

30/2014

Re: PS 4.34

From: Softrock Geological Services <geologize75@yahoo.com>

To: Alan Hetherington <alan@heth.co.uk>

Subject: WITS

Date: Apr 29, 2014 10:47 PM

Attachments:

Alan,

I am pleased to report that everything works perfectly! Hugh took some of my tech support calls today and I managed to get things going. I am working on adding a component that totals the individual gases to create a total gas track [1229]. It is still a bit glitchy and I will work on it tomorrow, but the individual gas components are Witsing in cleanly. Having to change the wits out com by using notebook to edit the control file was indeed tricky but your instructions were great. I had to change the value then save as, close PS then reopen everything to get the com value to stick. A wits out com assignment function in the edit overall window would be ideal. Thank you so much! Our clients are very pleased. Lets keep touch while in beta and I will be happy to field test any revisions. I am going to take a screenshot of the Pason tomorrow and email you and Hugh so you can see the components as displayed as a final output graph on the actual Pason EDR unit so you can visualize what we are exporting for everyone on the rig to see. Thanks again!

Dan McGinn
Softrock Geological Services, Inc.
505.330.8307
Sent from my iPhone

On Apr 29, 2014, at 7:54 PM, <alan@heth.co.uk> wrote:

Dan,

MFC80.DLL is a standard DLL from Microsoft which should get installed along with Peaksimple. I don't know why it isn't there on your machine because the PS install will put them in the same folder as the Peaksimple EXE.

MFC80.DLL is only one of a handful of DLLs Microsoft has in what they call their "Visual C++ Redistributable Package", so if you don't have this then there's a good chance you don't have the rest either. You can get all of them in one install from Microsoft here:

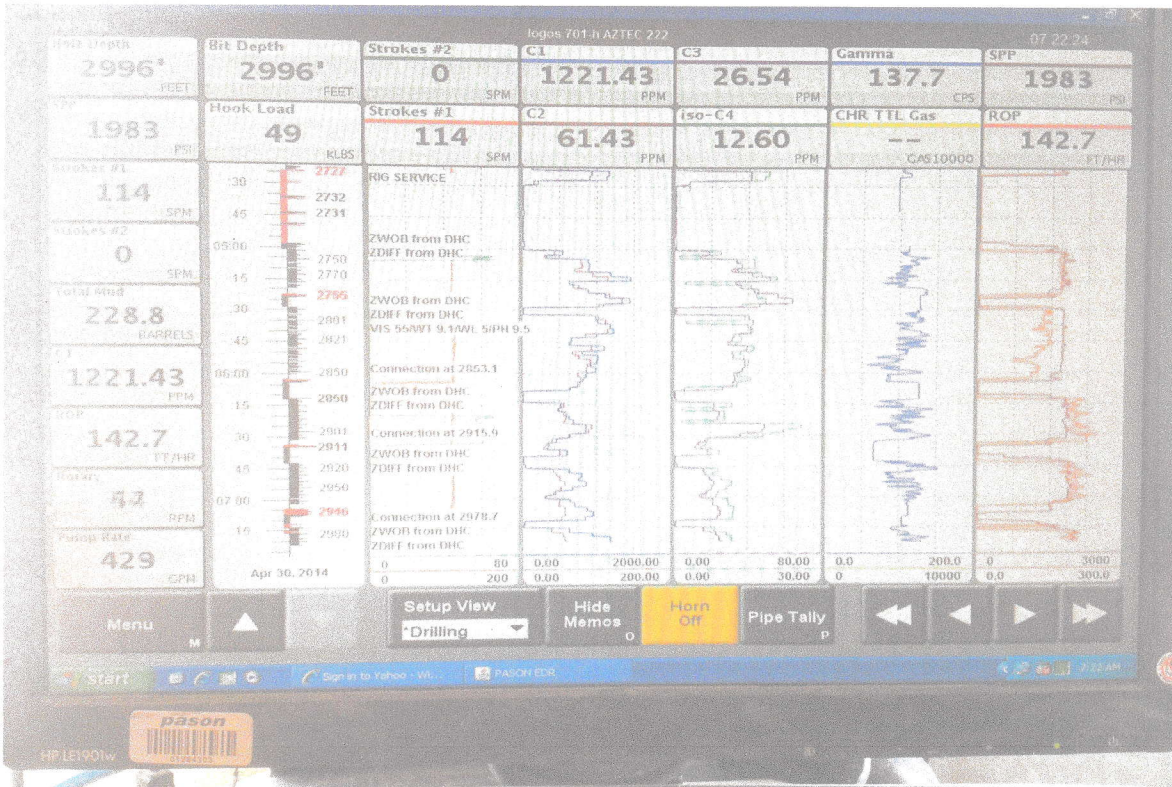
<http://www.microsoft.com/en-gb/download/details.aspx?id=29>

Be careful because it is possible to get 64-bit versions of these DLLs that have the same name (but are a different size) and won't work with Peaksimple. You'll get the correct 32-bit ones from this package because it's marked "x86".

Thanks

Alan

From: Dan McGinn [<mailto:geologize75@yahoo.com>]
Sent: 29 April 2014 10:50
To: Alan Hetherington



RE: Re: Possible export of data to drilling rigs

From: Alan Hetherington <alan@heth.co.uk>
To: hugh@srigc.com
Subject: RE: Re: Possible export of data to drilling rigs
Date: Apr 9, 2014 9:34 AM
Attachments: [image001.jpg](#) [image002.jpg](#) [image003.jpg](#) [image004.jpg](#) [image005.jpg](#) [image006.jpg](#) [image007.jpg](#)

1229
CARBON TOTAL GAS

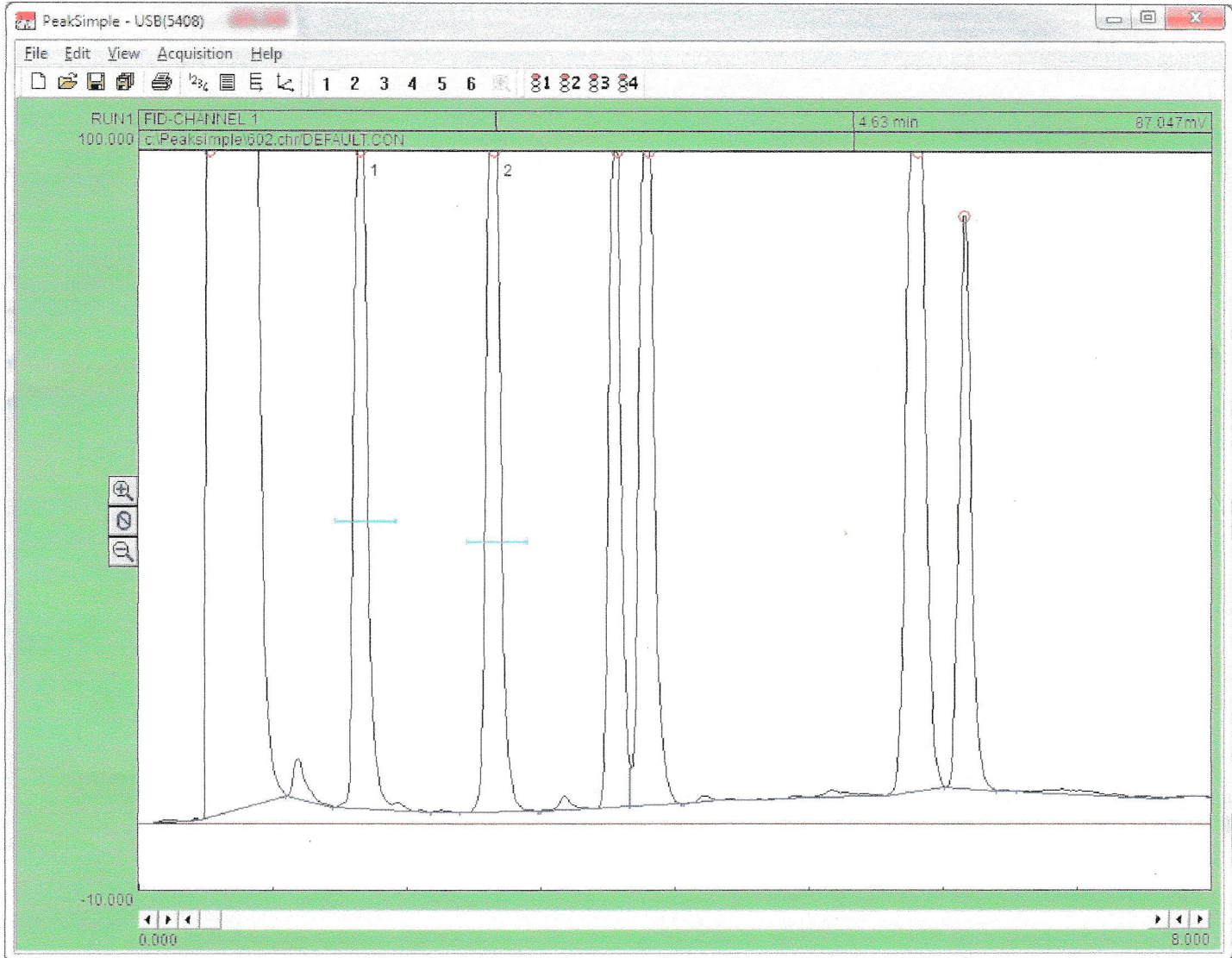
Hugh,

I managed to get this working today, no real user interface yet but enough to try out.

It's in PS 4.34 which I just uploaded.

Here's how it works, and how I tested it:

Set up some peaks and components, in my case I created two based on 602.CHR:



Then go to Channel 1 Components -> Component Details -> User Calculation:

Channel 1 components

WITS.cpt

Peak	Name	Start	End	Calibration
1	Number1	1.470	1.920	Bifenthrin 030
2	Number2	2.450	2.900	Bifenthrin 030

Add... Change... Remove Calibrate...
Load... Save... Clear Print
OK

Component details

Peak number: 1

Peak name: Number1

Start: 1.47 End: 1.92 Expected: 0.00

Internal standard: 0.000 Units:

Internal standard peak: 0 Ref peak: 0

In case of multiple peaks:
 Show each peak separately
 Show first peak only
 Show last peak only
 Show largest peak only
 Show total of all peaks

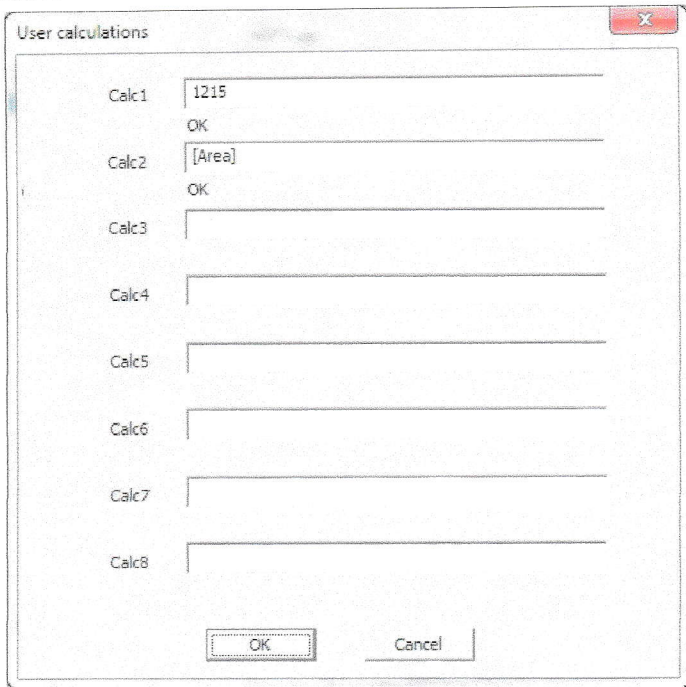
Measure peak:
 Area
 Height

Alarms...
User calculations...

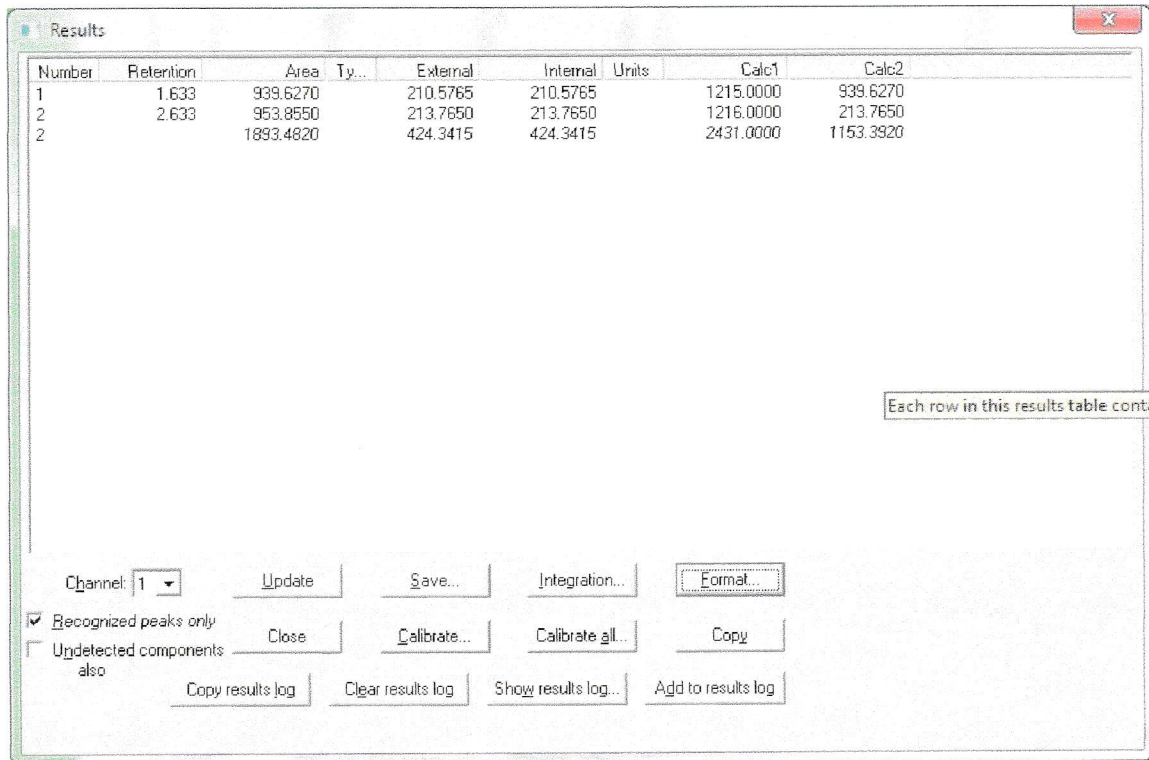
Multiplication factor: 0.00000000 Calculate area as time-slice

OK Cancel

And enter the WITS code for the component under Calc1, and the field to generate the output value under Calc2. So in this case below the code is 1215 (this is the code for Iso-Butane IC4) and the value comes from peak area:



I set up the first peak to be 1215 & [Area], and the second to be 1216 & [External]. If you look at that in the Results screen it should look something like this:

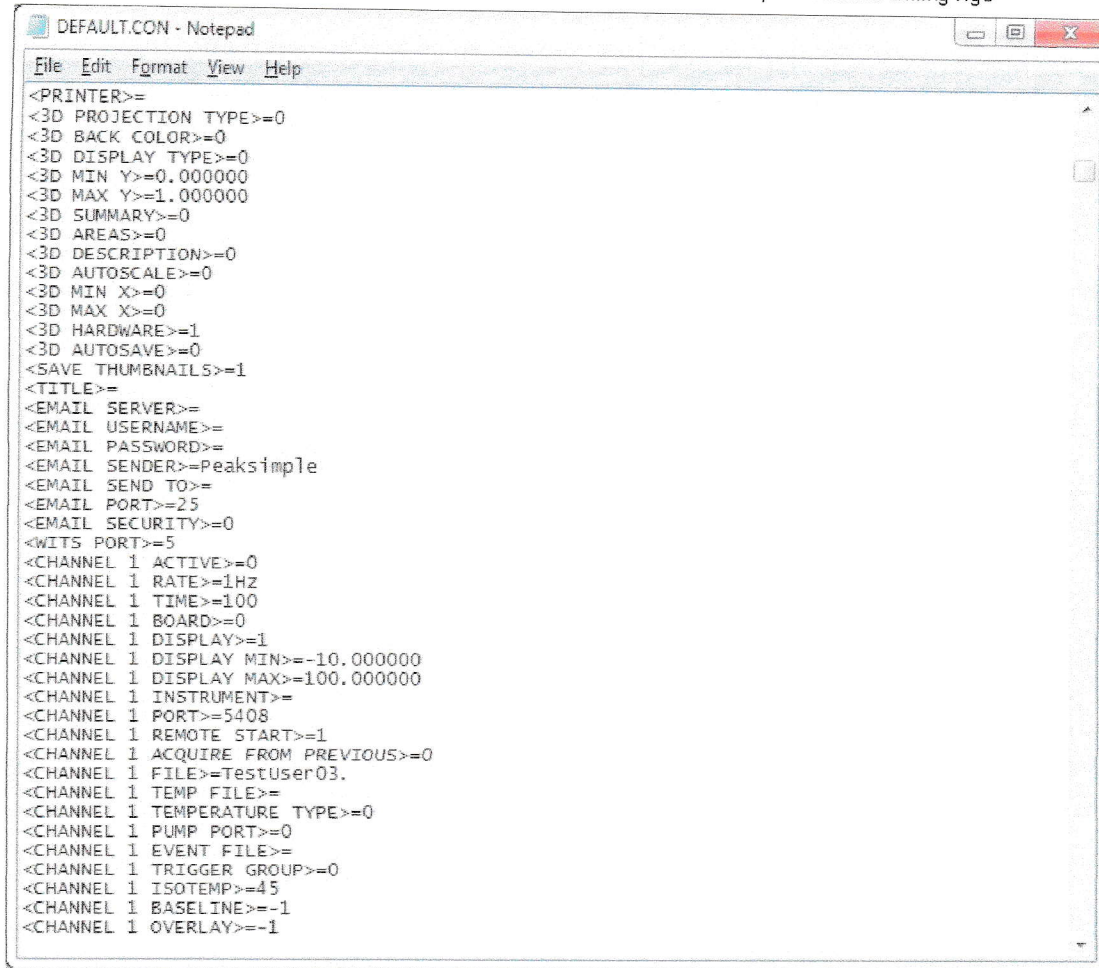


The COM port number is set in the control file. For speed I haven't created a way to set this yet except by hand-editing the control file using Notepad. To set it you need to have an entry for <WITS PORT> like the one below, which refers to COM5.

The default is 0, which means no WITS output.

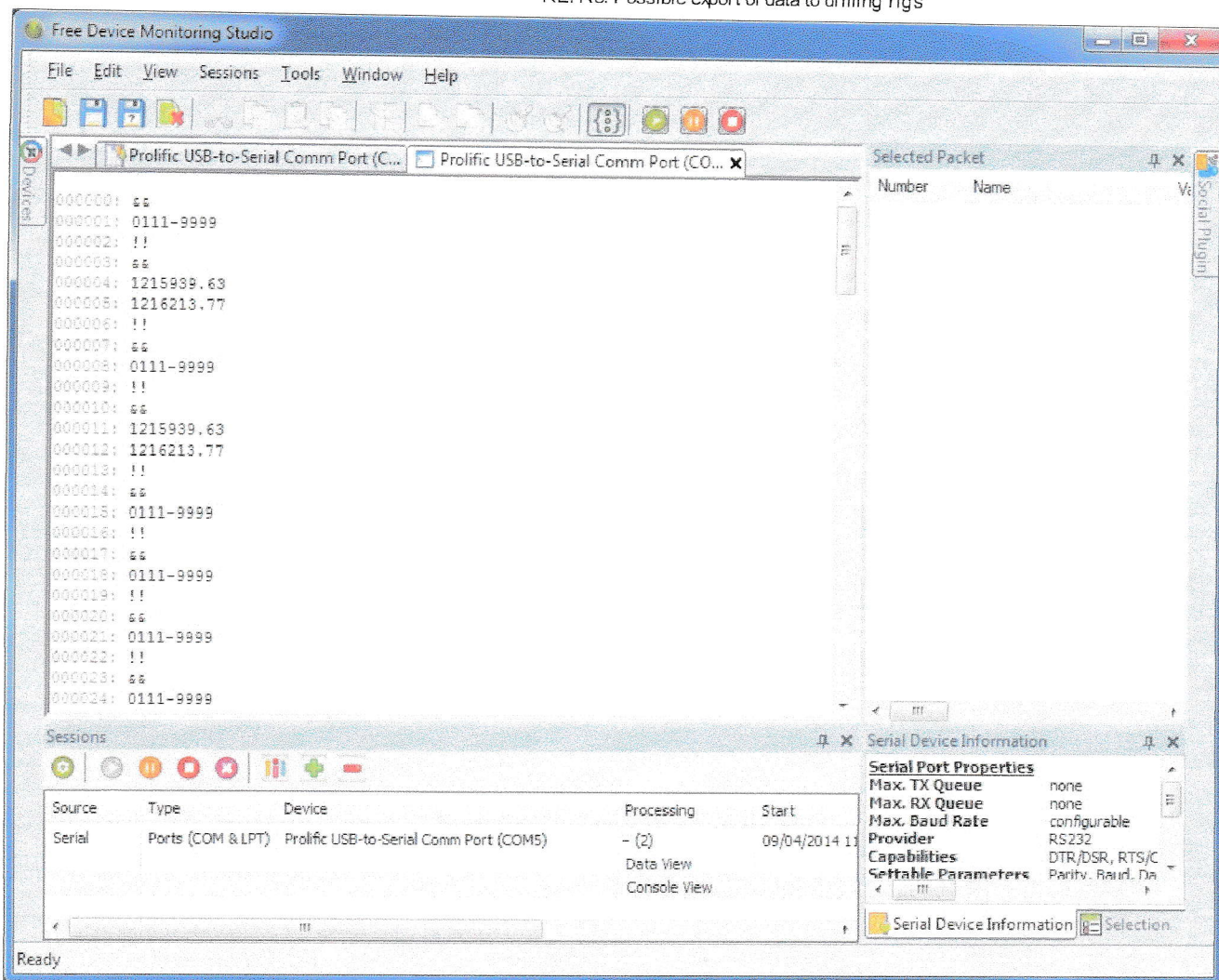
If you save a control file using 4.34 it'll make an entry of <WITS PORT>=0, which you could then edit in Notepad.

The configuration we use for COM port output is fixed at 9600,8,N,1 – so that will have to be set on the receiving instrument.



```
DEFAULT.CON - Notepad
File Edit Format View Help
<PRINTER>=
<3D PROJECTION TYPE>=0
<3D BACK COLOR>=0
<3D DISPLAY TYPE>=0
<3D MIN Y>=0.000000
<3D MAX Y>=1.000000
<3D SUMMARY>=0
<3D AREAS>=0
<3D DESCRIPTION>=0
<3D AUTOSCALE>=0
<3D MIN X>=0
<3D MAX X>=0
<3D HARDWARE>=1
<3D AUTOSAVE>=0
<SAVE THUMBNAILS>=1
<TITLE>=
<EMAIL SERVER>=
<EMAIL USERNAME>=
<EMAIL PASSWORD>=
<EMAIL SENDER>=Peaksimple
<EMAIL SEND TO>=
<EMAIL PORT>=25
<EMAIL SECURITY>=0
<WITS PORT>=5
<CHANNEL 1 ACTIVE>=0
<CHANNEL 1 RATE>=1HZ
<CHANNEL 1 TIME>=100
<CHANNEL 1 BOARD>=0
<CHANNEL 1 DISPLAY>=1
<CHANNEL 1 DISPLAY MIN>=-10.000000
<CHANNEL 1 DISPLAY MAX>=100.000000
<CHANNEL 1 INSTRUMENT>=
<CHANNEL 1 PORT>=5408
<CHANNEL 1 REMOTE START>=1
<CHANNEL 1 ACQUIRE FROM PREVIOUS>=0
<CHANNEL 1 FILE>=TestUser03.
<CHANNEL 1 TEMP FILE>=
<CHANNEL 1 TEMPERATURE TYPE>=0
<CHANNEL 1 PUMP PORT>=0
<CHANNEL 1 EVENT FILE>=
<CHANNEL 1 TRIGGER GROUP>=0
<CHANNEL 1 ISOTEMP>=45
<CHANNEL 1 BASELINE>=-1
<CHANNEL 1 OVERLAY>=-1
```

To test this I didn't write a log screen after all, because it turns out you can get free utilities which will monitor COM port activity and show you what's being output. I used something called Free Serial Analyzer <http://freeserialanalyzer.com/> which when I ran it and connected it to COM5 showed me what's being output, below:



Each record (called a packet) starts with a && and ends with a !!.

The packets that contain 0111-9999 are "keep-alive" signals that PS will output every 20 seconds. These are necessary apparently to keep the attention of the receiving equipment.

The packet that's written out at postrun time contains the entries that start with 1215 and 1216. The corresponding value is right after that 4-digit code with no spaces. It's output with 2 decimal places, as that seems to be the norm. Data is only output for components which have a code number (coming from Calc1) which is between 1200 and 1299, as this seems to be the expected range for GC data. You can test this without waiting for a run by pressing Ctrl-Alt-P which does all postrun actions immediately.

I hope that works – let me know. Once we're happy with it I can add user interface for:

- Enable/disable and setting the COM port
- The choice of fields that determine the WITS code and corresponding result field

Thanks

Alan

From: Hugh Goldsmith [mailto:hagoldsmith@earthlink.net]
Sent: 07 April 2014 18:43
To: Alan Hetherington
Subject: Fw: Re: Possible export of data to drilling rigs

—Forwarded Message—

From: Softrock Geological
Sent: Apr 7, 2014 10:36 AM
To: Hugh Goldsmith
Subject: Re: Possible export of data to drilling rigs

Thanks so much! It looks like we will have continuous work on rigs for the foreseeable future, so I will personally field test when you guys are ready to roll this out. In the meantime, let me know if I need to track down any hardware such as serial to USB adapters, customizable serial cables, or otherwise. Also you are always welcome to come check out our operation in N. New Mexico if it would give you a better understanding of our application of your great SRI instruments. Cheers and keep me in the loop.