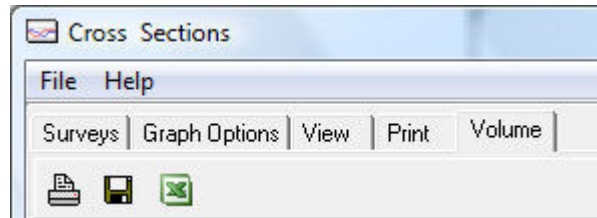


Output to XLS (Excel) Format from CROSS SECTIONS & VOLUMES (CSV)

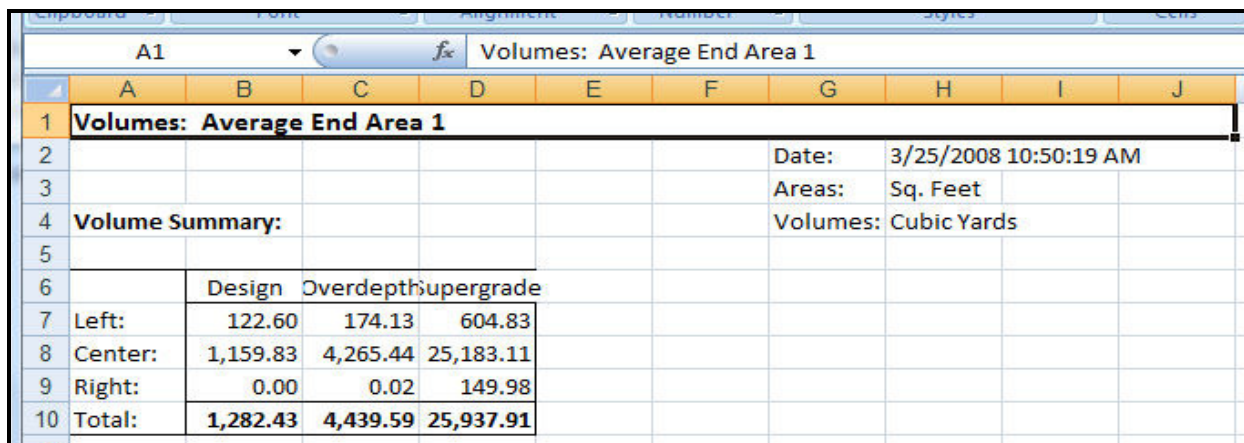
By Pat Sanders

We are currently experimenting with exporting the reports from the CSV program to XLS. For testing purposes, we took the AEA1, AEA2 and AEA3 reports and added a button in the Report tab that allows the user to take the files out to XLS.

[Click the Excel Icon to Export to a Spreadsheet](#)



In order to make some sense out of the AEA reports in Excel, we had to re-align the reports. They still start off with the header summary:



	A	B	C	D	E	F	G	H	I	J	
1	Volumes: Average End Area 1										
2								Date:	3/25/2008 10:50:19 AM		
3								Areas:	Sq. Feet		
4	Volume Summary:								Volumes:	Cubic Yards	
5											
6		Design	Overdepth	Supergrade							
7	Left:	122.60	174.13	604.83							
8	Center:	1,159.83	4,265.44	25,183.11							
9	Right:	0.00	0.02	149.98							
10	Total:	1,282.43	4,439.59	25,937.91							

[Header Summary in the Data Exported to Excel](#)

It then outputs an Area, Volume and Accumulated Volume group for all of the computed quantities:

F29 fx =(F17+F18)*D53/54											
	A	B	C	D	E	F	G	H	I	J	K
10	Total:	1,282.43	4,439.59	25,937.91							
11											
12											
13	Area										
14	Line:	File:	V1L	V2L	V3L	V1	V2	V3	V1R	V2R	V3R
15	1	360p00.p3a	0.76	3.91	17.39	5.83	164.13	992.91	0.00	0.00	5.49
16	2	361p00.p3a	2.12	5.20	19.61	30.05	162.90	966.38	0.00	0.00	5.16
17	3	362p00.p3a	1.02	4.43	18.48	14.72	124.48	974.90	0.00	0.00	6.03
18	4	363p00.p3a	3.06	6.10	21.82	31.82	220.00	984.38	0.00	0.00	6.38
19	5	364p00.p3a	3.07	6.43	23.47	26.72	140.44	950.99	0.00	0.00	5.13
20	6	365p00.p3a	8.33	8.81	27.89	65.40	187.90	989.51	0.00	0.00	6.53
21	7	366p00.p3a	8.64	8.66	27.92	97.66	136.50	945.14	0.00	0.00	5.28
22	8	367p00.p3a	12.95	10.89	30.87	87.75	195.00	984.78	0.00	0.00	6.48
23											
24	Volume										
25	Line:	File:	V1L	V2L	V3L	V1	V2	V3	V1R	V2R	V3R
26	1	360p00.p3a									
27	2	361p00.p3a	5.34	16.87	68.49	66.41	605.34	3,626.71	0.00	0.00	19.70
28	3	362p00.p3a	5.81	17.83	70.53	82.92	532.21	3,595.08	0.00	0.00	20.71
29	4	363p00.p3a	7.55	19.48	74.59	86.15	637.64	3,626.61	0.00	0.00	22.97
30	5	364p00.p3a	11.36	23.20	83.87	108.41	667.52	3,584.23	0.00	0.00	21.32
31	6	365p00.p3a	21.11	28.22	95.11	170.59	608.05	3,593.64	0.00	0.01	21.60
32	7	366p00.p3a	31.44	32.34	103.36	301.97	600.76	3,582.80	0.00	0.01	21.89
33	8	367p00.p3a	40.00	36.19	108.89	343.37	613.92	3,574.05	0.00	0.00	21.79
34			122.60	174.13	604.83	1,159.83	4,265.44	25,183.11	0.00	0.02	149.98

Volume Calculations in Excel

The Areas are numerical values. The Volumes are computed quantities, as shown by the formula at the top of the screen capture. This means that if you go in and change an Area or a distance between lines, the entire spreadsheet will be updated. Pretty neat! Pretty dangerous?

The Accumulated Volume section comes next. Once again, these are computed quantities. If you change an area or a distance between lines, the section will be updated.

36	Accumulated Volume										
37	Line:	File:	V1L	V2L	V3L	V1	V2	V3	V1R	V2R	V3R
38	1	360p00.p3a									
39	2	361p00.p3a	5.34	16.87	68.49	66.41	605.34	3,626.71	0.00	0.00	19.70
40	3	362p00.p3a	11.15	34.70	139.02	149.33	1,137.55	7,221.79	0.00	0.00	40.41
41	4	363p00.p3a	18.70	54.19	213.61	235.49	1,775.19	10,848.40	0.00	0.00	63.38
42	5	364p00.p3a	30.06	77.38	297.48	343.90	2,442.71	14,432.62	0.00	0.00	84.70
43	6	365p00.p3a	51.17	105.60	392.58	514.49	3,050.76	18,026.26	0.00	0.01	106.30
44	7	366p00.p3a	82.61	137.94	495.94	816.46	3,651.52	21,609.06	0.00	0.02	128.18
45	8	367p00.p3a	122.60	174.13	604.83	1,159.83	4,265.44	25,183.11	0.00	0.02	149.98
46											

Accumulated Volumes in Excel

Finally, the Line Info section provides details about the distance between lines the Channel Depth and the vertical offset to the Overdepth and Supergrade Templates.

47	Line Info		Distance Between Segments			Distance from Line Origin					Depths		
48	Line:	File:	Left	Center	Right	Left TOB	Left Toe	Center	Right Toe	Right TOB	Center	Overdepth	SuperGrade
50	1	360p00.p3a				-397.00	-250.00	0.00	250.00	250.00	49.00	1.00	2.00
51	2	361p00.p3	99.95	99.96	99.96	-397.00	-250.00	0.00	250.00	250.00	49.00	1.00	2.00
52	3	362p00.p3	100.01	100.00	100.00	-397.00	-250.00	0.00	250.00	250.00	49.00	1.00	2.00
53	4	363p00.p3	99.96	99.95	99.95	-397.00	-250.00	0.00	250.00	250.00	49.00	1.00	2.00
54	5	364p00.p3	100.01	100.01	100.01	-397.00	-250.00	0.00	250.00	250.00	49.00	1.00	2.00
55	6	365p00.p3	100.01	100.00	100.00	-397.00	-250.00	0.00	250.00	250.00	49.00	1.00	2.00
56	7	366p00.p3	100.00	100.00	100.01	-397.00	-250.00	0.00	250.00	250.00	49.00	1.00	2.00
57	8	367p00.p3	100.01	100.00	100.00	-397.00	-250.00	0.00	250.00	250.00	49.00	1.00	2.00

Line Information in Excel

If you change the Distance Between Segments, the Areas and Volumes are re-computed. If you change any other item in the Line Information, the Areas and Volumes are not affected. This is because Excel doesn't have the depth data and cannot recompute the area above the channel if we change the center channel depth. You'll have to go back to CSV to do that.

In order to make the XLS format available to other formats, we will have to modify the format of the reports. We'll address the remaining ones on a case-by-case basis.

If you have any comments, please forward them to pat@hypack.com.