29.02	21.45	-99.63	198.72	1,302.71	452.68	402.57	50.11	9.034	
5,400.00	5,207.57	5,315.02	5,183.44	29.62	21.58	-102.50	199.74	1,307.62	459.36	408.73	50.63	9.073	
5,500.00	5,303.38	5,412.81	5,281.16	30.22	21.69	-105.44	200.45	1,311.16	467.03	416.01	51.02	9.154	
5,600.00	5,399.19	5,509.20	5,377.52	30.82	21.80	-108.37	200.90	1,313.63	475.84	424.53	51.31	9.274	
5,700.00	5,495.00	5,604.15	5,472.46	31.42	21.90	-111.20	201.48	1,315.59	486.14	434.64	51.50	9.440	
5,800.00	5,590.81	5,699.51	5,567.80	32.02	21.99	-113.96	202.23	1,317.22	497.94	446.32	51.62	9.646	
5,900.00	5,686.63	5,795.08	5,663.36	32.62	22.08	-116.63	203.03	1,318.53	511.04	459.36	51.68	9.889	
6,000.00	5,782.44	5,890.40	5,758.67	33.22	22.16	-119.21	203.79	1,319.37	525.39	473.72	51.67	10.168	
6,100.00	5,878.25	5,985.30	5,853.56	33.82	22.23	-121.73	204.43	1,319.47	540.99	489.38	51.60	10.483	
6,200.00	5,974.06	6,080.41	5,948.68	34.42	22.31	-124.14	205.10	1,319.25	557.78	506.26	51.52	10.826	
6,300.00	6,069.87	6,175.61	6,043.87	35.03	22.39	-126.38	206.00	1,319.29	575.63	524.18	51.45	11.188	
6,400.00	6,165.68	6,270.20	6,138.45	35.63	22.47	-128.47	207.09	1,319.41	594.47	543.09	51.38	11.571	
6,500.00	6,261.49	6,364.49	6,232.73	36.23	22.55	-130.42	208.36	1,319.45	614.28	562.96	51.31	11.971	
6,600.00	6,357.30	6,457.90	6,326.13	36.83	22.62	-132.25	209.84	1,319.27	635.08	583.83	51.25	12.392	
6,700.00	6,453.11	6,552.27	6,420.49	37.43	22.70	-133.99	211.54	1,318.86	656.84	605.62	51.22	12.823	
6,800.00	6,548.92	6,648.60	6,516.80	38.03	22.78	-135.64	213.35	1,318.56	679.16	627.92	51.23	13.256	
6,900.00	6,644.73	6,744.36	6,612.54	38.63	22.87	-137.16	215.19	1,318.44	701.90	650.64	51.26	13.692	
7,000.00	6,740.55	6,839.55	6,707.71	39.23	22.95	-138.59	217.00	1,318.24	725.15	673.84	51.32	14.131	
7,100.00	6,836.36	6,941.11	6,809.26	39.83	23.04	-140.05	218.50	1,317.92	748.58	697.15	51.43	14.554	
7,188.78	6,921.42	7,024.24	6,892.38	40.37	23.11	-141.21	219.17	1,317.62	769.32	717.84	51.48	14.944	
7,200.00	6,932.17	7,034.57	6,902.71	40.44	23.12	-138.27	219.28	1,317.57	771.92	720.43	51.49	14.993	
7,250.00	6,980.19	7,083.68	6,951.82	40.72	23.16	-124.85	219.84	1,317.42	781.89	730.38	51.51	15.180	
7,300.00	7,028.16	7,132.75	7,000.89	40.99	23.21	-111.94	220.36	1,317.38	789.19	737.70	51.49	15.328	
7,350.00	7,075.86	7,178.23	7,046.37	41.24	23.25	-100.82	220.94	1,317.36	794.01	742.62	51.39	15.451	
7,400.00	7,123.05	7,223.46	7,091.59	41.47	23.29	-92.09	221.68	1,317.32	796.52	745.28	51.24	15.546	
7,450.00	7,169.51	7,268.66	7,136.78	41.68	23.33	-85.66	222.48	1,317.22	796.79	745.76	51.03	15.614	
7,500.00	7,215.00	7,313.16	7,181.27	41.87	23.37	-81.15	223.30	1,317.03	794.95	744.18	50.76	15.660	
7,550.00	7,259.31	7,357.16	7,225.26	42.04	23.41	-78.17	224.11	1,316.77	791.12	740.68	50.44	15.685	
7,600.00	7,302.22	7,400.13	7,268.23	42.19	23.44	-76.40	224.87	1,316.47	785.50	735.45	50.05	15.694	
7,650.00	7,343.52	7,442.52	7,310.61	42.32	23.48	-75.62	225.60	1,316.17	778.26	728.65	49.61	15.687	
7,700.00	7,383.01	7,483.10	7,351.18	42.44	23.52	-75.59	226.27	1,315.91	769.64	720.54	49.11	15.672	
7,750.00	7,420.50	7,521.67	7,389.75	42.54	23.55	-76.17	226.88	1,315.68	759.95	711.40	48.55	15.653	
7,800.00	7,455.80	7,558.03	7,426.10	42.63	23.59	-77.21	227.44	1,315.49	749.50	701.56	47.94	15.633	
7,850.00	7,488.75	7,592.16	7,460.23	42.70	23.62	-78.61	227.94	1,315.34	738.64	691.34	47.31	15.614	
7,900.00	7,519.17	7,623.78	7,491.85	42.76	23.65	-80.26	228.41	1,315.22	727.74	681.09	46.66	15.598	
7,950.00	7,546.94	7,652.72	7,520.78	42.81	23.68	-82.03	228.83	1,315.14	717.20	671.18	46.02	15.585	
8,000.00	7,571.90	7,678.81	7,546.87	42.84	23.70	-83.84	229.20	1,315.09	707.40	661.97	45.43	15.570	
8,050.00	7,593.93	7,701.94	7,570.00	42.87	23.73	-85.58	229.53	1,315.06	698.76	653.82	44.93	15.550	
8,100.00	7,612.94	7,722.00	7,590.05	42.88	23.75	-87.15	229.82	1,315.04	691.64	647.07	44.57	15.517	
8,150.00	7,628.82	7,738.87	7,606.93	42.89	23.76	-88.48	230.05	1,315.04	686.40	642.01	44.39	15.463	
8,200.00	7,641.51	7,752.14	7,620.20	42.89	23.78	-89.49	230.24	1,315.04	683.35	638.93	44.42	15.384	
8,237.47	7,648.88	7,759.99	7,628.04	42.88	23.78	-90.01	230.35	1,315.04	682.65	638.05	44.60	15.305	
8,250.00	7,650.93	7,762.20	7,630.26	42.88	23.79	-90.14	230.38	1,315.04	682.73	638.04	44.69	15.276	
8,300.00	7,657.04	7,769.00	7,637.05	42.87	23.79	-90.42	230.48	1,315.04	684.68	639.47	45.21	15.145	
8,350.00	7,659.82	7,772.49	7,640.54	42.85	23.80	-90.30	230.53	1,315.04	689.27	643.32	45.95	15.001	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 44-32 - CPR WELL - SURVEYS													Offset Site Error:	0.00 usft
Survey Program: 134-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		
8,366.42	7,660.00	7,772.91	7,640.96	42.84	23.80	-90.16	230.54	1,315.03	691.36	645.12	46.24	14.953		
8,400.00	7,660.00	7,773.40	7,641.45	42.83	23.80	-90.21	230.55	1,315.03	696.70	649.82	46.88	14.862		
8,500.00	7,660.00	7,774.86	7,642.91	42.81	23.80	-90.33	230.57	1,315.03	721.69	672.57	49.12	14.693		
8,600.00	7,660.00	7,776.32	7,644.37	42.80	23.80	-90.45	230.59	1,315.03	759.13	707.61	51.52	14.735		
8,700.00	7,660.00	7,777.79	7,645.84	42.81	23.80	-90.57	230.61	1,315.03	807.28	753.50	53.78	15.010		
8,800.00	7,660.00	7,779.27	7,647.32	42.83	23.80	-90.70	230.63	1,315.03	864.37	808.61	55.77	15.500		
8,900.00	7,660.00	7,780.76	7,648.81	42.88	23.81	-90.82	230.65	1,315.03	928.74	871.32	57.42	16.173		
9,000.00	7,660.00	7,782.25	7,650.30	42.96	23.81	-90.95	230.68	1,315.03	998.99	940.21	58.78	16.996		
9,100.00	7,660.00	7,783.74	7,651.79	43.08	23.81	-91.07	230.70	1,315.03	1,073.96	1,014.09	59.87	17.938		
9,200.00	7,660.00	7,785.25	7,653.29	43.25	23.81	-91.20	230.72	1,315.03	1,152.74	1,091.99	60.75	18.975		
9,300.00	7,660.00	7,786.75	7,654.80	43.48	23.81	-91.32	230.74	1,315.03	1,234.59	1,173.14	61.46	20.089		
9,400.00	7,660.00	7,788.27	7,656.32	43.80	23.81	-91.45	230.77	1,315.03	1,318.95	1,256.92	62.03	21.264		
9,500.00	7,660.00	7,789.79	7,657.84	44.22	23.81	-91.58	230.79	1,315.03	1,405.36	1,342.87	62.49	22.490		
9,600.00	7,660.00	7,791.32	7,659.37	44.77	23.82	-91.70	230.81	1,315.03	1,493.46	1,430.59	62.87	23.756		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 8-8-32 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 70-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	50.19	195.64	234.74	306.30				
100.00	100.00	76.44	76.44	0.14	0.11	50.21	195.77	235.08	305.93	305.68	0.25	1,204.477	
200.00	200.00	174.23	174.22	0.50	0.28	50.32	195.96	236.23	306.97	306.19	0.78	391.867	
300.00	299.98	273.30	273.23	0.84	0.46	-99.44	194.88	239.31	308.96	307.65	1.31	236.198	
350.00	349.93	320.69	320.55	1.02	0.56	-99.32	193.63	241.74	310.45	308.88	1.58	196.845	
400.00	399.85	368.00	367.72	1.19	0.66	-85.64	192.09	244.90	312.11	310.25	1.86	168.048	
500.00	499.55	465.33	464.56	1.55	0.90	-69.74	187.85	253.69	314.55	312.10	2.45	128.636	
600.00	598.97	562.35	560.77	1.93	1.17	-61.40	181.64	264.51	314.74	311.66	3.08	102.173	
700.00	698.00	657.48	654.60	2.32	1.49	-56.20	174.06	278.16	313.80	310.03	3.77	83.174	
800.00	796.50	751.74	746.94	2.73	1.86	-52.46	164.99	294.74	311.80	307.29	4.51	69.104	
900.00	894.36	844.49	837.37	3.17	2.25	-49.78	156.32	313.46	309.37	304.08	5.28	58.537	
1,000.00	991.47	941.59	931.59	3.64	2.70	-47.78	147.23	335.04	305.89	299.78	6.12	50.021	
1,093.81	1,081.77	1,031.28	1,017.93	4.12	3.17	-46.07	136.94	357.05	300.81	293.85	6.96	43.228	
1,100.00	1,087.70	1,037.07	1,023.46	4.15	3.20	-46.01	136.20	358.58	300.45	293.44	7.02	42.822	
1,200.00	1,183.51	1,128.97	1,110.65	4.69	3.76	-44.73	123.79	384.81	296.04	288.10	7.95	37.258	
1,300.00	1,279.32	1,221.54	1,197.32	5.25	4.38	-42.91	110.52	414.52	294.47	285.59	8.88	33.158	
1,310.31	1,289.20	1,231.11	1,206.21	5.31	4.44	-42.70	109.11	417.74	294.46	285.48	8.98	32.807	
1,400.00	1,375.13	1,317.03	1,285.60	5.81	5.07	-40.55	95.73	447.75	295.15	285.33	9.82	30.065	
1,500.00	1,470.94	1,416.59	1,376.67	6.38	5.82	-37.58	78.22	483.97	296.97	286.23	10.73	27.666	
1,600.00	1,566.75	1,515.23	1,466.49	6.96	6.58	-34.40	59.43	520.15	299.33	287.76	11.57	25.874	
1,700.00	1,662.56	1,609.46	1,552.42	7.54	7.30	-31.65	42.97	555.11	303.54	291.24	12.30	24.678	
1,800.00	1,758.38	1,706.20	1,640.77	8.12	8.05	-29.19	27.80	591.49	309.50	296.50	13.00	23.804	
1,900.00	1,854.19	1,802.40	1,728.39	8.71	8.80	-26.79	12.66	628.20	316.59	302.94	13.65	23.197	
2,000.00	1,950.00	1,900.86	1,817.77	9.30	9.59	-24.46	-2.54	666.61	325.20	310.93	14.26	22.799	
2,100.00	2,045.81	2,007.86	1,915.21	9.88	10.41	-21.93	-20.09	707.18	333.04	318.16	14.88	22.383	
2,200.00	2,141.62	2,114.83	2,013.65	10.48	11.18	-19.55	-37.97	745.01	338.69	323.25	15.44	21.935	
2,300.00	2,237.43	2,211.91	2,103.24	11.07	11.90	-17.50	-54.12	778.73	344.18	328.25	15.93	21.611	
2,400.00	2,333.24	2,317.74	2,200.98	11.66	12.65	-15.21	-72.61	814.83	349.43	333.03	16.40	21.301	
2,500.00	2,429.05	2,422.65	2,298.77	12.25	13.35	-13.13	-90.33	848.44	352.97	336.14	16.84	20.964	
2,600.00	2,524.86	2,520.89	2,391.02	12.85	13.99	-11.73	-103.81	879.40	356.33	339.05	17.28	20.622	
2,700.00	2,620.67	2,626.32	2,490.23	13.44	14.65	-10.43	-117.17	912.48	359.73	341.96	17.77	20.240	
2,800.00	2,716.49	2,732.13	2,590.43	14.04	15.29	-9.03	-131.32	943.39	361.04	342.80	18.23	19.799	
2,900.00	2,812.30	2,824.27	2,677.46	14.64	15.87	-7.85	-143.55	971.08	363.39	344.76	18.63	19.505	
3,000.00	2,908.11	2,931.32	2,778.54	15.23	16.53	-6.18	-159.65	1,002.36	365.26	346.21	19.05	19.173	
3,100.00	3,003.92	3,033.25	2,874.83	15.83	17.15	-4.28	-176.98	1,030.98	366.51	347.14	19.37	18.921	
3,200.00	3,099.73	3,131.65	2,968.22	16.43	17.74	-2.81	-191.46	1,058.37	367.50	347.78	19.72	18.637	
3,300.00	3,195.54	3,225.86	3,057.38	17.03	18.33	-1.47	-205.01	1,085.64	369.81	349.73	20.08	18.418	
3,400.00	3,291.35	3,322.80	3,148.57	17.62	18.95	0.13	-220.73	1,114.48	373.58	353.18	20.40	18.311	
3,500.00	3,387.16	3,422.43	3,242.37	18.22	19.59	1.48	-235.30	1,144.74	377.88	357.11	20.77	18.195	
3,600.00	3,482.97	3,526.78	3,341.00	18.82	20.22	2.56	-248.37	1,176.21	381.63	360.42	21.22	17.988	
3,700.00	3,578.78	3,628.43	3,437.32	19.42	20.84	3.76	-262.03	1,205.68	384.57	362.93	21.64	17.772	
3,800.00	3,674.60	3,725.57	3,529.39	20.02	21.43	4.80	-274.46	1,234.05	387.70	365.64	22.06	17.574	
3,900.00	3,770.41	3,825.23	3,623.59	20.62	22.04	5.89	-287.71	1,263.76	391.72	369.21	22.51	17.402	
4,000.00	3,866.22	3,917.95	3,711.16	21.22	22.64	6.94	-300.49	1,291.40	396.08	373.16	22.92	17.277	
4,100.00	3,962.03	4,013.05	3,800.35	21.82	23.27	7.77	-312.65	1,322.07	402.63	379.25	23.39	17.217	
4,200.00	4,057.84	4,123.94	3,904.65	22.42	23.96	8.82	-327.31	1,356.71	408.46	384.50	23.97	17.043	
4,300.00	4,153.65	4,227.21	4,002.66	23.02	24.58	9.95	-341.29	1,386.14	411.77	387.27	24.50	16.806	
4,400.00	4,249.46	4,311.79	4,082.40	23.62	25.14	10.59	-351.48	1,412.38	417.14	392.18	24.96	16.711	
4,500.00	4,345.27	4,399.95	4,164.41	24.22	25.77	11.22	-363.08	1,442.58	426.16	400.72	25.45	16.748	
4,600.00	4,441.08	4,512.61	4,269.29	24.82	26.52	12.03	-378.11	1,480.86	435.15	409.02	26.13	16.652	
4,700.00	4,536.89	4,623.02	4,373.50	25.42	27.20	12.92	-392.26	1,514.48	440.43	413.63	26.81	16.431	
4,800.00	4,632.70	4,721.01	4,466.19	26.02	27.81	13.68	-404.43	1,543.83	445.20	417.78	27.43	16.233	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 8-8-32 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 70-Geolink MWD												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
4,900.00	4,728.52	4,817.76	4,557.54	26.62	28.42	14.59	-417.99	1,572.69	450.66	422.59	28.07	16.054	
5,000.00	4,824.33	4,912.43	4,646.54	27.22	29.03	15.54	-432.28	1,601.58	457.38	428.64	28.74	15.915	
5,100.00	4,920.14	5,038.26	4,765.81	27.82	29.74	17.04	-451.94	1,636.48	462.00	432.35	29.65	15.580	
5,200.00	5,015.95	5,139.72	4,863.28	28.42	30.28	18.38	-466.83	1,660.39	462.45	431.96	30.49	15.166	
5,300.00	5,111.76	5,240.68	4,960.01	29.02	30.81	19.68	-481.97	1,685.05	464.10	432.72	31.38	14.789	
5,400.00	5,207.57	5,340.58	5,055.87	29.62	31.35	20.89	-496.17	1,709.31	465.43	433.13	32.30	14.408	
5,500.00	5,303.38	5,458.29	5,169.42	30.22	31.90	22.22	-511.12	1,736.41	465.03	431.71	33.32	13.958	
5,600.00	5,399.19	5,575.83	5,283.94	30.82	32.38	23.38	-522.24	1,760.46	460.75	426.47	34.28	13.440	
5,700.00	5,495.00	5,697.86	5,403.91	31.42	32.78	24.74	-531.65	1,780.59	452.29	417.03	35.26	12.828	
5,800.00	5,590.81	5,808.08	5,512.92	32.02	33.09	26.11	-538.44	1,795.36	440.62	404.30	36.32	12.133	
5,900.00	5,686.63	5,922.51	5,626.60	32.62	33.34	27.62	-543.04	1,807.46	425.57	388.19	37.38	11.385	
6,000.00	5,782.44	6,030.50	5,734.22	33.22	33.52	29.30	-546.09	1,815.86	407.90	369.31	38.59	10.570	
6,100.00	5,878.25	6,135.80	5,839.33	33.82	33.67	31.17	-547.99	1,821.92	388.38	348.43	39.95	9.721	
6,200.00	5,974.06	6,236.04	5,939.46	34.42	33.79	33.20	-549.10	1,826.52	367.96	326.43	41.52	8.862	
6,300.00	6,069.87	6,336.10	6,039.45	35.03	33.90	35.51	-549.80	1,830.28	347.15	303.86	43.29	8.020	
6,400.00	6,165.68	6,436.43	6,139.72	35.63	34.00	38.13	-549.81	1,833.40	326.02	280.77	45.24	7.206	
6,500.00	6,261.49	6,534.81	6,238.09	36.23	34.07	41.20	-549.58	1,835.21	304.62	257.06	47.55	6.406	
6,600.00	6,357.30	6,632.67	6,335.93	36.83	34.15	44.71	-549.03	1,836.70	283.72	233.55	50.17	5.655	
6,700.00	6,453.11	6,729.97	6,433.22	37.43	34.21	48.80	-548.22	1,837.59	263.47	210.30	53.17	4.955	
6,800.00	6,548.92	6,826.17	6,529.42	38.03	34.26	53.54	-547.35	1,838.08	244.50	187.93	56.57	4.322	
6,900.00	6,644.73	6,922.37	6,625.61	38.63	34.32	59.01	-546.42	1,838.47	227.39	167.10	60.29	3.772	
7,000.00	6,740.55	7,018.99	6,722.23	39.23	34.37	65.31	-545.27	1,838.69	212.47	148.26	64.20	3.309	
7,100.00	6,836.36	7,115.11	6,818.33	39.83	34.42	72.41	-543.85	1,838.74	200.24	132.14	68.10	2.940	
7,188.78	6,921.42	7,199.76	6,902.98	40.37	34.47	79.27	-542.64	1,838.76	192.45	121.20	71.25	2.701	
7,200.00	6,932.17	7,210.47	6,913.69	40.44	34.47	83.11	-542.50	1,838.76	191.78	120.17	71.61	2.678	
7,227.03	6,958.12	7,236.32	6,939.53	40.59	34.49	92.61	-542.16	1,838.77	191.12	118.69	72.43	2.639 CC	
7,250.00	6,980.19	7,258.30	6,961.52	40.72	34.50	100.78	-541.89	1,838.78	191.59	118.54	73.05	2.623 ES, SF	
7,300.00	7,028.16	7,306.27	7,009.48	40.99	34.53	118.05	-541.31	1,838.78	195.85	121.67	74.18	2.640	
7,350.00	7,075.86	7,353.97	7,057.18	41.24	34.55	133.43	-540.74	1,838.73	204.32	129.33	74.98	2.725	
7,400.00	7,123.05	7,401.18	7,104.39	41.47	34.58	146.25	-540.17	1,838.63	216.71	141.19	75.52	2.869	
7,450.00	7,169.51	7,447.64	7,150.84	41.68	34.60	156.57	-539.63	1,838.48	232.70	156.83	75.88	3.067	
7,500.00	7,215.00	7,493.07	7,196.26	41.87	34.62	164.79	-539.12	1,838.31	252.02	175.90	76.11	3.311	
7,550.00	7,259.31	7,537.32	7,240.51	42.04	34.65	171.34	-538.66	1,838.12	274.39	198.11	76.28	3.597	
7,600.00	7,302.22	7,580.17	7,283.36	42.19	34.67	176.63	-538.24	1,837.91	299.61	223.19	76.42	3.920	
7,650.00	7,343.52	7,621.37	7,324.56	42.32	34.69	-179.02	-537.87	1,837.69	327.49	250.95	76.54	4.279	
7,700.00	7,383.01	7,660.69	7,363.88	42.44	34.71	-175.34	-537.55	1,837.48	357.89	281.24	76.64	4.669	
7,750.00	7,420.50	7,697.98	7,401.17	42.54	34.73	-172.13	-537.29	1,837.27	390.67	313.93	76.74	5.091	
7,800.00	7,455.80	7,733.06	7,436.25	42.63	34.75	-169.20	-537.08	1,837.07	425.69	348.88	76.81	5.542	
7,850.00	7,488.75	7,765.77	7,468.95	42.70	34.77	-166.39	-536.92	1,836.89	462.81	385.94	76.87	6.021	
7,900.00	7,519.17	7,796.26	7,499.44	42.76	34.79	-163.56	-536.79	1,836.72	501.88	424.97	76.91	6.526	
7,950.00	7,546.94	7,824.48	7,527.67	42.81	34.80	-160.55	-536.65	1,836.54	542.71	465.79	76.92	7.055	
8,000.00	7,571.90	7,849.95	7,553.13	42.84	34.82	-157.19	-536.51	1,836.38	585.15	508.23	76.92	7.607	
8,050.00	7,593.93	7,872.52	7,575.70	42.87	34.83	-153.23	-536.37	1,836.22	629.02	552.12	76.90	8.179	
8,100.00	7,612.94	7,892.09	7,595.27	42.88	34.84	-148.40	-536.24	1,836.08	674.15	597.28	76.87	8.770	
8,150.00	7,628.82	7,908.55	7,611.73	42.89	34.85	-142.29	-536.12	1,835.95	720.34	643.53	76.81	9.378	
8,200.00	7,641.51	7,921.81	7,624.99	42.89	34.85	-134.40	-536.02	1,835.84	767.41	690.66	76.74	10.000	
8,250.00	7,650.93	7,931.80	7,634.98	42.88	34.86	-124.18	-535.94	1,835.76	815.14	738.48	76.66	10.633	
8,300.00	7,657.04	7,938.46	7,641.63	42.87	34.86	-111.36	-535.89	1,835.71	863.33	786.77	76.56	11.276	
8,350.00	7,659.82	7,941.73	7,644.91	42.85	34.86	-96.58	-535.86	1,835.68	911.76	835.30	76.46	11.925	
8,366.42	7,660.00	7,942.07	7,645.24	42.84	34.86	-91.57	-535.86	1,835.68	927.69	851.26	76.42	12.139	
8,400.00	7,660.00	7,942.37	7,645.55	42.83	34.86	-91.65	-535.86	1,835.68	960.27	883.92	76.35	12.578	
8,500.00	7,660.00	7,943.29	7,646.46	42.81	34.86	-91.88	-535.85	1,835.67	1,057.69	981.55	76.14	13.892	

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 HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Ray Nelson 8-8-32 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 70-Geolink MWD												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
8,600.00	7,660.00	7,944.20	7,647.38	42.80	34.87	-92.11	-535.84	1,835.66	1,155.55	1,079.60	75.94	15.216	
8,700.00	7,660.00	7,945.13	7,648.30	42.81	34.87	-92.34	-535.84	1,835.65	1,253.74	1,177.97	75.77	16.546	
8,800.00	7,660.00	7,946.06	7,649.23	42.83	34.87	-92.58	-535.83	1,835.64	1,352.20	1,276.58	75.61	17.883	
8,900.00	7,660.00	7,946.99	7,650.16	42.88	34.87	-92.81	-535.82	1,835.64	1,450.87	1,375.39	75.47	19.223	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4W-32H-O268
Project:	DJ BASIN	TVD Reference:	23' KB @ 5015.00usft
Reference Site:	S32-T2N-R68W	MD Reference:	23' KB @ 5015.00usft
Site Error:	0.00usft	North Reference:	True
Reference Well:	HWY52 4W-32H-O268	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 #3	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - SEC Four 4-4 - KMG WELL - SURVEYS													Offset Site Error: 0.00 usft	
Survey Program: 52-ISCWSA 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		
6,500.00	6,261.49	6,397.97	6,352.98	36.23	18.32	37.70	-1,396.75	2,673.18	1,496.65	1,453.56	43.09	34.733		
6,600.00	6,357.30	6,517.31	6,472.19	36.83	18.57	38.49	-1,391.97	2,670.67	1,469.64	1,425.82	43.82	33.541		
6,700.00	6,453.11	6,659.91	6,614.35	37.43	18.91	39.46	-1,382.53	2,664.97	1,439.60	1,395.14	44.46	32.382		
6,800.00	6,548.92	6,736.65	6,690.80	38.03	19.11	40.04	-1,377.29	2,660.96	1,408.76	1,363.42	45.33	31.076		
6,900.00	6,644.73	6,823.17	6,777.04	38.63	19.32	40.71	-1,371.71	2,656.66	1,378.58	1,332.40	46.19	29.847		
7,000.00	6,740.55	6,907.33	6,860.98	39.23	19.52	41.42	-1,367.38	2,652.56	1,349.60	1,302.53	47.07	28.672		
7,100.00	6,836.36	7,016.22	6,969.50	39.83	19.79	42.43	-1,361.63	2,645.67	1,319.82	1,271.93	47.89	27.559		
7,188.78	6,921.42	7,075.09	7,028.22	40.37	19.93	42.95	-1,358.54	2,643.17	1,294.75	1,245.98	48.77	26.550		
7,200.00	6,932.17	7,097.38	7,050.48	40.44	19.99	46.24	-1,357.39	2,642.29	1,291.71	1,242.89	48.82	26.459		
7,250.00	6,980.19	7,154.65	7,107.56	40.72	20.13	61.04	-1,353.68	2,639.65	1,279.22	1,229.97	49.24	25.978		
7,300.00	7,028.16	7,192.98	7,145.78	40.99	20.22	75.29	-1,351.32	2,638.00	1,269.99	1,220.20	49.78	25.510		
7,350.00	7,075.86	7,231.82	7,184.53	41.24	20.31	87.87	-1,349.40	2,636.18	1,264.23	1,213.88	50.36	25.106		
7,400.00	7,123.05	7,271.23	7,223.87	41.47	20.40	98.20	-1,347.51	2,634.64	1,261.98	1,211.03	50.95	24.771		
7,406.44	7,129.08	7,276.09	7,228.72	41.50	20.41	99.36	-1,347.29	2,634.46	1,261.95	1,210.92	51.02	24.733 CC, ES		
7,450.00	7,169.51	7,309.25	7,261.83	41.68	20.48	106.36	-1,345.89	2,633.31	1,263.33	1,211.78	51.55	24.505		
7,500.00	7,215.00	7,350.95	7,303.48	41.87	20.57	112.82	-1,344.31	2,631.94	1,268.26	1,216.10	52.16	24.317		
7,550.00	7,259.31	7,394.00	7,346.47	42.04	20.66	117.94	-1,342.76	2,630.52	1,276.64	1,223.88	52.76	24.199		
7,600.00	7,302.22	7,433.84	7,386.27	42.19	20.75	121.96	-1,341.40	2,629.24	1,288.50	1,235.13	53.36	24.145 SF		
7,650.00	7,343.52	7,471.20	7,423.60	42.32	20.82	125.09	-1,340.20	2,628.16	1,303.89	1,249.92	53.97	24.161		
7,700.00	7,383.01	7,508.07	7,460.44	42.44	20.90	127.57	-1,339.10	2,627.18	1,322.73	1,268.18	54.55	24.246		
7,750.00	7,420.50	7,543.69	7,496.02	42.54	20.97	129.48	-1,338.10	2,626.27	1,344.91	1,289.79	55.12	24.400		
7,800.00	7,455.80	7,577.26	7,529.58	42.63	21.04	130.89	-1,337.21	2,625.44	1,370.32	1,314.65	55.66	24.618		
7,850.00	7,488.75	7,608.63	7,560.93	42.70	21.10	131.84	-1,336.43	2,624.69	1,398.81	1,342.63	56.18	24.899		
7,900.00	7,519.17	7,637.63	7,589.91	42.76	21.16	132.32	-1,335.75	2,624.02	1,430.23	1,373.57	56.66	25.241		
7,950.00	7,546.94	7,664.16	7,616.43	42.81	21.21	132.34	-1,335.14	2,623.46	1,464.39	1,407.28	57.11	25.640		

Cathedral Energy Services

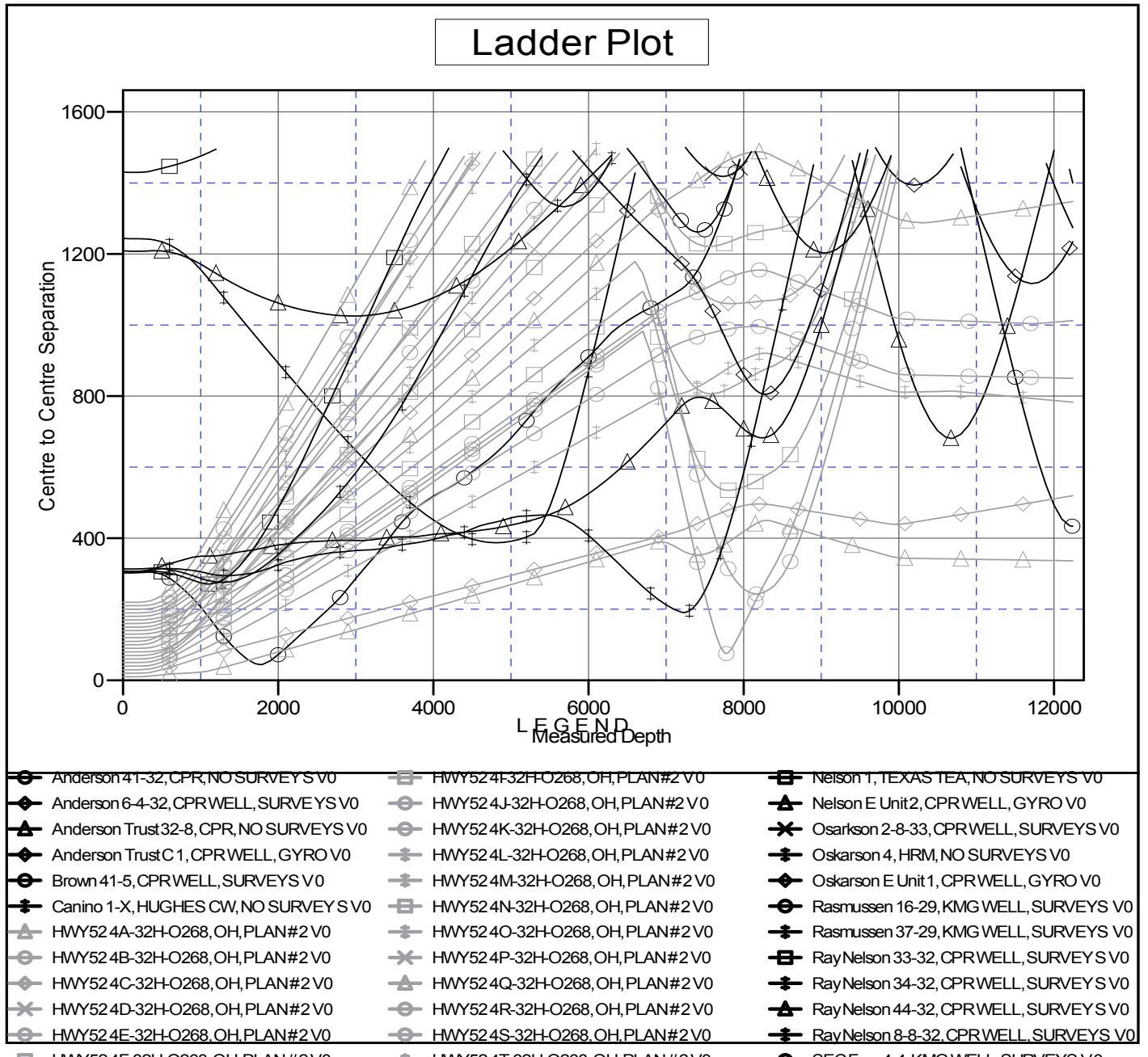
Anticollision Report

Company: Crestone Peak Resources
Project: DJ BASIN
Reference Site: S32-T2N-R68W
Site Error: 0.00usft
Reference Well: HWY52 4W-32H-O268
Well Error: 0.00usft
Reference Wellbore: OH
Reference Design: PLAN #3

Local Co-ordinate Reference: Well HWY52 4W-32H-O268
TVD Reference: 23' KB @ 5015.00usft
MD Reference: 23' KB @ 5015.00usft
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 @ 5015.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: HWY52 4W-32H-O268
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.31°



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