
Tutorial 8 – Reporting

PETROG has been designed to perform petrographic data tasks. It understands the inter-relationships which a geologist takes for granted: for example, that Feldspar is silicate mineral, which other software does not. The goal of the tools available in PETROG is to perform tasks which assume such relationships, but not to duplicate tools readily available elsewhere. Hence PETROG will enable you to set up a cross-tabulation of any imaginable grouping of minerals, pore types or other items logged, and will generate graphics such as ternary diagrams which are peculiar to petrography, but does not reproduce generic analyses available in software such as a spreadsheet tool. Reporting follows this principle: you can create text files for importing into, for example, Word or Excel, but PETROG does not offer assistance in formatting text, which is better done in a word processor, nor does it perform generic statistical tests or analyses.

There are many ways to report the data and analyses stored in PETROG, principally:

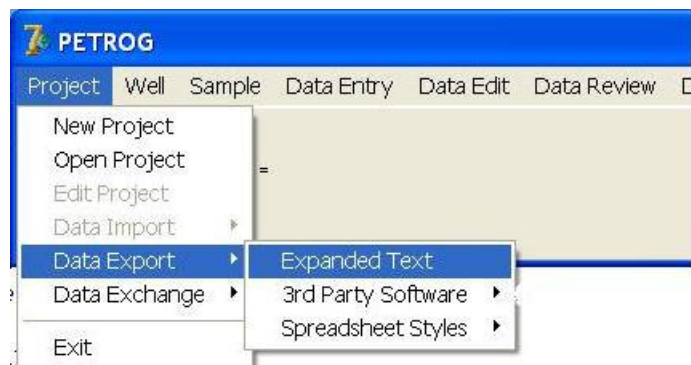
- Export to a file (useful for back-up and transferring data between PETROG systems);

- Copy and paste, available from most windows (useful for saving data for further analysis in a spreadsheet, particularly tabular data, or for taking copies of diagrams for inclusion in reports);

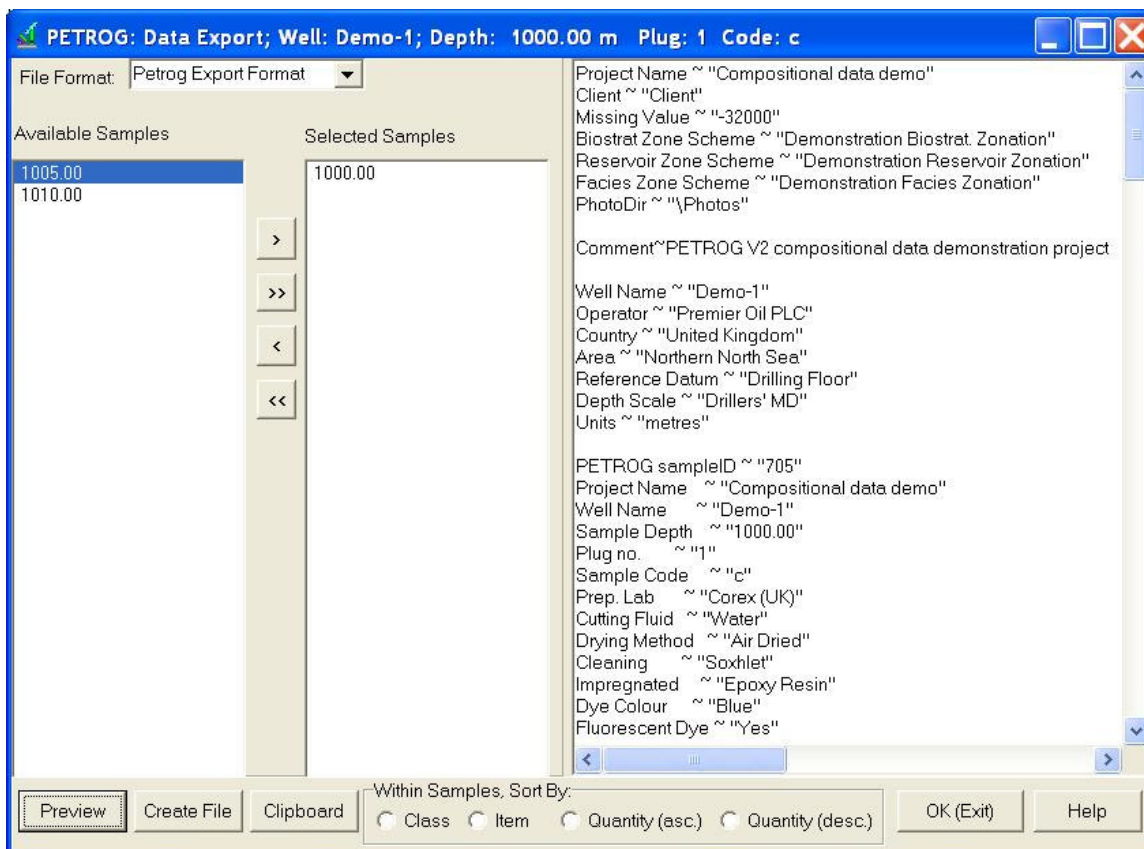
- Creating more complicated, ad hoc or customised, subsets of data from the Reporting option on the Main Menu.

Export to a file

This option, from the main menu:



allows you to choose which samples to export (from the current project):

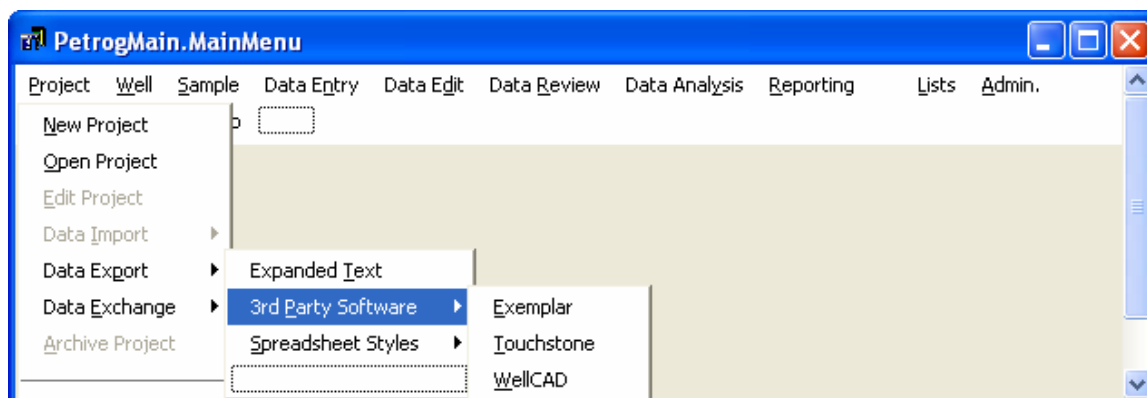


For Excel, choose 'delimited' and select character 'other', then '~'

and then either creates a file, which can be imported into Excel or any other application, or allows you to copy the results to the clipboard

All data for each sample is copied, except the images. If you want to copy the data and include the images, then you need to use the main Reporting menu (see below).

This option is designed to either take a complete copy of a project or to export into a specific third-party format. As well as exporting as expanded text or delimited (spreadsheet) styles, certain specific package formats are supported::



Currently supported are Exemplar and Touchstone, for basin modelling, and WellCAD, for data display. The "Touchstone" menu option is initially not enabled, at the request of Touchstone. Only if you have a licence for Touchstone and we can confirm this with Touchstone are we allowed to enable this menu option.

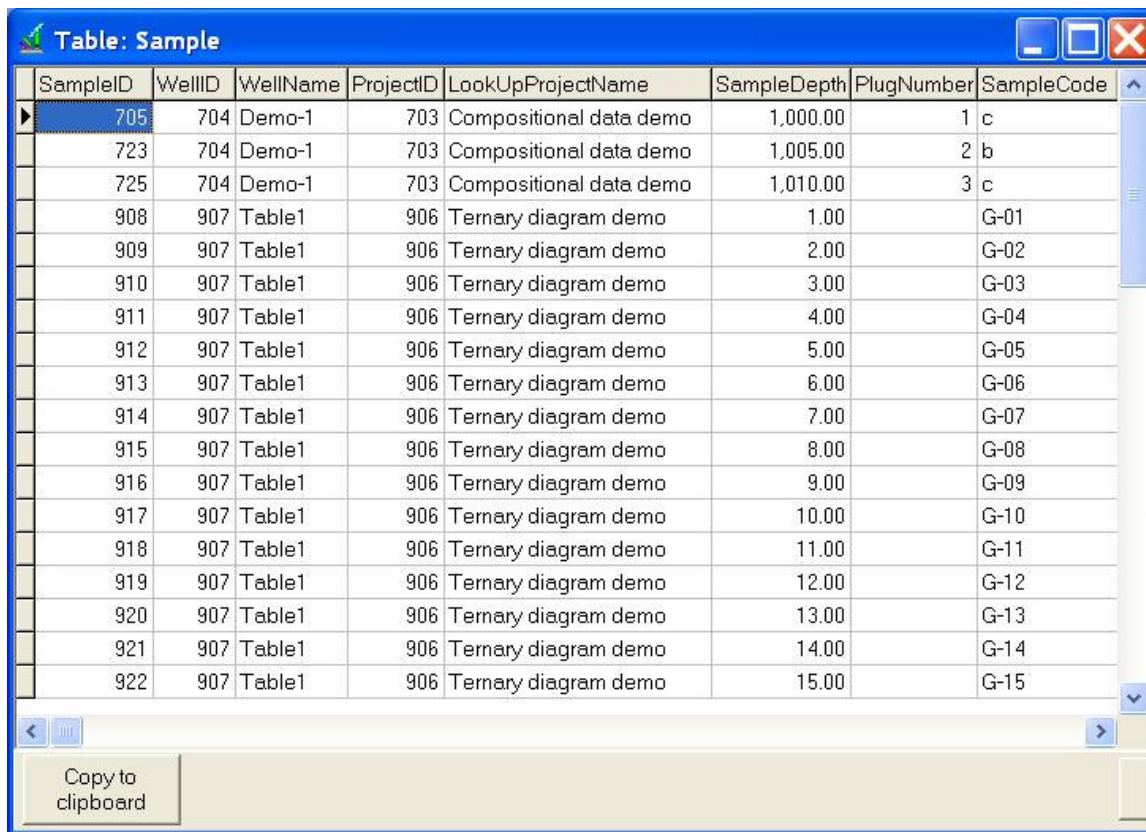
Finally,

Project | Data Exchange

is designed to move projects from one installation to another, or to backup an entire project.

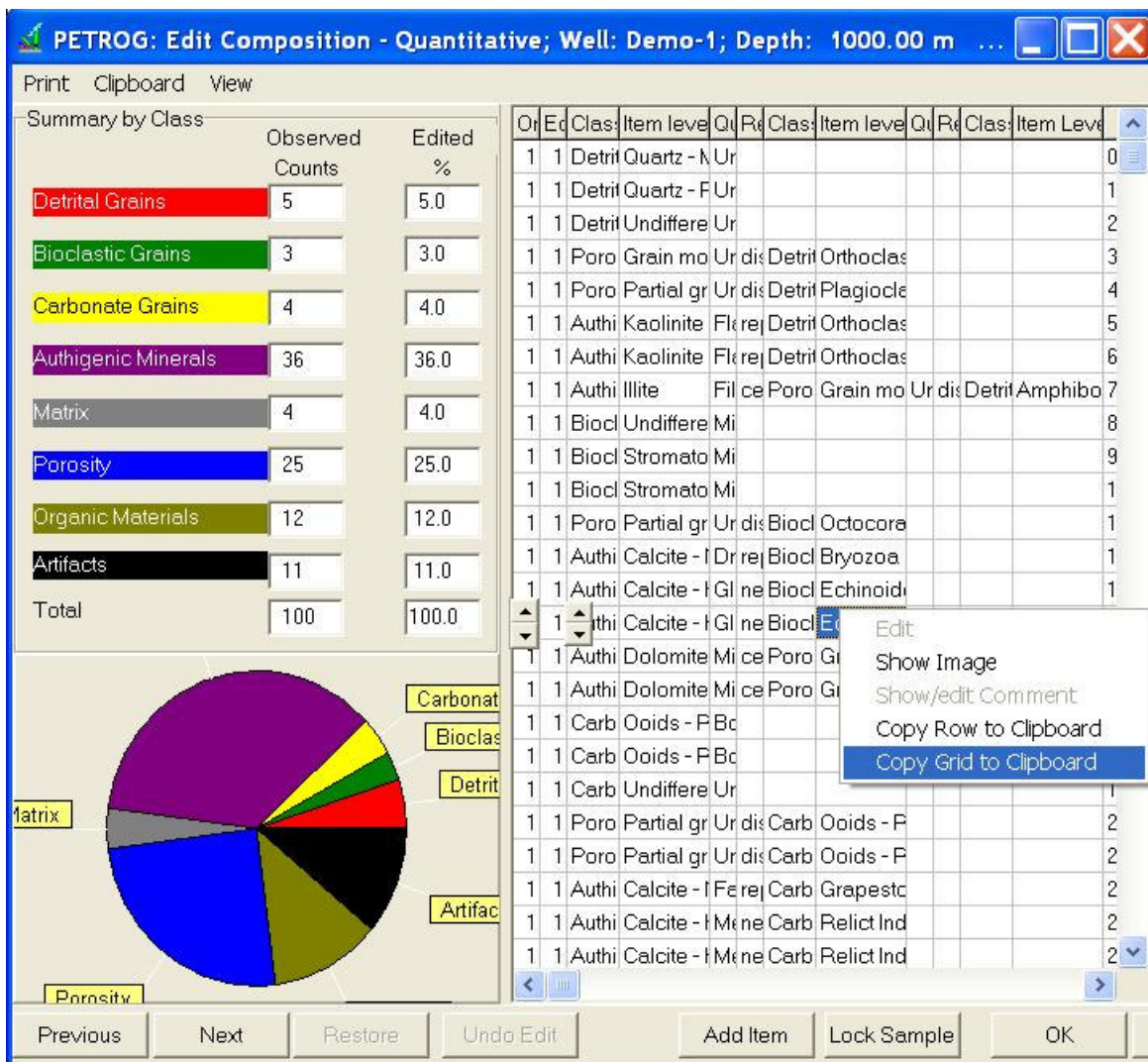
Copy and paste

Many windows have an option to “copy to clipboard”, either in the form of a button, e.g.:



SampleID	WellID	WellName	ProjectID	LookUpProjectName	SampleDepth	PlugNumber	SampleCode
705	704	Demo-1	703	Compositional data demo	1,000.00	1	c
723	704	Demo-1	703	Compositional data demo	1,005.00	2	b
725	704	Demo-1	703	Compositional data demo	1,010.00	3	c
908	907	Table1	906	Ternary diagram demo	1.00		G-01
909	907	Table1	906	Ternary diagram demo	2.00		G-02
910	907	Table1	906	Ternary diagram demo	3.00		G-03
911	907	Table1	906	Ternary diagram demo	4.00		G-04
912	907	Table1	906	Ternary diagram demo	5.00		G-05
913	907	Table1	906	Ternary diagram demo	6.00		G-06
914	907	Table1	906	Ternary diagram demo	7.00		G-07
915	907	Table1	906	Ternary diagram demo	8.00		G-08
916	907	Table1	906	Ternary diagram demo	9.00		G-09
917	907	Table1	906	Ternary diagram demo	10.00		G-10
918	907	Table1	906	Ternary diagram demo	11.00		G-11
919	907	Table1	906	Ternary diagram demo	12.00		G-12
920	907	Table1	906	Ternary diagram demo	13.00		G-13
921	907	Table1	906	Ternary diagram demo	14.00		G-14
922	907	Table1	906	Ternary diagram demo	15.00		G-15

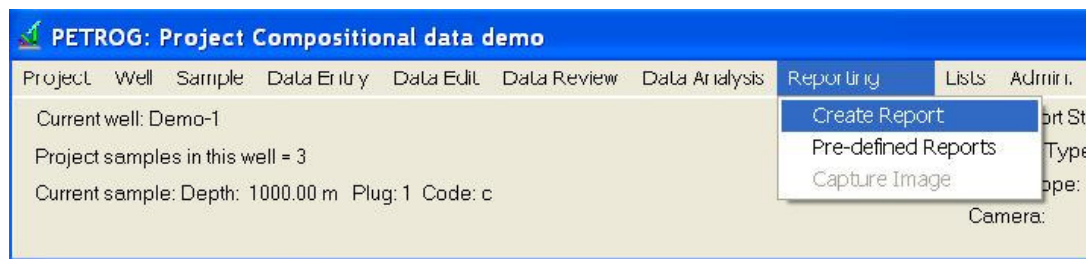
or as a RMB menu option:



Copying to the clipboard will preserve the format of the data: if the data is in a table, then it can be copied into Excel, retaining the same columns; if it is a picture, it can be pasted into any drawing application or word processor.

Reporting from the Main Menu

There are two types of report:



'Create Report' allows you to define a report format here, using the PETROG interface.

'Pre-defined Reports' are those which were specified once and then fixed in the software.

User-created reports allow great flexibility in deciding what data to export. This does not only mean choosing to report some things and not others, but also allows you to decide the level of detail to report. For example, you may have logged each of [Adularia, Albite, Anorthoclase, Microcline, Orthoclase, Sanidine] but want to report the quantity of Alkali Feldspars; all you need to do is specify Alkali Feldspars in the report template and PETROG will sum all of the components, reporting only the total. If you want to report Alkali Feldspars as a summary but also the percentage of Microcline, you simply include both in the report template. Finally, if you want to report Alkali Feldspars as a summary but without the contribution of Microcline, and then report the percentage of Microcline separately, this can also be done, but you must first create a Compound Item, “All Alkali Feldspars except Microcline” (see the Tutorial on Compound Items).

Pre-defined reports do not allow you to change the format or what categories of information to report, but they can be very powerful for writing a Word or Excel file directly, in the company format and including headers constructed from project, well and sample names, with embedded graphs, photos of samples or points interspersed with a summary of data for the sample or point, etc.

Both types of report allow you to choose which samples to report.

User-defined reports

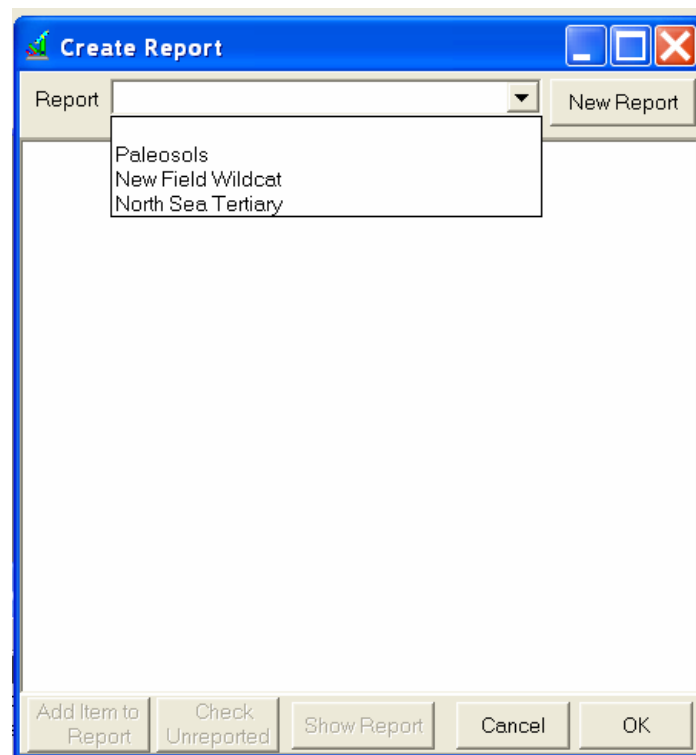
These are set up by a user, by selecting data, or types of data, to report. The reports created are really report templates, i.e. a list of data to report, which can be applied to any project or set of samples. The templates are held in the PETROG database, in tables:

ReportDetail.DB

ReportMaster.DB

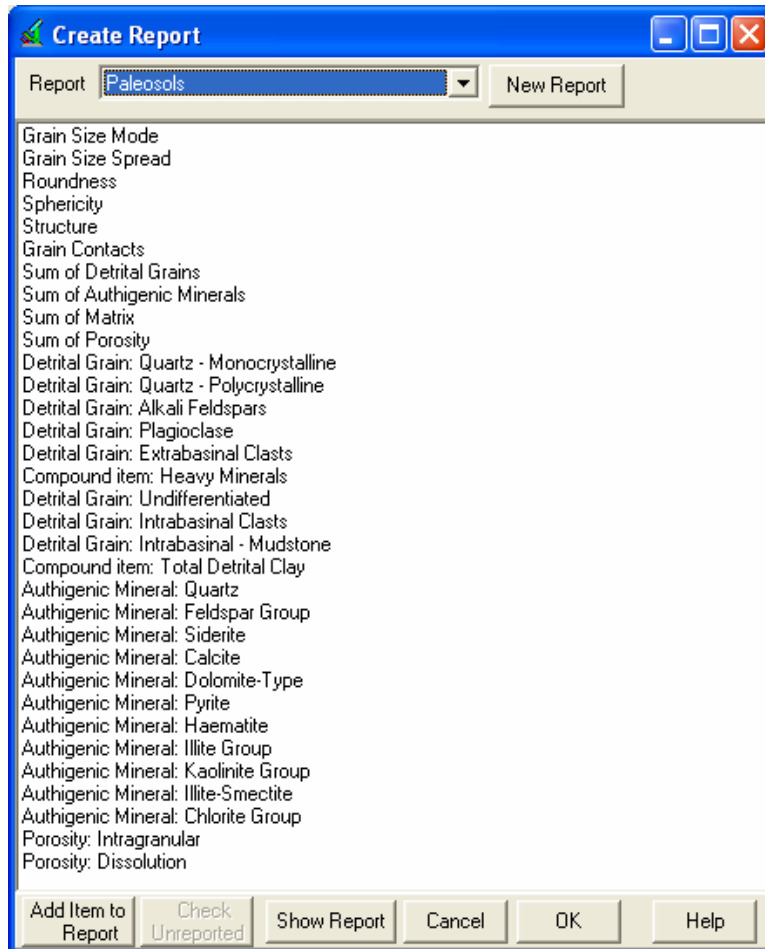
Once created, a user-defined report can be saved and re-used on any other data.: They are accessed by name from the dropdown list which is accessed from the main menu:

Reporting | Create Report

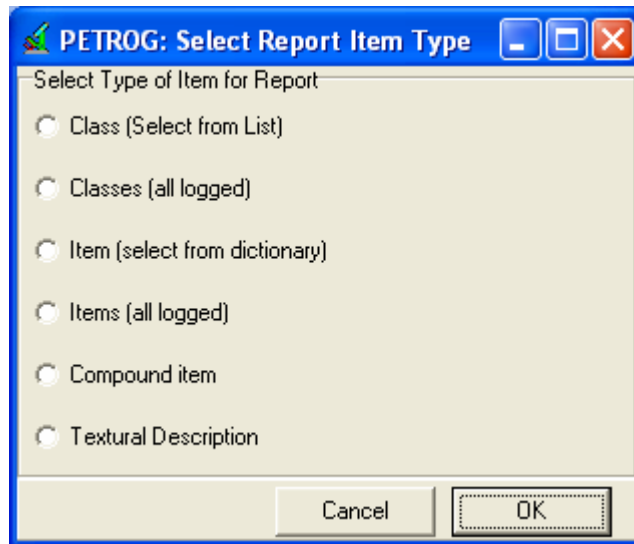


If your requirements are not met exactly by any of the existing report templates, you can either edit an existing one (PETROG will copy it, not overwrite the previous one) or press the New Report button and specify a name.

In either case, the Add Item to Report button becomes active, and you can start choosing what data will be reported. A completed report template may look like this:



Because a report can specify a “Derived Item”:

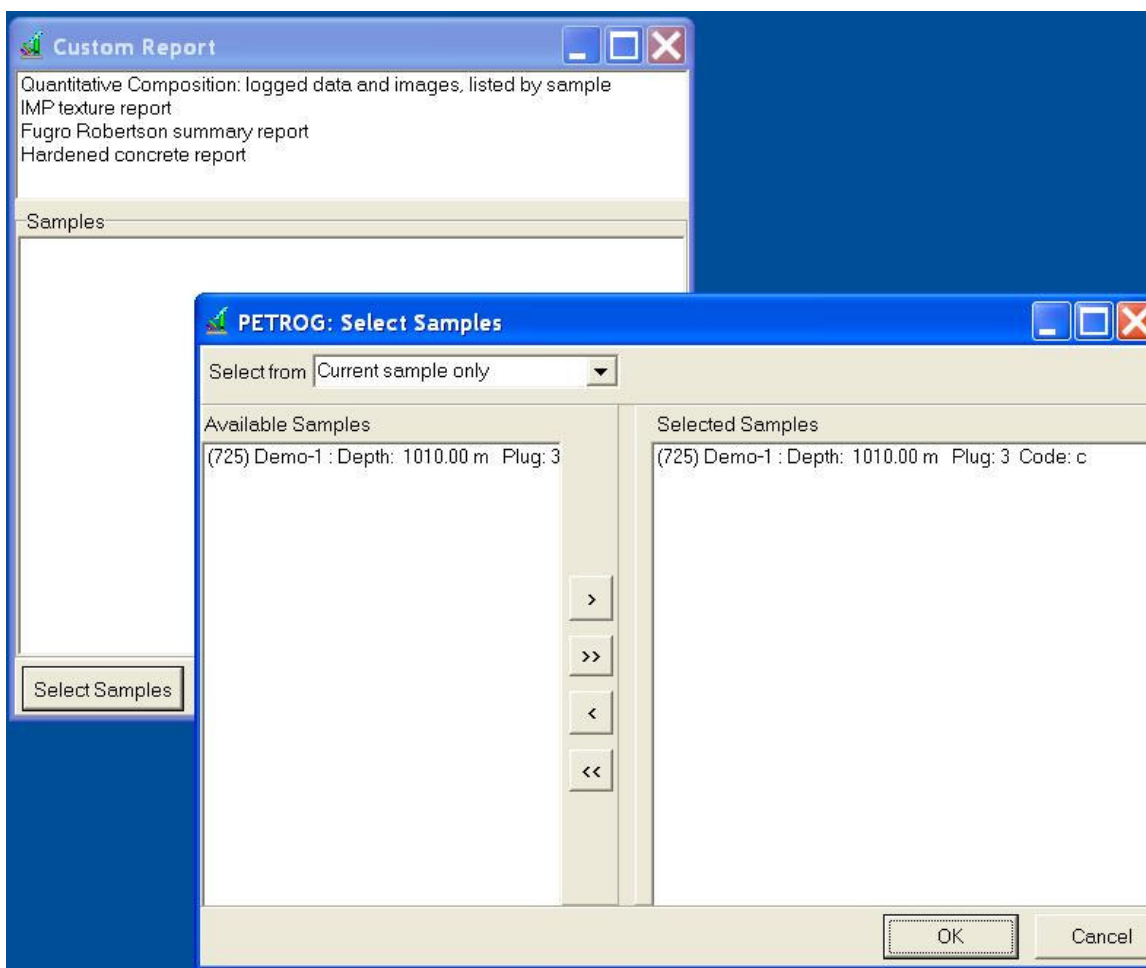


There is complete flexibility on what to report.

If you want to see how it will appear, press **Show Report**. This creates a grid, with the selected types of data across the top and the samples down the left side. The grid can be copied to the clipboard and then pasted into Excel or any other software application (such as a specialist statistics package).

Pre-defined reports

To create a pre-defined (Custom) report you need only specify which of the available pre-defined styles you want to use, the file into which to write and the samples to be reported:



Note: When using Custom (pre-defined) reports, it is often useful to include only a subset of the images that were collected while logging (counting 400 points per sample for 10 samples, and collecting two images, plain and cross-polarised light, for one in ten of them, creates 4400 images). Which images to include can be controlled by adding a comment to each image you want to have in the report, as well as choosing them when the report is created; this can save considerable time.
