The laptop or PC 10 is equipped with a Very Portable Hydrotest Recorder (VPHR) software and the an external power supply may not be needed.

The system 100 is arranged as shown in FIG. 1. In operation, a device to be tested 40 is connected by a tube 35. In general, there is one opening from the device to be tested 40 the tube 35 or a hose 35 is connected to the system 100 at the pressure transmitter 30, preferably the to be tested device 40 is securedly attached with the pipe and hose 35 linked to the pressure transmitter 30. The lap top 10 or the PC is pre-installed with VPHR software.

In the present system, the components that are needed to carry out the hydrotest include a laptop or PC 10, an interface driver 20, and pressure transducer 30. The system does not need to be connected to any external power supply. The live capturing of pressure result is generated by VPHR software on any PC via serial connection to pressure transducer on test pipe line. Ambient temperature data record is running in parallel with the pressure record and separate pen and range on a chart. In the present invention, calibration on VPHR is not needed, only the pressure transmitter 30 needs calibration. The VPHR software includes use friendly control parameter settings for adapting to various ranges on a plurality of variables.

The radar chart in VPHR software is capable of monitoring any duration pressure record, such as 1 hr, 4 hrs, 36 hrs… In accordance with the present invention, the radar chart in VPHR software has auto ranging feature which is capable of recording any pressure range in a very comprehensive presentation for audit purpose.

An inspector for the hydrotest can fill in the relevant info at the information column for audit purpose. The test duration, start time, stop time and date of the hydrotest are presented comprehensively and printable.

On the top-left corner of the program GUI there is an indicator, and the green blinking indicator indicates whether the driver and the transducer are connected as detected by the program. If the indicator is not blinking, the device to be tested is not connected. In other words, the online indicator blinks showing there is communication linkage between the laptop or PC 10 and the transmitter 30. In accordance with the present invention, the capturing of pressure information is instantaneous where any sudden drop in a second will be captured.

The completed test results can be recorded and be printed to ~~PDR~~PDF readily.

FIG. 2 is a view showing the test result being printable from the monitor of the laptop or PC in accordance with the present invention. FIG. 3 is a view showing the changing of range setting in accordance with the present invention.

FIG. 4 is a view showing the green blinking indicator located at the top-left corner of the program GUI in accordance with the present invention. FIG. 5 is a radar graph in the middle-left of the program GUI in accordance with the present invention. FIG. 6 is a radar graph for monitoring the test system in accordance with the present invention.

As shown in FIG. 2, the “Print” button in the “Command” section is clicked in the middle-left of the program GUI, the Radar graph is saved as a ~~PFF~~PDF format. In FIG. 3, the range setting can be changed using the “Setting” button in the “Command” section at the middle-left side of the program GUI. This opens a window with the editable variables (PSI & BAR being units of pressure measurement). Interface language can also be changed at this section.

As shown in FIG. 4, there is shown that the green blinking indicator at the top-left corner of the program GUI indicates whether the driver 20 and the transducer 30 are connected as detected by the program. If the indicator is not blinking, the devices are not connected.

The plotting of radar graph is done by using the “Start” button in the “Command” section in the middle-left of the program GUI. Variable readings such as pressure and ambient temperature are displayed below the connectivity indicator. In order to continue monitoring the system for a set duration, the “End” button in the “Command” section in the middle-left of the program GUI is clicked to end the reading.

It will be seen that the described system meets all stated objects. It provides the advantages (a) of being able to test a pipe or device at site; (b) of being able to serve an entire range of pipe size; (c) of being able to test a given-size pipe, whatever grooved, locally flattened or other contour may characterize the bore at the pipe end; (d) the cost of servicing is relatively low.

While the invention has been described in detail for a preferred embodiment, it will be understood that modifications may be made without departing from the claimed scope of the invention.