



CRESTONE PEAK
RESOURCES

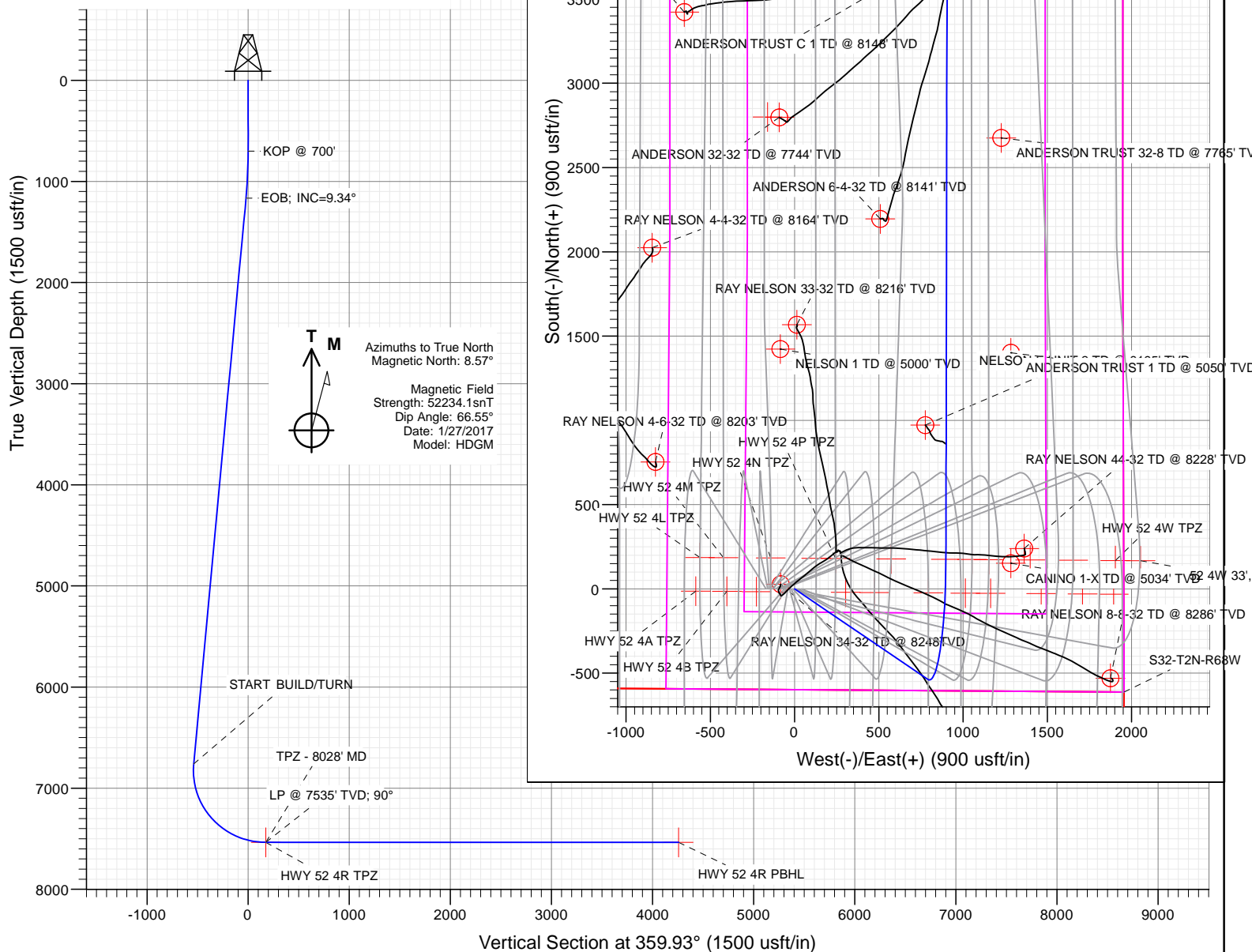
SECTION DETAILS

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	700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	
3	1166.13	9.32	124.17	1164.08	-21.26	31.31	2.00	124.17	-21.29	
4	6837.91	9.32	124.17	6760.94	-537.36	791.45	0.00	0.00	-538.33	
5	8027.99	90.00	0.11	7535.00	175.67	898.11	8.00	-123.71	174.58	HWY 52 4R TPZ
6	11567.32	90.00	0.11	7535.00	3715.00	905.00	0.00	0.00	3713.89	
7	11639.91	90.00	358.66	7535.00	3787.58	904.22	2.00	-90.00	3786.47	
8	12110.95	90.00	358.66	7535.00	4258.50	893.21	0.00	0.00	4257.40	HWY 52 4R PBHL

PLAN #2
HWY52 4R-32H-O268
17000' LR
23 KB @ 5015.00usft
Ground Level @ 4992.00
North American Datum 1983
Well HWY52 4R-32H-O268, True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
User	No Target (Freehand)	359.93	Slot	0.00	0.00	0.00
Name		TVD		+N/-S	+E/-W	Latitude
HWY 52 4R PBHL		7535.00		4258.50	893.21	40.101044
HWY 52 4R TPZ		7535.00		175.67	898.11	-105.021468

Project: DJ BASIN
Site: S32-T2N-R68W
Well: HWY52 4R-32H-O268
Wellbore: OH
Design: PLAN #2



CATHEDRAL

WELL DETAILS: HWY52 4R-32H-O268

+N/-S	+E/-W	Northing	Ground Level:	4992.00	Latitude	Longitude
0.00	0.00	1275752.67	Easting	3132988.05	40.089354	-105.024678



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

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 4R-32H-O268					
Well Position	+N/-S	0.00 usft	Northing:	1,275,752.67 usft	Latitude:	40.089354
	+E/-W	0.00 usft	Easting:	3,132,988.05 usft	Longitude:	-105.024678
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	52,234

Design	PLAN #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.93

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	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,166.13	9.32	124.17	1,164.08	-21.26	31.31	2.00	2.00	0.00	124.17	
6,837.91	9.32	124.17	6,760.94	-537.36	791.45	0.00	0.00	0.00	0.00	
8,027.99	90.00	0.11	7,535.00	175.67	898.11	8.00	6.78	-10.42	-123.71	HWY 52 4R TPZ
11,567.32	90.00	0.11	7,535.00	3,715.00	905.00	0.00	0.00	0.00	0.00	
11,639.91	90.00	358.66	7,535.00	3,787.58	904.22	2.00	0.00	-2.00	-90.00	
12,110.95	90.00	358.66	7,535.00	4,258.50	893.21	0.00	0.00	0.00	0.00	HWY 52 4R PBHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	KOP @ 700'
800.00	2.00	124.17	799.98	-0.98	1.44	-0.98	2.00	2.00	
900.00	4.00	124.17	899.84	-3.92	5.77	-3.93	2.00	2.00	
1,000.00	6.00	124.17	999.45	-8.82	12.98	-8.83	2.00	2.00	
1,100.00	8.00	124.17	1,098.70	-15.66	23.07	-15.69	2.00	2.00	
1,166.13	9.32	124.17	1,164.08	-21.26	31.31	-21.29	2.00	2.00	
1,167.12	9.32	124.17	1,165.06	-21.35	31.44	-21.38	0.00	0.00	EOB; INC=9.34°
1,200.00	9.32	124.17	1,197.50	-24.34	35.84	-24.38	0.00	0.00	
1,300.00	9.32	124.17	1,296.18	-33.44	49.25	-33.50	0.00	0.00	
1,400.00	9.32	124.17	1,394.86	-42.54	62.65	-42.61	0.00	0.00	
1,500.00	9.32	124.17	1,493.54	-51.64	76.05	-51.73	0.00	0.00	
1,600.00	9.32	124.17	1,592.22	-60.74	89.45	-60.84	0.00	0.00	
1,700.00	9.32	124.17	1,690.89	-69.83	102.86	-69.96	0.00	0.00	
1,800.00	9.32	124.17	1,789.57	-78.93	116.26	-79.08	0.00	0.00	
1,900.00	9.32	124.17	1,888.25	-88.03	129.66	-88.19	0.00	0.00	
2,000.00	9.32	124.17	1,986.93	-97.13	143.06	-97.31	0.00	0.00	
2,100.00	9.32	124.17	2,085.61	-106.23	156.46	-106.42	0.00	0.00	
2,200.00	9.32	124.17	2,184.29	-115.33	169.87	-115.54	0.00	0.00	
2,300.00	9.32	124.17	2,282.97	-124.43	183.27	-124.66	0.00	0.00	
2,400.00	9.32	124.17	2,381.65	-133.53	196.67	-133.77	0.00	0.00	
2,500.00	9.32	124.17	2,480.33	-142.63	210.07	-142.89	0.00	0.00	
2,600.00	9.32	124.17	2,579.01	-151.73	223.48	-152.00	0.00	0.00	
2,700.00	9.32	124.17	2,677.69	-160.83	236.88	-161.12	0.00	0.00	
2,800.00	9.32	124.17	2,776.37	-169.93	250.28	-170.24	0.00	0.00	
2,900.00	9.32	124.17	2,875.04	-179.03	263.68	-179.35	0.00	0.00	
3,000.00	9.32	124.17	2,973.72	-188.13	277.08	-188.47	0.00	0.00	
3,100.00	9.32	124.17	3,072.40	-197.23	290.49	-197.58	0.00	0.00	
3,200.00	9.32	124.17	3,171.08	-206.33	303.89	-206.70	0.00	0.00	
3,300.00	9.32	124.17	3,269.76	-215.43	317.29	-215.82	0.00	0.00	
3,400.00	9.32	124.17	3,368.44	-224.53	330.69	-224.93	0.00	0.00	
3,500.00	9.32	124.17	3,467.12	-233.63	344.10	-234.05	0.00	0.00	
3,600.00	9.32	124.17	3,565.80	-242.73	357.50	-243.16	0.00	0.00	
3,700.00	9.32	124.17	3,664.48	-251.83	370.90	-252.28	0.00	0.00	
3,800.00	9.32	124.17	3,763.16	-260.93	384.30	-261.40	0.00	0.00	
3,900.00	9.32	124.17	3,861.84	-270.03	397.70	-270.51	0.00	0.00	
4,000.00	9.32	124.17	3,960.52	-279.12	411.11	-279.63	0.00	0.00	
4,100.00	9.32	124.17	4,059.19	-288.22	424.51	-288.74	0.00	0.00	
4,200.00	9.32	124.17	4,157.87	-297.32	437.91	-297.86	0.00	0.00	
4,300.00	9.32	124.17	4,256.55	-306.42	451.31	-306.97	0.00	0.00	
4,400.00	9.32	124.17	4,355.23	-315.52	464.72	-316.09	0.00	0.00	
4,500.00	9.32	124.17	4,453.91	-324.62	478.12	-325.21	0.00	0.00	
4,600.00	9.32	124.17	4,552.59	-333.72	491.52	-334.32	0.00	0.00	
4,700.00	9.32	124.17	4,651.27	-342.82	504.92	-343.44	0.00	0.00	
4,800.00	9.32	124.17	4,749.95	-351.92	518.33	-352.55	0.00	0.00	
4,900.00	9.32	124.17	4,848.63	-361.02	531.73	-361.67	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
5,000.00	9.32	124.17	4,947.31	-370.12	545.13	-370.79	0.00	0.00	
5,100.00	9.32	124.17	5,045.99	-379.22	558.53	-379.90	0.00	0.00	
5,200.00	9.32	124.17	5,144.67	-388.32	571.93	-389.02	0.00	0.00	
5,300.00	9.32	124.17	5,243.34	-397.42	585.34	-398.13	0.00	0.00	
5,400.00	9.32	124.17	5,342.02	-406.52	598.74	-407.25	0.00	0.00	
5,500.00	9.32	124.17	5,440.70	-415.62	612.14	-416.37	0.00	0.00	
5,600.00	9.32	124.17	5,539.38	-424.72	625.54	-425.48	0.00	0.00	
5,700.00	9.32	124.17	5,638.06	-433.82	638.95	-434.60	0.00	0.00	
5,800.00	9.32	124.17	5,736.74	-442.92	652.35	-443.71	0.00	0.00	
5,900.00	9.32	124.17	5,835.42	-452.02	665.75	-452.83	0.00	0.00	
6,000.00	9.32	124.17	5,934.10	-461.12	679.15	-461.95	0.00	0.00	
6,100.00	9.32	124.17	6,032.78	-470.22	692.55	-471.06	0.00	0.00	
6,200.00	9.32	124.17	6,131.46	-479.32	705.96	-480.18	0.00	0.00	
6,300.00	9.32	124.17	6,230.14	-488.42	719.36	-489.29	0.00	0.00	
6,400.00	9.32	124.17	6,328.82	-497.51	732.76	-498.41	0.00	0.00	
6,500.00	9.32	124.17	6,427.49	-506.61	746.16	-507.53	0.00	0.00	
6,600.00	9.32	124.17	6,526.17	-515.71	759.57	-516.64	0.00	0.00	
6,700.00	9.32	124.17	6,624.85	-524.81	772.97	-525.76	0.00	0.00	
6,800.00	9.32	124.17	6,723.53	-533.91	786.37	-534.87	0.00	0.00	
6,837.90	9.32	124.17	6,760.93	-537.36	791.45	-538.33	0.00	0.00	START BUILD/TURN
6,837.91	9.32	124.17	6,760.94	-537.36	791.45	-538.33	0.00	0.00	
6,900.00	7.75	91.88	6,822.38	-540.33	799.80	-541.30	8.00	-2.54	
7,000.00	10.95	44.79	6,921.17	-533.80	813.25	-534.79	8.00	3.20	
7,100.00	17.52	25.63	7,018.10	-513.46	826.47	-514.47	8.00	6.57	
7,200.00	24.92	17.13	7,111.28	-479.70	839.21	-480.73	8.00	7.40	
7,300.00	32.60	12.39	7,198.89	-433.18	851.21	-434.22	8.00	7.67	
7,400.00	40.39	9.31	7,279.23	-374.81	862.25	-375.86	8.00	7.79	
7,500.00	48.23	7.09	7,350.73	-305.72	872.11	-306.79	8.00	7.85	
7,600.00	56.12	5.35	7,412.01	-227.26	880.60	-228.33	8.00	7.88	
7,700.00	64.02	3.91	7,461.87	-140.95	887.55	-142.03	8.00	7.90	
7,800.00	71.93	2.65	7,499.35	-48.47	892.82	-49.56	8.00	7.91	
7,900.00	79.86	1.51	7,523.70	48.37	896.32	47.28	8.00	7.92	
8,000.00	87.78	0.41	7,534.46	147.69	897.98	146.60	8.00	7.93	
8,027.99	90.00	0.11	7,535.00	175.67	898.11	174.58	8.00	7.93	
8,028.31	90.00	0.11	7,535.00	176.00	898.11	174.90	0.00	0.00	TPZ - 8028' MD
8,028.32	90.00	0.11	7,535.00	176.01	898.11	174.91	0.00	0.00	LP @ 7535' TVD; 90°
8,100.00	90.00	0.11	7,535.00	247.69	898.25	246.59	0.00	0.00	
8,200.00	90.00	0.11	7,535.00	347.69	898.44	346.59	0.00	0.00	
8,300.00	90.00	0.11	7,535.00	447.69	898.64	446.59	0.00	0.00	
8,400.00	90.00	0.11	7,535.00	547.69	898.83	546.59	0.00	0.00	
8,500.00	90.00	0.11	7,535.00	647.69	899.03	646.59	0.00	0.00	
8,600.00	90.00	0.11	7,535.00	747.69	899.22	746.59	0.00	0.00	
8,700.00	90.00	0.11	7,535.00	847.69	899.42	846.59	0.00	0.00	
8,800.00	90.00	0.11	7,535.00	947.69	899.61	946.59	0.00	0.00	
8,900.00	90.00	0.11	7,535.00	1,047.69	899.81	1,046.59	0.00	0.00	
9,000.00	90.00	0.11	7,535.00	1,147.68	900.00	1,146.58	0.00	0.00	
9,100.00	90.00	0.11	7,535.00	1,247.68	900.20	1,246.58	0.00	0.00	
9,200.00	90.00	0.11	7,535.00	1,347.68	900.39	1,346.58	0.00	0.00	
9,300.00	90.00	0.11	7,535.00	1,447.68	900.59	1,446.58	0.00	0.00	
9,400.00	90.00	0.11	7,535.00	1,547.68	900.78	1,546.58	0.00	0.00	
9,500.00	90.00	0.11	7,535.00	1,647.68	900.97	1,646.58	0.00	0.00	
9,600.00	90.00	0.11	7,535.00	1,747.68	901.17	1,746.58	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

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
9,700.00	90.00	0.11	7,535.00	1,847.68	901.36	1,846.58	0.00	0.00	
9,800.00	90.00	0.11	7,535.00	1,947.68	901.56	1,946.58	0.00	0.00	
9,900.00	90.00	0.11	7,535.00	2,047.68	901.75	2,046.58	0.00	0.00	
10,000.00	90.00	0.11	7,535.00	2,147.68	901.95	2,146.58	0.00	0.00	
10,100.00	90.00	0.11	7,535.00	2,247.68	902.14	2,246.58	0.00	0.00	
10,200.00	90.00	0.11	7,535.00	2,347.68	902.34	2,346.58	0.00	0.00	
10,300.00	90.00	0.11	7,535.00	2,447.68	902.53	2,446.58	0.00	0.00	
10,400.00	90.00	0.11	7,535.00	2,547.68	902.73	2,546.58	0.00	0.00	
10,500.00	90.00	0.11	7,535.00	2,647.68	902.92	2,646.58	0.00	0.00	
10,600.00	90.00	0.11	7,535.00	2,747.68	903.12	2,746.58	0.00	0.00	
10,700.00	90.00	0.11	7,535.00	2,847.68	903.31	2,846.58	0.00	0.00	
10,800.00	90.00	0.11	7,535.00	2,947.68	903.51	2,946.58	0.00	0.00	
10,900.00	90.00	0.11	7,535.00	3,047.68	903.70	3,046.58	0.00	0.00	
11,000.00	90.00	0.11	7,535.00	3,147.68	903.90	3,146.57	0.00	0.00	
11,100.00	90.00	0.11	7,535.00	3,247.68	904.09	3,246.57	0.00	0.00	
11,200.00	90.00	0.11	7,535.00	3,347.68	904.28	3,346.57	0.00	0.00	
11,300.00	90.00	0.11	7,535.00	3,447.68	904.48	3,446.57	0.00	0.00	
11,400.00	90.00	0.11	7,535.00	3,547.68	904.67	3,546.57	0.00	0.00	
11,500.00	90.00	0.11	7,535.00	3,647.68	904.87	3,646.57	0.00	0.00	
11,567.32	90.00	0.11	7,535.00	3,715.00	905.00	3,713.89	0.00	0.00	
11,600.00	90.00	359.46	7,535.00	3,747.68	904.88	3,746.57	2.00	0.00	
11,639.91	90.00	358.66	7,535.00	3,787.58	904.22	3,786.47	2.00	0.00	
11,700.00	90.00	358.66	7,535.00	3,847.66	902.82	3,846.55	0.00	0.00	
11,800.00	90.00	358.66	7,535.00	3,947.63	900.48	3,946.53	0.00	0.00	
11,900.00	90.00	358.66	7,535.00	4,047.60	898.14	4,046.50	0.00	0.00	
12,000.00	90.00	358.66	7,535.00	4,147.58	895.80	4,146.48	0.00	0.00	
12,100.00	90.00	358.66	7,535.00	4,247.55	893.46	4,246.45	0.00	0.00	
12,110.95	90.00	358.66	7,535.00	4,258.50	893.21	4,257.40	0.00	0.00	TD at 12111.15

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
HWY 52 4R TPZ - plan hits target center - Point	0.00	0.00	7,535.00	175.67	898.11	1,275,933.15	3,133,885.21	40.089836	-105.021468
HWY 52 4R PBHL - plan hits target center - Point	0.00	0.00	7,535.00	4,258.50	893.21	1,280,015.89	3,133,858.42	40.101044	-105.021485

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #2		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
700.00	700.00	0.00	0.00	KOP @ 700'
1,167.12	1,165.06	-21.31	31.46	EOB; INC=9.34°
6,837.90	6,760.61	-537.66	793.58	START BUILD/TURN
8,028.31	7,535.00	175.67	898.11	TPZ - 8028' MD
8,028.32	7,535.00	175.67	898.11	LP @ 7535' TVD; 90°
12,111.15	7,535.00	4,258.50	893.21	TD at 12111.15

Crestone Peak Resources

DJ BASIN

S32-T2N-R68W

HWY52 4R-32H-O268

OH

PLAN #2

Anticollision Report

22 February, 2017

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	Offset TVD Reference:	Offset Datum

Reference	PLAN #2		
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	2/22/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	12,110.95	PLAN #2 (OH)	MWD+HDGM	OWSG MWD + HDGM	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	10,600.00	7,659.91	987.35	910.94	12.922	SF
Anderson 32-32 - CPR WELL - SURVEYS	10,642.77	7,660.64	986.42	910.20	12.942	CC, ES
Anderson 41-32 - CPR - NO SURVEYS	12,077.95	7,415.00	570.61	481.53	6.406	CC
Anderson 41-32 - CPR - NO SURVEYS	12,100.00	7,415.00	571.04	481.39	6.370	ES
Anderson 41-32 - CPR - NO SURVEYS	12,110.95	7,415.00	571.57	481.68	6.359	SF
Anderson 4-2-32 - CPR WELL - SURVEYS						Out of range
Anderson 6-4-32 - CPR WELL - SURVEYS	10,048.96	7,719.14	383.26	306.33	4.982	CC, 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	12,058.83	7,459.04	967.12	883.07	11.506	CC, ES
Anderson Trust 32-2 - CPR WELL - GYRO	12,100.00	7,459.33	968.00	883.75	11.490	SF
Anderson Trust 32-8 - CPR - NO SURVEYS	10,528.68	7,493.00	323.47	256.25	4.812	CC, ES, SF
Anderson Trust C 1 - CPR WELL - GYRO	11,567.32	7,465.84	118.51	41.84	1.546	ES, SF
Anderson Trust C 1 - CPR WELL - GYRO	11,572.32	7,465.75	118.41	41.84	1.546	CC
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	6,852.76	7,063.42	1,111.06	1,041.14	15.892	CC, ES
Brown 31-5 - CPR WELL - SURVEYS	6,950.00	7,145.67	1,116.01	1,045.47	15.821	SF
Brown 41-5 - CPR WELL - SURVEYS	1,421.33	1,387.81	269.78	260.52	29.133	CC, ES
Brown 41-5 - CPR WELL - SURVEYS	7,050.00	7,169.43	819.67	780.83	21.102	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	5,184.38	5,034.00	895.64	865.75	29.967	CC, ES
Canino 1-X - HUGHES CW - NO SURVEYS	5,200.00	5,034.00	895.78	865.84	29.918	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	169.83	168.84	171.035	CC, ES
HWY52 4A-32H-O268 - OH - PLAN #2	1,100.00	1,077.23	258.61	251.16	34.709	SF
HWY52 4B-32H-O268 - OH - PLAN #2	300.00	300.00	160.04	158.33	93.595	CC
HWY52 4B-32H-O268 - OH - PLAN #2	400.00	398.84	160.40	157.98	66.190	ES
HWY52 4B-32H-O268 - OH - PLAN #2	8,400.00	7,540.00	1,219.90	1,162.11	21.111	SF
HWY52 4C-32H-O268 - OH - PLAN #2	400.00	400.00	149.97	147.54	61.795	CC
HWY52 4C-32H-O268 - OH - PLAN #2	600.00	598.83	150.69	146.84	39.073	ES
HWY52 4C-32H-O268 - OH - PLAN #2	7,594.04	8,223.54	1,100.55	1,043.94	19.439	SF
HWY52 4D-32H-O268 - OH - PLAN #2	798.95	803.68	139.18	133.89	26.273	CC
HWY52 4D-32H-O268 - OH - PLAN #2	800.00	804.77	139.18	133.88	26.235	ES
HWY52 4D-32H-O268 - OH - PLAN #2	8,225.94	7,730.43	569.27	511.50	9.854	SF
HWY52 4E-32H-O268 - OH - PLAN #2	862.90	869.57	126.96	121.21	22.075	CC
HWY52 4E-32H-O268 - OH - PLAN #2	900.00	907.30	127.12	121.10	21.142	ES
HWY52 4E-32H-O268 - OH - PLAN #2	7,591.29	8,138.87	412.20	355.42	7.260	SF
HWY52 4F-32H-O268 - OH - PLAN #2	855.91	865.25	97.68	91.86	16.764	CC
HWY52 4F-32H-O268 - OH - PLAN #2	7,966.72	7,924.92	106.42	48.92	1.851	ES, SF

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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 4G-32H-O268 - OH - PLAN #2	8,281.69	7,728.46	63.05	3.94	1.067	Level 2, CC, ES, SF
HWY52 4H-32H-O268 - OH - PLAN #2	1,040.29	1,051.54	89.55	82.51	12.717	CC, ES
HWY52 4H-32H-O268 - OH - PLAN #2	7,750.00	8,096.23	313.58	255.94	5.441	SF
HWY52 4I-32H-O268 - OH - PLAN #2	1,020.31	1,030.32	69.07	62.15	9.977	CC, ES
HWY52 4I-32H-O268 - OH - PLAN #2	1,166.13	1,175.26	75.46	67.44	9.411	SF
HWY52 4J-32H-O268 - OH - PLAN #2	977.60	985.77	47.11	40.46	7.084	CC, ES
HWY52 4J-32H-O268 - OH - PLAN #2	1,000.00	1,008.00	47.31	40.50	6.945	SF
HWY52 4K-32H-O268 - OH - PLAN #2	878.96	884.74	31.23	25.27	5.240	CC, ES
HWY52 4K-32H-O268 - OH - PLAN #2	900.00	905.51	31.51	25.39	5.154	SF
HWY52 4L-32H-O268 - OH - PLAN #2	200.00	200.00	59.88	58.88	60.299	CC, ES
HWY52 4L-32H-O268 - OH - PLAN #2	12,110.95	12,095.37	1,462.07	1,310.54	9.649	SF
HWY52 4M-32H-O268 - OH - PLAN #2	200.00	200.00	50.08	49.09	50.438	CC, ES
HWY52 4M-32H-O268 - OH - PLAN #2	12,110.95	12,046.69	1,320.07	1,166.51	8.597	SF
HWY52 4N-32H-O268 - OH - PLAN #2	300.00	300.00	40.01	38.30	23.399	CC
HWY52 4N-32H-O268 - OH - PLAN #2	400.00	399.73	40.34	37.92	16.730	ES
HWY52 4N-32H-O268 - OH - PLAN #2	12,110.95	11,960.10	1,044.90	891.92	6.830	SF
HWY52 4O-32H-O268 - OH - PLAN #2	410.88	411.07	28.91	26.43	11.665	CC, ES
HWY52 4O-32H-O268 - OH - PLAN #2	12,110.95	12,168.45	780.19	626.93	5.091	SF
HWY52 4P-32H-O268 - OH - PLAN #2	700.00	700.00	19.86	15.29	4.340	CC, ES
HWY52 4P-32H-O268 - OH - PLAN #2	800.00	799.98	21.33	16.05	4.039	SF
HWY52 4Q-32H-O268 - OH - PLAN #2	700.00	700.00	10.07	5.49	2.200	CC, ES
HWY52 4Q-32H-O268 - OH - PLAN #2	800.00	799.98	11.56	6.28	2.189	SF
HWY52 4S-32H-O268 - OH - PLAN #2	600.00	600.00	10.07	6.21	2.609	CC, ES
HWY52 4S-32H-O268 - OH - PLAN #2	12,110.95	12,253.72	199.11	76.38	1.622	SF
HWY52 4T-32H-O268 - OH - PLAN #2	500.00	500.00	20.14	17.00	6.408	CC, ES
HWY52 4T-32H-O268 - OH - PLAN #2	12,110.95	12,044.78	274.03	125.39	1.844	SF
HWY52 4U-32H-O268 - OH - PLAN #2	400.00	400.00	29.94	27.51	12.336	CC, ES
HWY52 4U-32H-O268 - OH - PLAN #2	12,110.95	12,030.43	499.91	346.84	3.266	SF
HWY52 4V-32H-O268 - OH - PLAN #2	300.00	300.00	40.01	38.30	23.399	CC, ES
HWY52 4V-32H-O268 - OH - PLAN #2	12,110.95	12,135.65	761.63	607.89	4.954	SF
HWY52 4W-32H-O268 - OH - PLAN #2	115.99	117.99	50.08	49.69	125.898	CC
HWY52 4W-32H-O268 - OH - PLAN #2	200.00	201.98	50.08	49.08	50.092	ES
HWY52 4W-32H-O268 - OH - PLAN #2	12,110.95	12,243.21	1,012.63	861.84	6.715	SF
Nelson 1 - TEXAS TEA - NO SURVEYS	700.00	654.00	1,425.43	1,421.97	412.045	CC, ES
Nelson 1 - TEXAS TEA - NO SURVEYS	1,600.00	1,546.22	1,493.82	1,485.50	179.493	SF
Nelson E Unit 1 - CPR WELL - GYRO						Out of range
Nelson E Unit 2 - CPR WELL - GYRO	8,800.00	7,475.60	110.83	68.21	2.601	ES, SF
Nelson E Unit 2 - CPR WELL - GYRO	8,805.98	7,475.76	110.67	68.34	2.614	CC
Oskarson 2-8-33 - CPR WELL - SURVEYS						Out of range
Oskarson 23-33 - CPR WELL - GYRO						Out of range
Oskarson 4 - HRM - NO SURVEYS						Out of range
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						Out of range
Paquette 14-5 - KERR-MCGEE - GYRO						Out of range
Rasmussen 10-29 - KMG WELL - SURVEYS						Out of range
Rasmussen 16-29 - KMG WELL - SURVEYS	12,110.95	7,656.52	1,281.79	1,216.67	19.683	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

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 4R-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 4R-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 #2	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						
Rasmussen 36-29 - KMG WELL - SURVEYS						Out of range
Rasmussen 37-29 - KMG WELL - SURVEYS	12,110.95	7,606.66	550.57	483.29	8.183	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
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	1,112.65	1,083.95	325.26	319.66	58.095	CC, ES
Ray Nelson 33-32 - CPR WELL - SURVEYS	9,500.00	7,701.11	889.15	821.67	13.177	SF
Ray Nelson 34-32 - CPR WELL - SURVEYS	1,551.62	1,525.47	334.78	326.69	41.390	CC
Ray Nelson 34-32 - CPR WELL - SURVEYS	1,600.00	1,573.67	334.84	326.47	40.007	ES
Ray Nelson 34-32 - CPR WELL - SURVEYS	3,900.00	3,867.06	485.87	464.12	22.338	SF
Ray Nelson 44-32 - CPR WELL - SURVEYS	163.76	142.75	343.33	342.74	579.355	CC, ES
Ray Nelson 44-32 - CPR WELL - SURVEYS	8,200.00	7,648.82	481.79	438.15	11.040	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	100.00	76.02	345.71	345.46	1,362.443	CC, ES
Ray Nelson 8-8-32 - CPR WELL - SURVEYS	7,150.00	7,343.02	1,056.79	1,012.39	23.806	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						Out of range
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 4R-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 4R-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 #2	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 4R-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 4R-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Anderson 32-32 - 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							
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
9,600.00	7,535.00	7,642.59	7,437.49	42.30	27.62	-87.36	2,792.06	-82.34	1,435.29	1,369.76	65.54	21.900	
9,700.00	7,535.00	7,644.33	7,439.23	43.49	27.62	-87.46	2,792.09	-82.38	1,364.40	1,297.49	66.90	20.393	
9,800.00	7,535.00	7,646.07	7,440.97	44.71	27.62	-87.56	2,792.12	-82.43	1,297.33	1,228.98	68.35	18.980	
9,900.00	7,535.00	7,647.81	7,442.70	45.95	27.62	-87.66	2,792.15	-82.48	1,234.73	1,164.87	69.86	17.674	
10,000.00	7,535.00	7,649.54	7,444.44	47.21	27.63	-87.76	2,792.18	-82.53	1,177.31	1,105.93	71.38	16.493	
10,100.00	7,535.00	7,651.27	7,446.17	48.48	27.63	-87.86	2,792.21	-82.58	1,125.85	1,053.00	72.85	15.453	
10,200.00	7,535.00	7,653.00	7,447.90	49.78	27.63	-87.96	2,792.24	-82.63	1,081.21	1,007.01	74.20	14.572	
10,300.00	7,535.00	7,654.73	7,449.62	51.09	27.63	-88.06	2,792.27	-82.67	1,044.26	968.94	75.32	13.864	
10,400.00	7,535.00	7,656.46	7,451.35	52.42	27.63	-88.16	2,792.30	-82.72	1,015.85	939.73	76.12	13.345	
10,500.00	7,535.00	7,658.18	7,453.07	53.75	27.63	-88.26	2,792.33	-82.77	996.70	920.20	76.50	13.028	
10,600.00	7,535.00	7,659.91	7,454.79	55.11	27.64	-88.36	2,792.36	-82.82	987.35	910.94	76.41	12.922 SF	
10,642.77	7,535.00	7,660.64	7,455.53	55.69	27.64	-88.40	2,792.37	-82.84	986.42	910.20	76.22	12.942 CC, ES	
10,700.00	7,535.00	7,661.63	7,456.51	56.47	27.64	-88.46	2,792.38	-82.87	988.08	912.25	75.83	13.030	
10,800.00	7,535.00	7,663.34	7,458.23	57.85	27.64	-88.56	2,792.41	-82.91	998.87	924.07	74.80	13.353	
10,900.00	7,535.00	7,665.06	7,459.95	59.23	27.64	-88.66	2,792.44	-82.96	1,019.40	945.97	73.43	13.882	
11,000.00	7,535.00	7,666.77	7,461.66	60.63	27.64	-88.76	2,792.47	-83.01	1,049.10	977.27	71.83	14.604	
11,100.00	7,535.00	7,668.48	7,463.37	62.03	27.64	-88.86	2,792.50	-83.06	1,087.21	1,017.07	70.14	15.500	
11,200.00	7,535.00	7,670.19	7,465.08	63.44	27.65	-88.96	2,792.53	-83.10	1,132.89	1,064.42	68.47	16.545	
11,300.00	7,535.00	7,671.90	7,466.78	64.87	27.65	-89.06	2,792.56	-83.15	1,185.27	1,118.36	66.91	17.716	
11,400.00	7,535.00	7,673.61	7,468.49	66.29	27.65	-89.16	2,792.59	-83.20	1,243.49	1,178.00	65.49	18.988	
11,500.00	7,535.00	7,675.31	7,470.19	67.73	27.65	-89.26	2,792.62	-83.25	1,306.78	1,242.54	64.24	20.343	
11,567.32	7,535.00	7,676.46	7,471.34	68.70	27.65	-89.32	2,792.64	-83.28	1,351.88	1,288.39	63.49	21.294	
11,600.00	7,535.00	7,677.02	7,471.90	69.17	27.65	-89.36	2,792.65	-83.29	1,374.30	1,311.15	63.15	21.763	
11,639.91	7,535.00	7,677.72	7,472.60	69.75	27.65	-89.41	2,792.66	-83.31	1,401.86	1,339.10	62.75	22.339	
11,700.00	7,535.00	7,678.78	7,473.66	70.63	27.65	-89.47	2,792.68	-83.34	1,444.15	1,381.96	62.20	23.219	

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 4R-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 4R-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 #2	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	7,535.00	7,415.00	7,415.00	57.85	13.29	90.00	4,238.85	1,464.43	1,407.74	1,362.10	45.64	30.841		
10,900.00	7,535.00	7,415.00	7,415.00	59.23	13.29	90.00	4,238.85	1,464.43	1,316.55	1,269.93	46.62	28.240		
11,000.00	7,535.00	7,415.00	7,415.00	60.63	13.29	90.00	4,238.85	1,464.43	1,226.72	1,178.87	47.85	25.635		
11,100.00	7,535.00	7,415.00	7,415.00	62.03	13.29	90.00	4,238.85	1,464.43	1,138.59	1,089.18	49.41	23.044		
11,200.00	7,535.00	7,415.00	7,415.00	63.44	13.29	90.00	4,238.85	1,464.43	1,052.59	1,001.22	51.36	20.493		
11,300.00	7,535.00	7,415.00	7,415.00	64.87	13.29	90.00	4,238.85	1,464.43	969.27	915.47	53.81	18.014		
11,400.00	7,535.00	7,415.00	7,415.00	66.29	13.29	90.00	4,238.85	1,464.43	889.40	832.57	56.83	15.649		
11,500.00	7,535.00	7,415.00	7,415.00	67.73	13.29	90.00	4,238.85	1,464.43	814.00	753.46	60.54	13.446		
11,567.32	7,535.00	7,415.00	7,415.00	68.70	13.29	90.00	4,238.85	1,464.43	766.41	702.96	63.44	12.080		
11,600.00	7,535.00	7,415.00	7,415.00	69.17	13.29	90.00	4,238.85	1,464.43	744.54	679.56	64.98	11.458		
11,639.91	7,535.00	7,415.00	7,415.00	69.75	13.29	90.00	4,238.85	1,464.43	719.36	652.37	66.98	10.739		
11,700.00	7,535.00	7,415.00	7,415.00	70.63	13.29	90.00	4,238.85	1,464.43	684.43	614.22	70.21	9.749		
11,800.00	7,535.00	7,415.00	7,415.00	72.10	13.29	90.00	4,238.85	1,464.43	634.71	558.82	75.89	8.364		
11,900.00	7,535.00	7,415.00	7,415.00	73.57	13.29	90.00	4,238.85	1,464.43	597.71	516.20	81.51	7.333		
12,000.00	7,535.00	7,415.00	7,415.00	75.05	13.29	90.00	4,238.85	1,464.43	575.91	489.57	86.34	6.670		
12,077.95	7,535.00	7,415.00	7,415.00	76.21	13.29	90.00	4,238.85	1,464.43	570.61	481.53	89.08	6.406 CC		
12,100.00	7,535.00	7,415.00	7,415.00	76.54	13.29	90.00	4,238.85	1,464.43	571.04	481.39	89.64	6.370 ES		
12,110.95	7,535.00	7,415.00	7,415.00	76.70	13.29	90.00	4,238.85	1,464.43	571.57	481.68	89.89	6.359 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 4R-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 4R-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 #2	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		
8,600.00	7,535.00	7,722.43	7,479.24	32.17	30.41	-89.44	2,197.38	518.78	1,498.78	1,449.74	49.05	30.558		
8,700.00	7,535.00	7,722.20	7,479.01	33.00	30.41	-89.41	2,197.38	518.79	1,402.34	1,352.77	49.58	28.286		
8,800.00	7,535.00	7,721.97	7,478.78	33.87	30.41	-89.37	2,197.38	518.79	1,306.44	1,256.23	50.20	26.024		
8,900.00	7,535.00	7,721.74	7,478.55	34.79	30.41	-89.34	2,197.38	518.80	1,211.19	1,160.25	50.94	23.776		
9,000.00	7,535.00	7,721.51	7,478.32	35.75	30.41	-89.30	2,197.38	518.80	1,116.78	1,064.95	51.83	21.547		
9,100.00	7,535.00	7,721.28	7,478.09	36.76	30.41	-89.27	2,197.38	518.81	1,023.43	970.52	52.91	19.344		
9,200.00	7,535.00	7,721.05	7,477.86	37.80	30.41	-89.23	2,197.38	518.81	931.46	877.23	54.23	17.176		
9,300.00	7,535.00	7,720.82	7,477.64	38.88	30.41	-89.20	2,197.38	518.81	841.32	785.45	55.87	15.059		
9,400.00	7,535.00	7,720.60	7,477.41	39.99	30.41	-89.17	2,197.38	518.82	753.68	695.76	57.92	13.013		
9,500.00	7,535.00	7,720.37	7,477.18	41.13	30.41	-89.13	2,197.38	518.82	669.51	609.02	60.49	11.069		
9,600.00	7,535.00	7,720.14	7,476.96	42.30	30.41	-89.10	2,197.38	518.83	590.30	526.62	63.68	9.270		
9,700.00	7,535.00	7,719.92	7,476.73	43.49	30.41	-89.06	2,197.38	518.83	518.33	450.81	67.52	7.677		
9,800.00	7,535.00	7,719.70	7,476.51	44.71	30.41	-89.03	2,197.38	518.83	457.02	385.28	71.75	6.370		
9,900.00	7,535.00	7,719.47	7,476.28	45.95	30.41	-89.00	2,197.38	518.84	411.19	335.68	75.51	5.445		
10,000.00	7,535.00	7,719.25	7,476.06	47.21	30.41	-88.96	2,197.38	518.84	386.38	309.11	77.27	5.001		
10,048.96	7,535.00	7,719.14	7,475.95	47.83	30.41	-88.95	2,197.38	518.84	383.26	306.33	76.93	4.982 CC, ES, SF		
10,100.00	7,535.00	7,719.03	7,475.84	48.48	30.41	-88.93	2,197.39	518.85	386.65	310.98	75.67	5.110		
10,200.00	7,535.00	7,718.81	7,475.62	49.78	30.41	-88.90	2,197.39	518.85	411.95	340.87	71.09	5.795		
10,300.00	7,535.00	7,718.58	7,475.40	51.09	30.41	-88.86	2,197.39	518.85	458.16	392.83	65.33	7.013		
10,400.00	7,535.00	7,718.36	7,475.18	52.42	30.41	-88.83	2,197.39	518.86	519.73	459.78	59.96	8.668		
10,500.00	7,535.00	7,718.14	7,474.96	53.75	30.41	-88.80	2,197.39	518.86	591.89	536.27	55.61	10.643		
10,600.00	7,535.00	7,717.93	7,474.74	55.11	30.41	-88.77	2,197.39	518.87	671.22	618.88	52.34	12.824		
10,700.00	7,535.00	7,717.71	7,474.52	56.47	30.41	-88.73	2,197.39	518.87	755.48	705.54	49.94	15.127		
10,800.00	7,535.00	7,717.49	7,474.30	57.85	30.41	-88.70	2,197.39	518.87	843.18	794.97	48.21	17.489		
10,900.00	7,535.00	7,717.27	7,474.08	59.23	30.41	-88.67	2,197.39	518.88	933.36	886.40	46.96	19.876		
11,000.00	7,535.00	7,717.06	7,473.87	60.63	30.41	-88.64	2,197.39	518.88	1,025.36	979.31	46.05	22.265		
11,100.00	7,535.00	7,716.84	7,473.65	62.03	30.41	-88.60	2,197.39	518.89	1,118.74	1,073.35	45.39	24.647		
11,200.00	7,535.00	7,716.62	7,473.44	63.44	30.41	-88.57	2,197.39	518.89	1,213.17	1,168.27	44.91	27.015		
11,300.00	7,535.00	7,716.41	7,473.22	64.87	30.41	-88.54	2,197.39	518.89	1,308.43	1,263.88	44.55	29.369		
11,400.00	7,535.00	7,716.20	7,473.01	66.29	30.41	-88.51	2,197.39	518.90	1,404.35	1,360.06	44.29	31.707		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Anderson Trust 32-2 - 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	
10,900.00	7,535.00	7,450.84	7,448.88	59.23	8.66	-89.29	4,183.71	-72.39	1,497.82	1,442.48	55.34	27.067	
11,000.00	7,535.00	7,451.54	7,449.59	60.63	8.66	-89.33	4,183.71	-72.39	1,423.60	1,365.95	57.65	24.696	
11,100.00	7,535.00	7,452.25	7,450.29	62.03	8.66	-89.37	4,183.72	-72.39	1,352.70	1,292.54	60.16	22.485	
11,200.00	7,535.00	7,452.95	7,450.99	63.44	8.66	-89.41	4,183.72	-72.40	1,285.68	1,222.81	62.87	20.450	
11,300.00	7,535.00	7,453.65	7,451.70	64.87	8.66	-89.46	4,183.73	-72.40	1,223.17	1,157.42	65.75	18.603	
11,400.00	7,535.00	7,454.36	7,452.40	66.29	8.66	-89.50	4,183.73	-72.40	1,165.90	1,097.14	68.76	16.957	
11,500.00	7,535.00	7,455.06	7,453.10	67.73	8.66	-89.54	4,183.74	-72.41	1,114.67	1,042.86	71.81	15.522	
11,567.32	7,535.00	7,455.53	7,453.58	68.70	8.66	-89.57	4,183.74	-72.41	1,084.02	1,010.17	73.85	14.679	
11,600.00	7,535.00	7,455.76	7,453.81	69.17	8.66	-89.58	4,183.74	-72.41	1,070.18	995.37	74.82	14.304	
11,639.91	7,535.00	7,456.05	7,454.09	69.75	8.66	-89.59	4,183.75	-72.41	1,053.95	977.98	75.97	13.873	
11,700.00	7,535.00	7,456.48	7,454.52	70.63	8.66	-89.62	4,183.75	-72.41	1,031.54	953.90	77.63	13.287	
11,800.00	7,535.00	7,457.19	7,455.23	72.10	8.66	-89.66	4,183.75	-72.42	1,001.15	921.02	80.13	12.494	
11,900.00	7,535.00	7,457.90	7,455.95	73.57	8.67	-89.70	4,183.76	-72.42	980.07	897.92	82.15	11.930	
12,000.00	7,535.00	7,458.62	7,456.66	75.05	8.67	-89.74	4,183.76	-72.42	968.91	885.35	83.56	11.596	
12,058.83	7,535.00	7,459.04	7,457.08	75.93	8.67	-89.77	4,183.77	-72.42	967.12	883.07	84.05	11.506 CC, ES	
12,100.00	7,535.00	7,459.33	7,457.38	76.54	8.67	-89.79	4,183.77	-72.42	968.00	883.75	84.25	11.490 SF	
12,110.95	7,535.00	7,459.41	7,457.45	76.70	8.67	-89.79	4,183.77	-72.42	968.52	884.24	84.28	11.492	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	Axis		
9,100.00	7,535.00	7,493.00	7,493.00	36.76	13.41	90.00	2,675.73	1,226.45	1,464.84	1,422.39	42.45	34.511	
9,200.00	7,535.00	7,493.00	7,493.00	37.80	13.41	90.00	2,675.73	1,226.45	1,367.49	1,325.04	42.45	32.217	
9,300.00	7,535.00	7,493.00	7,493.00	38.88	13.41	90.00	2,675.73	1,226.45	1,270.55	1,228.08	42.47	29.917	
9,400.00	7,535.00	7,493.00	7,493.00	39.99	13.41	90.00	2,675.73	1,226.45	1,174.12	1,131.59	42.53	27.610	
9,500.00	7,535.00	7,493.00	7,493.00	41.13	13.41	90.00	2,675.73	1,226.45	1,078.34	1,035.70	42.64	25.292	
9,600.00	7,535.00	7,493.00	7,493.00	42.30	13.41	90.00	2,675.73	1,226.45	983.40	940.58	42.83	22.962	
9,700.00	7,535.00	7,493.00	7,493.00	43.49	13.41	90.00	2,675.73	1,226.45	889.58	846.43	43.14	20.619	
9,800.00	7,535.00	7,493.00	7,493.00	44.71	13.41	90.00	2,675.73	1,226.45	797.25	753.60	43.66	18.262	
9,900.00	7,535.00	7,493.00	7,493.00	45.95	13.41	90.00	2,675.73	1,226.45	707.02	662.54	44.48	15.896	
10,000.00	7,535.00	7,493.00	7,493.00	47.21	13.41	90.00	2,675.73	1,226.45	619.79	574.00	45.79	13.535	
10,100.00	7,535.00	7,493.00	7,493.00	48.48	13.41	90.00	2,675.73	1,226.45	537.03	489.17	47.86	11.221	
10,200.00	7,535.00	7,493.00	7,493.00	49.78	13.41	90.00	2,675.73	1,226.45	461.16	410.12	51.04	9.035	
10,300.00	7,535.00	7,493.00	7,493.00	51.09	13.41	90.00	2,675.73	1,226.45	396.14	340.54	55.61	7.124	
10,400.00	7,535.00	7,493.00	7,493.00	52.42	13.41	90.00	2,675.73	1,226.45	348.13	286.90	61.23	5.686	
10,500.00	7,535.00	7,493.00	7,493.00	53.75	13.41	90.00	2,675.73	1,226.45	324.74	258.50	66.25	4.902	
10,528.68	7,535.00	7,493.00	7,493.00	54.14	13.41	90.00	2,675.73	1,226.45	323.47	256.25	67.22	4.812 CC, ES, SF	
10,600.00	7,535.00	7,493.00	7,493.00	55.11	13.41	90.00	2,675.73	1,226.45	331.24	262.88	68.36	4.845	
10,700.00	7,535.00	7,493.00	7,493.00	56.47	13.41	90.00	2,675.73	1,226.45	366.04	298.82	67.22	5.445	
10,800.00	7,535.00	7,493.00	7,493.00	57.85	13.41	90.00	2,675.73	1,226.45	422.20	357.74	64.46	6.550	
10,900.00	7,535.00	7,493.00	7,493.00	59.23	13.41	90.00	2,675.73	1,226.45	492.46	430.96	61.50	8.008	
11,000.00	7,535.00	7,493.00	7,493.00	60.63	13.41	90.00	2,675.73	1,226.45	571.65	512.71	58.94	9.700	
11,100.00	7,535.00	7,493.00	7,493.00	62.03	13.41	90.00	2,675.73	1,226.45	656.54	599.68	56.86	11.546	
11,200.00	7,535.00	7,493.00	7,493.00	63.44	13.41	90.00	2,675.73	1,226.45	745.19	689.97	55.22	13.495	
11,300.00	7,535.00	7,493.00	7,493.00	64.87	13.41	90.00	2,675.73	1,226.45	836.40	782.49	53.92	15.513	
11,400.00	7,535.00	7,493.00	7,493.00	66.29	13.41	90.00	2,675.73	1,226.45	929.43	876.55	52.88	17.576	
11,500.00	7,535.00	7,493.00	7,493.00	67.73	13.41	90.00	2,675.73	1,226.45	1,023.77	971.73	52.04	19.672	
11,567.32	7,535.00	7,493.00	7,493.00	68.70	13.41	90.00	2,675.73	1,226.45	1,087.85	1,036.28	51.57	21.096	
11,600.00	7,535.00	7,493.00	7,493.00	69.17	13.41	90.00	2,675.73	1,226.45	1,119.14	1,067.78	51.36	21.789	
11,639.91	7,535.00	7,493.00	7,493.00	69.75	13.41	90.00	2,675.73	1,226.45	1,157.60	1,106.46	51.14	22.636	
11,700.00	7,535.00	7,493.00	7,493.00	70.63	13.41	90.00	2,675.73	1,226.45	1,215.79	1,164.95	50.84	23.913	
11,800.00	7,535.00	7,493.00	7,493.00	72.10	13.41	90.00	2,675.73	1,226.45	1,313.01	1,262.59	50.42	26.043	
11,900.00	7,535.00	7,493.00	7,493.00	73.57	13.41	90.00	2,675.73	1,226.45	1,410.61	1,360.55	50.06	28.180	

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 4R-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 4R-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 #2	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		
10,100.00	7,535.00	7,497.61	7,495.94	48.48	8.23	-104.14	3,719.39	786.07	1,476.58	1,440.99	35.59	41.491		
10,200.00	7,535.00	7,495.02	7,493.36	49.78	8.22	-102.96	3,719.45	786.12	1,376.95	1,341.23	35.72	38.545		
10,300.00	7,535.00	7,492.51	7,490.85	51.09	8.22	-101.81	3,719.50	786.16	1,277.37	1,241.49	35.88	35.601		
10,400.00	7,535.00	7,490.07	7,488.41	52.42	8.22	-100.69	3,719.55	786.20	1,177.86	1,141.79	36.07	32.656		
10,500.00	7,535.00	7,487.69	7,486.03	53.75	8.22	-99.58	3,719.60	786.24	1,078.44	1,042.14	36.30	29.712		
10,600.00	7,535.00	7,485.38	7,483.72	55.11	8.21	-98.49	3,719.65	786.28	979.12	942.54	36.58	26.767		
10,700.00	7,535.00	7,483.13	7,481.47	56.47	8.21	-97.43	3,719.69	786.32	879.96	843.02	36.94	23.823		
10,800.00	7,535.00	7,480.93	7,479.28	57.85	8.21	-96.39	3,719.74	786.36	781.00	743.60	37.41	20.878		
10,900.00	7,535.00	7,478.80	7,477.14	59.23	8.20	-95.37	3,719.78	786.39	682.35	644.30	38.05	17.933		
11,000.00	7,535.00	7,476.72	7,475.06	60.63	8.20	-94.37	3,719.82	786.43	584.14	545.18	38.96	14.992		
11,100.00	7,535.00	7,474.69	7,473.03	62.03	8.20	-93.40	3,719.86	786.46	486.66	446.31	40.35	12.062		
11,200.00	7,535.00	7,472.71	7,471.05	63.44	8.20	-92.45	3,719.89	786.50	390.44	347.83	42.61	9.164		
11,300.00	7,535.00	7,470.78	7,469.12	64.87	8.19	-91.52	3,719.93	786.53	296.72	250.06	46.66	6.359		
11,400.00	7,535.00	7,468.89	7,467.24	66.29	8.19	-90.61	3,719.97	786.56	208.89	154.20	54.69	3.819		
11,500.00	7,535.00	7,467.06	7,465.40	67.73	8.19	-89.72	3,720.00	786.59	138.64	68.86	69.78	1.987		
11,567.32	7,535.00	7,465.84	7,464.19	68.70	8.19	-89.13	3,720.02	786.61	118.51	41.84	76.68	1.546 ES, SF		
11,572.32	7,535.00	7,465.75	7,464.10	68.77	8.19	-89.09	3,720.02	786.61	118.41	41.84	76.57	1.546 CC		
11,600.00	7,535.00	7,465.26	7,463.61	69.17	8.19	-88.85	3,720.03	786.62	121.47	47.38	74.09	1.639		
11,639.91	7,535.00	7,464.57	7,462.92	69.75	8.19	-88.52	3,720.04	786.63	135.64	68.90	66.75	2.032		
11,700.00	7,535.00	7,463.55	7,461.90	70.63	8.19	-88.03	3,720.06	786.64	172.61	117.57	55.03	3.136		
11,800.00	7,535.00	7,461.87	7,460.22	72.10	8.18	-87.23	3,720.09	786.67	254.48	210.78	43.70	5.824		
11,900.00	7,535.00	7,460.24	7,458.59	73.57	8.18	-86.44	3,720.12	786.69	346.01	307.03	38.97	8.878		
12,000.00	7,535.00	7,458.64	7,456.99	75.05	8.18	-85.67	3,720.15	786.72	441.22	404.32	36.90	11.956		
12,100.00	7,535.00	7,457.07	7,455.42	76.54	8.18	-84.93	3,720.17	786.74	538.17	502.25	35.92	14.983		
12,110.95	7,535.00	7,456.90	7,455.25	76.70	8.18	-84.85	3,720.18	786.75	548.85	513.00	35.85	15.311		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Brown 31-5 - CPR WELL - SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 722-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
2,600.00	2,579.01	2,968.77	2,921.37	9.86	16.48	105.71	-1,126.26	-878.27	1,493.08	1,468.63	24.44	61.080	
2,700.00	2,677.69	3,078.94	3,027.61	10.29	17.48	105.51	-1,130.65	-849.44	1,479.97	1,454.27	25.70	57.586	
2,800.00	2,776.37	3,162.20	3,107.95	10.72	18.23	105.38	-1,133.57	-827.77	1,466.67	1,439.88	26.78	54.757	
2,900.00	2,875.04	3,261.49	3,203.92	11.15	19.12	105.22	-1,137.50	-802.64	1,454.20	1,426.23	27.97	51.996	
3,000.00	2,973.72	3,359.15	3,298.39	11.58	19.99	105.08	-1,140.89	-778.08	1,441.56	1,412.42	29.14	49.476	
3,100.00	3,072.40	3,470.49	3,405.92	12.01	21.00	104.89	-1,144.93	-749.49	1,428.62	1,398.21	30.41	46.972	
3,200.00	3,171.08	3,565.27	3,497.25	12.44	21.90	104.70	-1,148.83	-724.44	1,415.44	1,383.82	31.62	44.764	
3,300.00	3,269.76	3,679.64	3,607.41	12.88	22.97	104.47	-1,153.00	-693.97	1,401.79	1,368.85	32.94	42.551	
3,400.00	3,368.44	3,776.00	3,700.21	13.31	23.88	104.29	-1,155.67	-668.16	1,387.49	1,353.35	34.14	40.636	
3,500.00	3,467.12	3,855.44	3,776.97	13.74	24.60	104.16	-1,158.12	-647.87	1,374.34	1,339.10	35.23	39.010	
3,600.00	3,565.80	3,947.33	3,866.02	14.17	25.40	104.04	-1,161.00	-625.37	1,362.04	1,325.67	36.37	37.452	
3,700.00	3,664.48	4,032.00	3,948.25	14.61	26.12	103.94	-1,163.96	-605.45	1,350.69	1,313.24	37.45	36.063	
3,800.00	3,763.16	4,123.03	4,036.80	15.04	26.89	103.84	-1,167.58	-584.66	1,340.20	1,301.62	38.58	34.742	
3,900.00	3,861.84	4,221.00	4,132.05	15.47	27.72	103.71	-1,172.04	-562.16	1,330.00	1,290.24	39.76	33.451	
4,000.00	3,960.52	4,325.35	4,233.25	15.91	28.64	103.51	-1,177.42	-537.28	1,319.56	1,278.53	41.02	32.165	
4,100.00	4,059.19	4,409.72	4,315.27	16.34	29.36	103.38	-1,181.60	-517.97	1,309.70	1,267.56	42.13	31.084	
4,200.00	4,157.87	4,503.96	4,407.15	16.77	30.13	103.28	-1,186.07	-497.52	1,300.60	1,257.33	43.28	30.053	
4,300.00	4,256.55	4,613.99	4,514.47	17.21	31.04	103.16	-1,191.05	-473.76	1,291.46	1,246.95	44.51	29.014	
4,400.00	4,355.23	4,723.38	4,621.05	17.64	31.94	103.07	-1,194.85	-449.39	1,281.07	1,235.34	45.73	28.012	
4,500.00	4,453.91	4,806.33	4,702.10	18.08	32.59	103.03	-1,197.33	-431.92	1,271.26	1,224.49	46.77	27.183	
4,600.00	4,552.59	4,894.15	4,788.26	18.51	33.24	103.07	-1,199.36	-415.05	1,262.38	1,214.61	47.77	26.425	
4,700.00	4,651.27	4,984.85	4,877.51	18.94	33.88	103.16	-1,201.30	-399.02	1,254.50	1,205.74	48.76	25.729	
4,800.00	4,749.95	5,096.65	4,987.34	19.38	34.70	103.22	-1,204.47	-378.41	1,246.55	1,196.66	49.89	24.988	
4,900.00	4,848.63	5,199.79	5,088.18	19.81	35.50	103.16	-1,208.47	-357.09	1,237.64	1,186.60	51.04	24.249	
5,000.00	4,947.31	5,289.51	5,176.02	20.25	36.19	103.14	-1,211.87	-339.17	1,229.18	1,177.08	52.10	23.592	
5,100.00	5,045.99	5,390.39	5,275.11	20.68	36.93	103.18	-1,214.87	-320.47	1,221.25	1,168.07	53.18	22.965	
5,200.00	5,144.67	5,483.26	5,366.34	21.12	37.60	103.23	-1,217.47	-303.35	1,213.27	1,159.06	54.20	22.384	
5,300.00	5,243.34	5,584.32	5,465.69	21.55	38.33	103.30	-1,220.55	-285.12	1,205.75	1,150.48	55.27	21.817	
5,400.00	5,342.02	5,688.17	5,567.69	21.99	39.08	103.34	-1,223.74	-265.86	1,197.87	1,141.51	56.36	21.255	
5,500.00	5,440.70	5,786.61	5,664.39	22.42	39.80	103.39	-1,226.57	-247.63	1,189.88	1,132.46	57.41	20.724	
5,600.00	5,539.38	5,885.51	5,761.64	22.86	40.51	103.47	-1,229.02	-229.81	1,181.99	1,123.54	58.45	20.223	
5,700.00	5,638.06	5,985.97	5,860.46	23.29	41.21	103.57	-1,231.19	-211.81	1,173.96	1,114.48	59.48	19.738	
5,800.00	5,736.74	6,067.11	5,940.52	23.73	41.75	103.73	-1,232.34	-198.73	1,166.79	1,106.42	60.36	19.329	
5,900.00	5,835.42	6,153.57	6,026.01	24.17	42.29	103.90	-1,234.41	-185.97	1,161.25	1,100.00	61.25	18.960	
6,000.00	5,934.10	6,253.32	6,124.67	24.60	42.91	104.11	-1,236.72	-171.46	1,155.87	1,093.68	62.19	18.585	
6,100.00	6,032.78	6,360.49	6,230.63	25.04	43.60	104.32	-1,239.69	-155.66	1,150.68	1,087.49	63.19	18.209	
6,200.00	6,131.46	6,471.08	6,339.57	25.47	44.35	104.43	-1,243.45	-137.01	1,144.29	1,080.02	64.27	17.804	
6,300.00	6,230.14	6,569.10	6,436.17	25.91	45.02	104.55	-1,246.07	-120.61	1,137.54	1,072.27	65.27	17.429	
6,400.00	6,328.82	6,664.13	6,529.96	26.34	45.64	104.72	-1,248.26	-105.50	1,131.18	1,064.96	66.22	17.083	
6,500.00	6,427.49	6,760.53	6,625.20	26.78	46.26	104.91	-1,250.36	-90.75	1,125.19	1,058.04	67.15	16.757	
6,600.00	6,526.17	6,855.17	6,718.81	27.21	46.85	105.14	-1,252.19	-76.89	1,119.56	1,051.51	68.05	16.452	
6,700.00	6,624.85	6,939.00	6,801.86	27.65	47.35	105.37	-1,253.76	-65.65	1,114.87	1,046.00	68.87	16.189	
6,800.00	6,723.53	7,019.90	6,882.29	28.09	47.77	105.70	-1,254.81	-57.03	1,111.89	1,042.32	69.57	15.981	
6,837.91	6,760.94	7,051.18	6,913.44	28.25	47.91	105.85	-1,255.05	-54.26	1,111.18	1,041.36	69.82	15.915	
6,850.00	6,772.88	7,061.14	6,923.38	28.30	47.96	111.07	-1,255.11	-53.44	1,111.06	1,041.17	69.90	15.896	
6,852.76	6,775.60	7,063.42	6,925.64	28.32	47.97	112.35	-1,255.12	-53.25	1,111.06	1,041.14	69.91	15.892 CC, ES	
6,900.00	6,822.38	7,097.00	6,959.13	28.51	48.13	138.04	-1,255.26	-50.74	1,112.26	1,042.07	70.19	15.846	
6,950.00	6,871.89	7,145.67	7,007.70	28.69	48.32	165.84	-1,255.33	-47.63	1,116.01	1,045.47	70.54	15.821 SF	
7,000.00	6,921.17	7,193.00	7,054.97	28.86	48.50	-174.78	-1,255.26	-45.14	1,122.33	1,051.43	70.89	15.831	
7,050.00	6,969.99	7,234.68	7,096.61	29.01	48.64	-162.90	-1,255.03	-43.32	1,131.05	1,059.84	71.20	15.885	
7,100.00	7,018.10	7,280.81	7,142.71	29.14	48.78	-155.35	-1,254.54	-41.63	1,142.06	1,070.51	71.55	15.962	
7,150.00	7,065.27	7,325.47	7,187.34	29.26	48.87	-150.17	-1,253.80	-40.35	1,155.33	1,083.48	71.85	16.080	

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 4R-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 4R-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - Brown 31-5 - CPR WELL - SURVEYS													Offset Site Error:	0.00 usft
Survey Program: 722-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		
7,200.00	7,111.28	7,369.06	7,230.91	29.36	48.95	-146.34	-1,252.86	-39.44	1,170.86	1,098.71	72.15	16.227		
7,250.00	7,155.89	7,409.29	7,271.12	29.45	49.00	-143.28	-1,251.85	-38.88	1,188.65	1,116.21	72.44	16.410		
7,300.00	7,198.89	7,447.10	7,308.92	29.53	49.03	-140.68	-1,250.97	-38.55	1,208.73	1,136.02	72.71	16.623		
7,350.00	7,240.07	7,484.17	7,345.98	29.60	49.06	-138.37	-1,250.18	-38.39	1,231.06	1,158.06	73.00	16.863		
7,400.00	7,279.23	7,522.33	7,384.13	29.65	49.08	-136.25	-1,249.41	-38.30	1,255.50	1,182.20	73.30	17.128		
7,450.00	7,316.18	7,558.37	7,420.16	29.69	49.11	-134.19	-1,248.70	-38.27	1,281.95	1,208.36	73.60	17.418		
7,500.00	7,350.73	7,592.52	7,454.31	29.72	49.13	-132.08	-1,248.05	-38.26	1,310.37	1,236.47	73.90	17.731		
7,550.00	7,382.73	7,624.39	7,486.17	29.74	49.15	-129.87	-1,247.46	-38.27	1,340.66	1,266.46	74.20	18.068		
7,600.00	7,412.01	7,653.60	7,515.38	29.74	49.17	-127.46	-1,246.93	-38.29	1,372.73	1,298.24	74.49	18.429		
7,650.00	7,438.44	7,680.86	7,542.64	29.74	49.19	-124.84	-1,246.45	-38.31	1,406.49	1,331.72	74.77	18.812		
7,700.00	7,461.87	7,705.75	7,567.52	29.73	49.21	-121.91	-1,246.01	-38.32	1,441.80	1,366.76	75.03	19.215		
7,750.00	7,482.21	7,727.52	7,589.29	29.71	49.23	-118.61	-1,245.61	-38.33	1,478.52	1,403.24	75.29	19.639		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	53.48	202.59	273.63	341.11					
100.00	100.00	76.60	76.60	0.14	0.11	53.54	202.55	274.11	340.84	340.58	0.25	1,353.245		
200.00	200.00	176.05	176.04	0.50	0.28	53.64	202.52	275.12	341.63	340.85	0.78	437.592		
300.00	300.00	277.20	277.19	0.85	0.46	53.79	202.28	276.25	342.40	341.08	1.31	260.517		
400.00	400.00	386.43	386.39	1.21	0.65	54.08	200.41	276.64	341.68	339.81	1.87	182.444		
500.00	500.00	494.60	494.39	1.57	0.86	54.88	194.36	276.36	338.21	335.76	2.45	138.089		
600.00	600.00	602.61	601.78	1.93	1.12	56.52	183.00	276.73	332.55	329.49	3.06	108.670		
700.00	700.00	707.67	705.52	2.29	1.43	59.05	166.47	277.63	324.80	321.08	3.71	87.482		
800.00	799.98	802.08	798.39	2.63	1.74	-62.74	149.60	279.42	316.74	312.40	4.34	73.022		
900.00	899.84	898.59	893.15	2.97	2.07	-60.46	131.69	283.04	308.99	303.98	5.01	61.713		
1,000.00	999.45	998.60	991.04	3.32	2.47	-58.23	111.75	287.62	300.21	294.46	5.75	52.230		
1,100.00	1,098.70	1,096.54	1,085.90	3.68	2.92	-55.62	88.17	293.57	289.87	283.30	6.57	44.153		
1,166.13	1,164.08	1,157.03	1,144.02	3.93	3.22	-53.83	72.11	298.43	282.97	275.86	7.11	39.784		
1,200.00	1,197.50	1,191.00	1,176.61	4.06	3.38	-52.75	63.08	301.64	279.81	272.39	7.41	37.754		
1,300.00	1,296.18	1,279.00	1,260.70	4.44	3.85	-49.64	39.24	311.83	272.84	264.59	8.26	33.051		
1,400.00	1,394.86	1,366.00	1,343.54	4.84	4.30	-46.36	15.83	324.41	269.90	260.83	9.07	29.757		
1,421.33	1,415.91	1,387.81	1,364.29	4.93	4.42	-45.55	10.13	327.93	269.78	260.52	9.26	29.133 CC, ES		
1,500.00	1,493.54	1,458.67	1,431.56	5.24	4.81	-42.90	-8.22	340.52	271.12	261.24	9.89	27.421		
1,600.00	1,592.22	1,553.67	1,521.32	5.65	5.35	-39.28	-33.24	359.06	275.56	264.87	10.68	25.790		
1,700.00	1,690.89	1,647.15	1,609.50	6.06	5.89	-35.93	-57.34	378.61	282.56	271.16	11.41	24.770		
1,800.00	1,789.57	1,739.07	1,695.72	6.48	6.46	-32.75	-81.28	399.61	292.57	280.49	12.08	24.220		
1,900.00	1,888.25	1,834.84	1,784.62	6.89	7.10	-29.28	-108.20	422.91	305.33	292.59	12.74	23.958		
2,000.00	1,986.93	1,933.32	1,875.70	7.31	7.76	-25.63	-137.79	445.87	318.57	305.21	13.36	23.848		
2,100.00	2,085.61	2,031.10	1,966.58	7.74	8.38	-22.72	-164.94	469.62	333.35	319.44	13.91	23.968		
2,200.00	2,184.29	2,127.40	2,056.55	8.16	9.01	-20.35	-190.11	492.98	348.40	333.96	14.44	24.125		
2,300.00	2,282.97	2,224.06	2,146.47	8.58	9.63	-18.05	-216.28	516.92	364.83	349.90	14.93	24.438		
2,400.00	2,381.65	2,323.80	2,239.64	9.01	10.27	-16.14	-241.55	541.98	381.50	366.07	15.43	24.718		
2,500.00	2,480.33	2,421.32	2,330.74	9.44	10.90	-14.40	-266.46	566.27	398.43	382.51	15.92	25.026		
2,600.00	2,579.01	2,533.90	2,436.43	9.86	11.59	-12.39	-295.58	591.83	413.71	397.20	16.51	25.062		
2,700.00	2,677.69	2,633.55	2,530.54	10.29	12.20	-10.62	-321.34	612.08	427.14	410.17	16.97	25.175		
2,800.00	2,776.37	2,719.60	2,611.39	10.72	12.77	-9.14	-344.34	630.47	442.37	425.05	17.32	25.534		
2,900.00	2,875.04	2,804.55	2,689.90	11.15	13.38	-7.47	-370.31	649.89	461.18	443.55	17.63	26.161		
3,000.00	2,973.72	2,895.82	2,773.61	11.58	14.05	-5.73	-399.32	671.86	482.21	464.25	17.97	26.842		
3,100.00	3,072.40	2,999.84	2,869.07	12.01	14.79	-4.02	-431.79	697.42	503.84	485.41	18.42	27.349		
3,200.00	3,171.08	3,110.20	2,971.32	12.44	15.54	-2.33	-465.07	722.21	523.35	504.42	18.93	27.646		
3,300.00	3,269.76	3,205.42	3,059.87	12.88	16.18	-0.96	-493.47	742.63	542.13	522.82	19.31	28.078		
3,400.00	3,368.44	3,291.89	3,139.76	13.31	16.81	0.34	-520.82	761.29	562.43	542.81	19.62	28.671		
3,500.00	3,467.12	3,384.41	3,224.47	13.74	17.49	1.81	-552.19	781.28	584.59	564.63	19.95	29.297		
3,600.00	3,565.80	3,506.05	3,337.06	14.17	18.30	3.43	-590.60	806.58	604.85	584.33	20.52	29.476		
3,700.00	3,664.48	3,638.49	3,461.87	14.61	19.08	4.75	-626.68	832.19	621.51	600.35	21.16	29.373		
3,800.00	3,763.16	3,814.02	3,631.95	15.04	19.81	6.31	-663.55	854.25	628.57	606.68	21.89	28.720		
3,900.00	3,861.84	3,909.22	3,725.38	15.47	20.16	7.06	-679.53	862.98	630.48	608.16	22.31	28.254		
4,000.00	3,960.52	4,013.37	3,827.67	15.91	20.53	7.71	-695.86	873.81	632.67	609.90	22.77	27.790		
4,100.00	4,059.19	4,119.36	3,932.13	16.34	20.89	8.11	-709.33	885.70	633.46	610.22	23.25	27.247		
4,200.00	4,157.87	4,207.17	4,018.59	16.77	21.21	8.40	-720.50	896.17	634.87	611.17	23.70	26.785		
4,300.00	4,256.55	4,291.57	4,101.27	17.21	21.55	8.77	-733.44	907.10	638.84	614.71	24.13	26.477		
4,400.00	4,355.23	4,374.49	4,182.10	17.64	21.93	9.17	-747.72	918.86	645.12	620.58	24.54	26.292		
4,500.00	4,453.91	4,467.00	4,271.67	18.08	22.36	9.69	-766.00	933.03	654.03	629.06	24.97	26.195		
4,600.00	4,552.59	4,581.91	4,383.31	18.51	22.86	10.15	-786.34	951.05	661.83	636.31	25.52	25.936		
4,700.00	4,651.27	4,662.57	4,461.71	18.94	23.26	10.52	-800.95	963.13	669.51	643.59	25.92	25.831		
4,800.00	4,749.95	4,741.38	4,537.60	19.38	23.68	10.97	-817.92	975.92	680.56	654.28	26.28	25.897		
4,900.00	4,848.63	4,817.11	4,609.89	19.81	24.12	11.38	-835.66	989.83	694.65	668.05	26.61	26.110		

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 4R-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 4R-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 #2	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	
5,000.00	4,947.31	4,897.10	4,685.37	20.25	24.63	11.84	-856.63	1,005.97	712.11	685.17	26.95	26.424	
5,100.00	5,045.99	5,004.56	4,786.31	20.68	25.29	12.66	-887.45	1,026.19	730.73	703.24	27.49	26.577	
5,200.00	5,144.67	5,110.35	4,886.34	21.12	25.92	13.56	-917.28	1,043.40	747.26	719.23	28.02	26.666	
5,300.00	5,243.34	5,221.74	4,992.02	21.55	26.56	14.50	-948.16	1,060.25	762.83	734.24	28.58	26.686	
5,400.00	5,342.02	5,313.36	5,079.19	21.99	27.09	15.14	-972.27	1,074.89	777.99	748.96	29.03	26.800	
5,500.00	5,440.70	5,404.97	5,165.83	22.42	27.63	15.71	-997.23	1,091.05	795.03	765.54	29.48	26.965	
5,600.00	5,539.38	5,539.74	5,294.69	22.86	28.34	16.46	-1,030.23	1,112.65	808.68	778.45	30.22	26.757	
5,700.00	5,638.06	5,677.49	5,427.79	23.29	28.97	17.20	-1,060.17	1,131.67	819.09	788.16	30.93	26.483	
5,800.00	5,736.74	5,794.87	5,542.38	23.73	29.45	17.84	-1,082.06	1,144.54	825.11	793.59	31.52	26.174	
5,900.00	5,835.42	5,905.80	5,650.85	24.17	29.88	18.56	-1,103.02	1,154.51	830.32	798.23	32.09	25.871	
6,000.00	5,934.10	6,016.92	5,759.76	24.60	30.28	19.53	-1,124.32	1,160.12	833.47	800.80	32.67	25.512	
6,100.00	6,032.78	6,113.48	5,854.10	25.04	30.64	20.48	-1,144.51	1,164.15	837.81	804.60	33.21	25.225	
6,200.00	6,131.46	6,239.25	5,977.88	25.47	31.04	21.49	-1,165.91	1,169.90	839.18	805.35	33.84	24.802	
6,300.00	6,230.14	6,386.30	6,123.70	25.91	31.40	22.22	-1,182.44	1,178.86	836.72	802.29	34.44	24.297	
6,400.00	6,328.82	6,484.39	6,221.29	26.34	31.62	22.69	-1,190.96	1,183.60	831.63	796.61	35.01	23.752	
6,500.00	6,427.49	6,570.64	6,306.99	26.78	31.84	22.99	-1,198.46	1,189.74	827.83	792.25	35.59	23.262	
6,600.00	6,526.17	6,697.02	6,432.53	27.21	32.13	23.29	-1,208.22	1,200.45	824.15	788.00	36.15	22.798	
6,700.00	6,624.85	6,798.65	6,533.69	27.65	32.33	23.44	-1,213.19	1,208.89	817.81	781.09	36.72	22.272	
6,800.00	6,723.53	6,895.26	6,629.87	28.09	32.54	23.69	-1,219.01	1,215.80	811.81	774.51	37.30	21.764	
6,837.91	6,760.94	6,934.98	6,669.43	28.25	32.62	23.82	-1,221.60	1,218.26	809.52	772.00	37.52	21.575	
6,850.00	6,772.88	6,947.63	6,682.04	28.30	32.64	29.09	-1,222.43	1,219.00	808.86	771.26	37.59	21.517	
6,899.43	6,821.81	7,005.53	6,739.73	28.51	32.75	55.90	-1,226.02	1,222.15	807.68	769.80	37.88	21.322	
6,900.00	6,822.38	7,006.21	6,740.41	28.51	32.75	56.24	-1,226.06	1,222.18	807.68	769.80	37.88	21.320	
6,950.00	6,871.89	7,063.23	6,797.29	28.69	32.85	84.17	-1,229.12	1,224.86	808.95	770.76	38.19	21.184	
7,000.00	6,921.17	7,117.17	6,851.11	28.86	32.93	103.64	-1,231.67	1,227.24	812.91	774.40	38.51	21.111	
7,050.00	6,969.99	7,169.43	6,903.28	29.01	33.01	115.55	-1,233.89	1,229.44	819.67	780.83	38.84	21.102 SF	
7,100.00	7,018.10	7,220.54	6,954.31	29.14	33.09	123.06	-1,235.90	1,231.46	829.31	790.12	39.20	21.157	
7,150.00	7,065.27	7,269.91	7,003.61	29.26	33.16	128.11	-1,237.69	1,233.31	841.89	802.32	39.57	21.273	
7,200.00	7,111.28	7,317.87	7,051.51	29.36	33.23	131.69	-1,239.31	1,235.04	857.43	817.46	39.97	21.451	
7,250.00	7,155.89	7,364.03	7,097.62	29.45	33.29	134.32	-1,240.79	1,236.59	875.93	835.54	40.39	21.687	
7,300.00	7,198.89	7,408.94	7,142.49	29.53	33.35	136.29	-1,242.15	1,238.00	897.38	856.56	40.82	21.982	
7,350.00	7,240.07	7,452.56	7,186.08	29.60	33.40	137.76	-1,243.37	1,239.27	921.68	880.41	41.27	22.333	
7,400.00	7,279.23	7,493.45	7,226.94	29.65	33.45	138.79	-1,244.41	1,240.38	948.76	907.04	41.73	22.738	
7,450.00	7,316.18	7,531.19	7,264.66	29.69	33.50	139.41	-1,245.31	1,241.35	978.59	936.40	42.19	23.197	
7,500.00	7,350.73	7,566.41	7,299.85	29.72	33.54	139.65	-1,246.10	1,242.24	1,011.04	968.40	42.64	23.709	
7,550.00	7,382.73	7,598.24	7,331.67	29.74	33.58	139.46	-1,246.81	1,242.99	1,045.99	1,002.90	43.09	24.274	
7,600.00	7,412.01	7,627.24	7,360.65	29.74	33.61	138.84	-1,247.45	1,243.62	1,083.28	1,039.76	43.53	24.888	
7,650.00	7,438.44	7,653.48	7,386.88	29.74	33.64	137.69	-1,248.04	1,244.15	1,122.73	1,078.79	43.94	25.550	
7,700.00	7,461.87	7,678.90	7,412.29	29.73	33.67	136.04	-1,248.57	1,244.64	1,164.11	1,119.78	44.33	26.257	
7,750.00	7,482.21	7,701.01	7,434.40	29.71	33.69	133.58	-1,248.98	1,245.06	1,207.19	1,162.49	44.70	27.005	
7,800.00	7,499.35	7,719.67	7,453.04	29.69	33.71	130.06	-1,249.29	1,245.40	1,251.76	1,206.72	45.04	27.789	
7,850.00	7,513.20	7,734.73	7,468.10	29.65	33.72	125.06	-1,249.52	1,245.67	1,297.61	1,252.25	45.36	28.606	
7,900.00	7,523.70	7,745.47	7,478.84	29.62	33.73	117.94	-1,249.66	1,245.87	1,344.49	1,298.84	45.65	29.452	
7,950.00	7,530.80	7,752.29	7,485.66	29.58	33.74	107.99	-1,249.76	1,245.99	1,392.17	1,346.25	45.91	30.322	
8,000.00	7,534.46	7,755.47	7,488.84	29.53	33.74	94.69	-1,249.80	1,246.05	1,440.39	1,394.24	46.15	31.210	
8,027.99	7,535.00	7,755.66	7,489.03	29.51	33.74	85.93	-1,249.80	1,246.05	1,467.54	1,421.26	46.27	31.714	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	83.25	152.00	1,283.65	1,293.51				
100.00	100.00	52.00	52.00	0.14	0.09	83.25	152.00	1,283.65	1,292.62	1,292.39	0.23	5,585.794	
200.00	200.00	152.00	152.00	0.50	0.27	83.25	152.00	1,283.65	1,292.62	1,291.85	0.77	1,680.659	
300.00	300.00	252.00	252.00	0.85	0.45	83.25	152.00	1,283.65	1,292.62	1,291.31	1.31	989.136	
400.00	400.00	352.00	352.00	1.21	0.63	83.25	152.00	1,283.65	1,292.62	1,290.78	1.84	700.789	
500.00	500.00	452.00	452.00	1.57	0.81	83.25	152.00	1,283.65	1,292.62	1,290.24	2.38	542.611	
600.00	600.00	552.00	552.00	1.93	0.99	83.25	152.00	1,283.65	1,292.62	1,289.70	2.92	442.689	
700.00	700.00	652.00	652.00	2.29	1.17	83.25	152.00	1,283.65	1,292.62	1,289.16	3.46	373.846	
800.00	799.98	751.98	751.98	2.63	1.35	-41.00	152.00	1,283.65	1,291.30	1,287.32	3.98	324.294	
900.00	899.84	851.84	851.84	2.97	1.53	-41.20	152.00	1,283.65	1,287.36	1,282.86	4.50	286.149	
1,000.00	999.45	951.45	951.45	3.32	1.71	-41.54	152.00	1,283.65	1,280.81	1,275.78	5.02	254.998	
1,100.00	1,098.70	1,050.70	1,050.70	3.68	1.88	-42.03	152.00	1,283.65	1,271.69	1,266.13	5.55	228.966	
1,166.13	1,164.08	1,116.08	1,116.08	3.93	2.00	-42.43	152.00	1,283.65	1,264.28	1,258.36	5.91	213.891	
1,200.00	1,197.50	1,149.50	1,149.50	4.06	2.06	-42.60	152.00	1,283.65	1,260.21	1,254.11	6.09	206.771	
1,300.00	1,296.18	1,248.18	1,248.18	4.44	2.24	-43.10	152.00	1,283.65	1,248.26	1,241.62	6.64	188.014	
1,400.00	1,394.86	1,346.86	1,346.86	4.84	2.41	-43.61	152.00	1,283.65	1,236.40	1,229.21	7.19	171.946	
1,500.00	1,493.54	1,445.54	1,445.54	5.24	2.59	-44.13	152.00	1,283.65	1,224.65	1,216.90	7.75	158.062	
1,600.00	1,592.22	1,544.22	1,544.22	5.65	2.77	-44.66	152.00	1,283.65	1,213.00	1,204.69	8.31	145.968	
1,700.00	1,690.89	1,642.89	1,642.89	6.06	2.94	-45.20	152.00	1,283.65	1,201.46	1,192.58	8.88	135.354	
1,800.00	1,789.57	1,741.57	1,741.57	6.48	3.12	-45.75	152.00	1,283.65	1,190.02	1,180.57	9.45	125.975	
1,900.00	1,888.25	1,840.25	1,840.25	6.89	3.30	-46.31	152.00	1,283.65	1,178.69	1,168.67	10.02	117.637	
2,000.00	1,986.93	1,938.93	1,938.93	7.31	3.48	-46.88	152.00	1,283.65	1,167.48	1,156.89	10.60	110.180	
2,100.00	2,085.61	2,037.61	2,037.61	7.74	3.65	-47.46	152.00	1,283.65	1,156.39	1,145.22	11.18	103.478	
2,200.00	2,184.29	2,136.29	2,136.29	8.16	3.83	-48.05	152.00	1,283.65	1,145.42	1,133.66	11.76	97.425	
2,300.00	2,282.97	2,234.97	2,234.97	8.58	4.01	-48.65	152.00	1,283.65	1,134.58	1,122.23	12.34	91.935	
2,400.00	2,381.65	2,333.65	2,333.65	9.01	4.18	-49.27	152.00	1,283.65	1,123.86	1,110.93	12.93	86.936	
2,500.00	2,480.33	2,432.33	2,432.33	9.44	4.36	-49.90	152.00	1,283.65	1,113.28	1,099.76	13.52	82.366	
2,600.00	2,579.01	2,531.01	2,531.01	9.86	4.54	-50.54	152.00	1,283.65	1,102.83	1,088.72	14.11	78.176	
2,700.00	2,677.69	2,629.69	2,629.69	10.29	4.71	-51.19	152.00	1,283.65	1,092.52	1,077.82	14.70	74.322	
2,800.00	2,776.37	2,728.37	2,728.37	10.72	4.89	-51.85	152.00	1,283.65	1,082.36	1,067.06	15.29	70.766	
2,900.00	2,875.04	2,827.04	2,827.04	11.15	5.07	-52.52	152.00	1,283.65	1,072.34	1,056.45	15.89	67.478	
3,000.00	2,973.72	2,925.72	2,925.72	11.58	5.24	-53.21	152.00	1,283.65	1,062.48	1,045.99	16.49	64.429	
3,100.00	3,072.40	3,024.40	3,024.40	12.01	5.42	-53.91	152.00	1,283.65	1,052.78	1,035.69	17.09	61.597	
3,200.00	3,171.08	3,123.08	3,123.08	12.44	5.60	-54.62	152.00	1,283.65	1,043.23	1,025.54	17.69	58.959	
3,300.00	3,269.76	3,221.76	3,221.76	12.88	5.77	-55.35	152.00	1,283.65	1,033.86	1,015.56	18.30	56.499	
3,400.00	3,368.44	3,320.44	3,320.44	13.31	5.95	-56.09	152.00	1,283.65	1,024.65	1,005.74	18.91	54.200	
3,500.00	3,467.12	3,419.12	3,419.12	13.74	6.13	-56.84	152.00	1,283.65	1,015.62	996.10	19.51	52.048	
3,600.00	3,565.80	3,517.80	3,517.80	14.17	6.31	-57.60	152.00	1,283.65	1,006.76	986.64	20.12	50.030	
3,700.00	3,664.48	3,616.48	3,616.48	14.61	6.48	-58.38	152.00	1,283.65	998.10	977.36	20.73	48.137	
3,800.00	3,763.16	3,715.16	3,715.16	15.04	6.66	-59.17	152.00	1,283.65	989.62	968.27	21.35	46.357	
3,900.00	3,861.84	3,813.84	3,813.84	15.47	6.84	-59.98	152.00	1,283.65	981.33	959.37	21.96	44.682	
4,000.00	3,960.52	3,912.52	3,912.52	15.91	7.01	-60.79	152.00	1,283.65	973.25	950.67	22.58	43.104	
4,100.00	4,059.19	4,011.19	4,011.19	16.34	7.19	-61.63	152.00	1,283.65	965.36	942.17	23.20	41.616	
4,200.00	4,157.87	4,109.87	4,109.87	16.77	7.37	-62.47	152.00	1,283.65	957.69	933.88	23.82	40.211	
4,300.00	4,256.55	4,208.55	4,208.55	17.21	7.54	-63.33	152.00	1,283.65	950.23	925.80	24.44	38.885	
4,400.00	4,355.23	4,307.23	4,307.23	17.64	7.72	-64.20	152.00	1,283.65	942.99	917.94	25.06	37.631	
4,500.00	4,453.91	4,405.91	4,405.91	18.08	7.90	-65.08	152.00	1,283.65	935.98	910.30	25.68	36.444	
4,600.00	4,552.59	4,504.59	4,504.59	18.51	8.07	-65.98	152.00	1,283.65	929.19	902.89	26.31	35.321	
4,700.00	4,651.27	4,603.27	4,603.27	18.94	8.25	-66.88	152.00	1,283.65	922.64	895.71	26.93	34.258	
4,800.00	4,749.95	4,701.95	4,701.95	19.38	8.43	-67.81	152.00	1,283.65	916.33	888.78	27.56	33.251	
4,900.00	4,848.63	4,800.63	4,800.63	19.81	8.60	-68.74	152.00	1,283.65	910.27	882.08	28.19	32.296	
5,000.00	4,947.31	4,899.31	4,899.31	20.25	8.78	-69.68	152.00	1,283.65	904.45	875.64	28.81	31.390	

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 4R-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 4R-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 #2	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	
5,100.00	5,045.99	4,997.99	4,997.99	20.68	8.96	-70.64	152.00	1,283.65	898.89	869.45	29.44	30.531		
5,184.38	5,129.25	5,034.00	5,034.00	21.05	9.02	-70.99	152.00	1,283.65	895.64	865.75	29.89	29.967 CC, ES		
5,200.00	5,144.67	5,034.00	5,034.00	21.12	9.02	-70.99	152.00	1,283.65	895.78	865.84	29.94	29.918 SF		
5,300.00	5,243.34	5,034.00	5,034.00	21.55	9.02	-70.99	152.00	1,283.65	903.07	873.00	30.07	30.030		
5,400.00	5,342.02	5,034.00	5,034.00	21.99	9.02	-70.99	152.00	1,283.65	921.23	891.37	29.86	30.854		
5,500.00	5,440.70	5,034.00	5,034.00	22.42	9.02	-70.99	152.00	1,283.65	949.63	920.28	29.34	32.361		
5,600.00	5,539.38	5,034.00	5,034.00	22.86	9.02	-70.99	152.00	1,283.65	987.38	958.78	28.60	34.523		
5,700.00	5,638.06	5,034.00	5,034.00	23.29	9.02	-70.99	152.00	1,283.65	1,033.46	1,005.76	27.70	37.310		
5,800.00	5,736.74	5,034.00	5,034.00	23.73	9.02	-70.99	152.00	1,283.65	1,086.81	1,060.11	26.71	40.694		
5,900.00	5,835.42	5,034.00	5,034.00	24.17	9.02	-70.99	152.00	1,283.65	1,146.42	1,120.74	25.68	44.645		
6,000.00	5,934.10	5,034.00	5,034.00	24.60	9.02	-70.99	152.00	1,283.65	1,211.37	1,186.71	24.66	49.132		
6,100.00	6,032.78	5,034.00	5,034.00	25.04	9.02	-70.99	152.00	1,283.65	1,280.83	1,257.17	23.66	54.126		
6,200.00	6,131.46	5,034.00	5,034.00	25.47	9.02	-70.99	152.00	1,283.65	1,354.13	1,331.40	22.72	59.594		
6,300.00	6,230.14	5,034.00	5,034.00	25.91	9.02	-70.99	152.00	1,283.65	1,430.66	1,408.82	21.84	65.507		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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: 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	-89.73	0.80	-169.83	169.83				
100.00	100.00	100.00	100.00	0.14	0.14	-89.73	0.80	-169.83	169.83	169.56	0.28	615.282	
200.00	200.00	200.00	200.00	0.50	0.50	-89.73	0.80	-169.83	169.83	168.84	0.99	171.035 CC, ES	
300.00	300.00	296.92	296.90	0.85	0.84	-89.26	2.20	-170.69	170.73	169.02	1.71	99.860	
400.00	400.00	393.62	393.47	1.21	1.20	-87.90	6.37	-173.26	173.50	171.07	2.44	71.189	
500.00	500.00	489.88	489.39	1.57	1.55	-85.72	13.27	-177.53	178.34	175.16	3.17	56.198	
600.00	600.00	586.03	584.87	1.93	1.91	-82.89	22.87	-183.45	185.49	181.57	3.91	47.393	
700.00	700.00	685.19	683.19	2.29	2.29	-79.92	33.81	-190.20	193.91	189.27	4.63	41.838	
800.00	799.98	784.12	781.29	2.63	2.68	158.72	44.72	-196.93	204.42	199.08	5.34	38.251	
900.00	899.84	882.52	878.86	2.97	3.07	161.52	55.57	-203.62	218.69	212.64	6.05	36.165	
1,000.00	999.45	980.26	975.78	3.32	3.45	164.18	66.34	-210.27	236.75	230.00	6.75	35.076	
1,100.00	1,098.70	1,077.23	1,071.93	3.68	3.84	166.63	77.04	-216.87	258.61	251.16	7.45	34.709 SF	
1,166.13	1,164.08	1,140.88	1,135.05	3.93	4.09	168.11	84.05	-221.20	275.12	267.21	7.91	34.760	
1,200.00	1,197.50	1,173.37	1,167.26	4.06	4.22	168.85	87.64	-223.41	284.02	275.86	8.15	34.844	
1,300.00	1,296.18	1,269.30	1,262.38	4.44	4.60	170.79	98.21	-229.94	310.51	301.67	8.84	35.126	
1,400.00	1,394.86	1,365.24	1,357.51	4.84	4.98	172.43	108.79	-236.46	337.29	327.76	9.53	35.385	
1,500.00	1,493.54	1,461.17	1,452.63	5.24	5.37	173.82	119.37	-242.99	364.28	354.06	10.23	35.621	
1,600.00	1,592.22	1,557.10	1,547.75	5.65	5.75	175.03	129.95	-249.52	391.45	380.53	10.92	35.835	
1,700.00	1,690.89	1,653.03	1,642.88	6.06	6.13	176.08	140.53	-256.04	418.77	407.14	11.62	36.029	
1,800.00	1,789.57	1,748.97	1,738.00	6.48	6.52	177.00	151.10	-262.57	446.19	433.87	12.32	36.205	
1,900.00	1,888.25	1,844.90	1,833.12	6.89	6.90	177.81	161.68	-269.10	473.71	460.69	13.03	36.365	
2,000.00	1,986.93	1,940.83	1,928.25	7.31	7.29	178.54	172.26	-275.62	501.31	487.58	13.73	36.511	
2,100.00	2,085.61	2,036.76	2,023.37	7.74	7.67	179.19	182.84	-282.15	528.98	514.54	14.44	36.643	
2,200.00	2,184.29	2,132.69	2,118.49	8.16	8.06	179.77	193.42	-288.68	556.70	541.56	15.14	36.765	
2,300.00	2,282.97	2,228.63	2,213.62	8.58	8.44	-179.70	203.99	-295.20	584.47	568.62	15.85	36.876	
2,400.00	2,381.65	2,324.56	2,308.74	9.01	8.83	-179.22	214.57	-301.73	612.29	595.73	16.56	36.978	
2,500.00	2,480.33	2,420.49	2,403.87	9.44	9.21	-178.78	225.15	-308.26	640.14	622.87	17.27	37.073	
2,600.00	2,579.01	2,516.42	2,498.99	9.86	9.59	-178.37	235.73	-314.78	668.02	650.04	17.98	37.160	
2,700.00	2,677.69	2,612.36	2,594.11	10.29	9.98	-178.00	246.31	-321.31	695.93	677.24	18.69	37.241	
2,800.00	2,776.37	2,708.29	2,689.24	10.72	10.36	-177.66	256.88	-327.84	723.86	704.47	19.40	37.316	
2,900.00	2,875.04	2,804.22	2,784.36	11.15	10.75	-177.34	267.46	-334.36	751.82	731.71	20.11	37.386	
3,000.00	2,973.72	2,900.15	2,879.48	11.58	11.13	-177.05	278.04	-340.89	779.80	758.98	20.82	37.451	
3,100.00	3,072.40	2,996.08	2,974.61	12.01	11.52	-176.77	288.62	-347.42	807.79	786.26	21.53	37.512	
3,200.00	3,171.08	3,092.02	3,069.73	12.44	11.90	-176.52	299.20	-353.94	835.80	813.56	22.25	37.569	
3,300.00	3,269.76	3,187.95	3,164.85	12.88	12.29	-176.28	309.78	-360.47	863.83	840.87	22.96	37.622	
3,400.00	3,368.44	3,283.88	3,259.98	13.31	12.67	-176.06	320.35	-366.99	891.87	868.19	23.67	37.672	
3,500.00	3,467.12	3,379.81	3,355.10	13.74	13.06	-175.85	330.93	-373.52	919.92	895.53	24.39	37.720	
3,600.00	3,565.80	3,475.75	3,450.23	14.17	13.44	-175.65	341.51	-380.05	947.98	922.88	25.10	37.764	
3,700.00	3,664.48	3,571.68	3,545.35	14.61	13.83	-175.46	352.09	-386.57	976.05	950.23	25.82	37.806	
3,800.00	3,763.16	3,667.61	3,640.47	15.04	14.22	-175.28	362.67	-393.10	1,004.13	977.60	26.53	37.846	
3,900.00	3,861.84	3,763.54	3,735.60	15.47	14.60	-175.12	373.24	-399.63	1,032.22	1,004.97	27.25	37.884	
4,000.00	3,960.52	3,859.47	3,830.72	15.91	14.99	-174.96	383.82	-406.15	1,060.31	1,032.35	27.96	37.920	
4,100.00	4,059.19	3,955.41	3,925.84	16.34	15.37	-174.81	394.40	-412.68	1,088.41	1,059.74	28.68	37.954	
4,200.00	4,157.87	4,051.34	4,020.97	16.77	15.76	-174.67	404.98	-419.21	1,116.52	1,087.13	29.39	37.986	
4,300.00	4,256.55	4,147.27	4,116.09	17.21	16.14	-174.53	415.56	-425.73	1,144.64	1,114.53	30.11	38.016	
4,400.00	4,355.23	4,243.20	4,211.21	17.64	16.53	-174.40	426.13	-432.26	1,172.76	1,141.93	30.83	38.046	
4,500.00	4,453.91	4,339.14	4,306.34	18.08	16.91	-174.28	436.71	-438.79	1,200.89	1,169.34	31.54	38.074	
4,600.00	4,552.59	4,435.07	4,401.46	18.51	17.30	-174.16	447.29	-445.31	1,229.02	1,196.76	32.26	38.100	
4,700.00	4,651.27	4,531.00	4,496.58	18.94	17.68	-174.05	457.87	-451.84	1,257.15	1,224.18	32.97	38.125	
4,800.00	4,749.95	4,626.93	4,591.71	19.38	18.07	-173.95	468.45	-458.37	1,285.29	1,251.60	33.69	38.150	
4,900.00	4,848.63	4,722.86	4,686.83	19.81	18.45	-173.84	479.02	-464.89	1,313.43	1,279.03	34.41	38.173	
5,000.00	4,947.31	4,818.80	4,781.96	20.25	18.84	-173.75	489.60	-471.42	1,341.58	1,306.46	35.12	38.195	

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 4R-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 4R-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 #2	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					
5,100.00	5,045.99	4,914.73	4,877.08	20.68	19.22	-173.65	500.18	-477.95	1,369.73	1,333.89	35.84	38.216					
5,200.00	5,144.67	5,010.66	4,972.20	21.12	19.61	-173.56	510.76	-484.47	1,397.89	1,361.33	36.56	38.237					
5,300.00	5,243.34	5,106.59	5,067.33	21.55	19.99	-173.47	521.34	-491.00	1,426.04	1,388.77	37.28	38.256					
5,400.00	5,342.02	5,202.53	5,162.45	21.99	20.38	-173.39	531.91	-497.53	1,454.20	1,416.21	37.99	38.275					
5,500.00	5,440.70	5,298.46	5,257.57	22.42	20.77	-173.31	542.49	-504.05	1,482.36	1,443.65	38.71	38.293					

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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: 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	0.78	-160.04	160.04					
100.00	100.00	100.00	100.00	0.14	0.14	-89.72	0.78	-160.04	160.04	159.76	0.28	579.805		
200.00	200.00	200.00	200.00	0.50	0.50	-89.72	0.78	-160.04	160.04	159.05	0.99	161.173		
300.00	300.00	300.00	300.00	0.85	0.85	-89.72	0.78	-160.04	160.04	158.33	1.71	93.595 CC		
400.00	400.00	398.84	398.82	1.21	1.21	-89.12	2.45	-160.38	160.40	157.98	2.42	66.190 ES		
500.00	500.00	497.44	497.28	1.57	1.57	-87.36	7.45	-161.39	161.59	158.45	3.14	51.476		
600.00	600.00	595.57	595.05	1.93	1.93	-84.50	15.71	-163.07	163.90	160.04	3.86	42.448		
700.00	700.00	694.65	693.53	2.29	2.29	-80.96	26.29	-165.22	167.42	162.83	4.59	36.480		
800.00	799.98	793.89	792.18	2.63	2.66	158.44	36.95	-167.38	173.21	167.90	5.31	32.638		
900.00	899.84	892.74	890.43	2.97	3.04	162.09	47.56	-169.54	182.96	176.94	6.02	30.405		
1,000.00	999.45	991.07	988.17	3.32	3.41	165.59	58.12	-171.68	196.75	190.02	6.73	29.235		
1,100.00	1,098.70	1,088.76	1,085.28	3.68	3.79	168.80	68.62	-173.81	214.58	207.14	7.44	28.835		
1,166.13	1,164.08	1,152.97	1,149.10	3.93	4.03	170.71	75.51	-175.21	228.56	220.64	7.91	28.884		
1,200.00	1,197.50	1,185.76	1,181.68	4.06	4.16	171.64	79.03	-175.93	236.18	228.03	8.15	28.969		
1,300.00	1,296.18	1,282.57	1,277.92	4.44	4.53	174.07	89.43	-178.04	259.01	250.16	8.85	29.255		
1,400.00	1,394.86	1,379.39	1,374.15	4.84	4.90	176.11	99.83	-180.15	282.22	272.66	9.56	29.530		
1,500.00	1,493.54	1,476.20	1,470.38	5.24	5.27	177.84	110.22	-182.26	305.71	295.45	10.26	29.790		
1,600.00	1,592.22	1,573.02	1,566.61	5.65	5.65	179.32	120.62	-184.37	329.43	318.46	10.97	30.032		
1,700.00	1,690.89	1,669.83	1,662.85	6.06	6.02	-179.39	131.02	-186.48	353.33	341.66	11.68	30.256		
1,800.00	1,789.57	1,766.65	1,759.08	6.48	6.39	-178.27	141.41	-188.59	377.38	364.99	12.39	30.462		
1,900.00	1,888.25	1,863.46	1,855.31	6.89	6.77	-177.28	151.81	-190.71	401.55	388.45	13.10	30.651		
2,000.00	1,986.93	1,960.28	1,951.54	7.31	7.14	-176.41	162.21	-192.82	425.82	412.01	13.81	30.826		
2,100.00	2,085.61	2,057.10	2,047.78	7.74	7.52	-175.62	172.60	-194.93	450.18	435.65	14.53	30.986		
2,200.00	2,184.29	2,153.91	2,144.01	8.16	7.89	-174.92	183.00	-197.04	474.60	459.36	15.24	31.134		
2,300.00	2,282.97	2,250.73	2,240.24	8.58	8.27	-174.29	193.40	-199.15	499.09	483.13	15.96	31.271		
2,400.00	2,381.65	2,347.54	2,336.47	9.01	8.64	-173.72	203.80	-201.26	523.62	506.95	16.68	31.398		
2,500.00	2,480.33	2,444.36	2,432.71	9.44	9.02	-173.19	214.19	-203.37	548.20	530.81	17.40	31.515		
2,600.00	2,579.01	2,541.17	2,528.94	9.86	9.39	-172.72	224.59	-205.48	572.83	554.71	18.11	31.624		
2,700.00	2,677.69	2,637.99	2,625.17	10.29	9.76	-172.28	234.99	-207.59	597.48	578.65	18.83	31.725		
2,800.00	2,776.37	2,734.80	2,721.40	10.72	10.14	-171.87	245.38	-209.71	622.17	602.62	19.55	31.820		
2,900.00	2,875.04	2,831.62	2,817.64	11.15	10.51	-171.50	255.78	-211.82	646.88	626.61	20.27	31.908		
3,000.00	2,973.72	2,928.43	2,913.87	11.58	10.89	-171.16	266.18	-213.93	671.62	650.62	20.99	31.991		
3,100.00	3,072.40	3,025.25	3,010.10	12.01	11.26	-170.83	276.57	-216.04	696.38	674.66	21.72	32.068		
3,200.00	3,171.08	3,122.07	3,106.33	12.44	11.64	-170.54	286.97	-218.15	721.15	698.72	22.44	32.141		
3,300.00	3,269.76	3,218.88	3,202.57	12.88	12.01	-170.26	297.37	-220.26	745.95	722.79	23.16	32.210		
3,400.00	3,368.44	3,315.70	3,298.80	13.31	12.39	-170.00	307.77	-222.37	770.76	746.88	23.88	32.274		
3,500.00	3,467.12	3,412.51	3,395.03	13.74	12.76	-169.75	318.16	-224.48	795.58	770.98	24.60	32.335		
3,600.00	3,565.80	3,509.33	3,491.26	14.17	13.14	-169.52	328.56	-226.60	820.42	795.09	25.33	32.393		
3,700.00	3,664.48	3,606.14	3,587.49	14.61	13.51	-169.30	338.96	-228.71	845.27	819.22	26.05	32.447		
3,800.00	3,763.16	3,702.96	3,683.73	15.04	13.89	-169.10	349.35	-230.82	870.13	843.35	26.77	32.499		
3,900.00	3,861.84	3,799.77	3,779.96	15.47	14.27	-168.91	359.75	-232.93	895.00	867.50	27.50	32.548		
4,000.00	3,960.52	3,896.59	3,876.19	15.91	14.64	-168.72	370.15	-235.04	919.88	891.65	28.22	32.594		
4,100.00	4,059.19	3,993.40	3,972.42	16.34	15.02	-168.55	380.55	-237.15	944.76	915.82	28.95	32.638		
4,200.00	4,157.87	4,090.22	4,068.66	16.77	15.39	-168.39	390.94	-239.26	969.66	939.99	29.67	32.681		
4,300.00	4,256.55	4,187.03	4,164.89	17.21	15.77	-168.23	401.34	-241.37	994.56	964.16	30.40	32.721		
4,400.00	4,355.23	4,283.85	4,261.12	17.64	16.14	-168.08	411.74	-243.48	1,019.47	988.35	31.12	32.759		
4,500.00	4,453.91	4,380.67	4,357.35	18.08	16.52	-167.94	422.13	-245.60	1,044.38	1,012.54	31.85	32.796		
4,600.00	4,552.59	4,477.48	4,453.59	18.51	16.89	-167.81	432.53	-247.71	1,069.30	1,036.73	32.57	32.831		
4,700.00	4,651.27	4,574.30	4,549.82	18.94	17.27	-167.68	442.93	-249.82	1,094.23	1,060.93	33.30	32.864		
4,800.00	4,749.95	4,671.11	4,646.05	19.38	17.64	-167.56	453.32	-251.93	1,119.15	1,085.13	34.02	32.896		
4,900.00	4,848.63	4,767.93	4,742.28	19.81	18.02	-167.44	463.72	-254.04	1,144.09	1,109.34	34.75	32.927		
5,000.00	4,947.31	4,864.74	4,838.52	20.25	18.39	-167.33	474.12	-256.15	1,169.03	1,133.56	35.47	32.956		

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 4R-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 4R-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 #2	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		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	
5,100.00	5,045.99	4,961.56	4,934.75	20.68	18.77	-167.22	484.52	-258.26	1,193.97	1,157.77	36.20	32.984	
5,200.00	5,144.67	5,058.37	5,030.98	21.12	19.14	-167.12	494.91	-260.37	1,218.92	1,181.99	36.92	33.012	
5,300.00	5,243.34	5,155.19	5,127.21	21.55	19.52	-167.02	505.31	-262.49	1,243.87	1,206.22	37.65	33.038	
5,400.00	5,342.02	5,252.00	5,223.45	21.99	19.89	-166.92	515.71	-264.60	1,268.82	1,230.45	38.38	33.063	
5,500.00	5,440.70	5,348.82	5,319.68	22.42	20.27	-166.83	526.10	-266.71	1,293.78	1,254.68	39.10	33.087	
5,600.00	5,539.38	5,445.64	5,415.91	22.86	20.65	-166.74	536.50	-268.82	1,318.74	1,278.91	39.83	33.110	
5,700.00	5,638.06	5,542.45	5,512.14	23.29	21.02	-166.66	546.90	-270.93	1,343.70	1,303.15	40.56	33.133	
5,800.00	5,736.74	5,639.27	5,608.37	23.73	21.40	-166.58	557.29	-273.04	1,368.67	1,327.38	41.28	33.154	
5,900.00	5,835.42	5,736.08	5,704.61	24.17	21.77	-166.50	567.69	-275.15	1,393.63	1,351.63	42.01	33.175	
6,000.00	5,934.10	5,832.90	5,800.84	24.60	22.15	-166.42	578.09	-277.26	1,418.60	1,375.87	42.74	33.195	
6,100.00	6,032.78	5,929.71	5,897.07	25.04	22.52	-166.35	588.49	-279.37	1,443.58	1,400.11	43.46	33.214	
6,200.00	6,131.46	6,026.53	5,993.30	25.47	22.90	-166.28	598.88	-281.49	1,468.55	1,424.36	44.19	33.233	
6,300.00	6,230.14	6,123.34	6,089.54	25.91	23.27	-166.21	609.28	-283.60	1,493.53	1,448.61	44.92	33.251	
6,400.00	6,328.82	6,221.02	6,185.74	26.34	23.64	-166.14	619.67	-285.71	1,518.51	1,473.59	45.65	33.269	
6,500.00	6,427.50	6,317.70	6,283.54	26.77	24.01	-166.07	629.99	-287.82	1,543.49	1,498.57	46.38	33.287	
6,600.00	6,526.18	6,416.38	6,382.34	27.20	24.38	-166.00	640.31	-289.93	1,568.47	1,523.55	47.11	33.305	
6,700.00	6,624.86	6,515.06	6,481.14	27.63	24.75	-165.93	650.62	-292.04	1,593.45	1,548.53	47.84	33.323	
6,800.00	6,723.54	6,613.74	6,582.82	28.06	25.12	-165.86	660.94	-294.15	1,618.43	1,573.51	48.57	33.341	
6,900.00	6,822.22	6,712.42	6,682.50	28.49	25.49	-165.79	671.26	-296.26	1,643.41	1,598.49	49.30	33.359	
7,000.00	6,920.90	6,811.10	6,781.18	28.92	25.86	-165.72	681.58	-298.37	1,668.39	1,623.47	50.03	33.377	
7,100.00	7,019.58	6,910.78	6,880.86	29.35	26.23	-165.65	691.89	-300.48	1,693.37	1,648.45	50.76	33.395	
7,200.00	7,118.26	7,009.46	6,979.54	29.78	26.60	-165.58	702.21	-302.59	1,718.35	1,673.43	51.49	33.413	
7,300.00	7,216.94	7,108.14	7,079.22	30.21	26.97	-165.51	712.53	-304.70	1,743.33	1,698.41	52.22	33.431	
7,400.00	7,315.62	7,206.82	7,178.90	30.64	27.34	-165.44	722.85	-306.81	1,768.31	1,723.39	52.95	33.449	
7,500.00	7,414.30	7,305.50	7,277.58	31.07	27.71	-165.37	733.17	-308.92	1,793.29	1,748.37	53.68	33.467	
7,600.00	7,512.98	7,404.18	7,376.26	31.50	28.08	-165.30	743.49	-311.03	1,818.27	1,773.35	54.41	33.485	
7,700.00	7,611.66	7,502.86	7,475.94	31.93	28.45	-165.23	753.81	-313.14	1,843.25	1,798.33	55.14	33.503	
7,800.00	7,710.34	7,601.54	7,574.62	32.36	28.82	-165.16	764.13	-315.25	1,868.23	1,823.31	55.87	33.521	
7,900.00	7,809.02	7,699.22	7,673.30	32.79	29.19	-165.09	774.45	-317.36	1,893.21	1,848.29	56.60	33.539	
8,000.00	7,907.70	7,797.90	7,771.98	33.22	29.56	-165.02	784.77	-319.47	1,918.19	1,873.27	57.33	33.557	
8,100.00	8,006.38	7,896.58	7,870.66	33.65	29.93	-164.95	795.09	-321.58	1,943.17	1,898.25	58.06	33.575	
8,200.00	8,105.06	7,995.26	7,969.34	34.08	30.30	-164.88	805.41	-323.69	1,968.15	1,923.23	58.79	33.593	
8,300.00	8,203.74	8,093.94	8,068.02	34.51	30.67	-164.81	815.73	-325.80	1,993.13	1,948.21	59.52	33.611	
8,400.00	8,302.42	8,192.62	8,166.70	34.94	31.04	-164.74	826.05	-327.91	2,018.11	1,973.19	60.25	33.629	
8,500.00	8,401.10	8,291.30	8,265.38	35.37	31.41	-164.67	836.37	-330.02	2,043.09	2,000.17	60.98	33.647	
8,600.00	8,500.00	8,390.00	8,363.50	35.80	31.78	-164.60	846.69	-332.13	2,068.07	2,025.15	61.71	33.665	
8,700.00	8,598.68	8,488.68	8,462.18	36.23	32.15	-164.53	857.01	-334.24	2,093.05	2,050.13	62.44	33.683	
8,800.00	8,697.36	8,587.36	8,560.86	36.66	32.52	-164.46	867.33	-336.35	2,118.03	2,075.11	63.17	33.701	
8,900.00	8,796.04	8,686.04	8,659.54	37.09	32.89	-164.39	877.65	-338.46	2,143.01	2,100.09	63.90	33.719	
9,000.00	8,894.72	8,784.72	8,758.22	37.52	33.26	-164.32	887.97	-340.57	2,167.99	2,125.07	64.63	33.737	
9,100.00	8,993.40	8,883.40	8,856.90	37.95	33.63	-164.25	898.29	-342.68	2,192.97	2,150.05	65.36	33.755	
9,200.00	9,092.08	8,982.08	8,955.48	38.38	34.00	-164.18	908.61	-344.79	2,217.95	2,175.03	66.09	33.773	
9,300.00	9,190.76	9,080.76	9,054.16	38.81	34.37	-164.11	918.93	-346.90	2,242.93	2,200.01	66.82	33.791	
9,400.00	9,289.44	9,179.44	9,152.64	39.24	34.74	-164.04	929.25	-349.01	2,267.91	2,225.00	67.55	33.809	
9,500.00	9,388.12	9,278.12	9,251.32	39.67	35.11	-163.97	939.57	-351.12	2,292.89	2,250.00	68.28	33.827	
9,600.00	9,486.80	9,376.80	9,349.90	40.10	35.48	-163.90	949.89	-353.23	2,317.87	2,275.00	69.01	33.845	
9,700.00	9,585.48	9,475.48	9,448.58	40.53	35.85	-163.83	960.21	-355.34	2,342.85	2,300.00	69.74	33.863	
9,800.00	9,684.16	9,574.16	9,547.26	40.96	36.22	-163.76	970.53	-357.45	2,367.83	2,325.00	70.47	33.881	
9,900.00	9,782.84	9,672.84	9,645.94	41.39	36.59	-163.69	980.85	-359.56	2,392.81	2,350.00	71.20	33.899	
10,000.00	9,881.52	9,771.52	9,744.62	41.82	36.96	-163.62	991.17	-361.67	2,417.79	2,375.00	71.93	33.917	
10,100.00	9,980.20	9,870.20	9,843.30	42.25	37.33	-163.55	1,001.49	-363.78	2,442.77	2,400.00	72.66	33.935	
10,200.00	10,078.88	9,968.88	9,941.98	42.68	37.70	-163.48	1,011.81	-365.89	2,467.75	2,425.00	73.39	33.953	
10,300.00	10,177.56	10,067.56	10,040.66	43.11	38.07	-163.41	1,022.13	-368.00	2,492.73	2,450.00	74.12	33.971	
10,400.00	10,276.24	10,166.24	10,139.34	43.54	38.44	-163.34	1,032.45	-370.11	2,517.71	2,475.00	74.85	33.989	
10,500.00	10,374.92	10,264.92	10,238.02	43.97	38.81	-163.27	1,042.77	-372.22	2,542.69	2,500.00	75.58	34.007	
10,600.00	10,473.60	10,363.60	10,336.70	44.40	39.18	-163.20	1,053.09	-374.33	2,567.67	2,525.00	76.31	34.025	
10,700.00	10,572.28	10,462.28	10,435.38	44.83	39.55	-163.13	1,063.41	-376.44	2,592.65	2,550.00	77.04	34.043	
10,800.00	10,670.96	10,560.96	10,534.06	45.26	39.92	-163.06	1,073.73	-378.55	2,617.63	2,575.00	77.77	34.061	
10,900.00	10,769.64	10,659.64	10,632.74	45.69	40.29	-162.99	1,084.05	-380.66	2,642.61	2,600.00	78.50	34.079	
11,000.00	10,868.32	10,758.32	10,731.42	46.12	40.66	-162.92	1,094.37	-382.77	2,667.59	2,625.00	79.23	34.097	
11,100.00	10,967.00	10,857.00	10,830.10	46.55	41.03	-162.85	1,104.69	-384.88	2,692.57	2,650.00	79.96	34.115	
11,200.00	11,065.68	10,955.68	10,928.78	46.98	41.40	-162.78	1,115.01	-386.99	2,717.55	2,675.00	80.69	34.133	
11,300.00	11,164.36	11,054.36	11,027.46	47.41	41.77	-162.71	1,125.33	-389.10	2,742.53	2,700.00	81.42	34.151	
11,400.00	11,263.04	11,153.04	11,126.14	47.84	42.14	-162.64	1,135.65	-391.21	2,767.51	2,725.00	82.15	34.169	
11,500.00	11,361.72	11,251.72	11,224.82	48.27	42.51	-162.57	1,145.97	-393.32	2,792.49	2,750.00	82.88	34.187	
11,600.00	11,460.40	11,350.40											

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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
9,200.00	7,535.00	7,273.02	7,228.09	37.80	27.31	-75.76	651.75	-309.98	1,429.52	1,370.33	59.18	24.154	
9,300.00	7,535.00	7,250.00	7,206.51	38.88	27.27	-74.79	659.72	-309.33	1,480.77	1,421.57	59.20	25.012	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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: 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	0.77	-149.97	149.97					
100.00	100.00	100.00	100.00	0.14	0.14	-89.71	0.77	-149.97	149.97	149.69	0.28	543.315		
200.00	200.00	200.00	200.00	0.50	0.50	-89.71	0.77	-149.97	149.97	148.97	0.99	151.030		
300.00	300.00	300.00	300.00	0.85	0.85	-89.71	0.77	-149.97	149.97	148.26	1.71	87.705		
400.00	400.00	400.00	400.00	1.21	1.21	-89.71	0.77	-149.97	149.97	147.54	2.43	61.795 CC		
500.00	500.00	499.54	499.52	1.57	1.57	-89.05	2.49	-150.10	150.12	146.98	3.14	47.783		
600.00	600.00	598.83	598.67	1.93	1.93	-87.09	7.64	-150.49	150.69	146.84	3.86	39.073 ES		
700.00	700.00	697.65	697.12	2.29	2.29	-83.89	16.17	-151.14	152.03	147.46	4.58	33.226		
800.00	799.98	796.66	795.52	2.63	2.65	156.16	27.10	-151.98	156.04	150.75	5.29	29.500		
900.00	899.84	895.53	893.77	2.97	3.02	160.57	38.10	-152.82	164.18	158.18	6.00	27.367		
1,000.00	999.45	993.92	991.54	3.32	3.39	164.82	49.05	-153.66	176.58	169.87	6.71	26.303		
1,100.00	1,098.70	1,091.70	1,088.71	3.68	3.76	168.70	59.93	-154.49	193.24	185.81	7.43	26.014		
1,166.13	1,164.08	1,155.98	1,152.59	3.93	4.01	170.99	67.08	-155.04	206.55	198.64	7.90	26.139		
1,200.00	1,197.50	1,188.81	1,185.21	4.06	4.13	172.09	70.74	-155.32	213.86	205.71	8.14	26.262		
1,300.00	1,296.18	1,285.74	1,281.54	4.44	4.50	174.94	81.52	-156.15	235.83	226.98	8.85	26.655		
1,400.00	1,394.86	1,382.68	1,377.87	4.84	4.88	177.31	92.31	-156.97	258.27	248.72	9.55	27.032		
1,500.00	1,493.54	1,479.62	1,474.20	5.24	5.25	179.30	103.10	-157.80	281.07	270.81	10.26	27.387		
1,600.00	1,592.22	1,576.55	1,570.54	5.65	5.62	-179.01	113.89	-158.62	304.15	293.17	10.97	27.716		
1,700.00	1,690.89	1,673.49	1,666.87	6.06	5.99	-177.56	124.67	-159.45	327.44	315.75	11.69	28.019		
1,800.00	1,789.57	1,770.42	1,763.20	6.48	6.37	-176.29	135.46	-160.28	350.90	338.50	12.40	28.298		
1,900.00	1,888.25	1,867.36	1,859.53	6.89	6.74	-175.19	146.25	-161.10	374.51	361.39	13.12	28.554		
2,000.00	1,986.93	1,964.29	1,955.86	7.31	7.12	-174.22	157.03	-161.93	398.23	384.39	13.83	28.790		
2,100.00	2,085.61	2,061.23	2,052.19	7.74	7.49	-173.36	167.82	-162.75	422.04	407.49	14.55	29.006		
2,200.00	2,184.29	2,158.17	2,148.52	8.16	7.87	-172.58	178.61	-163.58	445.94	430.67	15.27	29.205		
2,300.00	2,282.97	2,255.10	2,244.85	8.58	8.24	-171.89	189.39	-164.40	469.91	453.92	15.99	29.388		
2,400.00	2,381.65	2,352.04	2,341.18	9.01	8.62	-171.27	200.18	-165.23	493.94	477.23	16.71	29.558		
2,500.00	2,480.33	2,448.97	2,437.51	9.44	8.99	-170.70	210.97	-166.05	518.01	500.58	17.43	29.715		
2,600.00	2,579.01	2,545.91	2,533.84	9.86	9.37	-170.18	221.76	-166.88	542.14	523.98	18.16	29.861		
2,700.00	2,677.69	2,642.85	2,630.17	10.29	9.74	-169.71	232.54	-167.71	566.29	547.42	18.88	29.996		
2,800.00	2,776.37	2,739.78	2,726.50	10.72	10.12	-169.27	243.33	-168.53	590.49	570.88	19.60	30.123		
2,900.00	2,875.04	2,836.72	2,822.83	11.15	10.49	-168.87	254.12	-169.36	614.71	594.38	20.33	30.241		
3,000.00	2,973.72	2,933.65	2,919.16	11.58	10.87	-168.50	264.90	-170.18	638.96	617.90	21.05	30.351		
3,100.00	3,072.40	3,030.59	3,015.49	12.01	11.25	-168.16	275.69	-171.01	663.23	641.45	21.78	30.454		
3,200.00	3,171.08	3,127.53	3,111.82	12.44	11.62	-167.84	286.48	-171.83	687.52	665.02	22.50	30.551		
3,300.00	3,269.76	3,224.46	3,208.15	12.88	12.00	-167.54	297.26	-172.66	711.83	688.60	23.23	30.643		
3,400.00	3,368.44	3,321.40	3,304.48	13.31	12.37	-167.26	308.05	-173.49	736.16	712.20	23.96	30.729		
3,500.00	3,467.12	3,418.33	3,400.81	13.74	12.75	-167.00	318.84	-174.31	760.50	735.82	24.68	30.810		
3,600.00	3,565.80	3,515.27	3,497.14	14.17	13.13	-166.76	329.63	-175.14	784.86	759.45	25.41	30.887		
3,700.00	3,664.48	3,612.21	3,593.47	14.61	13.50	-166.53	340.41	-175.96	809.23	783.09	26.14	30.959		
3,800.00	3,763.16	3,709.14	3,689.80	15.04	13.88	-166.32	351.20	-176.79	833.61	806.74	26.87	31.028		
3,900.00	3,861.84	3,806.08	3,786.13	15.47	14.26	-166.11	361.99	-177.61	858.00	830.40	27.59	31.093		
4,000.00	3,960.52	3,903.01	3,882.46	15.91	14.63	-165.92	372.77	-178.44	882.40	854.08	28.32	31.155		
4,100.00	4,059.19	3,999.95	3,978.79	16.34	15.01	-165.74	383.56	-179.27	906.81	877.76	29.05	31.214		
4,200.00	4,157.87	4,096.89	4,075.12	16.77	15.38	-165.57	394.35	-180.09	931.23	901.45	29.78	31.270		
4,300.00	4,256.55	4,193.82	4,171.45	17.21	15.76	-165.40	405.14	-180.92	955.65	925.14	30.51	31.323		
4,400.00	4,355.23	4,290.76	4,267.78	17.64	16.14	-165.25	415.92	-181.74	980.09	948.85	31.24	31.374		
4,500.00	4,453.91	4,387.69	4,364.11	18.08	16.51	-165.10	426.71	-182.57	1,004.53	972.56	31.97	31.423		
4,600.00	4,552.59	4,484.63	4,460.44	18.51	16.89	-164.96	437.50	-183.39	1,028.97	996.27	32.70	31.469		
4,700.00	4,651.27	4,581.56	4,556.77	18.94	17.27	-164.82	448.28	-184.22	1,053.42	1,019.99	33.43	31.514		
4,800.00	4,749.95	4,678.50	4,653.11	19.38	17.64	-164.70	459.07	-185.05	1,077.88	1,043.72	34.16	31.557		
4,900.00	4,848.63	4,775.44	4,749.44	19.81	18.02	-164.57	469.86	-185.87	1,102.34	1,067.45	34.89	31.597		
5,000.00	4,947.31	4,872.37	4,845.77	20.25	18.40	-164.46	480.64	-186.70	1,126.80	1,091.18	35.62	31.637		

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 4R-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 4R-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 #2	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: 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
5,100.00	5,045.99	4,969.31	4,942.10	20.68	18.77	-164.34	491.43	-187.52	1,151.27	1,114.92	36.35	31.674	
5,200.00	5,144.67	5,066.24	5,038.43	21.12	19.15	-164.24	502.22	-188.35	1,175.74	1,138.67	37.08	31.710	
5,300.00	5,243.34	5,163.18	5,134.76	21.55	19.52	-164.13	513.01	-189.17	1,200.22	1,162.41	37.81	31.745	
5,400.00	5,342.02	5,260.12	5,231.09	21.99	19.90	-164.03	523.79	-190.00	1,224.70	1,186.16	38.54	31.779	
5,500.00	5,440.70	5,357.05	5,327.42	22.42	20.28	-163.94	534.58	-190.82	1,249.19	1,209.92	39.27	31.811	
5,600.00	5,539.38	5,453.99	5,423.75	22.86	20.65	-163.85	545.37	-191.65	1,273.67	1,233.67	40.00	31.842	
5,700.00	5,638.06	5,550.92	5,520.08	23.29	21.03	-163.76	556.15	-192.48	1,298.16	1,257.43	40.73	31.872	
5,800.00	5,736.74	5,647.86	5,616.41	23.73	21.41	-163.67	566.94	-193.30	1,322.66	1,281.19	41.46	31.900	
5,900.00	5,835.42	5,744.80	5,712.74	24.17	21.78	-163.59	577.73	-194.13	1,347.15	1,304.96	42.19	31.928	
6,000.00	5,934.10	5,841.73	5,809.07	24.60	22.16	-163.51	588.51	-194.95	1,371.65	1,328.72	42.92	31.955	
6,100.00	6,032.78	5,938.67	5,905.40	25.04	22.54	-163.44	599.30	-195.78	1,396.15	1,352.49	43.66	31.981	
6,200.00	6,131.46	6,035.60	6,001.73	25.47	22.91	-163.36	610.09	-196.60	1,420.65	1,376.26	44.39	32.006	
6,300.00	6,230.14	6,132.54	6,098.06	25.91	23.29	-163.29	620.88	-197.43	1,445.16	1,400.04	45.12	32.030	
6,400.00	6,328.82	6,229.48	6,194.39	26.34	23.67	-163.23	631.66	-198.26	1,469.66	1,423.81	45.85	32.053	
6,500.00	6,427.49	6,327.99	6,293.00	26.78	24.05	-163.16	642.44	-199.09	1,494.15	1,447.80	46.58	32.076	
6,600.00	6,526.17	6,426.67	6,391.51	27.21	24.43	-163.09	653.22	-199.92	1,518.64	1,471.29	47.31	32.100	
6,700.00	6,624.85	6,523.35	6,488.02	27.65	24.81	-163.02	664.00	-200.75	1,543.13	1,495.78	48.04	32.123	
6,800.00	6,723.53	6,621.83	6,586.50	28.09	25.19	-162.95	674.78	-201.58	1,567.62	1,520.27	48.77	32.146	
6,837.91	6,760.94	6,658.24	6,623.51	28.25	25.35	-162.92	679.56	-201.74	1,576.40	1,529.05	49.03	32.156	
6,850.00	6,772.88	6,670.18	6,635.45	28.30	25.40	-162.91	681.00	-201.79	1,579.00	1,531.60	49.10	32.159	
6,900.00	6,822.38	6,719.68	6,684.95	28.51	25.61	-162.87	686.78	-201.83	1,589.78	1,542.38	49.39	32.169	
6,950.00	6,871.89	6,768.19	6,733.46	28.69	25.79	-162.83	692.56	-201.87	1,599.56	1,552.16	49.67	32.179	
7,000.00	6,921.17	6,817.47	6,782.74	28.86	25.96	-162.79	698.34	-201.91	1,609.34	1,561.94	49.95	32.189	
7,050.00	6,969.99	6,866.29	6,831.56	29.01	26.11	-162.75	704.12	-201.95	1,619.12	1,571.72	50.23	32.199	
7,100.00	7,018.10	6,914.40	6,879.67	29.14	26.26	-162.71	709.90	-201.99	1,628.90	1,581.50	50.51	32.209	
7,150.00	7,065.27	6,961.57	6,926.84	29.26	26.41	-162.67	715.68	-202.03	1,638.68	1,591.28	50.79	32.219	
7,200.00	7,111.28	7,007.58	6,972.85	29.36	26.56	-162.63	721.46	-202.07	1,648.46	1,601.06	51.07	32.229	
7,250.00	7,155.89	7,051.19	7,017.46	29.45	26.71	-162.59	727.24	-202.11	1,658.24	1,610.84	51.35	32.239	
7,300.00	7,198.89	7,094.19	7,060.46	29.53	26.86	-162.55	733.02	-202.15	1,668.02	1,620.62	51.63	32.249	
7,350.00	7,240.07	7,135.37	7,101.64	29.60	27.01	-162.51	738.80	-202.19	1,677.80	1,630.40	51.91	32.259	
7,400.00	7,279.23	7,174.53	7,140.80	29.65	27.16	-162.47	744.58	-202.23	1,687.58	1,640.18	52.19	32.269	
7,450.00	7,316.18	7,211.48	7,177.75	29.69	27.31	-162.43	750.36	-202.27	1,697.36	1,649.96	52.47	32.279	
7,500.00	7,350.73	7,245.53	7,212.80	29.72	27.46	-162.39	756.14	-202.31	1,707.14	1,659.74	52.75	32.289	
7,550.00	7,382.73	7,277.53	7,243.80	29.74	27.61	-162.35	761.92	-202.35	1,716.92	1,669.52	53.03	32.299	
7,594.04	7,408.67	7,303.47	7,269.74	29.74	27.68	-162.34	767.70	-202.36	1,721.70	1,674.30	53.14	32.304	
7,600.00	7,412.01	7,306.80	7,273.07	29.74	27.68	-162.33	769.14	-202.36	1,723.14	1,675.74	53.18	32.306	
7,650.00	7,438.44	7,333.23	7,300.50	29.74	27.77	-162.31	774.92	-202.37	1,728.92	1,681.52	53.29	32.311	
7,700.00	7,461.87	7,356.66	7,323.93	29.73	27.85	-162.29	780.70	-202.38	1,734.70	1,687.30	53.40	32.316	
7,750.00	7,482.21	7,377.00	7,344.37	29.71	27.94	-162.27	786.48	-202.39	1,740.48	1,693.08	53.51	32.321	
7,800.00	7,499.35	7,394.14	7,361.51	29.69	28.03	-162.25	792.26	-202.40	1,746.26	1,698.86	53.62	32.326	
7,850.00	7,513.20	7,407.99	7,375.36	29.65	28.11	-162.23	798.04	-202.41	1,752.04	1,704.64	53.73	32.331	
7,900.00	7,523.70	7,418.49	7,385.86	29.62	28.19	-162.21	803.82	-202.42	1,757.82	1,710.42	53.84	32.336	
7,950.00	7,530.80	7,425.59	7,392.96	29.58	28.28	-162.19	809.60	-202.43	1,763.60	1,716.20	53.95	32.341	
8,000.00	7,534.46	7,429.25	7,396.62	29.53	28.37	-162.17	815.38	-202.44	1,769.38	1,721.98	54.06	32.346	
8,027.99	7,535.00	7,430.79	7,397.16	29.51	28.38	-162.16	817.82	-202.44	1,771.82	1,724.42	54.10	32.348	
8,028.20	7,535.00	7,430.79	7,397.16	29.51	28.38	-162.16	817.82	-202.44	1,771.82	1,724.42	54.10	32.348	
8,100.00	7,535.00	7,430.79	7,397.16	29.45	28.47	-162.14	823.60	-202.45	1,777.60	1,730.20	54.21	32.353	
8,200.00	7,535.00	7,430.79	7,397.16	29.49	28.56	-162.12	829.38	-202.46	1,783.38	1,735.98	54.32	32.358	
8,300.00	7,535.00	7,430.79	7,397.16	30.05	28.65	-162.10	835.16	-202.47	1,789.16	1,741.76	54.43	32.363	
8,400.00	7,535.00	7,430.79	7,397.16	30.69	28.74	-162.08	840.94	-202.48	1,794.94	1,747.54	54.54	32.368	
8,500.00	7,535.00	7,430.79	7,397.16	31.41	28.83	-162.06	846.72	-202.49	1,800.72	1,753.32	54.65	32.373	
8,600.00	7,535.00	7,430.79	7,397.16	32.17	28.92	-162.04	852.50	-202.50	1,806.50	1,759.10	54.76	32.378	

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 4R-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 4R-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 #2	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				
8,700.00	7,535.00	7,361.09	7,287.44	33.00	27.09	-77.39	545.97	-207.63	1,173.82	1,116.87	56.95	20.611					
8,800.00	7,535.00	7,323.49	7,257.33	33.87	27.05	-75.91	568.47	-207.37	1,202.62	1,145.64	56.99	21.104					
8,900.00	7,535.00	7,300.00	7,237.93	34.79	27.02	-74.97	581.72	-207.20	1,237.27	1,180.15	57.13	21.659					
9,000.00	7,535.00	7,262.11	7,205.75	35.75	26.98	-73.42	601.73	-206.93	1,277.40	1,220.35	57.05	22.389					
9,100.00	7,535.00	7,236.90	7,183.78	36.76	26.94	-72.38	614.08	-206.74	1,322.92	1,265.83	57.09	23.172					
9,200.00	7,535.00	7,214.60	7,163.99	37.80	26.91	-71.45	624.36	-206.57	1,373.39	1,316.26	57.13	24.040					
9,300.00	7,535.00	7,200.00	7,150.87	38.88	26.89	-70.84	630.75	-206.45	1,428.45	1,371.22	57.23	24.961					
9,400.00	7,535.00	7,177.05	7,129.98	39.99	26.85	-69.88	640.26	-206.28	1,487.63	1,430.42	57.20	26.006					

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.69	0.75	-139.89	139.90				
100.00	100.00	100.00	100.00	0.14	0.14	-89.69	0.75	-139.89	139.90	139.62	0.28	506.824	
200.00	200.00	200.00	200.00	0.50	0.50	-89.69	0.75	-139.89	139.90	138.90	0.99	140.886	
300.00	300.00	300.00	300.00	0.85	0.85	-89.69	0.75	-139.89	139.90	138.19	1.71	81.814	
400.00	400.00	400.00	400.00	1.21	1.21	-89.69	0.75	-139.89	139.90	137.47	2.43	57.645	
500.00	500.00	500.00	500.00	1.57	1.57	-89.69	0.75	-139.89	139.90	136.75	3.14	44.499	
500.08	500.08	500.08	500.08	1.57	1.57	-89.69	0.75	-139.89	139.90	136.75	3.14	44.491	
600.00	600.00	599.93	599.91	1.93	1.93	-88.98	2.49	-139.89	139.92	136.06	3.86	36.249	
700.00	700.00	701.59	701.43	2.29	2.30	-86.85	7.67	-139.54	139.76	135.17	4.58	30.494	
798.95	798.93	803.68	803.19	2.63	2.67	152.58	15.37	-136.74	139.18	133.89	5.30	26.273 CC	
800.00	799.98	804.77	804.27	2.63	2.67	152.63	15.46	-136.70	139.18	133.88	5.31	26.235 ES	
900.00	899.84	907.19	906.03	2.97	3.04	157.99	25.54	-131.07	140.12	134.10	6.02	23.275	
1,000.00	999.45	1,005.99	1,003.99	3.32	3.41	164.05	36.46	-124.23	144.56	137.83	6.73	21.487	
1,100.00	1,098.70	1,104.34	1,101.50	3.68	3.78	169.90	47.32	-117.42	153.98	146.53	7.45	20.672	
1,166.13	1,164.08	1,169.11	1,165.72	3.93	4.03	173.45	54.47	-112.93	162.92	154.99	7.93	20.542	
1,200.00	1,197.50	1,202.22	1,198.55	4.06	4.16	175.14	58.13	-110.64	168.10	159.93	8.18	20.555	
1,300.00	1,296.18	1,299.98	1,295.47	4.44	4.54	179.58	68.92	-103.87	184.18	175.28	8.90	20.683	
1,400.00	1,394.86	1,397.74	1,392.40	4.84	4.92	-176.70	79.72	-97.10	201.18	191.54	9.64	20.878	
1,500.00	1,493.54	1,495.50	1,489.32	5.24	5.30	-173.56	90.52	-90.33	218.88	208.51	10.37	21.106	
1,600.00	1,592.22	1,593.26	1,586.25	5.65	5.68	-170.89	101.31	-83.56	237.12	226.02	11.11	21.347	
1,700.00	1,690.89	1,691.02	1,683.18	6.06	6.07	-168.61	112.11	-76.78	255.80	243.95	11.85	21.589	
1,800.00	1,789.57	1,788.78	1,780.10	6.48	6.45	-166.63	122.91	-70.01	274.82	262.23	12.59	21.825	
1,900.00	1,888.25	1,886.54	1,877.03	6.89	6.84	-164.91	133.70	-63.24	294.12	280.78	13.34	22.052	
2,000.00	1,986.93	1,984.30	1,973.95	7.31	7.22	-163.41	144.50	-56.47	313.64	299.55	14.08	22.268	
2,100.00	2,085.61	2,082.06	2,070.88	7.74	7.61	-162.08	155.30	-49.70	333.35	318.51	14.83	22.471	
2,200.00	2,184.29	2,179.82	2,167.81	8.16	8.00	-160.89	166.09	-42.93	353.21	337.62	15.59	22.663	
2,300.00	2,282.97	2,277.58	2,264.73	8.58	8.39	-159.84	176.89	-36.16	373.20	356.86	16.34	22.842	
2,400.00	2,381.65	2,375.34	2,361.66	9.01	8.77	-158.89	187.69	-29.39	393.30	376.21	17.09	23.011	
2,500.00	2,480.33	2,473.10	2,458.59	9.44	9.16	-158.03	198.49	-22.62	413.49	395.65	17.85	23.168	
2,600.00	2,579.01	2,570.86	2,555.51	9.86	9.55	-157.25	209.28	-15.84	433.77	415.17	18.60	23.316	
2,700.00	2,677.69	2,668.62	2,652.44	10.29	9.94	-156.54	220.08	-9.07	454.12	434.75	19.36	23.455	
2,800.00	2,776.37	2,766.38	2,749.36	10.72	10.33	-155.89	230.88	-2.30	474.52	454.40	20.12	23.585	
2,900.00	2,875.04	2,864.14	2,846.29	11.15	10.72	-155.30	241.67	4.47	494.98	474.10	20.88	23.708	
3,000.00	2,973.72	2,961.91	2,943.22	11.58	11.11	-154.75	252.47	11.24	515.49	493.85	21.64	23.823	
3,100.00	3,072.40	3,059.67	3,040.14	12.01	11.50	-154.25	263.27	18.01	536.04	513.64	22.40	23.932	
3,200.00	3,171.08	3,157.43	3,137.07	12.44	11.89	-153.78	274.06	24.78	556.63	533.47	23.16	24.034	
3,300.00	3,269.76	3,255.19	3,233.99	12.88	12.28	-153.34	284.86	31.55	577.25	553.32	23.92	24.131	
3,400.00	3,368.44	3,352.95	3,330.92	13.31	12.67	-152.94	295.66	38.32	597.89	573.21	24.68	24.223	
3,500.00	3,467.12	3,450.71	3,427.85	13.74	13.06	-152.56	306.45	45.10	618.57	593.12	25.45	24.309	
3,600.00	3,565.80	3,548.47	3,524.77	14.17	13.45	-152.21	317.25	51.87	639.27	613.06	26.21	24.391	
3,700.00	3,664.48	3,646.23	3,621.70	14.61	13.84	-151.88	328.05	58.64	659.99	633.02	26.97	24.469	
3,800.00	3,763.16	3,743.99	3,718.63	15.04	14.23	-151.57	338.84	65.41	680.73	653.00	27.74	24.543	
3,900.00	3,861.84	3,841.75	3,815.55	15.47	14.62	-151.27	349.64	72.18	701.49	672.99	28.50	24.613	
4,000.00	3,960.52	3,939.51	3,912.48	15.91	15.01	-151.00	360.44	78.95	722.27	693.01	29.27	24.680	
4,100.00	4,059.19	4,037.27	4,009.40	16.34	15.40	-150.74	371.23	85.72	743.06	713.03	30.03	24.744	
4,200.00	4,157.87	4,135.03	4,106.33	16.77	15.79	-150.49	382.03	92.49	763.87	733.07	30.79	24.805	
4,300.00	4,256.55	4,232.79	4,203.26	17.21	16.18	-150.26	392.83	99.26	784.69	753.12	31.56	24.863	
4,400.00	4,355.23	4,330.55	4,300.18	17.64	16.57	-150.04	403.62	106.04	805.52	773.19	32.33	24.919	
4,500.00	4,453.91	4,428.31	4,397.11	18.08	16.96	-149.83	414.42	112.81	826.36	793.26	33.09	24.972	
4,600.00	4,552.59	4,526.07	4,494.03	18.51	17.35	-149.63	425.22	119.58	847.21	813.35	33.86	25.023	
4,700.00	4,651.27	4,623.83	4,590.96	18.94	17.74	-149.44	436.01	126.35	868.07	833.44	34.62	25.071	
4,800.00	4,749.95	4,721.59	4,687.89	19.38	18.14	-149.25	446.81	133.12	888.94	853.55	35.39	25.118	

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 4R-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 4R-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 #2	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							
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	4,848.63	4,819.35	4,784.81	19.81	18.53	-149.08	457.61	139.89	909.81	873.66	36.16	25.163	
5,000.00	4,947.31	4,917.11	4,881.74	20.25	18.92	-148.92	468.40	146.66	930.70	893.78	36.92	25.206	
5,100.00	5,045.99	5,014.87	4,978.66	20.68	19.31	-148.76	479.20	153.43	951.59	913.90	37.69	25.248	
5,200.00	5,144.67	5,112.63	5,075.59	21.12	19.70	-148.61	490.00	160.20	972.49	934.03	38.46	25.287	
5,300.00	5,243.34	5,210.39	5,172.52	21.55	20.09	-148.46	500.79	166.97	993.39	954.17	39.22	25.326	
5,400.00	5,342.02	5,308.15	5,269.44	21.99	20.48	-148.32	511.59	173.75	1,014.30	974.31	39.99	25.363	
5,500.00	5,440.70	5,405.91	5,366.37	22.42	20.87	-148.19	522.39	180.52	1,035.22	994.46	40.76	25.398	
5,600.00	5,539.38	5,503.67	5,463.30	22.86	21.26	-148.06	533.18	187.29	1,056.14	1,014.61	41.53	25.433	
5,700.00	5,638.06	5,601.44	5,560.22	23.29	21.65	-147.94	543.98	194.06	1,077.07	1,034.77	42.29	25.466	
5,800.00	5,736.74	5,699.20	5,657.15	23.73	22.05	-147.82	554.78	200.83	1,098.00	1,054.94	43.06	25.498	
5,900.00	5,835.42	5,796.96	5,754.07	24.17	22.44	-147.71	565.57	207.60	1,118.93	1,075.10	43.83	25.529	
6,000.00	5,934.10	5,894.72	5,851.00	24.60	22.83	-147.60	576.37	214.37	1,139.87	1,095.27	44.60	25.558	
6,100.00	6,032.78	5,992.48	5,947.93	25.04	23.22	-147.49	587.17	221.14	1,160.81	1,115.45	45.37	25.587	
6,200.00	6,131.46	6,090.24	6,044.85	25.47	23.61	-147.39	597.96	227.91	1,181.76	1,135.63	46.14	25.615	
6,300.00	6,230.14	6,188.00	6,141.78	25.91	24.00	-147.29	608.76	234.69	1,202.71	1,155.81	46.90	25.642	
6,400.00	6,328.82	6,285.76	6,238.70	26.34	24.39	-147.20	619.56	241.46	1,223.66	1,175.99	47.67	25.668	
6,500.00	6,427.49	6,383.52	6,335.63	26.78	24.78	-147.10	630.36	248.23	1,244.62	1,196.18	48.44	25.694	
6,600.00	6,526.17	6,483.67	6,435.00	27.21	31.02	156.27	-511.20	328.96	1,265.25	1,208.32	27.93	44.262	
6,700.00	6,624.85	6,581.83	6,533.00	27.65	31.08	155.42	-520.16	328.86	1,149.42	1,119.51	29.91	38.428	
6,800.00	6,723.53	6,680.59	6,631.00	28.09	31.14	154.56	-529.12	328.77	1,064.82	1,032.64	32.18	33.085	
6,837.91	6,760.94	6,660.98	6,611.00	28.25	31.16	154.23	-532.51	328.73	1,033.45	1,000.31	33.13	31.192	
6,850.00	6,772.88	6,661.97	6,612.00	28.30	31.17	157.95	-533.50	328.72	1,023.53	990.08	33.44	30.605	
6,900.00	6,822.38	6,663.86	6,614.00	28.51	31.18	178.96	-535.39	328.70	982.89	948.12	34.77	28.265	
6,950.00	6,871.89	6,662.27	6,613.00	28.69	31.17	-158.62	-533.80	328.72	943.13	906.96	36.17	26.075	
7,000.00	6,921.17	6,657.19	6,608.00	28.86	31.13	-143.91	-528.72	328.77	904.53	866.91	37.62	24.042	
7,050.00	6,969.99	6,648.66	6,600.00	29.01	31.08	-135.99	-520.19	328.86	867.41	828.27	39.13	22.166	
7,100.00	7,018.10	6,636.71	6,587.00	29.14	31.00	-131.69	-508.25	328.99	832.03	791.35	40.68	20.451	
7,150.00	7,065.27	6,621.41	6,572.00	29.26	30.90	-129.13	-492.94	329.15	798.67	756.40	42.26	18.897	
7,200.00	7,111.28	6,602.82	6,553.00	29.36	30.77	-127.37	-474.36	329.34	767.56	723.71	43.85	17.503	
7,250.00	7,155.89	6,581.05	6,532.00	29.45	30.64	-125.93	-452.58	329.57	738.91	693.47	45.44	16.263	
7,300.00	7,198.89	6,556.18	6,507.00	29.53	30.49	-124.56	-427.72	329.83	712.86	665.89	46.98	15.174	
7,350.00	7,240.07	6,528.36	6,479.00	29.60	30.32	-123.16	-399.89	330.12	689.53	641.08	48.45	14.232	
7,400.00	7,279.23	6,497.70	6,448.00	29.65	30.14	-121.67	-369.24	330.44	668.96	619.13	49.82	13.427	
7,450.00	7,316.18	6,464.36	6,415.00	29.69	29.96	-120.06	-335.91	330.79	651.11	600.03	51.08	12.746	
7,500.00	7,350.73	6,428.51	6,379.00	29.72	29.77	-118.35	-300.05	331.17	635.91	583.71	52.20	12.182	
7,550.00	7,382.73	6,390.31	6,341.00	29.74	29.57	-116.56	-261.86	331.57	623.21	570.04	53.17	11.721	
7,600.00	7,412.01	6,349.96	6,299.00	29.74	29.39	-114.74	-221.51	331.99	612.80	558.81	53.99	11.350	
7,650.00	7,438.44	6,307.65	6,258.00	29.74	29.20	-112.93	-179.20	332.44	604.44	549.79	54.66	11.059	
7,700.00	7,461.87	6,263.58	6,214.00	29.73	29.03	-111.18	-135.14	332.90	597.88	542.67	55.20	10.831	
7,750.00	7,482.21	6,217.98	6,168.00	29.71	28.87	-109.56	-89.53	333.37	592.82	537.20	55.62	10.658	
7,800.00	7,499.35	6,171.06	6,122.00	29.69	28.73	-108.11	-42.62	333.87	589.01	533.06	55.95	10.528	
7,850.00	7,513.20	6,117.26	6,068.00	29.65	28.59	-106.69	11.17	334.38	586.08	529.89	56.19	10.431	
7,900.00	7,523.70	6,059.32	6,010.00	29.62	28.48	-105.16	68.89	334.65	583.23	526.81	56.42	10.338	
7,950.00	7,530.80	6,002.98	5,953.00	29.58	28.40	-103.66	124.47	334.61	580.42	523.75	56.67	10.243	
8,000.00	7,534.46	5,948.16	5,899.00	29.53	28.34	-102.18	177.68	334.27	577.71	520.79	56.92	10.150	
8,027.99	7,535.00	5,918.12	5,869.00	29.51	28.32	-101.36	206.38	333.96	576.24	519.19	57.05	10.100	
8,100.00	7,535.00	5,844.29	5,795.00	29.45	28.29	-98.70	275.11	332.83	572.65	515.26	57.39	9.978	
8,200.00	7,535.00	5,752.24	5,703.00	29.49	28.28	-94.37	356.34	330.72	569.44	511.72	57.72	9.865	
8,225.94	7,535.00	5,730.43	5,681.00	29.62	28.28	-93.19	374.73	330.11	569.27	511.50	57.77	9.854 SF	
8,300.00	7,535.00	5,672.74	5,623.00	30.05	28.27	-89.81	421.56	328.29	570.95	513.21	57.74	9.889	
8,400.00	7,535.00	5,604.96	5,555.00	30.69	28.25	-85.40	472.90	325.80	579.73	522.34	57.39	10.101	
8,500.00	7,535.00	5,550.00	5,499.00	31.41	28.23	-81.57	511.31	323.51	597.58	540.76	56.81	10.518	

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 4R-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 4R-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 #2	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		
8,600.00	7,535.00	7,500.00	7,411.56	32.17	28.20	-77.94	543.55	321.23	625.29	569.22	56.07	11.152		
8,700.00	7,535.00	7,450.00	7,371.27	33.00	28.16	-74.24	573.05	318.77	662.86	607.68	55.18	12.013		
8,800.00	7,535.00	7,421.50	7,347.42	33.87	28.14	-72.13	588.57	317.29	709.40	654.64	54.75	12.957		
8,900.00	7,535.00	7,400.00	7,329.03	34.79	28.11	-70.54	599.65	316.14	764.08	709.55	54.53	14.012		
9,000.00	7,535.00	7,364.15	7,297.66	35.75	28.07	-67.91	616.88	314.17	825.40	771.35	54.05	15.272		
9,100.00	7,535.00	7,350.00	7,285.05	36.76	28.05	-66.89	623.24	313.37	892.62	838.54	54.08	16.506		
9,200.00	7,535.00	7,320.37	7,258.24	37.80	28.01	-64.77	635.75	311.66	964.39	910.56	53.83	17.916		
9,300.00	7,535.00	7,300.00	7,239.53	38.88	27.98	-63.34	643.70	310.46	1,040.16	986.37	53.79	19.337		
9,400.00	7,535.00	7,300.00	7,239.53	39.99	27.98	-63.34	643.70	310.46	1,119.36	1,065.26	54.10	20.692		
9,500.00	7,535.00	7,271.64	7,213.11	41.13	27.93	-61.40	653.88	308.75	1,200.83	1,146.88	53.95	22.260		
9,600.00	7,535.00	7,250.00	7,192.70	42.30	27.90	-59.95	660.93	307.42	1,284.81	1,230.90	53.91	23.831		
9,700.00	7,535.00	7,250.00	7,192.70	43.49	27.90	-59.95	660.93	307.42	1,370.52	1,316.35	54.16	25.303		
9,800.00	7,535.00	7,250.00	7,192.70	44.71	27.90	-59.95	660.93	307.42	1,458.05	1,403.67	54.38	26.814		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.68	0.73	-130.10	130.10					
100.00	100.00	100.00	100.00	0.14	0.14	-89.68	0.73	-130.10	130.10	129.83	0.28	471.347		
200.00	200.00	200.00	200.00	0.50	0.50	-89.68	0.73	-130.10	130.10	129.11	0.99	131.024		
300.00	300.00	300.00	300.00	0.85	0.85	-89.68	0.73	-130.10	130.10	128.39	1.71	76.088		
400.00	400.00	400.00	400.00	1.21	1.21	-89.68	0.73	-130.10	130.10	127.68	2.43	53.610		
500.00	500.00	500.00	500.00	1.57	1.57	-89.68	0.73	-130.10	130.10	126.96	3.14	41.384		
600.00	600.00	600.00	600.00	1.93	1.93	-89.68	0.73	-130.10	130.10	126.24	3.86	33.699		
700.00	700.00	702.82	702.80	2.29	2.30	-89.03	2.18	-128.96	129.01	124.42	4.59	28.107		
800.00	799.98	805.37	805.19	2.63	2.67	149.23	6.52	-125.56	127.33	122.02	5.31	23.995		
862.90	862.81	869.57	869.18	2.85	2.90	151.88	10.70	-122.27	126.96	121.21	5.75	22.075 CC		
900.00	899.84	907.30	906.71	2.97	3.03	153.84	13.68	-119.93	127.12	121.10	6.01	21.142 ES		
1,000.00	999.45	1,008.27	1,006.89	3.32	3.40	160.35	23.57	-112.16	129.48	122.76	6.72	19.258		
1,100.00	1,098.70	1,106.89	1,104.42	3.68	3.78	167.67	35.04	-103.15	136.14	128.70	7.44	18.303		
1,166.13	1,164.08	1,171.64	1,168.46	3.93	4.02	172.18	42.60	-97.21	143.58	135.66	7.92	18.130		
1,200.00	1,197.50	1,204.75	1,201.20	4.06	4.15	174.35	46.47	-94.18	148.10	139.93	8.17	18.133		
1,300.00	1,296.18	1,302.50	1,297.86	4.44	4.53	-179.99	57.88	-85.21	162.55	153.65	8.90	18.265		
1,400.00	1,394.86	1,400.25	1,394.53	4.84	4.92	-175.27	69.30	-76.25	178.32	168.68	9.64	18.502		
1,500.00	1,493.54	1,498.00	1,491.20	5.24	5.31	-171.33	80.72	-67.28	195.10	184.72	10.38	18.791		
1,600.00	1,592.22	1,595.75	1,587.87	5.65	5.70	-168.01	92.13	-58.31	212.65	201.52	11.13	19.104		
1,700.00	1,690.89	1,693.51	1,684.54	6.06	6.09	-165.20	103.55	-49.35	230.80	218.91	11.88	19.421		
1,800.00	1,789.57	1,791.26	1,781.21	6.48	6.48	-162.80	114.96	-40.38	249.40	236.76	12.64	19.731		
1,900.00	1,888.25	1,889.01	1,877.87	6.89	6.88	-160.74	126.38	-31.42	268.37	254.98	13.40	20.030		
2,000.00	1,986.93	1,986.76	1,974.54	7.31	7.27	-158.94	137.79	-22.45	287.64	273.48	14.16	20.313		
2,100.00	2,085.61	2,084.51	2,071.21	7.74	7.67	-157.37	149.21	-13.48	307.15	292.22	14.92	20.581		
2,200.00	2,184.29	2,182.26	2,167.88	8.16	8.07	-155.99	160.62	-4.52	326.85	311.16	15.69	20.833		
2,300.00	2,282.97	2,280.02	2,264.55	8.58	8.47	-154.77	172.04	4.45	346.71	330.26	16.46	21.068		
2,400.00	2,381.65	2,377.77	2,361.21	9.01	8.87	-153.68	183.45	13.41	366.71	349.49	17.23	21.289		
2,500.00	2,480.33	2,475.52	2,457.88	9.44	9.27	-152.70	194.87	22.38	386.83	368.83	18.00	21.495		
2,600.00	2,579.01	2,573.27	2,554.55	9.86	9.67	-151.81	206.28	31.35	407.04	388.28	18.77	21.689		
2,700.00	2,677.69	2,671.02	2,651.22	10.29	10.07	-151.02	217.70	40.31	427.34	407.80	19.54	21.870		
2,800.00	2,776.37	2,768.78	2,747.89	10.72	10.47	-150.29	229.11	49.28	447.71	427.40	20.31	22.040		
2,900.00	2,875.04	2,866.53	2,844.55	11.15	10.87	-149.63	240.53	58.24	468.15	447.06	21.09	22.199		
3,000.00	2,973.72	2,964.28	2,941.22	11.58	11.27	-149.02	251.94	67.21	488.64	466.77	21.86	22.349		
3,100.00	3,072.40	3,062.03	3,037.89	12.01	11.67	-148.46	263.36	76.18	509.18	486.54	22.64	22.490		
3,200.00	3,171.08	3,159.78	3,134.56	12.44	12.07	-147.94	274.77	85.14	529.76	506.34	23.42	22.623		
3,300.00	3,269.76	3,257.53	3,231.23	12.88	12.47	-147.46	286.19	94.11	550.38	526.18	24.19	22.749		
3,400.00	3,368.44	3,355.29	3,327.90	13.31	12.88	-147.02	297.60	103.07	571.03	546.06	24.97	22.867		
3,500.00	3,467.12	3,453.04	3,424.56	13.74	13.28	-146.61	309.02	112.04	591.71	565.96	25.75	22.979		
3,600.00	3,565.80	3,550.79	3,521.23	14.17	13.68	-146.23	320.43	121.01	612.43	585.90	26.53	23.085		
3,700.00	3,664.48	3,648.54	3,617.90	14.61	14.08	-145.87	331.85	129.97	633.16	605.85	27.31	23.186		
3,800.00	3,763.16	3,746.29	3,714.57	15.04	14.49	-145.53	343.27	138.94	653.92	625.83	28.09	23.281		
3,900.00	3,861.84	3,844.05	3,811.24	15.47	14.89	-145.21	354.68	147.90	674.70	645.83	28.87	23.372		
4,000.00	3,960.52	3,941.80	3,907.90	15.91	15.29	-144.92	366.10	156.87	695.50	665.85	29.65	23.458		
4,100.00	4,059.19	4,039.55	4,004.57	16.34	15.69	-144.64	377.51	165.84	716.31	685.88	30.43	23.541		
4,200.00	4,157.87	4,137.30	4,101.24	16.77	16.10	-144.37	388.93	174.80	737.14	705.93	31.21	23.619		
4,300.00	4,256.55	4,235.05	4,197.91	17.21	16.50	-144.12	400.34	183.77	757.98	725.99	31.99	23.694		
4,400.00	4,355.23	4,332.80	4,294.58	17.64	16.90	-143.89	411.76	192.73	778.84	746.07	32.77	23.765		
4,500.00	4,453.91	4,430.56	4,391.24	18.08	17.31	-143.66	423.17	201.70	799.71	766.15	33.55	23.833		
4,600.00	4,552.59	4,528.31	4,487.91	18.51	17.71	-143.45	434.59	210.67	820.59	786.25	34.34	23.899		
4,700.00	4,651.27	4,626.06	4,584.58	18.94	18.11	-143.25	446.00	219.63	841.48	806.36	35.12	23.961		
4,800.00	4,749.95	4,723.81	4,681.25	19.38	18.52	-143.06	457.42	228.60	862.37	826.47	35.90	24.021		
4,900.00	4,848.63	4,821.56	4,777.92	19.81	18.92	-142.88	468.83	237.56	883.28	846.60	36.68	24.079		

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 4R-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 4R-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 #2	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				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	4,947.31	4,919.32	4,874.58	20.25	19.32	-142.70	480.25	246.53	904.20	866.73	37.47	24.134	
5,100.00	5,045.99	5,017.07	4,971.25	20.68	19.73	-142.53	491.66	255.50	925.12	886.87	38.25	24.187	
5,200.00	5,144.67	5,114.82	5,067.92	21.12	20.13	-142.37	503.08	264.46	946.05	907.02	39.03	24.238	
5,300.00	5,243.34	5,212.57	5,164.59	21.55	20.53	-142.22	514.49	273.43	966.99	927.18	39.81	24.287	
5,400.00	5,342.02	5,310.32	5,261.26	21.99	20.94	-142.08	525.91	282.39	987.94	947.34	40.60	24.335	
5,500.00	5,440.70	5,408.08	5,357.93	22.42	21.34	-141.94	537.32	291.36	1,008.89	967.50	41.38	24.380	
5,600.00	5,539.38	5,505.83	5,454.59	22.86	21.75	-141.80	548.74	300.33	1,029.84	987.68	42.16	24.424	
5,700.00	5,638.06	5,603.58	5,551.26	23.29	22.15	-141.67	560.15	309.29	1,050.80	1,007.85	42.95	24.466	
5,800.00	5,736.74	5,701.33	5,647.93	23.73	22.55	-141.55	571.57	318.26	1,071.77	1,028.04	43.73	24.507	
5,900.00	5,835.42	5,799.08	5,744.60	24.17	22.96	-141.43	582.98	327.22	1,092.74	1,048.22	44.52	24.547	
6,000.00	5,934.10	5,896.83	5,841.27	24.60	23.36	-141.32	594.40	336.19	1,113.71	1,068.41	45.30	24.585	
6,100.00	6,032.78	5,994.59	5,937.93	25.04	23.76	-141.21	605.81	345.16	1,134.69	1,088.61	46.08	24.622	
6,200.00	6,131.46	6,092.34	6,034.60	25.47	24.17	-141.10	617.23	354.12	1,155.67	1,108.80	46.87	24.658	
6,300.00	6,230.14	6,190.09	6,131.27	25.91	24.57	-141.00	628.65	363.09	1,176.66	1,129.01	47.65	24.692	
6,400.00	6,328.82	6,404.14	7,455.00	26.34	30.29	160.01	-493.49	466.54	1,157.23	1,134.55	22.68	51.015	
6,500.00	6,427.49	8,413.04	7,455.00	26.78	30.36	158.85	-502.39	466.41	1,064.92	1,040.65	24.27	43.879	
6,600.00	6,526.17	8,421.94	7,455.00	27.21	30.42	157.68	-511.28	466.28	974.04	947.89	26.15	37.244	
6,700.00	6,624.85	8,430.83	7,455.00	27.65	30.48	156.50	-520.18	466.14	885.05	856.64	28.41	31.152	
6,800.00	6,723.53	8,439.73	7,455.00	28.09	30.54	155.31	-529.07	466.01	798.56	767.43	31.14	25.647	
6,837.91	6,760.94	8,443.10	7,455.00	28.25	30.56	154.86	-532.44	465.96	766.61	734.29	32.31	23.724	
6,850.00	6,772.88	8,444.08	7,455.00	28.30	30.57	158.46	-533.42	465.94	756.52	723.82	32.71	23.130	
6,900.00	6,822.38	8,445.94	7,455.00	28.51	30.58	179.18	-535.28	465.91	715.35	680.93	34.42	20.784	
6,950.00	6,871.89	8,444.31	7,455.00	28.69	30.57	-158.43	-533.66	465.94	675.32	639.05	36.27	18.620	
7,000.00	6,921.17	8,439.21	7,455.00	28.86	30.54	-143.49	-528.55	466.01	636.85	598.59	38.25	16.648	
7,050.00	6,969.99	8,430.65	7,455.00	29.01	30.48	-135.09	-519.99	466.14	600.34	559.97	40.37	14.872	
7,100.00	7,018.10	8,418.67	7,455.00	29.14	30.39	-130.10	-508.02	466.33	566.23	523.64	42.59	13.296	
7,150.00	7,065.27	8,403.34	7,455.00	29.26	30.29	-126.65	-492.69	466.56	534.92	490.05	44.87	11.922	
7,200.00	7,111.28	8,384.72	7,455.00	29.36	30.17	-123.81	-474.07	466.84	506.79	459.63	47.16	10.746	
7,250.00	7,155.89	8,362.92	7,455.00	29.45	30.03	-121.11	-452.27	467.17	482.18	432.80	49.38	9.764	
7,300.00	7,198.89	8,338.03	7,455.00	29.53	29.87	-118.31	-427.39	467.54	461.33	409.89	51.44	8.968	
7,350.00	7,240.07	8,310.18	7,455.00	29.60	29.69	-115.31	-399.54	467.96	444.38	391.15	53.24	8.347	
7,400.00	7,279.23	8,279.50	7,455.00	29.65	29.51	-112.07	-368.86	468.43	431.31	376.60	54.71	7.884	
7,450.00	7,316.18	8,246.14	7,455.00	29.69	29.32	-108.59	-335.51	468.93	421.95	366.16	55.79	7.563	
7,500.00	7,350.73	8,210.27	7,455.00	29.72	29.12	-104.94	-299.64	469.47	415.96	359.50	56.46	7.367	
7,550.00	7,382.73	8,172.05	7,455.00	29.74	28.92	-101.20	-261.43	470.05	412.91	356.14	56.77	7.274	
7,591.29	7,407.11	8,138.87	7,455.00	29.74	28.76	-98.11	-228.24	470.55	412.20	355.42	56.78	7.260 SF	
7,600.00	7,412.01	8,131.69	7,455.00	29.74	28.73	-97.47	-221.06	470.66	412.23	355.47	56.76	7.263	
7,650.00	7,438.44	8,089.36	7,455.00	29.74	28.53	-93.86	-178.74	471.30	413.35	356.85	56.50	7.316	
7,700.00	7,461.87	8,045.28	7,455.00	29.73	28.35	-90.48	-134.67	471.97	415.68	359.58	56.11	7.409	
7,750.00	7,482.21	7,999.66	7,455.00	29.71	28.18	-87.44	-89.06	472.66	418.68	363.06	55.62	7.528	
7,800.00	7,499.35	7,952.73	7,455.00	29.69	28.05	-84.81	-42.13	473.37	421.84	366.70	55.14	7.650	
7,850.00	7,513.20	7,907.96	7,454.60	29.65	27.96	-82.70	2.64	474.01	424.87	370.15	54.72	7.764	
7,900.00	7,523.70	7,865.91	7,451.96	29.62	27.90	-80.84	44.60	474.40	427.99	373.68	54.31	7.880	
7,950.00	7,530.80	7,824.40	7,446.96	29.58	27.87	-79.11	85.79	474.57	431.22	377.30	53.92	7.998	
8,000.00	7,534.46	7,783.39	7,439.70	29.53	27.87	-77.51	126.15	474.52	434.47	380.92	53.55	8.114	
8,027.99	7,535.00	7,760.63	7,434.68	29.51	27.87	-76.68	148.34	474.40	436.28	382.93	53.35	8.177	
8,100.00	7,535.00	7,700.00	7,417.90	29.45	27.89	-74.58	206.59	473.75	442.27	389.53	52.74	8.386	
8,200.00	7,535.00	7,628.99	7,392.10	29.49	27.92	-71.45	272.71	472.40	455.58	403.79	51.79	8.797	
8,300.00	7,535.00	7,560.81	7,361.33	30.05	27.95	-67.91	333.48	470.52	475.91	425.29	50.62	9.402	
8,400.00	7,535.00	7,500.00	7,329.13	30.69	27.97	-64.42	385.00	468.37	504.13	454.63	49.50	10.184	
8,500.00	7,535.00	7,450.00	7,299.47	31.41	27.98	-61.42	425.19	466.28	540.60	491.84	48.76	11.087	
8,600.00	7,535.00	7,400.00	7,267.10	32.17	27.99	-58.36	463.21	463.91	584.97	536.85	48.13	12.155	

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 4R-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 4R-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 #2	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		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	7,535.00	7,350.00	7,232.17	33.00	27.98	-55.31	498.87	461.27	636.67	589.05	47.62	13.369		
8,800.00	7,535.00	7,313.27	7,204.98	33.87	27.97	-53.10	523.46	459.17	694.89	647.16	47.73	14.560		
8,900.00	7,535.00	7,279.02	7,178.52	34.79	27.95	-51.10	545.11	457.09	758.72	710.75	47.97	15.817		
9,000.00	7,535.00	7,250.00	7,155.32	35.75	27.94	-49.44	562.44	455.24	827.33	778.94	48.39	17.096		
9,100.00	7,535.00	7,221.29	7,131.70	36.76	27.92	-47.85	578.65	453.34	899.97	851.18	48.80	18.444		
9,200.00	7,535.00	7,200.00	7,113.77	37.80	27.90	-46.70	590.04	451.88	976.02	926.67	49.35	19.778		
9,300.00	7,535.00	7,174.95	7,092.27	38.88	27.87	-45.39	602.76	450.12	1,054.91	1,005.17	49.74	21.207		
9,400.00	7,535.00	7,150.00	7,070.42	39.99	27.85	-44.13	614.67	448.31	1,136.26	1,086.17	50.09	22.684		
9,500.00	7,535.00	7,150.00	7,070.42	41.13	27.85	-44.13	614.67	448.31	1,219.78	1,168.92	50.86	23.983		
9,600.00	7,535.00	7,120.94	7,044.47	42.30	27.81	-42.71	627.57	446.14	1,304.73	1,253.71	51.02	25.572		
9,700.00	7,535.00	7,100.00	7,025.46	43.49	27.78	-41.73	636.20	444.54	1,391.40	1,340.11	51.29	27.126		
9,800.00	7,535.00	7,100.00	7,025.46	44.71	27.78	-41.73	636.20	444.54	1,479.35	1,427.52	51.83	28.544		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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							
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	0.72	-120.03	120.03					
100.00	100.00	100.00	100.00	0.14	0.14	-89.66	0.72	-120.03	120.03	119.75	0.28	434.856		
200.00	200.00	200.00	200.00	0.50	0.50	-89.66	0.72	-120.03	120.03	119.04	0.99	120.881		
200.36	200.36	200.36	200.36	0.50	0.50	-89.66	0.72	-120.03	120.03	119.04	1.00	120.571		
300.00	300.00	299.93	299.91	0.85	0.86	-88.83	2.46	-120.03	120.05	118.34	1.71	70.238		
400.00	400.00	401.69	401.54	1.21	1.23	-86.40	7.53	-119.60	119.85	117.41	2.44	49.166		
500.00	500.00	505.19	504.74	1.57	1.60	-82.93	14.41	-116.16	117.15	113.95	3.20	36.659		
600.00	600.00	608.13	607.12	1.93	1.98	-78.28	22.69	-109.34	111.90	107.94	3.96	28.278		
700.00	700.00	710.25	708.27	2.29	2.37	-71.96	32.32	-99.23	104.68	99.97	4.71	22.213		
800.00	799.98	810.07	806.73	2.63	2.77	172.29	42.85	-86.66	98.64	93.21	5.43	18.171		
855.91	855.83	865.25	861.14	2.82	2.99	177.44	48.74	-79.56	97.68	91.86	5.83	16.764 CC		
900.00	899.84	908.76	904.04	2.97	3.17	-178.47	53.38	-73.96	98.28	92.13	6.15	15.990		
1,000.00	999.45	1,007.38	1,001.27	3.32	3.58	-169.74	63.91	-61.27	103.95	97.06	6.89	15.076		
1,100.00	1,098.70	1,105.80	1,098.31	3.68	3.99	-162.52	74.41	-48.61	115.11	107.45	7.66	15.033		
1,166.13	1,164.08	1,170.72	1,162.32	3.93	4.26	-158.77	81.33	-40.26	125.09	116.93	8.16	15.321		
1,200.00	1,197.50	1,203.93	1,195.05	4.06	4.40	-157.17	84.88	-35.98	130.74	122.31	8.42	15.518		
1,300.00	1,296.18	1,301.97	1,291.72	4.44	4.81	-153.16	95.34	-23.37	147.90	138.71	9.19	16.094		
1,400.00	1,394.86	1,400.01	1,388.38	4.84	5.23	-149.99	105.80	-10.75	165.63	155.67	9.96	16.629		
1,500.00	1,493.54	1,498.06	1,485.05	5.24	5.65	-147.44	116.26	1.86	183.75	173.02	10.73	17.118		
1,600.00	1,592.22	1,596.10	1,581.71	5.65	6.06	-145.34	126.72	14.48	202.17	190.65	11.51	17.559		
1,700.00	1,690.89	1,694.15	1,678.38	6.06	6.48	-143.60	137.18	27.09	220.80	208.50	12.30	17.957		
1,800.00	1,789.57	1,792.19	1,775.04	6.48	6.90	-142.13	147.64	39.71	239.60	226.52	13.08	18.316		
1,900.00	1,888.25	1,890.24	1,871.71	6.89	7.32	-140.87	158.10	52.32	258.53	244.66	13.87	18.640		
2,000.00	1,986.93	1,988.28	1,968.37	7.31	7.74	-139.78	168.57	64.94	277.57	262.91	14.66	18.933		
2,100.00	2,085.61	2,086.33	2,065.04	7.74	8.16	-138.83	179.03	77.55	296.69	281.23	15.45	19.199		
2,200.00	2,184.29	2,184.37	2,161.70	8.16	8.58	-138.00	189.49	90.17	315.88	299.63	16.25	19.441		
2,300.00	2,282.97	2,282.41	2,258.37	8.58	9.00	-137.26	199.95	102.78	335.12	318.08	17.04	19.662		
2,400.00	2,381.65	2,380.46	2,355.03	9.01	9.42	-136.61	210.41	115.40	354.41	336.57	17.84	19.864		
2,500.00	2,480.33	2,478.50	2,451.70	9.44	9.84	-136.02	220.87	128.01	373.75	355.11	18.64	20.050		
2,600.00	2,579.01	2,576.55	2,548.36	9.86	10.26	-135.49	231.33	140.63	393.12	373.67	19.44	20.221		
2,700.00	2,677.69	2,674.59	2,645.03	10.29	10.68	-135.00	241.79	153.24	412.51	392.27	20.24	20.379		
2,800.00	2,776.37	2,772.64	2,741.69	10.72	11.10	-134.57	252.25	165.86	431.94	410.89	21.04	20.525		
2,900.00	2,875.04	2,870.68	2,838.36	11.15	11.52	-134.16	262.72	178.48	451.38	429.53	21.85	20.661		
3,000.00	2,973.72	2,968.72	2,935.02	11.58	11.94	-133.80	273.18	191.09	470.85	448.19	22.65	20.787		
3,100.00	3,072.40	3,066.77	3,031.69	12.01	12.37	-133.46	283.64	203.71	490.33	466.87	23.46	20.905		
3,200.00	3,171.08	3,164.81	3,128.35	12.44	12.79	-133.15	294.10	216.32	509.82	485.56	24.26	21.015		
3,300.00	3,269.76	3,262.86	3,225.02	12.88	13.21	-132.86	304.56	228.94	529.34	504.27	25.07	21.118		
3,400.00	3,368.44	3,360.90	3,321.68	13.31	13.63	-132.59	315.02	241.55	548.86	522.99	25.87	21.215		
3,500.00	3,467.12	3,458.95	3,418.35	13.74	14.05	-132.34	325.48	254.17	568.39	541.71	26.68	21.306		
3,600.00	3,565.80	3,556.99	3,515.01	14.17	14.47	-132.10	335.94	266.78	587.94	560.45	27.48	21.392		
3,700.00	3,664.48	3,655.04	3,611.68	14.61	14.90	-131.89	346.40	279.40	607.49	579.20	28.29	21.473		
3,800.00	3,763.16	3,753.08	3,708.34	15.04	15.32	-131.68	356.87	292.01	627.05	597.95	29.10	21.549		
3,900.00	3,861.84	3,851.12	3,805.01	15.47	15.74	-131.49	367.33	304.63	646.61	616.71	29.91	21.622		
4,000.00	3,960.52	3,949.17	3,901.67	15.91	16.16	-131.31	377.79	317.24	666.19	635.47	30.71	21.690		
4,100.00	4,059.19	4,047.21	3,998.34	16.34	16.58	-131.13	388.25	329.86	685.77	654.25	31.52	21.755		
4,200.00	4,157.87	4,145.26	4,095.00	16.77	17.01	-130.97	398.71	342.47	705.35	673.02	32.33	21.817		
4,300.00	4,256.55	4,243.30	4,191.67	17.21	17.43	-130.82	409.17	355.09	724.95	691.81	33.14	21.876		
4,400.00	4,355.23	4,341.35	4,288.33	17.64	17.85	-130.68	419.63	367.70	744.54	710.59	33.95	21.932		
4,500.00	4,453.91	4,439.39	4,385.00	18.08	18.27	-130.54	430.09	380.32	764.14	729.38	34.76	21.985		
4,600.00	4,552.59	4,537.44	4,481.66	18.51	18.69	-130.41	440.55	392.93	783.74	748.18	35.57	22.036		
4,700.00	4,651.27	4,635.48	4,578.33	18.94	19.12	-130.28	451.02	405.55	803.35	766.98	36.38	22.084		
4,800.00	4,749.95	4,733.52	4,674.99	19.38	19.54	-130.17	461.48	418.16	822.96	785.78	37.19	22.131		

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 4R-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 4R-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 #2	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	
4,900.00	4,848.63	4,831.57	4,771.66	19.81	19.96	-130.05	471.94	430.78	842.58	804.58	38.00	22.175		
5,000.00	4,947.31	4,929.61	4,868.32	20.25	20.38	-129.94	482.40	443.40	862.19	823.39	38.81	22.218		
5,100.00	5,045.99	5,027.66	4,964.99	20.68	20.81	-129.84	492.86	456.01	881.81	842.20	39.62	22.259		
5,200.00	5,144.67	5,125.70	5,061.65	21.12	21.23	-129.74	503.32	468.63	901.44	861.01	40.43	22.298		
5,300.00	5,243.34	5,223.75	5,158.32	21.55	21.65	-129.65	513.78	481.24	921.06	879.82	41.24	22.336		
5,400.00	5,342.02	5,321.79	5,254.98	21.99	22.07	-129.56	524.24	493.86	940.69	898.64	42.05	22.372		
5,500.00	5,440.70	5,419.83	5,351.65	22.42	22.49	-129.47	534.70	506.47	960.32	917.46	42.86	22.407		
5,600.00	5,539.38	5,517.88	5,448.31	22.86	22.92	-129.39	545.17	519.09	979.95	936.28	43.67	22.440		
5,700.00	5,638.06	5,615.92	5,544.98	23.29	23.34	-129.31	555.63	531.70	999.58	955.10	44.48	22.473		
5,800.00	5,736.74	5,713.97	5,641.64	23.73	23.76	-129.23	566.09	544.32	1,019.22	973.93	45.29	22.504		
5,900.00	5,835.42	5,812.01	5,738.31	24.17	24.18	-129.16	576.55	556.93	1,038.86	992.75	46.10	22.534		
6,000.00	5,934.10	5,910.06	5,834.97	24.60	24.61	-129.09	587.01	569.55	1,058.49	1,011.58	46.91	22.563		
6,100.00	6,032.78	6,008.10	5,931.64	25.04	25.03	-129.02	597.47	582.16	1,078.13	1,030.41	47.72	22.591		
6,200.00	6,131.46	6,106.15	6,028.30	25.47	25.45	-128.95	607.93	594.78	1,097.78	1,049.24	48.54	22.618		
6,300.00	6,230.14	6,204.19	6,124.97	25.91	25.87	-128.89	618.39	607.39	1,117.42	1,068.07	49.35	22.644		
6,400.00	6,328.82	6,302.23	6,221.63	26.34	26.30	-128.83	628.85	620.01	1,137.06	1,086.90	50.16	22.669		
6,500.00	6,427.49	6,401.16	6,320.00	26.78	26.73	-128.77	639.31	630.00	1,156.60	1,105.78	50.97	22.694		
6,600.00	6,526.17	6,499.25	6,418.00	27.21	27.16	-128.71	649.77	640.00	1,175.13	1,124.30	51.78	22.719		
6,700.00	6,624.85	6,597.33	6,516.00	27.65	27.60	-128.65	660.23	650.00	1,193.66	1,142.82	52.59	22.744		
6,800.00	6,723.53	6,695.42	6,614.00	28.09	28.04	-128.59	670.69	660.00	1,212.19	1,161.34	53.40	22.769		
6,837.91	6,760.94	6,732.86	6,651.00	28.25	28.20	-128.57	675.37	665.00	1,219.66	1,168.78	53.62	22.778		
6,850.00	6,772.88	6,744.36	6,663.00	28.30	28.25	-128.56	678.36	668.00	1,224.12	1,173.24	53.75	22.784		
6,900.00	6,822.38	6,793.86	6,712.00	28.51	28.46	-128.51	688.31	678.00	1,242.19	1,191.31	54.56	22.809		
6,950.00	6,871.89	6,842.87	6,761.00	28.69	28.64	-128.46	698.26	688.00	1,259.66	1,208.78	55.37	22.834		
7,000.00	6,921.17	6,891.65	6,810.00	28.86	28.81	-128.41	708.21	698.00	1,277.13	1,226.25	56.18	22.859		
7,050.00	6,969.99	6,940.47	6,858.00	29.01	28.96	-128.36	718.16	708.00	1,294.60	1,243.72	56.99	22.884		
7,100.00	7,018.10	6,988.58	6,907.00	29.14	29.09	-128.31	728.11	718.00	1,312.07	1,261.19	57.80	22.909		
7,150.00	7,065.27	7,035.75	6,954.00	29.26	29.21	-128.26	738.06	728.00	1,329.54	1,278.66	58.61	22.934		
7,200.00	7,111.28	7,081.76	7,000.00	29.36	29.31	-128.21	748.01	738.00	1,347.01	1,296.13	59.42	22.959		
7,250.00	7,155.89	7,126.37	7,039.00	29.45	29.40	-128.16	757.96	748.00	1,364.48	1,313.60	60.23	22.984		
7,300.00	7,198.89	7,169.37	7,078.00	29.53	29.48	-128.11	767.91	758.00	1,381.95	1,331.07	61.04	23.009		
7,350.00	7,240.07	7,210.55	7,117.00	29.60	29.55	-128.06	777.86	768.00	1,399.42	1,348.54	61.85	23.034		
7,400.00	7,279.23	7,249.71	7,156.00	29.65	29.60	-128.01	787.81	778.00	1,416.89	1,366.01	62.66	23.059		
7,450.00	7,316.18	7,286.66	7,195.00	29.69	29.64	-127.96	797.76	788.00	1,434.36	1,383.48	63.47	23.084		
7,500.00	7,350.73	7,321.21	7,234.00	29.72	29.67	-127.91	807.71	798.00	1,451.83	1,400.95	64.28	23.109		
7,550.00	7,382.73	7,353.21	7,273.00	29.74	29.69	-127.86	817.66	808.00	1,469.30	1,418.42	65.09	23.134		
7,600.00	7,412.01	7,382.49	7,312.00	29.74	29.69	-127.81	827.61	818.00	1,486.77	1,435.89	65.90	23.159		
7,650.00	7,438.44	7,410.49	7,351.00	29.74	29.69	-127.76	837.56	828.00	1,504.24	1,453.36	66.71	23.184		
7,700.00	7,461.87	7,433.82	7,390.00	29.73	29.68	-127.71	847.51	838.00	1,521.71	1,470.83	67.52	23.209		
7,750.00	7,482.21	7,454.16	7,429.00	29.71	29.66	-127.66	857.46	848.00	1,539.18	1,488.30	68.33	23.234		
7,800.00	7,499.35	7,471.30	7,468.00	29.69	29.64	-127.61	867.41	858.00	1,556.65	1,505.77	69.14	23.259		
7,850.00	7,513.20	7,485.15	7,486.00	29.65	29.60	-127.56	877.36	868.00	1,574.12	1,523.24	70.00	23.284		
7,900.00	7,523.70	7,495.65	7,496.00	29.62	29.57	-127.51	887.31	878.00	1,591.59	1,540.71	70.81	23.309		
7,950.00	7,530.80	7,502.75	7,506.00	29.58	29.53	-127.46	897.26	888.00	1,609.06	1,558.18	71.62	23.334		
7,966.72	7,532.41	7,504.92	7,508.00	29.56	29.51	-127.44	901.70	892.00	1,616.53	1,565.65	71.84	23.343		
8,000.00	7,534.46	7,506.97	7,510.00	29.53	29.48	-127.42	906.14	894.00	1,624.00	1,573.12	72.05	23.352		
8,027.99	7,535.00	7,507.51	7,511.00	29.51	29.46	-127.41	910.58	896.00	1,631.47	1,580.59	72.27	23.361		
8,100.00	7,535.00	7,507.51	7,512.00	29.45	29.40	-127.36	920.53	906.00	1,648.94	1,598.06	73.08	23.386		
8,200.00	7,535.00	7,507.51	7,512.00	29.49	29.44	-127.36	930.48	916.00	1,666.41	1,615.53	73.89	23.411		
8,300.00	7,535.00	7,507.51	7,512.00	30.05	29.95	-127.36	940.43	926.00	1,683.88	1,633.00	74.70	23.436		
8,400.00	7,535.00	7,507.51	7,512.00	30.69	29.97	-127.36	950.38	936.00	1,701.35	1,650.47	75.51	23.461		
8,500.00	7,535.00	7,507.51	7,512.00	31.41	29.98	-127.36	960.33	946.00	1,718.82	1,667.94	76.32	23.486		

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 4R-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 4R-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 #2	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							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		
8,600.00	7,535.00	7,469.36	7,328.90	32.17	29.98	-33.13	505.14	764.23	345.73	301.62	44.11	7.838		
8,700.00	7,535.00	7,426.23	7,296.48	33.00	29.96	-30.19	533.26	760.04	418.55	372.87	45.68	9.163		
8,800.00	7,535.00	7,388.69	7,266.94	33.87	29.94	-28.02	556.10	756.21	495.74	448.58	47.16	10.512		
8,900.00	7,535.00	7,350.00	7,235.29	34.79	29.91	-26.09	577.97	752.11	576.43	528.27	48.16	11.970		
9,000.00	7,535.00	7,327.09	7,216.02	35.75	29.89	-25.08	590.10	749.61	659.75	610.15	49.59	13.303		
9,100.00	7,535.00	7,300.00	7,192.74	36.76	29.86	-24.00	603.63	746.59	745.34	694.85	50.49	14.761		
9,200.00	7,535.00	7,279.16	7,174.51	37.80	29.84	-23.23	613.43	744.23	832.75	781.38	51.38	16.209		
9,300.00	7,535.00	7,250.00	7,148.53	38.88	29.80	-22.25	626.23	740.85	921.77	869.94	51.83	17.785		
9,400.00	7,535.00	7,250.00	7,148.53	39.99	29.80	-22.25	626.23	740.85	1,011.93	959.05	52.88	19.136		
9,500.00	7,535.00	7,224.97	7,125.83	41.13	29.76	-21.49	636.37	737.91	1,103.07	1,049.88	53.19	20.738		
9,600.00	7,535.00	7,200.00	7,102.85	42.30	29.72	-20.79	645.67	734.92	1,195.33	1,141.89	53.45	22.365		
9,700.00	7,535.00	7,200.00	7,102.85	43.49	29.72	-20.79	645.67	734.92	1,288.13	1,234.06	54.08	23.821		
9,800.00	7,535.00	7,200.00	7,102.85	44.71	29.72	-20.79	645.67	734.92	1,381.94	1,327.35	54.59	25.315		
9,900.00	7,535.00	7,174.05	7,078.65	45.95	29.67	-20.13	654.48	731.78	1,475.86	1,421.19	54.67	26.994		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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						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	-89.78	0.43	-109.96	109.96				
100.00	100.00	100.00	100.00	0.14	0.14	-89.78	0.43	-109.96	109.96	109.68	0.28	398.361	
200.00	200.00	200.00	200.00	0.50	0.50	-89.78	0.43	-109.96	109.96	108.96	0.99	110.736	
300.00	300.00	300.00	300.00	0.85	0.85	-89.78	0.43	-109.96	109.96	108.25	1.71	64.306	
400.00	400.00	400.00	400.00	1.21	1.21	-89.78	0.43	-109.96	109.96	107.53	2.43	45.308	
500.00	500.00	500.00	500.00	1.57	1.57	-89.78	0.43	-109.96	109.96	106.81	3.14	34.976	
600.00	600.00	600.00	600.00	1.93	1.93	-89.78	0.43	-109.96	109.96	106.10	3.86	28.481	
700.00	700.00	700.00	700.00	2.29	2.29	-89.78	0.43	-109.96	109.96	105.38	4.58	24.020	
768.43	768.42	770.62	770.61	2.53	2.54	146.56	0.93	-109.25	109.95	104.89	5.07	21.698	
800.00	799.98	803.18	803.16	2.63	2.66	147.14	1.51	-108.44	109.96	104.66	5.29	20.770	
900.00	899.84	906.10	905.93	2.97	3.02	150.38	4.72	-103.91	110.19	104.19	6.00	18.353	
1,000.00	999.45	1,008.52	1,007.92	3.32	3.39	155.67	10.03	-96.42	111.33	104.61	6.72	16.572	
1,100.00	1,098.70	1,110.18	1,108.78	3.68	3.76	162.73	17.38	-86.04	114.44	107.01	7.44	15.391	
1,166.13	1,164.08	1,176.88	1,174.68	3.93	4.02	168.10	23.33	-77.65	118.20	110.28	7.92	14.933	
1,200.00	1,197.50	1,210.87	1,208.17	4.06	4.15	170.98	26.70	-72.89	120.59	112.43	8.16	14.775	
1,300.00	1,296.18	1,309.93	1,305.39	4.44	4.54	179.50	37.65	-57.44	128.53	119.63	8.90	14.444	
1,400.00	1,394.86	1,407.80	1,401.35	4.84	4.94	-172.95	48.79	-41.73	138.84	129.19	9.65	14.384	
1,500.00	1,493.54	1,505.66	1,497.30	5.24	5.34	-166.51	59.92	-26.02	151.25	140.83	10.42	14.509	
1,600.00	1,592.22	1,603.53	1,593.26	5.65	5.76	-161.09	71.06	-10.31	165.29	154.08	11.21	14.745	
1,700.00	1,690.89	1,701.39	1,689.21	6.06	6.18	-156.52	82.19	5.40	180.59	168.58	12.00	15.043	
1,800.00	1,789.57	1,799.26	1,785.16	6.48	6.60	-152.68	93.32	21.11	196.84	184.03	12.81	15.370	
1,900.00	1,888.25	1,897.13	1,881.12	6.89	7.03	-149.43	104.46	36.82	213.83	200.22	13.61	15.708	
2,000.00	1,986.93	1,994.99	1,977.07	7.31	7.46	-146.66	115.59	52.53	231.40	216.98	14.42	16.044	
2,100.00	2,085.61	2,092.86	2,073.02	7.74	7.89	-144.28	126.73	68.24	249.42	234.19	15.24	16.371	
2,200.00	2,184.29	2,190.73	2,168.98	8.16	8.32	-142.22	137.86	83.95	267.81	251.76	16.05	16.685	
2,300.00	2,282.97	2,288.59	2,264.93	8.58	8.76	-140.43	148.99	99.66	286.49	269.62	16.87	16.983	
2,400.00	2,381.65	2,386.46	2,360.88	9.01	9.20	-138.85	160.13	115.37	305.41	287.73	17.69	17.267	
2,500.00	2,480.33	2,484.33	2,456.84	9.44	9.63	-137.46	171.26	131.08	324.53	306.02	18.51	17.534	
2,600.00	2,579.01	2,582.19	2,552.79	9.86	10.07	-136.23	182.40	146.79	343.82	324.48	19.33	17.786	
2,700.00	2,677.69	2,680.06	2,648.74	10.29	10.51	-135.12	193.53	162.50	363.24	343.08	20.15	18.023	
2,800.00	2,776.37	2,777.93	2,744.70	10.72	10.95	-134.13	204.67	178.21	382.78	361.80	20.98	18.246	
2,900.00	2,875.04	2,875.79	2,840.65	11.15	11.40	-133.23	215.80	193.92	402.42	380.61	21.80	18.457	
3,000.00	2,973.72	2,973.66	2,936.61	11.58	11.84	-132.42	226.93	209.63	422.14	399.51	22.63	18.655	
3,100.00	3,072.40	3,071.53	3,032.56	12.01	12.28	-131.68	238.07	225.34	441.94	418.49	23.46	18.842	
3,200.00	3,171.08	3,169.39	3,128.51	12.44	12.73	-131.00	249.20	241.05	461.81	437.53	24.28	19.018	
3,300.00	3,269.76	3,267.26	3,224.47	12.88	13.17	-130.38	260.34	256.76	481.73	456.62	25.11	19.185	
3,400.00	3,368.44	3,365.12	3,320.42	13.31	13.61	-129.80	271.47	272.47	501.71	475.77	25.94	19.342	
3,500.00	3,467.12	3,462.99	3,416.37	13.74	14.06	-129.28	282.60	288.18	521.72	494.96	26.77	19.491	
3,600.00	3,565.80	3,560.86	3,512.33	14.17	14.50	-128.79	293.74	303.89	541.78	514.19	27.60	19.633	
3,700.00	3,664.48	3,658.72	3,608.28	14.61	14.95	-128.33	304.87	319.60	561.87	533.45	28.43	19.767	
3,800.00	3,763.16	3,756.59	3,704.23	15.04	15.40	-127.91	316.01	335.31	582.00	552.74	29.26	19.894	
3,900.00	3,861.84	3,854.46	3,800.19	15.47	15.84	-127.51	327.14	351.02	602.15	572.07	30.09	20.015	
4,000.00	3,960.52	3,952.32	3,896.14	15.91	16.29	-127.14	338.27	366.73	622.33	591.41	30.92	20.130	
4,100.00	4,059.19	4,050.19	3,992.09	16.34	16.73	-126.80	349.41	382.44	642.53	610.78	31.75	20.239	
4,200.00	4,157.87	4,148.06	4,088.05	16.77	17.18	-126.47	360.54	398.15	662.76	630.18	32.58	20.344	
4,300.00	4,256.55	4,245.92	4,184.00	17.21	17.63	-126.17	371.68	413.86	683.00	649.59	33.41	20.443	
4,400.00	4,355.23	4,343.79	4,279.95	17.64	18.08	-125.88	382.81	429.57	703.26	669.02	34.24	20.539	
4,500.00	4,453.91	4,441.66	4,375.91	18.08	18.52	-125.60	393.94	445.28	723.53	688.46	35.07	20.630	
4,600.00	4,552.59	4,539.52	4,471.86	18.51	18.97	-125.35	405.08	460.99	743.82	707.92	35.90	20.717	
4,700.00	4,651.27	4,637.39	4,567.82	18.94	19.42	-125.10	416.21	476.70	764.13	727.39	36.74	20.800	
4,800.00	4,749.95	4,735.26	4,663.77	19.38	19.87	-124.87	427.35	492.41	784.45	746.88	37.57	20.880	
4,900.00	4,848.63	4,833.12	4,759.72	19.81	20.31	-124.65	438.48	508.12	804.78	766.37	38.40	20.957	

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 4R-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 4R-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 #2	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	4,947.31	4,930.99	4,855.68	20.25	20.76	-124.44	449.61	523.83	825.12	785.88	39.23	21.030	
5,100.00	5,045.99	5,028.85	4,951.63	20.68	21.21	-124.25	460.75	539.54	845.46	805.40	40.07	21.101	
5,200.00	5,144.67	5,126.72	5,047.58	21.12	21.66	-124.06	471.88	555.25	865.82	824.92	40.90	21.169	
5,300.00	5,243.34	5,224.59	5,143.54	21.55	22.11	-123.88	483.02	570.96	886.19	844.46	41.73	21.235	
5,400.00	5,342.02	5,322.45	5,239.49	21.99	22.55	-123.70	494.15	586.67	906.57	864.00	42.57	21.298	
5,500.00	5,440.70	5,420.32	5,335.44	22.42	23.00	-123.54	505.28	602.38	926.95	883.55	43.40	21.358	
5,600.00	5,539.38	5,518.19	5,431.40	22.86	23.45	-123.38	516.42	618.09	947.34	903.11	44.23	21.417	
5,700.00	5,638.06	5,616.05	5,527.35	23.29	23.90	-123.23	527.55	633.80	967.74	922.67	45.07	21.473	
5,800.00	5,736.74	5,713.92	5,623.30	23.73	24.35	-123.08	538.69	649.51	988.14	942.24	45.90	21.528	
5,900.00	5,835.42	5,811.79	5,719.26	24.17	24.80	-122.95	549.82	665.22	1,008.55	961.81	46.74	21.580	
6,000.00	5,934.10	5,909.65	5,815.21	24.60	25.25	-122.81	560.95	680.93	1,028.96	981.39	47.57	21.631	
6,100.00	6,032.78	6,007.52	5,911.16	25.04	25.70	-122.68	572.09	696.64	1,049.38	1,000.98	48.40	21.680	
6,200.00	6,131.46	6,105.39	6,007.12	25.47	26.14	-122.56	583.22	712.35	1,069.81	1,020.57	49.24	21.728	
6,300.00	6,230.14	6,203.25	6,103.07	25.91	26.59	-122.44	594.36	728.06	1,090.24	1,040.17	50.07	21.774	
6,400.00	6,328.82	6,301.12	6,199.03	26.34	27.04	-122.33	605.49	743.76	1,110.67	1,059.76	50.91	21.818	
6,500.00	6,427.49	6,398.99	6,294.98	26.78	27.49	-122.22	616.62	759.47	1,131.11	1,079.37	51.74	21.861	
6,600.00	6,526.17	6,496.85	6,390.93	27.21	27.94	-122.11	627.76	775.18	1,151.55	1,098.97	52.57	21.903	
6,700.00	6,624.85	6,720.33	7,685.00	27.65	32.83	-88.55	-524.81	987.05	1,081.55	1,066.69	14.86	72.797	
6,800.00	6,723.53	8,729.42	7,685.00	28.09	32.88	-85.90	-533.91	987.05	982.19	967.05	15.13	64.900	
6,837.91	6,760.94	8,732.87	7,685.00	28.25	32.90	-84.80	-537.36	987.05	944.53	929.28	15.25	61.948	
6,850.00	6,772.88	8,733.87	7,685.00	28.30	32.91	-73.45	-538.36	987.05	932.52	917.23	15.28	61.013	
6,900.00	6,822.38	8,735.84	7,685.00	28.51	32.92	-5.09	-540.33	987.05	882.71	867.29	15.42	57.237	
6,950.00	6,871.89	8,734.32	7,685.00	28.69	32.91	63.73	-538.81	987.05	832.91	817.37	15.54	53.607	
7,000.00	6,921.17	8,729.31	7,685.00	28.86	32.88	101.39	-533.80	987.05	783.35	767.72	15.63	50.121	
7,050.00	6,969.99	8,720.85	7,685.00	29.01	32.83	121.31	-525.34	987.05	734.29	718.59	15.70	46.764	
7,100.00	7,018.10	8,708.97	7,685.00	29.14	32.76	132.89	-513.46	987.05	685.96	670.20	15.76	43.523	
7,150.00	7,065.27	8,693.73	7,685.00	29.26	32.67	140.19	-498.22	987.05	638.61	622.79	15.81	40.385	
7,200.00	7,111.28	8,675.21	7,685.00	29.36	32.57	145.07	-479.70	987.05	592.47	576.60	15.87	37.338	
7,250.00	7,155.89	8,653.50	7,685.00	29.45	32.45	148.43	-457.99	987.05	547.77	531.83	15.93	34.382	
7,300.00	7,198.89	8,628.69	7,685.00	29.53	32.33	150.79	-433.18	987.05	504.73	488.72	16.02	31.514	
7,350.00	7,240.07	8,600.92	7,685.00	29.60	32.20	152.44	-405.41	987.05	463.59	447.45	16.13	28.735	
7,400.00	7,279.23	8,570.32	7,685.00	29.65	32.06	153.55	-374.81	987.05	424.53	408.22	16.31	26.028	
7,450.00	7,316.18	8,537.04	7,685.00	29.69	31.93	154.23	-341.53	987.05	387.76	371.21	16.56	23.422	
7,500.00	7,350.73	8,501.23	7,685.00	29.72	31.80	154.57	-305.72	987.05	353.47	336.59	16.89	20.934	
7,550.00	7,382.73	8,463.08	7,685.00	29.74	31.69	154.61	-267.57	987.05	321.84	304.50	17.34	18.565	
7,600.00	7,412.01	8,422.77	7,685.00	29.74	31.60	154.39	-227.26	987.05	293.01	275.10	17.90	16.365	
7,650.00	7,438.44	8,380.49	7,685.00	29.74	31.52	153.95	-184.98	987.05	267.12	248.52	18.61	14.356	
7,700.00	7,461.87	8,336.46	7,685.00	29.73	31.47	153.33	-140.95	987.05	244.31	224.87	19.44	12.568	
7,750.00	7,482.21	8,290.88	7,685.00	29.71	31.44	152.57	-95.37	987.05	224.64	204.28	20.36	11.032	
7,800.00	7,499.35	8,243.98	7,685.00	29.69	31.43	151.75	-48.47	987.05	208.20	186.85	21.35	9.751	
7,850.00	7,513.20	8,187.52	7,684.25	29.65	31.44	150.63	7.98	986.93	194.47	172.01	22.46	8.659	
7,900.00	7,523.70	8,124.22	7,678.62	29.62	31.48	148.98	71.00	986.01	180.44	155.89	24.55	7.351	
7,950.00	7,530.80	8,063.01	7,667.98	29.58	31.52	146.95	131.24	984.26	165.78	138.30	27.48	6.033	
8,000.00	7,534.46	8,003.82	7,652.90	29.53	31.57	144.42	188.40	981.80	150.70	119.76	30.95	4.870	
8,027.99	7,535.00	7,971.53	7,642.73	29.51	31.60	142.74	218.99	980.13	142.16	109.12	33.04	4.303	
8,100.00	7,535.00	7,892.83	7,612.32	29.45	31.66	135.19	291.37	975.15	117.47	78.34	39.13	3.002	
8,200.00	7,535.00	7,796.30	7,564.62	29.49	31.71	113.28	374.84	967.34	79.76	29.23	50.53	1.578	
8,281.69	7,535.00	7,728.46	7,524.67	29.93	31.73	80.57	429.25	960.80	63.05	3.94	59.11	1.067 Level 2, CC, ES, SF	
8,300.00	7,535.00	7,714.53	7,515.85	30.05	31.73	72.50	439.93	959.36	64.14	5.22	58.92	1.089 Level 2	
8,400.00	7,535.00	7,646.07	7,469.60	30.69	31.73	39.06	489.81	951.79	102.13	50.59	51.54	1.982	
8,500.00	7,535.00	7,588.88	7,427.52	31.41	31.71	23.22	527.88	944.90	167.36	117.46	49.89	3.354	
8,600.00	7,535.00	7,540.98	7,390.05	32.17	31.68	15.39	557.08	938.76	242.71	191.95	50.75	4.782	

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 4R-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 4R-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 #2	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							
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	7,535.00	7,500.00	7,356.52	33.00	31.64	10.90	579.99	933.27	323.51	271.61	51.91	6.233	
8,800.00	7,535.00	7,466.31	7,328.04	33.87	31.60	8.16	597.35	928.61	407.94	354.86	53.07	7.686	
8,900.00	7,535.00	7,436.96	7,302.58	34.79	31.56	6.26	611.35	924.44	494.99	440.97	54.02	9.164	
9,000.00	7,535.00	7,411.63	7,280.17	35.75	31.52	4.89	622.57	920.77	584.05	529.25	54.80	10.658	
9,100.00	7,535.00	7,400.00	7,269.75	36.76	31.51	4.33	627.46	919.07	674.83	619.01	55.82	12.090	
9,200.00	7,535.00	7,370.29	7,242.81	37.80	31.45	3.06	639.14	914.66	766.56	710.57	55.98	13.693	
9,300.00	7,535.00	7,350.00	7,224.13	38.88	31.41	2.32	646.47	911.60	859.48	803.13	56.35	15.253	
9,400.00	7,535.00	7,350.00	7,224.13	39.99	31.41	2.32	646.47	911.60	953.38	896.31	57.07	16.704	
9,500.00	7,535.00	7,324.65	7,200.53	41.13	31.36	1.49	654.87	907.73	1,047.66	990.53	57.13	18.337	
9,600.00	7,535.00	7,300.00	7,177.31	42.30	31.31	0.78	662.22	903.93	1,142.88	1,085.69	57.19	19.984	
9,700.00	7,535.00	7,300.00	7,177.31	43.49	31.31	0.78	662.22	903.93	1,238.25	1,180.63	57.63	21.488	
9,800.00	7,535.00	7,300.00	7,177.31	44.71	31.31	0.78	662.22	903.93	1,334.30	1,276.33	57.98	23.015	
9,900.00	7,535.00	7,282.67	7,160.84	45.95	31.26	0.33	666.90	901.24	1,430.58	1,372.54	58.04	24.647	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.76	0.41	-99.88	99.88				
100.00	100.00	100.00	100.00	0.14	0.14	-89.76	0.41	-99.88	99.88	99.61	0.28	361.870	
200.00	200.00	200.00	200.00	0.50	0.50	-89.76	0.41	-99.88	99.88	98.89	0.99	100.592	
300.00	300.00	300.00	300.00	0.85	0.85	-89.76	0.41	-99.88	99.88	98.17	1.71	58.415	
400.00	400.00	400.00	400.00	1.21	1.21	-89.76	0.41	-99.88	99.88	97.46	2.43	41.158	
500.00	500.00	500.00	500.00	1.57	1.57	-89.76	0.41	-99.88	99.88	96.74	3.14	31.772	
600.00	600.00	600.00	600.00	1.93	1.93	-89.76	0.41	-99.88	99.88	96.02	3.86	25.872	
700.00	700.00	703.18	703.16	2.29	2.30	-89.28	1.23	-98.21	98.27	93.68	4.59	21.391	
800.00	799.98	806.14	805.97	2.63	2.66	148.68	3.66	-93.22	94.97	89.65	5.32	17.855	
900.00	899.84	908.70	908.11	2.97	3.03	153.23	7.70	-84.95	91.84	85.80	6.03	15.219	
1,000.00	999.45	1,010.67	1,009.27	3.32	3.41	160.29	13.30	-73.47	89.78	83.03	6.75	13.300	
1,040.29	1,039.49	1,051.54	1,049.68	3.47	3.56	163.82	15.98	-67.97	89.55	82.51	7.04	12.717	CC, ES
1,100.00	1,098.70	1,111.87	1,109.15	3.68	3.80	169.65	20.41	-58.89	90.15	82.68	7.47	12.067	
1,166.13	1,164.08	1,178.28	1,174.36	3.93	4.06	176.71	25.91	-47.60	92.50	84.55	7.96	11.627	
1,200.00	1,197.50	1,212.13	1,207.48	4.06	4.20	-179.54	28.97	-41.33	94.32	86.11	8.21	11.489	
1,300.00	1,296.18	1,311.03	1,303.80	4.44	4.62	-168.42	38.82	-21.15	101.16	92.18	8.98	11.264	
1,400.00	1,394.86	1,408.85	1,398.89	4.84	5.06	-158.69	48.87	-0.54	111.19	101.41	9.79	11.363	
1,500.00	1,493.54	1,505.52	1,492.87	5.24	5.50	-150.82	58.90	19.75	124.05	113.45	10.60	11.698	
1,600.00	1,592.22	1,602.47	1,587.21	5.65	5.94	-144.65	69.95	39.22	140.10	128.67	11.43	12.255	
1,700.00	1,690.89	1,700.14	1,682.24	6.06	6.40	-139.74	81.12	58.79	157.49	145.22	12.27	12.838	
1,800.00	1,789.57	1,797.80	1,777.26	6.48	6.85	-135.82	92.28	78.37	175.79	162.69	13.10	13.414	
1,900.00	1,888.25	1,895.46	1,872.29	6.89	7.32	-132.63	103.45	97.94	194.75	180.80	13.94	13.967	
2,000.00	1,986.93	1,993.12	1,967.31	7.31	7.78	-130.02	114.61	117.52	214.18	199.40	14.78	14.488	
2,100.00	2,085.61	2,090.78	2,062.34	7.74	8.25	-127.84	125.78	137.10	233.98	218.35	15.62	14.975	
2,200.00	2,184.29	2,188.45	2,157.37	8.16	8.72	-126.00	136.94	156.67	254.05	237.58	16.47	15.427	
2,300.00	2,282.97	2,286.11	2,252.39	8.58	9.20	-124.43	148.11	176.25	274.34	257.03	17.31	15.848	
2,400.00	2,381.65	2,383.77	2,347.42	9.01	9.67	-123.07	159.27	195.83	294.80	276.64	18.16	16.237	
2,500.00	2,480.33	2,481.43	2,442.45	9.44	10.15	-121.89	170.44	215.40	315.40	296.40	19.00	16.599	
2,600.00	2,579.01	2,579.09	2,537.47	9.86	10.63	-120.86	181.60	234.98	336.11	316.26	19.85	16.934	
2,700.00	2,677.69	2,676.76	2,632.50	10.29	11.10	-119.95	192.77	254.55	356.91	336.22	20.70	17.245	
2,800.00	2,776.37	2,774.42	2,727.52	10.72	11.58	-119.13	203.93	274.13	377.79	356.25	21.54	17.535	
2,900.00	2,875.04	2,872.08	2,822.55	11.15	12.06	-118.40	215.10	293.71	398.74	376.35	22.39	17.806	
3,000.00	2,973.72	2,969.74	2,917.58	11.58	12.54	-117.75	226.26	313.28	419.74	396.50	23.24	18.058	
3,100.00	3,072.40	3,067.40	3,012.60	12.01	13.02	-117.15	237.43	332.86	440.79	416.70	24.09	18.294	
3,200.00	3,171.08	3,165.07	3,107.63	12.44	13.51	-116.61	248.60	352.43	461.89	436.94	24.95	18.515	
3,300.00	3,269.76	3,262.73	3,202.66	12.88	13.99	-116.12	259.76	372.01	483.01	457.22	25.80	18.723	
3,400.00	3,368.44	3,360.39	3,297.68	13.31	14.47	-115.67	270.93	391.59	504.17	477.52	26.65	18.918	
3,500.00	3,467.12	3,458.05	3,392.71	13.74	14.96	-115.26	282.09	411.16	525.36	497.85	27.50	19.102	
3,600.00	3,565.80	3,555.72	3,487.73	14.17	15.44	-114.87	293.26	430.74	546.57	518.21	28.36	19.275	
3,700.00	3,664.48	3,653.38	3,582.76	14.61	15.92	-114.52	304.42	450.32	567.80	538.59	29.21	19.438	
3,800.00	3,763.16	3,751.04	3,677.79	15.04	16.41	-114.19	315.59	469.89	589.05	558.99	30.06	19.593	
3,900.00	3,861.84	3,848.70	3,772.81	15.47	16.89	-113.88	326.75	489.47	610.32	579.40	30.92	19.739	
4,000.00	3,960.52	3,946.36	3,867.84	15.91	17.38	-113.60	337.92	509.04	631.60	599.83	31.77	19.878	
4,100.00	4,059.19	4,044.03	3,962.87	16.34	17.86	-113.33	349.08	528.62	652.90	620.27	32.63	20.010	
4,200.00	4,157.87	4,141.69	4,057.89	16.77	18.35	-113.08	360.25	548.20	674.21	640.73	33.48	20.135	
4,300.00	4,256.55	4,239.35	4,152.92	17.21	18.83	-112.85	371.41	567.77	695.53	661.19	34.34	20.255	
4,400.00	4,355.23	4,337.01	4,247.94	17.64	19.32	-112.63	382.58	587.35	716.86	681.67	35.20	20.368	
4,500.00	4,453.91	4,434.67	4,342.97	18.08	19.80	-112.42	393.74	606.92	738.21	702.15	36.05	20.476	
4,600.00	4,552.59	4,532.34	4,438.00	18.51	20.29	-112.22	404.91	626.50	759.56	722.65	36.91	20.580	
4,700.00	4,651.27	4,630.00	4,533.02	18.94	20.78	-112.04	416.07	646.08	780.92	743.15	37.76	20.678	
4,800.00	4,749.95	4,727.66	4,628.05	19.38	21.26	-111.86	427.24	665.65	802.28	763.66	38.62	20.773	
4,900.00	4,848.63	4,825.32	4,723.08	19.81	21.75	-111.70	438.40	685.23	823.65	784.18	39.48	20.863	

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 4R-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 4R-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 #2	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	4,947.31	4,922.98	4,818.10	20.25	22.24	-111.54	449.57	704.81	845.03	804.70	40.34	20.950	
5,100.00	5,045.99	5,020.65	4,913.13	20.68	22.72	-111.39	460.73	724.38	866.42	825.23	41.19	21.033	
5,200.00	5,144.67	5,118.31	5,008.15	21.12	23.21	-111.25	471.90	743.96	887.81	845.76	42.05	21.113	
5,300.00	5,243.34	5,215.97	5,103.18	21.55	23.70	-111.11	483.06	763.53	909.20	866.30	42.91	21.190	
5,400.00	5,342.02	5,313.63	5,198.21	21.99	24.18	-110.98	494.23	783.11	930.60	886.84	43.77	21.263	
5,500.00	5,440.70	5,411.29	5,293.23	22.42	24.67	-110.86	505.40	802.69	952.01	907.39	44.62	21.334	
5,600.00	5,539.38	5,508.96	5,388.26	22.86	25.16	-110.74	516.56	822.26	973.42	927.94	45.48	21.402	
5,700.00	5,638.06	5,606.62	5,483.29	23.29	25.65	-110.62	527.73	841.84	994.83	948.49	46.34	21.468	
5,800.00	5,736.74	5,704.28	5,578.31	23.73	26.13	-110.51	538.89	861.41	1,016.25	969.05	47.20	21.531	
5,900.00	5,835.42	5,801.94	5,673.34	24.17	26.62	-110.41	550.06	880.99	1,037.67	989.61	48.06	21.592	
6,000.00	5,934.10	5,899.60	5,768.36	24.60	27.11	-110.31	561.22	900.57	1,059.09	1,010.17	48.92	21.651	
6,100.00	6,032.78	5,997.27	5,863.39	25.04	27.60	-110.21	572.39	920.14	1,080.51	1,030.74	49.77	21.708	
6,200.00	6,131.46	6,094.93	5,958.42	25.47	28.08	-110.12	583.55	939.72	1,101.94	1,051.31	50.63	21.763	
6,300.00	6,230.14	6,192.59	6,053.44	25.91	28.57	-110.03	594.72	959.29	1,123.37	1,071.88	51.49	21.817	
6,400.00	6,328.82	6,290.25	6,148.47	26.34	29.06	-109.95	605.88	978.87	1,144.81	1,092.45	52.35	21.868	
6,500.00	6,427.49	6,384.46	6,043.00	26.78	29.55	-109.86	617.04	998.96	1,166.84	1,115.76	53.21	21.919	
6,600.00	6,526.17	6,482.84	6,145.00	27.21	30.04	-109.77	628.21	1,019.04	1,188.81	1,138.81	54.07	21.970	
6,700.00	6,624.85	6,581.23	6,245.00	27.65	30.53	-109.68	639.38	1,039.12	1,210.78	1,160.78	54.93	22.021	
6,800.00	6,723.53	6,679.61	6,345.00	28.09	31.02	-109.59	650.55	1,059.19	1,232.75	1,182.75	55.79	22.072	
6,837.91	6,760.94	6,716.79	6,382.00	28.25	31.18	-109.56	655.88	1,064.52	1,238.08	1,188.08	55.95	22.087	
6,850.00	6,772.88	6,728.70	6,395.00	28.30	31.23	-109.55	658.59	1,067.23	1,240.53	1,190.53	56.00	22.092	
6,900.00	6,822.38	6,778.32	6,445.00	28.51	31.44	-109.51	664.46	1,073.10	1,246.40	1,196.40	56.16	22.103	
6,950.00	6,871.89	6,827.44	6,495.00	28.69	31.65	-109.47	670.33	1,078.97	1,252.27	1,202.27	56.32	22.114	
7,000.00	6,921.17	6,876.09	6,545.00	28.86	31.86	-109.43	676.20	1,084.84	1,258.14	1,208.14	56.48	22.125	
7,050.00	6,969.99	6,924.29	6,595.00	29.01	32.07	-109.39	682.07	1,090.71	1,264.01	1,214.01	56.64	22.136	
7,100.00	7,018.10	6,972.09	6,645.00	29.14	32.28	-109.35	687.94	1,096.58	1,269.88	1,219.88	56.80	22.147	
7,150.00	7,065.27	6,999.53	6,695.00	29.26	32.49	-109.31	693.81	1,102.45	1,275.75	1,225.75	56.96	22.158	
7,200.00	7,111.28	7,045.21	6,745.00	29.36	32.70	-109.27	699.68	1,108.32	1,281.62	1,231.62	57.12	22.169	
7,250.00	7,155.89	7,089.41	6,795.00	29.45	32.91	-109.23	705.55	1,114.19	1,287.49	1,237.49	57.28	22.180	
7,300.00	7,198.89	7,132.63	6,845.00	29.53	33.12	-109.19	711.42	1,120.06	1,293.36	1,243.36	57.44	22.191	
7,350.00	7,240.07	7,173.60	6,895.00	29.60	33.33	-109.15	717.29	1,125.93	1,299.23	1,249.23	57.60	22.202	
7,400.00	7,279.23	7,212.76	6,945.00	29.65	33.54	-109.11	723.16	1,131.80	1,305.10	1,255.10	57.76	22.213	
7,450.00	7,316.18	7,249.25	6,995.00	29.69	33.75	-109.07	729.03	1,137.67	1,310.97	1,260.97	57.92	22.224	
7,500.00	7,350.73	7,283.25	7,045.00	29.72	33.96	-109.03	734.90	1,143.54	1,316.84	1,266.84	58.08	22.235	
7,550.00	7,382.73	7,315.25	7,095.00	29.74	34.17	-109.00	740.77	1,149.41	1,322.71	1,272.71	58.24	22.246	
7,600.00	7,412.01	7,344.45	7,145.00	29.74	34.38	-108.96	746.64	1,155.28	1,328.58	1,278.58	58.40	22.257	
7,650.00	7,438.44	7,370.04	7,195.00	29.74	34.59	-108.92	752.51	1,161.15	1,334.45	1,284.45	58.56	22.268	
7,700.00	7,461.87	7,393.47	7,245.00	29.73	34.80	-108.88	758.38	1,167.02	1,340.32	1,290.32	58.72	22.279	
7,706.06	7,464.51	7,396.11	7,248.00	29.73	34.83	-108.87	759.01	1,167.35	1,340.65	1,290.65	58.75	22.280	
7,750.00	7,482.21	7,414.23	7,265.00	29.71	34.89	-108.85	764.88	1,167.71	1,341.01	1,291.01	58.81	22.281	
7,800.00	7,499.35	7,431.27	7,282.00	29.69	34.91	-108.82	770.75	1,168.08	1,341.38	1,291.38	58.87	22.282	
7,850.00	7,513.20	7,445.06	7,299.00	29.65	34.94	-108.78	776.62	1,168.45	1,341.75	1,291.75	58.93	22.283	
7,900.00	7,523.70	7,455.42	7,309.00	29.62	34.98	-108.74	782.49	1,168.81	1,342.12	1,292.12	58.99	22.284	
7,950.00	7,530.80	7,462.62	7,316.00	29.58	35.02	-108.70	788.36	1,169.18	1,342.49	1,292.49	59.05	22.285	
8,000.00	7,534.46	7,466.61	7,320.00	29.53	35.06	-108.66	794.23	1,169.55	1,342.86	1,292.86	59.11	22.286	
8,027.99	7,535.00	7,467.18	7,321.00	29.51	35.08	-108.65	795.00	1,169.58	1,342.89	1,292.89	59.12	22.286	
8,100.00	7,535.00	7,467.18	7,321.00	29.45	35.14	-108.61	800.87	1,169.95	1,343.26	1,293.26	59.18	22.287	
8,200.00	7,535.00	7,467.18	7,321.00	29.49	35.20	-108.57	806.74	1,170.32	1,343.63	1,293.63	59.24	22.288	
8,300.00	7,535.00	7,467.18	7,321.00	30.05	35.24	-108.51	812.61	1,170.69	1,343.99	1,293.99	59.30	22.289	
8,400.00	7,535.00	7,467.18	7,321.00	30.69	35.27	-108.45	818.48	1,171.06	1,344.36	1,294.36	59.36	22.290	
8,500.00	7,535.00	7,467.18	7,321.00	31.41	35.27	-108.40	824.35	1,171.43	1,344.73	1,294.73	59.42	22.291	
8,600.00	7,535.00	7,467.18	7,321.00	32.17	35.26	-108.34	830.22	1,171.80	1,345.10	1,295.10	59.48	22.292	

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 4R-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 4R-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 #2	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							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	7,535.00	7,400.00	7,196.01	33.00	33.24	39.98	506.11	1,182.99	558.57	503.02	55.55	10.055					
8,800.00	7,535.00	7,366.16	7,169.78	33.87	33.22	37.48	527.09	1,178.85	623.10	566.80	56.31	11.066					
8,900.00	7,535.00	7,333.07	7,143.24	34.79	33.19	35.14	546.37	1,174.56	693.02	636.09	56.93	12.173					
9,000.00	7,535.00	7,300.00	7,115.88	35.75	33.16	32.90	564.38	1,170.03	767.35	709.94	57.41	13.366					
9,100.00	7,535.00	7,278.11	7,097.34	36.76	33.13	31.48	575.59	1,166.91	845.22	787.08	58.14	14.538					
9,200.00	7,535.00	7,250.00	7,073.06	37.80	33.09	29.73	589.14	1,162.77	926.08	867.55	58.52	15.824					
9,300.00	7,535.00	7,234.70	7,059.64	38.88	33.06	28.82	596.11	1,160.45	1,009.30	950.15	59.15	17.063					
9,400.00	7,535.00	7,216.33	7,043.33	39.99	33.03	27.75	604.08	1,157.61	1,094.57	1,035.00	59.57	18.374					
9,500.00	7,535.00	7,200.00	7,028.68	41.13	33.00	26.83	610.81	1,155.04	1,181.53	1,121.57	59.95	19.708					
9,600.00	7,535.00	7,200.00	7,028.68	42.30	33.00	26.83	610.81	1,155.04	1,270.15	1,209.59	60.56	20.974					
9,700.00	7,535.00	7,171.20	7,002.50	43.49	32.94	25.27	621.86	1,150.38	1,359.49	1,298.93	60.56	22.448					
9,800.00	7,535.00	7,150.00	6,982.96	44.71	32.90	24.18	629.30	1,146.87	1,450.20	1,389.52	60.68	23.900					

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.75	0.40	-90.09	90.09				
100.00	100.00	100.00	100.00	0.14	0.14	-89.75	0.40	-90.09	90.09	89.82	0.28	326.393	
200.00	200.00	200.00	200.00	0.50	0.50	-89.75	0.40	-90.09	90.09	89.10	0.99	90.730	
300.00	300.00	300.00	300.00	0.85	0.85	-89.75	0.40	-90.09	90.09	88.38	1.71	52.688	
400.00	400.00	400.00	400.00	1.21	1.21	-89.75	0.40	-90.09	90.09	87.67	2.43	37.123	
500.00	500.00	500.00	500.00	1.57	1.57	-89.75	0.40	-90.09	90.09	86.95	3.14	28.657	
600.00	600.00	602.86	602.84	1.93	1.94	-89.22	1.20	-88.43	88.48	84.60	3.88	22.809	
700.00	700.00	705.46	705.28	2.29	2.30	-87.52	3.61	-83.46	83.71	79.08	4.62	18.102	
800.00	799.98	807.61	807.02	2.63	2.67	152.27	7.59	-75.24	77.49	72.13	5.35	14.473	
900.00	899.84	909.17	907.78	2.97	3.05	159.69	13.12	-63.84	72.11	66.04	6.06	11.890	
1,000.00	999.45	1,009.96	1,007.27	3.32	3.44	170.80	20.14	-49.35	69.18	62.40	6.78	10.209	
1,020.31	1,019.64	1,030.32	1,027.30	3.39	3.52	173.45	21.74	-46.04	69.07	62.15	6.92	9.977 CC, ES	
1,100.00	1,098.70	1,109.82	1,105.22	3.68	3.84	-175.35	28.60	-31.90	70.87	63.37	7.51	9.441	
1,166.13	1,164.08	1,175.26	1,169.02	3.93	4.13	-165.87	34.94	-18.81	75.46	67.44	8.02	9.411 SF	
1,200.00	1,197.50	1,208.58	1,201.38	4.06	4.27	-161.20	38.42	-11.63	78.79	70.50	8.29	9.508	
1,300.00	1,296.18	1,306.22	1,295.80	4.44	4.72	-148.79	49.26	10.74	91.22	82.12	9.11	10.015	
1,400.00	1,394.86	1,403.67	1,389.99	4.84	5.19	-139.50	60.17	33.25	106.94	96.99	9.95	10.750	
1,500.00	1,493.54	1,501.12	1,484.17	5.24	5.66	-132.67	71.08	55.76	124.73	113.94	10.79	11.559	
1,600.00	1,592.22	1,598.57	1,578.35	5.65	6.14	-127.57	81.99	78.28	143.83	132.20	11.63	12.363	
1,700.00	1,690.89	1,696.02	1,672.54	6.06	6.63	-123.67	92.90	100.79	163.78	151.30	12.48	13.126	
1,800.00	1,789.57	1,793.47	1,766.72	6.48	7.12	-120.62	103.81	123.30	184.30	170.98	13.32	13.834	
1,900.00	1,888.25	1,890.92	1,860.90	6.89	7.62	-118.19	114.72	145.82	205.23	191.06	14.17	14.484	
2,000.00	1,986.93	1,988.37	1,955.09	7.31	8.12	-116.21	125.63	168.33	226.44	211.43	15.02	15.078	
2,100.00	2,085.61	2,085.82	2,049.27	7.74	8.63	-114.56	136.54	190.84	247.88	232.01	15.87	15.621	
2,200.00	2,184.29	2,183.27	2,143.45	8.16	9.13	-113.18	147.45	213.36	269.47	252.75	16.72	16.116	
2,300.00	2,282.97	2,280.72	2,237.64	8.58	9.64	-112.00	158.36	235.87	291.20	273.62	17.58	16.569	
2,400.00	2,381.65	2,378.17	2,331.82	9.01	10.15	-110.99	169.27	258.38	313.02	294.59	18.43	16.983	
2,500.00	2,480.33	2,475.62	2,426.00	9.44	10.66	-110.10	180.18	280.90	334.93	315.64	19.29	17.364	
2,600.00	2,579.01	2,573.07	2,520.19	9.86	11.17	-109.33	191.09	303.41	356.90	336.75	20.15	17.715	
2,700.00	2,677.69	2,670.52	2,614.37	10.29	11.68	-108.65	202.00	325.92	378.93	357.92	21.01	18.038	
2,800.00	2,776.37	2,767.96	2,708.55	10.72	12.20	-108.04	212.91	348.44	401.00	379.13	21.87	18.337	
2,900.00	2,875.04	2,865.41	2,802.74	11.15	12.71	-107.49	223.83	370.95	423.12	400.38	22.73	18.614	
3,000.00	2,973.72	2,962.86	2,896.92	11.58	13.23	-107.00	234.74	393.46	445.26	421.67	23.59	18.872	
3,100.00	3,072.40	3,060.31	2,991.10	12.01	13.74	-106.55	245.65	415.98	467.43	442.98	24.46	19.112	
3,200.00	3,171.08	3,157.76	3,085.29	12.44	14.26	-106.15	256.56	438.49	489.63	464.31	25.32	19.336	
3,300.00	3,269.76	3,255.21	3,179.47	12.88	14.78	-105.78	267.47	461.00	511.85	485.66	26.19	19.545	
3,400.00	3,368.44	3,352.66	3,273.65	13.31	15.29	-105.44	278.38	483.52	534.09	507.04	27.05	19.742	
3,500.00	3,467.12	3,450.11	3,367.84	13.74	15.81	-105.13	289.29	506.03	556.34	528.42	27.92	19.926	
3,600.00	3,565.80	3,547.56	3,462.02	14.17	16.33	-104.84	300.20	528.54	578.61	549.82	28.79	20.099	
3,700.00	3,664.48	3,645.01	3,556.20	14.61	16.85	-104.58	311.11	551.06	600.89	571.24	29.66	20.262	
3,800.00	3,763.16	3,742.46	3,650.39	15.04	17.37	-104.33	322.02	573.57	623.19	592.66	30.52	20.416	
3,900.00	3,861.84	3,839.91	3,744.57	15.47	17.89	-104.10	332.93	596.08	645.49	614.10	31.39	20.562	
4,000.00	3,960.52	3,937.36	3,838.75	15.91	18.41	-103.88	343.84	618.60	667.80	635.54	32.26	20.699	
4,100.00	4,059.19	4,034.81	3,932.94	16.34	18.93	-103.68	354.75	641.11	690.12	656.99	33.13	20.830	
4,200.00	4,157.87	4,132.26	4,027.12	16.77	19.44	-103.49	365.66	663.62	712.45	678.45	34.00	20.954	
4,300.00	4,256.55	4,229.71	4,121.30	17.21	19.96	-103.32	376.57	686.14	734.79	699.92	34.87	21.071	
4,400.00	4,355.23	4,327.15	4,215.49	17.64	20.48	-103.15	387.48	708.65	757.13	721.39	35.74	21.183	
4,500.00	4,453.91	4,424.60	4,309.67	18.08	21.01	-102.99	398.39	731.16	779.48	742.86	36.61	21.290	
4,600.00	4,552.59	4,522.05	4,403.85	18.51	21.53	-102.84	409.30	753.67	801.83	764.35	37.48	21.392	
4,700.00	4,651.27	4,619.50	4,498.04	18.94	22.05	-102.70	420.21	776.19	824.19	785.83	38.35	21.489	
4,800.00	4,749.95	4,716.95	4,592.22	19.38	22.57	-102.57	431.12	798.70	846.55	807.32	39.23	21.581	
4,900.00	4,848.63	4,814.40	4,686.40	19.81	23.09	-102.45	442.03	821.21	868.91	828.82	40.10	21.670	

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 4R-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 4R-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 #2	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
5,000.00	4,947.31	4,911.85	4,780.59	20.25	23.61	-102.33	452.94	843.73	891.28	850.31	40.97	21.755	
5,100.00	5,045.99	5,009.30	4,874.77	20.68	24.13	-102.21	463.85	866.24	913.66	871.82	41.84	21.836	
5,200.00	5,144.67	5,106.75	4,968.95	21.12	24.65	-102.10	474.76	888.75	936.03	893.32	42.71	21.914	
5,300.00	5,243.34	5,204.20	5,063.14	21.55	25.17	-102.00	485.67	911.27	958.41	914.83	43.59	21.989	
5,400.00	5,342.02	5,301.65	5,157.32	21.99	25.69	-101.90	496.58	933.78	980.80	936.34	44.46	22.061	
5,500.00	5,440.70	5,399.10	5,251.50	22.42	26.21	-101.81	507.49	956.29	1,003.18	957.85	45.33	22.130	
5,600.00	5,539.38	5,496.55	5,345.69	22.86	26.74	-101.72	518.40	978.81	1,025.57	979.36	46.21	22.196	
5,700.00	5,638.06	5,594.00	5,439.87	23.29	27.26	-101.63	529.31	1,001.32	1,047.96	1,000.88	47.08	22.260	
5,800.00	5,736.74	5,691.45	5,534.05	23.73	27.78	-101.55	540.22	1,023.83	1,070.35	1,022.40	47.95	22.322	
5,900.00	5,835.42	5,788.90	5,628.24	24.17	28.30	-101.47	551.13	1,046.35	1,092.75	1,043.92	48.82	22.381	
6,000.00	5,934.10	5,886.34	5,722.42	24.60	28.82	-101.39	562.04	1,068.86	1,115.14	1,065.44	49.70	22.438	
6,100.00	6,032.78	5,983.79	5,816.60	25.04	29.34	-101.32	572.95	1,091.37	1,137.54	1,086.97	50.57	22.493	
6,200.00	6,131.46	6,081.24	5,910.79	25.47	29.87	-101.25	583.87	1,113.89	1,159.94	1,108.49	51.45	22.547	
6,300.00	6,230.14	6,178.69	6,004.97	25.91	30.39	-101.18	594.78	1,136.40	1,182.34	1,130.02	52.32	22.598	
6,400.00	6,328.82	6,276.14	6,099.15	26.34	30.91	-101.12	605.69	1,158.91	1,204.74	1,151.55	53.19	22.648	
6,500.00	6,427.49	6,373.59	6,193.34	26.78	31.43	-101.05	616.60	1,181.43	1,227.15	1,173.08	54.07	22.696	
6,600.00	6,526.17	6,471.04	6,287.52	27.21	31.95	-100.99	627.51	1,203.94	1,249.55	1,194.61	54.94	22.743	
6,700.00	6,624.85	6,569.78	6,386.00	27.65	32.47	-100.92	638.42	1,226.86	1,275.46	1,219.42	55.81	22.790	
6,800.00	6,723.53	6,668.43	6,484.00	28.09	32.99	-100.85	649.33	1,249.77	1,298.37	1,241.33	56.68	22.837	
6,837.91	6,760.94	6,708.12	6,560.00	28.25	33.10	-100.87	654.33	1,254.77	1,303.37	1,246.33	56.79	22.847	
6,850.00	6,772.88	6,709.10	6,560.00	28.30	33.11	-100.87	654.33	1,254.77	1,303.37	1,246.33	56.79	22.847	
6,900.00	6,822.38	6,710.99	6,560.00	28.51	33.11	-1.46	658.20	1,258.64	1,307.24	1,250.20	56.90	22.857	
6,950.00	6,871.89	6,709.39	6,560.00	28.69	33.11	31.31	654.60	1,254.11	1,302.71	1,245.67	56.81	22.847	
7,000.00	6,921.17	6,704.31	6,560.00	28.86	33.09	54.85	651.52	1,249.17	1,297.98	1,241.99	56.72	22.837	
7,050.00	6,969.99	6,695.77	6,560.00	29.01	33.07	70.04	648.98	1,244.23	1,293.04	1,237.05	56.63	22.827	
7,100.00	7,018.10	6,683.82	6,560.00	29.14	33.03	80.10	646.03	1,239.28	1,288.19	1,232.20	56.54	22.817	
7,150.00	7,065.27	6,668.51	6,560.00	29.26	32.99	87.02	642.08	1,234.33	1,283.24	1,227.25	56.45	22.807	
7,200.00	7,111.28	6,649.92	6,560.00	29.36	32.94	91.89	637.13	1,229.38	1,278.29	1,222.30	56.36	22.797	
7,250.00	7,155.89	6,628.13	6,560.00	29.45	32.88	95.30	632.18	1,224.43	1,273.34	1,217.35	56.27	22.787	
7,300.00	7,198.89	6,603.27	6,560.00	29.53	32.82	97.62	627.23	1,219.48	1,268.39	1,212.40	56.18	22.777	
7,350.00	7,240.07	6,575.43	6,560.00	29.60	32.76	99.10	622.28	1,214.53	1,263.44	1,207.45	56.09	22.767	
7,400.00	7,279.23	6,544.77	6,560.00	29.65	32.70	99.91	617.33	1,209.58	1,258.49	1,202.50	56.00	22.757	
7,450.00	7,316.18	6,511.43	6,560.00	29.69	32.65	100.18	612.38	1,204.63	1,253.54	1,197.55	55.91	22.747	
7,500.00	7,350.73	6,475.58	6,560.00	29.72	32.59	100.02	607.43	1,199.68	1,248.59	1,192.60	55.82	22.737	
7,550.00	7,382.73	6,437.38	6,560.00	29.74	32.55	99.52	602.48	1,194.73	1,243.64	1,187.65	55.73	22.727	
7,600.00	7,412.01	6,397.02	6,560.00	29.74	32.51	98.77	597.53	1,189.78	1,238.69	1,182.70	55.64	22.717	
7,650.00	7,438.44	6,354.71	6,560.00	29.74	32.47	97.85	592.58	1,184.83	1,233.74	1,177.75	55.55	22.707	
7,700.00	7,461.87	6,310.64	6,560.00	29.73	32.45	96.83	587.63	1,179.88	1,228.79	1,172.80	55.46	22.697	
7,750.00	7,482.21	6,265.03	6,560.00	29.71	32.44	95.80	582.68	1,174.93	1,223.84	1,167.85	55.37	22.687	
7,800.00	7,499.35	6,218.11	6,560.00	29.69	32.44	94.82	577.73	1,169.98	1,218.89	1,162.90	55.28	22.677	
7,850.00	7,513.20	6,162.70	6,559.44	29.65	32.45	93.73	572.78	1,165.03	1,213.94	1,157.95	55.19	22.667	
7,900.00	7,523.70	6,099.10	6,554.23	29.62	32.48	92.34	567.83	1,159.98	1,208.99	1,152.96	55.10	22.657	
7,950.00	7,530.80	6,037.55	6,544.00	29.58	32.50	90.88	562.88	1,155.03	1,204.04	1,148.01	55.01	22.647	
8,000.00	7,534.46	5,978.00	6,529.31	29.53	32.53	89.36	557.93	1,149.98	1,199.09	1,143.06	54.92	22.637	
8,027.99	7,535.00	5,945.50	6,519.35	29.51	32.54	88.49	552.98	1,145.03	1,194.14	1,138.11	54.83	22.627	
8,100.00	7,535.00	5,866.24	6,489.44	29.45	32.57	85.57	548.03	1,140.08	1,189.19	1,133.16	54.74	22.617	
8,200.00	7,535.00	5,768.94	6,442.29	29.49	32.59	80.87	543.08	1,135.13	1,184.24	1,128.21	54.65	22.607	
8,273.55	7,535.00	5,706.91	6,406.59	29.88	32.58	77.28	538.13	1,130.18	1,179.29	1,123.26	54.56	22.597	
8,300.00	7,535.00	5,686.48	6,393.93	30.05	32.57	76.01	533.18	1,125.23	1,174.34	1,118.31	54.47	22.587	
8,400.00	7,535.00	5,617.44	6,348.01	30.69	32.54	71.40	528.23	1,120.28	1,169.39	1,113.36	54.38	22.577	
8,500.00	7,535.00	5,559.79	6,306.20	31.41	32.49	67.27	523.28	1,115.33	1,164.44	1,108.41	54.29	22.567	
8,600.00	7,535.00	5,511.52	6,268.98	32.17	32.43	63.67	518.33	1,110.38	1,159.49	1,103.46	54.20	22.557	

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 4R-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 4R-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 #2	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	7,535.00	7,470.86	7,236.18	33.00	36.37	60.58	577.22	1,428.89	665.42	602.61	62.81	10.594	
8,800.00	7,535.00	7,436.35	7,207.39	33.87	36.32	57.95	595.06	1,422.25	710.51	646.94	63.57	11.177	
8,900.00	7,535.00	7,400.00	7,176.22	34.79	36.25	55.19	612.28	1,415.03	764.04	699.95	64.09	11.922	
9,000.00	7,535.00	7,381.34	7,159.89	35.75	36.21	53.79	620.49	1,411.24	824.63	759.70	64.93	12.700	
9,100.00	7,535.00	7,350.00	7,132.03	36.76	36.14	51.45	633.28	1,404.77	891.33	826.08	65.24	13.661	
9,200.00	7,535.00	7,350.00	7,132.03	37.80	36.14	51.45	633.28	1,404.77	962.89	896.69	66.20	14.546	
9,300.00	7,535.00	7,322.69	7,107.33	38.88	36.06	49.46	643.40	1,399.01	1,038.36	972.03	66.34	15.653	
9,400.00	7,535.00	7,300.00	7,086.53	39.99	36.01	47.83	651.07	1,394.15	1,117.34	1,050.84	66.50	16.802	
9,500.00	7,535.00	7,300.00	7,086.53	41.13	36.01	47.83	651.07	1,394.15	1,198.99	1,131.96	67.03	17.888	
9,600.00	7,535.00	7,281.80	7,069.69	42.30	35.95	46.55	656.73	1,390.21	1,282.91	1,215.79	67.13	19.112	
9,700.00	7,535.00	7,270.84	7,059.48	43.49	35.92	45.79	659.92	1,387.82	1,368.77	1,301.47	67.30	20.339	
9,800.00	7,535.00	7,250.00	7,039.95	44.71	35.86	44.36	665.55	1,383.24	1,456.35	1,389.08	67.27	21.649	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.73	0.38	-80.02	80.02	79.74	0.28	289.902	
100.00	100.00	100.00	100.00	0.14	0.14	-89.73	0.38	-80.02	80.02	79.03	0.99	80.587	
200.00	200.00	200.00	200.00	0.50	0.50	-89.73	0.38	-80.02	80.02	78.31	1.71	46.798	
300.00	300.00	300.00	300.00	0.85	0.85	-89.73	0.38	-80.02	80.02	77.59	2.43	32.973	
400.00	400.00	400.00	400.00	1.21	1.21	-89.73	0.38	-80.02	80.02	75.20	3.17	24.747	
500.00	500.00	502.61	502.59	1.57	1.58	-89.22	1.07	-78.32	78.37	69.53	3.92	18.732	
600.00	600.00	604.96	604.78	1.93	1.94	-87.56	3.13	-73.22	73.45	60.75	4.68	13.993	
700.00	700.00	706.78	706.20	2.29	2.31	-84.25	6.53	-64.80	65.42	50.91	5.40	10.424	
800.00	799.98	807.96	806.58	2.63	2.69	158.52	11.24	-53.13	56.31	43.14	6.10	8.071	
900.00	899.84	908.41	905.75	2.97	3.08	171.51	17.23	-38.30	49.24	40.46	6.65	7.084 CC, ES	
977.60	977.17	985.77	981.70	3.24	3.40	-173.98	22.73	-24.68	47.11	40.50	6.81	6.945 SF	
1,000.00	999.45	1,008.00	1,003.44	3.32	3.49	-169.33	24.45	-20.42	47.31	45.97	7.59	7.052	
1,100.00	1,098.70	1,106.57	1,099.43	3.68	3.93	-149.06	32.85	0.37	53.56	54.16	8.15	7.647	
1,166.13	1,164.08	1,171.14	1,161.86	3.93	4.23	-138.15	39.01	15.64	62.31	59.44	8.43	8.049	
1,200.00	1,197.50	1,204.00	1,193.49	4.06	4.39	-133.54	42.36	23.91	67.87	77.43	9.28	9.345	
1,300.00	1,296.18	1,300.96	1,286.41	4.44	4.88	-122.71	52.72	49.58	86.71	107.59	10.12	10.634	
1,400.00	1,394.86	1,398.07	1,379.43	4.84	5.39	-115.75	63.17	75.44	107.59	118.54	10.95	11.822	
1,500.00	1,493.54	1,495.19	1,472.45	5.24	5.91	-111.07	73.61	101.30	129.50	140.20	11.79	12.890	
1,600.00	1,592.22	1,592.30	1,565.48	5.65	6.44	-107.76	84.06	127.16	151.99	162.22	12.63	13.841	
1,700.00	1,690.89	1,689.41	1,658.50	6.06	6.97	-105.30	94.50	153.02	174.85	184.46	13.48	14.686	
1,800.00	1,789.57	1,786.53	1,751.52	6.48	7.51	-103.40	104.94	178.88	197.94	206.87	14.33	15.438	
1,900.00	1,888.25	1,883.64	1,844.54	6.89	8.05	-101.91	115.39	204.74	221.20	229.39	15.18	16.110	
2,000.00	1,986.93	1,980.75	1,937.56	7.31	8.60	-100.70	125.83	230.60	244.57	251.99	16.04	16.712	
2,100.00	2,085.61	2,077.86	2,030.59	7.74	9.15	-99.70	136.28	256.46	268.02	274.65	16.90	17.254	
2,200.00	2,184.29	2,174.98	2,123.61	8.16	9.70	-98.86	146.72	282.32	291.55	297.36	17.76	17.743	
2,300.00	2,282.97	2,272.09	2,216.63	8.58	10.25	-98.14	157.16	308.17	315.12	320.10	18.62	18.187	
2,400.00	2,381.65	2,369.20	2,309.65	9.01	10.81	-97.53	167.61	334.03	338.73	342.88	19.49	18.592	
2,500.00	2,480.33	2,466.31	2,402.67	9.44	11.36	-96.99	178.05	359.89	362.37	365.68	20.36	18.961	
2,600.00	2,579.01	2,563.43	2,495.70	9.86	11.92	-96.52	188.50	385.75	386.04	388.50	21.23	19.300	
2,700.00	2,677.69	2,660.54	2,588.72	10.29	12.48	-96.11	198.94	411.61	409.73	411.34	22.10	19.611	
2,800.00	2,776.37	2,757.65	2,681.74	10.72	13.04	-95.74	209.38	437.47	433.44	434.19	22.97	19.899	
2,900.00	2,875.04	2,854.76	2,774.76	11.15	13.59	-95.41	219.83	463.33	457.17	457.06	23.85	20.165	
3,000.00	2,973.72	2,951.88	2,867.78	11.58	14.16	-95.11	230.27	489.19	480.91	479.93	24.72	20.411	
3,100.00	3,072.40	3,048.99	2,960.81	12.01	14.72	-94.84	240.72	515.05	504.66	502.81	25.60	20.641	
3,200.00	3,171.08	3,146.10	3,053.83	12.44	15.28	-94.59	251.16	540.91	528.41	525.70	26.48	20.855	
3,300.00	3,269.76	3,243.22	3,146.85	12.88	15.84	-94.37	261.60	566.77	552.18	548.60	27.36	21.055	
3,400.00	3,368.44	3,340.33	3,239.87	13.31	16.40	-94.16	272.05	592.63	575.96	571.50	28.23	21.242	
3,500.00	3,467.12	3,437.44	3,332.89	13.74	16.96	-93.97	282.49	618.49	599.74	594.41	29.11	21.417	
3,600.00	3,565.80	3,534.55	3,425.92	14.17	17.53	-93.79	292.94	644.35	623.52	617.32	29.99	21.582	
3,700.00	3,664.48	3,631.67	3,518.94	14.61	18.09	-93.63	303.38	670.20	647.32	640.24	30.87	21.738	
3,800.00	3,763.16	3,728.78	3,611.96	15.04	18.66	-93.48	313.82	696.06	671.11	663.16	31.75	21.884	
3,900.00	3,861.84	3,825.89	3,704.98	15.47	19.22	-93.34	324.27	721.92	694.91	686.08	32.64	22.022	
4,000.00	3,960.52	3,923.00	3,798.00	15.91	19.78	-93.21	334.71	747.78	718.72	709.01	33.52	22.153	
4,100.00	4,059.19	4,020.12	3,891.03	16.34	20.35	-93.08	345.16	773.64	742.53	731.94	34.40	22.277	
4,200.00	4,157.87	4,117.23	3,984.05	16.77	20.91	-92.97	355.60	799.50	766.34	754.87	35.28	22.395	
4,300.00	4,256.55	4,214.34	4,077.07	17.21	21.48	-92.86	366.04	825.36	790.15	777.80	36.17	22.507	
4,400.00	4,355.23	4,311.45	4,170.09	17.64	22.04	-92.76	376.49	851.22	813.97	800.74	37.05	22.613	
4,500.00	4,453.91	4,408.57	4,263.11	18.08	22.61	-92.66	386.93	877.08	837.78	823.67	37.93	22.714	
4,600.00	4,552.59	4,505.68	4,356.14	18.51	23.17	-92.57	397.38	902.94	861.61	846.61	38.82	22.811	
4,700.00	4,651.27	4,602.79	4,449.16	18.94	23.74	-92.49	407.82	928.80	885.43	869.55	39.70	22.903	
4,800.00	4,749.95	4,699.90	4,542.18	19.38	24.30	-92.40	418.26	954.66	909.25	892.49	40.58	22.991	
4,900.00	4,848.63	4,797.02	4,635.20	19.81	24.87	-92.33	428.71	980.52	933.08				

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 4R-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 4R-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 #2	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						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	4,947.31	4,894.13	4,728.22	20.25	25.44	-92.25	439.15	1,006.37	956.90	915.44	41.47	23.075		
5,100.00	5,045.99	4,991.24	4,821.25	20.68	26.00	-92.18	449.60	1,032.23	980.73	938.38	42.35	23.155		
5,200.00	5,144.67	5,088.36	4,914.27	21.12	26.57	-92.12	460.04	1,058.09	1,004.56	961.32	43.24	23.232		
5,300.00	5,243.34	5,185.47	5,007.29	21.55	27.13	-92.05	470.48	1,083.95	1,028.40	984.27	44.12	23.306		
5,400.00	5,342.02	5,282.58	5,100.31	21.99	27.70	-91.99	480.93	1,109.81	1,052.23	1,007.22	45.01	23.377		
5,500.00	5,440.70	5,379.69	5,193.33	22.42	28.27	-91.93	491.37	1,135.67	1,076.06	1,030.16	45.90	23.446		
5,600.00	5,539.38	5,476.81	5,286.36	22.86	28.83	-91.88	501.82	1,161.53	1,099.90	1,053.11	46.78	23.511		
5,700.00	5,638.06	5,573.92	5,379.38	23.29	29.40	-91.83	512.26	1,187.39	1,123.73	1,076.06	47.67	23.574		
5,800.00	5,736.74	5,671.03	5,472.40	23.73	29.97	-91.77	522.70	1,213.25	1,147.57	1,099.01	48.55	23.635		
5,900.00	5,835.42	5,768.14	5,565.42	24.17	30.53	-91.73	533.15	1,239.11	1,171.40	1,121.96	49.44	23.693		
6,000.00	5,934.10	5,865.26	5,658.44	24.60	31.10	-91.68	543.59	1,264.97	1,195.24	1,144.91	50.33	23.749		
6,100.00	6,032.78	5,962.37	5,751.47	25.04	31.67	-91.63	554.04	1,290.83	1,219.08	1,167.87	51.21	23.804		
6,200.00	6,131.46	6,059.48	5,844.49	25.47	32.23	-91.59	564.48	1,316.69	1,242.92	1,190.82	52.10	23.856		
6,300.00	6,230.14	6,156.59	5,937.51	25.91	32.80	-91.55	574.92	1,342.54	1,266.76	1,213.77	52.99	23.907		
6,400.00	6,328.82	6,253.71	6,030.53	26.34	33.37	-91.51	585.37	1,368.40	1,290.60	1,236.73	53.87	23.956		
6,500.00	6,427.49	6,350.82	6,123.55	26.78	33.93	-91.47	595.81	1,394.26	1,314.44	1,259.68	54.76	24.003		
6,600.00	6,526.17	6,447.93	6,216.58	27.21	34.50	-91.43	606.26	1,420.12	1,338.28	1,282.63	55.65	24.048		
6,700.00	6,624.85	6,545.05	6,309.60	27.65	35.07	-91.40	616.70	1,445.98	1,362.13	1,305.59	56.54	24.093		
6,800.00	6,723.53	6,642.16	6,402.62	28.09	35.63	-91.36	627.14	1,471.84	1,385.97	1,328.54	57.42	24.135		
6,837.91	6,760.94	8,914.21	7,685.00	28.25	41.30	-38.55	-560.89	1,797.17	1,365.98	1,329.62	36.36	37.571		
6,850.00	6,772.88	8,915.17	7,685.00	28.30	41.30	-32.16	-561.85	1,797.15	1,356.72	1,320.08	36.64	37.031		
6,900.00	6,822.38	8,916.98	7,685.00	28.51	41.30	-0.62	-563.66	1,797.10	1,318.82	1,281.00	37.82	34.875		
6,950.00	6,871.89	8,915.30	7,685.00	28.69	41.30	31.17	-561.98	1,797.14	1,281.79	1,242.78	39.02	32.853		
7,000.00	6,921.17	8,910.14	7,685.00	28.86	41.29	53.98	-556.82	1,797.26	1,245.89	1,205.66	40.24	30.965		
7,050.00	6,969.99	8,901.52	7,685.00	29.01	41.27	68.69	-548.21	1,797.47	1,211.36	1,169.89	41.47	29.212		
7,100.00	7,018.10	8,889.49	7,685.00	29.14	41.25	78.48	-536.18	1,797.75	1,178.41	1,135.70	42.71	27.590		
7,150.00	7,065.27	8,874.11	7,685.00	29.26	41.22	85.34	-520.80	1,798.11	1,147.24	1,103.29	43.95	26.101		
7,200.00	7,111.28	8,855.44	7,685.00	29.36	41.18	90.31	-502.14	1,798.54	1,118.03	1,072.85	45.18	24.746		
7,250.00	7,155.89	8,833.59	7,685.00	29.45	41.15	93.96	-480.30	1,799.05	1,090.90	1,044.53	46.38	23.522		
7,300.00	7,198.89	8,808.66	7,685.00	29.53	41.11	96.66	-455.37	1,799.64	1,065.98	1,018.44	47.53	22.426		
7,350.00	7,240.07	8,780.76	7,685.00	29.60	41.07	98.61	-427.48	1,800.29	1,043.31	994.66	48.65	21.445		
7,400.00	7,279.23	8,750.05	7,685.00	29.65	41.03	99.98	-396.77	1,801.01	1,022.93	973.23	49.71	20.579		
7,450.00	7,316.18	8,716.65	7,685.00	29.69	40.99	100.89	-363.39	1,801.79	1,004.84	954.15	50.69	19.824		
7,500.00	7,350.73	8,680.74	7,685.00	29.72	40.95	101.43	-327.49	1,802.63	988.97	937.37	51.60	19.166		
7,550.00	7,382.73	8,642.50	7,685.00	29.74	40.92	101.67	-289.26	1,803.52	975.26	922.83	52.43	18.600		
7,600.00	7,412.01	8,602.10	7,685.00	29.74	40.90	101.68	-248.87	1,804.47	963.60	910.43	53.17	18.122		
7,650.00	7,438.44	8,559.75	7,685.00	29.74	40.88	101.52	-206.53	1,805.46	953.85	900.00	53.85	17.713		
7,700.00	7,461.87	8,515.65	7,685.00	29.73	40.87	101.24	-162.45	1,806.49	945.89	891.45	54.43	17.377		
7,750.00	7,482.21	8,470.02	7,685.00	29.71	40.86	100.89	-116.83	1,807.56	939.55	884.60	54.96	17.096		
7,800.00	7,499.35	8,423.08	7,685.00	29.69	40.87	100.51	-69.90	1,808.66	934.71	879.31	55.39	16.874		
7,850.00	7,513.20	8,362.25	7,684.66	29.65	40.89	99.94	-9.09	1,809.98	931.15	875.38	55.76	16.698		
7,900.00	7,523.70	8,254.31	7,673.59	29.62	40.93	98.40	98.18	1,809.44	926.68	870.42	56.26	16.472		
7,950.00	7,530.80	8,154.71	7,649.70	29.58	40.97	96.68	194.69	1,805.13	920.60	863.68	56.92	16.173		
8,000.00	7,534.46	8,063.51	7,616.72	29.53	40.99	94.89	279.36	1,798.02	913.33	855.71	57.63	15.849		
8,027.99	7,535.00	8,015.95	7,595.48	29.51	40.99	93.87	321.63	1,793.16	908.89	850.89	58.00	15.669		
8,100.00	7,535.00	7,907.62	7,537.38	29.45	40.96	90.16	411.87	1,779.28	896.20	837.31	58.89	15.219		
8,200.00	7,535.00	7,790.52	7,460.68	29.49	40.86	85.07	498.10	1,760.17	877.91	818.04	59.87	14.664		
8,300.00	7,535.00	7,703.83	7,395.77	30.05	40.74	80.64	553.02	1,743.58	862.79	802.09	60.70	14.213		
8,400.00	7,535.00	7,638.84	7,343.19	30.69	40.61	77.00	588.67	1,729.94	853.94	792.33	61.61	13.861		
8,457.41	7,535.00	7,608.72	7,317.83	31.10	40.55	75.24	603.49	1,723.30	852.49	790.26	62.22	13.701		
8,500.00	7,535.00	7,589.05	7,300.95	31.41	40.50	74.07	612.56	1,718.87	853.32	790.61	62.71	13.607		
8,600.00	7,535.00	7,550.00	7,266.78	32.17	40.40	71.70	629.15	1,709.85	862.04	798.01	64.02	13.464		

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 4R-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 4R-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 #2	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	7,535.00	7,518.84	7,238.92	33.00	40.30	69.77	640.99	1,702.45	880.48	815.00	65.48	13.447				
8,800.00	7,535.00	7,500.00	7,221.85	33.87	40.24	68.60	647.53	1,697.90	908.53	841.44	67.09	13.541				
8,900.00	7,535.00	7,472.28	7,196.45	34.79	40.15	66.86	656.31	1,691.12	945.50	877.08	68.41	13.820				
9,000.00	7,535.00	7,450.00	7,175.81	35.75	40.07	65.45	662.62	1,685.58	990.67	921.03	69.65	14.225				
9,100.00	7,535.00	7,450.00	7,175.81	36.76	40.07	65.45	662.62	1,685.58	1,043.14	972.09	71.05	14.682				
9,200.00	7,535.00	7,426.38	7,153.74	37.80	39.98	63.97	668.59	1,679.64	1,101.71	1,029.88	71.83	15.338				
9,300.00	7,535.00	7,415.05	7,143.09	38.88	39.94	63.26	671.18	1,676.77	1,165.76	1,093.14	72.63	16.052				
9,400.00	7,535.00	7,400.00	7,128.89	39.99	39.88	62.31	674.36	1,672.94	1,234.44	1,161.25	73.19	16.865				
9,500.00	7,535.00	7,400.00	7,128.89	41.13	39.88	62.31	674.36	1,672.94	1,306.98	1,233.14	73.85	17.698				
9,600.00	7,535.00	7,400.00	7,128.89	42.30	39.88	62.31	674.36	1,672.94	1,382.96	1,308.59	74.37	18.597				
9,700.00	7,535.00	7,381.49	7,111.34	43.49	39.80	61.15	677.84	1,668.18	1,461.52	1,386.99	74.52	19.611				

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.70	0.36	-69.95	69.95				
100.00	100.00	100.00	100.00	0.14	0.14	-89.70	0.36	-69.95	69.95	69.67	0.28	253.412	
200.00	200.00	200.00	200.00	0.50	0.50	-89.70	0.36	-69.95	69.95	68.95	0.99	70.443	
300.00	300.00	300.00	300.00	0.85	0.85	-89.70	0.36	-69.95	69.95	68.24	1.71	40.907	
400.00	400.00	402.29	402.26	1.21	1.22	-89.15	1.02	-68.24	68.29	65.83	2.46	27.799	
500.00	500.00	504.31	504.14	1.57	1.58	-87.31	2.96	-63.14	63.35	60.13	3.22	19.663	
600.00	600.00	605.82	605.24	1.93	1.95	-83.56	6.18	-54.71	55.31	51.32	3.99	13.878	
700.00	700.00	706.57	705.20	2.29	2.33	-76.12	10.64	-43.04	44.64	39.91	4.73	9.435	
800.00	799.98	806.47	803.83	2.63	2.73	176.04	16.29	-28.23	34.55	29.12	5.42	6.370	
878.96	878.84	884.74	880.69	2.90	3.05	-161.78	21.57	-14.39	31.23	25.27	5.96	5.240 CC, ES	
900.00	899.84	905.51	901.01	2.97	3.14	-155.07	23.10	-10.39	31.51	25.39	6.11	5.154 SF	
1,000.00	999.45	1,003.56	996.51	3.32	3.58	-127.44	31.02	10.36	40.03	33.11	6.92	5.783	
1,100.00	1,098.70	1,100.00	1,089.64	3.68	4.04	-111.93	39.94	33.73	57.34	49.58	7.75	7.394	
1,166.13	1,164.08	1,163.93	1,150.89	3.93	4.38	-106.20	46.47	50.83	71.71	63.42	8.29	8.647	
1,200.00	1,197.50	1,196.28	1,181.73	4.06	4.55	-104.16	49.96	59.97	79.69	71.12	8.57	9.303	
1,300.00	1,296.18	1,293.06	1,273.86	4.44	5.08	-99.78	60.52	87.66	103.93	94.56	9.37	11.092	
1,400.00	1,394.86	1,389.84	1,365.99	4.84	5.63	-97.05	71.09	115.34	128.53	118.35	10.18	12.625	
1,500.00	1,493.54	1,486.61	1,458.12	5.24	6.18	-95.20	81.66	143.03	153.32	142.32	11.00	13.937	
1,600.00	1,592.22	1,583.39	1,550.25	5.65	6.74	-93.87	92.23	170.71	178.22	166.39	11.83	15.065	
1,700.00	1,690.89	1,680.17	1,642.38	6.06	7.31	-92.86	102.80	198.39	203.18	190.51	12.67	16.040	
1,800.00	1,789.57	1,776.95	1,734.51	6.48	7.88	-92.08	113.37	226.08	228.19	214.68	13.51	16.890	
1,900.00	1,888.25	1,873.73	1,826.65	6.89	8.46	-91.45	123.93	253.76	253.23	238.87	14.36	17.635	
2,000.00	1,986.93	1,970.51	1,918.78	7.31	9.04	-90.93	134.50	281.45	278.30	263.09	15.21	18.293	
2,100.00	2,085.61	2,067.29	2,010.91	7.74	9.62	-90.50	145.07	309.13	303.38	287.31	16.07	18.877	
2,200.00	2,184.29	2,164.07	2,103.04	8.16	10.20	-90.13	155.64	336.82	328.48	311.55	16.93	19.398	
2,300.00	2,282.97	2,260.85	2,195.17	8.58	10.79	-89.82	166.21	364.50	353.59	335.79	17.80	19.866	
2,400.00	2,381.65	2,357.63	2,287.30	9.01	11.37	-89.55	176.77	392.19	378.71	360.04	18.67	20.288	
2,500.00	2,480.33	2,454.41	2,379.43	9.44	11.96	-89.31	187.34	419.87	403.83	384.29	19.54	20.670	
2,600.00	2,579.01	2,551.19	2,471.56	9.86	12.55	-89.10	197.91	447.56	428.96	408.55	20.41	21.018	
2,700.00	2,677.69	2,647.97	2,563.70	10.29	13.13	-88.91	208.48	475.24	454.09	432.81	21.28	21.336	
2,800.00	2,776.37	2,744.75	2,655.83	10.72	13.72	-88.74	219.05	502.93	479.23	457.07	22.16	21.627	
2,900.00	2,875.04	2,841.53	2,747.96	11.15	14.31	-88.59	229.61	530.61	504.37	481.34	23.04	21.895	
3,000.00	2,973.72	2,938.31	2,840.09	11.58	14.90	-88.46	240.18	558.30	529.52	505.60	23.91	22.142	
3,100.00	3,072.40	3,035.09	2,932.22	12.01	15.49	-88.33	250.75	585.98	554.67	529.87	24.79	22.371	
3,200.00	3,171.08	3,131.87	3,024.35	12.44	16.09	-88.22	261.32	613.67	579.82	554.14	25.67	22.583	
3,300.00	3,269.76	3,228.65	3,116.48	12.88	16.68	-88.11	271.89	641.35	604.97	578.41	26.56	22.780	
3,400.00	3,368.44	3,325.43	3,208.61	13.31	17.27	-88.02	282.45	669.04	630.12	602.68	27.44	22.964	
3,500.00	3,467.12	3,422.21	3,300.75	13.74	17.86	-87.93	293.02	696.72	655.28	626.95	28.32	23.136	
3,600.00	3,565.80	3,518.99	3,392.88	14.17	18.46	-87.85	303.59	724.41	680.43	651.23	29.21	23.298	
3,700.00	3,664.48	3,615.77	3,485.01	14.61	19.05	-87.77	314.16	752.09	705.59	675.50	30.09	23.449	
3,800.00	3,763.16	3,712.55	3,577.14	15.04	19.64	-87.70	324.73	779.78	730.75	699.77	30.98	23.591	
3,900.00	3,861.84	3,809.33	3,669.27	15.47	20.24	-87.63	335.29	807.46	755.91	724.05	31.86	23.725	
4,000.00	3,960.52	3,906.11	3,761.40	15.91	20.83	-87.57	345.86	835.15	781.07	748.32	32.75	23.851	
4,100.00	4,059.19	4,002.89	3,853.53	16.34	21.42	-87.52	356.43	862.83	806.23	772.59	33.63	23.970	
4,200.00	4,157.87	4,099.67	3,945.67	16.77	22.02	-87.46	367.00	890.52	831.39	796.87	34.52	24.083	
4,300.00	4,256.55	4,196.45	4,037.80	17.21	22.61	-87.41	377.57	918.20	856.55	821.14	35.41	24.190	
4,400.00	4,355.23	4,293.23	4,129.93	17.64	23.21	-87.36	388.13	945.89	881.72	845.42	36.30	24.292	
4,500.00	4,453.91	4,390.01	4,222.06	18.08	23.80	-87.32	398.70	973.57	906.88	869.69	37.19	24.388	
4,600.00	4,552.59	4,486.79	4,314.19	18.51	24.40	-87.27	409.27	1,001.26	932.04	893.97	38.07	24.480	
4,700.00	4,651.27	4,583.57	4,406.32	18.94	24.99	-87.23	419.84	1,028.94	957.21	918.25	38.96	24.567	
4,800.00	4,749.95	4,680.35	4,498.45	19.38	25.59	-87.19	430.41	1,056.63	982.37	942.52	39.85	24.650	
4,900.00	4,848.63	4,777.13	4,590.58	19.81	26.18	-87.16	440.98	1,084.31	1,007.54	966.80	40.74	24.730	

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 4R-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 4R-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 #2	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	
5,000.00	4,947.31	4,873.90	4,682.72	20.25	26.78	-87.12	451.54	1,112.00	1,032.71	991.07	41.63	24.806		
5,100.00	5,045.99	4,970.68	4,774.85	20.68	27.37	-87.09	462.11	1,139.68	1,057.87	1,015.35	42.52	24.879		
5,200.00	5,144.67	5,067.46	4,866.98	21.12	27.97	-87.06	472.68	1,167.37	1,083.04	1,039.63	43.41	24.948		
5,300.00	5,243.34	5,164.24	4,959.11	21.55	28.56	-87.03	483.25	1,195.05	1,108.21	1,063.90	44.30	25.015		
5,400.00	5,342.02	5,261.02	5,051.24	21.99	29.16	-87.00	493.82	1,222.74	1,133.37	1,088.18	45.19	25.079		
5,500.00	5,440.70	5,357.80	5,143.37	22.42	29.75	-86.97	504.38	1,250.42	1,158.54	1,112.46	46.08	25.140		
5,600.00	5,539.38	5,454.58	5,235.50	22.86	30.35	-86.94	514.95	1,278.11	1,183.71	1,136.73	46.97	25.199		
5,700.00	5,638.06	5,551.36	5,327.63	23.29	30.94	-86.92	525.52	1,305.79	1,208.88	1,161.01	47.87	25.256		
5,800.00	5,736.74	5,648.14	5,419.77	23.73	31.54	-86.89	536.09	1,333.48	1,234.04	1,185.29	48.76	25.310		
5,900.00	5,835.42	5,744.92	5,511.90	24.17	32.14	-86.87	546.66	1,361.16	1,259.21	1,209.56	49.65	25.363		
6,000.00	5,934.10	5,841.70	5,604.03	24.60	32.73	-86.85	557.22	1,388.85	1,284.38	1,233.84	50.54	25.413		
6,100.00	6,032.78	5,938.48	5,696.16	25.04	33.33	-86.82	567.79	1,416.53	1,309.55	1,258.12	51.43	25.462		
6,200.00	6,131.46	6,035.26	5,788.29	25.47	33.92	-86.80	578.36	1,444.22	1,334.72	1,282.39	52.32	25.509		
6,300.00	6,230.14	6,132.04	5,880.42	25.91	34.52	-86.78	588.93	1,471.90	1,359.89	1,306.67	53.22	25.554		
6,400.00	6,328.82	6,228.82	5,972.55	26.34	35.11	-86.76	599.50	1,499.59	1,385.06	1,330.95	54.11	25.598		
6,500.00	6,427.49	6,325.60	6,064.68	26.78	35.71	-86.75	610.06	1,527.27	1,410.22	1,355.22	55.00	25.640		
6,600.00	6,526.17	6,422.38	6,156.82	27.21	36.31	-86.73	620.63	1,554.96	1,435.39	1,379.50	55.89	25.681		
6,700.00	6,624.85	6,685.42	7,455.00	27.65	42.83	-38.68	-524.82	1,945.05	1,436.29	1,395.81	40.48	35.484		
6,800.00	6,723.53	8,694.52	7,455.00	28.09	42.85	-38.19	-533.92	1,945.05	1,370.25	1,327.31	42.94	31.909		
6,837.91	6,760.94	8,697.97	7,455.00	28.25	42.86	-38.00	-537.37	1,945.05	1,346.29	1,302.38	43.91	30.659		
6,850.00	6,772.88	8,698.97	7,455.00	28.30	42.86	-32.00	-538.36	1,945.05	1,338.78	1,294.56	44.23	30.272		
6,900.00	6,822.38	8,700.93	7,455.00	28.51	42.87	-2.06	-540.33	1,945.05	1,308.36	1,262.84	45.52	28.743		
6,950.00	6,871.89	8,699.41	7,455.00	28.69	42.86	28.25	-538.81	1,945.05	1,279.16	1,232.35	46.80	27.331		
7,000.00	6,921.17	8,694.40	7,455.00	28.86	42.85	49.69	-533.80	1,945.05	1,251.38	1,203.31	48.07	26.034		
7,050.00	6,969.99	8,685.94	7,455.00	29.01	42.83	63.17	-525.34	1,945.05	1,225.23	1,175.93	49.30	24.852		
7,100.00	7,018.10	8,674.06	7,455.00	29.14	42.81	71.88	-513.46	1,945.05	1,200.88	1,150.38	50.49	23.783		
7,150.00	7,065.27	8,658.83	7,455.00	29.26	42.78	77.78	-498.22	1,945.05	1,178.45	1,126.82	51.63	22.825		
7,200.00	7,111.28	8,640.31	7,455.00	29.36	42.74	81.89	-479.70	1,945.05	1,158.03	1,105.33	52.70	21.974		
7,250.00	7,155.89	8,618.59	7,455.00	29.45	42.70	84.79	-457.99	1,945.05	1,139.69	1,086.00	53.69	21.227		
7,300.00	7,198.89	8,593.79	7,455.00	29.53	42.66	86.80	-433.19	1,945.05	1,123.42	1,068.83	54.60	20.577		
7,350.00	7,240.07	8,566.02	7,455.00	29.60	42.62	88.14	-405.42	1,945.05	1,109.21	1,053.79	55.42	20.014		
7,400.00	7,279.23	8,535.42	7,455.00	29.65	42.57	88.95	-374.81	1,945.05	1,096.97	1,040.82	56.15	19.537		
7,450.00	7,316.18	8,502.13	7,455.00	29.69	42.53	89.36	-341.53	1,945.05	1,086.61	1,029.84	56.78	19.138		
7,500.00	7,350.73	8,466.33	7,455.00	29.72	42.49	89.44	-305.72	1,945.05	1,078.00	1,020.66	57.33	18.803		
7,550.00	7,382.73	8,428.18	7,455.00	29.74	42.45	89.28	-267.57	1,945.05	1,070.96	1,013.16	57.79	18.531		
7,600.00	7,412.01	8,387.86	7,455.00	29.74	42.42	88.94	-227.26	1,945.05	1,065.32	1,007.14	58.18	18.312		
7,650.00	7,438.44	8,345.59	7,455.00	29.74	42.39	88.48	-184.99	1,945.05	1,060.91	1,002.40	58.51	18.134		
7,700.00	7,461.87	8,301.55	7,455.00	29.73	42.38	87.95	-140.95	1,945.05	1,057.53	998.76	58.76	17.996		
7,750.00	7,482.21	8,255.98	7,455.00	29.71	42.36	87.40	-95.37	1,945.05	1,055.00	996.01	59.00	17.883		
7,800.00	7,499.35	8,209.08	7,455.00	29.69	42.36	86.88	-48.48	1,945.05	1,053.16	993.99	59.18	17.796		
7,850.00	7,513.20	8,145.84	7,453.68	29.65	42.36	86.14	14.73	1,944.66	1,051.65	992.32	59.33	17.724		
7,900.00	7,523.70	8,074.90	7,446.12	29.62	42.37	85.20	85.20	1,942.39	1,049.58	990.08	59.50	17.641		
7,950.00	7,530.80	8,006.98	7,432.67	29.58	42.37	84.22	151.62	1,938.34	1,046.96	987.29	59.67	17.547		
8,000.00	7,534.46	7,942.00	7,414.21	29.53	42.37	83.22	213.66	1,932.80	1,043.87	984.03	59.83	17.446		
8,027.99	7,535.00	7,906.86	7,402.00	29.51	42.37	82.65	246.41	1,929.13	1,041.97	982.04	59.93	17.387		
8,100.00	7,535.00	7,822.36	7,366.49	29.45	42.34	80.62	322.27	1,918.46	1,036.72	976.54	60.18	17.227		
8,200.00	7,535.00	7,721.41	7,313.21	29.49	42.27	77.54	406.42	1,902.45	1,029.89	969.30	60.59	16.998		
8,300.00	7,535.00	7,638.35	7,261.23	30.05	42.18	74.51	469.23	1,886.83	1,025.64	964.55	61.09	16.789		
8,347.01	7,535.00	7,604.75	7,238.29	30.35	42.14	73.17	492.78	1,879.93	1,025.09	963.70	61.38	16.699		
8,400.00	7,535.00	7,570.52	7,213.85	30.69	42.08	71.75	515.59	1,872.59	1,025.85	964.10	61.75	16.614		
8,500.00	7,535.00	7,515.02	7,172.09	31.41	41.98	69.32	549.90	1,860.04	1,031.90	969.30	62.60	16.484		
8,600.00	7,535.00	7,469.28	7,135.85	32.17	41.87	67.22	575.58	1,849.15	1,044.66	981.01	63.65	16.413		

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 4R-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 4R-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 #2	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	7,535.00	7,431.22	7,104.54	33.00	41.78	65.41	595.06	1,839.74	1,064.58	999.72	64.85	16.415						
8,800.00	7,535.00	7,400.00	7,078.15	33.87	41.69	63.91	609.74	1,831.81	1,091.75	1,025.58	66.17	16.499						
8,900.00	7,535.00	7,372.07	7,054.04	34.79	41.60	62.54	621.83	1,824.57	1,125.99	1,058.51	67.48	16.686						
9,000.00	7,535.00	7,350.00	7,034.68	35.75	41.54	61.46	630.69	1,818.75	1,166.92	1,098.12	68.80	16.960						
9,100.00	7,535.00	7,328.62	7,015.69	36.76	41.46	60.40	638.67	1,813.05	1,214.03	1,144.04	69.99	17.345						
9,200.00	7,535.00	7,300.00	6,989.92	37.80	41.36	58.98	648.43	1,805.30	1,266.86	1,195.96	70.90	17.867						
9,300.00	7,535.00	7,300.00	6,989.92	38.88	41.36	58.98	648.43	1,805.30	1,324.55	1,252.37	72.18	18.351						
9,400.00	7,535.00	7,281.91	6,973.45	39.99	41.29	58.08	654.03	1,800.35	1,386.79	1,313.82	72.97	19.006						
9,500.00	7,535.00	7,269.73	6,962.28	41.13	41.24	57.47	657.56	1,797.00	1,453.00	1,379.27	73.72	19.709						

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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: 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	-89.67	0.35	-59.87	59.88					
100.00	100.00	100.00	100.00	0.14	0.14	-89.67	0.35	-59.87	59.88	59.60	0.28	216.921		
200.00	200.00	200.00	200.00	0.50	0.50	-89.67	0.35	-59.87	59.88	58.88	0.99	60.299	CC, ES	
300.00	300.00	298.62	298.60	0.85	0.84	-90.88	-0.94	-60.98	61.01	59.30	1.71	35.645		
400.00	400.00	397.01	396.86	1.21	1.18	-94.25	-4.78	-64.30	64.56	62.11	2.45	26.353		
500.00	500.00	494.94	494.42	1.57	1.54	-99.06	-11.13	-69.79	70.89	67.69	3.21	22.087		
600.00	600.00	594.18	593.10	1.93	1.91	-103.98	-19.10	-76.68	79.32	75.40	3.92	20.221		
700.00	700.00	693.61	691.97	2.29	2.29	-107.96	-27.09	-83.59	88.24	83.61	4.63	19.053		
800.00	799.98	793.00	790.80	2.63	2.67	125.30	-35.09	-90.50	98.49	93.16	5.33	18.487		
900.00	899.84	892.23	889.46	2.97	3.06	124.67	-43.07	-97.39	110.83	104.81	6.02	18.408		
1,000.00	999.45	991.17	987.84	3.32	3.44	125.42	-51.02	-104.27	125.16	118.43	6.72	18.616		
1,100.00	1,098.70	1,089.71	1,085.82	3.68	3.83	127.09	-58.95	-111.12	141.58	134.14	7.44	19.037		
1,166.13	1,164.08	1,154.60	1,150.34	3.93	4.08	128.52	-64.16	-115.63	153.69	145.77	7.92	19.413		
1,200.00	1,197.50	1,187.76	1,183.31	4.06	4.21	129.36	-66.83	-117.93	160.17	152.01	8.16	19.620		
1,300.00	1,296.18	1,285.68	1,280.68	4.44	4.59	131.50	-74.71	-124.74	179.48	170.59	8.89	20.180		
1,400.00	1,394.86	1,383.60	1,378.05	4.84	4.98	133.22	-82.58	-131.54	198.99	189.36	9.63	20.661		
1,500.00	1,493.54	1,481.52	1,475.41	5.24	5.36	134.63	-90.45	-138.35	218.64	208.27	10.37	21.078		
1,600.00	1,592.22	1,579.44	1,572.78	5.65	5.75	135.81	-98.33	-145.15	238.39	227.28	11.12	21.440		
1,700.00	1,690.89	1,677.36	1,670.14	6.06	6.13	136.81	-106.20	-151.96	258.23	246.36	11.87	21.759		
1,800.00	1,789.57	1,775.28	1,767.51	6.48	6.52	137.66	-114.08	-158.77	278.14	265.52	12.62	22.041		
1,900.00	1,888.25	1,873.20	1,864.87	6.89	6.90	138.41	-121.95	-165.57	298.09	284.72	13.37	22.292		
2,000.00	1,986.93	1,971.12	1,962.24	7.31	7.29	139.05	-129.83	-172.38	318.09	303.96	14.13	22.516		
2,100.00	2,085.61	2,069.04	2,059.61	7.74	7.67	139.63	-137.70	-179.18	338.12	323.24	14.88	22.719		
2,200.00	2,184.29	2,166.96	2,156.97	8.16	8.06	140.14	-145.58	-185.99	358.18	342.54	15.64	22.902		
2,300.00	2,282.97	2,264.88	2,254.34	8.58	8.44	140.59	-153.45	-192.79	378.26	361.87	16.40	23.068		
2,400.00	2,381.65	2,362.80	2,351.70	9.01	8.83	141.00	-161.33	-199.60	398.37	381.21	17.16	23.220		
2,500.00	2,480.33	2,460.72	2,449.07	9.44	9.21	141.37	-169.20	-206.40	418.49	400.58	17.92	23.359		
2,600.00	2,579.01	2,558.64	2,546.43	9.86	9.60	141.70	-177.08	-213.21	438.63	419.95	18.68	23.486		
2,700.00	2,677.69	2,656.56	2,643.80	10.29	9.98	142.01	-184.95	-220.01	458.78	439.34	19.44	23.604		
2,800.00	2,776.37	2,754.48	2,741.17	10.72	10.37	142.29	-192.82	-226.82	478.94	458.75	20.20	23.713		
2,900.00	2,875.04	2,852.41	2,838.53	11.15	10.75	142.55	-200.70	-233.63	499.12	478.16	20.96	23.814		
3,000.00	2,973.72	2,950.33	2,935.90	11.58	11.14	142.78	-208.57	-240.43	519.30	497.58	21.72	23.908		
3,100.00	3,072.40	3,048.25	3,033.26	12.01	11.52	143.00	-216.45	-247.24	539.49	517.01	22.48	23.996		
3,200.00	3,171.08	3,146.17	3,130.63	12.44	11.91	143.21	-224.32	-254.04	559.68	536.44	23.24	24.078		
3,300.00	3,269.76	3,244.09	3,228.00	12.88	12.30	143.40	-232.20	-260.85	579.89	555.88	24.01	24.155		
3,400.00	3,368.44	3,342.01	3,325.36	13.31	12.68	143.58	-240.07	-267.65	600.10	575.33	24.77	24.227		
3,500.00	3,467.12	3,439.93	3,422.73	13.74	13.07	143.74	-247.95	-274.46	620.31	594.78	25.53	24.295		
3,600.00	3,565.80	3,537.85	3,520.09	14.17	13.45	143.90	-255.82	-281.26	640.53	614.23	26.30	24.359		
3,700.00	3,664.48	3,635.77	3,617.46	14.61	13.84	144.04	-263.70	-288.07	660.75	633.69	27.06	24.419		
3,800.00	3,763.16	3,733.69	3,714.82	15.04	14.22	144.18	-271.57	-294.87	680.98	653.16	27.82	24.476		
3,900.00	3,861.84	3,831.61	3,812.19	15.47	14.61	144.31	-279.44	-301.68	701.21	672.62	28.59	24.530		
4,000.00	3,960.52	3,929.53	3,909.56	15.91	14.99	144.43	-287.32	-308.49	721.44	692.09	29.35	24.581		
4,100.00	4,059.19	4,027.45	4,006.92	16.34	15.38	144.54	-295.19	-315.29	741.68	711.56	30.11	24.629		
4,200.00	4,157.87	4,125.37	4,104.29	16.77	15.77	144.65	-303.07	-322.10	761.92	731.04	30.88	24.675		
4,300.00	4,256.55	4,223.29	4,201.65	17.21	16.15	144.76	-310.94	-328.90	782.16	750.52	31.64	24.719		
4,400.00	4,355.23	4,321.21	4,299.02	17.64	16.54	144.85	-318.82	-335.71	802.40	770.00	32.41	24.761		
4,500.00	4,453.91	4,419.13	4,396.38	18.08	16.92	144.95	-326.69	-342.51	822.65	789.48	33.17	24.801		
4,600.00	4,552.59	4,517.05	4,493.75	18.51	17.31	145.04	-334.57	-349.32	842.90	808.96	33.93	24.839		
4,700.00	4,651.27	4,614.97	4,591.12	18.94	17.70	145.12	-342.44	-356.12	863.15	828.45	34.70	24.875		
4,800.00	4,749.95	4,712.89	4,688.48	19.38	18.08	145.20	-350.32	-362.93	883.40	847.93	35.46	24.910		
4,900.00	4,848.63	4,810.82	4,785.85	19.81	18.47	145.28	-358.19	-369.73	903.65	867.42	36.23	24.944		
5,000.00	4,947.31	4,908.74	4,883.21	20.25	18.85	145.35	-366.07	-376.54	923.90	886.91	36.99	24.976		

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 4R-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 4R-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 #2	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: 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		
5,100.00	5,045.99	5,006.66	4,980.58	20.68	19.24	145.42	-373.94	-383.35	944.16	906.40	37.76	25.006		
5,200.00	5,144.67	5,104.58	5,077.95	21.12	19.62	145.49	-381.81	-390.15	964.42	925.90	38.52	25.036		
5,300.00	5,243.34	5,202.50	5,175.31	21.55	20.01	145.56	-389.69	-396.96	984.68	945.39	39.29	25.064		
5,400.00	5,342.02	5,300.42	5,272.68	21.99	20.40	145.62	-397.56	-403.76	1,004.94	964.88	40.05	25.091		
5,500.00	5,440.70	5,398.34	5,370.04	22.42	20.78	145.68	-405.44	-410.57	1,025.20	984.38	40.82	25.117		
5,600.00	5,539.38	5,496.26	5,467.41	22.86	21.17	145.74	-413.31	-417.37	1,045.46	1,003.88	41.58	25.142		
5,700.00	5,638.06	5,594.18	5,564.77	23.29	21.55	145.79	-421.19	-424.18	1,065.72	1,023.38	42.35	25.167		
5,800.00	5,736.74	5,692.10	5,662.14	23.73	21.94	145.84	-429.06	-430.98	1,085.99	1,042.87	43.11	25.190		
5,900.00	5,835.42	5,790.02	5,759.51	24.17	22.32	145.90	-436.94	-437.79	1,106.25	1,062.37	43.88	25.212		
6,000.00	5,934.10	5,887.94	5,856.87	24.60	22.71	145.95	-444.81	-444.59	1,126.52	1,081.87	44.64	25.234		
6,100.00	6,032.78	5,985.86	5,954.24	25.04	23.10	145.99	-452.69	-451.40	1,146.78	1,101.37	45.41	25.255		
6,200.00	6,131.46	6,083.78	6,051.60	25.47	23.48	146.04	-460.56	-458.21	1,167.05	1,120.88	46.17	25.276		
6,300.00	6,230.14	6,181.70	6,148.97	25.91	23.87	146.08	-468.44	-465.01	1,187.32	1,140.38	46.94	25.295		
6,400.00	6,328.82	6,279.62	6,246.33	26.34	24.25	146.13	-476.31	-471.82	1,207.58	1,159.88	47.70	25.314		
6,500.00	6,427.49	6,377.54	6,343.70	26.78	24.64	146.17	-484.18	-478.62	1,227.85	1,179.38	48.47	25.333		
6,600.00	6,526.17	6,475.46	6,441.07	27.21	25.03	146.21	-492.06	-485.43	1,248.12	1,198.89	49.23	25.350		
6,700.00	6,624.85	6,573.38	6,538.43	27.65	25.41	146.25	-499.93	-492.23	1,268.39	1,218.39	50.00	25.368		
6,800.00	6,723.53	6,671.30	6,635.80	28.09	25.80	146.28	-507.81	-499.04	1,288.66	1,237.90	50.77	25.384		
6,837.91	6,760.94	6,708.43	6,672.71	28.25	25.94	146.30	-510.79	-501.62	1,296.35	1,245.29	51.06	25.391		
6,850.00	6,772.88	6,720.26	6,684.48	28.30	25.99	151.68	-511.75	-502.44	1,298.80	1,247.65	51.15	25.393		
6,900.00	6,822.38	6,769.17	6,733.11	28.51	26.18	179.18	-515.68	-505.84	1,308.92	1,257.40	51.52	25.406		
6,950.00	6,871.89	6,817.81	6,781.47	28.69	26.37	-152.74	-519.59	-509.22	1,319.00	1,267.12	51.88	25.425		
7,000.00	6,921.17	6,865.95	6,829.34	28.86	26.56	-133.26	-523.46	-512.57	1,329.03	1,276.81	52.22	25.451		
7,050.00	6,969.99	6,913.34	6,876.47	29.01	26.75	-121.48	-527.27	-515.86	1,339.04	1,286.49	52.55	25.483		
7,100.00	7,018.10	6,961.44	6,924.35	29.14	26.93	-114.17	-530.19	-519.20	1,349.03	1,296.17	52.86	25.519		
7,150.00	7,065.27	7,010.89	6,973.67	29.26	27.10	-109.32	-529.90	-522.60	1,358.97	1,305.80	53.17	25.560		
7,200.00	7,111.28	7,061.50	7,024.01	29.36	27.26	-105.91	-526.08	-526.02	1,368.80	1,315.35	53.45	25.608		
7,250.00	7,155.89	7,113.37	7,075.20	29.45	27.40	-103.41	-518.48	-529.47	1,378.48	1,324.76	53.72	25.659		
7,300.00	7,198.89	7,166.60	7,127.01	29.53	27.54	-101.51	-506.85	-532.91	1,387.94	1,333.96	53.98	25.712		
7,350.00	7,240.07	7,221.28	7,179.19	29.60	27.66	-100.04	-490.91	-536.33	1,397.14	1,342.92	54.23	25.766		
7,400.00	7,279.23	7,277.50	7,231.42	29.65	27.78	-98.88	-470.42	-539.70	1,406.02	1,351.56	54.46	25.818		
7,450.00	7,316.18	7,335.34	7,283.31	29.69	27.88	-97.95	-445.12	-542.99	1,414.51	1,359.83	54.68	25.869		
7,500.00	7,350.73	7,394.86	7,334.41	29.72	27.97	-97.22	-414.80	-546.17	1,422.56	1,367.67	54.89	25.916		
7,550.00	7,382.73	7,456.11	7,384.19	29.74	28.06	-96.63	-379.26	-549.20	1,430.11	1,375.02	55.09	25.958		
7,600.00	7,412.01	7,519.12	7,432.04	29.74	28.13	-96.16	-338.41	-552.04	1,437.08	1,381.79	55.29	25.991		
7,650.00	7,438.44	7,583.87	7,477.29	29.74	28.20	-95.79	-292.20	-554.64	1,443.42	1,387.93	55.49	26.013		
7,700.00	7,461.87	7,650.31	7,519.21	29.73	28.26	-95.51	-240.74	-556.94	1,449.07	1,393.37	55.69	26.018		
7,750.00	7,482.21	7,718.34	7,557.02	29.71	28.31	-95.29	-184.24	-558.91	1,453.96	1,398.04	55.92	26.002		
7,800.00	7,499.35	7,787.82	7,589.94	29.69	28.38	-95.13	-123.10	-560.49	1,458.04	1,401.88	56.16	25.961		
7,850.00	7,513.20	7,858.55	7,617.22	29.65	28.46	-95.02	-57.89	-561.63	1,461.27	1,404.83	56.44	25.891		
7,900.00	7,523.70	7,930.29	7,638.21	29.62	28.58	-94.95	10.68	-562.30	1,463.59	1,406.84	56.76	25.787		
7,950.00	7,530.80	8,002.75	7,652.35	29.58	28.74	-94.90	81.71	-562.47	1,464.99	1,407.87	57.12	25.648		
8,000.00	7,534.46	8,075.60	7,659.28	29.53	28.94	-94.89	154.19	-562.12	1,465.44	1,407.91	57.53	25.473		
8,027.99	7,535.00	8,113.66	7,660.00	29.51	29.07	-94.89	192.25	-561.74	1,465.28	1,407.52	57.77	25.366		
8,100.00	7,535.00	8,185.67	7,660.00	29.45	29.35	-94.90	264.25	-560.92	1,464.61	1,406.27	58.34	25.104		
8,200.00	7,535.00	8,285.67	7,660.00	29.49	29.82	-94.90	364.24	-559.79	1,463.67	1,404.40	59.27	24.694		
8,300.00	7,535.00	8,385.66	7,660.00	30.05	30.38	-94.90	464.23	-558.65	1,462.73	1,402.38	60.35	24.236		
8,400.00	7,535.00	8,485.66	7,660.00	30.69	31.01	-94.91	564.22	-557.52	1,461.80	1,400.22	61.58	23.739		
8,500.00	7,535.00	8,585.65	7,660.00	31.41	31.72	-94.91	664.21	-556.38	1,460.86	1,397.92	62.94	23.211		
8,600.00	7,535.00	8,685.65	7,660.00	32.17	32.48	-94.91	764.20	-555.25	1,459.92	1,395.50	64.42	22.662		
8,700.00	7,535.00	8,785.64	7,660.00	33.00	33.30	-94.92	864.19	-554.11	1,458.99	1,392.96	66.03	22.097		
8,800.00	7,535.00	8,885.64	7,660.00	33.87	34.18	-94.92	964.18	-552.98	1,458.05	1,390.31	67.74	21.525		

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 4R-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 4R-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 #2	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							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		
8,900.00	7,535.00	8,985.64	7,660.00	34.79	35.10	-94.92	1,064.16	-551.84	1,457.11	1,387.56	69.55	20.950		
9,000.00	7,535.00	9,085.63	7,660.00	35.75	36.07	-94.92	1,164.15	-550.71	1,456.18	1,384.72	71.46	20.378		
9,100.00	7,535.00	9,185.63	7,660.00	36.76	37.08	-94.93	1,264.14	-549.57	1,455.24	1,381.79	73.45	19.812		
9,200.00	7,535.00	9,285.62	7,660.00	37.80	38.13	-94.93	1,364.13	-548.44	1,454.30	1,378.78	75.52	19.256		
9,300.00	7,535.00	9,385.62	7,660.00	38.88	39.21	-94.93	1,464.12	-547.30	1,453.36	1,375.70	77.67	18.713		
9,400.00	7,535.00	9,485.61	7,660.00	39.99	40.33	-94.94	1,564.11	-546.17	1,452.43	1,372.55	79.88	18.183		
9,500.00	7,535.00	9,585.61	7,660.00	41.13	41.47	-94.94	1,664.10	-545.03	1,451.49	1,369.34	82.15	17.668		
9,600.00	7,535.00	9,685.60	7,660.00	42.30	42.64	-94.94	1,764.09	-543.90	1,450.55	1,366.07	84.49	17.169		
9,700.00	7,535.00	9,785.60	7,660.00	43.49	43.84	-94.95	1,864.08	-542.76	1,449.62	1,362.75	86.87	16.688		
9,800.00	7,535.00	9,885.60	7,660.00	44.71	45.06	-94.95	1,964.07	-541.62	1,448.68	1,359.38	89.30	16.223		
9,900.00	7,535.00	9,985.59	7,660.00	45.95	46.30	-94.95	2,064.06	-540.49	1,447.74	1,355.97	91.77	15.775		
10,000.00	7,535.00	10,085.59	7,660.00	47.21	47.57	-94.96	2,164.04	-539.35	1,446.81	1,352.52	94.29	15.344		
10,100.00	7,535.00	10,185.58	7,660.00	48.48	48.85	-94.96	2,264.03	-538.22	1,445.87	1,349.03	96.84	14.930		
10,200.00	7,535.00	10,285.58	7,660.00	49.78	50.15	-94.96	2,364.02	-537.08	1,444.93	1,345.50	99.43	14.532		
10,300.00	7,535.00	10,385.57	7,660.00	51.09	51.46	-94.97	2,464.01	-535.95	1,444.00	1,341.94	102.05	14.150		
10,400.00	7,535.00	10,485.57	7,660.00	52.42	52.79	-94.97	2,564.00	-534.81	1,443.06	1,338.36	104.70	13.783		
10,500.00	7,535.00	10,585.56	7,660.00	53.75	54.13	-94.97	2,663.99	-533.68	1,442.12	1,334.74	107.38	13.430		
10,600.00	7,535.00	10,685.56	7,660.00	55.11	55.48	-94.98	2,763.98	-532.54	1,441.18	1,331.11	110.08	13.092		
10,700.00	7,535.00	10,785.56	7,660.00	56.47	56.84	-94.98	2,863.97	-531.41	1,440.25	1,327.44	112.80	12.768		
10,800.00	7,535.00	10,885.55	7,660.00	57.85	58.22	-94.98	2,963.96	-530.27	1,439.31	1,323.76	115.55	12.456		
10,900.00	7,535.00	10,985.55	7,660.00	59.23	59.61	-94.99	3,063.95	-529.14	1,438.37	1,320.05	118.32	12.157		
11,000.00	7,535.00	11,085.54	7,660.00	60.63	61.00	-94.99	3,163.94	-528.00	1,437.44	1,316.33	121.11	11.869		
11,100.00	7,535.00	11,185.54	7,660.00	62.03	62.40	-94.99	3,263.93	-526.87	1,436.50	1,312.59	123.91	11.593		
11,200.00	7,535.00	11,285.53	7,660.00	63.44	63.82	-95.00	3,363.91	-525.73	1,435.56	1,308.83	126.73	11.327		
11,300.00	7,535.00	11,377.69	7,660.00	64.87	65.12	-95.00	3,464.06	-524.73	1,434.69	1,305.25	129.44	11.083		
11,316.83	7,535.00	11,388.91	7,660.00	65.11	65.28	-95.00	3,467.29	-524.69	1,434.66	1,304.82	129.83	11.050		
11,400.00	7,535.00	11,444.40	7,660.00	66.29	66.09	-95.00	3,522.77	-525.12	1,435.46	1,303.72	131.74	10.896		
11,500.00	7,535.00	11,511.05	7,660.00	67.73	67.05	-94.99	3,589.39	-527.05	1,438.55	1,304.57	133.98	10.737		
11,567.32	7,535.00	11,563.27	7,660.00	68.70	67.82	-94.98	3,641.55	-529.65	1,441.96	1,306.33	135.63	10.632		
11,600.00	7,535.00	11,584.75	7,660.00	69.17	68.14	-94.97	3,662.99	-530.92	1,443.71	1,307.37	136.34	10.589		
11,639.91	7,535.00	11,624.62	7,660.00	69.75	68.74	-94.96	3,702.79	-533.26	1,445.40	1,307.88	137.51	10.511		
11,700.00	7,535.00	11,684.68	7,660.00	70.63	69.63	-94.96	3,762.74	-536.80	1,447.53	1,308.24	139.29	10.392		
11,800.00	7,535.00	11,784.61	7,660.00	72.10	71.13	-94.94	3,862.51	-542.68	1,451.06	1,308.82	142.25	10.201		
11,900.00	7,535.00	11,884.55	7,660.00	73.57	72.63	-94.93	3,962.27	-548.57	1,454.60	1,309.38	145.22	10.017		
12,000.00	7,535.00	11,984.49	7,660.00	75.05	74.13	-94.92	4,062.03	-554.45	1,458.14	1,309.94	148.20	9.839		
12,100.00	7,535.00	12,084.43	7,660.00	76.54	75.64	-94.91	4,161.80	-560.34	1,461.68	1,310.48	151.20	9.667		
12,110.95	7,535.00	12,095.37	7,660.00	76.70	75.81	-94.91	4,172.73	-560.98	1,462.07	1,310.54	151.53	9.649 SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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: 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	-89.62	0.33	-50.08	50.08					
100.00	100.00	100.00	100.00	0.14	0.14	-89.62	0.33	-50.08	50.08	49.81	0.28	181.444		
200.00	200.00	200.00	200.00	0.50	0.50	-89.62	0.33	-50.08	50.08	49.09	0.99	50.438	CC, ES	
300.00	300.00	299.05	299.03	0.85	0.84	-91.26	-1.12	-50.99	51.01	49.31	1.71	29.897		
400.00	400.00	397.87	397.71	1.21	1.19	-95.80	-5.46	-53.71	54.03	51.59	2.44	22.168		
500.00	500.00	496.49	495.96	1.57	1.54	-102.23	-12.61	-58.18	59.67	56.48	3.19	18.730		
600.00	600.00	596.02	595.03	1.93	1.91	-108.17	-20.77	-63.29	66.79	62.89	3.90	17.123		
700.00	700.00	695.55	694.09	2.29	2.29	-112.93	-28.93	-68.39	74.49	69.88	4.61	16.145		
800.00	799.98	795.07	793.14	2.63	2.67	119.94	-37.09	-73.50	83.46	78.15	5.31	15.706		
900.00	899.84	894.47	892.09	2.97	3.05	119.39	-45.23	-78.60	94.26	88.25	6.01	15.686		
1,000.00	999.45	993.65	990.80	3.32	3.43	120.52	-53.36	-83.68	106.79	100.08	6.71	15.904		
1,100.00	1,098.70	1,092.48	1,089.17	3.68	3.81	122.76	-61.47	-88.75	121.21	113.78	7.43	16.309		
1,166.13	1,164.08	1,157.59	1,153.97	3.93	4.06	124.62	-66.80	-92.09	131.92	124.01	7.91	16.668		
1,200.00	1,197.50	1,190.87	1,187.09	4.06	4.19	125.67	-69.53	-93.80	137.69	129.53	8.16	16.866		
1,300.00	1,296.18	1,289.15	1,284.91	4.44	4.57	128.32	-77.59	-98.84	154.94	146.04	8.90	17.409		
1,400.00	1,394.86	1,387.42	1,382.72	4.84	4.95	130.43	-85.64	-103.88	172.45	162.81	9.64	17.885		
1,500.00	1,493.54	1,485.70	1,480.54	5.24	5.33	132.16	-93.70	-108.92	190.14	179.75	10.39	18.302		
1,600.00	1,592.22	1,583.97	1,578.35	5.65	5.71	133.59	-101.75	-113.97	207.98	196.84	11.14	18.670		
1,700.00	1,690.89	1,682.25	1,676.17	6.06	6.09	134.80	-109.81	-119.01	225.92	214.02	11.89	18.997		
1,800.00	1,789.57	1,780.52	1,773.98	6.48	6.47	135.82	-117.87	-124.05	243.94	231.29	12.65	19.288		
1,900.00	1,888.25	1,878.80	1,871.80	6.89	6.85	136.71	-125.92	-129.09	262.03	248.62	13.40	19.548		
2,000.00	1,986.93	1,977.07	1,969.61	7.31	7.23	137.48	-133.98	-134.13	280.17	266.01	14.16	19.783		
2,100.00	2,085.61	2,075.35	2,067.43	7.74	7.61	138.16	-142.03	-139.17	298.35	283.43	14.92	19.995		
2,200.00	2,184.29	2,173.62	2,165.24	8.16	8.00	138.76	-150.09	-144.21	316.57	300.89	15.68	20.188		
2,300.00	2,282.97	2,271.90	2,263.05	8.58	8.38	139.30	-158.15	-149.26	334.82	318.38	16.44	20.364		
2,400.00	2,381.65	2,370.17	2,360.87	9.01	8.76	139.78	-166.20	-154.30	353.10	335.89	17.20	20.525		
2,500.00	2,480.33	2,468.45	2,458.68	9.44	9.14	140.21	-174.26	-159.34	371.39	353.43	17.97	20.673		
2,600.00	2,579.01	2,566.72	2,556.50	9.86	9.52	140.60	-182.31	-164.38	389.71	370.98	18.73	20.809		
2,700.00	2,677.69	2,665.00	2,654.31	10.29	9.90	140.96	-190.37	-169.42	408.04	388.55	19.49	20.935		
2,800.00	2,776.37	2,763.27	2,752.13	10.72	10.28	141.28	-198.43	-174.46	426.39	406.13	20.25	21.052		
2,900.00	2,875.04	2,861.55	2,849.94	11.15	10.67	141.58	-206.48	-179.50	444.74	423.73	21.02	21.161		
3,000.00	2,973.72	2,959.82	2,947.76	11.58	11.05	141.86	-214.54	-184.54	463.11	441.33	21.78	21.262		
3,100.00	3,072.40	3,058.10	3,045.57	12.01	11.43	142.11	-222.59	-189.59	481.49	458.95	22.55	21.356		
3,200.00	3,171.08	3,156.37	3,143.39	12.44	11.81	142.35	-230.65	-194.63	499.88	476.57	23.31	21.445		
3,300.00	3,269.76	3,254.65	3,241.20	12.88	12.19	142.57	-238.71	-199.67	518.27	494.20	24.07	21.528		
3,400.00	3,368.44	3,352.92	3,339.01	13.31	12.57	142.77	-246.76	-204.71	536.67	511.83	24.84	21.606		
3,500.00	3,467.12	3,451.20	3,436.83	13.74	12.95	142.96	-254.82	-209.75	555.08	529.48	25.60	21.679		
3,600.00	3,565.80	3,549.47	3,534.64	14.17	13.34	143.14	-262.87	-214.79	573.49	547.12	26.37	21.749		
3,700.00	3,664.48	3,647.75	3,632.46	14.61	13.72	143.31	-270.93	-219.83	591.91	564.78	27.13	21.814		
3,800.00	3,763.16	3,746.02	3,730.27	15.04	14.10	143.46	-278.99	-224.88	610.33	582.43	27.90	21.876		
3,900.00	3,861.84	3,844.30	3,828.09	15.47	14.48	143.61	-287.04	-229.92	628.76	600.09	28.67	21.935		
4,000.00	3,960.52	3,942.57	3,925.90	15.91	14.86	143.75	-295.10	-234.96	647.19	617.76	29.43	21.990		
4,100.00	4,059.19	4,040.85	4,023.72	16.34	15.24	143.88	-303.15	-240.00	665.62	635.43	30.20	22.043		
4,200.00	4,157.87	4,139.12	4,121.53	16.77	15.63	144.01	-311.21	-245.04	684.06	653.10	30.96	22.093		
4,300.00	4,256.55	4,237.40	4,219.35	17.21	16.01	144.13	-319.27	-250.08	702.50	670.77	31.73	22.141		
4,400.00	4,355.23	4,335.68	4,317.16	17.64	16.39	144.24	-327.32	-255.12	720.94	688.45	32.49	22.187		
4,500.00	4,453.91	4,433.95	4,414.97	18.08	16.77	144.34	-335.38	-260.16	739.39	706.13	33.26	22.231		
4,600.00	4,552.59	4,532.23	4,512.79	18.51	17.15	144.45	-343.43	-265.21	757.83	723.81	34.03	22.272		
4,700.00	4,651.27	4,630.50	4,610.60	18.94	17.53	144.54	-351.49	-270.25	776.28	741.49	34.79	22.312		
4,800.00	4,749.95	4,728.78	4,708.42	19.38	17.92	144.63	-359.55	-275.29	794.74	759.18	35.56	22.350		
4,900.00	4,848.63	4,827.05	4,806.23	19.81	18.30	144.72	-367.60	-280.33	813.19	776.86	36.32	22.387		
5,000.00	4,947.31	4,925.33	4,904.05	20.25	18.68	144.81	-375.66	-285.37	831.65	794.55	37.09	22.422		

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 4R-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 4R-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 #2	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: 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			
5,100.00	5,045.99	5,023.60	5,001.86	20.68	19.06	144.89	-383.71	-290.41	850.10	812.24	37.86	22.455			
5,200.00	5,144.67	5,121.88	5,099.68	21.12	19.44	144.96	-391.77	-295.45	868.56	829.94	38.62	22.488			
5,300.00	5,243.34	5,220.15	5,197.49	21.55	19.83	145.04	-399.83	-300.50	887.02	847.63	39.39	22.519			
5,400.00	5,342.02	5,318.43	5,295.31	21.99	20.21	145.11	-407.88	-305.54	905.48	865.33	40.16	22.548			
5,500.00	5,440.70	5,416.70	5,393.12	22.42	20.59	145.17	-415.94	-310.58	923.94	883.02	40.92	22.577			
5,600.00	5,539.38	5,514.98	5,490.93	22.86	20.97	145.24	-423.99	-315.62	942.41	900.72	41.69	22.605			
5,700.00	5,638.06	5,613.25	5,588.75	23.29	21.35	145.30	-432.05	-320.66	960.87	918.42	42.46	22.632			
5,800.00	5,736.74	5,711.53	5,686.56	23.73	21.73	145.36	-440.11	-325.70	979.34	936.12	43.22	22.657			
5,900.00	5,835.42	5,809.80	5,784.38	24.17	22.12	145.42	-448.16	-330.74	997.81	953.82	43.99	22.682			
6,000.00	5,934.10	5,908.08	5,882.19	24.60	22.50	145.48	-456.22	-335.78	1,016.27	971.52	44.76	22.706			
6,100.00	6,032.78	6,006.35	5,980.01	25.04	22.88	145.53	-464.27	-340.83	1,034.74	989.22	45.52	22.729			
6,200.00	6,131.46	6,104.63	6,077.82	25.47	23.26	145.58	-472.33	-345.87	1,053.21	1,006.92	46.29	22.752			
6,300.00	6,230.14	6,202.90	6,175.64	25.91	23.64	145.63	-480.39	-350.91	1,071.68	1,024.63	47.06	22.773			
6,400.00	6,328.82	6,301.18	6,273.45	26.34	24.02	145.68	-488.44	-355.95	1,090.16	1,042.33	47.83	22.794			
6,500.00	6,427.49	6,399.45	6,371.27	26.78	24.41	145.73	-496.50	-360.99	1,108.63	1,060.03	48.59	22.815			
6,600.00	6,526.17	6,497.73	6,469.08	27.21	24.79	145.77	-504.55	-366.03	1,127.10	1,077.74	49.36	22.834			
6,700.00	6,624.85	6,596.00	6,566.89	27.65	25.17	145.82	-512.61	-371.07	1,145.57	1,095.45	50.13	22.853			
6,800.00	6,723.53	6,694.28	6,664.71	28.09	25.55	145.86	-520.67	-376.12	1,164.05	1,113.15	50.89	22.872			
6,837.91	6,760.94	6,731.54	6,701.79	28.25	25.70	145.88	-523.72	-378.03	1,171.05	1,119.87	51.19	22.879			
6,850.00	6,772.88	6,743.42	6,713.62	28.30	25.74	151.24	-524.69	-378.64	1,173.29	1,122.01	51.28	22.881			
6,900.00	6,822.38	6,792.47	6,762.44	28.51	25.93	178.66	-528.71	-381.15	1,182.53	1,130.88	51.65	22.894			
6,950.00	6,871.89	6,840.70	6,810.55	28.69	26.11	-153.27	-530.96	-383.63	1,191.78	1,139.78	51.99	22.922			
7,000.00	6,921.17	6,889.18	6,858.94	28.86	26.27	-133.66	-529.95	-386.13	1,201.00	1,148.70	52.30	22.963			
7,050.00	6,969.99	6,937.94	6,907.43	29.01	26.41	-121.63	-525.62	-388.64	1,210.17	1,157.58	52.58	23.014			
7,100.00	7,018.10	6,986.99	6,955.81	29.14	26.54	-113.98	-517.95	-391.15	1,219.22	1,166.38	52.85	23.071			
7,150.00	7,065.27	7,036.36	7,003.85	29.26	26.67	-108.78	-506.90	-393.65	1,228.13	1,175.04	53.09	23.133			
7,200.00	7,111.28	7,086.07	7,051.34	29.36	26.78	-105.02	-492.45	-396.11	1,236.84	1,183.52	53.32	23.197			
7,250.00	7,155.89	7,136.14	7,098.04	29.45	26.89	-102.17	-474.60	-398.55	1,245.32	1,191.79	53.53	23.262			
7,300.00	7,198.89	7,186.58	7,143.72	29.53	26.98	-99.93	-453.36	-400.93	1,253.52	1,199.79	53.74	23.327			
7,350.00	7,240.07	7,237.40	7,188.12	29.60	27.07	-98.11	-428.76	-403.26	1,261.41	1,207.48	53.93	23.389			
7,400.00	7,279.23	7,288.62	7,230.99	29.65	27.16	-96.61	-400.83	-405.50	1,268.94	1,214.82	54.12	23.448			
7,450.00	7,316.18	7,340.25	7,272.06	29.69	27.23	-95.36	-369.66	-407.66	1,276.08	1,221.78	54.30	23.500			
7,500.00	7,350.73	7,392.28	7,311.08	29.72	27.31	-94.30	-335.33	-409.72	1,282.79	1,228.30	54.48	23.544			
7,550.00	7,382.73	7,444.71	7,347.79	29.74	27.38	-93.40	-297.95	-411.66	1,289.03	1,234.36	54.67	23.578			
7,600.00	7,412.01	7,497.53	7,381.90	29.74	27.45	-92.64	-257.68	-413.47	1,294.78	1,239.91	54.86	23.600			
7,650.00	7,438.44	7,550.74	7,413.17	29.74	27.53	-91.99	-214.68	-415.14	1,300.00	1,244.93	55.07	23.606			
7,700.00	7,461.87	7,604.31	7,441.35	29.73	27.61	-91.45	-169.15	-416.65	1,304.66	1,249.37	55.29	23.596			
7,750.00	7,482.21	7,658.22	7,466.20	29.71	27.70	-91.00	-121.34	-417.99	1,308.75	1,253.22	55.53	23.568			
7,800.00	7,499.35	7,712.45	7,487.50	29.69	27.81	-90.64	-71.50	-419.15	1,312.23	1,256.44	55.79	23.519			
7,850.00	7,513.20	7,766.97	7,505.06	29.65	27.94	-90.37	-19.91	-420.12	1,315.09	1,259.01	56.08	23.450			
7,900.00	7,523.70	7,821.72	7,518.70	29.62	28.09	-90.17	33.10	-420.89	1,317.31	1,260.92	56.39	23.359			
7,950.00	7,530.80	7,876.68	7,528.28	29.58	28.26	-90.04	87.20	-421.45	1,318.88	1,262.15	56.73	23.247			
8,000.00	7,534.46	7,931.80	7,533.70	29.53	28.45	-89.99	142.03	-421.80	1,319.79	1,262.69	57.10	23.114			
8,027.99	7,535.00	7,962.70	7,534.90	29.51	28.56	-90.00	172.91	-421.89	1,320.01	1,262.69	57.31	23.031			
8,100.00	7,535.00	8,035.87	7,535.00	29.45	28.87	-90.00	246.08	-421.99	1,320.24	1,262.33	57.90	22.800			
8,200.00	7,535.00	8,135.87	7,535.00	29.49	29.36	-90.00	346.08	-422.11	1,320.55	1,261.71	58.84	22.443			
8,300.00	7,535.00	8,235.87	7,535.00	30.05	29.93	-90.00	446.08	-422.23	1,320.87	1,260.94	59.93	22.039			
8,400.00	7,535.00	8,335.87	7,535.00	30.69	30.57	-90.00	546.08	-422.35	1,321.19	1,260.02	61.17	21.599			
8,500.00	7,535.00	8,435.87	7,535.00	31.41	31.29	-90.00	646.08	-422.48	1,321.50	1,258.96	62.54	21.130			
8,600.00	7,535.00	8,535.87	7,535.00	32.17	32.07	-90.00	746.08	-422.60	1,321.82	1,257.78	64.04	20.639			
8,700.00	7,535.00	8,635.87	7,535.00	33.00	32.90	-90.00	846.08	-422.72	1,322.14	1,256.47	65.66	20.135			
8,800.00	7,535.00	8,735.87	7,535.00	33.87	33.80	-90.00	946.08	-422.84	1,322.45	1,255.06	67.40	19.622			

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 4R-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 4R-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 #2	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							
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
8,900.00	7,535.00	8,835.87	7,535.00	34.79	34.74	-90.00	1,046.08	-422.96	1,322.77	1,253.54	69.23	19.107	
9,000.00	7,535.00	8,935.87	7,535.00	35.75	35.72	-90.00	1,146.08	-423.08	1,323.09	1,251.93	71.16	18.594	
9,100.00	7,535.00	9,035.87	7,535.00	36.76	36.75	-90.00	1,246.08	-423.20	1,323.40	1,250.23	73.17	18.086	
9,200.00	7,535.00	9,135.87	7,535.00	37.80	37.82	-90.00	1,346.08	-423.33	1,323.72	1,248.45	75.27	17.587	
9,300.00	7,535.00	9,235.87	7,535.00	38.88	38.92	-90.00	1,446.07	-423.45	1,324.03	1,246.60	77.43	17.099	
9,400.00	7,535.00	9,335.87	7,535.00	39.99	40.06	-90.00	1,546.07	-423.57	1,324.35	1,244.68	79.67	16.623	
9,500.00	7,535.00	9,435.87	7,535.00	41.13	41.22	-90.00	1,646.07	-423.69	1,324.67	1,242.70	81.97	16.161	
9,600.00	7,535.00	9,535.87	7,535.00	42.30	42.41	-90.00	1,746.07	-423.81	1,324.98	1,240.66	84.32	15.713	
9,700.00	7,535.00	9,635.86	7,535.00	43.49	43.63	-90.00	1,846.07	-423.93	1,325.30	1,238.57	86.73	15.281	
9,800.00	7,535.00	9,735.86	7,535.00	44.71	44.87	-90.00	1,946.07	-424.06	1,325.62	1,236.43	89.19	14.863	
9,900.00	7,535.00	9,835.86	7,535.00	45.95	46.13	-90.00	2,046.07	-424.18	1,325.93	1,234.25	91.69	14.462	
10,000.00	7,535.00	9,935.86	7,535.00	47.21	47.42	-90.00	2,146.07	-424.30	1,326.25	1,232.02	94.23	14.075	
10,100.00	7,535.00	10,035.86	7,535.00	48.48	48.71	-90.00	2,246.07	-424.42	1,326.56	1,229.76	96.80	13.704	
10,200.00	7,535.00	10,135.86	7,535.00	49.78	50.03	-90.00	2,346.07	-424.54	1,326.88	1,227.47	99.42	13.347	
10,300.00	7,535.00	10,235.86	7,535.00	51.09	51.36	-90.00	2,446.07	-424.66	1,327.20	1,225.14	102.06	13.004	
10,400.00	7,535.00	10,335.86	7,535.00	52.42	52.71	-90.00	2,546.07	-424.79	1,327.51	1,222.78	104.73	12.675	
10,500.00	7,535.00	10,435.86	7,535.00	53.75	54.07	-90.00	2,646.07	-424.91	1,327.83	1,220.40	107.43	12.360	
10,600.00	7,535.00	10,535.86	7,535.00	55.11	55.44	-90.00	2,746.07	-425.03	1,328.15	1,217.99	110.16	12.057	
10,700.00	7,535.00	10,635.86	7,535.00	56.47	56.82	-90.00	2,846.07	-425.15	1,328.46	1,215.55	112.91	11.766	
10,800.00	7,535.00	10,735.86	7,535.00	57.85	58.21	-90.00	2,946.07	-425.27	1,328.78	1,213.10	115.68	11.487	
10,900.00	7,535.00	10,835.86	7,535.00	59.23	59.61	-90.00	3,046.07	-425.39	1,329.09	1,210.62	118.47	11.219	
11,000.00	7,535.00	10,935.86	7,535.00	60.63	61.03	-90.00	3,146.06	-425.51	1,329.41	1,208.13	121.28	10.961	
11,100.00	7,535.00	11,035.86	7,535.00	62.03	62.45	-90.00	3,246.06	-425.64	1,329.73	1,205.62	124.11	10.714	
11,200.00	7,535.00	11,135.86	7,535.00	63.44	63.87	-90.00	3,346.06	-425.76	1,330.04	1,203.09	126.96	10.476	
11,300.00	7,535.00	11,235.86	7,535.00	64.87	65.31	-90.00	3,446.06	-425.88	1,330.36	1,200.55	129.81	10.248	
11,400.00	7,535.00	11,335.86	7,535.00	66.29	66.75	-90.00	3,546.06	-426.00	1,330.68	1,197.99	132.69	10.029	
11,500.00	7,535.00	11,435.86	7,535.00	67.73	68.20	-90.00	3,646.06	-426.12	1,330.99	1,195.42	135.58	9.817	
11,567.32	7,535.00	11,503.18	7,535.00	68.70	69.18	-90.00	3,713.38	-426.20	1,331.21	1,193.68	137.53	9.680	
11,600.00	7,535.00	11,535.85	7,535.00	69.17	69.65	-90.00	3,746.06	-426.24	1,331.12	1,192.65	138.48	9.613	
11,639.91	7,535.00	11,575.76	7,535.00	69.75	70.24	-90.00	3,785.96	-426.29	1,330.52	1,190.87	139.64	9.528	
11,700.00	7,535.00	11,635.84	7,535.00	70.63	71.11	-90.00	3,846.04	-426.37	1,329.18	1,187.78	141.41	9.400	
11,800.00	7,535.00	11,735.81	7,535.00	72.10	72.58	-90.00	3,946.02	-426.49	1,326.97	1,182.62	144.35	9.193	
11,900.00	7,535.00	11,835.79	7,535.00	73.57	74.05	-90.00	4,045.99	-426.61	1,324.75	1,177.45	147.30	8.994	
12,000.00	7,535.00	11,935.76	7,535.00	75.05	75.53	-90.00	4,145.97	-426.73	1,322.53	1,172.27	150.26	8.802	
12,100.00	7,535.00	12,035.74	7,535.00	76.54	77.00	-90.00	4,245.94	-426.85	1,320.31	1,167.08	153.23	8.616	
12,110.95	7,535.00	12,046.69	7,535.00	76.70	77.17	-90.00	4,256.89	-426.87	1,320.07	1,166.51	153.56	8.597 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.90	0.07	-40.01	40.01				
100.00	100.00	100.00	100.00	0.14	0.14	-89.90	0.07	-40.01	40.01	39.73	0.28	144.950	
200.00	200.00	200.00	200.00	0.50	0.50	-89.90	0.07	-40.01	40.01	39.02	0.99	40.293	
300.00	300.00	300.00	300.00	0.85	0.85	-89.90	0.07	-40.01	40.01	38.30	1.71	23.399 CC	
400.00	400.00	399.73	399.71	1.21	1.20	-92.34	-1.64	-40.30	40.34	37.92	2.41	16.730 ES	
500.00	500.00	499.21	499.05	1.57	1.54	-99.32	-6.76	-41.17	41.74	38.62	3.12	13.397	
600.00	600.00	598.62	598.12	1.93	1.89	-109.18	-14.80	-42.55	45.09	41.25	3.84	11.746	
700.00	700.00	698.25	697.38	2.29	2.25	-117.86	-23.25	-43.99	49.82	45.26	4.56	10.926	
800.00	799.98	797.92	796.68	2.63	2.62	112.46	-31.70	-45.43	56.14	50.88	5.27	10.662	
900.00	899.84	897.59	895.99	2.97	2.99	111.01	-40.16	-46.87	64.03	58.06	5.96	10.737	
1,000.00	999.45	997.15	995.17	3.32	3.36	112.40	-48.60	-48.31	73.20	66.53	6.67	10.972	
1,100.00	1,098.70	1,096.47	1,094.12	3.68	3.74	115.61	-57.02	-49.75	83.87	76.48	7.39	11.343	
1,166.13	1,164.08	1,161.96	1,159.37	3.93	3.98	118.34	-62.58	-50.70	91.95	84.07	7.88	11.668	
1,200.00	1,197.50	1,195.45	1,192.74	4.06	4.11	119.82	-65.42	-51.18	96.35	88.22	8.13	11.849	
1,300.00	1,296.18	1,294.34	1,291.26	4.44	4.49	123.50	-73.81	-52.61	109.68	100.80	8.88	12.357	
1,400.00	1,394.86	1,393.23	1,389.79	4.84	4.86	126.38	-82.19	-54.05	123.35	113.73	9.63	12.815	
1,500.00	1,493.54	1,492.12	1,488.31	5.24	5.24	128.68	-90.58	-55.48	137.27	126.89	10.38	13.226	
1,600.00	1,592.22	1,591.01	1,586.83	5.65	5.61	130.56	-98.97	-56.91	151.37	140.23	11.14	13.593	
1,700.00	1,690.89	1,689.90	1,685.36	6.06	5.99	132.11	-107.35	-58.34	165.60	153.70	11.89	13.922	
1,800.00	1,789.57	1,788.79	1,783.88	6.48	6.37	133.42	-115.74	-59.77	179.92	167.27	12.66	14.217	
1,900.00	1,888.25	1,887.69	1,882.41	6.89	6.74	134.53	-124.13	-61.20	194.33	180.91	13.42	14.484	
2,000.00	1,986.93	1,986.58	1,980.93	7.31	7.12	135.50	-132.52	-62.63	208.80	194.62	14.18	14.725	
2,100.00	2,085.61	2,085.47	2,079.46	7.74	7.50	136.33	-140.90	-64.06	223.32	208.38	14.94	14.944	
2,200.00	2,184.29	2,184.36	2,177.98	8.16	7.87	137.07	-149.29	-65.49	237.88	222.17	15.71	15.143	
2,300.00	2,282.97	2,283.25	2,276.51	8.58	8.25	137.72	-157.68	-66.92	252.48	236.00	16.47	15.326	
2,400.00	2,381.65	2,382.14	2,375.03	9.01	8.63	138.29	-166.06	-68.36	267.10	249.86	17.24	15.493	
2,500.00	2,480.33	2,481.03	2,473.55	9.44	9.01	138.81	-174.45	-69.79	281.74	263.74	18.01	15.647	
2,600.00	2,579.01	2,579.92	2,572.08	9.86	9.38	139.28	-182.84	-71.22	296.41	277.64	18.77	15.789	
2,700.00	2,677.69	2,678.81	2,670.60	10.29	9.76	139.70	-191.23	-72.65	311.10	291.56	19.54	15.921	
2,800.00	2,776.37	2,777.70	2,769.13	10.72	10.14	140.09	-199.61	-74.08	325.80	305.49	20.31	16.043	
2,900.00	2,875.04	2,876.60	2,867.65	11.15	10.52	140.44	-208.00	-75.51	340.51	319.43	21.08	16.157	
3,000.00	2,973.72	2,975.49	2,966.18	11.58	10.90	140.76	-216.39	-76.94	355.23	333.39	21.84	16.263	
3,100.00	3,072.40	3,074.38	3,064.70	12.01	11.27	141.06	-224.77	-78.37	369.97	347.36	22.61	16.362	
3,200.00	3,171.08	3,173.27	3,163.22	12.44	11.65	141.33	-233.16	-79.80	384.71	361.33	23.38	16.455	
3,300.00	3,269.76	3,272.16	3,261.75	12.88	12.03	141.59	-241.55	-81.24	399.46	375.31	24.15	16.542	
3,400.00	3,368.44	3,371.05	3,360.27	13.31	12.41	141.82	-249.94	-82.67	414.22	389.30	24.92	16.624	
3,500.00	3,467.12	3,469.94	3,458.80	13.74	12.79	142.04	-258.32	-84.10	428.99	403.30	25.69	16.701	
3,600.00	3,565.80	3,568.83	3,557.32	14.17	13.17	142.25	-266.71	-85.53	443.76	417.30	26.46	16.774	
3,700.00	3,664.48	3,667.72	3,655.85	14.61	13.54	142.44	-275.10	-86.96	458.53	431.31	27.22	16.843	
3,800.00	3,763.16	3,766.62	3,754.37	15.04	13.92	142.62	-283.48	-88.39	473.31	445.32	27.99	16.908	
3,900.00	3,861.84	3,865.51	3,852.89	15.47	14.30	142.79	-291.87	-89.82	488.10	459.33	28.76	16.969	
4,000.00	3,960.52	3,964.40	3,951.42	15.91	14.68	142.95	-300.26	-91.25	502.89	473.35	29.53	17.028	
4,100.00	4,059.19	4,063.29	4,049.94	16.34	15.06	143.10	-308.65	-92.68	517.68	487.38	30.30	17.084	
4,200.00	4,157.87	4,162.18	4,148.47	16.77	15.44	143.24	-317.03	-94.12	532.47	501.40	31.07	17.137	
4,300.00	4,256.55	4,261.07	4,246.99	17.21	15.81	143.37	-325.42	-95.55	547.27	515.43	31.84	17.187	
4,400.00	4,355.23	4,359.96	4,345.52	17.64	16.19	143.50	-333.81	-96.98	562.07	529.46	32.61	17.235	
4,500.00	4,453.91	4,458.85	4,444.04	18.08	16.57	143.62	-342.19	-98.41	576.88	543.50	33.38	17.281	
4,600.00	4,552.59	4,557.74	4,542.57	18.51	16.95	143.74	-350.58	-99.84	591.69	557.53	34.15	17.325	
4,700.00	4,651.27	4,656.63	4,641.09	18.94	17.33	143.84	-358.97	-101.27	606.49	571.57	34.92	17.367	
4,800.00	4,749.95	4,755.53	4,739.61	19.38	17.71	143.95	-367.36	-102.70	621.30	585.61	35.69	17.408	
4,900.00	4,848.63	4,854.42	4,838.14	19.81	18.08	144.05	-375.74	-104.13	636.12	599.66	36.46	17.446	
5,000.00	4,947.31	4,953.31	4,936.66	20.25	18.46	144.14	-384.13	-105.56	650.93	613.70	37.23	17.483	

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 4R-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 4R-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 #2	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
5,100.00	5,045.99	5,052.20	5,035.19	20.68	18.84	144.23	-392.52	-106.99	665.75	627.74	38.00	17.519	
5,200.00	5,144.67	5,151.09	5,133.71	21.12	19.22	144.32	-400.90	-108.43	680.56	641.79	38.77	17.553	
5,300.00	5,243.34	5,249.98	5,232.24	21.55	19.60	144.40	-409.29	-109.86	695.38	655.84	39.54	17.585	
5,400.00	5,342.02	5,348.87	5,330.76	21.99	19.98	144.48	-417.68	-111.29	710.20	669.89	40.31	17.617	
5,500.00	5,440.70	5,447.76	5,429.28	22.42	20.36	144.56	-426.07	-112.72	725.03	683.94	41.08	17.647	
5,600.00	5,539.38	5,546.65	5,527.81	22.86	20.73	144.63	-434.45	-114.15	739.85	697.99	41.85	17.677	
5,700.00	5,638.06	5,645.55	5,626.33	23.29	21.11	144.70	-442.84	-115.58	754.67	712.05	42.62	17.705	
5,800.00	5,736.74	5,744.44	5,724.86	23.73	21.49	144.77	-451.23	-117.01	769.50	726.10	43.40	17.732	
5,900.00	5,835.42	5,843.33	5,823.38	24.17	21.87	144.83	-459.61	-118.44	784.32	740.16	44.17	17.758	
6,000.00	5,934.10	5,942.22	5,921.91	24.60	22.25	144.89	-468.00	-119.87	799.15	754.21	44.94	17.784	
6,100.00	6,032.78	6,041.11	6,020.43	25.04	22.63	144.95	-476.39	-121.31	813.98	768.27	45.71	17.808	
6,200.00	6,131.46	6,140.00	6,118.96	25.47	23.00	145.01	-484.78	-122.74	828.81	782.33	46.48	17.832	
6,300.00	6,230.14	6,238.89	6,217.48	25.91	23.38	145.07	-493.16	-124.17	843.63	796.39	47.25	17.855	
6,400.00	6,328.82	6,337.78	6,316.00	26.34	23.76	145.12	-501.55	-125.60	858.46	810.45	48.02	17.877	
6,500.00	6,427.49	6,436.67	6,414.53	26.78	24.14	145.17	-509.94	-127.03	873.30	824.51	48.79	17.899	
6,600.00	6,526.17	6,535.56	6,513.05	27.21	24.52	145.22	-518.32	-128.46	888.13	838.57	49.56	17.920	
6,700.00	6,624.85	6,634.46	6,611.58	27.65	24.90	145.27	-526.71	-129.89	902.96	852.63	50.33	17.940	
6,800.00	6,723.53	6,733.34	6,710.21	28.09	25.26	145.44	-533.20	-131.32	917.79	866.71	51.08	17.967	
6,837.91	6,760.94	6,770.49	6,747.35	28.25	25.38	145.68	-532.69	-131.86	923.43	872.09	51.33	17.988	
6,850.00	6,772.88	6,782.25	6,759.09	28.30	25.41	151.11	-532.13	-132.03	925.23	873.82	51.41	17.997	
6,900.00	6,822.38	6,830.64	6,807.27	28.51	25.55	178.87	-527.78	-132.73	932.74	881.03	51.71	18.039	
6,950.00	6,871.89	6,878.63	6,854.65	28.69	25.68	-152.64	-520.26	-133.42	940.30	888.33	51.97	18.092	
7,000.00	6,921.17	6,926.24	6,901.07	28.86	25.80	-132.63	-509.69	-134.10	947.87	895.65	52.21	18.154	
7,050.00	6,969.99	6,973.51	6,946.35	29.01	25.91	-120.21	-496.16	-134.75	955.40	902.97	52.43	18.222	
7,100.00	7,018.10	7,020.46	6,990.34	29.14	26.02	-112.18	-479.80	-135.39	962.85	910.22	52.63	18.295	
7,150.00	7,065.27	7,067.12	7,032.90	29.26	26.11	-106.62	-460.72	-136.01	970.19	917.38	52.81	18.372	
7,200.00	7,111.28	7,113.50	7,073.90	29.36	26.21	-102.52	-439.05	-136.61	977.38	924.40	52.98	18.449	
7,250.00	7,155.89	7,159.64	7,113.20	29.45	26.30	-99.34	-414.90	-137.18	984.36	931.23	53.13	18.527	
7,300.00	7,198.89	7,205.55	7,150.68	29.53	26.39	-96.78	-388.41	-137.72	991.12	937.84	53.28	18.603	
7,350.00	7,240.07	7,250.00	7,185.28	29.60	26.47	-94.68	-360.53	-138.22	997.61	944.20	53.41	18.677	
7,400.00	7,279.23	7,296.79	7,219.77	29.65	26.56	-92.90	-328.91	-138.73	1,003.79	950.24	53.56	18.742	
7,450.00	7,316.18	7,342.16	7,251.16	29.69	26.65	-91.38	-296.17	-139.18	1,009.64	955.94	53.70	18.802	
7,500.00	7,350.73	7,387.39	7,280.34	29.72	26.75	-90.08	-261.62	-139.60	1,015.12	961.28	53.84	18.854	
7,550.00	7,382.73	7,432.50	7,307.20	29.74	26.85	-88.97	-225.40	-140.00	1,020.21	966.21	53.99	18.895	
7,600.00	7,412.01	7,477.50	7,331.68	29.74	26.95	-88.00	-187.65	-140.35	1,024.87	970.71	54.16	18.924	
7,650.00	7,438.44	7,522.41	7,353.69	29.74	27.06	-87.18	-148.51	-140.67	1,029.09	974.75	54.34	18.939	
7,700.00	7,461.87	7,567.25	7,373.19	29.73	27.18	-86.48	-108.14	-140.95	1,032.84	978.31	54.53	18.940	
7,750.00	7,482.21	7,612.03	7,390.09	29.71	27.31	-85.89	-66.69	-141.20	1,036.10	981.35	54.75	18.925	
7,800.00	7,499.35	7,656.76	7,404.36	29.69	27.45	-85.42	-24.30	-141.41	1,038.86	983.88	54.98	18.894	
7,850.00	7,513.20	7,700.00	7,415.62	29.65	27.59	-85.04	17.44	-141.57	1,041.11	985.87	55.24	18.847	
7,900.00	7,523.70	7,746.14	7,424.83	29.62	27.76	-84.77	62.65	-141.70	1,042.82	987.29	55.53	18.779	
7,950.00	7,530.80	7,790.82	7,430.95	29.58	27.93	-84.59	106.89	-141.79	1,044.00	988.16	55.84	18.695	
8,000.00	7,534.46	7,835.50	7,434.31	29.53	28.11	-84.51	151.44	-141.84	1,044.64	988.46	56.18	18.594	
8,027.99	7,535.00	7,860.51	7,434.97	29.51	28.21	-84.51	176.45	-141.85	1,044.76	988.38	56.38	18.531	
8,100.00	7,535.00	7,931.76	7,435.00	29.45	28.54	-84.51	247.69	-141.85	1,044.90	987.93	56.97	18.341	
8,200.00	7,535.00	8,031.76	7,435.00	29.49	29.06	-84.51	347.69	-141.85	1,045.09	987.17	57.92	18.044	
8,300.00	7,535.00	8,131.76	7,435.00	30.05	29.65	-84.51	447.69	-141.85	1,045.28	986.26	59.02	17.710	
8,400.00	7,535.00	8,214.50	7,435.00	30.69	30.20	-84.51	530.43	-142.24	1,046.01	985.87	60.14	17.392	
8,500.00	7,535.00	8,295.35	7,435.00	31.41	30.78	-84.53	611.24	-144.58	1,049.02	987.67	61.36	17.097	
8,600.00	7,535.00	8,395.28	7,435.00	32.17	31.58	-84.55	711.12	-148.07	1,052.69	989.83	62.86	16.747	
8,700.00	7,535.00	8,495.21	7,435.00	33.00	32.43	-84.56	810.99	-151.56	1,056.36	991.88	64.48	16.383	
8,800.00	7,535.00	8,595.15	7,435.00	33.87	33.34	-84.58	910.86	-155.05	1,060.03	993.81	66.22	16.008	

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 4R-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 4R-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 #2	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				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		
8,900.00	7,535.00	8,695.08	7,435.00	34.79	34.30	-84.60	1,010.73	-158.53	1,063.70	995.64	68.06	15.629		
9,000.00	7,535.00	8,795.01	7,435.00	35.75	35.30	-84.62	1,110.60	-162.02	1,067.36	997.36	70.00	15.248		
9,100.00	7,535.00	8,894.94	7,435.00	36.76	36.36	-84.64	1,210.47	-165.51	1,071.03	999.00	72.03	14.870		
9,200.00	7,535.00	8,994.87	7,435.00	37.80	37.45	-84.66	1,310.34	-169.00	1,074.70	1,000.56	74.14	14.496		
9,300.00	7,535.00	9,094.81	7,435.00	38.88	38.58	-84.68	1,410.21	-172.48	1,078.37	1,002.04	76.33	14.129		
9,400.00	7,535.00	9,194.74	7,435.00	39.99	39.74	-84.69	1,510.09	-175.97	1,082.04	1,003.46	78.58	13.770		
9,500.00	7,535.00	9,311.43	7,435.00	41.13	41.14	-84.71	1,626.72	-179.70	1,085.49	1,004.33	81.16	13.375		
9,600.00	7,535.00	9,432.40	7,435.00	42.30	42.60	-84.72	1,747.69	-180.24	1,086.02	1,002.18	83.84	12.953		
9,700.00	7,535.00	9,532.40	7,435.00	43.49	43.83	-84.72	1,847.69	-180.24	1,086.21	999.95	86.26	12.592		
9,800.00	7,535.00	9,632.40	7,435.00	44.71	45.09	-84.72	1,947.69	-180.24	1,086.41	997.68	88.73	12.244		
9,900.00	7,535.00	9,732.40	7,435.00	45.95	46.36	-84.72	2,047.69	-180.24	1,086.60	995.37	91.23	11.910		
10,000.00	7,535.00	9,832.40	7,435.00	47.21	47.66	-84.72	2,147.68	-180.24	1,086.80	993.01	93.78	11.589		
10,100.00	7,535.00	9,932.40	7,435.00	48.48	48.97	-84.72	2,247.68	-180.24	1,086.99	990.62	96.37	11.280		
10,200.00	7,535.00	10,032.40	7,435.00	49.78	50.30	-84.72	2,347.68	-180.24	1,087.18	988.20	98.98	10.983		
10,300.00	7,535.00	10,132.40	7,435.00	51.09	51.64	-84.72	2,447.68	-180.24	1,087.38	985.74	101.63	10.699		
10,400.00	7,535.00	10,232.40	7,435.00	52.42	52.99	-84.72	2,547.68	-180.24	1,087.57	983.26	104.31	10.426		
10,500.00	7,535.00	10,332.40	7,435.00	53.75	54.36	-84.73	2,647.68	-180.24	1,087.76	980.75	107.01	10.165		
10,600.00	7,535.00	10,432.40	7,435.00	55.11	55.74	-84.73	2,747.68	-180.24	1,087.96	978.22	109.74	9.914		
10,700.00	7,535.00	10,532.40	7,435.00	56.47	57.13	-84.73	2,847.68	-180.24	1,088.15	975.66	112.49	9.673		
10,800.00	7,535.00	10,632.40	7,435.00	57.85	58.53	-84.73	2,947.68	-180.24	1,088.35	973.08	115.27	9.442		
10,900.00	7,535.00	10,732.40	7,435.00	59.23	59.94	-84.73	3,047.68	-180.24	1,088.54	970.48	118.06	9.220		
11,000.00	7,535.00	10,832.40	7,435.00	60.63	61.36	-84.73	3,147.68	-180.24	1,088.73	967.86	120.87	9.008		
11,100.00	7,535.00	10,932.40	7,435.00	62.03	62.79	-84.73	3,247.68	-180.24	1,088.93	965.23	123.70	8.803		
11,200.00	7,535.00	11,032.40	7,435.00	63.44	64.22	-84.73	3,347.68	-180.24	1,089.12	962.58	126.54	8.607		
11,300.00	7,535.00	11,132.40	7,435.00	64.87	65.66	-84.73	3,447.68	-180.24	1,089.31	959.92	129.40	8.418		
11,400.00	7,535.00	11,232.40	7,435.00	66.29	67.11	-84.73	3,547.68	-180.24	1,089.51	957.24	132.27	8.237		
11,500.00	7,535.00	11,332.40	7,435.00	67.73	68.56	-84.73	3,647.68	-180.23	1,089.70	954.55	135.16	8.063		
11,567.32	7,535.00	11,399.72	7,435.00	68.70	69.55	-84.74	3,715.00	-180.23	1,089.83	952.73	137.11	7.949		
11,600.00	7,535.00	11,432.40	7,435.00	69.17	70.02	-84.73	3,747.68	-180.23	1,089.71	951.65	138.06	7.893		
11,639.91	7,535.00	11,472.30	7,435.00	69.75	70.61	-84.73	3,787.58	-180.23	1,089.06	949.84	139.22	7.823		
11,700.00	7,535.00	11,532.38	7,435.00	70.63	71.49	-84.72	3,847.66	-180.23	1,087.66	946.68	140.98	7.715		
11,800.00	7,535.00	11,632.35	7,435.00	72.10	72.96	-84.71	3,947.63	-180.23	1,085.33	941.42	143.91	7.542		
11,900.00	7,535.00	11,960.10	7,435.00	73.57	77.44	-84.51	4,266.86	-146.86	1,072.43	924.33	148.10	7.241		
12,000.00	7,535.00	11,960.10	7,435.00	75.05	77.44	-84.51	4,266.86	-146.86	1,054.22	903.21	151.01	6.981		
12,100.00	7,535.00	11,960.10	7,435.00	76.54	77.44	-84.51	4,266.86	-146.86	1,045.30	892.45	152.85	6.839		
12,110.95	7,535.00	11,960.10	7,435.00	76.70	77.44	-84.51	4,266.86	-146.86	1,044.90	891.92	152.98	6.830 SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.90	0.05	-29.94	29.94				
100.00	100.00	100.00	100.00	0.14	0.14	-89.90	0.05	-29.94	29.94	29.66	0.28	108.459	
200.00	200.00	200.00	200.00	0.50	0.50	-89.90	0.05	-29.94	29.94	28.94	0.99	30.149	
300.00	300.00	300.23	300.21	0.85	0.84	-93.19	-1.64	-29.48	29.53	27.83	1.70	17.392	
400.00	400.00	400.22	400.05	1.21	1.19	-103.41	-6.71	-28.13	28.92	26.52	2.40	12.047	
410.88	410.88	411.07	410.88	1.25	1.23	-104.95	-7.46	-27.93	28.91	26.43	2.48	11.665 CC, ES	
500.00	500.00	499.88	499.39	1.57	1.55	-119.10	-14.50	-26.05	29.82	26.69	3.13	9.539	
600.00	600.00	599.53	598.69	1.93	1.92	-133.34	-22.56	-23.90	32.89	29.03	3.86	8.515	
700.00	700.00	699.18	697.99	2.29	2.29	-144.61	-30.61	-21.75	37.61	33.02	4.59	8.191	
800.00	799.98	798.92	797.38	2.63	2.66	84.87	-38.68	-19.60	43.25	37.95	5.30	8.162	
900.00	899.84	898.76	896.86	2.97	3.04	84.05	-46.75	-17.44	48.81	42.81	6.00	8.136	
1,000.00	999.45	998.57	996.33	3.32	3.42	87.06	-54.82	-15.28	54.09	47.38	6.71	8.058	
1,100.00	1,098.70	1,098.24	1,095.65	3.68	3.79	92.86	-62.88	-13.13	59.58	52.13	7.45	8.002	
1,166.13	1,164.08	1,164.02	1,161.20	3.93	4.04	97.80	-68.20	-11.71	63.74	55.80	7.94	8.026	
1,200.00	1,197.50	1,197.67	1,194.73	4.06	4.17	100.45	-70.92	-10.99	66.11	57.91	8.20	8.064	
1,300.00	1,296.18	1,297.03	1,293.74	4.44	4.55	107.23	-78.96	-8.84	73.84	64.88	8.96	8.239	
1,400.00	1,394.86	1,396.39	1,392.75	4.84	4.93	112.67	-86.99	-6.69	82.40	72.67	9.73	8.468	
1,500.00	1,493.54	1,495.75	1,491.76	5.24	5.30	117.06	-95.03	-4.55	91.55	81.06	10.50	8.721	
1,600.00	1,592.22	1,595.10	1,590.77	5.65	5.68	120.64	-103.06	-2.40	101.15	89.88	11.27	8.977	
1,700.00	1,690.89	1,694.46	1,689.78	6.06	6.06	123.59	-111.09	-0.26	111.07	99.03	12.04	9.228	
1,800.00	1,789.57	1,793.82	1,788.79	6.48	6.44	126.05	-119.13	1.89	121.23	108.43	12.80	9.468	
1,900.00	1,888.25	1,893.18	1,887.80	6.89	6.82	128.13	-127.16	4.03	131.58	118.01	13.57	9.695	
2,000.00	1,986.93	1,992.54	1,986.81	7.31	7.20	129.90	-135.20	6.18	142.08	127.74	14.34	9.908	
2,100.00	2,085.61	2,091.90	2,085.82	7.74	7.57	131.43	-143.23	8.32	152.69	137.59	15.11	10.107	
2,200.00	2,184.29	2,191.25	2,184.83	8.16	7.95	132.76	-151.26	10.47	163.40	147.52	15.87	10.293	
2,300.00	2,282.97	2,290.61	2,283.84	8.58	8.33	133.93	-159.30	12.61	174.18	157.54	16.64	10.466	
2,400.00	2,381.65	2,389.97	2,382.85	9.01	8.71	134.96	-167.33	14.76	185.03	167.62	17.41	10.628	
2,500.00	2,480.33	2,489.33	2,481.86	9.44	9.09	135.88	-175.37	16.90	195.93	177.75	18.18	10.779	
2,600.00	2,579.01	2,588.69	2,580.87	9.86	9.47	136.70	-183.40	19.05	206.87	187.93	18.94	10.920	
2,700.00	2,677.69	2,688.04	2,679.88	10.29	9.85	137.43	-191.44	21.19	217.86	198.14	19.71	11.052	
2,800.00	2,776.37	2,787.40	2,778.89	10.72	10.23	138.10	-199.47	23.34	228.87	208.39	20.48	11.176	
2,900.00	2,875.04	2,886.76	2,877.89	11.15	10.60	138.70	-207.50	25.48	239.91	218.66	21.25	11.292	
3,000.00	2,973.72	2,986.12	2,976.90	11.58	10.98	139.26	-215.54	27.63	250.98	228.96	22.01	11.401	
3,100.00	3,072.40	3,085.48	3,075.91	12.01	11.36	139.76	-223.57	29.78	262.06	239.28	22.78	11.503	
3,200.00	3,171.08	3,184.83	3,174.92	12.44	11.74	140.22	-231.61	31.92	273.17	249.62	23.55	11.600	
3,300.00	3,269.76	3,284.19	3,273.93	12.88	12.12	140.65	-239.64	34.07	284.29	259.97	24.32	11.691	
3,400.00	3,368.44	3,383.55	3,372.94	13.31	12.50	141.05	-247.68	36.21	295.42	270.34	25.08	11.777	
3,500.00	3,467.12	3,482.91	3,471.95	13.74	12.88	141.41	-255.71	38.36	306.57	280.72	25.85	11.858	
3,600.00	3,565.80	3,582.27	3,570.96	14.17	13.26	141.76	-263.74	40.50	317.73	291.11	26.62	11.936	
3,700.00	3,664.48	3,681.63	3,669.97	14.61	13.64	142.07	-271.78	42.65	328.90	301.52	27.39	12.009	
3,800.00	3,763.16	3,780.98	3,768.98	15.04	14.01	142.37	-279.81	44.79	340.08	311.93	28.16	12.078	
3,900.00	3,861.84	3,880.34	3,867.99	15.47	14.39	142.65	-287.85	46.94	351.27	322.35	28.92	12.144	
4,000.00	3,960.52	3,979.70	3,967.00	15.91	14.77	142.91	-295.88	49.08	362.47	332.78	29.69	12.207	
4,100.00	4,059.19	4,079.06	4,066.01	16.34	15.15	143.16	-303.91	51.23	373.67	343.21	30.46	12.267	
4,200.00	4,157.87	4,178.42	4,165.02	16.77	15.53	143.39	-311.95	53.37	384.88	353.65	31.23	12.325	
4,300.00	4,256.55	4,277.77	4,264.03	17.21	15.91	143.60	-319.98	55.52	396.10	364.10	32.00	12.379	
4,400.00	4,355.23	4,377.13	4,363.04	17.64	16.29	143.81	-328.02	57.66	407.32	374.55	32.77	12.431	
4,500.00	4,453.91	4,476.49	4,462.05	18.08	16.67	144.01	-336.05	59.81	418.54	385.01	33.53	12.481	
4,600.00	4,552.59	4,575.85	4,561.06	18.51	17.05	144.19	-344.09	61.96	429.77	395.47	34.30	12.529	
4,700.00	4,651.27	4,675.21	4,660.07	18.94	17.43	144.37	-352.12	64.10	441.01	405.94	35.07	12.575	
4,800.00	4,749.95	4,774.56	4,759.08	19.38	17.80	144.53	-360.15	66.25	452.25	416.41	35.84	12.619	
4,900.00	4,848.63	4,873.92	4,858.09	19.81	18.18	144.69	-368.19	68.39	463.49	426.88	36.61	12.661	

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 4R-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 4R-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 #2	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
5,000.00	4,947.31	4,973.28	4,957.10	20.25	18.56	144.84	-376.22	70.54	474.73	437.36	37.38	12.702	
5,100.00	5,045.99	5,072.64	5,056.10	20.68	18.94	144.99	-384.26	72.68	485.98	447.84	38.14	12.741	
5,200.00	5,144.67	5,172.00	5,155.11	21.12	19.32	145.12	-392.29	74.83	497.23	458.32	38.91	12.778	
5,300.00	5,243.34	5,271.36	5,254.12	21.55	19.70	145.25	-400.32	76.97	508.49	468.81	39.68	12.814	
5,400.00	5,342.02	5,370.71	5,353.13	21.99	20.08	145.38	-408.36	79.12	519.74	479.29	40.45	12.849	
5,500.00	5,440.70	5,470.07	5,452.14	22.42	20.46	145.50	-416.39	81.26	531.00	489.78	41.22	12.883	
5,600.00	5,539.38	5,569.43	5,551.15	22.86	20.84	145.62	-424.43	83.41	542.26	500.28	41.99	12.915	
5,700.00	5,638.06	5,668.79	5,650.16	23.29	21.22	145.73	-432.46	85.55	553.53	510.77	42.75	12.946	
5,800.00	5,736.74	5,768.15	5,749.17	23.73	21.59	145.83	-440.50	87.70	564.79	521.27	43.52	12.977	
5,900.00	5,835.42	5,867.50	5,848.18	24.17	21.97	145.94	-448.53	89.84	576.06	531.76	44.29	13.006	
6,000.00	5,934.10	5,966.86	5,947.19	24.60	22.35	146.03	-456.56	91.99	587.33	542.26	45.06	13.034	
6,100.00	6,032.78	6,066.22	6,046.20	25.04	22.73	146.13	-464.60	94.14	598.60	552.77	45.83	13.061	
6,200.00	6,131.46	6,165.58	6,145.21	25.47	23.11	146.22	-472.63	96.28	609.87	563.27	46.60	13.088	
6,300.00	6,230.14	6,264.94	6,244.22	25.91	23.49	146.31	-480.67	98.43	621.14	573.77	47.37	13.113	
6,400.00	6,328.82	6,364.29	6,343.23	26.34	23.87	146.39	-488.70	100.57	632.42	584.28	48.14	13.138	
6,500.00	6,427.49	6,463.65	6,442.24	26.78	24.25	146.47	-496.74	102.72	643.69	594.79	48.90	13.162	
6,600.00	6,526.17	6,563.01	6,541.25	27.21	24.63	146.55	-504.77	104.86	654.97	605.30	49.67	13.186	
6,700.00	6,624.85	6,662.37	6,640.26	27.65	25.01	146.63	-512.80	107.01	666.25	615.80	50.44	13.208	
6,800.00	6,723.53	6,761.73	6,739.27	28.09	25.39	146.70	-520.84	109.15	677.53	626.32	51.21	13.230	
6,837.91	6,760.94	6,799.40	6,776.80	28.25	25.53	146.73	-523.88	109.97	681.80	630.30	51.50	13.238	
6,850.00	6,772.88	6,811.41	6,788.77	28.30	25.58	152.02	-524.86	110.23	683.17	631.57	51.60	13.241	
6,900.00	6,822.38	6,861.03	6,838.22	28.51	25.76	179.06	-528.87	111.30	688.78	636.80	51.98	13.251	
6,950.00	6,871.89	6,910.38	6,887.40	28.69	25.95	-153.44	-532.86	112.36	694.37	642.01	52.36	13.261	
7,000.00	6,921.17	6,959.31	6,936.26	28.86	26.13	-134.53	-535.05	113.42	699.99	647.27	52.73	13.276	
7,050.00	6,969.99	7,008.74	6,985.65	29.01	26.29	-123.18	-533.88	114.48	705.65	652.59	53.06	13.299	
7,100.00	7,018.10	7,058.67	7,035.35	29.14	26.43	-116.20	-529.24	115.55	711.31	657.94	53.36	13.329	
7,150.00	7,065.27	7,109.15	7,085.13	29.26	26.56	-111.65	-521.03	116.61	716.94	663.29	53.65	13.362	
7,200.00	7,111.28	7,160.18	7,134.75	29.36	26.69	-108.53	-509.20	117.67	722.52	668.60	53.92	13.399	
7,250.00	7,155.89	7,211.78	7,183.93	29.45	26.81	-106.29	-493.67	118.71	728.02	673.85	54.18	13.438	
7,300.00	7,198.89	7,263.97	7,232.41	29.53	26.93	-104.63	-474.40	119.73	733.41	679.00	54.41	13.479	
7,350.00	7,240.07	7,316.75	7,279.89	29.60	27.04	-103.38	-451.38	120.73	738.65	684.02	54.63	13.521	
7,400.00	7,279.23	7,370.14	7,326.04	29.65	27.15	-102.41	-424.60	121.69	743.71	688.88	54.83	13.563	
7,450.00	7,316.18	7,424.12	7,370.56	29.69	27.25	-101.65	-394.10	122.61	748.56	693.54	55.02	13.605	
7,500.00	7,350.73	7,478.71	7,413.11	29.72	27.35	-101.06	-359.94	123.49	753.17	697.97	55.20	13.644	
7,550.00	7,382.73	7,533.88	7,453.35	29.74	27.46	-100.59	-322.22	124.31	757.51	702.13	55.38	13.679	
7,600.00	7,412.01	7,589.62	7,490.93	29.74	27.57	-100.22	-281.09	125.07	761.55	705.99	55.55	13.708	
7,650.00	7,438.44	7,645.90	7,525.52	29.74	27.68	-99.93	-236.71	125.76	765.25	709.52	55.73	13.731	
7,700.00	7,461.87	7,702.70	7,556.78	29.73	27.81	-99.70	-189.32	126.37	768.59	712.67	55.92	13.744	
7,750.00	7,482.21	7,759.96	7,584.41	29.71	27.95	-99.52	-139.17	126.91	771.55	715.41	56.13	13.745	
7,800.00	7,499.35	7,817.66	7,608.10	29.69	28.10	-99.39	-86.58	127.35	774.10	717.73	56.37	13.733	
7,850.00	7,513.20	7,875.72	7,627.59	29.65	28.27	-99.30	-31.91	127.71	776.21	719.59	56.63	13.707	
7,900.00	7,523.70	7,934.10	7,642.66	29.62	28.45	-99.24	24.47	127.96	777.88	720.96	56.92	13.665	
7,950.00	7,530.80	7,992.72	7,653.13	29.58	28.66	-99.21	82.14	128.12	779.09	721.84	57.26	13.607	
8,000.00	7,534.46	8,051.52	7,658.86	29.53	28.88	-99.21	140.64	128.17	779.83	722.20	57.63	13.532	
8,027.99	7,535.00	8,084.48	7,659.96	29.51	29.01	-99.22	173.58	128.15	780.04	722.18	57.85	13.483	
8,100.00	7,535.00	8,157.63	7,660.00	29.45	29.33	-99.22	246.73	128.06	780.27	721.81	58.46	13.347	
8,200.00	7,535.00	8,257.63	7,660.00	29.49	29.83	-99.21	346.73	127.94	780.58	721.16	59.42	13.136	
8,300.00	7,535.00	8,357.63	7,660.00	30.05	30.41	-99.21	446.73	127.81	780.90	720.37	60.53	12.901	
8,400.00	7,535.00	8,457.63	7,660.00	30.69	31.06	-99.21	546.73	127.69	781.21	719.43	61.78	12.646	
8,500.00	7,535.00	8,557.63	7,660.00	31.41	31.77	-99.20	646.73	127.56	781.52	718.37	63.16	12.374	
8,600.00	7,535.00	8,657.63	7,660.00	32.17	32.54	-99.20	746.73	127.44	781.84	717.18	64.66	12.091	
8,700.00	7,535.00	8,757.63	7,660.00	33.00	33.38	-99.20	846.73	127.32	782.15	715.87	66.28	11.801	

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 4R-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 4R-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 #2	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							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	7,535.00	8,857.63	7,660.00	33.87	34.26	-99.19	946.73	127.19	782.47	714.46	68.01	11.506		
8,900.00	7,535.00	8,957.63	7,660.00	34.79	35.20	-99.19	1,046.73	127.07	782.78	712.95	69.83	11.210		
9,000.00	7,535.00	9,057.63	7,660.00	35.75	36.18	-99.19	1,146.73	126.95	783.10	711.35	71.75	10.915		
9,100.00	7,535.00	9,157.63	7,660.00	36.76	37.20	-99.18	1,246.73	126.82	783.41	709.66	73.75	10.623		
9,200.00	7,535.00	9,257.63	7,660.00	37.80	38.26	-99.18	1,346.73	126.70	783.73	707.90	75.83	10.336		
9,300.00	7,535.00	9,357.63	7,660.00	38.88	39.36	-99.17	1,446.73	126.57	784.04	706.06	77.98	10.055		
9,400.00	7,535.00	9,457.63	7,660.00	39.99	40.49	-99.17	1,546.73	126.45	784.35	704.16	80.19	9.781		
9,500.00	7,535.00	9,557.63	7,660.00	41.13	41.65	-99.17	1,646.72	126.33	784.67	702.20	82.47	9.515		
9,600.00	7,535.00	9,657.63	7,660.00	42.30	42.84	-99.16	1,746.72	126.20	784.98	700.18	84.80	9.257		
9,700.00	7,535.00	9,757.63	7,660.00	43.49	44.05	-99.16	1,846.72	126.08	785.30	698.12	87.18	9.008		
9,800.00	7,535.00	9,857.63	7,660.00	44.71	45.29	-99.16	1,946.72	125.96	785.61	696.00	89.61	8.767		
9,900.00	7,535.00	9,957.63	7,660.00	45.95	46.54	-99.15	2,046.72	125.83	785.93	693.84	92.08	8.535		
10,000.00	7,535.00	10,057.63	7,660.00	47.21	47.82	-99.15	2,146.72	125.71	786.24	691.64	94.60	8.311		
10,100.00	7,535.00	10,157.62	7,660.00	48.48	49.11	-99.14	2,246.72	125.58	786.56	689.41	97.15	8.096		
10,200.00	7,535.00	10,257.62	7,660.00	49.78	50.43	-99.14	2,346.72	125.46	786.87	687.14	99.73	7.890		
10,300.00	7,535.00	10,357.62	7,660.00	51.09	51.75	-99.14	2,446.72	125.34	787.18	684.84	102.35	7.691		
10,400.00	7,535.00	10,457.62	7,660.00	52.42	53.10	-99.13	2,546.72	125.21	787.50	682.51	104.99	7.501		
10,500.00	7,535.00	10,557.62	7,660.00	53.75	54.45	-99.13	2,646.72	125.09	787.81	680.15	107.66	7.317		
10,600.00	7,535.00	10,657.62	7,660.00	55.11	55.82	-99.13	2,746.72	124.96	788.13	677.77	110.36	7.141		
10,700.00	7,535.00	10,757.62	7,660.00	56.47	57.20	-99.12	2,846.72	124.84	788.44	675.36	113.08	6.972		
10,800.00	7,535.00	10,857.62	7,660.00	57.85	58.59	-99.12	2,946.72	124.72	788.76	672.94	115.82	6.810		
10,900.00	7,535.00	10,957.62	7,660.00	59.23	59.99	-99.11	3,046.72	124.59	789.07	670.49	118.58	6.654		
11,000.00	7,535.00	11,057.62	7,660.00	60.63	61.39	-99.11	3,146.72	124.47	789.39	668.02	121.36	6.504		
11,100.00	7,535.00	11,157.62	7,660.00	62.03	62.81	-99.11	3,246.72	124.35	789.70	665.54	124.16	6.360		
11,200.00	7,535.00	11,257.62	7,660.00	63.44	64.24	-99.10	3,346.71	124.22	790.02	663.04	126.97	6.222		
11,300.00	7,535.00	11,357.62	7,660.00	64.87	65.67	-99.10	3,446.71	124.10	790.33	660.53	129.80	6.089		
11,400.00	7,535.00	11,457.62	7,660.00	66.29	67.11	-99.10	3,546.71	123.97	790.64	658.00	132.65	5.961		
11,500.00	7,535.00	11,557.62	7,660.00	67.73	68.55	-99.09	3,646.71	123.85	790.96	655.46	135.50	5.837		
11,567.32	7,535.00	11,624.94	7,660.00	68.70	69.53	-99.09	3,714.03	123.77	791.17	653.74	137.43	5.757		
11,600.00	7,535.00	11,657.62	7,660.00	69.17	70.01	-99.09	3,746.71	123.73	791.09	652.72	138.37	5.717		
11,639.91	7,535.00	11,697.52	7,660.00	69.75	70.59	-99.10	3,786.61	123.68	790.49	650.97	139.53	5.666		
11,700.00	7,535.00	11,757.60	7,660.00	70.63	71.46	-99.12	3,846.69	123.60	789.18	647.91	141.27	5.586		
11,800.00	7,535.00	11,857.57	7,660.00	72.10	72.93	-99.14	3,946.67	123.48	786.99	642.82	144.17	5.459		
11,900.00	7,535.00	11,957.55	7,660.00	73.57	74.40	-99.17	4,046.64	123.35	784.80	637.72	147.09	5.336		
12,000.00	7,535.00	12,057.52	7,660.00	75.05	75.87	-99.19	4,146.62	123.23	782.62	632.61	150.01	5.217		
12,100.00	7,535.00	12,157.50	7,660.00	76.54	77.35	-99.22	4,246.59	123.11	780.43	627.49	152.94	5.103		
12,110.95	7,535.00	12,168.45	7,660.00	76.70	77.51	-99.22	4,257.54	123.09	780.19	626.93	153.26	5.091 SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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									
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	-89.90	0.03	-19.86	19.86							
100.00	100.00	100.00	100.00	0.14	0.14	-89.90	0.03	-19.86	19.86	19.59	0.28	71.968				
200.00	200.00	200.00	200.00	0.50	0.50	-89.90	0.03	-19.86	19.86	18.87	0.99	20.006				
300.00	300.00	300.00	300.00	0.85	0.85	-89.90	0.03	-19.86	19.86	18.15	1.71	11.617				
400.00	400.00	400.00	400.00	1.21	1.21	-89.90	0.03	-19.86	19.86	17.44	2.43	8.185				
500.00	500.00	500.00	500.00	1.57	1.57	-89.90	0.03	-19.86	19.86	16.72	3.14	6.319				
600.00	600.00	600.00	600.00	1.93	1.93	-89.90	0.03	-19.86	19.86	16.00	3.86	5.145				
700.00	700.00	700.00	700.00	2.29	2.29	-89.90	0.03	-19.86	19.86	15.29	4.58	4.340	CC, ES			
800.00	799.98	799.98	799.98	2.63	2.65	148.53	0.03	-19.86	21.33	16.05	5.28	4.039	SF			
900.00	899.84	899.84	899.84	2.97	3.01	154.54	0.03	-19.86	25.94	19.96	5.98	4.340				
1,000.00	999.45	1,000.15	1,000.13	3.32	3.35	158.46	-1.57	-19.17	32.96	26.30	6.66	4.946				
1,100.00	1,098.70	1,100.58	1,100.42	3.68	3.68	158.75	-6.40	-17.06	41.22	33.87	7.35	5.609				
1,166.13	1,164.08	1,167.04	1,166.65	3.93	3.91	157.83	-11.37	-14.90	47.32	39.51	7.81	6.060				
1,200.00	1,197.50	1,200.98	1,200.43	4.06	4.02	157.10	-14.43	-13.56	50.47	42.43	8.05	6.274				
1,300.00	1,296.18	1,300.54	1,299.48	4.44	4.36	155.18	-23.68	-9.53	59.68	50.93	8.75	6.823				
1,400.00	1,394.86	1,400.10	1,398.53	4.84	4.72	153.77	-32.92	-5.50	68.92	59.47	9.46	7.286				
1,500.00	1,493.54	1,499.66	1,497.57	5.24	5.07	152.70	-42.17	-1.47	78.21	68.02	10.18	7.679				
1,600.00	1,592.22	1,599.22	1,596.62	5.65	5.43	151.85	-51.41	2.55	87.51	76.59	10.92	8.016				
1,700.00	1,690.89	1,698.78	1,695.67	6.06	5.80	151.17	-60.66	6.58	96.83	85.17	11.66	8.307				
1,800.00	1,789.57	1,798.34	1,794.71	6.48	6.17	150.61	-69.91	10.61	106.16	93.75	12.40	8.560				
1,900.00	1,888.25	1,897.90	1,893.76	6.89	6.54	150.13	-79.15	14.64	115.49	102.34	13.15	8.783				
2,000.00	1,986.93	1,997.46	1,992.81	7.31	6.91	149.73	-88.40	18.67	124.84	110.93	13.90	8.979				
2,100.00	2,085.61	2,097.02	2,091.85	7.74	7.29	149.39	-97.64	22.70	134.19	119.53	14.66	9.153				
2,200.00	2,184.29	2,196.57	2,190.90	8.16	7.66	149.09	-106.89	26.73	143.54	128.12	15.42	9.309				
2,300.00	2,282.97	2,296.13	2,289.95	8.58	8.04	148.82	-116.14	30.76	152.90	136.71	16.18	9.448				
2,400.00	2,381.65	2,395.69	2,388.99	9.01	8.42	148.59	-125.38	34.79	162.26	145.31	16.95	9.575				
2,500.00	2,480.33	2,495.25	2,488.04	9.44	8.80	148.38	-134.63	38.81	171.62	153.91	17.71	9.689				
2,600.00	2,579.01	2,594.81	2,587.09	9.86	9.18	148.20	-143.87	42.84	180.98	162.50	18.48	9.794				
2,700.00	2,677.69	2,694.37	2,686.13	10.29	9.56	148.03	-153.12	46.87	190.35	171.10	19.25	9.889				
2,800.00	2,776.37	2,793.93	2,785.18	10.72	9.94	147.87	-162.36	50.90	199.72	179.70	20.02	9.976				
2,900.00	2,875.04	2,893.49	2,884.23	11.15	10.32	147.74	-171.61	54.93	209.09	188.30	20.79	10.057				
3,000.00	2,973.72	2,993.05	2,983.28	11.58	10.70	147.61	-180.86	58.96	218.46	196.89	21.56	10.131				
3,100.00	3,072.40	3,092.60	3,082.32	12.01	11.09	147.49	-190.10	62.99	227.83	205.49	22.34	10.200				
3,200.00	3,171.08	3,192.16	3,181.37	12.44	11.47	147.39	-199.35	67.02	237.20	214.09	23.11	10.264				
3,300.00	3,269.76	3,291.72	3,280.42	12.88	11.86	147.29	-208.59	71.05	246.57	222.69	23.89	10.323				
3,400.00	3,368.44	3,391.28	3,379.46	13.31	12.24	147.20	-217.84	75.07	255.94	231.28	24.66	10.379				
3,500.00	3,467.12	3,490.84	3,478.51	13.74	12.62	147.11	-227.09	79.10	265.32	239.88	25.44	10.431				
3,600.00	3,565.80	3,590.40	3,577.56	14.17	13.01	147.03	-236.33	83.13	274.69	248.48	26.21	10.479				
3,700.00	3,664.48	3,689.96	3,676.60	14.61	13.39	146.96	-245.58	87.16	284.07	257.08	26.99	10.525				
3,800.00	3,763.16	3,789.52	3,775.65	15.04	13.78	146.89	-254.82	91.19	293.44	265.67	27.77	10.568				
3,900.00	3,861.84	3,889.08	3,874.70	15.47	14.17	146.82	-264.07	95.22	302.82	274.27	28.55	10.608				
4,000.00	3,960.52	3,988.64	3,973.74	15.91	14.55	146.76	-273.31	99.25	312.19	282.87	29.32	10.646				
4,100.00	4,059.19	4,088.19	4,072.79	16.34	14.94	146.70	-282.56	103.28	321.57	291.47	30.10	10.682				
4,200.00	4,157.87	4,187.75	4,171.84	16.77	15.32	146.65	-291.81	107.31	330.95	300.06	30.88	10.717				
4,300.00	4,256.55	4,287.31	4,270.88	17.21	15.71	146.60	-301.05	111.34	340.32	308.66	31.66	10.749				
4,400.00	4,355.23	4,386.87	4,369.93	17.64	16.10	146.55	-310.30	115.36	349.70	317.26	32.44	10.780				
4,500.00	4,453.91	4,486.43	4,468.98	18.08	16.48	146.50	-319.54	119.39	359.08	325.86	33.22	10.809				
4,600.00	4,552.59	4,585.99	4,568.02	18.51	16.87	146.46	-328.79	123.42	368.46	334.45	34.00	10.837				
4,700.00	4,651.27	4,685.55	4,667.07	18.94	17.26	146.42	-338.04	127.45	377.83	343.05	34.78	10.863				
4,800.00	4,749.95	4,785.11	4,766.12	19.38	17.64	146.38	-347.28	131.48	387.21	351.65	35.56	10.888				
4,900.00	4,848.63	4,884.67	4,865.16	19.81	18.03	146.34	-356.53	135.51	396.59	360.25	36.34	10.913				
5,000.00	4,947.31	4,984.22	4,964.21	20.25	18.42	146.30	-365.77	139.54	405.97	368.84	37.12	10.936				

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 4R-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 4R-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 #2	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
5,100.00	5,045.99	5,083.78	5,063.26	20.68	18.80	146.27	-375.02	143.57	415.35	377.44	37.90	10.958	
5,200.00	5,144.67	5,183.34	5,162.30	21.12	19.19	146.24	-384.26	147.60	424.72	386.04	38.69	10.979	
5,300.00	5,243.34	5,282.90	5,261.35	21.55	19.58	146.21	-393.51	151.62	434.10	394.64	39.47	10.999	
5,400.00	5,342.02	5,382.46	5,360.40	21.99	19.97	146.18	-402.76	155.65	443.48	403.23	40.25	11.019	
5,500.00	5,440.70	5,482.02	5,459.44	22.42	20.35	146.15	-412.00	159.68	452.86	411.83	41.03	11.037	
5,600.00	5,539.38	5,581.58	5,558.49	22.86	20.74	146.12	-421.25	163.71	462.24	420.43	41.81	11.055	
5,700.00	5,638.06	5,681.14	5,657.54	23.29	21.13	146.09	-430.49	167.74	471.62	429.03	42.59	11.072	
5,800.00	5,736.74	5,780.70	5,756.59	23.73	21.52	146.07	-439.74	171.77	481.00	437.62	43.38	11.089	
5,900.00	5,835.42	5,880.26	5,855.63	24.17	21.91	146.04	-448.99	175.80	490.38	446.22	44.16	11.105	
6,000.00	5,934.10	5,979.81	5,954.68	24.60	22.29	146.02	-458.23	179.83	499.76	454.82	44.94	11.120	
6,100.00	6,032.78	6,079.37	6,053.73	25.04	22.68	146.00	-467.48	183.86	509.14	463.41	45.72	11.135	
6,200.00	6,131.46	6,178.93	6,152.77	25.47	23.07	145.97	-476.72	187.88	518.52	472.01	46.51	11.149	
6,300.00	6,230.14	6,278.49	6,251.82	25.91	23.46	145.95	-485.97	191.91	527.90	480.61	47.29	11.163	
6,400.00	6,328.82	6,378.05	6,350.87	26.34	23.85	145.93	-495.21	195.94	537.28	489.20	48.07	11.177	
6,500.00	6,427.49	6,477.61	6,449.91	26.78	24.23	145.91	-504.46	199.97	546.66	497.80	48.85	11.190	
6,600.00	6,526.17	6,577.17	6,548.96	27.21	24.62	145.89	-513.71	204.00	556.04	506.40	49.64	11.202	
6,700.00	6,624.85	6,676.73	6,648.01	27.65	25.01	145.88	-522.95	208.03	565.42	515.00	50.42	11.214	
6,800.00	6,723.53	6,776.29	6,747.05	28.09	25.40	145.86	-532.20	212.06	574.80	523.59	51.20	11.226	
6,837.91	6,760.94	6,813.90	6,784.53	28.25	25.54	145.92	-534.99	213.58	578.36	526.87	51.49	11.233	
6,850.00	6,772.88	6,825.87	6,796.48	28.30	25.58	151.25	-535.47	214.07	579.49	527.92	51.57	11.236	
6,900.00	6,822.38	6,875.28	6,845.84	28.51	25.75	178.60	-535.35	216.07	584.22	532.32	51.91	11.255	
6,950.00	6,871.89	6,924.55	6,894.94	28.69	25.90	-153.32	-531.83	218.06	588.97	536.77	52.21	11.282	
7,000.00	6,921.17	6,973.69	6,943.55	28.86	26.03	-133.71	-524.97	220.02	593.72	541.24	52.48	11.314	
7,050.00	6,969.99	7,022.71	6,991.45	29.01	26.16	-121.67	-514.82	221.95	598.43	545.71	52.73	11.350	
7,100.00	7,018.10	7,071.61	7,038.44	29.14	26.28	-114.02	-501.45	223.84	603.09	550.14	52.96	11.389	
7,150.00	7,065.27	7,120.40	7,084.30	29.26	26.39	-108.82	-484.94	225.68	607.68	554.51	53.17	11.429	
7,200.00	7,111.28	7,169.09	7,128.85	29.36	26.49	-105.06	-465.39	227.46	612.17	558.80	53.37	11.471	
7,250.00	7,155.89	7,217.70	7,171.90	29.45	26.59	-102.21	-442.90	229.18	616.53	562.98	53.55	11.512	
7,300.00	7,198.89	7,266.22	7,213.25	29.53	26.68	-99.97	-417.58	230.83	620.75	567.02	53.73	11.553	
7,350.00	7,240.07	7,314.67	7,252.74	29.60	26.76	-98.15	-389.57	232.39	624.80	570.90	53.90	11.592	
7,400.00	7,279.23	7,363.06	7,290.20	29.65	26.85	-96.66	-358.99	233.87	628.67	574.61	54.07	11.627	
7,450.00	7,316.18	7,411.39	7,325.47	29.69	26.93	-95.40	-325.98	235.26	632.34	578.10	54.24	11.659	
7,500.00	7,350.73	7,459.68	7,358.40	29.72	27.01	-94.34	-290.71	236.56	635.78	581.37	54.41	11.686	
7,550.00	7,382.73	7,507.92	7,388.86	29.74	27.09	-93.44	-253.33	237.74	638.98	584.40	54.58	11.706	
7,600.00	7,412.01	7,556.14	7,416.72	29.74	27.18	-92.68	-214.00	238.83	641.93	587.16	54.77	11.720	
7,650.00	7,438.44	7,604.33	7,441.87	29.74	27.28	-92.03	-172.91	239.79	644.60	589.63	54.97	11.726	
7,700.00	7,461.87	7,652.50	7,464.19	29.73	27.38	-91.48	-130.24	240.65	646.99	591.81	55.19	11.724	
7,750.00	7,482.21	7,700.00	7,483.34	29.71	27.49	-91.03	-86.79	241.37	649.09	593.67	55.42	11.713	
7,800.00	7,499.35	7,748.81	7,499.98	29.69	27.62	-90.67	-40.92	241.99	650.88	595.21	55.67	11.691	
7,850.00	7,513.20	7,796.97	7,513.30	29.65	27.76	-90.39	5.35	242.47	652.36	596.41	55.95	11.660	
7,900.00	7,523.70	7,845.13	7,523.48	29.62	27.91	-90.18	52.41	242.82	653.51	597.26	56.25	11.618	
7,950.00	7,530.80	7,893.30	7,530.48	29.58	28.07	-90.05	100.06	243.05	654.34	597.77	56.57	11.566	
8,000.00	7,534.46	7,941.49	7,534.27	29.53	28.25	-90.00	148.09	243.14	654.84	597.92	56.92	11.505	
8,027.99	7,535.00	7,968.47	7,534.98	29.51	28.35	-90.00	175.06	243.14	654.97	597.85	57.12	11.466	
8,100.00	7,535.00	8,040.28	7,535.00	29.45	28.67	-90.00	246.87	243.05	655.20	597.49	57.71	11.354	
8,200.00	7,535.00	8,140.28	7,535.00	29.49	29.16	-90.00	346.87	242.93	655.52	596.87	58.65	11.178	
8,300.00	7,535.00	8,240.28	7,535.00	30.05	29.73	-90.00	446.87	242.80	655.84	596.10	59.74	10.979	
8,400.00	7,535.00	8,340.28	7,535.00	30.69	30.38	-90.00	546.87	242.68	656.16	595.18	60.98	10.761	
8,500.00	7,535.00	8,440.28	7,535.00	31.41	31.09	-90.00	646.87	242.55	656.48	594.12	62.35	10.529	
8,600.00	7,535.00	8,540.28	7,535.00	32.17	31.87	-90.00	746.87	242.43	656.79	592.94	63.85	10.286	
8,700.00	7,535.00	8,640.28	7,535.00	33.00	32.71	-90.00	846.87	242.30	657.11	591.64	65.48	10.036	
8,800.00	7,535.00	8,740.28	7,535.00	33.87	33.60	-90.00	946.87	242.18	657.43	590.22	67.21	9.782	

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 4R-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 4R-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 #2	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					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
8,900.00	7,535.00	8,840.28	7,535.00	34.79	34.54	-90.00	1,046.87	242.06	657.75	588.70	69.05	9.526	
9,000.00	7,535.00	8,940.28	7,535.00	35.75	35.53	-90.00	1,146.87	241.93	658.07	587.09	70.98	9.272	
9,100.00	7,535.00	9,040.28	7,535.00	36.76	36.56	-90.00	1,246.87	241.81	658.39	585.39	73.00	9.020	
9,200.00	7,535.00	9,140.28	7,535.00	37.80	37.63	-90.00	1,346.87	241.68	658.71	583.62	75.09	8.772	
9,300.00	7,535.00	9,240.28	7,535.00	38.88	38.73	-90.00	1,446.87	241.56	659.03	581.76	77.26	8.530	
9,400.00	7,535.00	9,340.28	7,535.00	39.99	39.87	-90.00	1,546.86	241.43	659.35	579.84	79.50	8.293	
9,500.00	7,535.00	9,440.28	7,535.00	41.13	41.04	-90.00	1,646.86	241.31	659.67	577.86	81.80	8.064	
9,600.00	7,535.00	9,540.28	7,535.00	42.30	42.23	-90.00	1,746.86	241.19	659.98	575.82	84.16	7.842	
9,700.00	7,535.00	9,640.28	7,535.00	43.49	43.45	-90.00	1,846.86	241.06	660.30	573.73	86.57	7.627	
9,800.00	7,535.00	9,740.27	7,535.00	44.71	44.70	-90.00	1,946.86	240.94	660.62	571.59	89.03	7.420	
9,900.00	7,535.00	9,840.27	7,535.00	45.95	45.96	-90.00	2,046.86	240.81	660.94	569.41	91.53	7.221	
10,000.00	7,535.00	9,940.27	7,535.00	47.21	47.24	-90.00	2,146.86	240.69	661.26	567.19	94.07	7.029	
10,100.00	7,535.00	10,040.27	7,535.00	48.48	48.54	-90.00	2,246.86	240.56	661.58	564.93	96.65	6.845	
10,200.00	7,535.00	10,140.27	7,535.00	49.78	49.86	-90.00	2,346.86	240.44	661.90	562.63	99.27	6.668	
10,300.00	7,535.00	10,240.27	7,535.00	51.09	51.20	-90.00	2,446.86	240.32	662.22	560.30	101.91	6.498	
10,400.00	7,535.00	10,340.27	7,535.00	52.42	52.54	-90.00	2,546.86	240.19	662.54	557.95	104.59	6.335	
10,500.00	7,535.00	10,440.27	7,535.00	53.75	53.90	-90.00	2,646.86	240.07	662.86	555.56	107.29	6.178	
10,600.00	7,535.00	10,540.27	7,535.00	55.11	55.28	-90.00	2,746.86	239.94	663.17	553.15	110.02	6.028	
10,700.00	7,535.00	10,640.27	7,535.00	56.47	56.66	-90.00	2,846.86	239.82	663.49	550.72	112.77	5.883	
10,800.00	7,535.00	10,740.27	7,535.00	57.85	58.06	-90.00	2,946.86	239.69	663.81	548.27	115.55	5.745	
10,900.00	7,535.00	10,840.27	7,535.00	59.23	59.46	-90.00	3,046.86	239.57	664.13	545.79	118.34	5.612	
11,000.00	7,535.00	10,940.27	7,535.00	60.63	60.87	-90.00	3,146.86	239.45	664.45	543.30	121.15	5.484	
11,100.00	7,535.00	11,040.27	7,535.00	62.03	62.30	-90.00	3,246.85	239.32	664.77	540.79	123.98	5.362	
11,200.00	7,535.00	11,140.27	7,535.00	63.44	63.73	-90.00	3,346.85	239.20	665.09	538.26	126.83	5.244	
11,300.00	7,535.00	11,240.27	7,535.00	64.87	65.16	-90.00	3,446.85	239.07	665.41	535.72	129.69	5.131	
11,400.00	7,535.00	11,340.27	7,535.00	66.29	66.61	-90.00	3,546.85	238.95	665.73	533.16	132.56	5.022	
11,500.00	7,535.00	11,440.27	7,535.00	67.73	68.06	-90.00	3,646.85	238.82	666.05	530.59	135.45	4.917	
11,567.32	7,535.00	11,507.59	7,535.00	68.70	69.04	-90.00	3,714.17	238.74	666.26	528.85	137.40	4.849	
11,600.00	7,535.00	11,540.27	7,535.00	69.17	69.51	-90.00	3,746.85	238.70	666.18	527.82	138.36	4.815	
11,639.91	7,535.00	11,580.17	7,535.00	69.75	70.10	-90.00	3,786.75	238.65	665.57	526.05	139.52	4.770	
11,700.00	7,535.00	11,640.25	7,535.00	70.63	70.97	-90.00	3,846.83	238.58	664.24	522.95	141.29	4.701	
11,800.00	7,535.00	11,740.22	7,535.00	72.10	72.44	-90.00	3,946.81	238.45	662.03	517.80	144.23	4.590	
11,900.00	7,535.00	11,840.20	7,535.00	73.57	73.91	-90.00	4,046.78	238.33	659.81	512.63	147.18	4.483	
12,000.00	7,535.00	11,940.17	7,535.00	75.05	75.39	-90.00	4,146.76	238.20	657.60	507.45	150.15	4.380	
12,100.00	7,535.00	12,040.15	7,535.00	76.54	76.87	-90.00	4,246.73	238.08	655.38	502.26	153.12	4.280	
12,110.95	7,535.00	12,051.10	7,535.00	76.70	77.03	-90.00	4,257.68	238.07	655.14	501.70	153.44	4.270	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	-89.90	0.02	-10.07	10.07				
100.00	100.00	100.00	100.00	0.14	0.14	-89.90	0.02	-10.07	10.07	9.80	0.28	36.491	
200.00	200.00	200.00	200.00	0.50	0.50	-89.90	0.02	-10.07	10.07	9.08	0.99	10.144	
300.00	300.00	300.00	300.00	0.85	0.85	-89.90	0.02	-10.07	10.07	8.36	1.71	5.891	
400.00	400.00	400.00	400.00	1.21	1.21	-89.90	0.02	-10.07	10.07	7.65	2.43	4.150	
500.00	500.00	500.00	500.00	1.57	1.57	-89.90	0.02	-10.07	10.07	6.93	3.14	3.204	
600.00	600.00	600.00	600.00	1.93	1.93	-89.90	0.02	-10.07	10.07	6.21	3.86	2.609	
700.00	700.00	700.00	700.00	2.29	2.29	-89.90	0.02	-10.07	10.07	5.49	4.58	2.200 CC, ES	
800.00	799.98	799.98	799.98	2.63	2.65	150.76	0.02	-10.07	11.56	6.28	5.28	2.189 SF	
900.00	899.84	900.27	900.25	2.97	2.99	156.05	-1.27	-8.88	14.90	8.93	5.97	2.497	
1,000.00	999.45	1,000.67	1,000.51	3.32	3.33	157.16	-5.15	-5.32	18.69	12.04	6.65	2.810	
1,100.00	1,098.70	1,101.17	1,100.62	3.68	3.67	156.09	-11.62	0.63	22.87	15.52	7.35	3.111	
1,166.13	1,164.08	1,167.65	1,166.65	3.93	3.91	154.72	-17.32	5.87	25.86	18.04	7.82	3.307	
1,200.00	1,197.50	1,201.48	1,200.20	4.06	4.03	154.06	-20.47	8.77	27.48	19.42	8.06	3.410	
1,300.00	1,296.18	1,301.36	1,299.28	4.44	4.39	152.48	-29.77	17.32	32.28	23.51	8.77	3.680	
1,400.00	1,394.86	1,401.24	1,398.36	4.84	4.76	151.31	-39.07	25.88	37.10	27.60	9.50	3.906	
1,500.00	1,493.54	1,501.12	1,497.44	5.24	5.14	150.41	-48.37	34.43	41.93	31.70	10.23	4.098	
1,600.00	1,592.22	1,601.00	1,596.51	5.65	5.52	149.70	-57.67	42.99	46.76	35.79	10.98	4.261	
1,700.00	1,690.89	1,700.89	1,695.59	6.06	5.90	149.12	-66.97	51.54	51.61	39.88	11.73	4.401	
1,800.00	1,789.57	1,800.77	1,794.67	6.48	6.29	148.64	-76.28	60.10	56.46	43.97	12.48	4.523	
1,900.00	1,888.25	1,900.65	1,893.75	6.89	6.68	148.23	-85.58	68.65	61.31	48.07	13.24	4.630	
2,000.00	1,986.93	2,000.53	1,992.83	7.31	7.07	147.89	-94.88	77.20	66.16	52.16	14.00	4.724	
2,100.00	2,085.61	2,100.41	2,091.91	7.74	7.46	147.59	-104.18	85.76	71.02	56.24	14.77	4.807	
2,200.00	2,184.29	2,200.29	2,190.99	8.16	7.86	147.33	-113.48	94.31	75.87	60.33	15.54	4.882	
2,300.00	2,282.97	2,300.17	2,290.07	8.58	8.25	147.10	-122.78	102.87	80.73	64.42	16.31	4.949	
2,400.00	2,381.65	2,400.06	2,389.15	9.01	8.65	146.90	-132.08	111.42	85.59	68.50	17.09	5.009	
2,500.00	2,480.33	2,499.94	2,488.22	9.44	9.05	146.72	-141.38	119.97	90.45	72.59	17.86	5.063	
2,600.00	2,579.01	2,599.82	2,587.30	9.86	9.44	146.56	-150.68	128.53	95.31	76.67	18.64	5.113	
2,700.00	2,677.69	2,699.70	2,686.38	10.29	9.84	146.41	-159.98	137.08	100.18	80.76	19.42	5.158	
2,800.00	2,776.37	2,799.58	2,785.46	10.72	10.24	146.28	-169.28	145.64	105.04	84.84	20.20	5.200	
2,900.00	2,875.04	2,899.46	2,884.54	11.15	10.64	146.16	-178.58	154.19	109.90	88.92	20.98	5.238	
3,000.00	2,973.72	2,999.34	2,983.62	11.58	11.04	146.05	-187.88	162.75	114.77	93.00	21.77	5.273	
3,100.00	3,072.40	3,099.23	3,082.70	12.01	11.45	145.94	-197.18	171.30	119.63	97.08	22.55	5.306	
3,200.00	3,171.08	3,199.11	3,181.78	12.44	11.85	145.85	-206.48	179.85	124.50	101.16	23.33	5.336	
3,300.00	3,269.76	3,298.99	3,280.85	12.88	12.25	145.76	-215.79	188.41	129.36	105.24	24.12	5.364	
3,400.00	3,368.44	3,398.87	3,379.93	13.31	12.65	145.68	-225.09	196.96	134.23	109.32	24.90	5.390	
3,500.00	3,467.12	3,498.75	3,479.01	13.74	13.05	145.61	-234.39	205.52	139.09	113.40	25.69	5.415	
3,600.00	3,565.80	3,598.63	3,578.09	14.17	13.46	145.54	-243.69	214.07	143.96	117.48	26.47	5.438	
3,700.00	3,664.48	3,698.51	3,677.17	14.61	13.86	145.47	-252.99	222.62	148.82	121.56	27.26	5.459	
3,800.00	3,763.16	3,798.40	3,776.25	15.04	14.26	145.41	-262.29	231.18	153.69	125.64	28.05	5.479	
3,900.00	3,861.84	3,898.28	3,875.33	15.47	14.67	145.35	-271.59	239.73	158.55	129.72	28.84	5.498	
4,000.00	3,960.52	3,998.16	3,974.41	15.91	15.07	145.30	-280.89	248.29	163.42	133.80	29.62	5.516	
4,100.00	4,059.19	4,098.04	4,073.49	16.34	15.47	145.25	-290.19	256.84	168.29	137.88	30.41	5.534	
4,200.00	4,157.87	4,197.92	4,172.56	16.77	15.88	145.20	-299.49	265.40	173.15	141.95	31.20	5.550	
4,300.00	4,256.55	4,297.80	4,271.64	17.21	16.28	145.16	-308.79	273.95	178.02	146.03	31.99	5.565	
4,400.00	4,355.23	4,397.68	4,370.72	17.64	16.69	145.11	-318.09	282.50	182.89	150.11	32.78	5.579	
4,500.00	4,453.91	4,497.57	4,469.80	18.08	17.09	145.07	-327.39	291.06	187.75	154.19	33.57	5.593	
4,600.00	4,552.59	4,597.45	4,568.88	18.51	17.49	145.03	-336.69	299.61	192.62	158.26	34.36	5.606	
4,700.00	4,651.27	4,697.33	4,667.96	18.94	17.90	145.00	-346.00	308.17	197.49	162.34	35.15	5.619	
4,800.00	4,749.95	4,797.21	4,767.04	19.38	18.30	144.96	-355.30	316.72	202.36	166.42	35.94	5.631	
4,900.00	4,848.63	4,897.09	4,866.12	19.81	18.71	144.93	-364.60	325.27	207.22	170.49	36.73	5.642	
5,000.00	4,947.31	4,996.97	4,965.20	20.25	19.11	144.90	-373.90	333.83	212.09	174.57	37.52	5.653	

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 4R-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 4R-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 #2	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
5,100.00	5,045.99	5,096.85	5,064.27	20.68	19.52	144.87	-383.20	342.38	216.96	178.65	38.31	5.663	
5,200.00	5,144.67	5,196.73	5,163.35	21.12	19.92	144.84	-392.50	350.94	221.83	182.72	39.10	5.673	
5,300.00	5,243.34	5,296.62	5,262.43	21.55	20.33	144.81	-401.80	359.49	226.69	186.80	39.89	5.683	
5,400.00	5,342.02	5,396.50	5,361.51	21.99	20.73	144.78	-411.10	368.04	231.56	190.88	40.68	5.692	
5,500.00	5,440.70	5,496.38	5,460.59	22.42	21.14	144.76	-420.40	376.60	236.43	194.95	41.47	5.701	
5,600.00	5,539.38	5,596.26	5,559.67	22.86	21.54	144.73	-429.70	385.15	241.30	199.03	42.27	5.709	
5,700.00	5,638.06	5,696.14	5,658.75	23.29	21.95	144.71	-439.00	393.71	246.16	203.11	43.06	5.717	
5,800.00	5,736.74	5,796.02	5,757.83	23.73	22.36	144.69	-448.30	402.26	251.03	207.18	43.85	5.725	
5,900.00	5,835.42	5,895.90	5,856.91	24.17	22.76	144.67	-457.60	410.82	255.90	211.26	44.64	5.732	
6,000.00	5,934.10	5,995.79	5,955.98	24.60	23.17	144.64	-466.90	419.37	260.77	215.33	45.43	5.740	
6,100.00	6,032.78	6,095.67	6,055.06	25.04	23.57	144.62	-476.20	427.92	265.63	219.41	46.23	5.747	
6,200.00	6,131.46	6,195.55	6,154.14	25.47	23.98	144.60	-485.51	436.48	270.50	223.49	47.02	5.753	
6,300.00	6,230.14	6,295.43	6,253.22	25.91	24.38	144.59	-494.81	445.03	275.37	227.56	47.81	5.760	
6,400.00	6,328.82	6,395.31	6,352.30	26.34	24.79	144.57	-504.11	453.59	280.24	231.64	48.60	5.766	
6,500.00	6,427.49	6,495.19	6,451.38	26.78	25.20	144.55	-513.41	462.14	285.11	235.71	49.39	5.772	
6,600.00	6,526.17	6,595.07	6,550.46	27.21	25.60	144.53	-522.71	470.69	289.97	239.79	50.19	5.778	
6,700.00	6,624.85	6,694.96	6,649.54	27.65	26.01	144.52	-532.01	479.25	294.84	243.86	50.98	5.784	
6,800.00	6,723.53	6,796.58	6,750.63	28.09	26.39	145.67	-535.34	488.18	299.42	247.78	51.64	5.798	
6,837.91	6,760.94	6,834.45	6,788.26	28.25	26.51	146.79	-532.92	491.63	301.10	249.29	51.81	5.811	
6,850.00	6,772.88	6,846.40	6,800.10	28.30	26.54	152.43	-531.74	492.73	301.65	249.79	51.86	5.817	
6,900.00	6,822.38	6,895.47	6,848.46	28.51	26.69	-178.95	-524.82	497.28	304.04	252.01	52.03	5.843	
6,950.00	6,871.89	6,943.96	6,895.65	28.69	26.81	-149.65	-514.74	501.83	306.57	254.39	52.18	5.875	
7,000.00	6,921.17	6,991.89	6,941.53	28.86	26.93	-128.86	-501.64	506.37	309.23	256.92	52.31	5.912	
7,050.00	6,969.99	7,039.30	6,985.94	29.01	27.03	-115.68	-485.69	510.87	311.97	259.56	52.41	5.952	
7,100.00	7,018.10	7,086.21	7,028.74	29.14	27.12	-106.96	-467.03	515.32	314.78	262.28	52.50	5.996	
7,150.00	7,065.27	7,132.66	7,069.83	29.26	27.20	-100.73	-445.82	519.69	317.61	265.05	52.55	6.044	
7,200.00	7,111.28	7,178.67	7,109.07	29.36	27.27	-96.00	-422.22	523.99	320.43	267.84	52.58	6.094	
7,250.00	7,155.89	7,224.26	7,146.40	29.45	27.34	-92.24	-396.38	528.18	323.21	270.62	52.58	6.146	
7,300.00	7,198.89	7,269.47	7,181.70	29.53	27.39	-89.14	-368.45	532.26	325.91	273.35	52.56	6.201	
7,350.00	7,240.07	7,314.32	7,214.92	29.60	27.44	-86.53	-338.59	536.22	328.50	275.99	52.51	6.256	
7,400.00	7,279.23	7,358.84	7,245.98	29.65	27.48	-84.30	-306.93	540.05	330.95	278.52	52.43	6.312	
7,450.00	7,316.18	7,403.06	7,274.82	29.69	27.51	-82.36	-273.64	543.73	333.23	280.89	52.34	6.366	
7,500.00	7,350.73	7,446.99	7,301.39	29.72	27.54	-80.67	-238.84	547.26	335.32	283.08	52.24	6.419	
7,550.00	7,382.73	7,490.67	7,325.65	29.74	27.57	-79.20	-202.68	550.62	337.18	285.05	52.13	6.468	
7,600.00	7,412.01	7,534.11	7,347.54	29.74	27.59	-77.91	-165.30	553.82	338.79	286.77	52.03	6.512	
7,650.00	7,438.44	7,577.34	7,367.05	29.74	27.61	-76.80	-126.85	556.84	340.13	288.20	51.93	6.550	
7,700.00	7,461.87	7,620.39	7,384.14	29.73	27.64	-75.84	-87.44	559.67	341.19	289.33	51.86	6.579	
7,750.00	7,482.21	7,663.27	7,398.78	29.71	27.67	-75.02	-47.23	562.31	341.94	290.13	51.81	6.600	
7,800.00	7,499.35	7,706.02	7,410.96	29.69	27.71	-74.35	-6.34	564.75	342.37	290.57	51.81	6.609	
7,850.00	7,513.20	7,750.00	7,420.93	29.65	27.77	-73.79	36.43	567.06	342.48	290.62	51.86	6.604	
7,900.00	7,523.70	7,791.17	7,427.88	29.62	27.84	-73.39	76.96	569.02	342.24	290.30	51.94	6.589	
7,950.00	7,530.80	7,833.63	7,432.59	29.58	27.93	-73.10	119.11	570.84	341.66	289.57	52.09	6.559	
8,000.00	7,534.46	7,876.03	7,434.81	29.53	28.04	-72.93	161.42	572.44	340.73	288.43	52.30	6.515	
8,027.99	7,535.00	7,901.05	7,435.00	29.51	28.12	-72.89	186.42	573.28	340.04	287.59	52.45	6.483	
8,100.00	7,535.00	7,973.03	7,435.00	29.45	28.39	-72.78	258.36	575.66	337.90	284.97	52.93	6.384	
8,200.00	7,535.00	8,072.98	7,435.00	29.49	28.85	-72.62	358.26	578.97	334.93	281.21	53.72	6.235	
8,300.00	7,535.00	8,172.94	7,435.00	30.05	29.41	-72.46	458.16	582.28	331.96	277.29	54.67	6.072	
8,400.00	7,535.00	8,272.89	7,435.00	30.69	30.04	-72.30	558.05	585.58	328.99	273.23	55.76	5.900	
8,500.00	7,535.00	8,372.84	7,435.00	31.41	30.74	-72.13	657.95	588.89	326.02	269.04	56.98	5.722	
8,600.00	7,535.00	8,472.79	7,435.00	32.17	31.51	-71.96	757.85	592.20	323.06	264.73	58.33	5.538	
8,700.00	7,535.00	8,572.74	7,435.00	33.00	32.33	-71.79	857.74	595.50	320.10	260.30	59.80	5.353	
8,800.00	7,535.00	8,672.69	7,435.00	33.87	33.20	-71.61	957.64	598.81	317.15	255.77	61.37	5.168	

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 4R-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 4R-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 #2	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: 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
8,900.00	7,535.00	8,772.65	7,435.00	34.79	34.12	-71.43	1,057.54	602.11	314.19	251.15	63.04	4.984	
9,000.00	7,535.00	8,872.60	7,435.00	35.75	35.09	-71.25	1,157.44	605.42	311.24	246.44	64.81	4.803	
9,100.00	7,535.00	8,972.55	7,435.00	36.76	36.10	-71.06	1,257.33	608.73	308.30	241.65	66.65	4.626	
9,200.00	7,535.00	9,072.50	7,435.00	37.80	37.14	-70.87	1,357.23	612.03	305.35	236.79	68.57	4.453	
9,300.00	7,535.00	9,172.45	7,435.00	38.88	38.22	-70.68	1,457.13	615.34	302.41	231.86	70.55	4.286	
9,400.00	7,535.00	9,272.40	7,435.00	39.99	39.34	-70.48	1,557.02	618.65	299.48	226.88	72.60	4.125	
9,500.00	7,535.00	9,372.35	7,435.00	41.13	40.48	-70.28	1,656.92	621.95	296.54	221.85	74.70	3.970	
9,600.00	7,535.00	9,472.31	7,435.00	42.30	41.64	-70.08	1,756.82	625.26	293.61	216.77	76.85	3.821	
9,700.00	7,535.00	9,572.26	7,435.00	43.49	42.84	-69.87	1,856.71	628.57	290.69	211.65	79.04	3.678	
9,800.00	7,535.00	9,672.21	7,435.00	44.71	44.05	-69.66	1,956.61	631.87	287.77	206.50	81.27	3.541	
9,900.00	7,535.00	9,772.16	7,435.00	45.95	45.29	-69.44	2,056.51	635.18	284.85	201.31	83.54	3.410	
10,000.00	7,535.00	9,872.11	7,435.00	47.21	46.55	-69.22	2,156.40	638.49	281.94	196.10	85.83	3.285	
10,100.00	7,535.00	9,967.36	7,435.00	48.48	47.76	-69.03	2,251.62	641.17	279.50	191.48	88.02	3.175	
10,141.01	7,535.00	10,004.96	7,435.00	49.01	48.25	-69.02	2,289.21	641.49	279.25	190.35	88.90	3.141	
10,200.00	7,535.00	10,059.01	7,435.00	49.78	48.96	-69.05	2,343.26	641.09	279.77	189.58	90.19	3.102	
10,300.00	7,535.00	10,153.34	7,435.00	51.09	50.21	-69.28	2,437.54	638.13	282.87	190.26	92.61	3.054	
10,400.00	7,535.00	10,253.26	7,435.00	52.42	51.56	-69.57	2,537.38	634.30	286.64	191.29	95.35	3.006	
10,500.00	7,535.00	10,353.17	7,435.00	53.75	52.92	-69.84	2,637.23	630.46	290.42	192.29	98.12	2.960	
10,600.00	7,535.00	10,453.09	7,435.00	55.11	54.30	-70.11	2,737.07	626.63	294.20	193.28	100.92	2.915	
10,700.00	7,535.00	10,553.01	7,435.00	56.47	55.69	-70.38	2,836.92	622.80	298.00	194.26	103.74	2.872	
10,800.00	7,535.00	10,652.93	7,435.00	57.85	57.09	-70.63	2,936.76	618.97	301.80	195.21	106.58	2.832	
10,900.00	7,535.00	10,752.85	7,435.00	59.23	58.50	-70.89	3,036.61	615.14	305.60	196.16	109.44	2.792	
11,000.00	7,535.00	10,852.77	7,435.00	60.63	59.92	-71.13	3,136.45	611.31	309.41	197.09	112.32	2.755	
11,100.00	7,535.00	10,952.69	7,435.00	62.03	61.36	-71.37	3,236.30	607.47	313.23	198.00	115.22	2.718	
11,200.00	7,535.00	11,052.61	7,435.00	63.44	62.80	-71.60	3,336.14	603.64	317.05	198.91	118.14	2.684	
11,300.00	7,535.00	11,152.53	7,435.00	64.87	64.25	-71.83	3,435.99	599.81	320.87	199.81	121.06	2.650	
11,400.00	7,535.00	11,252.44	7,435.00	66.29	65.70	-72.05	3,535.83	595.98	324.70	200.70	124.01	2.618	
11,500.00	7,535.00	11,352.36	7,435.00	67.73	67.17	-72.27	3,635.68	592.15	328.54	201.58	126.96	2.588	
11,567.32	7,535.00	11,419.63	7,435.00	68.70	68.16	-72.41	3,702.90	589.57	331.13	202.16	128.96	2.568	
11,600.00	7,535.00	11,452.29	7,435.00	69.17	68.64	-72.47	3,735.53	588.32	332.20	202.28	129.93	2.557	
11,639.91	7,535.00	11,492.18	7,435.00	69.75	69.23	-72.52	3,775.40	586.79	333.04	201.94	131.10	2.540	
11,700.00	7,535.00	11,552.27	7,435.00	70.63	70.12	-72.57	3,835.44	584.48	333.90	201.05	132.85	2.513	
11,800.00	7,535.00	11,652.26	7,435.00	72.10	71.60	-72.65	3,935.36	580.65	335.32	199.55	135.78	2.470	
11,900.00	7,535.00	11,752.25	7,435.00	73.57	73.10	-72.72	4,035.27	576.81	336.75	198.04	138.71	2.428	
12,000.00	7,535.00	11,852.24	7,435.00	75.05	74.59	-72.80	4,135.19	572.98	338.18	196.52	141.66	2.387	
12,100.00	7,535.00	11,952.23	7,435.00	76.54	75.94	-72.87	4,235.10	569.14	339.61	195.15	144.46	2.351	
12,110.95	7,535.00	11,963.18	7,435.00	76.70	76.07	-72.88	4,246.05	568.72	339.77	195.02	144.75	2.347	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	90.10	-0.02	10.07	10.07					
100.00	100.00	100.00	100.00	0.14	0.14	90.10	-0.02	10.07	10.07	9.80	0.28	36.491		
200.00	200.00	200.00	200.00	0.50	0.50	90.10	-0.02	10.07	10.07	9.08	0.99	10.144		
300.00	300.00	300.00	300.00	0.85	0.85	90.10	-0.02	10.07	10.07	8.36	1.71	5.891		
400.00	400.00	400.00	400.00	1.21	1.21	90.10	-0.02	10.07	10.07	7.65	2.43	4.150		
500.00	500.00	500.00	500.00	1.57	1.57	90.10	-0.02	10.07	10.07	6.93	3.14	3.204		
600.00	600.00	600.00	600.00	1.93	1.93	90.10	-0.02	10.07	10.07	6.21	3.86	2.609 CC, ES		
700.00	700.00	699.66	699.64	2.29	2.28	94.39	-0.89	11.57	11.61	7.04	4.57	2.539		
800.00	799.98	799.17	799.01	2.63	2.62	-24.35	-3.50	16.05	14.86	9.58	5.28	2.816		
900.00	899.84	898.57	898.03	2.97	2.96	-21.62	-7.84	23.51	18.25	12.27	5.98	3.053		
1,000.00	999.45	997.84	996.57	3.32	3.32	-20.36	-13.89	33.91	21.72	15.03	6.69	3.247		
1,100.00	1,098.70	1,097.00	1,094.51	3.68	3.70	-19.98	-21.65	47.24	25.25	17.85	7.41	3.409		
1,166.13	1,164.08	1,163.06	1,159.56	3.93	3.96	-20.41	-27.45	57.21	27.01	19.15	7.87	3.434		
1,200.00	1,197.50	1,196.92	1,192.89	4.06	4.10	-20.90	-30.43	62.32	27.55	19.45	8.11	3.399		
1,300.00	1,296.18	1,296.90	1,291.34	4.44	4.50	-22.25	-39.22	77.42	29.16	20.34	8.82	3.305		
1,400.00	1,394.86	1,396.89	1,389.79	4.84	4.92	-23.45	-48.01	92.51	30.78	21.23	9.55	3.223		
1,500.00	1,493.54	1,496.87	1,488.24	5.24	5.34	-24.54	-56.79	107.61	32.41	22.13	10.29	3.151		
1,600.00	1,592.22	1,596.86	1,586.68	5.65	5.76	-25.52	-65.58	122.71	34.06	23.02	11.03	3.086		
1,700.00	1,690.89	1,696.84	1,685.13	6.06	6.19	-26.41	-74.37	137.80	35.71	23.92	11.79	3.029		
1,800.00	1,789.57	1,796.83	1,783.58	6.48	6.62	-27.22	-83.16	152.90	37.37	24.82	12.55	2.978		
1,900.00	1,888.25	1,896.81	1,882.02	6.89	7.05	-27.96	-91.95	168.00	39.04	25.72	13.32	2.931		
2,000.00	1,986.93	1,996.80	1,980.47	7.31	7.49	-28.64	-100.73	183.09	40.71	26.62	14.09	2.889		
2,100.00	2,085.61	2,096.78	2,078.92	7.74	7.92	-29.26	-109.52	198.19	42.39	27.52	14.87	2.851		
2,200.00	2,184.29	2,196.77	2,177.37	8.16	8.36	-29.84	-118.31	213.29	44.07	28.43	15.65	2.817		
2,300.00	2,282.97	2,296.75	2,275.81	8.58	8.80	-30.38	-127.10	228.39	45.76	29.33	16.43	2.785		
2,400.00	2,381.65	2,396.74	2,374.26	9.01	9.24	-30.88	-135.89	243.48	47.45	30.23	17.22	2.756		
2,500.00	2,480.33	2,496.72	2,472.71	9.44	9.68	-31.34	-144.68	258.58	49.14	31.14	18.00	2.729		
2,600.00	2,579.01	2,596.71	2,571.15	9.86	10.12	-31.77	-153.46	273.68	50.84	32.04	18.80	2.705		
2,700.00	2,677.69	2,696.69	2,669.60	10.29	10.56	-32.18	-162.25	288.77	52.54	32.95	19.59	2.682		
2,800.00	2,776.37	2,796.68	2,768.05	10.72	11.01	-32.56	-171.04	303.87	54.24	33.86	20.39	2.661		
2,900.00	2,875.04	2,896.66	2,866.50	11.15	11.45	-32.91	-179.83	318.97	55.95	34.76	21.18	2.641		
3,000.00	2,973.72	2,996.65	2,964.94	11.58	11.89	-33.25	-188.62	334.06	57.65	35.67	21.98	2.623		
3,100.00	3,072.40	3,096.63	3,063.39	12.01	12.34	-33.56	-197.40	349.16	59.36	36.58	22.78	2.606		
3,200.00	3,171.08	3,196.62	3,161.84	12.44	12.78	-33.86	-206.19	364.26	61.07	37.49	23.58	2.590		
3,300.00	3,269.76	3,296.60	3,260.28	12.88	13.23	-34.14	-214.98	379.35	62.78	38.40	24.39	2.574		
3,400.00	3,368.44	3,396.59	3,358.73	13.31	13.67	-34.41	-223.77	394.45	64.50	39.31	25.19	2.560		
3,500.00	3,467.12	3,496.57	3,457.18	13.74	14.12	-34.66	-232.56	409.55	66.21	40.21	26.00	2.547		
3,600.00	3,565.80	3,596.56	3,555.62	14.17	14.56	-34.90	-241.34	424.65	67.93	41.12	26.80	2.534		
3,700.00	3,664.48	3,696.54	3,654.07	14.61	15.01	-35.13	-250.13	439.74	69.64	42.03	27.61	2.522		
3,800.00	3,763.16	3,796.53	3,752.52	15.04	15.45	-35.35	-258.92	454.84	71.36	42.94	28.42	2.511		
3,900.00	3,861.84	3,896.51	3,850.97	15.47	15.90	-35.56	-267.71	469.94	73.08	43.85	29.23	2.501		
4,000.00	3,960.52	3,996.50	3,949.41	15.91	16.35	-35.75	-276.50	485.03	74.80	44.76	30.04	2.490		
4,100.00	4,059.19	4,096.48	4,047.86	16.34	16.79	-35.94	-285.28	500.13	76.52	45.68	30.85	2.481		
4,200.00	4,157.87	4,196.47	4,146.31	16.77	17.24	-36.12	-294.07	515.23	78.24	46.59	31.66	2.472		
4,300.00	4,256.55	4,296.45	4,244.75	17.21	17.69	-36.30	-302.86	530.32	79.96	47.50	32.47	2.463		
4,400.00	4,355.23	4,396.44	4,343.20	17.64	18.13	-36.46	-311.65	545.42	81.69	48.41	33.28	2.455		
4,500.00	4,453.91	4,496.42	4,441.65	18.08	18.58	-36.62	-320.44	560.52	83.41	49.32	34.09	2.447		
4,600.00	4,552.59	4,596.41	4,540.10	18.51	19.03	-36.77	-329.23	575.61	85.14	50.23	34.90	2.439		
4,700.00	4,651.27	4,696.39	4,638.54	18.94	19.48	-36.92	-338.01	590.71	86.86	51.14	35.72	2.432		
4,800.00	4,749.95	4,796.38	4,736.99	19.38	19.92	-37.06	-346.80	605.81	88.59	52.06	36.53	2.425		
4,900.00	4,848.63	4,896.36	4,835.44	19.81	20.37	-37.19	-355.59	620.91	90.31	52.97	37.34	2.418		
5,000.00	4,947.31	4,996.35	4,933.88	20.25	20.82	-37.32	-364.38	636.00	92.04	53.88	38.16	2.412		

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 4R-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 4R-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 #2	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
5,100.00	5,045.99	5,096.33	5,032.33	20.68	21.27	-37.45	-373.17	651.10	93.76	54.79	38.97	2.406	
5,200.00	5,144.67	5,196.32	5,130.78	21.12	21.71	-37.57	-381.95	666.20	95.49	55.70	39.79	2.400	
5,300.00	5,243.34	5,296.30	5,229.23	21.55	22.16	-37.69	-390.74	681.29	97.22	56.62	40.60	2.394	
5,400.00	5,342.02	5,396.28	5,327.67	21.99	22.61	-37.80	-399.53	696.39	98.95	57.53	41.42	2.389	
5,500.00	5,440.70	5,496.27	5,426.12	22.42	23.06	-37.91	-408.32	711.49	100.68	58.44	42.23	2.384	
5,600.00	5,539.38	5,596.25	5,524.57	22.86	23.50	-38.01	-417.11	726.58	102.40	59.36	43.05	2.379	
5,700.00	5,638.06	5,696.24	5,623.01	23.29	23.95	-38.11	-425.89	741.68	104.13	60.27	43.86	2.374	
5,800.00	5,736.74	5,796.22	5,721.46	23.73	24.40	-38.21	-434.68	756.78	105.86	61.18	44.68	2.369	
5,900.00	5,835.42	5,896.21	5,819.91	24.17	24.85	-38.31	-443.47	771.87	107.59	62.09	45.50	2.365	
6,000.00	5,934.10	5,996.19	5,918.36	24.60	25.30	-38.40	-452.26	786.97	109.32	63.01	46.31	2.360	
6,100.00	6,032.78	6,096.18	6,016.80	25.04	25.74	-38.49	-461.05	802.07	111.05	63.92	47.13	2.356	
6,200.00	6,131.46	6,196.16	6,115.25	25.47	26.19	-38.57	-469.83	817.17	112.78	64.83	47.95	2.352	
6,300.00	6,230.14	6,296.15	6,213.70	25.91	26.64	-38.66	-478.62	832.26	114.51	65.75	48.77	2.348	
6,400.00	6,328.82	6,396.13	6,312.14	26.34	27.09	-38.74	-487.41	847.36	116.24	66.66	49.58	2.344	
6,500.00	6,427.49	6,496.12	6,410.59	26.78	27.54	-38.82	-496.20	862.46	117.98	67.57	50.40	2.341	
6,600.00	6,526.17	6,596.10	6,509.04	27.21	27.99	-38.89	-504.99	877.55	119.71	68.49	51.22	2.337	
6,700.00	6,624.85	6,696.09	6,607.48	27.65	28.43	-38.97	-513.78	892.65	121.44	69.40	52.04	2.334	
6,800.00	6,723.53	6,796.07	6,705.93	28.09	28.88	-39.04	-522.56	907.75	123.17	70.32	52.85	2.330	
6,837.91	6,760.94	6,833.98	6,743.26	28.25	29.05	-39.07	-525.90	913.47	123.83	70.66	53.16	2.329	
6,850.00	6,772.88	6,846.07	6,755.16	28.30	29.11	-33.86	-526.96	915.29	124.03	70.77	53.26	2.329	
6,900.00	6,822.38	6,895.99	6,804.31	28.51	29.33	-6.00	-531.35	922.83	124.68	71.17	53.50	2.330	
6,950.00	6,871.89	6,945.62	6,853.18	28.69	29.55	24.17	-535.71	930.33	125.23	71.70	53.54	2.339	
7,000.00	6,921.17	6,994.83	6,901.64	28.86	29.77	47.29	-539.93	937.76	126.18	72.80	53.38	2.364	
7,050.00	6,969.99	7,044.55	6,950.74	29.01	29.98	63.20	-541.74	945.29	127.91	74.69	53.22	2.403	
7,100.00	7,018.10	7,095.01	7,000.58	29.14	30.18	74.60	-540.05	952.92	130.40	77.29	53.10	2.456	
7,150.00	7,065.27	7,146.24	7,050.93	29.26	30.35	83.37	-534.70	960.63	133.60	80.56	53.03	2.519	
7,200.00	7,111.28	7,198.26	7,101.55	29.36	30.51	90.48	-525.57	968.38	137.41	84.44	52.97	2.594	
7,250.00	7,155.89	7,251.11	7,152.15	29.45	30.66	96.44	-512.50	976.11	141.75	88.89	52.87	2.681	
7,300.00	7,198.89	7,304.79	7,202.44	29.53	30.78	101.53	-495.41	983.80	146.51	93.84	52.67	2.782	
7,350.00	7,240.07	7,359.33	7,252.10	29.60	30.90	105.93	-474.18	991.38	151.55	99.22	52.33	2.896	
7,400.00	7,279.23	7,414.74	7,300.76	29.65	30.99	109.76	-448.77	998.81	156.79	104.97	51.82	3.026	
7,450.00	7,316.18	7,471.02	7,348.04	29.69	31.08	113.10	-419.15	1,006.02	162.09	110.97	51.12	3.171	
7,500.00	7,350.73	7,528.16	7,393.55	29.72	31.14	116.01	-385.33	1,012.95	167.35	117.14	50.22	3.333	
7,550.00	7,382.73	7,586.14	7,436.86	29.74	31.20	118.54	-347.37	1,019.54	172.48	123.35	49.13	3.510	
7,600.00	7,412.01	7,644.93	7,477.53	29.74	31.23	120.72	-305.39	1,025.73	177.37	129.47	47.89	3.703	
7,650.00	7,438.44	7,704.51	7,515.13	29.74	31.25	122.61	-259.55	1,031.43	181.93	135.38	46.55	3.908	
7,700.00	7,461.87	7,764.80	7,549.22	29.73	31.26	124.21	-210.11	1,036.60	186.09	140.93	45.15	4.121	
7,750.00	7,482.21	7,825.75	7,579.38	29.71	31.25	125.55	-157.36	1,041.15	189.76	145.98	43.78	4.334	
7,800.00	7,499.35	7,887.28	7,605.22	29.69	31.22	126.64	-101.68	1,045.05	192.90	150.38	42.53	4.536	
7,850.00	7,513.20	7,949.30	7,626.39	29.65	31.19	127.51	-43.49	1,048.22	195.45	153.98	41.47	4.713	
7,900.00	7,523.70	8,011.72	7,642.59	29.62	31.14	128.17	16.72	1,050.63	197.35	156.64	40.71	4.848	
7,950.00	7,530.80	8,074.41	7,653.59	29.58	31.09	128.61	78.40	1,052.24	198.59	158.26	40.32	4.925	
8,000.00	7,534.46	8,137.28	7,659.22	29.53	31.04	128.84	140.99	1,053.03	199.13	158.77	40.35	4.934	
8,027.99	7,535.00	8,172.16	7,660.00	29.51	31.01	128.88	175.86	1,053.11	199.12	158.56	40.56	4.910	
8,100.00	7,535.00	8,244.18	7,660.00	29.45	30.95	128.93	247.87	1,053.02	198.95	158.01	40.93	4.861	
8,200.00	7,535.00	8,344.18	7,660.00	29.49	30.90	128.98	347.87	1,052.90	198.70	157.13	41.57	4.779	
8,300.00	7,535.00	8,444.17	7,660.00	30.05	30.98	129.04	447.87	1,052.78	198.46	156.08	42.37	4.683	
8,400.00	7,535.00	8,544.17	7,660.00	30.69	31.47	129.10	547.87	1,052.66	198.21	154.89	43.32	4.576	
8,500.00	7,535.00	8,644.17	7,660.00	31.41	32.14	129.16	647.87	1,052.54	197.97	153.57	44.40	4.459	
8,600.00	7,535.00	8,744.17	7,660.00	32.17	32.89	129.21	747.87	1,052.42	197.72	152.12	45.61	4.335	
8,700.00	7,535.00	8,844.17	7,660.00	33.00	33.69	129.27	847.87	1,052.30	197.48	150.55	46.93	4.208	
8,800.00	7,535.00	8,944.17	7,660.00	33.87	34.55	129.33	947.87	1,052.18	197.23	148.88	48.36	4.079	

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 4R-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 4R-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 #2	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
8,900.00	7,535.00	9,044.17	7,660.00	34.79	35.45	129.39	1,047.87	1,052.05	196.99	147.11	49.88	3.949	
9,000.00	7,535.00	9,144.17	7,660.00	35.75	36.40	129.45	1,147.87	1,051.93	196.75	145.25	51.49	3.821	
9,100.00	7,535.00	9,244.17	7,660.00	36.76	37.39	129.50	1,247.87	1,051.81	196.50	143.32	53.19	3.695	
9,200.00	7,535.00	9,344.17	7,660.00	37.80	38.42	129.56	1,347.87	1,051.69	196.26	141.31	54.95	3.572	
9,300.00	7,535.00	9,444.17	7,660.00	38.88	39.48	129.62	1,447.87	1,051.57	196.02	139.24	56.77	3.453	
9,400.00	7,535.00	9,544.17	7,660.00	39.99	40.58	129.68	1,547.87	1,051.45	195.77	137.11	58.66	3.338	
9,500.00	7,535.00	9,644.17	7,660.00	41.13	41.70	129.74	1,647.87	1,051.33	195.53	134.94	60.59	3.227	
9,600.00	7,535.00	9,744.17	7,660.00	42.30	42.86	129.80	1,747.86	1,051.21	195.29	132.71	62.58	3.121	
9,700.00	7,535.00	9,844.17	7,660.00	43.49	44.04	129.86	1,847.86	1,051.09	195.05	130.44	64.60	3.019	
9,800.00	7,535.00	9,944.17	7,660.00	44.71	45.24	129.92	1,947.86	1,050.97	194.80	128.14	66.67	2.922	
9,900.00	7,535.00	10,044.17	7,660.00	45.95	46.47	129.98	2,047.86	1,050.85	194.56	125.80	68.76	2.829	
10,000.00	7,535.00	10,144.17	7,660.00	47.21	47.72	130.04	2,147.86	1,050.73	194.32	123.43	70.89	2.741	
10,100.00	7,535.00	10,244.17	7,660.00	48.48	48.98	130.10	2,247.86	1,050.61	194.08	121.03	73.04	2.657	
10,200.00	7,535.00	10,344.17	7,660.00	49.78	50.27	130.16	2,347.86	1,050.49	193.84	118.61	75.23	2.577	
10,300.00	7,535.00	10,444.16	7,660.00	51.09	51.57	130.22	2,447.86	1,050.36	193.60	116.17	77.43	2.500	
10,400.00	7,535.00	10,544.16	7,660.00	52.42	52.88	130.28	2,547.86	1,050.24	193.36	113.70	79.65	2.428	
10,500.00	7,535.00	10,644.16	7,660.00	53.75	54.21	130.34	2,647.86	1,050.12	193.11	111.22	81.89	2.358	
10,600.00	7,535.00	10,744.16	7,660.00	55.11	55.56	130.40	2,747.86	1,050.00	192.87	108.72	84.15	2.292	
10,700.00	7,535.00	10,844.16	7,660.00	56.47	56.91	130.46	2,847.86	1,049.88	192.63	106.21	86.42	2.229	
10,800.00	7,535.00	10,944.16	7,660.00	57.85	58.28	130.52	2,947.86	1,049.76	192.39	103.68	88.71	2.169	
10,900.00	7,535.00	11,044.16	7,660.00	59.23	59.66	130.58	3,047.86	1,049.64	192.15	101.14	91.01	2.111	
11,000.00	7,535.00	11,144.16	7,660.00	60.63	61.05	130.64	3,147.86	1,049.52	191.92	98.59	93.32	2.057	
11,100.00	7,535.00	11,244.16	7,660.00	62.03	62.44	130.70	3,247.86	1,049.40	191.68	96.03	95.64	2.004	
11,200.00	7,535.00	11,344.16	7,660.00	63.44	63.85	130.77	3,347.86	1,049.28	191.44	93.47	97.97	1.954	
11,300.00	7,535.00	11,444.16	7,660.00	64.87	65.26	130.83	3,447.86	1,049.16	191.20	90.89	100.31	1.906	
11,400.00	7,535.00	11,544.16	7,660.00	66.29	66.69	130.89	3,547.85	1,049.04	190.96	88.31	102.65	1.860	
11,500.00	7,535.00	11,644.16	7,660.00	67.73	68.11	130.95	3,647.85	1,048.92	190.72	85.72	105.00	1.816	
11,567.32	7,535.00	11,711.48	7,660.00	68.70	69.08	130.99	3,715.17	1,048.83	190.56	83.97	106.59	1.788	
11,576.36	7,535.00	11,720.51	7,660.00	68.83	69.21	131.00	3,724.21	1,048.82	190.55	83.74	106.81	1.784	
11,600.00	7,535.00	11,744.16	7,660.00	69.17	69.55	130.98	3,747.85	1,048.80	190.62	83.22	107.41	1.775	
11,639.91	7,535.00	11,784.06	7,660.00	69.75	70.12	130.86	3,787.75	1,048.75	191.08	82.56	108.52	1.761	
11,700.00	7,535.00	11,844.14	7,660.00	70.63	70.99	130.60	3,847.83	1,048.67	192.09	81.78	110.31	1.741	
11,800.00	7,535.00	11,944.11	7,660.00	72.10	72.44	130.18	3,947.81	1,048.55	193.78	80.48	113.30	1.710	
11,900.00	7,535.00	12,044.09	7,660.00	73.57	73.89	129.76	4,047.78	1,048.43	195.48	79.18	116.30	1.681	
12,000.00	7,535.00	12,144.06	7,660.00	75.05	75.35	129.35	4,147.76	1,048.31	197.19	77.88	119.32	1.653	
12,100.00	7,535.00	12,244.04	7,660.00	76.54	76.82	128.94	4,247.73	1,048.19	198.91	76.57	122.34	1.626	
12,110.95	7,535.00	12,253.72	7,660.00	76.70	76.96	128.90	4,257.41	1,048.18	199.11	76.38	122.73	1.622 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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: 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	90.10	-0.03	20.14	20.14					
100.00	100.00	100.00	100.00	0.14	0.14	90.10	-0.03	20.14	20.14	19.87	0.28	72.982		
200.00	200.00	200.00	200.00	0.50	0.50	90.10	-0.03	20.14	20.14	19.15	0.99	20.287		
300.00	300.00	300.00	300.00	0.85	0.85	90.10	-0.03	20.14	20.14	18.43	1.71	11.781		
400.00	400.00	400.00	400.00	1.21	1.21	90.10	-0.03	20.14	20.14	17.72	2.43	8.301		
500.00	500.00	500.00	500.00	1.57	1.57	90.10	-0.03	20.14	20.14	17.00	3.14	6.408	CC, ES	
600.00	600.00	599.34	599.32	1.93	1.92	92.25	-0.85	21.66	21.69	17.83	3.86	5.621		
700.00	700.00	698.45	698.29	2.29	2.26	97.16	-3.29	26.20	26.46	21.87	4.58	5.773		
800.00	799.98	797.24	796.71	2.63	2.60	-22.97	-7.33	33.71	33.05	27.75	5.30	6.233		
900.00	899.84	895.80	894.54	2.97	2.97	-20.78	-12.97	44.18	39.82	33.80	6.01	6.620		
1,000.00	999.45	994.12	991.67	3.32	3.34	-19.64	-20.17	57.58	46.67	39.94	6.73	6.933		
1,100.00	1,098.70	1,093.03	1,088.88	3.68	3.74	-19.26	-28.84	73.69	53.22	45.79	7.43	7.159		
1,166.13	1,164.08	1,159.10	1,153.75	3.93	4.02	-19.62	-34.78	84.73	56.07	48.17	7.90	7.101		
1,200.00	1,197.50	1,192.95	1,186.98	4.06	4.16	-19.93	-37.83	90.38	57.16	49.02	8.14	7.025		
1,300.00	1,296.18	1,292.89	1,285.11	4.44	4.59	-20.79	-46.81	107.09	60.39	51.54	8.85	6.821		
1,400.00	1,394.86	1,392.84	1,383.23	4.84	5.02	-21.56	-55.80	123.79	63.63	54.05	9.58	6.641		
1,500.00	1,493.54	1,492.78	1,481.36	5.24	5.46	-22.25	-64.79	140.49	66.89	56.57	10.32	6.481		
1,600.00	1,592.22	1,592.73	1,579.49	5.65	5.91	-22.88	-73.78	157.19	70.15	59.08	11.07	6.339		
1,700.00	1,690.89	1,692.67	1,677.62	6.06	6.35	-23.46	-82.76	173.90	73.42	61.60	11.82	6.213		
1,800.00	1,789.57	1,792.61	1,775.75	6.48	6.80	-23.98	-91.75	190.60	76.70	64.12	12.58	6.099		
1,900.00	1,888.25	1,892.56	1,873.87	6.89	7.25	-24.46	-100.74	207.30	79.98	66.64	13.34	5.996		
2,000.00	1,986.93	1,992.50	1,972.00	7.31	7.71	-24.91	-109.72	224.01	83.27	69.16	14.10	5.904		
2,100.00	2,085.61	2,092.45	2,070.13	7.74	8.16	-25.32	-118.71	240.71	86.56	71.68	14.87	5.819		
2,200.00	2,184.29	2,192.39	2,168.26	8.16	8.62	-25.70	-127.70	257.41	89.86	74.21	15.65	5.742		
2,300.00	2,282.97	2,292.33	2,266.38	8.58	9.07	-26.05	-136.69	274.11	93.16	76.73	16.42	5.672		
2,400.00	2,381.65	2,392.28	2,364.51	9.01	9.53	-26.38	-145.67	290.82	96.46	79.26	17.20	5.607		
2,500.00	2,480.33	2,492.22	2,462.64	9.44	9.99	-26.69	-154.66	307.52	99.77	81.78	17.98	5.548		
2,600.00	2,579.01	2,592.16	2,560.77	9.86	10.45	-26.98	-163.65	324.22	103.08	84.31	18.77	5.493		
2,700.00	2,677.69	2,692.11	2,658.89	10.29	10.90	-27.25	-172.63	340.93	106.39	86.84	19.55	5.442		
2,800.00	2,776.37	2,792.05	2,757.02	10.72	11.36	-27.50	-181.62	357.63	109.70	89.37	20.34	5.394		
2,900.00	2,875.04	2,892.00	2,855.15	11.15	11.82	-27.74	-190.61	374.33	113.02	91.89	21.12	5.350		
3,000.00	2,973.72	2,991.94	2,953.28	11.58	12.28	-27.96	-199.60	391.03	116.34	94.42	21.91	5.309		
3,100.00	3,072.40	3,091.88	3,051.41	12.01	12.75	-28.18	-208.58	407.74	119.65	96.95	22.70	5.271		
3,200.00	3,171.08	3,191.83	3,149.53	12.44	13.21	-28.38	-217.57	424.44	122.98	99.48	23.49	5.235		
3,300.00	3,269.76	3,291.77	3,247.66	12.88	13.67	-28.57	-226.56	441.14	126.30	102.01	24.29	5.201		
3,400.00	3,368.44	3,391.72	3,345.79	13.31	14.13	-28.75	-235.54	457.84	129.62	104.54	25.08	5.169		
3,500.00	3,467.12	3,491.66	3,443.92	13.74	14.59	-28.92	-244.53	474.55	132.95	107.08	25.87	5.139		
3,600.00	3,565.80	3,591.60	3,542.04	14.17	15.05	-29.08	-253.52	491.25	136.27	109.61	26.67	5.110		
3,700.00	3,664.48	3,691.55	3,640.17	14.61	15.51	-29.24	-262.51	507.95	139.60	112.14	27.46	5.084		
3,800.00	3,763.16	3,791.49	3,738.30	15.04	15.98	-29.39	-271.49	524.66	142.93	114.67	28.26	5.058		
3,900.00	3,861.84	3,891.44	3,836.43	15.47	16.44	-29.53	-280.48	541.36	146.26	117.20	29.05	5.034		
4,000.00	3,960.52	3,991.38	3,934.55	15.91	16.90	-29.66	-289.47	558.06	149.59	119.74	29.85	5.011		
4,100.00	4,059.19	4,091.32	4,032.68	16.34	17.37	-29.79	-298.46	574.76	152.92	122.27	30.65	4.989		
4,200.00	4,157.87	4,191.27	4,130.81	16.77	17.83	-29.92	-307.44	591.47	156.25	124.80	31.45	4.969		
4,300.00	4,256.55	4,291.21	4,228.94	17.21	18.29	-30.03	-316.43	608.17	159.58	127.34	32.24	4.949		
4,400.00	4,355.23	4,391.16	4,327.06	17.64	18.75	-30.15	-325.42	624.87	162.91	129.87	33.04	4.930		
4,500.00	4,453.91	4,491.10	4,425.19	18.08	19.22	-30.26	-334.40	641.57	166.25	132.41	33.84	4.912		
4,600.00	4,552.59	4,591.04	4,523.32	18.51	19.68	-30.36	-343.39	658.28	169.58	134.94	34.64	4.895		
4,700.00	4,651.27	4,690.99	4,621.45	18.94	20.14	-30.46	-352.38	674.98	172.92	137.47	35.44	4.879		
4,800.00	4,749.95	4,790.93	4,719.58	19.38	20.61	-30.56	-361.37	691.68	176.25	140.01	36.24	4.863		
4,900.00	4,848.63	4,890.88	4,817.70	19.81	21.07	-30.65	-370.35	708.39	179.59	142.54	37.04	4.848		
5,000.00	4,947.31	4,990.82	4,915.83	20.25	21.54	-30.74	-379.34	725.09	182.92	145.08	37.84	4.834		

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 4R-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 4R-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 #2	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
5,100.00	5,045.99	5,090.76	5,013.96	20.68	22.00	-30.83	-388.33	741.79	186.26	147.61	38.65	4.820	
5,200.00	5,144.67	5,190.71	5,112.09	21.12	22.46	-30.91	-397.31	758.49	189.60	150.15	39.45	4.806	
5,300.00	5,243.34	5,290.65	5,210.21	21.55	22.93	-31.00	-406.30	775.20	192.93	152.69	40.25	4.794	
5,400.00	5,342.02	5,390.59	5,308.34	21.99	23.39	-31.07	-415.29	791.90	196.27	155.22	41.05	4.781	
5,500.00	5,440.70	5,490.54	5,406.47	22.42	23.85	-31.15	-424.28	808.60	199.61	157.76	41.85	4.769	
5,600.00	5,539.38	5,590.48	5,504.60	22.86	24.32	-31.22	-433.26	825.31	202.95	160.29	42.66	4.758	
5,700.00	5,638.06	5,690.43	5,602.72	23.29	24.78	-31.29	-442.25	842.01	206.29	162.83	43.46	4.747	
5,800.00	5,736.74	5,790.37	5,700.85	23.73	25.25	-31.36	-451.24	858.71	209.63	165.37	44.26	4.736	
5,900.00	5,835.42	5,890.31	5,798.98	24.17	25.71	-31.43	-460.22	875.41	212.96	167.90	45.06	4.726	
6,000.00	5,934.10	5,990.26	5,897.11	24.60	26.17	-31.49	-469.21	892.12	216.30	170.44	45.87	4.716	
6,100.00	6,032.78	6,090.20	5,995.24	25.04	26.64	-31.55	-478.20	908.82	219.64	172.97	46.67	4.706	
6,200.00	6,131.46	6,190.15	6,093.36	25.47	27.10	-31.61	-487.19	925.52	222.98	175.51	47.47	4.697	
6,300.00	6,230.14	6,290.09	6,191.49	25.91	27.57	-31.67	-496.17	942.22	226.32	178.05	48.28	4.688	
6,400.00	6,328.82	6,390.03	6,289.62	26.34	28.03	-31.73	-505.16	958.93	229.66	180.58	49.08	4.679	
6,500.00	6,427.49	6,489.98	6,387.75	26.78	28.50	-31.79	-514.15	975.63	233.01	183.12	49.88	4.671	
6,600.00	6,526.17	6,589.92	6,485.87	27.21	28.96	-31.84	-523.14	992.33	236.35	185.66	50.69	4.663	
6,700.00	6,624.85	6,689.87	6,584.00	27.65	29.42	-31.89	-532.12	1,009.04	239.69	188.19	51.49	4.655	
6,800.00	6,723.53	6,789.99	6,682.32	28.09	29.89	-31.99	-540.92	1,025.77	243.02	190.72	52.30	4.646	
6,837.91	6,760.94	6,828.17	6,719.93	28.25	30.05	-32.46	-542.41	1,032.17	244.24	191.58	52.66	4.638	
6,850.00	6,772.88	6,840.29	6,731.88	28.30	30.11	-27.53	-542.46	1,034.20	244.63	191.85	52.78	4.635	
6,900.00	6,822.38	6,890.28	6,781.11	28.51	30.30	-1.82	-540.50	1,042.58	246.26	193.01	53.25	4.625	
6,950.00	6,871.89	6,940.00	6,829.82	28.69	30.48	24.65	-535.10	1,050.86	247.94	194.27	53.67	4.620	
7,000.00	6,921.17	6,989.45	6,877.79	28.86	30.63	42.69	-526.35	1,059.01	249.67	195.61	54.05	4.619	
7,050.00	6,969.99	7,038.64	6,924.81	29.01	30.77	53.19	-514.32	1,066.99	251.42	197.03	54.39	4.622	
7,100.00	7,018.10	7,087.58	6,970.67	29.14	30.89	59.34	-499.14	1,074.77	253.20	198.50	54.69	4.629	
7,150.00	7,065.27	7,136.28	7,015.19	29.26	31.00	63.10	-480.92	1,082.33	254.98	200.03	54.95	4.640	
7,200.00	7,111.28	7,184.74	7,058.18	29.36	31.09	65.47	-459.78	1,089.61	256.75	201.58	55.17	4.654	
7,250.00	7,155.89	7,232.99	7,099.47	29.45	31.17	66.99	-435.85	1,096.61	258.50	203.15	55.35	4.671	
7,300.00	7,198.89	7,281.03	7,138.92	29.53	31.24	67.97	-409.29	1,103.29	260.21	204.73	55.49	4.690	
7,350.00	7,240.07	7,328.86	7,176.37	29.60	31.29	68.59	-380.22	1,109.63	261.88	206.28	55.60	4.710	
7,400.00	7,279.23	7,376.51	7,211.69	29.65	31.33	68.97	-348.82	1,115.60	263.48	207.81	55.68	4.732	
7,450.00	7,316.18	7,423.99	7,244.76	29.69	31.36	69.17	-315.23	1,121.19	265.01	209.28	55.73	4.755	
7,500.00	7,350.73	7,471.30	7,275.46	29.72	31.38	69.27	-279.62	1,126.37	266.45	210.67	55.78	4.777	
7,550.00	7,382.73	7,518.46	7,303.69	29.74	31.39	69.28	-242.15	1,131.13	267.79	211.97	55.82	4.798	
7,600.00	7,412.01	7,565.48	7,329.36	29.74	31.39	69.24	-203.00	1,135.45	269.02	213.17	55.85	4.817	
7,650.00	7,438.44	7,612.38	7,352.38	29.74	31.39	69.17	-162.33	1,139.32	270.13	214.23	55.90	4.832	
7,700.00	7,461.87	7,659.17	7,372.69	29.73	31.37	69.07	-120.33	1,142.73	271.10	215.14	55.96	4.844	
7,750.00	7,482.21	7,705.86	7,390.21	29.71	31.35	68.98	-77.16	1,145.66	271.94	215.89	56.05	4.852	
7,800.00	7,499.35	7,752.46	7,404.91	29.69	31.32	68.88	-33.01	1,148.11	272.63	216.46	56.17	4.853	
7,850.00	7,513.20	7,800.00	7,416.94	29.65	31.29	68.78	12.93	1,150.10	273.18	216.82	56.36	4.847	
7,900.00	7,523.70	7,845.47	7,425.62	29.62	31.25	68.71	57.53	1,151.53	273.56	217.02	56.54	4.838	
7,950.00	7,530.80	7,891.90	7,431.59	29.58	31.21	68.64	103.56	1,152.49	273.78	216.99	56.79	4.821	
8,000.00	7,534.46	7,938.30	7,434.60	29.53	31.18	68.60	149.85	1,152.95	273.84	216.74	57.09	4.796	
8,027.99	7,535.00	7,964.42	7,435.00	29.51	31.16	68.58	175.96	1,152.99	273.80	216.51	57.29	4.779	
8,100.00	7,535.00	8,036.43	7,435.00	29.45	31.10	68.56	247.98	1,152.91	273.59	215.70	57.89	4.726	
8,200.00	7,535.00	8,136.43	7,435.00	29.49	31.07	68.54	347.98	1,152.79	273.30	214.46	58.84	4.645	
8,300.00	7,535.00	8,236.43	7,435.00	30.05	31.10	68.51	447.98	1,152.68	273.01	213.09	59.92	4.556	
8,400.00	7,535.00	8,336.43	7,435.00	30.69	31.33	68.49	547.98	1,152.56	272.73	211.59	61.14	4.461	
8,500.00	7,535.00	8,436.43	7,435.00	31.41	31.86	68.47	647.98	1,152.45	272.44	209.97	62.47	4.361	
8,600.00	7,535.00	8,536.43	7,435.00	32.17	32.55	68.44	747.98	1,152.34	272.15	208.23	63.92	4.258	
8,700.00	7,535.00	8,636.43	7,435.00	33.00	33.34	68.42	847.97	1,152.22	271.86	206.39	65.47	4.152	
8,800.00	7,535.00	8,736.43	7,435.00	33.87	34.19	68.39	947.97	1,152.11	271.58	204.45	67.13	4.046	

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 4R-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 4R-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 #2	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						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		
8,900.00	7,535.00	8,836.43	7,435.00	34.79	35.10	68.37	1,047.97	1,151.99	271.29	202.42	68.87	3.939		
9,000.00	7,535.00	8,936.43	7,435.00	35.75	36.05	68.35	1,147.97	1,151.88	271.00	200.30	70.70	3.833		
9,100.00	7,535.00	9,036.43	7,435.00	36.76	37.04	68.32	1,247.97	1,151.76	270.72	198.11	72.61	3.728		
9,200.00	7,535.00	9,136.43	7,435.00	37.80	38.08	68.30	1,347.97	1,151.65	270.43	195.84	74.59	3.626		
9,300.00	7,535.00	9,236.43	7,435.00	38.88	39.15	68.27	1,447.97	1,151.54	270.14	193.51	76.63	3.525		
9,400.00	7,535.00	9,336.43	7,435.00	39.99	40.25	68.25	1,547.97	1,151.42	269.85	191.12	78.74	3.427		
9,500.00	7,535.00	9,436.43	7,435.00	41.13	41.39	68.22	1,647.97	1,151.31	269.57	188.67	80.90	3.332		
9,600.00	7,535.00	9,536.43	7,435.00	42.30	42.55	68.20	1,747.97	1,151.19	269.28	186.16	83.12	3.240		
9,700.00	7,535.00	9,636.42	7,435.00	43.49	43.74	68.18	1,847.97	1,151.08	268.99	183.62	85.38	3.151		
9,800.00	7,535.00	9,736.42	7,435.00	44.71	44.95	68.15	1,947.97	1,150.96	268.71	181.02	87.68	3.065		
9,900.00	7,535.00	9,836.42	7,435.00	45.95	46.18	68.13	2,047.97	1,150.85	268.42	178.39	90.03	2.981		
10,000.00	7,535.00	9,936.42	7,435.00	47.21	47.44	68.10	2,147.97	1,150.74	268.13	175.72	92.41	2.901		
10,100.00	7,535.00	10,036.42	7,435.00	48.48	48.71	68.08	2,247.97	1,150.62	267.85	173.02	94.83	2.824		
10,200.00	7,535.00	10,136.42	7,435.00	49.78	50.00	68.05	2,347.97	1,150.51	267.56	170.28	97.28	2.750		
10,300.00	7,535.00	10,236.42	7,435.00	51.09	51.31	68.03	2,447.97	1,150.39	267.27	167.52	99.76	2.679		
10,400.00	7,535.00	10,336.42	7,435.00	52.42	52.63	68.00	2,547.97	1,150.28	266.99	164.72	102.26	2.611		
10,500.00	7,535.00	10,436.42	7,435.00	53.75	53.96	67.98	2,647.96	1,150.16	266.70	161.91	104.79	2.545		
10,600.00	7,535.00	10,536.42	7,435.00	55.11	55.31	67.95	2,747.96	1,150.05	266.41	159.07	107.35	2.482		
10,700.00	7,535.00	10,636.42	7,435.00	56.47	56.67	67.93	2,847.96	1,149.94	266.13	156.20	109.92	2.421		
10,800.00	7,535.00	10,736.42	7,435.00	57.85	58.05	67.90	2,947.96	1,149.82	265.84	153.32	112.52	2.363		
10,900.00	7,535.00	10,836.42	7,435.00	59.23	59.43	67.88	3,047.96	1,149.71	265.56	150.42	115.13	2.306		
11,000.00	7,535.00	10,936.42	7,435.00	60.63	60.82	67.85	3,147.96	1,149.59	265.27	147.50	117.77	2.253		
11,100.00	7,535.00	11,036.42	7,435.00	62.03	62.22	67.83	3,247.96	1,149.48	264.98	144.57	120.41	2.201		
11,200.00	7,535.00	11,136.42	7,435.00	63.44	63.63	67.80	3,347.96	1,149.36	264.70	141.62	123.08	2.151		
11,300.00	7,535.00	11,236.42	7,435.00	64.87	65.05	67.78	3,447.96	1,149.25	264.41	138.66	125.75	2.103		
11,400.00	7,535.00	11,336.42	7,435.00	66.29	66.48	67.75	3,547.96	1,149.14	264.12	135.68	128.44	2.056		
11,500.00	7,535.00	11,436.42	7,435.00	67.73	67.91	67.73	3,647.96	1,149.02	263.84	132.69	131.14	2.012		
11,567.32	7,535.00	11,503.74	7,435.00	68.70	68.88	67.71	3,715.28	1,148.94	263.65	130.68	132.97	1.983		
11,576.17	7,535.00	11,512.59	7,435.00	68.83	69.01	67.71	3,724.13	1,148.93	263.63	130.42	133.21	1.979		
11,600.00	7,535.00	11,536.42	7,435.00	69.17	69.35	67.72	3,747.96	1,148.91	263.73	129.86	133.87	1.970		
11,639.91	7,535.00	11,576.32	7,435.00	69.75	69.93	67.76	3,787.86	1,148.86	264.29	129.30	134.99	1.958		
11,700.00	7,535.00	11,636.40	7,435.00	70.63	70.79	67.87	3,847.94	1,148.79	265.53	128.82	136.70	1.942		
11,800.00	7,535.00	11,736.37	7,435.00	72.10	72.25	68.05	3,947.91	1,148.68	267.59	128.02	139.57	1.917		
11,900.00	7,535.00	11,836.35	7,435.00	73.57	73.70	68.23	4,047.89	1,148.56	269.65	127.21	142.44	1.893		
12,000.00	7,535.00	11,936.32	7,435.00	75.05	75.16	68.40	4,147.86	1,148.45	271.72	126.39	145.33	1.870		
12,100.00	7,535.00	12,036.30	7,435.00	76.54	76.63	68.57	4,247.84	1,148.34	273.79	125.56	148.23	1.847		
12,110.95	7,535.00	12,044.78	7,435.00	76.70	76.76	68.59	4,256.32	1,148.33	274.03	125.39	148.64	1.844 SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	90.57	-0.30	29.94	29.94				
100.00	100.00	100.00	100.00	0.14	0.14	90.57	-0.30	29.94	29.94	29.66	0.28	108.464	
200.00	200.00	200.00	200.00	0.50	0.50	90.57	-0.30	29.94	29.94	28.95	0.99	30.151	
300.00	300.00	300.00	300.00	0.85	0.85	90.57	-0.30	29.94	29.94	28.23	1.71	17.509	
400.00	400.00	400.00	400.00	1.21	1.21	90.57	-0.30	29.94	29.94	27.51	2.43	12.336 CC, ES	
500.00	500.00	499.29	499.27	1.57	1.56	92.98	-1.62	31.04	31.09	27.96	3.14	9.914	
600.00	600.00	598.33	598.17	1.93	1.89	99.19	-5.55	34.35	34.84	30.99	3.86	9.035	
700.00	700.00	696.84	696.32	2.29	2.24	106.39	-11.75	39.95	41.81	37.21	4.60	9.090	
800.00	799.98	794.93	793.81	2.63	2.60	-14.21	-18.11	48.71	50.65	45.33	5.33	9.507	
900.00	899.84	892.83	890.76	2.97	2.98	-13.79	-24.24	60.79	59.34	53.30	6.04	9.824	
1,000.00	999.45	990.46	987.00	3.32	3.37	-15.29	-30.15	76.12	67.80	61.04	6.76	10.034	
1,100.00	1,098.70	1,087.76	1,082.34	3.68	3.78	-18.07	-35.82	94.65	76.15	68.68	7.47	10.190	
1,166.13	1,164.08	1,152.09	1,145.02	3.93	4.06	-20.42	-39.44	108.67	81.73	73.78	7.95	10.282	
1,200.00	1,197.50	1,185.79	1,177.79	4.06	4.22	-21.69	-41.32	116.30	84.56	76.37	8.19	10.330	
1,300.00	1,296.18	1,285.29	1,274.55	4.44	4.68	-25.00	-46.87	138.83	93.13	84.23	8.90	10.461	
1,400.00	1,394.86	1,384.79	1,371.30	4.84	5.15	-27.74	-52.42	161.36	101.96	92.33	9.64	10.581	
1,500.00	1,493.54	1,484.29	1,468.06	5.24	5.63	-30.04	-57.97	183.89	110.99	100.60	10.39	10.686	
1,600.00	1,592.22	1,583.79	1,564.82	5.65	6.11	-32.00	-63.51	206.42	120.17	109.02	11.15	10.778	
1,700.00	1,690.89	1,683.29	1,661.58	6.06	6.61	-33.67	-69.06	228.95	129.46	117.54	11.92	10.858	
1,800.00	1,789.57	1,782.79	1,758.33	6.48	7.10	-35.13	-74.61	251.48	138.85	126.15	12.71	10.927	
1,900.00	1,888.25	1,882.30	1,855.09	6.89	7.60	-36.39	-80.16	274.01	148.32	134.82	13.50	10.987	
2,000.00	1,986.93	1,981.80	1,951.85	7.31	8.10	-37.51	-85.71	296.54	157.85	143.55	14.30	11.039	
2,100.00	2,085.61	2,081.30	2,048.61	7.74	8.60	-38.49	-91.26	319.07	167.44	152.33	15.10	11.085	
2,200.00	2,184.29	2,180.80	2,145.36	8.16	9.10	-39.37	-96.80	341.60	177.06	161.15	15.92	11.125	
2,300.00	2,282.97	2,280.30	2,242.12	8.58	9.61	-40.16	-102.35	364.13	186.73	170.00	16.73	11.161	
2,400.00	2,381.65	2,379.80	2,338.88	9.01	10.11	-40.87	-107.90	386.66	196.42	178.87	17.55	11.192	
2,500.00	2,480.33	2,479.30	2,435.64	9.44	10.62	-41.52	-113.45	409.19	206.15	187.77	18.37	11.220	
2,600.00	2,579.01	2,578.80	2,532.39	9.86	11.13	-42.10	-119.00	431.72	215.90	196.70	19.20	11.245	
2,700.00	2,677.69	2,678.30	2,629.15	10.29	11.64	-42.64	-124.55	454.25	225.66	205.63	20.03	11.267	
2,800.00	2,776.37	2,777.80	2,725.91	10.72	12.15	-43.13	-130.09	476.78	235.45	214.59	20.86	11.287	
2,900.00	2,875.04	2,877.30	2,822.67	11.15	12.66	-43.58	-135.64	499.31	245.25	223.56	21.69	11.306	
3,000.00	2,973.72	2,976.80	2,919.42	11.58	13.17	-44.00	-141.19	521.84	255.06	232.54	22.53	11.322	
3,100.00	3,072.40	3,076.30	3,016.18	12.01	13.68	-44.38	-146.74	544.37	264.89	241.53	23.36	11.338	
3,200.00	3,171.08	3,175.80	3,112.94	12.44	14.19	-44.74	-152.29	566.90	274.73	250.53	24.20	11.351	
3,300.00	3,269.76	3,275.30	3,209.70	12.88	14.70	-45.08	-157.84	589.43	284.58	259.54	25.04	11.364	
3,400.00	3,368.44	3,374.80	3,306.45	13.31	15.22	-45.39	-163.38	611.96	294.44	268.55	25.88	11.376	
3,500.00	3,467.12	3,474.31	3,403.21	13.74	15.73	-45.68	-168.93	634.49	304.30	277.58	26.72	11.386	
3,600.00	3,565.80	3,573.81	3,499.97	14.17	16.24	-45.95	-174.48	657.02	314.17	286.61	27.57	11.396	
3,700.00	3,664.48	3,673.31	3,596.73	14.61	16.76	-46.21	-180.03	679.55	324.05	295.64	28.41	11.406	
3,800.00	3,763.16	3,772.81	3,693.48	15.04	17.27	-46.45	-185.58	702.08	333.94	304.68	29.26	11.414	
3,900.00	3,861.84	3,872.31	3,790.24	15.47	17.78	-46.68	-191.13	724.61	343.83	313.73	30.10	11.422	
4,000.00	3,960.52	3,971.81	3,887.00	15.91	18.30	-46.89	-196.67	747.14	353.73	322.78	30.95	11.430	
4,100.00	4,059.19	4,071.31	3,983.75	16.34	18.81	-47.09	-202.22	769.67	363.63	331.83	31.80	11.436	
4,200.00	4,157.87	4,170.81	4,080.51	16.77	19.33	-47.29	-207.77	792.20	373.53	340.89	32.64	11.443	
4,300.00	4,256.55	4,270.31	4,177.27	17.21	19.84	-47.47	-213.32	814.73	383.44	349.95	33.49	11.449	
4,400.00	4,355.23	4,369.81	4,274.03	17.64	20.35	-47.64	-218.87	837.26	393.35	359.01	34.34	11.455	
4,500.00	4,453.91	4,469.31	4,370.78	18.08	20.87	-47.81	-224.42	859.79	403.27	368.08	35.19	11.460	
4,600.00	4,552.59	4,568.81	4,467.54	18.51	21.38	-47.96	-229.96	882.32	413.19	377.15	36.04	11.465	
4,700.00	4,651.27	4,668.31	4,564.30	18.94	21.90	-48.11	-235.51	904.85	423.11	386.22	36.89	11.470	
4,800.00	4,749.95	4,767.81	4,661.06	19.38	22.41	-48.25	-241.06	927.38	433.03	395.30	37.74	11.475	
4,900.00	4,848.63	4,867.31	4,757.81	19.81	22.93	-48.39	-246.61	949.91	442.96	404.37	38.59	11.479	
5,000.00	4,947.31	4,966.82	4,854.57	20.25	23.44	-48.52	-252.16	972.44	452.89	413.45	39.44	11.483	

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 4R-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 4R-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 #2	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
5,100.00	5,045.99	5,066.32	4,951.33	20.68	23.96	-48.64	-257.71	994.97	462.82	422.53	40.29	11.487	
5,200.00	5,144.67	5,165.82	5,048.09	21.12	24.47	-48.76	-263.26	1,017.50	472.76	431.61	41.14	11.491	
5,300.00	5,243.34	5,265.32	5,144.84	21.55	24.99	-48.88	-268.80	1,040.03	482.69	440.70	42.00	11.494	
5,400.00	5,342.02	5,364.82	5,241.60	21.99	25.50	-48.99	-274.35	1,062.56	492.63	449.78	42.85	11.497	
5,500.00	5,440.70	5,464.32	5,338.36	22.42	26.02	-49.09	-279.90	1,085.09	502.57	458.87	43.70	11.500	
5,600.00	5,539.38	5,563.82	5,435.12	22.86	26.54	-49.19	-285.45	1,107.62	512.51	467.96	44.55	11.504	
5,700.00	5,638.06	5,663.32	5,531.87	23.29	27.05	-49.29	-291.00	1,130.15	522.45	477.05	45.41	11.506	
5,800.00	5,736.74	5,762.82	5,628.63	23.73	27.57	-49.39	-296.55	1,152.68	532.40	486.14	46.26	11.509	
5,900.00	5,835.42	5,862.32	5,725.39	24.17	28.08	-49.48	-302.09	1,175.21	542.34	495.23	47.11	11.512	
6,000.00	5,934.10	5,961.82	5,822.15	24.60	28.60	-49.56	-307.64	1,197.74	552.29	504.32	47.97	11.514	
6,100.00	6,032.78	6,061.32	5,918.90	25.04	29.11	-49.65	-313.19	1,220.27	562.24	513.42	48.82	11.517	
6,200.00	6,131.46	6,160.82	6,015.66	25.47	29.63	-49.73	-318.74	1,242.80	572.19	522.51	49.67	11.519	
6,300.00	6,230.14	6,260.32	6,112.42	25.91	30.15	-49.81	-324.29	1,265.33	582.14	531.61	50.53	11.521	
6,400.00	6,328.82	6,359.82	6,209.18	26.34	30.66	-49.88	-329.84	1,287.86	592.09	540.71	51.38	11.523	
6,500.00	6,427.49	6,459.33	6,305.93	26.78	31.18	-49.96	-335.38	1,310.39	602.04	549.80	52.24	11.525	
6,600.00	6,526.17	6,558.83	6,402.69	27.21	31.69	-50.03	-340.93	1,332.92	611.99	558.90	53.09	11.527	
6,700.00	6,624.85	6,658.33	6,499.45	27.65	32.21	-50.10	-346.48	1,355.45	621.95	568.00	53.94	11.529	
6,800.00	6,723.53	6,757.83	6,596.20	28.09	32.73	-50.16	-352.03	1,377.98	631.90	577.10	54.80	11.531	
6,837.91	6,760.94	6,795.55	6,632.89	28.25	32.92	-50.19	-354.13	1,386.52	635.67	580.55	55.12	11.532	
6,850.00	6,772.88	6,807.58	6,644.59	28.30	32.98	-45.09	-354.80	1,389.25	636.85	581.62	55.22	11.532	
6,900.00	6,822.38	6,857.34	6,692.98	28.51	33.24	-18.46	-357.58	1,400.52	641.09	585.49	55.60	11.531	
6,950.00	6,871.89	6,906.93	6,741.20	28.69	33.50	9.28	-360.34	1,411.74	644.36	588.46	55.90	11.527	
7,000.00	6,921.17	6,956.10	6,789.01	28.86	33.75	28.91	-363.08	1,422.88	646.73	590.60	56.13	11.523	
7,050.00	6,969.99	7,000.00	6,831.76	29.01	33.98	41.10	-364.33	1,432.78	648.57	592.32	56.25	11.530	
7,100.00	7,018.10	7,038.59	6,869.35	29.14	34.16	48.85	-363.20	1,441.39	650.25	593.98	56.27	11.556	
7,150.00	7,065.27	7,080.30	6,909.87	29.26	34.35	54.28	-359.66	1,450.57	651.80	595.50	56.29	11.578	
7,200.00	7,111.28	7,122.49	6,950.62	29.36	34.53	58.34	-353.62	1,459.69	653.23	596.92	56.30	11.602	
7,250.00	7,155.89	7,165.22	6,991.48	29.45	34.69	61.57	-345.01	1,468.72	654.55	598.24	56.31	11.625	
7,300.00	7,198.89	7,208.53	7,032.33	29.53	34.85	64.25	-333.76	1,477.64	655.78	599.46	56.31	11.645	
7,350.00	7,240.07	7,252.47	7,073.05	29.60	35.00	66.58	-319.78	1,486.41	656.93	600.60	56.33	11.662	
7,400.00	7,279.23	7,297.10	7,113.50	29.65	35.13	68.67	-303.00	1,495.00	658.02	601.65	56.36	11.674	
7,450.00	7,316.18	7,342.46	7,153.51	29.69	35.26	70.57	-283.34	1,503.35	659.06	602.64	56.42	11.681	
7,500.00	7,350.73	7,388.62	7,192.92	29.72	35.37	72.36	-260.73	1,511.45	660.06	603.55	56.51	11.681	
7,550.00	7,382.73	7,435.64	7,231.54	29.74	35.48	74.05	-235.08	1,519.22	661.03	604.41	56.62	11.674	
7,600.00	7,412.01	7,483.58	7,269.16	29.74	35.57	75.67	-206.33	1,526.63	661.97	605.21	56.76	11.663	
7,650.00	7,438.44	7,532.49	7,305.56	29.74	35.65	77.24	-174.43	1,533.62	662.89	605.97	56.92	11.646	
7,700.00	7,461.87	7,582.46	7,340.49	29.73	35.73	78.76	-139.30	1,540.14	663.78	606.68	57.10	11.625	
7,750.00	7,482.21	7,633.54	7,373.66	29.71	35.79	80.25	-100.93	1,546.10	664.65	607.35	57.29	11.601	
7,800.00	7,499.35	7,685.81	7,404.77	29.69	35.84	81.70	-59.29	1,551.45	665.47	607.98	57.49	11.575	
7,850.00	7,513.20	7,739.31	7,433.49	29.65	35.88	83.13	-14.40	1,556.10	666.24	608.55	57.69	11.549	
7,900.00	7,523.70	7,794.12	7,459.46	29.62	35.91	84.52	33.70	1,559.99	666.93	609.04	57.88	11.522	
7,950.00	7,530.80	7,850.29	7,482.29	29.58	35.93	85.87	84.91	1,563.01	667.51	609.45	58.07	11.495	
8,000.00	7,534.46	7,907.87	7,501.57	29.53	35.94	87.19	139.10	1,565.09	667.97	609.72	58.25	11.467	
8,027.99	7,535.00	7,940.72	7,510.66	29.51	35.94	87.91	170.66	1,565.80	668.15	609.80	58.35	11.451	
8,100.00	7,535.00	8,028.12	7,527.89	29.45	35.94	89.39	256.29	1,566.03	667.88	609.19	58.68	11.381	
8,200.00	7,535.00	8,148.90	7,535.00	29.49	35.94	90.00	376.68	1,562.41	664.60	605.14	59.46	11.177	
8,300.00	7,535.00	8,248.79	7,535.00	30.05	35.95	90.00	476.48	1,558.06	660.05	599.64	60.40	10.927	
8,400.00	7,535.00	8,348.69	7,535.00	30.69	36.00	90.00	576.28	1,553.70	655.49	594.00	61.49	10.660	
8,500.00	7,535.00	8,448.59	7,535.00	31.41	36.10	90.00	676.08	1,549.34	650.93	588.21	62.73	10.377	
8,600.00	7,535.00	8,548.48	7,535.00	32.17	36.26	90.00	775.88	1,544.98	646.38	582.28	64.10	10.084	
8,700.00	7,535.00	8,648.38	7,535.00	33.00	36.49	90.00	875.68	1,540.63	641.82	576.22	65.60	9.784	
8,800.00	7,535.00	8,748.27	7,535.00	33.87	36.83	90.00	975.48	1,536.27	637.26	570.05	67.22	9.481	

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 4R-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 4R-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 #2	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		
8,900.00	7,535.00	8,848.17	7,535.00	34.79	37.29	90.00	1,075.28	1,531.91	632.71	563.76	68.95	9.177		
9,000.00	7,535.00	8,948.07	7,535.00	35.75	37.88	90.00	1,175.09	1,527.55	628.15	557.37	70.78	8.874		
9,100.00	7,535.00	9,047.96	7,535.00	36.76	38.58	90.00	1,274.89	1,523.19	623.59	550.88	72.71	8.576		
9,200.00	7,535.00	9,147.86	7,535.00	37.80	39.39	90.00	1,374.69	1,518.84	619.04	544.31	74.73	8.284		
9,300.00	7,535.00	9,247.75	7,535.00	38.88	40.29	90.00	1,474.49	1,514.48	614.48	537.65	76.83	7.998		
9,400.00	7,535.00	9,347.65	7,535.00	39.99	41.25	90.00	1,574.29	1,510.12	609.92	530.92	79.00	7.721		
9,500.00	7,535.00	9,447.55	7,535.00	41.13	42.28	90.00	1,674.09	1,505.76	605.37	524.12	81.24	7.451		
9,600.00	7,535.00	9,547.44	7,535.00	42.30	43.35	90.00	1,773.89	1,501.41	600.81	517.26	83.55	7.191		
9,700.00	7,535.00	9,647.34	7,535.00	43.49	44.47	90.00	1,873.69	1,497.05	596.25	510.34	85.91	6.940		
9,800.00	7,535.00	9,747.23	7,535.00	44.71	45.62	90.00	1,973.49	1,492.69	591.70	503.37	88.33	6.699		
9,900.00	7,535.00	9,847.13	7,535.00	45.95	46.80	90.00	2,073.29	1,488.33	587.14	496.35	90.79	6.467		
10,000.00	7,535.00	9,947.03	7,535.00	47.21	48.02	90.00	2,173.10	1,483.98	582.58	489.28	93.30	6.244		
10,100.00	7,535.00	10,046.92	7,535.00	48.48	49.26	90.00	2,272.90	1,479.62	578.03	482.17	95.85	6.030		
10,200.00	7,535.00	10,146.82	7,535.00	49.78	50.52	90.00	2,372.70	1,475.26	573.47	475.03	98.44	5.825		
10,300.00	7,535.00	10,246.72	7,535.00	51.09	51.81	90.00	2,472.50	1,470.90	568.91	467.84	101.07	5.629		
10,400.00	7,535.00	10,346.61	7,535.00	52.42	53.12	90.00	2,572.30	1,466.55	564.36	460.63	103.73	5.441		
10,500.00	7,535.00	10,446.51	7,535.00	53.75	54.44	90.00	2,672.10	1,462.19	559.80	453.38	106.42	5.260		
10,600.00	7,535.00	10,546.40	7,535.00	55.11	55.78	90.00	2,771.90	1,457.83	555.24	446.11	109.14	5.088		
10,700.00	7,535.00	10,646.30	7,535.00	56.47	57.13	90.00	2,871.70	1,453.47	550.69	438.81	111.88	4.922		
10,800.00	7,535.00	10,746.20	7,535.00	57.85	58.50	90.00	2,971.50	1,449.12	546.13	431.48	114.65	4.764		
10,900.00	7,535.00	10,846.09	7,535.00	59.23	59.88	90.00	3,071.31	1,444.76	541.57	424.14	117.44	4.612		
11,000.00	7,535.00	10,945.99	7,535.00	60.63	61.28	90.00	3,171.11	1,440.40	537.02	416.77	120.25	4.466		
11,100.00	7,535.00	11,045.88	7,535.00	62.03	62.68	90.00	3,270.91	1,436.04	532.46	409.38	123.08	4.326		
11,200.00	7,535.00	11,145.78	7,535.00	63.44	64.10	90.00	3,370.71	1,431.69	527.90	401.98	125.93	4.192		
11,300.00	7,535.00	11,245.68	7,535.00	64.87	65.53	90.00	3,470.51	1,427.33	523.35	394.55	128.79	4.063		
11,400.00	7,535.00	11,345.57	7,535.00	66.29	66.96	90.00	3,570.31	1,422.97	518.79	387.12	131.67	3.940		
11,500.00	7,535.00	11,445.47	7,535.00	67.73	68.40	90.00	3,670.11	1,418.61	514.23	379.66	134.57	3.821		
11,567.32	7,535.00	11,512.72	7,535.00	68.70	69.38	90.00	3,737.30	1,415.68	511.17	374.64	136.53	3.744		
11,600.00	7,535.00	11,545.37	7,535.00	69.17	69.85	90.00	3,769.92	1,414.26	509.86	372.38	137.48	3.709		
11,639.91	7,535.00	11,585.26	7,535.00	69.75	70.44	90.00	3,809.77	1,412.52	508.78	370.13	138.65	3.669		
11,700.00	7,535.00	11,645.35	7,535.00	70.63	71.31	90.00	3,869.80	1,409.90	507.56	367.14	140.42	3.614		
11,800.00	7,535.00	11,745.33	7,535.00	72.10	72.78	90.00	3,969.68	1,405.53	505.54	362.16	143.38	3.526		
11,900.00	7,535.00	11,845.30	7,535.00	73.57	74.25	90.00	4,069.57	1,401.17	503.51	357.16	146.35	3.440		
12,000.00	7,535.00	11,945.28	7,535.00	75.05	75.73	90.00	4,169.45	1,396.81	501.49	352.16	149.33	3.358		
12,094.43	7,535.00	12,030.43	7,535.00	76.45	77.00	90.00	4,254.51	1,393.10	499.66	347.32	152.34	3.280		
12,100.00	7,535.00	12,030.43	7,535.00	76.54	77.00	90.00	4,254.51	1,393.10	499.69	347.08	152.60	3.274		
12,110.95	7,535.00	12,030.43	7,535.00	76.70	77.00	90.00	4,254.51	1,393.10	499.91	346.84	153.07	3.266 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 4R-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 4R-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 #2	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	90.45	-0.31	40.01	40.01				
100.00	100.00	100.00	100.00	0.14	0.14	90.45	-0.31	40.01	40.01	39.73	0.28	144.954	
200.00	200.00	200.00	200.00	0.50	0.50	90.45	-0.31	40.01	40.01	39.02	0.99	40.294	
300.00	300.00	300.00	300.00	0.85	0.85	90.45	-0.31	40.01	40.01	38.30	1.71	23.399 CC, ES	
400.00	400.00	398.67	398.65	1.21	1.20	91.26	-0.92	41.60	41.63	39.19	2.44	17.081	
500.00	500.00	497.10	496.95	1.57	1.54	93.35	-2.72	46.35	46.53	43.34	3.19	14.605	
600.00	600.00	595.07	594.55	1.93	1.89	95.99	-5.69	54.21	54.78	50.83	3.94	13.887	
700.00	700.00	692.36	691.13	2.29	2.26	98.58	-9.82	65.10	66.43	61.72	4.70	14.125	
800.00	799.98	789.00	786.63	2.63	2.64	-23.75	-15.06	78.94	79.89	74.45	5.44	14.691	
900.00	899.84	885.19	881.13	2.97	3.05	-22.90	-21.41	95.71	93.51	87.35	6.16	15.187	
1,000.00	999.45	980.94	974.54	3.32	3.48	-22.66	-28.85	115.33	107.22	100.35	6.87	15.604	
1,100.00	1,098.70	1,078.80	1,069.43	3.68	3.94	-22.89	-37.34	137.75	120.33	112.76	7.56	15.906	
1,166.13	1,164.08	1,144.55	1,133.14	3.93	4.27	-23.35	-43.09	152.92	127.38	119.35	8.02	15.873	
1,200.00	1,197.50	1,178.25	1,165.80	4.06	4.43	-23.66	-46.03	160.70	130.64	122.37	8.26	15.807	
1,300.00	1,296.18	1,277.76	1,262.23	4.44	4.93	-24.50	-54.74	183.68	140.28	131.29	8.99	15.609	
1,400.00	1,394.86	1,377.28	1,358.66	4.84	5.44	-25.22	-63.44	206.65	149.94	140.22	9.72	15.422	
1,500.00	1,493.54	1,476.79	1,455.10	5.24	5.95	-25.86	-72.14	229.62	159.63	149.16	10.47	15.247	
1,600.00	1,592.22	1,576.31	1,551.53	5.65	6.47	-26.42	-80.85	252.60	169.34	158.11	11.23	15.085	
1,700.00	1,690.89	1,675.82	1,647.97	6.06	6.99	-26.93	-89.55	275.57	179.06	167.07	11.99	14.934	
1,800.00	1,789.57	1,775.34	1,744.40	6.48	7.51	-27.38	-98.25	298.54	188.79	176.03	12.76	14.795	
1,900.00	1,888.25	1,874.85	1,840.84	6.89	8.03	-27.79	-106.95	321.52	198.53	185.00	13.54	14.667	
2,000.00	1,986.93	1,974.37	1,937.27	7.31	8.56	-28.16	-115.66	344.49	208.29	193.97	14.32	14.549	
2,100.00	2,085.61	2,073.88	2,033.71	7.74	9.08	-28.49	-124.36	367.47	218.05	202.94	15.10	14.439	
2,200.00	2,184.29	2,173.40	2,130.14	8.16	9.61	-28.80	-133.06	390.44	227.81	211.92	15.89	14.338	
2,300.00	2,282.97	2,272.91	2,226.58	8.58	10.14	-29.08	-141.77	413.41	237.58	220.90	16.68	14.244	
2,400.00	2,381.65	2,372.43	2,323.01	9.01	10.67	-29.34	-150.47	436.39	247.36	229.89	17.47	14.156	
2,500.00	2,480.33	2,471.94	2,419.45	9.44	11.20	-29.58	-159.17	459.36	257.15	238.88	18.27	14.075	
2,600.00	2,579.01	2,571.45	2,515.88	9.86	11.73	-29.81	-167.87	482.33	266.93	247.86	19.07	13.999	
2,700.00	2,677.69	2,670.97	2,612.32	10.29	12.26	-30.01	-176.58	505.31	276.72	256.85	19.87	13.928	
2,800.00	2,776.37	2,770.48	2,708.75	10.72	12.79	-30.21	-185.28	528.28	286.52	265.85	20.67	13.862	
2,900.00	2,875.04	2,870.00	2,805.19	11.15	13.33	-30.39	-193.98	551.25	296.31	274.84	21.47	13.800	
3,000.00	2,973.72	2,969.51	2,901.62	11.58	13.86	-30.56	-202.68	574.23	306.11	283.84	22.28	13.741	
3,100.00	3,072.40	3,069.03	2,998.06	12.01	14.39	-30.71	-211.39	597.20	315.91	292.83	23.08	13.686	
3,200.00	3,171.08	3,168.54	3,094.49	12.44	14.92	-30.86	-220.09	620.17	325.72	301.83	23.89	13.635	
3,300.00	3,269.76	3,268.06	3,190.93	12.88	15.46	-31.00	-228.79	643.15	335.52	310.83	24.70	13.586	
3,400.00	3,368.44	3,367.57	3,287.36	13.31	15.99	-31.13	-237.50	666.12	345.33	319.83	25.51	13.540	
3,500.00	3,467.12	3,467.09	3,383.80	13.74	16.52	-31.26	-246.20	689.10	355.14	328.83	26.31	13.496	
3,600.00	3,565.80	3,566.60	3,480.23	14.17	17.06	-31.38	-254.90	712.07	364.95	337.83	27.12	13.455	
3,700.00	3,664.48	3,666.12	3,576.67	14.61	17.59	-31.49	-263.60	735.04	374.77	346.83	27.94	13.415	
3,800.00	3,763.16	3,765.63	3,673.10	15.04	18.12	-31.59	-272.31	758.02	384.58	355.83	28.75	13.378	
3,900.00	3,861.84	3,865.15	3,769.54	15.47	18.66	-31.69	-281.01	780.99	394.40	364.84	29.56	13.343	
4,000.00	3,960.52	3,964.66	3,865.97	15.91	19.19	-31.79	-289.71	803.96	404.21	373.84	30.37	13.309	
4,100.00	4,059.19	4,064.18	3,962.40	16.34	19.73	-31.88	-298.42	826.94	414.03	382.84	31.18	13.277	
4,200.00	4,157.87	4,163.69	4,058.84	16.77	20.26	-31.97	-307.12	849.91	423.85	391.85	32.00	13.246	
4,300.00	4,256.55	4,263.21	4,155.27	17.21	20.80	-32.05	-315.82	872.88	433.67	400.85	32.81	13.217	
4,400.00	4,355.23	4,362.72	4,251.71	17.64	21.33	-32.13	-324.52	895.86	443.49	409.86	33.63	13.189	
4,500.00	4,453.91	4,462.24	4,348.14	18.08	21.86	-32.21	-333.23	918.83	453.31	418.87	34.44	13.162	
4,600.00	4,552.59	4,561.75	4,444.58	18.51	22.40	-32.28	-341.93	941.80	463.13	427.87	35.26	13.136	
4,700.00	4,651.27	4,661.27	4,541.01	18.94	22.93	-32.35	-350.63	964.78	472.95	436.88	36.07	13.111	
4,800.00	4,749.95	4,760.78	4,637.45	19.38	23.47	-32.42	-359.34	987.75	482.78	445.89	36.89	13.088	
4,900.00	4,848.63	4,860.30	4,733.88	19.81	24.00	-32.48	-368.04	1,010.73	492.60	454.90	37.70	13.065	
5,000.00	4,947.31	4,959.81	4,830.32	20.25	24.54	-32.54	-376.74	1,033.70	502.42	463.90	38.52	13.043	

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 4R-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 4R-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 #2	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: 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		
5,100.00	5,045.99	5,059.32	4,926.75	20.68	25.07	-32.60	-385.44	1,056.67	512.25	472.91	39.34	13.022		
5,200.00	5,144.67	5,158.84	5,023.19	21.12	25.61	-32.66	-394.15	1,079.65	522.08	481.92	40.15	13.002		
5,300.00	5,243.34	5,258.35	5,119.62	21.55	26.14	-32.71	-402.85	1,102.62	531.90	490.93	40.97	12.982		
5,400.00	5,342.02	5,357.87	5,216.06	21.99	26.68	-32.77	-411.55	1,125.59	541.73	499.94	41.79	12.964		
5,500.00	5,440.70	5,457.38	5,312.49	22.42	27.22	-32.82	-420.25	1,148.57	551.55	508.95	42.61	12.946		
5,600.00	5,539.38	5,556.90	5,408.93	22.86	27.75	-32.87	-428.96	1,171.54	561.38	517.96	43.42	12.928		
5,700.00	5,638.06	5,656.41	5,505.36	23.29	28.29	-32.92	-437.66	1,194.51	571.21	526.97	44.24	12.911		
5,800.00	5,736.74	5,755.93	5,601.80	23.73	28.82	-32.96	-446.36	1,217.49	581.04	535.98	45.06	12.895		
5,900.00	5,835.42	5,855.44	5,698.23	24.17	29.36	-33.01	-455.07	1,240.46	590.87	544.99	45.88	12.879		
6,000.00	5,934.10	5,954.96	5,794.67	24.60	29.89	-33.05	-463.77	1,263.44	600.70	554.00	46.70	12.864		
6,100.00	6,032.78	6,054.47	5,891.10	25.04	30.43	-33.09	-472.47	1,286.41	610.52	563.01	47.51	12.849		
6,200.00	6,131.46	6,153.99	5,987.54	25.47	30.96	-33.13	-481.17	1,309.38	620.35	572.02	48.33	12.835		
6,300.00	6,230.14	6,253.50	6,083.97	25.91	31.50	-33.17	-489.88	1,332.36	630.18	581.03	49.15	12.821		
6,400.00	6,328.82	6,353.02	6,180.41	26.34	32.03	-33.21	-498.58	1,355.33	640.01	590.04	49.97	12.808		
6,500.00	6,427.49	6,452.53	6,276.84	26.78	32.57	-33.25	-507.28	1,378.30	649.84	599.05	50.79	12.795		
6,600.00	6,526.17	6,552.05	6,373.27	27.21	33.11	-33.28	-515.99	1,401.28	659.67	608.07	51.61	12.782		
6,700.00	6,624.85	6,651.56	6,469.71	27.65	33.64	-33.32	-524.69	1,424.25	669.51	617.08	52.43	12.770		
6,800.00	6,723.53	6,751.08	6,566.14	28.09	34.18	-33.35	-533.39	1,447.22	679.34	626.09	53.25	12.758		
6,837.91	6,760.94	6,788.81	6,602.71	28.25	34.38	-33.36	-536.69	1,455.93	683.06	629.50	53.56	12.753		
6,850.00	6,772.88	6,800.83	6,614.36	28.30	34.45	-28.27	-537.74	1,458.71	684.25	630.60	53.66	12.753		
6,900.00	6,822.38	6,850.52	6,662.51	28.51	34.71	-1.69	-542.09	1,470.18	689.18	635.16	54.02	12.759		
6,950.00	6,871.89	6,900.31	6,710.81	28.69	34.98	25.83	-545.60	1,481.69	694.13	639.81	54.32	12.778		
7,000.00	6,921.17	6,950.51	6,759.64	28.86	35.23	44.91	-545.81	1,493.31	699.09	644.49	54.60	12.804		
7,050.00	6,969.99	7,001.10	6,808.74	29.01	35.45	56.43	-542.46	1,505.00	704.03	649.17	54.85	12.834		
7,100.00	7,018.10	7,052.07	6,857.85	29.14	35.66	63.57	-535.49	1,516.69	708.92	653.83	55.09	12.868		
7,150.00	7,065.27	7,103.44	6,906.73	29.26	35.85	68.28	-524.85	1,528.31	713.74	658.42	55.31	12.903		
7,200.00	7,111.28	7,155.22	6,955.12	29.36	36.02	71.56	-510.52	1,539.82	718.46	662.94	55.53	12.939		
7,250.00	7,155.89	7,207.40	7,002.74	29.45	36.17	73.96	-492.47	1,551.13	723.06	667.33	55.73	12.974		
7,300.00	7,198.89	7,259.97	7,049.31	29.53	36.31	75.76	-470.74	1,562.20	727.52	671.59	55.93	13.007		
7,350.00	7,240.07	7,312.95	7,094.53	29.60	36.42	77.17	-445.34	1,572.93	731.80	675.67	56.13	13.038		
7,400.00	7,279.23	7,366.32	7,138.12	29.65	36.52	78.28	-416.36	1,583.28	735.88	679.55	56.33	13.065		
7,450.00	7,316.18	7,420.07	7,179.77	29.69	36.61	79.17	-383.88	1,593.16	739.73	683.21	56.52	13.087		
7,500.00	7,350.73	7,474.18	7,219.20	29.72	36.67	79.89	-348.03	1,602.50	743.34	686.62	56.73	13.104		
7,550.00	7,382.73	7,528.64	7,256.10	29.74	36.73	80.48	-308.97	1,611.24	746.68	689.75	56.94	13.114		
7,600.00	7,412.01	7,563.42	7,290.21	29.74	36.76	80.97	-266.88	1,619.31	749.73	692.58	57.15	13.118		
7,650.00	7,438.44	7,638.50	7,321.24	29.74	36.79	81.36	-221.99	1,626.64	752.47	695.09	57.38	13.113		
7,700.00	7,461.87	7,693.84	7,348.96	29.73	36.80	81.68	-174.56	1,633.18	754.89	697.26	57.63	13.100		
7,750.00	7,482.21	7,749.41	7,373.12	29.71	36.80	81.94	-124.85	1,638.87	756.96	699.07	57.88	13.077		
7,800.00	7,499.35	7,805.17	7,393.52	29.69	36.79	82.14	-73.20	1,643.67	758.67	700.51	58.16	13.044		
7,850.00	7,513.20	7,861.08	7,409.99	29.65	36.77	82.29	-19.92	1,647.53	760.02	701.55	58.46	13.000		
7,900.00	7,523.70	7,917.10	7,422.39	29.62	36.74	82.39	34.62	1,650.41	760.99	702.20	58.79	12.945		
7,950.00	7,530.80	7,973.18	7,430.62	29.58	36.71	82.45	90.05	1,652.30	761.58	702.44	59.13	12.879		
8,000.00	7,534.46	8,029.29	7,434.60	29.53	36.68	82.46	145.99	1,653.18	761.78	702.28	59.50	12.803		
8,027.99	7,535.00	8,059.91	7,435.00	29.51	36.66	82.46	176.60	1,653.24	761.72	702.01	59.71	12.757		
8,100.00	7,535.00	8,131.92	7,435.00	29.45	36.63	82.45	248.62	1,653.15	761.50	701.23	60.27	12.636		
8,200.00	7,535.00	8,231.92	7,435.00	29.49	36.60	82.45	348.62	1,653.03	761.18	700.02	61.16	12.446		
8,300.00	7,535.00	8,331.92	7,435.00	30.05	36.61	82.45	448.62	1,652.90	760.87	698.66	62.20	12.232		
8,400.00	7,535.00	8,431.92	7,435.00	30.69	36.64	82.44	548.61	1,652.78	760.55	697.17	63.38	11.999		
8,500.00	7,535.00	8,531.92	7,435.00	31.41	36.73	82.44	648.61	1,652.66	760.24	695.54	64.70	11.751		
8,600.00	7,535.00	8,631.92	7,435.00	32.17	36.87	82.44	748.61	1,652.53	759.92	693.78	66.14	11.490		
8,700.00	7,535.00	8,731.92	7,435.00	33.00	37.11	82.44	848.61	1,652.41	759.61	691.91	67.69	11.222		
8,800.00	7,535.00	8,831.92	7,435.00	33.87	37.45	82.43	948.61	1,652.29	759.29	689.94	69.36	10.948		

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 4R-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 4R-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 #2	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: 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
8,900.00	7,535.00	8,931.91	7,435.00	34.79	37.93	82.43	1,048.61	1,652.17	758.98	687.86	71.12	10.672	
9,000.00	7,535.00	9,031.91	7,435.00	35.75	38.54	82.43	1,148.61	1,652.04	758.66	685.68	72.98	10.396	
9,100.00	7,535.00	9,131.91	7,435.00	36.76	39.28	82.42	1,248.61	1,651.92	758.35	683.42	74.92	10.122	
9,200.00	7,535.00	9,231.91	7,435.00	37.80	40.11	82.42	1,348.61	1,651.80	758.03	681.08	76.95	9.851	
9,300.00	7,535.00	9,331.91	7,435.00	38.88	41.03	82.42	1,448.61	1,651.67	757.72	678.67	79.05	9.585	
9,400.00	7,535.00	9,431.91	7,435.00	39.99	42.01	82.41	1,548.61	1,651.55	757.40	676.18	81.22	9.326	
9,500.00	7,535.00	9,531.91	7,435.00	41.13	43.04	82.41	1,648.61	1,651.43	757.09	673.64	83.45	9.073	
9,600.00	7,535.00	9,631.91	7,435.00	42.30	44.12	82.41	1,748.61	1,651.30	756.77	671.04	85.74	8.827	
9,700.00	7,535.00	9,731.91	7,435.00	43.49	45.23	82.40	1,848.61	1,651.18	756.46	668.38	88.08	8.589	
9,800.00	7,535.00	9,831.91	7,435.00	44.71	46.38	82.40	1,948.61	1,651.06	756.14	665.67	90.47	8.358	
9,900.00	7,535.00	9,931.91	7,435.00	45.95	47.55	82.40	2,048.61	1,650.93	755.83	662.92	92.91	8.135	
10,000.00	7,535.00	10,031.91	7,435.00	47.21	48.76	82.39	2,148.61	1,650.81	755.51	660.13	95.38	7.921	
10,100.00	7,535.00	10,131.91	7,435.00	48.48	49.98	82.39	2,248.60	1,650.69	755.20	657.29	97.90	7.714	
10,200.00	7,535.00	10,231.91	7,435.00	49.78	51.23	82.39	2,348.60	1,650.56	754.88	654.42	100.46	7.515	
10,300.00	7,535.00	10,331.91	7,435.00	51.09	52.50	82.38	2,448.60	1,650.44	754.57	651.52	103.04	7.323	
10,400.00	7,535.00	10,431.91	7,435.00	52.42	53.78	82.38	2,548.60	1,650.32	754.25	648.59	105.66	7.138	
10,500.00	7,535.00	10,531.91	7,435.00	53.75	55.08	82.38	2,648.60	1,650.19	753.93	645.63	108.31	6.961	
10,600.00	7,535.00	10,631.91	7,435.00	55.11	56.40	82.37	2,748.60	1,650.07	753.62	642.64	110.98	6.791	
10,700.00	7,535.00	10,731.91	7,435.00	56.47	57.73	82.37	2,848.60	1,649.95	753.30	639.63	113.68	6.627	
10,800.00	7,535.00	10,831.90	7,435.00	57.85	59.07	82.37	2,948.60	1,649.83	752.99	636.59	116.40	6.469	
10,900.00	7,535.00	10,931.90	7,435.00	59.23	60.42	82.37	3,048.60	1,649.70	752.67	633.54	119.14	6.318	
11,000.00	7,535.00	11,031.90	7,435.00	60.63	61.79	82.36	3,148.60	1,649.58	752.36	630.46	121.90	6.172	
11,100.00	7,535.00	11,131.90	7,435.00	62.03	63.17	82.36	3,248.60	1,649.46	752.04	627.37	124.68	6.032	
11,200.00	7,535.00	11,231.90	7,435.00	63.44	64.55	82.36	3,348.60	1,649.33	751.73	624.25	127.48	5.897	
11,300.00	7,535.00	11,331.90	7,435.00	64.87	65.95	82.35	3,448.60	1,649.21	751.41	621.12	130.29	5.767	
11,400.00	7,535.00	11,431.90	7,435.00	66.29	67.35	82.35	3,548.60	1,649.09	751.10	617.98	133.12	5.642	
11,500.00	7,535.00	11,531.90	7,435.00	67.73	68.76	82.35	3,648.60	1,648.96	750.78	614.82	135.96	5.522	
11,567.32	7,535.00	11,599.22	7,435.00	68.70	69.72	82.34	3,715.92	1,648.88	750.57	612.69	137.88	5.444	
11,576.43	7,535.00	11,608.33	7,435.00	68.83	69.85	82.34	3,725.02	1,648.87	750.56	612.41	138.14	5.433	
11,600.00	7,535.00	11,631.90	7,435.00	69.17	70.18	82.34	3,748.60	1,648.84	750.65	611.83	138.82	5.407	
11,639.91	7,535.00	11,671.80	7,435.00	69.75	70.75	82.35	3,788.50	1,648.79	751.25	611.29	139.97	5.367	
11,700.00	7,535.00	11,731.88	7,435.00	70.63	71.61	82.36	3,848.58	1,648.72	752.57	610.87	141.71	5.311	
11,800.00	7,535.00	11,831.86	7,435.00	72.10	73.04	82.38	3,948.55	1,648.59	754.77	610.16	144.61	5.219	
11,900.00	7,535.00	11,931.83	7,435.00	73.57	74.48	82.41	4,048.53	1,648.47	756.97	609.45	147.52	5.131	
12,000.00	7,535.00	12,031.81	7,435.00	75.05	75.93	82.43	4,148.50	1,648.35	759.16	608.72	150.44	5.046	
12,100.00	7,535.00	12,131.78	7,435.00	76.54	77.37	82.45	4,248.48	1,648.22	761.36	607.99	153.37	4.964	
12,110.95	7,535.00	12,135.65	7,435.00	76.70	77.43	82.45	4,252.34	1,648.22	761.63	607.89	153.74	4.954 SF	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4W-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	2.00	2.00	0.00	0.00	90.38	-0.33	50.08	50.08				
100.00	100.00	102.00	102.00	0.14	0.15	90.38	-0.33	50.08	50.08	49.80	0.28	176.851	
115.99	115.99	117.99	117.99	0.20	0.20	90.38	-0.33	50.08	50.08	49.69	0.40	125.898 CC	
200.00	200.00	201.98	201.98	0.50	0.50	90.38	-0.34	50.08	50.08	49.08	1.00	50.092 ES	
300.00	300.00	301.06	301.04	0.85	0.85	92.11	-1.88	50.97	51.02	49.30	1.71	29.787	
400.00	400.00	399.54	399.38	1.21	1.19	96.36	-5.99	53.77	54.16	51.71	2.46	22.061	
500.00	500.00	497.30	496.86	1.57	1.54	99.99	-10.51	59.68	60.82	57.59	3.23	18.828	
600.00	600.00	594.54	593.56	1.93	1.91	102.37	-15.10	68.86	71.00	67.00	4.00	17.741	
700.00	700.00	691.05	689.15	2.29	2.29	103.65	-19.72	81.21	84.55	79.79	4.76	17.754	
800.00	799.98	786.87	783.60	2.63	2.68	-20.24	-24.39	96.65	99.75	94.26	5.50	18.153	
900.00	899.84	882.20	877.00	2.97	3.09	-20.94	-29.10	115.15	114.95	108.74	6.21	18.515	
1,000.00	999.45	977.00	969.21	3.32	3.53	-22.26	-33.84	136.61	130.19	123.27	6.92	18.808	
1,100.00	1,098.70	1,071.23	1,060.11	3.68	4.01	-23.99	-38.61	160.96	145.56	137.93	7.64	19.060	
1,166.13	1,164.08	1,135.34	1,121.56	3.93	4.34	-25.33	-41.88	178.94	155.58	147.48	8.10	19.217	
1,200.00	1,197.50	1,168.79	1,153.61	4.06	4.53	-26.06	-43.58	188.37	160.44	152.10	8.33	19.256	
1,300.00	1,296.18	1,267.58	1,248.26	4.44	5.07	-27.99	-48.62	216.21	174.93	165.88	9.05	19.333	
1,400.00	1,394.86	1,366.37	1,342.91	4.84	5.62	-29.63	-53.66	244.05	189.58	179.80	9.78	19.379	
1,500.00	1,493.54	1,465.15	1,437.55	5.24	6.18	-31.02	-58.70	271.89	204.36	193.83	10.53	19.403	
1,600.00	1,592.22	1,563.94	1,532.20	5.65	6.75	-32.24	-63.73	299.73	219.25	207.96	11.30	19.411	
1,700.00	1,690.89	1,662.73	1,626.85	6.06	7.32	-33.29	-68.77	327.57	234.22	222.15	12.07	19.407	
1,800.00	1,789.57	1,761.51	1,721.50	6.48	7.90	-34.22	-73.81	355.41	249.26	236.41	12.85	19.394	
1,900.00	1,888.25	1,860.30	1,816.15	6.89	8.47	-35.04	-78.85	383.25	264.36	250.71	13.64	19.375	
2,000.00	1,986.93	1,959.08	1,910.80	7.31	9.05	-35.78	-83.88	411.09	279.50	265.06	14.44	19.353	
2,100.00	2,085.61	2,057.87	2,005.44	7.74	9.64	-36.44	-88.92	438.93	294.69	279.44	15.25	19.327	
2,200.00	2,184.29	2,156.66	2,100.09	8.16	10.22	-37.03	-93.96	466.77	309.90	293.85	16.06	19.300	
2,300.00	2,282.97	2,255.44	2,194.74	8.58	10.80	-37.57	-99.00	494.61	325.15	308.28	16.87	19.273	
2,400.00	2,381.65	2,354.23	2,289.39	9.01	11.39	-38.06	-104.04	522.46	340.43	322.74	17.69	19.245	
2,500.00	2,480.33	2,453.02	2,384.04	9.44	11.98	-38.51	-109.07	550.30	355.72	337.21	18.51	19.217	
2,600.00	2,579.01	2,551.80	2,478.69	9.86	12.56	-38.92	-114.11	578.14	371.04	351.70	19.34	19.189	
2,700.00	2,677.69	2,650.59	2,573.34	10.29	13.15	-39.30	-119.15	605.98	386.37	366.21	20.16	19.162	
2,800.00	2,776.37	2,749.38	2,667.98	10.72	13.74	-39.65	-124.19	633.82	401.72	380.72	20.99	19.135	
2,900.00	2,875.04	2,848.16	2,762.63	11.15	14.33	-39.97	-129.22	661.66	417.08	395.25	21.83	19.109	
3,000.00	2,973.72	2,946.95	2,857.28	11.58	14.92	-40.27	-134.26	689.50	432.45	409.79	22.66	19.084	
3,100.00	3,072.40	3,045.74	2,951.93	12.01	15.51	-40.55	-139.30	717.34	447.84	424.34	23.50	19.060	
3,200.00	3,171.08	3,144.52	3,046.58	12.44	16.10	-40.82	-144.34	745.18	463.23	438.90	24.33	19.036	
3,300.00	3,269.76	3,243.31	3,141.23	12.88	16.69	-41.06	-149.37	773.02	478.63	453.46	25.17	19.014	
3,400.00	3,368.44	3,342.10	3,235.87	13.31	17.28	-41.29	-154.41	800.86	494.05	468.03	26.01	18.992	
3,500.00	3,467.12	3,440.88	3,330.52	13.74	17.87	-41.51	-159.45	828.70	509.46	482.61	26.86	18.971	
3,600.00	3,565.80	3,539.67	3,425.17	14.17	18.46	-41.71	-164.49	856.54	524.89	497.19	27.70	18.950	
3,700.00	3,664.48	3,638.46	3,519.82	14.61	19.05	-41.90	-169.53	884.38	540.32	511.78	28.54	18.931	
3,800.00	3,763.16	3,737.24	3,614.47	15.04	19.64	-42.08	-174.56	912.22	555.76	526.37	29.39	18.912	
3,900.00	3,861.84	3,836.03	3,709.12	15.47	20.24	-42.25	-179.60	940.06	571.20	540.97	30.23	18.894	
4,000.00	3,960.52	3,934.82	3,803.76	15.91	20.83	-42.41	-184.64	967.90	586.64	555.57	31.08	18.876	
4,100.00	4,059.19	4,033.60	3,898.41	16.34	21.42	-42.57	-189.68	995.74	602.10	570.17	31.93	18.860	
4,200.00	4,157.87	4,132.39	3,993.06	16.77	22.01	-42.71	-194.71	1,023.58	617.55	584.78	32.77	18.843	
4,300.00	4,256.55	4,231.18	4,087.71	17.21	22.60	-42.85	-199.75	1,051.43	633.01	599.39	33.62	18.828	
4,400.00	4,355.23	4,329.96	4,182.36	17.64	23.20	-42.99	-204.79	1,079.27	648.47	614.00	34.47	18.813	
4,500.00	4,453.91	4,428.75	4,277.01	18.08	23.79	-43.11	-209.83	1,107.11	663.94	628.62	35.32	18.798	
4,600.00	4,552.59	4,527.54	4,371.65	18.51	24.38	-43.23	-214.86	1,134.95	679.40	643.24	36.17	18.784	
4,700.00	4,651.27	4,626.32	4,466.30	18.94	24.97	-43.35	-219.90	1,162.79	694.88	657.86	37.02	18.771	
4,800.00	4,749.95	4,725.11	4,560.95	19.38	25.57	-43.46	-224.94	1,190.63	710.35	672.48	37.87	18.757	
4,900.00	4,848.63	4,823.90	4,655.60	19.81	26.16	-43.56	-229.98	1,218.47	725.82	687.10	38.72	18.745	

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 4R-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 4R-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4W-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	4,947.31	4,922.68	4,750.25	20.25	26.75	-43.66	-235.02	1,246.31	741.30	701.73	39.57	18.733	
5,100.00	5,045.99	5,021.47	4,844.90	20.68	27.35	-43.76	-240.05	1,274.15	756.78	716.36	40.42	18.721	
5,200.00	5,144.67	5,120.26	4,939.54	21.12	27.94	-43.85	-245.09	1,301.99	772.27	730.99	41.28	18.709	
5,300.00	5,243.34	5,219.04	5,034.19	21.55	28.53	-43.94	-250.13	1,329.83	787.75	745.62	42.13	18.698	
5,400.00	5,342.02	5,317.83	5,128.84	21.99	29.13	-44.03	-255.17	1,357.67	803.24	760.25	42.98	18.687	
5,500.00	5,440.70	5,416.62	5,223.49	22.42	29.72	-44.11	-260.20	1,385.51	818.72	774.89	43.84	18.677	
5,600.00	5,539.38	5,515.40	5,318.14	22.86	30.31	-44.19	-265.24	1,413.35	834.21	789.52	44.69	18.667	
5,700.00	5,638.06	5,614.19	5,412.79	23.29	30.91	-44.27	-270.28	1,441.19	849.71	804.16	45.54	18.657	
5,800.00	5,736.74	5,712.98	5,507.44	23.73	31.50	-44.34	-275.32	1,469.03	865.20	818.80	46.40	18.648	
5,900.00	5,835.42	5,811.76	5,602.08	24.17	32.09	-44.41	-280.35	1,496.87	880.69	833.44	47.25	18.638	
6,000.00	5,934.10	5,910.55	5,696.73	24.60	32.69	-44.48	-285.39	1,524.71	896.19	848.08	48.11	18.629	
6,100.00	6,032.78	6,009.33	5,791.38	25.04	33.28	-44.55	-290.43	1,552.56	911.68	862.72	48.96	18.621	
6,200.00	6,131.46	6,108.12	5,886.03	25.47	33.87	-44.61	-295.47	1,580.40	927.18	877.37	49.82	18.612	
6,300.00	6,230.14	6,206.91	5,980.68	25.91	34.47	-44.67	-300.51	1,608.24	942.68	892.01	50.67	18.604	
6,400.00	6,328.82	6,305.69	6,075.33	26.34	35.06	-44.73	-305.54	1,636.08	958.18	906.65	51.53	18.596	
6,500.00	6,427.49	6,404.48	6,169.97	26.78	35.65	-44.79	-310.58	1,663.92	973.68	921.30	52.38	18.588	
6,600.00	6,526.17	6,503.27	6,264.62	27.21	36.25	-44.85	-315.62	1,691.76	989.18	935.94	53.24	18.581	
6,700.00	6,624.85	6,602.05	6,359.27	27.65	36.84	-44.90	-320.66	1,719.60	1,004.68	950.59	54.09	18.573	
6,800.00	6,723.53	6,700.84	6,453.92	28.09	37.43	-44.96	-325.69	1,747.44	1,020.19	965.24	54.95	18.566	
6,837.91	6,760.94	6,738.29	6,489.80	28.25	37.66	-44.98	-327.60	1,757.99	1,026.07	970.79	55.27	18.564	
6,850.00	6,772.88	6,750.24	6,501.25	28.30	37.73	-39.94	-328.21	1,761.36	1,027.92	972.54	55.37	18.563	
6,900.00	6,822.38	6,799.66	6,548.59	28.51	38.03	-13.63	-330.73	1,775.29	1,035.16	979.40	55.76	18.565	
6,950.00	6,871.89	6,848.91	6,595.79	28.69	38.32	13.66	-333.24	1,789.17	1,041.71	985.63	56.08	18.576	
7,000.00	6,921.17	6,897.77	6,642.60	28.86	38.62	32.73	-335.74	1,802.94	1,047.59	991.24	56.34	18.593	
7,050.00	6,969.99	6,945.99	6,688.79	29.01	38.91	44.45	-338.20	1,816.53	1,052.84	996.29	56.55	18.618	
7,100.00	7,018.10	6,993.33	6,734.15	29.14	39.19	51.99	-340.61	1,829.87	1,057.57	1,000.86	56.71	18.650	
7,150.00	7,065.27	7,039.56	6,778.45	29.26	39.47	57.26	-342.97	1,842.90	1,061.88	1,005.07	56.81	18.691	
7,200.00	7,111.28	7,084.47	6,821.48	29.36	39.74	61.26	-345.26	1,855.55	1,065.92	1,009.04	56.88	18.740	
7,250.00	7,155.89	7,127.83	6,863.02	29.45	40.00	64.47	-347.47	1,867.77	1,069.85	1,012.94	56.91	18.799	
7,300.00	7,198.89	7,169.42	6,902.87	29.53	40.25	67.17	-349.59	1,879.50	1,073.86	1,016.95	56.91	18.870	
7,350.00	7,240.07	7,209.91	6,941.69	29.60	40.49	69.52	-351.34	1,890.89	1,078.13	1,021.23	56.90	18.949	
7,400.00	7,279.23	7,251.87	6,981.98	29.65	40.73	71.61	-351.02	1,902.54	1,082.74	1,025.82	56.92	19.023	
7,450.00	7,316.18	7,295.55	7,023.89	29.69	40.97	73.53	-348.09	1,914.46	1,087.70	1,030.73	56.98	19.090	
7,500.00	7,350.73	7,341.25	7,067.54	29.72	41.20	75.32	-342.20	1,926.63	1,093.02	1,035.94	57.08	19.149	
7,550.00	7,382.73	7,389.31	7,113.02	29.74	41.42	77.03	-332.90	1,939.07	1,098.67	1,041.44	57.23	19.198	
7,600.00	7,412.01	7,440.17	7,160.44	29.74	41.64	78.70	-319.65	1,951.75	1,104.63	1,047.21	57.42	19.239	
7,650.00	7,438.44	7,494.33	7,209.90	29.74	41.85	80.34	-301.77	1,964.65	1,110.85	1,053.21	57.64	19.273	
7,700.00	7,461.87	7,552.42	7,261.43	29.73	42.05	81.98	-278.37	1,977.70	1,117.27	1,059.40	57.88	19.305	
7,750.00	7,482.21	7,615.19	7,314.95	29.71	42.23	83.65	-248.36	1,990.80	1,123.80	1,065.69	58.11	19.340	
7,800.00	7,499.35	7,683.51	7,370.20	29.69	42.40	85.37	-210.36	2,003.76	1,130.30	1,072.00	58.31	19.386	
7,850.00	7,513.20	7,758.42	7,426.60	29.65	42.56	87.14	-162.73	2,016.27	1,136.61	1,078.16	58.45	19.447	
7,900.00	7,523.70	7,841.05	7,483.03	29.62	42.69	88.97	-103.57	2,027.87	1,142.50	1,083.99	58.51	19.528	
7,950.00	7,530.80	7,932.51	7,537.54	29.58	42.79	90.83	-30.87	2,037.82	1,147.69	1,089.20	58.48	19.624	
8,000.00	7,534.46	8,033.75	7,587.10	29.53	42.86	92.68	57.00	2,045.11	1,151.83	1,093.41	58.41	19.718	
8,027.99	7,535.00	8,094.85	7,611.12	29.51	42.88	93.69	113.11	2,047.57	1,153.54	1,095.16	58.38	19.758	
8,100.00	7,535.00	8,267.51	7,653.45	29.45	42.87	95.79	280.07	2,046.40	1,154.50	1,095.87	58.62	19.694	
8,200.00	7,535.00	8,427.29	7,660.00	29.49	42.82	96.17	439.17	2,035.50	1,147.34	1,087.79	59.55	19.266	
8,300.00	7,535.00	8,526.95	7,660.00	30.05	42.80	96.22	538.52	2,027.50	1,139.17	1,078.75	60.43	18.852	
8,400.00	7,535.00	8,626.62	7,660.00	30.69	42.80	96.26	637.86	2,019.51	1,131.01	1,069.55	61.46	18.403	
8,500.00	7,535.00	8,726.28	7,660.00	31.41	42.81	96.31	737.20	2,011.52	1,122.84	1,060.21	62.64	17.927	
8,600.00	7,535.00	8,825.94	7,660.00	32.17	42.84	96.36	836.54	2,003.53	1,114.68	1,050.73	63.95	17.430	
8,700.00	7,535.00	8,925.60	7,660.00	33.00	42.90	96.40	935.88	1,995.53	1,106.52	1,041.11	65.40	16.919	

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 4R-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 4R-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W - HWY52 4W-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	7,535.00	9,025.26	7,660.00	33.87	42.99	96.45	1,035.22	1,987.54	1,098.35	1,031.38	66.97	16.400		
8,900.00	7,535.00	9,124.93	7,660.00	34.79	43.12	96.50	1,134.56	1,979.55	1,090.19	1,021.53	68.66	15.878		
9,000.00	7,535.00	9,224.59	7,660.00	35.75	43.30	96.55	1,233.90	1,971.55	1,082.03	1,011.58	70.45	15.359		
9,100.00	7,535.00	9,324.25	7,660.00	36.76	43.55	96.60	1,333.24	1,963.56	1,073.87	1,001.53	72.34	14.845		
9,200.00	7,535.00	9,423.91	7,660.00	37.80	43.89	96.65	1,432.58	1,955.57	1,065.71	991.39	74.32	14.340		
9,300.00	7,535.00	9,523.58	7,660.00	38.88	44.34	96.70	1,531.93	1,947.57	1,057.55	981.17	76.38	13.846		
9,400.00	7,535.00	9,623.24	7,660.00	39.99	44.92	96.75	1,631.27	1,939.58	1,049.39	970.87	78.52	13.365		
9,500.00	7,535.00	9,722.90	7,660.00	41.13	45.63	96.81	1,730.61	1,931.59	1,041.24	960.51	80.73	12.898		
9,600.00	7,535.00	9,822.56	7,660.00	42.30	46.46	96.86	1,829.95	1,923.60	1,033.08	950.08	83.00	12.447		
9,700.00	7,535.00	9,900.00	7,660.00	43.49	47.17	96.90	1,907.15	1,917.58	1,025.36	940.04	85.32	12.017		
9,800.00	7,535.00	9,981.32	7,660.00	44.71	47.99	96.93	1,988.35	1,913.16	1,019.86	932.17	87.70	11.629		
9,900.00	7,535.00	10,055.21	7,660.00	45.95	48.78	96.95	2,062.21	1,911.15	1,016.96	926.86	90.11	11.286		
10,000.00	7,535.00	10,146.56	7,660.00	47.21	49.80	96.95	2,153.55	1,910.51	1,016.05	923.49	92.56	10.977		
10,100.00	7,535.00	10,246.55	7,660.00	48.48	50.95	96.96	2,253.55	1,909.93	1,015.28	920.22	95.06	10.681		
10,200.00	7,535.00	10,346.55	7,660.00	49.78	52.14	96.96	2,353.54	1,909.35	1,014.51	916.91	97.59	10.395		
10,300.00	7,535.00	10,446.55	7,660.00	51.09	53.36	96.97	2,453.54	1,908.76	1,013.74	913.57	100.17	10.121		
10,400.00	7,535.00	10,546.54	7,660.00	52.42	54.60	96.97	2,553.53	1,908.18	1,012.97	910.20	102.77	9.857		
10,500.00	7,535.00	10,646.54	7,660.00	53.75	55.86	96.98	2,653.53	1,907.60	1,012.20	906.79	105.40	9.603		
10,600.00	7,535.00	10,746.54	7,660.00	55.11	57.14	96.99	2,753.53	1,907.02	1,011.42	903.36	108.07	9.359		
10,700.00	7,535.00	10,846.53	7,660.00	56.47	58.44	96.99	2,853.52	1,906.44	1,010.65	899.90	110.76	9.125		
10,800.00	7,535.00	10,946.53	7,660.00	57.85	59.75	97.00	2,953.52	1,905.85	1,009.88	896.41	113.47	8.900		
10,900.00	7,535.00	11,046.53	7,660.00	59.23	61.08	97.00	3,053.51	1,905.27	1,009.11	892.91	116.20	8.684		
11,000.00	7,535.00	11,146.53	7,660.00	60.63	62.43	97.01	3,153.51	1,904.69	1,008.34	889.38	118.96	8.476		
11,100.00	7,535.00	11,246.52	7,660.00	62.03	63.78	97.01	3,253.50	1,904.11	1,007.57	885.83	121.74	8.277		
11,200.00	7,535.00	11,346.52	7,660.00	63.44	65.14	97.02	3,353.50	1,903.53	1,006.80	882.27	124.53	8.085		
11,300.00	7,535.00	11,446.52	7,660.00	64.87	66.52	97.02	3,453.49	1,902.94	1,006.03	878.69	127.34	7.900		
11,400.00	7,535.00	11,546.51	7,660.00	66.29	67.91	97.03	3,553.49	1,902.36	1,005.26	875.09	130.17	7.723		
11,500.00	7,535.00	11,646.51	7,660.00	67.73	69.30	97.03	3,653.48	1,901.78	1,004.49	871.48	133.01	7.552		
11,567.32	7,535.00	11,713.83	7,660.00	68.70	70.25	97.04	3,720.80	1,901.39	1,003.97	869.04	134.93	7.441		
11,589.57	7,535.00	11,736.08	7,660.00	69.02	70.56	97.04	3,743.05	1,901.26	1,003.88	868.32	135.57	7.405		
11,600.00	7,535.00	11,746.51	7,660.00	69.17	70.70	97.04	3,753.48	1,901.20	1,003.90	868.04	135.86	7.389		
11,639.91	7,535.00	11,786.41	7,660.00	69.75	71.27	97.04	3,793.38	1,900.96	1,004.32	867.30	137.02	7.330		
11,700.00	7,535.00	11,846.50	7,660.00	70.63	72.12	97.03	3,853.47	1,900.62	1,005.37	866.61	138.76	7.246		
11,800.00	7,535.00	11,946.48	7,660.00	72.10	73.53	97.02	3,953.45	1,900.03	1,007.11	865.45	141.67	7.109		
11,900.00	7,535.00	12,046.47	7,660.00	73.57	74.96	97.00	4,053.43	1,899.45	1,008.86	864.27	144.59	6.978		
12,000.00	7,535.00	12,146.45	7,660.00	75.05	76.39	96.99	4,153.41	1,898.87	1,010.60	863.08	147.52	6.851		
12,100.00	7,535.00	12,243.21	7,660.00	76.54	77.78	96.98	4,250.18	1,898.31	1,012.35	861.89	150.46	6.728		
12,110.95	7,535.00	12,243.21	7,660.00	76.70	77.78	96.98	4,250.18	1,898.31	1,012.63	861.84	150.80	6.715 SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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							
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	-3.40	1,422.92	-84.49	1,426.17				
100.00	100.00	54.00	54.00	0.14	0.10	-3.40	1,422.92	-84.49	1,425.43	1,425.20	0.23	6,074.360	
200.00	200.00	154.00	154.00	0.50	0.28	-3.40	1,422.92	-84.49	1,425.43	1,424.66	0.77	1,846.126	
300.00	300.00	254.00	254.00	0.85	0.45	-3.40	1,422.92	-84.49	1,425.43	1,424.12	1.31	1,088.467	
400.00	400.00	354.00	354.00	1.21	0.63	-3.40	1,422.92	-84.49	1,425.43	1,423.58	1.85	771.741	
500.00	500.00	454.00	454.00	1.57	0.81	-3.40	1,422.92	-84.49	1,425.43	1,423.05	2.38	597.793	
600.00	600.00	554.00	554.00	1.93	0.99	-3.40	1,422.92	-84.49	1,425.43	1,422.51	2.92	487.836	
700.00	700.00	654.00	654.00	2.29	1.17	-3.40	1,422.92	-84.49	1,425.43	1,421.97	3.46	412.045	CC, ES
800.00	799.98	753.98	753.98	2.63	1.35	-127.61	1,422.92	-84.49	1,426.50	1,422.51	3.98	358.060	
900.00	899.84	853.84	853.84	2.97	1.53	-127.73	1,422.92	-84.49	1,429.70	1,425.19	4.50	317.587	
1,000.00	999.45	953.45	953.45	3.32	1.71	-127.92	1,422.92	-84.49	1,435.05	1,430.03	5.03	285.466	
1,100.00	1,098.70	1,052.70	1,052.70	3.68	1.88	-128.18	1,422.92	-84.49	1,442.60	1,437.04	5.56	259.436	
1,166.13	1,164.08	1,118.08	1,118.08	3.93	2.00	-128.39	1,422.92	-84.49	1,448.81	1,442.90	5.92	244.772	
1,200.00	1,197.50	1,151.50	1,151.50	4.06	2.06	-128.56	1,422.92	-84.49	1,452.26	1,446.15	6.10	237.920	
1,300.00	1,296.18	1,250.18	1,250.18	4.44	2.24	-129.05	1,422.92	-84.49	1,462.49	1,455.84	6.65	219.865	
1,400.00	1,394.86	1,348.86	1,348.86	4.84	2.41	-129.53	1,422.92	-84.49	1,472.83	1,465.62	7.20	204.418	
1,500.00	1,493.54	1,447.54	1,447.54	5.24	2.59	-130.01	1,422.92	-84.49	1,483.27	1,475.51	7.76	191.088	
1,600.00	1,592.22	1,546.22	1,546.22	5.65	2.77	-130.49	1,422.92	-84.49	1,493.82	1,485.50	8.32	179.493	SF

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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							
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	46.29	859.04	898.64	1,244.58				
100.00	100.00	41.19	41.19	0.14	0.03	46.29	859.03	898.65	1,243.18	1,243.03	0.15	8,056.221	
200.00	200.00	141.15	141.15	0.50	0.09	46.30	858.94	898.69	1,243.15	1,242.59	0.57	2,191.512	
220.67	220.67	161.66	161.66	0.57	0.10	46.29	858.96	898.68	1,243.15	1,242.50	0.66	1,897.586	
300.00	300.00	240.11	240.11	0.85	0.15	46.28	859.12	898.55	1,243.18	1,242.18	0.99	1,255.231	
400.00	400.00	338.93	338.92	1.21	0.24	46.27	859.41	898.44	1,243.30	1,241.88	1.42	874.778	
500.00	500.00	437.93	437.93	1.57	0.36	46.26	859.71	898.43	1,243.50	1,241.63	1.87	663.321	
600.00	600.00	539.46	539.46	1.93	0.48	46.26	859.97	898.55	1,243.76	1,241.42	2.33	533.270	
700.00	700.00	642.24	642.23	2.29	0.59	46.24	860.11	898.31	1,243.69	1,240.93	2.76	450.960	
800.00	799.98	741.00	741.00	2.63	0.72	-78.05	860.60	897.80	1,243.29	1,240.14	3.15	394.228	
900.00	899.84	841.72	841.71	2.97	0.86	-78.34	861.07	897.33	1,242.21	1,238.65	3.56	349.208	
1,000.00	999.45	942.52	942.50	3.32	1.01	-78.82	861.70	896.51	1,240.33	1,236.36	3.97	312.496	
1,100.00	1,098.70	1,041.64	1,041.62	3.68	1.16	-79.47	862.45	895.55	1,237.86	1,233.47	4.39	281.790	
1,166.13	1,164.08	1,107.55	1,107.52	3.93	1.25	-80.00	862.99	894.84	1,235.96	1,231.27	4.68	263.931	
1,200.00	1,197.50	1,142.48	1,142.45	4.06	1.31	-80.29	863.28	894.41	1,234.92	1,230.08	4.83	255.434	
1,300.00	1,296.18	1,243.18	1,243.14	4.44	1.45	-81.11	864.07	892.92	1,231.80	1,226.51	5.29	232.961	
1,400.00	1,394.86	1,340.77	1,340.71	4.84	1.60	-81.92	865.00	891.28	1,228.93	1,223.18	5.75	213.787	
1,500.00	1,493.54	1,438.72	1,438.63	5.24	1.74	-82.75	866.10	889.53	1,226.38	1,220.17	6.22	197.223	
1,600.00	1,592.22	1,536.45	1,536.35	5.65	1.89	-83.59	867.33	887.66	1,224.11	1,217.42	6.69	182.851	
1,700.00	1,690.89	1,633.07	1,632.93	6.06	2.04	-84.42	868.72	885.78	1,222.23	1,215.05	7.18	170.328	
1,800.00	1,789.57	1,731.67	1,731.51	6.48	2.19	-85.28	870.21	883.90	1,220.71	1,213.05	7.66	159.305	
1,900.00	1,888.25	1,832.30	1,832.11	6.89	2.35	-86.15	871.49	881.99	1,219.30	1,211.15	8.15	149.546	
2,000.00	1,986.93	1,930.93	1,930.72	7.31	2.50	-86.99	872.49	880.33	1,218.09	1,209.44	8.64	140.915	
2,100.00	2,085.61	2,029.17	2,028.95	7.74	2.65	-87.81	873.31	878.85	1,217.11	1,207.97	9.14	133.214	
2,200.00	2,184.29	2,126.14	2,125.90	8.16	2.80	-88.63	874.13	877.53	1,216.48	1,206.85	9.63	126.313	
2,300.00	2,282.97	2,225.47	2,225.22	8.58	2.95	-89.46	875.01	876.25	1,216.19	1,206.06	10.13	120.075	
2,400.00	2,381.65	2,329.94	2,329.68	9.01	3.10	-90.33	875.56	874.75	1,215.77	1,205.15	10.63	114.407	
2,500.00	2,480.33	2,430.30	2,430.02	9.44	3.24	-91.16	875.76	873.23	1,215.31	1,204.19	11.12	109.304	
2,600.00	2,579.01	2,529.69	2,529.40	9.86	3.37	-91.97	875.77	871.88	1,215.02	1,203.41	11.61	104.660	
2,700.00	2,677.69	2,628.50	2,628.21	10.29	3.50	-92.78	875.68	870.46	1,214.85	1,202.75	12.10	100.397	
2,700.06	2,677.74	2,628.56	2,628.26	10.29	3.50	-92.78	875.67	870.46	1,214.85	1,202.75	12.10	100.395	
2,800.00	2,776.37	2,725.64	2,725.33	10.72	3.63	-93.57	875.80	869.08	1,215.12	1,202.53	12.59	96.495	
2,900.00	2,875.04	2,829.47	2,829.15	11.15	3.77	-94.43	875.61	867.44	1,215.31	1,202.22	13.09	92.849	
3,000.00	2,973.72	2,925.60	2,925.27	11.58	3.89	-95.22	875.43	865.80	1,215.67	1,202.09	13.58	89.515	
3,100.00	3,072.40	3,020.09	3,019.74	12.01	4.03	-96.01	875.64	864.10	1,216.60	1,202.53	14.07	86.454	
3,200.00	3,171.08	3,118.03	3,117.66	12.44	4.18	-96.84	876.09	862.23	1,217.95	1,203.38	14.57	83.611	
3,300.00	3,269.76	3,217.31	3,216.92	12.88	4.33	-97.69	876.61	860.15	1,219.54	1,204.48	15.06	80.967	
3,400.00	3,368.44	3,317.34	3,316.92	13.31	4.48	-98.54	877.05	857.94	1,221.27	1,205.72	15.56	78.501	
3,500.00	3,467.12	3,414.47	3,414.03	13.74	4.62	-99.37	877.48	855.75	1,223.27	1,207.22	16.05	76.216	
3,600.00	3,565.80	3,511.27	3,510.81	14.17	4.77	-100.19	877.97	853.71	1,225.65	1,209.10	16.54	74.092	
3,700.00	3,664.48	3,608.00	3,607.51	14.61	4.92	-101.00	878.57	851.76	1,228.43	1,211.39	17.03	72.112	
3,800.00	3,763.16	3,709.44	3,708.93	15.04	5.08	-101.86	879.25	849.43	1,231.41	1,213.88	17.53	70.240	
3,900.00	3,861.84	3,812.31	3,811.76	15.47	5.23	-102.75	879.75	846.54	1,234.31	1,216.28	18.03	68.470	
4,000.00	3,960.52	3,908.69	3,908.08	15.91	5.38	-103.59	880.22	843.59	1,237.40	1,218.88	18.52	66.827	
4,100.00	4,059.19	4,000.00	3,999.35	16.34	5.52	-104.38	880.90	840.88	1,241.05	1,222.05	19.00	65.311	
4,200.00	4,157.87	4,096.12	4,095.44	16.77	5.67	-105.21	881.91	838.22	1,245.33	1,225.84	19.50	63.879	
4,300.00	4,256.55	4,190.98	4,190.25	17.21	5.81	-106.00	883.11	835.91	1,250.18	1,230.19	19.99	62.540	
4,400.00	4,355.23	4,285.74	4,284.98	17.64	5.96	-106.79	884.51	833.79	1,255.56	1,235.07	20.49	61.280	
4,500.00	4,453.91	4,379.92	4,379.13	18.08	6.10	-107.56	886.17	831.78	1,261.48	1,240.49	20.99	60.092	
4,600.00	4,552.59	4,477.97	4,477.14	18.51	6.25	-108.35	888.00	830.00	1,267.85	1,246.35	21.51	58.951	
4,700.00	4,651.27	4,571.49	4,570.63	18.94	6.39	-109.09	889.90	828.18	1,274.58	1,252.56	22.02	57.885	
4,800.00	4,749.95	4,670.72	4,669.81	19.38	6.53	-109.88	892.15	826.41	1,281.82	1,259.28	22.55	56.855	

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 4R-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 4R-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 #2	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						
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	4,848.63	4,765.39	4,764.44	19.81	6.67	-110.62	894.26	824.53	1,289.23	1,266.16	23.07	55.889	
5,000.00	4,947.31	4,860.14	4,859.15	20.25	6.80	-111.35	896.70	822.98	1,297.26	1,273.67	23.60	54.978	
5,100.00	5,045.99	4,963.57	4,962.53	20.68	6.95	-112.13	899.35	821.28	1,305.52	1,281.37	24.14	54.070	
5,200.00	5,144.67	5,064.03	5,062.96	21.12	7.10	-112.88	901.43	819.59	1,313.51	1,288.82	24.69	53.205	
5,300.00	5,243.34	5,161.32	5,160.21	21.55	7.24	-113.60	903.49	817.99	1,321.77	1,296.55	25.23	52.396	
5,400.00	5,342.02	5,259.04	5,257.90	21.99	7.38	-114.31	905.61	816.39	1,330.29	1,304.53	25.77	51.623	
5,500.00	5,440.70	5,355.95	5,354.77	22.42	7.52	-114.99	907.73	815.02	1,339.08	1,312.76	26.32	50.885	
5,600.00	5,539.38	5,455.17	5,453.96	22.86	7.66	-115.68	909.93	813.89	1,348.13	1,321.26	26.87	50.170	
5,700.00	5,638.06	5,556.47	5,555.23	23.29	7.80	-116.37	912.01	812.54	1,357.19	1,329.75	27.43	49.475	
5,800.00	5,736.74	5,656.70	5,655.43	23.73	7.95	-117.05	913.86	811.26	1,366.24	1,338.25	27.99	48.815	
5,900.00	5,835.42	5,756.77	5,755.48	24.17	8.10	-117.71	915.60	809.95	1,375.36	1,346.82	28.54	48.186	
6,000.00	5,934.10	5,853.54	5,852.23	24.60	8.24	-118.35	917.22	808.60	1,384.59	1,355.50	29.09	47.596	
6,100.00	6,032.78	5,948.06	5,946.72	25.04	8.38	-118.96	919.03	807.50	1,394.26	1,364.62	29.64	47.042	
6,200.00	6,131.46	6,043.98	6,042.61	25.47	8.51	-119.56	921.07	806.62	1,404.32	1,374.12	30.20	46.507	
6,300.00	6,230.14	6,142.54	6,141.15	25.91	8.65	-120.17	923.26	805.75	1,414.63	1,383.87	30.76	45.985	
6,400.00	6,328.82	6,243.01	6,241.59	26.34	8.79	-120.78	925.38	804.71	1,424.99	1,393.66	31.33	45.479	
6,500.00	6,427.49	6,341.17	6,339.72	26.78	8.92	-121.37	927.33	803.84	1,435.40	1,403.50	31.90	44.998	
6,600.00	6,526.17	6,437.37	6,435.90	27.21	9.05	-121.93	929.37	803.27	1,446.09	1,413.62	32.46	44.547	
6,700.00	6,624.85	6,534.26	6,532.77	27.65	9.17	-122.48	931.52	802.73	1,457.02	1,423.99	33.03	44.114	
6,800.00	6,723.53	6,631.15	6,629.63	28.09	9.30	-123.03	933.81	801.93	1,468.22	1,434.63	33.59	43.706	
6,837.91	6,760.94	6,668.60	6,667.06	28.25	9.35	-123.24	934.70	801.60	1,472.51	1,438.70	33.81	43.554	
6,850.00	6,772.88	6,680.55	6,679.01	28.30	9.37	-118.13	934.98	801.50	1,473.78	1,439.90	33.88	43.503	
6,900.00	6,822.38	6,730.32	6,728.77	28.51	9.44	-91.64	936.16	801.08	1,476.89	1,442.73	34.16	43.235	
6,950.00	6,871.89	6,780.31	6,778.75	28.69	9.51	-64.41	937.32	800.73	1,476.53	1,442.10	34.43	42.879	
7,000.00	6,921.17	6,830.18	6,828.60	28.86	9.57	-45.63	938.46	800.39	1,472.70	1,438.00	34.70	42.442	
7,050.00	6,969.99	6,879.61	6,878.02	29.01	9.64	-34.44	939.58	799.89	1,465.42	1,430.47	34.95	41.926	
7,100.00	7,018.10	6,927.64	6,926.02	29.14	9.71	-27.63	940.65	799.25	1,454.74	1,419.54	35.19	41.338	
7,150.00	7,065.27	6,974.26	6,972.63	29.26	9.78	-23.27	941.70	798.51	1,440.73	1,405.31	35.42	40.679	
7,200.00	7,111.28	7,021.69	7,020.04	29.36	9.86	-20.37	942.79	797.65	1,423.46	1,387.83	35.64	39.944	
7,250.00	7,155.89	7,070.08	7,068.41	29.45	9.93	-18.42	943.80	796.79	1,402.92	1,367.06	35.85	39.131	
7,300.00	7,198.89	7,114.33	7,112.65	29.53	10.00	-17.07	944.64	796.03	1,379.19	1,343.14	36.05	38.261	
7,350.00	7,240.07	7,152.77	7,151.07	29.60	10.06	-16.15	945.41	795.34	1,352.56	1,316.34	36.22	37.342	
7,400.00	7,279.23	7,189.51	7,187.80	29.65	10.12	-15.58	946.24	794.65	1,323.17	1,286.79	36.38	36.368	
7,450.00	7,316.18	7,225.83	7,224.10	29.69	10.17	-15.34	947.12	793.94	1,291.16	1,254.62	36.54	35.336	
7,500.00	7,350.73	7,260.53	7,258.78	29.72	10.22	-15.38	947.98	793.25	1,256.61	1,219.92	36.69	34.252	
7,550.00	7,382.73	7,292.82	7,291.05	29.74	10.27	-15.70	948.79	792.61	1,219.69	1,182.87	36.82	33.122	
7,600.00	7,412.01	7,321.84	7,320.06	29.74	10.32	-16.32	949.54	792.03	1,180.59	1,143.64	36.95	31.952	
7,650.00	7,438.44	7,348.06	7,346.26	29.74	10.36	-17.29	950.25	791.51	1,139.50	1,102.44	37.06	30.746	
7,700.00	7,461.87	7,371.56	7,369.75	29.73	10.39	-18.72	950.91	791.03	1,096.62	1,059.45	37.17	29.505	
7,750.00	7,482.21	7,392.22	7,390.40	29.71	10.43	-20.75	951.51	790.61	1,052.13	1,014.87	37.26	28.235	
7,800.00	7,499.35	7,410.76	7,408.93	29.69	10.45	-23.74	952.05	790.24	1,006.26	968.91	37.35	26.938	
7,850.00	7,513.20	7,426.56	7,424.71	29.65	10.48	-28.19	952.51	789.93	959.20	921.76	37.44	25.619	
7,900.00	7,523.70	7,438.85	7,437.00	29.62	10.50	-35.03	952.86	789.68	911.18	873.66	37.52	24.285	
7,950.00	7,530.80	7,447.62	7,445.76	29.58	10.51	-46.04	953.11	789.51	862.44	824.84	37.60	22.940	
8,000.00	7,534.46	7,452.82	7,450.96	29.53	10.52	-64.07	953.26	789.41	813.21	775.55	37.67	21.590	
8,027.99	7,535.00	7,454.18	7,452.32	29.51	10.52	-77.88	953.29	789.39	785.54	747.83	37.71	20.833	
8,100.00	7,535.00	7,456.23	7,454.37	29.45	10.52	-78.91	953.35	789.35	714.34	676.53	37.81	18.891	
8,200.00	7,535.00	7,459.06	7,457.20	29.49	10.53	-80.33	953.43	789.29	615.78	577.78	38.01	16.201	
8,300.00	7,535.00	7,461.87	7,460.00	30.05	10.53	-81.76	953.51	789.24	517.76	479.48	38.28	13.526	
8,400.00	7,535.00	7,464.66	7,462.79	30.69	10.54	-83.18	953.58	789.19	420.65	381.98	38.68	10.876	
8,500.00	7,535.00	7,467.42	7,465.56	31.41	10.54	-84.61	953.66	789.13	325.28	285.96	39.31	8.274	
8,600.00	7,535.00	7,470.17	7,468.30	32.17	10.54	-86.02	953.73	789.08	233.76	193.32	40.44	5.780	

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 4R-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 4R-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 #2	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		
8,700.00	7,535.00	7,472.90	7,471.03	33.00	10.55	-87.43	953.81	789.03	153.20	110.74	42.47	3.608		
8,800.00	7,535.00	7,475.60	7,473.73	33.87	10.55	-88.83	953.88	788.98	110.83	68.21	42.62	2.601 ES, SF		
8,805.98	7,535.00	7,475.76	7,473.89	33.92	10.55	-88.91	953.88	788.98	110.67	68.34	42.33	2.614 CC		
8,900.00	7,535.00	7,478.29	7,476.42	34.79	10.56	-90.22	953.95	788.93	145.19	108.53	36.66	3.960		
9,000.00	7,535.00	7,480.96	7,479.08	35.75	10.56	-91.60	954.02	788.88	223.30	188.13	35.17	6.349		
9,100.00	7,535.00	7,483.60	7,481.73	36.76	10.56	-92.96	954.09	788.83	314.06	278.79	35.27	8.905		
9,200.00	7,535.00	7,486.23	7,484.35	37.80	10.57	-94.32	954.16	788.78	409.13	373.62	35.51	11.522		
9,300.00	7,535.00	7,488.84	7,486.96	38.88	10.57	-95.65	954.23	788.73	506.09	470.37	35.72	14.169		
9,400.00	7,535.00	7,491.43	7,489.55	39.99	10.58	-96.97	954.30	788.68	604.03	568.14	35.89	16.831		
9,500.00	7,535.00	7,494.01	7,492.12	41.13	10.58	-98.27	954.37	788.63	702.54	666.52	36.03	19.500		
9,600.00	7,535.00	7,496.56	7,494.68	42.30	10.58	-99.55	954.44	788.59	801.42	765.27	36.14	22.174		
9,700.00	7,535.00	7,500.00	7,498.11	43.49	10.59	-101.26	954.53	788.52	900.53	864.29	36.24	24.849		
9,800.00	7,535.00	7,501.70	7,499.82	44.71	10.59	-102.10	954.57	788.49	999.81	963.49	36.33	27.523		
9,900.00	7,535.00	7,504.37	7,502.48	45.95	10.60	-103.40	954.64	788.44	1,099.22	1,062.82	36.40	30.197		
10,000.00	7,535.00	7,507.04	7,505.15	47.21	10.60	-104.69	954.71	788.39	1,198.72	1,162.25	36.47	32.868		
10,100.00	7,535.00	7,509.73	7,507.84	48.48	10.60	-105.97	954.78	788.34	1,298.29	1,261.76	36.53	35.537		
10,200.00	7,535.00	7,512.42	7,510.53	49.78	10.61	-107.24	954.85	788.29	1,397.92	1,361.33	36.59	38.203		
10,300.00	7,535.00	7,515.12	7,513.23	51.09	10.61	-108.49	954.92	788.25	1,497.59	1,460.95	36.65	40.865		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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							
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	7,535.00	7,664.00	7,528.70	73.57	33.37	98.85	5,490.65	1,241.62	1,484.52	1,420.64	63.88	23.238	
12,000.00	7,535.00	7,661.72	7,526.43	75.05	33.36	98.51	5,490.75	1,241.60	1,388.12	1,323.74	64.38	21.560	
12,100.00	7,535.00	7,657.03	7,521.74	76.54	33.35	97.81	5,490.96	1,241.56	1,292.25	1,227.21	65.04	19.869	
12,110.95	7,535.00	7,656.52	7,521.23	76.70	33.35	97.74	5,490.98	1,241.55	1,281.79	1,216.67	65.12	19.683	CC, ES, SF

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
11,200.00	7,535.00	7,595.75	7,456.68	63.44	30.98	-85.43	4,787.41	740.50	1,449.08	1,388.44	60.64	23.895		
11,300.00	7,535.00	7,597.03	7,457.96	64.87	30.99	-85.87	4,787.43	740.53	1,349.79	1,288.88	60.92	22.158		
11,400.00	7,535.00	7,598.29	7,459.23	66.29	30.99	-86.30	4,787.44	740.57	1,250.62	1,189.38	61.24	20.420		
11,500.00	7,535.00	7,599.55	7,460.49	67.73	30.99	-86.73	4,787.46	740.60	1,151.59	1,089.96	61.64	18.683		
11,567.32	7,535.00	7,600.39	7,461.33	68.70	31.00	-87.02	4,787.47	740.62	1,085.03	1,023.08	61.95	17.514		
11,600.00	7,535.00	7,600.79	7,461.73	69.17	31.00	-86.93	4,787.47	740.63	1,052.72	990.60	62.12	16.947		
11,639.91	7,535.00	7,601.27	7,462.20	69.75	31.00	-86.82	4,787.48	740.64	1,013.22	950.90	62.32	16.259		
11,700.00	7,535.00	7,601.97	7,462.90	70.63	31.00	-87.10	4,787.49	740.66	953.74	891.10	62.64	15.225		
11,800.00	7,535.00	7,603.12	7,464.06	72.10	31.01	-87.57	4,787.50	740.69	854.96	791.65	63.30	13.506		
11,900.00	7,535.00	7,604.27	7,465.21	73.57	31.01	-88.04	4,787.51	740.72	756.49	692.31	64.17	11.788		
12,000.00	7,535.00	7,605.41	7,466.35	75.05	31.01	-88.51	4,787.53	740.74	658.48	593.12	65.36	10.074		
12,100.00	7,535.00	7,606.54	7,467.47	76.54	31.02	-88.97	4,787.54	740.77	561.17	494.11	67.06	8.369		
12,110.95	7,535.00	7,606.66	7,467.60	76.70	31.02	-89.02	4,787.54	740.77	550.57	483.29	67.29	8.183 CC, ES, SF		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	49.05	224.81	259.08	343.60				
100.00	100.00	80.67	80.67	0.14	0.14	49.05	224.76	259.02	342.94	342.66	0.28	1,237.855	
200.00	200.00	181.51	181.51	0.50	0.32	49.05	224.54	258.78	342.62	341.81	0.81	423.579	
300.00	300.00	282.36	282.36	0.85	0.50	49.05	224.16	258.35	342.05	340.71	1.34	255.123	
400.00	400.00	383.20	383.19	1.21	0.67	49.05	223.62	257.73	341.24	339.36	1.87	182.231	
500.00	500.00	484.04	484.02	1.57	0.85	49.06	222.91	256.93	340.17	337.77	2.40	141.485	
600.00	600.00	584.87	584.85	1.93	1.03	49.06	222.03	255.94	338.86	335.93	2.94	115.417	
700.00	700.00	685.69	685.66	2.29	1.21	49.06	220.99	254.77	337.31	333.84	3.47	97.275	
800.00	799.98	786.47	786.43	2.63	1.38	-75.45	219.79	253.40	335.06	331.07	3.99	84.062	
900.00	899.84	887.11	887.04	2.97	1.56	-76.39	218.42	251.86	331.73	327.24	4.50	73.770	
1,000.00	999.45	984.55	984.45	3.32	1.73	-78.03	217.60	249.91	327.76	322.74	5.01	65.377	
1,100.00	1,098.70	1,073.14	1,072.98	3.68	1.88	-80.49	219.73	247.50	325.29	319.76	5.53	58.802	
1,112.65	1,111.22	1,083.95	1,083.78	3.73	1.90	-80.84	220.22	247.31	325.26	319.66	5.60	58.095 CC, ES	
1,166.13	1,164.08	1,130.10	1,129.85	3.93	1.98	-82.45	222.88	246.69	325.87	319.98	5.89	55.338	
1,200.00	1,197.50	1,159.34	1,159.00	4.06	2.03	-83.56	225.08	246.37	326.91	320.84	6.07	53.838	
1,300.00	1,296.18	1,246.62	1,245.86	4.44	2.18	-86.98	233.67	245.97	333.11	326.49	6.62	50.314	
1,400.00	1,394.86	1,336.27	1,334.81	4.84	2.36	-90.47	244.76	246.37	343.36	336.17	7.19	47.786	
1,500.00	1,493.54	1,423.02	1,420.54	5.24	2.56	-93.92	258.02	246.25	357.30	349.55	7.74	46.158	
1,600.00	1,592.22	1,512.94	1,508.98	5.65	2.79	-97.41	274.23	246.15	375.17	366.87	8.30	45.214	
1,700.00	1,690.89	1,598.98	1,593.29	6.06	3.05	-100.66	291.38	245.35	395.98	387.15	8.83	44.831	
1,800.00	1,789.57	1,683.58	1,675.60	6.48	3.34	-103.80	310.83	243.66	420.68	411.34	9.35	45.009	
1,900.00	1,888.25	1,772.14	1,761.33	6.89	3.68	-106.90	332.91	241.30	448.42	438.56	9.86	45.457	
2,000.00	1,986.93	1,855.92	1,842.17	7.31	4.03	-109.60	354.76	238.65	478.44	468.10	10.34	46.252	
2,100.00	2,085.61	1,941.82	1,924.54	7.74	4.41	-112.15	378.91	235.55	511.39	500.56	10.82	47.247	
2,200.00	2,184.29	2,029.11	2,008.03	8.16	4.83	-114.55	404.09	231.65	545.92	534.61	11.31	48.276	
2,300.00	2,282.97	2,108.79	2,083.80	8.58	5.25	-116.71	428.12	226.23	582.46	570.72	11.74	49.631	
2,400.00	2,381.65	2,192.69	2,162.99	9.01	5.70	-118.84	455.08	219.67	621.65	609.48	12.18	51.039	
2,500.00	2,480.33	2,282.64	2,248.03	9.44	6.19	-120.74	483.81	214.13	661.45	648.79	12.66	52.247	
2,600.00	2,579.01	2,372.60	2,333.11	9.86	6.68	-122.28	512.79	210.24	701.99	688.84	13.15	53.401	
2,700.00	2,677.69	2,463.63	2,419.23	10.29	7.19	-123.78	541.80	204.96	742.68	729.04	13.64	54.456	
2,800.00	2,776.37	2,551.69	2,502.52	10.72	7.69	-125.11	569.89	199.66	783.79	769.68	14.11	55.546	
2,900.00	2,875.04	2,636.04	2,582.19	11.15	8.17	-126.27	597.09	194.36	825.59	811.03	14.56	56.707	
3,000.00	2,973.72	2,717.29	2,658.71	11.58	8.66	-127.30	623.89	189.10	868.42	853.43	14.99	57.948	
3,100.00	3,072.40	2,806.11	2,742.15	12.01	9.19	-128.31	653.85	183.56	912.15	896.68	15.47	58.959	
3,200.00	3,171.08	2,901.01	2,831.48	12.44	9.75	-129.33	685.20	177.11	955.53	939.53	16.00	59.721	
3,300.00	3,269.76	3,001.08	2,925.91	12.88	10.33	-130.30	717.62	170.34	998.52	981.95	16.57	60.275	
3,400.00	3,368.44	3,096.56	3,016.33	13.31	10.87	-131.18	747.57	163.65	1,040.75	1,023.65	17.10	60.860	
3,500.00	3,467.12	3,188.48	3,103.46	13.74	11.39	-131.94	776.18	157.51	1,082.87	1,065.26	17.61	61.478	
3,600.00	3,565.80	3,299.21	3,208.72	14.17	12.00	-132.77	809.81	150.38	1,124.43	1,106.18	18.25	61.604	
3,700.00	3,664.48	3,427.32	3,331.67	14.61	12.64	-133.67	844.89	142.42	1,163.12	1,144.12	18.99	61.240	
3,800.00	3,763.16	3,544.42	3,444.75	15.04	13.19	-134.39	874.71	136.47	1,200.05	1,180.39	19.66	61.045	
3,900.00	3,861.84	3,646.55	3,543.77	15.47	13.66	-134.96	899.27	131.81	1,235.63	1,215.39	20.24	61.054	
4,000.00	3,960.52	3,740.32	3,634.78	15.91	14.08	-135.41	921.63	128.59	1,270.86	1,250.09	20.77	61.174	
4,100.00	4,059.19	3,824.90	3,716.78	16.34	14.48	-135.76	942.24	126.31	1,306.49	1,285.23	21.26	61.447	
4,200.00	4,157.87	3,906.93	3,796.13	16.77	14.87	-136.05	962.97	124.53	1,342.88	1,321.14	21.74	61.778	
4,300.00	4,256.55	3,981.00	3,867.64	17.21	15.23	-136.29	982.24	123.12	1,380.02	1,357.85	22.17	62.259	
4,400.00	4,355.23	4,068.00	3,951.33	17.64	15.68	-136.57	1,005.90	120.99	1,418.34	1,395.66	22.67	62.559	
4,500.00	4,453.91	4,120.36	4,001.41	18.08	15.97	-136.73	1,021.08	119.46	1,458.28	1,435.32	22.96	63.511	
8,300.00	7,535.00	7,689.03	7,505.42	30.05	27.20	-89.38	1,561.77	15.96	1,421.40	1,374.37	47.03	30.221	
8,400.00	7,535.00	7,690.03	7,506.42	30.69	27.20	-89.45	1,561.78	15.96	1,344.59	1,296.43	48.15	27.924	
8,500.00	7,535.00	7,691.04	7,507.43	31.41	27.20	-89.51	1,561.79	15.96	1,271.00	1,221.54	49.46	25.700	
8,600.00	7,535.00	7,692.04	7,508.43	32.17	27.20	-89.58	1,561.80	15.96	1,201.23	1,150.28	50.96	23.573	

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 4R-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 4R-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 #2	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						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	7,535.00	7,693.05	7,509.44	33.00	27.20	-89.64	1,561.81	15.97	1,135.99	1,083.32	52.67	21.568	
8,800.00	7,535.00	7,694.06	7,510.45	33.87	27.20	-89.71	1,561.82	15.97	1,076.11	1,021.52	54.58	19.715	
8,900.00	7,535.00	7,695.06	7,511.45	34.79	27.20	-89.77	1,561.83	15.97	1,022.51	965.84	56.67	18.044	
9,000.00	7,535.00	7,696.07	7,512.46	35.75	27.20	-89.84	1,561.84	15.97	976.24	917.37	58.87	16.584	
9,100.00	7,535.00	7,697.08	7,513.47	36.76	27.21	-89.90	1,561.85	15.97	938.38	877.29	61.08	15.362	
9,200.00	7,535.00	7,698.09	7,514.48	37.80	27.21	-89.97	1,561.86	15.98	909.98	846.79	63.19	14.401	
9,300.00	7,535.00	7,699.09	7,515.48	38.88	27.21	-90.03	1,561.87	15.98	891.95	826.90	65.04	13.713	
9,400.00	7,535.00	7,700.10	7,516.49	39.99	27.21	-90.10	1,561.88	15.98	884.91	818.41	66.50	13.306	
9,412.47	7,535.00	7,700.23	7,516.62	40.13	27.21	-90.11	1,561.88	15.98	884.83	818.17	66.66	13.275	
9,500.00	7,535.00	7,701.11	7,517.50	41.13	27.21	-90.16	1,561.89	15.98	889.15	821.67	67.48	13.177 SF	
9,600.00	7,535.00	7,702.12	7,518.51	42.30	27.21	-90.23	1,561.90	15.98	904.48	836.55	67.92	13.316	
9,700.00	7,535.00	7,703.13	7,519.52	43.49	27.21	-90.29	1,561.91	15.99	930.37	862.49	67.87	13.707	
9,800.00	7,535.00	7,704.14	7,520.53	44.71	27.21	-90.36	1,561.92	15.99	965.96	898.55	67.41	14.330	
9,900.00	7,535.00	7,705.15	7,521.54	45.95	27.21	-90.42	1,561.93	15.99	1,010.24	943.61	66.62	15.163	
10,000.00	7,535.00	7,706.16	7,522.55	47.21	27.21	-90.49	1,561.94	15.99	1,062.11	996.48	65.63	16.183	
10,100.00	7,535.00	7,707.18	7,523.57	48.48	27.22	-90.56	1,561.95	15.99	1,120.52	1,056.00	64.52	17.367	
10,200.00	7,535.00	7,708.19	7,524.58	49.78	27.22	-90.62	1,561.96	15.99	1,184.51	1,121.14	63.36	18.694	
10,300.00	7,535.00	7,709.20	7,525.59	51.09	27.22	-90.69	1,561.97	16.00	1,253.21	1,191.00	62.21	20.145	
10,400.00	7,535.00	7,710.21	7,526.60	52.42	27.22	-90.75	1,561.98	16.00	1,325.91	1,264.81	61.10	21.702	
10,500.00	7,535.00	7,711.23	7,527.62	53.75	27.22	-90.82	1,561.99	16.00	1,401.97	1,341.93	60.04	23.351	
10,600.00	7,535.00	7,712.24	7,528.63	55.11	27.22	-90.88	1,562.00	16.00	1,480.88	1,421.83	59.05	25.078	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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							
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	50.06	224.46	268.03	350.18				
100.00	100.00	78.46	78.46	0.14	0.12	50.07	224.48	268.24	349.78	349.53	0.26	1,358.120	
200.00	200.00	177.81	177.81	0.50	0.28	50.16	224.46	269.01	350.36	349.58	0.78	447.762	
300.00	300.00	279.24	279.23	0.85	0.46	50.31	224.06	269.95	350.83	349.51	1.32	266.280	
400.00	400.00	380.19	380.18	1.21	0.64	50.48	223.30	270.67	350.89	349.04	1.85	189.367	
500.00	500.00	480.12	480.10	1.57	0.81	50.63	222.53	271.24	350.84	348.46	2.39	147.010	
515.30	515.30	495.31	495.29	1.63	0.84	50.65	222.43	271.32	350.84	348.37	2.47	142.160	
600.00	600.00	579.62	579.60	1.93	0.99	50.76	221.99	271.77	350.91	347.99	2.92	120.216	
700.00	700.00	680.04	680.02	2.29	1.16	50.85	221.58	272.14	350.94	347.49	3.45	101.640	
800.00	799.98	780.00	779.98	2.63	1.34	-73.57	221.39	272.30	350.44	346.47	3.97	88.223	
900.00	899.84	880.30	880.28	2.97	1.51	-74.42	221.34	272.27	348.94	344.46	4.48	77.806	
1,000.00	999.45	980.73	980.70	3.32	1.69	-75.93	221.47	271.85	346.48	341.47	5.01	69.200	
1,100.00	1,098.70	1,080.36	1,080.34	3.68	1.86	-78.00	221.38	271.32	343.25	337.71	5.54	61.961	
1,166.13	1,164.08	1,146.07	1,146.04	3.93	1.98	-79.74	221.42	270.81	340.96	335.06	5.90	57.786	
1,200.00	1,197.50	1,179.74	1,179.71	4.06	2.03	-80.69	221.47	270.46	339.81	333.72	6.09	55.818	
1,300.00	1,296.18	1,277.00	1,276.96	4.44	2.20	-83.51	221.84	269.36	337.07	330.42	6.64	50.725	
1,400.00	1,394.86	1,375.00	1,374.95	4.84	2.37	-86.41	222.50	268.36	335.50	328.29	7.21	46.516	
1,500.00	1,493.54	1,473.96	1,473.91	5.24	2.55	-89.41	223.37	267.08	334.85	327.06	7.79	42.994	
1,551.62	1,544.47	1,525.47	1,525.40	5.45	2.64	-90.99	223.81	266.25	334.78	326.69	8.09	41.390 CC	
1,600.00	1,592.22	1,573.67	1,573.60	5.65	2.72	-92.48	224.16	265.39	334.84	326.47	8.37	40.007 ES	
1,700.00	1,690.89	1,671.23	1,671.13	6.06	2.89	-95.50	224.78	263.53	335.58	326.63	8.95	37.496	
1,800.00	1,789.57	1,767.57	1,767.46	6.48	3.06	-98.42	225.84	262.21	337.93	328.40	9.53	35.468	
1,900.00	1,888.25	1,864.45	1,864.33	6.89	3.23	-101.30	227.27	261.05	341.61	331.50	10.11	33.804	
2,000.00	1,986.93	1,963.06	1,962.91	7.31	3.40	-104.19	229.06	259.82	346.48	335.80	10.68	32.428	
2,100.00	2,085.61	2,064.43	2,064.27	7.74	3.58	-106.99	230.22	258.93	351.71	340.44	11.27	31.214	
2,200.00	2,184.29	2,166.40	2,166.23	8.16	3.76	-109.60	230.22	258.45	356.73	344.88	11.85	30.107	
2,300.00	2,282.97	2,265.46	2,265.30	8.58	3.93	-112.01	229.63	258.21	361.91	349.49	12.42	29.138	
2,400.00	2,381.65	2,364.85	2,364.68	9.01	4.11	-114.39	229.08	257.77	367.74	354.75	12.99	28.310	
2,500.00	2,480.33	2,467.78	2,467.60	9.44	4.29	-116.76	227.77	257.34	373.48	359.91	13.56	27.534	
2,600.00	2,579.01	2,567.68	2,567.45	9.86	4.46	-119.28	225.74	254.86	378.87	364.74	14.13	26.817	
2,700.00	2,677.69	2,675.68	2,675.25	10.29	4.66	-122.37	222.66	249.08	384.09	369.39	14.70	26.127	
2,800.00	2,776.37	2,777.96	2,777.23	10.72	4.85	-125.28	217.74	243.12	388.30	373.04	15.26	25.447	
2,900.00	2,875.04	2,881.17	2,879.93	11.15	5.05	-128.40	210.91	235.55	391.75	375.93	15.82	24.768	
3,000.00	2,973.72	2,979.46	2,977.66	11.58	5.25	-131.44	204.38	227.38	396.37	380.00	16.37	24.218	
3,100.00	3,072.40	3,085.10	3,082.34	12.01	5.48	-134.98	195.43	216.37	400.71	383.78	16.94	23.661	
3,200.00	3,171.08	3,183.62	3,179.49	12.44	5.72	-138.60	185.17	203.58	405.14	387.64	17.50	23.156	
3,300.00	3,269.76	3,275.90	3,270.58	12.88	5.94	-141.84	176.03	192.04	411.53	393.49	18.05	22.805	
3,400.00	3,368.44	3,365.30	3,358.89	13.31	6.16	-144.88	168.38	180.42	420.79	402.21	18.59	22.640	
3,500.00	3,467.12	3,465.50	3,457.46	13.74	6.45	-148.46	159.32	164.95	431.98	412.79	19.19	22.516	
3,600.00	3,565.80	3,560.30	3,550.38	14.17	6.72	-151.91	149.60	148.83	444.40	424.63	19.77	22.480	
3,700.00	3,664.48	3,659.44	3,647.26	14.61	7.04	-155.48	138.74	130.88	458.43	438.04	20.39	22.480	
3,800.00	3,763.16	3,765.66	3,750.80	15.04	7.40	-159.23	124.38	111.97	471.89	450.82	21.08	22.390	
3,900.00	3,861.84	3,867.06	3,849.28	15.47	7.76	-162.77	108.78	93.53	485.87	464.12	21.75	22.338 SF	
4,000.00	3,960.52	3,958.93	3,938.39	15.91	8.10	-165.84	93.69	77.09	500.56	478.17	22.38	22.362	
4,100.00	4,059.19	4,047.77	4,024.43	16.34	8.44	-168.72	79.62	59.98	518.08	495.09	22.99	22.533	
4,200.00	4,157.87	4,141.32	4,115.18	16.77	8.80	-171.48	65.73	42.05	537.62	513.99	23.63	22.750	
4,300.00	4,256.55	4,244.41	4,215.52	17.21	9.18	-174.19	50.94	23.57	557.78	533.44	24.34	22.917	
4,400.00	4,355.23	4,336.62	4,305.66	17.64	9.51	-176.27	38.71	8.53	578.33	553.38	24.95	23.180	
4,500.00	4,453.91	4,445.15	4,412.12	18.08	9.88	-178.40	24.80	-7.39	598.58	572.89	25.69	23.303	
4,600.00	4,552.59	4,541.04	4,506.24	18.51	10.21	-179.86	12.19	-20.67	618.62	592.29	26.33	23.495	
4,700.00	4,651.27	4,640.65	4,603.94	18.94	10.56	-178.12	-1.22	-34.71	639.25	612.25	27.00	23.673	
4,800.00	4,749.95	4,739.40	4,701.19	19.38	10.87	-176.69	-13.17	-47.01	659.68	632.05	27.63	23.872	

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 4R-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 4R-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 #2	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							
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	4,848.63	4,844.04	4,804.76	19.81	11.15	175.54	-23.35	-57.85	679.85	651.56	28.29	24.035	
5,000.00	4,947.31	4,949.35	4,909.51	20.25	11.40	174.80	-30.72	-65.60	698.93	670.02	28.91	24.175	
5,100.00	5,045.99	5,046.79	5,006.66	20.68	11.61	174.33	-35.76	-71.36	717.70	688.23	29.47	24.355	
5,200.00	5,144.67	5,148.34	5,108.03	21.12	11.79	174.03	-39.32	-76.00	736.14	706.11	30.03	24.512	
5,300.00	5,243.34	5,246.99	5,206.60	21.55	11.96	173.93	-40.82	-79.45	754.58	724.02	30.56	24.691	
5,400.00	5,342.02	5,353.79	5,313.38	21.99	12.11	173.97	-41.14	-81.75	772.43	741.31	31.12	24.823	
5,500.00	5,440.70	5,450.58	5,410.16	22.42	12.24	174.13	-40.25	-82.39	789.55	757.93	31.61	24.975	
5,600.00	5,539.38	5,544.72	5,504.29	22.86	12.36	174.32	-38.51	-83.18	807.26	775.18	32.09	25.156	
5,700.00	5,638.06	5,649.06	5,608.60	23.29	12.49	174.56	-36.20	-83.79	824.94	792.32	32.62	25.288	
5,800.00	5,736.74	5,752.17	5,711.70	23.73	12.63	174.77	-34.57	-83.77	841.81	808.66	33.15	25.397	
5,900.00	5,835.42	5,846.36	5,805.87	24.17	12.75	174.95	-33.11	-83.88	858.79	825.16	33.63	25.537	
6,000.00	5,934.10	5,942.64	5,902.14	24.60	12.89	175.12	-31.48	-84.42	876.23	842.10	34.13	25.673	
6,100.00	6,032.78	6,042.54	6,002.02	25.04	13.04	175.22	-30.65	-85.42	893.64	858.97	34.66	25.781	
6,200.00	6,131.46	6,139.31	6,098.79	25.47	13.18	175.27	-30.51	-86.71	911.00	875.83	35.17	25.905	
6,300.00	6,230.14	6,234.13	6,193.60	25.91	13.31	175.37	-29.54	-87.89	928.70	893.05	35.66	26.046	
6,400.00	6,328.82	6,333.74	6,293.18	26.34	13.46	175.49	-28.00	-89.04	946.60	910.42	36.18	26.164	
6,500.00	6,427.49	6,434.40	6,393.84	26.78	13.61	175.59	-26.99	-90.22	964.24	927.54	36.71	26.268	
6,600.00	6,526.17	6,529.37	6,488.79	27.21	13.75	175.68	-25.96	-91.38	981.97	944.77	37.20	26.397	
6,700.00	6,624.85	6,626.32	6,585.72	27.65	13.88	175.80	-24.31	-92.58	1,000.02	962.32	37.70	26.525	
6,800.00	6,723.53	6,730.70	6,690.07	28.09	14.02	175.96	-22.03	-93.20	1,017.77	979.54	38.23	26.621	
6,837.91	6,760.94	6,770.31	6,729.68	28.25	14.07	176.04	-21.04	-93.18	1,024.35	985.92	38.43	26.653	
6,850.00	6,772.88	6,778.00	6,737.36	28.30	14.08	-178.62	-20.85	-93.16	1,026.39	987.92	38.47	26.679	
6,900.00	6,822.38	6,828.10	6,787.44	28.51	14.15	-151.36	-19.52	-93.11	1,033.81	995.09	38.72	26.698	
6,950.00	6,871.89	6,873.93	6,833.25	28.69	14.21	-123.63	-18.26	-93.24	1,039.67	1,000.73	38.94	26.700	
7,000.00	6,921.17	6,919.60	6,878.90	28.86	14.28	-104.62	-16.96	-93.52	1,043.96	1,004.82	39.15	26.668	
7,050.00	6,969.99	6,965.72	6,925.00	29.01	14.34	-93.43	-15.61	-93.97	1,046.72	1,007.37	39.35	26.603	
7,100.00	7,018.10	7,013.59	6,972.85	29.14	14.41	-86.88	-14.13	-94.47	1,047.90	1,008.36	39.55	26.498	
7,150.00	7,065.27	7,060.69	7,019.92	29.26	14.47	-83.01	-12.61	-94.95	1,047.57	1,007.83	39.74	26.361	
7,200.00	7,111.28	7,106.78	7,065.99	29.36	14.53	-80.79	-11.04	-95.40	1,045.83	1,005.91	39.92	26.198	
7,250.00	7,155.89	7,154.96	7,114.13	29.45	14.60	-79.75	-9.41	-95.84	1,042.82	1,002.70	40.12	25.994	
7,300.00	7,198.89	7,203.84	7,162.99	29.53	14.68	-79.57	-8.11	-96.21	1,038.54	998.21	40.32	25.757	
7,350.00	7,240.07	7,250.34	7,209.49	29.60	14.75	-79.99	-7.23	-96.48	1,033.21	992.70	40.51	25.504	
7,400.00	7,279.23	7,294.19	7,253.33	29.65	14.81	-80.83	-6.74	-96.65	1,027.14	986.45	40.69	25.242	
7,450.00	7,316.18	7,335.40	7,294.54	29.69	14.86	-81.98	-6.42	-96.70	1,020.63	979.77	40.86	24.981	
7,500.00	7,350.73	7,374.32	7,333.45	29.72	14.91	-83.34	-5.97	-96.53	1,013.97	972.95	41.02	24.720	
7,550.00	7,382.73	7,410.76	7,369.89	29.74	14.96	-84.83	-5.42	-96.19	1,007.46	966.28	41.18	24.467	
7,600.00	7,412.01	7,444.54	7,403.66	29.74	15.00	-86.37	-4.79	-95.71	1,001.40	960.07	41.33	24.228	
7,650.00	7,438.44	7,475.47	7,434.57	29.74	15.04	-87.88	-4.12	-95.13	996.09	954.61	41.49	24.009	
7,700.00	7,461.87	7,499.49	7,458.58	29.73	15.07	-89.09	-3.54	-94.63	991.89	950.26	41.63	23.828	
7,750.00	7,482.21	7,520.42	7,479.51	29.71	15.09	-90.14	-3.01	-94.21	989.08	947.32	41.76	23.683	
7,800.00	7,499.35	7,538.38	7,497.45	29.69	15.11	-91.00	-2.53	-93.85	987.91	946.01	41.90	23.577	
7,808.04	7,501.80	7,540.98	7,500.05	29.68	15.12	-91.11	-2.46	-93.80	987.89	945.96	41.92	23.564	
7,850.00	7,513.20	7,553.25	7,512.31	29.65	15.13	-91.60	-2.12	-93.56	988.55	946.51	42.04	23.516	
7,900.00	7,523.70	7,564.93	7,523.99	29.62	15.15	-91.94	-1.78	-93.34	991.14	948.97	42.17	23.503	
7,950.00	7,530.80	7,573.34	7,532.40	29.58	15.16	-91.97	-1.54	-93.18	995.77	953.47	42.30	23.542	
8,000.00	7,534.46	7,578.42	7,537.47	29.53	15.16	-91.68	-1.39	-93.08	1,002.48	960.06	42.42	23.634	
8,027.99	7,535.00	7,579.78	7,538.83	29.51	15.17	-91.38	-1.35	-93.06	1,007.13	964.65	42.48	23.709	
8,100.00	7,535.00	7,581.92	7,540.97	29.45	15.17	-91.50	-1.28	-93.02	1,022.39	979.75	42.64	23.977	
8,200.00	7,535.00	7,584.92	7,543.97	29.49	15.17	-91.68	-1.19	-92.96	1,051.40	1,008.53	42.87	24.528	
8,300.00	7,535.00	7,587.97	7,547.01	30.05	15.18	-91.85	-1.10	-92.91	1,088.85	1,045.76	43.09	25.271	
8,400.00	7,535.00	7,591.05	7,550.09	30.69	15.18	-92.03	-1.01	-92.85	1,133.90	1,090.60	43.30	26.189	
8,500.00	7,535.00	7,594.17	7,553.21	31.41	15.18	-92.21	-0.91	-92.79	1,185.68	1,142.19	43.49	27.264	

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 4R-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 4R-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 #2	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	
8,600.00	7,535.00	7,597.33	7,556.37	32.17	15.19	-92.39	-0.81	-92.73	1,243.36	1,199.70	43.66	28.478	
8,700.00	7,535.00	7,600.53	7,559.57	33.00	15.19	-92.58	-0.71	-92.68	1,306.15	1,262.33	43.81	29.812	
8,800.00	7,535.00	7,603.77	7,562.81	33.87	15.20	-92.76	-0.61	-92.62	1,373.34	1,329.40	43.95	31.251	
8,900.00	7,535.00	7,607.06	7,566.09	34.79	15.20	-92.95	-0.51	-92.56	1,444.34	1,400.28	44.06	32.781	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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	51.88	212.06	270.27	344.18					
100.00	100.00	79.58	79.58	0.14	0.13	51.93	211.80	270.39	343.47	343.20	0.26	1,302.714		
163.76	163.76	142.75	142.75	0.37	0.23	52.03	211.23	270.66	343.33	342.74	0.59	579.355 CC, ES		
200.00	200.00	175.33	175.32	0.50	0.28	52.08	211.11	270.98	343.52	342.74	0.78	438.726		
300.00	300.00	264.73	264.69	0.85	0.44	52.12	212.30	272.94	346.09	344.76	1.33	261.104		
400.00	400.00	356.73	356.56	1.21	0.63	52.18	215.08	277.09	351.48	349.62	1.86	188.643		
500.00	500.00	447.17	446.73	1.57	0.82	52.33	218.53	283.07	359.06	356.66	2.40	149.500		
600.00	600.00	538.48	537.54	1.93	1.05	52.60	222.86	291.51	369.27	366.34	2.93	125.882		
700.00	700.00	630.46	628.80	2.29	1.30	52.97	227.71	301.90	381.46	378.00	3.46	110.253		
800.00	799.98	720.12	717.49	2.63	1.57	-70.70	232.91	314.01	395.20	391.23	3.97	99.462		
900.00	899.84	815.00	810.94	2.97	1.89	-70.38	238.19	329.49	409.90	405.42	4.48	91.520		
1,000.00	999.45	917.36	911.63	3.32	2.24	-70.26	242.18	347.43	423.46	418.45	5.01	84.490		
1,100.00	1,098.70	1,016.65	1,009.24	3.68	2.59	-70.32	243.97	365.49	435.14	429.56	5.58	77.984		
1,166.13	1,164.08	1,073.69	1,065.07	3.93	2.83	-70.34	244.19	377.19	442.93	436.95	5.97	74.156		
1,200.00	1,197.50	1,104.00	1,094.59	4.06	2.95	-70.40	244.15	384.09	447.29	441.11	6.18	72.397		
1,300.00	1,296.18	1,191.00	1,178.89	4.44	3.36	-70.45	244.12	405.57	461.82	455.02	6.80	67.929		
1,400.00	1,394.86	1,281.82	1,266.36	4.84	3.81	-70.36	244.36	430.02	478.36	470.91	7.45	64.223		
1,500.00	1,493.54	1,379.47	1,360.07	5.24	4.31	-70.19	244.50	457.47	495.80	487.67	8.14	60.944		
1,600.00	1,592.22	1,481.20	1,457.50	5.65	4.85	-69.88	243.61	486.69	513.17	504.32	8.86	57.935		
1,700.00	1,690.89	1,582.41	1,554.71	6.06	5.36	-69.59	242.04	514.84	529.40	519.83	9.58	55.285		
1,800.00	1,789.57	1,675.26	1,643.94	6.48	5.85	-69.47	242.01	540.54	546.40	536.13	10.26	53.237		
1,900.00	1,888.25	1,769.68	1,734.45	6.89	6.36	-69.34	242.26	567.38	564.21	553.24	10.96	51.458		
2,000.00	1,986.93	1,872.57	1,832.92	7.31	6.92	-69.12	242.03	597.23	582.23	570.51	11.72	49.676		
2,100.00	2,085.61	1,978.48	1,934.37	7.74	7.48	-68.80	239.99	627.58	598.98	586.49	12.49	47.951		
2,200.00	2,184.29	2,078.31	2,030.25	8.16	8.00	-68.56	238.19	655.32	615.09	601.87	13.23	46.501		
2,300.00	2,282.97	2,179.75	2,127.78	8.58	8.53	-68.35	236.22	683.14	630.83	616.84	13.98	45.112		
2,400.00	2,381.65	2,281.01	2,224.99	9.01	9.05	-68.04	233.13	711.34	646.31	631.58	14.73	43.865		
2,500.00	2,480.33	2,383.06	2,323.31	9.44	9.57	-67.85	230.71	738.55	661.19	645.70	15.49	42.698		
2,600.00	2,579.01	2,483.12	2,419.75	9.86	10.08	-67.67	228.13	765.08	675.83	659.59	16.23	41.631		
2,700.00	2,677.69	2,585.19	2,518.23	10.29	10.58	-67.52	225.54	791.78	690.19	673.21	16.98	40.656		
2,800.00	2,776.37	2,690.28	2,619.86	10.72	11.09	-67.41	222.89	818.39	703.86	686.11	17.75	39.656		
2,900.00	2,875.04	2,796.14	2,722.44	11.15	11.57	-67.33	220.04	844.37	716.78	698.27	18.51	38.727		
3,000.00	2,973.72	2,907.34	2,830.74	11.58	12.05	-67.37	217.50	869.49	728.26	708.96	19.30	37.739		
3,100.00	3,072.40	3,004.29	2,925.31	12.01	12.47	-67.42	214.87	890.66	738.87	718.85	20.01	36.917		
3,200.00	3,171.08	3,086.28	3,005.15	12.44	12.85	-67.49	213.69	909.24	750.91	730.24	20.67	36.336		
3,300.00	3,269.76	3,177.06	3,093.16	12.88	13.28	-67.56	213.29	931.51	765.03	743.68	21.35	35.830		
3,400.00	3,368.44	3,275.51	3,188.56	13.31	13.75	-67.64	213.18	955.83	779.50	757.41	22.09	35.291		
3,500.00	3,467.12	3,375.76	3,285.61	13.74	14.23	-67.66	212.49	980.92	793.93	771.09	22.83	34.771		
3,600.00	3,565.80	3,489.58	3,395.86	14.17	14.77	-67.58	209.58	1,009.09	807.06	783.39	23.66	34.106		
3,700.00	3,664.48	3,590.15	3,493.32	14.61	15.25	-67.48	206.31	1,033.62	819.53	795.12	24.41	33.569		
3,800.00	3,763.16	3,686.54	3,586.78	15.04	15.69	-67.40	203.10	1,056.99	831.85	806.72	25.13	33.107		
3,900.00	3,861.84	3,778.55	3,676.17	15.47	16.12	-67.46	202.20	1,078.78	844.97	819.14	25.82	32.723		
4,000.00	3,960.52	3,878.17	3,772.96	15.91	16.57	-67.57	202.06	1,102.41	858.58	832.03	26.55	32.333		
4,100.00	4,059.19	3,994.53	3,886.23	16.34	17.08	-67.69	201.12	1,128.95	871.08	843.69	27.40	31.795		
4,200.00	4,157.87	4,089.00	3,978.12	16.77	17.52	-67.68	198.47	1,150.74	882.69	854.57	28.12	31.390		
4,300.00	4,256.55	4,170.70	4,057.28	17.21	17.92	-67.63	196.39	1,170.86	895.74	866.97	28.77	31.137		
4,400.00	4,355.23	4,260.93	4,144.26	17.64	18.38	-67.52	194.20	1,194.69	910.37	880.91	29.46	30.902		
4,500.00	4,453.91	4,382.26	4,261.63	18.08	18.94	-67.46	191.85	1,225.32	924.33	894.02	30.31	30.496		
4,600.00	4,552.59	4,499.64	4,376.29	18.51	19.42	-67.65	191.08	1,250.41	935.65	904.52	31.13	30.056		
4,700.00	4,651.27	4,607.04	4,481.62	18.94	19.83	-67.91	190.95	1,271.45	945.81	913.91	31.91	29.643		
4,800.00	4,749.95	4,711.04	4,583.80	19.38	20.20	-68.21	191.20	1,290.79	955.38	922.72	32.66	29.254		
4,900.00	4,848.63	4,823.63	4,694.75	19.81	20.57	-68.66	192.78	1,309.85	964.27	930.82	33.45	28.829		

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 4R-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 4R-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 #2	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							
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	4,947.31	4,947.44	4,817.27	20.25	20.93	-69.26	194.58	1,327.56	971.07	936.79	34.27	28.334	
5,100.00	5,045.99	5,070.84	4,939.83	20.68	21.21	-69.96	196.43	1,341.76	975.74	940.67	35.07	27.819	
5,200.00	5,144.67	5,198.56	5,067.15	21.12	21.42	-70.85	198.17	1,351.66	977.31	941.45	35.86	27.253	
5,300.00	5,243.34	5,316.34	5,184.77	21.55	21.58	-71.75	199.41	1,357.76	976.86	940.24	36.62	26.673	
5,400.00	5,342.02	5,427.47	5,295.82	21.99	21.71	-72.65	200.20	1,361.68	975.10	937.73	37.37	26.091	
5,500.00	5,440.70	5,531.71	5,400.03	22.42	21.82	-73.53	200.69	1,364.21	972.53	934.42	38.12	25.515	
5,600.00	5,539.38	5,631.98	5,500.27	22.86	21.92	-74.41	201.35	1,366.19	969.97	931.11	38.86	24.961	
5,700.00	5,638.06	5,733.21	5,601.49	23.29	22.02	-75.32	202.18	1,367.80	967.45	927.85	39.60	24.430	
5,800.00	5,736.74	5,835.30	5,703.57	23.73	22.12	-76.26	203.03	1,369.05	964.91	924.57	40.34	23.918	
5,900.00	5,835.42	5,941.21	5,809.48	24.17	22.20	-77.27	203.82	1,369.60	962.05	920.97	41.08	23.420	
6,000.00	5,934.10	6,041.42	5,909.68	24.60	22.28	-78.25	204.47	1,369.39	958.88	917.06	41.82	22.930	
6,100.00	6,032.78	6,136.52	6,004.78	25.04	22.36	-79.19	205.27	1,369.33	956.22	913.66	42.55	22.471	
6,200.00	6,131.46	6,233.41	6,101.66	25.47	22.44	-80.16	206.31	1,369.45	954.14	910.86	43.28	22.044	
6,300.00	6,230.14	6,331.04	6,199.29	25.91	22.52	-81.14	207.56	1,369.52	952.46	908.45	44.01	21.641	
6,400.00	6,328.82	6,429.63	6,297.86	26.34	22.60	-82.16	209.03	1,369.44	951.14	906.41	44.73	21.264	
6,500.00	6,427.49	6,527.97	6,396.19	26.78	22.68	-83.20	210.76	1,369.05	950.11	904.67	45.45	20.906	
6,600.00	6,526.17	6,624.70	6,492.90	27.21	22.76	-84.22	212.57	1,368.70	949.52	903.36	46.16	20.570	
6,669.75	6,595.00	6,692.22	6,560.41	27.52	22.82	-84.93	213.85	1,368.58	949.40	902.74	46.66	20.346	
6,700.00	6,624.85	6,722.25	6,590.43	27.65	22.85	-85.25	214.43	1,368.55	949.41	902.53	46.88	20.253	
6,800.00	6,723.53	6,821.51	6,689.67	28.09	22.93	-86.29	216.32	1,368.37	949.60	902.02	47.58	19.957	
6,837.91	6,760.94	6,859.13	6,727.29	28.25	22.97	-86.69	217.04	1,368.27	949.74	901.89	47.85	19.850	
6,850.00	6,772.88	6,871.88	6,740.04	28.30	22.98	-81.64	217.28	1,368.23	949.70	901.77	47.93	19.814	
6,900.00	6,822.38	6,927.77	6,795.92	28.51	23.02	-55.25	218.05	1,368.05	947.67	899.41	48.26	19.637	
6,950.00	6,871.89	6,979.00	6,847.14	28.69	23.07	-27.81	218.43	1,367.87	942.61	894.07	48.54	19.419	
7,000.00	6,921.17	7,026.17	6,894.31	28.86	23.11	-8.55	218.86	1,367.69	934.84	886.06	48.78	19.165	
7,050.00	6,969.99	7,073.89	6,942.03	29.01	23.15	3.40	219.40	1,367.53	924.43	875.45	48.98	18.873	
7,100.00	7,018.10	7,121.38	6,989.52	29.14	23.20	11.26	219.91	1,367.46	911.35	862.20	49.15	18.543	
7,150.00	7,065.27	7,166.60	7,034.73	29.26	23.24	16.99	220.45	1,367.45	895.71	846.44	49.27	18.179	
7,200.00	7,111.28	7,210.65	7,078.78	29.36	23.28	21.61	221.12	1,367.42	877.66	828.31	49.36	17.783	
7,250.00	7,155.89	7,255.96	7,124.09	29.45	23.32	25.71	221.92	1,367.34	857.26	807.86	49.40	17.354	
7,300.00	7,198.89	7,299.98	7,168.09	29.53	23.36	29.64	222.73	1,367.18	834.58	785.19	49.40	16.896	
7,350.00	7,240.07	7,342.61	7,210.72	29.60	23.39	33.62	223.51	1,366.95	809.81	760.47	49.34	16.412	
7,400.00	7,279.23	7,383.21	7,251.31	29.65	23.43	37.79	224.24	1,366.68	783.17	733.94	49.23	15.907	
7,450.00	7,316.18	7,420.87	7,288.96	29.69	23.46	42.23	224.90	1,366.40	754.94	705.88	49.06	15.387	
7,500.00	7,350.73	7,456.03	7,324.12	29.72	23.49	47.01	225.49	1,366.16	725.47	676.64	48.82	14.859	
7,550.00	7,382.73	7,488.64	7,356.72	29.74	23.52	52.12	226.02	1,365.96	695.12	646.61	48.51	14.330	
7,600.00	7,412.01	7,518.53	7,386.61	29.74	23.55	57.50	226.50	1,365.78	664.32	616.22	48.10	13.811	
7,650.00	7,438.44	7,545.57	7,413.64	29.74	23.58	63.02	226.92	1,365.64	633.55	585.95	47.60	13.309	
7,700.00	7,461.87	7,569.56	7,437.64	29.73	23.60	68.48	227.28	1,365.52	603.37	556.37	47.00	12.837	
7,750.00	7,482.21	7,590.32	7,458.39	29.71	23.62	73.66	227.58	1,365.43	574.42	528.12	46.30	12.406	
7,800.00	7,499.35	7,607.93	7,476.00	29.69	23.64	78.36	227.84	1,365.36	547.40	501.89	45.51	12.027	
7,850.00	7,513.20	7,622.31	7,490.38	29.65	23.65	82.41	228.05	1,365.31	523.08	478.41	44.66	11.711	
7,900.00	7,523.70	7,633.38	7,501.45	29.62	23.66	85.68	228.22	1,365.27	502.26	458.45	43.81	11.464	
7,950.00	7,530.80	7,641.10	7,509.17	29.58	23.67	88.09	228.33	1,365.25	485.72	442.69	43.04	11.286	
8,000.00	7,534.46	7,645.43	7,513.49	29.53	23.67	89.61	228.39	1,365.24	474.18	431.72	42.46	11.167	
8,027.99	7,535.00	7,646.37	7,514.43	29.51	23.67	90.05	228.40	1,365.24	470.10	427.83	42.27	11.122	
8,081.64	7,535.00	7,647.13	7,515.19	29.46	23.67	90.15	228.42	1,365.24	467.03	424.80	42.23	11.060	
8,100.00	7,535.00	7,647.39	7,515.46	29.45	23.67	90.18	228.42	1,365.24	467.39	425.07	42.31	11.046	
8,200.00	7,535.00	7,648.82	7,516.88	29.49	23.68	90.35	228.44	1,365.23	481.79	438.15	43.64	11.040 SF	
8,300.00	7,535.00	7,650.25	7,518.31	30.05	23.68	90.53	228.46	1,365.23	515.54	469.78	45.76	11.266	
8,400.00	7,535.00	7,651.67	7,519.73	30.69	23.68	90.70	228.48	1,365.23	565.20	517.29	47.90	11.799	
8,500.00	7,535.00	7,653.09	7,521.15	31.41	23.68	90.88	228.50	1,365.22	626.98	577.28	49.70	12.616	

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 4R-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 4R-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 #2	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		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		
8,600.00	7,535.00	7,654.51	7,522.57	32.17	23.68	91.05	228.52	1,365.22	697.68	646.60	51.08	13.658	
8,700.00	7,535.00	7,655.93	7,523.99	33.00	23.68	91.23	228.54	1,365.22	774.86	722.74	52.12	14.866	
8,800.00	7,535.00	7,657.35	7,525.41	33.87	23.68	91.40	228.56	1,365.21	856.77	803.87	52.90	16.196	
8,900.00	7,535.00	7,658.76	7,526.83	34.79	23.69	91.57	228.58	1,365.21	942.17	888.69	53.48	17.617	
9,000.00	7,535.00	7,660.18	7,528.24	35.75	23.69	91.75	228.60	1,365.21	1,030.21	976.28	53.93	19.104	
9,100.00	7,535.00	7,661.59	7,529.65	36.76	23.69	91.92	228.62	1,365.20	1,120.25	1,065.98	54.27	20.642	
9,200.00	7,535.00	7,663.00	7,531.07	37.80	23.69	92.09	228.64	1,365.20	1,211.85	1,157.31	54.54	22.219	
9,300.00	7,535.00	7,664.41	7,532.47	38.88	23.69	92.27	228.66	1,365.20	1,304.69	1,249.93	54.76	23.826	
9,400.00	7,535.00	7,665.82	7,533.88	39.99	23.69	92.44	228.69	1,365.19	1,398.51	1,343.58	54.94	25.457	
9,500.00	7,535.00	7,667.23	7,535.29	41.13	23.69	92.61	228.71	1,365.19	1,493.13	1,438.05	55.08	27.108	

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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
0.00	0.00	0.00	0.00	0.00	0.00	55.56	195.30	284.82	345.99				
100.00	100.00	76.02	76.02	0.14	0.11	55.58	195.43	285.16	345.71	345.46	0.25	1,362.443	CC, ES
200.00	200.00	173.29	173.28	0.50	0.28	55.65	195.63	286.29	346.80	346.01	0.78	443.187	
300.00	300.00	271.21	271.14	0.85	0.46	56.07	194.60	289.30	348.74	347.43	1.32	264.414	
400.00	400.00	364.18	363.91	1.21	0.66	56.93	191.89	294.70	351.99	350.12	1.88	187.675	
500.00	500.00	459.20	458.46	1.57	0.88	58.22	187.84	303.16	357.22	354.77	2.45	145.703	
600.00	600.00	554.18	552.69	1.93	1.15	59.89	181.88	313.57	363.46	360.41	3.05	119.076	
700.00	700.00	645.32	642.65	2.29	1.45	61.82	174.81	326.31	371.96	368.28	3.68	101.064	
800.00	799.98	735.82	731.38	2.63	1.79	-60.13	166.20	341.86	382.22	377.91	4.31	88.692	
900.00	899.84	824.99	818.39	2.97	2.17	-58.28	157.76	359.44	393.54	388.61	4.93	79.840	
1,000.00	999.45	917.53	908.31	3.32	2.58	-56.77	149.31	379.59	405.37	399.80	5.57	72.806	
1,100.00	1,098.70	1,009.45	997.02	3.68	3.05	-55.40	139.30	401.48	416.80	410.55	6.25	66.734	
1,166.13	1,164.08	1,062.00	1,047.24	3.93	3.34	-54.60	132.61	415.43	424.74	418.06	6.68	63.547	
1,200.00	1,197.50	1,095.52	1,079.06	4.06	3.55	-54.16	128.08	424.94	429.09	422.15	6.94	61.827	
1,300.00	1,296.18	1,180.88	1,159.38	4.44	4.10	-52.93	116.10	451.21	444.23	436.59	7.64	58.120	
1,400.00	1,394.86	1,268.53	1,240.90	4.84	4.71	-51.56	103.14	480.68	462.22	453.86	8.36	55.307	
1,500.00	1,493.54	1,360.46	1,325.41	5.24	5.39	-49.96	88.04	513.54	482.24	473.14	9.09	53.025	
1,600.00	1,592.22	1,457.08	1,413.55	5.65	6.13	-48.17	70.26	548.91	503.10	493.25	9.85	51.085	
1,700.00	1,690.89	1,550.57	1,498.69	6.06	6.85	-46.51	52.61	583.27	524.50	513.95	10.55	49.728	
1,800.00	1,789.57	1,642.52	1,582.62	6.48	7.56	-45.22	37.33	617.57	547.19	535.98	11.21	48.809	
1,900.00	1,888.25	1,736.35	1,668.27	6.89	8.28	-44.09	22.75	653.01	570.75	558.87	11.88	48.042	
2,000.00	1,986.93	1,826.20	1,750.02	7.31	8.99	-43.07	8.64	687.52	595.18	582.67	12.51	47.589	
2,100.00	2,085.61	1,925.56	1,840.20	7.74	9.78	-42.03	-6.82	726.25	620.40	607.20	13.19	47.018	
2,200.00	2,184.29	2,041.35	1,945.90	8.16	10.65	-40.83	-26.11	769.39	643.92	629.95	13.98	46.070	
2,300.00	2,282.97	2,146.70	2,043.10	8.58	11.42	-39.86	-43.55	806.07	665.07	650.40	14.68	45.319	
2,400.00	2,381.65	2,245.45	2,134.17	9.01	12.14	-38.99	-60.21	840.44	686.37	671.04	15.33	44.769	
2,500.00	2,480.33	2,360.68	2,240.89	9.44	12.94	-37.99	-80.46	878.89	706.33	690.26	16.07	43.953	
2,600.00	2,579.01	2,462.96	2,336.59	9.86	13.61	-37.32	-96.48	911.18	724.58	707.87	16.70	43.382	
2,700.00	2,677.69	2,557.26	2,425.18	10.29	14.22	-36.94	-108.69	941.11	743.13	725.83	17.30	42.954	
2,800.00	2,776.37	2,676.04	2,537.24	10.72	14.95	-36.49	-124.08	977.36	760.48	742.43	18.05	42.142	
2,900.00	2,875.04	2,769.61	2,625.91	11.15	15.53	-36.12	-136.68	1,004.43	776.24	757.60	18.64	41.642	
3,000.00	2,973.72	2,873.59	2,723.99	11.58	16.18	-35.71	-150.90	1,035.91	793.43	774.12	19.31	41.099	
3,100.00	3,072.40	2,981.27	2,825.70	12.01	16.84	-35.09	-168.53	1,066.55	808.72	788.74	19.98	40.476	
3,200.00	3,171.08	3,083.49	2,922.51	12.44	17.45	-34.56	-184.95	1,094.95	823.42	802.83	20.59	39.994	
3,300.00	3,269.76	3,172.11	3,006.58	12.88	17.99	-34.24	-197.32	1,120.05	838.68	817.54	21.15	39.658	
3,400.00	3,368.44	3,262.77	3,092.11	13.31	18.57	-33.83	-211.35	1,146.64	855.06	833.34	21.72	39.366	
3,500.00	3,467.12	3,356.47	3,180.25	13.74	19.17	-33.39	-226.33	1,174.72	872.16	849.88	22.28	39.138	
3,600.00	3,565.80	3,454.75	3,272.87	14.17	19.78	-33.09	-239.80	1,204.68	889.75	866.88	22.88	38.895	
3,700.00	3,664.48	3,565.29	3,377.48	14.61	20.45	-32.85	-253.70	1,237.58	906.58	883.02	23.56	38.477	
3,800.00	3,763.16	3,663.87	3,470.92	15.04	21.05	-32.58	-267.00	1,266.03	922.52	898.36	24.16	38.187	
3,900.00	3,861.84	3,753.68	3,555.97	15.47	21.61	-32.39	-278.44	1,292.51	939.09	914.38	24.72	37.994	
4,000.00	3,960.52	3,855.00	3,651.76	15.91	22.23	-32.13	-292.19	1,322.53	955.85	930.51	25.34	37.723	
4,100.00	4,059.19	3,943.00	3,734.69	16.34	22.81	-31.91	-304.13	1,349.43	973.57	947.70	25.87	37.632	
4,200.00	4,157.87	4,019.94	3,806.81	16.77	23.32	-31.78	-313.83	1,374.41	993.10	966.77	26.33	37.716	
4,300.00	4,256.55	4,161.98	3,940.68	17.21	24.18	-31.45	-333.01	1,417.78	1,010.79	983.59	27.20	37.160	
4,400.00	4,355.23	4,246.81	4,021.23	17.64	24.71	-31.29	-344.06	1,441.99	1,026.57	998.86	27.71	37.043	
4,500.00	4,453.91	4,312.89	4,083.44	18.08	25.15	-31.21	-351.94	1,462.83	1,045.24	1,017.12	28.12	37.177	
4,600.00	4,552.59	4,384.57	4,150.15	18.51	25.66	-31.08	-361.30	1,487.28	1,066.67	1,038.13	28.53	37.381	
4,700.00	4,651.27	4,523.72	4,279.72	18.94	26.59	-30.82	-379.91	1,534.48	1,088.22	1,058.82	29.41	37.006	
4,800.00	4,749.95	4,640.98	4,390.50	19.38	27.31	-30.65	-394.74	1,569.95	1,105.57	1,075.46	30.11	36.714	
4,900.00	4,848.63	4,739.23	4,483.41	19.81	27.92	-30.51	-407.20	1,599.36	1,122.70	1,091.98	30.72	36.546	
5,000.00	4,947.31	4,833.93	4,572.78	20.25	28.52	-30.30	-420.73	1,627.61	1,139.87	1,108.57	31.29	36.425	

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 4R-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 4R-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 #2	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
5,100.00	5,045.99	4,939.43	4,671.96	20.68	29.19	-30.02	-436.80	1,659.77	1,157.86	1,125.94	31.92	36.273	
5,200.00	5,144.67	5,110.17	4,834.92	21.12	30.11	-29.57	-462.79	1,703.41	1,170.11	1,137.26	32.85	35.624	
5,300.00	5,243.34	5,198.46	4,919.53	21.55	30.59	-29.34	-476.01	1,724.92	1,181.74	1,148.36	33.38	35.402	
5,400.00	5,342.02	5,299.44	5,016.40	21.99	31.13	-29.11	-490.82	1,749.28	1,193.17	1,159.20	33.96	35.132	
5,500.00	5,440.70	5,427.92	5,140.02	22.42	31.77	-28.90	-507.86	1,779.83	1,204.26	1,169.59	34.66	34.741	
5,600.00	5,539.38	5,568.95	5,277.21	22.86	32.36	-28.88	-522.00	1,809.23	1,211.91	1,176.51	35.40	34.236	
5,700.00	5,638.06	5,739.89	5,445.44	23.29	32.91	-29.03	-534.82	1,836.47	1,213.96	1,177.78	36.19	33.547	
5,800.00	5,736.74	5,887.93	5,592.20	23.73	33.27	-29.31	-542.17	1,854.27	1,212.32	1,175.45	36.87	32.877	
5,900.00	5,835.42	6,027.47	5,731.20	24.17	33.52	-29.69	-546.35	1,865.74	1,206.57	1,169.03	37.54	32.142	
6,000.00	5,934.10	6,150.46	5,853.97	24.60	33.69	-30.09	-548.51	1,872.72	1,198.22	1,160.03	38.19	31.375	
6,100.00	6,032.78	6,260.92	5,964.31	25.04	33.82	-30.48	-549.65	1,877.61	1,188.67	1,149.81	38.85	30.593	
6,200.00	6,131.46	6,367.40	6,070.73	25.47	33.94	-30.90	-550.20	1,881.43	1,178.28	1,138.76	39.52	29.812	
6,300.00	6,230.14	6,485.84	6,189.12	25.91	34.04	-31.40	-550.06	1,884.46	1,166.90	1,126.71	40.19	29.036	
6,400.00	6,328.82	6,587.40	6,290.67	26.34	34.11	-31.85	-549.66	1,886.16	1,154.70	1,113.82	40.88	28.247	
6,500.00	6,427.49	6,694.09	6,397.35	26.78	34.18	-32.36	-548.86	1,887.42	1,142.07	1,100.50	41.57	27.475	
6,600.00	6,526.17	6,796.64	6,499.90	27.21	34.25	-32.86	-547.96	1,888.03	1,128.93	1,086.66	42.27	26.707	
6,700.00	6,624.85	6,896.63	6,599.88	27.65	34.31	-33.37	-547.01	1,888.46	1,115.72	1,072.73	42.99	25.956	
6,800.00	6,723.53	6,997.47	6,700.71	28.09	34.36	-33.90	-545.89	1,888.74	1,102.44	1,058.74	43.70	25.227	
6,837.91	6,760.94	7,035.72	6,738.96	28.25	34.38	-34.10	-545.37	1,888.80	1,097.37	1,053.40	43.97	24.955	
6,850.00	6,772.88	7,047.92	6,751.16	28.30	34.38	-28.85	-545.20	1,888.81	1,095.76	1,051.70	44.06	24.870	
6,900.00	6,822.38	7,098.16	6,801.39	28.51	34.41	-1.68	-544.43	1,888.82	1,089.03	1,044.67	44.35	24.553	
6,950.00	6,871.89	7,147.53	6,850.75	28.69	34.44	26.41	-543.70	1,888.83	1,082.30	1,037.75	44.55	24.293	
7,000.00	6,921.17	7,196.72	6,899.94	28.86	34.47	46.23	-543.01	1,888.84	1,075.63	1,030.98	44.65	24.089	
7,050.00	6,969.99	7,245.49	6,948.70	29.01	34.49	58.66	-542.38	1,888.86	1,069.09	1,024.43	44.66	23.940	
7,100.00	7,018.10	7,294.55	6,997.76	29.14	34.52	66.90	-541.78	1,888.87	1,062.77	1,018.21	44.57	23.846	
7,150.00	7,065.27	7,343.02	7,046.23	29.26	34.54	72.86	-541.20	1,888.83	1,056.79	1,012.39	44.39	23.806 SF	
7,200.00	7,111.28	7,390.32	7,093.52	29.36	34.57	77.51	-540.63	1,888.74	1,051.30	1,007.16	44.14	23.819	
7,250.00	7,155.89	7,436.17	7,139.37	29.45	34.59	81.35	-540.09	1,888.60	1,046.52	1,002.71	43.81	23.887	
7,300.00	7,198.89	7,479.90	7,183.10	29.53	34.62	84.64	-539.60	1,888.44	1,042.69	999.26	43.43	24.009	
7,350.00	7,240.07	7,521.78	7,224.98	29.60	34.64	87.52	-539.15	1,888.27	1,040.05	997.05	43.00	24.185	
7,400.00	7,279.23	7,561.62	7,264.81	29.65	34.66	90.06	-538.75	1,888.08	1,038.87	996.32	42.55	24.413	
7,410.76	7,287.37	7,569.90	7,273.09	29.66	34.66	90.56	-538.67	1,888.04	1,038.83	996.37	42.46	24.468	
7,450.00	7,316.18	7,599.20	7,302.39	29.69	34.68	92.28	-538.40	1,887.89	1,039.39	997.29	42.10	24.686	
7,500.00	7,350.73	7,633.99	7,337.18	29.72	34.70	94.18	-538.10	1,887.70	1,041.86	1,000.18	41.68	24.996	
7,550.00	7,382.73	7,666.08	7,369.26	29.74	34.72	95.75	-537.85	1,887.53	1,046.52	1,005.21	41.31	25.333	
7,600.00	7,412.01	7,695.41	7,398.60	29.74	34.73	96.98	-537.64	1,887.37	1,053.56	1,012.53	41.02	25.683	
7,650.00	7,438.44	7,721.87	7,425.05	29.74	34.75	97.85	-537.48	1,887.22	1,063.11	1,022.28	40.84	26.034	
7,700.00	7,461.87	7,745.31	7,448.49	29.73	34.76	98.34	-537.35	1,887.09	1,075.30	1,034.53	40.78	26.371	
7,750.00	7,482.21	7,765.64	7,468.82	29.71	34.77	98.43	-537.25	1,886.97	1,090.17	1,049.32	40.85	26.686	
7,800.00	7,499.35	7,782.79	7,485.98	29.69	34.78	98.09	-537.18	1,886.88	1,107.72	1,066.65	41.07	26.974	
7,850.00	7,513.20	7,797.28	7,500.46	29.65	34.79	97.33	-537.12	1,886.79	1,127.87	1,086.46	41.41	27.238	
7,900.00	7,523.70	7,808.35	7,511.53	29.62	34.80	96.09	-537.06	1,886.73	1,150.53	1,108.66	41.86	27.482	
7,950.00	7,530.80	7,815.93	7,519.11	29.58	34.80	94.34	-537.03	1,886.68	1,175.52	1,133.11	42.41	27.717	
8,000.00	7,534.46	7,819.98	7,523.16	29.53	34.80	92.07	-537.01	1,886.66	1,202.66	1,159.63	43.03	27.951	
8,027.99	7,535.00	7,820.68	7,523.87	29.51	34.80	90.57	-537.00	1,886.65	1,218.70	1,175.30	43.39	28.085	
8,100.00	7,535.00	7,821.07	7,524.25	29.45	34.80	90.59	-537.00	1,886.65	1,262.05	1,217.67	44.38	28.435	
8,200.00	7,535.00	7,821.60	7,524.78	29.49	34.80	90.62	-537.00	1,886.65	1,326.40	1,280.57	45.83	28.943	
8,300.00	7,535.00	7,822.13	7,525.32	30.05	34.80	90.66	-537.00	1,886.64	1,394.95	1,347.67	47.27	29.508	
8,400.00	7,535.00	7,822.67	7,525.85	30.69	34.80	90.69	-536.99	1,886.64	1,467.12	1,418.45	48.66	30.148	

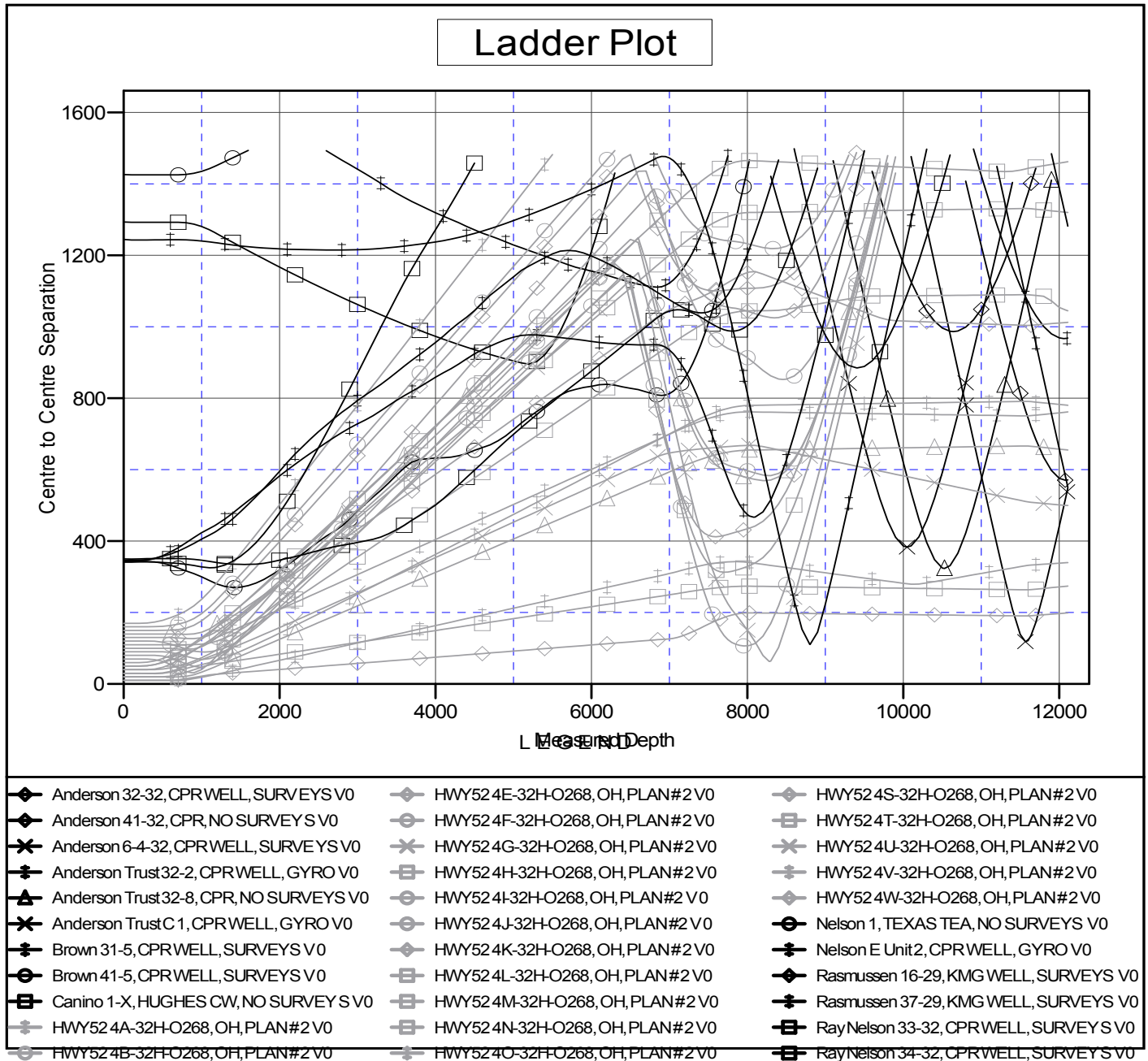
Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4R-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 4R-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 #2	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 4R-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