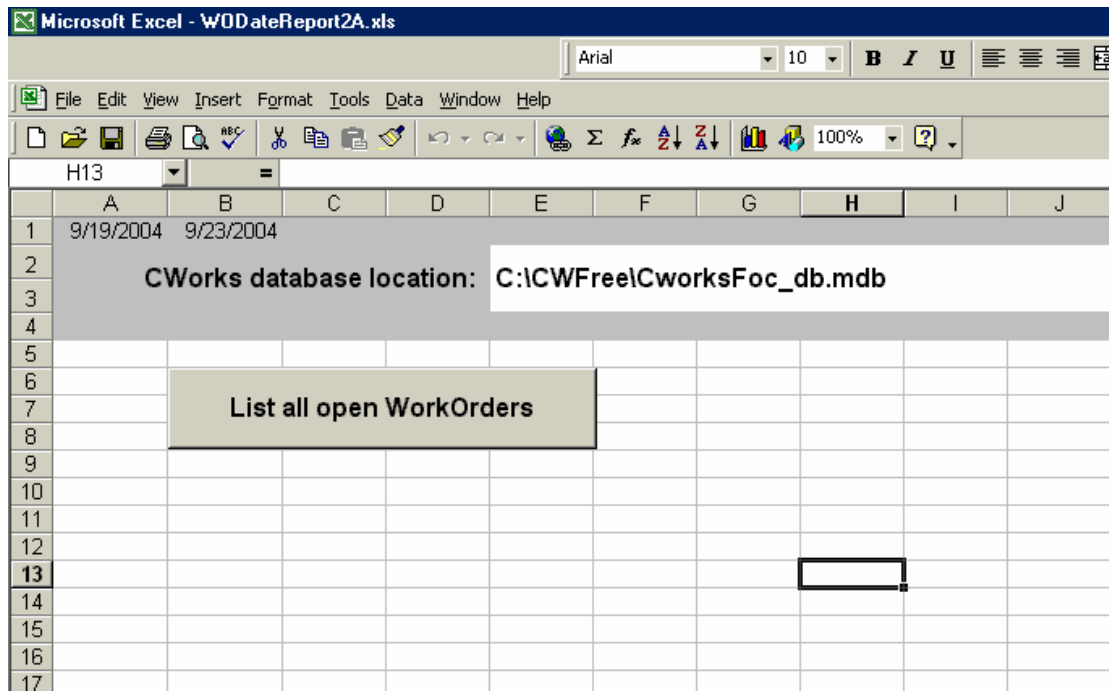


## Key Performance Indicators (KPIs) from CWorks by DWIGtech Associates

One of the most important functions of CMMS software is to provide information on maintenance improvement. Normally this is achieved through a basket of KPIs that together give an accurate picture of the situation and identify priority areas for improvement. An example of this is the Report below that, for any date range identifies the most troublesome Assets (Equipment) by ranking them by the number of Work Orders and/or by highest cost. The data is extracted from the Access database using Excel functions and then presented as an Excel report. In Excel such Tools as Pivot Tables can then be used to sort the data, and as appropriate, present it graphically.

The Excel Report can be added to any desktop with access to the database. The User has then only to click on the icon, and then on “List all open Work Orders”



This then presents the User with a date range to fill in (this one is based on received date, but this can be modified)

	A	B	C	D	E	F	G	H	I	J	K	L
1	9/19/2004	9/23/2004										
2	<b>CWorks database location: C:\CWF\freelCworksFoc_db.mdb</b>											
3												
4												
5												
6	<b>List all open WorkOrders</b>											
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

Enter Date Range to Display

From: 9 / 1 /2004 To: 11/30/2004

OK

November 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11

Today: 11/22/2004

Clicking on “OK” then produces a list of all Work Orders received within that date range. The extracted fields can be modified to suit particular Client needs.

	A	B	C	D	E	F	G	H	I
1	<b>WorkorderNo</b>	<b>WorkStatus</b>	<b>WOLaborCost</b>	<b>AssetNo</b>	<b>AssetCatCode</b>	<b>Supplier</b>	<b>FirstName</b>	<b>DateReceived</b>	<b>ProblemDescription</b>
2	0000000004	Open	145.25	Antenna-1	Antenna	No Good	Smith's Repairs	21/09/2004	Send broken Antenna to S
3	0000000001	Open	87.50	Radio-1	Radio	Damaged	Smith's Repairs	21/09/2004	Send Radio out for repair a
4	0000000009	Open	0.00	Transmitter-1	Transmitter	Damaged		15/11/2004	November 15 test
5	0000000010	Open	0.00	Transmitter-1	Transmitter	No Good	Smith's Repairs	15/11/2004	Second Test for Nov 16th
6	0000000006	Open	146.15	Antenna-1	Antenna	Damaged		23/09/2004	check damage to antenna
7	0000000007	Open	304.33	Antenna-1	Antenna	Damaged		04/10/2004	Test No 3 on October 4th,
8	0000000002	Open	129.50	Radio-2	Radio	Intermittent Fault	Jone's Repairs	21/09/2004	Send Radio to Jones'
9	0000000005	Open	45.50			Damaged	Smith's Repairs	23/09/2004	test for broken wires in cor
10	0000000012	Open	350.00	Antenna-1	Antenna	Damaged	Smith's Repairs	22/11/2004	test Nov 22, 2004
11	0000000011	Open	0.00	Radio-3	Radio		Jone's Repairs	17/11/2004	Test nov17, 2004
12	0000000003	Open	192.50	Switch-2	Switch	Damaged	Smith's Repairs	21/09/2004	send switch to Smiths
13	0000000008	Open	78.75	Switch-2	Switch	Weld Failure	Jone's Repairs	10/11/2004	Test Nov 10, 2004

In this example we have created a Pivot Table that shows the Assets ranked by WO cost for that date range.

	A	B	C
1			
2			
3	Sum of WOLaborCost		
4	AssetNo	Total	
5	Antenna-1	595.73	
6	Switch-2	271.25	
7	Radio-2	129.50	
8	Radio-1	87.50	
9	(blank)	45.50	
10	Radio-3	0.00	
11	Transmitter-1	0.00	
12	Grand Total	1129.48	
13			
14			

In this example we have created a Pivot Table that shows the Assets ranked by the Number of Work Orders for that date range. This can then be shown graphically using standard Excel features.

	A	B	C
1			
2			
3	Count of Wos		
4	AssetNo	Total	
5	Antenna-1	3	
6	Transmitter-1	2	
7	Switch-2	2	
8	(blank)	1	
9	Radio-3	1	
10	Radio-2	1	
11	Radio-1	1	
12	Grand Total	11	
13			

Clicking on the total for any Asset then provides a list in detail of these Work Orders

	A	B	C	D	E	F	G	H	I	J
1	WorkorderNo	WorkStatus	WOLaborCost	AssetNo	AssetCatCode	Supplier	FirstName	DateReceived	ProblemDescription	LocationNo
2	0000000004	Open	145.25	Antenna-1	Antenna	No Good	Smith's Repairs	9/21/2004 07:15	Send broken Antenna to Smiths	VV
3	0000000007	Open	304.325	Antenna-1	Antenna	Damaged		10/4/2004 16:16	Test No 3 on October 4th, 2004	VV
4	0000000006	Open	146.15	Antenna-1	Antenna	Damaged		9/23/2004 10:26	check damage to antenna base	VV