



MemLog v1.7.5

Quick Guide

Rev. 1.0

This manual summarizes the procedures for the operation of the MemLog Software that will allow you programming, downloading, plotting and printing the data recorded with **EZGauge** downhole memory gauges family.

This document is meant as a quick start-up guide since this not include some of the advanced features for the software and it might not correspond with the latest available version of it.

For any further information or to get new versions of the MemLog Software please check our website or contact *Altos Technologies* at info@altos-tech.com.

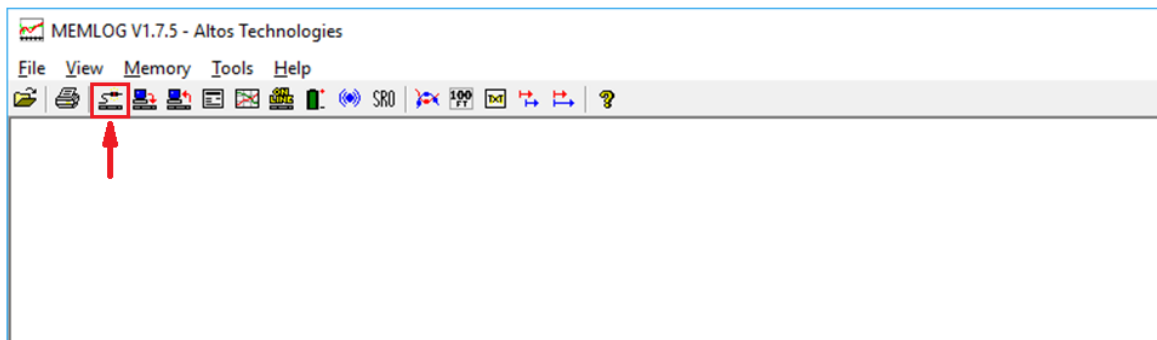
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How to program a gauge?

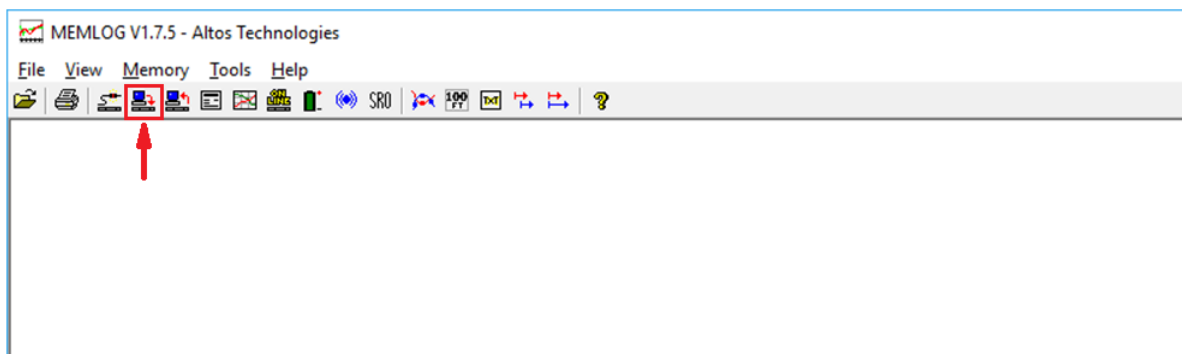
Run MemLog.

If you cannot find the MemLog Software in your PC please run file “Setup.exe” from MemLog’s installation CD.

Connecting with the gauge: Connect the USB wire from the interface box to your computer, then click on the “Tool Connection” icon from the software toolbar.



Programming the gauge:



Now fill the program table with the needed sample rate and period time according to your downhole test specifications. Left click on the light blue (“**overrun**” step disallowed) row or on an empty one in case that you cannot see any light blue row (“**overrun**” step allowed) then you will be able to start filling a new program step.

Tool Programming

Program Step	Sampling Time		Period		Samples	Battery Usage
	Value	Unit	Value	Unit		
1	1	Seconds	1	Minutes	60	0 mAh
2	1	Seconds	100	Hours	360000	77 mAh
3	30	Seconds	OVERRUN			
4						
5						
6						
7						
8						

Total: 360060 78 mAh

Save File Load File Send to Tool Clear Cancel

Please note that if the overrun condition is enabled (it is enabled as long as the light blue step row is being showed), once all your program steps have been run the gauge will continue recording data with the recording rate specified in the overrun row until the end of the memory is reached. This is a very useful feature that allows you to record data even if the expected downhole test time was extended for some reason.

You can edit the overrun step by right clicking on it and then changing the sampling rate, then this change will be saved as default:

OverRun Manager

OverRun Program Line

	Value	Unit	Value	Unit
<input checked="" type="checkbox"/>	30	Seconds	OVERRUN	

OK Cancel

The over run condition can be disabled from this window also if you uncheck the box on the left side, then the light blue row will not be showed.

The orange row is the test step and cannot be disabled. This one is used to verify the proper function of the gage after the battery has been connected and the gauge has run few internal tests and self calibrating procedures the battery **LED** will blink every one second over the first 60 seconds to warn the user the right tool operation. After this 60 seconds test the LED turns off and will remain like that during the rest of the gauge operation.

Once you are happy with the added program steps you should save it on the gauge memory by clicking on the **“Send Tool”** button,

Save File Load File Send to Tool Clear Cancel

At this moment the memory gauge is ready to go on Job.

Optionally before you detach the tool from the interface box you can check the gauge readings in real time by clicking on the “online” icon on the toolbar.



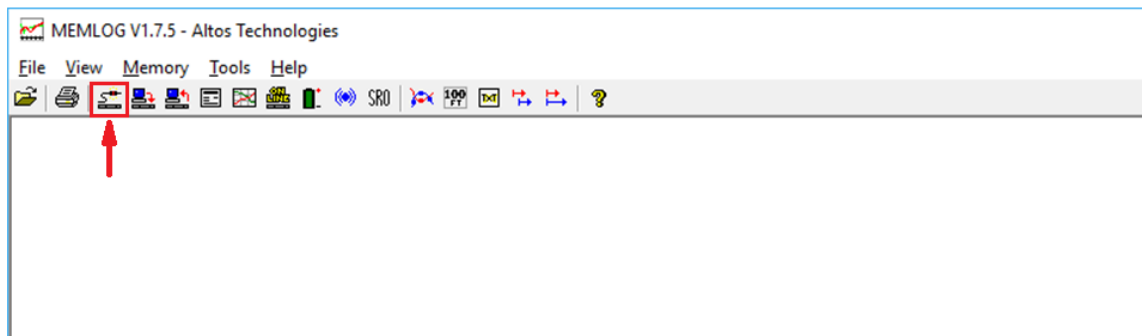
How to download data to your PC?

After one or more jobs have been recorded (depending on how many “plug-unplug” battery cycles have been performed).

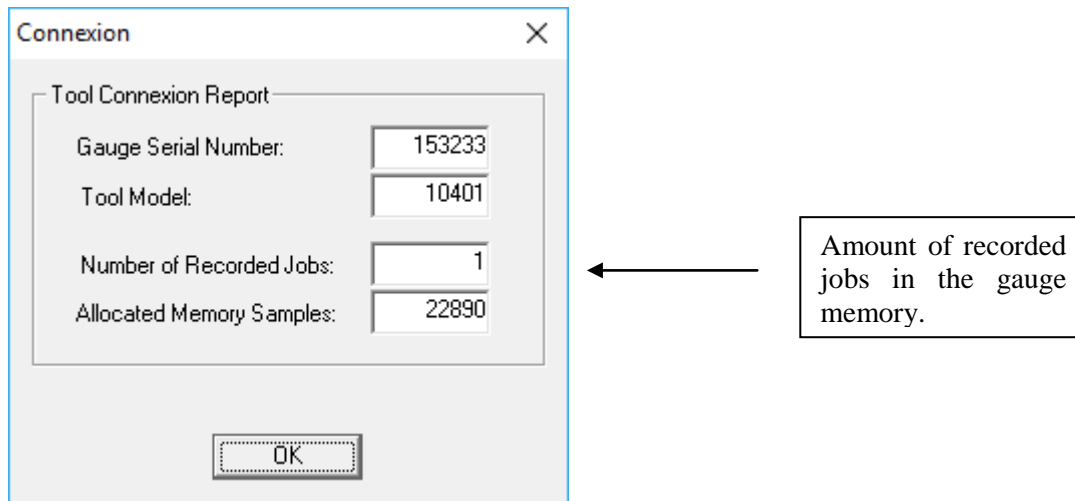
Run MemLog.

If you cannot find the MemLog Software in your PC please run file “Setup.exe” from MemLog’s installation CD.

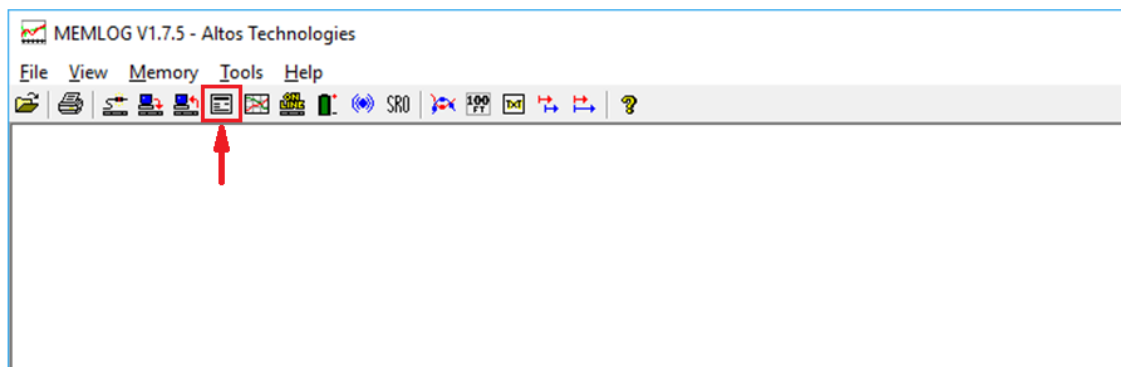
Connecting with the gauge: Connect the USB wire from the interface box to your computer, then click on the “Tool Connection” icon from the software toolbar.



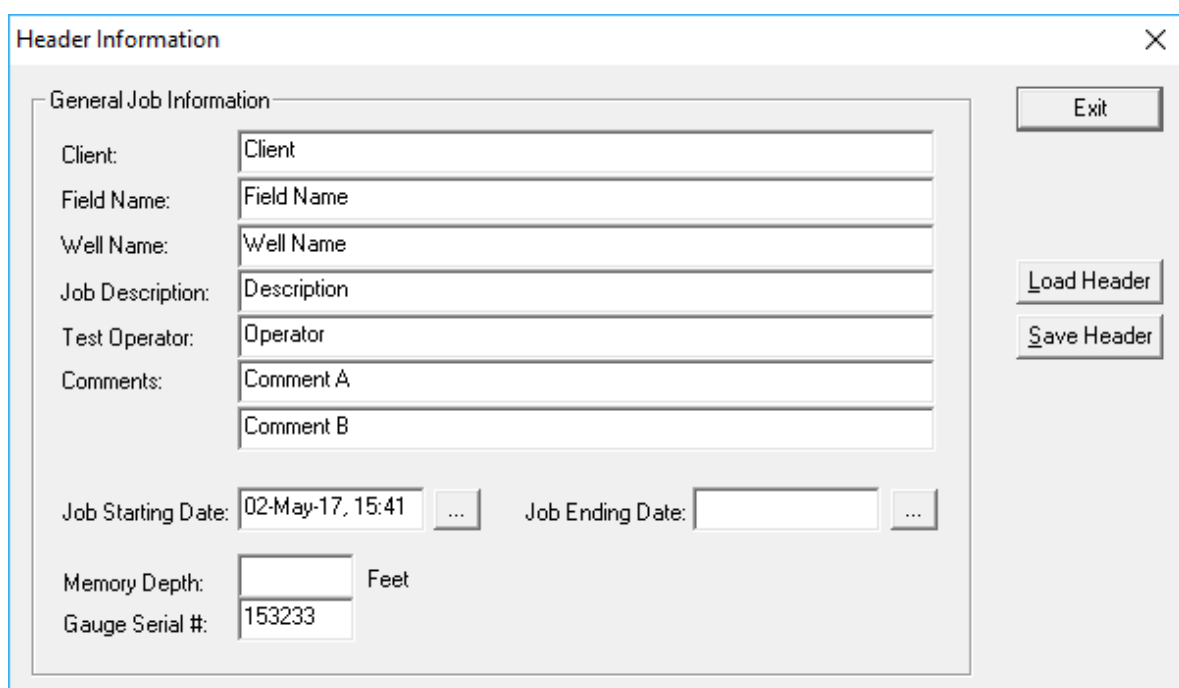
A report from the connection will pop up showing information from the gauge such as tool serial number, model and the total of recorded jobs in the memory.



It is recommended at this point to load the header data that will be placed at the beginning of the downloaded ASCII file.



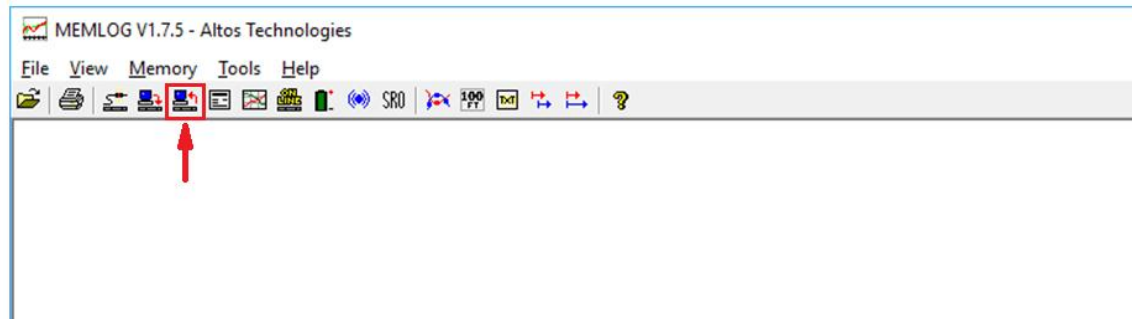
After pressing on “**Header**” the next dialog box pops up:



The new header data can be entered by keyboard or through a file previously recorded using this dialog.

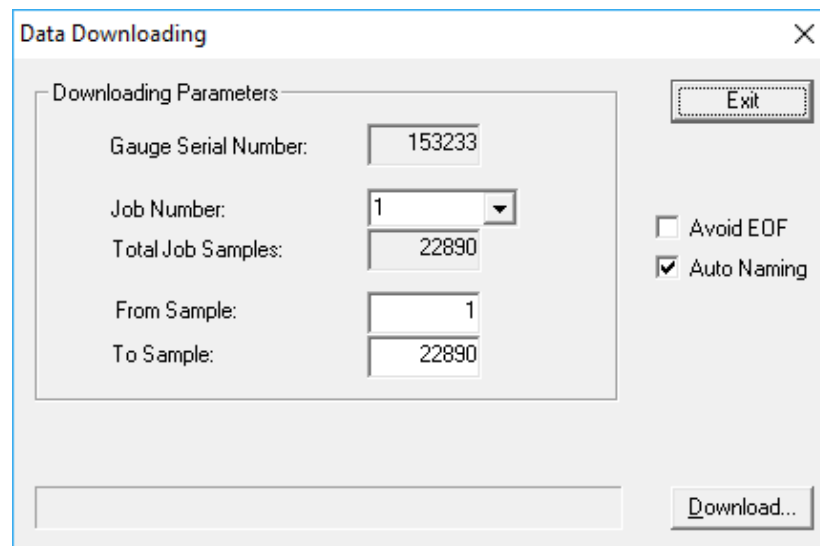
The next step is to download the data and generate a “.TXT” file with them.

Click on the “**Download**” icon:



Then from the “**Data Downloading**” dialog box choose the job number you want to download.

It is also possible to partially download a job by specifying the “**From Sample**” and “**To Sample**” numbers which must be between the “**Total Job Samples**”. By default the total samples are downloaded.



After pressing the “**Download...**” button you can specify the exact date and time for the battery connection that must be pick up at the location by the gauge operator.

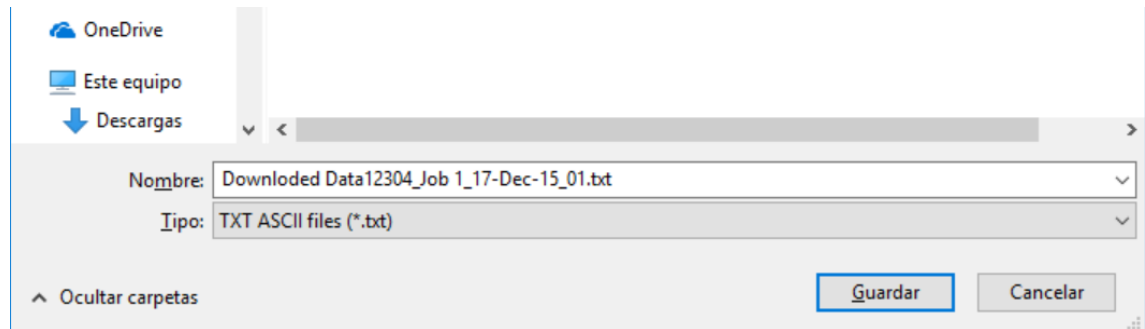


All jobs are written in binary format (.BIN) files and text format files (.TXT) at the same time in the folder:

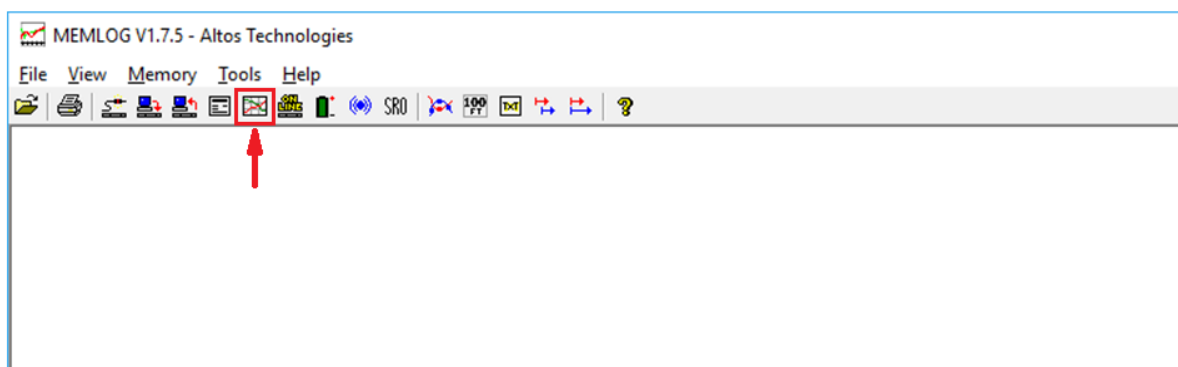
C:\Program Files\Altos Technologies\MemLog\Downloaded Data

(Note: other folder can be chosen at this point)

Enter the desired file name in the “Save As” dialog. The MemLog Software will offer the serial number of the connected gauge as default prefix for the file name being entered.



To visualize the data just being downloaded use the “**Plot**” icon and select the file name.




How to generate a plot?

The software allows you to directly open the downloaded ASCII (.TXT) files and generate plots by pressing on the “**Plot**” icon.

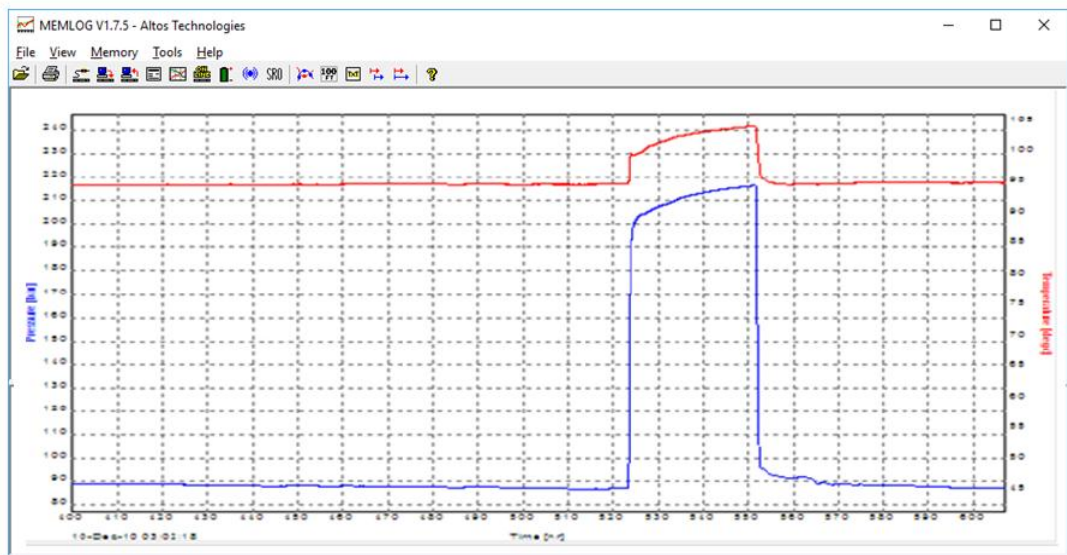
Once the file is plotted you can zoom in by selecting an area by dragging the mouse cursor while the left button is being pressed. As soon as you release the button the area will be zoomed.

By clicking the right button you zoom out the plot back to its original size.

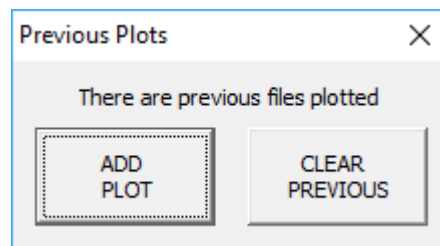
The axis limits are set automatically while the AUTO RANGE function is enabled (by default it is enabled).

If different units than those from the ASCII file are required you can you can change them from the **View** → **Options** menu and then you have to generate a new ASCII file by pressing on **BIN to ASCII** () button located on the toolbar.

(Note: any file containing three rows with numbers separated by TAB or SPACES can be plotted with MemLog as long as the line immediately before the data rows is an empty)



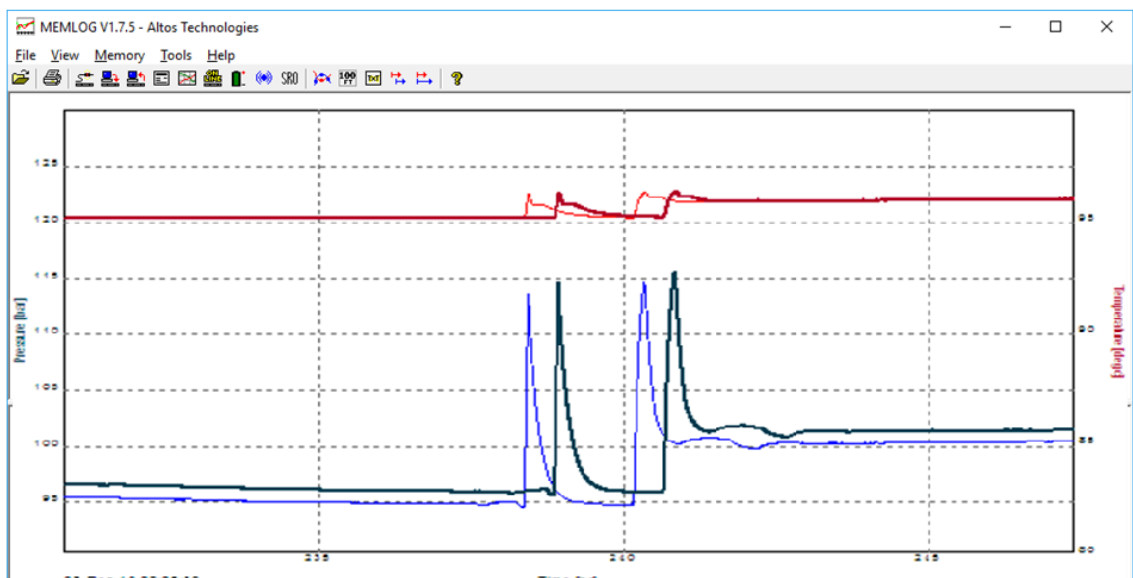
If you want to plot another set of curves you can press on **“Plot”** again and select another file. Then the next message box appears:



By pressing **“CLEAR PREVIOUS”** the current plotted file will be discharged and the new one will be showed instead.

If you press **“ADD PLOT”** then the new curves will be plotted together with the current ones. You can repeat this procedure and plot up to 10 sets at the same time.

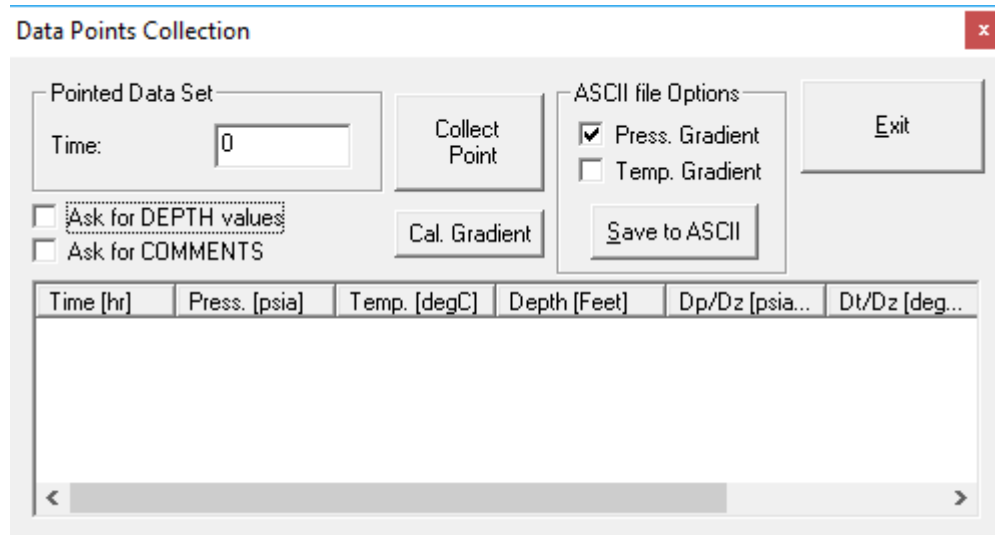
In the next example two different set of curves are plotted simultaneously, they belong to the same downhole test but have been recorded by different gauges:



How to add comments and depth labels to the output ASCII files?

Once a job is being plotted we can generate another ASCII having comments and/or depth labels for some any point within the survey data.

To accomplish that select **Tools** → **Points Collection** to access the next dialog box:



Time [hr]	Press. [psia]	Temp. [degC]	Depth [Feet]	Dp/Dz [psia...]	Dt/Dz [deg...]

Check the “Ask for DEPTH values” and/or “Ask for COMMENTS” boxes and press on **Collect Point**. Then click along the plotted graph in order to “collect” points into the table showed in the “Data Collection” dialog box. At the time you click you will be prompted to enter depth values and/or comments for the chosen points that then will be showed in the subsequent ASCII files generation or can be used to calculate other useful information.

Once you are done with collecting the points click on **Stop Collecting**

(Note: if you have entered depth values for different points you can calculate pressure gradients by pressing **Cal. Gradient** and then save this table on a text file by pressing **Save Gradient** for later use)

At this point you can create a new ASCII file having the depth labels and/or the comments from this table, that will be located right before the collected points appear in the file.

To generate a new ASCII file, press **File** → **Save ASCII...** Now select the “Insert DEPTH values” and/or “Insert Comments” check boxes and then press **Create ASCII** button.

How to print out a plot?

MemLog Software allows you to print out plots direct to a printer or a .PDF file by clicking on the **Print** button.

To be able to generate a PDF file you must have installed special software drivers such as Adobe PDF Writer o Primo PDF, this last one is distributed freely with MemLog installation CD and it is recommended to be used over Adobe PDF writer since it is faster to produce the PDF output file.