



CRESTONE PEAK
RESOURCES

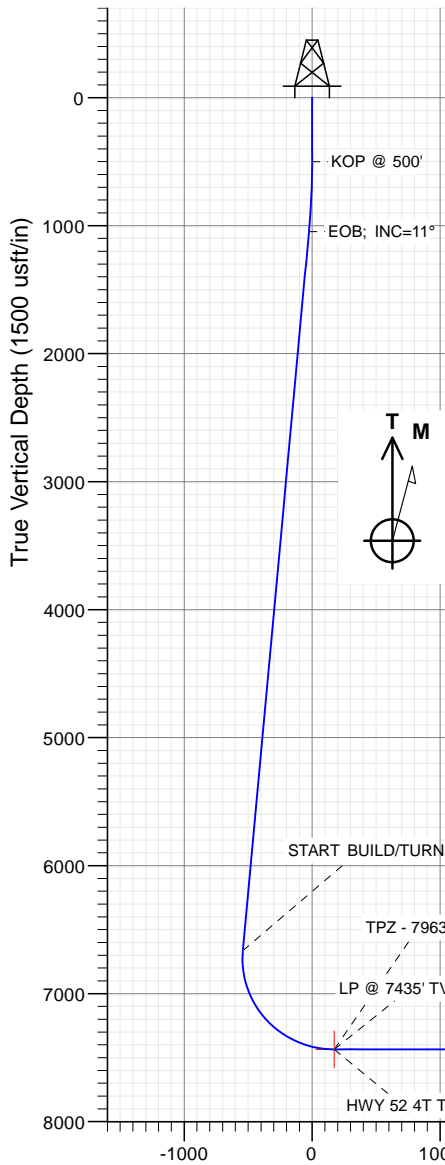
SECTION DETAILS

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	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
3	1050.28	11.01	118.17	1046.90	-24.88	46.45	2.00	118.17	-24.93	
4	6772.64	11.01	118.17	6664.02	-540.69	1009.43	0.00	0.00	-541.92	
5	7963.63	90.00	359.36	7435.00	173.90	1132.85	8.00	-118.37	172.51	HWY 52 4T TPZ
6	10459.89	90.00	359.36	7435.00	2670.00	1105.00	0.00	0.00	2668.65	
7	10535.52	90.00	0.87	7435.00	2745.63	1105.15	2.00	90.00	2744.28	
8	12046.42	90.00	0.87	7435.00	4256.36	1128.19	0.00	0.00	4254.97	HWY 52 4T PBHL

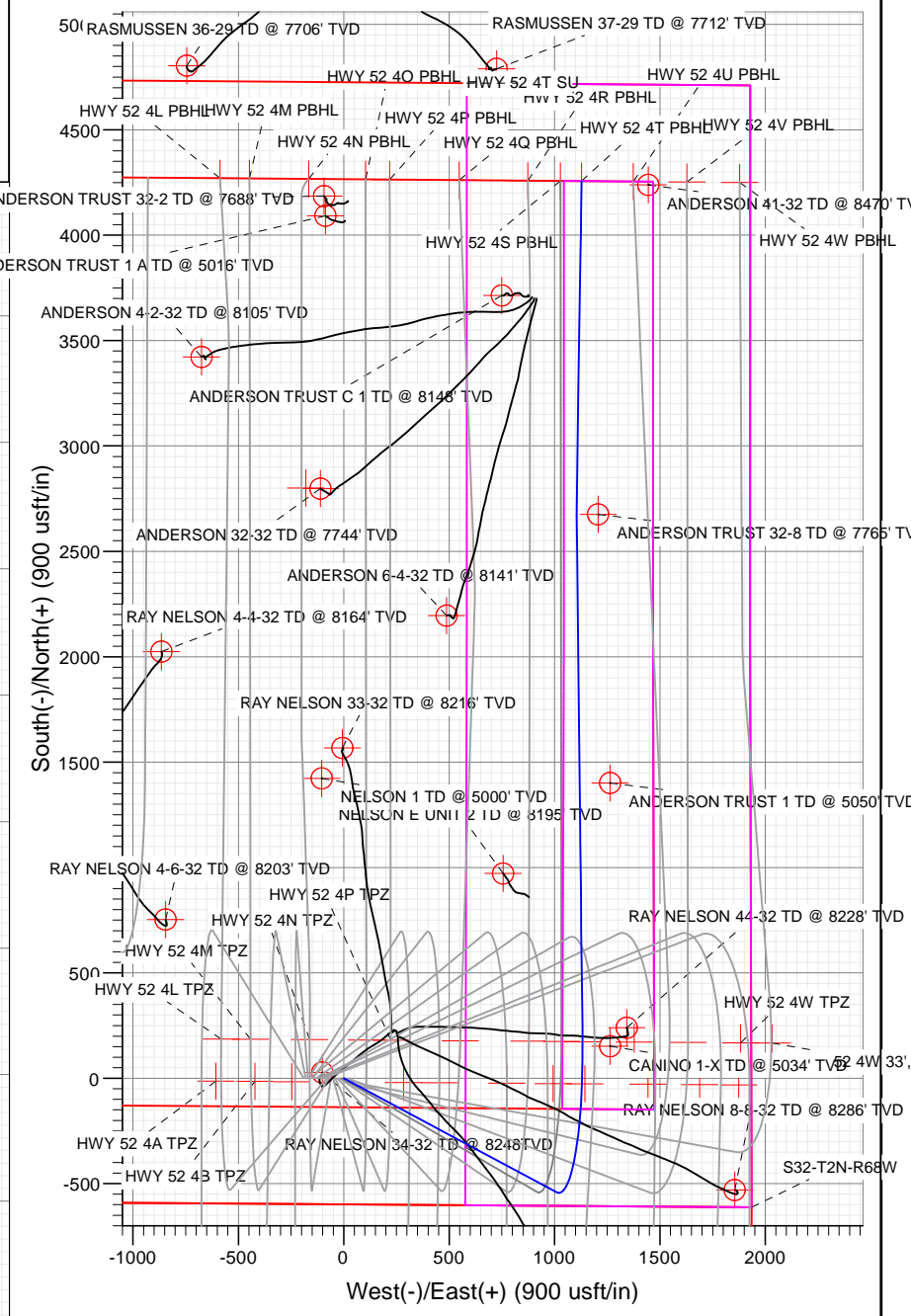
PLAN #2
HWY52 4T-32H-O268
17X0X LR
23 KB @ 5015.00usft
Ground Level @ 4992.00
North American Datum 1983
Well HWY52 4T-32H-O268, True North

Type User	Target No Target (Freehand)	Azimuth 359.93	Origin Type Slot	N/S 0.00	E/W 0.00	From TVD 0.00
Name		TVD	+N/-S	+E/-W	Latitude	Longitude
HWY 52 4T PBHL		7435.00	4256.36	1128.19	40.101038	-105.020573
HWY 52 4T TPZ		7435.00	173.90	1132.85	40.089831	-105.020557

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



Azimuths to True North
Magnetic North: 8.57°
Magnetic Field
Strength: 52234.1snT
Dip Angle: 66.55°
Date: 1/27/2017
Model: HDGM



WELL DETAILS: HWY52 4T-32H-O268

+N/-S	+E/-W	Northing	Ground Level:	4992.00	Latitude	Longitude
0.00	0.00	1275752.74	Easting	3133008.20	40.089354	-105.024606

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well HWY52 4T-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 4T-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 4T-32H-O268			
Well Position	+N/-S 0.00 usft	Northing: 1,275,752.74 usft	Latitude: 40.089354
	+E/-W 0.00 usft	Easting: 3,133,008.20 usft	Longitude: -105.024606
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)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,050.28	11.01	118.17	1,046.90	-24.88	46.45	2.00	2.00	0.00	118.17	
6,772.64	11.01	118.17	6,664.02	-540.69	1,009.43	0.00	0.00	0.00	0.00	
7,963.63	90.00	359.36	7,435.00	173.90	1,132.85	8.00	6.63	-9.98	-118.37	HWY 52 4T TPZ
10,459.89	90.00	359.36	7,435.00	2,670.00	1,105.00	0.00	0.00	0.00	0.00	
10,535.52	90.00	0.87	7,435.00	2,745.63	1,105.15	2.00	0.00	2.00	90.00	
12,046.42	90.00	0.87	7,435.00	4,256.36	1,128.19	0.00	0.00	0.00	0.00	HWY 52 4T PBHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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	KOP @ 500'
600.00	2.00	118.17	599.98	-0.82	1.54	-0.83	2.00	2.00	
700.00	4.00	118.17	699.84	-3.29	6.15	-3.30	2.00	2.00	
800.00	6.00	118.17	799.45	-7.41	13.83	-7.43	2.00	2.00	
900.00	8.00	118.17	898.70	-13.16	24.58	-13.19	2.00	2.00	
1,000.00	10.00	118.17	997.47	-20.55	38.37	-20.60	2.00	2.00	
1,050.28	11.01	118.17	1,046.90	-24.88	46.45	-24.93	2.00	2.00	EOB; INC=11°
1,100.00	11.01	118.17	1,095.71	-29.36	54.81	-29.43	0.00	0.00	
1,200.00	11.01	118.17	1,193.87	-38.37	71.64	-38.46	0.00	0.00	
1,300.00	11.01	118.17	1,292.03	-47.39	88.47	-47.49	0.00	0.00	
1,400.00	11.01	118.17	1,390.19	-56.40	105.30	-56.53	0.00	0.00	
1,500.00	11.01	118.17	1,488.35	-65.41	122.13	-65.56	0.00	0.00	
1,600.00	11.01	118.17	1,586.51	-74.43	138.95	-74.60	0.00	0.00	
1,700.00	11.01	118.17	1,684.67	-83.44	155.78	-83.63	0.00	0.00	
1,800.00	11.01	118.17	1,782.83	-92.46	172.61	-92.67	0.00	0.00	
1,900.00	11.01	118.17	1,880.99	-101.47	189.44	-101.70	0.00	0.00	
2,000.00	11.01	118.17	1,979.16	-110.48	206.27	-110.74	0.00	0.00	
2,100.00	11.01	118.17	2,077.32	-119.50	223.10	-119.77	0.00	0.00	
2,200.00	11.01	118.17	2,175.48	-128.51	239.93	-128.80	0.00	0.00	
2,300.00	11.01	118.17	2,273.64	-137.53	256.75	-137.84	0.00	0.00	
2,400.00	11.01	118.17	2,371.80	-146.54	273.58	-146.87	0.00	0.00	
2,500.00	11.01	118.17	2,469.96	-155.55	290.41	-155.91	0.00	0.00	
2,600.00	11.01	118.17	2,568.12	-164.57	307.24	-164.94	0.00	0.00	
2,700.00	11.01	118.17	2,666.28	-173.58	324.07	-173.98	0.00	0.00	
2,800.00	11.01	118.17	2,764.44	-182.60	340.90	-183.01	0.00	0.00	
2,900.00	11.01	118.17	2,862.60	-191.61	357.73	-192.05	0.00	0.00	
3,000.00	11.01	118.17	2,960.76	-200.62	374.55	-201.08	0.00	0.00	
3,100.00	11.01	118.17	3,058.92	-209.64	391.38	-210.12	0.00	0.00	
3,200.00	11.01	118.17	3,157.09	-218.65	408.21	-219.15	0.00	0.00	
3,300.00	11.01	118.17	3,255.25	-227.66	425.04	-228.18	0.00	0.00	
3,400.00	11.01	118.17	3,353.41	-236.68	441.87	-237.22	0.00	0.00	
3,500.00	11.01	118.17	3,451.57	-245.69	458.70	-246.25	0.00	0.00	
3,600.00	11.01	118.17	3,549.73	-254.71	475.53	-255.29	0.00	0.00	
3,700.00	11.01	118.17	3,647.89	-263.72	492.35	-264.32	0.00	0.00	
3,800.00	11.01	118.17	3,746.05	-272.73	509.18	-273.36	0.00	0.00	
3,900.00	11.01	118.17	3,844.21	-281.75	526.01	-282.39	0.00	0.00	
4,000.00	11.01	118.17	3,942.37	-290.76	542.84	-291.43	0.00	0.00	
4,100.00	11.01	118.17	4,040.53	-299.78	559.67	-300.46	0.00	0.00	
4,200.00	11.01	118.17	4,138.69	-308.79	576.50	-309.49	0.00	0.00	
4,300.00	11.01	118.17	4,236.85	-317.80	593.32	-318.53	0.00	0.00	
4,400.00	11.01	118.17	4,335.02	-326.82	610.15	-327.56	0.00	0.00	
4,500.00	11.01	118.17	4,433.18	-335.83	626.98	-336.60	0.00	0.00	
4,600.00	11.01	118.17	4,531.34	-344.85	643.81	-345.63	0.00	0.00	
4,700.00	11.01	118.17	4,629.50	-353.86	660.64	-354.67	0.00	0.00	
4,800.00	11.01	118.17	4,727.66	-362.87	677.47	-363.70	0.00	0.00	
4,900.00	11.01	118.17	4,825.82	-371.89	694.30	-372.74	0.00	0.00	
5,000.00	11.01	118.17	4,923.98	-380.90	711.12	-381.77	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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
5,100.00	11.01	118.17	5,022.14	-389.92	727.95	-390.80	0.00	0.00	
5,200.00	11.01	118.17	5,120.30	-398.93	744.78	-399.84	0.00	0.00	
5,300.00	11.01	118.17	5,218.46	-407.94	761.61	-408.87	0.00	0.00	
5,400.00	11.01	118.17	5,316.62	-416.96	778.44	-417.91	0.00	0.00	
5,500.00	11.01	118.17	5,414.78	-425.97	795.27	-426.94	0.00	0.00	
5,600.00	11.01	118.17	5,512.95	-434.98	812.10	-435.98	0.00	0.00	
5,700.00	11.01	118.17	5,611.11	-444.00	828.92	-445.01	0.00	0.00	
5,800.00	11.01	118.17	5,709.27	-453.01	845.75	-454.05	0.00	0.00	
5,900.00	11.01	118.17	5,807.43	-462.03	862.58	-463.08	0.00	0.00	
6,000.00	11.01	118.17	5,905.59	-471.04	879.41	-472.11	0.00	0.00	
6,100.00	11.01	118.17	6,003.75	-480.05	896.24	-481.15	0.00	0.00	
6,200.00	11.01	118.17	6,101.91	-489.07	913.07	-490.18	0.00	0.00	
6,300.00	11.01	118.17	6,200.07	-498.08	929.90	-499.22	0.00	0.00	
6,400.00	11.01	118.17	6,298.23	-507.10	946.72	-508.25	0.00	0.00	
6,500.00	11.01	118.17	6,396.39	-516.11	963.55	-517.29	0.00	0.00	
6,600.00	11.01	118.17	6,494.55	-525.12	980.38	-526.32	0.00	0.00	
6,700.00	11.01	118.17	6,592.71	-534.14	997.21	-535.36	0.00	0.00	
6,772.64	11.01	118.17	6,664.02	-540.69	1,009.43	-541.92	0.00	0.00	START BUILD/TURN
6,800.00	10.15	107.18	6,690.92	-542.63	1,014.04	-543.87	8.00	-3.14	
6,900.00	10.83	62.28	6,789.40	-540.86	1,030.80	-542.12	8.00	0.69	
7,000.00	16.08	35.60	6,886.71	-525.20	1,047.21	-526.48	8.00	5.25	
7,100.00	22.95	23.10	6,980.95	-495.96	1,062.95	-497.26	8.00	6.87	
7,200.00	30.35	16.28	7,070.29	-453.71	1,077.70	-455.02	8.00	7.40	
7,300.00	37.98	11.97	7,152.98	-399.27	1,091.18	-400.60	8.00	7.63	
7,400.00	45.72	8.93	7,227.42	-333.69	1,103.14	-335.04	8.00	7.74	
7,500.00	53.52	6.60	7,292.16	-258.27	1,113.33	-259.63	8.00	7.80	
7,600.00	61.36	4.70	7,345.94	-174.46	1,121.56	-175.83	8.00	7.84	
7,700.00	69.22	3.07	7,387.71	-83.90	1,127.66	-85.27	8.00	7.86	
7,800.00	77.10	1.60	7,416.65	11.66	1,131.53	10.28	8.00	7.88	
7,900.00	84.98	0.22	7,432.22	110.35	1,133.08	108.96	8.00	7.88	
7,963.63	90.00	359.36	7,435.00	173.90	1,132.85	172.51	8.00	7.89	TPZ - 7963' MD - LP @ 7435' TVD; 90°
8,000.00	90.00	359.36	7,435.00	210.26	1,132.44	208.88	0.00	0.00	
8,100.00	90.00	359.36	7,435.00	310.26	1,131.33	308.87	0.00	0.00	
8,200.00	90.00	359.36	7,435.00	410.25	1,130.21	408.87	0.00	0.00	
8,300.00	90.00	359.36	7,435.00	510.24	1,129.10	508.86	0.00	0.00	
8,400.00	90.00	359.36	7,435.00	610.24	1,127.98	608.86	0.00	0.00	
8,500.00	90.00	359.36	7,435.00	710.23	1,126.86	708.85	0.00	0.00	
8,600.00	90.00	359.36	7,435.00	810.22	1,125.75	808.85	0.00	0.00	
8,700.00	90.00	359.36	7,435.00	910.22	1,124.63	908.84	0.00	0.00	
8,800.00	90.00	359.36	7,435.00	1,010.21	1,123.52	1,008.84	0.00	0.00	
8,900.00	90.00	359.36	7,435.00	1,110.21	1,122.40	1,108.83	0.00	0.00	
9,000.00	90.00	359.36	7,435.00	1,210.20	1,121.29	1,208.83	0.00	0.00	
9,100.00	90.00	359.36	7,435.00	1,310.19	1,120.17	1,308.82	0.00	0.00	
9,200.00	90.00	359.36	7,435.00	1,410.19	1,119.06	1,408.82	0.00	0.00	
9,300.00	90.00	359.36	7,435.00	1,510.18	1,117.94	1,508.81	0.00	0.00	
9,400.00	90.00	359.36	7,435.00	1,610.18	1,116.82	1,608.81	0.00	0.00	
9,500.00	90.00	359.36	7,435.00	1,710.17	1,115.71	1,708.80	0.00	0.00	
9,600.00	90.00	359.36	7,435.00	1,810.16	1,114.59	1,808.80	0.00	0.00	
9,700.00	90.00	359.36	7,435.00	1,910.16	1,113.48	1,908.79	0.00	0.00	
9,800.00	90.00	359.36	7,435.00	2,010.15	1,112.36	2,008.79	0.00	0.00	
9,900.00	90.00	359.36	7,435.00	2,110.14	1,111.25	2,108.78	0.00	0.00	
10,000.00	90.00	359.36	7,435.00	2,210.14	1,110.13	2,208.78	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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
10,100.00	90.00	359.36	7,435.00	2,310.13	1,109.01	2,308.77	0.00	0.00	
10,200.00	90.00	359.36	7,435.00	2,410.13	1,107.90	2,408.77	0.00	0.00	
10,300.00	90.00	359.36	7,435.00	2,510.12	1,106.78	2,508.76	0.00	0.00	
10,400.00	90.00	359.36	7,435.00	2,610.11	1,105.67	2,608.76	0.00	0.00	
10,459.89	90.00	359.36	7,435.00	2,670.00	1,105.00	2,668.65	0.00	0.00	START TURN
10,500.00	90.00	0.16	7,435.00	2,710.11	1,104.83	2,708.76	2.00	0.00	
10,535.52	90.00	0.87	7,435.00	2,745.63	1,105.15	2,744.28	2.00	0.00	END OF TURN
10,600.00	90.00	0.87	7,435.00	2,810.10	1,106.14	2,808.75	0.00	0.00	
10,700.00	90.00	0.87	7,435.00	2,910.09	1,107.66	2,908.73	0.00	0.00	
10,800.00	90.00	0.87	7,435.00	3,010.08	1,109.19	3,008.72	0.00	0.00	
10,900.00	90.00	0.87	7,435.00	3,110.06	1,110.71	3,108.71	0.00	0.00	
11,000.00	90.00	0.87	7,435.00	3,210.05	1,112.23	3,208.69	0.00	0.00	
11,100.00	90.00	0.87	7,435.00	3,310.04	1,113.76	3,308.68	0.00	0.00	
11,200.00	90.00	0.87	7,435.00	3,410.03	1,115.28	3,408.66	0.00	0.00	
11,300.00	90.00	0.87	7,435.00	3,510.02	1,116.81	3,508.65	0.00	0.00	
11,400.00	90.00	0.87	7,435.00	3,610.01	1,118.33	3,608.64	0.00	0.00	
11,500.00	90.00	0.87	7,435.00	3,709.99	1,119.86	3,708.62	0.00	0.00	
11,600.00	90.00	0.87	7,435.00	3,809.98	1,121.38	3,808.61	0.00	0.00	
11,700.00	90.00	0.87	7,435.00	3,909.97	1,122.90	3,908.60	0.00	0.00	
11,800.00	90.00	0.87	7,435.00	4,009.96	1,124.43	4,008.58	0.00	0.00	
11,900.00	90.00	0.87	7,435.00	4,109.95	1,125.95	4,108.57	0.00	0.00	
12,000.00	90.00	0.87	7,435.00	4,209.94	1,127.48	4,208.56	0.00	0.00	
12,046.42	90.00	0.87	7,435.00	4,256.36	1,128.19	4,254.97	0.00	0.00	TD at 12046.42

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
HWY 52 4T PBHL - hit/miss target - Shape - Point	0.00	0.00	7,435.00	4,256.36	1,128.19	1,280,015.08	3,134,113.55	40.101038	-105.020573
HWY 52 4T TPZ - plan hits target center - Point	0.00	0.00	7,435.00	173.90	1,132.85	1,275,932.71	3,134,140.10	40.089831	-105.020557

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.00	500.00	0.00	0.00	KOP @ 500'
1,050.28	1,046.90	-24.88	46.45	EOB; INC=11°
6,772.64	6,664.02	-540.69	1,009.43	START BUILD/TURN
7,963.63	7,435.00	173.89	1,132.85	TPZ - 7963' MD
7,963.63	7,435.00	173.90	1,132.85	LP @ 7435' TVD; 90°
10,459.89	7,435.00	2,670.00	1,105.00	START TURN
10,535.52	7,435.00	2,745.63	1,105.15	END OF TURN
12,046.42	7,435.00	4,256.36	1,128.19	TD at 12046.42

Crestone Peak Resources

DJ BASIN

S32-T2N-R68W

HWY52 4T-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 4T-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 4T-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
0.00	12,046.04	PLAN #2 (OH)	MWD+HDGM
			Description
			OWSG MWD + HDGM

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S32-T2N-R68W						
Anderson 32-32 - CPR WELL - SURVEYS	10,535.52	7,555.23	1,206.50	1,130.09	15.790	SF
Anderson 32-32 - CPR WELL - SURVEYS	10,562.14	7,555.63	1,206.21	1,129.85	15.797	CC, ES
Anderson 41-32 - CPR - NO SURVEYS	12,033.77	7,315.00	316.34	227.03	3.542	CC
Anderson 41-32 - CPR - NO SURVEYS	12,046.42	7,315.00	316.59	226.92	3.531	ES, SF
Anderson 4-2-32 - CPR WELL - SURVEYS						Out of range
Anderson 6-4-32 - CPR WELL - SURVEYS	9,994.18	7,616.67	609.89	532.90	7.921	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	11,954.56	7,357.68	1,219.08	1,135.46	14.579	CC, ES
Anderson Trust 32-2 - CPR WELL - GYRO	12,000.00	7,358.00	1,219.92	1,135.96	14.529	SF
Anderson Trust 32-8 - CPR - NO SURVEYS	10,464.69	7,393.00	101.36	34.16	1.508	CC, ES, SF
Anderson Trust C 1 - CPR WELL - GYRO	11,506.03	7,363.23	352.18	275.56	4.596	CC, ES, SF
Anderson Trust C Unit 2 - CPR WELL - GYRO						Out of range
Brown 22-5 - CPR WELL - SURVEYS						Out of range
Brown 31-5 - CPR WELL - SURVEYS	6,703.49	6,939.00	1,306.09	1,238.05	19.197	CC, ES
Brown 31-5 - CPR WELL - SURVEYS	6,900.00	7,097.00	1,315.69	1,246.35	18.973	SF
Brown 41-5 - CPR WELL - SURVEYS	1,574.11	1,541.00	208.43	197.62	19.274	CC
Brown 41-5 - CPR WELL - SURVEYS	1,600.00	1,565.52	208.54	197.52	18.925	ES
Brown 41-5 - CPR WELL - SURVEYS	6,950.00	7,038.99	713.72	669.15	16.011	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	5,200.03	5,034.00	757.70	726.29	24.124	CC, ES, 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	189.98	188.98	191.323	CC, ES
HWY52 4A-32H-O268 - OH - PLAN #2	1,200.00	1,164.42	340.38	332.26	41.876	SF
HWY52 4B-32H-O268 - OH - PLAN #2	300.00	300.00	180.18	178.47	105.377	CC
HWY52 4B-32H-O268 - OH - PLAN #2	400.00	398.70	180.54	178.12	74.518	ES
HWY52 4B-32H-O268 - OH - PLAN #2	8,600.00	7,343.70	1,476.76	1,417.83	25.058	SF
HWY52 4C-32H-O268 - OH - PLAN #2	400.00	400.00	170.11	167.69	70.096	CC
HWY52 4C-32H-O268 - OH - PLAN #2	500.00	499.48	170.26	167.12	54.198	ES
HWY52 4C-32H-O268 - OH - PLAN #2	8,400.00	7,417.30	1,363.89	1,306.30	23.684	SF
HWY52 4D-32H-O268 - OH - PLAN #2	500.00	500.00	160.04	156.90	50.907	CC, ES
HWY52 4D-32H-O268 - OH - PLAN #2	8,300.00	7,574.85	825.47	767.05	14.129	SF
HWY52 4E-32H-O268 - OH - PLAN #2	500.00	500.00	150.25	147.10	47.792	CC, ES
HWY52 4E-32H-O268 - OH - PLAN #2	7,600.00	8,074.98	679.07	622.18	11.936	SF
HWY52 4F-32H-O268 - OH - PLAN #2	751.31	764.97	130.24	125.16	25.666	CC, ES
HWY52 4F-32H-O268 - OH - PLAN #2	8,110.88	7,709.17	370.48	312.36	6.374	SF
HWY52 4G-32H-O268 - OH - PLAN #2	500.00	500.00	130.10	126.96	41.384	CC, ES
HWY52 4G-32H-O268 - OH - PLAN #2	8,285.96	7,640.07	200.63	140.96	3.363	SF
HWY52 4H-32H-O268 - OH - PLAN #2	7,913.46	7,858.95	57.20	0.06	1.001	Level 2, CC
HWY52 4H-32H-O268 - OH - PLAN #2	7,950.00	7,823.83	58.26	-0.17	0.997	Level 1, 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 4T-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 4T-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	Offset	Distance		Separation Factor	Warning
	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)		
S32-T2N-R68W						
HWY52 4I-32H-O268 - OH - PLAN #2	683.10	689.48	110.10	105.63	24.609	CC
HWY52 4I-32H-O268 - OH - PLAN #2	800.00	809.99	110.49	105.15	20.717	ES
HWY52 4I-32H-O268 - OH - PLAN #2	8,300.00	7,613.45	318.23	257.21	5.216	SF
HWY52 4J-32H-O268 - OH - PLAN #2	880.52	893.40	88.52	82.54	14.803	CC
HWY52 4J-32H-O268 - OH - PLAN #2	900.00	913.16	88.58	82.45	14.465	ES
HWY52 4J-32H-O268 - OH - PLAN #2	8,500.00	7,535.91	592.82	528.62	9.233	SF
HWY52 4K-32H-O268 - OH - PLAN #2	869.20	880.56	65.53	59.59	11.024	CC, ES
HWY52 4K-32H-O268 - OH - PLAN #2	1,000.00	1,011.02	70.19	63.25	10.109	SF
HWY52 4L-32H-O268 - OH - PLAN #2	200.00	200.00	80.02	79.03	80.587	CC, ES
HWY52 4L-32H-O268 - OH - PLAN #2	800.00	790.74	127.78	122.48	24.113	SF
HWY52 4M-32H-O268 - OH - PLAN #2	200.00	200.00	70.23	69.23	70.725	CC, ES
HWY52 4M-32H-O268 - OH - PLAN #2	800.00	793.40	111.65	106.37	21.118	SF
HWY52 4N-32H-O268 - OH - PLAN #2	300.00	300.00	60.15	58.44	35.180	CC
HWY52 4N-32H-O268 - OH - PLAN #2	400.00	399.61	60.47	58.06	25.085	ES
HWY52 4N-32H-O268 - OH - PLAN #2	12,046.42	11,960.10	1,295.23	1,141.51	8.426	SF
HWY52 4O-32H-O268 - OH - PLAN #2	474.89	475.30	48.36	45.42	16.450	CC
HWY52 4O-32H-O268 - OH - PLAN #2	500.00	500.32	48.41	45.29	15.510	ES
HWY52 4O-32H-O268 - OH - PLAN #2	12,046.42	12,165.96	1,049.63	897.26	6.889	SF
HWY52 4P-32H-O268 - OH - PLAN #2	500.00	500.00	40.01	36.87	12.727	CC, ES
HWY52 4P-32H-O268 - OH - PLAN #2	12,046.42	12,048.61	915.74	762.46	5.974	SF
HWY52 4Q-32H-O268 - OH - PLAN #2	500.00	500.00	30.22	27.07	9.612	CC, ES
HWY52 4Q-32H-O268 - OH - PLAN #2	12,046.42	11,951.22	579.57	428.05	3.825	SF
HWY52 4R-32H-O268 - OH - PLAN #2	500.00	500.00	20.14	17.00	6.408	CC, ES
HWY52 4R-32H-O268 - OH - PLAN #2	12,046.42	12,102.81	273.91	125.91	1.851	SF
HWY52 4S-32H-O268 - OH - PLAN #2	500.00	500.00	10.07	6.93	3.204	CC, ES
HWY52 4S-32H-O268 - OH - PLAN #2	7,000.00	6,998.74	131.22	76.06	2.379	SF
HWY52 4U-32H-O268 - OH - PLAN #2	400.00	400.00	9.80	7.37	4.037	CC, ES
HWY52 4U-32H-O268 - OH - PLAN #2	12,046.42	12,030.43	264.42	124.92	1.896	SF
HWY52 4V-32H-O268 - OH - PLAN #2	300.00	300.00	19.87	18.16	11.619	CC, ES
HWY52 4V-32H-O268 - OH - PLAN #2	12,046.42	12,135.65	499.91	347.02	3.270	SF
HWY52 4W-32H-O268 - OH - PLAN #2	115.99	117.99	29.94	29.54	75.259	CC
HWY52 4W-32H-O268 - OH - PLAN #2	200.00	201.99	29.94	28.94	29.944	ES
HWY52 4W-32H-O268 - OH - PLAN #2	12,046.42	12,243.21	782.46	638.37	5.430	SF
Nelson 1 - TEXAS TEA - NO SURVEYS	500.00	454.00	1,426.80	1,424.42	598.367	CC, ES
Nelson 1 - TEXAS TEA - NO SURVEYS	1,400.00	1,344.19	1,494.18	1,486.83	203.167	SF
Nelson E Unit 1 - CPR WELL - GYRO						Out of range
Nelson E Unit 2 - CPR WELL - GYRO	8,700.00	7,369.50	356.13	313.51	8.356	SF
Nelson E Unit 2 - CPR WELL - GYRO	8,744.64	7,370.78	353.32	311.09	8.366	CC, ES
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	12,046.42	7,556.52	1,243.47	1,178.71	19.202	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 4T-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 4T-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	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance		Separation Factor	Warning
Offset Well - Wellbore - Design			Between Centres (usft)	Between Ellipses (usft)		
S32-T2N-R68W						
Rasmussen 36-29 - KMG WELL - SURVEYS						Out of range
Rasmussen 37-29 - KMG WELL - SURVEYS	12,046.42	7,515.17	670.21	584.98	7.864	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	1,100.07	1,069.19	303.03	297.40	53.890	CC, ES
Ray Nelson 33-32 - CPR WELL - SURVEYS	9,500.00	7,603.58	1,130.03	1,061.99	16.608	SF
Ray Nelson 34-32 - CPR WELL - SURVEYS	1,362.44	1,332.97	313.30	306.11	43.546	CC
Ray Nelson 34-32 - CPR WELL - SURVEYS	1,400.00	1,369.58	313.41	305.98	42.227	ES
Ray Nelson 34-32 - CPR WELL - SURVEYS	3,200.00	3,154.97	463.25	445.61	26.257	SF
Ray Nelson 44-32 - CPR WELL - SURVEYS	8,014.33	7,546.97	213.22	171.09	5.061	CC, ES, 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	76.19	329.31	329.06	1,297.131	CC, ES
Ray Nelson 8-8-32 - CPR WELL - SURVEYS	7,100.00	7,256.90	807.10	763.04	18.317	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

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 4T-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 4T-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	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
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 4T-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 4T-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													Offset Site Error:	0.00 usft
S32-T2N-R68W - Anderson 32-32 - CPR WELL - SURVEYS													Offset Well Error:	0.00 usft
Survey Program: 71-Geolink MWD														
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
9,700.00	7,435.00	7,542.67	7,337.62	44.59	27.52	-87.84	2,790.43	-99.73	1,499.60	1,430.18	69.42	21.603		
9,800.00	7,435.00	7,544.15	7,339.10	45.82	27.52	-87.91	2,790.45	-99.77	1,442.24	1,371.57	70.67	20.408		
9,900.00	7,435.00	7,545.63	7,340.58	47.08	27.52	-87.98	2,790.47	-99.81	1,389.71	1,317.80	71.91	19.324		
10,000.00	7,435.00	7,547.12	7,342.07	48.35	27.53	-88.05	2,790.49	-99.85	1,342.58	1,269.48	73.10	18.365		
10,100.00	7,435.00	7,548.62	7,343.57	49.64	27.53	-88.12	2,790.52	-99.89	1,301.45	1,227.26	74.19	17.542		
10,200.00	7,435.00	7,550.13	7,345.08	50.95	27.53	-88.20	2,790.54	-99.93	1,266.88	1,191.76	75.12	16.865		
10,300.00	7,435.00	7,551.65	7,346.60	52.28	27.53	-88.27	2,790.56	-99.97	1,239.44	1,163.61	75.84	16.344		
10,400.00	7,435.00	7,553.18	7,348.12	53.62	27.53	-88.34	2,790.59	-100.01	1,219.61	1,143.32	76.29	15.987		
10,459.89	7,435.00	7,554.10	7,349.04	54.43	27.53	-88.38	2,790.60	-100.03	1,211.53	1,135.11	76.42	15.854		
10,500.00	7,435.00	7,554.71	7,349.65	54.97	27.53	-88.41	2,790.61	-100.05	1,208.03	1,131.59	76.44	15.804		
10,535.52	7,435.00	7,555.23	7,350.18	55.45	27.53	-88.44	2,790.62	-100.06	1,206.50	1,130.09	76.41	15.790 SF		
10,562.14	7,435.00	7,555.63	7,350.57	55.81	27.53	-88.46	2,790.63	-100.07	1,206.21	1,129.85	76.36	15.797 CC, ES		
10,600.00	7,435.00	7,556.19	7,351.13	56.32	27.53	-88.49	2,790.64	-100.09	1,206.80	1,130.55	76.25	15.827		
10,700.00	7,435.00	7,557.67	7,352.62	57.68	27.54	-88.56	2,790.66	-100.13	1,214.06	1,138.31	75.75	16.027		
10,800.00	7,435.00	7,559.17	7,354.11	59.05	27.54	-88.63	2,790.68	-100.17	1,229.43	1,154.45	74.98	16.396		
10,900.00	7,435.00	7,560.67	7,355.62	60.44	27.54	-88.70	2,790.71	-100.21	1,252.62	1,178.63	73.99	16.929		
11,000.00	7,435.00	7,562.19	7,357.13	61.83	27.54	-88.77	2,790.73	-100.25	1,283.20	1,210.35	72.86	17.613		
11,100.00	7,435.00	7,563.71	7,358.65	63.23	27.54	-88.84	2,790.75	-100.29	1,320.67	1,249.03	71.64	18.435		
11,200.00	7,435.00	7,565.24	7,360.18	64.63	27.54	-88.92	2,790.78	-100.33	1,364.44	1,294.04	70.40	19.381		
11,300.00	7,435.00	7,566.78	7,361.72	66.05	27.55	-88.99	2,790.80	-100.37	1,413.95	1,344.75	69.20	20.433		
11,400.00	7,435.00	7,568.33	7,363.27	67.47	27.55	-89.06	2,790.83	-100.41	1,468.60	1,400.53	68.07	21.576		

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 4T-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 4T-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													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	Warning		
10,600.00	7,435.00	7,315.00	7,315.00	56.32	13.11	90.00	4,238.88	1,444.29	1,468.25	1,424.40	43.85	33.483			
10,700.00	7,435.00	7,315.00	7,315.00	57.68	13.11	90.00	4,238.88	1,444.29	1,370.77	1,326.76	44.01	31.145			
10,800.00	7,435.00	7,315.00	7,315.00	59.05	13.11	90.00	4,238.88	1,444.29	1,273.68	1,229.43	44.24	28.788			
10,900.00	7,435.00	7,315.00	7,315.00	60.44	13.11	90.00	4,238.88	1,444.29	1,177.07	1,132.50	44.57	26.408			
11,000.00	7,435.00	7,315.00	7,315.00	61.83	13.11	90.00	4,238.88	1,444.29	1,081.08	1,036.05	45.04	24.003			
11,100.00	7,435.00	7,315.00	7,315.00	63.23	13.11	90.00	4,238.88	1,444.29	985.90	940.19	45.70	21.571			
11,200.00	7,435.00	7,315.00	7,315.00	64.63	13.11	90.00	4,238.88	1,444.29	891.76	845.10	46.66	19.114			
11,300.00	7,435.00	7,315.00	7,315.00	66.05	13.11	90.00	4,238.88	1,444.29	799.05	751.03	48.03	16.638			
11,400.00	7,435.00	7,315.00	7,315.00	67.47	13.11	90.00	4,238.88	1,444.29	708.33	658.32	50.01	14.163			
11,500.00	7,435.00	7,315.00	7,315.00	68.90	13.11	90.00	4,238.88	1,444.29	620.46	567.57	52.90	11.729			
11,600.00	7,435.00	7,315.00	7,315.00	70.33	13.11	90.00	4,238.88	1,444.29	536.86	479.78	57.08	9.406			
11,700.00	7,435.00	7,315.00	7,315.00	71.77	13.11	90.00	4,238.88	1,444.29	459.86	396.85	63.01	7.298			
11,800.00	7,435.00	7,315.00	7,315.00	73.22	13.11	90.00	4,238.88	1,444.29	393.34	322.38	70.96	5.543			
11,900.00	7,435.00	7,315.00	7,315.00	74.67	13.11	90.00	4,238.88	1,444.29	343.46	263.27	80.18	4.283			
12,000.00	7,435.00	7,315.00	7,315.00	76.13	13.11	90.00	4,238.88	1,444.29	318.13	230.26	87.87	3.620			
12,033.77	7,435.00	7,315.00	7,315.00	76.53	13.11	90.00	4,238.88	1,444.29	316.34	227.03	89.31	3.542 CC			
12,046.42	7,435.00	7,315.00	7,315.00	76.69	13.11	90.00	4,238.88	1,444.29	316.59	226.92	89.67	3.531 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 4T-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 4T-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													Offset Site Error:	0.00 usft
S32-T2N-R68W - Anderson 6-4-32 - CPR WELL - SURVEYS													Offset Well Error:	0.00 usft
Survey Program: 71-Geolink MWD														
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	7,435.00	7,615.73	7,372.55	33.87	30.32	-89.02	2,197.52	500.43	1,430.69	1,375.96	54.73	26.143		
8,800.00	7,435.00	7,615.80	7,372.63	34.77	30.32	-89.03	2,197.52	500.43	1,340.91	1,285.18	55.72	24.063		
8,900.00	7,435.00	7,615.88	7,372.70	35.71	30.32	-89.03	2,197.52	500.43	1,252.68	1,195.80	56.88	22.023		
9,000.00	7,435.00	7,615.95	7,372.78	36.70	30.32	-89.04	2,197.52	500.43	1,166.35	1,108.12	58.22	20.032		
9,100.00	7,435.00	7,616.02	7,372.85	37.73	30.32	-89.05	2,197.52	500.43	1,082.37	1,022.59	59.78	18.106		
9,200.00	7,435.00	7,616.10	7,372.92	38.79	30.32	-89.05	2,197.52	500.43	1,001.34	939.76	61.58	16.260		
9,300.00	7,435.00	7,616.17	7,373.00	39.89	30.32	-89.06	2,197.52	500.43	924.04	860.39	63.66	14.516		
9,400.00	7,435.00	7,616.24	7,373.07	41.03	30.32	-89.07	2,197.52	500.42	851.48	785.48	66.00	12.901		
9,500.00	7,435.00	7,616.32	7,373.14	42.19	30.32	-89.07	2,197.52	500.42	784.97	716.40	68.57	11.447		
9,600.00	7,435.00	7,616.39	7,373.21	43.37	30.32	-89.08	2,197.52	500.42	726.19	654.93	71.26	10.191		
9,700.00	7,435.00	7,616.46	7,373.29	44.59	30.32	-89.09	2,197.52	500.42	677.13	603.31	73.82	9.173		
9,800.00	7,435.00	7,616.53	7,373.36	45.82	30.32	-89.10	2,197.52	500.42	640.06	564.15	75.90	8.433		
9,900.00	7,435.00	7,616.60	7,373.43	47.08	30.32	-89.10	2,197.52	500.42	617.12	540.06	77.06	8.008		
9,994.18	7,435.00	7,616.67	7,373.49	48.28	30.32	-89.11	2,197.52	500.42	609.89	532.90	76.99	7.921	CC, ES, SF	
10,000.00	7,435.00	7,616.67	7,373.50	48.35	30.32	-89.11	2,197.52	500.42	609.92	532.97	76.95	7.926		
10,100.00	7,435.00	7,616.74	7,373.57	49.64	30.32	-89.11	2,197.52	500.42	619.00	543.53	75.47	8.202		
10,200.00	7,435.00	7,616.81	7,373.64	50.95	30.32	-89.12	2,197.52	500.42	643.68	570.81	72.87	8.833		
10,300.00	7,435.00	7,616.88	7,373.71	52.28	30.32	-89.13	2,197.52	500.41	682.27	612.64	69.62	9.799		
10,400.00	7,435.00	7,616.95	7,373.78	53.62	30.32	-89.13	2,197.52	500.41	732.57	666.38	66.18	11.069		
10,459.89	7,435.00	7,616.99	7,373.82	54.43	30.32	-89.14	2,197.52	500.41	767.36	703.19	64.18	11.957		
10,500.00	7,435.00	7,617.01	7,373.84	54.97	30.32	-89.13	2,197.52	500.41	792.56	729.67	62.90	12.601		
10,535.52	7,435.00	7,617.03	7,373.85	55.45	30.32	-89.12	2,197.52	500.41	816.22	754.41	61.82	13.204		
10,600.00	7,435.00	7,617.04	7,373.87	56.32	30.32	-89.12	2,197.52	500.41	861.53	801.54	59.99	14.361		
10,700.00	7,435.00	7,617.07	7,373.90	57.68	30.32	-89.13	2,197.52	500.41	936.26	878.76	57.50	16.283		
10,800.00	7,435.00	7,617.10	7,373.93	59.05	30.32	-89.13	2,197.52	500.41	1,015.35	959.95	55.40	18.326		
10,900.00	7,435.00	7,617.13	7,373.95	60.44	30.32	-89.13	2,197.52	500.41	1,097.86	1,044.19	53.67	20.457		
11,000.00	7,435.00	7,617.15	7,373.98	61.83	30.32	-89.13	2,197.52	500.41	1,183.06	1,130.83	52.24	22.648		
11,100.00	7,435.00	7,617.18	7,374.01	63.23	30.32	-89.14	2,197.52	500.41	1,270.43	1,219.36	51.06	24.880		
11,200.00	7,435.00	7,617.21	7,374.03	64.63	30.32	-89.14	2,197.52	500.41	1,359.53	1,309.43	50.10	27.136		
11,300.00	7,435.00	7,617.23	7,374.06	66.05	30.32	-89.14	2,197.52	500.41	1,450.06	1,400.75	49.31	29.407		

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 100- GyroFlex													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)					
11,100.00	7,435.00	7,351.72	7,349.77	63.23	8.55	-89.47	4,183.05	-92.11	1,488.75	1,423.24	65.51	22.725			
11,200.00	7,435.00	7,352.42	7,350.47	64.63	8.55	-89.51	4,183.05	-92.12	1,433.70	1,365.66	68.04	21.072			
11,300.00	7,435.00	7,353.12	7,351.16	66.05	8.55	-89.54	4,183.06	-92.12	1,383.68	1,313.08	70.61	19.597			
11,400.00	7,435.00	7,353.81	7,351.86	67.47	8.55	-89.57	4,183.06	-92.12	1,339.28	1,266.12	73.16	18.307			
11,500.00	7,435.00	7,354.51	7,352.56	68.90	8.55	-89.60	4,183.06	-92.12	1,301.06	1,225.44	75.62	17.204			
11,600.00	7,435.00	7,355.21	7,353.26	70.33	8.55	-89.64	4,183.07	-92.13	1,269.59	1,191.66	77.93	16.291			
11,700.00	7,435.00	7,355.91	7,353.96	71.77	8.55	-89.67	4,183.07	-92.13	1,245.37	1,165.38	79.99	15.569			
11,800.00	7,435.00	7,356.61	7,354.65	73.22	8.55	-89.70	4,183.08	-92.13	1,228.84	1,147.11	81.73	15.036			
11,900.00	7,435.00	7,357.30	7,355.35	74.67	8.55	-89.73	4,183.08	-92.14	1,220.30	1,137.23	83.07	14.690			
11,954.56	7,435.00	7,357.68	7,355.73	75.46	8.55	-89.75	4,183.09	-92.14	1,219.08	1,135.46	83.62	14.579 CC, ES			
12,000.00	7,435.00	7,358.00	7,356.05	76.13	8.55	-89.77	4,183.09	-92.14	1,219.92	1,135.96	83.97	14.529 SF			
12,046.42	7,435.00	7,358.33	7,356.37	76.69	8.55	-89.78	4,183.09	-92.14	1,222.53	1,138.45	84.08	14.540			

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 4T-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 4T-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													Offset Site Error:	0.00 usft
S32-T2N-R68W - Anderson Trust 32-8 - CPR - NO SURVEYS													Offset Well Error:	0.00 usft
Survey Program: 7765-MWD+HDGM														
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	
9,000.00	7,435.00	7,393.00	7,393.00	36.70	13.23	90.00	2,675.76	1,206.31	1,468.03	1,423.89	44.14	33.257		
9,100.00	7,435.00	7,393.00	7,393.00	37.73	13.23	90.00	2,675.76	1,206.31	1,368.28	1,324.17	44.11	31.020		
9,200.00	7,435.00	7,393.00	7,393.00	38.79	13.23	90.00	2,675.76	1,206.31	1,268.58	1,224.51	44.07	28.784		
9,300.00	7,435.00	7,393.00	7,393.00	39.89	13.23	90.00	2,675.76	1,206.31	1,168.93	1,124.90	44.03	26.547		
9,400.00	7,435.00	7,393.00	7,393.00	41.03	13.23	90.00	2,675.76	1,206.31	1,069.34	1,025.35	43.99	24.311		
9,500.00	7,435.00	7,393.00	7,393.00	42.19	13.23	90.00	2,675.76	1,206.31	969.84	925.90	43.93	22.075		
9,600.00	7,435.00	7,393.00	7,393.00	43.37	13.23	90.00	2,675.76	1,206.31	870.45	826.57	43.87	19.840		
9,700.00	7,435.00	7,393.00	7,393.00	44.59	13.23	90.00	2,675.76	1,206.31	771.21	727.40	43.81	17.603		
9,800.00	7,435.00	7,393.00	7,393.00	45.82	13.23	90.00	2,675.76	1,206.31	672.21	628.47	43.75	15.366		
9,900.00	7,435.00	7,393.00	7,393.00	47.08	13.23	90.00	2,675.76	1,206.31	573.55	529.86	43.69	13.127		
10,000.00	7,435.00	7,393.00	7,393.00	48.35	13.23	90.00	2,675.76	1,206.31	475.46	431.76	43.69	10.882		
10,100.00	7,435.00	7,393.00	7,393.00	49.64	13.23	90.00	2,675.76	1,206.31	378.36	334.49	43.86	8.626		
10,200.00	7,435.00	7,393.00	7,393.00	50.95	13.23	90.00	2,675.76	1,206.31	283.28	238.69	44.60	6.352		
10,300.00	7,435.00	7,393.00	7,393.00	52.28	13.23	90.00	2,675.76	1,206.31	193.24	145.79	47.46	4.072		
10,400.00	7,435.00	7,393.00	7,393.00	53.62	13.23	90.00	2,675.76	1,206.31	120.16	62.28	57.89	2.076		
10,459.89	7,435.00	7,393.00	7,393.00	54.43	13.23	90.00	2,675.76	1,206.31	101.47	34.66	66.81	1.519		
10,464.69	7,435.00	7,393.00	7,393.00	54.49	13.23	90.00	2,675.76	1,206.31	101.36	34.16	67.21	1.508	CC, ES, SF	
10,500.00	7,435.00	7,393.00	7,393.00	54.97	13.23	90.00	2,675.76	1,206.31	107.13	39.48	67.65	1.584		
10,535.52	7,435.00	7,393.00	7,393.00	55.45	13.23	90.00	2,675.76	1,206.31	122.94	58.05	64.88	1.895		
10,600.00	7,435.00	7,393.00	7,393.00	56.32	13.23	90.00	2,675.76	1,206.31	167.57	108.88	58.69	2.855		
10,700.00	7,435.00	7,393.00	7,393.00	57.68	13.23	90.00	2,675.76	1,206.31	254.24	201.27	52.97	4.800		
10,800.00	7,435.00	7,393.00	7,393.00	59.05	13.23	90.00	2,675.76	1,206.31	348.13	297.86	50.28	6.925		
10,900.00	7,435.00	7,393.00	7,393.00	60.44	13.23	90.00	2,675.76	1,206.31	444.70	395.85	48.85	9.103		
11,000.00	7,435.00	7,393.00	7,393.00	61.83	13.23	90.00	2,675.76	1,206.31	542.51	494.50	48.00	11.301		
11,100.00	7,435.00	7,393.00	7,393.00	63.23	13.23	90.00	2,675.76	1,206.31	640.99	593.53	47.46	13.506		
11,200.00	7,435.00	7,393.00	7,393.00	64.63	13.23	90.00	2,675.76	1,206.31	739.89	692.79	47.09	15.712		
11,300.00	7,435.00	7,393.00	7,393.00	66.05	13.23	90.00	2,675.76	1,206.31	839.04	792.21	46.83	17.917		
11,400.00	7,435.00	7,393.00	7,393.00	67.47	13.23	90.00	2,675.76	1,206.31	938.38	891.74	46.64	20.121		
11,500.00	7,435.00	7,393.00	7,393.00	68.90	13.23	90.00	2,675.76	1,206.31	1,037.84	991.34	46.49	22.322		
11,600.00	7,435.00	7,393.00	7,393.00	70.33	13.23	90.00	2,675.76	1,206.31	1,137.39	1,091.01	46.39	24.521		
11,700.00	7,435.00	7,393.00	7,393.00	71.77	13.23	90.00	2,675.76	1,206.31	1,237.02	1,190.72	46.30	26.716		
11,800.00	7,435.00	7,393.00	7,393.00	73.22	13.23	90.00	2,675.76	1,206.31	1,336.71	1,290.47	46.24	28.908		
11,900.00	7,435.00	7,393.00	7,393.00	74.67	13.23	90.00	2,675.76	1,206.31	1,436.43	1,390.24	46.19	31.096		

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 4T-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 4T-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													Offset Site Error:	0.00 usft		
Survey Program: 100- GyroFlex													Offset Well Error:		0.00 usft	
S32-T2N-R68W - Anderson Trust C 1 - CPR WELL - GYRO																
Reference				Offset				Semi Major Axis			Distance					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning			
10,100.00	7,435.00	7,379.55	7,377.92	49.64	8.08	-92.10	3,721.20	767.64	1,451.82	1,412.23	39.59	36.669				
10,200.00	7,435.00	7,378.51	7,376.87	50.95	8.08	-91.91	3,721.21	767.65	1,354.56	1,314.44	40.12	33.764				
10,300.00	7,435.00	7,377.45	7,375.81	52.28	8.08	-91.73	3,721.22	767.66	1,257.72	1,216.98	40.75	30.866				
10,400.00	7,435.00	7,376.37	7,374.74	53.62	8.08	-91.54	3,721.23	767.68	1,161.42	1,119.92	41.51	27.980				
10,459.89	7,435.00	7,375.73	7,374.09	54.43	8.08	-91.43	3,721.24	767.68	1,104.06	1,062.02	42.04	26.260				
10,500.00	7,435.00	7,375.29	7,373.65	54.97	8.08	-91.29	3,721.25	767.69	1,065.89	1,023.44	42.45	25.110				
10,535.52	7,435.00	7,374.89	7,373.25	55.45	8.08	-91.18	3,721.25	767.69	1,032.36	989.51	42.86	24.089				
10,600.00	7,435.00	7,374.16	7,372.52	56.32	8.07	-91.06	3,721.26	767.70	972.01	928.31	43.69	22.245				
10,700.00	7,435.00	7,373.01	7,371.38	57.68	8.07	-90.88	3,721.27	767.72	879.55	834.28	45.27	19.427				
10,800.00	7,435.00	7,371.85	7,370.22	59.05	8.07	-90.69	3,721.29	767.73	788.94	741.65	47.29	16.684				
10,900.00	7,435.00	7,370.68	7,369.05	60.44	8.07	-90.50	3,721.30	767.75	700.89	651.00	49.89	14.050				
11,000.00	7,435.00	7,369.49	7,367.86	61.83	8.07	-90.30	3,721.32	767.76	616.49	563.24	53.25	11.577				
11,100.00	7,435.00	7,368.29	7,366.65	63.23	8.07	-90.11	3,721.33	767.78	537.46	479.88	57.58	9.335				
11,200.00	7,435.00	7,367.07	7,365.43	64.63	8.07	-89.91	3,721.35	767.79	466.55	403.61	62.94	7.412				
11,300.00	7,435.00	7,365.83	7,364.20	66.05	8.06	-89.71	3,721.36	767.81	408.01	339.02	68.99	5.914				
11,400.00	7,435.00	7,364.58	7,362.94	67.47	8.06	-89.50	3,721.38	767.82	367.79	293.45	74.34	4.947				
11,500.00	7,435.00	7,363.31	7,361.67	68.90	8.06	-89.30	3,721.39	767.84	352.23	275.60	76.63	4.597				
11,506.03	7,435.00	7,363.23	7,361.60	68.99	8.06	-89.29	3,721.39	767.84	352.18	275.56	76.62	4.596	CC, ES, SF			
11,600.00	7,435.00	7,362.02	7,360.39	70.33	8.06	-89.09	3,721.41	767.86	364.50	290.12	74.38	4.901				
11,700.00	7,435.00	7,360.72	7,359.08	71.77	8.06	-88.88	3,721.42	767.87	402.05	333.16	68.89	5.836				
11,800.00	7,435.00	7,359.40	7,357.76	73.22	8.06	-88.66	3,721.44	767.89	458.73	396.12	62.61	7.327				
11,900.00	7,435.00	7,358.06	7,356.42	74.67	8.05	-88.44	3,721.46	767.91	528.41	471.37	57.04	9.264				
12,000.00	7,435.00	7,356.70	7,355.06	76.13	8.05	-88.22	3,721.48	767.92	606.62	554.04	52.59	11.536				
12,046.42	7,435.00	7,356.06	7,354.43	76.69	8.05	-88.12	3,721.48	767.93	644.98	593.90	51.09	12.626				

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 722-MWD													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)					
3,300.00	3,255.25	3,702.28	3,629.20	13.73	23.19	114.16	-1,153.63	-708.05	1,491.38	1,458.03	33.35	44.719			
3,400.00	3,353.41	3,791.58	3,715.23	14.19	24.02	114.12	-1,156.08	-684.23	1,479.69	1,445.20	34.49	42.904			
3,500.00	3,451.57	3,872.98	3,793.95	14.66	24.75	114.10	-1,158.66	-663.66	1,469.33	1,433.77	35.56	41.316			
3,600.00	3,549.73	3,962.02	3,880.27	15.12	25.53	114.09	-1,161.43	-642.00	1,459.73	1,423.07	36.66	39.814			
3,700.00	3,647.89	4,045.00	3,960.89	15.58	26.23	114.10	-1,164.43	-622.61	1,451.19	1,413.47	37.72	38.472			
3,800.00	3,746.05	4,139.42	4,052.75	16.05	27.03	114.11	-1,168.23	-601.09	1,443.37	1,404.53	38.85	37.157			
3,900.00	3,844.21	4,240.49	4,150.97	16.51	27.90	114.09	-1,172.99	-577.74	1,435.73	1,395.69	40.04	35.860			
4,000.00	3,942.37	4,340.54	4,247.98	16.98	28.78	114.03	-1,178.16	-553.81	1,427.71	1,386.46	41.25	34.611			
4,100.00	4,040.53	4,424.86	4,330.01	17.44	29.49	114.01	-1,182.29	-534.78	1,420.58	1,378.25	42.33	33.560			
4,200.00	4,138.69	4,520.09	4,422.90	17.90	30.27	114.03	-1,186.79	-514.20	1,414.14	1,370.69	43.45	32.544			
4,300.00	4,236.85	4,635.94	4,535.86	18.37	31.22	114.06	-1,191.88	-489.04	1,407.44	1,362.75	44.70	31.488			
4,400.00	4,335.02	4,736.78	4,634.12	18.83	32.05	114.10	-1,195.20	-466.61	1,399.62	1,353.78	45.84	30.536			
4,500.00	4,433.18	4,819.13	4,714.63	19.30	32.69	114.18	-1,197.65	-449.50	1,392.75	1,345.92	46.83	29.741			
4,600.00	4,531.34	4,902.47	4,796.44	19.76	33.30	114.32	-1,199.48	-433.70	1,386.91	1,339.13	47.78	29.029			
4,700.00	4,629.50	4,994.57	4,887.06	20.23	33.95	114.51	-1,201.53	-417.43	1,382.11	1,333.37	48.74	28.356			
4,800.00	4,727.66	5,112.65	5,003.02	20.69	34.82	114.69	-1,204.95	-395.40	1,376.95	1,327.07	49.89	27.601			
4,900.00	4,825.82	5,214.11	5,102.17	21.16	35.62	114.76	-1,209.03	-374.27	1,370.72	1,319.72	51.00	26.875			
5,000.00	4,923.98	5,300.61	5,186.91	21.62	36.27	114.85	-1,212.20	-357.22	1,365.18	1,313.18	52.00	26.251			
5,100.00	5,022.14	5,403.55	5,288.03	22.09	37.03	115.01	-1,215.20	-338.16	1,360.17	1,307.11	53.06	25.636			
5,200.00	5,120.30	5,493.08	5,376.00	22.55	37.67	115.17	-1,217.72	-321.73	1,355.24	1,301.21	54.03	25.084			
5,300.00	5,218.46	5,597.08	5,478.23	23.02	38.42	115.34	-1,220.92	-302.92	1,350.68	1,295.61	55.07	24.525			
5,400.00	5,316.62	5,700.81	5,580.11	23.48	39.18	115.51	-1,224.08	-283.65	1,345.73	1,289.60	56.13	23.976			
5,500.00	5,414.78	5,798.40	5,675.98	23.95	39.89	115.68	-1,226.86	-265.62	1,340.74	1,283.60	57.14	23.465			
5,600.00	5,512.95	5,897.05	5,773.00	24.41	40.59	115.87	-1,229.25	-247.90	1,335.94	1,277.81	58.13	22.982			
5,700.00	5,611.11	5,994.11	5,868.47	24.88	41.27	116.08	-1,231.30	-230.54	1,331.04	1,271.95	59.10	22.523			
5,800.00	5,709.27	6,071.41	5,944.77	25.35	41.77	116.31	-1,232.38	-218.22	1,327.33	1,267.41	59.92	22.153			
5,900.00	5,807.43	6,158.03	6,030.42	25.81	42.32	116.55	-1,234.49	-205.47	1,325.22	1,264.46	60.76	21.810			
6,000.00	5,905.59	6,256.40	6,127.71	26.28	42.93	116.84	-1,236.76	-191.16	1,323.25	1,261.59	61.66	21.460			
6,100.00	6,003.75	6,369.84	6,239.85	26.74	43.66	117.15	-1,239.96	-174.30	1,321.38	1,258.71	62.67	21.085			
6,200.00	6,101.91	6,481.53	6,349.86	27.21	44.42	117.37	-1,243.73	-155.38	1,318.07	1,254.36	63.72	20.687			
6,300.00	6,200.07	6,576.63	6,443.60	27.67	45.07	117.60	-1,246.22	-139.53	1,314.61	1,249.96	64.65	20.335			
6,400.00	6,298.23	6,670.31	6,536.06	28.14	45.68	117.85	-1,248.36	-124.69	1,311.66	1,246.12	65.54	20.012			
6,500.00	6,396.39	6,765.34	6,629.96	28.61	46.29	118.12	-1,250.42	-110.18	1,309.15	1,242.73	66.43	19.709			
6,600.00	6,494.55	6,858.28	6,721.88	29.07	46.87	118.41	-1,252.22	-96.59	1,307.10	1,239.82	67.27	19.429			
6,700.00	6,592.71	6,939.00	6,801.86	29.54	47.35	118.70	-1,253.73	-85.80	1,306.09	1,238.07	68.03	19.200			
6,703.49	6,596.14	6,939.00	6,801.86	29.55	47.35	118.70	-1,253.73	-85.80	1,306.09	1,238.05	68.04	19.197 CC, ES			
6,772.64	6,664.02	6,991.51	6,854.04	29.88	47.63	118.91	-1,254.50	-79.95	1,306.56	1,238.07	68.49	19.076			
6,800.00	6,690.92	7,012.68	6,875.11	30.00	47.73	129.85	-1,254.71	-77.85	1,307.26	1,238.60	68.67	19.038			
6,850.00	6,740.19	7,051.48	6,913.74	30.21	47.91	153.03	-1,255.01	-74.38	1,310.33	1,241.34	68.98	18.995			
6,900.00	6,789.40	7,097.00	6,959.13	30.41	48.13	174.73	-1,255.23	-70.89	1,315.69	1,246.35	69.35	18.973 SF			
6,950.00	6,838.32	7,130.25	6,992.31	30.58	48.26	-169.23	-1,255.29	-68.70	1,323.24	1,253.60	69.64	19.002			
7,000.00	6,886.71	7,170.25	7,032.24	30.73	48.41	-158.34	-1,255.28	-66.41	1,332.94	1,262.96	69.98	19.047			
7,050.00	6,934.33	7,211.55	7,073.49	30.87	48.56	-150.82	-1,255.15	-64.44	1,344.73	1,274.39	70.34	19.118			
7,100.00	6,980.95	7,254.68	7,116.59	30.99	48.70	-145.38	-1,254.82	-62.69	1,358.45	1,287.75	70.71	19.213			
7,150.00	7,026.35	7,296.60	7,158.48	31.09	48.82	-141.22	-1,254.27	-61.28	1,374.06	1,302.99	71.07	19.333			
7,200.00	7,070.29	7,336.67	7,198.53	31.19	48.89	-137.85	-1,253.55	-60.23	1,391.55	1,320.14	71.41	19.488			
7,250.00	7,112.57	7,375.41	7,237.25	31.26	48.96	-134.99	-1,252.67	-59.48	1,410.89	1,339.14	71.75	19.664			
7,300.00	7,152.98	7,410.55	7,272.38	31.32	49.00	-132.40	-1,251.79	-59.02	1,432.08	1,360.02	72.07	19.871			
7,350.00	7,191.33	7,443.44	7,305.26	31.37	49.03	-129.97	-1,251.02	-58.72	1,455.13	1,382.74	72.39	20.102			
7,400.00	7,227.42	7,475.00	7,336.81	31.41	49.05	-127.62	-1,250.34	-58.56	1,479.97	1,407.26	72.72	20.353			

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 41-Geolink MWD													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)					
0.00	0.00	0.00	0.00	0.00	0.00	51.36	202.62	253.48	325.20	325.20	0.25	1,289.904			
100.00	100.00	76.77	76.77	0.14	0.11	51.42	202.58	253.97	324.88	324.62	0.78	416.964			
200.00	200.00	176.29	176.28	0.50	0.28	51.54	202.56	254.97	325.65	324.87	1.31	248.266			
300.00	300.00	277.38	277.37	0.85	0.46	51.69	202.31	256.11	326.38	325.07	1.87	173.819			
400.00	400.00	386.41	386.37	1.21	0.65	51.99	200.45	256.49	325.61	323.74	2.45	131.398			
500.00	500.00	494.60	494.39	1.57	0.86	52.81	194.39	256.21	321.98	319.53	3.05	103.310			
600.00	599.98	602.85	602.02	1.92	1.12	-64.10	183.00	256.59	315.23	312.18	3.69	82.553			
700.00	699.84	708.40	706.23	2.26	1.43	-62.57	166.37	257.49	304.48	300.80	4.31	67.735			
800.00	799.45	803.60	799.88	2.61	1.74	-61.26	149.35	259.32	292.06	287.75	5.00	55.908			
900.00	898.70	900.80	895.32	2.98	2.08	-60.07	131.31	262.99	279.33	274.33	5.76	46.009			
1,000.00	997.47	1,001.69	994.05	3.37	2.48	-59.00	111.11	267.64	264.97	259.21	6.18	41.546			
1,050.28	1,046.90	1,051.91	1,042.83	3.57	2.71	-58.31	99.48	270.46	256.78	250.59	6.61	37.592			
1,100.00	1,095.71	1,100.99	1,090.19	3.77	2.94	-57.24	87.03	273.75	248.44	241.83	7.47	31.231			
1,200.00	1,193.87	1,191.00	1,176.61	4.19	3.38	-54.63	63.11	281.50	233.14	225.67	8.39	26.334			
1,300.00	1,292.03	1,285.51	1,266.90	4.62	3.88	-51.11	37.48	292.55	221.06	212.67	9.30	22.898			
1,400.00	1,390.19	1,377.17	1,354.18	5.06	4.36	-47.19	12.94	306.05	212.92	203.62	10.18	20.550			
1,500.00	1,488.35	1,469.62	1,441.94	5.50	4.87	-42.97	-11.02	322.46	209.13	198.96	10.81	19.274	CC		
1,574.11	1,561.09	1,541.00	1,509.37	5.83	5.28	-39.48	-29.83	336.38	208.43	197.62	11.02	18.925	ES		
1,600.00	1,586.51	1,565.52	1,532.49	5.94	5.42	-38.26	-36.34	341.32	208.54	197.52	11.77	17.928			
1,700.00	1,684.67	1,660.05	1,621.64	6.39	5.97	-33.76	-60.61	361.29	211.00	199.23	12.44	17.432			
1,800.00	1,782.83	1,754.04	1,709.68	6.84	6.56	-29.24	-85.30	383.04	216.91	204.47	13.07	17.271			
1,900.00	1,880.99	1,852.10	1,800.59	7.29	7.21	-24.24	-113.27	406.88	225.71	212.64	13.56	17.358			
2,000.00	1,979.16	1,949.26	1,890.47	7.75	7.86	-19.29	-142.39	429.53	235.46	221.90	14.02	17.621			
2,100.00	2,077.32	2,048.50	1,982.84	8.20	8.49	-15.32	-169.45	453.69	247.12	233.09	14.44	17.967			
2,200.00	2,175.48	2,144.19	2,072.17	8.66	9.12	-12.03	-194.67	476.95	259.48	245.04	14.83	18.441			
2,300.00	2,273.64	2,242.46	2,163.62	9.12	9.75	-8.91	-221.01	501.40	273.39	258.57	15.23	18.880			
2,400.00	2,371.80	2,341.96	2,256.63	9.58	10.38	-6.39	-246.02	526.38	287.52	272.29	15.63	19.333			
2,500.00	2,469.96	2,441.95	2,350.01	10.04	11.03	-3.95	-271.83	551.12	302.12	286.50	16.07	19.587			
2,600.00	2,568.12	2,549.89	2,451.52	10.50	11.69	-1.35	-299.66	575.03	314.80	298.73	16.40	19.897			
2,700.00	2,666.28	2,647.43	2,543.63	10.96	12.28	0.99	-324.92	594.81	326.39	309.99	16.65	20.444			
2,800.00	2,764.44	2,734.19	2,624.97	11.42	12.87	2.99	-348.55	613.58	340.48	323.83	16.88	21.248			
2,900.00	2,862.60	2,822.69	2,706.57	11.88	13.51	5.23	-376.01	634.03	358.58	341.70	17.15	22.080			
3,000.00	2,960.76	2,916.46	2,792.51	12.34	14.20	7.38	-405.81	656.82	378.76	361.60	17.58	22.687			
3,100.00	3,058.92	3,022.36	2,889.86	12.80	14.95	9.46	-438.61	682.55	398.91	381.32	18.01	23.157			
3,200.00	3,157.09	3,127.31	2,987.24	13.27	15.65	11.41	-470.15	705.71	417.02	399.01	18.35	23.701			
3,300.00	3,255.25	3,221.43	3,074.74	13.73	16.30	13.05	-498.30	725.95	435.01	416.65	18.65	24.400			
3,400.00	3,353.41	3,309.14	3,155.59	14.19	16.94	14.65	-526.52	744.86	455.05	436.40	19.06	25.019			
3,500.00	3,451.57	3,408.45	3,246.52	14.66	17.65	16.45	-560.23	766.28	476.88	457.82	19.65	25.235			
3,600.00	3,549.73	3,525.24	3,355.00	15.12	18.42	18.18	-596.15	790.35	495.86	476.21	20.34	25.111			
3,700.00	3,647.89	3,656.64	3,479.20	15.58	19.16	19.75	-631.11	815.07	510.82	490.47	21.05	24.549			
3,800.00	3,746.05	3,812.10	3,630.06	16.05	19.80	21.68	-663.20	833.94	516.67	495.62	21.55	24.032			
3,900.00	3,844.21	3,908.10	3,724.29	16.51	20.16	22.83	-679.31	842.73	517.83	496.28	22.09	23.500			
4,000.00	3,942.37	4,013.90	3,828.19	16.98	20.54	23.90	-695.90	853.72	519.10	497.01	22.65	22.896			
4,100.00	4,040.53	4,120.28	3,933.03	17.44	20.89	24.69	-709.41	865.66	518.57	495.92	22.94	22.592			
4,153.62	4,093.17	4,170.47	3,982.50	17.69	21.06	25.03	-715.57	871.55	518.32	495.37	23.19	22.366			
4,200.00	4,138.69	4,209.24	4,020.62	17.90	21.22	25.30	-720.76	876.28	518.66	495.47	23.73	21.984			
4,300.00	4,236.85	4,295.67	4,105.27	18.37	21.57	25.95	-734.08	887.51	521.59	497.86	24.25	21.730			
4,400.00	4,335.02	4,380.12	4,187.57	18.83	21.96	26.59	-748.75	899.55	527.03	502.77	24.84	21.541			
4,500.00	4,433.18	4,476.96	4,281.32	19.30	22.41	27.34	-767.85	914.46	535.17	510.33	25.51	21.233			
4,600.00	4,531.34	4,589.58	4,390.79	19.76	22.90	28.03	-787.60	932.04	541.66	516.15	26.04	21.072			
4,700.00	4,629.50	4,669.01	4,467.94	20.23	23.29	28.59	-802.23	943.98	548.70	522.66	26.58	21.049			
4,800.00	4,727.66	4,751.58	4,547.37	20.69	23.73	29.20	-820.18	957.55	559.42	532.84					

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 41-Geolink MWD													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)					
4,900.00	4,825.82	4,830.04	4,622.15	21.16	24.20	29.69	-838.86	972.23	573.30	546.23	27.07	21.182			
5,000.00	4,923.98	4,913.14	4,700.44	21.62	24.73	30.21	-861.08	989.00	590.59	563.02	27.58	21.417			
5,100.00	5,022.14	5,021.18	4,802.00	22.09	25.39	31.10	-892.10	1,008.89	608.91	580.57	28.34	21.483			
5,200.00	5,120.30	5,120.33	4,895.77	22.55	25.98	32.05	-920.10	1,024.79	625.66	596.60	29.06	21.533			
5,300.00	5,218.46	5,230.70	5,000.54	23.02	26.61	33.09	-950.52	1,041.46	641.47	611.58	29.89	21.462			
5,400.00	5,316.62	5,323.59	5,088.90	23.48	27.15	33.80	-974.95	1,056.48	656.81	626.24	30.57	21.488			
5,500.00	5,414.78	5,427.22	5,186.95	23.95	27.75	34.47	-1,003.07	1,074.73	673.74	642.41	31.33	21.507			
5,600.00	5,512.95	5,549.36	5,303.94	24.41	28.39	35.26	-1,032.42	1,093.98	686.83	654.60	32.23	21.311			
5,700.00	5,611.11	5,679.21	5,429.46	24.88	28.98	36.15	-1,060.47	1,111.73	697.01	663.86	33.16	21.021			
5,800.00	5,709.27	5,791.77	5,539.35	25.35	29.44	37.01	-1,081.45	1,124.08	703.26	669.26	34.00	20.685			
5,900.00	5,807.43	5,895.63	5,640.90	25.81	29.84	37.94	-1,101.05	1,133.59	709.21	674.38	34.83	20.363			
6,000.00	5,905.59	6,002.78	5,745.91	26.28	30.23	38.18	-1,121.50	1,139.45	714.11	678.37	35.74	19.983			
6,100.00	6,003.75	6,084.81	5,826.08	26.74	30.55	40.23	-1,138.51	1,142.79	720.35	683.78	36.57	19.700			
6,200.00	6,101.91	6,224.38	5,963.20	27.21	31.00	41.88	-1,163.66	1,148.82	724.23	686.52	37.71	19.205			
6,300.00	6,200.07	6,366.51	6,104.01	27.67	31.35	43.11	-1,180.60	1,157.71	723.44	684.78	38.67	18.710			
6,400.00	6,298.23	6,469.59	6,206.58	28.14	31.59	44.05	-1,189.66	1,162.61	719.37	679.79	39.58	18.176			
6,500.00	6,396.39	6,560.98	6,297.41	28.61	31.82	44.74	-1,197.55	1,168.83	715.95	675.48	40.47	17.693			
6,600.00	6,494.55	6,682.89	6,418.47	29.07	32.10	45.51	-1,207.44	1,179.14	712.80	671.49	41.31	17.253			
6,700.00	6,592.71	6,787.93	6,523.02	29.54	32.31	46.11	-1,212.63	1,187.87	706.45	664.29	42.16	16.758			
6,772.64	6,664.02	6,852.88	6,587.68	29.88	32.45	46.54	-1,216.23	1,192.82	702.17	659.37	42.80	16.406			
6,800.00	6,690.92	6,878.99	6,613.67	30.00	32.50	47.57	-1,217.91	1,194.59	701.26	658.21	43.05	16.289			
6,810.84	6,701.59	6,889.97	6,624.60	30.05	32.53	47.39	-1,218.63	1,195.31	701.18	658.03	43.15	16.249			
6,850.00	6,740.19	6,929.57	6,664.04	30.21	32.61	48.90	-1,221.22	1,197.79	702.21	658.68	43.54	16.130			
6,900.00	6,789.40	6,983.11	6,717.38	30.41	32.71	102.76	-1,224.66	1,200.84	706.47	662.42	44.05	16.039			
6,950.00	6,838.32	7,038.99	6,773.10	30.58	32.81	118.94	-1,227.84	1,203.61	713.72	669.15	44.58	16.011 SF			
7,000.00	6,886.71	7,091.31	6,825.31	30.73	32.89	129.89	-1,230.45	1,205.97	724.03	678.91	45.12	16.046			
7,050.00	6,934.33	7,142.26	6,876.16	30.87	32.97	137.40	-1,232.73	1,208.16	737.48	691.81	45.67	16.147			
7,100.00	6,980.95	7,191.09	6,924.91	30.99	33.05	142.74	-1,234.73	1,210.16	754.11	707.89	46.22	16.316			
7,150.00	7,026.35	7,238.33	6,972.07	31.09	33.12	146.71	-1,236.53	1,211.99	773.89	727.13	46.76	16.550			
7,200.00	7,070.29	7,283.76	7,017.45	31.19	33.18	149.75	-1,238.14	1,213.67	796.76	749.48	47.28	16.851			
7,250.00	7,112.57	7,327.04	7,060.68	31.26	33.24	152.13	-1,239.57	1,215.21	822.64	774.86	47.78	17.216			
7,300.00	7,152.98	7,368.07	7,101.66	31.32	33.30	154.02	-1,240.88	1,216.58	851.44	803.18	48.26	17.643			
7,350.00	7,191.33	7,407.42	7,140.97	31.37	33.35	155.54	-1,242.08	1,217.81	883.03	834.32	48.70	18.130			
7,400.00	7,227.42	7,445.00	7,178.53	31.41	33.39	156.75	-1,243.14	1,218.91	917.21	868.09	49.11	18.675			
7,450.00	7,261.09	7,479.98	7,213.48	31.44	33.44	157.69	-1,244.04	1,219.87	953.82	904.33	49.49	19.273			
7,500.00	7,292.16	7,511.33	7,244.81	31.45	33.47	158.34	-1,244.81	1,220.70	992.71	942.88	49.83	19.921			
7,550.00	7,320.49	7,539.85	7,273.31	31.45	33.51	158.73	-1,245.48	1,221.43	1,033.71	983.58	50.14	20.618			
7,600.00	7,345.94	7,565.35	7,298.79	31.44	33.54	158.81	-1,246.05	1,222.07	1,076.61	1,026.20	50.40	21.360			
7,650.00	7,368.38	7,586.91	7,320.35	31.43	33.56	158.51	-1,246.52	1,222.58	1,121.20	1,070.56	50.64	22.142			
7,700.00	7,387.71	7,605.30	7,338.73	31.40	33.58	157.71	-1,246.93	1,223.00	1,167.27	1,116.43	50.84	22.961			
7,750.00	7,403.82	7,620.43	7,353.84	31.37	33.60	156.13	-1,247.27	1,223.33	1,214.59	1,163.58	51.01	23.812			
7,800.00	7,416.65	7,632.22	7,365.63	31.34	33.62	153.16	-1,247.53	1,223.58	1,262.91	1,211.76	51.15	24.691			
7,850.00	7,426.13	7,640.63	7,374.03	31.30	33.63	147.12	-1,247.72	1,223.75	1,311.99	1,260.73	51.26	25.593			
7,900.00	7,432.22	7,645.61	7,379.01	31.25	33.63	132.10	-1,247.83	1,223.85	1,361.59	1,310.23	51.35	26.514			
7,950.00	7,434.87	7,647.15	7,380.55	31.21	33.63	85.07	-1,247.86	1,223.88	1,411.46	1,360.03	51.42	27.448			
7,963.63	7,435.00	7,646.97	7,380.37	31.20	33.63	65.90	-1,247.86	1,223.88	1,425.06	1,373.63	51.44	27.704			
8,000.00	7,435.00	7,646.14	7,379.55	31.17	33.63	65.38	-1,247.84	1,223.86	1,461.37	1,409.90	51.48	28.389			

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 4T-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 4T-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												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	83.14	152.04	1,263.51	1,273.53						
100.00	100.00	52.00	52.00	0.14	0.09	83.14	152.04	1,263.51	1,272.62	1,272.39	0.23	5,499.374			
200.00	200.00	152.00	152.00	0.50	0.27	83.14	152.04	1,263.51	1,272.62	1,271.85	0.77	1,654.657			
300.00	300.00	252.00	252.00	0.85	0.45	83.14	152.04	1,263.51	1,272.62	1,271.32	1.31	973.832			
400.00	400.00	352.00	352.00	1.21	0.63	83.14	152.04	1,263.51	1,272.62	1,270.78	1.84	689.947			
500.00	500.00	452.00	452.00	1.57	0.81	83.14	152.04	1,263.51	1,272.62	1,270.24	2.38	534.216			
600.00	599.98	551.98	551.98	1.92	0.99	-35.10	152.04	1,263.51	1,271.19	1,268.29	2.91	437.154			
700.00	699.84	651.84	651.84	2.26	1.17	-35.28	152.04	1,263.51	1,266.91	1,263.49	3.43	369.428			
800.00	799.45	751.45	751.45	2.61	1.35	-35.59	152.04	1,263.51	1,259.80	1,255.85	3.96	318.237			
900.00	898.70	850.70	850.70	2.98	1.52	-36.04	152.04	1,263.51	1,249.90	1,245.40	4.50	278.029			
1,000.00	997.47	949.47	949.47	3.37	1.70	-36.61	152.04	1,263.51	1,237.24	1,232.20	5.04	245.432			
1,050.28	1,046.90	998.90	998.90	3.57	1.79	-36.96	152.04	1,263.51	1,229.85	1,224.53	5.32	231.142			
1,100.00	1,095.71	1,047.71	1,047.71	3.77	1.88	-37.22	152.04	1,263.51	1,222.23	1,216.64	5.60	218.382			
1,200.00	1,193.87	1,145.87	1,145.87	4.19	2.05	-37.77	152.04	1,263.51	1,206.98	1,200.83	6.16	196.092			
1,300.00	1,292.03	1,244.03	1,244.03	4.62	2.23	-38.32	152.04	1,263.51	1,191.84	1,185.12	6.72	177.333			
1,400.00	1,390.19	1,342.19	1,342.19	5.06	2.41	-38.90	152.04	1,263.51	1,176.82	1,169.52	7.29	161.369			
1,500.00	1,488.35	1,440.35	1,440.35	5.50	2.58	-39.48	152.04	1,263.51	1,161.91	1,154.04	7.87	147.643			
1,600.00	1,586.51	1,538.51	1,538.51	5.94	2.76	-40.08	152.04	1,263.51	1,147.13	1,138.68	8.45	135.734			
1,700.00	1,684.67	1,636.67	1,636.67	6.39	2.93	-40.70	152.04	1,263.51	1,132.48	1,123.44	9.04	125.315			
1,800.00	1,782.83	1,734.83	1,734.83	6.84	3.11	-41.33	152.04	1,263.51	1,117.96	1,108.33	9.63	116.132			
1,900.00	1,880.99	1,832.99	1,832.99	7.29	3.29	-41.98	152.04	1,263.51	1,103.58	1,093.36	10.22	107.985			
2,000.00	1,979.16	1,931.16	1,931.16	7.75	3.46	-42.65	152.04	1,263.51	1,089.34	1,078.53	10.82	100.712			
2,100.00	2,077.32	2,029.32	2,029.32	8.20	3.64	-43.33	152.04	1,263.51	1,075.26	1,063.84	11.42	94.186			
2,200.00	2,175.48	2,127.48	2,127.48	8.66	3.81	-44.03	152.04	1,263.51	1,061.33	1,049.31	12.02	88.300			
2,300.00	2,273.64	2,225.64	2,225.64	9.12	3.99	-44.75	152.04	1,263.51	1,047.57	1,034.94	12.63	82.969			
2,400.00	2,371.80	2,323.80	2,323.80	9.58	4.17	-45.49	152.04	1,263.51	1,033.97	1,020.74	13.24	78.120			
2,500.00	2,469.96	2,421.96	2,421.96	10.04	4.34	-46.25	152.04	1,263.51	1,020.55	1,006.70	13.85	73.694			
2,600.00	2,568.12	2,520.12	2,520.12	10.50	4.52	-47.02	152.04	1,263.51	1,007.32	992.85	14.46	69.640			
2,700.00	2,666.28	2,618.28	2,618.28	10.96	4.69	-47.82	152.04	1,263.51	994.27	979.19	15.08	65.917			
2,800.00	2,764.44	2,716.44	2,716.44	11.42	4.87	-48.64	152.04	1,263.51	981.42	965.72	15.71	62.486			
2,900.00	2,862.60	2,814.60	2,814.60	11.88	5.04	-49.48	152.04	1,263.51	968.78	952.45	16.33	59.318			
3,000.00	2,960.76	2,912.76	2,912.76	12.34	5.22	-50.34	152.04	1,263.51	956.35	939.39	16.96	56.386			
3,100.00	3,058.92	3,010.92	3,010.92	12.80	5.40	-51.22	152.04	1,263.51	944.15	926.55	17.59	53.666			
3,200.00	3,157.09	3,109.09	3,109.09	13.27	5.57	-52.12	152.04	1,263.51	932.17	913.94	18.23	51.139			
3,300.00	3,255.25	3,207.25	3,207.25	13.73	5.75	-53.05	152.04	1,263.51	920.44	901.57	18.87	48.786			
3,400.00	3,353.41	3,305.41	3,305.41	14.19	5.92	-54.00	152.04	1,263.51	908.95	889.44	19.51	46.592			
3,500.00	3,451.57	3,403.57	3,403.57	14.66	6.10	-54.97	152.04	1,263.51	897.72	877.57	20.15	44.544			
3,600.00	3,549.73	3,501.73	3,501.73	15.12	6.28	-55.97	152.04	1,263.51	886.77	865.97	20.80	42.629			
3,700.00	3,647.89	3,599.89	3,599.89	15.58	6.45	-56.99	152.04	1,263.51	876.09	854.64	21.45	40.838			
3,800.00	3,746.05	3,698.05	3,698.05	16.05	6.63	-58.04	152.04	1,263.51	865.70	843.59	22.11	39.159			
3,900.00	3,844.21	3,796.21	3,796.21	16.51	6.80	-59.11	152.04	1,263.51	855.61	832.85	22.76	37.586			
4,000.00	3,942.37	3,894.37	3,894.37	16.98	6.98	-60.20	152.04	1,263.51	845.83	822.41	23.42	36.109			
4,100.00	4,040.53	3,992.53	3,992.53	17.44	7.16	-61.32	152.04	1,263.51	836.38	812.29	24.09	34.723			
4,200.00	4,138.69	4,090.69	4,090.69	17.90	7.33	-62.47	152.04	1,263.51	827.25	802.50	24.75	33.422			
4,300.00	4,236.85	4,188.85	4,188.85	18.37	7.51	-63.63	152.04	1,263.51	818.47	793.05	25.42	32.199			
4,400.00	4,335.02	4,287.02	4,287.02	18.83	7.68	-64.83	152.04	1,263.51	810.05	783.96	26.09	31.050			
4,500.00	4,433.18	4,385.18	4,385.18	19.30	7.86	-66.04	152.04	1,263.51	801.99	775.23	26.76	29.970			
4,600.00	4,531.34	4,483.34	4,483.34	19.76	8.04	-67.28	152.04	1,263.51	794.30	766.87	27.43	28.956			
4,700.00	4,629.50	4,581.50	4,581.50	20.23	8.21	-68.54	152.04	1,263.51	787.01	758.90	28.11	28.002			
4,800.00	4,727.66	4,679.66	4,679.66	20.69	8.39	-69.83	152.04	1,263.51	780.11	751.33	28.78	27.106			
4,900.00	4,825.82	4,777.82	4,777.82	21.16	8.56	-71.13	152.04	1,263.51	773.63	744.17	29.45	26.265			
5,000.00	4,923.98	4,875.98	4,875.98	21.62	8.74	-72.46	152.04	1,263.51	767.56	737.43	30.13	25.476			

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 4T-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 4T-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													Offset Site Error:	0.00 usft
Survey Program: 5034-MWD+HDGM													Offset Well Error:	0.00 usft
Reference				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	5,022.14	4,974.14	4,974.14	22.09	8.92	-73.80	152.04	1,263.51	761.93	731.12	30.80	24.735		
5,200.00	5,120.30	5,034.00	5,034.00	22.55	9.02	-74.63	152.04	1,263.51	757.70	726.29	31.41	24.125		
5,200.03	5,120.33	5,034.00	5,034.00	22.55	9.02	-74.63	152.04	1,263.51	757.70	726.29	31.41	24.124	CC, ES, SF	
5,300.00	5,218.46	5,034.00	5,034.00	23.02	9.02	-74.63	152.04	1,263.51	764.26	732.73	31.54	24.233		
5,400.00	5,316.62	5,034.00	5,034.00	23.48	9.02	-74.63	152.04	1,263.51	783.64	752.47	31.17	25.143		
5,500.00	5,414.78	5,034.00	5,034.00	23.95	9.02	-74.63	152.04	1,263.51	814.92	784.53	30.38	26.821		
5,600.00	5,512.95	5,034.00	5,034.00	24.41	9.02	-74.63	152.04	1,263.51	856.79	827.48	29.31	29.233		
5,700.00	5,611.11	5,034.00	5,034.00	24.88	9.02	-74.63	152.04	1,263.51	907.79	879.72	28.07	32.344		
5,800.00	5,709.27	5,034.00	5,034.00	25.35	9.02	-74.63	152.04	1,263.51	966.47	939.71	26.76	36.116		
5,900.00	5,807.43	5,034.00	5,034.00	25.81	9.02	-74.63	152.04	1,263.51	1,031.53	1,006.07	25.46	40.515		
6,000.00	5,905.59	5,034.00	5,034.00	26.28	9.02	-74.63	152.04	1,263.51	1,101.84	1,077.63	24.22	45.500		
6,100.00	6,003.75	5,034.00	5,034.00	26.74	9.02	-74.63	152.04	1,263.51	1,176.46	1,153.40	23.05	51.036		
6,200.00	6,101.91	5,034.00	5,034.00	27.21	9.02	-74.63	152.04	1,263.51	1,254.61	1,232.63	21.98	57.082		
6,300.00	6,200.07	5,034.00	5,034.00	27.67	9.02	-74.63	152.04	1,263.51	1,335.68	1,314.68	21.00	63.600		
6,400.00	6,298.23	5,034.00	5,034.00	28.14	9.02	-74.63	152.04	1,263.51	1,419.16	1,399.05	20.12	70.550		

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.75	0.83	-189.98	189.98										
100.00	100.00	100.00	100.00	0.14	0.14	-89.75	0.83	-189.98	189.98	189.70	0.28	688.264							
200.00	200.00	200.00	200.00	0.50	0.50	-89.75	0.83	-189.98	189.98	188.98	0.99	191.323 CC, ES							
300.00	300.00	296.58	296.56	0.85	0.84	-89.33	2.22	-190.83	190.87	189.17	1.71	111.728							
400.00	400.00	392.93	392.79	1.21	1.19	-88.12	6.36	-193.39	193.62	191.19	2.43	79.543							
500.00	500.00	488.85	488.36	1.57	1.55	-86.17	13.22	-197.62	198.40	195.23	3.17	62.626							
600.00	599.98	584.44	583.29	1.92	1.90	158.31	22.73	-203.49	207.05	203.15	3.90	53.126							
700.00	699.84	682.87	680.89	2.26	2.28	161.35	33.59	-210.18	220.27	215.67	4.60	47.835							
800.00	799.45	780.67	777.87	2.61	2.66	164.25	44.37	-216.84	237.39	232.08	5.31	44.673							
900.00	898.70	877.72	874.10	2.98	3.05	166.91	55.07	-223.44	258.40	252.38	6.02	42.897							
1,000.00	997.47	973.90	969.46	3.37	3.43	169.30	65.68	-229.98	283.25	276.52	6.73	42.081							
1,050.28	1,046.90	1,021.89	1,017.06	3.57	3.62	170.38	70.97	-233.25	297.16	290.07	7.09	41.919							
1,100.00	1,095.71	1,069.22	1,063.99	3.77	3.80	171.42	76.19	-236.47	311.43	304.00	7.44	41.884							
1,200.00	1,193.87	1,164.42	1,158.38	4.19	4.18	173.25	86.68	-242.94	340.38	332.26	8.13	41.876 SF							
1,300.00	1,292.03	1,259.61	1,252.77	4.62	4.56	174.79	97.18	-249.42	369.61	360.78	8.82	41.885							
1,400.00	1,390.19	1,354.81	1,347.16	5.06	4.94	176.10	107.68	-255.90	399.04	389.52	9.52	41.903							
1,500.00	1,488.35	1,450.00	1,441.55	5.50	5.32	177.24	118.17	-262.37	428.64	418.42	10.22	41.925							
1,600.00	1,586.51	1,545.19	1,535.95	5.94	5.70	178.23	128.67	-268.85	458.38	447.45	10.93	41.949							
1,700.00	1,684.67	1,640.39	1,630.34	6.39	6.08	179.10	139.17	-275.33	488.22	476.59	11.63	41.973							
1,800.00	1,782.83	1,735.58	1,724.73	6.84	6.47	179.87	149.66	-281.80	518.16	505.82	12.34	41.996							
1,900.00	1,880.99	1,830.78	1,819.12	7.29	6.85	-179.44	160.16	-288.28	548.17	535.13	13.05	42.018							
2,000.00	1,979.16	1,925.97	1,913.52	7.75	7.23	-178.83	170.66	-294.76	578.25	564.50	13.76	42.039							
2,100.00	2,077.32	2,021.17	2,007.91	8.20	7.61	-178.28	181.15	-301.23	608.38	593.92	14.47	42.058							
2,200.00	2,175.48	2,116.36	2,102.30	8.66	7.99	-177.77	191.65	-307.71	638.56	623.39	15.18	42.076							
2,300.00	2,273.64	2,211.56	2,196.69	9.12	8.37	-177.32	202.15	-314.18	668.78	652.89	15.89	42.092							
2,400.00	2,371.80	2,306.75	2,291.08	9.58	8.75	-176.90	212.64	-320.66	699.04	682.44	16.60	42.108							
2,500.00	2,469.96	2,401.95	2,385.48	10.04	9.14	-176.52	223.14	-327.14	729.32	712.01	17.31	42.122							
2,600.00	2,568.12	2,497.14	2,479.87	10.50	9.52	-176.16	233.64	-333.61	759.64	741.61	18.03	42.135							
2,700.00	2,666.28	2,592.33	2,574.26	10.96	9.90	-175.84	244.13	-340.09	789.98	771.23	18.74	42.146							
2,800.00	2,764.44	2,687.53	2,668.65	11.42	10.28	-175.54	254.63	-346.57	820.33	800.88	19.46	42.157							
2,900.00	2,862.60	2,782.72	2,763.05	11.88	10.66	-175.26	265.13	-353.04	850.71	830.54	20.17	42.168							
3,000.00	2,960.76	2,877.92	2,857.44	12.34	11.05	-175.00	275.62	-359.52	881.11	860.22	20.89	42.177							
3,100.00	3,058.92	2,973.11	2,951.83	12.80	11.43	-174.75	286.12	-366.00	911.52	889.91	21.61	42.186							
3,200.00	3,157.09	3,068.31	3,046.22	13.27	11.81	-174.53	296.62	-372.47	941.94	919.62	22.32	42.194							
3,300.00	3,255.25	3,163.50	3,140.61	13.73	12.19	-174.31	307.11	-378.95	972.38	949.34	23.04	42.201							
3,400.00	3,353.41	3,258.70	3,235.01	14.19	12.57	-174.11	317.61	-385.43	1,002.83	979.07	23.76	42.208							
3,500.00	3,451.57	3,353.89	3,329.40	14.66	12.96	-173.92	328.11	-391.90	1,033.29	1,008.81	24.48	42.215							
3,600.00	3,549.73	3,449.09	3,423.79	15.12	13.34	-173.75	338.60	-398.38	1,063.76	1,038.56	25.20	42.221							
3,700.00	3,647.89	3,544.28	3,518.18	15.58	13.72	-173.58	349.10	-404.86	1,094.24	1,068.32	25.91	42.227							
3,800.00	3,746.05	3,639.48	3,612.58	16.05	14.10	-173.42	359.60	-411.33	1,124.72	1,098.09	26.63	42.232							
3,900.00	3,844.21	3,734.67	3,706.97	16.51	14.48	-173.27	370.09	-417.81	1,155.22	1,127.87	27.35	42.237							
4,000.00	3,942.37	3,829.86	3,801.36	16.98	14.87	-173.13	380.59	-424.28	1,185.72	1,157.65	28.07	42.241							
4,100.00	4,040.53	3,925.06	3,895.75	17.44	15.25	-172.99	391.09	-430.76	1,216.22	1,187.44	28.79	42.246							
4,200.00	4,138.69	4,020.25	3,990.14	17.90	15.63	-172.86	401.58	-437.24	1,246.74	1,217.23	29.51	42.250							
4,300.00	4,236.85	4,115.45	4,084.54	18.37	16.01	-172.74	412.08	-443.71	1,277.26	1,247.03	30.23	42.254							
4,400.00	4,335.02	4,210.64	4,178.93	18.83	16.40	-172.62	422.58	-450.19	1,307.78	1,276.83	30.95	42.257							
4,500.00	4,433.18	4,305.84	4,273.32	19.30	16.78	-172.51	433.07	-456.67	1,338.31	1,306.64	31.67	42.260							
4,600.00	4,531.34	4,401.03	4,367.71	19.76	17.16	-172.40	443.57	-463.14	1,368.84	1,336.45	32.39	42.263							
4,700.00	4,629.50	4,496.23	4,462.10	20.23	17.54	-172.30	454.07	-469.62	1,399.38	1,366.27	33.11	42.266							
4,800.00	4,727.66	4,591.42	4,556.50	20.69	17.93	-172.20	464.56	-476.10	1,429.92	1,396.09	33.83	42.269							
4,900.00	4,825.82	4,686.62	4,650.89	21.16	18.31	-172.11	475.06	-482.57	1,460.46	1,425.91	34.55	42.272							
5,000.00	4,923.98	4,781.81	4,745.28	21.62	18.69	-172.02	485.56	-489.05	1,491.01	1,455.74	35.27	42.274							

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 4T-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 4T-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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.74	0.82	-180.18	180.18	179.91	0.28	652.787							
100.00	100.00	100.00	100.00	0.14	0.14	-89.74	0.82	-180.18	180.18	179.19	0.99	181.461							
200.00	200.00	200.00	200.00	0.50	0.50	-89.74	0.82	-180.18	180.18	178.47	1.71	105.377 CC							
300.00	300.00	300.00	300.00	0.85	0.85	-89.74	0.82	-180.18	180.18	178.12	2.42	74.518 ES							
400.00	400.00	398.70	398.68	1.21	1.21	-89.21	2.48	-180.52	180.54	178.57	3.14	57.908							
500.00	500.00	497.16	497.01	1.57	1.57	-87.65	7.46	-181.53	181.71	178.57	3.14	57.908							
600.00	599.98	595.03	594.51	1.92	1.93	156.90	15.69	-183.20	185.56	181.71	3.85	48.224							
700.00	699.84	693.56	692.45	2.26	2.29	160.49	26.21	-185.34	193.89	189.33	4.56	42.515							
800.00	799.45	791.96	790.26	2.61	2.65	164.05	36.78	-187.48	206.31	201.04	5.28	39.078							
900.00	898.70	889.76	887.47	2.98	3.03	167.38	47.28	-189.62	222.84	216.84	6.00	37.139							
1,000.00	997.47	986.84	983.96	3.37	3.40	170.37	57.70	-191.73	243.42	236.70	6.72	36.223							
1,050.28	1,046.90	1,035.34	1,032.17	3.57	3.58	171.74	62.91	-192.79	255.26	248.18	7.08	36.034							
1,100.00	1,095.71	1,083.18	1,079.73	3.77	3.76	173.01	68.05	-193.83	267.52	260.09	7.44	35.969							
1,200.00	1,193.87	1,179.42	1,175.38	4.19	4.13	175.26	78.38	-195.93	292.52	284.38	8.14	35.916							
1,300.00	1,292.03	1,275.65	1,271.04	4.62	4.50	177.15	88.72	-198.03	317.88	309.03	8.85	35.903							
1,400.00	1,390.19	1,371.89	1,366.69	5.06	4.87	178.76	99.05	-200.13	343.52	333.95	9.57	35.913							
1,500.00	1,488.35	1,468.12	1,462.35	5.50	5.24	-179.85	109.39	-202.23	369.38	359.10	10.28	35.936							
1,600.00	1,586.51	1,564.36	1,558.00	5.94	5.61	-178.64	119.72	-204.33	395.41	384.42	10.99	35.967							
1,700.00	1,684.67	1,660.59	1,653.66	6.39	5.99	-177.58	130.06	-206.43	421.59	409.88	11.71	36.002							
1,800.00	1,782.83	1,756.83	1,749.32	6.84	6.36	-176.64	140.39	-208.52	447.89	435.46	12.43	36.038							
1,900.00	1,880.99	1,853.06	1,844.97	7.29	6.73	-175.81	150.73	-210.62	474.29	461.14	13.15	36.074							
2,000.00	1,979.16	1,949.30	1,940.63	7.75	7.10	-175.06	161.06	-212.72	500.77	486.91	13.87	36.109							
2,100.00	2,077.32	2,045.53	2,036.28	8.20	7.47	-174.39	171.40	-214.82	527.33	512.74	14.59	36.144							
2,200.00	2,175.48	2,141.76	2,131.94	8.66	7.84	-173.79	181.73	-216.92	553.94	538.63	15.31	36.176							
2,300.00	2,273.64	2,238.00	2,227.59	9.12	8.22	-173.24	192.07	-219.02	580.61	564.58	16.04	36.207							
2,400.00	2,371.80	2,334.23	2,323.25	9.58	8.59	-172.73	202.40	-221.12	607.32	590.56	16.76	36.237							
2,500.00	2,469.96	2,430.47	2,418.90	10.04	8.96	-172.27	212.74	-223.21	634.08	616.59	17.48	36.265							
2,600.00	2,568.12	2,526.70	2,514.56	10.50	9.33	-171.85	223.07	-225.31	660.87	642.66	18.21	36.291							
2,700.00	2,666.28	2,622.94	2,610.21	10.96	9.71	-171.46	233.40	-227.41	687.68	668.75	18.94	36.316							
2,800.00	2,764.44	2,719.17	2,705.87	11.42	10.08	-171.10	243.74	-229.51	714.53	694.87	19.66	36.340							
2,900.00	2,862.60	2,815.41	2,801.52	11.88	10.45	-170.76	254.07	-231.61	741.40	721.01	20.39	36.362							
3,000.00	2,960.76	2,911.64	2,897.18	12.34	10.82	-170.45	264.41	-233.71	768.30	747.18	21.12	36.383							
3,100.00	3,058.92	3,007.88	2,992.83	12.80	11.20	-170.16	274.74	-235.80	795.21	773.36	21.85	36.402							
3,200.00	3,157.09	3,104.11	3,088.49	13.27	11.57	-169.89	285.08	-237.90	822.14	799.57	22.57	36.421							
3,300.00	3,255.25	3,200.35	3,184.14	13.73	11.94	-169.64	295.41	-240.00	849.09	825.78	23.30	36.438							
3,400.00	3,353.41	3,296.58	3,279.80	14.19	12.32	-169.40	305.75	-242.10	876.05	852.02	24.03	36.455							
3,500.00	3,451.57	3,392.82	3,375.45	14.66	12.69	-169.17	316.08	-244.20	903.02	878.26	24.76	36.471							
3,600.00	3,549.73	3,489.05	3,471.11	15.12	13.06	-168.96	326.42	-246.30	930.01	904.52	25.49	36.486							
3,700.00	3,647.89	3,585.29	3,566.76	15.58	13.43	-168.76	336.75	-248.40	957.00	930.79	26.22	36.500							
3,800.00	3,746.05	3,681.52	3,662.42	16.05	13.81	-168.57	347.09	-250.49	984.01	957.06	26.95	36.513							
3,900.00	3,844.21	3,777.75	3,758.07	16.51	14.18	-168.40	357.42	-252.59	1,011.03	983.35	27.68	36.526							
4,000.00	3,942.37	3,873.99	3,853.73	16.98	14.55	-168.23	367.75	-254.69	1,038.05	1,009.64	28.41	36.538							
4,100.00	4,040.53	3,970.22	3,949.38	17.44	14.93	-168.07	378.09	-256.79	1,065.09	1,035.95	29.14	36.550							
4,200.00	4,138.69	4,066.46	4,045.04	17.90	15.30	-167.91	388.42	-258.89	1,092.13	1,062.26	29.87	36.561							
4,300.00	4,236.85	4,162.69	4,140.69	18.37	15.67	-167.77	398.76	-260.99	1,119.18	1,088.57	30.60	36.571							
4,400.00	4,335.02	4,258.93	4,236.35	18.83	16.04	-167.63	409.09	-263.09	1,146.23	1,114.90	31.33	36.582							
4,500.00	4,433.18	4,355.16	4,332.00	19.30	16.42	-167.50	419.43	-265.18	1,173.29	1,141.23	32.06	36.591							
4,600.00	4,531.34	4,451.40	4,427.66	19.76	16.79	-167.37	429.76	-267.28	1,200.36	1,167.56	32.80	36.600							
4,700.00	4,629.50	4,547.63	4,523.32	20.23	17.16	-167.25	440.10	-269.38	1,227.43	1,193.90	33.53	36.609							
4,800.00	4,727.66	4,643.87	4,618.97	20.69	17.54	-167.14	450.43	-271.48	1,254.50	1,220.24	34.26	36.617							
4,900.00	4,825.82	4,740.10	4,714.63	21.16	17.91	-167.02	460.77	-273.58	1,281.58	1,246.59	34.99	36.625							
5,000.00	4,923.98	4,836.34	4,810.28	21.62	18.28	-166.92	471.10	-275.68	1,308.67	1,272.94	35.72	36.633							

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error:		0.00 usft
Reference: S32-T2N-R68W - HWY52 4B-32H-O268 - OH - PLAN #2															
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	5,022.14	4,932.57	4,905.94	22.09	18.66	-166.82	481.44	-277.78	1,335.76	1,299.30	36.46	36.640			
5,200.00	5,120.30	5,028.81	5,001.59	22.55	19.03	-166.72	491.77	-279.87	1,362.85	1,325.66	37.19	36.647			
5,300.00	5,218.46	5,125.04	5,097.25	23.02	19.40	-166.63	502.11	-281.97	1,389.94	1,352.02	37.92	36.654			
5,400.00	5,316.62	5,221.28	5,192.90	23.48	19.78	-166.54	512.44	-284.07	1,417.04	1,378.39	38.65	36.661			
5,500.00	5,414.78	5,317.51	5,288.56	23.95	20.15	-166.45	522.77	-286.17	1,444.15	1,404.76	39.39	36.667			
5,600.00	5,512.95	5,413.75	5,384.21	24.41	20.52	-166.37	533.11	-288.27	1,471.25	1,431.13	40.12	36.673			
5,700.00	5,611.11	5,509.98	5,479.87	24.88	20.89	-166.28	543.44	-290.37	1,498.36	1,457.51	40.85	36.678			
7,900.00	7,432.22	7,888.74	7,643.81	31.25	28.04	-97.74	223.76	-347.50	1,499.92	1,443.27	56.65	26.477			
7,950.00	7,434.87	7,819.16	7,617.42	31.21	27.94	-96.94	288.08	-345.75	1,495.43	1,438.66	56.77	26.344			
7,963.63	7,435.00	7,800.90	7,609.47	31.20	27.91	-96.74	304.51	-345.28	1,494.10	1,437.30	56.80	26.304			
8,000.00	7,435.00	7,754.23	7,587.26	31.17	27.86	-95.89	345.54	-344.03	1,490.45	1,433.55	56.90	26.192			
8,100.00	7,435.00	7,642.71	7,523.77	31.10	27.75	-93.45	437.04	-340.92	1,480.36	1,423.13	57.23	25.867			
8,200.00	7,435.00	7,553.69	7,463.38	31.08	27.66	-91.11	502.30	-338.34	1,471.71	1,414.14	57.57	25.565			
8,300.00	7,435.00	7,483.03	7,409.96	31.19	27.59	-89.02	548.47	-336.26	1,466.07	1,408.17	57.90	25.320			
8,382.47	7,435.00	7,435.62	7,371.68	31.50	27.54	-87.52	576.39	-334.86	1,464.50	1,406.32	58.18	25.170			
8,400.00	7,435.00	7,426.59	7,364.19	31.60	27.53	-87.23	581.41	-334.60	1,464.57	1,406.34	58.24	25.148			
8,500.00	7,435.00	7,381.01	7,325.41	32.26	27.47	-85.71	605.32	-333.26	1,467.98	1,409.40	58.58	25.059			
8,600.00	7,435.00	7,343.70	7,292.60	33.03	27.42	-84.43	623.03	-332.16	1,476.76	1,417.83	58.93	25.058 SF			
8,700.00	7,435.00	7,312.77	7,264.71	33.87	27.38	-83.34	636.39	-331.27	1,491.18	1,431.90	59.28	25.153			

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.73	0.80	-170.11	170.11										
100.00	100.00	100.00	100.00	0.14	0.14	-89.73	0.80	-170.11	170.11	169.84	0.28	616.296							
200.00	200.00	200.00	200.00	0.50	0.50	-89.73	0.80	-170.11	170.11	169.12	0.99	171.317							
300.00	300.00	300.00	300.00	0.85	0.85	-89.73	0.80	-170.11	170.11	168.40	1.71	99.486							
400.00	400.00	400.00	400.00	1.21	1.21	-89.73	0.80	-170.11	170.11	167.69	2.43	70.096 CC							
500.00	500.00	499.48	499.46	1.57	1.57	-89.15	2.52	-170.24	170.26	167.12	3.14	54.198 ES							
600.00	599.98	598.64	598.48	1.92	1.93	154.63	7.66	-170.64	172.39	168.55	3.84	44.843							
700.00	699.84	696.95	696.41	2.26	2.29	158.00	16.13	-171.28	178.53	173.98	4.55	39.262							
800.00	799.45	795.14	794.01	2.61	2.65	162.15	26.96	-172.11	189.18	183.91	5.26	35.946							
900.00	898.70	893.04	891.30	2.98	3.01	166.11	37.86	-172.95	204.14	198.16	5.98	34.114							
1,000.00	997.47	990.25	987.90	3.37	3.38	169.67	48.68	-173.77	223.35	216.65	6.71	33.306							
1,050.28	1,046.90	1,038.83	1,036.17	3.57	3.56	171.28	54.08	-174.19	234.58	227.51	7.07	33.172							
1,100.00	1,095.71	1,086.76	1,083.80	3.77	3.74	172.78	59.41	-174.60	246.27	238.85	7.43	33.159							
1,200.00	1,193.87	1,183.16	1,179.60	4.19	4.11	175.41	70.14	-175.42	270.22	262.08	8.14	33.205							
1,300.00	1,292.03	1,279.56	1,275.40	4.62	4.48	177.61	80.87	-176.24	294.61	285.76	8.85	33.286							
1,400.00	1,390.19	1,375.96	1,371.20	5.06	4.85	179.47	91.60	-177.06	319.36	309.79	9.57	33.383							
1,500.00	1,488.35	1,472.36	1,467.00	5.50	5.22	-178.93	102.32	-177.88	344.38	334.10	10.28	33.488							
1,600.00	1,586.51	1,568.76	1,562.80	5.94	5.59	-177.55	113.05	-178.70	369.62	358.62	11.00	33.593							
1,700.00	1,684.67	1,665.16	1,658.59	6.39	5.96	-176.35	123.78	-179.52	395.03	383.31	11.72	33.696							
1,800.00	1,782.83	1,761.57	1,754.39	6.84	6.33	-175.29	134.51	-180.34	420.59	408.15	12.45	33.794							
1,900.00	1,880.99	1,857.97	1,850.19	7.29	6.71	-174.35	145.23	-181.17	446.27	433.10	13.17	33.887							
2,000.00	1,979.16	1,954.37	1,945.99	7.75	7.08	-173.51	155.96	-181.99	472.05	458.16	13.89	33.974							
2,100.00	2,077.32	2,050.77	2,041.79	8.20	7.45	-172.76	166.69	-182.81	497.92	483.30	14.62	34.056							
2,200.00	2,175.48	2,147.17	2,137.59	8.66	7.82	-172.08	177.42	-183.63	523.86	508.51	15.35	34.132							
2,300.00	2,273.64	2,243.57	2,233.39	9.12	8.20	-171.47	188.15	-184.45	549.86	533.78	16.08	34.203							
2,400.00	2,371.80	2,339.97	2,329.19	9.58	8.57	-170.91	198.87	-185.27	575.91	559.10	16.81	34.270							
2,500.00	2,469.96	2,436.37	2,424.99	10.04	8.94	-170.40	209.60	-186.09	602.01	584.47	17.53	34.332							
2,600.00	2,568.12	2,532.77	2,520.78	10.50	9.32	-169.93	220.33	-186.91	628.15	609.88	18.27	34.391							
2,700.00	2,666.28	2,629.18	2,616.58	10.96	9.69	-169.50	231.06	-187.73	654.33	635.33	19.00	34.445							
2,800.00	2,764.44	2,725.58	2,712.38	11.42	10.06	-169.11	241.78	-188.56	680.53	660.81	19.73	34.496							
2,900.00	2,862.60	2,821.98	2,808.18	11.88	10.44	-168.74	252.51	-189.38	706.77	686.31	20.46	34.544							
3,000.00	2,960.76	2,918.38	2,903.98	12.34	10.81	-168.40	263.24	-190.20	733.03	711.84	21.19	34.589							
3,100.00	3,058.92	3,014.78	2,999.78	12.80	11.19	-168.08	273.97	-191.02	759.32	737.39	21.93	34.631							
3,200.00	3,157.09	3,111.18	3,095.58	13.27	11.56	-167.78	284.69	-191.84	785.62	762.96	22.66	34.671							
3,300.00	3,255.25	3,207.58	3,191.38	13.73	11.93	-167.51	295.42	-192.66	811.94	788.55	23.39	34.709							
3,400.00	3,353.41	3,303.98	3,287.18	14.19	12.31	-167.25	306.15	-193.48	838.28	814.15	24.13	34.744							
3,500.00	3,451.57	3,400.39	3,382.97	14.66	12.68	-167.00	316.88	-194.30	864.64	839.77	24.86	34.777							
3,600.00	3,549.73	3,496.79	3,478.77	15.12	13.06	-166.77	327.60	-195.12	891.00	865.41	25.60	34.809							
3,700.00	3,647.89	3,593.19	3,574.57	15.58	13.43	-166.56	338.33	-195.95	917.39	891.05	26.33	34.839							
3,800.00	3,746.05	3,689.59	3,670.37	16.05	13.80	-166.35	349.06	-196.77	943.78	916.71	27.07	34.868							
3,900.00	3,844.21	3,785.99	3,766.17	16.51	14.18	-166.16	359.79	-197.59	970.18	942.38	27.80	34.895							
4,000.00	3,942.37	3,882.39	3,861.97	16.98	14.55	-165.98	370.51	-198.41	996.59	968.05	28.54	34.921							
4,100.00	4,040.53	3,978.79	3,957.77	17.44	14.93	-165.80	381.24	-199.23	1,023.01	993.74	29.27	34.945							
4,200.00	4,138.69	4,075.19	4,053.57	17.90	15.30	-165.64	391.97	-200.05	1,049.44	1,019.43	30.01	34.969							
4,300.00	4,236.85	4,171.59	4,149.37	18.37	15.67	-165.48	402.70	-200.87	1,075.88	1,045.13	30.75	34.991							
4,400.00	4,335.02	4,268.00	4,245.17	18.83	16.05	-165.33	413.42	-201.69	1,102.33	1,070.84	31.48	35.012							
4,500.00	4,433.18	4,364.40	4,340.96	19.30	16.42	-165.19	424.15	-202.51	1,128.78	1,096.56	32.22	35.032							
4,600.00	4,531.34	4,460.80	4,436.76	19.76	16.80	-165.05	434.88	-203.34	1,155.24	1,122.28	32.96	35.052							
4,700.00	4,629.50	4,557.20	4,532.56	20.23	17.17	-164.92	445.61	-204.16	1,181.70	1,148.00	33.70	35.070							
4,800.00	4,727.66	4,653.60	4,628.36	20.69	17.55	-164.80	456.33	-204.98	1,208.17	1,173.74	34.43	35.088							
4,900.00	4,825.82	4,750.00	4,724.16	21.16	17.92	-164.68	467.06	-205.80	1,234.64	1,199.47	35.17	35.105							
5,000.00	4,923.98	4,846.40	4,819.96	21.62	18.29	-164.57	477.79	-206.62	1,261.12	1,225.21	35.91	35.121							

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 4T-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 4T-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													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)				
5,100.00	5,022.14	4,942.80	4,915.76	22.09	18.67	-164.46	488.52	-207.44	1,287.60	1,250.96	36.65	35.137		
5,200.00	5,120.30	5,039.21	5,011.56	22.55	19.04	-164.35	499.24	-208.26	1,314.09	1,276.71	37.38	35.152		
5,300.00	5,218.46	5,135.61	5,107.36	23.02	19.42	-164.25	509.97	-209.08	1,340.58	1,302.46	38.12	35.167		
5,400.00	5,316.62	5,232.01	5,203.15	23.48	19.79	-164.16	520.70	-209.90	1,367.08	1,328.22	38.86	35.181		
5,500.00	5,414.78	5,328.41	5,298.95	23.95	20.17	-164.06	531.43	-210.73	1,393.57	1,353.98	39.60	35.194		
5,600.00	5,512.95	5,424.81	5,394.75	24.41	20.54	-163.97	542.15	-211.55	1,420.07	1,379.74	40.34	35.207		
5,700.00	5,611.11	5,521.21	5,490.55	24.88	20.92	-163.89	552.88	-212.37	1,446.58	1,405.51	41.07	35.219		
5,800.00	5,709.27	5,617.61	5,586.35	25.35	21.29	-163.80	563.61	-213.19	1,473.09	1,431.27	41.81	35.231		
5,900.00	5,807.43	5,714.01	5,682.15	25.81	21.66	-163.72	574.34	-214.01	1,499.60	1,457.05	42.55	35.243		
6,850.00	6,740.19	8,534.89	7,560.00	30.21	30.80	-174.49	-543.48	-230.11	1,497.00	1,446.51	50.49	29.651		
6,900.00	6,789.40	8,532.26	7,560.00	30.41	30.78	-154.70	-540.85	-230.11	1,477.75	1,426.33	51.41	28.744		
6,950.00	6,838.32	8,526.15	7,560.00	30.58	30.74	-140.37	-534.74	-230.11	1,460.02	1,407.75	52.27	27.932		
7,000.00	6,886.71	8,516.60	7,560.00	30.73	30.67	-130.94	-525.19	-230.11	1,443.91	1,390.85	53.06	27.214		
7,050.00	6,934.33	8,503.65	7,560.00	30.87	30.58	-124.65	-512.24	-230.11	1,429.49	1,375.72	53.77	26.586		
7,100.00	6,980.95	8,487.36	7,560.00	30.99	30.48	-120.22	-495.95	-230.11	1,416.79	1,362.39	54.40	26.042		
7,150.00	7,026.35	8,467.82	7,560.00	31.09	30.35	-116.88	-476.40	-230.11	1,405.80	1,350.85	54.96	25.580		
7,200.00	7,070.29	8,445.11	7,560.00	31.19	30.21	-114.19	-453.70	-230.11	1,396.49	1,341.07	55.42	25.197		
7,250.00	7,112.57	8,419.35	7,560.00	31.26	30.04	-111.89	-427.94	-230.11	1,388.78	1,332.98	55.80	24.887		
7,300.00	7,152.98	8,390.67	7,560.00	31.32	29.87	-109.84	-399.26	-230.11	1,382.56	1,326.46	56.10	24.643		
7,350.00	7,191.33	8,359.20	7,560.00	31.37	29.69	-107.96	-367.79	-230.11	1,377.72	1,321.38	56.34	24.454		
7,400.00	7,227.42	8,325.10	7,560.00	31.41	29.50	-106.19	-333.69	-230.11	1,374.10	1,317.60	56.50	24.319		
7,450.00	7,261.09	8,288.53	7,560.00	31.44	29.30	-104.53	-297.12	-230.11	1,371.55	1,314.94	56.61	24.229		
7,500.00	7,292.16	8,249.67	7,560.00	31.45	29.11	-102.96	-258.26	-230.11	1,369.88	1,313.20	56.67	24.171		
7,550.00	7,320.49	8,208.72	7,560.00	31.45	28.91	-101.49	-217.31	-230.11	1,368.93	1,312.23	56.69	24.147		
7,600.00	7,345.94	8,165.86	7,560.00	31.44	28.73	-100.14	-174.45	-230.11	1,368.51	1,311.81	56.70	24.136		
7,630.16	7,359.84	8,139.18	7,560.00	31.43	28.62	-99.39	-147.77	-230.11	1,368.46	1,311.76	56.69	24.137		
7,650.00	7,368.38	8,121.32	7,560.00	31.43	28.54	-98.92	-129.91	-230.11	1,368.48	1,311.79	56.68	24.142		
7,700.00	7,387.71	8,075.30	7,560.00	31.40	28.38	-97.85	-83.89	-230.11	1,368.66	1,311.99	56.67	24.152		
7,750.00	7,403.82	8,028.03	7,560.00	31.37	28.22	-96.94	-36.62	-230.11	1,368.93	1,312.27	56.66	24.160		
7,800.00	7,416.65	7,972.06	7,559.12	31.34	28.06	-96.11	19.34	-230.10	1,369.09	1,312.46	56.63	24.176		
7,850.00	7,426.13	7,911.61	7,553.57	31.30	27.90	-95.29	79.51	-230.05	1,368.73	1,312.12	56.61	24.178		
7,900.00	7,432.22	7,852.89	7,543.34	31.25	27.76	-94.56	137.32	-229.97	1,367.84	1,311.22	56.62	24.158		
7,950.00	7,434.87	7,795.85	7,528.91	31.21	27.65	-93.91	192.48	-229.84	1,366.44	1,309.78	56.66	24.117		
7,963.63	7,435.00	7,780.59	7,524.30	31.20	27.62	-93.75	207.04	-229.80	1,365.98	1,309.30	56.67	24.103		
8,000.00	7,435.00	7,740.79	7,510.85	31.17	27.55	-93.19	244.48	-229.69	1,364.67	1,307.95	56.72	24.059		
8,100.00	7,435.00	7,640.19	7,467.78	31.10	27.40	-91.38	335.31	-229.32	1,361.27	1,304.36	56.91	23.921		
8,200.00	7,435.00	7,553.28	7,420.63	31.08	27.29	-89.39	408.26	-228.91	1,359.20	1,302.07	57.13	23.791		
8,234.53	7,435.00	7,526.38	7,404.29	31.09	27.27	-88.71	429.62	-228.77	1,359.03	1,301.81	57.22	23.751		
8,300.00	7,435.00	7,479.49	7,373.92	31.19	27.22	-87.42	465.33	-228.51	1,359.72	1,302.36	57.36	23.705		
8,400.00	7,435.00	7,417.30	7,330.16	31.60	27.15	-85.58	509.49	-228.14	1,363.89	1,306.30	57.59	23.684 SF		
8,500.00	7,435.00	7,364.93	7,290.45	32.26	27.10	-83.92	543.61	-227.80	1,372.50	1,314.69	57.81	23.742		
8,600.00	7,435.00	7,320.67	7,255.02	33.03	27.05	-82.44	570.13	-227.49	1,386.11	1,328.08	58.03	23.887		
8,700.00	7,435.00	7,283.03	7,223.65	33.87	27.00	-81.14	590.92	-227.22	1,405.04	1,346.79	58.25	24.123		
8,800.00	7,435.00	7,250.00	7,195.26	34.77	26.96	-79.97	607.79	-226.98	1,429.43	1,370.98	58.45	24.455		
8,900.00	7,435.00	7,223.01	7,171.49	35.71	26.92	-78.99	620.59	-226.78	1,459.26	1,400.60	58.66	24.875		
9,000.00	7,435.00	7,200.00	7,150.87	36.70	26.89	-78.15	630.78	-226.60	1,494.40	1,435.54	58.87	25.385		

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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							
400.00	400.00	400.00	400.00	1.21	1.21	-89.72	0.78	-160.04	160.04	157.61	2.43	65.945							
500.00	500.00	500.00	500.00	1.57	1.57	-89.72	0.78	-160.04	160.04	156.90	3.14	50.907	CC, ES						
600.00	599.98	599.88	599.86	1.92	1.93	153.00	2.52	-160.04	161.61	157.76	3.85	42.002							
700.00	699.84	701.58	701.42	2.26	2.30	155.58	7.71	-159.68	166.21	161.65	4.55	36.493							
800.00	799.45	805.03	804.54	2.61	2.67	159.44	15.52	-156.83	172.27	166.99	5.28	32.621							
900.00	898.70	907.73	906.57	2.98	3.04	164.22	25.64	-151.18	180.16	174.15	6.02	29.949							
1,000.00	997.47	1,005.88	1,003.88	3.37	3.41	169.06	36.48	-144.38	191.55	184.81	6.74	28.431							
1,050.28	1,046.90	1,054.98	1,052.56	3.57	3.60	171.32	41.90	-140.98	199.05	191.94	7.11	28.011							
1,100.00	1,095.71	1,103.45	1,100.62	3.77	3.78	173.44	47.25	-137.63	207.18	199.72	7.47	27.744							
1,200.00	1,193.87	1,200.94	1,197.28	4.19	4.15	177.24	58.02	-130.87	224.31	216.11	8.20	27.364							
1,300.00	1,292.03	1,298.43	1,293.94	4.62	4.53	-179.51	68.79	-124.12	242.27	233.34	8.93	27.122							
1,400.00	1,390.19	1,395.93	1,390.60	5.06	4.91	-176.71	79.55	-117.37	260.89	251.22	9.67	26.972							
1,500.00	1,488.35	1,493.42	1,487.26	5.50	5.29	-174.28	90.32	-110.62	280.04	269.62	10.42	26.883							
1,600.00	1,586.51	1,590.91	1,583.92	5.94	5.67	-172.16	101.09	-103.86	299.62	288.46	11.17	26.835							
1,700.00	1,684.67	1,688.41	1,680.59	6.39	6.06	-170.30	111.86	-97.11	319.55	307.63	11.92	26.815							
1,800.00	1,782.83	1,785.90	1,777.25	6.84	6.44	-168.66	122.62	-90.36	339.77	327.10	12.67	26.814							
1,900.00	1,880.99	1,883.39	1,873.91	7.29	6.82	-167.20	133.39	-83.60	360.23	346.80	13.43	26.826							
2,000.00	1,979.16	1,980.89	1,970.57	7.75	7.21	-165.90	144.16	-76.85	380.89	366.70	14.19	26.846							
2,100.00	2,077.32	2,078.38	2,067.23	8.20	7.60	-164.73	154.93	-70.10	401.71	386.76	14.95	26.871							
2,200.00	2,175.48	2,175.87	2,163.89	8.66	7.98	-163.68	165.69	-63.35	422.69	406.97	15.71	26.900							
2,300.00	2,273.64	2,273.37	2,260.55	9.12	8.37	-162.72	176.46	-56.59	443.79	427.31	16.48	26.932							
2,400.00	2,371.80	2,370.86	2,357.21	9.58	8.76	-161.85	187.23	-49.84	464.99	447.75	17.24	26.964							
2,500.00	2,469.96	2,468.35	2,453.88	10.04	9.14	-161.06	197.99	-43.09	486.29	468.28	18.01	26.997							
2,600.00	2,568.12	2,565.85	2,550.54	10.50	9.53	-160.34	208.76	-36.34	507.67	488.89	18.78	27.029							
2,700.00	2,666.28	2,663.34	2,647.20	10.96	9.92	-159.67	219.53	-29.58	529.12	509.57	19.55	27.062							
2,800.00	2,764.44	2,760.83	2,743.86	11.42	10.31	-159.05	230.30	-22.83	550.64	530.31	20.32	27.093							
2,900.00	2,862.60	2,858.33	2,840.52	11.88	10.70	-158.48	241.06	-16.08	572.21	551.11	21.10	27.124							
3,000.00	2,960.76	2,955.82	2,937.18	12.34	11.08	-157.96	251.83	-9.33	593.83	571.96	21.87	27.154							
3,100.00	3,058.92	3,053.31	3,033.84	12.80	11.47	-157.47	262.60	-2.57	615.50	592.85	22.64	27.183							
3,200.00	3,157.09	3,150.81	3,130.50	13.27	11.86	-157.01	273.36	4.18	637.20	613.79	23.42	27.211							
3,300.00	3,255.25	3,248.30	3,227.17	13.73	12.25	-156.58	284.13	10.93	658.95	634.75	24.19	27.238							
3,400.00	3,353.41	3,345.79	3,323.83	14.19	12.64	-156.18	294.90	17.68	680.72	655.75	24.97	27.264							
3,500.00	3,451.57	3,443.29	3,420.49	14.66	13.03	-155.81	305.67	24.44	702.53	676.78	25.74	27.289							
3,600.00	3,549.73	3,540.78	3,517.15	15.12	13.42	-155.45	316.43	31.19	724.36	697.84	26.52	27.314							
3,700.00	3,647.89	3,638.27	3,613.81	15.58	13.81	-155.12	327.20	37.94	746.22	718.92	27.30	27.337							
3,800.00	3,746.05	3,735.76	3,710.47	16.05	14.20	-154.81	337.97	44.69	768.10	740.02	28.07	27.359							
3,900.00	3,844.21	3,833.26	3,807.13	16.51	14.58	-154.51	348.74	51.45	790.00	761.14	28.85	27.381							
4,000.00	3,942.37	3,930.75	3,903.79	16.98	14.97	-154.23	359.50	58.20	811.92	782.29	29.63	27.402							
4,100.00	4,040.53	4,028.24	4,000.46	17.44	15.36	-153.97	370.27	64.95	833.85	803.44	30.41	27.422							
4,200.00	4,138.69	4,125.74	4,097.12	17.90	15.75	-153.71	381.04	71.71	855.81	824.62	31.19	27.441							
4,300.00	4,236.85	4,223.23	4,193.78	18.37	16.14	-153.47	391.80	78.46	877.77	845.81	31.97	27.459							
4,400.00	4,335.02	4,320.72	4,290.44	18.83	16.53	-153.25	402.57	85.21	899.76	867.01	32.75	27.477							
4,500.00	4,433.18	4,418.22	4,387.10	19.30	16.92	-153.03	413.34	91.96	921.75	888.23	33.52	27.495							
4,600.00	4,531.34	4,515.71	4,483.76	19.76	17.31	-152.82	424.11	98.72	943.76	909.45	34.30	27.511							
4,700.00	4,629.50	4,613.20	4,580.42	20.23	17.70	-152.63	434.87	105.47	965.78	930.69	35.08	27.527							
4,800.00	4,727.66	4,710.70	4,677.08	20.69	18.09	-152.44	445.64	112.22	987.80	951.94	35.86	27.543							
4,900.00	4,825.82	4,808.19	4,773.75	21.16	18.48	-152.26	456.41	118.97	1,009.84	973.20	36.64	27.557							
5,000.00	4,923.98	4,905.68	4,870.41	21.62	18.87	-152.09	467.18	125.73	1,031.89	994.46	37.43	27.572							

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 4T-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 4T-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				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)				
5,100.00	5,022.14	5,003.18	4,967.07	22.09	19.26	-151.92	477.94	132.48	1,053.94	1,015.74	38.21	27.586		
5,200.00	5,120.30	5,100.67	5,063.73	22.55	19.65	-151.76	488.71	139.23	1,076.01	1,037.02	38.99	27.599		
5,300.00	5,218.46	5,198.16	5,160.39	23.02	20.04	-151.61	499.48	145.98	1,098.08	1,058.31	39.77	27.612		
5,400.00	5,316.62	5,295.66	5,257.05	23.48	20.43	-151.46	510.24	152.74	1,120.16	1,079.61	40.55	27.625		
5,500.00	5,414.78	5,393.15	5,353.71	23.95	20.82	-151.32	521.01	159.49	1,142.24	1,100.91	41.33	27.637		
5,600.00	5,512.95	5,490.64	5,450.37	24.41	21.21	-151.19	531.78	166.24	1,164.33	1,122.22	42.11	27.649		
5,700.00	5,611.11	5,588.14	5,547.04	24.88	21.60	-151.06	542.55	172.99	1,186.43	1,143.54	42.89	27.660		
5,800.00	5,709.27	5,685.63	5,643.70	25.35	21.99	-150.93	553.31	179.75	1,208.53	1,164.86	43.68	27.671		
5,900.00	5,807.43	5,783.12	5,740.36	25.81	22.38	-150.81	564.08	186.50	1,230.64	1,186.19	44.46	27.682		
6,000.00	5,905.59	5,880.62	5,837.02	26.28	22.77	-150.70	574.85	193.25	1,252.76	1,207.52	45.24	27.692		
6,100.00	6,003.75	5,978.11	5,933.68	26.74	23.16	-150.58	585.61	200.00	1,274.87	1,228.85	46.02	27.702		
6,200.00	6,101.91	6,075.60	6,030.34	27.21	23.55	-150.47	596.38	206.76	1,297.00	1,250.19	46.80	27.712		
6,300.00	6,200.07	6,173.10	6,127.00	27.67	23.94	-150.37	607.15	213.51	1,319.12	1,271.54	47.59	27.721		
6,400.00	6,298.23	6,270.59	6,223.66	28.14	24.33	-150.27	617.92	220.26	1,341.25	1,292.89	48.37	27.730		
6,500.00	6,396.39	6,368.08	6,320.33	28.61	24.72	-150.17	628.68	227.01	1,363.39	1,314.24	49.15	27.739		
6,600.00	6,494.55	6,466.59	6,418.00	29.07	31.06	159.04	-518.09	308.74	1,366.86	1,331.44	35.42	38.599		
6,700.00	6,592.71	6,565.42	6,517.00	29.54	31.12	158.46	-526.92	308.65	1,291.22	1,253.53	37.69	34.259		
6,772.64	6,664.02	6,661.84	6,613.00	29.88	31.17	158.04	-533.34	308.58	1,238.41	1,198.95	39.46	31.382		
6,800.00	6,690.92	6,663.74	6,615.00	30.00	31.18	166.54	-535.24	308.56	1,219.00	1,178.85	40.15	30.358		
6,850.00	6,740.19	6,664.51	6,616.00	30.21	31.18	-174.51	-536.01	308.55	1,184.22	1,142.79	41.43	28.583		
6,900.00	6,789.40	6,661.79	6,613.00	30.41	31.17	-156.63	-533.29	308.58	1,150.55	1,107.83	42.72	26.935		
6,950.00	6,838.32	6,655.60	6,607.00	30.58	31.12	-144.00	-527.10	308.64	1,118.23	1,074.23	44.00	25.413		
7,000.00	6,886.71	6,645.96	6,593.00	30.73	31.06	-136.08	-517.46	308.75	1,087.50	1,042.22	45.28	24.019		
7,050.00	6,934.33	6,632.93	6,580.00	30.87	30.97	-131.10	-504.43	308.88	1,058.55	1,012.02	46.53	22.750		
7,100.00	6,980.95	6,616.56	6,565.00	30.99	30.86	-127.79	-488.06	309.05	1,031.55	983.81	47.74	21.607		
7,150.00	7,026.35	6,596.94	6,548.00	31.09	30.73	-125.40	-468.44	309.26	1,006.64	957.73	48.90	20.584		
7,200.00	7,070.29	6,574.15	6,525.00	31.19	30.60	-123.51	-445.66	309.50	983.90	933.90	50.01	19.676		
7,250.00	7,112.57	6,548.33	6,495.00	31.26	30.44	-121.88	-419.83	309.77	963.39	912.37	51.03	18.890		
7,300.00	7,152.98	6,519.58	6,460.00	31.32	30.27	-120.37	-391.08	310.07	945.12	893.16	51.96	18.180		
7,350.00	7,191.33	6,488.04	6,420.00	31.37	30.09	-118.91	-359.55	310.40	929.03	876.24	52.79	17.598		
7,400.00	7,227.42	6,453.88	6,380.00	31.41	29.90	-117.47	-325.39	310.76	915.05	861.51	53.53	17.093		
7,450.00	7,261.09	6,417.26	6,335.00	31.44	29.71	-116.05	-288.77	311.14	903.05	848.88	54.17	16.672		
7,500.00	7,292.16	6,378.36	6,285.00	31.45	29.52	-114.64	-249.87	311.55	892.88	838.18	54.71	16.322		
7,550.00	7,320.49	6,337.36	6,235.00	31.45	29.33	-113.26	-208.87	311.98	884.38	829.22	55.16	16.034		
7,600.00	7,345.94	6,294.46	6,185.00	31.44	29.15	-111.95	-165.98	312.43	877.34	821.82	55.52	15.802		
7,650.00	7,368.38	6,249.89	6,130.00	31.43	28.98	-110.74	-121.41	312.90	871.58	815.75	55.83	15.612		
7,700.00	7,387.71	6,203.84	6,075.00	31.40	28.82	-109.64	-75.36	313.38	866.90	810.84	56.07	15.462		
7,750.00	7,403.82	6,156.55	6,020.00	31.37	28.69	-108.71	-28.08	313.87	863.14	806.87	56.27	15.339		
7,800.00	7,416.65	6,091.48	5,965.00	31.34	28.54	-107.57	36.94	314.40	859.73	803.35	56.39	15.247		
7,850.00	7,426.13	6,025.25	5,890.00	31.30	28.42	-106.39	102.62	314.52	855.96	799.41	56.56	15.135		
7,900.00	7,432.22	5,961.51	5,815.00	31.25	28.35	-105.24	164.86	314.23	851.90	795.12	56.78	15.004		
7,950.00	7,434.87	5,900.15	5,740.00	31.21	28.31	-104.14	223.39	313.59	847.63	790.61	57.02	14.864		
7,963.63	7,435.00	5,883.82	5,720.00	31.20	28.31	-103.84	238.69	313.36	846.45	789.35	57.10	14.825		
8,000.00	7,435.00	5,841.52	5,670.00	31.17	28.29	-102.75	277.67	312.64	843.20	785.91	57.29	14.718		
8,100.00	7,435.00	5,736.51	5,570.00	31.10	28.28	-99.34	369.68	310.14	834.33	776.50	57.82	14.429		
8,200.00	7,435.00	5,648.14	5,470.00	31.08	28.26	-95.73	440.71	307.29	827.62	769.40	58.22	14.215		
8,287.32	7,435.00	5,583.39	5,405.00	31.16	28.24	-92.70	488.37	304.78	825.42	767.01	58.41	14.131		
8,300.00	7,435.00	5,574.85	5,390.00	31.19	28.24	-92.28	494.35	304.43	825.47	767.05	58.42	14.129 SF		
8,400.00	7,435.00	5,514.28	5,320.00	31.60	28.21	-89.15	534.65	301.75	829.77	771.33	58.44	14.199		
8,500.00	7,435.00	5,464.05	5,260.00	32.26	28.17	-86.40	565.08	299.33	841.79	783.47	58.31	14.435		
8,600.00	7,435.00	5,422.11	5,215.00	33.03	28.14	-84.02	588.29	297.18	862.19	804.08	58.11	14.837		
8,700.00	7,435.00	5,386.79	5,170.00	33.87	28.10	-81.97	606.22	295.28	891.08	833.21	57.87	15.398		

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 4T-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 4T-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		
8,800.00	7,435.00	7,350.00	7,285.05	34.77	28.05	-79.81	623.28	293.23	928.22	870.68	57.54	16.133		
8,900.00	7,435.00	7,331.04	7,267.95	35.71	28.03	-78.69	631.41	292.14	972.88	915.45	57.43	16.941		
9,000.00	7,435.00	7,300.00	7,239.53	36.70	27.98	-76.86	643.74	290.31	1,024.50	967.38	57.12	17.935		
9,100.00	7,435.00	7,300.00	7,239.53	37.73	27.98	-76.86	643.74	290.31	1,082.14	1,024.86	57.28	18.892		
9,200.00	7,435.00	7,272.33	7,213.76	38.79	27.93	-75.22	653.68	288.65	1,144.92	1,087.89	57.03	20.077		
9,300.00	7,435.00	7,250.00	7,192.70	39.89	27.90	-73.91	660.97	287.28	1,212.38	1,155.52	56.86	21.322		
9,400.00	7,435.00	7,250.00	7,192.70	41.03	27.90	-73.91	660.97	287.28	1,283.69	1,226.69	57.00	22.522		
9,500.00	7,435.00	7,231.84	7,175.41	42.19	27.86	-72.85	666.41	286.15	1,358.31	1,301.41	56.90	23.874		
9,600.00	7,435.00	7,221.04	7,165.07	43.37	27.84	-72.22	669.43	285.47	1,435.82	1,378.93	56.89	25.240		

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.71	0.77	-150.25	150.25										
100.00	100.00	100.00	100.00	0.14	0.14	-89.71	0.77	-150.25	150.25	149.97		0.28	544.328						
200.00	200.00	200.00	200.00	0.50	0.50	-89.71	0.77	-150.25	150.25	149.25		0.99	151.312						
300.00	300.00	300.00	300.00	0.85	0.85	-89.71	0.77	-150.25	150.25	148.54		1.71	87.869						
400.00	400.00	400.00	400.00	1.21	1.21	-89.71	0.77	-150.25	150.25	147.82		2.43	61.910						
500.00	500.00	500.00	500.00	1.57	1.57	-89.71	0.77	-150.25	150.25	147.10		3.14	47.792	CC, ES					
600.00	599.98	599.98	599.98	1.92	1.93	152.41	0.77	-150.25	151.79	147.94		3.85	39.440						
700.00	699.84	703.16	703.14	2.26	2.30	153.84	2.23	-149.10	155.38	150.82		4.56	34.062						
800.00	799.45	805.93	805.75	2.61	2.67	156.82	6.58	-145.68	160.25	154.96		5.28	30.335						
900.00	898.70	907.98	907.39	2.98	3.04	161.08	13.77	-140.03	167.02	161.01		6.01	27.800						
1,000.00	997.47	1,009.00	1,007.61	3.37	3.41	166.30	23.69	-132.24	176.54	169.80		6.74	26.204						
1,050.28	1,046.90	1,058.58	1,056.65	3.57	3.59	169.06	29.43	-127.73	182.71	175.60		7.10	25.719						
1,100.00	1,095.71	1,107.08	1,104.61	3.77	3.78	171.65	35.10	-123.28	189.61	182.14		7.46	25.403						
1,200.00	1,193.87	1,204.65	1,201.10	4.19	4.15	176.31	46.49	-114.33	204.55	196.35		8.19	24.964						
1,300.00	1,292.03	1,302.21	1,297.58	4.62	4.53	-179.67	57.88	-105.38	220.66	211.73		8.93	24.703						
1,400.00	1,390.19	1,399.77	1,394.06	5.06	4.92	-176.19	69.28	-96.43	237.71	228.03		9.68	24.558						
1,500.00	1,488.35	1,497.34	1,490.54	5.50	5.30	-173.19	80.67	-87.49	255.50	245.07		10.43	24.490						
1,600.00	1,586.51	1,594.90	1,587.02	5.94	5.69	-170.57	92.06	-78.54	273.90	262.71		11.19	24.472						
1,700.00	1,684.67	1,692.46	1,683.51	6.39	6.08	-168.29	103.46	-69.59	292.79	280.83		11.96	24.487						
1,800.00	1,782.83	1,790.03	1,779.99	6.84	6.48	-166.28	114.85	-60.64	312.07	299.35		12.73	24.524						
1,900.00	1,880.99	1,887.59	1,876.47	7.29	6.87	-164.50	126.24	-51.69	331.69	318.19		13.50	24.574						
2,000.00	1,979.16	1,985.15	1,972.95	7.75	7.27	-162.92	137.64	-42.74	351.58	337.31		14.27	24.633						
2,100.00	2,077.32	2,082.72	2,069.43	8.20	7.66	-161.51	149.03	-33.79	371.70	356.65		15.05	24.696						
2,200.00	2,175.48	2,180.28	2,165.92	8.66	8.06	-160.25	160.42	-24.84	392.02	376.19		15.83	24.761						
2,300.00	2,273.64	2,277.84	2,262.40	9.12	8.46	-159.11	171.82	-15.90	412.50	395.89		16.61	24.827						
2,400.00	2,371.80	2,375.41	2,358.88	9.58	8.86	-158.08	183.21	-6.95	433.13	415.73		17.40	24.893						
2,500.00	2,469.96	2,472.97	2,455.36	10.04	9.26	-157.14	194.60	2.00	453.88	435.69		18.19	24.958						
2,600.00	2,568.12	2,570.53	2,551.84	10.50	9.65	-156.28	206.00	10.95	474.73	455.76		18.97	25.021						
2,700.00	2,666.28	2,668.10	2,648.32	10.96	10.05	-155.49	217.39	19.90	495.68	475.92		19.76	25.082						
2,800.00	2,764.44	2,765.66	2,744.81	11.42	10.45	-154.77	228.78	28.85	516.71	496.16		20.55	25.141						
2,900.00	2,862.60	2,863.22	2,841.29	11.88	10.85	-154.11	240.18	37.80	537.82	516.47		21.34	25.197						
3,000.00	2,960.76	2,960.79	2,937.77	12.34	11.25	-153.49	251.57	46.75	558.99	536.85		22.14	25.252						
3,100.00	3,058.92	3,058.35	3,034.25	12.80	11.65	-152.92	262.96	55.69	580.21	557.28		22.93	25.304						
3,200.00	3,157.09	3,155.92	3,130.73	13.27	12.06	-152.39	274.36	64.64	601.49	577.77		23.72	25.354						
3,300.00	3,255.25	3,253.48	3,227.22	13.73	12.46	-151.90	285.75	73.59	622.81	598.29		24.52	25.402						
3,400.00	3,353.41	3,351.04	3,323.70	14.19	12.86	-151.43	297.14	82.54	644.18	618.86		25.31	25.448						
3,500.00	3,451.57	3,448.61	3,420.18	14.66	13.26	-151.00	308.54	91.49	665.58	639.47		26.11	25.492						
3,600.00	3,549.73	3,546.17	3,516.66	15.12	13.66	-150.60	319.93	100.44	687.01	660.11		26.91	25.535						
3,700.00	3,647.89	3,643.73	3,613.14	15.58	14.06	-150.22	331.32	109.39	708.48	680.78		27.70	25.575						
3,800.00	3,746.05	3,741.30	3,709.63	16.05	14.46	-149.86	342.71	118.34	729.98	701.48		28.50	25.614						
3,900.00	3,844.21	3,838.86	3,806.11	16.51	14.87	-149.52	354.11	127.28	751.50	722.20		29.30	25.651						
4,000.00	3,942.37	3,936.42	3,902.59	16.98	15.27	-149.20	365.50	136.23	773.04	742.95		30.09	25.687						
4,100.00	4,040.53	4,033.99	3,999.07	17.44	15.67	-148.90	376.89	145.18	794.61	763.71		30.89	25.721						
4,200.00	4,138.69	4,131.55	4,095.55	17.90	16.07	-148.61	388.29	154.13	816.19	784.50		31.69	25.754						
4,300.00	4,236.85	4,229.11	4,192.03	18.37	16.48	-148.34	399.68	163.08	837.80	805.31		32.49	25.786						
4,400.00	4,335.02	4,326.68	4,288.52	18.83	16.88	-148.08	411.07	172.03	859.42	826.13		33.29	25.817						
4,500.00	4,433.18	4,424.24	4,385.00	19.30	17.28	-147.84	422.47	180.98	881.06	846.97		34.09	25.846						
4,600.00	4,531.34	4,521.80	4,481.48	19.76	17.68	-147.61	433.86	189.93	902.71	867.82		34.89	25.874						
4,700.00	4,629.50	4,619.37	4,577.96	20.23	18.09	-147.38	445.25	198.87	924.37	888.68		35.69	25.901						
4,800.00	4,727.66	4,716.93	4,674.44	20.69	18.49	-147.17	456.65	207.82	946.05	909.56		36.49	25.927						
4,900.00	4,825.82	4,814.50	4,770.93	21.16	18.89	-146.97	468.04	216.77	967.74	930.45		37.29	25.953						
5,000.00	4,923.98	4,912.06	4,867.41	21.62	19.29	-146.78	479.43	225.72	989.44	951.35		38.09	25.977						

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 4T-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 4T-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													Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance					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)	Total Uncertainty Axis			
5,100.00	5,022.14	5,009.62	4,963.89	22.09	19.70	-146.59	490.83	234.67	1,011.15	972.26	38.89	26.000		
5,200.00	5,120.30	5,107.19	5,060.37	22.55	20.10	-146.41	502.22	243.62	1,032.87	993.18	39.69	26.023		
5,300.00	5,218.46	5,204.75	5,156.85	23.02	20.50	-146.24	513.61	252.57	1,054.60	1,014.11	40.49	26.045		
5,400.00	5,316.62	5,302.31	5,253.34	23.48	20.90	-146.08	525.01	261.52	1,076.34	1,035.05	41.29	26.066		
5,500.00	5,414.78	5,399.88	5,349.82	23.95	21.31	-145.92	536.40	270.46	1,098.09	1,055.99	42.09	26.086		
5,600.00	5,512.95	5,497.44	5,446.30	24.41	21.71	-145.77	547.79	279.41	1,119.84	1,076.95	42.90	26.106		
5,700.00	5,611.11	5,595.00	5,542.78	24.88	22.11	-145.63	559.19	288.36	1,141.60	1,097.90	43.70	26.125		
5,800.00	5,709.27	5,692.57	5,639.26	25.35	22.52	-145.49	570.58	297.31	1,163.37	1,118.87	44.50	26.144		
5,900.00	5,807.43	5,790.13	5,735.74	25.81	22.92	-145.35	581.97	306.26	1,185.14	1,139.84	45.30	26.162		
6,000.00	5,905.59	5,887.69	5,832.23	26.28	23.32	-145.22	593.37	315.21	1,206.92	1,160.82	46.10	26.179		
6,100.00	6,003.75	5,985.26	5,928.71	26.74	23.73	-145.10	604.76	324.16	1,228.71	1,181.80	46.90	26.196		
6,200.00	6,101.91	6,082.82	6,025.19	27.21	24.13	-144.98	616.15	333.11	1,250.50	1,202.79	47.71	26.212		
6,300.00	6,200.07	6,180.38	6,121.67	27.67	24.53	-144.86	627.55	342.05	1,272.30	1,223.79	48.51	26.228		
6,400.00	6,298.23	6,278.42	6,219.16	28.14	24.94	-144.75	638.94	350.99	1,294.09	1,244.79	49.31	26.244		
6,500.00	6,396.39	6,378.58	6,319.25	28.61	25.35	-144.63	650.33	359.93	1,315.88	1,265.78	50.11	26.260		
6,600.00	6,494.55	6,477.74	6,418.74	29.07	25.76	-144.52	661.72	368.87	1,337.67	1,286.77	50.91	26.276		
6,700.00	6,592.71	6,577.91	6,518.73	29.54	26.17	-144.41	673.11	377.81	1,359.46	1,307.76	51.71	26.292		
6,772.64	6,664.02	6,650.11	6,590.10	29.88	26.51	-144.31	684.50	386.75	1,381.25	1,328.75	52.51	26.308		
6,800.00	6,690.92	6,677.01	6,607.00	30.00	26.85	-144.21	695.89	395.69	1,403.04	1,349.74	53.31	26.324		
6,850.00	6,740.19	6,727.10	6,656.27	30.21	27.19	-144.11	707.28	404.63	1,424.83	1,370.73	54.11	26.340		
6,900.00	6,789.40	6,776.11	6,705.54	30.41	27.53	-144.01	718.67	413.57	1,446.62	1,391.72	54.91	26.356		
6,950.00	6,838.32	6,825.12	6,754.81	30.58	27.87	-143.91	730.06	422.51	1,468.41	1,412.71	55.71	26.372		
7,000.00	6,886.71	6,873.13	6,803.08	30.73	28.21	-143.81	741.45	431.45	1,490.20	1,433.70	56.51	26.388		
7,050.00	6,934.33	6,920.14	6,848.35	30.87	28.55	-143.71	752.84	440.39	1,511.99	1,454.69	57.31	26.404		
7,100.00	6,980.95	6,966.15	6,893.62	30.99	28.89	-143.61	764.23	449.33	1,533.78	1,475.68	58.11	26.420		
7,150.00	7,026.35	7,011.36	6,938.89	31.09	29.23	-143.51	775.62	458.27	1,555.57	1,496.67	58.91	26.436		
7,200.00	7,070.29	7,055.37	6,984.16	31.19	29.57	-143.41	787.01	467.21	1,577.36	1,517.66	59.71	26.452		
7,250.00	7,112.57	7,100.38	7,029.43	31.26	29.91	-143.31	798.40	476.15	1,599.15	1,538.65	60.51	26.468		
7,300.00	7,152.98	7,138.39	7,074.70	31.32	30.25	-143.21	810.79	485.09	1,620.94	1,559.64	61.31	26.484		
7,350.00	7,191.33	7,174.74	7,119.97	31.37	30.59	-143.11	823.18	494.03	1,642.73	1,580.63	62.11	26.500		
7,400.00	7,227.42	7,210.15	7,165.24	31.41	30.93	-143.01	835.57	502.97	1,664.52	1,601.62	62.91	26.516		
7,450.00	7,261.09	7,244.56	7,210.51	31.44	31.27	-142.91	847.96	511.91	1,686.31	1,622.61	63.71	26.532		
7,500.00	7,292.16	7,278.97	7,255.78	31.45	31.61	-142.81	860.35	520.85	1,708.10	1,643.60	64.51	26.548		
7,550.00	7,320.49	7,307.30	7,299.11	31.45	31.95	-142.71	872.74	529.79	1,729.89	1,664.59	65.31	26.564		
7,600.00	7,345.94	7,331.71	7,342.44	31.44	32.29	-142.61	885.13	538.73	1,751.68	1,685.58	66.11	26.580		
7,650.00	7,368.38	7,356.12	7,385.77	31.43	32.63	-142.51	897.52	547.67	1,773.47	1,706.57	66.91	26.596		
7,693.87	7,385.51	7,379.53	7,429.10	31.41	32.97	-142.41	910.91	556.61	1,795.26	1,727.56	67.71	26.612		
7,700.00	7,387.71	7,381.74	7,431.31	31.40	33.31	-142.31	923.30	565.55	1,817.05	1,748.55	68.51	26.628		
7,750.00	7,403.82	7,400.15	7,474.64	31.37	33.65	-142.21	935.69	574.49	1,838.84	1,769.54	69.31	26.644		
7,800.00	7,416.65	7,412.36	7,517.97	31.34	33.99	-142.11	948.08	583.43	1,860.63	1,790.53	70.11	26.660		
7,850.00	7,426.13	7,423.67	7,561.30	31.30	34.33	-142.01	960.47	592.37	1,882.42	1,811.52	70.91	26.676		
7,900.00	7,432.22	7,430.98	7,604.63	31.25	34.67	-141.91	972.86	601.31	1,904.21	1,832.51	71.71	26.692		
7,950.00	7,434.87	7,435.29	7,647.96	31.21	35.01	-141.81	985.25	610.25	1,926.00	1,853.50	72.51	26.708		
7,963.63	7,435.00	7,440.60	7,691.29	31.20	35.35	-141.71	997.64	619.19	1,947.79	1,874.49	73.31	26.724		
8,000.00	7,435.00	7,445.91	7,734.62	31.17	35.69	-141.61	1010.03	628.13	1,969.58	1,895.48	74.11	26.740		
8,100.00	7,435.00	7,451.22	7,777.95	31.10	36.03	-141.51	1022.42	637.07	1,991.37	1,916.47	74.91	26.756		
8,200.00	7,435.00	7,456.53	7,821.28	31.08	36.37	-141.41	1034.81	646.01	2,013.16	1,937.46	75.71	26.772		
8,300.00	7,435.00	7,461.84	7,864.61	31.19	36.71	-141.31	1047.20	654.95	2,034.95	1,958.45	76.51	26.788		
8,400.00	7,435.00	7,467.15	7,907.94	31.60	37.05	-141.21	1059.59	663.89	2,056.74	1,979.44	77.31	26.804		
8,500.00	7,435.00	7,472.46	7,951.27	32.26	37.39	-141.11	1071.98	672.83	2,078.53	1,999.43	78.11	26.820		
8,600.00	7,435.00	7,477.77	7,994.60	33.03	37.73	-141.01	1084.37	681.77	2,100.32	2,019.42	78.91	26.836		
8,700.00	7,435.00	7,483.08	8,037.93	33.87	38.07	-140.91	1096.76	690.71	2,122.11	2,039.41	79.71	26.852		

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 4T-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 4T-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						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	7,435.00	7,250.00	7,155.32	34.77	27.94	-68.03	562.48	435.10	867.53	814.65	52.88	16.405		
8,900.00	7,435.00	7,225.64	7,135.32	35.71	27.92	-66.67	576.28	433.49	921.68	868.77	52.90	17.422		
9,000.00	7,435.00	7,200.00	7,113.77	36.70	27.90	-65.24	590.08	431.74	981.44	928.52	52.92	18.545		
9,100.00	7,435.00	7,174.08	7,091.51	37.73	27.87	-63.80	603.22	429.91	1,046.07	993.11	52.95	19.754		
9,200.00	7,435.00	7,150.00	7,070.42	38.79	27.85	-62.48	614.70	428.16	1,114.92	1,061.88	53.04	21.022		
9,300.00	7,435.00	7,132.97	7,055.27	39.89	27.83	-61.55	622.39	426.90	1,187.39	1,134.14	53.25	22.299		
9,400.00	7,435.00	7,115.46	7,039.52	41.03	27.80	-60.61	629.91	425.58	1,262.98	1,209.55	53.44	23.635		
9,500.00	7,435.00	7,100.00	7,025.46	42.19	27.78	-59.79	636.24	424.40	1,341.25	1,287.61	53.64	25.004		
9,600.00	7,435.00	7,100.00	7,025.46	43.37	27.78	-59.79	636.24	424.40	1,422.04	1,367.99	54.05	26.312		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference: S32-T2N-R68W - HWY52 4F-32H-O268 - OH - PLAN #2														
Reference				Offset				Semi Major Axis			Distance			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-89.69	0.75	-140.17	140.18	139.90	0.28	507.838		
100.00	100.00	100.00	100.00	0.14	0.14	-89.69	0.75	-140.17	140.18	139.18	0.99	141.168		
200.00	200.00	200.00	200.00	0.50	0.50	-89.69	0.75	-140.17	140.18	139.18	0.99	141.086		
200.08	200.08	200.08	200.08	0.50	0.50	-89.69	0.75	-140.17	140.18	139.18	0.99	141.086		
300.00	300.00	299.93	299.91	0.85	0.86	-88.98	2.49	-140.17	140.20	138.49	1.71	82.023		
400.00	400.00	402.04	401.89	1.21	1.23	-86.89	7.58	-139.74	139.96	137.52	2.44	57.377		
500.00	500.00	506.23	505.78	1.57	1.61	-83.92	14.52	-136.26	137.15	133.95	3.20	42.835		
600.00	599.98	609.89	608.87	1.92	1.99	162.12	22.88	-129.34	133.30	129.35	3.95	33.710		
700.00	699.84	712.88	710.87	2.26	2.38	167.87	32.62	-119.07	130.73	126.04	4.70	27.834		
751.31	750.99	764.97	762.27	2.44	2.59	171.34	38.07	-112.61	130.24	125.16	5.07	25.666	CC, ES	
800.00	799.45	813.04	809.67	2.61	2.78	174.66	43.20	-106.42	130.87	125.45	5.42	24.144		
900.00	898.70	911.66	906.90	2.98	3.18	-178.69	53.73	-93.73	136.16	130.00	6.15	22.124		
1,000.00	997.47	1,010.02	1,003.88	3.37	3.59	-172.76	64.22	-81.08	146.61	139.70	6.91	21.210		
1,050.28	1,046.90	1,059.35	1,052.51	3.57	3.79	-170.16	69.48	-74.73	153.69	146.38	7.30	21.050		
1,100.00	1,095.71	1,108.06	1,100.54	3.77	4.00	-167.86	74.68	-68.46	161.38	153.70	7.68	21.001		
1,200.00	1,193.87	1,206.04	1,197.14	4.19	4.41	-163.86	85.14	-55.86	177.54	169.08	8.46	20.985		
1,300.00	1,292.03	1,304.03	1,293.75	4.62	4.82	-160.53	95.59	-43.25	194.41	185.16	9.24	21.029		
1,400.00	1,390.19	1,402.01	1,390.35	5.06	5.24	-157.73	106.05	-30.64	211.82	201.78	10.04	21.106		
1,500.00	1,488.35	1,499.99	1,486.96	5.50	5.65	-155.36	116.50	-18.03	229.65	218.82	10.83	21.198		
1,600.00	1,586.51	1,597.98	1,583.56	5.94	6.07	-153.33	126.95	-5.43	247.81	236.17	11.64	21.297		
1,700.00	1,684.67	1,695.96	1,680.17	6.39	6.49	-151.58	137.41	7.18	266.23	253.79	12.44	21.398		
1,800.00	1,782.83	1,793.94	1,776.77	6.84	6.91	-150.05	147.86	19.79	284.86	271.61	13.25	21.496		
1,900.00	1,880.99	1,891.93	1,873.38	7.29	7.32	-148.71	158.32	32.40	303.66	289.60	14.06	21.591		
2,000.00	1,979.16	1,989.91	1,969.98	7.75	7.74	-147.53	168.77	45.00	322.61	307.73	14.88	21.682		
2,100.00	2,077.32	2,087.89	2,066.58	8.20	8.16	-146.48	179.23	57.61	341.67	325.97	15.70	21.767		
2,200.00	2,175.48	2,185.88	2,163.19	8.66	8.58	-145.54	189.68	70.22	360.83	344.32	16.52	21.848		
2,300.00	2,273.64	2,283.86	2,259.79	9.12	9.00	-144.70	200.14	82.83	380.08	362.74	17.34	21.924		
2,400.00	2,371.80	2,381.84	2,356.40	9.58	9.42	-143.93	210.59	95.43	399.40	381.24	18.16	21.995		
2,500.00	2,469.96	2,479.83	2,453.00	10.04	9.84	-143.24	221.05	108.04	418.78	399.79	18.98	22.062		
2,600.00	2,568.12	2,577.81	2,549.61	10.50	10.26	-142.61	231.50	120.65	438.21	418.40	19.81	22.124		
2,700.00	2,666.28	2,675.79	2,646.21	10.96	10.69	-142.03	241.96	133.26	457.69	437.06	20.63	22.183		
2,800.00	2,764.44	2,773.78	2,742.82	11.42	11.11	-141.50	252.41	145.86	477.22	455.76	21.46	22.239		
2,900.00	2,862.60	2,871.76	2,839.42	11.88	11.53	-141.01	262.86	158.47	496.78	474.49	22.29	22.291		
3,000.00	2,960.76	2,969.74	2,936.03	12.34	11.95	-140.55	273.32	171.08	516.37	493.25	23.11	22.340		
3,100.00	3,058.92	3,067.73	3,032.63	12.80	12.37	-140.13	283.77	183.68	535.99	512.05	23.94	22.387		
3,200.00	3,157.09	3,165.71	3,129.24	13.27	12.79	-139.74	294.23	196.29	555.63	530.86	24.77	22.431		
3,300.00	3,255.25	3,263.69	3,225.84	13.73	13.21	-139.38	304.68	208.90	575.30	549.70	25.60	22.472		
3,400.00	3,353.41	3,361.68	3,322.45	14.19	13.63	-139.04	315.14	221.51	594.99	568.56	26.43	22.511		
3,500.00	3,451.57	3,459.66	3,419.05	14.66	14.05	-138.72	325.59	234.11	614.70	587.44	27.26	22.549		
3,600.00	3,549.73	3,557.64	3,515.66	15.12	14.48	-138.43	336.05	246.72	634.43	606.34	28.09	22.584		
3,700.00	3,647.89	3,655.63	3,612.26	15.58	14.90	-138.15	346.50	259.33	654.17	625.25	28.92	22.617		
3,800.00	3,746.05	3,753.61	3,708.87	16.05	15.32	-137.88	356.96	271.94	673.93	644.17	29.75	22.649		
3,900.00	3,844.21	3,851.59	3,805.47	16.51	15.74	-137.63	367.41	284.54	693.70	663.11	30.59	22.680		
4,000.00	3,942.37	3,949.58	3,902.08	16.98	16.16	-137.40	377.86	297.15	713.48	682.06	31.42	22.709		
4,100.00	4,040.53	4,047.56	3,998.68	17.44	16.58	-137.18	388.32	309.76	733.27	701.02	32.25	22.736		
4,200.00	4,138.69	4,145.54	4,095.29	17.90	17.01	-136.97	398.77	322.37	753.07	719.99	33.08	22.763		
4,300.00	4,236.85	4,243.53	4,191.89	18.37	17.43	-136.77	409.23	334.97	772.88	738.96	33.92	22.788		
4,400.00	4,335.02	4,341.51	4,288.50	18.83	17.85	-136.58	419.68	347.58	792.70	757.95	34.75	22.812		
4,500.00	4,433.18	4,439.49	4,385.10	19.30	18.27	-136.40	430.14	360.19	812.53	776.94	35.58	22.835		
4,600.00	4,531.34	4,537.48	4,481.71	19.76	18.69	-136.22	440.59	372.80	832.36	795.95	36.42	22.857		
4,700.00	4,629.50	4,635.46	4,578.31	20.23	19.12	-136.06	451.05	385.40	852.20	814.95	37.25	22.878		
4,800.00	4,727.66	4,733.44	4,674.92	20.69	19.54	-135.90	461.50	398.01	872.05	833.97	38.08	22.898		

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 4T-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 4T-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													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)					
4,900.00	4,825.82	4,831.43	4,771.52	21.16	19.96	-135.76	471.96	410.62	891.90	852.99	38.92	22.918			
5,000.00	4,923.98	4,929.41	4,868.12	21.62	20.38	-135.61	482.41	423.23	911.76	872.01	39.75	22.937			
5,100.00	5,022.14	5,027.39	4,964.73	22.09	20.80	-135.48	492.87	435.83	931.63	891.04	40.59	22.955			
5,200.00	5,120.30	5,125.38	5,061.33	22.55	21.23	-135.34	503.32	448.44	951.50	910.08	41.42	22.972			
5,300.00	5,218.46	5,223.36	5,157.94	23.02	21.65	-135.22	513.77	461.05	971.37	929.12	42.25	22.989			
5,400.00	5,316.62	5,321.34	5,254.54	23.48	22.07	-135.10	524.23	473.65	991.25	948.16	43.09	23.005			
5,500.00	5,414.78	5,419.33	5,351.15	23.95	22.49	-134.98	534.68	486.26	1,011.13	967.21	43.92	23.020			
5,600.00	5,512.95	5,517.31	5,447.75	24.41	22.91	-134.87	545.14	498.87	1,031.02	986.26	44.76	23.035			
5,700.00	5,611.11	5,615.29	5,544.36	24.88	23.34	-134.76	555.59	511.48	1,050.91	1,005.32	45.59	23.050			
5,800.00	5,709.27	5,713.28	5,640.96	25.35	23.76	-134.66	566.05	524.08	1,070.80	1,024.38	46.43	23.064			
5,900.00	5,807.43	5,811.26	5,737.57	25.81	24.18	-134.56	576.50	536.69	1,090.70	1,043.44	47.26	23.077			
6,000.00	5,905.59	5,909.24	5,834.17	26.28	24.60	-134.46	586.96	549.30	1,110.60	1,062.50	48.10	23.090			
6,100.00	6,003.75	6,007.23	5,930.78	26.74	25.03	-134.37	597.41	561.91	1,130.50	1,081.57	48.93	23.103			
6,200.00	6,101.91	6,105.21	6,027.38	27.21	25.45	-134.28	607.87	574.51	1,150.41	1,100.64	49.77	23.115			
6,300.00	6,200.07	6,203.20	6,123.99	27.67	25.87	-134.20	618.32	587.12	1,170.32	1,119.71	50.60	23.127			
6,400.00	6,298.23	6,301.18	6,220.59	28.14	26.29	-134.11	628.78	599.73	1,190.23	1,138.79	51.44	23.138			
6,500.00	6,396.39	6,399.42	6,317.00	28.61	26.71	-134.02	639.23	611.14	1,210.14	1,157.86	52.27	23.150			
6,600.00	6,494.55	6,497.58	6,403.60	29.07	27.13	-133.93	649.68	622.55	1,230.05	1,176.93	53.10	23.161			
6,700.00	6,592.71	6,595.74	6,500.00	29.54	27.55	-133.84	660.13	635.86	1,250.00	1,196.00	53.93	23.172			
6,772.64	6,664.02	6,667.05	6,566.00	29.88	27.89	-133.76	670.58	647.04	1,269.95	1,215.07	54.76	23.183			
6,800.00	6,690.92	6,693.95	6,566.00	30.00	28.00	-133.68	681.03	658.26	1,289.90	1,234.14	55.59	23.194			
6,850.00	6,740.19	6,743.22	6,566.00	30.21	28.21	-133.60	691.48	669.47	1,309.85	1,253.21	56.42	23.205			
6,900.00	6,789.46	6,792.49	6,566.00	30.41	28.41	-133.51	701.93	680.68	1,329.80	1,272.28	57.25	23.216			
6,950.00	6,838.73	6,841.76	6,566.00	30.58	28.58	-133.43	712.38	691.89	1,349.75	1,291.35	58.08	23.227			
7,000.00	6,888.00	6,891.03	6,566.00	30.73	28.73	-133.34	722.83	703.10	1,369.70	1,310.42	58.91	23.238			
7,050.00	6,937.27	6,940.30	6,566.00	30.87	28.87	-133.26	733.28	714.31	1,389.65	1,329.49	59.74	23.249			
7,100.00	6,986.54	6,989.57	6,566.00	30.99	29.00	-133.17	743.73	725.52	1,409.60	1,348.56	60.57	23.260			
7,150.00	7,026.35	7,029.38	6,566.00	31.09	29.10	-133.09	754.18	736.73	1,429.55	1,367.63	61.40	23.271			
7,200.00	7,070.29	7,073.32	6,566.00	31.19	29.20	-133.00	764.63	747.94	1,449.50	1,386.70	62.23	23.282			
7,250.00	7,112.57	7,115.60	6,566.00	31.26	29.26	-132.92	775.08	759.15	1,469.45	1,405.77	63.06	23.293			
7,300.00	7,152.98	7,156.01	6,566.00	31.32	29.32	-132.83	785.53	770.36	1,489.40	1,424.84	63.89	23.304			
7,350.00	7,191.33	7,194.36	6,566.00	31.37	29.37	-132.75	795.98	781.57	1,509.35	1,443.91	64.72	23.315			
7,400.00	7,227.42	7,230.45	6,566.00	31.41	29.41	-132.66	806.43	792.78	1,529.30	1,462.98	65.55	23.326			
7,450.00	7,261.09	7,264.12	6,566.00	31.44	29.44	-132.58	816.88	803.99	1,549.25	1,482.05	66.38	23.337			
7,500.00	7,292.16	7,295.19	6,566.00	31.45	29.45	-132.50	827.33	815.20	1,569.20	1,501.12	67.21	23.348			
7,550.00	7,320.49	7,323.52	6,566.00	31.45	29.45	-132.42	837.78	826.41	1,589.15	1,520.19	68.04	23.359			
7,600.00	7,345.94	7,348.97	6,566.00	31.44	29.44	-132.33	848.23	837.62	1,609.10	1,539.26	68.87	23.370			
7,650.00	7,368.38	7,371.41	6,566.00	31.43	29.43	-132.25	858.68	848.83	1,629.05	1,558.33	69.70	23.381			
7,700.00	7,387.71	7,390.74	6,566.00	31.40	29.38	-132.16	869.13	860.04	1,649.00	1,577.40	70.53	23.392			
7,750.00	7,403.82	7,406.85	6,566.00	31.37	29.35	-132.08	879.58	871.25	1,668.95	1,596.47	71.36	23.403			
7,800.00	7,416.65	7,419.68	6,566.00	31.34	29.30	-132.00	890.03	882.46	1,688.90	1,615.54	72.19	23.414			
7,850.00	7,426.13	7,429.16	6,566.00	31.30	29.26	-131.91	900.48	893.67	1,708.85	1,634.61	73.02	23.425			
7,900.00	7,432.22	7,435.25	6,566.00	31.25	29.20	-131.82	910.93	904.88	1,728.80	1,653.68	73.85	23.436			
7,950.00	7,434.87	7,437.90	6,566.00	31.21	29.16	-131.74	921.38	916.09	1,748.75	1,672.75	74.68	23.447			
7,963.63	7,435.00	7,438.03	6,566.00	31.20	29.15	-131.66	931.83	927.30	1,768.70	1,691.82	75.51	23.458			
8,000.00	7,435.00	7,438.03	6,566.00	31.17	29.11	-131.57	942.28	938.51	1,788.65	1,710.89	76.34	23.469			
8,100.00	7,435.00	7,438.03	6,566.00	31.10	29.04	-131.48	952.73	949.72	1,808.60	1,729.96	77.17	23.480			
8,110.88	7,435.00	7,438.03	6,566.00	31.09	29.00	-131.40	963.18	960.93	1,828.55	1,749.03	78.00	23.491	SF		
8,200.00	7,435.00	7,438.03	6,566.00	31.08	28.95	-131.32	973.63	972.14	1,848.50	1,768.10	78.83	23.502			
8,300.00	7,435.00	7,438.03	6,566.00	31.19	28.95	-131.23	984.08	983.35	1,868.45	1,787.17	79.66	23.513			
8,400.00	7,435.00	7,438.03	6,566.00	31.60	29.98	-131.14	994.53	994.56	1,888.40	1,806.24	80.49	23.524			
8,500.00	7,435.00	7,438.03	6,566.00	32.26	29.97	-131.05	1,004.98	1,005.79	1,908.35	1,825.31	81.32	23.535			

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 4T-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 4T-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	7,435.00	7,400.00	7,275.96	33.03	29.95	-67.89	549.42	737.24	494.22	441.73	52.49	9.416		
8,700.00	7,435.00	7,367.96	7,250.12	33.87	29.93	-64.89	568.07	733.89	551.30	498.94	52.35	10.530		
8,800.00	7,435.00	7,334.64	7,222.41	34.77	29.90	-61.89	586.21	730.30	616.12	563.79	52.33	11.774		
8,900.00	7,435.00	7,300.00	7,192.74	35.71	29.86	-58.90	603.66	726.45	687.06	634.71	52.35	13.126		
9,000.00	7,435.00	7,280.34	7,175.55	36.70	29.84	-57.27	612.92	724.22	762.71	709.81	52.90	14.418		
9,100.00	7,435.00	7,250.00	7,148.53	37.73	29.80	-54.86	626.27	720.71	842.25	789.18	53.08	15.869		
9,200.00	7,435.00	7,250.00	7,148.53	38.79	29.80	-54.86	626.27	720.71	924.81	870.80	54.01	17.123		
9,300.00	7,435.00	7,220.76	7,121.98	39.89	29.75	-52.67	638.02	717.26	1,009.54	955.42	54.12	18.654		
9,400.00	7,435.00	7,200.00	7,102.85	41.03	29.72	-51.18	645.70	714.78	1,096.43	1,042.04	54.39	20.158		
9,500.00	7,435.00	7,200.00	7,102.85	42.19	29.72	-51.18	645.70	714.78	1,184.97	1,129.97	55.00	21.545		
9,600.00	7,435.00	7,178.16	7,082.51	43.37	29.68	-49.68	653.18	712.13	1,274.69	1,219.54	55.15	23.113		
9,700.00	7,435.00	7,166.58	7,071.63	44.59	29.65	-48.91	656.88	710.72	1,365.63	1,310.20	55.43	24.635		
9,800.00	7,435.00	7,150.00	7,055.95	45.82	29.62	-47.85	661.88	708.68	1,457.55	1,401.94	55.61	26.210		

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.80	0.47	-130.10	130.10										
100.00	100.00	100.00	100.00	0.14	0.14	-89.80	0.47	-130.10	130.10	129.83	0.28	471.342							
200.00	200.00	200.00	200.00	0.50	0.50	-89.80	0.47	-130.10	130.10	129.11	0.99	131.023							
300.00	300.00	300.00	300.00	0.85	0.85	-89.80	0.47	-130.10	130.10	128.39	1.71	76.087							
400.00	400.00	400.00	400.00	1.21	1.21	-89.80	0.47	-130.10	130.10	127.67	2.43	53.609							
500.00	500.00	500.00	500.00	1.57	1.57	-89.80	0.47	-130.10	130.10	126.96	3.14	41.384	CC, ES						
600.00	599.98	599.98	599.98	1.92	1.93	152.37	0.47	-130.10	131.65	127.80	3.85	34.205							
700.00	699.84	699.84	699.84	2.26	2.29	153.35	0.47	-130.10	136.30	131.75	4.55	29.961							
800.00	799.45	803.49	803.46	2.61	2.66	155.37	1.55	-128.58	142.75	137.48	5.27	27.084							
900.00	898.70	906.90	906.72	2.98	3.02	158.68	4.78	-124.01	149.88	143.88	6.00	24.979							
1,000.00	997.47	1,009.86	1,009.25	3.37	3.39	163.01	10.15	-116.44	158.26	151.53	6.74	23.498							
1,050.28	1,046.90	1,061.38	1,060.43	3.57	3.58	165.50	13.63	-111.53	163.16	156.05	7.11	22.957							
1,100.00	1,095.71	1,112.20	1,110.78	3.77	3.77	168.09	17.58	-105.95	168.15	160.68	7.47	22.500							
1,200.00	1,193.87	1,214.06	1,211.31	4.19	4.16	173.56	27.06	-92.57	177.63	169.41	8.21	21.627							
1,300.00	1,292.03	1,313.80	1,309.19	4.62	4.55	179.16	38.13	-76.96	187.01	178.05	8.96	20.875							
1,400.00	1,390.19	1,411.72	1,405.20	5.06	4.95	-175.76	49.27	-61.24	197.80	188.09	9.72	20.360							
1,500.00	1,488.35	1,509.64	1,501.20	5.50	5.36	-171.23	60.41	-45.52	210.01	199.52	10.49	20.018							
1,600.00	1,586.51	1,607.55	1,597.20	5.94	5.78	-167.20	71.55	-29.80	223.39	212.11	11.28	19.799							
1,700.00	1,684.67	1,705.47	1,693.21	6.39	6.20	-163.64	82.69	-14.09	237.76	225.67	12.09	19.668							
1,800.00	1,782.83	1,803.39	1,789.21	6.84	6.62	-160.48	93.83	1.63	252.94	240.03	12.90	19.600							
1,900.00	1,880.99	1,901.31	1,885.22	7.29	7.05	-157.68	104.97	17.35	268.79	255.06	13.73	19.577							
2,000.00	1,979.16	1,999.23	1,981.22	7.75	7.48	-155.20	116.11	33.07	285.21	270.65	14.56	19.585							
2,100.00	2,077.32	2,097.14	2,077.22	8.20	7.91	-152.98	127.25	48.79	302.11	286.70	15.40	19.616							
2,200.00	2,175.48	2,195.06	2,173.23	8.66	8.34	-151.00	138.39	64.50	319.39	303.15	16.24	19.662							
2,300.00	2,273.64	2,292.98	2,269.23	9.12	8.78	-149.23	149.53	80.22	337.02	319.93	17.09	19.719							
2,400.00	2,371.80	2,390.90	2,365.24	9.58	9.22	-147.63	160.67	95.94	354.93	336.99	17.94	19.784							
2,500.00	2,469.96	2,488.82	2,461.24	10.04	9.65	-146.18	171.81	111.66	373.09	354.29	18.79	19.853							
2,600.00	2,568.12	2,586.73	2,557.24	10.50	10.09	-144.86	182.95	127.38	391.45	371.81	19.65	19.924							
2,700.00	2,666.28	2,684.65	2,653.25	10.96	10.53	-143.67	194.09	143.09	410.00	389.50	20.50	19.997							
2,800.00	2,764.44	2,782.57	2,749.25	11.42	10.98	-142.58	205.23	158.81	428.71	407.35	21.36	20.070							
2,900.00	2,862.60	2,880.49	2,845.26	11.88	11.42	-141.57	216.37	174.53	447.56	425.34	22.22	20.142							
3,000.00	2,960.76	2,978.41	2,941.26	12.34	11.86	-140.65	227.51	190.25	466.52	443.44	23.08	20.214							
3,100.00	3,058.92	3,076.32	3,037.26	12.80	12.30	-139.80	238.65	205.97	485.60	461.66	23.94	20.284							
3,200.00	3,157.09	3,174.24	3,133.27	13.27	12.75	-139.02	249.79	221.69	504.77	479.97	24.80	20.352							
3,300.00	3,255.25	3,272.16	3,229.27	13.73	13.19	-138.29	260.93	237.40	524.03	498.36	25.66	20.419							
3,400.00	3,353.41	3,370.08	3,325.28	14.19	13.64	-137.62	272.07	253.12	543.36	516.83	26.53	20.484							
3,500.00	3,451.57	3,468.00	3,421.28	14.66	14.08	-136.99	283.21	268.84	562.76	535.37	27.39	20.546							
3,600.00	3,549.73	3,565.92	3,517.29	15.12	14.53	-136.40	294.35	284.56	582.22	553.97	28.25	20.607							
3,700.00	3,647.89	3,663.83	3,613.29	15.58	14.97	-135.85	305.49	300.28	601.74	572.62	29.12	20.666							
3,800.00	3,746.05	3,761.75	3,709.29	16.05	15.42	-135.33	316.63	315.99	621.30	591.32	29.98	20.723							
3,900.00	3,844.21	3,859.67	3,805.30	16.51	15.87	-134.85	327.77	331.71	640.92	610.07	30.85	20.778							
4,000.00	3,942.37	3,957.59	3,901.30	16.98	16.31	-134.39	338.91	347.43	660.57	628.86	31.71	20.831							
4,100.00	4,040.53	4,055.51	3,997.31	17.44	16.76	-133.96	350.05	363.15	680.26	647.69	32.58	20.882							
4,200.00	4,138.69	4,153.42	4,093.31	17.90	17.21	-133.56	361.19	378.87	699.99	666.55	33.44	20.931							
4,300.00	4,236.85	4,251.34	4,189.31	18.37	17.65	-133.18	372.33	394.58	719.75	685.44	34.31	20.979							
4,400.00	4,335.02	4,349.26	4,285.32	18.83	18.10	-132.81	383.47	410.30	739.54	704.36	35.17	21.025							
4,500.00	4,433.18	4,447.18	4,381.32	19.30	18.55	-132.47	394.61	426.02	759.35	723.31	36.04	21.070							
4,600.00	4,531.34	4,545.10	4,477.33	19.76	19.00	-132.14	405.75	441.74	779.19	742.28	36.91	21.113							
4,700.00	4,629.50	4,643.01	4,573.33	20.23	19.44	-131.83	416.88	457.46	799.05	761.28	37.77	21.155							
4,800.00	4,727.66	4,740.93	4,669.33	20.69	19.89	-131.54	428.02	473.17	818.94	780.30	38.64	21.195							
4,900.00	4,825.82	4,838.85	4,765.34	21.16	20.34	-131.26	439.16	488.89	838.84	799.34	39.51	21.234							
5,000.00	4,923.98	4,936.77	4,861.34	21.62	20.79	-130.99	450.30	504.61	858.76	818.39	40.37	21.271							

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
5,100.00	5,022.14	5,034.69	4,957.35	22.09	21.24	-130.73	461.44	520.33	878.70	837.46	41.24	21.308							
5,200.00	5,120.30	5,132.60	5,053.35	22.55	21.69	-130.49	472.58	536.05	898.66	856.55	42.11	21.343							
5,300.00	5,218.46	5,230.52	5,149.35	23.02	22.13	-130.26	483.72	551.77	918.63	875.66	42.97	21.377							
5,400.00	5,316.62	5,328.44	5,245.36	23.48	22.58	-130.03	494.86	567.48	938.62	894.78	43.84	21.410							
5,500.00	5,414.78	5,426.36	5,341.36	23.95	23.03	-129.82	506.00	583.20	958.61	913.91	44.71	21.442							
5,600.00	5,512.95	5,524.28	5,437.37	24.41	23.48	-129.61	517.14	598.92	978.62	933.05	45.57	21.473							
5,700.00	5,611.11	5,622.19	5,533.37	24.88	23.93	-129.41	528.28	614.64	998.65	952.20	46.44	21.503							
5,800.00	5,709.27	5,720.11	5,629.37	25.35	24.38	-129.22	539.42	630.36	1,018.68	971.37	47.31	21.532							
5,900.00	5,807.43	5,818.03	5,725.38	25.81	24.83	-129.04	550.56	646.07	1,038.72	990.55	48.18	21.561							
6,000.00	5,905.59	5,915.95	5,821.38	26.28	25.28	-128.87	561.70	661.79	1,058.78	1,009.73	49.04	21.588							
6,100.00	6,003.75	6,013.87	5,917.39	26.74	25.72	-128.70	572.84	677.51	1,078.84	1,028.93	49.91	21.615							
6,200.00	6,101.91	6,111.78	6,013.39	27.21	26.17	-128.53	583.98	693.23	1,098.91	1,048.13	50.78	21.641							
6,300.00	6,200.07	6,209.70	6,109.40	27.67	26.62	-128.38	595.12	708.95	1,118.99	1,067.34	51.65	21.666							
6,400.00	6,298.23	6,307.62	6,205.40	28.14	27.07	-128.23	606.26	724.66	1,139.08	1,086.56	52.52	21.690							
6,500.00	6,396.39	6,405.54	6,301.40	28.61	27.52	-128.08	617.40	740.38	1,159.17	1,105.79	53.38	21.714							
6,600.00	6,494.55	6,503.46	6,397.41	29.07	27.97	-127.94	628.54	756.10	1,179.27	1,125.02	54.25	21.737							
6,700.00	6,592.71	6,601.33	6,493.41	29.54	28.42	-127.81	639.68	771.81	1,199.36	1,144.11	55.11	21.760							
6,772.64	6,664.02	6,672.64	6,560.00	29.88	28.76	-127.70	649.82	783.45	1,219.45	1,163.20	55.97	21.783							
6,800.00	6,690.92	6,700.00	6,585.00	30.00	28.93	-127.63	659.96	795.08	1,239.54	1,182.29	56.83	21.806							
6,850.00	6,740.19	6,750.00	6,635.00	30.21	29.14	-127.58	669.10	806.71	1,259.63	1,201.38	57.69	21.829							
6,900.00	6,789.40	6,800.00	6,685.00	30.41	29.35	-127.54	678.24	818.34	1,279.72	1,220.47	58.55	21.852							
6,950.00	6,838.32	6,850.00	6,735.00	30.58	29.52	-127.51	687.38	830.00	1,299.81	1,239.56	59.41	21.875							
7,000.00	6,886.71	6,900.00	6,785.00	30.73	29.69	-127.48	696.52	841.67	1,319.90	1,258.65	60.27	21.898							
7,050.00	6,934.33	6,950.00	6,835.00	30.87	29.86	-127.46	705.66	853.34	1,340.00	1,277.74	61.13	21.921							
7,100.00	6,980.95	7,000.00	6,885.00	30.99	30.03	-127.44	714.80	865.00	1,360.10	1,296.83	62.00	21.944							
7,150.00	7,026.35	7,050.00	6,935.00	31.09	30.20	-127.42	723.94	876.67	1,380.20	1,315.92	62.86	21.967							
7,200.00	7,070.29	7,100.00	6,985.00	31.19	30.37	-127.41	733.08	888.33	1,400.30	1,335.01	63.72	21.990							
7,250.00	7,112.57	7,150.00	7,035.00	31.26	30.54	-127.40	742.22	899.99	1,420.40	1,354.10	64.58	22.013							
7,300.00	7,152.98	7,200.00	7,085.00	31.32	30.71	-127.39	751.36	911.66	1,440.50	1,373.19	65.44	22.036							
7,350.00	7,191.33	7,250.00	7,135.00	31.37	30.88	-127.38	760.50	923.32	1,460.60	1,392.28	66.30	22.059							
7,400.00	7,227.42	7,300.00	7,185.00	31.41	31.05	-127.37	769.64	934.98	1,480.70	1,411.37	67.16	22.082							
7,450.00	7,261.09	7,350.00	7,235.00	31.44	31.22	-127.36	778.78	946.64	1,500.80	1,430.46	68.02	22.105							
7,500.00	7,292.16	7,400.00	7,285.00	31.45	31.39	-127.35	787.92	958.30	1,520.90	1,449.55	68.88	22.128							
7,550.00	7,320.49	7,450.00	7,335.00	31.45	31.56	-127.34	797.06	970.00	1,541.00	1,468.64	69.74	22.151							
7,600.00	7,345.94	7,500.00	7,385.00	31.44	31.73	-127.33	806.20	981.66	1,561.10	1,487.73	70.60	22.174							
7,650.00	7,368.38	7,550.00	7,435.00	31.43	31.90	-127.32	815.34	993.32	1,581.20	1,506.82	71.46	22.197							
7,700.00	7,387.71	7,600.00	7,485.00	31.40	32.07	-127.31	824.48	1,005.00	1,601.30	1,525.91	72.32	22.220							
7,750.00	7,403.82	7,650.00	7,535.00	31.37	32.24	-127.30	833.62	1,016.66	1,621.40	1,545.00	73.18	22.243							
7,800.00	7,416.65	7,700.00	7,585.00	31.34	32.41	-127.29	842.76	1,028.32	1,641.50	1,564.09	74.04	22.266							
7,850.00	7,426.13	7,750.00	7,635.00	31.30	32.58	-127.28	851.90	1,040.00	1,661.60	1,583.18	74.90	22.289							
7,900.00	7,432.22	7,800.00	7,685.00	31.25	32.75	-127.27	861.04	1,051.66	1,681.70	1,602.27	75.76	22.312							
7,950.00	7,434.87	7,850.00	7,735.00	31.21	32.92	-127.26	870.18	1,063.32	1,701.80	1,621.36	76.62	22.335							
7,963.63	7,435.00	7,900.00	7,785.00	31.20	33.09	-127.25	879.32	1,075.00	1,721.90	1,640.45	77.48	22.358							
8,000.00	7,435.00	7,950.00	7,835.00	31.17	33.26	-127.24	888.46	1,086.66	1,742.00	1,659.54	78.34	22.381							
8,100.00	7,435.00	8,000.00	7,885.00	31.10	33.43	-127.23	897.60	1,098.32	1,762.10	1,678.63	79.20	22.404							
8,200.00	7,435.00	8,050.00	7,935.00	31.08	33.60	-127.22	906.74	1,110.00	1,782.20	1,697.72	80.06	22.427							
8,285.96	7,435.00	8,100.00	7,985.00	31.15	33.77	-127.21	915.88	1,121.66	1,802.30	1,716.81	80.92	22.450							
8,300.00	7,435.00	8,150.00	8,035.00	31.19	33.94	-127.20	925.02	1,133.32	1,822.40	1,735.90	81.78	22.473							
8,400.00	7,435.00	8,200.00	8,085.00	31.60	34.11	-127.19	934.16	1,145.00	1,842.50	1,755.00	82.64	22.496							
8,500.00	7,435.00	8,250.00	8,135.00	32.26	34.28	-127.18	943.30	1,156.66	1,862.60	1,774.09	83.50	22.519							
8,600.00	7,435.00	8,300.00	8,185.00	33.03	34.45	-127.17	952.44	1,168.32	1,882.70	1,793.18	84.36	22.542							
8,700.00	7,435.00	8,350.00	8,235.00	33.87	34.62	-127.16	961.58	1,180.00	1,902.80	1,812.27	85.22	22.565							

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 4T-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 4T-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						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	7,435.00	7,414.82	7,283.02	34.77	31.53	-56.17	621.24	901.09	473.15	418.85	54.31	8.712		
8,900.00	7,435.00	7,400.00	7,269.75	35.71	31.51	-54.17	627.49	898.92	557.01	501.67	55.34	10.065		
9,000.00	7,435.00	7,368.19	7,240.88	36.70	31.45	-50.25	639.96	894.20	643.76	588.26	55.50	11.599		
9,100.00	7,435.00	7,350.00	7,224.13	37.73	31.41	-48.23	646.51	891.45	732.98	676.93	56.05	13.077		
9,200.00	7,435.00	7,332.94	7,208.28	38.79	31.38	-46.47	652.25	888.86	823.93	767.43	56.50	14.584		
9,300.00	7,435.00	7,318.41	7,194.68	39.89	31.35	-45.06	656.84	886.63	916.21	859.31	56.90	16.102		
9,400.00	7,435.00	7,300.00	7,177.31	41.03	31.31	-43.39	662.25	883.79	1,009.59	952.44	57.14	17.668		
9,500.00	7,435.00	7,300.00	7,177.31	42.19	31.31	-43.39	662.25	883.79	1,103.77	1,046.11	57.66	19.142		
9,600.00	7,435.00	7,283.58	7,161.71	43.37	31.26	-42.00	666.70	881.23	1,198.61	1,140.78	57.82	20.730		
9,700.00	7,435.00	7,274.20	7,152.76	44.59	31.24	-41.25	669.07	879.77	1,294.05	1,236.00	58.05	22.291		
9,800.00	7,435.00	7,250.00	7,129.52	45.82	31.18	-39.44	674.65	875.96	1,390.24	1,332.18	58.05	23.947		
9,900.00	7,435.00	7,250.00	7,129.52	47.08	31.18	-39.44	674.65	875.96	1,486.38	1,428.03	58.35	25.474		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.79	0.45	-120.03	120.03										
100.00	100.00	100.00	100.00	0.14	0.14	-89.79	0.45	-120.03	120.03	119.75	0.28	434.852							
200.00	200.00	200.00	200.00	0.50	0.50	-89.79	0.45	-120.03	120.03	119.04	0.99	120.879							
300.00	300.00	300.00	300.00	0.85	0.85	-89.79	0.45	-120.03	120.03	118.32	1.71	70.196							
400.00	400.00	400.00	400.00	1.21	1.21	-89.79	0.45	-120.03	120.03	117.60	2.43	49.459							
500.00	500.00	500.00	500.00	1.57	1.57	-89.79	0.45	-120.03	120.03	116.89	3.14	38.180							
600.00	599.98	599.98	599.98	1.92	1.93	152.41	0.45	-120.03	121.57	117.72	3.85	31.588							
700.00	699.84	703.85	703.82	2.26	2.30	153.93	1.27	-118.34	124.64	120.07	4.57	27.295							
800.00	799.45	807.57	807.39	2.61	2.67	156.87	3.74	-113.27	127.84	122.54	5.30	24.136							
900.00	898.70	910.99	910.38	2.98	3.04	161.10	7.84	-104.87	131.66	125.63	6.03	21.817							
1,000.00	997.47	1,013.94	1,012.50	3.37	3.42	166.41	13.53	-93.20	136.73	129.96	6.78	20.182							
1,050.28	1,046.90	1,065.47	1,063.43	3.57	3.62	169.40	16.99	-86.12	139.99	132.84	7.15	19.579							
1,100.00	1,095.71	1,116.30	1,113.51	3.77	3.81	172.51	20.79	-78.33	143.38	135.86	7.52	19.065							
1,200.00	1,193.87	1,218.12	1,213.34	4.19	4.22	179.07	29.57	-60.32	149.70	141.42	8.28	18.090							
1,300.00	1,292.03	1,318.07	1,310.64	4.62	4.65	-174.07	39.57	-39.81	156.09	147.04	9.05	17.250							
1,400.00	1,390.19	1,416.12	1,405.95	5.06	5.09	-167.74	49.65	-19.15	164.26	154.42	9.85	16.682							
1,500.00	1,488.35	1,512.09	1,499.26	5.50	5.53	-162.17	59.67	0.94	174.50	163.84	10.66	16.366							
1,600.00	1,586.51	1,609.32	1,593.87	5.94	5.97	-157.19	70.77	20.44	187.57	176.06	11.51	16.296							
1,700.00	1,684.67	1,707.17	1,689.08	6.39	6.43	-152.83	81.95	40.06	201.91	189.53	12.38	16.312							
1,800.00	1,782.83	1,805.02	1,784.29	6.84	6.89	-149.07	93.14	59.67	217.26	204.01	13.26	16.389							
1,900.00	1,880.99	1,902.88	1,879.51	7.29	7.35	-145.80	104.33	79.29	233.43	219.29	14.14	16.505							
2,000.00	1,979.16	2,000.73	1,974.72	7.75	7.82	-142.96	115.52	98.90	250.25	235.21	15.03	16.645							
2,100.00	2,077.32	2,098.59	2,069.93	8.20	8.29	-140.47	126.70	118.52	267.59	251.66	15.93	16.799							
2,200.00	2,175.48	2,196.44	2,165.15	8.66	8.76	-138.29	137.89	138.13	285.38	268.55	16.83	16.960							
2,300.00	2,273.64	2,294.30	2,260.36	9.12	9.24	-136.37	149.08	157.75	303.51	285.79	17.73	17.123							
2,400.00	2,371.80	2,392.15	2,355.57	9.58	9.71	-134.66	160.26	177.36	321.95	303.32	18.63	17.285							
2,500.00	2,469.96	2,490.00	2,450.79	10.04	10.19	-133.14	171.45	196.98	340.63	321.11	19.53	17.445							
2,600.00	2,568.12	2,587.86	2,546.00	10.50	10.67	-131.77	182.64	216.59	359.53	339.10	20.43	17.601							
2,700.00	2,666.28	2,685.71	2,641.21	10.96	11.15	-130.54	193.83	236.20	378.60	357.27	21.33	17.751							
2,800.00	2,764.44	2,783.57	2,736.43	11.42	11.63	-129.43	205.01	255.82	397.82	375.59	22.23	17.896							
2,900.00	2,862.60	2,881.42	2,831.64	11.88	12.11	-128.42	216.20	275.43	417.18	394.05	23.13	18.035							
3,000.00	2,960.76	2,979.28	2,926.85	12.34	12.59	-127.50	227.39	295.05	436.65	412.62	24.03	18.168							
3,100.00	3,058.92	3,077.13	3,022.07	12.80	13.07	-126.66	238.58	314.66	456.22	431.29	24.94	18.295							
3,200.00	3,157.09	3,174.98	3,117.28	13.27	13.56	-125.88	249.76	334.28	475.88	450.04	25.84	18.417							
3,300.00	3,255.25	3,272.84	3,212.49	13.73	14.04	-125.17	260.95	353.89	495.61	468.87	26.74	18.534							
3,400.00	3,353.41	3,370.69	3,307.71	14.19	14.52	-124.52	272.14	373.51	515.42	487.77	27.64	18.645							
3,500.00	3,451.57	3,468.55	3,402.92	14.66	15.01	-123.91	283.32	393.12	535.28	506.73	28.55	18.752							
3,600.00	3,549.73	3,566.40	3,498.13	15.12	15.49	-123.34	294.51	412.74	555.20	525.75	29.45	18.853							
3,700.00	3,647.89	3,664.26	3,593.35	15.58	15.98	-122.82	305.70	432.35	575.16	544.81	30.35	18.950							
3,800.00	3,746.05	3,762.11	3,688.56	16.05	16.46	-122.33	316.89	451.97	595.17	563.92	31.25	19.043							
3,900.00	3,844.21	3,859.96	3,783.77	16.51	16.95	-121.87	328.07	471.58	615.22	583.07	32.16	19.132							
4,000.00	3,942.37	3,957.82	3,878.99	16.98	17.43	-121.44	339.26	491.20	635.31	602.25	33.06	19.217							
4,100.00	4,040.53	4,055.67	3,974.20	17.44	17.92	-121.03	350.45	510.81	655.42	621.46	33.96	19.299							
4,200.00	4,138.69	4,153.53	4,069.41	17.90	18.41	-120.65	361.63	530.43	675.57	640.70	34.86	19.377							
4,300.00	4,236.85	4,251.38	4,164.63	18.37	18.89	-120.30	372.82	550.04	695.74	659.97	35.77	19.452							
4,400.00	4,335.02	4,349.24	4,259.84	18.83	19.38	-119.96	384.01	569.65	715.94	679.27	36.67	19.524							
4,500.00	4,433.18	4,447.09	4,355.05	19.30	19.87	-119.64	395.20	589.27	736.16	698.58	37.57	19.593							
4,600.00	4,531.34	4,544.95	4,450.27	19.76	20.35	-119.34	406.38	608.88	756.40	717.92	38.48	19.659							
4,700.00	4,629.50	4,642.80	4,545.48	20.23	20.84	-119.05	417.57	628.50	776.66	737.28	39.38	19.723							
4,800.00	4,727.66	4,740.65	4,640.69	20.69	21.33	-118.78	428.76	648.11	796.93	756.65	40.28	19.784							
4,900.00	4,825.82	4,838.51	4,735.91	21.16	21.82	-118.52	439.94	667.73	817.23	776.04	41.18	19.843							
5,000.00	4,923.98	4,936.36	4,831.12	21.62	22.30	-118.28	451.13	687.34	837.54	795.45	42.09	19.900							

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 4T-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 4T-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													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				
5,100.00	5,022.14	5,034.22	4,926.33	22.09	22.79	-118.04	462.32	706.96	857.86	814.87	42.99	19.955				
5,200.00	5,120.30	5,132.07	5,021.55	22.55	23.28	-117.82	473.51	726.57	878.20	834.30	43.89	20.008				
5,300.00	5,218.46	5,229.93	5,116.76	23.02	23.77	-117.61	484.69	746.19	898.54	853.75	44.80	20.058				
5,400.00	5,316.62	5,327.78	5,211.97	23.48	24.25	-117.40	495.88	765.80	918.90	873.20	45.70	20.108				
5,500.00	5,414.78	5,425.63	5,307.19	23.95	24.74	-117.21	507.07	785.42	939.27	892.67	46.60	20.155				
5,600.00	5,512.95	5,523.49	5,402.40	24.41	25.23	-117.02	518.25	805.03	959.65	912.15	47.51	20.201				
5,700.00	5,611.11	5,621.34	5,497.61	24.88	25.72	-116.84	529.44	824.65	980.04	931.63	48.41	20.245				
5,800.00	5,709.27	5,719.20	5,592.83	25.35	26.21	-116.67	540.63	844.26	1,000.44	951.13	49.31	20.288				
5,900.00	5,807.43	5,817.05	5,688.04	25.81	26.70	-116.50	551.82	863.87	1,020.85	970.63	50.22	20.329				
6,000.00	5,905.59	5,914.91	5,783.25	26.28	27.18	-116.35	563.00	883.49	1,041.26	990.14	51.12	20.370				
6,100.00	6,003.75	6,012.76	5,878.47	26.74	27.67	-116.19	574.19	903.10	1,061.69	1,009.66	52.02	20.408				
6,200.00	6,101.91	6,110.61	5,973.68	27.21	28.16	-116.05	585.38	922.72	1,082.11	1,029.19	52.93	20.446				
6,300.00	6,200.07	6,208.47	6,068.89	27.67	28.65	-115.91	596.56	942.33	1,102.55	1,048.72	53.83	20.483				
6,400.00	6,298.23	6,306.32	6,164.11	28.14	29.14	-115.77	607.75	961.95	1,122.99	1,068.26	54.73	20.518				
6,500.00	6,396.39	6,404.36	6,259.42	28.61	29.63	-115.63	618.94	981.56	1,143.42	1,087.73	55.63	20.553				
6,600.00	6,494.55	6,502.31	6,354.57	29.07	30.11	-115.49	630.13	1,001.17	1,163.80	1,107.19	56.53	20.588				
6,700.00	6,592.71	6,600.27	6,449.72	29.54	30.58	-115.35	641.32	1,020.78	1,184.11	1,126.60	57.43	20.623				
6,772.64	6,664.02	6,671.28	6,545.00	29.88	30.92	-115.21	652.51	1,040.39	1,204.37	1,145.97	58.33	20.658				
6,800.00	6,690.92	6,700.00	6,640.00	30.00	31.17	-115.07	663.70	1,060.00	1,224.58	1,165.30	59.23	20.693				
6,850.00	6,740.19	6,750.00	6,740.00	30.21	31.37	-114.93	674.89	1,080.61	1,244.75	1,184.59	60.13	20.728				
6,900.00	6,789.40	6,800.00	6,830.00	30.41	31.57	-114.79	686.08	1,101.22	1,264.88	1,203.88	61.03	20.763				
6,950.00	6,838.32	6,850.00	6,920.00	30.58	31.77	-114.65	697.27	1,121.83	1,284.97	1,223.07	61.93	20.798				
7,000.00	6,886.71	6,900.00	7,000.00	30.73	31.97	-114.51	708.46	1,142.44	1,305.02	1,242.26	62.83	20.833				
7,050.00	6,934.33	6,950.00	7,100.00	30.87	32.17	-114.37	719.65	1,163.05	1,325.07	1,261.45	63.73	20.868				
7,100.00	6,980.95	7,000.00	7,200.00	30.99	32.37	-114.23	730.84	1,183.66	1,345.12	1,280.64	64.63	20.903				
7,150.00	7,026.35	7,050.00	7,300.00	31.09	32.57	-114.09	742.03	1,204.27	1,365.17	1,300.83	65.53	20.938				
7,200.00	7,070.29	7,100.00	7,400.00	31.19	32.77	-113.95	753.22	1,224.88	1,385.22	1,321.02	66.43	20.973				
7,250.00	7,112.57	7,150.00	7,500.00	31.26	32.97	-113.81	764.41	1,245.49	1,405.27	1,341.21	67.33	21.008				
7,300.00	7,152.98	7,200.00	7,600.00	31.32	33.17	-113.67	775.60	1,266.10	1,425.32	1,361.40	68.23	21.043				
7,350.00	7,191.33	7,250.00	7,700.00	31.37	33.37	-113.53	786.79	1,286.71	1,445.37	1,381.59	69.13	21.078				
7,400.00	7,227.42	7,300.00	7,800.00	31.41	33.57	-113.39	797.98	1,307.32	1,465.42	1,401.78	70.03	21.113				
7,450.00	7,261.09	7,350.00	7,900.00	31.44	33.77	-113.25	809.17	1,327.93	1,485.47	1,421.97	70.93	21.148				
7,500.00	7,292.16	7,400.00	8,000.00	31.45	33.97	-113.11	820.36	1,348.54	1,505.52	1,442.16	71.83	21.183				
7,550.00	7,320.49	7,450.00	8,100.00	31.45	34.17	-112.97	831.55	1,369.15	1,525.57	1,462.35	72.73	21.218				
7,600.00	7,345.94	7,500.00	8,200.00	31.44	34.37	-112.83	842.74	1,389.76	1,545.62	1,482.54	73.63	21.253				
7,650.00	7,368.38	7,550.00	8,300.00	31.43	34.57	-112.69	853.93	1,410.37	1,565.67	1,502.73	74.53	21.288				
7,700.00	7,387.71	7,600.00	8,400.00	31.40	34.77	-112.55	865.12	1,430.98	1,585.72	1,522.92	75.43	21.323				
7,750.00	7,403.82	7,650.00	8,500.00	31.37	34.97	-112.41	876.31	1,451.59	1,605.77	1,543.11	76.33	21.358				
7,800.00	7,416.65	7,700.00	8,600.00	31.34	35.17	-112.27	887.50	1,472.20	1,625.82	1,563.30	77.23	21.393				
7,850.00	7,426.13	7,750.00	8,700.00	31.30	35.37	-112.13	898.69	1,492.81	1,645.87	1,583.49	78.13	21.428				
7,900.00	7,432.22	7,800.00	8,800.00	31.25	35.57	-111.99	909.88	1,513.42	1,665.92	1,603.68	79.03	21.463				
7,913.46	7,433.27	7,850.00	8,900.00	31.24	35.77	-111.85	921.07	1,534.03	1,685.97	1,623.87	79.93	21.498				
7,950.00	7,434.87	7,900.00	9,000.00	31.21	35.97	-111.71	932.26	1,554.64	1,706.02	1,644.06	80.83	21.533				
7,963.63	7,435.00	7,950.00	9,100.00	31.20	36.17	-111.57	943.45	1,575.25	1,726.07	1,664.25	81.73	21.568				
8,000.00	7,435.00	8,000.00	9,200.00	31.17	36.37	-111.43	954.64	1,595.86	1,746.12	1,684.44	82.63	21.603				
8,100.00	7,435.00	8,100.00	9,300.00	31.10	36.57	-111.29	965.83	1,616.47	1,766.17	1,704.63	83.53	21.638				
8,200.00	7,435.00	8,200.00	9,400.00	31.08	36.77	-111.15	977.02	1,637.11	1,786.22	1,724.82	84.43	21.673				
8,300.00	7,435.00	8,300.00	9,500.00	31.19	36.97	-111.01	988.21	1,657.75	1,806.27	1,745.01	85.33	21.708				
8,400.00	7,435.00	8,400.00	9,600.00	31.60	37.17	-110.87	999.40	1,678.40	1,826.32	1,765.20	86.23	21.743				
8,500.00	7,435.00	8,500.00	9,700.00	32.26	37.37	-110.73	1,010.59	1,699.05	1,846.37	1,785.39	87.13	21.778				
8,600.00	7,435.00	8,600.00	9,800.00	33.03	37.57	-110.59	1,021.78	1,719.70	1,866.42	1,805.58	88.03	21.813				
8,700.00	7,435.00	8,700.00	9,900.00	33.87	37.77	-110.45	1,032.97	1,740.35	1,886.47	1,825.77	88.93	21.848				

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 4T-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 4T-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		
8,800.00	7,435.00	7,317.15	7,130.17	34.77	33.17	4.44	555.23	1,152.26	548.41	494.01	54.40	10.081		
8,900.00	7,435.00	7,287.87	7,105.64	35.71	33.14	3.43	570.70	1,148.17	632.62	577.06	55.55	11.388		
9,000.00	7,435.00	7,250.00	7,073.06	36.70	33.09	2.28	589.17	1,142.63	719.12	663.11	56.00	12.840		
9,100.00	7,435.00	7,250.00	7,073.06	37.73	33.09	2.28	589.17	1,142.63	807.08	749.37	57.71	13.986		
9,200.00	7,435.00	7,219.06	7,045.77	38.79	33.04	1.45	602.96	1,137.90	896.37	838.36	58.01	15.451		
9,300.00	7,435.00	7,200.00	7,028.68	39.89	33.00	0.98	610.85	1,134.90	987.01	928.44	58.57	16.852		
9,400.00	7,435.00	7,184.71	7,014.83	41.03	32.97	0.62	616.84	1,132.44	1,078.65	1,019.56	59.09	18.255		
9,500.00	7,435.00	7,170.05	7,001.45	42.19	32.94	0.29	622.31	1,130.05	1,171.16	1,111.65	59.52	19.678		
9,600.00	7,435.00	7,150.00	6,982.96	43.37	32.90	-0.13	629.33	1,126.73	1,264.46	1,204.70	59.76	21.160		
9,700.00	7,435.00	7,150.00	6,982.96	44.59	32.90	-0.13	629.33	1,126.73	1,358.32	1,298.02	60.30	22.527		
9,800.00	7,435.00	7,150.00	6,982.96	45.82	32.90	-0.13	629.33	1,126.73	1,453.00	1,392.26	60.74	23.921		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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	-89.78	0.43	-110.24	110.24										
100.00	100.00	100.00	100.00	0.14	0.14	-89.78	0.43	-110.24	110.24	109.96	0.28	399.375							
200.00	200.00	200.00	200.00	0.50	0.50	-89.78	0.43	-110.24	110.24	109.24	0.99	111.018							
300.00	300.00	300.00	300.00	0.85	0.85	-89.78	0.43	-110.24	110.24	108.53	1.71	64.469							
400.00	400.00	400.00	400.00	1.21	1.21	-89.78	0.43	-110.24	110.24	107.81	2.43	45.424							
500.00	500.00	500.00	500.00	1.57	1.57	-89.78	0.43	-110.24	110.24	107.09	3.14	35.065							
600.00	599.98	603.55	603.53	1.92	1.94	152.92	1.25	-108.55	110.17	106.30	3.87	28.476							
683.10	682.97	689.48	689.34	2.20	2.24	154.96	3.16	-104.60	110.10	105.63	4.47	24.609 CC							
700.00	699.84	706.94	706.76	2.26	2.31	155.52	3.69	-103.51	110.10	105.51	4.60	23.951							
800.00	799.45	809.99	809.39	2.61	2.68	159.82	7.74	-95.16	110.49	105.15	5.33	20.717 ES							
900.00	898.70	912.56	911.13	2.98	3.06	165.70	13.36	-83.55	112.02	105.95	6.07	18.454							
1,000.00	997.47	1,014.48	1,011.72	3.37	3.46	172.85	20.52	-68.78	115.63	108.81	6.81	16.976							
1,050.28	1,046.90	1,065.43	1,061.77	3.57	3.66	176.77	24.69	-60.18	118.52	111.33	7.19	16.489							
1,100.00	1,095.71	1,115.64	1,110.91	3.77	3.87	-179.22	29.17	-50.94	121.82	114.25	7.56	16.103							
1,200.00	1,193.87	1,216.04	1,208.61	4.19	4.31	-170.87	39.25	-30.13	128.84	120.49	8.35	15.436							
1,300.00	1,292.03	1,314.36	1,303.67	4.62	4.76	-162.68	50.21	-7.53	137.39	128.22	9.17	14.987							
1,400.00	1,390.19	1,412.11	1,398.14	5.06	5.23	-155.53	61.15	15.05	148.41	138.38	10.03	14.802							
1,500.00	1,488.35	1,509.86	1,492.62	5.50	5.70	-149.43	72.09	37.64	161.45	150.53	10.91	14.792							
1,600.00	1,586.51	1,607.61	1,587.09	5.94	6.19	-144.26	83.04	60.22	176.05	164.23	11.82	14.895							
1,700.00	1,684.67	1,705.36	1,681.57	6.39	6.68	-139.90	93.98	82.80	191.87	179.14	12.73	15.067							
1,800.00	1,782.83	1,803.11	1,776.04	6.84	7.17	-136.20	104.92	105.39	208.63	194.97	13.65	15.279							
1,900.00	1,880.99	1,900.86	1,870.51	7.29	7.67	-133.06	115.87	127.97	226.11	211.53	14.58	15.511							
2,000.00	1,979.16	1,998.61	1,964.99	7.75	8.18	-130.37	126.81	150.55	244.16	228.66	15.50	15.752							
2,100.00	2,077.32	2,096.36	2,059.46	8.20	8.68	-128.06	137.76	173.13	262.67	246.24	16.42	15.992							
2,200.00	2,175.48	2,194.11	2,153.93	8.66	9.19	-126.04	148.70	195.72	281.54	264.19	17.35	16.228							
2,300.00	2,273.64	2,291.86	2,248.41	9.12	9.70	-124.28	159.64	218.30	300.71	282.44	18.27	16.456							
2,400.00	2,371.80	2,389.61	2,342.88	9.58	10.21	-122.73	170.59	240.88	320.12	300.92	19.20	16.675							
2,500.00	2,469.96	2,487.36	2,437.35	10.04	10.72	-121.36	181.53	263.46	339.73	319.61	20.12	16.885							
2,600.00	2,568.12	2,585.11	2,531.83	10.50	11.24	-120.13	192.48	286.05	359.51	338.46	21.04	17.083							
2,700.00	2,666.28	2,682.86	2,626.30	10.96	11.75	-119.04	203.42	308.63	379.43	357.46	21.97	17.272							
2,800.00	2,764.44	2,780.61	2,720.77	11.42	12.27	-118.05	214.36	331.21	399.47	376.58	22.89	17.451							
2,900.00	2,862.60	2,878.36	2,815.25	11.88	12.78	-117.16	225.31	353.79	419.62	395.80	23.81	17.620							
3,000.00	2,960.76	2,976.11	2,909.72	12.34	13.30	-116.35	236.25	376.38	439.85	415.11	24.74	17.781							
3,100.00	3,058.92	3,073.86	3,004.19	12.80	13.82	-115.61	247.20	398.96	460.16	434.50	25.66	17.932							
3,200.00	3,157.09	3,171.61	3,098.67	13.27	14.33	-114.93	258.14	421.54	480.54	453.96	26.58	18.076							
3,300.00	3,255.25	3,269.36	3,193.14	13.73	14.85	-114.31	269.08	444.13	500.98	473.47	27.51	18.212							
3,400.00	3,353.41	3,367.11	3,287.61	14.19	15.37	-113.73	280.03	466.71	521.47	493.04	28.43	18.342							
3,500.00	3,451.57	3,464.86	3,382.09	14.66	15.89	-113.20	290.97	489.29	542.01	512.65	29.35	18.464							
3,600.00	3,549.73	3,562.61	3,476.56	15.12	16.41	-112.71	301.91	511.87	562.59	532.31	30.28	18.581							
3,700.00	3,647.89	3,660.35	3,571.03	15.58	16.93	-112.26	312.86	534.46	583.20	552.00	31.20	18.692							
3,800.00	3,746.05	3,758.10	3,665.51	16.05	17.45	-111.83	323.80	557.04	603.85	571.72	32.12	18.797							
3,900.00	3,844.21	3,855.85	3,759.98	16.51	17.97	-111.43	334.75	579.62	624.53	591.48	33.05	18.898							
4,000.00	3,942.37	3,953.60	3,854.45	16.98	18.49	-111.06	345.69	602.20	645.23	611.26	33.97	18.993							
4,100.00	4,040.53	4,051.35	3,948.93	17.44	19.01	-110.71	356.63	624.79	665.96	631.07	34.90	19.085							
4,200.00	4,138.69	4,149.10	4,043.40	17.90	19.53	-110.38	367.58	647.37	686.71	650.90	35.82	19.172							
4,300.00	4,236.85	4,246.85	4,137.87	18.37	20.06	-110.07	378.52	669.95	707.49	670.74	36.74	19.255							
4,400.00	4,335.02	4,344.60	4,232.35	18.83	20.58	-109.78	389.47	692.53	728.28	690.61	37.67	19.335							
4,500.00	4,433.18	4,442.35	4,326.82	19.30	21.10	-109.51	400.41	715.12	749.09	710.50	38.59	19.411							
4,600.00	4,531.34	4,540.10	4,421.30	19.76	21.62	-109.25	411.35	737.70	769.91	730.40	39.51	19.484							
4,700.00	4,629.50	4,637.85	4,515.77	20.23	22.14	-109.00	422.30	760.28	790.75	750.31	40.44	19.555							
4,800.00	4,727.66	4,735.60	4,610.24	20.69	22.67	-108.77	433.24	782.87	811.60	770.24	41.36	19.622							
4,900.00	4,825.82	4,833.35	4,704.72	21.16	23.19	-108.55	444.19	805.45	832.46	790.18	42.29	19.686							

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft	
Reference: S32-T2N-R68W - HWY52 4I-32H-O268 - OH - PLAN #2															
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	4,923.98	4,931.10	4,799.19	21.62	23.71	-108.33	455.13	828.03	853.34	810.13	43.21	19.749			
5,100.00	5,022.14	5,028.85	4,893.66	22.09	24.23	-108.13	466.07	850.61	874.22	830.09	44.13	19.808			
5,200.00	5,120.30	5,126.60	4,988.14	22.55	24.76	-107.94	477.02	873.20	895.12	850.06	45.06	19.866			
5,300.00	5,218.46	5,224.35	5,082.61	23.02	25.28	-107.76	487.96	895.78	916.02	870.04	45.98	19.921			
5,400.00	5,316.62	5,322.10	5,177.08	23.48	25.80	-107.58	498.90	918.36	936.94	890.03	46.91	19.974			
5,500.00	5,414.78	5,419.85	5,271.56	23.95	26.33	-107.42	509.85	940.94	957.86	910.03	47.83	20.026			
5,600.00	5,512.95	5,517.60	5,366.03	24.41	26.85	-107.26	520.79	963.53	978.79	930.03	48.76	20.075			
5,700.00	5,611.11	5,615.35	5,460.50	24.88	27.37	-107.10	531.74	986.11	999.72	950.04	49.68	20.123			
5,800.00	5,709.27	5,713.10	5,554.98	25.35	27.89	-106.95	542.68	1,008.69	1,020.67	970.06	50.60	20.169			
5,900.00	5,807.43	5,810.85	5,649.45	25.81	28.42	-106.81	553.62	1,031.27	1,041.61	990.08	51.53	20.214			
6,000.00	5,905.59	5,908.59	5,743.92	26.28	28.94	-106.68	564.57	1,053.86	1,062.57	1,010.11	52.45	20.257			
6,100.00	6,003.75	6,006.34	5,838.40	26.74	29.46	-106.55	575.51	1,076.44	1,083.53	1,030.15	53.38	20.299			
6,200.00	6,101.91	6,104.09	5,932.87	27.21	29.99	-106.42	586.46	1,099.02	1,104.49	1,050.19	54.30	20.339			
6,300.00	6,200.07	6,201.84	6,027.34	27.67	30.51	-106.30	597.40	1,121.61	1,125.46	1,070.23	55.23	20.378			
6,400.00	6,298.23	6,299.59	6,121.82	28.14	31.04	-106.18	608.34	1,144.19	1,146.44	1,090.28	56.15	20.416			
6,500.00	6,396.39	6,397.34	6,216.29	28.61	31.56	-106.07	619.29	1,166.77	1,167.42	1,110.34	57.08	20.453			
6,600.00	6,494.55	6,493.54	7,560.00	29.07	37.06	-45.27	-530.72	1,473.15	1,173.89	1,154.34	19.56	60.023			
6,700.00	6,592.71	6,702.36	7,560.00	29.54	37.09	-43.77	-539.54	1,473.05	1,078.00	1,057.40	20.61	52.309			
6,772.64	6,664.02	8,708.77	7,560.00	29.88	37.10	-42.66	-545.95	1,472.98	1,008.80	987.29	21.51	46.891			
6,800.00	6,690.92	8,710.66	7,560.00	30.00	37.11	-25.00	-547.84	1,472.95	982.82	960.93	21.89	44.902			
6,850.00	6,740.19	8,711.43	7,560.00	30.21	37.11	9.83	-548.60	1,472.95	935.45	912.84	22.61	41.376			
6,900.00	6,789.40	8,708.70	7,560.00	30.41	37.10	41.53	-545.88	1,472.98	888.46	865.08	23.38	37.994			
6,950.00	6,838.32	8,702.50	7,560.00	30.58	37.09	65.43	-539.68	1,473.05	842.12	817.90	24.23	34.759			
7,000.00	6,886.71	8,692.86	7,560.00	30.73	37.06	82.18	-530.03	1,473.16	796.72	771.57	25.16	31.672			
7,050.00	6,934.33	8,679.81	7,560.00	30.87	37.02	93.86	-516.99	1,473.30	752.53	726.35	26.18	28.745			
7,100.00	6,980.95	8,663.44	7,560.00	30.99	36.97	102.11	-500.62	1,473.49	709.83	682.52	27.31	25.991			
7,150.00	7,026.35	8,643.81	7,560.00	31.09	36.92	107.98	-480.99	1,473.71	668.89	640.34	28.56	23.423			
7,200.00	7,070.29	8,621.02	7,560.00	31.19	36.86	112.14	-458.20	1,473.97	629.98	600.05	29.93	21.051			
7,250.00	7,112.57	8,595.19	7,560.00	31.26	36.81	115.04	-432.37	1,474.26	593.33	561.91	31.42	18.883			
7,300.00	7,152.98	8,566.43	7,560.00	31.32	36.74	116.95	-403.62	1,474.59	559.18	526.13	33.05	16.920			
7,350.00	7,191.33	8,534.89	7,560.00	31.37	36.69	118.08	-372.08	1,474.95	527.74	492.96	34.78	15.175			
7,400.00	7,227.42	8,500.73	7,560.00	31.41	36.63	118.58	-337.92	1,475.34	499.16	462.58	36.58	13.646			
7,450.00	7,261.09	8,464.10	7,560.00	31.44	36.58	118.57	-301.30	1,475.75	473.57	435.11	38.45	12.316			
7,500.00	7,292.16	8,425.19	7,560.00	31.45	36.53	118.14	-262.39	1,476.19	451.03	410.71	40.32	11.186			
7,550.00	7,320.49	8,384.19	7,560.00	31.45	36.50	117.37	-221.39	1,476.66	431.55	389.40	42.15	10.238			
7,600.00	7,345.94	8,341.30	7,560.00	31.44	36.47	116.37	-178.50	1,477.15	415.07	371.17	43.90	9.456			
7,650.00	7,368.38	8,296.72	7,560.00	31.43	36.45	115.21	-133.92	1,477.65	401.47	355.98	45.49	8.825			
7,700.00	7,387.71	8,250.67	7,560.00	31.40	36.44	113.99	-87.87	1,478.17	390.59	343.65	46.94	8.321			
7,750.00	7,403.82	8,203.38	7,560.00	31.37	36.44	112.79	-40.59	1,478.71	382.21	334.05	48.16	7.936			
7,800.00	7,416.65	8,139.10	7,558.15	31.34	36.46	110.98	23.64	1,479.00	375.36	326.01	49.35	7.606			
7,850.00	7,426.13	8,071.59	7,550.28	31.30	36.49	108.76	90.66	1,477.89	368.15	317.40	50.75	7.254			
7,900.00	7,432.22	8,006.60	7,536.95	31.25	36.52	106.35	154.20	1,475.44	360.70	308.46	52.24	6.904			
7,950.00	7,434.87	7,944.05	7,518.87	31.21	36.55	103.75	213.95	1,471.82	353.21	299.49	53.72	6.575			
7,963.63	7,435.00	7,927.41	7,513.22	31.20	36.55	103.01	229.56	1,470.66	351.19	297.08	54.11	6.490			
8,000.00	7,435.00	7,884.30	7,496.94	31.17	36.57	100.46	269.33	1,467.24	345.56	290.42	55.15	6.266			
8,100.00	7,435.00	7,777.39	7,446.82	31.10	36.59	92.08	363.01	1,456.39	329.53	271.69	57.84	5.698			
8,200.00	7,435.00	7,687.66	7,394.67	31.08	36.57	82.70	435.04	1,444.81	318.14	258.31	59.83	5.318			
8,250.83	7,435.00	7,648.15	7,369.02	31.10	36.56	77.96	464.52	1,439.04	316.38	255.85	60.53	5.227			
8,300.00	7,435.00	7,613.45	7,345.22	31.19	36.53	73.56	489.19	1,433.67	318.23	257.21	61.01	5.216 SF			
8,400.00	7,435.00	7,550.00	7,298.81	31.60	36.48	65.16	531.12	1,423.11	334.53	272.94	61.59	5.432			
8,500.00	7,435.00	7,500.00	7,259.81	32.26	36.42	58.48	561.09	1,414.18	368.08	305.93	62.15	5.922			
8,600.00	7,435.00	7,459.60	7,226.88	33.03	36.36	53.21	583.22	1,406.60	416.80	353.95	62.85	6.631			

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 4T-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 4T-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						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	7,435.00	7,424.20	7,197.07	33.87	36.29	48.78	601.03	1,399.72	477.37	413.88	63.49	7.519		
8,800.00	7,435.00	7,400.00	7,176.22	34.77	36.25	45.89	612.32	1,394.89	546.75	482.38	64.37	8.494		
8,900.00	7,435.00	7,368.44	7,148.49	35.71	36.18	42.29	625.94	1,388.45	622.40	557.78	64.62	9.631		
9,000.00	7,435.00	7,350.00	7,132.03	36.70	36.14	40.29	633.32	1,384.62	702.80	637.59	65.21	10.777		
9,100.00	7,435.00	7,326.89	7,111.15	37.73	36.08	37.90	641.94	1,379.76	786.65	721.20	65.46	12.018		
9,200.00	7,435.00	7,300.00	7,086.53	38.79	36.01	35.27	651.10	1,374.01	873.29	807.80	65.50	13.333		
9,300.00	7,435.00	7,300.00	7,086.53	39.89	36.01	35.27	651.10	1,374.01	961.78	895.62	66.16	14.537		
9,400.00	7,435.00	7,281.58	7,069.49	41.03	35.95	33.57	656.83	1,370.02	1,051.94	985.69	66.25	15.878		
9,500.00	7,435.00	7,269.65	7,058.37	42.19	35.91	32.50	660.29	1,367.42	1,143.44	1,077.00	66.43	17.212		
9,600.00	7,435.00	7,250.00	7,039.95	43.37	35.86	30.82	665.59	1,363.10	1,236.07	1,169.65	66.43	18.608		
9,700.00	7,435.00	7,250.00	7,039.95	44.59	35.86	30.82	665.59	1,363.10	1,329.41	1,262.68	66.73	19.921		
9,800.00	7,435.00	7,250.00	7,039.95	45.82	35.86	30.82	665.59	1,363.10	1,423.65	1,356.68	66.98	21.256		

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.76	0.41	-100.16	100.16										
100.00	100.00	100.00	100.00	0.14	0.14	-89.76	0.41	-100.16	100.16	99.89	0.28	362.884							
200.00	200.00	200.00	200.00	0.50	0.50	-89.76	0.41	-100.16	100.16	99.17	0.99	100.874							
300.00	300.00	300.00	300.00	0.85	0.85	-89.76	0.41	-100.16	100.16	98.45	1.71	58.579							
400.00	400.00	400.00	400.00	1.21	1.21	-89.76	0.41	-100.16	100.16	97.74	2.43	41.273							
500.00	500.00	503.30	503.28	1.57	1.58	-89.35	1.11	-98.44	98.50	95.33	3.17	31.078							
600.00	599.98	606.39	606.22	1.92	1.95	154.30	3.20	-93.27	95.10	91.19	3.91	24.305							
700.00	699.84	709.16	708.56	2.26	2.32	158.17	6.66	-84.71	91.82	87.17	4.65	19.743							
800.00	799.45	811.46	810.05	2.61	2.70	164.22	11.46	-72.81	89.31	83.92	5.39	16.576							
880.52	879.40	893.40	890.97	2.91	3.02	170.65	16.29	-60.86	88.52	82.54	5.98	14.803 CC							
900.00	898.70	913.16	910.42	2.98	3.10	172.39	17.58	-57.66	88.58	82.45	6.12	14.465 ES							
1,000.00	997.47	1,014.14	1,009.44	3.37	3.52	-177.84	24.97	-39.36	90.87	84.00	6.87	13.232							
1,050.28	1,046.90	1,064.60	1,058.65	3.57	3.74	-172.61	29.15	-29.00	93.54	86.29	7.26	12.892							
1,100.00	1,095.71	1,114.28	1,106.90	3.77	3.96	-167.39	33.59	-18.02	96.92	89.27	7.65	12.670							
1,200.00	1,193.87	1,213.53	1,202.64	4.19	4.44	-156.82	43.38	6.22	105.07	96.58	8.49	12.378							
1,300.00	1,292.03	1,311.29	1,296.31	4.62	4.93	-146.98	53.87	32.19	115.92	106.53	9.39	12.345							
1,400.00	1,390.19	1,408.83	1,389.74	5.06	5.45	-138.95	64.36	58.16	129.63	119.31	10.32	12.556							
1,500.00	1,488.35	1,506.37	1,483.16	5.50	5.97	-132.51	74.85	84.13	145.41	134.14	11.27	12.901							
1,600.00	1,586.51	1,603.91	1,576.59	5.94	6.50	-127.36	85.34	110.11	162.65	150.43	12.22	13.311							
1,700.00	1,684.67	1,701.44	1,670.02	6.39	7.04	-123.21	95.83	136.08	180.94	167.78	13.17	13.743							
1,800.00	1,782.83	1,798.98	1,763.45	6.84	7.58	-119.82	106.32	162.05	200.00	185.89	14.11	14.174							
1,900.00	1,880.99	1,896.52	1,856.88	7.29	8.12	-117.02	116.81	188.02	219.61	204.56	15.05	14.590							
2,000.00	1,979.16	1,994.06	1,950.31	7.75	8.67	-114.68	127.30	214.00	239.65	223.66	15.99	14.986							
2,100.00	2,077.32	2,091.59	2,043.74	8.20	9.22	-112.71	137.79	239.97	260.01	243.08	16.93	15.358							
2,200.00	2,175.48	2,189.13	2,137.17	8.66	9.78	-111.02	148.28	265.94	280.63	262.77	17.87	15.706							
2,300.00	2,273.64	2,286.67	2,230.60	9.12	10.33	-109.56	158.77	291.91	301.46	282.65	18.80	16.031							
2,400.00	2,371.80	2,384.21	2,324.03	9.58	10.89	-108.29	169.26	317.89	322.45	302.70	19.74	16.333							
2,500.00	2,469.96	2,481.75	2,417.46	10.04	11.45	-107.17	179.75	343.86	343.57	322.89	20.68	16.615							
2,600.00	2,568.12	2,579.28	2,510.89	10.50	12.01	-106.19	190.23	369.83	364.80	343.18	21.61	16.877							
2,700.00	2,666.28	2,676.82	2,604.31	10.96	12.57	-105.31	200.72	395.80	386.12	363.57	22.55	17.122							
2,800.00	2,764.44	2,774.36	2,697.74	11.42	13.13	-104.52	211.21	421.78	407.52	384.04	23.49	17.350							
2,900.00	2,862.60	2,871.90	2,791.17	11.88	13.69	-103.81	221.70	447.75	428.99	404.57	24.43	17.563							
3,000.00	2,960.76	2,969.43	2,884.60	12.34	14.26	-103.17	232.19	473.72	450.52	425.15	25.36	17.762							
3,100.00	3,058.92	3,066.97	2,978.03	12.80	14.82	-102.59	242.68	499.69	472.09	445.79	26.30	17.949							
3,200.00	3,157.09	3,164.51	3,071.46	13.27	15.38	-102.06	253.17	525.67	493.71	466.47	27.24	18.125							
3,300.00	3,255.25	3,262.05	3,164.89	13.73	15.95	-101.57	263.66	551.64	515.36	487.18	28.18	18.290							
3,400.00	3,353.41	3,359.59	3,258.32	14.19	16.51	-101.12	274.15	577.61	537.04	507.93	29.12	18.445							
3,500.00	3,451.57	3,457.12	3,351.75	14.66	17.08	-100.71	284.64	603.58	558.76	528.70	30.05	18.592							
3,600.00	3,549.73	3,554.66	3,445.18	15.12	17.64	-100.33	295.13	629.56	580.50	549.51	30.99	18.730							
3,700.00	3,647.89	3,652.20	3,538.61	15.58	18.21	-99.98	305.62	655.53	602.26	570.33	31.93	18.861							
3,800.00	3,746.05	3,749.74	3,632.04	16.05	18.78	-99.65	316.11	681.50	624.04	591.17	32.87	18.985							
3,900.00	3,844.21	3,847.27	3,725.46	16.51	19.34	-99.34	326.60	707.47	645.85	612.04	33.81	19.102							
4,000.00	3,942.37	3,944.81	3,818.89	16.98	19.91	-99.05	337.09	733.44	667.66	632.91	34.75	19.213							
4,100.00	4,040.53	4,042.35	3,912.32	17.44	20.48	-98.78	347.58	759.42	689.50	653.81	35.69	19.319							
4,200.00	4,138.69	4,139.89	4,005.75	17.90	21.04	-98.53	358.07	785.39	711.35	674.72	36.63	19.420							
4,300.00	4,236.85	4,237.43	4,099.18	18.37	21.61	-98.29	368.56	811.36	733.20	695.63	37.57	19.516							
4,400.00	4,335.02	4,334.96	4,192.61	18.83	22.18	-98.07	379.05	837.33	755.08	716.57	38.51	19.607							
4,500.00	4,433.18	4,432.50	4,286.04	19.30	22.75	-97.86	389.54	863.31	776.96	737.51	39.45	19.694							
4,600.00	4,531.34	4,530.04	4,379.47	19.76	23.32	-97.66	400.03	889.28	798.85	758.46	40.39	19.778							
4,700.00	4,629.50	4,627.58	4,472.90	20.23	23.88	-97.47	410.52	915.25	820.75	779.41	41.33	19.875							
4,800.00	4,727.66	4,725.11	4,566.33	20.69	24.45	-97.29	421.01	941.22	842.65	800.38	42.27	19.934							
4,900.00	4,825.82	4,822.65	4,659.76	21.16	25.02	-97.12	431.50	967.20	864.57	821.36	43.21	20.007							

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 4T-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 4T-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													Offset Site Error:	0.00 usft			
Survey Program: O-MWD+HDGM													Offset Well Error:		0.00 usft		
Reference													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	4,923.98	4,920.19	4,753.19	21.62	25.59	-96.96	441.99	993.17	886.49	842.34	44.15	20.077					
5,100.00	5,022.14	5,017.73	4,846.61	22.09	26.16	-96.80	452.48	1,019.14	908.42	863.32	45.10	20.144					
5,200.00	5,120.30	5,115.26	4,940.04	22.55	26.72	-96.65	462.97	1,045.11	930.35	884.32	46.04	20.209					
5,300.00	5,218.46	5,212.80	5,033.47	23.02	27.29	-96.51	473.46	1,071.09	952.29	905.31	46.98	20.271					
5,400.00	5,316.62	5,310.34	5,126.90	23.48	27.86	-96.38	483.95	1,097.06	974.24	926.32	47.92	20.330					
5,500.00	5,414.78	5,407.88	5,220.33	23.95	28.43	-96.25	494.44	1,123.03	996.19	947.33	48.86	20.388					
5,600.00	5,512.95	5,505.42	5,313.76	24.41	29.00	-96.13	504.93	1,149.00	1,018.14	968.34	49.80	20.443					
5,700.00	5,611.11	5,602.95	5,407.19	24.88	29.57	-96.01	515.42	1,174.98	1,040.10	989.36	50.75	20.497					
5,800.00	5,709.27	5,700.49	5,500.62	25.35	30.14	-95.90	525.91	1,200.95	1,062.06	1,010.38	51.69	20.548					
5,900.00	5,807.43	5,798.03	5,594.05	25.81	30.71	-95.79	536.39	1,226.92	1,084.03	1,031.40	52.63	20.598					
6,000.00	5,905.59	5,895.57	5,687.48	26.28	31.28	-95.69	546.88	1,252.89	1,106.00	1,052.43	53.57	20.645					
6,100.00	6,003.75	5,993.10	5,780.91	26.74	31.85	-95.59	557.37	1,278.87	1,127.97	1,073.46	54.51	20.692					
6,200.00	6,101.91	6,090.64	5,874.34	27.21	32.41	-95.49	567.86	1,304.84	1,149.95	1,094.49	55.46	20.736					
6,300.00	6,200.07	6,188.18	5,967.76	27.67	32.98	-95.40	578.35	1,330.81	1,171.93	1,115.53	56.40	20.780					
6,400.00	6,298.23	6,285.72	6,061.19	28.14	33.55	-95.31	588.84	1,356.78	1,193.91	1,136.57	57.34	20.822					
6,500.00	6,396.39	6,383.26	6,154.62	28.61	34.12	-95.23	599.33	1,382.76	1,215.89	1,157.61	58.28	20.862					
6,600.00	6,494.55	6,480.79	6,248.05	29.07	34.69	-95.15	609.82	1,408.73	1,237.88	1,178.66	59.23	20.901					
6,700.00	6,592.71	6,578.33	6,341.48	29.54	35.26	-95.07	620.31	1,434.70	1,259.87	1,199.70	60.17	20.939					
6,772.64	6,664.02	6,649.18	6,409.35	29.88	35.67	-95.01	627.93	1,453.57	1,275.84	1,214.99	60.85	20.966					
6,800.00	6,690.92	8,913.83	7,685.00	30.00	41.30	-20.83	-560.48	1,777.03	1,253.27	1,224.90	28.37	44.174					
6,850.00	6,740.19	8,914.49	7,685.00	30.21	41.30	9.51	-561.14	1,777.02	1,209.28	1,179.97	29.32	41.250					
6,900.00	6,789.40	8,911.66	7,685.00	30.41	41.29	37.50	-558.32	1,777.08	1,165.90	1,135.60	30.30	38.474					
6,950.00	6,838.32	8,905.37	7,685.00	30.58	41.28	58.79	-552.02	1,777.23	1,123.40	1,092.07	31.34	35.851					
7,000.00	6,886.71	8,895.63	7,685.00	30.73	41.26	73.92	-542.28	1,777.46	1,082.04	1,049.63	32.42	33.381					
7,050.00	6,934.33	8,882.49	7,685.00	30.87	41.23	84.73	-529.15	1,777.77	1,042.07	1,008.52	33.55	31.063					
7,100.00	6,980.95	8,866.03	7,685.00	30.99	41.20	92.61	-512.69	1,778.15	1,003.73	969.01	34.72	28.908					
7,150.00	7,026.35	8,846.31	7,685.00	31.09	41.17	98.46	-492.98	1,778.61	967.25	931.32	35.93	26.917					
7,200.00	7,070.29	8,823.44	7,685.00	31.19	41.13	102.84	-470.12	1,779.15	932.83	895.65	37.18	25.092					
7,250.00	7,112.57	8,797.53	7,685.00	31.26	41.09	106.11	-444.21	1,779.75	900.64	862.20	38.44	23.431					
7,300.00	7,152.98	8,768.70	7,685.00	31.32	41.05	108.53	-415.39	1,780.43	870.84	831.11	39.72	21.922					
7,350.00	7,191.33	8,737.09	7,685.00	31.37	41.01	110.28	-383.79	1,781.17	843.53	802.54	41.00	20.575					
7,400.00	7,227.42	8,702.87	7,685.00	31.41	40.98	111.49	-349.58	1,781.97	818.80	776.56	42.24	19.383					
7,450.00	7,261.09	8,666.18	7,685.00	31.44	40.94	112.27	-312.90	1,782.82	796.69	753.22	43.47	18.328					
7,500.00	7,292.16	8,627.23	7,685.00	31.45	40.91	112.70	-273.95	1,783.74	777.18	732.55	44.63	17.414					
7,550.00	7,320.49	8,586.18	7,685.00	31.45	40.89	112.86	-232.92	1,784.70	760.26	714.54	45.72	16.628					
7,600.00	7,345.94	8,543.25	7,685.00	31.44	40.87	112.81	-190.00	1,785.70	745.85	699.11	46.74	15.957					
7,650.00	7,368.38	8,498.63	7,685.00	31.43	40.87	112.61	-145.40	1,786.74	733.86	686.20	47.65	15.400					
7,700.00	7,387.71	8,452.56	7,685.00	31.40	40.87	112.31	-99.34	1,787.82	724.17	675.69	48.49	14.935					
7,750.00	7,403.82	8,405.26	7,685.00	31.37	40.88	111.97	-52.05	1,788.93	716.68	667.49	49.19	14.569					
7,800.00	7,416.65	8,314.59	7,681.69	31.34	40.91	110.68	38.50	1,790.14	710.44	660.48	49.96	14.219					
7,850.00	7,426.13	8,200.27	7,662.23	31.30	40.95	108.42	151.00	1,787.41	701.90	650.51	51.40	13.657					
7,900.00	7,432.22	8,096.80	7,629.96	31.25	40.98	105.92	248.99	1,780.81	691.29	638.13	53.16	13.005					
7,950.00	7,434.87	8,003.74	7,589.60	31.21	40.99	103.32	332.27	1,771.65	679.28	624.39	54.89	12.376					
7,963.63	7,435.00	7,980.04	7,577.68	31.20	40.98	102.61	352.56	1,768.84	675.85	620.52	55.33	12.216					
8,000.00	7,435.00	7,921.05	7,545.29	31.17	40.96	99.92	401.22	1,761.06	666.18	609.77	56.41	11.810					
8,100.00	7,435.00	7,790.30	7,460.53	31.10	40.86	92.39	498.28	1,739.99	637.56	578.93	58.63	10.875					
8,200.00	7,435.00	7,696.16	7,389.73	31.08	40.73	85.64	557.52	1,721.88	611.40	551.38	60.02	10.187					
8,300.00	7,435.00	7,627.33	7,333.57	31.19	40.59	80.07	594.49	1,707.28	593.03	531.86	61.17	9.695					
8,400.00	7,435.00	7,575.69	7,289.36	31.60	40.46	75.61	618.49	1,695.67	586.13	523.61	62.52	9.375					
8,402.38	7,435.00	7,574.63	7,288.43	31.61	40.46	75.52	618.95	1,695.42	586.13	523.57	62.56	9.370					
8,500.00	7,435.00	7,535.91	7,254.24	32.26	40.35	72.07	634.69	1,686.38	592.82	528.62	64.20	9.233 SF					
8,600.00	7,435.00	7,500.00	7,221.85	33.03	40.24	68.82	647.56	1,677.76	613.68	547.68	66.00	9.298					

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 4T-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 4T-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		
8,700.00	7,435.00	7,479.14	7,202.77	33.87	40.17	66.93	654.26	1,672.66	647.91	579.94	67.97	9.532		
8,800.00	7,435.00	7,458.31	7,183.53	34.77	40.10	65.03	660.38	1,667.51	693.94	624.31	69.63	9.967		
8,900.00	7,435.00	7,450.00	7,175.81	35.71	40.07	64.28	662.66	1,665.44	749.91	678.72	71.19	10.534		
9,000.00	7,435.00	7,426.18	7,153.56	36.70	39.98	62.12	668.67	1,659.45	813.69	741.66	72.03	11.296		
9,100.00	7,435.00	7,413.56	7,141.69	37.73	39.93	60.99	671.54	1,656.25	883.90	811.08	72.82	12.138		
9,200.00	7,435.00	7,400.00	7,128.89	38.79	39.88	59.78	674.39	1,652.79	959.15	885.79	73.36	13.075		
9,300.00	7,435.00	7,400.00	7,128.89	39.89	39.88	59.78	674.39	1,652.79	1,038.42	964.46	73.96	14.041		
9,400.00	7,435.00	7,384.65	7,114.35	41.03	39.81	58.42	677.31	1,648.85	1,120.76	1,046.63	74.14	15.117		
9,500.00	7,435.00	7,377.18	7,107.25	42.19	39.78	57.76	678.61	1,646.93	1,205.70	1,131.35	74.36	16.215		
9,600.00	7,435.00	7,370.50	7,100.89	43.37	39.75	57.18	679.71	1,645.20	1,292.71	1,218.19	74.51	17.349		
9,700.00	7,435.00	7,350.00	7,081.32	44.59	39.66	55.40	682.71	1,639.89	1,381.60	1,307.18	74.42	18.565		
9,800.00	7,435.00	7,350.00	7,081.32	45.82	39.66	55.40	682.71	1,639.89	1,471.55	1,396.97	74.58	19.731		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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			
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	402.98	402.96	1.21	1.22	-89.31	1.06	-88.36	88.42	85.96	2.46	35.954			
500.00	500.00	505.69	505.51	1.57	1.59	-87.91	3.03	-83.20	83.43	80.21	3.23	25.846			
600.00	599.98	607.98	607.39	1.92	1.96	157.23	6.30	-74.64	76.87	72.89	3.98	19.303			
700.00	699.84	709.78	708.38	2.26	2.34	163.51	10.83	-62.76	70.86	66.14	4.72	15.026			
800.00	799.45	810.97	808.26	2.61	2.75	173.22	16.61	-47.63	66.58	61.14	5.44	12.237			
869.20	868.17	880.56	876.59	2.87	3.04	-178.16	21.31	-35.32	65.53	59.59	5.94	11.024	CC, ES		
900.00	898.70	911.42	906.78	2.98	3.17	-173.96	23.58	-29.37	65.77	59.60	6.17	10.662			
1,000.00	997.47	1,011.02	1,003.74	3.37	3.62	-159.83	31.70	-8.08	70.19	63.25	6.94	10.109	SF		
1,050.28	1,046.90	1,060.74	1,051.84	3.57	3.86	-153.05	36.21	3.72	74.71	67.34	7.37	10.141			
1,100.00	1,095.71	1,109.67	1,098.93	3.77	4.10	-146.78	40.93	16.09	80.31	72.52	7.80	10.299			
1,200.00	1,193.87	1,207.29	1,192.21	4.19	4.61	-135.25	51.19	42.98	94.06	85.34	8.72	10.788			
1,300.00	1,292.03	1,304.56	1,284.81	4.62	5.14	-126.27	61.81	70.80	110.86	101.19	9.67	11.780			
1,400.00	1,390.19	1,401.84	1,377.42	5.06	5.69	-119.72	72.44	98.63	129.64	119.03	10.61	12.220			
1,500.00	1,488.35	1,499.11	1,470.02	5.50	6.25	-114.85	83.06	126.46	149.66	138.12	11.55	12.961			
1,600.00	1,586.51	1,596.39	1,562.62	5.94	6.82	-111.14	93.68	154.28	170.49	158.01	12.48	13.659			
1,700.00	1,684.67	1,693.67	1,655.23	6.39	7.39	-108.23	104.30	182.11	191.86	178.44	13.41	14.304			
1,800.00	1,782.83	1,790.94	1,747.83	6.84	7.97	-105.91	114.93	209.94	213.60	199.26	14.34	14.891			
1,900.00	1,880.99	1,888.22	1,840.43	7.29	8.55	-104.02	125.55	237.76	235.62	220.35	15.27	15.426			
2,000.00	1,979.16	1,985.49	1,933.04	7.75	9.13	-102.45	136.17	265.59	257.85	241.64	16.21	15.910			
2,100.00	2,077.32	2,082.77	2,025.64	8.20	9.71	-101.13	146.79	293.42	280.22	263.09	17.14	16.351			
2,200.00	2,175.48	2,180.04	2,118.24	8.66	10.30	-100.00	157.41	321.24	302.72	284.65	18.07	16.751			
2,300.00	2,273.64	2,277.32	2,210.85	9.12	10.89	-99.03	168.04	349.07	325.32	306.32	19.01	17.117			
2,400.00	2,371.80	2,374.60	2,303.45	9.58	11.47	-98.19	178.66	376.90	347.99	328.05	19.94	17.451			
2,500.00	2,469.96	2,471.87	2,396.05	10.04	12.06	-97.45	189.28	404.72	370.73	349.85	20.88	17.758			
2,600.00	2,568.12	2,569.15	2,488.66	10.50	12.65	-96.79	199.90	432.55	393.52	371.70	21.81	18.040			
2,700.00	2,666.28	2,666.42	2,581.26	10.96	13.25	-96.21	210.53	460.38	416.35	393.60	22.75	18.300			
2,800.00	2,764.44	2,763.70	2,673.86	11.42	13.84	-95.69	221.15	488.21	439.22	415.53	23.69	18.540			
2,900.00	2,862.60	2,860.97	2,766.47	11.88	14.43	-95.22	231.77	516.03	462.12	437.49	24.63	18.763			
3,000.00	2,960.76	2,958.25	2,859.07	12.34	15.03	-94.79	242.39	543.86	485.04	459.47	25.57	18.969			
3,100.00	3,058.92	3,055.53	2,951.68	12.80	15.62	-94.40	253.01	571.69	507.99	481.48	26.51	19.162			
3,200.00	3,157.09	3,152.80	3,044.28	13.27	16.21	-94.05	263.64	599.51	530.96	503.51	27.45	19.342			
3,300.00	3,255.25	3,250.08	3,136.88	13.73	16.81	-93.72	274.26	627.34	553.95	525.56	28.39	19.510			
3,400.00	3,353.41	3,347.35	3,229.49	14.19	17.40	-93.42	284.88	655.17	576.96	547.62	29.34	19.667			
3,500.00	3,451.57	3,444.63	3,322.09	14.66	18.00	-93.15	295.50	682.99	599.97	569.69	30.28	19.815			
3,600.00	3,549.73	3,541.90	3,414.69	15.12	18.60	-92.89	306.13	710.82	623.00	591.78	31.22	19.954			
3,700.00	3,647.89	3,639.18	3,507.30	15.58	19.19	-92.65	316.75	738.65	646.04	613.88	32.16	20.085			
3,800.00	3,746.05	3,736.46	3,599.90	16.05	19.79	-92.43	327.37	766.47	669.09	635.98	33.11	20.209			
3,900.00	3,844.21	3,833.73	3,692.50	16.51	20.39	-92.22	337.99	794.30	692.15	658.10	34.05	20.326			
4,000.00	3,942.37	3,931.01	3,785.11	16.98	20.98	-92.03	348.61	822.13	715.22	680.22	35.00	20.436			
4,100.00	4,040.53	4,028.28	3,877.71	17.44	21.58	-91.85	359.24	849.95	738.29	702.35	35.94	20.541			
4,200.00	4,138.69	4,125.56	3,970.31	17.90	22.18	-91.68	369.86	877.78	761.37	724.49	36.89	20.641			
4,300.00	4,236.85	4,222.84	4,062.92	18.37	22.77	-91.52	380.48	905.61	784.46	746.63	37.83	20.735			
4,400.00	4,335.02	4,320.11	4,155.52	18.83	23.37	-91.37	391.10	933.44	807.55	768.77	38.78	20.825			
4,500.00	4,433.18	4,417.39	4,248.12	19.30	23.97	-91.22	401.73	961.26	830.65	790.93	39.72	20.911			
4,600.00	4,531.34	4,514.66	4,340.73	19.76	24.57	-91.09	412.35	989.09	853.75	813.08	40.67	20.992			
4,700.00	4,629.50	4,611.94	4,433.33	20.23	25.17	-90.96	422.97	1,016.92	876.86	835.24	41.62	21.070			
4,800.00	4,727.66	4,709.21	4,525.94	20.69	25.76	-90.84	433.59	1,044.74	899.97	857.40	42.56	21.145			
4,900.00	4,825.82	4,806.49	4,618.54	21.16	26.36	-90.72	444.21	1,072.57	923.08	879.57	43.51	21.216			

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 4T-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 4T-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				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	4,923.98	4,903.77	4,711.14	21.62	26.96	-90.61	454.84	1,100.40	946.20	901.74	44.46	21.284		
5,100.00	5,022.14	5,001.04	4,803.75	22.09	27.56	-90.51	465.46	1,128.22	969.32	923.92	45.40	21.349		
5,200.00	5,120.30	5,098.32	4,896.35	22.55	28.16	-90.41	476.08	1,156.05	992.44	946.09	46.35	21.412		
5,300.00	5,218.46	5,195.59	4,988.95	23.02	28.75	-90.32	486.70	1,183.88	1,015.57	968.27	47.30	21.472		
5,400.00	5,316.62	5,292.87	5,081.56	23.48	29.35	-90.23	497.33	1,211.70	1,038.70	990.45	48.24	21.530		
5,500.00	5,414.78	5,390.14	5,174.16	23.95	29.95	-90.14	507.95	1,239.53	1,061.83	1,012.63	49.19	21.585		
5,600.00	5,512.95	5,487.42	5,266.76	24.41	30.55	-90.06	518.57	1,267.36	1,084.96	1,034.82	50.14	21.639		
5,700.00	5,611.11	5,584.70	5,359.37	24.88	31.15	-89.98	529.19	1,295.18	1,108.09	1,057.01	51.09	21.690		
5,800.00	5,709.27	5,681.97	5,451.97	25.35	31.75	-89.90	539.81	1,323.01	1,131.23	1,079.20	52.04	21.740		
5,900.00	5,807.43	5,779.25	5,544.57	25.81	32.35	-89.83	550.44	1,350.84	1,154.37	1,101.39	52.98	21.787		
6,000.00	5,905.59	5,876.52	5,637.18	26.28	32.95	-89.76	561.06	1,378.67	1,177.51	1,123.58	53.93	21.833		
6,100.00	6,003.75	5,973.80	5,729.78	26.74	33.54	-89.69	571.68	1,406.49	1,200.65	1,145.77	54.88	21.878		
6,200.00	6,101.91	6,071.07	5,822.38	27.21	34.14	-89.62	582.30	1,434.32	1,223.80	1,167.97	55.83	21.921		
6,300.00	6,200.07	6,168.35	5,914.99	27.67	34.74	-89.56	592.93	1,462.15	1,246.94	1,190.16	56.78	21.962		
6,400.00	6,298.23	6,265.63	6,007.59	28.14	35.34	-89.50	603.55	1,489.97	1,270.09	1,212.36	57.72	22.002		
6,500.00	6,396.39	6,362.90	6,100.19	28.61	35.94	-89.44	614.17	1,517.80	1,293.23	1,234.56	58.67	22.041		
6,600.00	6,494.55	6,460.18	6,192.80	29.07	36.54	-89.38	624.79	1,545.63	1,316.38	1,256.76	59.62	22.079		
6,700.00	6,592.71	6,694.78	7,455.00	29.54	42.85	-34.47	-534.14	1,924.91	1,266.55	1,231.79	34.76	36.438		
6,772.64	6,664.02	8,701.32	7,455.00	29.88	42.87	-33.99	-540.69	1,924.91	1,209.85	1,173.28	36.57	33.083		
6,800.00	6,690.92	8,703.27	7,455.00	30.00	42.87	-20.44	-542.63	1,924.91	1,188.91	1,151.62	37.29	31.886		
6,850.00	6,740.19	8,704.13	7,455.00	30.21	42.87	7.08	-543.49	1,924.91	1,151.26	1,112.63	38.63	29.805		
6,900.00	6,789.40	8,701.49	7,455.00	30.41	42.87	32.53	-540.86	1,924.91	1,114.65	1,074.65	40.00	27.867		
6,950.00	6,838.32	8,695.39	7,455.00	30.58	42.85	51.63	-534.75	1,924.91	1,079.35	1,037.95	41.40	26.071		
7,000.00	6,886.71	8,685.84	7,455.00	30.73	42.83	64.95	-525.20	1,924.91	1,045.61	1,002.79	42.82	24.418		
7,050.00	6,934.33	8,672.88	7,455.00	30.87	42.81	74.27	-512.25	1,924.91	1,013.66	969.41	44.25	22.907		
7,100.00	6,980.95	8,656.60	7,455.00	30.99	42.77	80.93	-495.96	1,924.91	983.72	938.04	45.67	21.538		
7,150.00	7,026.35	8,637.05	7,455.00	31.09	42.74	85.76	-476.42	1,924.91	955.94	908.87	47.07	20.308		
7,200.00	7,070.29	8,614.34	7,455.00	31.19	42.70	89.26	-453.71	1,924.91	930.47	882.04	48.43	19.213		
7,250.00	7,112.57	8,588.59	7,455.00	31.26	42.65	91.76	-427.95	1,924.91	907.39	857.65	49.74	18.244		
7,300.00	7,152.98	8,559.90	7,455.00	31.32	42.61	93.48	-399.27	1,924.91	886.74	835.77	50.98	17.395		
7,350.00	7,191.33	8,528.43	7,455.00	31.37	42.56	94.59	-367.80	1,924.91	868.53	816.41	52.12	16.663		
7,400.00	7,227.42	8,494.33	7,455.00	31.41	42.52	95.20	-333.70	1,924.91	852.70	799.53	53.17	16.037		
7,450.00	7,261.09	8,457.76	7,455.00	31.44	42.48	95.43	-297.13	1,924.91	839.15	785.02	54.13	15.503		
7,500.00	7,292.16	8,418.91	7,455.00	31.45	42.44	95.35	-258.27	1,924.91	827.76	772.79	54.97	15.059		
7,550.00	7,320.49	8,377.95	7,455.00	31.45	42.41	95.04	-217.32	1,924.91	818.34	762.64	55.70	14.691		
7,600.00	7,345.94	8,335.10	7,455.00	31.44	42.39	94.58	-174.46	1,924.91	810.72	754.38	56.34	14.390		
7,650.00	7,368.38	8,290.55	7,455.00	31.43	42.37	94.03	-129.92	1,924.91	804.70	747.83	56.87	14.150		
7,700.00	7,387.71	8,244.53	7,455.00	31.40	42.36	93.43	-83.90	1,924.91	800.08	742.75	57.33	13.955		
7,750.00	7,403.82	8,197.27	7,455.00	31.37	42.36	92.86	-36.63	1,924.91	796.67	738.97	57.70	13.807		
7,800.00	7,416.65	8,124.92	7,452.15	31.34	42.37	91.76	35.63	1,924.05	793.68	735.60	58.07	13.667		
7,850.00	7,426.13	8,051.52	7,442.17	31.30	42.37	90.47	108.25	1,921.05	790.05	731.56	58.49	13.507		
7,900.00	7,432.22	7,981.50	7,426.07	31.25	42.37	89.11	176.19	1,916.22	785.92	727.00	58.92	13.339		
7,950.00	7,434.87	7,914.75	7,404.88	31.21	42.37	87.69	239.14	1,909.85	781.44	722.11	59.33	13.172		
7,963.63	7,435.00	7,897.10	7,398.34	31.20	42.37	87.30	255.42	1,907.88	780.17	720.74	59.43	13.127		
8,000.00	7,435.00	7,851.64	7,379.76	31.17	42.35	85.90	296.52	1,902.30	776.64	716.93	59.71	13.007		
8,100.00	7,435.00	7,740.89	7,324.37	31.10	42.29	81.67	390.84	1,885.66	766.65	706.20	60.44	12.684		
8,200.00	7,435.00	7,650.20	7,269.07	31.08	42.20	77.35	460.69	1,869.04	758.91	697.78	61.13	12.414		
8,287.84	7,435.00	7,584.91	7,224.25	31.16	42.11	73.82	506.18	1,855.57	756.34	694.55	61.80	12.239		
8,300.00	7,435.00	7,576.79	7,218.40	31.19	42.09	73.36	511.54	1,853.81	756.40	694.50	61.89	12.221		
8,400.00	7,435.00	7,517.31	7,173.86	31.60	41.98	69.85	548.59	1,840.43	761.30	698.45	62.85	12.113		
8,500.00	7,435.00	7,468.77	7,135.43	32.26	41.87	66.85	575.89	1,828.88	775.00	710.95	64.05	12.101		
8,600.00	7,435.00	7,428.74	7,102.47	33.03	41.77	64.30	596.31	1,818.98	798.06	732.62	65.45	12.194		

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 4T-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 4T-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	7,435.00	7,400.00	7,078.15	33.87	41.69	62.44	609.77	1,811.67	830.44	763.38	67.06	12.384		
8,800.00	7,435.00	7,367.23	7,049.82	34.77	41.59	60.30	623.86	1,803.16	871.52	803.09	68.43	12.736		
8,900.00	7,435.00	7,350.00	7,034.68	35.71	41.54	59.17	630.72	1,798.61	920.55	850.57	69.98	13.155		
9,000.00	7,435.00	7,322.62	7,010.32	36.70	41.44	57.38	640.84	1,791.29	976.44	905.39	71.04	13.744		
9,100.00	7,435.00	7,300.00	6,989.92	37.73	41.36	55.91	648.46	1,785.16	1,038.36	966.36	72.00	14.421		
9,200.00	7,435.00	7,300.00	6,989.92	38.79	41.36	55.91	648.46	1,785.16	1,105.45	1,032.21	73.24	15.094		
9,300.00	7,435.00	7,275.21	6,967.32	39.89	41.26	54.30	656.03	1,778.37	1,176.63	1,102.89	73.75	15.955		
9,400.00	7,435.00	7,250.00	6,944.09	41.03	41.16	52.68	662.89	1,771.38	1,251.72	1,177.61	74.11	16.891		
9,500.00	7,435.00	7,250.00	6,944.09	42.19	41.16	52.68	662.89	1,771.38	1,329.55	1,254.73	74.82	17.769		
9,600.00	7,435.00	7,250.00	6,944.09	43.37	41.16	52.68	662.89	1,771.38	1,410.18	1,334.78	75.40	18.702		
9,700.00	7,435.00	7,233.24	6,928.52	44.59	41.09	51.61	666.98	1,766.71	1,492.89	1,417.30	75.60	19.748		

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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				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)				
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 CC, ES		
200.00	200.00	200.00	200.00	0.50	0.50	-89.73	0.38	-80.02	80.02	79.43	1.71	47.462		
300.00	300.00	298.18	298.16	0.85	0.84	-90.63	-0.89	-81.12	81.14	79.43	1.71	47.462		
400.00	400.00	396.13	395.97	1.21	1.18	-93.18	-4.70	-84.41	84.63	82.19	2.44	34.627		
500.00	500.00	493.62	493.10	1.57	1.53	-96.98	-10.99	-89.85	90.78	87.58	3.20	28.384		
600.00	599.98	592.72	591.65	1.92	1.90	141.25	-18.95	-96.72	100.26	96.36	3.90	25.702		
700.00	699.84	691.89	690.25	2.26	2.28	139.39	-26.92	-103.61	112.69	108.09	4.60	24.518		
800.00	799.45	790.74	788.54	2.61	2.66	138.88	-34.87	-110.48	127.78	122.48	5.30	24.113 SF		
900.00	898.70	889.14	886.39	2.98	3.05	139.31	-42.78	-117.32	145.48	139.47	6.01	24.192		
1,000.00	997.47	986.98	983.67	3.37	3.43	140.37	-50.65	-124.12	165.83	159.09	6.74	24.612		
1,050.28	1,046.90	1,035.93	1,032.34	3.57	3.62	141.04	-54.59	-127.52	177.09	169.98	7.11	24.913		
1,100.00	1,095.71	1,084.23	1,080.37	3.77	3.81	141.84	-58.47	-130.88	188.59	181.11	7.47	25.238		
1,200.00	1,193.87	1,181.39	1,176.98	4.19	4.19	143.19	-66.29	-137.63	211.80	203.60	8.21	25.809		
1,300.00	1,292.03	1,278.55	1,273.59	4.62	4.57	144.27	-74.10	-144.39	235.11	226.16	8.95	26.278		
1,400.00	1,390.19	1,375.71	1,370.20	5.06	4.95	145.16	-81.91	-151.14	258.48	248.78	9.69	26.669		
1,500.00	1,488.35	1,472.87	1,466.81	5.50	5.33	145.90	-89.73	-157.89	281.90	271.45	10.44	26.999		
1,600.00	1,586.51	1,570.03	1,563.42	5.94	5.71	146.52	-97.54	-164.64	305.35	294.16	11.19	27.282		
1,700.00	1,684.67	1,667.19	1,660.03	6.39	6.09	147.06	-105.35	-171.40	328.84	316.89	11.95	27.527		
1,800.00	1,782.83	1,764.35	1,756.64	6.84	6.47	147.53	-113.17	-178.15	352.35	339.65	12.70	27.740		
1,900.00	1,880.99	1,861.51	1,853.25	7.29	6.85	147.93	-120.98	-184.90	375.88	362.42	13.46	27.929		
2,000.00	1,979.16	1,958.67	1,949.86	7.75	7.24	148.29	-128.79	-191.66	399.42	385.20	14.22	28.096		
2,100.00	2,077.32	2,055.83	2,046.47	8.20	7.62	148.61	-136.61	-198.41	422.98	408.00	14.98	28.245		
2,200.00	2,175.48	2,152.99	2,143.08	8.66	8.00	148.90	-144.42	-205.16	446.55	430.81	15.74	28.379		
2,300.00	2,273.64	2,250.15	2,239.69	9.12	8.38	149.15	-152.23	-211.91	470.13	453.63	16.50	28.500		
2,400.00	2,371.80	2,347.31	2,336.30	9.58	8.77	149.39	-160.05	-218.67	493.71	476.46	17.26	28.610		
2,500.00	2,469.96	2,444.47	2,432.91	10.04	9.15	149.60	-167.86	-225.42	517.31	499.29	18.02	28.710		
2,600.00	2,568.12	2,541.63	2,529.52	10.50	9.53	149.79	-175.67	-232.17	540.90	522.12	18.78	28.801		
2,700.00	2,666.28	2,638.79	2,626.13	10.96	9.91	149.97	-183.49	-238.92	564.51	544.97	19.54	28.886		
2,800.00	2,764.44	2,735.95	2,722.74	11.42	10.29	150.13	-191.30	-245.68	588.12	567.81	20.31	28.963		
2,900.00	2,862.60	2,833.11	2,819.35	11.88	10.68	150.28	-199.11	-252.43	611.73	590.66	21.07	29.035		
3,000.00	2,960.76	2,930.27	2,915.96	12.34	11.06	150.42	-206.93	-259.18	635.35	613.52	21.83	29.101		
3,100.00	3,058.92	3,027.43	3,012.57	12.80	11.44	150.55	-214.74	-265.93	658.97	636.37	22.60	29.163		
3,200.00	3,157.09	3,124.59	3,109.18	13.27	11.82	150.67	-222.55	-272.69	682.59	659.23	23.36	29.221		
3,300.00	3,255.25	3,221.75	3,205.79	13.73	12.21	150.78	-230.37	-279.44	706.22	682.09	24.12	29.275		
3,400.00	3,353.41	3,318.91	3,302.40	14.19	12.59	150.88	-238.18	-286.19	729.85	704.96	24.89	29.325		
3,500.00	3,451.57	3,416.07	3,399.01	14.66	12.97	150.98	-245.99	-292.94	753.48	727.82	25.65	29.373		
3,600.00	3,549.73	3,513.23	3,495.62	15.12	13.36	151.07	-253.81	-299.70	777.11	750.69	26.42	29.417		
3,700.00	3,647.89	3,610.39	3,592.23	15.58	13.74	151.16	-261.62	-306.45	800.74	773.56	27.18	29.459		
3,800.00	3,746.05	3,707.55	3,688.84	16.05	14.12	151.24	-269.43	-313.20	824.38	796.43	27.95	29.499		
3,900.00	3,844.21	3,804.71	3,785.45	16.51	14.50	151.32	-277.25	-319.96	848.02	819.31	28.71	29.536		
4,000.00	3,942.37	3,901.87	3,882.06	16.98	14.89	151.39	-285.06	-326.71	871.66	842.18	29.48	29.571		
4,100.00	4,040.53	3,999.03	3,978.67	17.44	15.27	151.46	-292.88	-333.46	895.30	865.05	30.24	29.605		
4,200.00	4,138.69	4,096.19	4,075.27	17.90	15.65	151.53	-300.69	-340.21	918.94	887.93	31.01	29.637		
4,300.00	4,236.85	4,193.35	4,171.88	18.37	16.03	151.59	-308.50	-346.97	942.58	910.81	31.77	29.667		
4,400.00	4,335.02	4,290.51	4,268.49	18.83	16.42	151.65	-316.32	-353.72	966.22	933.68	32.54	29.696		
4,500.00	4,433.18	4,387.67	4,365.10	19.30	16.80	151.70	-324.13	-360.47	989.87	956.56	33.30	29.723		
4,600.00	4,531.34	4,484.83	4,461.71	19.76	17.18	151.76	-331.94	-367.22	1,013.51	979.44	34.07	29.749		
4,700.00	4,629.50	4,581.99	4,558.32	20.23	17.57	151.81	-339.76	-373.98	1,037.16	1,002.32	34.83	29.774		
4,800.00	4,727.66	4,679.15	4,654.93	20.69	17.95	151.86	-347.57	-380.73	1,060.80	1,025.20	35.60	29.798		
4,900.00	4,825.82	4,776.31	4,751.54	21.16	18.33	151.90	-355.38	-387.48	1,084.45	1,048.08	36.37	29.821		
5,000.00	4,923.98	4,873.47	4,848.15	21.62	18.71	151.95	-363.20	-394.23	1,108.10	1,070.97	37.13	29.842		

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 4T-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 4T-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													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference: S32-T2N-R68W - HWY52 4L-32H-O268 - OH - PLAN #2														
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	5,022.14	4,970.63	4,944.76	22.09	19.10	151.99	-371.01	-400.99	1,131.75	1,093.85	37.90	29.863		
5,200.00	5,120.30	5,067.79	5,041.37	22.55	19.48	152.03	-378.82	-407.74	1,155.40	1,116.73	38.66	29.883		
5,300.00	5,218.46	5,164.95	5,137.98	23.02	19.86	152.07	-386.64	-414.49	1,179.05	1,139.62	39.43	29.903		
5,400.00	5,316.62	5,262.11	5,234.59	23.48	20.24	152.11	-394.45	-421.24	1,202.70	1,162.50	40.20	29.921		
5,500.00	5,414.78	5,359.27	5,331.20	23.95	20.63	152.15	-402.26	-428.00	1,226.35	1,185.38	40.96	29.939		
5,600.00	5,512.95	5,456.43	5,427.81	24.41	21.01	152.18	-410.08	-434.75	1,250.00	1,208.27	41.73	29.956		
5,700.00	5,611.11	5,553.59	5,524.42	24.88	21.39	152.22	-417.89	-441.50	1,273.65	1,231.15	42.49	29.972		
5,800.00	5,709.27	5,650.76	5,621.03	25.35	21.78	152.25	-425.70	-448.26	1,297.30	1,254.04	43.26	29.988		
5,900.00	5,807.43	5,747.92	5,717.64	25.81	22.16	152.28	-433.52	-455.01	1,320.95	1,276.93	44.03	30.003		
6,000.00	5,905.59	5,845.08	5,814.25	26.28	22.54	152.31	-441.33	-461.76	1,344.61	1,299.81	44.79	30.018		
6,100.00	6,003.75	5,942.24	5,910.86	26.74	22.92	152.34	-449.14	-468.51	1,368.26	1,322.70	45.56	30.032		
6,200.00	6,101.91	6,039.40	6,007.47	27.21	23.31	152.37	-456.96	-475.27	1,391.91	1,345.59	46.33	30.046		
6,300.00	6,200.07	6,136.56	6,104.08	27.67	23.69	152.40	-464.77	-482.02	1,415.57	1,368.47	47.09	30.059		
6,400.00	6,298.23	6,233.72	6,200.69	28.14	24.07	152.42	-472.58	-488.77	1,439.22	1,391.36	47.86	30.072		
6,500.00	6,396.39	6,330.88	6,297.30	28.61	24.46	152.45	-480.40	-495.52	1,462.87	1,414.25	48.63	30.084		
6,600.00	6,494.55	6,428.04	6,393.91	29.07	24.84	152.47	-488.21	-502.28	1,486.53	1,437.14	49.39	30.096		

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.70	0.36	-70.23	70.23	69.95	0.28	254.425							
100.00	100.00	100.00	100.00	0.14	0.14	-89.70	0.36	-70.23	70.23	69.23	0.99	70.725 CC, ES							
200.00	200.00	200.00	200.00	0.50	0.50	-89.70	0.36	-70.23	70.23	69.23	1.70	41.738							
300.00	300.00	298.69	298.67	0.85	0.84	-90.87	-1.08	-71.13	71.15	69.44	2.43	30.467							
400.00	400.00	397.14	396.99	1.21	1.18	-94.17	-5.38	-73.82	74.08	71.65	3.17	25.026							
500.00	500.00	495.45	494.94	1.57	1.54	-99.07	-12.49	-78.27	79.42	76.25	3.88	22.537							
600.00	599.98	594.95	593.97	1.92	1.91	138.58	-20.65	-83.38	87.40	83.53	4.58	21.457							
700.00	699.84	694.31	692.86	2.26	2.28	136.48	-28.79	-88.47	98.25	93.67	5.29	21.118 SF							
800.00	799.45	793.40	791.49	2.61	2.66	136.01	-36.92	-93.56	111.65	106.37	6.01	21.238							
900.00	898.70	892.11	889.73	2.98	3.04	136.67	-45.01	-98.62	127.56	121.55	6.74	21.680							
1,000.00	997.47	990.31	987.47	3.37	3.42	138.04	-53.06	-103.66	146.04	139.30	7.11	21.991							
1,050.28	1,046.90	1,039.45	1,036.39	3.57	3.61	138.89	-57.09	-106.18	156.34	149.23	7.48	22.322							
1,100.00	1,095.71	1,087.97	1,084.67	3.77	3.79	139.86	-61.06	-108.67	166.89	159.41	8.22	22.907							
1,200.00	1,193.87	1,185.54	1,181.79	4.19	4.17	141.46	-69.06	-113.67	188.22	180.01	8.96	23.393							
1,300.00	1,292.03	1,283.12	1,278.91	4.62	4.55	142.74	-77.06	-118.68	209.67	200.71	9.71	23.802							
1,400.00	1,390.19	1,380.70	1,376.03	5.06	4.92	143.79	-85.06	-123.68	231.20	221.49	10.47	24.152							
1,500.00	1,488.35	1,478.27	1,473.15	5.50	5.30	144.65	-93.06	-128.69	252.79	242.32	11.22	24.453							
1,600.00	1,586.51	1,575.85	1,570.27	5.94	5.68	145.38	-101.06	-133.69	274.43	263.20	11.98	24.715							
1,700.00	1,684.67	1,673.42	1,667.39	6.39	6.06	146.00	-109.05	-138.70	296.10	284.12	12.74	24.946							
1,800.00	1,782.83	1,771.00	1,764.51	6.84	6.43	146.54	-117.05	-143.70	317.80	305.06	13.50	25.150							
1,900.00	1,880.99	1,868.58	1,861.62	7.29	6.81	147.01	-125.05	-148.71	339.52	326.02	14.26	25.331							
2,000.00	1,979.16	1,966.15	1,958.74	7.75	7.19	147.42	-133.05	-153.72	361.27	347.01	15.02	25.494							
2,100.00	2,077.32	2,063.73	2,055.86	8.20	7.57	147.79	-141.05	-158.72	383.03	368.00	15.79	25.641							
2,200.00	2,175.48	2,161.31	2,152.98	8.66	7.95	148.11	-149.05	-163.73	404.80	389.01	16.55	25.774							
2,300.00	2,273.64	2,258.88	2,250.10	9.12	8.33	148.41	-157.05	-168.73	426.58	410.03	17.31	25.896							
2,400.00	2,371.80	2,356.46	2,347.22	9.58	8.71	148.67	-165.04	-173.74	448.38	431.06	18.08	26.006							
2,500.00	2,469.96	2,454.04	2,444.34	10.04	9.08	148.91	-173.04	-178.74	470.18	452.10	18.84	26.108							
2,600.00	2,568.12	2,551.61	2,541.46	10.50	9.46	149.13	-181.04	-183.75	491.99	473.14	19.61	26.202							
2,700.00	2,666.28	2,649.19	2,638.58	10.96	9.84	149.33	-189.04	-188.75	513.80	494.19	20.38	26.288							
2,800.00	2,764.44	2,746.77	2,735.70	11.42	10.22	149.52	-197.04	-193.76	535.62	515.25	21.14	26.368							
2,900.00	2,862.60	2,844.34	2,832.82	11.88	10.60	149.68	-205.04	-198.77	557.45	536.31	21.91	26.443							
3,000.00	2,960.76	2,941.92	2,929.93	12.34	10.98	149.84	-213.04	-203.77	579.28	557.37	22.67	26.512							
3,100.00	3,058.92	3,039.49	3,027.05	12.80	11.36	149.99	-221.04	-208.78	601.11	578.44	23.44	26.577							
3,200.00	3,157.09	3,137.07	3,124.17	13.27	11.74	150.12	-229.03	-213.78	622.95	599.51	24.21	26.637							
3,300.00	3,255.25	3,234.65	3,221.29	13.73	12.11	150.25	-237.03	-218.79	644.79	620.58	24.97	26.694							
3,400.00	3,353.41	3,332.22	3,318.41	14.19	12.49	150.37	-245.03	-223.79	666.63	641.66	25.74	26.747							
3,500.00	3,451.57	3,429.80	3,415.53	14.66	12.87	150.48	-253.03	-228.80	688.48	662.74	26.51	26.798							
3,600.00	3,549.73	3,527.38	3,512.65	15.12	13.25	150.58	-261.03	-233.80	710.33	683.82	27.27	26.845							
3,700.00	3,647.89	3,624.95	3,609.77	15.58	13.63	150.68	-269.03	-238.81	732.18	704.90	28.04	26.890							
3,800.00	3,746.05	3,722.53	3,706.89	16.05	14.01	150.77	-277.03	-243.81	754.03	725.99	28.81	26.932							
3,900.00	3,844.21	3,820.11	3,804.01	16.51	14.39	150.85	-285.03	-248.82	775.88	747.07	29.58	26.972							
4,000.00	3,942.37	3,917.68	3,901.13	16.98	14.77	150.94	-293.02	-253.83	797.74	768.16	30.34	27.010							
4,100.00	4,040.53	4,015.26	3,998.25	17.44	15.15	151.01	-301.02	-258.83	819.59	789.25	31.11	27.046							
4,200.00	4,138.69	4,112.84	4,095.36	17.90	15.52	151.09	-309.02	-263.84	841.45	810.34	31.88	27.080							
4,300.00	4,236.85	4,210.41	4,192.48	18.37	15.90	151.16	-317.02	-268.84	863.31	831.43	32.65	27.113							
4,400.00	4,335.02	4,307.99	4,289.60	18.83	16.28	151.22	-325.02	-273.85	885.17	852.52	33.42	27.144							
4,500.00	4,433.18	4,405.56	4,386.72	19.30	16.66	151.29	-333.02	-278.85	907.03	873.61	34.18	27.174							
4,600.00	4,531.34	4,503.14	4,483.84	19.76	17.04	151.35	-341.02	-283.86	928.89	894.71	34.95	27.203							
4,700.00	4,629.50	4,600.72	4,580.96	20.23	17.42	151.40	-349.01	-288.86	950.76	915.80	35.72	27.230							
4,800.00	4,727.66	4,698.29	4,678.08	20.69	17.80	151.46	-357.01	-293.87	972.62	936.90	36.49	27.256							
4,900.00	4,825.82	4,795.87	4,775.20	21.16	18.18	151.51	-365.01	-298.88	994.48	958.00									
5,000.00	4,923.98	4,893.45	4,872.32	21.62	18.56	151.56	-373.01	-303.88	1,016.35	979.09									

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 4T-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 4T-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													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference: S32-T2N-R68W - HWY52 4M-32H-O268 - OH - PLAN #2														
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	5,022.14	4,991.02	4,969.44	22.09	18.94	151.61	-381.01	-308.89	1,038.22	1,000.19	38.02	27.305		
5,200.00	5,120.30	5,088.60	5,066.56	22.55	19.31	151.66	-389.01	-313.89	1,060.08	1,021.29	38.79	27.327		
5,300.00	5,218.46	5,186.18	5,163.67	23.02	19.69	151.70	-397.01	-318.90	1,081.95	1,042.39	39.56	27.350		
5,400.00	5,316.62	5,283.75	5,260.79	23.48	20.07	151.74	-405.01	-323.90	1,103.82	1,063.49	40.33	27.371		
5,500.00	5,414.78	5,381.33	5,357.91	23.95	20.45	151.78	-413.00	-328.91	1,125.69	1,084.59	41.10	27.391		
5,600.00	5,512.95	5,478.91	5,455.03	24.41	20.83	151.82	-421.00	-333.91	1,147.56	1,105.69	41.87	27.411		
5,700.00	5,611.11	5,576.48	5,552.15	24.88	21.21	151.86	-429.00	-338.92	1,169.43	1,126.79	42.63	27.429		
5,800.00	5,709.27	5,674.06	5,649.27	25.35	21.59	151.90	-437.00	-343.92	1,191.30	1,147.89	43.40	27.448		
5,900.00	5,807.43	5,771.63	5,746.39	25.81	21.97	151.93	-445.00	-348.93	1,213.17	1,169.00	44.17	27.465		
6,000.00	5,905.59	5,869.21	5,843.51	26.28	22.35	151.96	-453.00	-353.94	1,235.04	1,190.10	44.94	27.482		
6,100.00	6,003.75	5,966.79	5,940.63	26.74	22.73	152.00	-461.00	-358.94	1,256.91	1,211.20	45.71	27.498		
6,200.00	6,101.91	6,064.36	6,037.75	27.21	23.10	152.03	-468.99	-363.95	1,278.78	1,232.31	46.48	27.514		
6,300.00	6,200.07	6,161.94	6,134.87	27.67	23.48	152.06	-476.99	-368.95	1,300.65	1,253.41	47.25	27.529		
6,400.00	6,298.23	6,259.52	6,231.99	28.14	23.86	152.09	-484.99	-373.96	1,322.53	1,274.51	48.01	27.544		
6,500.00	6,396.39	6,357.09	6,329.10	28.61	24.24	152.12	-492.99	-378.96	1,344.40	1,295.62	48.78	27.558		
6,600.00	6,494.55	6,454.67	6,426.22	29.07	24.62	152.14	-500.99	-383.97	1,366.27	1,316.72	49.55	27.572		
6,700.00	6,592.71	6,552.25	6,523.34	29.54	25.00	152.17	-508.99	-388.97	1,388.15	1,337.82	50.32	27.585		
6,772.64	6,664.02	6,623.13	6,593.89	29.88	25.28	152.19	-514.80	-392.61	1,404.04	1,353.16	50.88	27.595		
6,800.00	6,690.92	6,649.82	6,620.46	30.00	25.38	163.48	-516.99	-393.98	1,410.01	1,358.92	51.09	27.599		
6,850.00	6,740.19	6,698.50	6,668.91	30.21	25.57	-172.89	-520.98	-396.48	1,420.89	1,369.43	51.46	27.611		
6,900.00	6,789.40	6,746.84	6,717.02	30.41	25.76	-150.94	-524.94	-398.96	1,431.68	1,379.86	51.82	27.628		
6,950.00	6,838.32	6,794.57	6,764.53	30.58	25.94	-134.87	-528.84	-401.41	1,442.38	1,390.21	52.17	27.650		
7,000.00	6,886.71	6,841.89	6,811.74	30.73	26.11	-124.06	-530.94	-403.84	1,453.00	1,400.51	52.49	27.683		
7,050.00	6,934.33	6,889.99	6,859.75	30.87	26.27	-116.70	-529.87	-406.32	1,463.51	1,410.73	52.79	27.725		
7,100.00	6,980.95	6,938.93	6,908.42	30.99	26.41	-111.49	-525.47	-408.84	1,473.87	1,420.80	53.06	27.775		
7,150.00	7,026.35	6,988.78	6,957.56	31.09	26.55	-107.64	-517.58	-411.39	1,484.02	1,430.69	53.33	27.828		
7,200.00	7,070.29	7,039.60	7,006.97	31.19	26.67	-104.71	-506.03	-413.95	1,493.91	1,440.33	53.58	27.883		

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.90	0.10	-60.15	60.15	59.88	0.28	217.931							
100.00	100.00	100.00	100.00	0.14	0.14	-89.90	0.10	-60.15	60.15	59.16	0.99	60.580							
200.00	200.00	200.00	200.00	0.50	0.50	-89.90	0.10	-60.15	60.15	58.44	1.71	35.180 CC							
300.00	300.00	300.00	300.00	0.85	0.85	-89.90	0.10	-60.15	60.15	57.72	2.41	25.085 ES							
400.00	400.00	399.61	399.59	1.21	1.20	-91.52	-1.61	-60.45	60.47	58.06	3.11	19.826							
500.00	500.00	498.98	498.82	1.57	1.54	-96.24	-6.71	-61.32	61.69	58.58									
600.00	599.98	598.36	597.86	1.92	1.89	139.54	-14.74	-62.69	65.75	61.93	3.82	17.222							
700.00	699.84	697.99	697.12	2.26	2.25	135.84	-23.19	-64.13	73.09	68.57	4.52	16.163							
800.00	799.45	797.47	796.24	2.61	2.62	134.54	-31.63	-65.57	83.08	77.84	5.24	15.865							
900.00	898.70	896.69	895.08	2.98	2.99	134.97	-40.05	-67.00	95.51	89.55	5.96	16.023							
1,000.00	997.47	995.51	993.54	3.37	3.36	136.51	-48.43	-68.43	110.45	103.75	6.70	16.492							
1,050.28	1,046.90	1,045.02	1,042.86	3.57	3.54	137.54	-52.63	-69.15	118.95	111.88	7.07	16.817							
1,100.00	1,095.71	1,093.90	1,091.56	3.77	3.73	138.66	-56.77	-69.86	127.72	120.27	7.44	17.158							
1,200.00	1,193.87	1,192.22	1,189.52	4.19	4.10	140.50	-65.11	-71.28	145.47	137.27	8.19	17.758							
1,300.00	1,292.03	1,290.53	1,287.47	4.62	4.47	141.93	-73.45	-72.70	163.33	154.39	8.94	18.261							
1,400.00	1,390.19	1,388.85	1,385.42	5.06	4.84	143.09	-81.79	-74.13	181.27	171.57	9.70	18.686							
1,500.00	1,488.35	1,487.17	1,483.38	5.50	5.22	144.03	-90.13	-75.55	199.28	188.82	10.46	19.050							
1,600.00	1,586.51	1,585.49	1,581.33	5.94	5.59	144.82	-98.47	-76.97	217.32	206.10	11.22	19.364							
1,700.00	1,684.67	1,683.80	1,679.28	6.39	5.97	145.49	-106.80	-78.39	235.40	223.42	11.99	19.639							
1,800.00	1,782.83	1,782.12	1,777.24	6.84	6.34	146.06	-115.14	-79.82	253.51	240.76	12.75	19.881							
1,900.00	1,880.99	1,880.44	1,875.19	7.29	6.71	146.56	-123.48	-81.24	271.64	258.12	13.52	20.095							
2,000.00	1,979.16	1,978.76	1,973.14	7.75	7.09	146.99	-131.82	-82.66	289.78	275.50	14.28	20.286							
2,100.00	2,077.32	2,077.08	2,071.10	8.20	7.46	147.38	-140.16	-84.09	307.94	292.89	15.05	20.458							
2,200.00	2,175.48	2,175.39	2,169.05	8.66	7.84	147.72	-148.50	-85.51	326.11	310.29	15.82	20.613							
2,300.00	2,273.64	2,273.71	2,267.00	9.12	8.21	148.02	-156.83	-86.93	344.29	327.70	16.59	20.753							
2,400.00	2,371.80	2,372.03	2,364.96	9.58	8.59	148.30	-165.17	-88.35	362.48	345.12	17.36	20.881							
2,500.00	2,469.96	2,470.35	2,462.91	10.04	8.97	148.54	-173.51	-89.78	380.68	362.55	18.13	20.998							
2,600.00	2,568.12	2,568.66	2,560.86	10.50	9.34	148.77	-181.85	-91.20	398.88	379.98	18.90	21.106							
2,700.00	2,666.28	2,666.98	2,658.82	10.96	9.72	148.97	-190.19	-92.62	417.09	397.42	19.67	21.205							
2,800.00	2,764.44	2,765.30	2,756.77	11.42	10.09	149.16	-198.53	-94.05	435.30	414.86	20.44	21.296							
2,900.00	2,862.60	2,863.62	2,854.72	11.88	10.47	149.34	-206.87	-95.47	453.52	432.31	21.21	21.381							
3,000.00	2,960.76	2,961.94	2,952.67	12.34	10.84	149.49	-215.20	-96.89	471.74	449.76	21.98	21.459							
3,100.00	3,058.92	3,060.25	3,050.63	12.80	11.22	149.64	-223.54	-98.31	489.96	467.21	22.75	21.533							
3,200.00	3,157.09	3,158.57	3,148.58	13.27	11.60	149.78	-231.88	-99.74	508.19	484.67	23.53	21.601							
3,300.00	3,255.25	3,256.89	3,246.53	13.73	11.97	149.91	-240.22	-101.16	526.42	502.12	24.30	21.665							
3,400.00	3,353.41	3,355.21	3,344.49	14.19	12.35	150.03	-248.56	-102.58	544.65	519.58	25.07	21.725							
3,500.00	3,451.57	3,453.52	3,442.44	14.66	12.72	150.14	-256.90	-104.00	562.89	537.05	25.84	21.782							
3,600.00	3,549.73	3,551.84	3,540.39	15.12	13.10	150.24	-265.24	-105.43	581.12	554.51	26.61	21.835							
3,700.00	3,647.89	3,650.16	3,638.35	15.58	13.48	150.34	-273.57	-106.85	599.36	571.97	27.39	21.885							
3,800.00	3,746.05	3,748.48	3,736.30	16.05	13.85	150.43	-281.91	-108.27	617.60	589.44	28.16	21.933							
3,900.00	3,844.21	3,846.80	3,834.25	16.51	14.23	150.52	-290.25	-109.70	635.84	606.91	28.93	21.978							
4,000.00	3,942.37	3,945.11	3,932.21	16.98	14.60	150.60	-298.59	-111.12	654.08	624.38	29.70	22.020							
4,100.00	4,040.53	4,043.43	4,030.16	17.44	14.98	150.68	-306.93	-112.54	672.33	641.85	30.48	22.060							
4,200.00	4,138.69	4,141.75	4,128.11	17.90	15.36	150.75	-315.27	-113.96	690.57	659.32	31.25	22.099							
4,300.00	4,236.85	4,240.07	4,226.07	18.37	15.73	150.82	-323.60	-115.39	708.82	676.80	32.02	22.135							
4,400.00	4,335.02	4,338.38	4,324.02	18.83	16.11	150.89	-331.94	-116.81	727.06	694.27	32.80	22.170							
4,500.00	4,433.18	4,436.70	4,421.97	19.30	16.49	150.95	-340.28	-118.23	745.31	711.74	33.57	22.203							
4,600.00	4,531.34	4,535.02	4,519.93	19.76	16.86	151.01	-348.62	-119.66	763.56	729.22	34.34	22.234							
4,700.00	4,629.50	4,633.34	4,617.88	20.23	17.24	151.07	-356.96	-121.08	781.81	746.70	35.11	22.265							
4,800.00	4,727.66	4,731.66	4,715.83	20.69	17.61	151.13	-365.30	-122.50	800.06	764.17	35.89	22.293							
4,900.00	4,825.82	4,829.97	4,813.79	21.16	17.99	151.18	-373.64	-123.92	818.31	781.65	36.66	22.321							
5,000.00	4,923.98	4,928.29	4,911.74	21.62	18.37	151.23	-381.97	-125.35	836.56	799.13	37.43	22.348							

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 4T-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 4T-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			Total		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)	Uncertainty Axis			
5,100.00	5,022.14	5,026.61	5,009.69	22.09	18.74	151.28	-390.31	-126.77	854.81	816.61	38.21	22.373		
5,200.00	5,120.30	5,124.93	5,107.65	22.55	19.12	151.32	-398.65	-128.19	873.07	834.08	38.98	22.397		
5,300.00	5,218.46	5,223.25	5,205.60	23.02	19.50	151.37	-406.99	-129.61	891.32	851.56	39.75	22.421		
5,400.00	5,316.62	5,321.56	5,303.55	23.48	19.87	151.41	-415.33	-131.04	909.57	869.04	40.53	22.443		
5,500.00	5,414.78	5,419.88	5,401.51	23.95	20.25	151.45	-423.67	-132.46	927.83	886.52	41.30	22.465		
5,600.00	5,512.95	5,518.20	5,499.46	24.41	20.62	151.49	-432.01	-133.88	946.08	904.01	42.07	22.486		
5,700.00	5,611.11	5,616.52	5,597.41	24.88	21.00	151.52	-440.34	-135.31	964.33	921.49	42.85	22.506		
5,800.00	5,709.27	5,714.83	5,695.37	25.35	21.38	151.56	-448.68	-136.73	982.59	938.97	43.62	22.525		
5,900.00	5,807.43	5,813.15	5,793.32	25.81	21.75	151.60	-457.02	-138.15	1,000.85	956.45	44.40	22.544		
6,000.00	5,905.59	5,911.47	5,891.27	26.28	22.13	151.63	-465.36	-139.57	1,019.10	973.93	45.17	22.562		
6,100.00	6,003.75	6,009.79	5,989.22	26.74	22.51	151.66	-473.70	-141.00	1,037.36	991.41	45.94	22.579		
6,200.00	6,101.91	6,108.11	6,087.18	27.21	22.88	151.69	-482.04	-142.42	1,055.61	1,008.90	46.72	22.596		
6,300.00	6,200.07	6,206.42	6,185.13	27.67	23.26	151.72	-490.37	-143.84	1,073.87	1,026.38	47.49	22.612		
6,400.00	6,298.23	6,304.74	6,283.08	28.14	23.64	151.75	-498.71	-145.27	1,092.13	1,043.86	48.26	22.628		
6,500.00	6,396.39	6,403.06	6,381.04	28.61	24.01	151.78	-507.05	-146.69	1,110.38	1,061.35	49.04	22.643		
6,600.00	6,494.55	6,501.38	6,478.99	29.07	24.39	151.81	-515.39	-148.11	1,128.64	1,078.83	49.81	22.658		
6,700.00	6,592.71	6,599.69	6,576.94	29.54	24.76	151.83	-523.73	-149.53	1,146.90	1,096.31	50.59	22.672		
6,772.64	6,664.02	6,671.11	6,648.10	29.88	25.04	151.85	-529.79	-150.57	1,160.16	1,109.01	51.15	22.682		
6,800.00	6,690.92	6,697.76	6,674.66	30.00	25.14	163.06	-531.85	-150.95	1,165.16	1,113.80	51.36	22.688		
6,850.00	6,740.19	6,746.21	6,723.07	30.21	25.30	-173.35	-533.21	-151.66	1,174.27	1,122.57	51.70	22.713		
6,900.00	6,789.40	6,794.70	6,771.51	30.41	25.45	-151.30	-531.28	-152.36	1,183.34	1,131.33	52.01	22.753		
6,950.00	6,838.32	6,843.25	6,819.77	30.58	25.59	-135.02	-526.08	-153.06	1,192.31	1,140.02	52.29	22.803		
7,000.00	6,886.71	6,891.89	6,867.66	30.73	25.71	-123.95	-517.59	-153.76	1,201.14	1,148.60	52.55	22.859		
7,050.00	6,934.33	6,940.63	6,914.95	30.87	25.83	-116.34	-505.86	-154.44	1,209.80	1,157.01	52.79	22.919		
7,100.00	6,980.95	6,989.49	6,961.44	30.99	25.95	-110.88	-490.89	-155.12	1,218.23	1,165.22	53.01	22.981		
7,150.00	7,026.35	7,038.48	7,006.92	31.09	26.05	-106.79	-472.73	-155.78	1,226.40	1,173.18	53.22	23.045		
7,200.00	7,070.29	7,087.60	7,051.18	31.19	26.16	-103.61	-451.45	-156.42	1,234.27	1,180.86	53.41	23.108		
7,250.00	7,112.57	7,136.89	7,094.01	31.26	26.26	-101.08	-427.09	-157.04	1,241.80	1,188.20	53.60	23.169		
7,300.00	7,152.98	7,186.33	7,135.20	31.32	26.35	-99.00	-399.76	-157.64	1,248.95	1,195.17	53.78	23.225		
7,350.00	7,191.33	7,235.95	7,174.53	31.37	26.45	-97.28	-369.54	-158.21	1,255.69	1,201.74	53.95	23.274		
7,400.00	7,227.42	7,285.74	7,211.81	31.41	26.54	-95.84	-336.55	-158.75	1,261.99	1,207.86	54.13	23.316		
7,450.00	7,261.09	7,335.70	7,246.82	31.44	26.64	-94.62	-300.92	-159.26	1,267.81	1,213.51	54.30	23.347		
7,500.00	7,292.16	7,385.84	7,279.37	31.45	26.74	-93.59	-262.80	-159.74	1,273.14	1,218.65	54.49	23.365		
7,550.00	7,320.49	7,436.16	7,309.28	31.45	26.85	-92.72	-222.36	-160.17	1,277.93	1,223.24	54.68	23.370		
7,600.00	7,345.94	7,486.64	7,336.35	31.44	26.97	-91.99	-179.77	-160.56	1,282.17	1,227.27	54.89	23.358		
7,650.00	7,368.38	7,537.27	7,360.43	31.43	27.10	-91.39	-135.23	-160.91	1,285.83	1,230.71	55.12	23.328		
7,700.00	7,387.71	7,588.06	7,381.37	31.40	27.24	-90.91	-88.97	-161.22	1,288.91	1,233.54	55.37	23.280		
7,750.00	7,403.82	7,638.98	7,399.01	31.37	27.39	-90.53	-41.22	-161.47	1,291.37	1,235.74	55.63	23.212		
7,800.00	7,416.65	7,690.02	7,413.24	31.34	27.56	-90.25	7.78	-161.68	1,293.22	1,237.29	55.93	23.123		
7,850.00	7,426.13	7,741.17	7,423.97	31.30	27.74	-90.07	57.78	-161.84	1,294.44	1,238.19	56.25	23.013		
7,900.00	7,432.22	7,792.40	7,431.12	31.25	27.93	-89.98	108.50	-161.94	1,295.02	1,238.43	56.59	22.883		
7,950.00	7,434.87	7,843.69	7,434.62	31.21	28.14	-89.98	159.66	-161.99	1,294.97	1,238.00	56.96	22.733		
7,963.63	7,435.00	7,857.69	7,434.94	31.20	28.20	-90.00	173.65	-161.99	1,294.84	1,237.77	57.07	22.689		
8,000.00	7,435.00	7,894.30	7,435.00	31.17	28.36	-90.00	210.27	-162.00	1,294.44	1,237.08	57.36	22.568		
8,100.00	7,435.00	7,994.29	7,435.00	31.10	28.85	-90.00	310.26	-161.99	1,293.32	1,235.06	58.26	22.198		
8,200.00	7,435.00	8,094.29	7,435.00	31.08	29.42	-90.00	410.25	-161.99	1,292.21	1,232.88	59.32	21.783		
8,300.00	7,435.00	8,185.81	7,435.00	31.19	30.00	-90.00	501.77	-162.06	1,291.18	1,230.71	60.47	21.353		
8,320.13	7,435.00	8,200.00	7,435.00	31.24	30.10	-90.00	515.97	-162.18	1,291.14	1,230.45	60.69	21.274		
8,400.00	7,435.00	8,254.73	7,435.00	31.60	30.48	-90.00	570.69	-163.34	1,291.92	1,230.36	61.56	20.986		
8,500.00	7,435.00	8,349.17	7,435.00	32.26	31.21	-90.00	665.07	-166.61	1,294.26	1,231.29	62.97	20.553		
8,600.00	7,435.00	8,449.14	7,435.00	33.03	32.03	-90.00	764.98	-170.10	1,296.63	1,232.08	64.55	20.087		
8,700.00	7,435.00	8,549.11	7,435.00	33.87	32.92	-90.00	864.89	-173.58	1,299.01	1,232.76	66.25	19.608		

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 4T-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 4T-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													Offset Site Error:	0.00 usft		
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft		
Reference: S32-T2N-R68W - HWY52 4N-32H-O268 - OH - PLAN #2																
Reference				Offset				Semi Major Axis			Distance					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning			
8,800.00	7,435.00	8,649.09	7,435.00	34.77	33.85	-90.00	964.80	-177.07	1,301.38	1,233.33	68.06	19.122				
8,900.00	7,435.00	8,749.06	7,435.00	35.71	34.84	-90.00	1,064.71	-180.56	1,303.76	1,233.79	69.96	18.635				
9,000.00	7,435.00	8,849.03	7,435.00	36.70	35.87	-90.00	1,164.62	-184.05	1,306.13	1,234.17	71.96	18.150				
9,100.00	7,435.00	8,949.00	7,435.00	37.73	36.95	-90.00	1,264.53	-187.54	1,308.51	1,234.46	74.05	17.671				
9,200.00	7,435.00	9,048.97	7,435.00	38.79	38.06	-90.00	1,364.44	-191.03	1,310.88	1,234.67	76.21	17.200				
9,300.00	7,435.00	9,148.94	7,435.00	39.89	39.21	-90.00	1,464.35	-194.52	1,313.26	1,234.81	78.45	16.740				
9,400.00	7,435.00	9,248.92	7,435.00	41.03	40.39	-90.00	1,564.26	-198.01	1,315.63	1,234.88	80.75	16.293				
9,500.00	7,435.00	9,348.86	7,435.00	42.19	42.14	-90.00	1,710.17	-200.38	1,316.09	1,232.28	83.81	15.703				
9,600.00	7,435.00	9,448.85	7,435.00	43.37	43.37	-90.00	1,810.17	-200.38	1,314.97	1,228.75	86.23	15.250				
9,700.00	7,435.00	9,548.84	7,435.00	44.59	44.61	-90.00	1,910.16	-200.38	1,313.86	1,225.17	88.69	14.815				
9,800.00	7,435.00	9,648.84	7,435.00	45.82	45.88	-90.00	2,010.15	-200.38	1,312.74	1,221.55	91.19	14.395				
9,900.00	7,435.00	9,748.83	7,435.00	47.08	47.17	-90.00	2,110.15	-200.38	1,311.63	1,217.89	93.74	13.992				
10,000.00	7,435.00	9,848.82	7,435.00	48.35	48.47	-90.00	2,210.14	-200.38	1,310.51	1,214.18	96.33	13.605				
10,100.00	7,435.00	9,948.82	7,435.00	49.64	49.80	-90.00	2,310.13	-200.38	1,309.39	1,210.45	98.95	13.233				
10,200.00	7,435.00	10,048.81	7,435.00	50.95	51.13	-90.00	2,410.13	-200.38	1,308.28	1,206.68	101.60	12.877				
10,300.00	7,435.00	10,148.81	7,435.00	52.28	52.48	-90.00	2,510.12	-200.38	1,307.16	1,202.88	104.28	12.535				
10,400.00	7,435.00	10,248.80	7,435.00	53.62	53.85	-90.00	2,610.12	-200.38	1,306.05	1,199.06	106.99	12.207				
10,459.89	7,435.00	10,354.69	7,435.00	54.43	54.67	-90.00	2,670.00	-200.38	1,305.38	1,196.75	108.63	12.017				
10,491.86	7,435.00	10,386.65	7,435.00	54.86	55.11	-90.00	2,701.97	-200.38	1,305.20	1,195.70	109.50	11.920				
10,500.00	7,435.00	10,394.80	7,435.00	54.97	55.22	-90.00	2,710.11	-200.38	1,305.21	1,195.49	109.72	11.896				
10,535.52	7,435.00	10,430.31	7,435.00	55.45	55.71	-90.00	2,745.63	-200.38	1,305.53	1,194.84	110.69	11.794				
10,600.00	7,435.00	10,494.79	7,435.00	56.32	56.61	-90.00	2,810.10	-200.38	1,306.52	1,194.05	112.46	11.617				
10,700.00	7,435.00	10,594.77	7,435.00	57.68	58.00	-90.00	2,910.09	-200.38	1,308.04	1,192.82	115.22	11.353				
10,800.00	7,435.00	10,694.76	7,435.00	59.05	59.41	-90.00	3,010.08	-200.38	1,309.56	1,191.56	118.00	11.098				
10,900.00	7,435.00	10,794.75	7,435.00	60.44	60.83	-90.00	3,110.07	-200.38	1,311.09	1,190.29	120.80	10.854				
11,000.00	7,435.00	10,894.74	7,435.00	61.83	62.25	-90.00	3,210.06	-200.38	1,312.61	1,189.00	123.61	10.619				
11,100.00	7,435.00	10,994.73	7,435.00	63.23	63.68	-90.00	3,310.04	-200.38	1,314.14	1,187.69	126.45	10.393				
11,200.00	7,435.00	11,094.72	7,435.00	64.63	65.12	-90.00	3,410.03	-200.38	1,315.66	1,186.37	129.29	10.176				
11,300.00	7,435.00	11,194.70	7,435.00	66.05	66.56	-90.00	3,510.02	-200.38	1,317.18	1,185.03	132.16	9.967				
11,400.00	7,435.00	11,294.69	7,435.00	67.47	68.02	-90.00	3,610.01	-200.38	1,318.71	1,183.68	135.03	9.766				
11,500.00	7,435.00	11,394.68	7,435.00	68.90	69.47	-90.00	3,710.00	-200.38	1,320.23	1,182.31	137.92	9.573				
11,600.00	7,435.00	11,494.67	7,435.00	70.33	70.94	-90.00	3,809.99	-200.38	1,321.76	1,180.94	140.82	9.386				
11,700.00	7,435.00	11,594.66	7,435.00	71.77	72.40	-90.00	3,909.97	-200.38	1,323.28	1,179.55	143.73	9.207				
11,800.00	7,435.00	11,690.10	7,435.00	73.22	77.44	-90.00	4,266.89	-167.00	1,316.74	1,167.73	149.02	8.836				
11,900.00	7,435.00	11,960.10	7,435.00	74.67	77.44	-90.00	4,266.89	-167.00	1,302.45	1,150.94	151.51	8.596				
12,000.00	7,435.00	11,960.10	7,435.00	76.13	77.44	-90.00	4,266.89	-167.00	1,295.73	1,142.44	153.29	8.453				
12,037.22	7,435.00	11,960.10	7,435.00	76.58	77.44	-90.00	4,266.89	-167.00	1,295.20	1,141.55	153.65	8.430				
12,046.42	7,435.00	11,960.10	7,435.00	76.69	77.44	-90.00	4,266.89	-167.00	1,295.23	1,141.51	153.72	8.426 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 4T-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 4T-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													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	-89.90	0.08	-50.08	50.08					
100.00	100.00	100.00	100.00	0.14	0.14	-89.90	0.08	-50.08	50.08	49.81	0.28	181.441		
200.00	200.00	200.00	200.00	0.50	0.50	-89.90	0.08	-50.08	50.08	49.09	0.99	50.437		
300.00	300.00	300.41	300.39	0.85	0.84	-91.87	-1.62	-49.63	49.66	47.96	1.70	29.226		
400.00	400.00	400.58	400.42	1.21	1.19	-97.90	-6.70	-48.27	48.74	46.33	2.40	20.276		
474.89	474.89	475.30	474.89	1.48	1.46	-104.95	-12.48	-46.73	48.36	45.42	2.94	16.450	CC	
500.00	500.00	500.32	499.82	1.57	1.55	-107.43	-14.50	-46.19	48.41	45.29	3.12	15.510	ES	
600.00	599.98	600.05	599.20	1.92	1.92	126.28	-22.56	-44.03	50.50	46.66	3.84	13.155		
700.00	699.84	699.85	698.66	2.26	2.29	122.04	-30.64	-41.88	55.28	50.73	4.55	12.138		
800.00	799.45	799.62	798.07	2.61	2.67	121.28	-38.70	-39.73	62.05	56.77	5.28	11.753		
900.00	898.70	899.21	897.32	2.98	3.04	123.05	-46.76	-37.57	70.66	64.65	6.02	11.745		
1,000.00	997.47	998.53	996.29	3.37	3.42	126.40	-54.79	-35.43	81.36	74.59	6.77	12.024		
1,050.28	1,046.90	1,048.32	1,045.90	3.57	3.61	128.43	-58.81	-34.36	87.64	80.49	7.15	12.259		
1,100.00	1,095.71	1,097.49	1,094.90	3.77	3.79	130.45	-62.79	-33.29	94.24	86.71	7.53	12.519		
1,200.00	1,193.87	1,196.40	1,193.47	4.19	4.17	133.76	-70.79	-31.16	107.79	99.50	8.29	13.003		
1,300.00	1,292.03	1,295.31	1,292.03	4.62	4.54	136.33	-78.78	-29.02	121.61	112.56	9.05	13.432		
1,400.00	1,390.19	1,394.22	1,390.59	5.06	4.92	138.37	-86.78	-26.89	135.63	125.81	9.82	13.811		
1,500.00	1,488.35	1,493.13	1,489.15	5.50	5.29	140.03	-94.78	-24.75	149.79	139.20	10.59	14.147		
1,600.00	1,586.51	1,592.04	1,587.71	5.94	5.67	141.41	-102.78	-22.62	164.04	152.69	11.36	14.446		
1,700.00	1,684.67	1,690.94	1,686.27	6.39	6.05	142.56	-110.78	-20.48	178.38	166.25	12.12	14.712		
1,800.00	1,782.83	1,789.85	1,784.84	6.84	6.42	143.54	-118.77	-18.34	192.77	179.88	12.89	14.951		
1,900.00	1,880.99	1,888.76	1,883.40	7.29	6.80	144.38	-126.77	-16.21	207.21	193.55	13.66	15.165		
2,000.00	1,979.16	1,987.67	1,981.96	7.75	7.18	145.12	-134.77	-14.07	221.69	207.26	14.43	15.360		
2,100.00	2,077.32	2,086.58	2,080.52	8.20	7.55	145.76	-142.77	-11.94	236.21	221.00	15.20	15.536		
2,200.00	2,175.48	2,185.49	2,179.08	8.66	7.93	146.33	-150.77	-9.80	250.74	234.77	15.97	15.696		
2,300.00	2,273.64	2,284.40	2,277.64	9.12	8.31	146.84	-158.76	-7.67	265.30	248.56	16.75	15.843		
2,400.00	2,371.80	2,383.30	2,376.21	9.58	8.68	147.29	-166.76	-5.53	279.88	262.36	17.52	15.978		
2,500.00	2,469.96	2,482.21	2,474.77	10.04	9.06	147.70	-174.76	-3.39	294.47	276.18	18.29	16.102		
2,600.00	2,568.12	2,581.12	2,573.33	10.50	9.44	148.07	-182.76	-1.26	309.08	290.02	19.06	16.216		
2,700.00	2,666.28	2,680.03	2,671.89	10.96	9.82	148.41	-190.75	0.88	323.70	303.87	19.83	16.323		
2,800.00	2,764.44	2,778.94	2,770.45	11.42	10.19	148.72	-198.75	3.01	338.32	317.72	20.60	16.421		
2,900.00	2,862.60	2,877.85	2,869.01	11.88	10.57	149.00	-206.75	5.15	352.96	331.59	21.37	16.513		
3,000.00	2,960.76	2,976.76	2,967.58	12.34	10.95	149.26	-214.75	7.28	367.61	345.46	22.15	16.599		
3,100.00	3,058.92	3,075.67	3,066.14	12.80	11.32	149.50	-222.75	9.42	382.26	359.34	22.92	16.679		
3,200.00	3,157.09	3,174.57	3,164.70	13.27	11.70	149.72	-230.74	11.55	396.91	373.22	23.69	16.754		
3,300.00	3,255.25	3,273.48	3,263.26	13.73	12.08	149.93	-238.74	13.69	411.58	387.11	24.46	16.824		
3,400.00	3,353.41	3,372.39	3,361.82	14.19	12.46	150.12	-246.74	15.83	426.24	401.01	25.24	16.891		
3,500.00	3,451.57	3,471.30	3,460.38	14.66	12.83	150.30	-254.74	17.96	440.92	414.91	26.01	16.953		
3,600.00	3,549.73	3,570.21	3,558.95	15.12	13.21	150.47	-262.74	20.10	455.59	428.81	26.78	17.012		
3,700.00	3,647.89	3,669.12	3,657.51	15.58	13.59	150.63	-270.73	22.23	470.27	442.72	27.55	17.068		
3,800.00	3,746.05	3,768.03	3,756.07	16.05	13.96	150.78	-278.73	24.37	484.95	456.63	28.33	17.121		
3,900.00	3,844.21	3,866.93	3,854.63	16.51	14.34	150.92	-286.73	26.50	499.64	470.54	29.10	17.171		
4,000.00	3,942.37	3,965.84	3,953.19	16.98	14.72	151.05	-294.73	28.64	514.33	484.46	29.87	17.218		
4,100.00	4,040.53	4,064.75	4,051.75	17.44	15.10	151.17	-302.72	30.78	529.02	498.38	30.64	17.264		
4,200.00	4,138.69	4,163.66	4,150.32	17.90	15.47	151.29	-310.72	32.91	543.71	512.30	31.42	17.307		
4,300.00	4,236.85	4,262.57	4,248.88	18.37	15.85	151.40	-318.72	35.05	558.41	526.22	32.19	17.348		
4,400.00	4,335.02	4,361.48	4,347.44	18.83	16.23	151.50	-326.72	37.18	573.11	540.14	32.96	17.387		
4,500.00	4,433.18	4,460.39	4,446.00	19.30	16.61	151.61	-334.72	39.32	587.81	554.07	33.73	17.424		
4,600.00	4,531.34	4,559.30	4,544.56	19.76	16.98	151.70	-342.71	41.45	602.51	568.00	34.51	17.460		
4,700.00	4,629.50	4,658.20	4,643.12	20.23	17.36	151.79	-350.71	43.59	617.21	581.93	35.28	17.494		
4,800.00	4,727.66	4,757.11	4,741.69	20.69	17.74	151.88	-358.71	45.72	631.91	595.86	36.05	17.527		
4,900.00	4,825.82	4,856.02	4,840.25	21.16	18.12	151.96	-366.71	47.86	646.62	609.79	36.83	17.558		

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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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	4,923.98	4,954.93	4,938.81	21.62	18.49	152.04	-374.71	50.00	661.32	623.72	37.60	17.588							
5,100.00	5,022.14	5,053.84	5,037.37	22.09	18.87	152.11	-382.70	52.13	676.03	637.66	38.37	17.617							
5,200.00	5,120.30	5,152.75	5,135.93	22.55	19.25	152.19	-390.70	54.27	690.74	651.59	39.15	17.645							
5,300.00	5,218.46	5,251.66	5,234.49	23.02	19.62	152.26	-398.70	56.40	705.45	665.53	39.92	17.672							
5,400.00	5,316.62	5,350.56	5,333.06	23.48	20.00	152.32	-406.70	58.54	720.16	679.47	40.69	17.698							
5,500.00	5,414.78	5,449.47	5,431.62	23.95	20.38	152.39	-414.69	60.67	734.87	693.41	41.47	17.723							
5,600.00	5,512.95	5,548.38	5,530.18	24.41	20.76	152.45	-422.69	62.81	749.59	707.35	42.24	17.746							
5,700.00	5,611.11	5,647.29	5,628.74	24.88	21.13	152.51	-430.69	64.94	764.30	721.29	43.01	17.769							
5,800.00	5,709.27	5,746.20	5,727.30	25.35	21.51	152.56	-438.69	67.08	779.01	735.23	43.79	17.792							
5,900.00	5,807.43	5,845.11	5,825.86	25.81	21.89	152.62	-446.69	69.22	793.73	749.17	44.56	17.813							
6,000.00	5,905.59	5,944.02	5,924.43	26.28	22.27	152.67	-454.68	71.35	808.44	763.11	45.33	17.834							
6,100.00	6,003.75	6,042.93	6,022.99	26.74	22.64	152.72	-462.68	73.49	823.16	777.05	46.11	17.854							
6,200.00	6,101.91	6,141.83	6,121.55	27.21	23.02	152.77	-470.68	75.62	837.88	791.00	46.88	17.873							
6,300.00	6,200.07	6,240.74	6,220.11	27.67	23.40	152.82	-478.68	77.76	852.59	804.94	47.65	17.892							
6,400.00	6,298.23	6,339.65	6,318.67	28.14	23.78	152.86	-486.68	79.89	867.31	818.89	48.43	17.910							
6,500.00	6,396.39	6,438.56	6,417.23	28.61	24.15	152.91	-494.67	82.03	882.03	832.83	49.20	17.928							
6,600.00	6,494.55	6,537.47	6,515.79	29.07	24.53	152.95	-502.67	84.17	896.75	846.78	49.97	17.945							
6,700.00	6,592.71	6,636.38	6,614.36	29.54	24.91	152.99	-510.67	86.30	911.47	860.72	50.75	17.962							
6,772.64	6,664.02	6,708.22	6,685.95	29.88	25.18	153.02	-516.48	87.85	922.16	870.85	51.31	17.973							
6,800.00	6,690.92	6,735.28	6,712.92	30.00	25.28	164.13	-518.67	88.44	926.17	874.66	51.52	17.977							
6,850.00	6,740.19	6,784.63	6,762.09	30.21	25.47	-172.61	-522.66	89.50	933.43	881.53	51.90	17.984							
6,900.00	6,789.40	6,833.64	6,810.93	30.41	25.66	-151.10	-526.62	90.56	940.60	888.31	52.29	17.989							
6,950.00	6,838.32	6,882.08	6,859.20	30.58	25.85	-135.53	-530.54	91.61	947.70	895.04	52.67	17.994							
7,000.00	6,886.71	6,929.93	6,906.90	30.73	26.02	-125.33	-534.10	92.64	954.83	901.79	53.04	18.001							
7,050.00	6,934.33	6,978.47	6,955.42	30.87	26.19	-118.59	-534.97	93.69	961.99	908.60	53.40	18.016							
7,100.00	6,980.95	7,027.99	7,004.85	30.99	26.34	-113.99	-532.47	94.75	969.18	915.45	53.73	18.039							
7,150.00	7,026.35	7,078.56	7,055.03	31.09	26.48	-110.75	-526.39	95.82	976.34	922.30	54.04	18.067							
7,200.00	7,070.29	7,130.24	7,105.74	31.19	26.62	-108.39	-516.54	96.91	983.44	929.11	54.33	18.100							
7,250.00	7,112.57	7,183.11	7,156.74	31.26	26.75	-106.66	-502.70	97.99	990.44	935.83	54.61	18.137							
7,300.00	7,152.98	7,237.23	7,207.75	31.32	26.87	-105.36	-484.68	99.07	997.29	942.43	54.87	18.177							
7,350.00	7,191.33	7,292.67	7,258.44	31.37	26.99	-104.38	-462.29	100.13	1,003.95	948.85	55.10	18.220							
7,400.00	7,227.42	7,349.48	7,308.42	31.41	27.10	-103.65	-435.34	101.18	1,010.35	955.04	55.31	18.266							
7,450.00	7,261.09	7,407.70	7,357.26	31.44	27.22	-103.11	-403.70	102.19	1,016.46	960.96	55.50	18.313							
7,500.00	7,292.16	7,467.35	7,404.48	31.45	27.33	-102.72	-367.28	103.16	1,022.22	966.54	55.68	18.360							
7,550.00	7,320.49	7,528.45	7,449.52	31.45	27.45	-102.45	-326.03	104.08	1,027.56	971.72	55.84	18.403							
7,600.00	7,345.94	7,590.99	7,491.81	31.44	27.57	-102.26	-280.00	104.94	1,032.44	976.45	55.99	18.440							
7,650.00	7,368.38	7,654.91	7,530.73	31.43	27.70	-102.16	-229.33	105.72	1,036.79	980.65	56.15	18.466							
7,700.00	7,387.71	7,720.15	7,565.62	31.40	27.85	-102.11	-174.24	106.40	1,040.57	984.26	56.32	18.478							
7,750.00	7,403.82	7,786.59	7,595.87	31.37	28.02	-102.10	-115.11	106.98	1,043.73	987.22	56.51	18.470							
7,800.00	7,416.65	7,854.10	7,620.85	31.34	28.20	-102.13	-52.42	107.44	1,046.21	989.47	56.74	18.438							
7,850.00	7,426.13	7,922.50	7,640.03	31.30	28.42	-102.19	13.21	107.77	1,047.99	990.96	57.02	18.378							
7,900.00	7,432.22	7,991.58	7,652.97	31.25	28.65	-102.26	81.04	107.97	1,049.02	991.66	57.36	18.288							
7,950.00	7,434.87	8,061.12	7,659.33	31.21	28.92	-102.35	150.26	108.02	1,049.30	991.53	57.76	18.166							
7,963.63	7,435.00	8,080.13	7,659.90	31.20	28.99	-102.38	169.26	108.01	1,049.24	991.35	57.88	18.127							
8,000.00	7,435.00	8,119.86	7,660.00	31.17	29.16	-102.39	208.99	107.96	1,048.90	990.71	58.19	18.025							
8,100.00	7,435.00	8,219.86	7,660.00	31.10	29.63	-102.40	308.99	107.84	1,047.93	988.83	59.10	17.731							
8,200.00	7,435.00	8,319.85	7,660.00	31.08	30.18	-102.41	408.98	107.71	1,046.96	986.80	60.16	17.402							
8,300.00	7,435.00	8,419.85	7,660.00	31.19	30.80	-102.42	508.98	107.59	1,045.99	984.63	61.36	17.046							
8,400.00	7,435.00	8,519.84	7,660.00	31.60	31.49	-102.43	608.97	107.47	1,045.02	982.32	62.70	16.667							
8,500.00	7,435.00	8,619.84	7,660.00	32.26	32.24	-102.45	708.97	107.34	1,044.05	979.89	64.16	16.273							
8,600.00	7,435.00	8,719.83	7,660.00	33.03	33.05	-102.46	808.96	107.22	1,043.09	977.35	65.74	15.868							
8,700.00	7,435.00	8,819.83	7,660.00	33.87	33.92	-102.47	908.96	107.10	1,042.12	974.70	67.42	15.457							

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 4T-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 4T-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													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference: S32-T2N-R68W - HWY52 4O-32H-O268 - OH - PLAN #2														
Reference				Offset				Semi Major Axis			Distance			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
8,800.00	7,435.00	8,919.82	7,660.00	34.77	34.84	-102.48	1,008.95	106.97	1,041.15	971.94	69.21	15.044		
8,900.00	7,435.00	9,019.82	7,660.00	35.71	35.80	-102.49	1,108.95	106.85	1,040.18	969.10	71.08	14.633		
9,000.00	7,435.00	9,119.81	7,660.00	36.70	36.81	-102.50	1,208.94	106.73	1,039.21	966.16	73.05	14.227		
9,100.00	7,435.00	9,219.81	7,660.00	37.73	37.86	-102.52	1,308.94	106.60	1,038.24	963.15	75.09	13.827		
9,200.00	7,435.00	9,319.80	7,660.00	38.79	38.94	-102.53	1,408.93	106.48	1,037.28	960.07	77.20	13.435		
9,300.00	7,435.00	9,419.80	7,660.00	39.89	40.06	-102.54	1,508.93	106.35	1,036.31	956.92	79.39	13.054		
9,400.00	7,435.00	9,519.79	7,660.00	41.03	41.21	-102.55	1,608.92	106.23	1,035.34	953.71	81.63	12.683		
9,500.00	7,435.00	9,619.79	7,660.00	42.19	42.38	-102.56	1,708.92	106.11	1,034.37	950.44	83.93	12.324		
9,600.00	7,435.00	9,719.78	7,660.00	43.37	43.59	-102.58	1,808.91	105.98	1,033.40	947.12	86.28	11.977		
9,700.00	7,435.00	9,819.78	7,660.00	44.59	44.81	-102.59	1,908.91	105.86	1,032.43	943.75	88.68	11.642		
9,800.00	7,435.00	9,919.77	7,660.00	45.82	46.06	-102.60	2,008.90	105.74	1,031.47	940.34	91.12	11.319		
9,900.00	7,435.00	10,019.77	7,660.00	47.08	47.33	-102.61	2,108.90	105.61	1,030.50	936.89	93.61	11.009		
10,000.00	7,435.00	10,119.76	7,660.00	48.35	48.62	-102.62	2,208.89	105.49	1,029.53	933.40	96.13	10.710		
10,100.00	7,435.00	10,219.76	7,660.00	49.64	49.93	-102.64	2,308.89	105.36	1,028.56	929.88	98.68	10.423		
10,200.00	7,435.00	10,319.75	7,660.00	50.95	51.25	-102.65	2,408.88	105.24	1,027.60	926.32	101.27	10.147		
10,300.00	7,435.00	10,419.75	7,660.00	52.28	52.59	-102.66	2,508.88	105.12	1,026.63	922.74	103.89	9.882		
10,400.00	7,435.00	10,519.74	7,660.00	53.62	53.94	-102.67	2,608.87	104.99	1,025.66	919.13	106.53	9.628		
10,459.89	7,435.00	10,579.63	7,660.00	54.43	54.75	-102.68	2,668.76	104.92	1,025.08	916.95	108.13	9.480		
10,488.31	7,435.00	10,608.05	7,660.00	54.81	55.14	-102.68	2,697.18	104.88	1,024.94	916.06	108.89	9.413		
10,500.00	7,435.00	10,619.74	7,660.00	54.97	55.30	-102.68	2,708.87	104.87	1,024.97	915.77	109.20	9.386		
10,535.52	7,435.00	10,655.26	7,660.00	55.45	55.79	-102.68	2,744.39	104.83	1,025.32	915.17	110.15	9.308		
10,600.00	7,435.00	10,719.73	7,660.00	56.32	56.67	-102.66	2,808.86	104.75	1,026.36	914.48	111.88	9.174		
10,700.00	7,435.00	10,819.72	7,660.00	57.68	58.06	-102.64	2,908.85	104.62	1,027.97	913.39	114.58	8.972		
10,800.00	7,435.00	10,919.70	7,660.00	59.05	59.45	-102.62	3,008.83	104.50	1,029.58	912.27	117.30	8.777		
10,900.00	7,435.00	11,019.69	7,660.00	60.44	60.86	-102.60	3,108.82	104.37	1,031.18	911.14	120.04	8.590		
11,000.00	7,435.00	11,119.68	7,660.00	61.83	62.27	-102.58	3,208.81	104.25	1,032.79	909.99	122.80	8.410		
11,100.00	7,435.00	11,219.66	7,660.00	63.23	63.69	-102.56	3,308.79	104.13	1,034.40	908.82	125.58	8.237		
11,200.00	7,435.00	11,319.65	7,660.00	64.63	65.12	-102.55	3,408.78	104.00	1,036.01	907.64	128.37	8.071		
11,300.00	7,435.00	11,419.64	7,660.00	66.05	66.56	-102.53	3,508.76	103.88	1,037.62	906.44	131.17	7.910		
11,400.00	7,435.00	11,519.62	7,660.00	67.47	68.00	-102.51	3,608.75	103.76	1,039.23	905.23	133.99	7.756		
11,500.00	7,435.00	11,619.61	7,660.00	68.90	69.45	-102.49	3,708.74	103.63	1,040.84	904.01	136.83	7.607		
11,600.00	7,435.00	11,719.59	7,660.00	70.33	70.91	-102.47	3,808.72	103.51	1,042.44	902.77	139.67	7.463		
11,700.00	7,435.00	11,819.58	7,660.00	71.77	72.37	-102.45	3,908.71	103.38	1,044.05	901.52	142.53	7.325		
11,800.00	7,435.00	11,919.57	7,660.00	73.22	73.84	-102.43	4,008.70	103.26	1,045.66	900.27	145.40	7.192		
11,900.00	7,435.00	12,019.55	7,660.00	74.67	75.31	-102.41	4,108.68	103.14	1,047.27	899.00	148.28	7.063		
12,000.00	7,435.00	12,119.54	7,660.00	76.13	76.79	-102.39	4,208.67	103.01	1,048.88	897.72	151.16	6.939		
12,046.42	7,435.00	12,165.96	7,660.00	76.69	77.47	-102.38	4,255.09	102.96	1,049.63	897.26	152.37	6.889 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 4T-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 4T-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													Offset Site Error:	0.00 usft				
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft				
Reference													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	-89.90	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						
400.00	400.00	400.00	400.00	1.21	1.21	-89.90	0.07	-40.01	40.01	37.58	2.43	16.486						
500.00	500.00	500.00	500.00	1.57	1.57	-89.90	0.07	-40.01	40.01	36.87	3.14	12.727	CC, ES					
600.00	599.98	599.98	599.98	1.92	1.93	153.04	0.07	-40.01	41.56	37.71	3.85	10.798						
700.00	699.84	699.84	699.84	2.26	2.29	155.94	0.07	-40.01	46.28	41.73	4.55	10.173						
800.00	799.45	799.45	799.45	2.61	2.65	159.63	0.07	-40.01	54.36	49.10	5.26	10.341						
900.00	898.70	898.70	898.70	2.98	3.00	163.25	0.07	-40.01	65.93	59.96	5.97	11.047						
1,000.00	997.47	999.16	999.14	3.37	3.34	165.44	-1.51	-39.32	80.01	73.34	6.67	11.992						
1,050.28	1,046.90	1,049.77	1,049.70	3.57	3.51	165.78	-3.52	-38.45	87.58	80.56	7.03	12.466						
1,100.00	1,095.71	1,099.92	1,099.75	3.77	3.68	165.74	-6.33	-37.22	94.96	87.59	7.37	12.879						
1,200.00	1,193.87	1,200.94	1,200.39	4.19	4.02	164.55	-14.39	-33.71	108.24	100.16	8.08	13.390						
1,300.00	1,292.03	1,300.12	1,299.06	4.62	4.36	163.10	-23.60	-29.69	120.74	111.94	8.80	13.726						
1,400.00	1,390.19	1,399.29	1,397.72	5.06	4.71	161.91	-32.81	-25.68	133.30	123.78	9.52	14.003						
1,500.00	1,488.35	1,498.47	1,496.38	5.50	5.07	160.94	-42.02	-21.67	145.91	135.65	10.25	14.232						
1,600.00	1,586.51	1,597.64	1,595.05	5.94	5.43	160.11	-51.23	-17.65	158.55	147.56	10.99	14.424						
1,700.00	1,684.67	1,696.81	1,693.71	6.39	5.79	159.41	-60.44	-13.64	171.22	159.48	11.74	14.586						
1,800.00	1,782.83	1,795.99	1,792.38	6.84	6.16	158.81	-69.65	-9.63	183.91	171.42	12.49	14.725						
1,900.00	1,880.99	1,895.16	1,891.04	7.29	6.53	158.28	-78.86	-5.61	196.62	183.37	13.25	14.844						
2,000.00	1,979.16	1,994.34	1,989.70	7.75	6.90	157.82	-88.07	-1.60	209.34	195.34	14.00	14.948						
2,100.00	2,077.32	2,093.51	2,088.37	8.20	7.27	157.41	-97.28	2.41	222.08	207.31	14.77	15.039						
2,200.00	2,175.48	2,192.68	2,187.03	8.66	7.65	157.04	-106.49	6.43	234.82	219.29	15.53	15.119						
2,300.00	2,273.64	2,291.86	2,285.69	9.12	8.02	156.72	-115.70	10.44	247.57	231.27	16.30	15.189						
2,400.00	2,371.80	2,391.03	2,384.36	9.58	8.40	156.42	-124.91	14.45	260.33	243.27	17.07	15.252						
2,500.00	2,469.96	2,490.21	2,483.02	10.04	8.78	156.15	-134.13	18.47	273.10	255.26	17.84	15.309						
2,600.00	2,568.12	2,589.38	2,581.69	10.50	9.16	155.91	-143.34	22.48	285.87	267.26	18.61	15.359						
2,700.00	2,666.28	2,688.55	2,680.35	10.96	9.54	155.69	-152.55	26.49	298.65	279.26	19.39	15.405						
2,800.00	2,764.44	2,787.73	2,779.01	11.42	9.92	155.48	-161.76	30.51	311.43	291.27	20.16	15.447						
2,900.00	2,862.60	2,886.90	2,877.68	11.88	10.30	155.29	-170.97	34.52	324.22	303.28	20.94	15.485						
3,000.00	2,960.76	2,986.08	2,976.34	12.34	10.68	155.12	-180.18	38.53	337.00	315.29	21.71	15.520						
3,100.00	3,058.92	3,085.25	3,075.00	12.80	11.06	154.96	-189.39	42.55	349.79	327.30	22.49	15.552						
3,200.00	3,157.09	3,184.42	3,173.67	13.27	11.44	154.81	-198.60	46.56	362.59	339.32	23.27	15.581						
3,300.00	3,255.25	3,283.60	3,272.33	13.73	11.82	154.67	-207.81	50.57	375.38	351.33	24.05	15.608						
3,400.00	3,353.41	3,382.77	3,371.00	14.19	12.21	154.54	-217.02	54.59	388.18	363.35	24.83	15.633						
3,500.00	3,451.57	3,481.95	3,469.66	14.66	12.59	154.41	-226.23	58.60	400.98	375.37	25.61	15.656						
3,600.00	3,549.73	3,581.12	3,568.32	15.12	12.97	154.30	-235.44	62.61	413.78	387.39	26.39	15.678						
3,700.00	3,647.89	3,680.29	3,666.99	15.58	13.36	154.19	-244.65	66.63	426.58	399.41	27.17	15.698						
3,800.00	3,746.05	3,779.47	3,765.65	16.05	13.74	154.09	-253.86	70.64	439.39	411.43	27.96	15.717						
3,900.00	3,844.21	3,878.64	3,864.32	16.51	14.12	153.99	-263.07	74.65	452.19	423.45	28.74	15.734						
4,000.00	3,942.37	3,977.82	3,962.98	16.98	14.51	153.90	-272.28	78.67	465.00	435.48	29.52	15.751						
4,100.00	4,040.53	4,076.99	4,061.64	17.44	14.89	153.82	-281.49	82.68	477.81	447.50	30.31	15.766						
4,200.00	4,138.69	4,176.16	4,160.31	17.90	15.28	153.74	-290.70	86.69	490.61	459.53	31.09	15.781						
4,300.00	4,236.85	4,275.34	4,258.97	18.37	15.66	153.66	-299.91	90.71	503.42	471.55	31.87	15.795						
4,400.00	4,335.02	4,374.51	4,357.63	18.83	16.05	153.58	-309.12	94.72	516.23	483.58	32.66	15.808						
4,500.00	4,433.18	4,473.69	4,456.30	19.30	16.43	153.52	-318.33	98.73	529.05	495.60	33.44	15.820						
4,600.00	4,531.34	4,572.86	4,554.96	19.76	16.82	153.45	-327.54	102.75	541.86	507.63	34.23	15.831						
4,700.00	4,629.50	4,672.03	4,653.63	20.23	17.20	153.39	-336.75	106.76	554.67	519.66	35.01	15.842						
4,800.00	4,727.66	4,771.21	4,752.29	20.69	17.59	153.32	-345.96	110.77	567.48	531.69	35.80	15.853						
4,900.00	4,825.82	4,870.38	4,850.95	21.16	17.97	153.27	-355.17	114.79	580.30	543.71	36.58	15.863						
5,000.00	4,923.98	4,969.56	4,949.62	21.62	18.36	153.21	-364.38	118.80	593.11	555.74	37.37	15.872						

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 4T-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 4T-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			
5,100.00	5,022.14	5,068.73	5,048.28	22.09	18.75	153.16	-373.59	122.81	605.93	567.77	38.15	15.881			
5,200.00	5,120.30	5,167.90	5,146.94	22.55	19.13	153.11	-382.80	126.83	618.74	579.80	38.94	15.890			
5,300.00	5,218.46	5,267.08	5,245.61	23.02	19.52	153.06	-392.01	130.84	631.56	591.83	39.73	15.898			
5,400.00	5,316.62	5,366.25	5,344.27	23.48	19.90	153.01	-401.22	134.85	644.37	603.86	40.51	15.906			
5,500.00	5,414.78	5,465.43	5,442.94	23.95	20.29	152.97	-410.43	138.87	657.19	615.89	41.30	15.913			
5,600.00	5,512.95	5,564.60	5,541.60	24.41	20.68	152.92	-419.64	142.88	670.01	627.92	42.08	15.921			
5,700.00	5,611.11	5,663.77	5,640.26	24.88	21.06	152.88	-428.85	146.89	682.82	639.95	42.87	15.927			
5,800.00	5,709.27	5,762.95	5,738.93	25.35	21.45	152.84	-438.06	150.91	695.64	651.98	43.66	15.934			
5,900.00	5,807.43	5,862.12	5,837.59	25.81	21.83	152.80	-447.27	154.92	708.46	664.01	44.44	15.940			
6,000.00	5,905.59	5,961.30	5,936.26	26.28	22.22	152.77	-456.48	158.93	721.28	676.05	45.23	15.946			
6,100.00	6,003.75	6,060.47	6,034.92	26.74	22.61	152.73	-465.69	162.95	734.10	688.08	46.02	15.952			
6,200.00	6,101.91	6,159.64	6,133.58	27.21	22.99	152.70	-474.90	166.96	746.91	700.11	46.81	15.958			
6,300.00	6,200.07	6,258.82	6,232.25	27.67	23.38	152.66	-484.11	170.97	759.73	712.14	47.59	15.963			
6,400.00	6,298.23	6,357.99	6,330.91	28.14	23.77	152.63	-493.32	174.99	772.55	724.17	48.38	15.968			
6,500.00	6,396.39	6,457.17	6,429.57	28.61	24.15	152.60	-502.53	179.00	785.37	736.20	49.17	15.973			
6,600.00	6,494.55	6,556.34	6,528.24	29.07	24.54	152.57	-511.74	183.01	798.19	748.24	49.96	15.978			
6,700.00	6,592.71	6,655.51	6,626.90	29.54	24.93	152.54	-520.95	187.03	811.01	760.27	50.74	15.983			
6,772.64	6,664.02	6,727.55	6,698.57	29.88	25.21	152.52	-527.64	189.94	820.32	769.01	51.31	15.986			
6,800.00	6,690.92	6,754.68	6,725.56	30.00	25.31	163.57	-530.16	191.04	823.82	772.29	51.53	15.987			
6,850.00	6,740.19	6,803.81	6,774.47	30.21	25.50	-173.29	-534.39	193.03	830.18	778.25	51.92	15.989			
6,900.00	6,789.40	6,852.69	6,823.27	30.41	25.68	-151.71	-535.79	195.01	836.50	784.22	52.28	16.001			
6,950.00	6,838.32	6,901.84	6,872.33	30.58	25.83	-135.89	-533.84	197.00	842.76	790.16	52.60	16.021			
7,000.00	6,886.71	6,951.29	6,921.44	30.73	25.97	-125.28	-528.48	198.98	848.95	796.04	52.90	16.047			
7,050.00	6,934.33	7,001.04	6,970.36	30.87	26.11	-118.11	-519.68	200.96	855.02	801.84	53.18	16.077			
7,100.00	6,980.95	7,051.11	7,018.85	30.99	26.23	-113.08	-507.41	202.91	860.95	807.51	53.44	16.110			
7,150.00	7,026.35	7,101.51	7,066.68	31.09	26.35	-109.40	-491.67	204.83	866.71	813.02	53.68	16.145			
7,200.00	7,070.29	7,152.25	7,113.60	31.19	26.46	-106.63	-472.46	206.71	872.27	818.36	53.91	16.180			
7,250.00	7,112.57	7,203.33	7,159.33	31.26	26.56	-104.47	-449.82	208.53	877.60	823.48	54.12	16.215			
7,300.00	7,152.98	7,254.76	7,203.64	31.32	26.66	-102.76	-423.78	210.30	882.68	828.36	54.32	16.249			
7,350.00	7,191.33	7,306.53	7,246.23	31.37	26.75	-101.39	-394.43	211.99	887.48	832.96	54.51	16.280			
7,400.00	7,227.42	7,358.64	7,286.86	31.41	26.84	-100.26	-361.85	213.60	891.97	837.27	54.70	16.307			
7,450.00	7,261.09	7,411.09	7,325.25	31.44	26.93	-99.34	-326.16	215.11	896.13	841.25	54.88	16.328			
7,500.00	7,292.16	7,463.88	7,361.15	31.45	27.02	-98.59	-287.51	216.52	899.93	844.87	55.07	16.343			
7,550.00	7,320.49	7,516.97	7,394.29	31.45	27.11	-97.97	-246.06	217.81	903.37	848.11	55.26	16.348			
7,600.00	7,345.94	7,570.37	7,424.44	31.44	27.21	-97.46	-202.01	218.98	906.40	850.94	55.46	16.343			
7,650.00	7,368.38	7,624.04	7,451.35	31.43	27.32	-97.06	-155.60	220.01	909.03	853.35	55.68	16.326			
7,700.00	7,387.71	7,677.98	7,474.82	31.40	27.44	-96.74	-107.06	220.90	911.23	855.31	55.92	16.296			
7,750.00	7,403.82	7,732.14	7,494.65	31.37	27.58	-96.50	-56.68	221.65	912.99	856.81	56.18	16.252			
7,800.00	7,416.65	7,786.50	7,510.67	31.34	27.73	-96.34	-4.75	222.23	914.29	857.83	56.46	16.193			
7,850.00	7,426.13	7,841.03	7,522.74	31.30	27.90	-96.25	48.41	222.65	915.14	858.37	56.78	16.119			
7,900.00	7,432.22	7,895.70	7,530.75	31.25	28.08	-96.22	102.48	222.91	915.52	858.40	57.12	16.029			
7,950.00	7,434.87	7,950.46	7,534.62	31.21	28.28	-96.25	157.09	223.00	915.43	857.94	57.49	15.923			
7,963.63	7,435.00	7,965.40	7,534.95	31.20	28.34	-96.27	172.03	223.00	915.33	857.73	57.60	15.892			
8,000.00	7,435.00	8,002.51	7,535.00	31.17	28.49	-96.27	209.13	222.95	914.97	857.09	57.89	15.807			
8,100.00	7,435.00	8,102.50	7,535.00	31.10	28.96	-96.28	309.13	222.83	913.99	855.20	58.78	15.549			
8,200.00	7,435.00	8,202.50	7,535.00	31.08	29.50	-96.29	409.12	222.70	913.00	853.17	59.83	15.259			
8,300.00	7,435.00	8,302.50	7,535.00	31.19	30.12	-96.30	509.12	222.58	912.01	850.98	61.03	14.943			
8,400.00	7,435.00	8,402.49	7,535.00	31.60	30.81	-96.30	609.11	222.46	911.03	848.66	62.37	14.607			
8,500.00	7,435.00	8,502.49	7,535.00	32.26	31.57	-96.31	709.11	222.33	910.04	846.21	63.84	14.256			
8,600.00	7,435.00	8,602.48	7,535.00	33.03	32.38	-96.32	809.10	222.21	909.06	843.63	65.42	13.895			
8,700.00	7,435.00	8,702.48	7,535.00	33.87	33.25	-96.32	909.10	222.08	908.07	840.95	67.12	13.528			
8,800.00	7,435.00	8,802.47	7,535.00	34.77	34.18	-96.33	1,009.09	221.96	907.09	838.16	68.93	13.160			

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 4T-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 4T-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													Offset Site Error:	0.00 usft						
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft						
Reference													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	7,435.00	8,902.47	7,535.00	35.71	35.15	-96.34	1,109.09	221.83	906.10	835.28	70.83	12.793								
9,000.00	7,435.00	9,002.46	7,535.00	36.70	36.16	-96.34	1,209.08	221.71	905.12	832.30	72.82	12.430								
9,100.00	7,435.00	9,102.46	7,535.00	37.73	37.22	-96.35	1,309.08	221.59	904.13	829.25	74.89	12.074								
9,200.00	7,435.00	9,202.45	7,535.00	38.79	38.31	-96.36	1,409.07	221.46	903.15	826.12	77.03	11.725								
9,300.00	7,435.00	9,302.45	7,535.00	39.89	39.43	-96.36	1,509.07	221.34	902.16	822.92	79.24	11.385								
9,400.00	7,435.00	9,402.44	7,535.00	41.03	40.59	-96.37	1,609.06	221.21	901.18	819.66	81.52	11.055								
9,500.00	7,435.00	9,502.44	7,535.00	42.19	41.77	-96.38	1,709.06	221.09	900.19	816.34	83.85	10.735								
9,600.00	7,435.00	9,602.43	7,535.00	43.37	42.99	-96.39	1,809.05	220.97	899.21	812.96	86.24	10.427								
9,700.00	7,435.00	9,702.43	7,535.00	44.59	44.22	-96.39	1,909.05	220.84	898.22	809.54	88.68	10.129								
9,800.00	7,435.00	9,802.42	7,535.00	45.82	45.48	-96.40	2,009.04	220.72	897.24	806.07	91.16	9.842								
9,900.00	7,435.00	9,902.42	7,535.00	47.08	46.75	-96.41	2,109.04	220.59	896.25	802.57	93.68	9.567								
10,000.00	7,435.00	10,002.41	7,535.00	48.35	48.05	-96.41	2,209.03	220.47	895.26	799.02	96.25	9.302								
10,100.00	7,435.00	10,102.41	7,535.00	49.64	49.36	-96.42	2,309.03	220.34	894.28	795.44	98.84	9.048								
10,200.00	7,435.00	10,202.40	7,535.00	50.95	50.69	-96.43	2,409.02	220.22	893.29	791.82	101.47	8.803								
10,300.00	7,435.00	10,302.40	7,535.00	52.28	52.03	-96.43	2,509.02	220.10	892.31	788.18	104.13	8.569								
10,400.00	7,435.00	10,402.39	7,535.00	53.62	53.39	-96.44	2,609.01	219.97	891.32	784.51	106.82	8.344								
10,459.89	7,435.00	10,462.28	7,535.00	54.43	54.21	-96.45	2,668.90	219.90	890.73	782.29	108.44	8.214								
10,488.29	7,435.00	10,490.68	7,535.00	54.81	54.59	-96.45	2,697.30	219.86	890.59	781.38	109.21	8.155								
10,500.00	7,435.00	10,502.39	7,535.00	54.97	54.75	-96.45	2,709.01	219.85	890.62	781.09	109.53	8.131								
10,535.52	7,435.00	10,537.91	7,535.00	55.45	55.24	-96.45	2,744.53	219.80	890.98	780.49	110.49	8.064								
10,600.00	7,435.00	10,602.38	7,535.00	56.32	56.13	-96.44	2,809.00	219.72	892.04	779.79	112.25	7.947								
10,700.00	7,435.00	10,702.36	7,535.00	57.68	57.53	-96.43	2,908.98	219.60	893.68	778.69	114.99	7.772								
10,800.00	7,435.00	10,802.35	7,535.00	59.05	58.93	-96.41	3,008.97	219.48	895.31	777.57	117.75	7.604								
10,900.00	7,435.00	10,902.34	7,535.00	60.44	60.34	-96.40	3,108.96	219.35	896.95	776.43	120.52	7.442								
11,000.00	7,435.00	11,002.32	7,535.00	61.83	61.75	-96.39	3,208.94	219.23	898.59	775.27	123.32	7.287								
11,100.00	7,435.00	11,102.31	7,535.00	63.23	63.18	-96.38	3,308.93	219.10	900.23	774.10	126.13	7.137								
11,200.00	7,435.00	11,202.30	7,535.00	64.63	64.62	-96.37	3,408.92	218.98	901.87	772.90	128.96	6.993								
11,300.00	7,435.00	11,302.28	7,535.00	66.05	66.06	-96.36	3,508.90	218.85	903.51	771.70	131.81	6.855								
11,400.00	7,435.00	11,402.27	7,535.00	67.47	67.50	-96.34	3,608.89	218.73	905.14	770.48	134.66	6.722								
11,500.00	7,435.00	11,502.26	7,535.00	68.90	68.96	-96.33	3,708.88	218.61	906.78	769.25	137.53	6.593								
11,600.00	7,435.00	11,602.24	7,535.00	70.33	70.42	-96.32	3,808.86	218.48	908.42	768.00	140.42	6.470								
11,700.00	7,435.00	11,702.23	7,535.00	71.77	71.88	-96.31	3,908.85	218.36	910.06	766.75	143.31	6.350								
11,800.00	7,435.00	11,802.21	7,535.00	73.22	73.35	-96.30	4,008.83	218.23	911.70	765.48	146.21	6.235								
11,900.00	7,435.00	11,902.20	7,535.00	74.67	74.83	-96.29	4,108.82	218.11	913.34	764.21	149.13	6.124								
12,000.00	7,435.00	12,002.19	7,535.00	76.13	76.31	-96.28	4,208.81	217.98	914.97	762.92	152.05	6.017								
12,046.42	7,435.00	12,048.61	7,535.00	76.69	77.00	-96.27	4,255.23	217.93	915.74	762.46	153.28	5.974 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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.90	0.05	-30.22	30.22	29.94	0.28	109.473							
100.00	100.00	100.00	100.00	0.14	0.14	-89.90	0.05	-30.22	30.22	29.22	0.99	30.431							
200.00	200.00	200.00	200.00	0.50	0.50	-89.90	0.05	-30.22	30.22	28.51	1.71	17.672							
300.00	300.00	300.00	300.00	0.85	0.85	-89.90	0.05	-30.22	30.22	27.79	2.43	12.451							
400.00	400.00	400.00	400.00	1.21	1.21	-89.90	0.05	-30.22	30.22	27.07	3.14	9.612 CC, ES							
500.00	500.00	500.00	500.00	1.57	1.57	-89.90	0.05	-30.22	30.22	27.07	3.14	9.612 CC, ES							
600.00	599.98	599.98	599.98	1.92	1.93	153.39	0.05	-30.22	31.77	27.92	3.85	8.254							
700.00	699.84	699.84	699.84	2.26	2.29	157.03	0.05	-30.22	36.52	31.97	4.55	8.028							
800.00	799.45	799.45	799.45	2.61	2.65	161.34	0.05	-30.22	44.68	39.42	5.26	8.500							
900.00	898.70	900.30	900.28	2.98	2.99	164.28	-1.24	-29.03	54.94	48.98	5.96	9.217							
1,000.00	997.47	1,001.47	1,001.31	3.37	3.33	165.32	-5.16	-25.42	65.73	59.06	6.67	9.859							
1,050.28	1,046.90	1,052.46	1,052.13	3.57	3.51	165.39	-8.13	-22.69	71.33	64.30	7.03	10.144							
1,100.00	1,095.71	1,102.98	1,102.42	3.77	3.68	165.18	-11.73	-19.38	76.55	69.16	7.39	10.359							
1,200.00	1,193.87	1,203.98	1,202.68	4.19	4.04	163.93	-20.67	-11.16	85.13	77.02	8.11	10.492							
1,300.00	1,292.03	1,303.63	1,301.53	4.62	4.40	162.70	-29.95	-2.63	93.23	84.40	8.84	10.552							
1,400.00	1,390.19	1,403.28	1,400.38	5.06	4.77	161.66	-39.23	5.91	101.37	91.81	9.57	10.595							
1,500.00	1,488.35	1,502.94	1,499.24	5.50	5.14	160.78	-48.51	14.44	109.54	99.23	10.31	10.625							
1,600.00	1,586.51	1,602.59	1,598.09	5.94	5.52	160.02	-57.79	22.98	117.73	106.67	11.06	10.645							
1,700.00	1,684.67	1,702.24	1,696.94	6.39	5.91	159.36	-67.07	31.51	125.94	114.13	11.81	10.660							
1,800.00	1,782.83	1,801.90	1,795.79	6.84	6.29	158.78	-76.35	40.05	134.17	121.59	12.58	10.669							
1,900.00	1,880.99	1,901.55	1,894.64	7.29	6.68	158.27	-85.63	48.58	142.40	129.06	13.34	10.675							
2,000.00	1,979.16	2,001.20	1,993.50	7.75	7.07	157.81	-94.91	57.12	150.65	136.54	14.11	10.678							
2,100.00	2,077.32	2,100.85	2,092.35	8.20	7.46	157.41	-104.18	65.65	158.90	144.02	14.88	10.679							
2,200.00	2,175.48	2,200.51	2,191.20	8.66	7.86	157.04	-113.46	74.19	167.16	151.51	15.65	10.679							
2,300.00	2,273.64	2,300.16	2,290.05	9.12	8.25	156.70	-122.74	82.72	175.43	159.00	16.43	10.678							
2,400.00	2,371.80	2,399.81	2,388.90	9.58	8.65	156.40	-132.02	91.25	183.70	166.50	17.21	10.676							
2,500.00	2,469.96	2,499.46	2,487.76	10.04	9.04	156.12	-141.30	99.79	191.98	173.99	17.99	10.673							
2,600.00	2,568.12	2,599.12	2,586.61	10.50	9.44	155.87	-150.58	108.32	200.26	181.49	18.77	10.670							
2,700.00	2,666.28	2,698.77	2,685.46	10.96	9.84	155.63	-159.86	116.86	208.55	188.99	19.55	10.666							
2,800.00	2,764.44	2,798.42	2,784.31	11.42	10.24	155.42	-169.14	125.39	216.84	196.50	20.34	10.662							
2,900.00	2,862.60	2,898.08	2,883.16	11.88	10.64	155.22	-178.42	133.93	225.13	204.00	21.12	10.658							
3,000.00	2,960.76	2,997.73	2,982.02	12.34	11.04	155.03	-187.70	142.46	233.42	211.51	21.91	10.654							
3,100.00	3,058.92	3,097.38	3,080.87	12.80	11.44	154.86	-196.98	151.00	241.72	219.02	22.70	10.650							
3,200.00	3,157.09	3,197.03	3,179.72	13.27	11.84	154.70	-206.26	159.53	250.01	226.53	23.48	10.646							
3,300.00	3,255.25	3,296.69	3,278.57	13.73	12.24	154.54	-215.54	168.07	258.31	234.04	24.27	10.642							
3,400.00	3,353.41	3,396.34	3,377.42	14.19	12.64	154.40	-224.82	176.60	266.62	241.55	25.06	10.638							
3,500.00	3,451.57	3,495.99	3,476.27	14.66	13.04	154.27	-234.10	185.14	274.92	249.07	25.85	10.634							
3,600.00	3,549.73	3,595.64	3,575.13	15.12	13.44	154.14	-243.38	193.67	283.22	256.58	26.64	10.630							
3,700.00	3,647.89	3,695.30	3,673.98	15.58	13.85	154.02	-252.66	202.20	291.53	264.10	27.43	10.626							
3,800.00	3,746.05	3,794.95	3,772.83	16.05	14.25	153.91	-261.93	210.74	299.84	271.61	28.23	10.623							
3,900.00	3,844.21	3,894.60	3,871.68	16.51	14.65	153.81	-271.21	219.27	308.15	279.13	29.02	10.619							
4,000.00	3,942.37	3,994.25	3,970.53	16.98	15.05	153.71	-280.49	227.81	316.45	286.64	29.81	10.615							
4,100.00	4,040.53	4,093.91	4,069.39	17.44	15.46	153.61	-289.77	236.34	324.76	294.16	30.60	10.612							
4,200.00	4,138.69	4,193.56	4,168.24	17.90	15.86	153.52	-299.05	244.88	333.08	301.68	31.40	10.609							
4,300.00	4,236.85	4,293.21	4,267.09	18.37	16.26	153.43	-308.33	253.41	341.39	309.20	32.19	10.605							
4,400.00	4,335.02	4,392.87	4,365.94	18.83	16.67	153.35	-317.61	261.95	349.70	316.72	32.98	10.602							
4,500.00	4,433.18	4,492.52	4,464.79	19.30	17.07	153.27	-326.89	270.48	358.01	324.23	33.78	10.599							
4,600.00	4,531.34	4,592.17	4,563.65	19.76	17.47	153.20	-336.17	279.02	366.33	331.75	34.57	10.596							
4,700.00	4,629.50	4,691.82	4,662.50	20.23	17.88	153.13	-345.45	287.55	374.64	339.27	35.37	10.593							
4,800.00	4,727.66	4,791.48	4,761.35	20.69	18.28	153.06	-354.73	296.08	382.96	346.79	36.16	10.590							
4,900.00	4,825.82	4,891.13	4,860.20	21.16	18.68	153.00	-364.01	304.62	391.27	354.31	36.96	10.587							
5,000.00	4,923.98	4,990.78	4,959.05	21.62	19.09	152.93	-373.29	313.15	399.59	361.83	37.75	10.584							

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 4T-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 4T-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				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)				
5,100.00	5,022.14	5,090.43	5,057.91	22.09	19.49	152.87	-382.57	321.69	407.90	369.36	38.55	10.582		
5,200.00	5,120.30	5,190.09	5,156.76	22.55	19.90	152.82	-391.85	330.22	416.22	376.88	39.34	10.579		
5,300.00	5,218.46	5,289.74	5,255.61	23.02	20.30	152.76	-401.13	338.76	424.54	384.40	40.14	10.577		
5,400.00	5,316.62	5,389.39	5,354.46	23.48	20.71	152.71	-410.41	347.29	432.85	391.92	40.93	10.574		
5,500.00	5,414.78	5,489.05	5,453.31	23.95	21.11	152.66	-419.68	355.83	441.17	399.44	41.73	10.572		
5,600.00	5,512.95	5,588.70	5,552.17	24.41	21.51	152.61	-428.96	364.36	449.49	406.96	42.53	10.570		
5,700.00	5,611.11	5,688.35	5,651.02	24.88	21.92	152.56	-438.24	372.90	457.81	414.49	43.32	10.567		
5,800.00	5,709.27	5,788.00	5,749.87	25.35	22.32	152.51	-447.52	381.43	466.13	422.01	44.12	10.565		
5,900.00	5,807.43	5,887.66	5,848.72	25.81	22.73	152.47	-456.80	389.96	474.45	429.53	44.92	10.563		
6,000.00	5,905.59	5,987.31	5,947.57	26.28	23.13	152.43	-466.08	398.50	482.77	437.05	45.71	10.561		
6,100.00	6,003.75	6,086.96	6,046.43	26.74	23.54	152.38	-475.36	407.03	491.09	444.58	46.51	10.559		
6,200.00	6,101.91	6,186.61	6,145.28	27.21	23.94	152.34	-484.64	415.57	499.41	452.10	47.31	10.557		
6,300.00	6,200.07	6,286.27	6,244.13	27.67	24.35	152.31	-493.92	424.10	507.73	459.62	48.10	10.555		
6,400.00	6,298.23	6,385.92	6,342.98	28.14	24.75	152.27	-503.20	432.64	516.05	467.15	48.90	10.553		
6,500.00	6,396.39	6,485.57	6,441.83	28.61	25.16	152.23	-512.48	441.17	524.37	474.67	49.70	10.551		
6,600.00	6,494.55	6,585.23	6,540.69	29.07	25.56	152.20	-521.76	449.71	532.69	482.19	50.49	10.549		
6,700.00	6,592.71	6,684.88	6,639.54	29.54	25.97	152.16	-531.04	458.24	541.01	489.72	51.29	10.548		
6,772.64	6,664.02	6,758.33	6,712.54	29.88	26.25	152.37	-535.73	464.62	547.00	495.16	51.84	10.551		
6,800.00	6,690.92	6,786.00	6,740.09	30.00	26.35	163.57	-535.63	467.08	549.21	497.19	52.02	10.558		
6,850.00	6,740.19	6,836.36	6,790.15	30.21	26.51	-172.85	-532.71	471.66	553.16	500.84	52.32	10.573		
6,900.00	6,789.40	6,886.47	6,839.63	30.41	26.66	-150.82	-526.30	476.29	556.97	504.38	52.58	10.592		
6,950.00	6,838.32	6,936.35	6,888.30	30.58	26.79	-134.55	-516.50	480.97	560.63	507.81	52.82	10.613		
7,000.00	6,886.71	6,985.99	6,935.93	30.73	26.91	-123.50	-503.39	485.67	564.12	511.08	53.04	10.636		
7,050.00	6,934.33	7,035.40	6,982.32	30.87	27.02	-115.92	-487.08	490.36	567.42	514.18	53.24	10.658		
7,100.00	6,980.95	7,084.58	7,027.27	30.99	27.12	-110.48	-467.69	495.02	570.51	517.09	53.42	10.680		
7,150.00	7,026.35	7,133.55	7,070.60	31.09	27.20	-106.42	-445.36	499.63	573.38	519.80	53.59	10.700		
7,200.00	7,070.29	7,182.30	7,112.11	31.19	27.28	-103.28	-420.22	504.18	576.02	522.27	53.75	10.717		
7,250.00	7,112.57	7,230.86	7,151.65	31.26	27.35	-100.77	-392.42	508.63	578.40	524.50	53.90	10.731		
7,300.00	7,152.98	7,279.21	7,189.07	31.32	27.40	-98.73	-362.12	512.98	580.51	526.46	54.05	10.740		
7,350.00	7,191.33	7,327.38	7,224.23	31.37	27.45	-97.04	-329.48	517.21	582.35	528.15	54.20	10.745		
7,400.00	7,227.42	7,375.37	7,257.00	31.41	27.49	-95.63	-294.67	521.29	583.90	529.56	54.35	10.744		
7,450.00	7,261.09	7,423.18	7,287.26	31.44	27.53	-94.44	-257.87	525.22	585.15	530.66	54.50	10.737		
7,500.00	7,292.16	7,470.84	7,314.91	31.45	27.56	-93.44	-219.25	528.97	586.10	531.44	54.66	10.723		
7,550.00	7,320.49	7,518.33	7,339.86	31.45	27.58	-92.60	-178.99	532.53	586.74	531.91	54.83	10.701		
7,600.00	7,345.94	7,565.69	7,362.02	31.44	27.61	-91.89	-137.29	535.89	587.06	532.04	55.02	10.671		
7,650.00	7,368.38	7,612.91	7,381.34	31.43	27.64	-91.31	-94.33	539.04	587.06	531.85	55.22	10.632		
7,700.00	7,387.71	7,660.00	7,397.75	31.40	27.67	-90.84	-50.30	541.97	586.74	531.31	55.43	10.584		
7,750.00	7,403.82	7,706.98	7,411.21	31.37	27.72	-90.48	-5.38	544.66	586.10	530.43	55.67	10.528		
7,800.00	7,416.65	7,753.85	7,421.68	31.34	27.78	-90.21	40.24	547.11	585.14	529.21	55.93	10.462		
7,850.00	7,426.13	7,800.00	7,429.06	31.30	27.86	-90.04	85.73	549.27	583.87	527.66	56.21	10.387		
7,900.00	7,432.22	7,847.33	7,433.58	31.25	27.97	-89.96	132.79	551.24	582.28	525.76	56.52	10.302		
7,950.00	7,434.87	7,894.06	7,435.00	31.21	28.10	-89.97	179.47	552.91	580.39	523.54	56.85	10.209		
7,963.63	7,435.00	7,907.68	7,435.00	31.20	28.14	-90.00	193.08	553.36	579.81	522.86	56.95	10.181		
8,000.00	7,435.00	7,944.01	7,435.00	31.17	28.28	-90.00	229.39	554.56	578.20	520.96	57.24	10.102		
8,100.00	7,435.00	8,043.91	7,435.00	31.10	28.71	-90.00	329.24	557.86	573.78	515.67	58.11	9.874		
8,200.00	7,435.00	8,143.81	7,435.00	31.08	29.24	-90.00	429.08	561.17	569.35	510.21	59.14	9.626		
8,300.00	7,435.00	8,243.72	7,435.00	31.19	29.85	-90.00	528.93	564.47	564.93	504.61	60.33	9.365		
8,400.00	7,435.00	8,343.62	7,435.00	31.60	30.53	-90.00	628.78	567.78	560.51	498.86	61.64	9.093		
8,500.00	7,435.00	8,443.52	7,435.00	32.26	31.28	-90.00	728.63	571.08	556.09	492.99	63.09	8.813		
8,600.00	7,435.00	8,543.42	7,435.00	33.03	32.08	-90.00	828.47	574.39	551.66	487.00	64.67	8.531		
8,700.00	7,435.00	8,643.33	7,435.00	33.87	32.94	-90.00	928.32	577.69	547.24	480.89	66.35	8.248		
8,800.00	7,435.00	8,743.23	7,435.00	34.77	33.85	-90.00	1,028.17	581.00	542.82	474.68	68.14	7.966		

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 4T-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 4T-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													Offset Site Error:	0.00 usft						
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft						
Reference													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	7,435.00	8,843.13	7,435.00	35.71	34.80	-90.00	1,128.02	584.30	538.39	468.37	70.03	7.688								
9,000.00	7,435.00	8,943.03	7,435.00	36.70	35.80	-90.00	1,227.86	587.61	533.97	461.97	72.00	7.416								
9,100.00	7,435.00	9,042.93	7,435.00	37.73	36.83	-90.00	1,327.71	590.91	529.55	455.49	74.06	7.150								
9,200.00	7,435.00	9,142.84	7,435.00	38.79	37.90	-90.00	1,427.56	594.22	525.13	448.93	76.19	6.892								
9,300.00	7,435.00	9,242.74	7,435.00	39.89	39.00	-90.00	1,527.41	597.52	520.70	442.31	78.40	6.642								
9,400.00	7,435.00	9,342.64	7,435.00	41.03	40.13	-90.00	1,627.25	600.83	516.28	435.62	80.66	6.401								
9,500.00	7,435.00	9,442.54	7,435.00	42.19	41.29	-90.00	1,727.10	604.13	511.86	428.87	82.99	6.168								
9,600.00	7,435.00	9,542.44	7,435.00	43.37	42.48	-90.00	1,826.95	607.44	507.43	422.07	85.36	5.944								
9,700.00	7,435.00	9,642.35	7,435.00	44.59	43.69	-90.00	1,926.80	610.74	503.01	415.22	87.79	5.730								
9,800.00	7,435.00	9,742.25	7,435.00	45.82	44.92	-90.00	2,026.64	614.05	498.59	408.33	90.26	5.524								
9,900.00	7,435.00	9,842.15	7,435.00	47.08	46.17	-90.00	2,126.49	617.35	494.17	401.39	92.78	5.326								
10,000.00	7,435.00	9,938.21	7,435.00	48.35	47.39	-90.00	2,222.50	620.44	489.85	394.62	95.22	5.144								
10,100.00	7,435.00	10,023.62	7,435.00	49.64	48.49	-90.00	2,307.90	621.32	487.70	390.33	97.37	5.009								
10,122.09	7,435.00	10,042.50	7,435.00	49.93	48.74	-90.00	2,326.78	621.18	487.62	389.78	97.84	4.984								
10,200.00	7,435.00	10,109.06	7,435.00	50.95	49.62	-90.00	2,393.33	619.66	488.53	389.04	99.49	4.910								
10,300.00	7,435.00	10,207.09	7,435.00	52.28	50.94	-90.00	2,491.28	615.92	491.22	389.13	102.09	4.812								
10,400.00	7,435.00	10,307.05	7,435.00	53.62	52.29	-90.00	2,591.17	612.09	493.94	389.15	104.80	4.713								
10,459.89	7,435.00	10,366.92	7,435.00	54.43	53.11	-90.00	2,651.00	609.79	495.57	389.14	106.43	4.656								
10,500.00	7,435.00	10,407.01	7,435.00	54.97	53.66	-90.00	2,691.05	608.26	496.94	389.42	107.53	4.622								
10,535.52	7,435.00	10,442.49	7,435.00	55.45	54.15	-90.00	2,726.51	606.90	498.62	390.13	108.50	4.596								
10,600.00	7,435.00	10,506.87	7,435.00	56.32	55.04	-90.00	2,790.85	604.43	502.08	391.82	110.26	4.554								
10,700.00	7,435.00	10,606.73	7,435.00	57.68	56.44	-90.00	2,890.63	600.60	507.44	394.42	113.02	4.490								
10,800.00	7,435.00	10,706.59	7,435.00	59.05	57.85	-90.00	2,990.41	596.77	512.79	396.99	115.80	4.428								
10,900.00	7,435.00	10,806.44	7,435.00	60.44	59.26	-90.00	3,090.20	592.94	518.15	399.55	118.60	4.369								
11,000.00	7,435.00	10,906.30	7,435.00	61.83	60.69	-90.00	3,189.98	589.11	523.51	402.09	121.42	4.312								
11,100.00	7,435.00	11,006.16	7,435.00	63.23	62.13	-90.00	3,289.76	585.28	528.87	404.61	124.26	4.256								
11,200.00	7,435.00	11,106.01	7,435.00	64.63	63.57	-90.00	3,389.54	581.45	534.22	407.11	127.11	4.203								
11,300.00	7,435.00	11,205.87	7,435.00	66.05	65.02	-90.00	3,489.33	577.62	539.58	409.60	129.98	4.151								
11,400.00	7,435.00	11,305.73	7,435.00	67.47	66.48	-90.00	3,589.11	573.79	544.94	412.07	132.87	4.101								
11,500.00	7,435.00	11,405.58	7,435.00	68.90	67.95	-90.00	3,688.89	569.96	550.30	414.53	135.77	4.053								
11,600.00	7,435.00	11,505.44	7,435.00	70.33	69.43	-90.00	3,788.68	566.14	555.65	416.97	138.68	4.007								
11,700.00	7,435.00	11,605.29	7,435.00	71.77	70.91	-90.00	3,888.46	562.31	561.01	419.41	141.61	3.962								
11,800.00	7,435.00	11,705.15	7,435.00	73.22	72.39	-90.00	3,988.24	558.48	566.37	421.83	144.54	3.918								
11,900.00	7,435.00	11,805.01	7,435.00	74.67	73.88	-90.00	4,088.02	554.65	571.73	424.24	147.49	3.876								
12,000.00	7,435.00	11,904.86	7,435.00	76.13	75.37	-90.00	4,187.81	550.82	577.08	426.66	150.43	3.836								
12,046.42	7,435.00	11,951.22	7,435.00	76.69	75.93	-90.00	4,234.13	549.04	579.57	428.05	151.52	3.825 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 4T-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 4T-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													Offset Site Error:	0.00 usft					
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft					
Reference													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)									
0.00	0.00	0.00	0.00	0.00	0.00	-89.90	0.03	-20.14	20.14										
100.00	100.00	100.00	100.00	0.14	0.14	-89.90	0.03	-20.14	20.14	19.87	0.28	72.982							
200.00	200.00	200.00	200.00	0.50	0.50	-89.90	0.03	-20.14	20.14	19.15	0.99	20.287							
300.00	300.00	300.00	300.00	0.85	0.85	-89.90	0.03	-20.14	20.14	18.43	1.71	11.781							
400.00	400.00	400.00	400.00	1.21	1.21	-89.90	0.03	-20.14	20.14	17.72	2.43	8.301							
500.00	500.00	500.00	500.00	1.57	1.57	-89.90	0.03	-20.14	20.14	17.00	3.14	6.408	CC, ES						
600.00	599.98	599.98	599.98	1.92	1.93	154.08	0.03	-20.14	21.70	17.85	3.85	5.638							
700.00	699.84	699.84	699.84	2.26	2.29	158.99	0.03	-20.14	26.51	21.96	4.55	5.826							
800.00	799.45	800.54	800.52	2.61	2.64	163.02	-0.96	-18.69	33.17	27.92	5.25	6.316							
900.00	898.70	901.50	901.33	2.98	2.98	165.17	-3.95	-14.28	40.03	34.06	5.96	6.714							
1,000.00	997.47	1,002.69	1,002.13	3.37	3.33	166.24	-8.94	-6.93	46.99	40.30	6.69	7.026							
1,050.28	1,046.90	1,053.67	1,052.77	3.57	3.51	166.50	-12.21	-2.11	50.52	43.46	7.06	7.156							
1,100.00	1,095.71	1,104.16	1,102.82	3.77	3.70	166.54	-15.95	3.40	53.60	46.18	7.43	7.219							
1,200.00	1,193.87	1,205.20	1,202.63	4.19	4.08	165.81	-24.78	16.40	57.56	49.41	8.16	7.058							
1,300.00	1,292.03	1,305.14	1,301.25	4.62	4.46	164.97	-33.87	29.79	60.92	52.04	8.88	6.860							
1,400.00	1,390.19	1,405.08	1,399.87	5.06	4.86	164.21	-42.96	43.18	64.28	54.67	9.61	6.686							
1,500.00	1,488.35	1,505.02	1,498.49	5.50	5.26	163.53	-52.06	56.58	67.66	57.30	10.36	6.533							
1,600.00	1,586.51	1,604.96	1,597.11	5.94	5.67	162.91	-61.15	69.97	71.04	59.94	11.11	6.396							
1,700.00	1,684.67	1,704.90	1,695.73	6.39	6.08	162.35	-70.25	83.37	74.43	62.57	11.86	6.275							
1,800.00	1,782.83	1,804.84	1,794.34	6.84	6.50	161.83	-79.34	96.76	77.83	65.21	12.62	6.166							
1,900.00	1,880.99	1,904.78	1,892.96	7.29	6.91	161.36	-88.43	110.16	81.24	67.85	13.39	6.068							
2,000.00	1,979.16	2,004.72	1,991.58	7.75	7.33	160.93	-97.53	123.55	84.65	70.49	14.16	5.979							
2,100.00	2,077.32	2,104.66	2,090.20	8.20	7.76	160.53	-106.62	136.94	88.06	73.13	14.93	5.898							
2,200.00	2,175.48	2,204.59	2,188.82	8.66	8.18	160.16	-115.72	150.34	91.48	75.77	15.71	5.825							
2,300.00	2,273.64	2,304.53	2,287.44	9.12	8.60	159.82	-124.81	163.73	94.90	78.41	16.48	5.757							
2,400.00	2,371.80	2,404.47	2,386.06	9.58	9.03	159.50	-133.91	177.13	98.32	81.06	17.26	5.695							
2,500.00	2,469.96	2,504.41	2,484.68	10.04	9.46	159.21	-143.00	190.52	101.75	83.70	18.05	5.638							
2,600.00	2,568.12	2,604.35	2,583.30	10.50	9.88	158.93	-152.09	203.91	105.18	86.35	18.83	5.586							
2,700.00	2,666.28	2,704.29	2,681.92	10.96	10.31	158.67	-161.19	217.31	108.61	88.99	19.61	5.537							
2,800.00	2,764.44	2,804.23	2,780.54	11.42	10.74	158.43	-170.28	230.70	112.04	91.64	20.40	5.492							
2,900.00	2,862.60	2,904.17	2,879.16	11.88	11.17	158.20	-179.38	244.10	115.48	94.29	21.19	5.450							
3,000.00	2,960.76	3,004.11	2,977.78	12.34	11.60	157.98	-188.47	257.49	118.92	96.94	21.98	5.410							
3,100.00	3,058.92	3,104.05	3,076.40	12.80	12.03	157.78	-197.56	270.89	122.36	99.58	22.77	5.373							
3,200.00	3,157.09	3,203.99	3,175.02	13.27	12.46	157.58	-206.66	284.28	125.80	102.23	23.56	5.339							
3,300.00	3,255.25	3,303.93	3,273.64	13.73	12.89	157.40	-215.75	297.67	129.24	104.88	24.35	5.307							
3,400.00	3,353.41	3,403.87	3,372.26	14.19	13.32	157.23	-224.85	311.07	132.68	107.53	25.15	5.276							
3,500.00	3,451.57	3,503.81	3,470.88	14.66	13.76	157.06	-233.94	324.46	136.13	110.18	25.94	5.247							
3,600.00	3,549.73	3,603.75	3,569.50	15.12	14.19	156.91	-243.04	337.86	139.57	112.83	26.74	5.220							
3,700.00	3,647.89	3,703.69	3,668.12	15.58	14.62	156.76	-252.13	351.25	143.02	115.48	27.53	5.194							
3,800.00	3,746.05	3,803.63	3,766.74	16.05	15.05	156.61	-261.22	364.64	146.46	118.14	28.33	5.170							
3,900.00	3,844.21	3,903.57	3,865.36	16.51	15.49	156.48	-270.32	378.04	149.91	120.79	29.13	5.147							
4,000.00	3,942.37	4,003.51	3,963.98	16.98	15.92	156.35	-279.41	391.43	153.36	123.44	29.92	5.125							
4,100.00	4,040.53	4,103.45	4,062.60	17.44	16.35	156.23	-288.51	404.83	156.81	126.09	30.72	5.104							
4,200.00	4,138.69	4,203.39	4,161.22	17.90	16.79	156.11	-297.60	418.22	160.26	128.74	31.52	5.085							
4,300.00	4,236.85	4,303.33	4,259.84	18.37	17.22	156.00	-306.69	431.62	163.71	131.40	32.32	5.066							
4,400.00	4,335.02	4,403.27	4,358.46	18.83	17.66	155.89	-315.79	445.01	167.16	134.05	33.12	5.048							
4,500.00	4,433.18	4,503.21	4,457.08	19.30	18.09	155.78	-324.88	458.40	170.62	136.70	33.92	5.031							
4,600.00	4,531.34	4,603.15	4,555.70	19.76	18.52	155.68	-333.98	471.80	174.07	139.35	34.71	5.014							
4,700.00	4,629.50	4,703.09	4,654.32	20.23	18.96	155.59	-343.07	485.19	177.52	142.01	35.51	4.999							
4,800.00	4,727.66	4,803.03	4,752.94	20.69	19.39	155.49	-352.16	498.59	180.98	144.66	36.32	4.983							
4,900.00	4,825.82	4,902.97	4,851.56	21.16	19.83	155.41	-361.26	511.98	184.43	147.31	37.12	4.969							
5,000.00	4,923.98	5,002.91	4,950.18	21.62	20.26	155.32	-370.35	525.38	187.88	149.97	37.92	4.955							

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 4T-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 4T-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 4R-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 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)				
5,100.00	5,022.14	5,102.85	5,048.80	22.09	20.70	155.24	-379.45	538.77	191.34	152.62	38.72	4.942		
5,200.00	5,120.30	5,202.79	5,147.42	22.55	21.13	155.16	-388.54	552.16	194.80	155.28	39.52	4.929		
5,300.00	5,218.46	5,302.73	5,246.04	23.02	21.57	155.08	-397.64	565.56	198.25	157.93	40.32	4.917		
5,400.00	5,316.62	5,402.67	5,344.66	23.48	22.00	155.01	-406.73	578.95	201.71	160.58	41.12	4.905		
5,500.00	5,414.78	5,502.61	5,443.28	23.95	22.44	154.93	-415.82	592.35	205.16	163.24	41.92	4.894		
5,600.00	5,512.95	5,602.55	5,541.90	24.41	22.87	154.86	-424.92	605.74	208.62	165.89	42.73	4.883		
5,700.00	5,611.11	5,702.49	5,640.52	24.88	23.31	154.80	-434.01	619.13	212.08	168.55	43.53	4.872		
5,800.00	5,709.27	5,802.43	5,739.14	25.35	23.74	154.73	-443.11	632.53	215.53	171.20	44.33	4.862		
5,900.00	5,807.43	5,902.37	5,837.76	25.81	24.18	154.67	-452.20	645.92	218.99	173.86	45.13	4.852		
6,000.00	5,905.59	6,002.31	5,936.38	26.28	24.61	154.61	-461.29	659.32	222.45	176.51	45.94	4.842		
6,100.00	6,003.75	6,102.25	6,035.00	26.74	25.05	154.55	-470.39	672.71	225.91	179.17	46.74	4.833		
6,200.00	6,101.91	6,202.19	6,133.62	27.21	25.48	154.49	-479.48	686.11	229.37	181.82	47.54	4.824		
6,300.00	6,200.07	6,302.13	6,232.24	27.67	25.92	154.44	-488.58	699.50	232.82	184.48	48.35	4.816		
6,400.00	6,298.23	6,402.07	6,330.86	28.14	26.35	154.38	-497.67	712.89	236.28	187.13	49.15	4.807		
6,500.00	6,396.39	6,502.01	6,429.48	28.61	26.79	154.33	-506.76	726.29	239.74	189.79	49.95	4.799		
6,600.00	6,494.55	6,601.95	6,528.10	29.07	27.22	154.28	-515.86	739.68	243.20	192.44	50.76	4.791		
6,700.00	6,592.71	6,701.89	6,626.72	29.54	27.66	154.23	-524.95	753.08	246.66	195.10	51.56	4.784		
6,772.64	6,664.02	6,774.49	6,698.36	29.88	27.98	154.19	-531.56	762.81	249.17	197.03	52.15	4.778		
6,800.00	6,690.92	6,801.82	6,725.33	30.00	28.09	164.95	-534.05	766.47	250.10	197.72	52.38	4.775		
6,850.00	6,740.19	6,851.56	6,774.42	30.21	28.31	-172.87	-538.44	773.14	251.70	198.84	52.86	4.762		
6,900.00	6,789.40	6,901.17	6,823.54	30.41	28.51	-152.41	-540.30	779.81	253.30	199.96	53.34	4.749		
6,950.00	6,838.32	6,951.09	6,872.97	30.58	28.70	-137.70	-538.70	786.54	254.93	201.14	53.78	4.740		
7,000.00	6,886.71	7,001.34	6,922.48	30.73	28.86	-128.17	-533.59	793.28	256.57	202.38	54.19	4.734		
7,050.00	6,934.33	7,051.91	6,971.84	30.87	29.01	-122.07	-524.91	800.01	258.22	203.66	54.56	4.732		
7,100.00	6,980.95	7,102.80	7,020.77	30.99	29.15	-118.07	-512.66	806.69	259.87	204.97	54.90	4.734		
7,150.00	7,026.35	7,154.03	7,069.03	31.09	29.27	-115.41	-496.82	813.28	261.49	206.30	55.19	4.738		
7,200.00	7,070.29	7,205.59	7,116.34	31.19	29.37	-113.60	-477.40	819.76	263.09	207.65	55.44	4.746		
7,250.00	7,112.57	7,257.48	7,162.43	31.26	29.47	-112.38	-454.44	826.07	264.64	208.99	55.65	4.756		
7,300.00	7,152.98	7,309.69	7,207.02	31.32	29.54	-111.56	-427.99	832.18	266.13	210.32	55.81	4.769		
7,350.00	7,191.33	7,362.22	7,249.84	31.37	29.61	-111.02	-398.16	838.06	267.55	211.62	55.93	4.784		
7,400.00	7,227.42	7,415.06	7,290.60	31.41	29.66	-110.69	-365.03	843.67	268.88	212.86	56.01	4.800		
7,450.00	7,261.09	7,468.19	7,329.04	31.44	29.70	-110.50	-328.75	848.97	270.10	214.03	56.07	4.817		
7,500.00	7,292.16	7,521.61	7,364.89	31.45	29.73	-110.43	-289.48	853.92	271.21	215.11	56.10	4.834		
7,550.00	7,320.49	7,575.29	7,397.89	31.45	29.74	-110.43	-247.40	858.49	272.18	216.06	56.12	4.850		
7,600.00	7,345.94	7,629.22	7,427.81	31.44	29.74	-110.49	-202.74	862.65	273.01	216.88	56.14	4.863		
7,650.00	7,368.38	7,683.38	7,454.42	31.43	29.74	-110.58	-155.74	866.36	273.69	217.52	56.16	4.873		
7,700.00	7,387.71	7,737.73	7,477.51	31.40	29.72	-110.70	-106.65	869.60	274.19	217.98	56.22	4.878		
7,750.00	7,403.82	7,792.26	7,496.91	31.37	29.69	-110.84	-55.78	872.33	274.52	218.22	56.30	4.876		
7,800.00	7,416.65	7,846.94	7,512.45	31.34	29.66	-110.98	-3.41	874.55	274.67	218.23	56.44	4.867		
7,850.00	7,426.13	7,901.73	7,524.00	31.30	29.62	-111.12	50.11	876.22	274.63	218.00	56.63	4.850		
7,900.00	7,432.22	7,956.62	7,531.48	31.25	29.57	-111.26	104.46	877.35	274.39	217.50	56.89	4.823		
7,950.00	7,434.87	8,011.56	7,534.81	31.21	29.52	-111.39	159.28	877.91	273.95	216.74	57.21	4.789		
7,963.63	7,435.00	8,026.54	7,535.00	31.20	29.51	-111.42	174.26	877.96	273.80	216.49	57.31	4.778		
8,000.00	7,435.00	8,063.04	7,535.00	31.17	29.48	-111.46	210.76	878.03	273.36	215.76	57.60	4.746		
8,100.00	7,435.00	8,163.03	7,535.00	31.10	29.40	-111.56	310.75	878.23	272.14	213.64	58.50	4.652		
8,200.00	7,435.00	8,263.02	7,535.00	31.08	29.82	-111.66	410.74	878.42	270.92	211.40	59.52	4.551		
8,300.00	7,435.00	8,363.01	7,535.00	31.19	30.45	-111.77	510.73	878.62	269.70	209.02	60.68	4.444		
8,400.00	7,435.00	8,463.00	7,535.00	31.60	31.14	-111.87	610.72	878.81	268.49	206.52	61.97	4.333		
8,500.00	7,435.00	8,563.00	7,535.00	32.26	31.89	-111.97	710.71	879.01	267.27	203.90	63.37	4.218		
8,600.00	7,435.00	8,662.99	7,535.00	33.03	32.69	-112.08	810.71	879.20	266.06	201.18	64.87	4.101		
8,700.00	7,435.00	8,762.98	7,535.00	33.87	33.54	-112.19	910.70	879.40	264.84	198.36	66.48	3.984		
8,800.00	7,435.00	8,862.97	7,535.00	34.77	34.45	-112.29	1,010.69	879.59	263.63	195.45	68.18	3.867		

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 4T-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 4T-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													Offset Site Error:	0.00 usft				
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft				
Reference													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	7,435.00	8,962.96	7,535.00	35.71	35.39	-112.40	1,110.68	879.79	262.42	192.45	69.97	3.751						
9,000.00	7,435.00	9,062.95	7,535.00	36.70	36.38	-112.51	1,210.67	879.98	261.21	189.38	71.83	3.636						
9,100.00	7,435.00	9,162.94	7,535.00	37.73	37.41	-112.62	1,310.66	880.17	260.00	186.23	73.76	3.525						
9,200.00	7,435.00	9,262.94	7,535.00	38.79	38.48	-112.73	1,410.65	880.37	258.79	183.02	75.77	3.416						
9,300.00	7,435.00	9,362.93	7,535.00	39.89	39.58	-112.85	1,510.64	880.56	257.58	179.75	77.83	3.310						
9,400.00	7,435.00	9,462.92	7,535.00	41.03	40.71	-112.96	1,610.63	880.76	256.37	176.43	79.94	3.207						
9,500.00	7,435.00	9,562.91	7,535.00	42.19	41.86	-113.07	1,710.63	880.95	255.17	173.06	82.11	3.108						
9,600.00	7,435.00	9,662.90	7,535.00	43.37	43.05	-113.19	1,810.62	881.15	253.96	169.64	84.32	3.012						
9,700.00	7,435.00	9,762.89	7,535.00	44.59	44.26	-113.31	1,910.61	881.34	252.76	166.18	86.58	2.919						
9,800.00	7,435.00	9,862.88	7,535.00	45.82	45.49	-113.43	2,010.60	881.54	251.55	162.68	88.87	2.831						
9,900.00	7,435.00	9,962.88	7,535.00	47.08	46.74	-113.54	2,110.59	881.73	250.35	159.15	91.20	2.745						
10,000.00	7,435.00	10,062.87	7,535.00	48.35	48.01	-113.67	2,210.58	881.93	249.15	155.59	93.56	2.663						
10,100.00	7,435.00	10,162.86	7,535.00	49.64	49.30	-113.79	2,310.57	882.12	247.95	152.00	95.95	2.584						
10,200.00	7,435.00	10,262.85	7,535.00	50.95	50.60	-113.91	2,410.56	882.32	246.75	148.39	98.37	2.509						
10,300.00	7,435.00	10,362.84	7,535.00	52.28	51.92	-114.03	2,510.56	882.51	245.56	144.75	100.81	2.436						
10,400.00	7,435.00	10,462.83	7,535.00	53.62	53.26	-114.16	2,610.55	882.71	244.36	141.09	103.27	2.366						
10,459.89	7,435.00	10,522.72	7,535.00	54.43	54.06	-114.23	2,670.43	882.82	243.64	138.89	104.75	2.326						
10,497.43	7,435.00	10,560.26	7,535.00	54.93	54.57	-114.26	2,707.97	882.90	243.42	137.73	105.69	2.303						
10,500.00	7,435.00	10,562.83	7,535.00	54.97	54.60	-114.26	2,710.54	882.90	243.42	137.66	105.76	2.302						
10,535.52	7,435.00	10,598.35	7,535.00	55.45	55.08	-114.23	2,746.06	882.97	243.65	136.98	106.67	2.284						
10,600.00	7,435.00	10,662.82	7,535.00	56.32	55.96	-114.15	2,810.53	883.10	244.43	136.09	108.35	2.256						
10,700.00	7,435.00	10,762.81	7,535.00	57.68	57.34	-114.02	2,910.52	883.29	245.65	134.68	110.96	2.214						
10,800.00	7,435.00	10,862.80	7,535.00	59.05	58.72	-113.90	3,010.52	883.49	246.86	133.26	113.60	2.173						
10,900.00	7,435.00	10,962.79	7,535.00	60.44	60.11	-113.77	3,110.51	883.68	248.08	131.81	116.26	2.134						
11,000.00	7,435.00	11,062.78	7,535.00	61.83	61.51	-113.65	3,210.50	883.88	249.30	130.35	118.94	2.096						
11,100.00	7,435.00	11,162.77	7,535.00	63.23	62.92	-113.53	3,310.49	884.07	250.51	128.87	121.64	2.059						
11,200.00	7,435.00	11,262.77	7,535.00	64.63	64.34	-113.41	3,410.48	884.27	251.73	127.38	124.36	2.024						
11,300.00	7,435.00	11,362.76	7,535.00	66.05	65.76	-113.29	3,510.47	884.46	252.95	125.87	127.09	1.990						
11,400.00	7,435.00	11,462.75	7,535.00	67.47	67.19	-113.17	3,610.46	884.65	254.18	124.34	129.83	1.958						
11,500.00	7,435.00	11,562.74	7,535.00	68.90	68.63	-113.05	3,710.45	884.85	255.40	122.80	132.60	1.926						
11,600.00	7,435.00	11,656.72	7,535.00	70.33	70.00	-112.83	3,804.42	883.69	257.93	122.91	135.03	1.910						
11,700.00	7,435.00	11,756.65	7,535.00	71.77	71.46	-112.50	3,904.32	881.35	261.50	123.55	137.94	1.896						
11,800.00	7,435.00	11,856.57	7,535.00	73.22	72.93	-112.18	4,004.22	879.01	265.07	124.19	140.88	1.882						
11,900.00	7,435.00	11,956.50	7,535.00	74.67	74.41	-111.87	4,104.12	876.68	268.65	124.83	143.82	1.868						
12,000.00	7,435.00	12,056.42	7,535.00	76.13	75.89	-111.57	4,204.01	874.34	272.24	125.47	146.77	1.855						
12,046.42	7,435.00	12,102.81	7,535.00	76.69	76.58	-111.43	4,250.39	873.25	273.91	125.91	148.00	1.851 SF						

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft				
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft				
Reference													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	-89.90	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	CC, ES					
600.00	599.98	599.98	599.98	1.92	1.93	155.95	0.02	-10.07	11.64	7.79	3.85	3.025						
700.00	699.84	700.35	700.33	2.26	2.28	161.20	-0.87	-8.55	14.91	10.37	4.55	3.280						
800.00	799.45	800.84	800.67	2.61	2.62	164.15	-3.52	-3.99	18.28	13.03	5.26	3.478						
900.00	898.70	901.45	900.89	2.98	2.97	165.85	-7.95	3.62	21.70	15.72	5.98	3.628						
1,000.00	997.47	1,002.18	1,000.86	3.37	3.34	166.80	-14.16	14.29	25.14	18.42	6.72	3.741						
1,050.28	1,046.90	1,052.88	1,050.99	3.57	3.53	167.08	-17.95	20.80	26.88	19.78	7.10	3.787						
1,100.00	1,095.71	1,103.04	1,100.46	3.77	3.72	167.07	-22.15	28.00	28.17	20.71	7.46	3.774						
1,200.00	1,193.87	1,203.03	1,198.91	4.19	4.12	166.63	-30.93	43.10	29.92	21.75	8.18	3.659						
1,300.00	1,292.03	1,303.01	1,297.36	4.62	4.53	166.23	-39.72	58.19	31.68	22.78	8.91	3.558						
1,400.00	1,390.19	1,403.00	1,395.80	5.06	4.94	165.88	-48.51	73.29	33.44	23.80	9.64	3.469						
1,500.00	1,488.35	1,502.98	1,494.25	5.50	5.36	165.56	-57.30	88.39	35.20	24.82	10.38	3.390						
1,600.00	1,586.51	1,602.97	1,592.70	5.94	5.79	165.27	-66.09	103.48	36.96	25.83	11.13	3.321						
1,700.00	1,684.67	1,702.95	1,691.14	6.39	6.21	165.01	-74.87	118.58	38.72	26.84	11.88	3.259						
1,800.00	1,782.83	1,802.94	1,789.59	6.84	6.64	164.77	-83.66	133.68	40.48	27.84	12.64	3.203						
1,900.00	1,880.99	1,902.92	1,888.04	7.29	7.08	164.55	-92.45	148.77	42.24	28.85	13.40	3.153						
2,000.00	1,979.16	2,002.90	1,986.48	7.75	7.51	164.35	-101.24	163.87	44.01	29.85	14.16	3.108						
2,100.00	2,077.32	2,102.89	2,084.93	8.20	7.95	164.17	-110.03	178.97	45.77	30.84	14.93	3.066						
2,200.00	2,175.48	2,202.87	2,183.38	8.66	8.39	163.99	-118.81	194.07	47.54	31.84	15.69	3.029						
2,300.00	2,273.64	2,302.86	2,281.82	9.12	8.83	163.83	-127.60	209.16	49.30	32.84	16.46	2.994						
2,400.00	2,371.80	2,402.84	2,380.27	9.58	9.27	163.69	-136.39	224.26	51.06	33.83	17.23	2.963						
2,500.00	2,469.96	2,502.83	2,478.72	10.04	9.71	163.55	-145.18	239.36	52.83	34.82	18.01	2.934						
2,600.00	2,568.12	2,602.81	2,577.16	10.50	10.15	163.42	-153.97	254.45	54.60	35.81	18.78	2.907						
2,700.00	2,666.28	2,702.79	2,675.61	10.96	10.59	163.30	-162.75	269.55	56.36	36.81	19.56	2.882						
2,800.00	2,764.44	2,802.78	2,774.05	11.42	11.03	163.18	-171.54	284.65	58.13	37.80	20.33	2.859						
2,900.00	2,862.60	2,902.76	2,872.50	11.88	11.48	163.07	-180.33	299.74	59.89	38.78	21.11	2.837						
3,000.00	2,960.76	3,002.75	2,970.95	12.34	11.92	162.97	-189.12	314.84	61.66	39.77	21.89	2.817						
3,100.00	3,058.92	3,102.73	3,069.39	12.80	12.36	162.88	-197.91	329.94	63.43	40.76	22.66	2.799						
3,200.00	3,157.09	3,202.72	3,167.84	13.27	12.81	162.79	-206.69	345.03	65.19	41.75	23.44	2.781						
3,300.00	3,255.25	3,302.70	3,266.29	13.73	13.25	162.70	-215.48	360.13	66.96	42.74	24.22	2.764						
3,400.00	3,353.41	3,402.68	3,364.73	14.19	13.70	162.62	-224.27	375.23	68.73	43.72	25.00	2.749						
3,500.00	3,451.57	3,502.67	3,463.18	14.66	14.14	162.54	-233.06	390.32	70.49	44.71	25.78	2.734						
3,600.00	3,549.73	3,602.65	3,561.63	15.12	14.59	162.47	-241.85	405.42	72.26	45.70	26.56	2.720						
3,700.00	3,647.89	3,702.64	3,660.07	15.58	15.04	162.40	-250.64	420.52	74.03	46.68	27.35	2.707						
3,800.00	3,746.05	3,802.62	3,758.52	16.05	15.48	162.33	-259.42	435.61	75.80	47.67	28.13	2.695						
3,900.00	3,844.21	3,902.61	3,856.97	16.51	15.93	162.27	-268.21	450.71	77.56	48.65	28.91	2.683						
4,000.00	3,942.37	4,002.59	3,955.41	16.98	16.37	162.21	-277.00	465.81	79.33	49.64	29.69	2.672						
4,100.00	4,040.53	4,102.57	4,053.86	17.44	16.82	162.15	-285.79	480.90	81.10	50.62	30.48	2.661						
4,200.00	4,138.69	4,202.56	4,152.31	17.90	17.27	162.09	-294.58	496.00	82.87	51.61	31.26	2.651						
4,300.00	4,236.85	4,302.54	4,250.75	18.37	17.71	162.04	-303.36	511.10	84.63	52.59	32.04	2.641						
4,400.00	4,335.02	4,402.53	4,349.20	18.83	18.16	161.99	-312.15	526.20	86.40	53.57	32.83	2.632						
4,500.00	4,433.18	4,502.51	4,447.65	19.30	18.61	161.94	-320.94	541.29	88.17	54.56	33.61	2.623						
4,600.00	4,531.34	4,602.50	4,546.09	19.76	19.06	161.89	-329.73	556.39	89.94	55.54	34.40	2.615						
4,700.00	4,629.50	4,702.48	4,644.54	20.23	19.50	161.85	-338.52	571.49	91.71	56.53	35.18	2.607						
4,800.00	4,727.66	4,802.47	4,742.99	20.69	19.95	161.80	-347.30	586.58	93.47	57.51	35.97	2.599						
4,900.00	4,825.82	4,902.45	4,841.43	21.16	20.40	161.76	-356.09	601.68	95.24	58.49	36.75	2.592						
5,000.00	4,923.98	5,002.43	4,939.88	21.62	20.84	161.72	-364.88	616.78	97.01	59.48	37.54	2.585						

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 4T-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 4T-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						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	5,022.14	5,102.42	5,038.33	22.09	21.29	161.68	-373.67	631.87	98.78	60.46	38.32	2.578		
5,200.00	5,120.30	5,202.40	5,136.77	22.55	21.74	161.64	-382.46	646.97	100.55	61.44	39.11	2.571		
5,300.00	5,218.46	5,302.39	5,235.22	23.02	22.19	161.61	-391.24	662.07	102.32	62.42	39.89	2.565		
5,400.00	5,316.62	5,402.37	5,333.67	23.48	22.64	161.57	-400.03	677.16	104.08	63.41	40.68	2.559		
5,500.00	5,414.78	5,502.36	5,432.11	23.95	23.08	161.54	-408.82	692.26	105.85	64.39	41.46	2.553		
5,600.00	5,512.95	5,602.34	5,530.56	24.41	23.53	161.50	-417.61	707.36	107.62	65.37	42.25	2.547		
5,700.00	5,611.11	5,702.32	5,629.01	24.88	23.98	161.47	-426.40	722.45	109.39	66.35	43.04	2.542		
5,800.00	5,709.27	5,802.31	5,727.45	25.35	24.43	161.44	-435.18	737.55	111.16	67.34	43.82	2.537		
5,900.00	5,807.43	5,902.29	5,825.90	25.81	24.88	161.41	-443.97	752.65	112.93	68.32	44.61	2.532		
6,000.00	5,905.59	6,002.28	5,924.34	26.28	25.32	161.38	-452.76	767.74	114.70	69.30	45.39	2.527		
6,100.00	6,003.75	6,102.26	6,022.79	26.74	25.77	161.35	-461.55	782.84	116.46	70.28	46.18	2.522		
6,200.00	6,101.91	6,202.25	6,121.24	27.21	26.22	161.33	-470.34	797.94	118.23	71.27	46.97	2.517		
6,300.00	6,200.07	6,302.23	6,219.68	27.67	26.67	161.30	-479.12	813.04	120.00	72.25	47.75	2.513		
6,400.00	6,298.23	6,402.21	6,318.13	28.14	27.12	161.28	-487.91	828.13	121.77	73.23	48.54	2.509		
6,500.00	6,396.39	6,502.20	6,416.58	28.61	27.56	161.25	-496.70	843.23	123.54	74.21	49.33	2.504		
6,600.00	6,494.55	6,602.18	6,515.02	29.07	28.01	161.23	-505.49	858.33	125.31	75.19	50.12	2.500		
6,700.00	6,592.71	6,702.17	6,613.47	29.54	28.46	161.20	-514.28	873.42	127.08	76.17	50.90	2.496		
6,772.64	6,664.02	6,774.80	6,684.98	29.88	28.79	161.19	-520.66	884.39	128.36	76.89	51.47	2.494		
6,800.00	6,690.92	6,802.15	6,711.91	30.00	28.91	171.79	-523.06	888.52	128.76	77.05	51.71	2.490		
6,850.00	6,740.19	6,852.00	6,761.00	30.21	29.13	-166.91	-527.45	896.05	129.10	76.83	52.27	2.470		
6,900.00	6,789.40	6,901.49	6,809.73	30.41	29.36	-148.65	-531.80	903.52	129.22	76.20	53.02	2.437		
6,950.00	6,838.32	6,950.37	6,857.86	30.58	29.57	-137.54	-536.09	910.90	129.66	75.68	53.98	2.402		
7,000.00	6,886.71	6,998.74	6,905.50	30.73	29.79	-132.79	-540.17	918.20	131.22	76.06	55.16	2.379 SF		
7,050.00	6,934.33	7,048.12	6,954.28	30.87	30.00	-131.64	-541.70	925.68	134.30	77.94	56.36	2.383		
7,100.00	6,980.95	7,098.56	7,004.08	30.99	30.19	-132.32	-539.76	933.31	138.78	81.37	57.41	2.417		
7,150.00	7,026.35	7,150.11	7,054.72	31.09	30.36	-133.99	-534.12	941.06	144.50	86.30	58.20	2.483		
7,200.00	7,070.29	7,202.84	7,105.97	31.19	30.52	-136.11	-524.55	948.91	151.26	92.60	58.66	2.579		
7,250.00	7,112.57	7,256.82	7,157.56	31.26	30.67	-138.39	-510.83	956.80	158.85	100.12	58.73	2.705		
7,300.00	7,152.98	7,312.10	7,209.19	31.32	30.80	-140.67	-492.75	964.69	167.03	108.66	58.38	2.861		
7,350.00	7,191.33	7,368.75	7,260.50	31.37	30.91	-142.83	-470.10	972.52	175.61	118.00	57.61	3.048		
7,400.00	7,227.42	7,426.80	7,311.08	31.41	31.01	-144.85	-442.71	980.24	184.36	127.94	56.42	3.268		
7,450.00	7,261.09	7,486.29	7,360.47	31.44	31.10	-146.69	-410.44	987.77	193.09	138.25	54.84	3.521		
7,500.00	7,292.16	7,547.22	7,408.13	31.45	31.16	-148.35	-373.21	995.03	201.63	148.74	52.89	3.812		
7,550.00	7,320.49	7,609.60	7,453.50	31.45	31.21	-149.83	-330.99	1,001.93	209.80	159.17	50.63	4.144		
7,600.00	7,345.94	7,673.40	7,495.96	31.44	31.24	-151.14	-283.85	1,008.38	217.45	169.32	48.12	4.518		
7,650.00	7,368.38	7,738.54	7,534.88	31.43	31.26	-152.28	-231.97	1,014.28	224.43	178.97	45.46	4.937		
7,700.00	7,387.71	7,804.95	7,569.58	31.40	31.25	-153.26	-175.62	1,019.53	230.62	187.86	42.76	5.394		
7,750.00	7,403.82	7,872.50	7,599.44	31.37	31.23	-154.10	-115.22	1,024.03	235.90	195.73	40.17	5.872		
7,800.00	7,416.65	7,941.03	7,623.85	31.34	31.19	-154.78	-51.32	1,027.70	240.16	202.27	37.89	6.338		
7,850.00	7,426.13	8,010.36	7,642.29	31.30	31.15	-155.33	15.43	1,030.44	243.34	207.20	36.13	6.735		
7,900.00	7,432.22	8,080.27	7,654.34	31.25	31.09	-155.74	84.24	1,032.21	245.35	210.25	35.10	6.990		
7,950.00	7,434.87	8,150.52	7,659.71	31.21	31.03	-156.01	154.25	1,032.95	246.16	211.22	34.95	7.044		
7,963.63	7,435.00	8,169.70	7,660.00	31.20	31.01	-156.06	173.43	1,032.97	246.17	211.11	35.07	7.020		
8,000.00	7,435.00	8,206.41	7,660.00	31.17	30.98	-156.14	210.14	1,032.92	246.03	210.68	35.35	6.960		
8,100.00	7,435.00	8,306.41	7,660.00	31.10	30.91	-156.35	310.14	1,032.80	245.63	209.46	36.17	6.791		
8,200.00	7,435.00	8,406.40	7,660.00	31.08	30.92	-156.57	410.13	1,032.68	245.23	208.17	37.06	6.617		
8,300.00	7,435.00	8,506.40	7,660.00	31.19	31.25	-156.78	510.13	1,032.56	244.83	206.81	38.02	6.439		
8,400.00	7,435.00	8,606.39	7,660.00	31.60	31.88	-156.99	610.12	1,032.44	244.44	205.40	39.04	6.261		
8,500.00	7,435.00	8,706.39	7,660.00	32.26	32.60	-157.21	710.12	1,032.32	244.06	203.94	40.12	6.083		
8,600.00	7,435.00	8,806.38	7,660.00	33.03	33.38	-157.42	810.11	1,032.20	243.67	202.43	41.24	5.908		
8,700.00	7,435.00	8,906.38	7,660.00	33.87	34.22	-157.64	910.11	1,032.08	243.29	200.88	42.41	5.736		
8,800.00	7,435.00	9,006.37	7,660.00	34.77	35.10	-157.86	1,010.10	1,031.96	242.92	199.30	43.62	5.569		

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 4T-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 4T-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													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
8,900.00	7,435.00	9,106.37	7,660.00	35.71	36.03	-158.08	1,110.10	1,031.84	242.54	197.69	44.86	5.407		
9,000.00	7,435.00	9,206.36	7,660.00	36.70	37.01	-158.29	1,210.09	1,031.72	242.17	196.05	46.13	5.250		
9,100.00	7,435.00	9,306.36	7,660.00	37.73	38.02	-158.51	1,310.09	1,031.59	241.81	194.38	47.42	5.099		
9,200.00	7,435.00	9,406.35	7,660.00	38.79	39.07	-158.73	1,410.08	1,031.47	241.44	192.70	48.74	4.953		
9,300.00	7,435.00	9,506.35	7,660.00	39.89	40.16	-158.95	1,510.08	1,031.35	241.09	191.00	50.08	4.814		
9,400.00	7,435.00	9,606.34	7,660.00	41.03	41.27	-159.17	1,610.07	1,031.23	240.73	189.29	51.44	4.680		
9,500.00	7,435.00	9,706.34	7,660.00	42.19	42.42	-159.40	1,710.07	1,031.11	240.38	187.57	52.81	4.552		
9,600.00	7,435.00	9,806.33	7,660.00	43.37	43.59	-159.62	1,810.06	1,030.99	240.03	185.84	54.19	4.429		
9,700.00	7,435.00	9,906.33	7,660.00	44.59	44.78	-159.84	1,910.06	1,030.87	239.68	184.10	55.59	4.312		
9,800.00	7,435.00	10,006.32	7,660.00	45.82	46.00	-160.06	2,010.05	1,030.75	239.34	182.35	56.99	4.199		
9,900.00	7,435.00	10,106.32	7,660.00	47.08	47.24	-160.29	2,110.05	1,030.63	239.01	180.60	58.41	4.092		
10,000.00	7,435.00	10,206.31	7,660.00	48.35	48.50	-160.51	2,210.04	1,030.51	238.67	178.85	59.82	3.990		
10,100.00	7,435.00	10,306.31	7,660.00	49.64	49.78	-160.74	2,310.04	1,030.39	238.34	177.09	61.25	3.891		
10,200.00	7,435.00	10,406.30	7,660.00	50.95	51.07	-160.96	2,410.03	1,030.27	238.02	175.34	62.68	3.798		
10,300.00	7,435.00	10,506.30	7,660.00	52.28	52.38	-161.19	2,510.03	1,030.15	237.69	173.59	64.11	3.708		
10,400.00	7,435.00	10,606.29	7,660.00	53.62	53.71	-161.42	2,610.02	1,030.03	237.37	171.84	65.54	3.622		
10,459.89	7,435.00	10,666.18	7,660.00	54.43	54.51	-161.56	2,669.91	1,029.95	237.19	170.79	66.40	3.572		
10,488.39	7,435.00	10,694.68	7,660.00	54.81	54.89	-161.59	2,698.41	1,029.92	237.14	170.30	66.84	3.548		
10,500.00	7,435.00	10,706.29	7,660.00	54.97	55.05	-161.58	2,710.02	1,029.91	237.15	170.11	67.03	3.538		
10,535.52	7,435.00	10,741.81	7,660.00	55.45	55.53	-161.50	2,745.54	1,029.86	237.26	169.56	67.70	3.504		
10,600.00	7,435.00	10,806.28	7,660.00	56.32	56.40	-161.26	2,810.01	1,029.79	237.60	168.59	69.01	3.443		
10,700.00	7,435.00	10,906.26	7,660.00	57.68	57.76	-160.88	2,909.99	1,029.66	238.14	167.08	71.06	3.351		
10,800.00	7,435.00	11,006.25	7,660.00	59.05	59.13	-160.51	3,009.98	1,029.54	238.68	165.56	73.12	3.264		
10,900.00	7,435.00	11,106.24	7,660.00	60.44	60.52	-160.14	3,109.97	1,029.42	239.23	164.03	75.20	3.181		
11,000.00	7,435.00	11,206.22	7,660.00	61.83	61.91	-159.77	3,209.95	1,029.30	239.80	162.50	77.30	3.102		
11,100.00	7,435.00	11,306.21	7,660.00	63.23	63.31	-159.40	3,309.94	1,029.18	240.37	160.95	79.42	3.027		
11,200.00	7,435.00	11,406.20	7,660.00	64.63	64.72	-159.04	3,409.93	1,029.06	240.95	159.40	81.56	2.955		
11,300.00	7,435.00	11,506.18	7,660.00	66.05	66.14	-158.67	3,509.91	1,028.94	241.55	157.84	83.71	2.886		
11,400.00	7,435.00	11,606.17	7,660.00	67.47	67.57	-158.31	3,609.90	1,028.82	242.15	156.27	85.88	2.820		
11,500.00	7,435.00	11,706.16	7,660.00	68.90	69.00	-157.95	3,709.88	1,028.70	242.76	154.69	88.07	2.756		
11,600.00	7,435.00	11,806.14	7,660.00	70.33	70.44	-157.59	3,809.87	1,028.58	243.39	153.11	90.28	2.696		
11,700.00	7,435.00	11,906.13	7,660.00	71.77	71.89	-157.23	3,909.86	1,028.46	244.02	151.51	92.51	2.638		
11,800.00	7,435.00	12,006.12	7,660.00	73.22	73.34	-156.88	4,009.84	1,028.34	244.66	149.91	94.75	2.582		
11,900.00	7,435.00	12,106.10	7,660.00	74.67	74.80	-156.52	4,109.83	1,028.22	245.31	148.30	97.01	2.529		
12,000.00	7,435.00	12,206.09	7,660.00	76.13	76.26	-156.17	4,209.82	1,028.10	245.97	146.68	99.29	2.477		
12,046.42	7,435.00	12,252.51	7,660.00	76.69	76.94	-156.01	4,256.23	1,028.04	246.28	146.08	100.20	2.458		

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 0-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)					
0.00	0.00	0.00	0.00	0.00	0.00	91.54	-0.26	9.79	9.80	9.52	0.28	35.490			
100.00	100.00	100.00	100.00	0.14	0.14	91.54	-0.26	9.79	9.80	8.80	0.99	9.865			
200.00	200.00	200.00	200.00	0.50	0.50	91.54	-0.26	9.79	9.80	8.09	1.71	5.729			
300.00	300.00	300.00	300.00	0.85	0.85	91.54	-0.26	9.79	9.80	7.37	2.43	4.037	CC, ES		
400.00	400.00	400.00	400.00	1.21	1.21	91.54	-0.26	9.79	9.80	6.65	3.14	3.512			
500.00	500.00	499.73	499.71	1.57	1.56	98.31	-1.59	10.91	11.03	5.92	3.86	3.524			
600.00	599.98	599.32	599.16	1.92	1.90	-7.67	-5.57	14.25	13.59	5.21	4.59	3.556			
700.00	699.84	698.79	698.26	2.26	2.25	3.61	-11.85	19.95	16.31	4.51	5.31	3.529			
800.00	799.45	798.27	797.12	2.61	2.61	7.54	-18.29	28.93	18.75	3.64	6.04	3.387			
900.00	898.70	897.71	895.59	2.98	2.99	5.86	-24.51	41.33	20.47	2.96	6.79	3.184			
1,000.00	997.47	997.08	993.50	3.37	3.39	-0.22	-30.51	57.13	21.61	2.16	7.16	3.088			
1,050.28	1,046.90	1,047.00	1,042.47	3.57	3.60	-4.81	-33.43	66.35	22.11	1.95	7.54	3.065			
1,100.00	1,095.71	1,096.30	1,090.68	3.77	3.81	-10.09	-36.27	76.29	23.12	1.57	8.30	3.344			
1,200.00	1,193.87	1,195.71	1,187.44	4.19	4.26	-20.23	-41.84	98.40	27.74	1.45	9.06	3.685			
1,300.00	1,292.03	1,295.48	1,284.46	4.62	4.72	-27.40	-47.40	120.99	33.40	1.33	9.86	3.998			
1,400.00	1,390.19	1,395.25	1,381.47	5.06	5.20	-32.44	-52.97	143.58	39.42	1.26	10.68	4.277			
1,500.00	1,488.35	1,495.01	1,478.49	5.50	5.68	-36.13	-58.53	166.18	45.66	1.18	11.51	4.522			
1,600.00	1,586.51	1,594.78	1,575.51	5.94	6.17	-38.92	-64.09	188.77	52.05	1.11	12.36	4.737			
1,700.00	1,684.67	1,694.55	1,672.52	6.39	6.66	-41.09	-69.66	211.36	58.53	1.06	13.21	4.926			
1,800.00	1,782.83	1,794.32	1,769.54	6.84	7.16	-42.84	-75.22	233.95	65.08	1.01	14.07	5.093			
1,900.00	1,880.99	1,894.09	1,866.56	7.29	7.66	-44.26	-80.78	256.54	71.68	0.97	14.94	5.241			
2,000.00	1,979.16	1,993.85	1,963.57	7.75	8.16	-45.44	-86.35	279.13	78.32	0.93	15.82	5.372			
2,100.00	2,077.32	2,093.62	2,060.59	8.20	8.66	-46.44	-91.91	301.72	84.98	0.89	16.70	5.490			
2,200.00	2,175.48	2,193.39	2,157.61	8.66	9.17	-47.29	-97.47	324.31	91.67	0.85	17.58	5.596			
2,300.00	2,273.64	2,293.16	2,254.63	9.12	9.67	-48.02	-103.04	346.90	98.37	0.81	18.46	5.692			
2,400.00	2,371.80	2,392.92	2,351.64	9.58	10.18	-48.66	-108.60	369.49	105.09	0.78	19.35	5.778			
2,500.00	2,469.96	2,492.69	2,448.66	10.04	10.69	-49.23	-114.16	392.08	111.82	0.74	20.24	5.857			
2,600.00	2,568.12	2,592.46	2,545.68	10.50	11.20	-49.73	-119.73	414.67	118.56	0.71	21.13	5.930			
2,700.00	2,666.28	2,692.23	2,642.69	10.96	11.71	-50.18	-125.29	437.26	125.30	0.68	22.02	5.996			
2,800.00	2,764.44	2,791.99	2,739.71	11.42	12.22	-50.58	-130.85	459.85	132.06	0.65	22.92	6.057			
2,900.00	2,862.60	2,891.76	2,836.73	11.88	12.73	-50.94	-136.42	482.44	138.82	0.62	23.81	6.504			
3,000.00	2,960.76	2,991.53	2,933.74	12.34	13.25	-51.27	-141.98	505.03	145.58	0.59	24.71	6.165			
3,100.00	3,058.92	3,091.30	3,030.76	12.80	13.76	-51.57	-147.54	527.62	152.35	0.56	25.61	6.214			
3,200.00	3,157.09	3,191.07	3,127.78	13.27	14.27	-51.84	-153.11	550.21	159.12	0.53	26.51	6.259			
3,300.00	3,255.25	3,290.83	3,224.80	13.73	14.78	-52.09	-158.67	572.80	165.90	0.50	27.40	6.301			
3,400.00	3,353.41	3,390.60	3,321.81	14.19	15.30	-52.32	-164.23	595.39	172.68	0.47	28.30	6.340			
3,500.00	3,451.57	3,490.37	3,418.83	14.66	15.81	-52.54	-169.80	617.98	179.46	0.44	29.20	6.377			
3,600.00	3,549.73	3,590.14	3,515.85	15.12	16.33	-52.73	-175.36	640.57	186.24	0.41	30.11	6.412			
3,700.00	3,647.89	3,689.90	3,612.86	15.58	16.84	-52.92	-180.92	663.16	193.03	0.38	31.01	6.444			
3,800.00	3,746.05	3,789.67	3,709.88	16.05	17.36	-53.09	-186.49	685.76	199.81	0.35	31.91	6.475			
3,900.00	3,844.21	3,889.44	3,806.90	16.51	17.87	-53.25	-192.05	708.35	206.60	0.32	32.81	6.504			
4,000.00	3,942.37	3,989.21	3,903.92	16.98	18.39	-53.40	-197.61	730.94	213.39	0.29	33.71	6.531			
4,100.00	4,040.53	4,088.97	4,000.93	17.44	18.90	-53.54	-203.18	753.53	220.18	0.26	34.62	6.557			
4,200.00	4,138.69	4,188.74	4,097.95	17.90	19.42	-53.68	-208.74	776.12	226.98	0.23	35.52	6.582			
4,300.00	4,236.85	4,288.51	4,194.97	18.37	19.93	-53.80	-214.30	798.71	233.77	0.20	36.42	6.605			
4,400.00	4,335.02	4,388.28	4,291.98	18.83	20.45	-53.92	-219.87	821.30	240.57	0.17	37.33	6.627			
4,500.00	4,433.18	4,488.04	4,389.00	19.30	20.97	-54.03	-225.43	843.89	247.36	0.14	38.23	6.648			
4,600.00	4,531.34	4,587.81	4,486.02	19.76	21.48	-54.14	-230.99	866.48	254.16	0.11	39.14	6.668			
4,700.00	4,629.50	4,687.58	4,583.03	20.23	22.00	-54.24	-236.55	889.07	260.96	0.08	40.04	6.687			
4,800.00	4,727.66	4,787.35	4,680.05	20.69	22.51	-54.33	-242.12	911.66	267.76	0.05	40.94	6.706			
4,900.00	4,825.82	4,887.12	4,777.07	21.16	23.03	-54.42	-247.68	934.25	274.56	0.02	41.85	6.723			
5,000.00	4,923.98	4,986.88	4,874.09	21.62	23.55	-54.51	-253.24	956.84	281.36	0.00					

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 4T-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 4T-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		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)					
5,100.00	5,022.14	5,086.65	4,971.10	22.09	24.06	-54.59	-258.81	979.43	288.16	245.40	42.75	6.740			
5,200.00	5,120.30	5,186.42	5,068.12	22.55	24.58	-54.67	-264.37	1,002.02	294.96	251.30	43.66	6.756			
5,300.00	5,218.46	5,286.19	5,165.14	23.02	25.10	-54.74	-269.93	1,024.61	301.76	257.20	44.57	6.771			
5,400.00	5,316.62	5,385.95	5,262.15	23.48	25.61	-54.81	-275.50	1,047.20	308.56	263.09	45.47	6.786			
5,500.00	5,414.78	5,485.72	5,359.17	23.95	26.13	-54.88	-281.06	1,069.79	315.37	268.99	46.38	6.800			
5,600.00	5,512.95	5,585.49	5,456.19	24.41	26.65	-54.95	-286.62	1,092.38	322.17	274.89	47.28	6.814			
5,700.00	5,611.11	5,685.26	5,553.21	24.88	27.17	-55.01	-292.19	1,114.97	328.97	280.78	48.19	6.827			
5,800.00	5,709.27	5,785.02	5,650.22	25.35	27.68	-55.07	-297.75	1,137.56	335.78	286.68	49.09	6.839			
5,900.00	5,807.43	5,884.79	5,747.24	25.81	28.20	-55.13	-303.31	1,160.15	342.58	292.58	50.00	6.851			
6,000.00	5,905.59	5,984.56	5,844.26	26.28	28.72	-55.18	-308.88	1,182.75	349.39	298.48	50.91	6.863			
6,100.00	6,003.75	6,084.33	5,941.27	26.74	29.23	-55.24	-314.44	1,205.34	356.19	304.38	51.81	6.874			
6,200.00	6,101.91	6,184.09	6,038.29	27.21	29.75	-55.29	-320.00	1,227.93	363.00	310.28	52.72	6.885			
6,300.00	6,200.07	6,283.86	6,135.31	27.67	30.27	-55.34	-325.57	1,250.52	369.80	316.17	53.63	6.896			
6,400.00	6,298.23	6,383.63	6,232.32	28.14	30.79	-55.38	-331.13	1,273.11	376.61	322.07	54.53	6.906			
6,500.00	6,396.39	6,483.40	6,329.34	28.61	31.30	-55.43	-336.69	1,295.70	383.41	327.97	55.44	6.916			
6,600.00	6,494.55	6,583.17	6,426.36	29.07	31.82	-55.47	-342.26	1,318.29	390.22	333.87	56.35	6.925			
6,700.00	6,592.71	6,682.93	6,523.38	29.54	32.34	-55.52	-347.82	1,340.88	397.03	339.77	57.25	6.934			
6,772.64	6,664.02	6,755.40	6,593.85	29.88	32.71	-55.55	-351.86	1,357.29	401.97	344.06	57.91	6.941			
6,800.00	6,690.92	6,782.71	6,620.40	30.00	32.86	-44.80	-353.38	1,363.47	403.59	345.45	58.15	6.941			
6,850.00	6,740.19	6,832.58	6,668.89	30.21	33.11	-21.61	-356.16	1,374.76	405.34	346.85	58.48	6.931			
6,900.00	6,789.40	6,882.18	6,717.13	30.41	33.37	0.59	-358.93	1,385.99	405.56	346.85	58.71	6.908			
6,950.00	6,838.32	6,931.28	6,764.88	30.58	33.63	17.57	-361.67	1,397.11	404.41	345.59	58.82	6.876			
7,000.00	6,886.71	6,976.07	6,808.44	30.73	33.86	29.68	-363.95	1,407.25	402.19	343.42	58.77	6.844			
7,050.00	6,934.33	7,016.40	6,847.74	30.87	34.06	38.35	-364.07	1,416.30	399.83	341.25	58.58	6.825			
7,100.00	6,980.95	7,057.25	6,887.50	30.99	34.25	44.99	-361.88	1,425.37	397.57	339.23	58.34	6.815			
7,150.00	7,026.35	7,100.00	6,928.94	31.09	34.44	50.43	-357.11	1,434.70	395.47	337.37	58.09	6.808			
7,200.00	7,070.29	7,140.64	6,968.03	31.19	34.60	54.96	-350.23	1,443.41	393.58	335.81	57.77	6.813			
7,250.00	7,112.57	7,183.30	7,008.61	31.26	34.76	59.02	-340.59	1,452.34	391.99	334.50	57.50	6.818			
7,300.00	7,152.98	7,226.69	7,049.26	31.32	34.91	62.72	-328.26	1,461.16	390.75	333.49	57.25	6.825			
7,350.00	7,191.33	7,270.88	7,089.85	31.37	35.05	66.17	-313.14	1,469.85	389.91	332.85	57.06	6.833			
7,400.00	7,227.42	7,315.92	7,130.24	31.41	35.19	69.44	-295.13	1,478.37	389.52	332.59	56.93	6.842			
7,414.23	7,237.26	7,328.91	7,141.67	31.42	35.22	70.34	-289.46	1,480.75	389.50	332.60	56.90	6.845			
7,450.00	7,261.09	7,361.91	7,170.28	31.44	35.31	72.56	-274.10	1,486.67	389.64	332.78	56.86	6.853			
7,500.00	7,292.16	7,408.92	7,209.78	31.45	35.42	75.57	-249.94	1,494.72	390.27	333.43	56.84	6.866			
7,550.00	7,320.49	7,457.04	7,248.56	31.45	35.52	78.49	-222.53	1,502.45	391.45	334.60	56.85	6.886			
7,600.00	7,345.94	7,506.37	7,286.38	31.44	35.61	81.32	-191.75	1,509.82	393.18	336.31	56.88	6.913			
7,650.00	7,368.38	7,557.00	7,322.98	31.43	35.69	84.08	-157.48	1,516.75	395.45	338.57	56.88	6.952			
7,700.00	7,387.71	7,609.03	7,358.07	31.40	35.76	86.75	-119.61	1,523.18	398.23	341.39	56.84	7.006			
7,750.00	7,403.82	7,662.58	7,391.30	31.37	35.82	89.33	-78.05	1,529.02	401.48	344.74	56.73	7.076			
7,800.00	7,416.65	7,717.74	7,422.30	31.34	35.86	91.83	-32.73	1,534.18	405.13	348.60	56.53	7.166			
7,850.00	7,426.13	7,774.61	7,450.62	31.30	35.90	94.23	16.38	1,538.56	409.11	352.88	56.23	7.275			
7,900.00	7,432.22	7,833.30	7,475.79	31.25	35.92	96.54	69.26	1,542.05	413.33	357.50	55.83	7.403			
7,950.00	7,434.87	7,893.89	7,497.28	31.21	35.94	98.72	125.84	1,544.53	417.68	362.32	55.36	7.545			
7,963.63	7,435.00	7,910.74	7,502.42	31.20	35.94	99.30	141.88	1,545.02	418.87	363.65	55.22	7.585			
8,000.00	7,435.00	7,956.75	7,514.58	31.17	35.94	100.90	186.23	1,545.88	421.71	366.82	54.89	7.682			
8,100.00	7,435.00	8,089.63	7,533.87	31.10	35.94	103.45	317.51	1,544.59	424.99	370.31	54.68	7.772			
8,200.00	7,435.00	8,200.38	7,535.00	31.08	35.94	103.71	428.14	1,540.02	422.22	366.81	55.41	7.620			
8,300.00	7,435.00	8,300.33	7,535.00	31.19	35.97	103.81	527.99	1,535.66	419.06	362.76	56.30	7.443			
8,400.00	7,435.00	8,400.27	7,535.00	31.60	36.05	103.92	627.85	1,531.30	415.91	358.56	57.35	7.252			
8,500.00	7,435.00	8,500.22	7,535.00	32.26	36.17	104.03	727.70	1,526.94	412.76	354.21	58.55	7.050			
8,600.00	7,435.00	8,600.17	7,535.00	33.03	36.37	104.14	827.55	1,522.58	409.61	349.73	59.88	6.840			
8,700.00	7,435.00	8,700.12	7,535.00	33.87	36.65	104.25	927.40	1,518.22	406.46	345.12	61.34	6.626			

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 4T-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 4T-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		
8,800.00	7,435.00	8,800.06	7,535.00	34.77	37.05	104.36	1,027.26	1,513.86	403.31	340.39	62.92	6.410		
8,900.00	7,435.00	8,900.01	7,535.00	35.71	37.58	104.48	1,127.11	1,509.50	400.17	335.56	64.61	6.194		
9,000.00	7,435.00	8,999.96	7,535.00	36.70	38.23	104.60	1,226.96	1,505.15	397.02	330.63	66.40	5.980		
9,100.00	7,435.00	9,099.90	7,535.00	37.73	38.99	104.71	1,326.81	1,500.79	393.88	325.60	68.28	5.769		
9,200.00	7,435.00	9,199.85	7,535.00	38.79	39.85	104.84	1,426.66	1,496.43	390.74	320.50	70.24	5.563		
9,300.00	7,435.00	9,299.80	7,535.00	39.89	40.78	104.96	1,526.52	1,492.07	387.61	315.32	72.29	5.362		
9,400.00	7,435.00	9,399.75	7,535.00	41.03	41.78	105.08	1,626.37	1,487.71	384.47	310.07	74.40	5.168		
9,500.00	7,435.00	9,499.69	7,535.00	42.19	42.83	105.21	1,726.22	1,483.35	381.33	304.76	76.57	4.980		
9,600.00	7,435.00	9,599.64	7,535.00	43.37	43.93	105.34	1,826.07	1,478.99	378.20	299.39	78.81	4.799		
9,700.00	7,435.00	9,699.59	7,535.00	44.59	45.06	105.47	1,925.92	1,474.63	375.07	293.98	81.09	4.625		
9,800.00	7,435.00	9,799.54	7,535.00	45.82	46.23	105.60	2,025.78	1,470.27	371.94	288.51	83.43	4.458		
9,900.00	7,435.00	9,899.48	7,535.00	47.08	47.44	105.74	2,125.63	1,465.91	368.82	283.01	85.81	4.298		
10,000.00	7,435.00	9,999.43	7,535.00	48.35	48.66	105.88	2,225.48	1,461.55	365.69	277.47	88.22	4.145		
10,100.00	7,435.00	10,099.38	7,535.00	49.64	49.92	106.02	2,325.33	1,457.19	362.57	271.90	90.67	3.999		
10,200.00	7,435.00	10,199.32	7,535.00	50.95	51.20	106.16	2,425.19	1,452.83	359.45	266.29	93.16	3.859		
10,300.00	7,435.00	10,299.27	7,535.00	52.28	52.49	106.31	2,525.04	1,448.47	356.33	260.66	95.67	3.725		
10,400.00	7,435.00	10,399.22	7,535.00	53.62	53.81	106.45	2,624.89	1,444.11	353.22	255.01	98.21	3.597		
10,459.89	7,435.00	10,459.08	7,535.00	54.43	54.61	106.54	2,684.69	1,441.50	351.35	251.61	99.74	3.523		
10,500.00	7,435.00	10,499.16	7,535.00	54.97	55.14	106.63	2,724.73	1,439.75	349.83	249.07	100.76	3.472		
10,535.52	7,435.00	10,534.63	7,535.00	55.45	55.62	106.73	2,760.17	1,438.20	348.04	246.39	101.65	3.424		
10,600.00	7,435.00	10,598.99	7,535.00	56.32	56.49	106.91	2,824.48	1,435.40	344.41	241.16	103.25	3.336		
10,700.00	7,435.00	10,698.82	7,535.00	57.68	57.85	107.20	2,924.21	1,431.04	338.78	233.05	105.73	3.204		
10,800.00	7,435.00	10,798.65	7,535.00	59.05	59.23	107.50	3,023.94	1,426.69	333.16	224.94	108.23	3.078		
10,900.00	7,435.00	10,898.47	7,535.00	60.44	60.61	107.80	3,123.67	1,422.33	327.56	216.83	110.73	2.958		
11,000.00	7,435.00	10,998.30	7,535.00	61.83	62.01	108.12	3,223.40	1,417.98	321.96	208.72	113.24	2.843		
11,100.00	7,435.00	11,098.13	7,535.00	63.23	63.42	108.46	3,323.13	1,413.62	316.37	200.63	115.74	2.733		
11,200.00	7,435.00	11,197.95	7,535.00	64.63	64.84	108.80	3,422.87	1,409.27	310.79	192.55	118.24	2.628		
11,300.00	7,435.00	11,297.78	7,535.00	66.05	66.27	109.16	3,522.60	1,404.91	305.23	184.48	120.74	2.528		
11,400.00	7,435.00	11,397.61	7,535.00	67.47	67.71	109.52	3,622.33	1,400.56	299.67	176.44	123.24	2.432		
11,500.00	7,435.00	11,497.44	7,535.00	68.90	69.16	109.91	3,722.06	1,396.21	294.13	168.41	125.72	2.340		
11,600.00	7,435.00	11,597.26	7,535.00	70.33	70.61	110.31	3,821.79	1,391.85	288.61	160.42	128.19	2.251		
11,700.00	7,435.00	11,697.09	7,535.00	71.77	72.07	110.72	3,921.52	1,387.50	283.09	152.45	130.64	2.167		
11,800.00	7,435.00	11,796.92	7,535.00	73.22	73.54	111.15	4,021.26	1,383.14	277.60	144.52	133.08	2.086		
11,900.00	7,435.00	11,896.74	7,535.00	74.67	75.01	111.59	4,120.99	1,378.79	272.12	136.62	135.50	2.008		
12,000.00	7,435.00	11,996.57	7,535.00	76.13	76.49	112.06	4,220.72	1,374.43	266.65	128.76	137.89	1.934		
12,046.42	7,435.00	12,030.43	7,535.00	76.69	77.00	112.22	4,254.55	1,372.96	264.42	124.92	139.49	1.896 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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error:		0.00 usft
Reference: S32-T2N-R68W - HWY52 4V-32H-O268 - OH - PLAN #2															
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)					
0.00	0.00	0.00	0.00	0.00	0.00	90.81	-0.28	19.86	19.87	19.87	19.59	0.28	71.975		
100.00	100.00	100.00	100.00	0.14	0.14	90.81	-0.28	19.86	19.87	19.87	18.87	0.99	20.008		
200.00	200.00	200.00	200.00	0.50	0.50	90.81	-0.28	19.86	19.87	19.87	18.16	1.71	11.619	CC, ES	
300.00	300.00	300.00	300.00	0.85	0.85	90.81	-0.28	19.86	19.87	19.87	18.16	1.71	11.619	CC, ES	
400.00	400.00	399.31	399.29	1.21	1.20	92.37	-0.89	21.47	21.50	21.50	19.06	2.44	8.813		
500.00	500.00	498.39	498.23	1.57	1.55	95.89	-2.71	26.29	26.48	23.29	19.06	3.19	8.295		
600.00	599.98	597.15	596.61	1.92	1.90	-19.58	-5.73	34.26	33.26	29.32	19.06	3.94	8.440		
700.00	699.84	695.67	694.41	2.26	2.27	-18.42	-9.94	45.38	40.15	35.47	19.06	4.68	8.576		
800.00	799.45	793.96	791.51	2.61	2.66	-18.13	-15.33	59.59	47.11	41.68	19.06	5.43	8.680		
900.00	898.70	892.01	887.80	2.98	3.07	-18.37	-21.87	76.86	54.12	47.94	19.06	6.18	8.761		
1,000.00	997.47	989.83	983.18	3.37	3.52	-18.95	-29.56	93.16	61.17	54.24	19.06	6.93	8.831		
1,050.28	1,046.90	1,039.46	1,031.31	3.57	3.75	-19.36	-33.86	108.52	64.63	57.34	19.06	7.29	8.862		
1,100.00	1,095.71	1,089.08	1,079.39	3.77	3.99	-19.86	-38.20	119.97	67.75	60.11	19.06	7.65	8.858		
1,200.00	1,193.87	1,188.88	1,176.09	4.19	4.49	-20.73	-46.93	143.01	74.05	65.67	19.06	8.38	8.837		
1,300.00	1,292.03	1,288.67	1,272.80	4.62	4.99	-21.46	-55.66	166.05	80.36	71.23	19.06	9.13	8.805		
1,400.00	1,390.19	1,388.47	1,369.51	5.06	5.50	-22.09	-64.39	189.09	86.67	76.79	19.06	9.89	8.768		
1,500.00	1,488.35	1,488.26	1,466.22	5.50	6.01	-22.63	-73.11	212.13	93.00	82.35	19.06	10.65	8.729		
1,600.00	1,586.51	1,588.06	1,562.92	5.94	6.53	-23.10	-81.84	235.17	99.34	87.91	19.06	11.43	8.690		
1,700.00	1,684.67	1,687.86	1,659.63	6.39	7.05	-23.51	-90.57	258.20	105.68	93.46	19.06	12.22	8.651		
1,800.00	1,782.83	1,787.65	1,756.34	6.84	7.57	-23.88	-99.30	281.24	112.02	99.02	19.06	13.01	8.613		
1,900.00	1,880.99	1,887.45	1,853.04	7.29	8.10	-24.21	-108.02	304.28	118.38	104.57	19.06	13.80	8.577		
2,000.00	1,979.16	1,987.24	1,949.75	7.75	8.63	-24.51	-116.75	327.32	124.73	110.13	19.06	14.60	8.543		
2,100.00	2,077.32	2,087.04	2,046.46	8.20	9.15	-24.77	-125.48	350.36	131.09	115.68	19.06	15.40	8.511		
2,200.00	2,175.48	2,186.84	2,143.17	8.66	9.68	-25.02	-134.20	373.40	137.44	121.24	19.06	16.21	8.481		
2,300.00	2,273.64	2,286.63	2,239.87	9.12	10.21	-25.24	-142.93	396.44	143.81	126.79	19.06	17.01	8.452		
2,400.00	2,371.80	2,386.43	2,336.58	9.58	10.74	-25.44	-151.66	419.47	150.17	132.34	19.06	17.82	8.425		
2,500.00	2,469.96	2,486.22	2,433.29	10.04	11.28	-25.62	-160.39	442.51	156.53	137.90	19.06	18.64	8.399		
2,600.00	2,568.12	2,586.02	2,530.00	10.50	11.81	-25.79	-169.11	465.55	162.90	143.45	19.06	19.45	8.375		
2,700.00	2,666.28	2,685.82	2,626.70	10.96	12.34	-25.95	-177.84	488.59	169.27	149.00	19.06	20.27	8.352		
2,800.00	2,764.44	2,785.61	2,723.41	11.42	12.87	-26.10	-186.57	511.63	175.64	154.55	19.06	21.08	8.331		
2,900.00	2,862.60	2,885.41	2,820.12	11.88	13.41	-26.24	-195.30	534.67	182.01	160.11	19.06	21.90	8.311		
3,000.00	2,960.76	2,985.20	2,916.83	12.34	13.94	-26.36	-204.02	557.70	188.38	165.66	19.06	22.72	8.292		
3,100.00	3,058.92	3,085.00	3,013.53	12.80	14.48	-26.48	-212.75	580.74	194.75	171.21	19.06	23.54	8.273		
3,200.00	3,157.09	3,184.80	3,110.24	13.27	15.01	-26.59	-221.48	603.78	201.12	176.76	19.06	24.36	8.256		
3,300.00	3,255.25	3,284.59	3,206.95	13.73	15.54	-26.70	-230.21	626.82	207.50	182.31	19.06	25.18	8.240		
3,400.00	3,353.41	3,384.39	3,303.65	14.19	16.08	-26.80	-238.93	649.86	213.87	187.87	19.06	26.00	8.225		
3,500.00	3,451.57	3,484.18	3,400.36	14.66	16.61	-26.89	-247.66	672.90	220.24	193.42	19.06	26.83	8.210		
3,600.00	3,549.73	3,583.98	3,497.07	15.12	17.15	-26.98	-256.39	695.94	226.62	198.97	19.06	27.65	8.196		
3,700.00	3,647.89	3,683.78	3,593.78	15.58	17.68	-27.06	-265.12	718.97	233.00	204.52	19.06	28.47	8.183		
3,800.00	3,746.05	3,783.57	3,690.48	16.05	18.22	-27.14	-273.84	742.01	239.37	210.07	19.06	29.30	8.170		
3,900.00	3,844.21	3,883.37	3,787.19	16.51	18.76	-27.21	-282.57	765.05	245.75	215.62	19.06	30.12	8.158		
4,000.00	3,942.37	3,983.16	3,883.90	16.98	19.29	-27.28	-291.30	788.09	252.13	221.18	19.06	30.95	8.146		
4,100.00	4,040.53	4,082.96	3,980.61	17.44	19.83	-27.35	-300.03	811.13	258.50	226.73	19.06	31.78	8.135		
4,200.00	4,138.69	4,182.76	4,077.31	17.90	20.36	-27.41	-308.75	834.17	264.88	232.28	19.06	32.60	8.124		
4,300.00	4,236.85	4,282.55	4,174.02	18.37	20.90	-27.47	-317.48	857.21	271.26	237.83	19.06	33.43	8.114		
4,400.00	4,335.02	4,382.35	4,270.73	18.83	21.44	-27.53	-326.21	880.24	277.64	243.38	19.06	34.26	8.105		
4,500.00	4,433.18	4,482.14	4,367.43	19.30	21.97	-27.59	-334.93	903.28	284.02	248.93	19.06	35.08	8.095		
4,600.00	4,531.34	4,581.94	4,464.14	19.76	22.51	-27.64	-343.66	926.32	290.39	254.48	19.06	35.91	8.086		
4,700.00	4,629.50	4,681.74	4,560.85	20.23	23.04	-27.69	-352.39	949.36	296.77	260.03	19.06	36.74	8.078		
4,800.00	4,727.66	4,781.53	4,657.56	20.69	23.58	-27.74	-361.12	972.40	303.15	265.58	19.06	37.57	8.070		
4,900.00	4,825.82	4,881.33	4,754.26	21.16	24.12	-27.78	-369.84	995.44	309.53	271.14	19.06	38.40	8.062		
5,000.00	4,923.98	4,981.12	4,850.97	21.62	24.65	-27.83	-378.57	1,018.47	315.91	276.69	19.06	39.22	8.054		

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 4T-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 4T-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
5,100.00	5,022.14	5,080.92	4,947.68	22.09	25.19	-27.87	-387.30	1,041.51	322.29	282.24	40.05	8.047	
5,200.00	5,120.30	5,180.72	5,044.39	22.55	25.73	-27.91	-396.03	1,064.55	328.67	287.79	40.88	8.039	
5,300.00	5,218.46	5,280.51	5,141.09	23.02	26.26	-27.95	-404.75	1,087.59	335.05	293.34	41.71	8.033	
5,400.00	5,316.62	5,380.31	5,237.80	23.48	26.80	-27.99	-413.48	1,110.63	341.43	298.89	42.54	8.026	
5,500.00	5,414.78	5,480.10	5,334.51	23.95	27.34	-28.03	-422.21	1,133.67	347.81	304.44	43.37	8.020	
5,600.00	5,512.95	5,579.90	5,431.21	24.41	27.87	-28.06	-430.94	1,156.71	354.19	309.99	44.20	8.013	
5,700.00	5,611.11	5,679.70	5,527.92	24.88	28.41	-28.10	-439.66	1,179.74	360.57	315.54	45.03	8.007	
5,800.00	5,709.27	5,779.49	5,624.63	25.35	28.95	-28.13	-448.39	1,202.78	366.95	321.09	45.86	8.002	
5,900.00	5,807.43	5,879.29	5,721.34	25.81	29.49	-28.16	-457.12	1,225.82	373.33	326.64	46.69	7.996	
6,000.00	5,905.59	5,979.08	5,818.04	26.28	30.02	-28.19	-465.85	1,248.86	379.72	332.20	47.52	7.991	
6,100.00	6,003.75	6,078.88	5,914.75	26.74	30.56	-28.22	-474.57	1,271.90	386.10	337.75	48.35	7.985	
6,200.00	6,101.91	6,178.68	6,011.46	27.21	31.10	-28.25	-483.30	1,294.94	392.48	343.30	49.18	7.980	
6,300.00	6,200.07	6,278.47	6,108.17	27.67	31.63	-28.28	-492.03	1,317.97	398.86	348.85	50.01	7.975	
6,400.00	6,298.23	6,378.27	6,204.87	28.14	32.17	-28.30	-500.76	1,341.01	405.24	354.40	50.84	7.971	
6,500.00	6,396.39	6,478.06	6,301.58	28.61	32.71	-28.33	-509.48	1,364.05	411.62	359.95	51.67	7.966	
6,600.00	6,494.55	6,577.86	6,398.29	29.07	33.24	-28.36	-518.21	1,387.09	418.00	365.50	52.50	7.961	
6,700.00	6,592.71	6,677.66	6,495.00	29.54	33.78	-28.38	-526.94	1,410.13	424.39	371.05	53.33	7.957	
6,772.64	6,664.02	6,750.15	6,565.24	29.88	34.17	-28.40	-533.28	1,426.86	429.02	375.08	53.94	7.954	
6,800.00	6,690.92	6,777.45	6,591.70	30.00	34.32	-17.66	-535.66	1,433.17	430.77	376.62	54.15	7.955	
6,850.00	6,740.19	6,827.21	6,639.92	30.21	34.59	5.43	-540.02	1,444.65	433.97	379.51	54.46	7.969	
6,900.00	6,789.40	6,876.66	6,687.85	30.41	34.85	27.41	-544.26	1,456.07	437.24	382.58	54.66	7.999	
6,950.00	6,838.32	6,926.46	6,736.25	30.58	35.11	43.77	-546.12	1,467.60	440.66	385.84	54.83	8.037	
7,000.00	6,886.71	6,976.83	6,785.22	30.73	35.35	54.91	-544.48	1,479.26	444.23	389.24	54.98	8.079	
7,050.00	6,934.33	7,027.79	6,834.51	30.87	35.56	62.60	-539.23	1,490.99	447.91	392.77	55.13	8.124	
7,100.00	6,980.95	7,079.35	6,883.90	30.99	35.77	68.15	-530.26	1,502.74	451.68	396.40	55.28	8.170	
7,150.00	7,026.35	7,131.52	6,933.10	31.09	35.95	72.32	-517.49	1,514.44	455.52	400.08	55.44	8.217	
7,200.00	7,070.29	7,184.33	6,981.85	31.19	36.11	75.58	-500.86	1,526.02	459.39	403.80	55.59	8.264	
7,250.00	7,112.57	7,237.77	7,029.83	31.26	36.25	78.20	-480.31	1,537.43	463.28	407.53	55.75	8.311	
7,300.00	7,152.98	7,291.84	7,076.73	31.32	36.38	80.35	-455.84	1,548.56	467.13	411.23	55.90	8.356	
7,350.00	7,191.33	7,346.55	7,122.22	31.37	36.49	82.15	-427.45	1,559.36	470.93	414.87	56.05	8.401	
7,400.00	7,227.42	7,401.89	7,165.95	31.41	36.58	83.68	-395.19	1,569.73	474.63	418.42	56.21	8.445	
7,450.00	7,261.09	7,457.83	7,207.57	31.44	36.66	84.97	-359.15	1,579.60	478.20	421.85	56.35	8.486	
7,500.00	7,292.16	7,514.37	7,246.71	31.45	36.71	86.07	-319.45	1,588.87	481.61	425.11	56.50	8.524	
7,550.00	7,320.49	7,571.46	7,283.03	31.45	36.76	87.01	-276.27	1,597.47	484.82	428.18	56.65	8.558	
7,600.00	7,345.94	7,629.07	7,316.17	31.44	36.78	87.80	-229.82	1,605.30	487.81	431.01	56.80	8.588	
7,650.00	7,368.38	7,687.16	7,345.80	31.43	36.80	88.46	-180.36	1,612.29	490.53	433.56	56.97	8.610	
7,700.00	7,387.71	7,745.67	7,371.61	31.40	36.80	88.99	-128.22	1,618.38	492.97	435.82	57.16	8.625	
7,750.00	7,403.82	7,804.55	7,393.31	31.37	36.79	89.41	-73.75	1,623.48	495.10	437.73	57.37	8.630	
7,800.00	7,416.65	7,863.73	7,410.67	31.34	36.77	89.72	-17.33	1,627.54	496.89	439.27	57.62	8.624	
7,850.00	7,426.13	7,923.14	7,423.48	31.30	36.74	89.92	40.58	1,630.52	498.33	440.43	57.91	8.606	
7,900.00	7,432.22	7,982.70	7,431.59	31.25	36.71	90.02	99.54	1,632.38	499.41	441.17	58.24	8.575	
7,950.00	7,434.87	8,042.34	7,434.91	31.21	36.67	90.02	159.07	1,633.10	500.12	441.49	58.63	8.531	
7,963.63	7,435.00	8,057.78	7,435.00	31.20	36.67	90.00	174.51	1,633.10	500.25	441.52	58.73	8.518	
8,000.00	7,435.00	8,094.15	7,435.00	31.17	36.65	90.00	210.88	1,633.05	500.61	441.63	58.98	8.488	
8,100.00	7,435.00	8,194.14	7,435.00	31.10	36.61	90.00	310.87	1,632.93	501.60	441.83	59.77	8.392	
8,200.00	7,435.00	8,294.14	7,435.00	31.08	36.60	90.00	410.87	1,632.81	502.60	441.87	60.73	8.277	
8,300.00	7,435.00	8,394.13	7,435.00	31.19	36.62	90.00	510.86	1,632.68	503.59	441.76	61.83	8.145	
8,400.00	7,435.00	8,494.13	7,435.00	31.60	36.69	90.00	610.86	1,632.56	504.58	441.51	63.07	8.000	
8,500.00	7,435.00	8,594.12	7,435.00	32.26	36.81	90.00	710.85	1,632.44	505.57	441.13	64.45	7.845	
8,600.00	7,435.00	8,694.12	7,435.00	33.03	37.01	90.00	810.85	1,632.31	506.57	440.62	65.95	7.681	
8,700.00	7,435.00	8,794.11	7,435.00	33.87	37.31	90.00	910.84	1,632.19	507.56	439.99	67.56	7.512	
8,800.00	7,435.00	8,894.11	7,435.00	34.77	37.74	90.00	1,010.84	1,632.07	508.55	439.26	69.29	7.339	

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 4T-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 4T-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		
8,900.00	7,435.00	8,994.10	7,435.00	35.71	38.30	90.00	1,110.83	1,631.95	509.54	438.42	71.12	7.165		
9,000.00	7,435.00	9,094.10	7,435.00	36.70	38.99	90.00	1,210.83	1,631.82	510.54	437.50	73.04	6.990		
9,100.00	7,435.00	9,194.09	7,435.00	37.73	39.79	90.00	1,310.82	1,631.70	511.53	436.48	75.05	6.816		
9,200.00	7,435.00	9,294.09	7,435.00	38.79	40.67	90.00	1,410.82	1,631.58	512.52	435.39	77.13	6.645		
9,300.00	7,435.00	9,394.08	7,435.00	39.89	41.63	90.00	1,510.81	1,631.45	513.51	434.22	79.29	6.476		
9,400.00	7,435.00	9,494.08	7,435.00	41.03	42.64	90.00	1,610.81	1,631.33	514.51	432.99	81.52	6.311		
9,500.00	7,435.00	9,594.07	7,435.00	42.19	43.70	90.00	1,710.80	1,631.21	515.50	431.69	83.81	6.151		
9,600.00	7,435.00	9,694.07	7,435.00	43.37	44.80	90.00	1,810.80	1,631.08	516.49	430.34	86.15	5.995		
9,700.00	7,435.00	9,794.06	7,435.00	44.59	45.94	90.00	1,910.79	1,630.96	517.48	428.93	88.55	5.844		
9,800.00	7,435.00	9,894.06	7,435.00	45.82	47.10	90.00	2,010.79	1,630.84	518.48	427.48	91.00	5.698		
9,900.00	7,435.00	9,994.05	7,435.00	47.08	48.30	90.00	2,110.78	1,630.71	519.47	425.98	93.49	5.557		
10,000.00	7,435.00	10,094.05	7,435.00	48.35	49.51	90.00	2,210.78	1,630.59	520.46	424.44	96.02	5.420		
10,100.00	7,435.00	10,194.04	7,435.00	49.64	50.75	90.00	2,310.77	1,630.47	521.45	422.87	98.59	5.289		
10,200.00	7,435.00	10,294.04	7,435.00	50.95	52.01	90.00	2,410.77	1,630.35	522.45	421.25	101.19	5.163		
10,300.00	7,435.00	10,394.03	7,435.00	52.28	53.29	90.00	2,510.76	1,630.22	523.44	419.61	103.83	5.041		
10,400.00	7,435.00	10,494.03	7,435.00	53.62	54.59	90.00	2,610.76	1,630.10	524.43	417.93	106.50	4.924		
10,459.89	7,435.00	10,553.92	7,435.00	54.43	55.37	90.00	2,670.65	1,630.03	525.03	416.92	108.11	4.856		
10,500.00	7,435.00	10,594.03	7,435.00	54.97	55.90	90.00	2,710.75	1,629.98	525.14	415.95	109.19	4.809		
10,535.52	7,435.00	10,629.54	7,435.00	55.45	56.37	90.00	2,746.27	1,629.93	524.78	414.63	110.15	4.764		
10,600.00	7,435.00	10,694.02	7,435.00	56.32	57.22	90.00	2,810.74	1,629.85	523.72	411.83	111.89	4.681		
10,700.00	7,435.00	10,794.00	7,435.00	57.68	58.56	90.00	2,910.73	1,629.73	522.07	407.46	114.61	4.555		
10,800.00	7,435.00	10,893.99	7,435.00	59.05	59.91	90.00	3,010.72	1,629.61	520.42	403.06	117.36	4.435		
10,900.00	7,435.00	10,993.97	7,435.00	60.44	61.27	90.00	3,110.70	1,629.48	518.77	398.65	120.12	4.319		
11,000.00	7,435.00	11,093.96	7,435.00	61.83	62.64	90.00	3,210.69	1,629.36	517.13	394.22	122.91	4.207		
11,100.00	7,435.00	11,193.95	7,435.00	63.23	64.03	90.00	3,310.68	1,629.24	515.48	389.77	125.71	4.101		
11,200.00	7,435.00	11,293.93	7,435.00	64.63	65.42	90.00	3,410.66	1,629.11	513.83	385.30	128.53	3.998		
11,300.00	7,435.00	11,393.92	7,435.00	66.05	66.82	90.00	3,510.65	1,628.99	512.18	380.82	131.36	3.899		
11,400.00	7,435.00	11,493.91	7,435.00	67.47	68.23	90.00	3,610.63	1,628.87	510.54	376.32	134.21	3.804		
11,500.00	7,435.00	11,593.89	7,435.00	68.90	69.64	90.00	3,710.62	1,628.75	508.89	371.81	137.08	3.712		
11,600.00	7,435.00	11,693.88	7,435.00	70.33	71.07	90.00	3,810.61	1,628.62	507.24	367.29	139.95	3.624		
11,700.00	7,435.00	11,793.87	7,435.00	71.77	72.50	90.00	3,910.59	1,628.50	505.59	362.75	142.84	3.540		
11,800.00	7,435.00	11,893.85	7,435.00	73.22	73.93	90.00	4,010.58	1,628.38	503.95	358.21	145.74	3.458		
11,900.00	7,435.00	11,993.84	7,435.00	74.67	75.38	90.00	4,110.57	1,628.25	502.30	353.65	148.65	3.379		
12,000.00	7,435.00	12,093.83	7,435.00	76.13	76.82	90.00	4,210.55	1,628.13	500.65	349.08	151.57	3.303		
12,046.42	7,435.00	12,135.65	7,435.00	76.69	77.43	90.00	4,252.38	1,628.08	499.91	347.02	152.89	3.270 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 4T-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 4T-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													Offset Site Error:	0.00 usft
S32-T2N-R68W - HWY52 4W-32H-O268 - OH - PLAN #2													Offset Well Error:	0.00 usft
Survey Program: 0-MWD+HDGM														
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)				
0.00	0.00	2.00	2.00	0.00	0.00	90.58	-0.30	29.94	29.94					
100.00	100.00	102.00	102.00	0.14	0.15	90.58	-0.30	29.94	29.94	29.66	0.28	105.718		
115.99	115.99	117.99	117.99	0.20	0.20	90.58	-0.30	29.94	29.94	29.54	0.40	75.259 CC		
200.00	200.00	201.99	201.99	0.50	0.50	90.58	-0.30	29.94	29.94	28.94	1.00	29.944 ES		
300.00	300.00	301.42	301.40	0.85	0.85	93.44	-1.86	30.83	30.90	29.18	1.71	18.016		
400.00	400.00	400.00	399.85	1.21	1.19	100.08	-5.98	33.64	34.24	31.74	2.49	13.725		
500.00	500.00	498.84	498.40	1.57	1.55	104.90	-10.55	39.66	41.19	37.95	3.24	12.701		
600.00	599.98	596.94	595.93	1.92	1.92	-11.30	-15.18	48.98	49.93	45.93	4.00	12.484		
700.00	699.84	694.78	692.84	2.26	2.30	-11.44	-19.87	61.61	58.58	53.83	4.74	12.353		
800.00	799.45	792.33	788.96	2.61	2.70	-12.86	-24.62	77.48	67.11	61.62	5.49	12.233		
900.00	898.70	889.55	884.18	2.98	3.12	-15.11	-29.43	96.56	75.62	69.39	6.23	12.135		
1,000.00	997.47	986.43	978.34	3.37	3.58	-17.94	-34.28	118.77	84.26	77.27	6.98	12.068		
1,050.28	1,046.90	1,035.00	1,025.26	3.57	3.82	-19.52	-36.74	131.10	88.69	81.33	7.36	12.049		
1,100.00	1,095.71	1,082.90	1,071.31	3.77	4.07	-21.09	-39.17	144.04	93.56	85.83	7.74	12.092		
1,200.00	1,193.87	1,181.80	1,166.07	4.19	4.60	-23.91	-44.21	171.89	104.75	96.28	8.47	12.368		
1,300.00	1,292.03	1,281.05	1,261.16	4.62	5.14	-26.19	-49.27	199.86	116.15	106.93	9.22	12.599		
1,400.00	1,390.19	1,380.30	1,356.26	5.06	5.70	-28.06	-54.34	227.83	127.71	117.72	9.99	12.784		
1,500.00	1,488.35	1,479.55	1,451.35	5.50	6.27	-29.62	-59.40	255.80	139.38	128.60	10.78	12.933		
1,600.00	1,586.51	1,578.80	1,546.44	5.94	6.84	-30.94	-64.46	283.78	151.14	139.56	11.58	13.054		
1,700.00	1,684.67	1,678.05	1,641.54	6.39	7.41	-32.07	-69.52	311.75	162.96	150.57	12.39	13.152		
1,800.00	1,782.83	1,777.30	1,736.63	6.84	7.99	-33.04	-74.58	339.72	174.84	161.62	13.21	13.232		
1,900.00	1,880.99	1,876.56	1,831.72	7.29	8.57	-33.90	-79.64	367.69	186.76	172.71	14.04	13.298		
2,000.00	1,979.16	1,975.81	1,926.82	7.75	9.15	-34.64	-84.70	395.66	198.71	183.83	14.88	13.353		
2,100.00	2,077.32	2,075.06	2,021.91	8.20	9.74	-35.31	-89.77	423.63	210.70	194.97	15.72	13.399		
2,200.00	2,175.48	2,174.31	2,117.01	8.66	10.32	-35.90	-94.83	451.60	222.71	206.14	16.57	13.438		
2,300.00	2,273.64	2,273.56	2,212.10	9.12	10.91	-36.43	-99.89	479.58	234.74	217.31	17.43	13.470		
2,400.00	2,371.80	2,372.81	2,307.19	9.58	11.50	-36.91	-104.95	507.55	246.79	228.51	18.28	13.498		
2,500.00	2,469.96	2,472.06	2,402.29	10.04	12.09	-37.35	-110.01	535.52	258.86	239.71	19.14	13.522		
2,600.00	2,568.12	2,571.31	2,497.38	10.50	12.68	-37.74	-115.07	563.49	270.93	250.93	20.01	13.543		
2,700.00	2,666.28	2,670.57	2,592.47	10.96	13.27	-38.10	-120.13	591.46	283.02	262.15	20.87	13.561		
2,800.00	2,764.44	2,769.82	2,687.57	11.42	13.86	-38.44	-125.20	619.43	295.12	273.39	21.74	13.576		
2,900.00	2,862.60	2,869.07	2,782.66	11.88	14.45	-38.74	-130.26	647.40	307.23	284.63	22.61	13.590		
3,000.00	2,960.76	2,968.32	2,877.75	12.34	15.04	-39.03	-135.32	675.38	319.35	295.87	23.48	13.601		
3,100.00	3,058.92	3,067.57	2,972.85	12.80	15.64	-39.29	-140.38	703.35	331.48	307.12	24.35	13.612		
3,200.00	3,157.09	3,166.82	3,067.94	13.27	16.23	-39.53	-145.44	731.32	343.61	318.38	25.23	13.621		
3,300.00	3,255.25	3,266.07	3,163.03	13.73	16.82	-39.76	-150.50	759.29	355.74	329.64	26.10	13.629		
3,400.00	3,353.41	3,365.32	3,258.13	14.19	17.42	-39.97	-155.56	787.26	367.89	340.91	26.98	13.636		
3,500.00	3,451.57	3,464.58	3,353.22	14.66	18.01	-40.17	-160.63	815.23	380.03	352.18	27.86	13.643		
3,600.00	3,549.73	3,563.83	3,448.32	15.12	18.61	-40.36	-165.69	843.20	392.18	363.45	28.73	13.648		
3,700.00	3,647.89	3,663.08	3,543.41	15.58	19.20	-40.53	-170.75	871.18	404.34	374.72	29.61	13.653		
3,800.00	3,746.05	3,762.33	3,638.50	16.05	19.79	-40.70	-175.81	899.15	416.50	386.00	30.49	13.658		
3,900.00	3,844.21	3,861.58	3,733.60	16.51	20.39	-40.85	-180.87	927.12	428.66	397.28	31.38	13.662		
4,000.00	3,942.37	3,960.83	3,828.69	16.98	20.98	-41.00	-185.93	955.09	440.82	408.56	32.26	13.666		
4,100.00	4,040.53	4,060.08	3,923.78	17.44	21.58	-41.14	-190.99	983.06	452.99	419.85	33.14	13.669		
4,200.00	4,138.69	4,159.33	4,018.88	17.90	22.17	-41.27	-196.06	1,011.03	465.16	431.13	34.02	13.672		
4,300.00	4,236.85	4,258.59	4,113.97	18.37	22.77	-41.40	-201.12	1,039.01	477.33	442.42	34.91	13.675		
4,400.00	4,335.02	4,357.84	4,209.06	18.83	23.36	-41.52	-206.18	1,066.98	489.50	453.71	35.79	13.677		
4,500.00	4,433.18	4,457.09	4,304.16	19.30	23.96	-41.63	-211.24	1,094.95	501.68	465.00	36.67	13.679		
4,600.00	4,531.34	4,556.34	4,399.25	19.76	24.55	-41.74	-216.30	1,122.92	513.86	476.30	37.56	13.681		
4,700.00	4,629.50	4,655.59	4,494.34	20.23	25.15	-41.84	-221.36	1,150.89	526.04	487.59	38.44	13.683		
4,800.00	4,727.66	4,754.84	4,589.44	20.69	25.75	-41.94	-226.42	1,178.86	538.22	498.89	39.33	13.685		
4,900.00	4,825.82	4,854.09	4,684.53	21.16	26.34	-42.03	-231.49	1,206.83	550.40	510.18	40.22	13.686		

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 4T-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 4T-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		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	4,923.98	4,953.34	4,779.62	21.62	26.94	-42.12	-236.55	1,234.81	562.58	521.48	41.10	13.687			
5,100.00	5,022.14	5,052.59	4,874.72	22.09	27.53	-42.21	-241.61	1,262.78	574.77	532.78	41.99	13.689			
5,200.00	5,120.30	5,151.85	4,969.81	22.55	28.13	-42.29	-246.67	1,290.75	586.95	544.08	42.88	13.690			
5,300.00	5,218.46	5,251.10	5,064.91	23.02	28.72	-42.37	-251.73	1,318.72	599.14	555.38	43.76	13.691			
5,400.00	5,316.62	5,350.35	5,160.00	23.48	29.32	-42.44	-256.79	1,346.69	611.33	566.68	44.65	13.692			
5,500.00	5,414.78	5,449.60	5,255.09	23.95	29.92	-42.52	-261.85	1,374.66	623.52	577.98	45.54	13.693			
5,600.00	5,512.95	5,548.85	5,350.19	24.41	30.51	-42.59	-266.91	1,402.63	635.71	589.29	46.43	13.693			
5,700.00	5,611.11	5,648.10	5,445.28	24.88	31.11	-42.65	-271.98	1,430.61	647.90	600.59	47.31	13.694			
5,800.00	5,709.27	5,747.35	5,540.37	25.35	31.71	-42.72	-277.04	1,458.58	660.10	611.89	48.20	13.695			
5,900.00	5,807.43	5,846.60	5,635.47	25.81	32.30	-42.78	-282.10	1,486.55	672.29	623.20	49.09	13.695			
6,000.00	5,905.59	5,945.86	5,730.56	26.28	32.90	-42.84	-287.16	1,514.52	684.48	634.50	49.98	13.696			
6,100.00	6,003.75	6,045.11	5,825.65	26.74	33.49	-42.90	-292.22	1,542.49	696.68	645.81	50.87	13.696			
6,200.00	6,101.91	6,144.36	5,920.75	27.21	34.09	-42.96	-297.28	1,570.46	708.87	657.12	51.76	13.696			
6,300.00	6,200.07	6,243.61	6,015.84	27.67	34.69	-43.01	-302.34	1,598.43	721.07	668.42	52.64	13.697			
6,400.00	6,298.23	6,342.86	6,110.93	28.14	35.28	-43.06	-307.41	1,626.41	733.26	679.73	53.53	13.697			
6,500.00	6,396.39	6,442.11	6,206.03	28.61	35.88	-43.12	-312.47	1,654.38	745.46	691.04	54.42	13.697			
6,600.00	6,494.55	6,541.36	6,301.12	29.07	36.48	-43.16	-317.53	1,682.35	757.66	702.35	55.31	13.698			
6,700.00	6,592.71	6,640.61	6,396.22	29.54	37.07	-43.21	-322.59	1,710.32	769.86	713.66	56.20	13.698			
6,772.64	6,664.02	6,712.71	6,465.29	29.88	37.51	-43.25	-326.27	1,730.64	778.72	721.87	56.85	13.698			
6,800.00	6,690.92	6,739.88	6,491.32	30.00	37.67	-32.66	-327.65	1,738.30	781.92	724.84	57.08	13.699			
6,850.00	6,740.19	6,789.50	6,538.86	30.21	37.97	-9.95	-330.18	1,752.28	787.08	729.65	57.44	13.704			
6,900.00	6,789.40	6,838.87	6,586.17	30.41	38.26	11.54	-332.70	1,766.19	791.36	733.66	57.71	13.714			
6,950.00	6,838.32	6,887.76	6,633.01	30.58	38.56	27.57	-335.19	1,779.97	794.82	736.93	57.89	13.729			
7,000.00	6,886.71	6,935.93	6,679.16	30.73	38.85	38.66	-337.65	1,793.55	797.56	739.56	58.00	13.751			
7,050.00	6,934.33	6,983.14	6,724.40	30.87	39.13	46.57	-340.06	1,806.85	799.74	741.70	58.04	13.779			
7,100.00	6,980.95	7,029.17	6,768.49	30.99	39.41	52.55	-342.41	1,819.82	801.52	743.52	58.01	13.818			
7,150.00	7,026.35	7,073.78	6,811.24	31.09	39.68	57.36	-344.68	1,832.40	803.14	745.22	57.92	13.867			
7,200.00	7,070.29	7,116.77	6,852.42	31.19	39.94	61.39	-346.87	1,844.51	804.84	747.05	57.78	13.929			
7,250.00	7,112.57	7,157.91	6,891.84	31.26	40.18	64.89	-348.97	1,856.11	806.87	749.26	57.62	14.005			
7,300.00	7,152.98	7,197.18	6,929.47	31.32	40.42	67.98	-350.92	1,867.17	809.54	752.10	57.43	14.095			
7,350.00	7,191.33	7,237.05	6,967.74	31.37	40.65	70.78	-351.39	1,878.30	813.03	755.74	57.29	14.191			
7,400.00	7,227.42	7,278.46	7,007.51	31.41	40.88	73.35	-349.52	1,889.68	817.40	760.18	57.22	14.284			
7,450.00	7,261.09	7,321.69	7,048.90	31.44	41.10	75.75	-345.04	1,901.32	822.67	765.44	57.23	14.374			
7,500.00	7,292.16	7,367.08	7,092.05	31.45	41.32	78.03	-337.56	1,913.22	828.84	771.52	57.32	14.461			
7,550.00	7,320.49	7,415.04	7,137.12	31.45	41.54	80.23	-326.60	1,925.40	835.88	778.41	57.47	14.545			
7,600.00	7,345.94	7,466.10	7,184.27	31.44	41.74	82.39	-311.54	1,937.86	843.76	786.10	57.66	14.633			
7,650.00	7,368.38	7,520.88	7,233.66	31.43	41.94	84.53	-291.58	1,950.57	852.40	794.54	57.86	14.731			
7,700.00	7,387.71	7,580.22	7,285.42	31.40	42.13	86.68	-265.64	1,963.49	861.69	803.66	58.03	14.849			
7,750.00	7,403.82	7,645.11	7,339.56	31.37	42.31	88.88	-232.35	1,976.50	871.47	813.36	58.11	14.998			
7,800.00	7,416.65	7,716.81	7,395.85	31.34	42.48	91.16	-189.91	1,989.40	881.53	823.49	58.04	15.190			
7,850.00	7,426.13	7,796.83	7,453.63	31.30	42.62	93.52	-136.02	2,001.82	891.57	833.82	57.76	15.437			
7,900.00	7,432.22	7,886.91	7,511.46	31.25	42.75	95.98	-67.96	2,013.10	901.22	843.98	57.24	15.745			
7,950.00	7,434.87	7,988.85	7,566.58	31.21	42.83	98.49	17.20	2,022.23	909.98	853.47	56.51	16.103			
7,963.63	7,435.00	8,018.90	7,580.58	31.20	42.85	99.17	43.73	2,024.15	912.13	855.84	56.29	16.204			
8,000.00	7,435.00	8,104.98	7,614.66	31.17	42.88	101.24	122.63	2,027.68	916.90	861.16	55.74	16.450			
8,100.00	7,435.00	8,369.66	7,660.00	31.10	42.84	104.08	381.76	2,019.98	918.99	863.23	55.76	16.481			
8,200.00	7,435.00	8,469.42	7,660.00	31.08	42.81	104.18	481.20	2,011.97	912.29	855.82	56.47	16.156			
8,300.00	7,435.00	8,569.18	7,660.00	31.19	42.80	104.29	580.64	2,003.97	905.59	848.27	57.32	15.798			
8,400.00	7,435.00	8,668.94	7,660.00	31.60	42.80	104.40	680.08	1,995.97	898.90	840.56	58.34	15.408			
8,500.00	7,435.00	8,768.70	7,660.00	32.26	42.82	104.51	779.52	1,987.97	892.21	832.71	59.50	14.995			
8,600.00	7,435.00	8,868.46	7,660.00	33.03	42.86	104.62	878.95	1,979.97	885.52	824.72	60.80	14.564			
8,700.00	7,435.00	8,968.22	7,660.00	33.87	42.93	104.73	978.39	1,971.97	878.84	816.61	62.23	14.122			

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 4T-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 4T-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													Offset Site Error:	0.00 usft				
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft				
Reference													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	7,435.00	9,067.99	7,660.00	34.77	43.04	104.85	1,077.83	1,963.97	872.16	808.38	63.78	13.674						
8,900.00	7,435.00	9,167.75	7,660.00	35.71	43.19	104.97	1,177.27	1,955.97	865.48	800.04	65.45	13.224						
9,000.00	7,435.00	9,267.51	7,660.00	36.70	43.39	105.08	1,276.71	1,947.97	858.81	791.60	67.21	12.778						
9,100.00	7,435.00	9,367.27	7,660.00	37.73	43.68	105.21	1,376.15	1,939.97	852.14	783.07	69.07	12.338						
9,200.00	7,435.00	9,467.03	7,660.00	38.79	44.07	105.33	1,475.59	1,931.97	845.48	774.46	71.01	11.906						
9,300.00	7,435.00	9,566.79	7,660.00	39.89	44.58	105.45	1,575.03	1,923.97	838.82	765.78	73.04	11.485						
9,400.00	7,435.00	9,666.55	7,660.00	41.03	45.21	105.58	1,674.47	1,915.96	832.16	757.03	75.13	11.076						
9,500.00	7,435.00	9,766.31	7,660.00	42.19	45.98	105.71	1,773.91	1,907.96	825.51	748.21	77.30	10.680						
9,600.00	7,435.00	9,866.07	7,660.00	43.37	46.85	105.84	1,873.35	1,899.96	818.86	739.34	79.51	10.298						
9,700.00	7,435.00	9,944.52	7,660.00	44.59	47.61	105.92	1,951.62	1,894.73	813.52	731.64	81.88	9.936						
9,800.00	7,435.00	10,023.07	7,660.00	45.82	48.43	105.97	2,030.11	1,891.65	810.81	726.50	84.31	9.618						
9,852.66	7,435.00	10,064.47	7,660.00	46.48	48.88	105.97	2,071.50	1,890.89	810.44	724.83	85.61	9.467						
9,900.00	7,435.00	10,107.65	7,660.00	47.08	49.36	105.97	2,114.68	1,890.59	810.64	723.87	86.77	9.342						
10,000.00	7,435.00	10,207.65	7,660.00	48.35	50.50	105.96	2,214.68	1,890.01	811.15	721.92	89.23	9.090						
10,100.00	7,435.00	10,307.65	7,660.00	49.64	51.68	105.95	2,314.67	1,889.43	811.66	719.93	91.73	8.848						
10,200.00	7,435.00	10,407.64	7,660.00	50.95	52.88	105.94	2,414.67	1,888.85	812.18	717.91	94.27	8.616						
10,300.00	7,435.00	10,507.64	7,660.00	52.28	54.11	105.93	2,514.67	1,888.27	812.69	715.85	96.84	8.392						
10,400.00	7,435.00	10,607.64	7,660.00	53.62	55.37	105.92	2,614.66	1,887.68	813.20	713.76	99.44	8.178						
10,459.89	7,435.00	10,667.53	7,660.00	54.43	56.13	105.91	2,674.55	1,887.33	813.51	712.50	101.01	8.054						
10,500.00	7,435.00	10,707.64	7,660.00	54.97	56.64	105.91	2,714.66	1,887.10	813.45	711.39	102.06	7.970						
10,535.52	7,435.00	10,743.16	7,660.00	55.45	57.10	105.92	2,750.18	1,886.89	812.94	709.95	102.99	7.894						
10,600.00	7,435.00	10,807.62	7,660.00	56.32	57.93	105.95	2,814.64	1,886.52	811.63	706.97	104.66	7.755						
10,700.00	7,435.00	10,907.60	7,660.00	57.68	59.24	105.99	2,914.62	1,885.94	809.61	702.32	107.28	7.546						
10,800.00	7,435.00	11,007.58	7,660.00	59.05	60.56	106.03	3,014.59	1,885.36	807.58	697.66	109.92	7.347						
10,900.00	7,435.00	11,107.56	7,660.00	60.44	61.90	106.07	3,114.57	1,884.77	805.56	692.97	112.59	7.155						
11,000.00	7,435.00	11,207.53	7,660.00	61.83	63.25	106.12	3,214.55	1,884.19	803.53	688.27	115.27	6.971						
11,100.00	7,435.00	11,307.51	7,660.00	63.23	64.61	106.16	3,314.52	1,883.61	801.51	683.55	117.96	6.795						
11,200.00	7,435.00	11,407.49	7,660.00	64.63	65.98	106.20	3,414.50	1,883.03	799.49	678.81	120.68	6.625						
11,300.00	7,435.00	11,507.47	7,660.00	66.05	67.36	106.24	3,514.47	1,882.45	797.47	674.06	123.41	6.462						
11,400.00	7,435.00	11,607.44	7,660.00	67.47	68.76	106.28	3,614.45	1,881.86	795.44	669.30	126.15	6.306						
11,500.00	7,435.00	11,707.42	7,660.00	68.90	70.15	106.33	3,714.43	1,881.28	793.42	664.52	128.90	6.155						
11,600.00	7,435.00	11,807.40	7,660.00	70.33	71.56	106.37	3,814.40	1,880.70	791.40	659.73	131.67	6.011						
11,700.00	7,435.00	11,907.38	7,660.00	71.77	72.98	106.41	3,914.38	1,880.12	789.38	654.94	134.44	5.871						
11,800.00	7,435.00	12,007.36	7,660.00	73.22	74.40	106.46	4,014.35	1,879.54	787.36	650.13	137.23	5.738						
11,900.00	7,435.00	12,107.33	7,660.00	74.67	75.83	106.50	4,114.33	1,878.96	785.34	645.31	140.03	5.609						
12,000.00	7,435.00	12,207.31	7,660.00	76.13	77.27	106.54	4,214.31	1,878.37	783.32	640.49	142.83	5.484						
12,046.42	7,435.00	12,243.21	7,660.00	76.69	77.78	106.56	4,250.21	1,878.16	782.46	638.37	144.09	5.430 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 4T-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 4T-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													Offset Site Error:	0.00 usft
Survey Program: 5000-MWD+HDGM													Offset Well Error:	0.00 usft
Reference				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	-4.21	1,422.96	-104.63	1,427.54					
100.00	100.00	54.00	54.00	0.14	0.10	-4.21	1,422.96	-104.63	1,426.80	1,426.57	0.23	6,080.195		
200.00	200.00	154.00	154.00	0.50	0.28	-4.21	1,422.96	-104.63	1,426.80	1,426.03	0.77	1,847.899		
300.00	300.00	254.00	254.00	0.85	0.45	-4.21	1,422.96	-104.63	1,426.80	1,425.49	1.31	1,089.513		
400.00	400.00	354.00	354.00	1.21	0.63	-4.21	1,422.96	-104.63	1,426.80	1,424.95	1.85	772.482		
500.00	500.00	454.00	454.00	1.57	0.81	-4.21	1,422.96	-104.63	1,426.80	1,424.42	2.38	598.367	CC, ES	
600.00	599.98	553.98	553.98	1.92	0.99	-122.42	1,422.96	-104.63	1,427.74	1,424.82	2.91	490.586		
700.00	699.84	653.84	653.84	2.26	1.17	-122.55	1,422.96	-104.63	1,430.55	1,427.12	3.43	416.847		
800.00	799.45	753.45	753.45	2.61	1.35	-122.77	1,422.96	-104.63	1,435.27	1,431.30	3.96	362.218		
900.00	898.70	852.70	852.70	2.98	1.53	-123.06	1,422.96	-104.63	1,441.92	1,437.42	4.50	320.215		
1,000.00	997.47	951.47	951.47	3.37	1.70	-123.43	1,422.96	-104.63	1,450.57	1,445.52	5.06	286.923		
1,050.28	1,046.90	1,000.90	1,000.90	3.57	1.79	-123.64	1,422.96	-104.63	1,455.70	1,450.36	5.34	272.620		
1,100.00	1,095.71	1,049.71	1,049.71	3.77	1.88	-123.95	1,422.96	-104.63	1,461.04	1,455.42	5.62	259.875		
1,200.00	1,193.87	1,147.87	1,147.87	4.19	2.05	-124.55	1,422.96	-104.63	1,471.92	1,465.73	6.19	237.619		
1,300.00	1,292.03	1,246.03	1,246.03	4.62	2.23	-125.15	1,422.96	-104.63	1,482.97	1,476.20	6.77	218.968		
1,400.00	1,390.19	1,344.19	1,344.19	5.06	2.41	-125.75	1,422.96	-104.63	1,494.18	1,486.83	7.35	203.167	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 4T-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 4T-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													Offset Site Error:	0.00 usft			
Survey Program: 100- GyroFlex													Offset Well Error:		0.00 usft		
Reference													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	45.64	859.07	878.50	1,230.14								
100.00	100.00	41.20	41.20	0.14	0.03	45.64	859.06	878.51	1,228.72	1,228.57	0.15	7,954.950					
200.00	200.00	141.15	141.15	0.50	0.09	45.65	858.98	878.55	1,228.69	1,228.12	0.57	2,165.069					
218.48	218.48	159.47	159.47	0.56	0.10	45.64	858.99	878.53	1,228.69	1,228.04	0.65	1,901.830					
300.00	300.00	240.08	240.08	0.85	0.15	45.63	859.16	878.41	1,228.72	1,227.73	0.99	1,240.481					
400.00	400.00	338.91	338.91	1.21	0.24	45.62	859.44	878.30	1,228.84	1,227.42	1.42	864.441					
500.00	500.00	437.94	437.94	1.57	0.36	45.61	859.75	878.29	1,229.05	1,227.17	1.88	655.260					
600.00	599.98	539.44	539.44	1.92	0.48	-72.65	860.00	878.40	1,228.78	1,226.46	2.32	529.168					
700.00	699.84	641.96	641.96	2.26	0.59	-72.93	860.14	878.17	1,227.17	1,224.44	2.73	449.135					
800.00	799.45	740.28	740.27	2.61	0.72	-73.40	860.63	877.66	1,224.61	1,221.48	3.14	390.385					
900.00	898.70	840.27	840.26	2.98	0.86	-74.05	861.10	877.19	1,221.18	1,217.61	3.57	342.076					
1,000.00	997.47	940.04	940.03	3.37	1.01	-74.88	861.71	876.39	1,216.83	1,212.81	4.02	302.758					
1,050.28	1,046.90	989.16	989.14	3.57	1.08	-75.37	862.07	875.92	1,214.38	1,210.13	4.25	285.564					
1,100.00	1,095.71	1,037.98	1,037.96	3.77	1.15	-75.82	862.45	875.44	1,211.92	1,207.44	4.49	269.968					
1,200.00	1,193.87	1,137.81	1,137.79	4.19	1.30	-76.76	863.28	874.33	1,207.18	1,202.21	4.97	242.677					
1,300.00	1,292.03	1,238.01	1,237.97	4.62	1.44	-77.73	864.06	872.86	1,202.51	1,197.04	5.47	219.915					
1,400.00	1,390.19	1,334.92	1,334.86	5.06	1.59	-78.68	864.97	871.24	1,198.17	1,192.20	5.97	200.764					
1,500.00	1,488.35	1,432.13	1,432.05	5.50	1.73	-79.65	866.06	869.51	1,194.25	1,187.77	6.48	184.391					
1,600.00	1,586.51	1,529.36	1,529.25	5.94	1.88	-80.63	867.27	867.65	1,190.71	1,183.72	6.99	170.301					
1,700.00	1,684.67	1,625.31	1,625.18	6.39	2.03	-81.61	868.63	865.79	1,187.67	1,180.15	7.51	158.103					
1,800.00	1,782.83	1,722.99	1,722.83	6.84	2.18	-82.62	870.11	863.92	1,185.09	1,177.06	8.04	147.433					
1,900.00	1,880.99	1,823.40	1,823.21	7.29	2.33	-83.65	871.42	862.01	1,182.74	1,174.17	8.57	138.042					
2,000.00	1,979.16	1,921.66	1,921.45	7.75	2.48	-84.65	872.43	860.33	1,180.65	1,171.55	9.10	129.782					
2,100.00	2,077.32	2,019.67	2,019.44	8.20	2.63	-85.63	873.27	858.85	1,178.88	1,169.25	9.63	122.446					
2,200.00	2,175.48	2,116.15	2,115.91	8.66	2.78	-86.60	874.08	857.51	1,177.54	1,167.38	10.16	115.892					
2,300.00	2,273.64	2,214.01	2,213.76	9.12	2.93	-87.58	874.95	856.26	1,176.66	1,165.96	10.70	109.990					
2,400.00	2,371.80	2,318.28	2,318.02	9.58	3.09	-88.63	875.55	854.78	1,175.80	1,164.56	11.23	104.669					
2,500.00	2,469.96	2,418.39	2,418.12	10.04	3.22	-89.63	875.78	853.27	1,174.95	1,163.19	11.76	99.923					
2,600.00	2,568.12	2,517.14	2,516.85	10.50	3.36	-90.60	875.81	851.91	1,174.35	1,162.07	12.28	95.633					
2,700.00	2,666.28	2,616.10	2,615.81	10.96	3.48	-91.58	875.71	850.50	1,173.98	1,161.18	12.80	91.715					
2,728.73	2,694.48	2,643.00	2,642.70	11.09	3.52	-91.85	875.71	850.11	1,173.95	1,161.00	12.95	90.651					
2,800.00	2,764.44	2,710.98	2,710.68	11.42	3.61	-92.53	875.81	849.14	1,174.12	1,160.80	13.32	88.135					
2,900.00	2,862.60	2,815.39	2,815.07	11.88	3.75	-93.57	875.69	847.53	1,174.38	1,160.53	13.85	84.810					
3,000.00	2,960.76	2,911.34	2,911.01	12.34	3.87	-94.52	875.47	845.91	1,174.84	1,160.47	14.37	81.782					
3,100.00	3,058.92	3,004.45	3,004.11	12.80	4.01	-95.46	875.61	844.25	1,175.95	1,161.07	14.89	78.994					
3,200.00	3,157.09	3,101.44	3,101.07	13.27	4.15	-96.45	876.04	842.41	1,177.66	1,162.24	15.41	76.402					
3,300.00	3,255.25	3,199.56	3,199.17	13.73	4.30	-97.45	876.55	840.39	1,179.75	1,163.81	15.94	74.000					
3,400.00	3,353.41	3,299.51	3,299.10	14.19	4.45	-98.47	877.01	838.19	1,182.12	1,165.65	16.47	71.769					
3,500.00	3,451.57	3,396.08	3,395.64	14.66	4.60	-99.46	877.43	836.02	1,184.81	1,167.82	17.00	69.711					
3,600.00	3,549.73	3,492.68	3,492.22	15.12	4.74	-100.44	877.91	833.94	1,187.97	1,170.45	17.52	67.800					
3,700.00	3,647.89	3,588.49	3,588.01	15.58	4.89	-101.40	878.47	832.01	1,191.63	1,173.58	18.05	66.025					
3,800.00	3,746.05	3,687.87	3,687.36	16.05	5.04	-102.40	879.14	829.82	1,195.67	1,177.09	18.58	64.358					
3,900.00	3,844.21	3,789.91	3,789.36	16.51	5.20	-103.44	879.70	827.07	1,199.84	1,180.73	19.11	62.795					
4,000.00	3,942.37	3,886.48	3,885.88	16.98	5.34	-104.43	880.13	824.13	1,204.21	1,184.58	19.63	61.351					
4,100.00	4,040.53	3,979.88	3,979.24	17.44	5.49	-105.38	880.76	821.32	1,209.18	1,189.03	20.15	60.013					
4,200.00	4,138.69	4,073.48	4,072.80	17.90	5.63	-106.33	881.68	818.69	1,214.88	1,194.20	20.67	58.764					
4,300.00	4,236.85	4,168.19	4,167.47	18.37	5.78	-107.26	882.85	816.27	1,221.22	1,200.01	21.21	57.589					
4,400.00	4,335.02	4,262.42	4,261.68	18.83	5.92	-108.17	884.17	814.19	1,228.14	1,206.39	21.74	56.486					
4,500.00	4,433.18	4,356.64	4,355.86	19.30	6.07	-109.07	885.78	812.08	1,235.69	1,213.40	22.29	55.447					
4,600.00	4,531.34	4,453.05	4,452.23	19.76	6.21	-109.97	887.57	810.33	1,243.77	1,220.93	22.84	54.458					
4,700.00	4,629.50	4,547.82	4,546.97	20.23	6.35	-110.84	889.42	808.46	1,252.25	1,228.86	23.39	53.530					
4,800.00	4,727.66	4,643.74	4,642.85	20.69	6.49	-111.71	891.58	806.78	1,261.37	1,237.41	23.95	52.658					

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 100- GyroFlex													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)					
4,900.00	4,825.82	4,740.63	4,739.69	21.16	6.63	-112.58	893.71	804.85	1,270.71	1,246.19	24.52	51.826			
5,000.00	4,923.98	4,833.95	4,832.97	21.62	6.77	-113.40	896.04	803.26	1,280.66	1,255.59	25.08	51.064			
5,100.00	5,022.14	4,933.56	4,932.54	22.09	6.91	-114.26	898.67	801.64	1,291.05	1,265.40	25.66	50.316			
5,200.00	5,120.30	5,036.71	5,035.65	22.55	7.06	-115.14	900.90	799.91	1,301.25	1,275.00	26.24	49.582			
5,300.00	5,218.46	5,133.11	5,132.01	23.02	7.20	-115.94	902.92	798.31	1,311.66	1,284.85	26.81	48.919			
5,400.00	5,316.62	5,230.36	5,229.22	23.48	7.34	-116.74	905.02	796.70	1,322.41	1,295.02	27.38	48.290			
5,500.00	5,414.78	5,327.64	5,326.47	23.95	7.48	-117.52	907.14	795.24	1,333.43	1,305.47	27.96	47.692			
5,600.00	5,512.95	5,425.19	5,423.98	24.41	7.62	-118.28	909.31	794.10	1,344.75	1,316.21	28.54	47.121			
5,700.00	5,611.11	5,525.64	5,524.41	24.88	7.76	-119.05	911.43	792.81	1,356.20	1,327.07	29.12	46.566			
5,800.00	5,709.27	5,625.95	5,624.69	25.35	7.91	-119.81	913.34	791.51	1,367.67	1,337.96	29.71	46.040			
5,900.00	5,807.43	5,725.05	5,723.76	25.81	8.05	-120.54	915.10	790.23	1,379.24	1,348.96	30.28	45.546			
6,000.00	5,905.59	5,823.23	5,821.92	26.28	8.20	-121.27	916.73	788.86	1,390.94	1,360.09	30.85	45.082			
6,100.00	6,003.75	5,917.40	5,916.07	26.74	8.34	-121.94	918.46	787.69	1,403.01	1,371.59	31.42	44.659			
6,200.00	6,101.91	6,012.67	6,011.32	27.21	8.47	-122.60	920.43	786.75	1,415.50	1,383.51	31.99	44.253			
6,300.00	6,200.07	6,109.44	6,108.05	27.67	8.60	-123.26	922.56	785.91	1,428.30	1,395.74	32.56	43.863			
6,400.00	6,298.23	6,209.12	6,207.71	28.14	8.74	-123.93	924.71	784.92	1,441.27	1,408.12	33.15	43.483			
6,500.00	6,396.39	6,308.83	6,307.39	28.61	8.88	-124.58	926.72	783.96	1,454.27	1,420.54	33.73	43.118			
6,600.00	6,494.55	6,404.62	6,403.16	29.07	9.01	-125.19	928.70	783.30	1,467.48	1,433.18	34.30	42.786			
6,700.00	6,592.71	6,500.00	6,498.52	29.54	9.13	-125.78	930.79	782.79	1,480.95	1,446.08	34.87	42.474			
6,772.64	6,664.02	6,570.14	6,568.64	29.88	9.22	-126.21	932.39	782.33	1,490.92	1,455.64	35.28	42.258			
6,800.00	6,690.92	6,596.06	6,594.55	30.00	9.25	-115.53	933.00	782.11	1,494.22	1,458.78	35.43	42.168			
6,850.00	6,740.19	6,645.36	6,643.84	30.21	9.32	-92.93	934.18	781.66	1,497.62	1,461.90	35.72	41.928			
6,900.00	6,789.40	6,694.87	6,693.32	30.41	9.39	-71.92	935.35	781.23	1,497.62	1,461.62	36.00	41.602			
6,950.00	6,838.32	6,744.62	6,743.06	30.58	9.46	-56.72	936.52	780.83	1,494.21	1,457.93	36.27	41.195			
7,000.00	6,886.71	6,793.98	6,792.40	30.73	9.52	-46.79	937.67	780.50	1,487.40	1,450.86	36.54	40.710			
7,050.00	6,934.33	6,841.58	6,839.99	30.87	9.59	-40.36	938.75	780.15	1,477.26	1,440.47	36.79	40.157			
7,100.00	6,980.95	6,888.06	6,886.46	30.99	9.66	-36.15	939.80	779.65	1,463.87	1,426.84	37.03	39.535			
7,150.00	7,026.35	6,932.68	6,931.07	31.09	9.72	-33.38	940.79	779.03	1,447.31	1,410.06	37.25	38.851			
7,200.00	7,070.29	6,975.72	6,974.08	31.19	9.79	-31.61	941.77	778.34	1,427.71	1,390.24	37.47	38.104			
7,250.00	7,112.57	7,019.11	7,017.46	31.26	9.85	-30.62	942.77	777.56	1,405.15	1,367.47	37.68	37.292			
7,300.00	7,152.98	7,063.18	7,061.51	31.32	9.92	-30.27	943.70	776.77	1,379.66	1,341.77	37.89	36.413			
7,350.00	7,191.33	7,104.25	7,102.57	31.37	9.98	-30.43	944.48	776.06	1,351.37	1,313.28	38.08	35.483			
7,400.00	7,227.42	7,138.02	7,136.32	31.41	10.04	-30.98	945.14	775.46	1,320.53	1,282.28	38.25	34.521			
7,450.00	7,261.09	7,169.71	7,168.01	31.44	10.08	-32.01	945.81	774.88	1,287.38	1,248.97	38.41	33.515			
7,500.00	7,292.16	7,200.00	7,198.28	31.45	10.13	-33.56	946.52	774.30	1,252.07	1,213.50	38.57	32.465			
7,550.00	7,320.49	7,227.84	7,226.11	31.45	10.17	-35.67	947.20	773.76	1,214.76	1,176.04	38.71	31.377			
7,600.00	7,345.94	7,253.80	7,252.05	31.44	10.21	-38.45	947.84	773.24	1,175.63	1,136.77	38.86	30.254			
7,650.00	7,368.38	7,276.89	7,275.13	31.43	10.25	-41.99	948.42	772.79	1,134.88	1,095.88	39.00	29.102			
7,700.00	7,387.71	7,296.99	7,295.22	31.40	10.28	-46.41	948.93	772.39	1,092.74	1,053.61	39.13	27.925			
7,750.00	7,403.82	7,313.64	7,311.86	31.37	10.31	-51.80	949.36	772.05	1,049.43	1,010.17	39.26	26.731			
7,800.00	7,416.65	7,327.15	7,325.37	31.34	10.33	-58.27	949.72	771.78	1,005.19	965.81	39.39	25.521			
7,850.00	7,426.13	7,337.53	7,335.74	31.30	10.34	-65.79	949.99	771.57	960.27	920.75	39.51	24.302			
7,900.00	7,432.22	7,344.68	7,342.89	31.25	10.35	-74.16	950.19	771.43	914.90	875.26	39.64	23.078			
7,950.00	7,434.87	7,348.58	7,346.78	31.21	10.36	-82.95	950.30	771.35	869.35	829.57	39.78	21.855			
7,963.63	7,435.00	7,349.07	7,347.27	31.20	10.36	-85.35	950.31	771.34	856.93	817.12	39.82	21.522			
8,000.00	7,435.00	7,350.05	7,348.25	31.17	10.36	-85.51	950.34	771.32	823.95	784.03	39.92	20.640			
8,100.00	7,435.00	7,352.76	7,350.96	31.10	10.37	-85.94	950.41	771.27	734.89	694.64	40.25	18.257			
8,200.00	7,435.00	7,355.50	7,353.70	31.08	10.37	-86.39	950.49	771.21	649.03	608.36	40.67	15.960			
8,300.00	7,435.00	7,358.25	7,356.45	31.19	10.37	-86.83	950.57	771.16	567.79	526.62	41.18	13.790			
8,400.00	7,435.00	7,361.03	7,359.23	31.60	10.38	-87.28	950.64	771.10	493.48	451.70	41.78	11.812			
8,500.00	7,435.00	7,363.83	7,362.03	32.26	10.38	-87.74	950.72	771.04	429.70	387.29	42.41	10.133			
8,600.00	7,435.00	7,366.66	7,364.85	33.03	10.39	-88.19	950.80	770.99	381.76	338.93	42.83	8.914			

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 100- GyroFlex													Offset Well Error:	0.00 usft	
Reference				Offset			Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
8,700.00	7,435.00	7,369.50	7,367.70	33.87	10.39	-88.65	950.88	770.93	356.13	313.51	42.62	8.356 SF			
8,744.64	7,435.00	7,370.78	7,368.97	34.27	10.39	-88.86	950.92	770.90	353.32	311.09	42.23	8.366 CC, ES			
8,800.00	7,435.00	7,372.38	7,370.57	34.77	10.40	-89.12	950.97	770.87	357.63	316.13	41.50	8.617			
8,900.00	7,435.00	7,375.27	7,373.46	35.71	10.40	-89.59	951.05	770.81	385.94	346.08	39.86	9.682			
9,000.00	7,435.00	7,378.19	7,376.38	36.70	10.40	-90.06	951.13	770.75	435.88	397.47	38.40	11.350			
9,100.00	7,435.00	7,381.14	7,379.32	37.73	10.41	-90.54	951.22	770.70	501.01	463.54	37.47	13.370			
9,200.00	7,435.00	7,384.10	7,382.29	38.79	10.41	-91.02	951.30	770.64	576.20	539.21	36.99	15.576			
9,300.00	7,435.00	7,387.10	7,385.28	39.89	10.42	-91.50	951.39	770.57	658.02	621.24	36.79	17.887			
9,400.00	7,435.00	7,390.12	7,388.30	41.03	10.42	-91.99	951.48	770.51	744.29	707.56	36.72	20.267			
9,500.00	7,435.00	7,393.16	7,391.34	42.19	10.43	-92.49	951.57	770.45	833.61	796.88	36.73	22.696			
9,600.00	7,435.00	7,396.24	7,394.41	43.37	10.43	-92.98	951.66	770.39	925.12	888.35	36.77	25.160			
9,700.00	7,435.00	7,399.33	7,397.51	44.59	10.44	-93.48	951.75	770.33	1,018.21	981.39	36.83	27.649			
9,800.00	7,435.00	7,402.28	7,400.45	45.82	10.44	-93.95	951.84	770.27	1,112.50	1,075.61	36.89	30.157			
9,900.00	7,435.00	7,405.16	7,403.33	47.08	10.45	-94.42	951.92	770.21	1,207.70	1,170.74	36.96	32.680			
10,000.00	7,435.00	7,408.02	7,406.19	48.35	10.45	-94.88	952.01	770.15	1,303.61	1,266.58	37.02	35.212			
10,100.00	7,435.00	7,410.86	7,409.02	49.64	10.45	-95.33	952.09	770.10	1,400.08	1,363.00	37.09	37.752			
10,200.00	7,435.00	7,413.68	7,411.84	50.95	10.46	-95.78	952.17	770.04	1,497.02	1,459.87	37.15	40.297			

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 153-MWD+HDGM													Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor			
11,800.00	7,435.00	7,567.33	7,432.13	73.22	33.10	130.35	5,494.90	1,220.20	1,489.33	1,425.24	64.09	23.239			
11,900.00	7,435.00	7,562.93	7,427.74	74.67	33.09	128.33	5,495.09	1,220.12	1,389.54	1,325.47	64.07	21.688			
12,000.00	7,435.00	7,558.55	7,423.36	76.13	33.08	126.18	5,495.28	1,220.04	1,289.78	1,225.73	64.05	20.138			
12,046.42	7,435.00	7,556.52	7,421.34	76.69	33.07	125.15	5,495.37	1,220.00	1,243.47	1,178.71	64.76	19.202	CC, ES, SF		

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													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	7,435.00	7,499.39	7,360.39	64.63	30.68	-88.69	4,785.98	717.28	1,432.39	1,366.29	66.10	21.670						
11,300.00	7,435.00	7,501.37	7,362.36	66.05	30.69	-88.96	4,786.02	717.36	1,337.09	1,270.01	67.07	19.934						
11,400.00	7,435.00	7,503.31	7,364.30	67.47	30.70	-89.22	4,786.06	717.43	1,242.52	1,174.28	68.23	18.210						
11,500.00	7,435.00	7,505.22	7,366.21	68.90	30.70	-89.48	4,786.09	717.51	1,148.86	1,079.24	69.62	16.501						
11,600.00	7,435.00	7,507.10	7,368.09	70.33	30.71	-89.74	4,786.13	717.58	1,056.37	985.06	71.30	14.815						
11,700.00	7,435.00	7,508.96	7,369.95	71.77	30.71	-89.99	4,786.16	717.66	965.37	892.01	73.36	13.160						
11,800.00	7,435.00	7,510.78	7,371.77	73.22	30.72	-90.24	4,786.19	717.73	876.33	800.44	75.88	11.549						
11,900.00	7,435.00	7,512.58	7,373.57	74.67	30.72	-90.49	4,786.22	717.80	789.91	710.90	79.00	9.998						
12,000.00	7,435.00	7,514.35	7,375.34	76.13	30.73	-90.73	4,786.26	717.86	707.08	624.20	82.87	8.532						
12,046.42	7,435.00	7,515.17	7,376.15	76.69	30.73	-90.84	4,786.27	717.89	670.21	584.98	85.23	7.864	CC, ES, SF					

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft		
Survey Program: 926-Geolink MWD													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)						
0.00	0.00	0.00	0.00	0.00	0.00	46.74	224.84	238.94	328.70							
100.00	100.00	80.64	80.64	0.14	0.14	46.74	224.79	238.88	328.01	327.74	0.28	1,184.189				
200.00	200.00	181.45	181.45	0.50	0.32	46.74	224.58	238.63	327.69	326.88	0.81	405.181				
300.00	300.00	282.25	282.25	0.85	0.50	46.74	224.20	238.20	327.13	325.78	1.34	244.022				
400.00	400.00	383.06	383.05	1.21	0.67	46.73	223.65	237.59	326.31	324.44	1.87	174.282				
500.00	500.00	483.86	483.84	1.57	0.85	46.72	222.94	236.79	325.25	322.85	2.40	135.294				
600.00	599.98	584.62	584.60	1.92	1.03	-71.79	222.07	235.80	323.39	320.47	2.92	110.608				
700.00	699.84	685.23	685.20	2.26	1.21	-72.75	221.03	234.63	320.24	316.80	3.44	93.118				
800.00	799.45	785.55	785.50	2.61	1.38	-74.37	219.83	233.27	315.96	312.00	3.96	79.698				
900.00	898.70	885.46	885.39	2.98	1.56	-76.66	218.48	231.74	310.84	306.34	4.50	69.034				
1,000.00	997.47	981.41	981.31	3.37	1.73	-79.66	217.62	229.85	305.62	300.57	5.06	60.458				
1,050.28	1,046.90	1,026.80	1,026.68	3.57	1.81	-81.50	218.25	228.49	303.73	298.39	5.34	56.884				
1,100.00	1,095.71	1,069.13	1,068.98	3.77	1.88	-83.32	219.60	227.44	303.03	297.40	5.62	53.894				
1,100.07	1,095.78	1,069.19	1,069.04	3.77	1.88	-83.32	219.60	227.44	303.03	297.40	5.62	53.890 CC, ES				
1,200.00	1,193.87	1,154.65	1,154.33	4.19	2.02	-87.07	224.73	226.28	305.81	299.60	6.21	49.267				
1,300.00	1,292.03	1,241.61	1,240.87	4.62	2.17	-90.96	233.15	225.82	313.90	307.11	6.79	46.237				
1,400.00	1,390.19	1,330.25	1,328.85	5.06	2.35	-94.74	243.97	226.22	326.42	319.05	7.37	44.269				
1,500.00	1,488.35	1,416.41	1,414.02	5.50	2.54	-98.37	256.94	226.11	343.04	335.10	7.94	43.216				
1,600.00	1,586.51	1,504.81	1,500.99	5.94	2.77	-101.88	272.74	226.04	363.87	355.38	8.49	42.844				
1,700.00	1,684.67	1,590.15	1,584.66	6.39	3.02	-105.08	289.52	225.34	387.74	378.72	9.02	42.983				
1,800.00	1,782.83	1,673.09	1,665.43	6.84	3.30	-108.04	308.34	223.76	415.62	406.10	9.52	43.663				
1,900.00	1,880.99	1,759.75	1,749.35	7.29	3.63	-110.88	329.81	221.52	446.64	436.62	10.02	44.568				
2,000.00	1,979.16	1,843.80	1,830.50	7.75	3.98	-113.38	351.51	218.91	479.74	469.24	10.50	45.694				
2,100.00	2,077.32	1,927.22	1,910.55	8.20	4.35	-115.61	374.79	215.95	515.66	504.70	10.96	47.030				
2,200.00	2,175.48	2,013.10	1,992.74	8.66	4.75	-117.70	399.43	212.38	553.14	541.69	11.44	48.334				
2,300.00	2,273.64	2,092.13	2,068.02	9.12	5.16	-119.57	422.99	207.32	592.51	580.64	11.87	49.909				
2,400.00	2,371.80	2,170.45	2,142.00	9.58	5.58	-121.32	447.94	201.20	634.55	622.27	12.29	51.637				
2,500.00	2,469.96	2,264.02	2,230.43	10.04	6.09	-123.07	477.88	194.95	677.16	664.34	12.82	52.826				
2,600.00	2,568.12	2,352.76	2,314.35	10.50	6.57	-124.36	506.45	191.04	720.01	706.69	13.32	54.047				
2,700.00	2,666.28	2,442.35	2,399.10	10.96	7.07	-125.60	535.06	186.09	763.09	749.26	13.83	55.162				
2,800.00	2,764.44	2,530.25	2,482.26	11.42	7.57	-126.73	563.07	180.82	806.46	792.12	14.34	56.254				
2,900.00	2,862.60	2,614.67	2,562.03	11.88	8.05	-127.71	590.18	175.58	850.34	835.53	14.82	57.392				
3,000.00	2,960.76	2,695.71	2,638.41	12.34	8.53	-128.58	616.73	170.33	895.09	879.81	15.28	58.595				
3,100.00	3,058.92	2,779.01	2,716.68	12.80	9.03	-129.36	644.78	165.15	940.77	925.01	15.76	59.704				
3,200.00	3,157.09	2,874.28	2,806.30	13.27	9.59	-130.21	676.45	158.78	986.32	970.00	16.33	60.403				
3,300.00	3,255.25	2,970.28	2,896.81	13.73	10.15	-131.00	707.81	152.33	1,031.52	1,014.61	16.91	61.006				
3,400.00	3,353.41	3,068.24	2,989.50	14.19	10.71	-131.77	738.76	145.46	1,075.92	1,058.41	17.50	61.474				
3,500.00	3,451.57	3,160.48	3,076.92	14.66	11.24	-132.42	767.51	139.21	1,120.01	1,101.95	18.06	62.022				
3,600.00	3,549.73	3,261.17	3,172.50	15.12	11.80	-133.07	798.50	132.67	1,163.78	1,145.11	18.68	62.316				
3,700.00	3,647.89	3,365.23	3,300.78	15.58	12.48	-133.91	836.43	124.11	1,205.38	1,185.87	19.51	61.787				
3,800.00	3,746.05	3,509.17	3,410.65	16.05	13.03	-134.53	866.05	118.13	1,244.68	1,224.47	20.20	61.605				
3,900.00	3,844.21	3,618.39	3,516.46	16.51	13.53	-135.10	892.58	112.83	1,282.37	1,261.50	20.87	61.448				
4,000.00	3,942.37	3,716.98	3,612.13	16.98	13.98	-135.54	916.08	109.17	1,319.39	1,297.91	21.48	61.436				
4,100.00	4,040.53	3,806.00	3,698.47	17.44	14.39	-135.87	937.61	106.63	1,356.50	1,334.47	22.03	61.572				
4,200.00	4,138.69	3,884.94	3,774.88	17.90	14.76	-136.13	957.37	104.82	1,394.22	1,371.69	22.53	61.885				
4,300.00	4,236.85	3,967.98	3,855.08	18.37	15.16	-136.36	978.85	103.22	1,432.62	1,409.56	23.05	62.141				
4,400.00	4,335.02	4,038.05	3,922.56	18.83	15.52	-136.55	997.61	101.70	1,471.96	1,448.46	23.49	62.650				
8,400.00	7,435.00	7,593.59	7,409.99	31.60	27.10	-89.74	1,560.86	-4.44	1,478.54	1,427.00	51.54	28.688				
8,500.00	7,435.00	7,594.49	7,410.88	32.26	27.10	-89.79	1,560.86	-4.44	1,415.43	1,362.51	52.92	26.745				
8,600.00	7,435.00	7,595.38	7,411.78	33.03	27.10	-89.84	1,560.87	-4.44	1,356.76	1,302.32	54.44	24.920				
8,700.00	7,435.00	7,596.28	7,412.68	33.87	27.10	-89.88	1,560.88	-4.44	1,303.14	1,247.05	56.09	23.233				
8,800.00	7,435.00	7,597.18	7,413.58	34.77	27.11	-89.93	1,560.89	-4.43	1,255.20	1,197.37	57.83	21.705				

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 4T-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 4T-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													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			
8,900.00	7,435.00	7,598.09	7,414.48	35.71	27.11	-89.97	1,560.90	-4.43	1,213.62	1,153.99	59.63	20.354			
9,000.00	7,435.00	7,599.00	7,415.39	36.70	27.11	-90.02	1,560.91	-4.43	1,179.08	1,117.65	61.42	19.195			
9,100.00	7,435.00	7,599.91	7,416.30	37.73	27.11	-90.07	1,560.92	-4.42	1,152.20	1,089.05	63.16	18.243			
9,200.00	7,435.00	7,600.82	7,417.22	38.79	27.11	-90.11	1,560.92	-4.42	1,133.55	1,068.79	64.75	17.506			
9,300.00	7,435.00	7,601.74	7,418.13	39.89	27.11	-90.16	1,560.93	-4.42	1,123.51	1,057.38	66.13	16.989			
9,363.27	7,435.00	7,602.32	7,418.71	40.61	27.11	-90.19	1,560.94	-4.42	1,121.73	1,054.85	66.87	16.774			
9,400.00	7,435.00	7,602.66	7,419.05	41.03	27.11	-90.21	1,560.94	-4.42	1,122.33	1,055.09	67.24	16.691			
9,500.00	7,435.00	7,603.58	7,419.98	42.19	27.11	-90.25	1,560.95	-4.41	1,130.03	1,061.99	68.04	16.608 SF			
9,600.00	7,435.00	7,604.51	7,420.90	43.37	27.11	-90.30	1,560.96	-4.41	1,146.43	1,077.92	68.51	16.733			
9,700.00	7,435.00	7,605.43	7,421.83	44.59	27.11	-90.35	1,560.97	-4.41	1,171.17	1,102.50	68.67	17.055			
9,800.00	7,435.00	7,606.36	7,422.76	45.82	27.11	-90.40	1,560.98	-4.40	1,203.74	1,135.19	68.55	17.560			
9,900.00	7,435.00	7,607.30	7,423.69	47.08	27.12	-90.44	1,560.98	-4.40	1,243.51	1,175.32	68.19	18.236			
10,000.00	7,435.00	7,608.24	7,424.63	48.35	27.12	-90.49	1,560.99	-4.40	1,289.83	1,222.18	67.65	19.067			
10,100.00	7,435.00	7,609.18	7,425.57	49.64	27.12	-90.54	1,561.00	-4.39	1,342.01	1,275.04	66.97	20.039			
10,200.00	7,435.00	7,610.12	7,426.52	50.95	27.12	-90.59	1,561.01	-4.39	1,399.40	1,333.20	66.20	21.138			
10,300.00	7,435.00	7,611.07	7,427.46	52.28	27.12	-90.64	1,561.02	-4.39	1,461.39	1,396.00	65.38	22.351			

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 4T-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 4T-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				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)				
0.00	0.00	0.00	0.00	0.00	0.00	47.83	224.50	247.89	335.03					
100.00	100.00	78.56	78.56	0.14	0.12	47.86	224.52	248.10	334.61	334.35	0.26	1,298.984		
200.00	200.00	178.01	178.00	0.50	0.29	47.95	224.49	248.86	335.16	334.38	0.78	428.202		
300.00	300.00	279.40	279.39	0.85	0.46	48.11	224.10	249.81	335.59	334.28	1.32	254.657		
400.00	400.00	380.32	380.30	1.21	0.64	48.28	223.33	250.53	335.62	333.77	1.85	181.096		
500.00	500.00	480.23	480.21	1.57	0.81	48.45	222.56	251.10	335.53	333.15	2.39	140.580		
600.00	599.98	579.71	579.69	1.92	0.99	-69.89	222.03	251.62	334.97	332.06	2.91	115.220		
700.00	699.84	679.96	679.94	2.26	1.16	-70.67	221.62	252.00	333.21	329.78	3.42	97.300		
800.00	799.45	779.52	779.50	2.61	1.34	-72.11	221.42	252.15	330.39	326.44	3.95	83.622		
900.00	898.70	879.06	879.03	2.98	1.51	-74.20	221.37	252.13	326.78	322.29	4.49	72.771		
1,000.00	997.47	978.49	978.47	3.37	1.68	-77.01	221.51	251.72	322.66	317.62	5.05	63.919		
1,050.28	1,046.90	1,028.34	1,028.31	3.57	1.77	-78.66	221.46	251.47	320.50	315.16	5.34	60.054		
1,100.00	1,095.71	1,077.04	1,077.02	3.77	1.86	-80.33	221.42	251.19	318.52	312.89	5.63	56.613		
1,200.00	1,193.87	1,175.42	1,175.39	4.19	2.03	-83.82	221.49	250.37	315.40	309.18	6.22	50.721		
1,300.00	1,292.03	1,272.21	1,272.17	4.62	2.19	-87.38	221.84	249.26	313.59	306.77	6.82	46.002		
1,362.44	1,353.32	1,332.97	1,332.93	4.89	2.30	-89.63	222.23	248.63	313.30	306.11	7.19	43.546 CC		
1,400.00	1,390.19	1,369.58	1,369.54	5.06	2.36	-90.99	222.49	248.27	313.41	305.98	7.42	42.227 ES		
1,500.00	1,488.35	1,467.56	1,467.51	5.50	2.54	-94.67	223.35	247.04	314.62	306.59	8.03	39.182		
1,600.00	1,586.51	1,566.50	1,566.43	5.94	2.71	-98.40	224.15	245.37	316.97	308.34	8.64	36.693		
1,700.00	1,684.67	1,663.87	1,663.78	6.39	2.88	-102.04	224.76	243.51	320.44	311.20	9.24	34.678		
1,800.00	1,782.83	1,759.81	1,759.70	6.84	3.05	-105.47	225.78	242.16	325.76	315.93	9.83	33.128		
1,900.00	1,880.99	1,856.08	1,855.95	7.29	3.22	-108.77	227.16	241.02	332.69	322.27	10.42	31.927		
2,000.00	1,979.16	1,954.11	1,953.96	7.75	3.39	-112.01	228.95	239.76	341.12	330.12	11.00	31.000		
2,100.00	2,077.32	2,055.01	2,054.85	8.20	3.57	-115.11	230.18	238.87	350.05	338.46	11.59	30.205		
2,200.00	2,175.48	2,157.41	2,157.24	8.66	3.74	-118.04	230.29	238.33	358.81	346.64	12.17	29.476		
2,300.00	2,273.64	2,255.98	2,255.81	9.12	3.92	-120.67	229.72	238.09	367.73	354.99	12.74	28.863		
2,400.00	2,371.80	2,354.40	2,354.23	9.58	4.09	-123.21	229.19	237.66	377.45	364.15	13.30	28.376		
2,500.00	2,469.96	2,456.15	2,455.98	10.04	4.27	-125.69	228.01	237.31	387.27	373.40	13.87	27.925		
2,600.00	2,568.12	2,553.24	2,553.02	10.50	4.44	-128.20	226.05	235.30	397.22	382.81	14.41	27.560		
2,700.00	2,666.28	2,656.50	2,656.11	10.96	4.62	-131.17	223.48	230.05	408.16	393.20	14.96	27.276		
2,800.00	2,764.44	2,758.67	2,758.00	11.42	4.81	-134.12	218.78	224.11	418.24	402.74	15.51	26.972		
2,900.00	2,862.60	2,861.55	2,860.42	11.88	5.01	-137.17	212.33	216.97	428.13	412.08	16.05	26.675		
3,000.00	2,960.76	2,955.46	2,953.81	12.34	5.20	-139.97	206.08	209.34	439.17	422.61	16.56	26.514		
3,100.00	3,058.92	3,057.12	3,054.68	12.80	5.42	-143.10	198.12	199.51	450.92	433.81	17.11	26.356		
3,200.00	3,157.09	3,154.97	3,151.23	13.27	5.65	-146.39	188.19	187.12	463.25	445.61	17.64	26.257 SF		
3,300.00	3,255.25	3,248.38	3,243.39	13.73	5.87	-149.38	178.66	175.31	477.00	458.84	18.16	26.260		
3,400.00	3,353.41	3,336.48	3,330.43	14.19	6.09	-151.98	170.75	164.18	493.07	474.40	18.66	26.417		
3,500.00	3,451.57	3,428.26	3,420.92	14.66	6.34	-154.64	163.05	150.96	511.75	492.55	19.20	26.659		
3,600.00	3,549.73	3,522.44	3,513.27	15.12	6.61	-157.50	153.50	135.12	531.77	512.02	19.75	26.927		
3,700.00	3,647.89	3,614.73	3,603.63	15.58	6.90	-160.16	143.85	119.02	553.25	532.95	20.30	27.249		
3,800.00	3,746.05	3,724.48	3,710.70	16.05	7.25	-163.30	130.31	99.11	575.19	554.19	21.00	27.390		
3,900.00	3,844.21	3,819.69	3,803.29	16.51	7.59	-165.96	116.30	81.95	596.72	575.10	21.62	27.604		
4,000.00	3,942.37	3,919.96	3,900.62	16.98	7.95	-168.67	100.10	64.09	618.43	596.14	22.29	27.750		
4,100.00	4,040.53	4,003.60	3,981.64	17.44	8.27	-170.83	86.52	48.37	642.00	619.16	22.83	28.116		
4,200.00	4,138.69	4,093.82	4,069.08	17.90	8.62	-172.98	72.76	30.97	667.56	644.13	23.43	28.488		
4,300.00	4,236.85	4,192.65	4,165.06	18.37	8.99	-175.10	58.33	12.36	694.03	669.92	24.11	28.789		
4,400.00	4,335.02	4,292.72	4,262.71	18.83	9.35	-176.95	44.39	-4.49	719.94	695.16	24.78	29.048		
4,500.00	4,433.18	4,398.40	4,366.21	19.30	9.72	-178.63	30.89	-21.03	746.06	720.56	25.50	29.253		
4,600.00	4,531.34	4,498.39	4,464.38	19.76	10.06	-179.95	17.87	-34.88	770.97	744.79	26.18	29.450		
4,700.00	4,629.50	4,590.92	4,555.15	20.23	10.39	-178.67	5.49	-47.93	796.33	769.53	26.80	29.713		
4,800.00	4,727.66	4,695.64	4,658.04	20.69	10.73	-177.38	-8.09	-61.89	821.58	794.08	27.50	29.877		
4,900.00	4,825.82	4,799.72	4,760.81	21.16	11.04	-176.37	-19.40	-73.81	846.33	818.16	28.17	30.046		

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 4T-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 4T-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													Offset Site Error:	0.00 usft			
S32-T2N-R68W - Ray Nelson 34-32 - CPR WELL - SURVEYS													Offset Well Error:	0.00 usft			
Survey Program: 103-Geolink MWD																	
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	4,923.98	4,911.38	4,871.70	21.62	11.31	175.65	-28.28	-83.25	869.72	840.86	28.85	30.142					
5,100.00	5,022.14	5,012.00	4,971.96	22.09	11.53	175.23	-34.11	-89.53	892.06	862.62	29.45	30.295					
5,200.00	5,120.30	5,116.97	5,076.70	22.55	11.74	174.95	-38.39	-94.88	914.10	884.06	30.04	30.425					
5,300.00	5,218.46	5,214.03	5,173.67	23.02	11.91	174.84	-40.46	-98.55	935.70	905.13	30.58	30.603					
5,400.00	5,316.62	5,321.51	5,281.10	23.48	12.07	174.84	-41.15	-101.43	956.89	925.74	31.15	30.719					
5,500.00	5,414.78	5,424.89	5,384.48	23.95	12.21	174.96	-40.54	-102.35	976.92	945.23	31.69	30.830					
5,600.00	5,512.95	5,517.44	5,477.02	24.41	12.33	175.11	-39.08	-103.10	997.28	965.12	32.17	31.004					
5,700.00	5,611.11	5,618.88	5,578.43	24.88	12.46	175.31	-36.77	-103.82	1,017.85	985.16	32.69	31.137					
5,800.00	5,709.27	5,725.68	5,685.20	25.35	12.59	175.50	-34.91	-103.96	1,037.68	1,004.44	33.24	31.217					
5,900.00	5,807.43	5,819.03	5,778.54	25.81	12.71	175.65	-33.52	-103.95	1,057.30	1,023.57	33.73	31.348					
6,000.00	5,905.59	5,912.11	5,871.61	26.28	12.84	175.79	-31.92	-104.35	1,077.40	1,043.19	34.22	31.489					
6,100.00	6,003.75	6,010.55	5,970.04	26.74	12.99	175.90	-30.76	-105.20	1,097.69	1,062.95	34.75	31.591					
6,200.00	6,101.91	6,107.86	6,067.34	27.21	13.14	175.95	-30.59	-106.44	1,117.95	1,082.68	35.27	31.700					
6,300.00	6,200.07	6,202.37	6,161.84	27.67	13.27	176.02	-29.94	-107.65	1,138.42	1,102.66	35.76	31.832					
6,400.00	6,298.23	6,299.45	6,258.90	28.14	13.41	176.14	-28.44	-108.79	1,159.13	1,122.85	36.28	31.952					
6,500.00	6,396.39	6,399.85	6,359.29	28.61	13.56	176.23	-27.24	-109.96	1,179.71	1,142.90	36.81	32.046					
6,600.00	6,494.55	6,495.92	6,455.35	29.07	13.70	176.30	-26.36	-111.11	1,200.20	1,162.88	37.32	32.159					
6,700.00	6,592.71	6,590.07	6,549.48	29.54	13.83	176.40	-24.96	-112.28	1,220.97	1,183.15	37.82	32.286					
6,772.64	6,664.02	6,665.54	6,624.93	29.88	13.93	176.49	-23.47	-113.07	1,236.08	1,197.87	38.21	32.351					
6,800.00	6,690.92	6,694.69	6,654.07	30.00	13.97	-172.29	-22.83	-113.24	1,241.46	1,203.11	38.36	32.367					
6,850.00	6,740.19	6,748.20	6,707.56	30.21	14.04	-148.87	-21.57	-113.35	1,250.04	1,211.42	38.62	32.367					
6,900.00	6,789.40	6,797.90	6,757.25	30.41	14.11	-127.23	-20.29	-113.26	1,256.99	1,218.13	38.86	32.348					
6,950.00	6,838.32	6,842.51	6,801.84	30.58	14.17	-111.55	-19.09	-113.28	1,262.57	1,223.51	39.06	32.322					
7,000.00	6,886.71	6,886.67	6,845.99	30.73	14.23	-101.28	-17.87	-113.44	1,266.86	1,227.61	39.26	32.272					
7,050.00	6,934.33	6,930.19	6,889.48	30.87	14.29	-94.64	-16.62	-113.76	1,269.92	1,230.48	39.44	32.199					
7,100.00	6,980.95	6,974.70	6,933.97	30.99	14.35	-90.34	-15.30	-114.21	1,271.79	1,232.17	39.62	32.098					
7,150.00	7,026.35	7,020.24	6,979.49	31.09	14.42	-87.61	-13.89	-114.69	1,272.49	1,232.68	39.81	31.967					
7,200.00	7,070.29	7,064.52	7,023.74	31.19	14.48	-85.93	-12.45	-115.13	1,272.11	1,232.12	39.98	31.817					
7,250.00	7,112.57	7,107.31	7,066.52	31.26	14.54	-85.00	-10.99	-115.55	1,270.80	1,230.65	40.15	31.650					
7,300.00	7,152.98	7,151.20	7,110.38	31.32	14.60	-84.70	-9.49	-115.96	1,268.71	1,228.37	40.33	31.456					
7,350.00	7,191.33	7,195.09	7,154.24	31.37	14.66	-84.88	-8.28	-116.30	1,265.91	1,225.38	40.52	31.239					
7,400.00	7,227.42	7,236.05	7,195.19	31.41	14.72	-85.37	-7.43	-116.55	1,262.63	1,221.92	40.71	31.019					
7,450.00	7,261.09	7,273.87	7,233.01	31.44	14.78	-86.06	-6.89	-116.73	1,259.12	1,218.25	40.88	30.801					
7,500.00	7,292.16	7,308.80	7,267.94	31.45	14.83	-86.89	-6.60	-116.84	1,255.65	1,214.61	41.05	30.590					
7,550.00	7,320.49	7,342.38	7,301.52	31.45	14.87	-87.84	-6.31	-116.83	1,252.43	1,211.21	41.22	30.385					
7,600.00	7,345.94	7,372.94	7,332.08	31.44	14.91	-88.79	-5.96	-116.69	1,249.67	1,208.28	41.39	30.193					
7,650.00	7,368.38	7,400.30	7,359.43	31.43	14.94	-89.68	-5.56	-116.45	1,247.60	1,206.04	41.56	30.019					
7,700.00	7,387.71	7,424.28	7,383.40	31.40	14.97	-90.48	-5.15	-116.16	1,246.41	1,204.68	41.73	29.868					
7,730.07	7,397.79	7,436.99	7,396.12	31.39	14.99	-90.89	-4.91	-115.97	1,246.21	1,204.37	41.83	29.789					
7,750.00	7,403.82	7,444.69	7,403.81	31.37	15.00	-91.13	-4.75	-115.85	1,246.30	1,204.40	41.90	29.745					
7,800.00	7,416.65	7,461.39	7,420.51	31.34	15.02	-91.59	-4.40	-115.55	1,247.42	1,205.35	42.07	29.654					
7,850.00	7,426.13	7,474.23	7,433.34	31.30	15.04	-91.84	-4.11	-115.30	1,249.88	1,207.65	42.23	29.598					
7,900.00	7,432.22	7,481.87	7,440.98	31.25	15.05	-91.79	-3.93	-115.14	1,253.77	1,211.39	42.38	29.584					
7,950.00	7,434.87	7,485.64	7,444.74	31.21	15.05	-91.50	-3.84	-115.06	1,259.14	1,216.61	42.52	29.610					
7,963.63	7,435.00	7,486.09	7,445.19	31.20	15.05	-91.38	-3.83	-115.05	1,260.86	1,218.29	42.56	29.624					
8,000.00	7,435.00	7,486.94	7,446.04	31.17	15.05	-91.42	-3.81	-115.04	1,266.09	1,223.43	42.66	29.675					
8,100.00	7,435.00	7,489.30	7,448.40	31.10	15.05	-91.53	-3.76	-114.99	1,285.70	1,242.73	42.96	29.926					
8,200.00	7,435.00	7,491.69	7,450.78	31.08	15.06	-91.64	-3.70	-114.94	1,312.64	1,269.37	43.27	30.334					
8,300.00	7,435.00	7,494.10	7,453.20	31.19	15.06	-91.75	-3.64	-114.89	1,346.49	1,302.90	43.58	30.894					
8,400.00	7,435.00	7,496.56	7,455.65	31.60	15.06	-91.86	-3.58	-114.84	1,386.73	1,342.84	43.89	31.598					
8,500.00	7,435.00	7,499.04	7,458.13	32.26	15.07	-91.98	-3.52	-114.79	1,432.83	1,388.65	44.17	32.435					
8,600.00	7,435.00	7,501.55	7,460.65	33.03	15.07	-92.09	-3.46	-114.73	1,484.24	1,439.79	44.44	33.395					

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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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													Offset Site Error:	0.00 usft						
Survey Program: 134-Geolink MWD													Offset Well Error:		0.00 usft					
Reference													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	49.70	212.09	250.13	328.62											
100.00	100.00	79.64	79.64	0.14	0.13	49.75	211.83	250.25	327.87	327.60	0.26	1,242.568								
165.00	165.00	144.00	143.99	0.37	0.23	49.86	211.25	250.52	327.70	327.11	0.60	546.920								
200.00	200.00	175.56	175.56	0.50	0.28	49.91	211.14	250.84	327.89	327.10	0.78	418.602								
300.00	300.00	265.34	265.30	0.85	0.45	49.97	212.35	252.82	330.45	329.13	1.33	249.041								
400.00	400.00	357.76	357.58	1.21	0.63	50.07	215.15	257.00	335.85	333.99	1.87	180.048								
500.00	500.00	448.62	448.17	1.57	0.83	50.27	218.63	263.04	343.42	341.01	2.41	142.786								
600.00	599.98	540.51	539.56	1.92	1.05	-67.63	222.99	271.58	352.94	350.02	2.93	120.636								
700.00	699.84	633.13	631.45	2.26	1.30	-67.69	227.89	282.08	363.08	359.64	3.44	105.608								
800.00	799.45	723.72	721.04	2.61	1.58	-68.03	233.16	294.41	374.02	370.05	3.97	94.295								
900.00	898.70	818.40	814.29	2.98	1.90	-68.52	238.39	309.94	385.66	381.14	4.51	85.425								
1,000.00	997.47	923.38	917.56	3.37	2.26	-69.25	242.39	328.34	395.84	390.73	5.11	77.520								
1,050.28	1,046.90	973.87	967.22	3.57	2.44	-69.67	243.49	337.36	400.12	394.69	5.43	73.739								
1,100.00	1,095.71	1,022.79	1,015.27	3.77	2.61	-70.11	244.05	346.53	404.20	398.45	5.75	70.266								
1,200.00	1,193.87	1,111.49	1,101.87	4.19	2.99	-70.54	244.16	365.71	413.93	407.50	6.43	64.347								
1,300.00	1,292.03	1,201.57	1,189.10	4.62	3.41	-70.67	244.19	388.18	426.09	418.95	7.14	59.689								
1,400.00	1,390.19	1,294.73	1,278.75	5.06	3.88	-70.61	244.42	413.49	440.06	432.18	7.87	55.883								
1,500.00	1,488.35	1,393.53	1,373.55	5.50	4.39	-70.46	244.50	441.32	454.67	446.02	8.65	52.574								
1,600.00	1,586.51	1,497.17	1,472.82	5.94	4.93	-70.15	243.40	471.08	468.95	459.49	9.46	49.589								
1,700.00	1,684.67	1,595.59	1,567.38	6.39	5.43	-69.92	241.98	498.33	482.19	471.95	10.24	47.100								
1,800.00	1,782.83	1,689.66	1,657.75	6.84	5.93	-69.84	242.08	524.43	496.51	485.51	11.01	45.111								
1,900.00	1,880.99	1,785.18	1,749.29	7.29	6.44	-69.71	242.35	551.71	511.57	499.78	11.79	43.399								
2,000.00	1,979.16	1,891.11	1,850.66	7.75	7.02	-69.47	241.77	582.47	526.46	513.83	12.64	41.659								
2,100.00	2,077.32	1,995.25	1,950.46	8.20	7.57	-69.17	239.67	612.14	539.96	526.49	13.47	40.082								
2,200.00	2,175.48	2,095.42	2,046.70	8.66	8.09	-68.97	237.94	639.88	553.05	538.77	14.28	38.721								
2,300.00	2,273.64	2,197.23	2,144.56	9.12	8.62	-68.76	235.79	667.83	565.71	550.59	15.12	37.425								
2,400.00	2,371.80	2,299.09	2,242.37	9.58	9.15	-68.47	232.67	696.11	577.99	562.06	15.93	36.272								
2,500.00	2,469.96	2,400.14	2,339.78	10.04	9.66	-68.34	230.34	722.92	589.83	573.08	16.75	35.207								
2,600.00	2,568.12	2,501.00	2,436.97	10.50	10.17	-68.17	227.62	749.71	601.43	583.86	17.58	34.217								
2,700.00	2,666.28	2,602.57	2,535.05	10.96	10.66	-68.09	225.25	776.04	612.78	594.39	18.39	33.325								
2,800.00	2,764.44	2,707.47	2,636.49	11.42	11.17	-68.01	222.41	802.56	623.38	604.15	19.23	32.423								
2,900.00	2,862.60	2,812.75	2,738.59	11.88	11.64	-68.01	219.69	828.12	633.28	613.23	20.05	31.584								
3,000.00	2,960.76	2,922.30	2,845.33	12.34	12.12	-68.16	217.10	852.62	641.84	620.94	20.90	30.705								
3,100.00	3,058.92	3,016.86	2,937.57	12.80	12.52	-68.29	214.66	873.26	649.85	628.17	21.68	29.775								
3,200.00	3,157.09	3,099.66	3,018.14	13.27	12.91	-68.42	213.61	892.32	659.64	637.23	22.41	29.439								
3,300.00	3,255.25	3,193.92	3,109.51	13.73	13.36	-68.54	213.34	915.51	671.26	648.08	23.18	28.957								
3,400.00	3,353.41	3,293.99	3,206.45	14.19	13.84	-68.66	213.10	940.31	683.09	659.09	24.00	28.461								
3,500.00	3,451.57	3,398.37	3,307.51	14.66	14.34	-68.72	212.24	966.42	694.71	669.87	24.85	27.961								
3,600.00	3,549.73	3,508.12	3,413.81	15.12	14.86	-68.66	208.99	993.48	704.63	678.91	25.72	27.395								
3,700.00	3,647.89	3,609.79	3,512.36	15.58	15.34	-68.60	205.64	1,018.27	714.14	687.59	26.55	26.898								
3,800.00	3,746.05	3,703.00	3,602.77	16.05	15.77	-68.58	202.84	1,040.77	723.67	696.36	27.31	26.496								
3,900.00	3,844.21	3,795.82	3,692.94	16.51	16.20	-68.71	202.15	1,062.76	734.32	706.23	28.09	26.145								
4,000.00	3,942.37	3,896.14	3,790.43	16.98	16.65	-68.89	202.16	1,086.41	745.38	716.48	28.90	25.795								
4,100.00	4,040.53	4,011.82	3,903.06	17.44	17.16	-69.06	200.73	1,112.73	754.95	725.13	29.82	25.320								
4,200.00	4,138.69	4,105.26	3,993.90	17.90	17.60	-69.08	198.03	1,134.48	763.89	733.29	30.61	24.959								
4,300.00	4,236.85	4,191.16	4,077.03	18.37	18.03	-69.04	195.95	1,155.98	774.46	743.11	31.35	24.704								
4,400.00	4,335.02	4,288.77	4,171.11	18.83	18.52	-68.92	193.58	1,181.92	786.22	754.08	32.15	24.456								
4,500.00	4,433.18	4,405.75	4,284.51	19.30	19.04	-68.96	191.61	1,210.51	796.87	763.82	33.05	24.114								
4,600.00	4,531.34	4,514.46	4,390.82	19.76	19.47	-69.25	191.10	1,233.23	805.57	771.66	33.90	23.762								
4,700.00	4,629.50	4,619.63	4,493.97	20.23	19.87	-69.62	190.97	1,253.70	813.43	778.69	34.75	23.411								
4,800.00	4,727.66	4,721.38	4,593.97	20.69	20.24	-70.04	191.32	1,272.49	820.91	785.34	35.57	23.081								
4,900.00	4,825.82	4,830.85	4,701.88	21.16	20.60	-70.63	192.92	1,290.84	827.92	791.50	36.43	22.728								

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 4T-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 4T-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													Offset Site Error:	0.00 usft	
Survey Program: 134-Geolink MWD													Offset Well Error:		0.00 usft
Reference				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	4,923.98	4,947.93	4,817.76	21.62	20.93	-71.40	194.62	1,307.48	833.14	795.83	37.31	22.328			
5,100.00	5,022.14	5,063.73	4,932.76	22.09	21.20	-72.29	196.36	1,320.92	836.66	798.48	38.18	21.914			
5,200.00	5,120.30	5,184.45	5,053.07	22.55	21.40	-73.42	198.03	1,330.61	837.67	798.63	39.04	21.458			
5,300.00	5,218.46	5,298.00	5,166.44	23.02	21.56	-74.60	199.28	1,336.83	836.99	797.11	39.88	20.989			
5,400.00	5,316.62	5,405.95	5,274.31	23.48	21.68	-75.81	200.11	1,340.89	835.21	794.50	40.70	20.519			
5,500.00	5,414.78	5,510.01	5,378.34	23.95	21.80	-77.02	200.61	1,343.58	832.76	791.23	41.53	20.054			
5,600.00	5,512.95	5,609.02	5,477.32	24.41	21.90	-78.21	201.21	1,345.62	830.43	788.09	42.34	19.612			
5,700.00	5,611.11	5,708.72	5,577.00	24.88	22.00	-79.45	202.01	1,347.30	828.38	785.22	43.15	19.196			
5,800.00	5,709.27	5,808.72	5,676.99	25.35	22.09	-80.72	202.84	1,348.62	826.53	782.57	43.96	18.801			
5,900.00	5,807.43	5,911.85	5,780.12	25.81	22.17	-82.06	203.65	1,349.40	824.71	779.96	44.75	18.427			
6,000.00	5,905.59	6,013.24	5,881.51	26.28	22.25	-83.43	204.31	1,349.32	822.75	777.20	45.54	18.065			
6,100.00	6,003.75	6,108.41	5,976.67	26.74	22.33	-84.72	205.04	1,349.17	821.31	774.98	46.33	17.729			
6,200.00	6,101.91	6,204.33	6,072.58	27.21	22.42	-86.03	206.01	1,349.27	820.66	773.56	47.09	17.426			
6,252.81	6,153.75	6,255.54	6,123.79	27.45	22.46	-86.73	206.61	1,349.33	820.57	773.08	47.49	17.277			
6,300.00	6,200.07	6,301.28	6,169.53	27.67	22.50	-87.35	207.19	1,349.36	820.64	772.79	47.85	17.151			
6,400.00	6,298.23	6,398.51	6,266.75	28.14	22.58	-88.70	208.57	1,349.35	821.22	772.63	48.59	16.902			
6,500.00	6,396.39	6,495.84	6,364.06	28.61	22.65	-90.06	210.20	1,349.06	822.36	773.04	49.31	16.676			
6,600.00	6,494.55	6,592.68	6,460.89	29.07	22.74	-91.43	212.00	1,348.64	824.09	774.07	50.02	16.474			
6,700.00	6,592.71	6,689.49	6,557.68	29.54	22.82	-92.78	213.83	1,348.44	826.45	775.72	50.73	16.292			
6,772.64	6,664.02	6,760.98	6,629.16	29.88	22.88	-93.77	215.20	1,348.35	828.51	777.28	51.23	16.172			
6,800.00	6,690.92	6,787.96	6,656.13	30.00	22.90	-83.33	215.72	1,348.30	828.86	777.45	51.41	16.122			
6,850.00	6,740.19	6,837.43	6,705.59	30.21	22.95	-60.98	216.66	1,348.18	827.11	775.39	51.72	15.991			
6,900.00	6,789.40	6,889.59	6,757.75	30.41	22.99	-40.00	217.60	1,348.03	822.20	770.19	52.01	15.808			
6,950.00	6,838.32	6,944.81	6,812.96	30.58	23.04	-24.58	218.23	1,347.85	813.84	761.56	52.28	15.567			
7,000.00	6,886.71	6,992.35	6,860.50	30.73	23.08	-14.11	218.57	1,347.67	802.18	749.67	52.51	15.277			
7,050.00	6,934.33	7,038.00	6,906.14	30.87	23.12	-6.86	219.02	1,347.50	787.56	734.85	52.71	14.941			
7,100.00	6,980.95	7,084.50	6,952.64	30.99	23.16	-1.53	219.55	1,347.36	769.99	717.10	52.90	14.557			
7,150.00	7,026.35	7,129.77	6,997.91	31.09	23.20	2.71	220.03	1,347.31	749.49	696.44	53.05	14.127			
7,200.00	7,070.29	7,171.83	7,039.97	31.19	23.24	6.34	220.55	1,347.30	726.22	673.04	53.18	13.656			
7,250.00	7,112.57	7,212.50	7,080.63	31.26	23.28	9.68	221.19	1,347.27	700.35	647.07	53.28	13.145			
7,300.00	7,152.98	7,253.38	7,121.50	31.32	23.32	12.99	221.91	1,347.20	671.95	618.60	53.35	12.595			
7,350.00	7,191.33	7,292.37	7,160.49	31.37	23.35	16.47	222.62	1,347.07	641.12	587.74	53.38	12.010			
7,400.00	7,227.42	7,329.48	7,197.59	31.41	23.38	20.32	223.30	1,346.88	608.06	554.68	53.38	11.391			
7,450.00	7,261.09	7,364.24	7,232.34	31.44	23.41	24.72	223.93	1,346.66	572.98	519.65	53.33	10.745			
7,500.00	7,292.16	7,396.31	7,264.41	31.45	23.44	29.88	224.50	1,346.43	536.15	482.93	53.21	10.075			
7,550.00	7,320.49	7,425.42	7,293.51	31.45	23.47	35.95	225.01	1,346.22	497.90	444.88	53.03	9.390			
7,600.00	7,345.94	7,451.65	7,319.73	31.44	23.49	43.05	225.45	1,346.05	458.64	405.90	52.74	8.696			
7,650.00	7,368.38	7,474.86	7,342.94	31.43	23.51	51.10	225.83	1,345.90	418.84	366.51	52.32	8.005			
7,700.00	7,387.71	7,494.94	7,363.03	31.40	23.53	59.74	226.16	1,345.77	379.10	327.39	51.72	7.330			
7,750.00	7,403.82	7,511.82	7,379.90	31.37	23.54	68.33	226.43	1,345.68	340.25	289.40	50.85	6.691			
7,800.00	7,416.65	7,525.40	7,393.47	31.34	23.56	76.11	226.64	1,345.60	303.39	253.75	49.64	6.112			
7,850.00	7,426.13	7,535.62	7,403.70	31.30	23.57	82.47	226.80	1,345.55	270.05	222.08	47.97	5.629			
7,900.00	7,432.22	7,542.46	7,410.53	31.25	23.57	87.05	226.90	1,345.51	242.30	196.45	45.85	5.285			
7,950.00	7,434.87	7,545.87	7,413.94	31.21	23.58	89.69	226.95	1,345.49	222.73	179.11	43.62	5.106			
7,963.63	7,435.00	7,546.20	7,414.28	31.20	23.58	90.08	226.96	1,345.49	219.16	176.06	43.10	5.085			
8,000.00	7,435.00	7,546.76	7,414.83	31.17	23.58	90.23	226.97	1,345.49	213.70	171.49	42.21	5.062			
8,014.33	7,435.00	7,546.97	7,415.05	31.15	23.58	90.28	226.97	1,345.49	213.22	171.09	42.13	5.061	CC, ES, SF		
8,100.00	7,435.00	7,548.28	7,416.35	31.10	23.58	90.63	226.99	1,345.48	229.78	185.35	44.43	5.171			
8,200.00	7,435.00	7,549.79	7,417.86	31.08	23.58	91.04	227.01	1,345.47	282.72	233.98	48.74	5.801			
8,300.00	7,435.00	7,551.30	7,419.37	31.19	23.58	91.45	227.04	1,345.46	356.44	304.93	51.51	6.920			
8,400.00	7,435.00	7,552.80	7,420.88	31.60	23.58	91.85	227.06	1,345.46	440.65	387.60	53.04	8.307			
8,500.00	7,435.00	7,554.30	7,422.38	32.26	23.58	92.25	227.08	1,345.45	530.36	476.44	53.92	9.836			

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 4T-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 4T-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												Offset Site Error:	0.00 usft			
Survey Program: 134-Geolink MWD												Offset Well Error:		0.00 usft		
Reference				Offset				Semi Major Axis				Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor				
8,600.00	7,435.00	7,555.80	7,423.87	33.03	23.58	92.65	227.10	1,345.44	623.21	568.76	54.46	11.444				
8,700.00	7,435.00	7,557.29	7,425.36	33.87	23.59	93.05	227.13	1,345.43	717.98	663.18	54.80	13.101				
8,800.00	7,435.00	7,558.77	7,426.85	34.77	23.59	93.45	227.15	1,345.43	814.00	758.96	55.04	14.789				
8,900.00	7,435.00	7,560.26	7,428.33	35.71	23.59	93.85	227.17	1,345.42	910.88	855.66	55.21	16.497				
9,000.00	7,435.00	7,561.73	7,429.80	36.70	23.59	94.24	227.19	1,345.41	1,008.36	953.01	55.34	18.220				
9,100.00	7,435.00	7,564.00	7,432.07	37.73	23.59	94.85	227.23	1,345.40	1,106.29	1,050.85	55.44	19.954				
9,200.00	7,435.00	7,564.00	7,432.07	38.79	23.59	94.85	227.23	1,345.40	1,204.56	1,149.03	55.53	21.693				
9,300.00	7,435.00	7,566.16	7,434.23	39.89	23.59	95.42	227.26	1,345.39	1,303.09	1,247.49	55.59	23.440				
9,400.00	7,435.00	7,567.63	7,435.70	41.03	23.60	95.82	227.28	1,345.38	1,401.82	1,346.17	55.65	25.190				

Cathedral Energy Services

Anticollision Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HWY52 4T-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 4T-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												Offset Site Error:	0.00 usft
Survey Program: 70-Geolink MWD												Offset Well Error:	0.00 usft
Reference				Offset			Semi Major Axis		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	53.57	195.34	264.68	329.62				
100.00	100.00	76.19	76.19	0.14	0.11	53.59	195.46	265.01	329.31	329.06	0.25	1,297.131	CC, ES
200.00	200.00	173.67	173.66	0.50	0.28	53.68	195.66	266.16	330.38	329.60	0.78	422.005	
300.00	300.00	272.02	271.96	0.85	0.46	54.13	194.61	269.19	332.24	330.92	1.32	251.731	
400.00	400.00	365.57	365.30	1.21	0.66	55.06	191.88	274.66	335.32	333.45	1.88	178.569	
500.00	500.00	461.21	460.46	1.57	0.89	56.46	187.77	283.21	340.31	337.85	2.46	138.528	
600.00	599.98	556.71	555.19	1.92	1.16	-60.07	181.74	293.74	345.37	342.32	3.05	113.275	
700.00	699.84	649.29	646.55	2.26	1.47	-58.52	174.49	306.79	350.76	347.09	3.67	95.590	
800.00	799.45	741.48	736.91	2.61	1.82	-56.99	165.69	322.76	356.54	352.22	4.32	82.479	
900.00	898.70	832.32	825.52	2.98	2.20	-55.77	157.12	340.83	362.95	357.96	4.99	72.679	
1,000.00	997.47	926.84	917.33	3.37	2.63	-54.86	148.43	361.57	369.48	363.78	5.70	64.810	
1,050.28	1,046.90	975.00	963.87	3.57	2.86	-54.42	143.34	372.85	372.40	366.32	6.07	61.319	
1,100.00	1,095.71	1,020.22	1,007.34	3.77	3.11	-53.99	138.02	384.10	375.47	369.01	6.46	58.116	
1,200.00	1,193.87	1,108.49	1,091.33	4.19	3.63	-52.82	126.33	408.60	383.81	376.58	7.24	53.039	
1,300.00	1,292.03	1,196.48	1,173.96	4.62	4.21	-51.39	113.88	436.14	395.35	387.34	8.01	49.328	
1,400.00	1,390.19	1,287.00	1,257.96	5.06	4.85	-49.74	100.28	467.00	409.57	400.77	8.80	46.521	
1,500.00	1,488.35	1,382.17	1,345.26	5.50	5.56	-47.79	84.23	501.30	425.53	415.92	9.61	44.270	
1,600.00	1,586.51	1,480.33	1,434.72	5.94	6.31	-45.66	65.84	537.29	442.09	431.68	10.42	42.447	
1,700.00	1,684.67	1,572.90	1,519.05	6.39	7.02	-43.82	48.75	571.41	459.49	448.36	11.13	41.266	
1,800.00	1,782.83	1,666.30	1,604.34	6.84	7.74	-42.32	33.65	606.37	478.38	466.55	11.83	40.425	
1,900.00	1,880.99	1,761.00	1,690.73	7.29	8.47	-40.97	18.88	642.24	498.16	485.63	12.53	39.747	
2,000.00	1,979.16	1,852.17	1,773.58	7.75	9.20	-39.75	4.72	677.54	519.07	505.89	13.18	39.370	
2,100.00	2,077.32	1,957.67	1,869.39	8.20	10.03	-38.41	-12.02	718.41	540.21	526.28	13.93	38.782	
2,200.00	2,175.48	2,071.69	1,973.81	8.66	10.87	-37.02	-31.17	760.00	559.10	544.40	14.70	38.030	
2,300.00	2,273.64	2,171.29	2,065.80	9.12	11.60	-35.96	-47.60	794.46	576.30	560.93	15.37	37.491	
2,400.00	2,371.80	2,274.75	2,161.22	9.58	12.35	-34.85	-65.30	830.33	593.72	577.66	16.06	36.976	
2,500.00	2,469.96	2,387.46	2,265.85	10.04	13.12	-33.71	-85.02	867.26	609.31	592.54	16.76	36.344	
2,600.00	2,568.12	2,485.65	2,357.92	10.50	13.76	-33.03	-99.51	898.17	623.88	606.50	17.38	35.901	
2,700.00	2,666.28	2,586.68	2,452.86	10.96	14.40	-32.55	-112.37	930.23	638.91	620.88	18.03	35.444	
2,800.00	2,764.44	2,702.74	2,562.54	11.42	15.11	-32.00	-127.63	964.95	652.06	633.31	18.75	34.768	
2,900.00	2,862.60	2,789.20	2,644.42	11.88	15.65	-31.59	-139.24	990.20	664.57	645.25	19.31	34.412	
3,000.00	2,960.76	2,902.39	2,751.21	12.34	16.35	-31.00	-155.29	1,024.07	677.84	657.82	20.03	33.850	
3,100.00	3,058.92	3,005.83	2,848.89	12.80	16.99	-30.25	-172.76	1,053.28	689.35	668.70	20.65	33.381	
3,200.00	3,157.09	3,104.37	2,942.33	13.27	17.57	-29.68	-187.93	1,080.62	700.44	679.20	21.24	32.982	
3,300.00	3,255.25	3,195.26	3,028.49	13.73	18.14	-29.28	-200.62	1,106.62	712.47	690.66	21.81	32.665	
3,400.00	3,353.41	3,288.57	3,116.38	14.19	18.73	-28.72	-215.52	1,134.17	725.53	703.16	22.38	32.426	
3,500.00	3,451.57	3,383.17	3,205.38	14.66	19.34	-28.21	-230.23	1,162.67	739.27	716.35	22.93	32.247	
3,600.00	3,549.73	3,485.35	3,301.79	15.12	19.97	-27.88	-243.60	1,193.78	753.33	729.79	23.54	32.004	
3,700.00	3,647.89	3,594.00	3,404.68	15.58	20.63	-27.55	-257.60	1,225.72	766.31	742.10	24.21	31.655	
3,800.00	3,746.05	3,689.77	3,495.48	16.05	21.21	-27.25	-270.22	1,253.44	778.86	754.08	24.78	31.431	
3,900.00	3,844.21	3,783.32	3,583.98	16.51	21.79	-26.98	-282.32	1,281.27	792.24	766.89	25.35	31.249	
4,000.00	3,942.37	3,881.82	3,677.11	16.98	22.40	-26.65	-295.89	1,310.28	805.39	779.45	25.94	31.048	
4,100.00	4,040.53	3,960.95	3,751.52	17.44	22.92	-26.42	-306.42	1,335.06	820.43	794.03	26.40	31.073	
4,200.00	4,138.69	4,068.09	3,851.99	17.90	23.62	-26.18	-319.81	1,369.80	836.69	809.63	27.06	30.916	
4,300.00	4,236.85	4,196.50	3,973.46	18.37	24.39	-25.77	-337.63	1,407.39	849.61	821.80	27.81	30.549	
4,400.00	4,335.02	4,268.92	4,042.11	18.83	24.85	-25.62	-346.71	1,428.59	862.65	834.40	28.24	30.543	
4,500.00	4,433.18	4,341.01	4,109.71	19.30	25.35	-25.49	-355.42	1,452.07	879.00	850.33	28.67	30.659	
4,600.00	4,531.34	4,432.17	4,194.30	19.76	25.99	-25.26	-367.75	1,483.72	897.69	868.49	29.20	30.742	
4,700.00	4,629.50	4,574.10	4,327.23	20.23	26.90	-24.93	-386.47	1,529.71	914.03	883.96	30.07	30.396	
4,800.00	4,727.66	4,674.86	4,422.55	20.69	27.52	-24.77	-398.81	1,559.96	927.79	897.11	30.68	30.244	
4,900.00	4,825.82	4,773.81	4,516.07	21.16	28.14	-24.54	-411.94	1,589.53	941.50	910.23	31.27	30.109	
5,000.00	4,923.98	4,864.51	4,601.55	21.62	28.72	-24.27	-425.28	1,616.73	955.48	923.69	31.79	30.053	

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 4T-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 4T-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			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	5,022.14	5,005.17	4,734.22	22.09	29.57	-23.78	-447.15	1,657.97	969.26	936.69	32.57	29.760		
5,200.00	5,120.30	5,129.06	4,853.06	22.55	30.22	-23.39	-465.54	1,687.76	976.87	943.64	33.23	29.398		
5,300.00	5,218.46	5,227.57	4,947.42	23.02	30.74	-23.07	-480.32	1,711.83	985.23	951.45	33.78	29.166		
5,400.00	5,316.62	5,323.10	5,039.10	23.48	31.25	-22.81	-494.09	1,734.93	993.29	958.97	34.32	28.943		
5,500.00	5,414.78	5,455.35	5,166.58	23.95	31.89	-22.56	-511.09	1,765.71	1,000.31	965.31	35.00	28.581		
5,600.00	5,512.95	5,589.39	5,297.20	24.41	32.44	-22.55	-523.65	1,792.96	1,003.93	968.23	35.70	28.122		
5,700.00	5,611.11	5,742.79	5,448.31	24.88	32.92	-22.68	-534.98	1,816.72	1,002.05	965.64	36.41	27.520		
5,800.00	5,709.27	5,880.03	5,584.34	25.35	33.25	-22.97	-541.84	1,833.33	997.00	959.92	37.07	26.894		
5,900.00	5,807.43	6,010.96	5,714.73	25.81	33.49	-23.36	-545.91	1,844.46	988.06	950.33	37.72	26.192		
6,000.00	5,905.59	6,131.40	5,834.94	26.28	33.66	-23.80	-548.23	1,851.64	976.55	938.17	38.38	25.443		
6,100.00	6,003.75	6,238.78	5,942.19	26.74	33.80	-24.25	-549.43	1,856.57	963.69	924.62	39.07	24.665		
6,200.00	6,101.91	6,344.72	6,048.06	27.21	33.91	-24.73	-550.12	1,860.51	949.98	910.21	39.77	23.886		
6,300.00	6,200.07	6,457.11	6,160.39	27.67	34.01	-25.30	-550.08	1,863.79	935.53	895.06	40.47	23.116		
6,400.00	6,298.23	6,558.70	6,261.97	28.14	34.09	-25.85	-549.78	1,865.55	919.95	878.74	41.21	22.324		
6,500.00	6,396.39	6,663.02	6,366.28	28.61	34.17	-26.46	-549.09	1,866.98	904.07	862.12	41.95	21.551		
6,600.00	6,494.55	6,765.80	6,469.05	29.07	34.23	-27.09	-548.21	1,867.72	887.65	844.94	42.71	20.782		
6,700.00	6,592.71	6,864.99	6,568.24	29.54	34.29	-27.73	-547.29	1,868.19	871.09	827.59	43.50	20.026		
6,772.64	6,664.02	6,937.23	6,640.48	29.88	34.33	-28.21	-546.57	1,868.45	859.04	814.97	44.08	19.490		
6,800.00	6,690.92	6,964.61	6,667.85	30.00	34.34	-17.18	-546.26	1,868.53	854.50	810.22	44.28	19.299		
6,850.00	6,740.19	7,014.76	6,718.00	30.21	34.37	6.27	-545.63	1,868.63	846.18	801.64	44.55	18.995		
6,900.00	6,789.40	7,064.89	6,768.13	30.41	34.39	28.43	-544.92	1,868.67	837.88	793.19	44.69	18.748		
6,950.00	6,838.32	7,114.16	6,817.39	30.58	34.42	45.07	-544.16	1,868.68	829.66	784.94	44.72	18.554		
7,000.00	6,886.71	7,162.56	6,865.78	30.73	34.45	56.73	-543.45	1,868.68	821.68	777.06	44.62	18.417		
7,050.00	6,934.33	7,210.22	6,913.44	30.87	34.47	65.17	-542.80	1,868.70	814.09	769.69	44.40	18.337		
7,100.00	6,980.95	7,256.90	6,960.12	30.99	34.50	71.65	-542.21	1,868.72	807.10	763.04	44.06	18.317 SF		
7,150.00	7,026.35	7,303.32	7,006.53	31.09	34.52	76.95	-541.64	1,868.72	800.92	757.29	43.63	18.358		
7,200.00	7,070.29	7,348.30	7,051.50	31.19	34.55	81.45	-541.10	1,868.67	795.79	752.68	43.11	18.458		
7,250.00	7,112.57	7,391.60	7,094.81	31.26	34.57	85.38	-540.59	1,868.59	792.03	749.49	42.54	18.617		
7,300.00	7,152.98	7,433.03	7,136.23	31.32	34.59	88.85	-540.10	1,868.47	789.95	748.00	41.95	18.830		
7,326.50	7,173.58	7,453.94	7,157.14	31.35	34.60	90.52	-539.86	1,868.40	789.65	748.00	41.65	18.960		
7,350.00	7,191.33	7,471.97	7,175.17	31.37	34.61	91.90	-539.65	1,868.33	789.90	748.51	41.39	19.086		
7,400.00	7,227.42	7,508.63	7,211.83	31.41	34.63	94.56	-539.26	1,868.18	792.20	751.31	40.89	19.374		
7,450.00	7,261.09	7,542.83	7,246.03	31.44	34.65	96.82	-538.90	1,868.03	797.14	756.62	40.51	19.676		
7,500.00	7,292.16	7,574.41	7,277.60	31.45	34.67	98.67	-538.60	1,867.88	804.96	764.66	40.30	19.972		
7,550.00	7,320.49	7,603.22	7,306.41	31.45	34.68	100.08	-538.33	1,867.73	815.87	775.57	40.30	20.244		
7,600.00	7,345.94	7,628.85	7,332.04	31.44	34.70	101.02	-538.11	1,867.59	829.97	789.45	40.52	20.481		
7,650.00	7,368.38	7,651.41	7,354.60	31.43	34.71	101.47	-537.92	1,867.46	847.32	806.35	40.97	20.684		
7,700.00	7,387.71	7,670.85	7,374.04	31.40	34.72	101.38	-537.78	1,867.36	867.88	826.27	41.60	20.862		
7,750.00	7,403.82	7,687.08	7,390.27	31.37	34.73	100.74	-537.67	1,867.27	891.53	849.14	42.39	21.032		
7,800.00	7,416.65	7,700.04	7,403.23	31.34	34.74	99.48	-537.58	1,867.20	918.11	874.82	43.28	21.211		
7,850.00	7,426.13	7,709.68	7,412.87	31.30	34.74	97.58	-537.52	1,867.14	947.37	903.13	44.24	21.414		
7,900.00	7,432.22	7,715.96	7,419.14	31.25	34.75	94.99	-537.48	1,867.11	979.05	933.83	45.22	21.651		
7,950.00	7,434.87	7,718.86	7,422.04	31.21	34.75	91.68	-537.46	1,867.09	1,012.83	966.64	46.19	21.927		
7,963.63	7,435.00	7,719.06	7,422.25	31.20	34.75	90.65	-537.46	1,867.09	1,022.36	975.91	46.45	22.010		
8,000.00	7,435.00	7,719.27	7,422.46	31.17	34.75	90.67	-537.46	1,867.09	1,048.27	1,001.14	47.13	22.240		
8,100.00	7,435.00	7,719.85	7,423.04	31.10	34.75	90.71	-537.46	1,867.09	1,122.52	1,073.59	48.93	22.943		
8,200.00	7,435.00	7,720.43	7,423.61	31.08	34.75	90.76	-537.46	1,867.08	1,200.51	1,149.95	50.56	23.744		
8,300.00	7,435.00	7,721.00	7,424.19	31.19	34.75	90.80	-537.45	1,867.08	1,281.56	1,229.53	52.02	24.634		
8,400.00	7,435.00	7,721.57	7,424.76	31.60	34.75	90.85	-537.45	1,867.08	1,365.12	1,311.80	53.32	25.601		
8,500.00	7,435.00	7,722.14	7,425.32	32.26	34.75	90.89	-537.45	1,867.07	1,450.77	1,396.30	54.47	26.632		

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

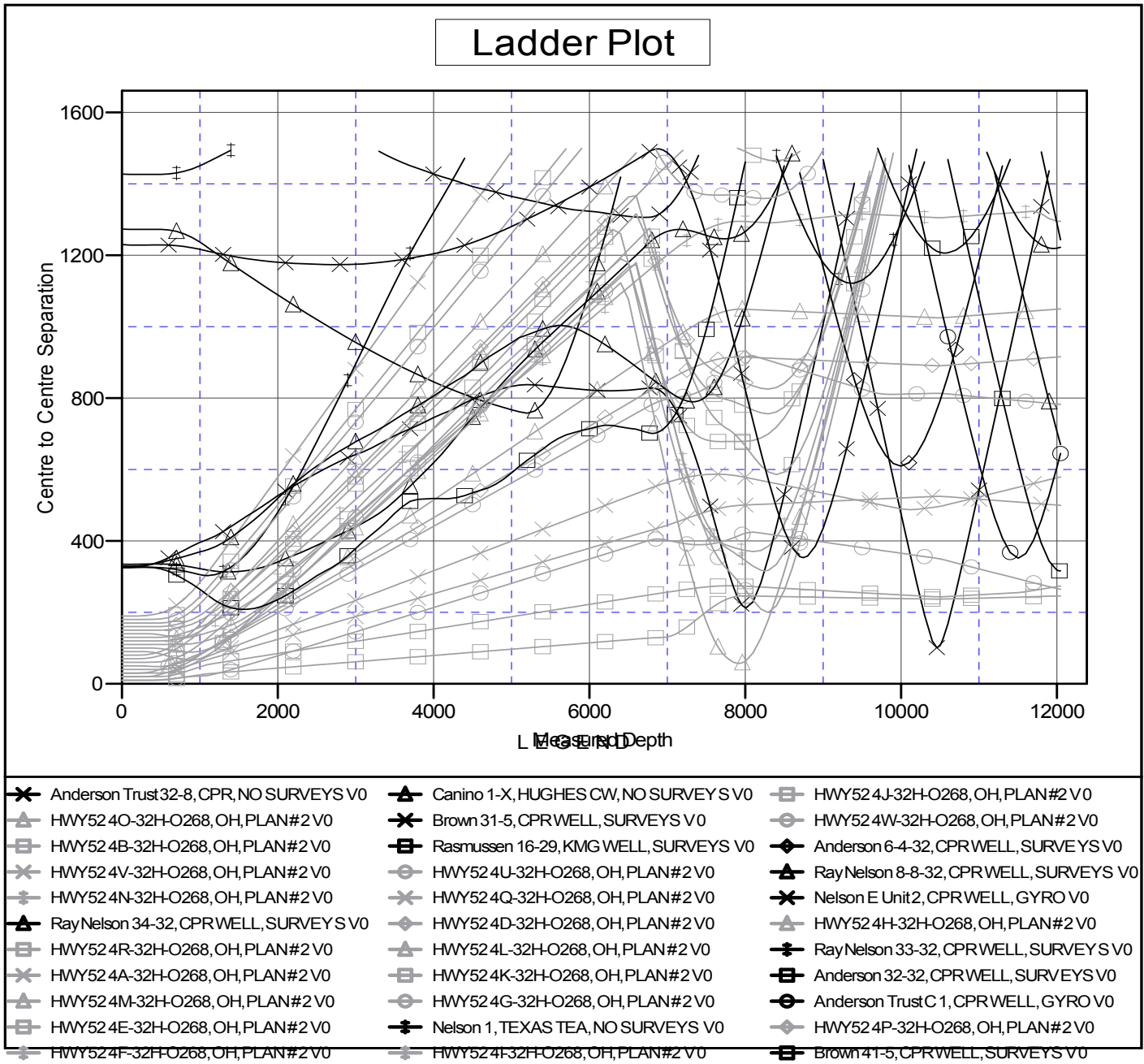
Cathedral Energy Services

Anticollision Report

Company: Crestone Peak Resources	Local Co-ordinate Reference: Well HWY52 4T-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 4T-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 4T-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