



1point
Desktop

**TRAINING
MANUAL**

1point Desktop Training Manual


By Robert Epps 12th April 2014




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Quick Start Guide

If you don't have time to read the entire manual, here are some quick guides to using the main features. If you need more information on a particular subject there will be links to the main section of the manual.

Load Data

Load the drill holes you want to work with either through the File/Open menu or the Database button on the toolbar. Load LAS files (if you want to view geophysics) via the LAS button on the toolbar. For more information refer to [Loading Data](#)

Table Window

Need a quick hole summary? Just select New Table Window from the Windows menu or click the button on the toolbar. Select your filter options and click ok to see the table. Click the Choose Columns button to select the columns you want to view or to add custom columns. For more information refer to [Table Window](#)

Map Window

Want to see the spatial relationship of your drill holes? Select New Map Window from the Windows menu or click the button on the toolbar. Select your filter options (as above) and click OK to see the map. Zoom and Pan around the map using the provided tools . Make hole selections by drawing a rectangle around the desired holes. Add other layers to the map such as lease boundaries, select different values to post instead of the hole name, create contours from various parameters including custom columns. For more information refer to [Map Window](#)

Graphic Log Window

Want to see all the hole information and detailed graphic plots? Select the hole from the list and either right click and select Show Graphic Log, select New Graphic Log Window from the Windows menu or click the button on the toolbar. Click anywhere to navigate around the hole, everything is synchronised. Right click to select various display options. Expand the list of LAS curves from the holes list to select or customize the curves. Try the View menu to see different graphic log styles, change the vertical scale or turn various display options on/off. Right click and change the edit mode to edit the data. For more information refer to [Graphic Log Window](#)

Section Window

Would you like to see a cross section (fence diagram) of some drill holes? Either select the holes from the list on the left or use the section tool in the map window to draw a cross section line. Use the mouse scroll wheel to change the buffer size. Right click and select "New Section Window" or choose it from the Windows menu or click the button on the toolbar to see the new cross section. Use the View menu to change horizontal and vertical scaling, change the depth mode or other display options. Use the move tool to click and drag objects around the screen, right click to hide objects, turn correlations on/off, separate holes that are bunched together or rename a seam in a hole. For more information refer to [Section Window](#)

What is 1point Desktop?

1point Desktop (1PD) is an integrated suite of software tools for the Coal Mining Exploration industry. Designed with the field geologist in mind as the primary user, the tools include data entry, validation, depth correction plus English log, graphic log and cross section generators. Data can then be exported for modelling and mine planning.

History of 1point Desktop

1point Desktop started life somewhere around 2000/2001, it's hard to put an exact date on it. Originally called the LG&A Task Manager as a collection of tools for Lance Grimstone & Associates, it consisted of a number of individual modules brought together by a simple menu system. The first module was the LAS Converter which converted standard ASCII LAS files into CSV files. Later modules included a Brightness Profile Generator, Strat Log Generator, Coal Quality Processing and Database tools. The original tools were written in a combination of Visual Basic 5.0 and Excel VBA.

In around 2007 most of these modules were completely re-written in VB.NET and renamed Task Manager 2008 (TM2008). This was mainly driven by the fact that newer versions of Windows at the time were dropping support for the old Visual Basic 5.0 language runtime. TM2008 features were similar to the previous version with the main programs functions still quite distinct and separate although some steps were removed and/or automated to improve efficiency.

In 2013 the entire product was re-written again to take advantage of new technologies, lessons learned from the previous re-write and to conform to the new Coal Log standard. This version was called Task Manager 2014 (TM2014)

Functionally TM2014 and TM2008 are very similar. TM2014 was completely re-written from the ground up based on the CoalLog logging standard. The main differences for logging are things like the additional of a Lithology Qualifier column for coal brightness and sandstone grain size which were previously housed in a Lithology Adjective column.

TM2014 is also more tightly integrated than TM2008 so changes to a hole in one part of the program are now automatically reflected elsewhere. TM2014 includes integrated GIS functionality to allow more accurate mapping of boreholes and overlaying of common file formats such as SHP & DXF files. Finally, unlike TM2008, TM2014 does not require any third party applications such as Microsoft Excel to read/write Excel files or Adobe Acrobat to create PDF files.

As of 2024 TM2014 became the product you know as 1point Desktop.

Please note: some screenshots in this guide still refer to TM2014. The product is the same, just with a different name.

Future of 1point Desktop

1point Desktop is continuously evolving and we release updates on an almost weekly basis, some are minor bug fixes but many are new and/or improved features. We strongly encourage and welcome feedback, suggestions, bug reports and anything that will help improve the product and the experience for our customers.

Installation

There are two versions of 1point Desktop: public and internal for Peabody staff. The two versions are identical with the exception that the public version requires .NET 4.5 instead of .NET 4.0

1point Desktop can be downloaded from the following link:

<https://www.floutsoftware.com/1point-desktop>

System Requirements

The Peabody version of 1point Desktop requires Microsoft .NET 4.0 which is already installed on Peabody equipment. The public version requires .NET 4.5 and will be installed on demand.

Windows 8 and Windows 10 both come with .NET 4.5 pre-installed. Windows 7 comes with .NET 3.5. You can install 4.5 but this may require admin rights.

Unlike previous versions of 1point Desktop, no other third party applications are required such as Microsoft Office, MapInfo*, Adobe Acrobat etc.

** Note MapInfo is required in order to use any of the MapInfo related functions*

The installer utilises Microsoft Click-Once deployment and installation does not require administrator privileges. Essentially anyone should be able to install the software easily.

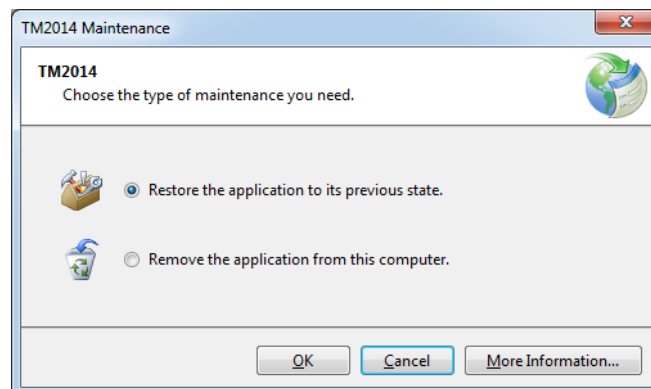
For installation problems refer to [Installation Errors](#)

Installing Program Updates

Program updates are released periodically and you will be prompted to install them when available. It is recommended that you install updates as soon as possible as they may include important bug fixes and/or new features.

Restore a Previous Version

If you have problems after installing an update you can temporarily restore the previous version via Control Panel, Programs and Features. Select 1PD from the list and select Uninstall/Change, then select "Restore the application to its previous state"



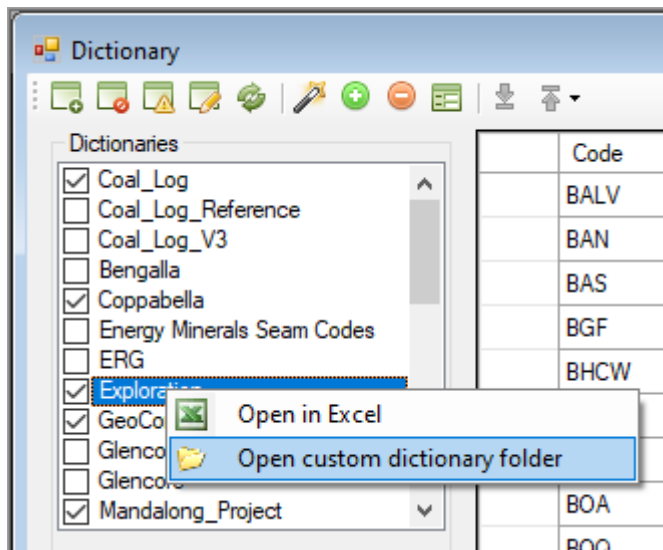
Restore previous version

Dictionary Updates

Dictionary updates can be managed in several ways depending on your circumstances. If you are managing your own custom dictionaries, it is recommended that one person in the organisation is responsible for updating the dictionary files and disseminating them to everyone else.

Manual Updates

The simplest way to update dictionaries is by manually copying the dictionary file. To locate the dictionary file, go into the Dictionary Editor, right click on the dictionary and Open custom dictionary folder. This will open a Windows Explorer window where you can copy the file:



Copy this file to a USB or send it via email. Then have the recipient repeat the above to locate their folder and save the updated file there.

For more information about custom dictionaries refer to [Dictionary Editor](#)

Automatic Updates

1PD can be configured to check a remote server or shared network drive for dictionary updates.

Configure the update source location via Settings (see below). Any changes to the dictionaries should be copied to the update source folder.

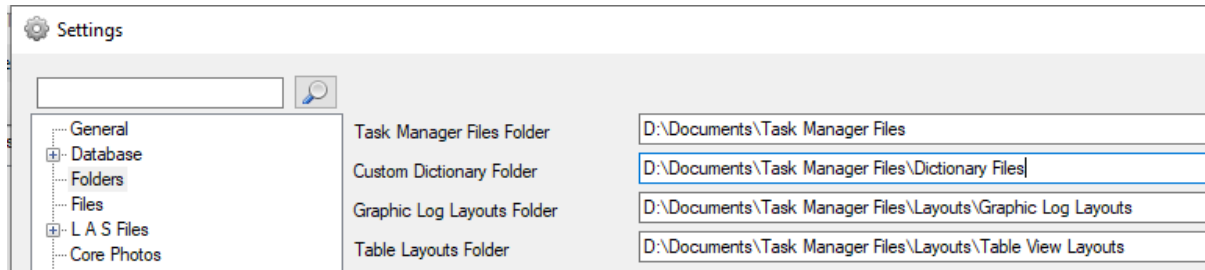
1point Desktop is configured to prompt you to update your dictionaries every 30 days. You can change this setting to zero if this becomes annoying but this is not recommended.

Settings

The following settings are used to define dictionary locations:

Folders, Custom Dictionary Folder

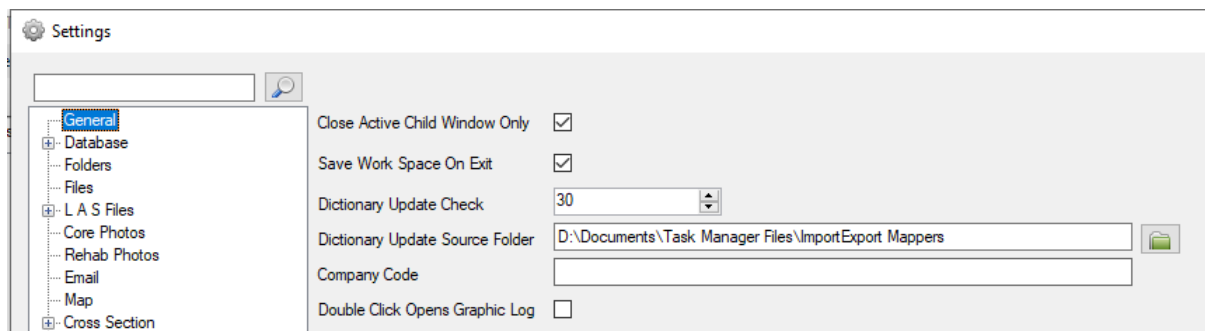
This is the folder on your machine where the dictionary files are saved. This should NOT be a network folder, only a local folder such as your C: or Documents folder.



General, Dictionary Update Source Folder (optional)

This is a folder, usually on a shared network drive, where master copies of the dictionaries are held. 1PD will check this folder for new versions and copy them to local folder above.

If this setting is blank, 1PD will check our web server for updates. You will need to send any dictionary updates to us for uploading to our server.



Licencing

On initial installation you will be granted an automatic free 30 day trial period. 1point Desktop will be fully functional for this period after which it will revert to “read only” mode and you will not be able to save any changes. To obtain a licence number and continue using 1point Desktop you will need to pay a licence/subscription fee and request a licence number from the Help/Licencing screen. When you receive your licence number, enter all details into this screen and click OK. All features will then be unlocked until the licence/subscription expires.

When your licence expires you will be granted an additional grace period (currently 30 days) to allow for any delays in obtaining your licence renewal. After the grace period 1point Desktop will revert to “read only” mode.

In “read only” mode you can continue to use 1point Desktop to view and print, you can also make changes but your changes cannot be saved or exported except as a printed graphic log or English log.

Licences are generally issued to an individual and renewed annually. Shorter periods can be accommodated such as quarterly or even monthly for special circumstances i.e. a short term project. Please refer to our web site for the latest pricing information.

Licence renewals are effective from the previous expiry date unless a period of 90 days or more has passed in which case the new licence will be effective from the date of purchase or other agreed period.

Please note that the 30 day trial and grace periods, and 90 day renewal window, are subject to change without notice and are provided as a courtesy to prevent any potential down time. Furthermore, the functionality available in “read only” mode is subject to change without notice.

We understand that staff come and go, equipment changes and sometimes staff share equipment. Our licence conditions are therefore very flexible and allow easy transfer and sharing of licences in approved circumstances. Please discuss your situation with us and we can come up with a licencing configuration that suits your requirements.

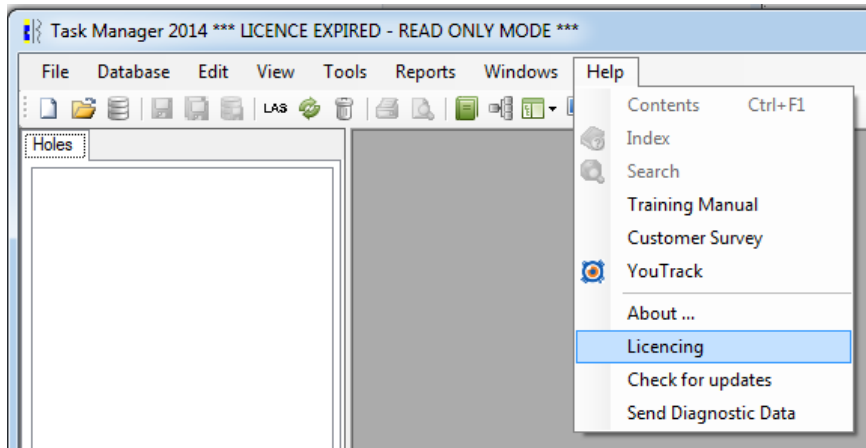
Dependencies

Parts of this software are included and distributed under separate licence arrangements. No action is required by the end user with the exception of Interop.MapInfo which requires a licenced copy of Pitney Bowes MapInfo be installed only if using 1PD's "Export to MapInfo" functionality.

Component	Licence
DotSpatial	MIT https://github.com/DotSpatial/DotSpatial/blob/master/LICENSE
GemBox.Spreadsheet	Licensed to Epssoft by GemBox Ltd
Interop.MapInfo	MapInfo must be installed on end users PC (optional)
KellermenSoftware.NET-FTP-Library	Licensed to Epssoft by Kellerman Software
netDxf	LGPL-3.0 https://opensource.org/licenses/LGPL-3.0
PdfSharp	MIT https://en.wikipedia.org/wiki/MIT_License
SocialExplorer.FastDBF	BSD 2-clause "Simplified" License https://github.com/SocialExplorer/FastDBF/blob/master/LICENSE
Svg	Microsoft Public Licence (Ms-PL) https://svg.codeplex.com/license
wContour	Unknown
WebEye.Controls.WinForms.WebCamera Control	Code Project Open License (CPOL) 1.02 https://www.codeproject.com/info/cpol10.aspx
ZipForge	Licensed to Epssoft by ComponentAce

Requesting a licence

To request a new licence or renewal, locate the Licencing screen under the Help menu.



Licencing Menu Option

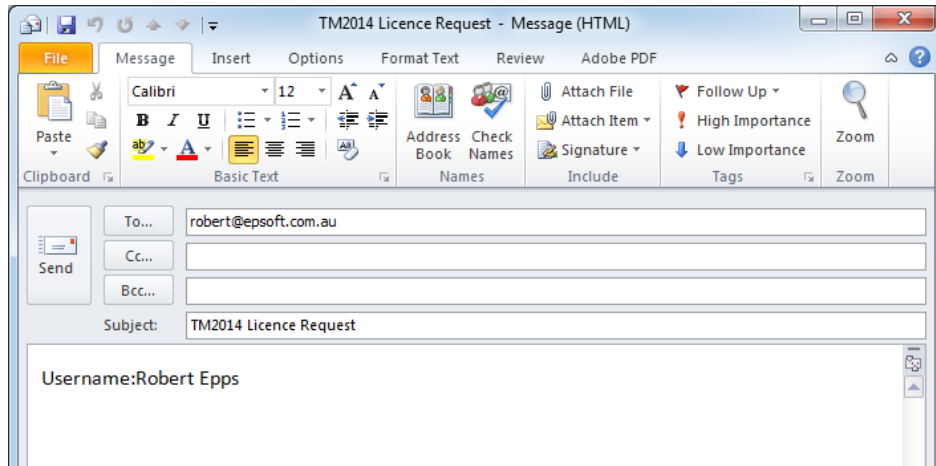
A screenshot of the 'Licence' dialog box. It contains the following fields and buttons:

- 'Your Name' field with the text 'Robert Epps'.
- 'Email Address' field with the text 'robert@epsoft.com.au'.
- 'Licence Expires' field with a date picker set to 'Saturday, 31 December 2016'.
- 'Licence Number' field with the text '30528'.
- 'Request Licence Number' button.
- 'Paste' button.
- 'OK' and 'Cancel' buttons.
- A link for 'Software Licensing Agreement' at the bottom left.
- Instructions on the right: 'Enter your details then click the Request button to request your licence via email.' and 'When you receive your new or renewed licence via email, either click the Request button again to download it or copy the entire licence from the email and click the Paste button. Then click OK'.

Licence Screen

Enter your name and email address then click the Request Licence Number button.

If a licence has already been generated it should download immediately, otherwise an email screen will pop up with a pre-written licence request. Simply append any additional information if required and hit send.

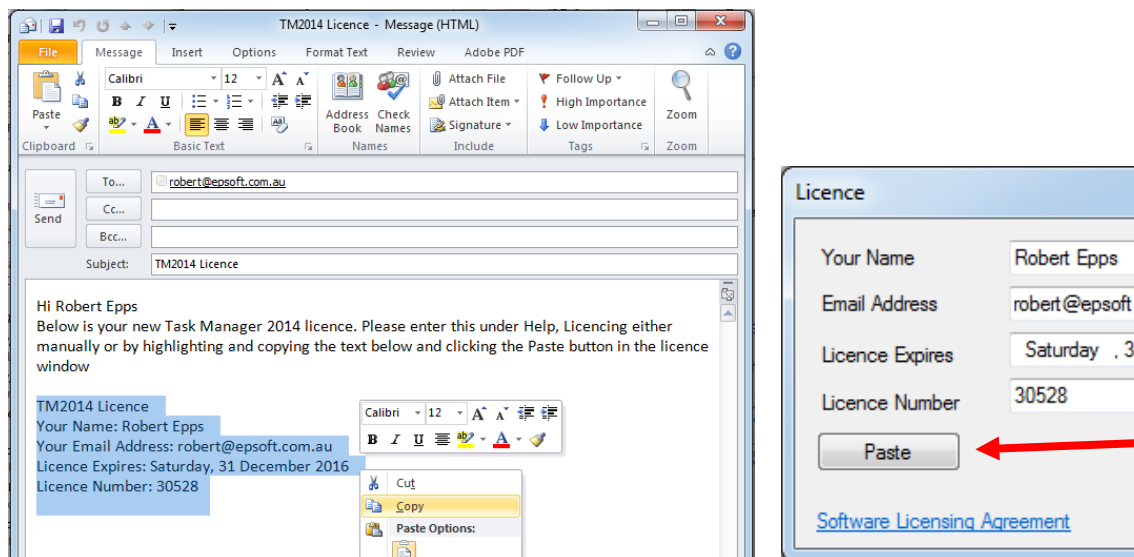


Licence Request Email

Installing a licence manually


Once you are advised that your licence has been generated, repeat the above process. When you click the Request button your licence should download automatically. If not you can install the licence manually as follows:

If you receive your licence via email simply highlight and copy the entire licence text and paste it into the Licencing screen using the Paste button.



Highlight and copy the licence text from the email then hit the Paste button

Configuration

The configuration setting screen is accessible from the Tools, Settings menu option or from the Settings button on the toolbar  and is used to configure various aspects of the application such as data folder locations, display preferences, default values etc. The settings are broken down into groups described below.

Settings can be imported and exported using the buttons in the lower left hand corner of the settings screen. The Settings Wizard can be used to assign specific settings and/or download specific files such as custom dictionary files. A settings wizard file must be provided by your administrator/provider in order to use this feature.

Settings can be exported in three different file formats. Each has a slightly different use:

.csv

Exports all settings in a .csv file which is easiest to read however this format cannot be re-imported. This format is used by our developers to maintain the tool tip text that appears when you hover the mouse over a setting. This may also be used to prepare documentation.

.wizard

Exports all settings in a .wizard file format which is easier to read and modify than .xml and can be re-imported. This is useful for setting up new users where you may not want all settings. Export a .wizard file then use a text editor to remove settings that aren't required.

.xml

Exports all settings in an .xml file format. This is best for exporting/importing all settings for a single user (backup/restore), either to revert to an earlier configuration or to move settings to another pc.

For copying settings from one user to another, use the .wizard format as some settings may not be appropriate and can be removed via a text editor.

Creating a Settings Wizard file manually

In addition to the existing settings exported above, the Wizard file can also contain commands to include additional settings from another file, download custom dictionaries and copy/unzip files. Using these settings the Wizard file can be used to fully configure a new installation.

SETTING (Individual Settings)

SETTING=settingcategory.settingproperty.value

SETTING=Database.DatabaseType=GeoCore

SETTING=Database.Server=BRSPGEOSQL01

SETTING=Database.Catalog=GEO_CORE

SETTINGS (Download and import a settings file)

SETTINGS=settingsfilename.xml

SETTINGS=Peabody_Settings_2016.xml

DICTIONARY (Download a custom dictionary file)

DICTIONARY=dictionaryfilename.csv

DICTIONARY=Peabody_dictionary.csv

DICTIONARY=Coppabella_Dictionary.csv

DOWNLOAD (Download a specific file from the Epssoft 1PD Server)

FILE=filename=path (filename on server, path=local path to save)

FILE=EPCs.shp={My Documents}\Data\Lease Boundaries

FILE=Demo_Data.zip={My Documents}\Data\Demo Data

COPYFILE (Copy a specific file (or files) from a given path)

COPYFILE=sourcefile=targetfile

COPYFILE=\\SERVER\Data Folder\Demo_Data.zip={My Documents}\Data

COPYFILE=\\SERVER\Data Folder\xyz*.*= {my documents}\Data

UNZIP (Unzip a specific file)

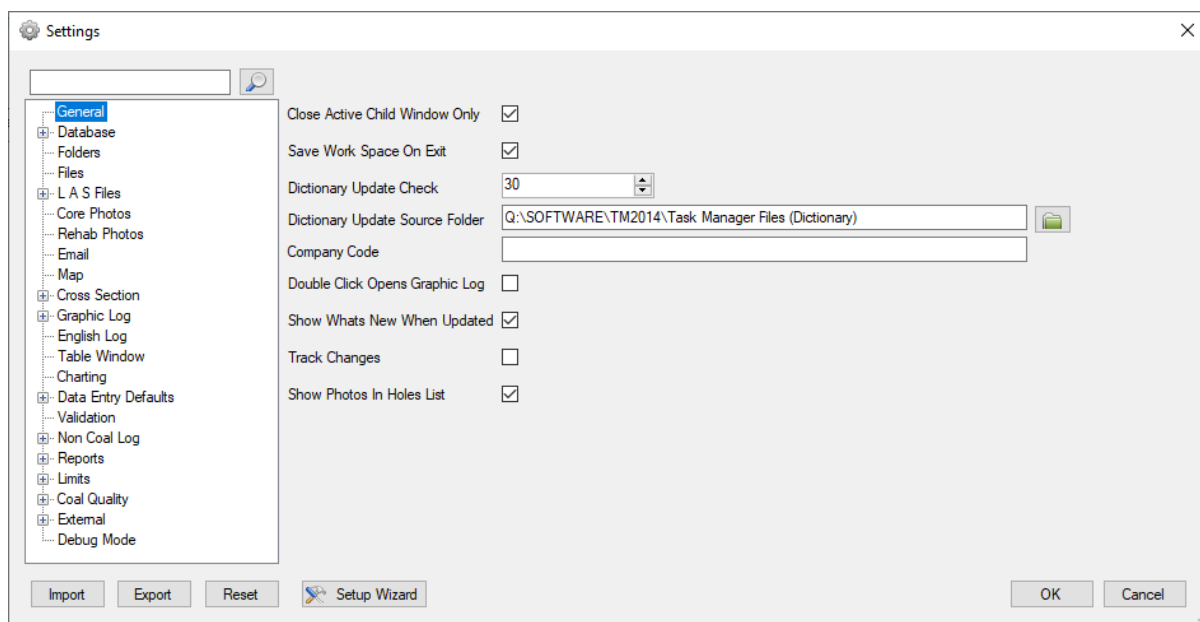
UNZIP=filename.zip=path

UNZIP={My Documents}\Data\Demo_Data.zip={My Documents}\Data\Demo Data

General

This section contains general settings not specific to any particular part of the program

Close Active Child Window Only	When you click the Close button in the top right hand corner of the application, 1point Desktop will attempt to save any un-saved changes, close all windows then exit. This option will prevent this behaviour and instead only close the active child window. If you wish to exit the application you will need to close all windows first using the Windows/Close All menu option.
Save Workspace on Exit	When this option is ticked, 1point Desktop will save the current workspace including a list of holes and any windows open. When you next launch the program you can select “Last Workspace” from the File menu to restore this workspace. The workspace does NOT contain any data, merely a list of holes and windows. Any un-saved changes must be saved prior to exiting the program or they will be lost.
Dictionary Update Check	This setting specifies the number of days that can pass before you are prompted to check for dictionary updates. Setting this to zero will disable the reminder.
Company Code	Holes with these company codes are shown in a different colour on maps
Double Click Opens Graphic Log	Double clicking on a hole in the holes list opens a graphic log window. Otherwise double clicking just expands/collapse the tree node.
Show What’s New When Updated	Display the What’s New window on launch when a new update is installed.
Track Changes	When this option is enabled a log of lithology depth/thickness changes, lithology row insert/delete and seam name changes is kept. This log can be displayed from the Reports menu and exported to Excel/CSV if required. <i>Note: Making depth/thickness changes can trigger a large number of depth change events which may reduce performance. You may want to disable event logging while making these types of changes.</i>
Show Photos in Holes List	Shows Core Photos and Rehab Photos in the Holes list when expanded

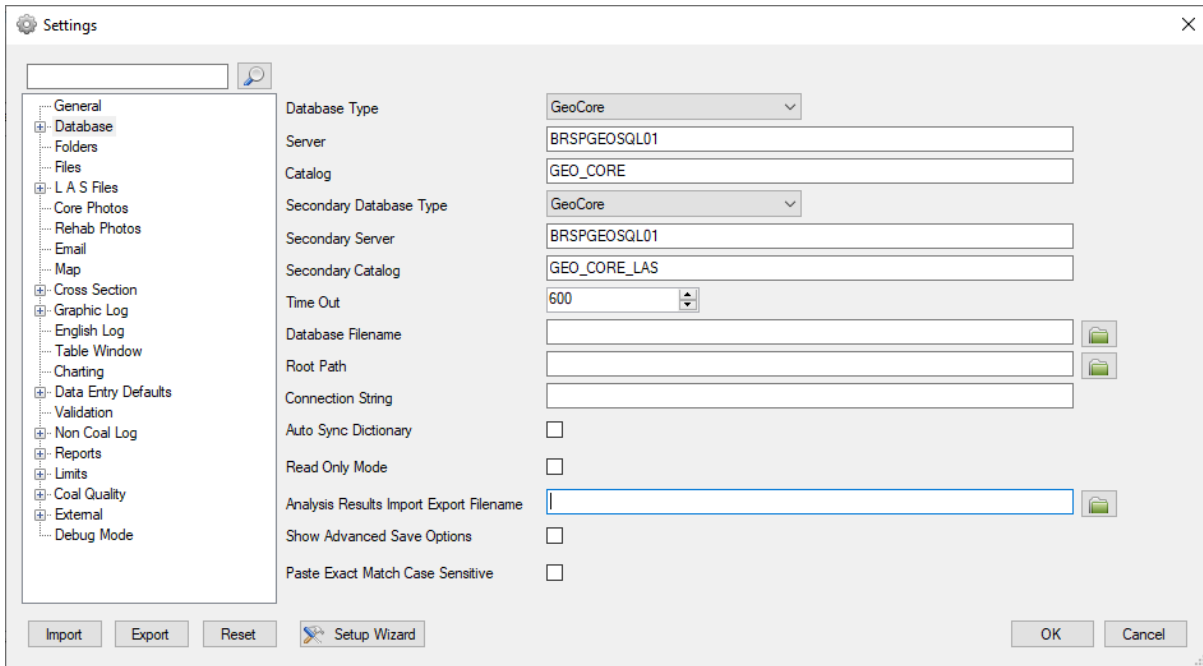


Database

This section is used to configure the database connection. In some cases merely the database type is required but in other cases more information may be needed. Generally your database administrator or technical support will provide these settings and they should not be changed unless instructed to do so.

Database	
Database Type	Refer to Database Types
Server	Server name where the database engine is running. For Peabody Australia users this is BRSPGEOSQL01
Catalog	Database name on the server. For Peabody Australia users this is GEO_CORE
Secondary Database Type	Same as Database Type– See Secondary Database For Peabody Australia users this is GeoCore
Secondary Server	Same as Server – See Secondary Database For Peabody Australia users this is BRSPGEOSQL01
Secondary Catalog	Same as Catalog– See Secondary Database For Peabody Australia users this is GEO_CORE_LAS
Time Out	Database connection time out in seconds
Database Filename	Filename for Internal database file
Root Path	Root path used by Internal database to search for files
Connection String	NOT USED (contact support for more information)
Auto Sync Dictionary	NOT USED
Read Only Mode	Disallows write access to the database (disables “Save to Database” function)
Analysis Results Import Export Filename	Template file used for importing and exporting coal quality data with GeoCore
Show Advanced Save Options	This option displays advanced options when saving holes to the database. In most cases these should not be changed unless instructed to do so. (See below)
Internal	
Ignore Folders With	When updating internal database ignore folders containing these terms
Ignore Files With	When updating internal database ignore files containing these terms
Quick Load	
Rehab Date	Include rehab date when quick loading
Drill Dates	Include drilling dates when quick loading

Note: When using the [Quick Load](#) function, including additional data such as Rehab and Drill Dates will affect performance. This will still be significantly quicker than a normal load but if this information is not critical, don't include it for maximum load speed.



Database Settings

The primary and secondary database type, server and catalogue can also be configured via the Configuration menu option under the Database menu.

Secondary Database

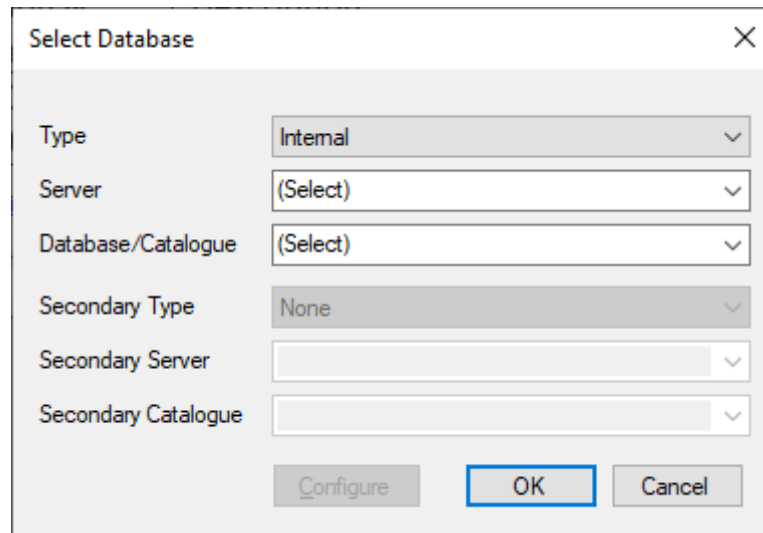
A secondary server can be configured for supplemental data. For GeoCore the secondary database is used to store LAS data. For all other database types, the secondary database is not required.

Database Types

Internal	Internal cache only
acquire	acquire is a third party SQL database provided by acquire Technology Solutions
GeoCore	GeoCore is a proprietary SQL database developed internally by Peabody Energy.
OnePoint	1Point (OnePoint) is an Azure based database available from Flout Software that stores all your geological data securely in the cloud
1PDDB	1PDDB is a database structure based on the CoalLog standard and is closely tied to 1PD's internal data structure. Refer to 1PDDB for more information.

Internal

1point Desktop can use an internal cache to store information about drill log files in your file system. This pseudo database is not required but can be used to locate files more efficiently and does not store any actual lithology data.



Type	Internal
Server	(Select)
Database/Catalogue	(Select)
Secondary Type	None
Secondary Server	
Secondary Catalogue	

Buttons: Configure, OK, Cancel

Configuration for Internal database/cache

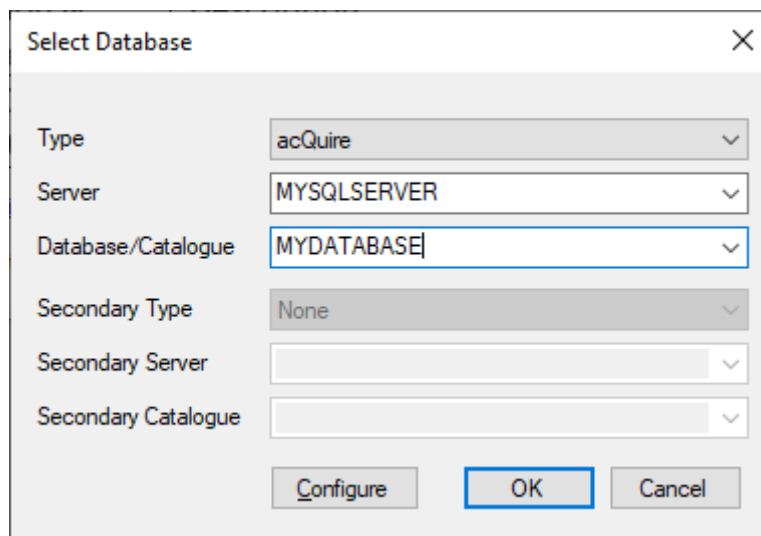
acquire

acquire is a third party SQL database provided by acquire Technology Solutions

1PD can be configured to read from an acquire database but cannot currently write to it. Database must be exported from 1PD and imported into acquire using the standard methods.

To read from acquire, 1PD requires two SQL views to be created in the acquire database with the required header information. A custom mapper file must then be created to map the view columns to existing 1PD columns.

Please contact us to assist in configuring an acquire link.



Select Database

Type: acquire

Server: MYSQLSERVER

Database/Catalogue: MYDATABASE

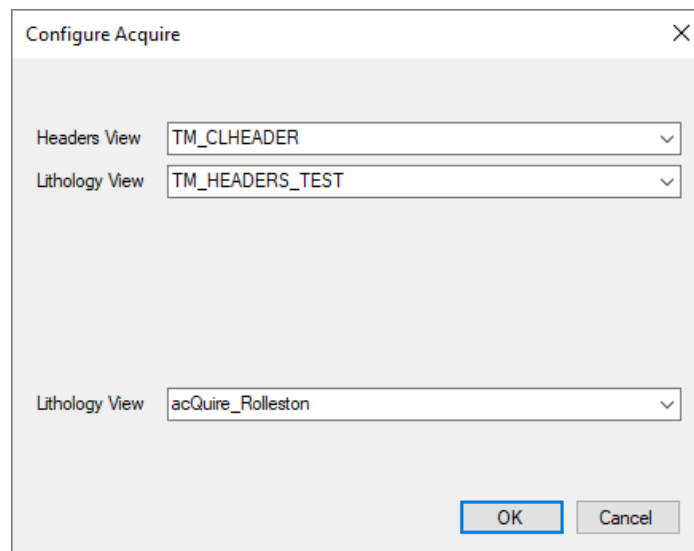
Secondary Type: None

Secondary Server:

Secondary Catalogue:

Buttons: Configure, OK, Cancel

Configure the acquire Server



Configure Acquire

Headers View: TM_CLHEADER

Lithology View: TM_HEADERS_TEST

Lithology View: acquire_Rolleston

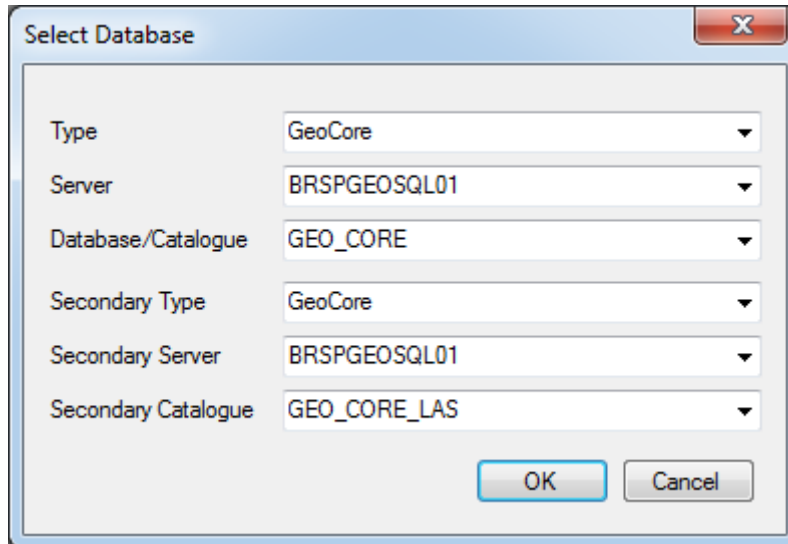
Buttons: OK, Cancel

Configure the views and mapper

GeoCore

GeoCore is a proprietary SQL database developed internally by Peabody Energy.

1PD requires both a primary and secondary configuration to connect to both the GEO_CORE and GEO_CORE_LAS databases:



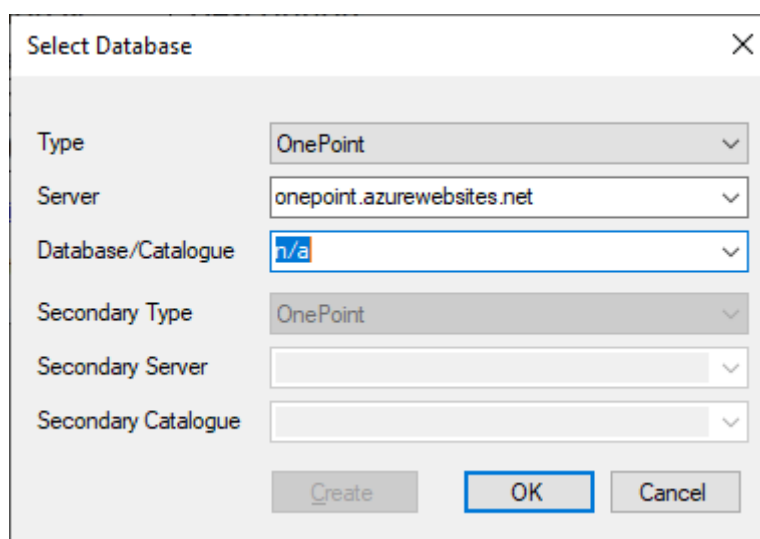
Type	GeoCore
Server	BRSPGEOSQL01
Database/Catalogue	GEO_CORE
Secondary Type	GeoCore
Secondary Server	BRSPGEOSQL01
Secondary Catalogue	GEO_CORE_LAS

Database Configuration Window (GeoCore)

1Point (OnePoint)

1Point (OnePoint) is an Azure based database available from Flout Software that stores all your geological data securely in the cloud.

Configuration only requires the server, database is ignored. You will be prompted for your 1Point username and password the first time you login.



Type	OnePoint
Server	onepoint.azurewebsites.net
Database/Catalogue	n/a
Secondary Type	OnePoint
Secondary Server	
Secondary Catalogue	

Database Configuration for 1Point

1PDDB

1PDDB is a database structure based on the CoalLog standard and is closely tied to 1PD's internal data structure. 1PDDB can be deployed on a Microsoft SQL Server or a single user local instance of SQL called (localdb) and is ideally suited for this environment. For multi user we recommend using another database such as 1Point ([OnePoint](#)).

The default settings for 1PDDB are as follows but can be changed to suit your configuration:

Server: (localdb)\v11.0

Database/Catalogue: 1PD

The server name will be dictated by the LocalDB SQL instance name. Examples include:

(localdb)\v11.0

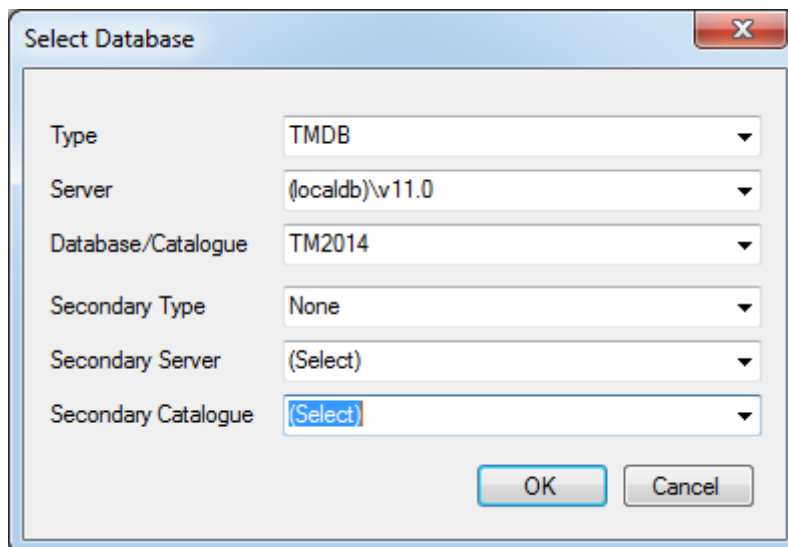
(localdb)\mssqllocaldb

The Database/Catalogue can be anything you like but ideally should reflect the type of data:

1PD (default)

1PD_MYPROJECT

1PD_PROJ_GEOLOGY



Database Configuration Window (1PDDB)

Folders

These settings determine where 1point Desktop looks for and/or saves specific files. To select a specific folder (rather than using tokens), first clear the existing entry then click the Browse button to select a folder. If you are only working on a small project this may be the simplest way to configure your folders. If you are working on multiple projects, use tokens to define your folder configuration as this will enable 1point Desktop to locate files very quickly and save you a lot of time and frustration. This does require a consistent folder setup and naming convention and can be a bit tricky to setup initially but it's well worth the effort. If you have trouble getting this right, let us know what your folder setup looks like and we can supply you with the best settings to use. Also refer to the [Folder Settings Wizard](#) for help with these settings.

1point Desktop Files Folder	This is the parent/root folder for all 1point Desktop Settings. Most of the following folder settings are <i>usually</i> a subfolder of this.
Custom Dictionary Folder	Folder location where custom dictionary files are saved. Refer to the Dictionary section for more information about dictionaries.
Graphic Log Layouts Folder	Folder where custom Graphic Log Layouts are saved. Refer to Graphic Log Layouts for more information. This can be the same as the Custom Dictionary Folder if required.
Table Layouts Folder	As above but for Table windows
Section Layouts Folder	As above but for Cross Section windows
	<i>The above folders must be direct paths without tokens and typically all point to the same "1point Desktop Files" folder or a sub-folder.</i>
Patterns Folder	Folder that contains the CoalLog V2.0 pattern/plotting symbol files. This feature is not fully implemented yet and should not be used.
Custom Patterns Folder	Folder that contains custom pattern files
LAS Curve Display Settings Folder	Folder that contains LAS curve display settings
Coal Quality Display Settings Folder	Folder that contains CQ display settings.
Reporting Templates Folder	This is the folder that contains reporting templates for custom exports.
Logging Templates Folder	This is the folder that contains template logging sheets for creating new logs with some data pre-populated
Import Export Mappers Folder	This is the folder that contains mapping files for custom import/exports
Root Folder	This is the root data folder for all data files (i.e. C:\Data).
<i>The above folders must be direct paths without tokens</i>	
Holes Folder	These folders can be direct paths but it is generally more useful to use tokens to determine the exact path for a specific hole.
Holes Folder Raw	
Holes Folder Corrected	
Holes Folder Final	
LAS Folder	
Core Photos Folder	
Rehab Photos Folder	

English Logs Folder	
Graphic Logs Folder	
Map Layers Folder	Default folder for map layer files (i.e. .SHP, .DXF files)
Backup Folder	Folder where backups of drill log files are saved.
Workspaces Folder	Default folder where workspace files are saved.
Settings Folder	Default folder for saving settings files (i.e. .csv, .wizard, .xml)
Event Log Folder	This is the folder where Event Log files are saved (when enabled)

Folder Tokens

The following tokens can be used:

Token	Meaning	Example
{root}	Root Data Folder	C:\Data
{hole}	Hole Name (from hole status sheet)	AB4567C
{site-id}	Site Id (from hole status sheet)	AB4567
{lease_no}	Lease_No (from hole status sheet)	1234
{lease_name}	Lease Name as translated from the dictionary	EPC1234
{project}	Project Code (from hole status sheet)	XX
{project_name}	Project Name as translated from the dictionary	My XX Project
{company}	Company Code (from hole status sheet)	XX
{company_name}	Company Name as translated from the dictionary	My XX Company
{start_date}	Drilling start date (from hole status sheet)	(See below)
{complete_date}	Drilling completion date (from hole status sheet)	(See below)

Additional/Advanced folder tokens

With the exception of {my documents}, the following tokens refer to Folder Settings values as described above.

Note: there would generally be few cases where these would be useful and are listed for information purposes only.

{my documents}	Current users Documents folder
{custom_dictionary_folder}	Custom Dictionary Folder
{task_manager_files_folder}	1point Desktop Files Folder
{backup_folder}	Backup Folder
{patterns_folder}	Patterns Folder
{custom_patterns_folder}	Custom Patterns Folder
{graphic_log_layouts_folder}	Graphic Log Layouts Folder
{reporting_templates_folder}	Reporting Templates Folder
{section_layouts_folder}	Section Layouts Folder
{table_layouts_folder}	Table Layouts Folder

You can also use the [Folder Settings Wizard](#) to determine folder settings by using an existing hole as an example.

In the case of {lease_name}, {project_name} and {company_name}, if the code description does not match the folder name you can use the Folder parameter in the dictionary to define the correct folder name. For example, if your project is called “ZZZ Joint Venture” but the folder is just “ZZZJV” then set the Folder value in the dictionary to “ZZZJV”.

Date Values

Date values can be formatted using standard windows formatting conventions such as “yyyy” for just the year component. This is useful if your data is broken up into different folders by year.

I.e. {root}\drilllogs\corrected\{complete_date,yyyy}

Assuming the root was C:\Data and the complete_date was 01/01/2014, would return C:\Data\drilllogs\corrected\2014

Alternate Folders

Multiple alternate options can be used separated by a semicolon. Each option will be tested and the first one that exists will be used.

Example:

```
{root}\{lease_name}\drilgeophys\las files\{hole};{root}\{lease_name}\drilgeophys\las files\
```

Will first check:

```
{root}\{lease_name}\drilgeophys\las files\{hole}
```

Then

```
{root}\{lease_name}\drilgeophys\las files
```

Sub-folders should be tested first as the parent folder will always exist and will be selected if it appears earlier in the list.

Example:

This:

```
{root}\{lease_name}\drilgeophys\las files\{hole};{root}\{lease_name}\drilgeophys\las files\
```

Is preferable to this:

```
{root}\{lease_name}\drilgeophys\las files\;{root}\{lease_name}\drilgeophys\las files\{hole}
```

As the “las files” parent folder will always exist if the {hole} sub-folder exists so you need to test for that first.

See also [Folder Settings Examples](#)

Wildcards

The asterisk (*) wildcard can also be used to search for folders matching a given specification. For example if LAS files could be in any folder beginning with “LAS” you could use “LAS*” and 1point

Desktop will try the first folder starting with LAS. 1point Desktop will stop searching if/when it finds what it's looking for.

Default Settings

The default settings for these folders match the structure used by 1point Desktop 2008 and are as follows:

Holes Folder:

{root}\{lease_name}\drilllogs\corrected\{project_name}

LAS Folder:

{root}\{lease_name}\drilgeophys\las files\{project_name}\{hole};{root}\{lease_name}\drilgeophys\las files\{hole}

Core Photos Folder:

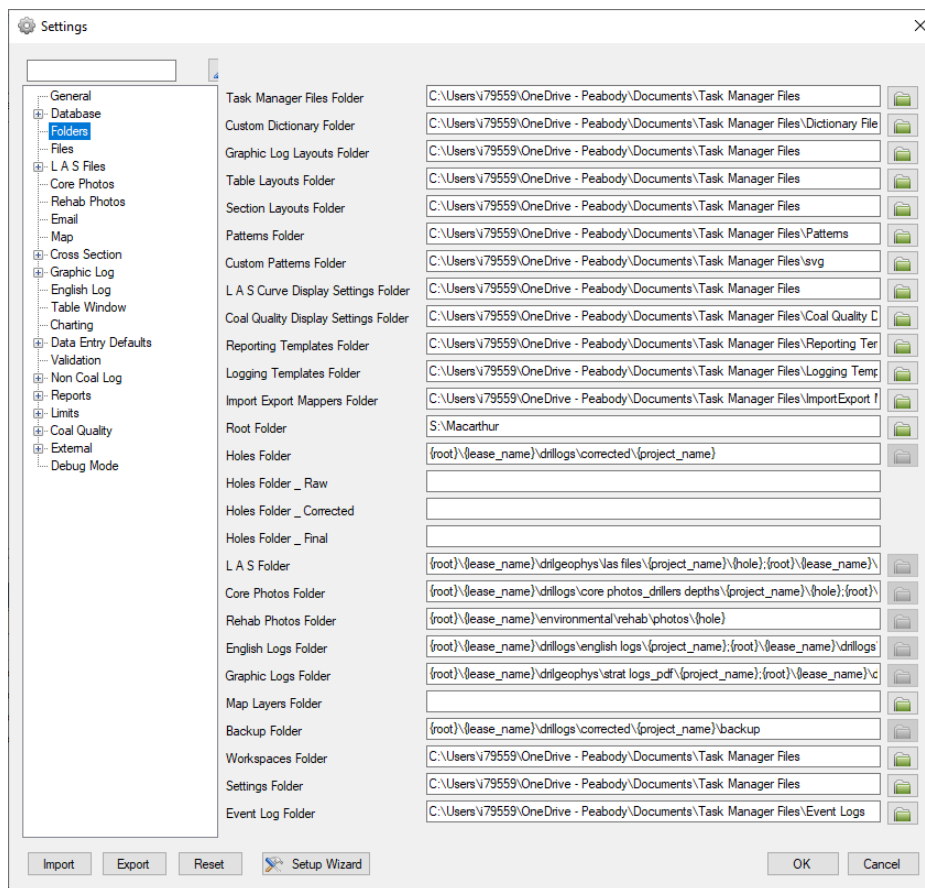
{root}\{lease_name}\drilllogs\core photos_drillers depths\{project_name}\{hole};{root}\{lease_name}\drilllogs\core photos_drillers depths\{hole}

Using the above examples, 1point Desktop would search the following folders for LAS files:

C:\Data\EPC1234\drilgeophys\las files\My XX Project\AB4567C

If the above folder was not found, 1point Desktop would then try:

C:\Data\EPC1234\drilgeophys\las files\AB4567C



Files

This section is mainly concerned with how files are named, in particular the suffixes used for various file types.

If you use a standard naming convention for differentiating between raw, adjusted and final logs, define the suffixes here and enable the option to enforce them. This will ensure that the raw file is not overwritten when you change the data status to A.

Coal Log Raw Suffix

Suffix for logs with Data_Status R. Default is “_FIELD”

Coal Log Adjusted Suffix

Suffix for logs with Data_Status A or S. Default is “_CRX”

Coal Log Final Suffix

Suffix for logs with Data_Status F. Default is none.

Enforce Coal Log Suffix Usage

Enabling this option will not allow files to be saved unless they are using the correct suffix above.

Graphic Log Suffix

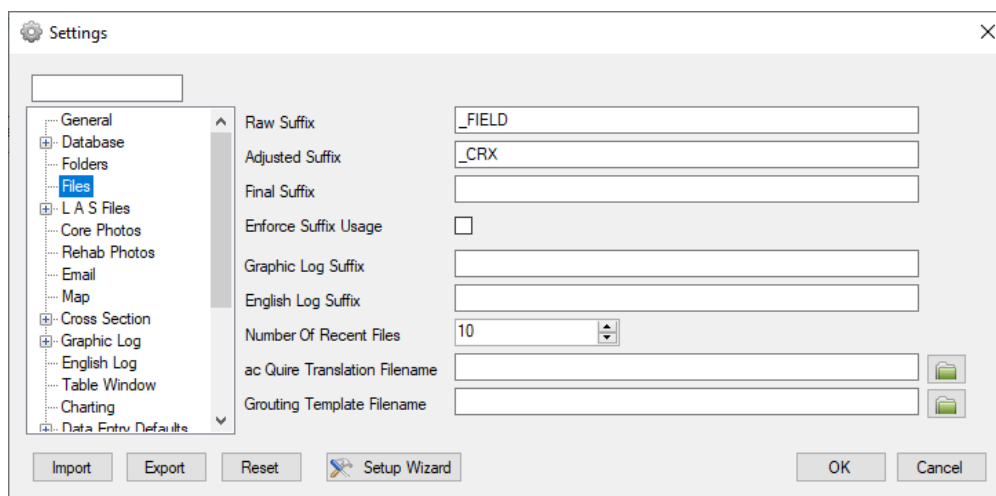
Default suffix for graphic logs bulk generated from the reports menu

English Log Suffix

Default suffix for english logs bulk generated from the reports menu

Number of Recent Files

This value determines the number of recently open files that are saved in the “Recent” list under the File menu. The default is 10 and maximum is 30.



LAS Files

These settings determine how LAS files are located and displayed.

Auto Load

1PD will attempt to auto load the LAS files whenever a hole is loaded. This is convenient but may take some time when a large number of holes are loaded

General logs are geophysical logs usually of the entire well but might be recorded at a lower depth frequency or “Step” (i.e. 10cm). Detail logs are usually geophysical logs of specific coal seams but might be recorded at a higher depth frequency (i.e. 1cm) and hence more detailed than the general logs. This was common practice in the past when file size was an issue. These days in many cases only a high frequency (1cm) general log is available. When both General and Detail logs are available you can switch between them depending on whether you are viewing the entire hole or a detailed section of it.

Suffixes

The suffix settings are used by 1point Desktop to determine the type of LAS file being loaded. The suffixes are used in the filename to enable 1point Desktop to quickly determine the file type. Examples are AA1234_GN.LAS or AA1234_DA.LAS, AA1234_DB.LAS

If the logging tool was used with casing in place (logged through rods) then sometimes the suffix _RN is used in place of _GN and _RA,_RB in place of _DA,_DB. This method falls short when you have a large number of detail logs as you eventually hit _RN, however this situation is rare.

Refer to [LAS File Naming Convention](#)

Default Curves

This is the default set of curve mnemonics displayed by 1point Desktop. Any number of mnemonics can be listed separated by commas.

Reverse Curves

This is a list of curve mnemonics that should be plotted in reverse by default. I.e. GAMMA & CADE

True Depth Mneumonic

List of curve mneumonics that can be used for True Depth

Search Sub Folders

This setting determines whether 1point Desktop should search sub-folders of the selected LAS file folder when looking for LAS files.

Search All Folders

This setting determines whether 1point Desktop should continue searching sub-folders even after locating a LAS file

Use Well Name

This setting determines whether 1point Desktop should open the file and read the Well Name from the LAS header or just go by the LAS filename itself. Using the well name is significantly slower than just using the filename.

There is a “Rename LAS Files” tool under the Tools menu that will renamed all loaded LAS files based on their well name.

Load From Database

Indicates if 1PD should load LAS from the database if LAS files cannot be found in the specified folder(s)

Load From Database Only

Indicates that 1PD should only load LAS from the database and ignore the file system

Allow Partial Names

Load LAS files where the filename begins with the hole name

Hide LAS in Raw Edit Mode

Disable display of LAS curves when in Raw edit mode. This is intended to prevent users accidentally performing depth corrections in the wrong edit mode

De-Select After Loading

De-select the hole after loading one or more LAS files. This makes it easier to manage loading LAS for holes in batches

Default LAS Load Types

Determines which types of LAS files should be loaded by default

Sync LAS Curves

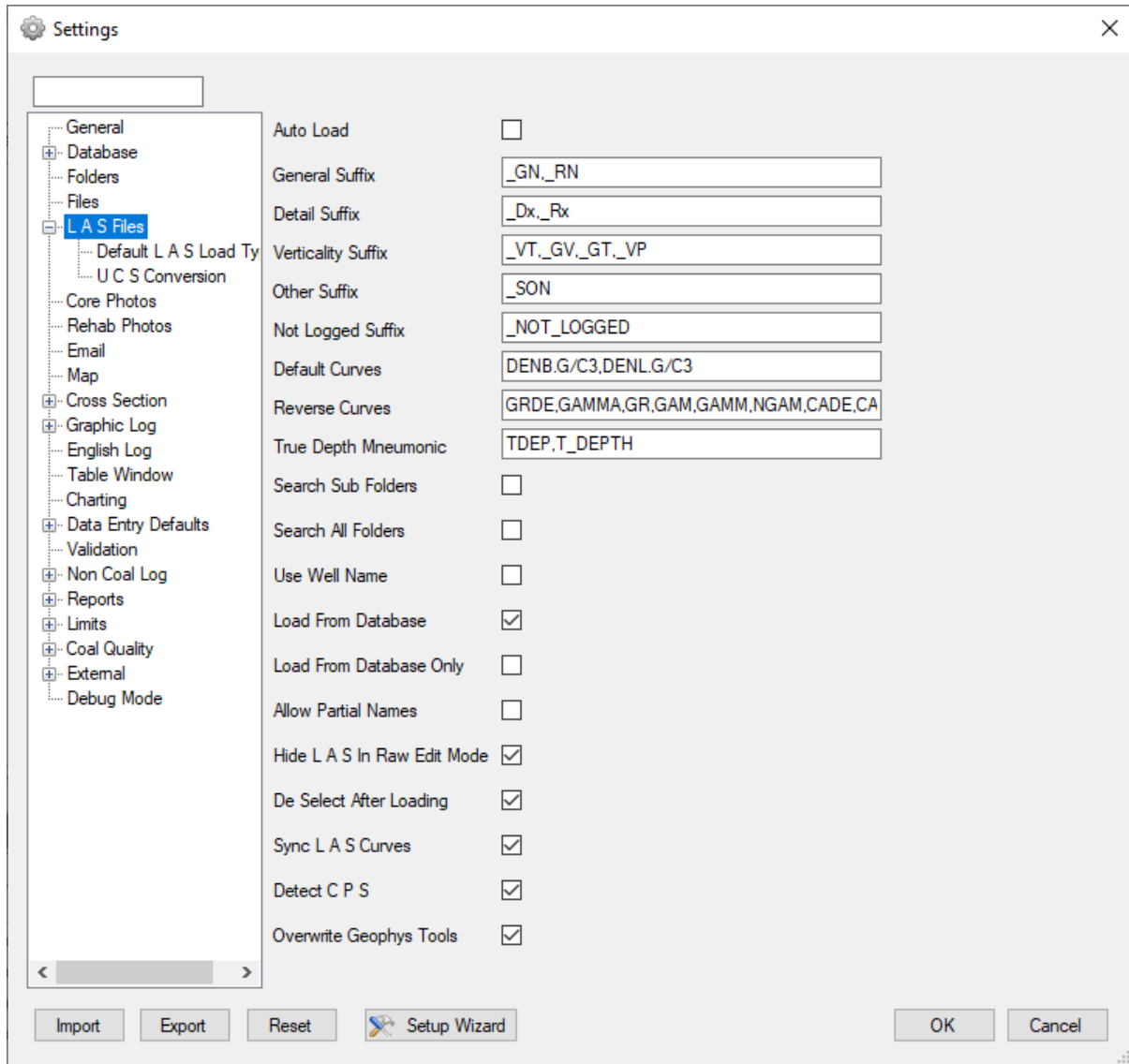
Enable/Disable syncing of LAS curve display across all loaded holes. Hold down SHIFT to reverse this feature.

Detect CPS

Detect CPS and convert mnemonics from SSD to DENR(SS) and LSD to DENR(LS)

Overwrite Geophys Tools

When loading LAS files, overwrite the Geophys tools in the Hole Status sheet



Core Photos

The Core Photo Renaming tool can be used to quickly rename and resize core photos. These settings affect how this tool functions.

Core Photo Increment

This setting determines the depth increment when renaming photos. The default is 0.5m. If you are using Core Boxes you will want to change this to say 3.0m for example.

Round to Increment

This setting determines whether depths should be automatically rounded to the nearest increment

Resize Width

This setting determines the image size when resizing photos. The default is 1024 pixels wide. A higher value will create higher resolution images. A lower value will create small file sizes. The default setting is usually sufficient to retain image quality at the smallest file size.

Rotate According to EXIF

Some cameras record the camera orientation rather than actually rotating the image. With this setting enabled, 1PD will rotate the core photos according to this EXIF information.

Align With Un Corrected Depths

If un-corrected depths are available, align core photos on the graphic log with un-corrected instead of corrected depths. Core photo depths are generally un-corrected so this option should provide better alignment.

Naming Format

File naming format for use by the Core Photo Renaming Tool.

Note: The format is case sensitive and should not be changed without testing on some dummy photo files as an incorrect format can have strange results. Create a folder with some sample photos to test any format changes. Format should always begin with the hole name followed by an underscore. The zero's after each depth indicate the number format i.e. leading zeros and decimal places.

Default is:

```
{hole}__{from_depth,000.00}-{to_depth,000.00}
```

Recommended format for NSW reports is:

```
{hole}_Core_Photo_{from_depth,000.00}m-{to_depth,000.00}m
```

Dry Suffix

Additional suffix added to dry photos and should always start with an underscore.

Default is: _Dry

Wet Suffix

Additional suffix added to wet photos and should always start with an underscore.

Default is blank



Rehab Photos

The rehab photo editor allows you to add attribute data to your rehab photos quickly and easily. These settings affect how this tool functions.

Logo Filename (optional)

Specify a filename to use as a logo in the top right corner of the rehab photo

Title

Default title (i.e. REHABILITATION)

Date Mode

FromEXIF – Date taken is extracted from EXIF data in the photo itself if available

FromFileDateCreated – Date taken is assumed to be the file creation date

None – No date taken is assumed and must be entered or left blank

Font

Font style to use for attribute labels

Default Camera

Default camera used by Rehab and Core Photo tools. Best to set this via the individual tool rather than via Settings.

Email

This section is used to configure your email settings but these are only required if using particular functions within the software that send emails. In most cases these settings can be ignored.

Map

Default Projection

Sets the default projection for new Map Windows.

Warn When Reprojecting

Displays a warning when loaded layers require reprojection to display in the current map projection

Use Plugins

This setting determines whether plugins should be used. Plugins provide support for additional file types when loading Map layers.

Plugins Folder

When using plugins you must specify where the plugin files are to be saved. You will then need to go into Tools, Plugins to download the plugins from our server. It is recommended that plugins be saved in a separate folder, preferably under your existing “Custom Dictionary Folder”

Grid Shift Filename

Grid shift file used for datum conversion

Average Cost Per Hole

Used to calculate approximate drill planning cost

Cross Section

Save Default Layout on Exit

This setting determines whether the cross section layout should be saved as the default layout when exiting. Otherwise you can manually save the default layout from the View menu.

Include Horizons

When this option is enabled, the horizon name is combined with the seam name in order to distinguish seams of the same name in different formations

Default Buffer Width

Sets the initial buffer size for the cross section hole selection tool in the map window

Correlation Offset

Gap between lithology and correlations

Correlation Field

Specifies the lithology column(s) to use for seam correlations. Default is {Seam}. Other examples {Ply} or {Seam}{Ply} or {Seam}{Fault} etc

Graphics Quality

Compromise between graphics quality and drawing performance

Default Title 1-5

Default values for the title block when creating a new section

Values can use tokens as below

Token	Value
{Company_Name}	Company name from hole status sheet
{Project_Name}	Project name from hole status sheet
{Holes}	List of hole names
{Date}	Today's Date
{Username}	User name (from licence)
{Center}	Centers text within block
{backcolour}	Define background colour of text block
{forecolour}	Define text/font colour

Fonts

Defines default fonts for Hole labels and Seam labels

Graphic Log

Depth Column Mode

The Depth Column Mode setting switches between two options and affects the way depths are displayed in the Lithology tab. The two options are:

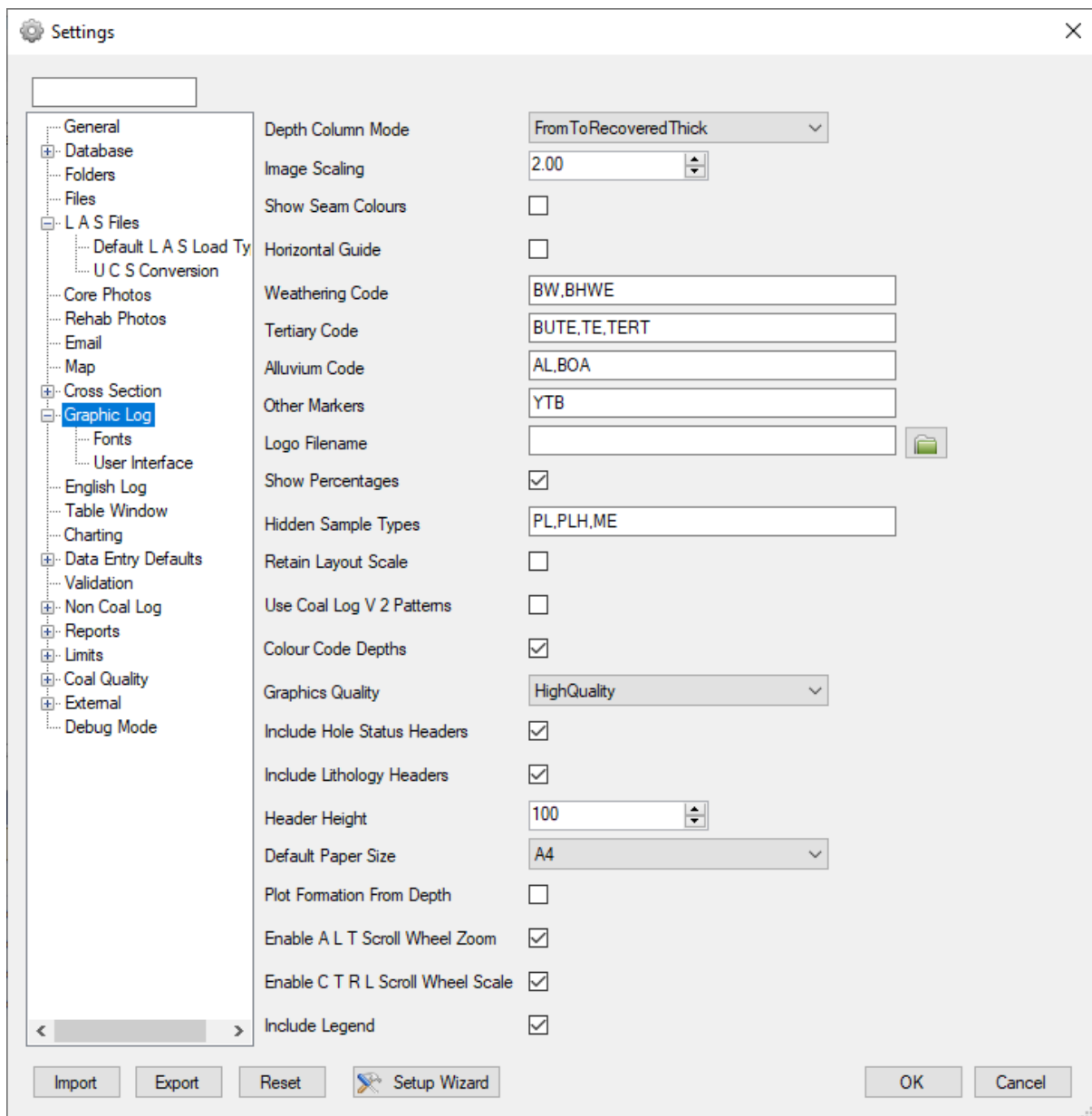
1. FromToRecoveredThick
This is the default setting that displays three columns labelled “From_Depth”, “To_Depth” and “Recovered_Thick”. This is the default CoalLog format.
2. DepthToBaseThickness
This setting emulates the previous version of 1point Desktop and displays two columns labelled “Depth to base” and “Thickness”.

The latter setting simply hides the “From_Depth” and renames the other two columns. Functionally they are identical.

This option can also be changed from the View, Options menu in the Graphic Log Window.

Image Scaling	This setting determines the image quality when saving to an image file or PDF. Lower values reduce image quality (and file size), larger values improve quality. Default is 2.5, values below 1 or above 5 are not recommended. This does not affect the image quality when printing to a PDF printer driver such as Adobe PDF, only when using 1point Desktop's internal PDF driver.	
Show Seam Colours	Different colours can be assigned to seam codes using the seam hierarchy editor. This setting determines whether those colours are used in the graphic log or ignored.	
Horizontal Guide	This setting displays a horizontal guide in the graphic log screen as you move the mouse. However this can cause poor performance on slower computers and is therefore disabled by default. If you are using a modern PC you can probably enable this option without affecting interface performance.	
Weathering Code	The cross section generator can display weathering as a jagged line instead of the typical seam/horizon correlation style. This will also enable the display of weathering correlation by default whereas normally horizon correlation is disabled. This setting determines the horizon code(s) that you use to denote weathering. Multiple alternate codes can be listed separated by commas	
Tertiary Code	This is used to identify the Tertiary horizon and validate lithology codes that should not be used above/below Tertiary	
Other Markers	Other markers are used to draw lines on the cross section for significant marker bands. Multiple markers can be listed separated by commas.	
Logo Filename	Selected an image file here will display that image on the graphic log. The position of the image can be set by editing the layout in the graphic log view. The image must be sized appropriately as it cannot be scaled within this application.	
Show Percentages	This option enables multiple lithology types at the same depth to be displayed on the graphic log proportional to their percentage.	
Retain Layout Scale	When switching between graphic log layouts, the default scale is determined by the layout type. Selecting this option forces the scale to remain constant regardless of the layout type.	
Use CoalLog V2 Patterns	Use CoalLog V2.0 lithology plotting patterns for Graphic Logs and Cross Sections. <i>Note: This feature is still in development and may produce odd results.</i>	
Graphics Quality	Tweaks internal graphics settings to improve quality or performance. Use High Quality unless you encounter issues in which case you can try the other settings but they may cause problems on some systems.	
	High Quality	Default
	High Performance	Best performance increase
	Good Performance	Minor performance increase
Include Hole Status Headers	Determines whether hole status information is displayed in the graphic log	
Include Lithology Headers	Determines whether lithology & LAS header information is displayed in the graphic log	
Header Height	Determines the height of the graphic log header	
Default Paper Size	Usually A4	
Plot Formation	Display formation from depths as well as to depths	

From Depth	
Enable ALT Scroll Wheel Zoom	Enable option to hold ALT key while scrolling mouse wheel to zoom in/out
Enable CTRL Scroll Wheel Scale	Enable option to hold CTRL key while scrolling mouse wheel to adjust vertical scale
Include Legend	Include a legend when exporting graphic logs to PDF



User Interface

Enter Key Behaviour

This setting determines what happens when you press the ENTER key on a table in the Graphic Log Window. There are four settings available that are fairly self-explanatory:

1. Enter Key Moves Right
The cursor moves to the cell immediately adjacent and to the right unless you have reached the last column in which case the cursor moves to the first column on the next row.
2. Enter Key Moves Down
The cursor moves down to the cell immediately below
3. Enter Key Next Row
The cursor moves down to the first column on the next row
4. Enter Key Do Nothing
The cursor stays on the current cell

Allow Sample Thickness Change

This setting determines whether the user is allowed to change the thickness of a unit that has been assigned a sample number.

Allow Sample Thickness Change If Broken Core

This setting allows the user to change the thickness of a unit that has been assigned a sample number only if the core is broken. This setting is superfluous if the above setting is enabled.

Fonts

These settings allow you to change the default font settings used by the graphic log display. The names are generic and are grouped by size. This feature may be expanded in future to allow further customization.

English Logs

Include Header	Includes the header section
Include Comments	This setting includes comments per lithology row when generating English Logs.
Include Rig Type	Includes the rig type in the drilling section
Include Drill Fluid	Includes the drill fluid in the drilling section
Title Colour	Font colour for titles

Charting

Default Chart Type	This setting determines the default chart type when creating a new chart window.
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Data Entry Defaults

These settings are used to configure various data entry and display options

Use Custom Dictionaries	This setting determines whether the drop down lists are populated from the standard Coal Log dictionary or from any custom dictionaries. This can be used to display a subset of the standard CoalLog codes and/or sorted in a different order.
Use Coal Log V3 Standard Dictionary	Use the CoalLog V3 standard dictionary instead of the default CoalLog V1.2 dictionary
Use Coal Log V3 Reference Dictionary	Use the CoalLog V3 reference dictionary in addition to the above CoalLog standard dictionary.
Use RQD column	This setting determines whether the RQD columns are displayed in the drilling sheet.
Decimal Places	This setting determines the number of decimal places displayed for numeric values. The default is 3. Recommend values are 2 or 3. <i>Note: Reducing the decimal places for existing data may result in rounding errors</i>
Drag Decimal Places	This setting determines the number of decimal places used when dragging lithology or lithology boundaries in the graphic log. The default is 2. Recommend values are 2 or 3.
Coal Log Continuations	This setting determines whether continuation rows are displayed as the same From/To/Thickness as their parent row. The default setting is off and continued rows are displayed as a zero thickness with both the From_Depth and To_Depth being the same as the previous rows To_Depth. <i>Note: This is against the CoalLog standard to maintain continuity from previous versions of 1point Desktop.</i>
Use Coal Log Max Sheets	The CoalLog standard offers a recommend data entry sheet and also a maximum data entry sheet. In most cases the maximum sheet simply has wider columns but in the Defects sheet there are also some additional columns. By default 1point Desktop only uses the recommended columns, this setting enables the additional defect columns to be used.
Use Coal Log V2	Default format is CoalLog V2.0, otherwise V1.x is used
Use Coal Log V2.1	Default format is CoalLog V2.1, otherwise V1.x is used
Use Coal Log V3	Default format is CoalLog V3.x, otherwise V1.x is used
Use Acquire Style Record Sequence Flags	
Use GeoBank Style Record Sequence Flags	
Custom Template Filename	
Auto Fix Depths	When this option is enabled, 1PD will attempt to correct depth errors when you change a thickness. Otherwise a validation error will occur that you will have to fix manually.
Auto Save	This option will save the drill log automatically every <i>n</i> minutes. A setting of zero disables auto save. You can also pause this feature by clicking on the AUTOSAVE label in the status bar. Auto save only applies when editing drill logs

	loaded from Excel format, not loaded from a database or via an import/export file.
Auto Backup	This option creates a “Backup” folder in the same folder as the original Excel file. Whenever you activate one of the edit modes a copy of the file is saved in the backup folder.
Auto Convert On Load	This setting applies any auto convert codes when a hole is loaded. (See Auto Convert Codes below)
Auto Convert On Data Entry	This setting applies any auto convert codes during data entry.
<i>Auto Convert Codes</i>	<i>Auto Convert Codes can be useful where incorrect codes have commonly been used and exist in old logs or where loggers have trouble remembering the new codes. (See below for further information)</i>
Auto Progression	Causes the focus to move to the next cell once the maximum number of characters have been entered.
V Notch Weir Multiplier	Used to calculate Flow Rate from Flow Height
Touch Friendly	Makes 1PD more useable with touch screen devices
Auto Fresh	
Dynamic Dictionary	
Auto Repeat Columns	List of columns (separated by commas) that should auto repeat
Sample Number Prefix	Text to appear before sample ID
Default Sample Type	Sample type used predominantly - Usually QP
Header Defaults	These settings allow you to set default values for some header sheet (hole status) values.

Auto Convert Codes (further information)

Auto Convert Codes are a list of old and new codes that are applied according to the above settings. When 1point Desktop encounters an “Old Code” it replaces it with the “New Code”.

Auto Convert Codes should be listed in a csv file named “Auto_Convert.csv” and saved in the Custom Dictionary folder. This file should contain four columns as follows:

Category, Old Code, New Code, Description

The description column is optional.

Note: Auto Convert is currently only available for Header, Lithology, Drilling and Casing.

Contact us if you need more information or assistance setting up Auto Convert codes.

Validation

Coal Ash Threshold	When validating raw coal quality data, this setting determines the limit where the Ash content is deemed high enough that the lithological unit can no longer be considered Coal. Any Coal units with a higher Ash value higher will highlighted.
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Base of Weathering on Separate Row	Some modelling applications require that the base of weathering is shown on a separate row with a zero thickness. This option enforces that requirement.
Zero Thickness Horizons	This setting generates a validation error if a horizon is not entered on a separate row with zero thickness. This is a requirement for some systems but is not a CoalLog standard.
Auto Validate	This setting determines whether a hole is validated every time a value is changed. This setting was added in an earlier version when validation performance was slow. Later improvements in validation performance have rendered this setting obsolete.
Invalid Lithology Above Tertiary	List of lithology type codes that should not appear above Tertiary horizon. These will appear as validation errors.
Invalid Lithology Below Tertiary	List of lithology type codes that should not appear below Tertiary horizon. These will appear as validation errors.
Casing Recovered Length Required	Display a validation error if casing recovered length is missing
Validate Seam Order	Validate seam order with dictionary
Warn About Validation Errors On Save	Alert the user about any validation errors when saving
Display Critical Errors in Holes List	Display a list of critical validation errors as a number next to the hole name in the holes list
Allow Overlapping Casing	Allow casing depths to overlap
Allow Duplicate Defect Depths	Allow defects to have duplicate depths / multiple defects at the same depth
Allow Positive Inclination	Allow Inclination in the Hole Status sheet to be non-negative (usually -90)
Allow Empty Defect Type	Allow Defect_Type to be blank
Allow Empty Litho_Type	Allow Litho_Type to be blank
Allow Empty Seam	Allow Seam to be blank

Non Coal Log

These settings allow additional functionality outside of the CoalLog standard.

Activities Sheet	This is an additional worksheet for recording other drilling related activities outside the scope of the CoalLog standard.
Defects Sheet	This option replaces the standard CoalLog Defects sheet with an alternate layout.
Lithology Sheet	This option replaces the standard CoalLog Lithology sheet with an alternate layout which includes six additional columns.
Default Lab	This is used in conjunction with the Sample Dispatch Sheet and sets the default lab to be used.
Default Geotech Lab	
Default Gas Lab	
Master Sample Progression Sheet	This is the filename of the Master Sample Progression sheet which can be appended to when generating sample advices.
Conversion Dictionary	This setting determines the conversion matrix to use when the dictionary is unknown.
Equip Abandoned	Provides an additional column in the header sheet to flag when equipment has been abandoned downhole. This is not a CoalLog standard column.
Auto Detect	1PD attempts to auto detect when any of the above sheets are in use
Sample Bag	Include non-CoalLog column Sample_Bag
Geologist	Include non-CoalLog column Geologist
Date Logged	Include non-CoalLog column Date_Logged
Sample Dispatch	Default values for Sample Dispatch sheet
Sample Dispatch Format	Default format for Sample Displatch sheet (None, Auto, Non-CoalLog, V1x, V2x, V3x) – Auto uses the CoalLog version
Default Lab	Default lab for Coal samples
Default Geotech Lab	Default lab for Geotech samples
Default Gas Lab	Default lab for Gas samples
Master Sample Progression Filename	Spreadsheet which maintains a list of all samples
Default Core Size for Calculating Mass	Default core size to use for calculating mass if core size is missing from the drilling sheet
Alternate Sample Columns	Alternate/Additional columns to use when generating sample dispatch.
GeoCore Settings	Settings for GeoCore database
	These additional Non CoalLog Settings are only for use with the GeoCore database
Non Coal Log Worksheet	Settings for using non Coal Log format files
Mapping Filename	Mapping file used to map worksheets/columns to Coal Log
Template Filename	Blank template for saving logs in a custom format

Reports

Strip Ratio

These settings determine how strip ratios are calculated

Exclude Seams Above BW	Exclude seams which occur above the BW horizon
Exclude Non Coal Seams	Exclude seams which do not contain coal

Interval Log

These settings are used for generating interval logs. This feature is a work in progress, contact us for further information.

Well Completion Report

Core Photos Title	Title for Core Photos section
Rehab Photos Title	Title for Rehab Photos section
Title Colour	Font colour for titles
Filename	Default filename template (i.e. {hole}_report.pdf)

Limits

Limits determine minimum and maximum allowable values for various fields. Values outside this range are highlighted as a validation error or warning.

Default limits are as follows:

Sheet	Column	Range
Cementing	Volume Min/Max	
Defects	Infill_Thickness	0 to 100
Drilling	Recov_Length	0 to 3.05
Lithology	Bedding_Dip	1 to 89
Quality	Max Seam Core Loss Percent	5
Raw Coal	Ash	0.1 to 100
	FC	0 to 100
	RD	1.2 to 3.6
	SE	0 to 40
	VM	1 to 95

Coal Quality

WTDAVG Mode	Auto	RD mode is used if available otherwise Mass mode is used
	Mass	Value = $\text{SUM}(\text{Value} * \text{Mass}) / \text{Sum}(\text{Mass})$
	RD	Value = $\text{SUM}(\text{Value} * \text{RD} * \text{Thickness}) / \text{Sum}(\text{RD} * \text{Thickness})$
Fix Proximate Analysis Mode		Adjusts proximate analysis values to sum to 100%
Fix Proximate Analysis FC Max		Maximum value for FC when adjusting values
Sample Composite Mode	Auto	
	Simple	Use a simple fromsample – tosample naming convention
	Detailed	Use a detailed convention that enumerates all samples
Sample Range	_-.	Characters that indicate a sample range (i.e. underscore,

Identifiers		hyphen, period)
Multiple Sample Identifiers	,&+	Characters that indicate multiple, separate samples (i.e. comma, ampersand, plus)
Auto Load From Display Settings		Performs a “Transfer from Data Summary” based on the products in the selected Coal Quality Display Settings
Sample ID Format		Format to be used for sample ID’s
Translation Filename		Translation used to map CQ results to internal columns

Lab Results

Procedures Folder	Location of lab procedures documents
Instructions Folder	Location of lab instructions files
Incoming Folder	Location of incoming lab results files
Uploaded Folder	Location of successfully uploaded lab results
Failed Folder	Location of lab results that failed to upload
Other Folder	Location for user defined lab results storage
Max Load	Maximum number of lab results to load at once
Lab To Email Address	Email address for sending lab instructions
Lab CC Email Address	Email address to CC with lab instructions

External

MapInfo

Universal Translator Path	To convert CSV files to MapInfo tables, 1point Desktop requires access to MapInfo’s Universal Translator. This is part of the MapInfo product and is not supplied with 1point Desktop. If you do not have MapInfo installed you will not be able to use this function within 1point Desktop.
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KML

Elevation Offset	Elevations in KML files are raised by this value to make underground elements appear above ground in Google Earth
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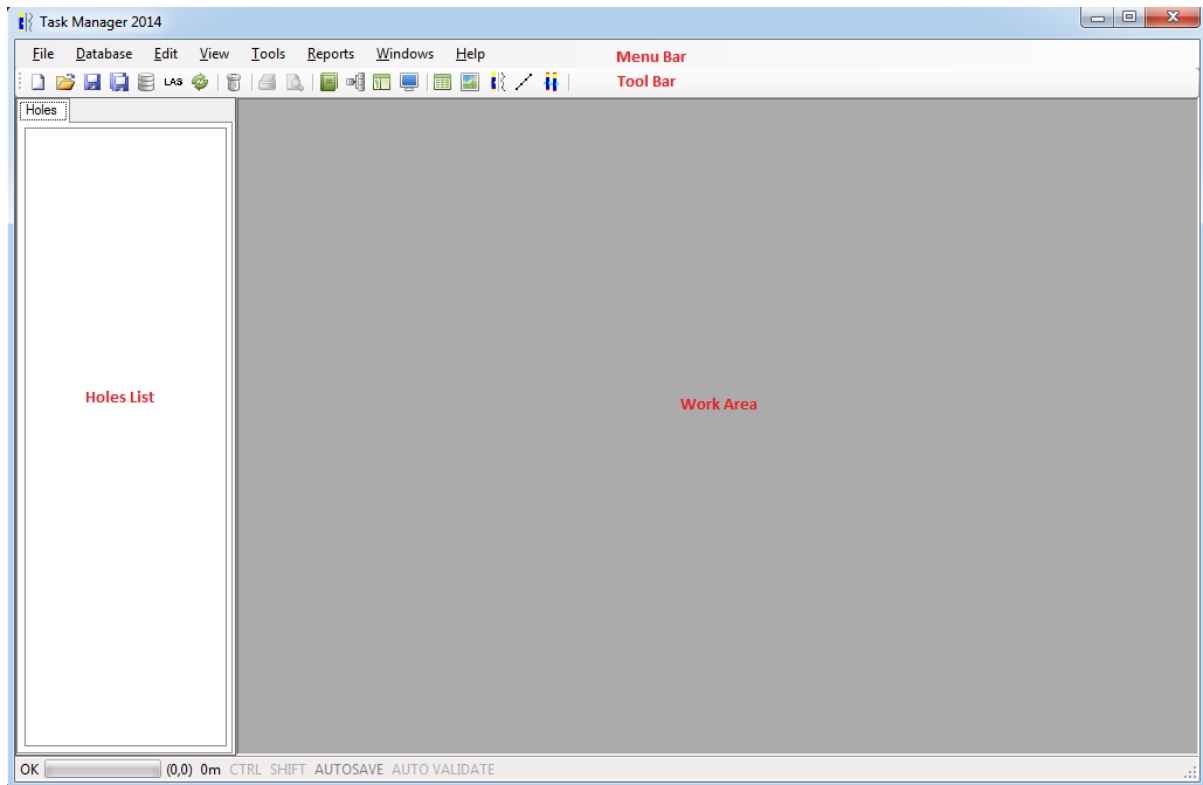
Debug Mode

These settings are only to be used when attempting to identify issues with the software or data. They should not be used unless instructed by technical support.

Beta	Enable prototype features still in development. Try new features before they are released for general use.
Debug Mode / Developer Mode	Displays various information to assist with testing and debugging. These should not be enabled unless instructed to do so.
Event Log	Creates a log file during certain operations to assist with testing and debugging. This can affect performance so should only be enabled when necessary. You can also enable the Event Log temporarily by holding down the SHIFT key while 1PD is starting.
Always Save As	Forces the File Save operation to always create a new file from a blank template even when saving over an existing file.
Safe Mode	Prevents background loading of settings at start up. This is slightly slower and should only be enabled if advised by support.
Disable Apply Depth Corrections	If you have issues with the way defects are depth corrected you can disable the automatic depth correction functionality.

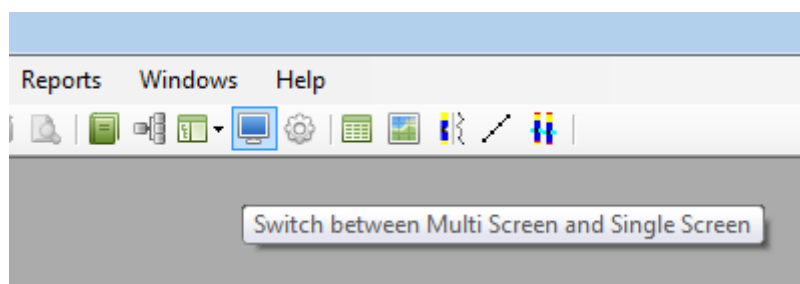
Introducing the interface

1point Desktop uses a fairly standard MDI (Multiple Document Interface) layout meaning you can have multiple windows open at one time. When launching 1point Desktop for the first time you will be presented with a fairly stark screen consisting of a large grey area taking up most of the screen and a thin white strip (hole list) down the left hand side. Along the top is a fairly standard looking menu strip following by a toolbar strip with various buttons.



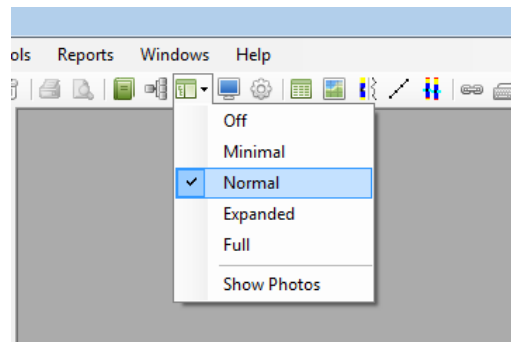
Multi-Screen Mode

The multi-screen mode allows you to quickly switch between single and multi-screen views. In multi-screen mode, 1point Desktop expands to fill all available screens. This is particularly useful when working on cross sections.

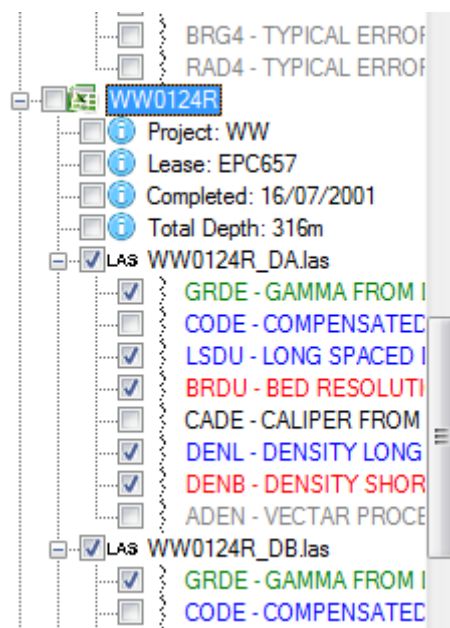


Holes List

The holes list displays a list of all holes loaded in 1point Desktop. This list is used to select holes, load and select geophysics curves and show other information. The holes list has four modes:



- Off – Hides the holes list leaving more space for other windows
- Minimal – Displays just the hole name and a check box for selection using the least possible space whilst remaining usable. You must double click on the hole name to expand the tree and display LAS curve information.
- Normal – Displays the hole name with a plus-minus box that you can use to expand/collapse the LAS curve information
- Expanded – Displays the hole name including LAS files not not curves
- Full – Displays all available information include LAS curves



Full Holes List View

Creating a New Hole

Creating a new hole from scratch

To create a new hole from scratch, select File, New or click the New button on the toolbar. This will create a brand new drill log. If you hover the mouse over the New menu item, a sub menu will appear with additional options including blank templates for both V1.x and V2.x CoalLog versions.

You can provide a few default settings via Tools, Settings, Data Entry Defaults, Header Defaults but these options are limited. For a better option see Templates below.

Note: The default CoalLog version is 1.x, if you prefer 2.x tick this option under Tools, Settings, Data Entry Defaults before you begin.

You can also create new holes from a Map Window or Cross Section. Creating a hole from a Map Window will give the hole approximate coordinates. Creating a hole from a Cross Section will give the hole approximate coordinates, elevation and lithology with seams based on existing correlations.

Creating a new hole from an existing hole

You can “clone” an existing hole using the “Save as” function to save the file with a different name. You can then change the Hole_Name and any other details in the hole status sheet. This method is not recommended due to risk of contaminating the new hole with information from the original hole. However it may be useful when logging a redrill or core hole in the same location.

Creating a new hole from a template

To create a new hole from a template, select File, New then select a template from the list. If you don't see a list it's because you haven't created any templates yet.

Creating templates


To create a template, simply load any existing drill log or better yet create a new one from scratch and enter any data which is common to most of your drill holes. Then select File, Save Template. This will save a copy of the current drill log as a template which can be used later to create new logs.

You should avoid putting too much data into templates as you will have to change or delete it later. Restrict it to header information such as Company, Project, Lease_No, Datum, UTM zone etc. I.e. things that are likely to be common to most holes.

Note: If the Save Template option is disabled you will need to check the folder location under Tools, Settings, Folders, Logging Templates.

Loading Hole Data

Loading Drill Logs (CoalLog format)

This is 1point Desktop's primary file format for drill logs. To open one or more logs simply select File, Open from the menu or click the  "Open" toolbar button. Select the log(s) you wish to open and click OK. The holes will appear in the holes list on the left hand side.

1point Desktop currently supports CoalLog V1.x and V2.0 log formats plus some variations.

Load from Clipboard

If you have a list of holes in a spreadsheet, you can copy this list then select File, Load from Clipboard. 1PD will attempt to find the selected holes using the current Settings, Folders, Holes Folder configuration. Alternatively, you can use a [Workspace](#)

Converting Drill Logs (1point Desktop 2008 format)

1point Desktop can convert 1point Desktop 2008 format drill logs to the new CoalLog format including translating the dictionary. You cannot save logs in the old format or overwrite the old files, you must save the converted log to a new file, preferably in a different folder to avoid confusion.

If there are any issues during conversion a Conversion Log window will be displayed for each hole. You can save this conversion log to a CSV file for review. If you have a number of conversion log windows you can combine them into a single window then save that to a CSV file. To combine windows refer to [Combining Windows](#)

Conversion Issues

Conversion issues arise when a code cannot be translated for some reason. In each case the code will need to be manually translated into the new file. You should review all conversion issues to determine what action (if any) should be taken. You can then close the conversion log(s) and continue.

Code Errors

Code Errors are usually due to a code in the original log that doesn't have a corresponding translation available. This could be because the original code was invalid to begin with, doesn't have a direct translation in Coal Log or simply one that we haven't come across before and haven't constructed a translation for it.

Conversion Warnings

Conversion warnings are generally for information purposes. A common conversion warning is related to joint frequencies as they are converted to defect spacings. As there is no direct conversion an approximation must be made and therefore a warning is generated.

Load from Database

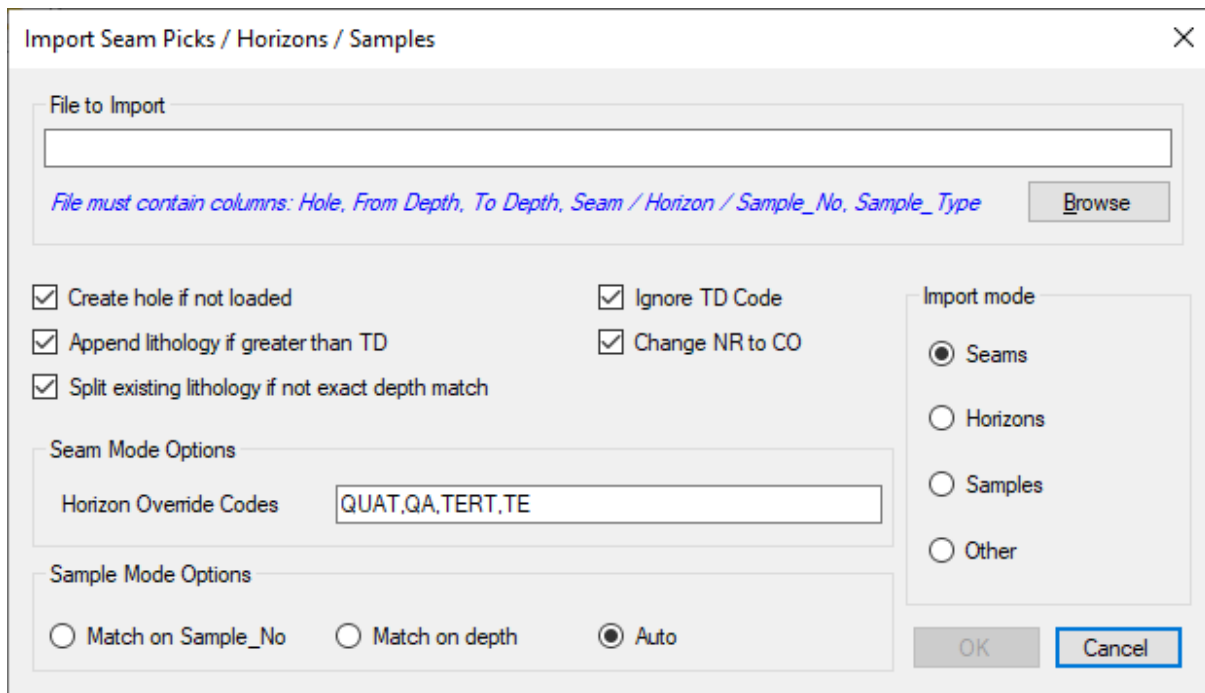
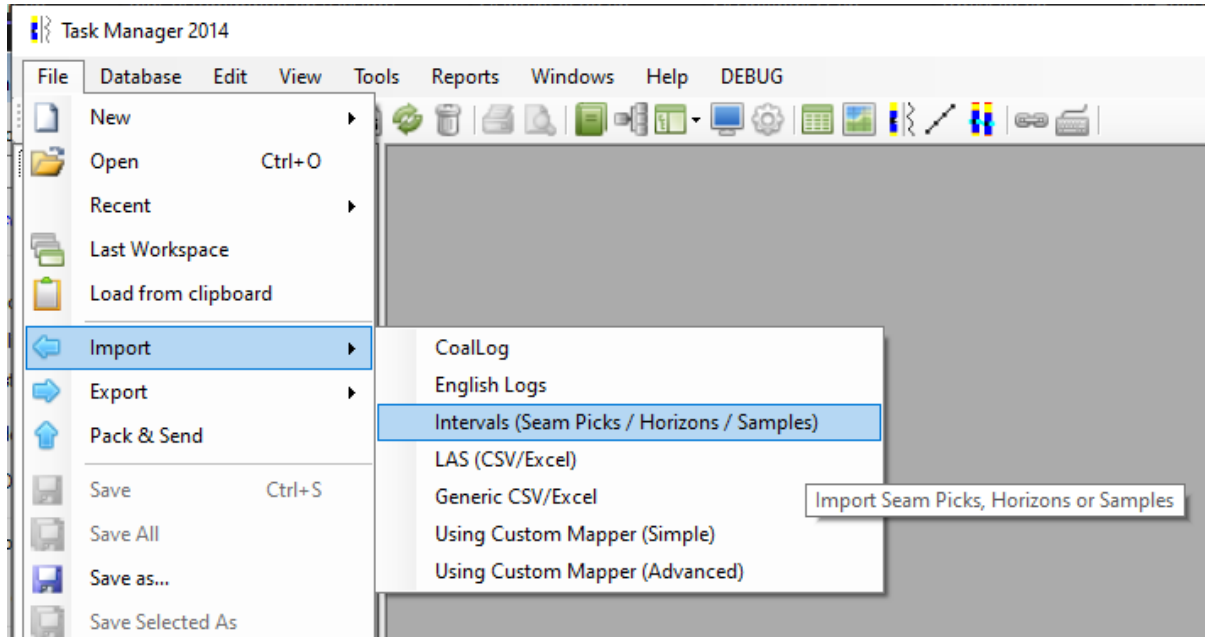
Holes can also be loaded from a database, refer to [Database](#) for more information

Importing Data

Drill logs can be imported from a CoalLog standard import/export file (CoalLog Transfer File). These are a defined set of CSV files and can be contained within a zip file. 1point Desktop can import either the zip file or the CSV files.

Import Intervals

Intervals such as seams/horizons can be imported and merged into existing holes. This can also be used to import other Lithology information such as Litho_Type, Mech_State, Weathering etc using the “Other” mode.



First load the holes then create a file with the intervals you want to import. The file can be an Excel, CSV or .PCK (seams only) file and must contain headings as follows:

For Seams, Horizons and Samples:

Hole, From, To, Interval Name, Interval Type

The column names are not important but the order of the columns is.

The interval type should be either **Seam**, **Horizon** or **Sample**

Note: See [Seam Picks \(.pck\) files](#) for .pck format specification

For "Other":

Hole, From, To, Litho_Type, Mech_State, Core_State

As before, the first three column names are not important, however subsequent column names must match the CoalLog/1PD lithology columns.

Additional options

Create hole if not loaded

If the imported file contains a hole that has not already been loaded, this option will create a new hole. Otherwise the hole will be ignored

Append lithology if greater than TD

If the imported file contains depths that exceed the existing lithology, this option will append the lithology. Otherwise the interval will be ignored

Split existing lithology if not exact depth match

If the imported depths don't exactly match the existing lithology, the lithology will be split to accommodate. Otherwise the interval will be applied to the closes matching lithology.

Ignore TD Code

Skip importing TD seam/horizon codes

Change NR to CO

When importing seam codes, if the existing Litho_Type is NR, change it to CO

Horizon Override Codes

If the import file contains a mixture of Seam and Horizon codes, specify the horizon codes here so they are allocated to the correct column

Sample Mode Match Options

- Match on Sample_No
- Match on Depth
- Auto – Match on Sample_No if present, otherwise match on depth

Once the import is complete, a report will be generated listing which actions were taken and any errors which may have occurred.

Loading LAS (Geophysics) Files

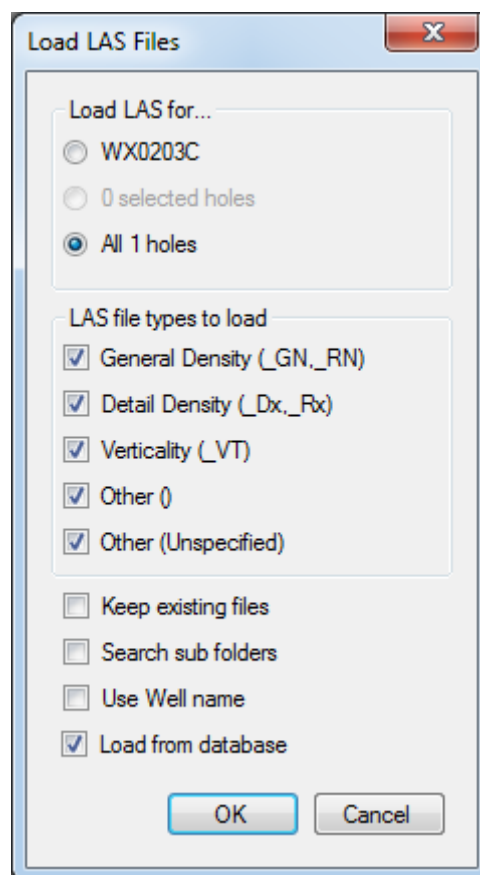
Once you have some drill logs (holes) loaded, you can load the associated LAS files. There are two options, manual and automatic.

Loading LAS files manually

In manual mode you simply right click on the hole name and select “Load LAS Files (Manual)”. You will be presented with the standard file open dialog where you can locate and select the LAS files you wish to load for that hole.

Loading LAS files automatically

In automatic mode you can right click on the hole as above and select the automatic mode or you can click the “LAS” button in the toolbar. This will present you with the “Load LAS Files” dialog window which gives you several options for locating and selecting LAS files to load.



Load LAS Files window

Load LAS for...

In this section you select whether you want to load LAS files just for the highlighted hole, all selected holes or for all holes.

LAS file types to load

In this section you select whether you want to load General Logs, Detail Logs and/or other LAS file types. LAS file types are determined by a suffix on the filename which can be configured in the [Settings](#).

Options

Keep existing files

This option tells 1point Desktop to retain any LAS files already loaded rather than replacing them with the new files.

Search sub folders

This option tells 1point Desktop to search within any sub folders of the selected LAS file folder (also refer to [Folder Settings](#)). This can be slow if the folder contains a large number of files in sub-folders.

Use Well Name

This option determines whether 1point Desktop should read the Well Name from the LAS header rather than just using the filename. (See [Use Well Name](#)). This option can be very slow, especially when searching a large number of files, as each LAS file must be opened and read to determine the well name from the header. It may be preferable to load the files manually or use the [drag/drop method](#).

Load from database

If the LAS files cannot be located using the above criteria, 1PD can look for LAS data in the database. If the database contains a file link to a LAS file 1PD will attempt to load that file directly. If the file link is not valid 1PD will load the actual LAS data from the database. However this is done as a last resort as it is considerably slower than loading the LAS file directly.

Choose your options then click OK. Your LAS files should load and appear in the Holes window under each Hole name. If your LAS files do not load you may need to check your [folder settings](#) and/or [LAS suffix settings](#).

Importing LAS in CSV format

LAS data can also be loaded/imported from a CSV file. Refer to [file formats](#) for more information

Dragging and Dropping Files

You can also load data by dragging and dropping files from Windows Explorer onto the main 1point Desktop screen. Virtually any supported file type can be loaded in this manner and is equivalent to loading via the File/Open menu. It is particularly useful for loading Geophysics (LAS files) when the auto load LAS function is not working due to incompatible file naming conventions or folder structure.

When loading LAS files, 1point Desktop tries three methods to identify the hole:

1. WellName – The WellName specified in the LAS header is used to identify the hole.
2. Filename – The LAS filename excluding any suffix is used to identify the hole.
3. If neither of the above is successful, or the hole is not currently loaded, if the active window is a graphic log window you will be given the option to load the LAS into that.



Workspaces

A workspace is merely a list of holes and windows which enables 1point Desktop to re-create your work environment if you need to close the program and return to it later. The workspace does not contain any actual data nor does it save any unsaved changes.

When you re-load a workspace, 1point Desktop re-loads the holes from the original locations either from files or the database. Windows are then re-created based on the original hole selections but may not appear exactly as they were before. Map windows may not be zoomed or labelled as they were, Table windows may not be arranged or sorted as they were.

Imported data cannot be saved in a workspace, holes must be exported to individual log files and re-loaded from those files if they are to be saved as part of a workspace.

1point Desktop can be configured to save the current workspace on exit. When you next launch 1point Desktop you can restore the workspace by selecting “Last Workspace” from the File Menu.

Multiple workspaces can be loaded consecutively. For example, you could create several workspaces with different hole selections, then pick and choose one or more of those workspaces to load in a later session.


Database


1point Desktop can work “offline” with no database connectivity or can be configured to work with a database.



Database Configuration


Please speak with your database administrator or contact us for assistance with database configuration. Also refer to the [Database](#) section under Settings

Load From Database


The “Load From Database” function is available from the Database menu or via the  icon on the toolbar.

From this screen you can obtain a list of holes in the database filtered by project as a list and also a map view. You can then  filter the list further before selecting holes to be loaded.

Selected holes can be loaded in full by clicking the  icon. Alternatively, holes can be “Quick Loaded” using the  icon. This loads only the header information, other data such as Lithology is loaded later on demand. Quick Load is useful for loading a large number of holes almost instantly, then when you select holes for viewing the remaining data is loaded at that time.

Use the “Find” window  to find all holes matching a partial hole name. I.e. the search value “123” will return AB123, AB123C, BB123, BB1234 etc

Click the “Paste” icon to paste a list of hole names and find them in the database. This is useful if you have a list of holes in a spread sheet that you want to load. There are two paste options, exact match and partial match. A partial match will include holes that begin with the same hole name. I.e. AB123 will include AB123, AB123C, AB123CR, as well as AB1234, AB1235 etc

Click the “Configuration”  icon to configure your database connection

Validate With Database (GeoCore)

This function will validate the selected holes with the database by “pretending” to save the holes but not actually proceeding. This is enough for the GeoCore validation rules to be applied and any errors reported back to the user.

Select the holes you wish to validate by ticking the boxes in the holes list. Click Database, Validate with Database, OK.

1point Desktop will upload the holes into the GeoCore buffer tables and run the validations. A status window will appear showing the number of successful and failed hole validations. Individual validation error windows will also appear for each hole. Finally a Database Validation Summary window will appear which contains an abbreviated version of the individual validation error windows.

The individual validation error windows can be closed. Review the Database Validation Summary window for any errors that require attention. Repeat the process until all holes validate successfully.

Save To Database

This function will attempt to save the selected holes to the database after first running a validation check. Holes that fail validation will not be saved and the errors will need to be dealt with before attempting to upload those holes again.

There are some options in the Save to Database window to assist with this process.

Save changes to file first

If this option is ticked and the hole is loaded from an Excel log file, any unsaved changes will be saved to the file before saving. This ensures that the file copy matches what is actually uploaded

Remove hole if successful

If this option is ticked and the hole is successfully validated and saved to the database, it is removed from the hole list. Therefore you know that whatever remains afterwards was not saved to the database and you can avoid re-uploading holes that were already successfully saved.

Perform validations only

This option is the same as running “Validate with Database” from the Database menu.

LAS (Geophysics) data in Database (GeoCore)

LAS files can be uploaded into the GeoCore database and retrieved from there as an alternative to manually loading from the file system. This can be an advantage when the LAS files are not organised in a rigid file structure that can be defined in the folder settings.

Uploading LAS files

LAS files can be loaded and linked to existing holes using the existing methods then uploaded to GeoCore or they can be uploaded directly by jumping straight to step 3 below.

1. [Load holes](#)
2. [Load LAS files](#)
3. Select Database, Upload LAS Data

From the **Upload LAS files** screen, click the Browse button to select additional LAS files to upload.

Note: Holes must already exist in the database prior to uploading LAS files

Click **Upload** to upload the files

Downloading LAS files

Refer to [Loading LAS files](#)

Database Reports

Database reports are reports that can be run directly from the database without first loading the holes into 1PD.

Hole Summary

A brief hole summary of borehole counts sorted by project, hole type and hole reason

Seam Summary

A summary of seams including location, depth, thickness etc

Database Dump

Enables a direct dump of GeoCore database tables with optional code translation and pivoted coal quality data.

Templates

Exports data using a pre-defined template.

Custom Exports

Exports data using custom queries in the GEO_CORE_LAS database.

MapInfo Holes Table

Generates a MapInfo table for selected predefined filters.

Note: The MapInfo product must be installed on the same PC as 1point Desktop for this function to work. MapInfo is not provided with 1point Desktop and must be purchased separately if required.

Selecting Holes

Once you have some holes loaded you can start working with them. Typically you might want to view a hole summary table or a map view of selected holes or a graphic log view of a particular hole.

To select holes simply tick the box next to the hole name.

To quickly select multiple holes use the select functions under Edit menu. You can also select holes geographically via a [Map Window](#).

Select UnSaved

Select all holes that have un-saved changes

Select UnChanged

Select all holes that have not been changed/edited

Select Holes from Current Window

If the active window is a Map Window, Table Window or Cross Section window, this option selects all the holes in the active window.

Select Holes from Clipboard

If you have a list of holes in a spreadsheet, you can copy that list then select Edit, Select Holes from Clipboard to select those holes.

Select Holes by Filter

You can also select by filtering the current holes list via Edit, Select Holes by Filter

Table Window

A table window is used to view data in a tabular format much like Excel. Typically this is used to display a list of holes with hole type, location, completion date, total depth etc.

To create a new table window select the “New Table Window” option from the Windows menu or click the table button on the toolbar.

You will be presented with a “Filter Holes” dialog where you can select what data to display in the new table window (see [Filter Holes Dialog](#) for more information).

Once you have made your selection from the Filter Holes window your new table window will appear. In the table window you can sort by a column by clicking on it. You can sort by multiple columns by holding down the CTRL key when clicking on subsequent columns. I.e. to sort by Hole_Type then Total_Depth, first click the Hole_Type column heading to sort by that column, then hold down the CTRL key and click on the Total_Depth column heading.

You can also re-arrange the column by clicking on a column, holding down the mouse button and dragging it to the new position.

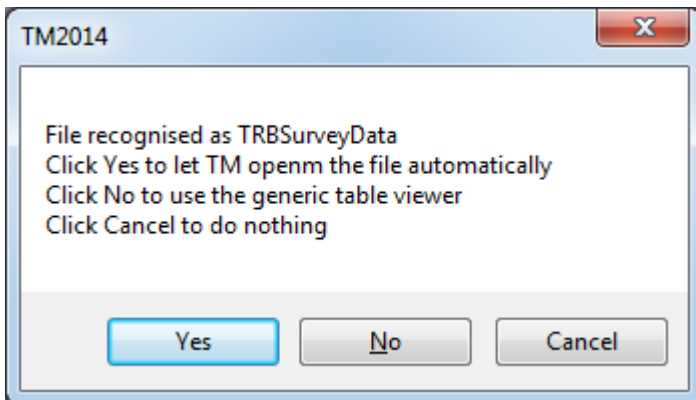
You can select which columns to display by clicking the “Choose Columns” button in the toolbar. This will show you all the available columns and you can turn them on/off by ticking the appropriate boxes. Click the right mouse button for some quick selections and/or to manage custom columns.

Custom columns can be used to display additional data generally derived from [special functions](#).

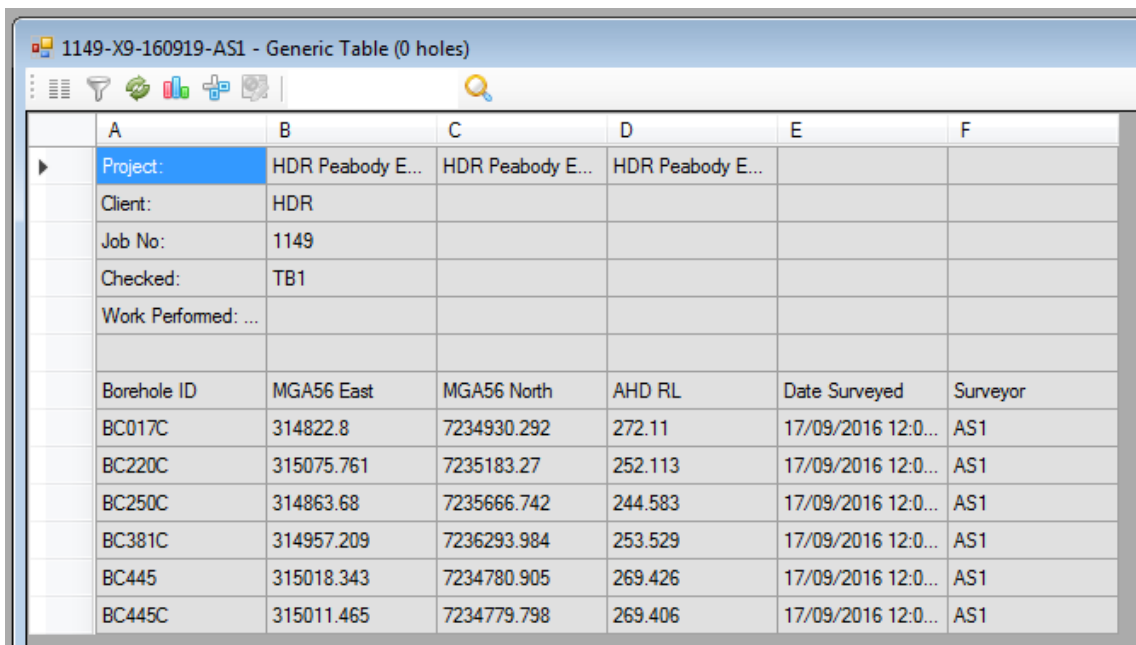
Generic Table View

Any Excel or CSV file can be opened in a generic table view. From there you can map columns to fields in the hole status sheet and import or export data between the two.

When opening Excel or CSV files you will be given the option to allow 1PD to open the file automatically or use the generic table view

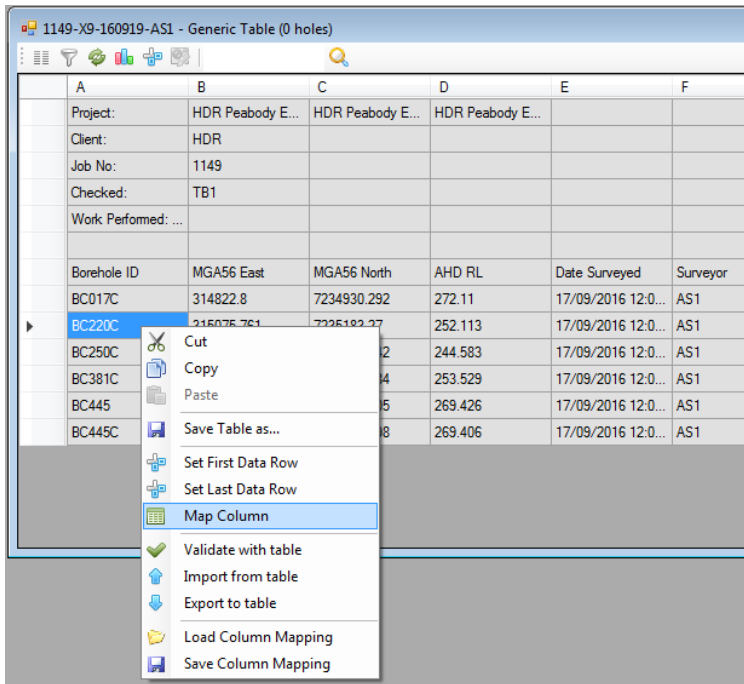


Click No to use the Generic Table Viewer

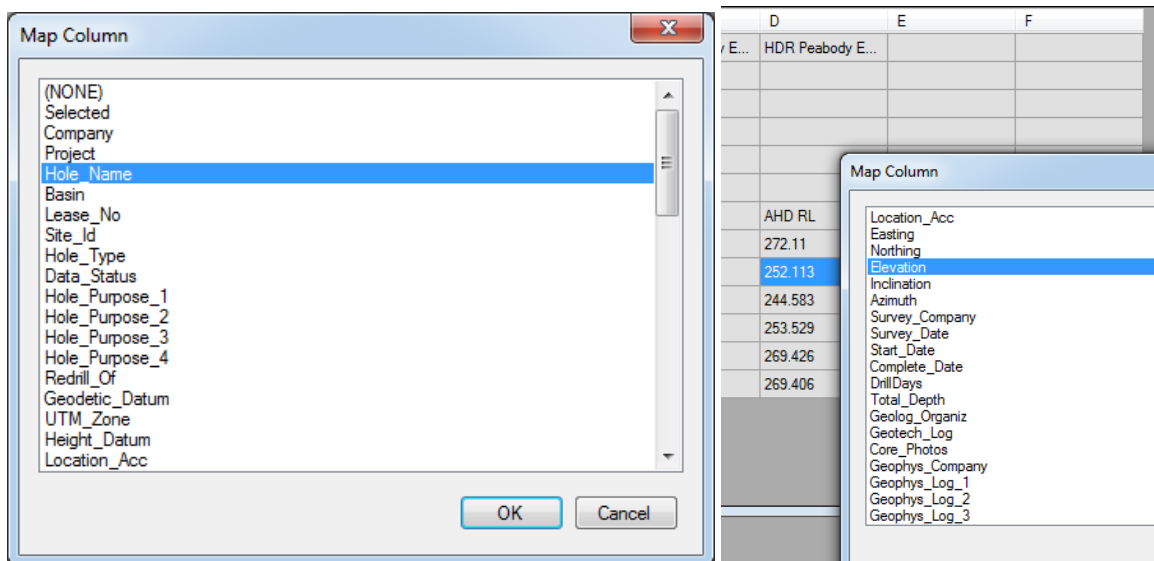


	A	B	C	D	E	F
Project:	HDR Peabody E...	HDR Peabody E...	HDR Peabody E...			
Client:	HDR					
Job No:	1149					
Checked:	TB1					
Work Performed: ...						
Borehole ID	MGA56 East	MGA56 North	AHD RL	Date Surveyed	Surveyor	
BC017C	314822.8	7234930.292	272.11	17/09/2016 12:0...	AS1	
BC220C	315075.761	7235183.27	252.113	17/09/2016 12:0...	AS1	
BC250C	314863.68	7235666.742	244.583	17/09/2016 12:0...	AS1	
BC381C	314957.209	7236293.984	253.529	17/09/2016 12:0...	AS1	
BC445	315018.343	7234780.905	269.426	17/09/2016 12:0...	AS1	
BC445C	315011.465	7234779.798	269.406	17/09/2016 12:0...	AS1	

Define the column mapping by right-clicking on any cell in each column

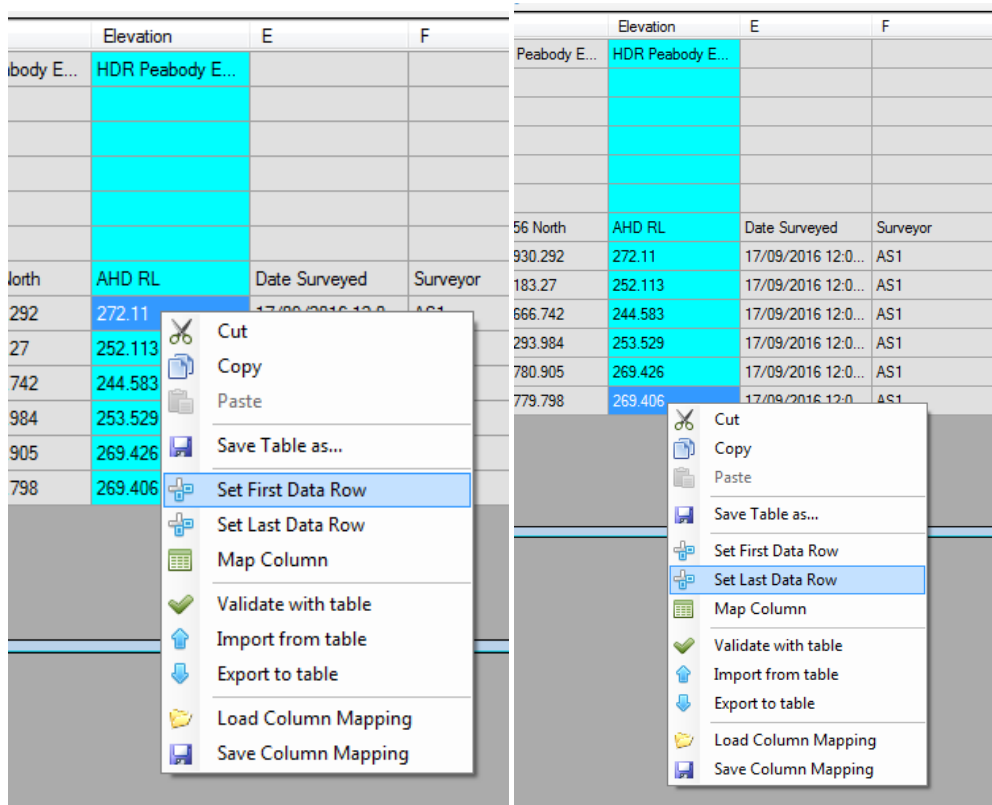


At a bare minimum you must match the Hole_Name column in order for 1PD to associate the row with a hole.

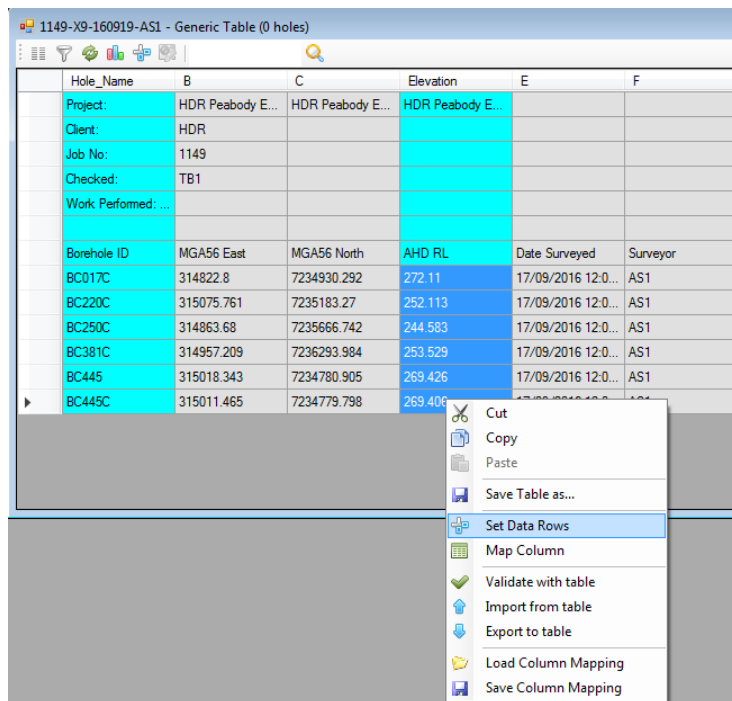


You will also need to map at least one other column to be of any use.

Define the data rows either by selecting the first data row and last data row separately...

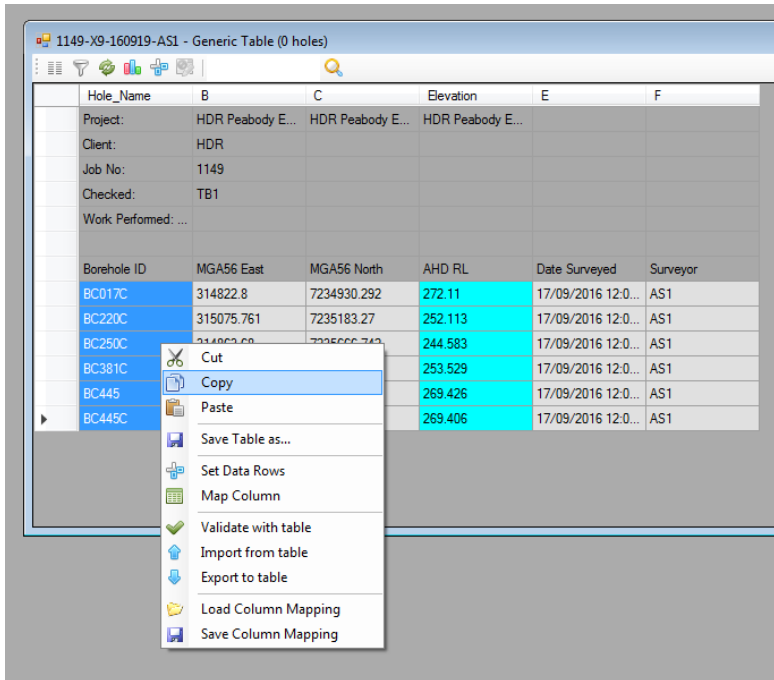


...or by selecting all the data rows at once.

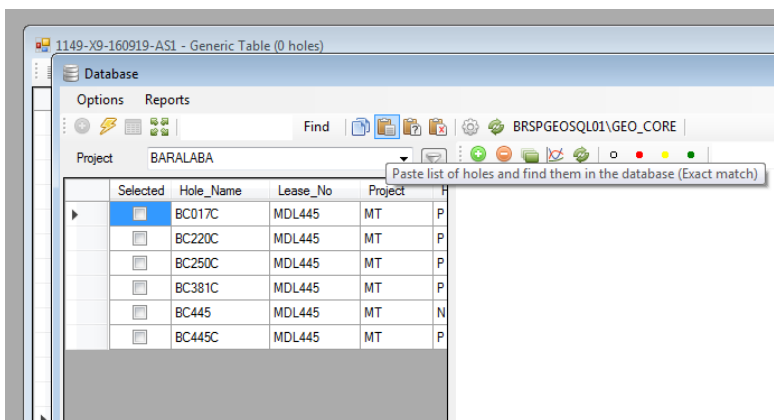


The column mapping can be saved for reuse at a later date.

Then load the holes either from files or the database. If loading from the database you can copy the hole list from the table and use the paste select option in the database.

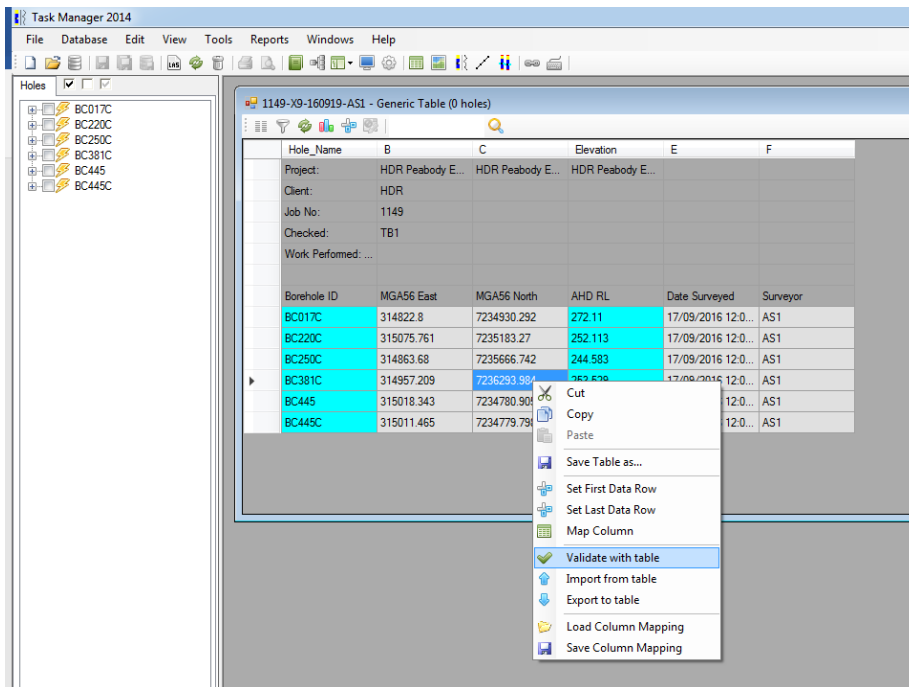


Select the holes and copy...

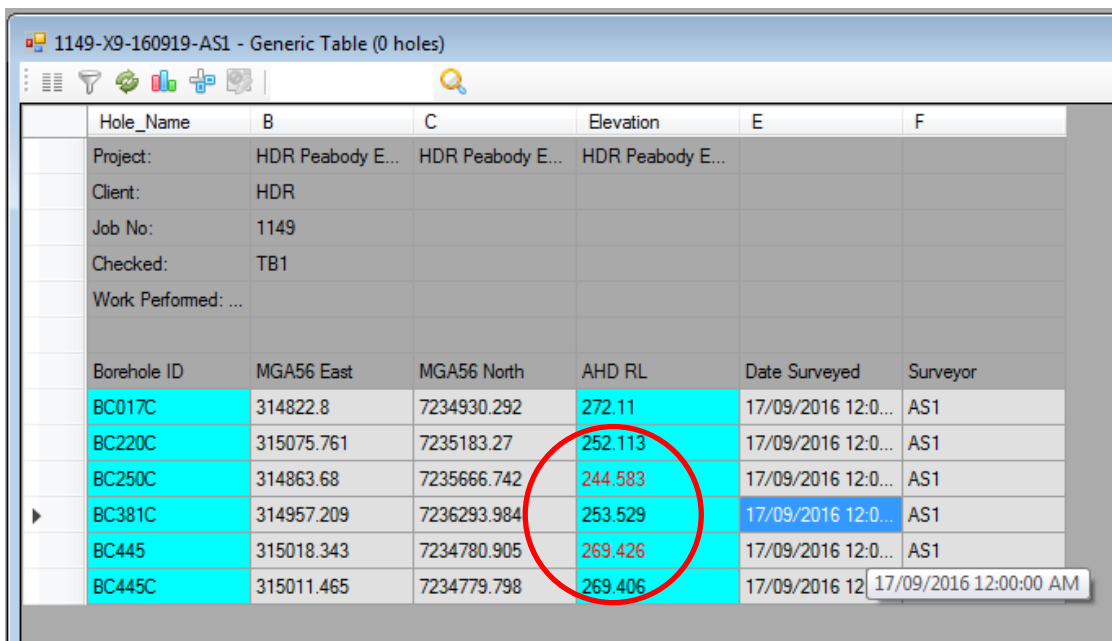


Paste list in database screen. Use quick load as only hole status information can be updated with this method currently.

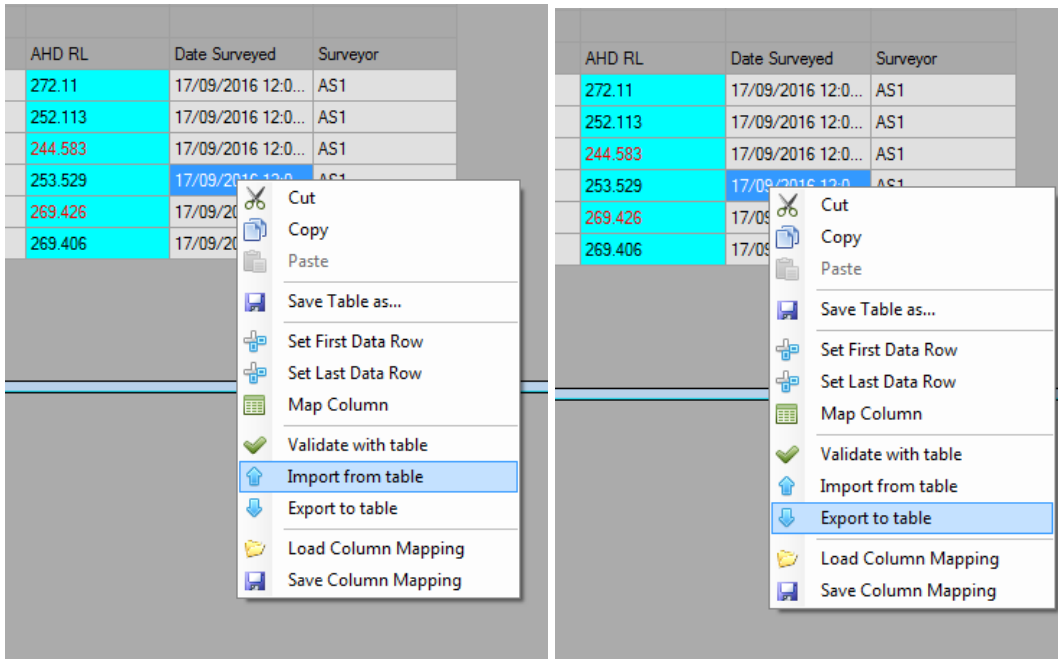
You can now validate the data in the table against the holes you just loaded



Data that doesn't match is highlighted in red

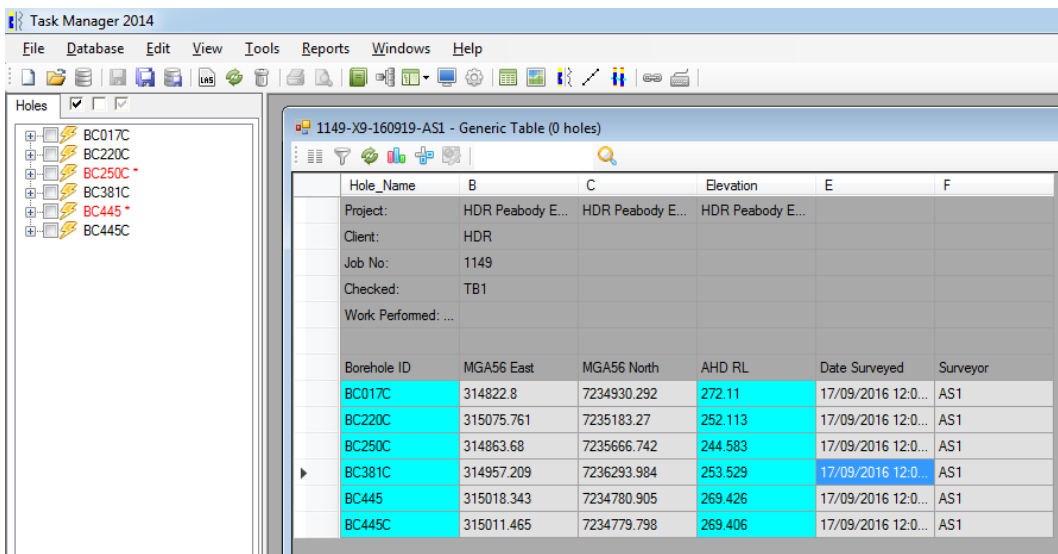


You can then update the holes from the table or go the other way and update the table from the holes.



Import from table

This will update your holes in 1PD with any changes from the table



Changed holes will be highlighted as having unsaved changes.

Export to table

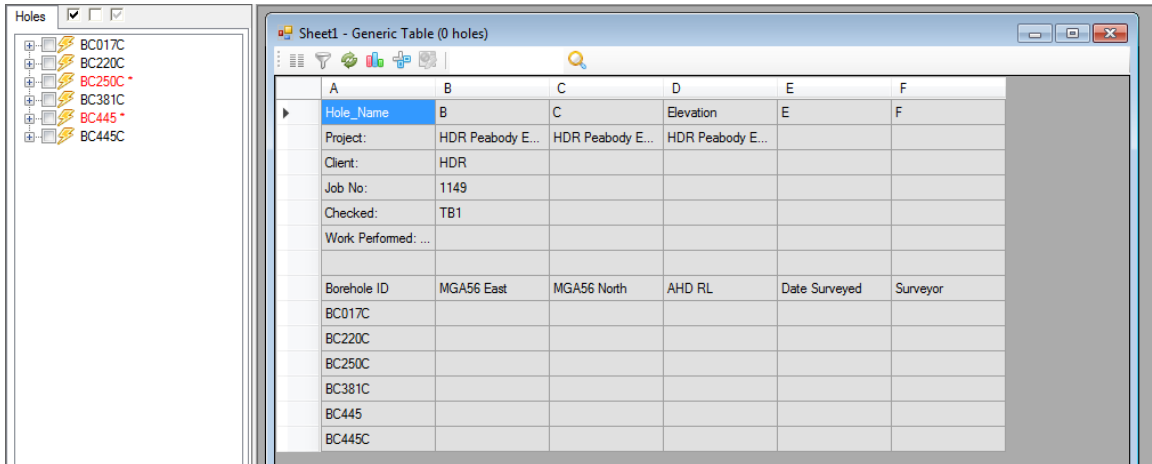
This will update the table with values from your holes. This can also be used to populate an empty sheet.

Note: You cannot save changes back to the original source but you can save the results as a new Excel or CSV file.

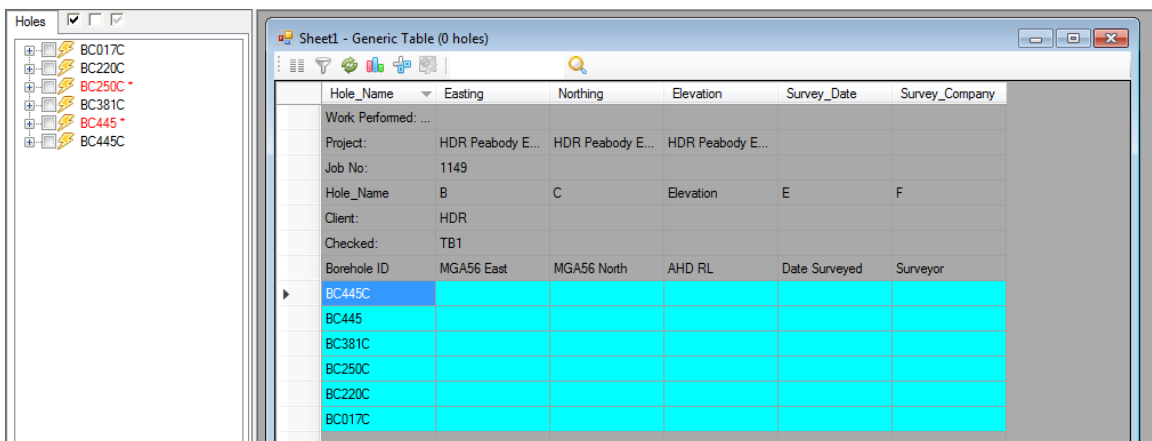


Populating an empty sheet

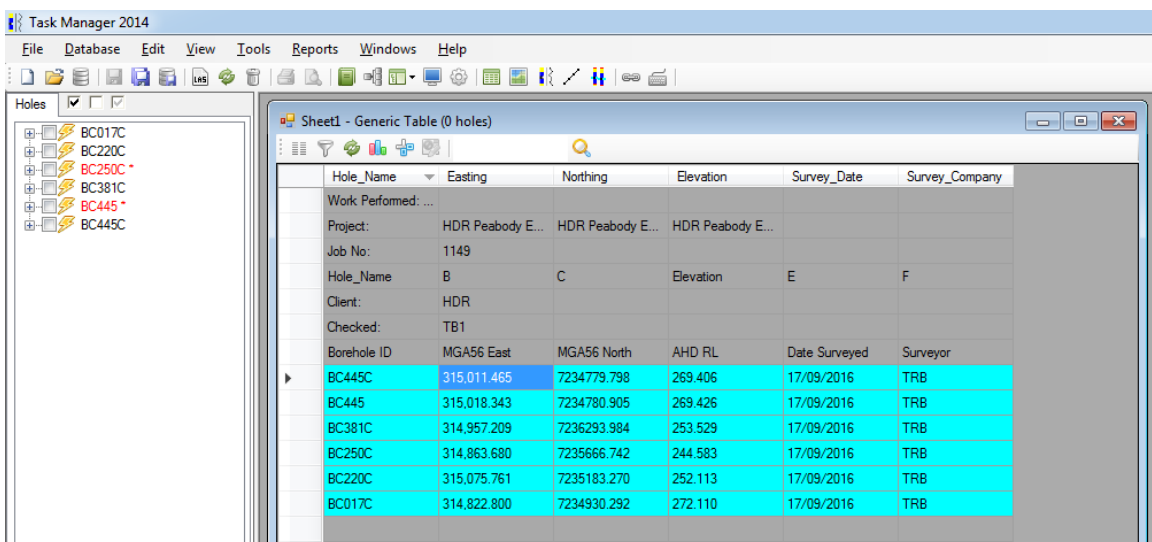
Open an existing Excel or CSV file with the holes required as a generic table view:



Set the column mapping (or load the mapping from a file) and load the holes as before.



Right click and select Export to table



Save the table as an Excel or CSV file

Map Window

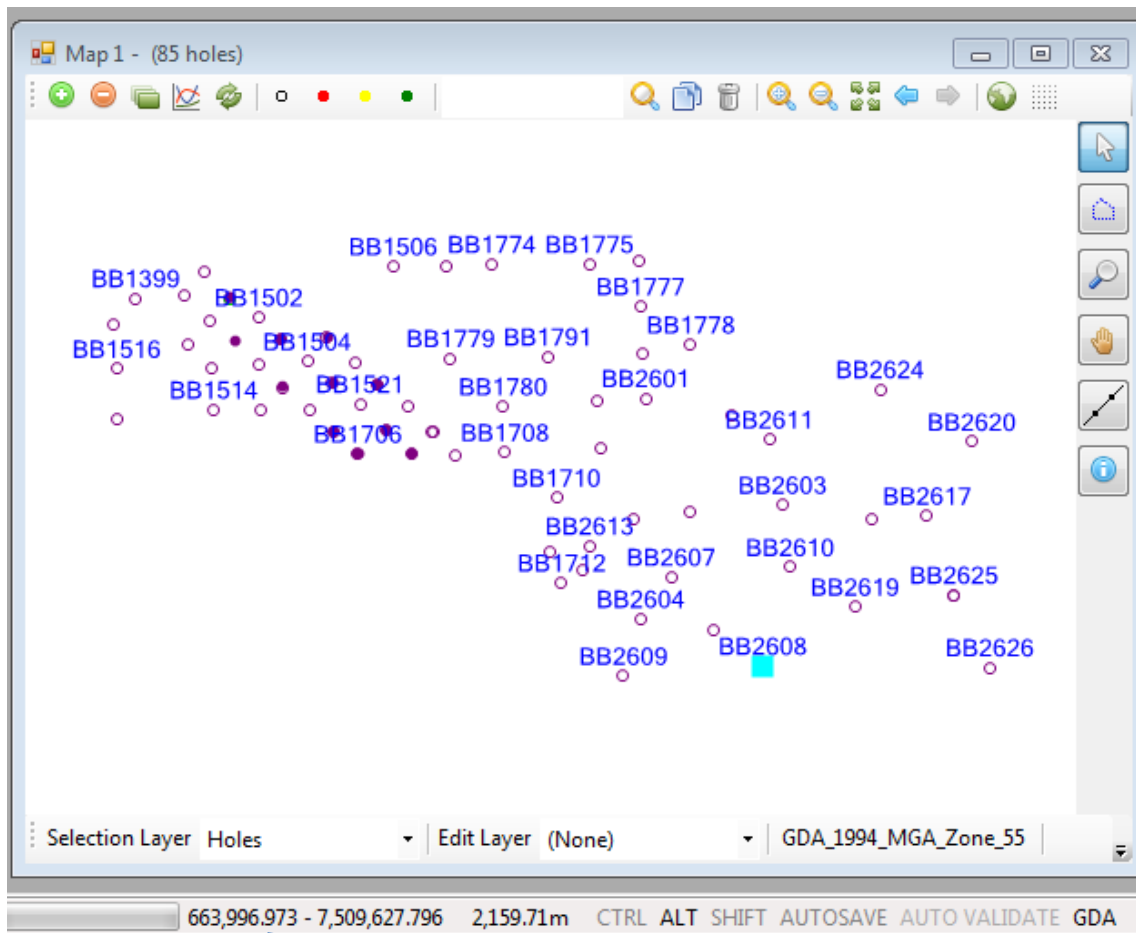
A map window is used to display holes spatially according to their geographical location. This can be used simply as a selection tool but can also be used to post various values and create contours based on those values.

To create a new map window select the “New Map Window” option from the Windows menu or click the map button on the toolbar.

You will be presented with a “Filter Holes” dialog where you can select what data to display in the new table window (see [Filter Holes Dialog](#) for more information).

Once you have made your selection from the Filter Holes window your new map window will appear. Then use the various tools to navigate around the map, select holes, add layers, draw cross sections etc.

Information can be found in the status bar at the bottom of the main screen. This includes the coordinates under the mouse cursor and the distance from the mouse cursor to the last selected object.



Mouse cursor coordinates

Distance from last selected object

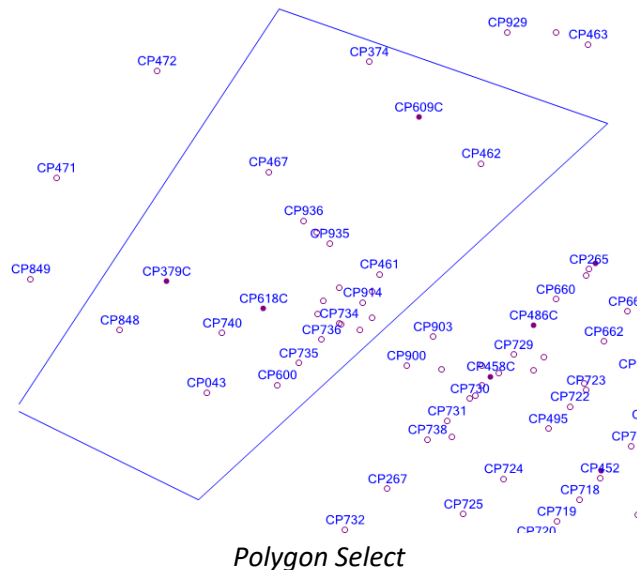
Current map projection

Hole Selection

Use the selection tools to select individual holes or groups of holes. Hold down the CTRL or SHIFT keys to append the selection to any existing selection you may have made previously.

Polygon Select

Use Polygon Select to draw a rough polygon around a number of holes to select all holes within that polygon. Click the select or polygon select button again to clear the polygon.



Zoom & Pan

Use the zoom tool to zoom in on a specific area of the map. You can also use the mouse wheel to zoom in/out. Use the pan tool to move the map.

Cross Section

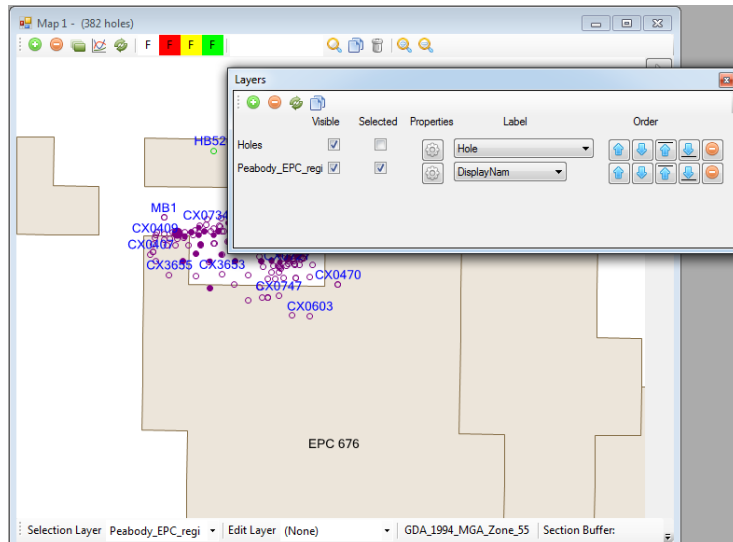
Use the cross section tool to draw a line through a series of holes. Adjust the buffer size of the section corridor using the mouse scroll wheel. When you're happy with the selection, right click and select "New Section Window" or click the button on the main toolbar.

Layers

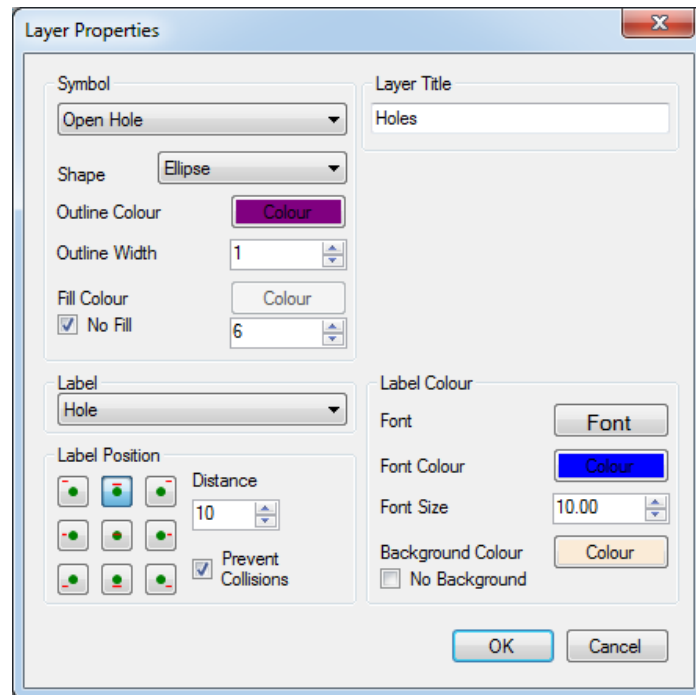
By default a new map starts with a "Holes" layer but you can add your own layers by importing SHP or DXF* files. Click the green plus button to add one or more layers. Click the layers button to manage existing layers including the display order (vertical position), labels, colours etc.

Support for additional file types can be obtained by installing the DotSpatial GDAL [plugin](#).

* Support for DXF is currently limited to simple polygons



Map Window with Holes Layer and Tenement Boundary Layer



Layer Properties Window

Posting Values

The default label for a new map window is the hole name from the holes layer. However you can post almost any value from the header sheet (i.e. Project, Lease, Hole Type, Elevation) and/or a calculated (custom) value such as baseofseam, coalthick, interburden, stripratio etc. Refer to [Appendix A – Lithology Functions](#) for a complete list.

In addition to the above header values, the following tokens can be used:

Company_Name	Dictionary Translation of Company code
Lease_Name	Dictionary Translation of Lease_No code
Project_Name	Dictionary translation of Project code

Contours

Click the contours button to create simple contours based on various data such as elevation, total depth, seam depth/elevation, seam thickness etc.

For example, to produce elevation contours, load your boreholes and create a map covering the area of interest then:

1. Click the Create Contours button.
2. Select “Elevation” from the “Value column from layer” drop down list.
3. Review the Start and End values (they will default to the existing data range)
4. Adjust the increment as desired. Smaller increments means more contour lines.
5. Select appropriate colours (i.e. red for high values, green for low values)
6. Click Apply
7. If you’re not happy with the results, go back to step 3 and repeat.
8. When you’re happy, press OK

Results will vary depending on the data and your selections above. You may need to experiment.

To remove the contours, click Layers, then the red minus button to remove a layer.

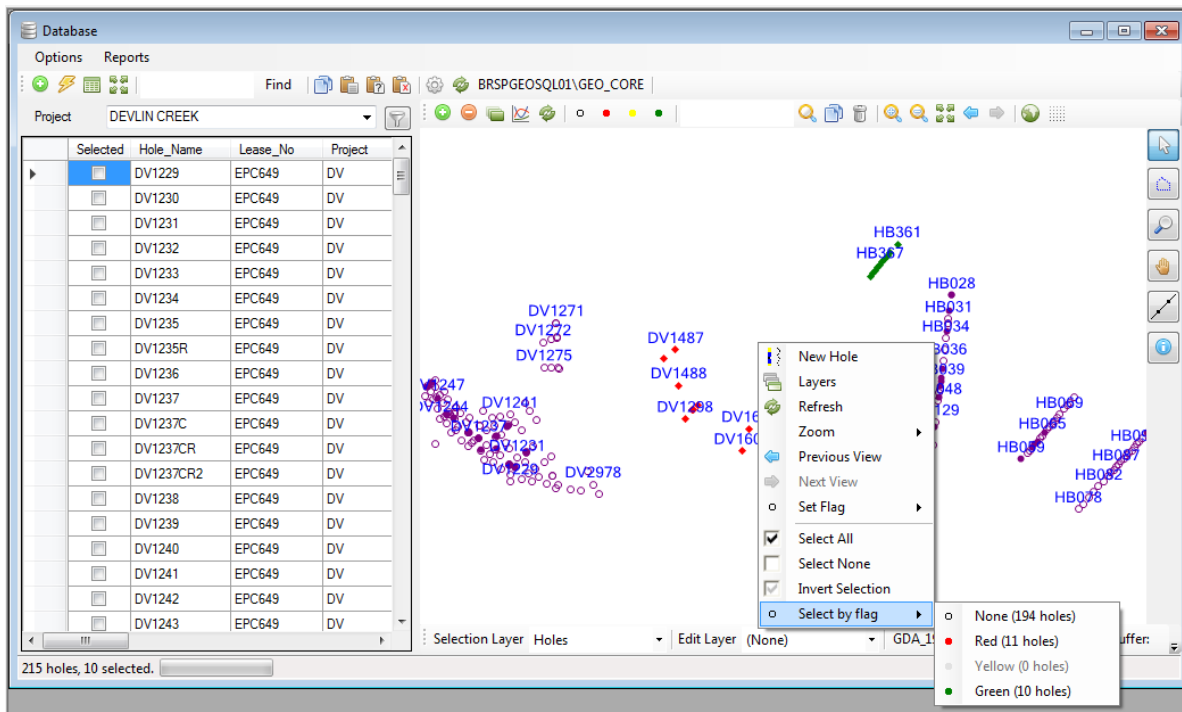
Flags

Flags can be used to hold temporary selections / groups of holes.

Select one or more holes using any of the selection tools then click one of the flag buttons in the toolbar or right click menu. There are three colours to choose from, Red, Green and Yellow and the selected holes will be flagged/tagged with that colour. Additional holes can be assigned the same flag colour. Any given hole can only be assigned one flag colour at a time.

You may find using flags is easier than trying to perform multiple selections without losing previous selections. I.e. select a few holes, assign a flag colour, and just keep repeating the process until all the required holes have been selected. Then simply select by flag colour and load.

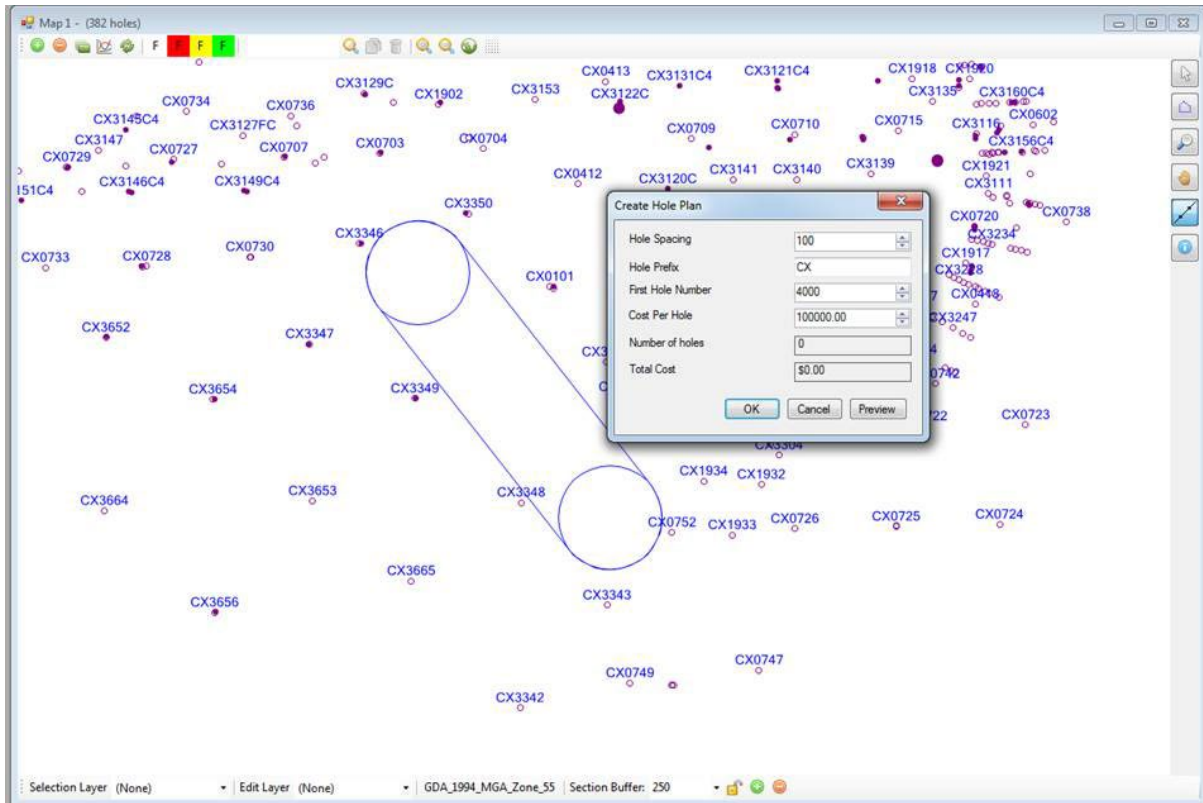
Flags are set at the hole level and will carry across multiple map windows. I.e. changing a flag in one map window will be reflected in other map windows (after a refresh).



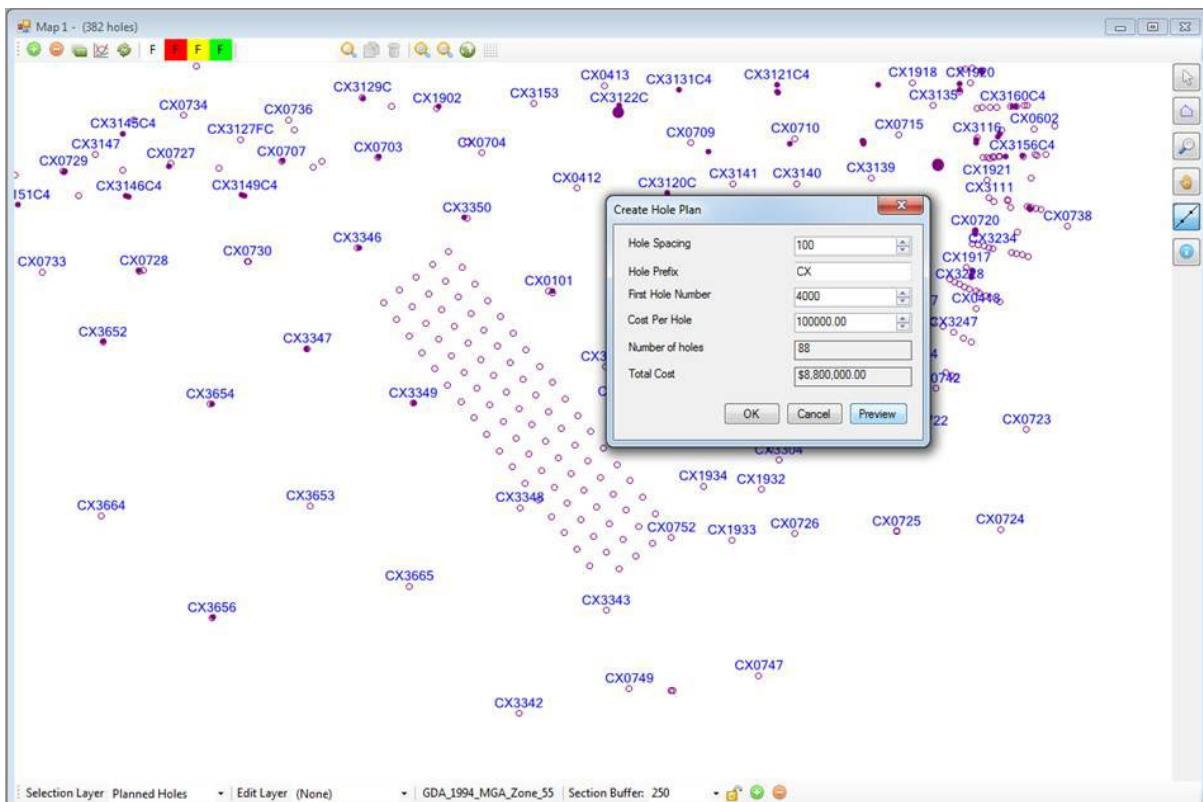
Hole Planning

You can create a hole plan (or grid of evenly spaced holes) as follows:

1. Use the section tool to select an area and determine the orientation
2. Use the section buffer size to adjust the width of the area
3. Click the Hole Plan button in the toolbar



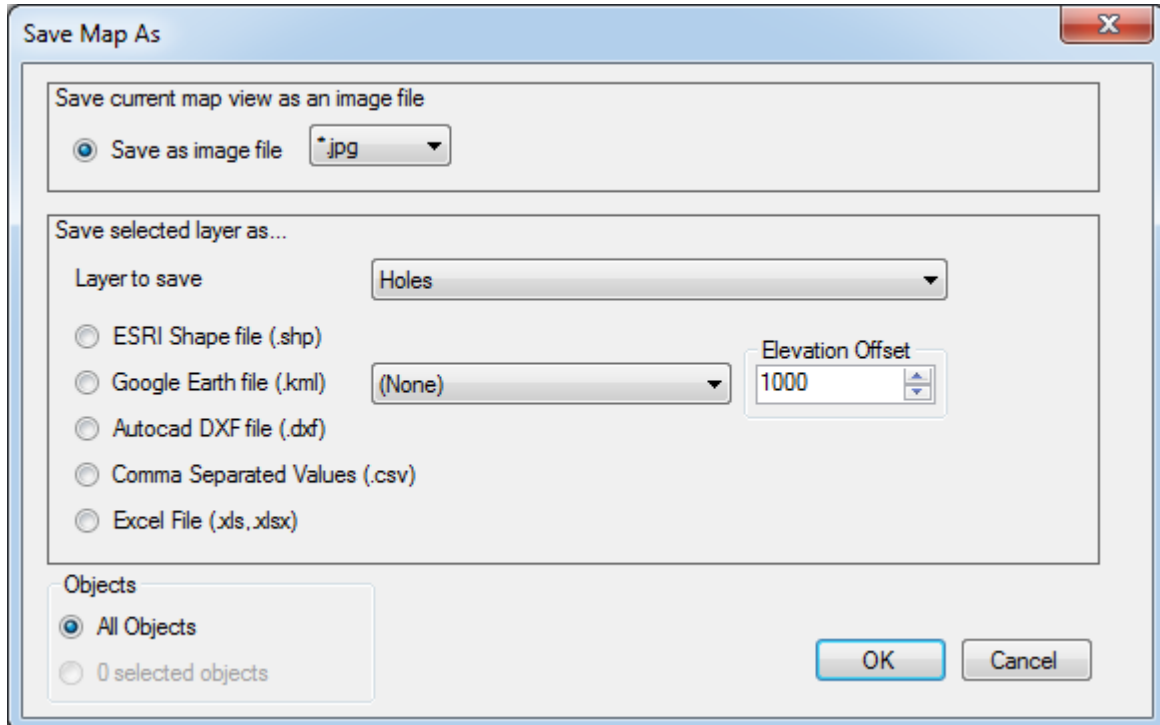
4. Select the hole spacing, hole prefix and first hole number
5. Enter a "Cost Per Hole" if you want a quick cost calculation
6. Click the Preview button to generate the holes
7. Adjust the hole spacing if required and repeat as required



Save/Export Map layers

You can save the map window as an image or export a map layer as a file in various formats.

Click File, Save Map As...



Save current view as an image file

Select the file format (.bmp, .jpg, .png, .tif etc) then click OK.

Save selected layer as

Select a layer from the drop down list then select the desired output format

Google Earth file (kml)

Select an attribute to use as the place mark label and adjust the elevation offset if required. The elevation offset allows objects to float above the ground rather than underground where they cannot be seen.

Comma Separated Values / Excel File

Save the attributes only to a .csv or Excel file

Objects

Save either all objects or selected objects from the selected layer

Graphic Log Window

The graphic log window is used to generate graphic plots of your drill logs but is also the main place for editing your data. All aspects of the drill hole can be edited in this window including headers (hole status, geologists, casing), drilling, lithology, defects etc.

The graphic log window consists of four main areas:

Preview/Overview Window

Starting on the far right is a preview window where you can see a graphical representation of the entire log. This is primarily an overview window for selecting sections to view, it also contains additional information such as Total Depth, Casing Depth & Type, depths and elevations. Moving the mouse around will update the depth & elevation displayed in the bottom left corner of the main screen. Clicking on the preview window will update the main display window to show that depth.

Main Graphic Log Window

On the other side of the screen (far left) is a more detailed view of a section of the hole. The default scale is 1:50 and can be adjusted depending on the layout or as required.

The central part of the screen is broken vertically into two. The upper portion contains most of the main data sheet tables and the lower portion contains additional information and tools.

Data Sheets

The data sheets contain the main data tables for hole status, drilling, lithology, defects etc. This is the primary data entry and viewing area. Data can be entered directly into the cells or selected via pick lists where available by double-clicking on a cell or hitting the F3 key.

Selecting Lithology

You can select lithology from almost anywhere in this screen, the lithology data sheet, the samples data sheet, directly on the graphic log display or even the overview display. Wherever you click, the other screen will synchronise and display the same depths.

You can select multiple rows on the data sheets simply by holding down the mouse button and dragging. You can select multiple rows on the graphic log by holding down the SHIFT key and clicking on the log. When selecting multiple rows on the graphic log you can only select/deselect the first or last rows as selections are from/to inclusive (i.e. you can't leave gaps in the middle).

Edit Mode

There are four edit modes:

- Read Only – No data can be changed
- Raw/Uncorrected – Entered depths are raw/uncorrected depth
- Adjusted/Corrected – Entered depths are adjusted for geophysics or other method
- Final – Non depth related changes, any depth changes are assumed to be corrected

When creating a new drill log you are automatically placed in Raw/Uncorrected edit mode. When loading an existing drill log the default mode is "Read Only".

The available edit modes are determined by the Data Status flag in the Hole Status sheet. The Data Status flag R is the only flag which will allow the Raw/Uncorrected edit mode. All other flags will only allow Corrected and Final modes.

Depth changes made in Raw Edit mode are not recorded as a depth change and do not affect depths anywhere else (i.e. Defects, Point Loads etc).

Depth changes made in Corrected or Final mode are recorded as a depth change and will affect other depths when depth corrections are applied

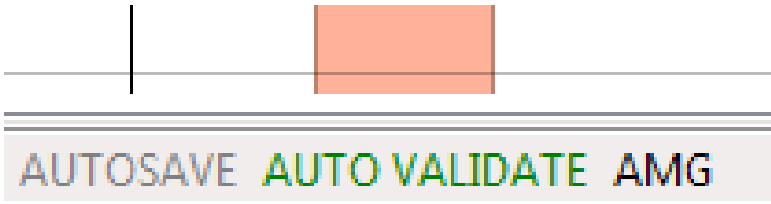
Changing the Interval Status on any lithology row from R to A will automatically change the Data Status to in the Hole Status sheet to A.

One you enter Adjusted Edit Mode you cannot go back to Raw Mode. However, if you enter Adjusted mode by mistake you can reset the hole back to Raw mode via the Tools menu. This will reset the Data Status back to R and change the edit mode to Raw. Any depth changes will be retained and will be treated as raw/uncorrected depths.

Validation

Data is validated as it is entered, serious errors are highlighted in red, warnings are highlighted in orange. You can also force a refresh/re-validation by right-clicking and selecting Validate.

Auto Validation can be disabled by clicking on the label in the status bar. It will turn red when disabled. Click it again to re-active it.



Validation errors are also listed under the Validation tab in the lower half of the screen. Clicking on a row in this table will take you to that cell on the relevant data sheet.

	23.000	23.000	0.000	B													A	20	SS	FM		B
	23.000	23.980	0.980														A	0	SS	FM		B
	23.980	24.610	0.630														A	0	ST			D
	24.610	26.330	1.720	A													A	70	SS	MM		A
	26.330	26.330	0.000	B													A	30	ST			D
	26.330	26.380	0.050														A	0				
	26.380	26.570	0.190							QP	456458						A	0	ST			D
	26.570	26.630	0.060	LL2						QP	456459						A	0	CO	BD		
	26.630	26.660	0.030	LL2						QP	456459						A	0	CO	DB		
	26.660	26.910	0.250	LL2						QP	456459						A	0	CO	DD		
	26.910	26.970	0.060	LL2						QP	456459						A	0	CO	DB		

Info	Core Photo	Rehab Photo	Quality	Composites	Validation	Files	Data Entry
Sheet	Row	Column	Depth	Code	Category	ValidationCategory	Message
78c	Lithology	22	21	26.38	Litho_Type	CodeWarning	Litho_Type cannot be blank!
*		1					

Lithology Data Grid showing validation warning (orange cell)

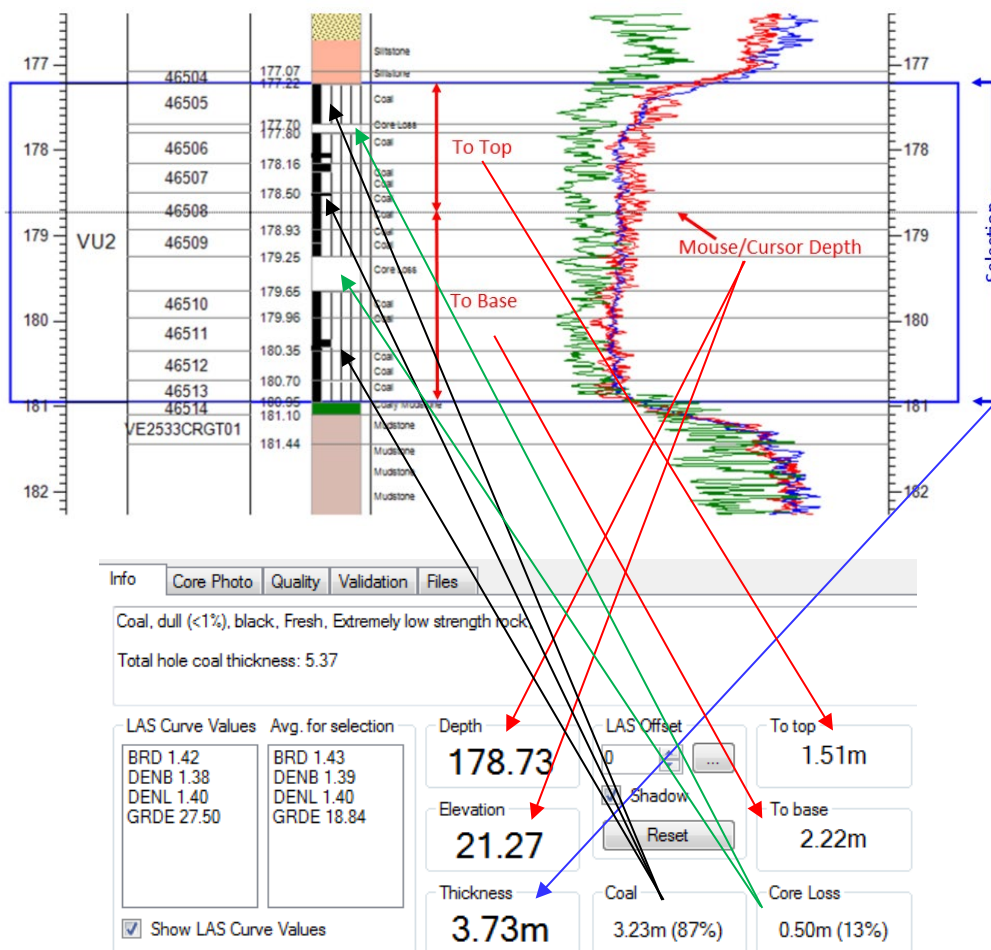
Information & Tools

The lower section consists of the following tabs:

Info

This tab contains an English translation of the current lithology row, information about current cursor depth & elevation and thickness of the current selection as well as LAS curve values for both the cursor depth plus an average for current selection. You can also obtain average LAS curve values for any arbitrary thickness by holding down the ALT key and the left mouse button and dragging the mouse down the hole.

Depending on the current selection, it will also display coal and core loss as both a thickness and a percentage. There is also a tool for artificially adjusting the LAS curve display which we will cover more in [depth corrections](#).



Depth – Depth at mouse cursor location

Elevation – Elevation at mouse cursor location

To top – Distance from mouse cursor to top of lithology selection

To base – Distance from mouse cursor to base of lithology selection

Thickness – Total thickness of current lithology selection

Coal – Total coal thickness within current lithology selection

Core Loss – Total core loss within current lithology selection

Core Photo

This tab displays the core photo for the selected depth assuming that the photos are correctly named and available. You can also cycle through the photos by clicking the Next/Previous buttons or right click for more options. See [Core Photo Renaming Tool](#) for more info.

Rehab Photo

This tab displays the rehab photos for the hole. Click the Next/Previous buttons to cycle through the photos.

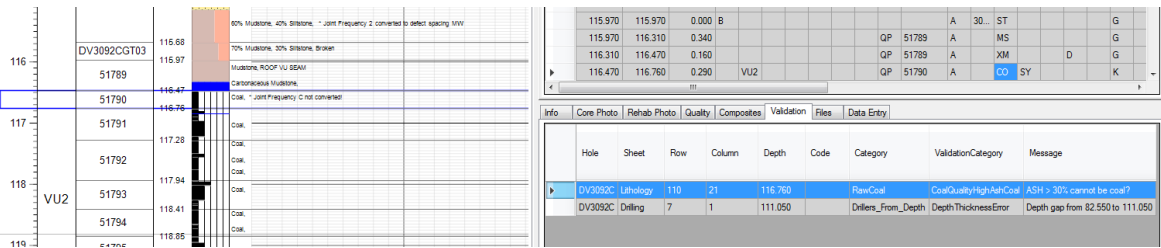
Quality

This tab is used for the display and management of coal quality information. This is covered in more detail in the Coal Quality section of this manual.

Sample	IM	FM	ASH	VM	FC	SE	RD	CSN	TS	Phos	CumMass
51791	2.800		85.300				2.530	0.000	0.010	0.000	
51792	2.000		38.700	13.600	45.700		1.700	0.000	0.180	0.018	
51793	1.800		16.400	18.800	63.000		1.460	1.000	0.270	0.011	
51794	1.600		9.700	18.500	70.200		1.370	3.000	0.280	0.031	
51795	1.400		13.600	18.900	66.100		1.420	4.500	0.260	0.009	
51796	1.400		11.600	19.000	68.000		1.410	2.000	0.270	0.004	
51797	1.200		8.400	21.100	69.300		1.370	8.500	0.300	0.006	
51798	1.600		9.700	18.500	70.200		1.370	3.000	0.280	0.031	

Validation

This tab displays a list of any validation errors. Click on a row to display the relevant section in the data sheet area above.



Files

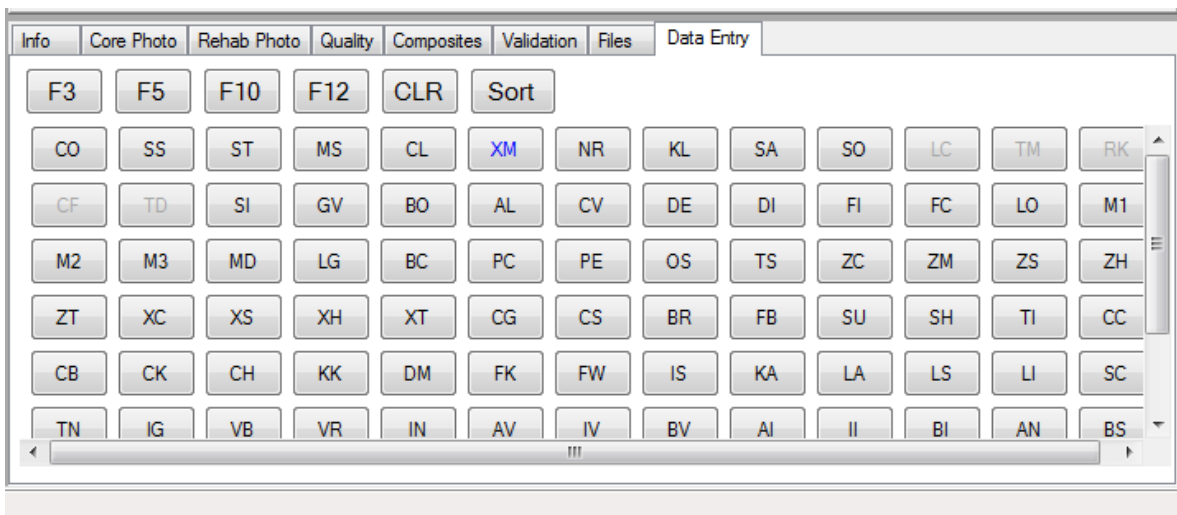
This tab displays the folder locations of various files accessed for this hole such as LAS files, Core Photos etc.

Right click anywhere in the files window to active the [Folder Settings Wizard](#) which can help you configure the folder settings.

Data Entry

This tab provides buttons for selecting codes when using a touch screen device.

Codes can be displayed either in alphabetical order or dictionary order. Additionally, a dynamic dictionary mode can be enabled via Settings which will display the most commonly used codes first as shown below:



Quick Setup

Quick Setup uses an example bore hole to configure basic folder settings automatically. Essentially this is a simplified version of the [Folder Settings Wizard](#)

- Select a bore hole file (.xlsx) that you have both LAS files and core photos available.
- Select the folder that contains the LAS files for the selected bore hole.
- Select the folder that contains the Core Photos for the selected bore hole.

Quick Setup will then determine the appropriate folder settings by substituting tokens where possible. If the resulting settings look acceptable, click the Save button to save the settings.

Best results are achieved under the following conditions:

1. LAS files are arranged in sub-folders for each bore hole
2. Core Photo files are arranged in sub-folders for each bore hole
3. A custom dictionary exists with relevant Project, Lease codes etc.

How it works

Quick Setup compares the file paths of the given locations to determine a common (root) path. Tokens are then substituted for information from the borehole where appropriate (i.e. Project Code, Project Name, Lease Code/Name, Company etc).

Quick Setup

Start Folders Folder Settings

This page configures your folder settings by example. Select a borehole below that you have both LAS files and core photos for...

Bore Hole File: C:\DATA\Sample Data\Drill Logs\CX1610C.xlsx

Use the same folder for Raw, Corrected and Final

Raw: [Empty field]

Corrected: [Empty field]

Final: [Empty field]

Now select the folder containing the LAS files for the above borehole.

LAS Folder: C:\DATA\Sample Data\LAS Files\CX1610C

Now select the folder containing the core photo files for the above borehole.

Photos Folder: C:\DATA\Sample Data\Core Photos\CX1610C

Previous Next Cancel

Example bore hole, LAS and core photo folders selected

Quick Setup

Start Folders Folder Settings

We have determined the following should work for this example. Click Save below to keep these settings.

{root} folder: C:\DATA\Sample Data

{holes} folder: {root}\Drill Logs

{holes} folder (Raw): [Empty field]

{holes} folder (corrected): [Empty field]

{holes} folder (final): [Empty field]

LAS Folder: {root}\LAS Files\{hole}

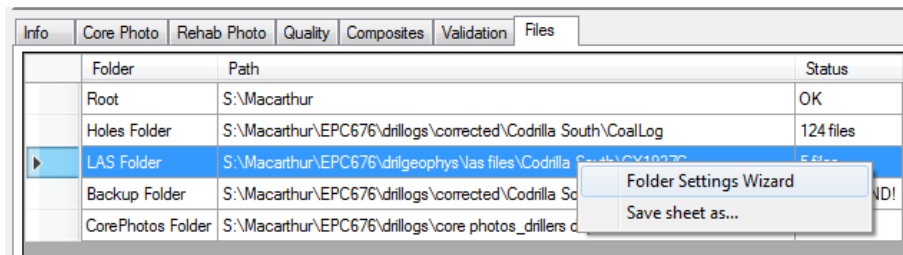
Core Photos Folder: {root}\Core Photos\{hole}

Previous Save Cancel

Generated/Tokenised Settings

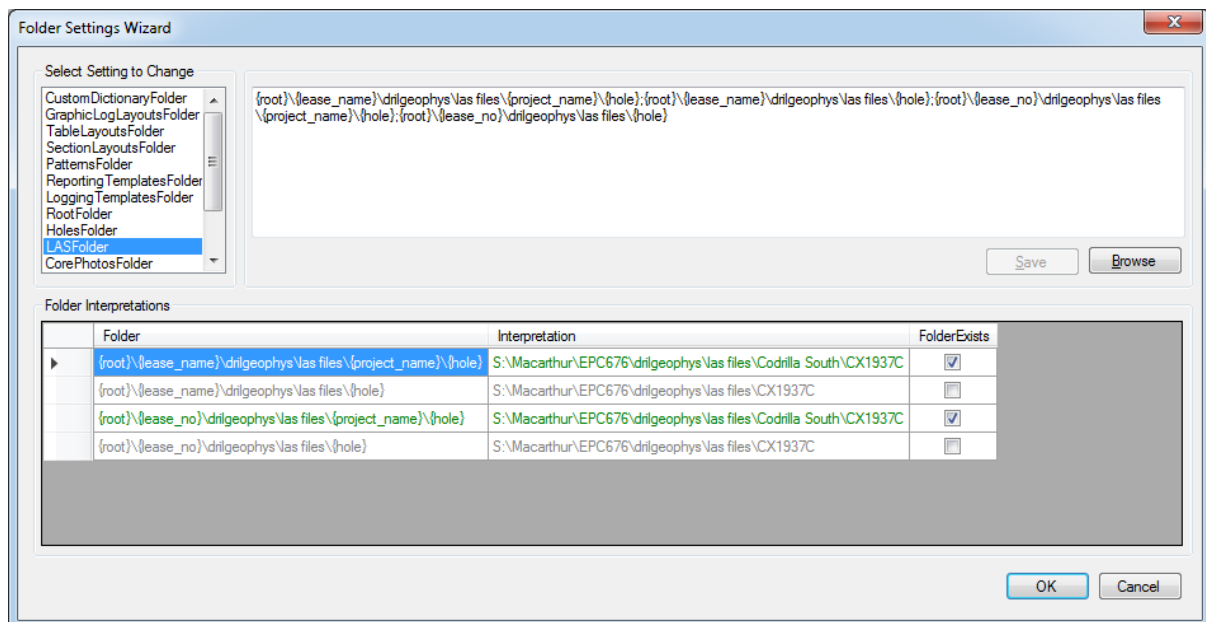
Folder Settings Wizard

The Folder Settings Wizard can be accessed by right clicking anywhere in the Files tab in the Information section of the main graphic log window.



The wizard uses information from the displayed hole to determine the appropriate folder settings.

Select the folder setting you which to change. This will display the current setting in the top window and all the interpretations of that setting in the lower window.



If the correct path is not listed, click the Browse button and manually select the correct folder. The Wizard will attempt to tokenise the selected folder based on information in the drill log and add it to the list.

To remove a folder, right click on the folder interpretation and select “Remove folder”.

Note that just because an interpretation is incorrect for this hole, it may be correct for other holes. The wizard is using the current hole as a guide in order to tokenise the folder setting. Only remove folders if you’re sure they are incorrect for all holes.

Depending on your setup you may need multiple alternate folder settings. Every time you encounter a situation where folders are not located correctly, repeat the above process to append a new alternative folder location.

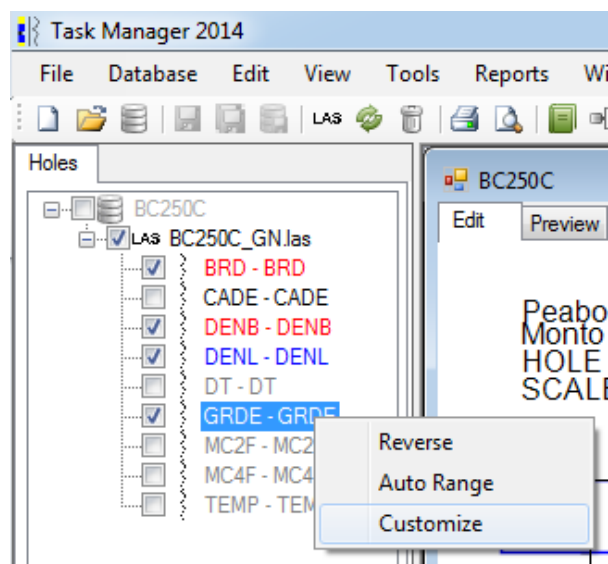
See also [Folder Settings Examples](#)

Geophysical Curves

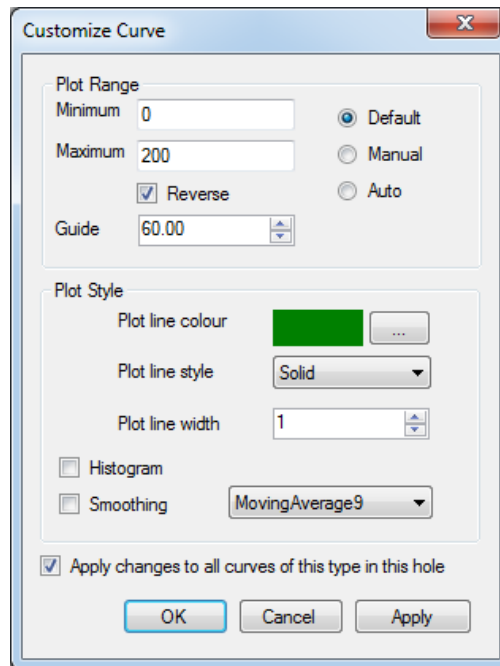
The display of geophysical curves can be customised extensively including horizontal scale (range), colour, line style, line thickness etc. You can also apply various smoothing functions to smooth out the appearance of noisy curves such as gamma. To customise the curve display, right-click on the curve mnemonic in the holes list. You may have to expand the hole and/or las filename in the tree view to see the curve mnemonics.

When you select a Curve from the list, that curve is also selected for all other holes (where LAS is loaded and the curve exists). To disable this feature go to Tools, Settings, LAS, SyncLASCurves. Holding down the SHIFT key will temporarily reverse this setting. I.e. when syncing is disabled, holding SHIFT will enable it. When syncing is enabled, holding SHIFT will disable it.

Customise Curve



Right click on the curve to customize it



Customize Curve window

Plot Range

The plot range defines the minimum and maximum values to be plotted. Values outside of this range will be cropped.

Default – Use the pre-defined range for this curve type (if applicable, otherwise Auto values are used)

Manual – Override the default values and define your own range. This can be used to focus on a particular subset of values to gain more visual resolution.

Auto – Range is defined by the minimum and maximum values contained in the current data set. This is useful if you have unusual values that fall outside the default range but can create inconsistent plots as each hole may be using a different range.

Guide – Draws a vertical line on the graphic log at the specified value. Used as a guide for picking lithology types from geophysics.

Note: To display LAS guides the option must be enabled under View/Options and the guide value must be greater than zero.

Plot Style

Plot line colour – Common curve colours are predefined, unknown curves will be grey. This can be used to override the default colours.

Plot line style – I.e. solid line, dotted, dashed etc. Default is solid

Plot line width – Number of pixels (default is 1)

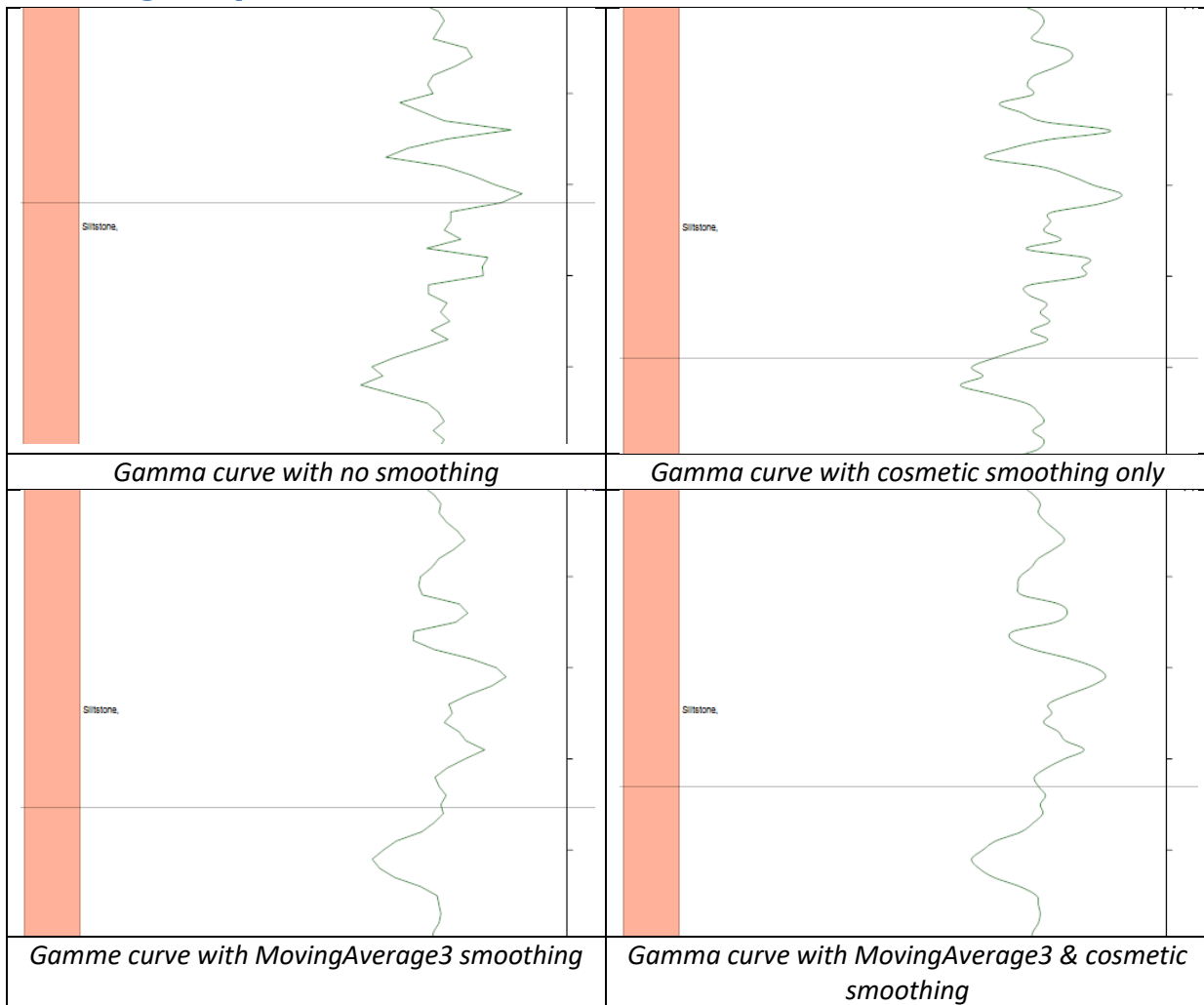
Histogram – Plots the curve as a histogram rather than a single line.



Smoothing

There are two types of smoothing, the check box performs a cosmetic smoothing whereby the curve is plotted as a cardinal spline rather than a series of line segments creating a less jagged appearance. The second type of smoothing generates a series of moving averages. The two smoothing options can be applied separately or combined. Smoothing can be applied to any curve if required but is particularly useful for Gamma curves which tend to be quite noisy.

Smoothing Examples



Display Options

Vertical Scale

In any layout the vertical scale can be adjusted to suit your specific requirements but changing layout will revert to the default for that layout. You can also adjust the vertical scale by holding down the CTRL key and moving the mouse wheel.

Layout Options

There are 3 standard layouts plus a “Data Entry” layout which simply hides the graphic plots and maximises the data entry table window. You can also create your own custom layouts. The three standard layouts are listed below.

Graphic Log Layout

This is the default layout and provides a detailed view at 1:50 vertical scale. This is the best view for looking in detail at coal seams or individual samples or lithological units. Geophysical curves are overlaid on top of each other in this view.

Strat Log Layout

The strat log layout moves the lithology plot over to the far left and maximises the space available for the geophysical curves. The curves are still overlaid as in the graphic log layout but expanded horizontally. The vertical scale defaults to 1:200 and is useful for looking at the general stratigraphy of the hole rather than detailed samples or lithological units.

Stacked Layout

The stacked layout is similar to the strat log layout except that the geophysical curves are stacked side by side rather than overlaid on each other. The vertical is the same and is useful for looking specifically at geophysics.

Custom Layouts

You can arrange the graphic log window the way you like for a particular task then save that layout (View, Layout, Save Layout). You can then recall this layout by selecting it from the Layout menu (under the standard layouts). You can also save a layout as “Default”, this layout when then be used when opening a new graphic log layout.

Layout preferences saved include:

- Window size and state (i.e. maximized)
- Grid column positions, widths and visibility
- LAS curve selection and customisation
- Vertical scale and other options

Custom Header Labels

You can optionally turn off the default headers (via Tools, Settings, Graphic Log) and provide your own custom labels. To do this, enable edit mode via View, Layout, Edit Layout. The header area will change to a grey background and blue vertical lines will appear on the main graphic log. You can move the blue lines to adjust the position and width of various components although the order of

those components is fixed. You can also add/edit/move custom labels in the header section by right clicking on it. Custom labels can be any text or hole status fields in square brackets.

Refer to [Posting Values](#) for more information

Additionally the following tokens can be used in graphic log custom header labels

[page]	Current print page
[pages]	Total number of print pages
[scale]	Vertical scale

Example:

PAGE [page] OF [pages]

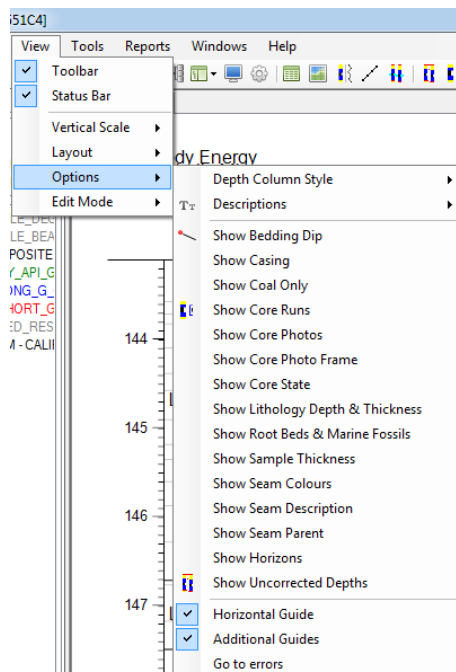
SCALE 1:[scale]

You can also provide a background image or logo via Tools, Settings, Graphic Logs, Logo Filename. You can then adjust the position of the logo while in layout edit mode.

Once you are happy with the layout, remember to save it as a custom layout and/or the default layout.

Options

The graphic log layout has some additional display options selectable from the View menu:



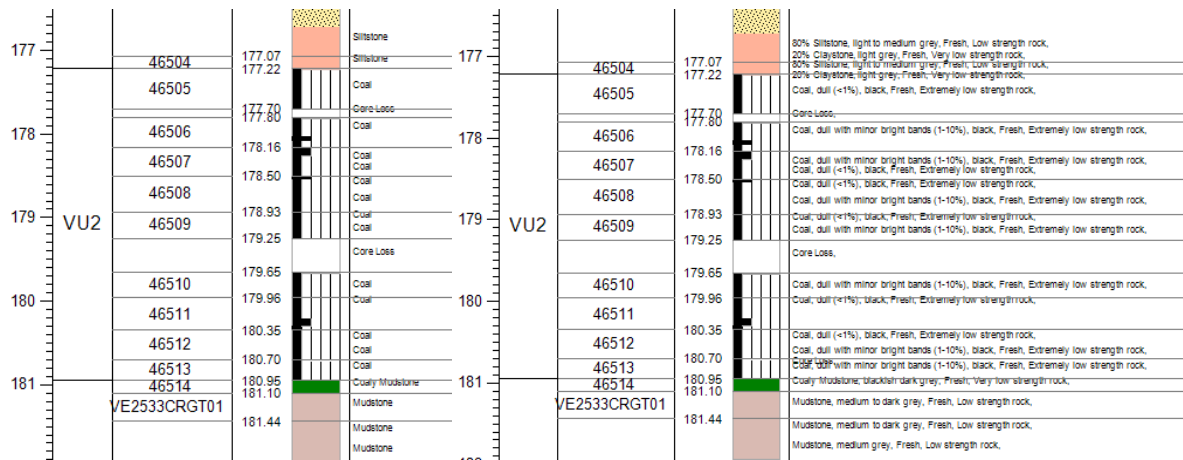
View Options Menu

Depth Column Style

This option switches between From Depth/To Depth/Recovered Thickness and Depth To Base/Thickness modes (see also [Settings, Graphic Log, Depth Column Mode](#))

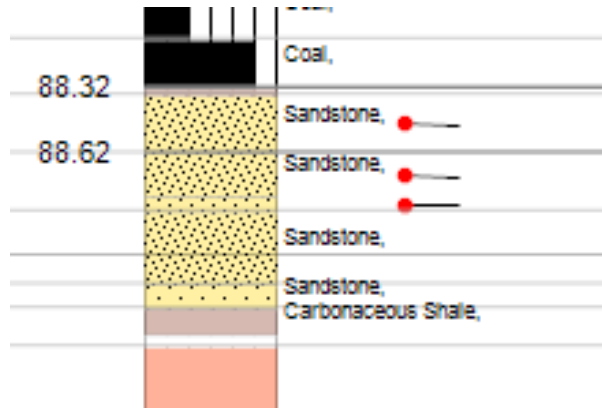
Descriptions

An English translation of the lithological codes can be displayed alongside the lithology. These can be short, long or none.



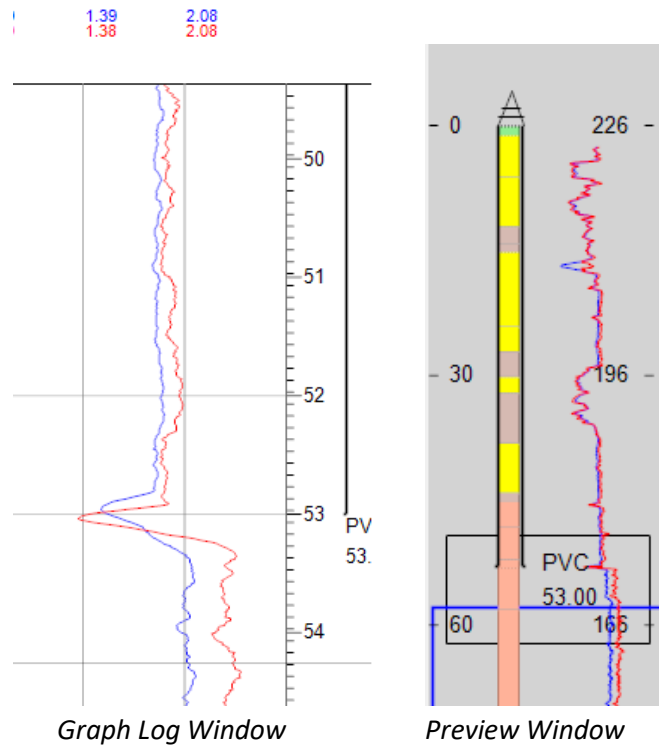
Show Bedding Dip (Angle)

Bedding dip can be displayed in the form of “tad poles” consisting of a red dot with a black “tail” indicating the approximate dip angle.



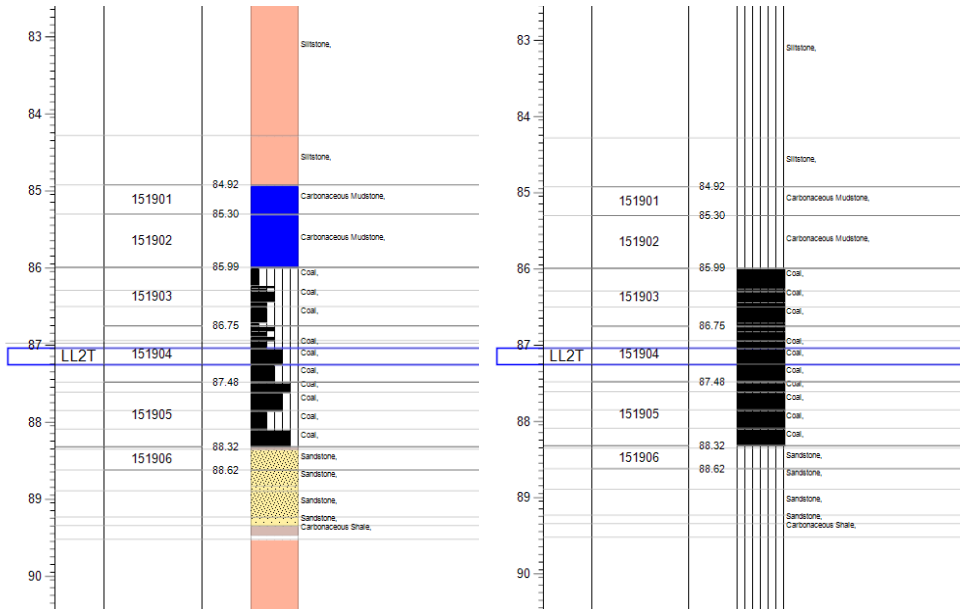
Show Casing

This option displays a vertical line on the main graphic log from the top of the hole down to the cased depth. The casing is always visible on the preview window



Show Coal Only

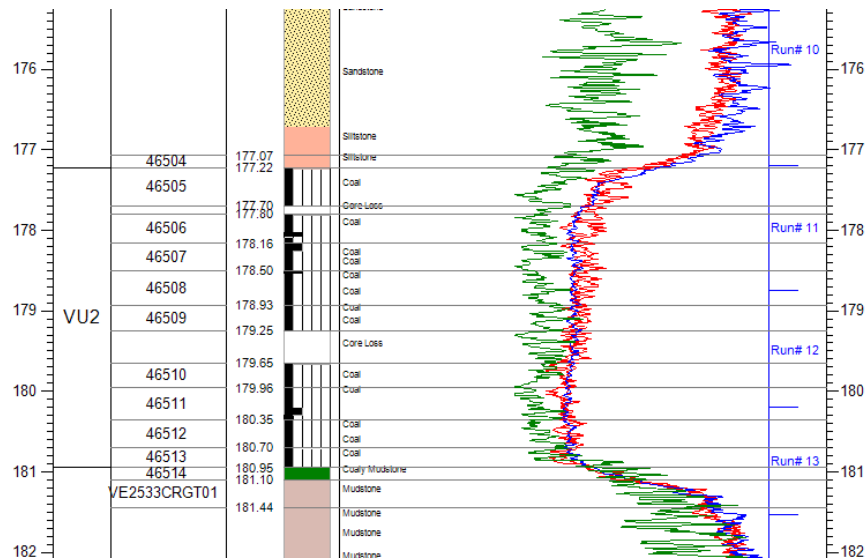
This option removes all lithology plotting except for coal which is displayed full width.



Show Coal Only

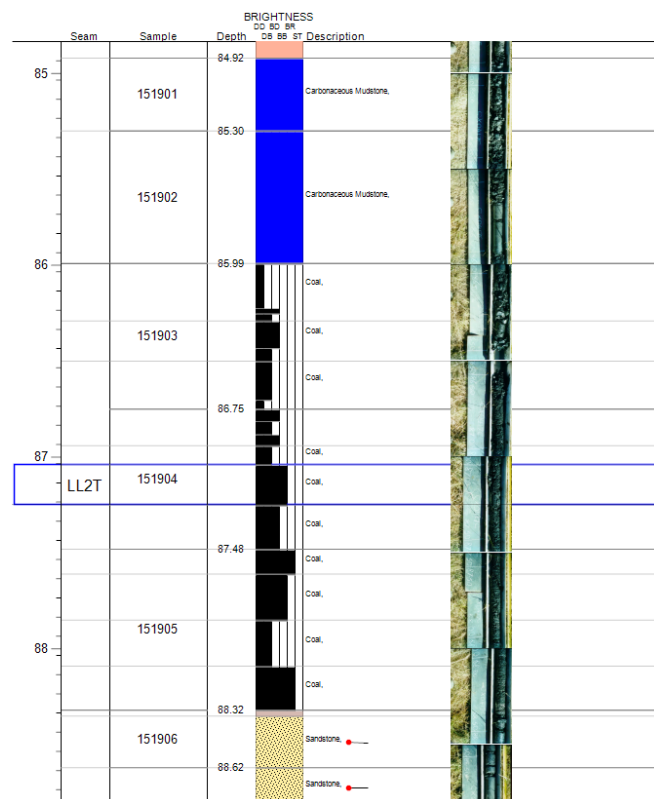
Show Core Runs

Drilling runs (core runs) can be displayed on the right of the graphic log, just left of the right hand scale.



Show Core Photos

Displays core photos rotated and arranged vertically down the hole alongside the corresponding lithology/depth. Suitable for 0.5m core photos.

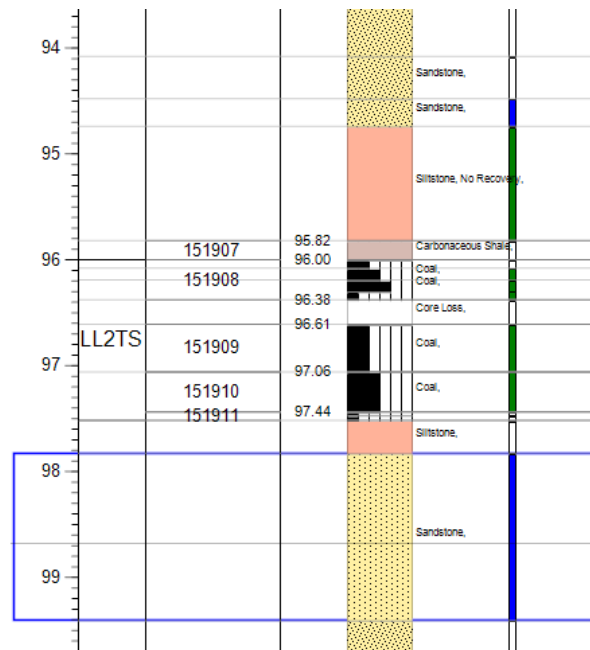


Show Core Photo Frame

Displays core photos in the lower half of the screen. Suitable for 5.0m core box photos.

Show Core State

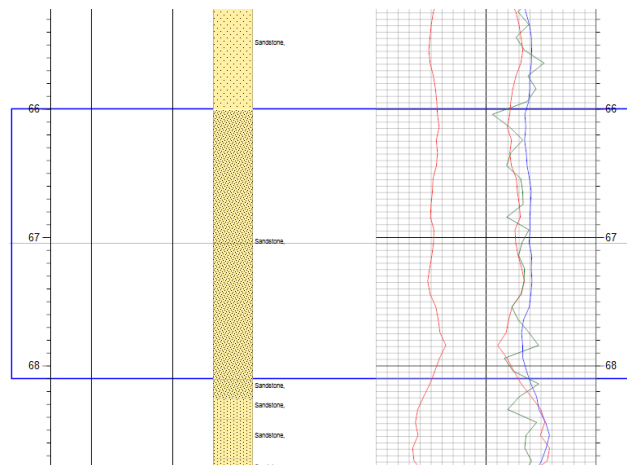
This option displays the core state as a coloured bar where blue is solid core and green is broken or crushed core.



Show Core State

Show LAS Grid

Display a grid beneath the geophysics curves to resemble a typical geophysical plot.



Show LAS Grid

Show Lithology Depth & Thickness.

Displays the depth for every lithology (except very thin bands) where the sample depth is usually displayed, and the thickness where the description is usually displayed

Show Root Beds & Marine Fossils

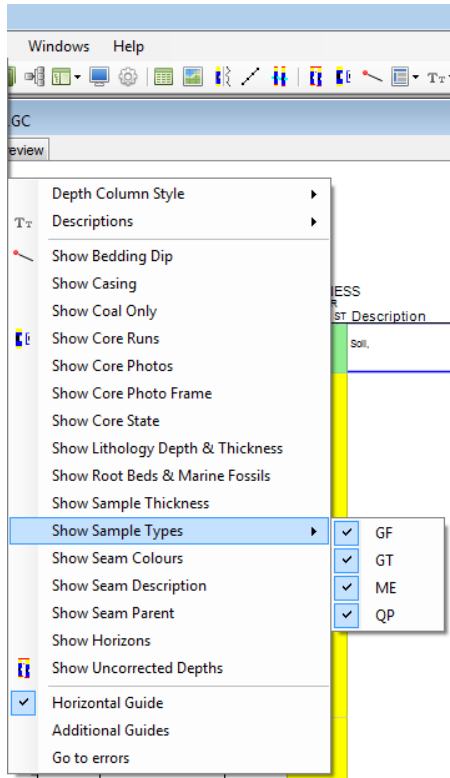
This is a custom option which requires additional pattern files. Please contact us if you need this option.

Show Sample Thickness

Displays the sample thickness instead of the sample depth in the depth column.

Show Sample Types

This option allows you to enable/display the display of sample labels by sample type. This is useful when different sample types coincide and the labels overlap. This setting is also used when creating composite samples to determine the type of composite sample.

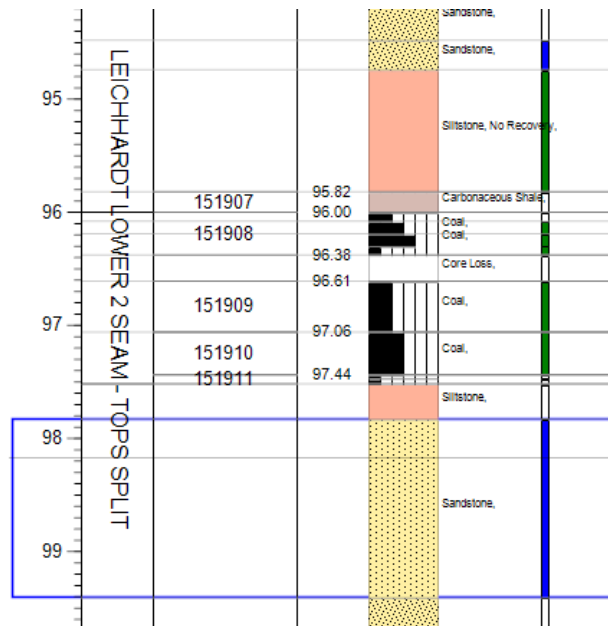


Show Seam Colours

Seams can be coloured (if defined in the dictionary) for easy recognition.

Show Seam Description

Displays the seam description (as translated via the dictionary) as opposed to the seam code.

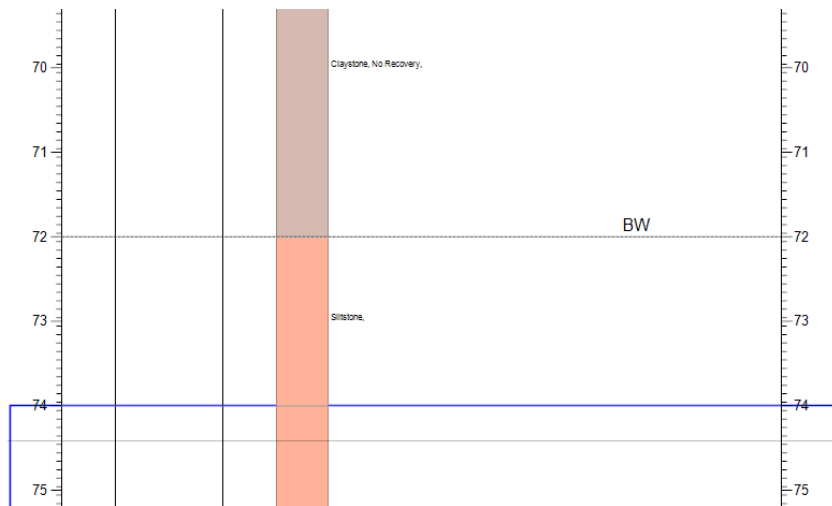


Show Seam Parent

Displays the seam parent to the left of the seam name. This requires that the parent/daughter seam relationship has been defined in the Seam Hierarchy editor.

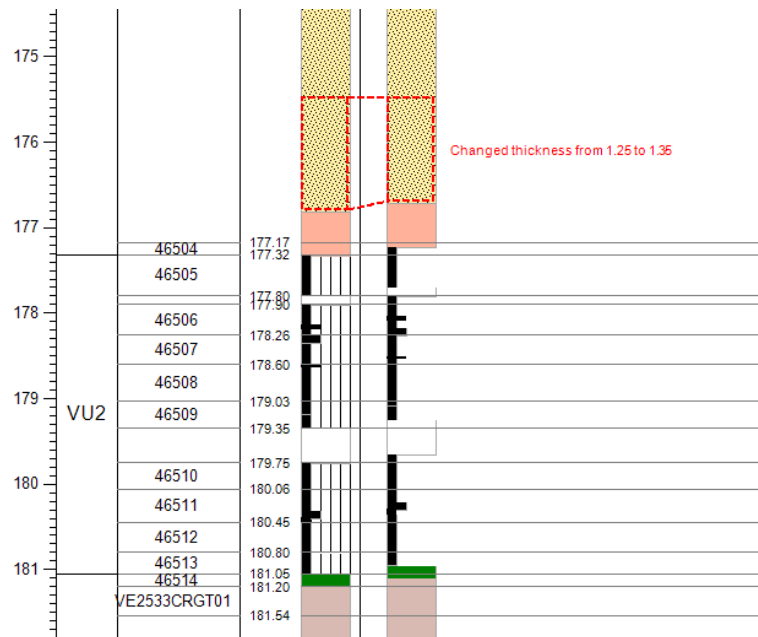
Show Horizons

Displays horizons such as base of weathering.



Show Uncorrected Depths

If available, uncorrected depths can be displayed alongside the existing lithology and any differences highlighted so they can be clearly seen.



Horizontal Guide

Displays a horizontal dotted line at the mouse cursor depth as you move the mouse. This is useful for visually aligning lithology & geophysics but can affect performance.

Additional Guides

Displays some additional horizontal lines in cored sections and vertical lines for geophysics to assist with visual alignment.

Go to errors

When this option is enabled, clicking on a row in the validation tab highlights the corresponding row in the associated data sheet/tab.

Generate Sample Dispatch Advice

The samples sheet displays a summary of the samples in your log, however you can also generate a separate Sample Dispatch Advice sheet which can be appended to the log and/or saved as a separate Excel file for sending to the lab. Additionally, the sample information can be appended to a master sample progression sheet. To enable these features you may need to adjust some settings:

1. You must have the Sample Dispatch Sheet option enabled under Tools, Settings, [Non-Coal Log](#), Sample Dispatch Sheet
2. While you're in there you can also set the Master Sample Progression Sheet (if you have one, otherwise see step 5 below)
3. The graphic log must be in edit mode to generate the sample advice (right click on the Lithology sheet and select Generate Sample Dispatch)
4. From the Sample Dispatch Sheet, right click and select "Save Sample Dispatch as..." to save as a separate Excel file
5. To create/append to Master Progression sheet, right click and select "Append to Master Sample Progression sheet"
6. If you don't have one, select "Create" otherwise select "Append".
7. Once created, repeat step 2 above to set the master sample progression sheet. Fyi there's no browse option, you need to type or copy/paste the entire path.

Alternate Sample Numbers

If you need to attached more than one sample number to a lithology unit, i.e. for Geotech, Enviro samples etc, it is possible to "hijack" unused columns and use them for additional sample numbers. These can be defined via Tools, Settings, Non-CoalLog, Sample Dispatch. You can also use a [custom_settings.xlsx](#) file to change the column headings.

When you generate a sample dispatch, 1PD will check these columns in addition to the standard sample number column.

Note: A sample MUST be entered into the standard sample number column otherwise any additional columns will be ignored. Furthermore, as you are using columns that are not intended for sample numbers, some functionality will not apply.

Generate Point Load Sheet

While the point load sheet can be entered entirely manually, this function can simplify/automate much of the data entry required.

Point Load testing generally requires splitting a core sample in two then splitting each of those samples in two again. Depth, length and sample number information is then entered into the point load sheet along with the test results.

To automate the data entry process, simply enter a sample in the main lithology sheet at the appropriate depths and using the sample type GF (Geotech Field Sample). Then right click and select "Generate Point Load Sheet".

The screenshot shows the 'Generate Point Loads' dialog box. It contains a grid of depth ranges and checkboxes for generating point load sheets. The depth ranges are 494.960 to 495.140. The checkboxes are: 494.960 (checked), 495.005 (unchecked), 495.050 (checked), 495.095 (unchecked), and 495.140 (checked). There are 'OK' and 'Cancel' buttons at the bottom right, and a checkbox 'Use same procedure for all samples' at the bottom left.

Generate Point Loads

This will take each GF sample and generate appropriate rows in the point load sheet. One for the whole sample, one each for the two halves, and one each for the four quarters. If you only test one of the final quarters, click the appropriate button in the screen above to omit the others.

If you use the same procedure for each GF sample, tick the box in the bottom left corner. Otherwise you will be asked for each sample.

Each sample will have the associated depth, sample number, test id and test type pre-populated.

Due to the nature of the test, the final depths/lengths may require minor adjustment. This function also assumes a standard sampling regime. Other configurations are not currently supported but we welcome feedback in this area.

This feature can also be used to update existing PL data but be aware that any existing depth information will be overwritten. This also assumes that you have used the same Test_ID naming convention, otherwise new rows will be created and the existing rows will be left unchanged.

Generate Mass from Density

Once you have generated the sample dispatch sheet, you can optionally calculate an estimated sample mass from the density curve in your LAS file.

1. Ensure the density curve is visible in the graphic log
2. Right click on the Sample Dispatch sheet and select "Generate Mass from Density"
3. Select the density curve from the list
4. The "Calculated Mass" column should be populated

You can also enter actual Mass values and the "Mass Difference" column will populate automatically.

If multiple LAS files are loaded, the first file that contains the required sample depth is used.

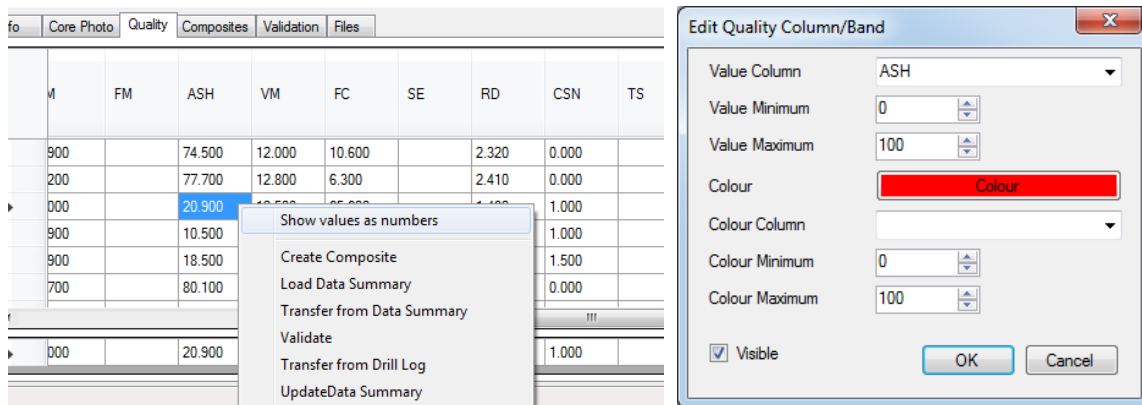
Note: The core size is required to calculate the mass. This is derived from the drilling sheet. If the core size is not available a default core size is used. This can be configured via Tools, Settings, Non Coal Log, Sample Dispatch, Default Core Size for Calculating Mass

Coal Quality

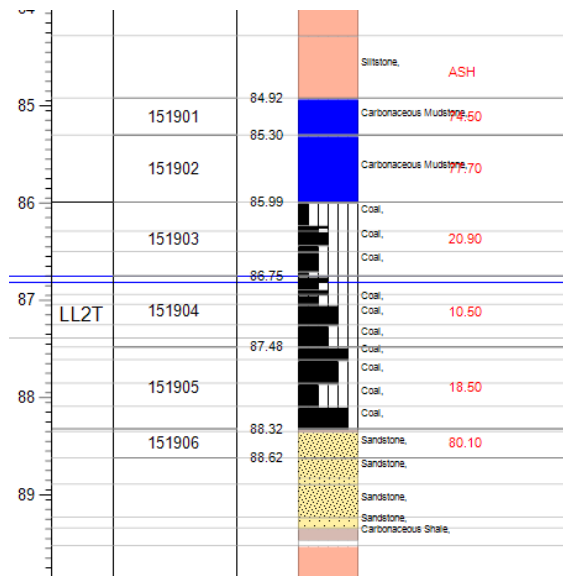
Coal Quality data can be loaded from the database or from a spreadsheet and displayed on the graphic log or on cross sections. You can also combine samples to create composites and generate testing/laboratory advices.

Refer to [Coal Quality Display Settings](#) for more information

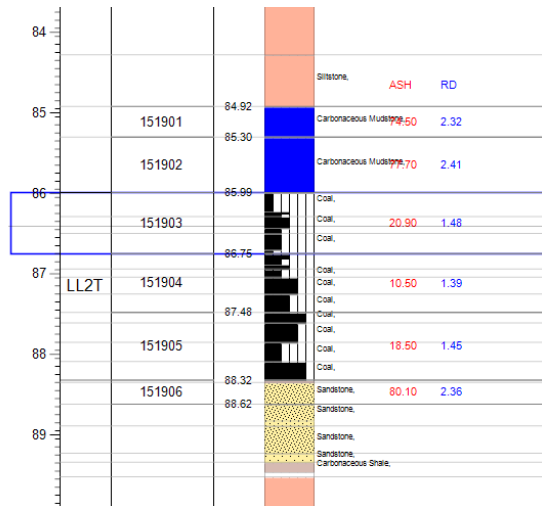
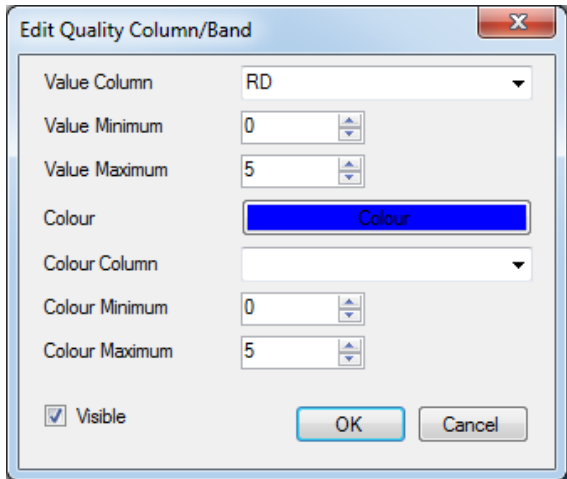
Once loaded, the data will appear in the Quality tab in the bottom right hand corner of the graphic log screen. To display values on the graphic log, right click on a suitable column (such as ASH) and select "Show values as numbers"



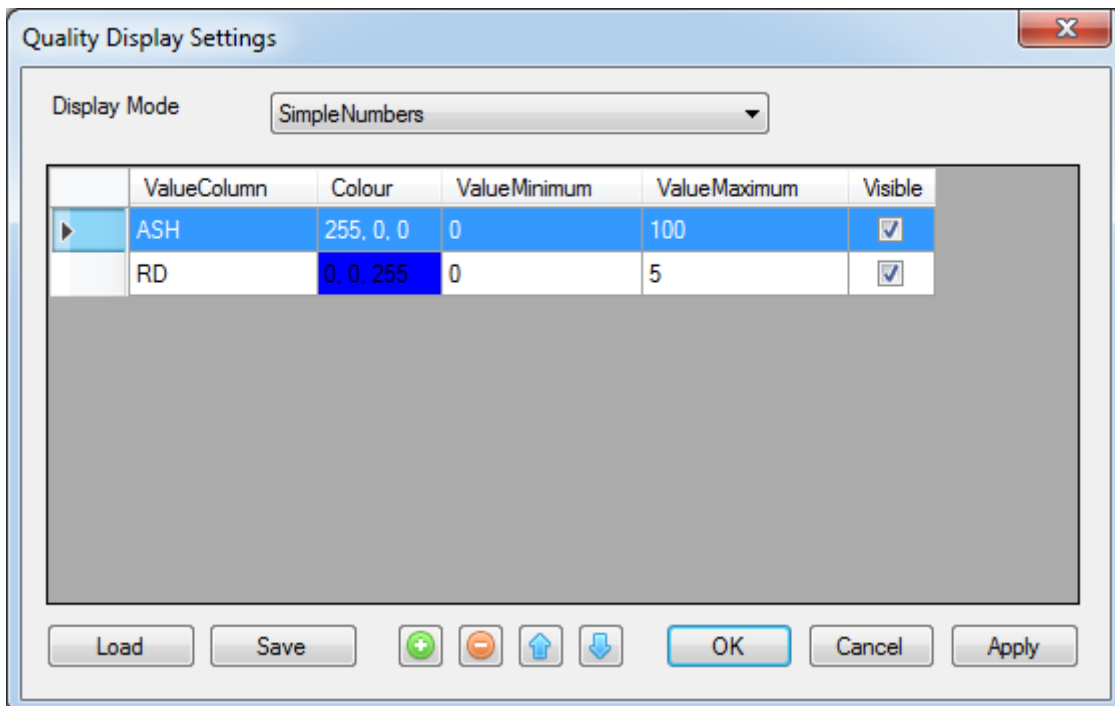
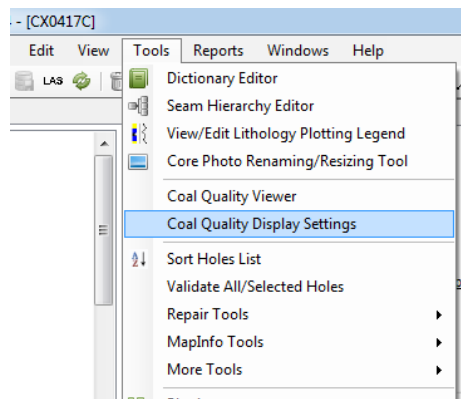
Adjust the parameters as required. The default range of 0-100 is probably suitable for ASH but other parameters may require different ranges. The parameter will be displayed on the graphic log



Select another such as RD. RD values are typically smaller so change the maximum value to 5 or 10. Change this on both the value and colour maximum. This will become important later. You might also want to pick a different colour.



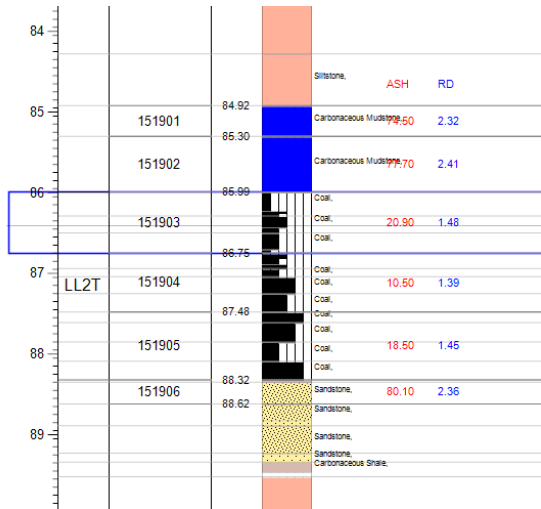
To change these settings later, go to Tools, Coal Quality Display Settings



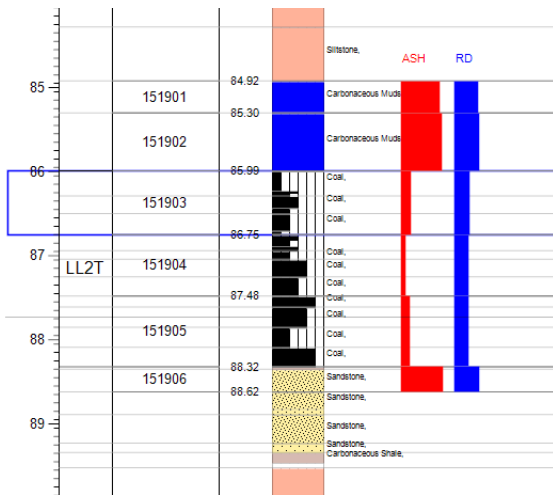
Here you can add/remove parameters or simply hide them (invisible), adjust their position or change the display mode.

Coal Quality Display Modes

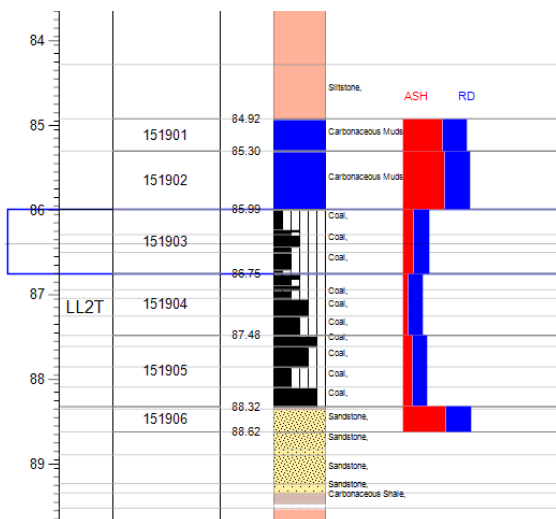
Simple Numbers



Simple Histogram

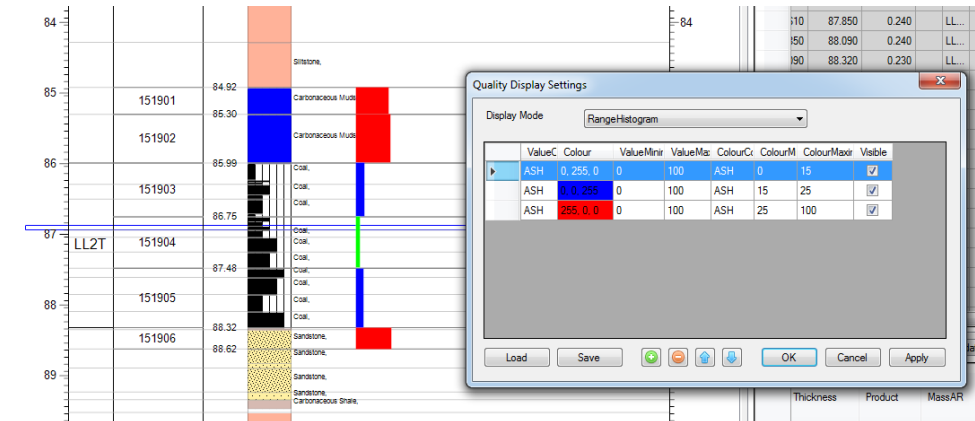


Stacked Histogram



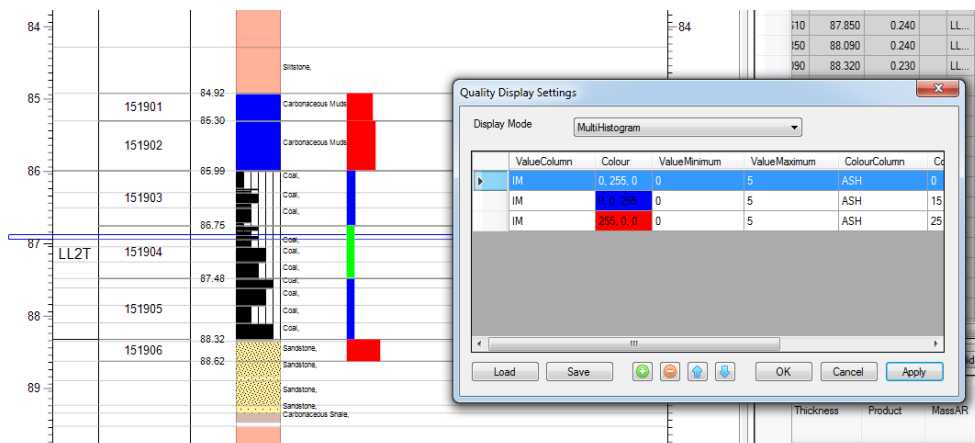
Range Histogram

With the Range Histogram, you can specify different colours for different ranges of the same parameter. For example, ASH 0-15% green, 15-25% blue, 25-100% red.



Multi Histogram

With the Multi Histogram you can combine values from different parameters. Using one parameter to determine the bar width and another parameter to determine the colour. For example using the same ASH values as above for colour but using IM for the bar width.

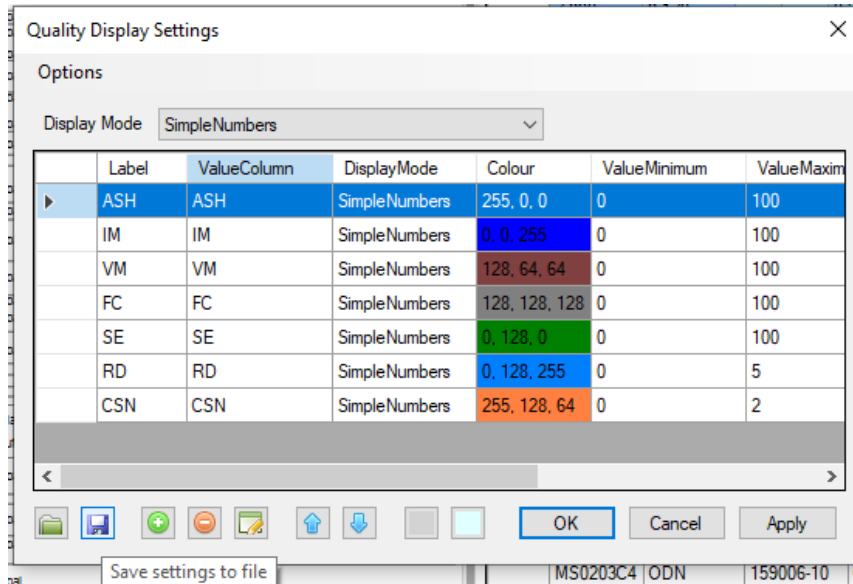


Displaying Coal Quality Results

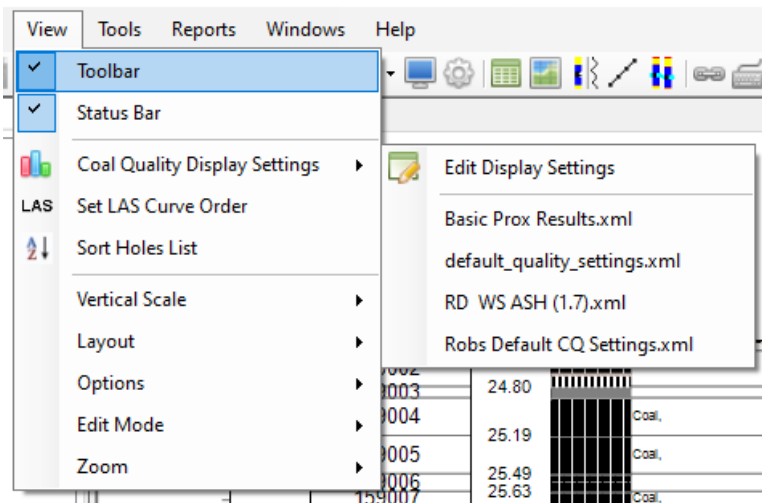
Recent improvements to CQ display include:

1. Ability to quickly switch between different CQ display modes
2. Ability to display both RC and WS results at the same time
3. Ability to display WS results at a specific cut point/density

Quickly Switch between different CQ display settings



When you have your CQ display settings they way you like them, save the settings to a file. Give the file a suitable name but don't change the default folder location.

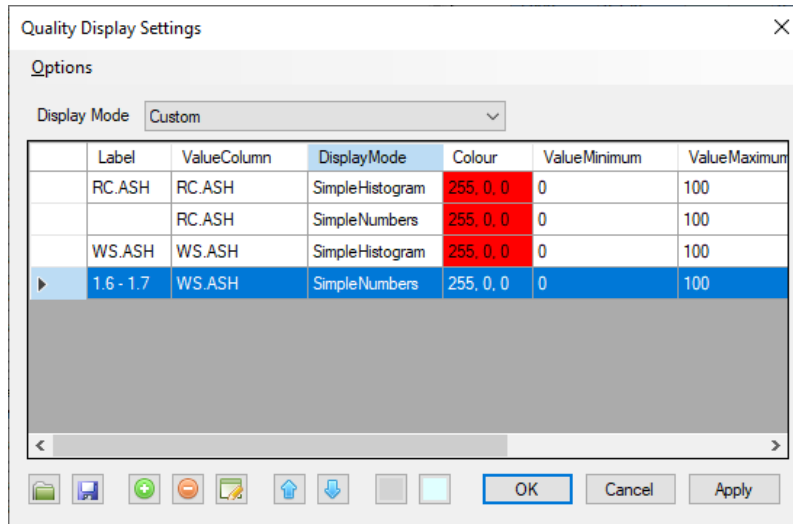


Your CQ display setting files will appear under the Coal Quality Display Settings sub-menu and you can easily switch between them by selecting them here.

Display both RC and WS results at the same time

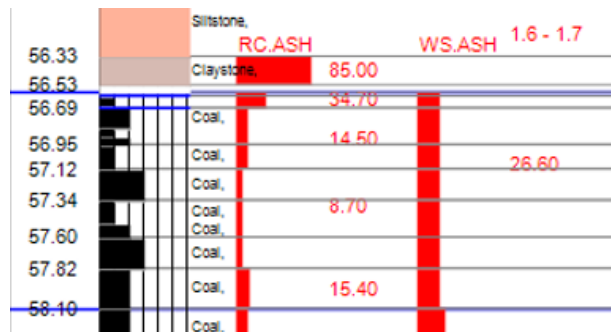
When selecting the Value Column to display, normally you simply select the parameter (i.e. Ash). To display Ash from different result types, prefix the value with the type. I.e. RC.ASH or WS.ASH

You can then create another column with the other type:

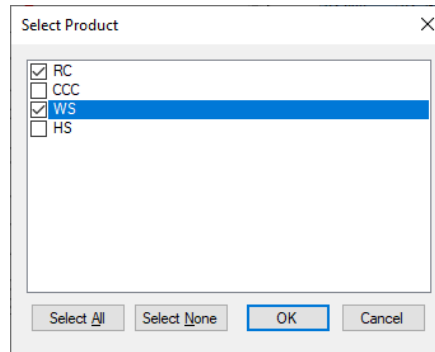


The settings above produce the example below:

- Column 1 – RC.ASH as a histogram
- Column 2 – RC.ASH as a number (without a heading)
- Column 3 – WS.ASH as a histogram
- Column 4 – WS.ASH as a number (with a different heading)

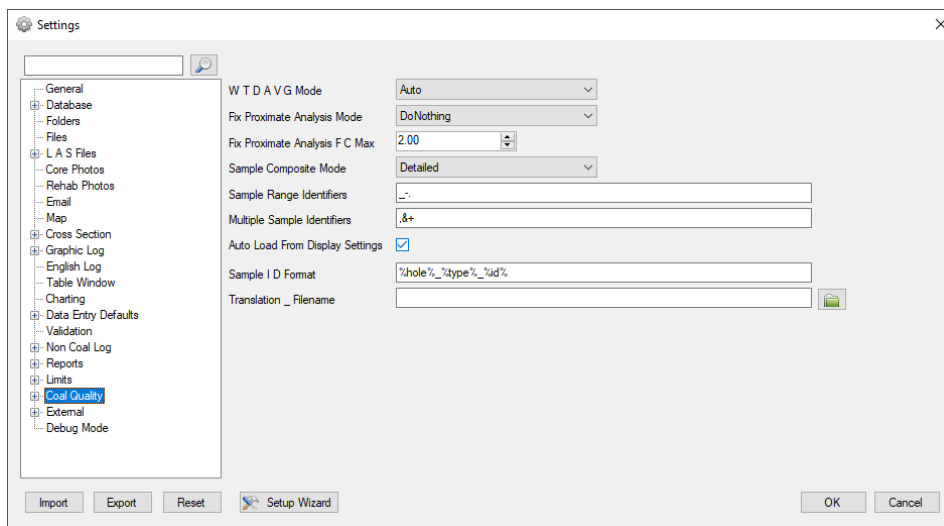


Note: To display RC & WS at the same time, remember to “Transfer from Data Summary” and select both RC & WS. Or see “Auto Load from Display Settings” below.

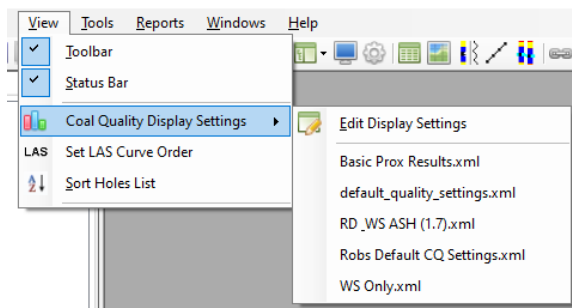


Auto Load from Display Settings

To make this a little easier, I have added an option to “Auto Load From Display Settings”. When you select a display settings file from the drop down menu, it will detect the type of results you are trying to display and attempt to automatically perform the “Transfer from Data Summary” for those types.



Enable “Auto Load from Display Settings”



With Auto Load enabled, selecting CQ display settings will attempt to automatically load/transfer the required results

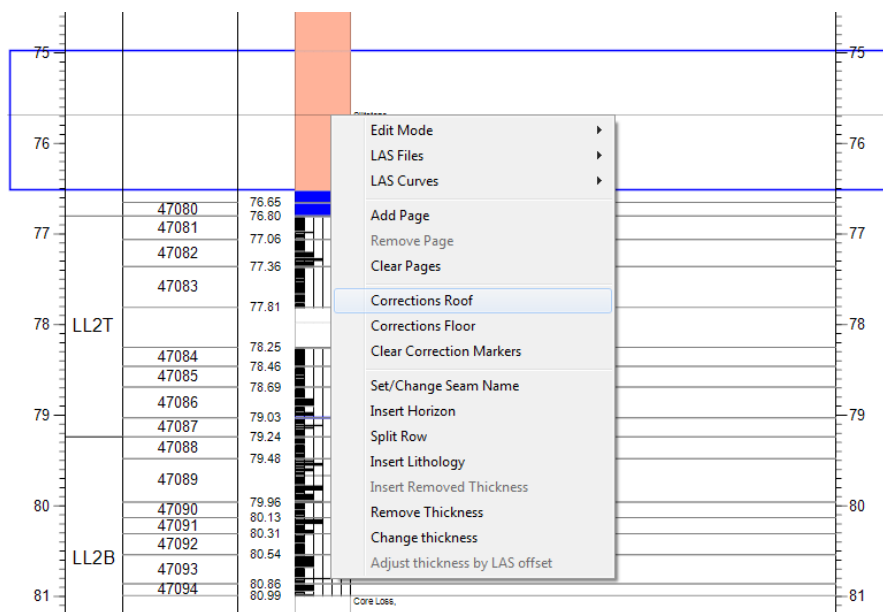


Depth Corrections

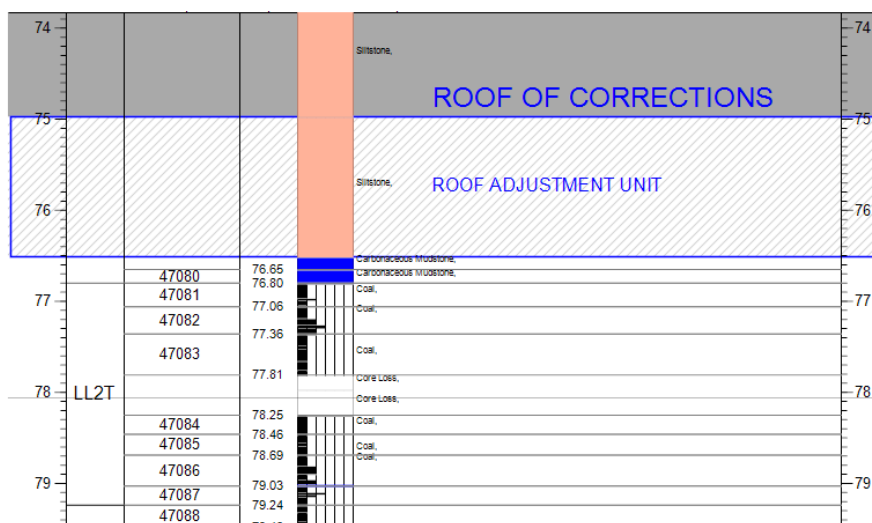
There are a number of tools available for correcting hole depths. Before using any of these tools you may need to set a roof and/or floor of corrections. This confines the depth adjustments to the units between these limits, otherwise depth adjustments will flow down to the end of the hole.

Define Roof and Floor of Corrections

Click on a lithology unit in the graphic log to select it then right click and select Corrections Roof. The selected unit will be nominated as the "Roof Adjustment Unit". Any units above this unit will remain unchanged. Ideally you want to select a unit with reasonable thickness to allow sufficient compression for the required adjustment. Furthermore, the unit's core state should not be solid core or sampled. You cannot change the thickness of sampled units unless you override this safety feature under Tools, Settings, Graphic Log, User Interface.

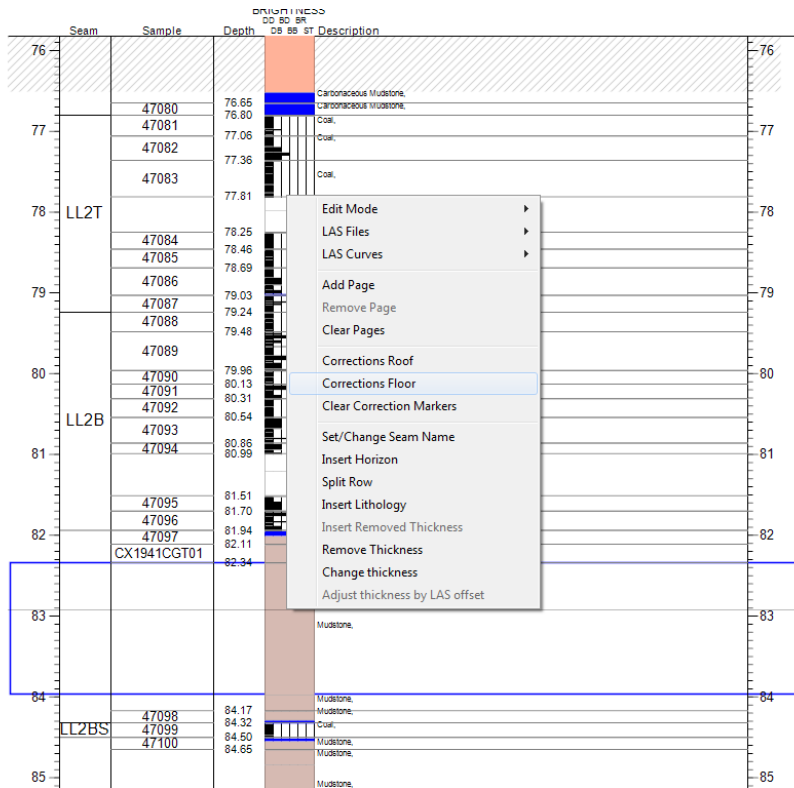


Setting the corrections roof

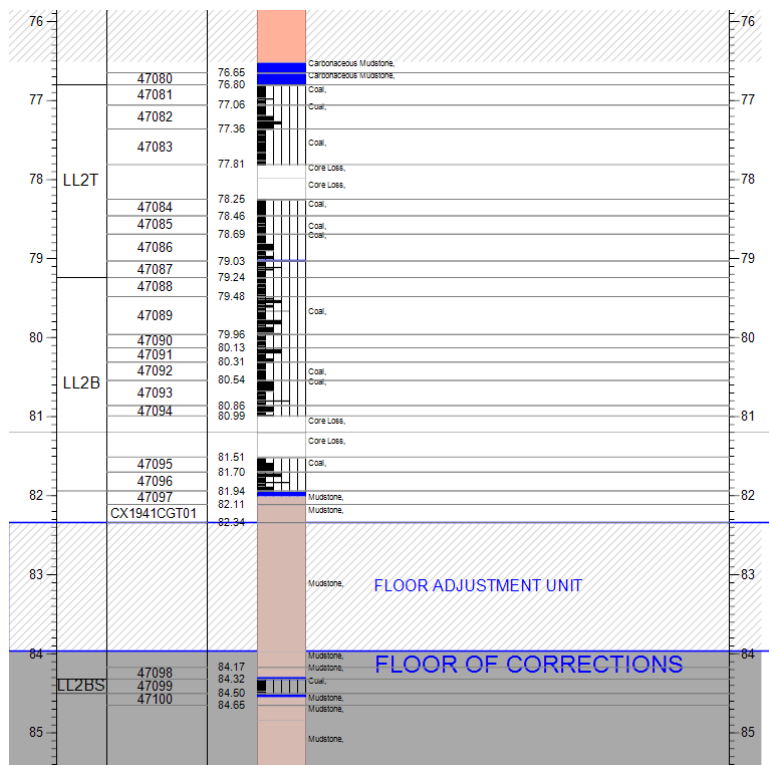


Corrections roof set

Now select a similar lithology unit below the area of interest. Right click again and select Corrections Floor. The selected unit will be nominated as the “Floor Adjus1PDent Unit”. Any units below this unit will remain unchanged.



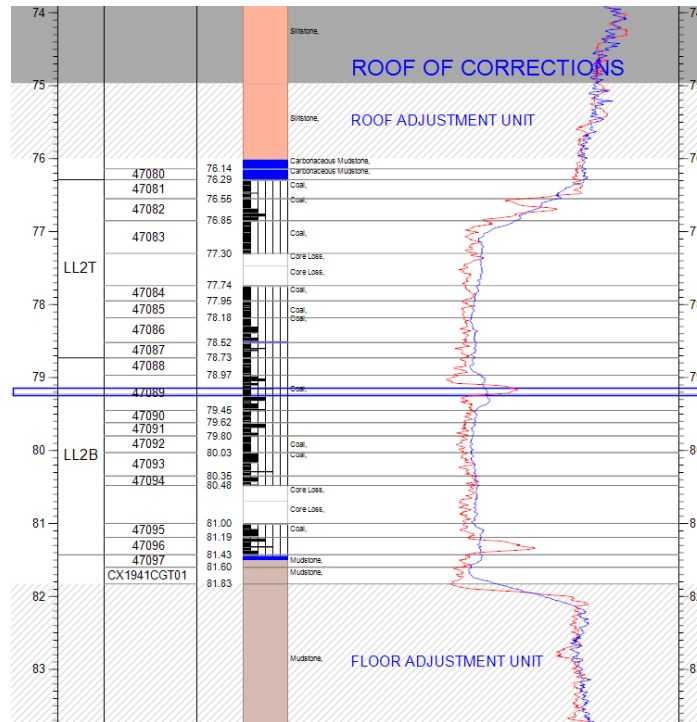
Setting the corrections floor



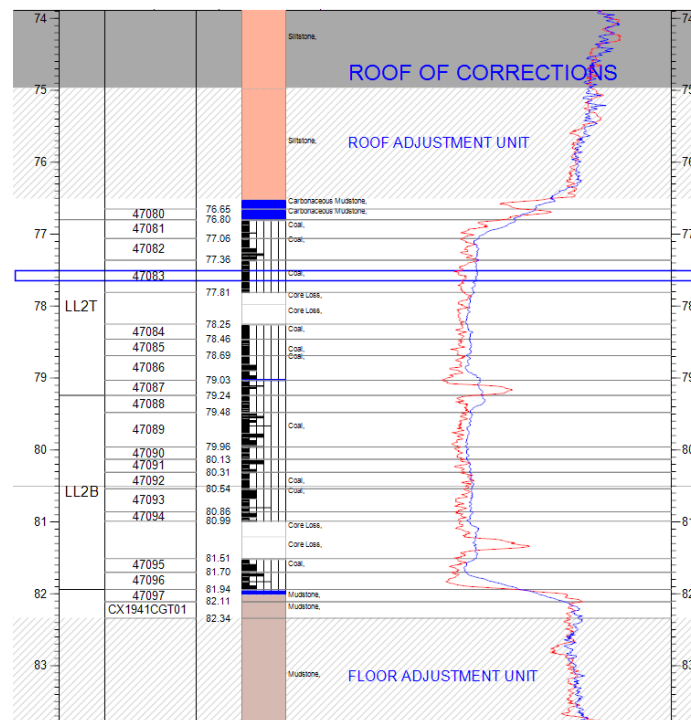
Corrections floor set

Lithology Drag

With this method you must first nominate the roof and floor adjustment units as described above. These two adjustment units are where thickness changes will be applied. You then “drag” the units in between up or down to align with the geophysics by holding down the CTRL key and dragging the mouse. Movement is limited to the thickness of the nominated adjustment units:



Before: Seam does not correctly align with density curves



After: Seam now correctly aligned with density curves

Lithology Boundary

With this method you simply drag the boundary line between two units adjusting the thickness of the units either side accordingly. Place the mouse cursor on the boundary line between two lithology units, then hold down the CTRL key and drag the boundary line up or down. The thicknesses of the units either side of the boundary line will be adjusted accordingly. It is not necessary to set the correction roof/floor in this case as only the units either side of the boundary are affected.

LAS Offset

Use the LAS offset tool to artificially move the curves up or down until the lithology lines up with the geophysics. Then choose the unit where you would like to apply the adjustment, right click and select "Adjust thickness by LAS offset". This will adjust the thickness of that unit by the offset amount then reset the offset to zero. Correction roof/floor are optional with this feature, if they are not set you will be given the option to adjust the last lithology unit to retain the same TD.

Manual Adjustment

You can also adjust the thickness of individual units or multiple units (shifting below units up or down accordingly), split rows into two or more units or manually adjust depths and thickness in the data sheets using the [manual editing tools](#).

Related Tools

While performing depth corrections the LAS curve values and average values can be used to assist you. The LAS curve values displays the point values of each visible curve at the cursor depth. The average LAS values displays the average values for the selected lithologies. You can also manually select any depth regardless of lithology and see the average curve values. Simply hold down the SHIFT key, click the first depth then hold the button down and drag down to the second depth.

Show Depth Adjustments

You can visualize any depth/thickness adjustments using the "[Show Uncorrected Depths](#)" option.

Apply Depth Corrections

After making depth corrections you may wish to apply these adjustments to other data in the log such as Defects, Point Loads, Water Observations etc. These will be applied automatically when you save the log but if you want to see the changes prior to saving you can apply them at any time via Tools, Apply Depth Corrections.

Manual Editing Tools

Insert/Delete rows

You can manually insert or delete rows in the lithology grid, however the depths of the units below will not change. If you want to insert/remove rows and shift the units below, use the Insert Lithology/Remove Thickness tools.

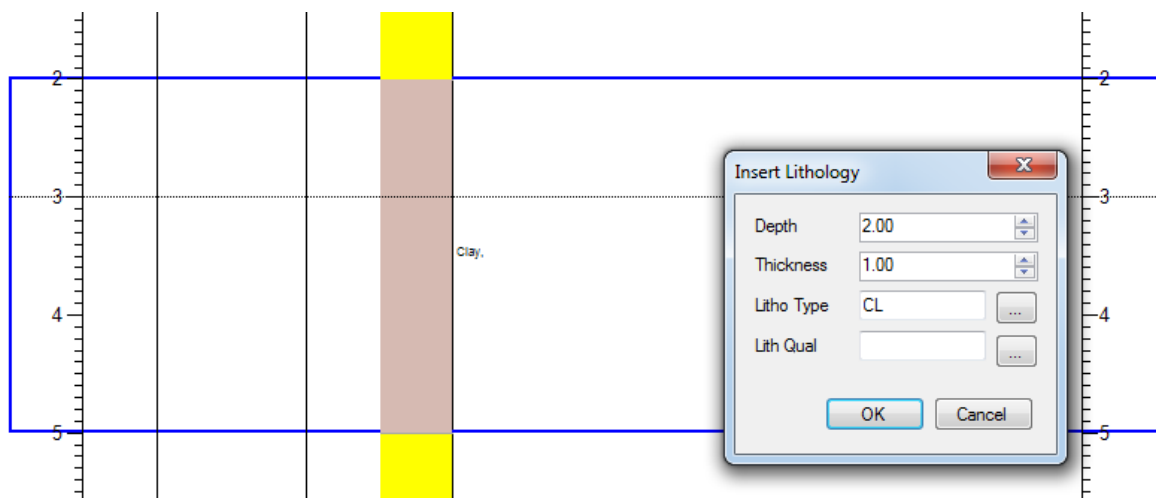
Insert Lithology

This function is available from both the lithology grid and the graphic log and has several different implementations. Right click and select Insert Lithology. A window will appear where you can nominate the depth and thickness to insert and select the lithology type and qualifier for the inserted unit. All units below the selected unit will shift down accordingly subject to any [roof/floor adjustment units](#).

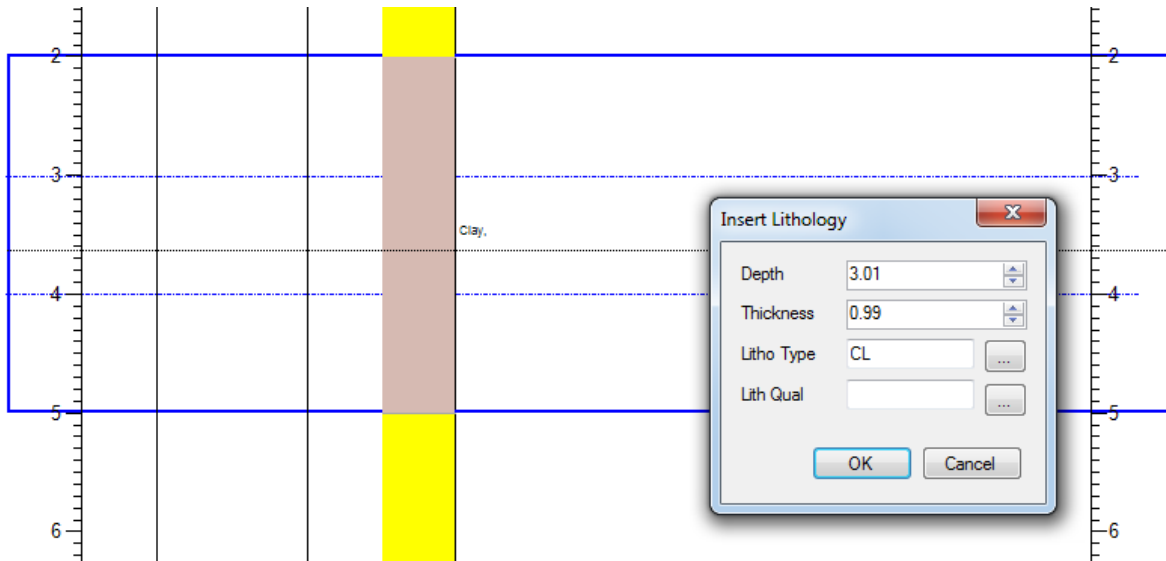
You can insert a new unit immediately before the selected unit, or you can split an existing unit and insert a new unit at a specific depth.

If you haven't [nominated any specific depths](#), the default depth will be the top of the current selected unit.

Select the lithology type and qualifier for the inserted unit and confirm the depth/thickness then press OK. The new unit will be inserted at the specified depth. If necessary the existing unit will be split to accommodate the new unit.



Insert lithology at specific depth



Insert lithology using nominated depths

Remove Thickness

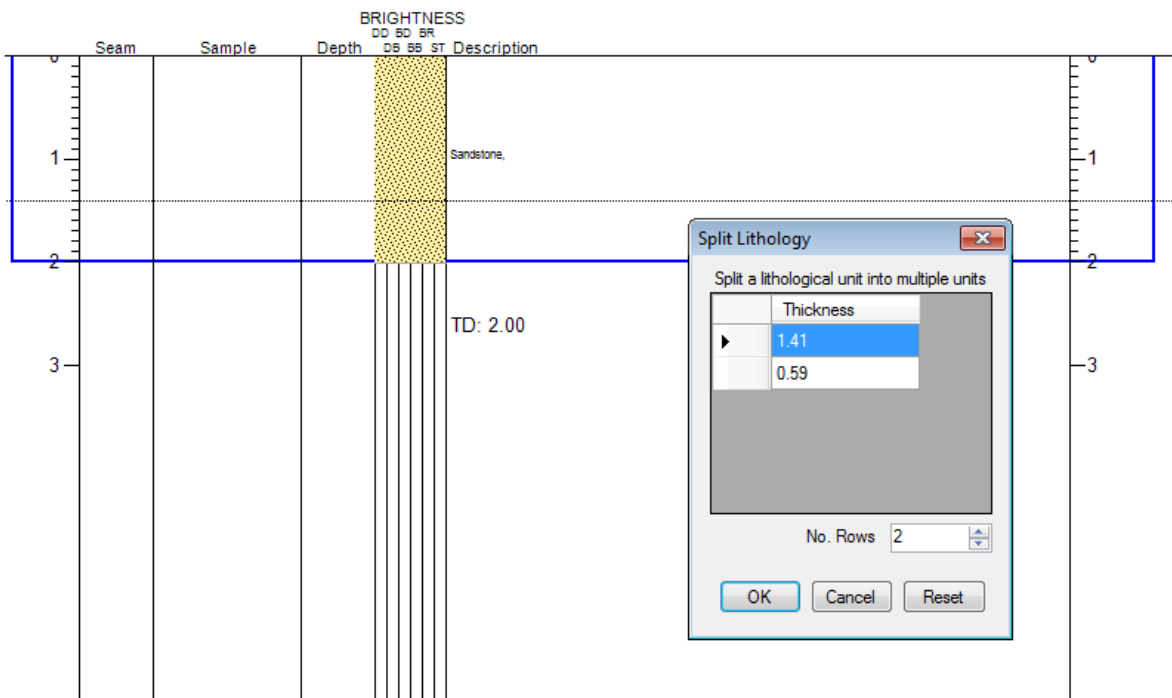
This function is available from both the lithology grid and the graphic log. Right click and select Remove Thickness. All units below the selected unit will shift up accordingly subject to any [roof/floor adjustment units](#).

Change Thickness

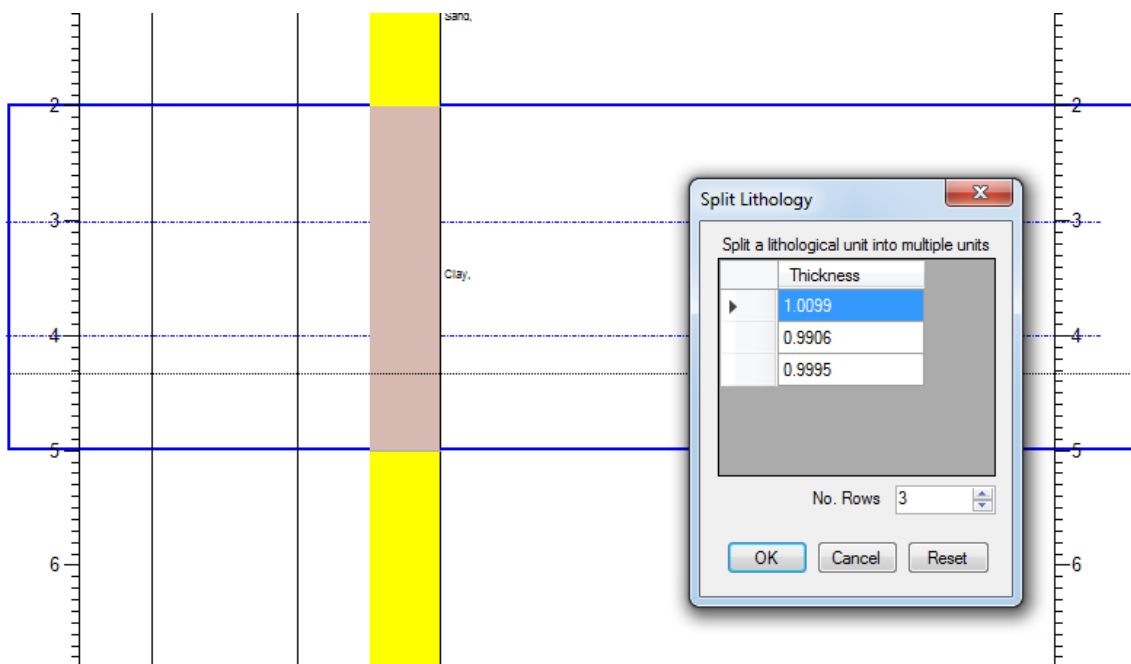
Right click on any unit and select Change Thickness. Enter either a new thickness or a thickness change value (i.e. to reduce the thickness by 10cm enter -0.10, to increase the thickness by 5cm enter 0.05). The selected unit will be changed and any units below shifted up/down accordingly (subject to [roof/floor adjustment units](#)). You can also change the thickness of multiple units as a group. The thickness of each unit will be adjusted proportionally to the new combined thickness.

Split Rows

This function can be used to split an existing lithology row into two or more rows. If you select this option from the graphic log then the split will be determined by the cursor position on the log. Otherwise the unit will be evenly split. In the Split Rows dialog window you can then choose to split into more than two rows but the split will reset to an even distribution. Once you have split the rows you can use the other tools to adjust the thickness of each new unit. You can also [nominate depths](#) prior to using this function to define the desired thickness splits.



Method 1: Split row at specific depth



Method 2: Split unit at nominated depths

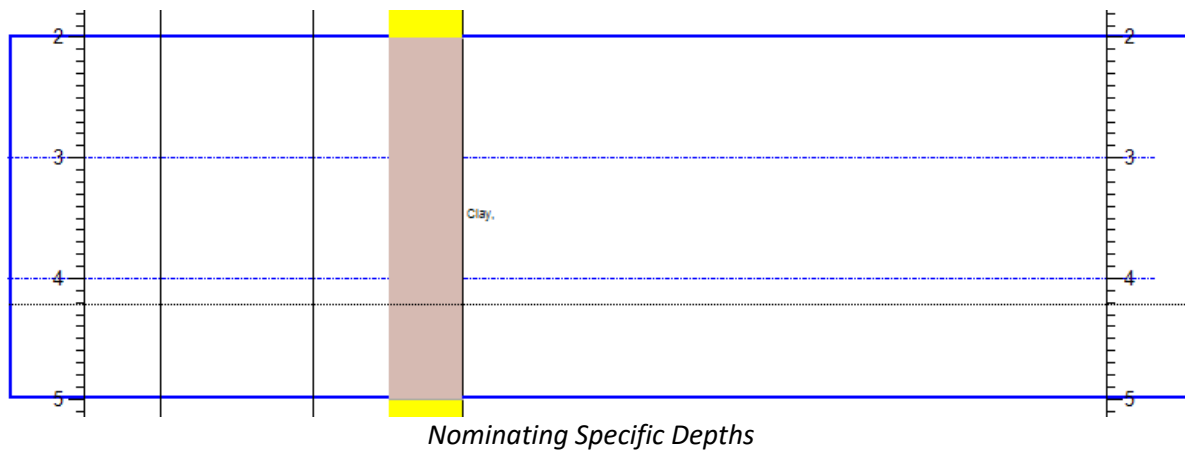
Rounding Errors

When performing depth adjustments it's possible that small gaps can form due to rounding. After each depth adjustment session, validate the hole then fix any depth errors using the F12 fix tool. Highlight the cell that requires "fixing" then press F12. The depth/thickness will be calculated based on the cells around it.

Nominating specific depths

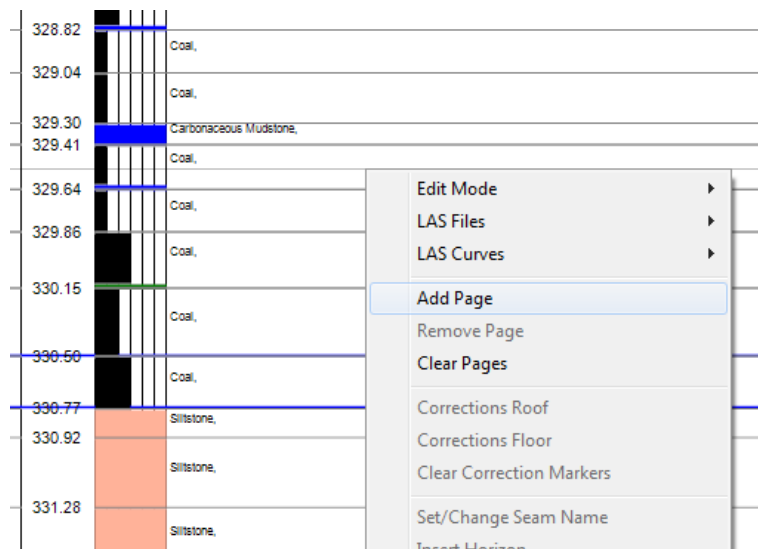
You can nominate specific depths prior to executing the functions. This will pre-populate the functions with the specified depths/thicknesses. To nominate depths, hold down the ALT key and click on the graphic log. A dotted line will appear at the nominated depth. You can nominate as many depths as you want using them as temporary markers. When you click on the graphic log without holding down the ALT key all nominated depths are removed.

Nominated depths are especially useful in conjunction with the [Insert Lithology](#) and [Split Rows](#) functions for setting default depths and thicknesses.



Printing

Graphic Logs can be printed and/or saved as a PDF file. Individual pages can also be saved as an image file. Depending on the scale it may be desirable to only print specific pages, such as pages that show coal seams. You can nominate these pages in two ways, either by right clicking on the main graphic log window or preview window and selecting “Add Page” or double-clicking on the preview window. You can remove pages or clear all pages by right clicking on the main graphic log window or preview window.



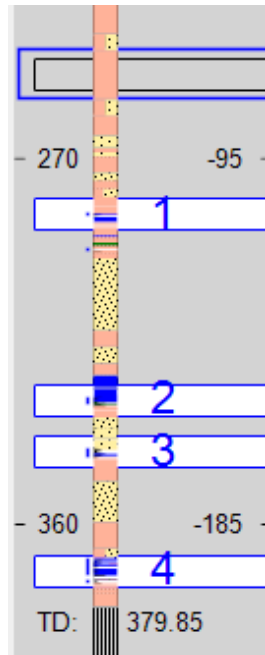
Right click on main graphic log to Add, Remove or Clear print pages

Pages can be added in any order, the page numbers will update automatically according to depth.

Note: While you can use the top, middle or bottom of the page to adjust the page position, you cannot crop or print part of a page. The printed page will always be a full page at the nominated depth. Similarly, if you change the vertical scale after selecting pages you may need to review/adjust the page positions for best results as the base depth for each page will have changed to match the new scale.

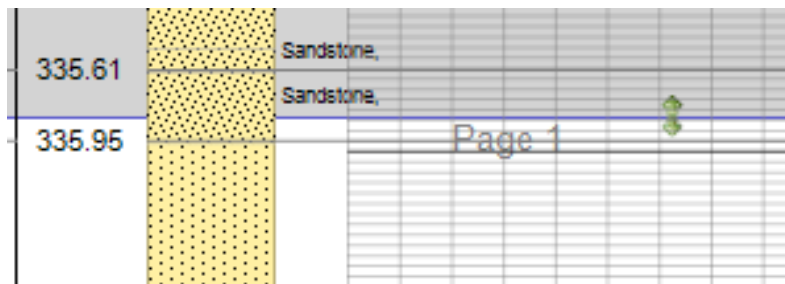
If no print pages are selected, all pages will be printed/exported.

When one or more print pages are selected they are displayed with a white background where the rest of the log is displayed with a gray background. On the main graphic log window, the mid point of the page is indicated by a blue dashed line. You use this to align the page with the coal seam nicely centred.

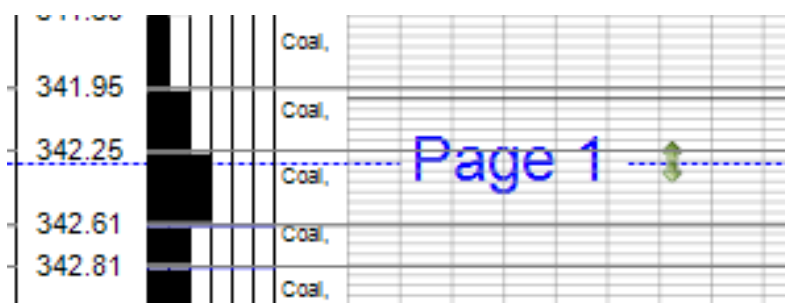


Preview window showing four print pages selected

You can then adjust the position of each page either by dragging the page in the preview window or dragging the top, bottom or mid point (centre line) of the page in the main graphic log window.



Top of page and adjustment arrow



Page centre line and adjustment arrow

Once you are happy with the page selections you can preview the results via the Print Preview function under the File menu. You can then either print the pages or save as PDF.

Note: Print pages are NOT saved with the log. If you close the Graphic Log window you will lose any print page selections.

Keyboard Shortcuts

There are a number of keyboard shortcuts available to make data entry easier and/or more efficient. Unless specified, most work on all data entry sheets.

Copy/Paste/Insert/Delete (Ctrl-C, Ctrl-V or right-click or Edit menu)

For copy/pasting, the main issue is copy/pasting the correct value types into the cells. The grid is not like an Excel spreadsheet where every cell can take any type of value. You can copy/paste a range of cells, you just need to be careful where you paste them. You can also copy a single cell and paste it to multiple cells, again being careful where you paste them.

Depths and thicknesses should not be copy/pasted. We provide several methods for either inserting rows (depths below are NOT changed) or inserting lithology (depths below are shifted down). The same is true of deleting rows/removing lithology. 1PD also calculates depth/thickness as you go so you generally only need to enter one or the other, not both. If you generally work in thickness, just enter that down the page as you go and the depths will be calculated, or you can just as easily work in depths and the thickness will be calculated.

If you need to create space (i.e. for chipping to be inserted later), just enter a dummy row (i.e. 0 to 123m with 123m thickness). You can come back later and either split this row or insert/delete as required.

To insert multiple rows just highlight two or more cells vertically before right-clicking and selecting insert lithology/row(s)

Ctrl E – Edit mode on/off

Switches Edit Mode on/off

Edit mode is dependent on data status. I.e. Data Status: R = Edit Mode: Raw, Data Status: A = Edit Mode: Adjusted/Corrected etc

Dictionary Lookup (F3 or double-click)

F3 pops up the dictionary code selection window for the current cell.

Data Entry (F4)

F4 pops up a data entry window with the current row arranged vertically with drop down boxes for dictionary based codes.

Refresh (F5)

In the rare case that the display does not show the correct/current values, press F5 to refresh the screen.

Next Sample (F6)

Populates the selected rows Sample Number column with the next consecutive sample number.

The next consecutive sample number is derived by scanning all the sample numbers in the hole and adding 1 to the last number.

	From Depth	To Depth	Recovered Tr	Record Seque	Seam	Seam_Confide	Fault	Ply	Horizon	Horizon_Confi	Sample Type	Sample Numb	Interval Statu	Lithology %	Lithology	Lithology Qual	Lith_Modifier	Shade	Hue
	0.000	2.000	2.000										R						
	2.000	4.000	2.000										R						
	4.000	6.000	2.000										R						
	6.000	8.000	2.000										R						
	8.000	10.000	2.000										R						
	10.000	12.000	2.000										R						
	12.000	14.000	2.000								QP	654654	R	CO	BR				
	14.000	16.000	2.000								QP		R	CO	BB				
	16.000	18.000	2.000		A						QP		R	CO	DD				
	18.000	20.000	2.000		A						QP		R	CO	DD				
	20.000	22.000	2.000		A						QP		R	CO	BR				
	22.000	24.000	2.000																

If the sample comprises multiple lithology units, select them all before pressing F6

	From Depth	To Depth	Recovered Tr	Record Seque	Seam	Seam_Confide	Fault	Ply	Horizon	Horizon_Confi	Sample Type	Sample Numb	Interval Statu	Lithology %	Lithology	Lithology Qual	Lith_Modifier	Shade	Hue
	0.000	2.000	2.000										R						
	2.000	4.000	2.000										R						
	4.000	6.000	2.000										R						
	6.000	8.000	2.000										R						
	8.000	10.000	2.000										R						
	10.000	12.000	2.000								QP	654654	R	CO	BR				
	12.000	14.000	2.000								QP	654655	R	CO	BR				
	14.000	16.000	2.000		A						QP	654656	R	CO	BB				
	16.000	18.000	2.000		A						QP		R	CO	DD				
	18.000	20.000	2.000		A						QP		R	CO	DD				
	20.000	22.000	2.000		A						QP		R	CO	BR				
	22.000	24.000	2.000																

Using the F6 feature helps to keep sample numbers consecutive and avoids typos. However, if you are using sample books be sure to check that the generated sample numbers match the tags!

Copy Cells/Rows (F7/F9/F10/F11)

These functions are similar but subtly different. Each are explained in detail below but in short:

Key	Function	Description
F7	Copy Depths	Copy drillers depths to geologists depths or vice versa (Drilling Only)
F9	Copy Cells	Copy selected columns from above row to selected rows
SHIFT-F9	Copy Cells	As above but overwrites existing cells
F10	Copy Rows	Copy all columns from above row to selected rows
SHIFT-F10	Copy Rows	As above but overwrites existing cells
F11	Copy All	Copy all columns from current row to all rows below (Drilling Only)
F11	Copy/Append	Copy and append selected rows to end of log (Lithology Only)
ALT-I	Copy/Append	As above

Drillers/Geologists Depths (F7) - Drilling

F7 copies drillers depths to geologists depths or vice versa in Drilling sheet. For example, enter the Drillers depths then move across to any of the Geologist depth columns and press F7 to copy the drillers depths.

Copy cell(s) above (F9 / SHIFT-F9)

F9 copies the cells immediately above the current row to the selected columns except depth/thickness or where the existing cell is already populated.

SHIFT-F9 does the same but overwrites any existing cells.

Example: Enter sample type and number a row, select the cells below then press F9

6.000	8.000	2.000								R			
8.000	10.000	2.000								R			
10.000	12.000	2.000							QP	1	R	CO	BR
12.000	14.000	2.000								2	R	CO	BD
14.000	16.000	2.000	A							3	R	CO	BR
16.000	18.000	2.000	A										
18.000	20.000	2.000	A										
20.000	22.000	2.000	A										
22.000	24.000	2.000											

8.000	10.000	2.000									R		
10.000	12.000	2.000							QP	1	R	CO	BR
12.000	14.000	2.000							QP	2	R	CO	BD
14.000	16.000	2.000	A						QP	3	R	CO	BR
16.000	18.000	2.000	A						QP	4	R	CO	DD
18.000	20.000	2.000	A										
20.000	22.000	2.000	A										
22.000	24.000	2.000											

Copy row above (F10)

F10 copies everything from the previous row except depth/thickness or where the existing cell is already populated.

SHIFT-F10 does the same but overwrites any existing cells.

Sample Type	Sample Number	Interval_Status	Lithology %	Lithology	Lithology Qual	Lith_Modifier	Shade	Hue	Colour	Adjective_1	Adjective_2	Adjective_3	Adjective_4
		R											
		R											
		R											
		R											
		R											
		R		SS	FF				B				
		R		FM									
		R		FF									
		R											

Sample Type	Sample Number	Interval_Status	Lithology %	Lithology	Lithology Qual	Lith_Modifier	Shade	Hue	Colour	Adjective_1	Adjective_2	Adjective_3	Adjective_4	Rvalues
		R												
		R												
		R												
		R												
		R		SS	FF				B					
		R		SS	FM				B					
		R		SS	FF				B					
		R		SS	FG				B					

Repeat (F11) - Drilling

For the Drilling sheet only, F11 repeats all columns except depths for all subsequent rows. I.e. generally the drilling company, driller, rig_no etc would all be the same. So just enter the first row then F11 to copy down. Then where there's a change, i.e. change of bit size, edit the cell then F11 to copy down from there.

Run_No	Drillers_From_Dept	Drillers_To_Depth	Cored	Geologists_From_L	Geologists_To_De	Geologists_Recov.	Geologists_Gain_L	Drill_Date	Drill_Company	Rig_No	Rig_Type	Driller	Bit_Type	Drill_Fluid	Drill_Size_Name	Reamed	Core_Size	Comments	Hole_Size
	0.000	3.000		0.000	3.000			28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				
1	3.000	6.000	3.000	3.000	6.000	3.000	0.000								<input type="checkbox"/>				
2	6.000	9.000	3.000	6.000	9.000	3.000	0.000								<input type="checkbox"/>				
3	9.000	12.000	3.000	9.000	12.000	3.000	0.000								<input type="checkbox"/>				

Enter first row details then F11 to copy down

Run_No	Drillers_From_Dept	Drillers_To_Depth	Cored	Geologists_From_L	Geologists_To_De	Geologists_Recov.	Geologists_Gain_L	Drill_Date	Drill_Company	Rig_No	Rig_Type	Driller	Bit_Type	Drill_Fluid	Drill_Size_Name	Reamed	Core_Size	Comments	Hole_Size
	0.000	3.000		0.000	3.000			28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				
1	3.000	6.000	3.000	3.000	6.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				
2	6.000	9.000	3.000	6.000	9.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				
3	9.000	12.000	3.000	9.000	12.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				

Run_No	Drillers_From_Dept	Drillers_To_Depth	Cored	Geologists_From_L	Geologists_To_De	Geologists_Recov.	Geologists_Gain_L	Drill_Date	Drill_Company	Rig_No	Rig_Type	Driller	Bit_Type	Drill_Fluid	Drill_Size_Name	Reamed	Core_Size	Comments	Hole_Size
	0.000	3.000		0.000	3.000			28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				
1	3.000	6.000	3.000	3.000	6.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	C	A		<input type="checkbox"/>				
2	6.000	9.000	3.000	6.000	9.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				
3	9.000	12.000	3.000	9.000	12.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				

Change Bit Type then F11 to copy down

Run_No	Drillers_From_Dept	Drillers_To_Depth	Cored	Geologists_From_L	Geologists_To_De	Geologists_Recov.	Geologists_Gain_L	Drill_Date	Drill_Company	Rig_No	Rig_Type	Driller	Bit_Type	Drill_Fluid	Drill_Size_Name	Reamed	Core_Size	Comments	Hole_Size
	0.000	3.000		0.000	3.000			28/06/2018	ACE	1	BNE1000R	B	A		<input type="checkbox"/>				
1	3.000	6.000	3.000	3.000	6.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	C	A		<input type="checkbox"/>				
2	6.000	9.000	3.000	6.000	9.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	C	A		<input type="checkbox"/>				
3	9.000	12.000	3.000	9.000	12.000	3.000	0.000	28/06/2018	ACE	1	BNE1000R	C	A		<input type="checkbox"/>				

ALT-I – Lithology

Copies selected rows to the end of the log

Copies the selected row and adds them as new rows at the end of the log.

	From Depth	To Depth	Recovered Thickness	Record Sequence Flag	Seam	Seam_Confidence	Fault	Ply	Horizon	Horizon_Confidence	Sample Type	Sample Number	Interval_Status	Lithology %	Lithology	Lithology Qualifier	Lith_Modifier	Shade	Hue
	0.000	2.000	2.000										R						
	2.000	4.000	2.000										R						
	4.000	6.000	2.000										R						
	6.000	8.000	2.000										R						
	8.000	10.000	2.000										R						
	10.000	12.000	2.000																
	12.000	14.000	2.000																
	14.000	16.000	2.000																
▶	16.000	18.000	2.000										R	SS	FG				
	18.000	20.000	2.000																
	20.000	22.000	2.000																
	22.000	24.000	2.000																
	24.000	26.000	2.000																
*																			

	From Depth	To Depth	Recovered Thickness	Record Sequence Flag	Seam	Seam_Confidence	Fault	Ply	Horizon	Horizon_Confidence	Sample Type	Sample Number	Interval_Status	Lithology %	Lithology	Lithology Qualifier	Lith_Modifier	Shade	Hue
	0.000	2.000	2.000										R						
	2.000	4.000	2.000										R						
	4.000	6.000	2.000										R						
	6.000	8.000	2.000										R						
	8.000	10.000	2.000										R						
	10.000	12.000	2.000																
	12.000	14.000	2.000																
	14.000	16.000	2.000																
▶	16.000	18.000	2.000										R	SS	FG				
	18.000	20.000	2.000																
	20.000	22.000	2.000																
	22.000	24.000	2.000																
	24.000	26.000	2.000																
	26.000	28.000	2.000										R	SS	FG				
*																			

CTRL-I – Drilling, Defects, Lithology

Insert empty rows

Fix (F12, Shift F12)

F12 by itself will “fix” the current cell. Shift F12 will fix selected cells (if more than one is selected) or the current cell and all subsequent cells in that column (if only one cell is selected).

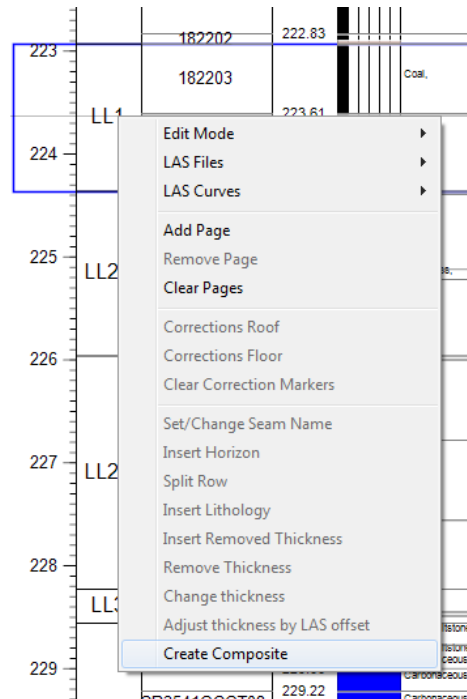
“Fix” means updating the cell based on other values depending on the sheet & column:

Column	Fix Action
Lithology	
Record_Seq_Flag (Shift F12 only)	Fixes ALL record sequence flags depending on the percentage column.
Litho_Perc	Fixes ALL percentages based on existing percentages. I.e. if the first row is 60% and the second row is blank, it updates to 40%
From_Depth To_Depth	Calculates depths based on previous depths and current thickness/length
Thickness Recovered_Thick	Calculates thickness based on from/to depths
Drilling	
Run_No	Calculates next run number in sequence
Geologists Depths	Same as Lithology From/To Depths
Drillers Depths	Same as Lithology From/To Depths
Recov_Length	Same as Lithology Thickness
Water Observations	
Flow_Rate (Water Observations)	Calculates V-Notch Flow_Rate based on Flow_Height

Other Tools

Create Composite

This function is used to combine individual samples to create a composite sample for further testing. Select the samples you wish to combine then right click and select "Create Composite"



You can edit the seam and working section names then click OK to accept.

Composite X

Sample(s)

From Depth

To Depth

Thickness

Core Loss

Recovery

Seam

Working Section

Lithology

Data Dispatched

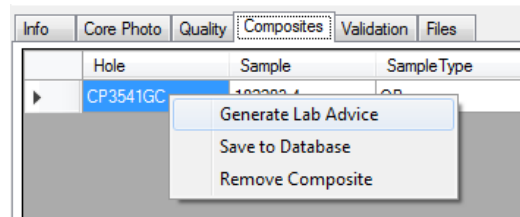
Test Y/N

Comments

The new composite sample will then appear in the Composites table.

Info	Core Photo	Quality	Composites	Validation	Files		
	Hole	Sample	SampleType	Seam	WS	DepthFrom	DepthTo
▶	CP3541GC	182203-4	QP	LL1	LL1	222.93	224.36

Right click to generate a lab advice (Excel file) or save samples to the database.



Section Window

The section window allows you to quickly create cross section views of your drill holes. Coal seams are automatically correlated and the presentation can be manipulated before being exported to an external application for final publication.

Hole Selection

There are several ways to select holes for your cross section. The simplest is to manually selected holes from list, however in order to select holes along a particular line it is usually better to use a Map Window to select the holes.

Manual Hole Selection

Use any of the available selection tools to select a number of drill holes. Then click the “New Section Window” button on the main toolbar or the “Windows”, “New Section Window” menu option.

Select Holes From a Map Window

Refer to the [Map Window](#) section for information on using the Map Window to select holes for a cross section.

Display Options (View Menu)

Once you have your holes selected and section window open, there are a number of tools and options for manipulating the cross section display.

Horizontal Scale

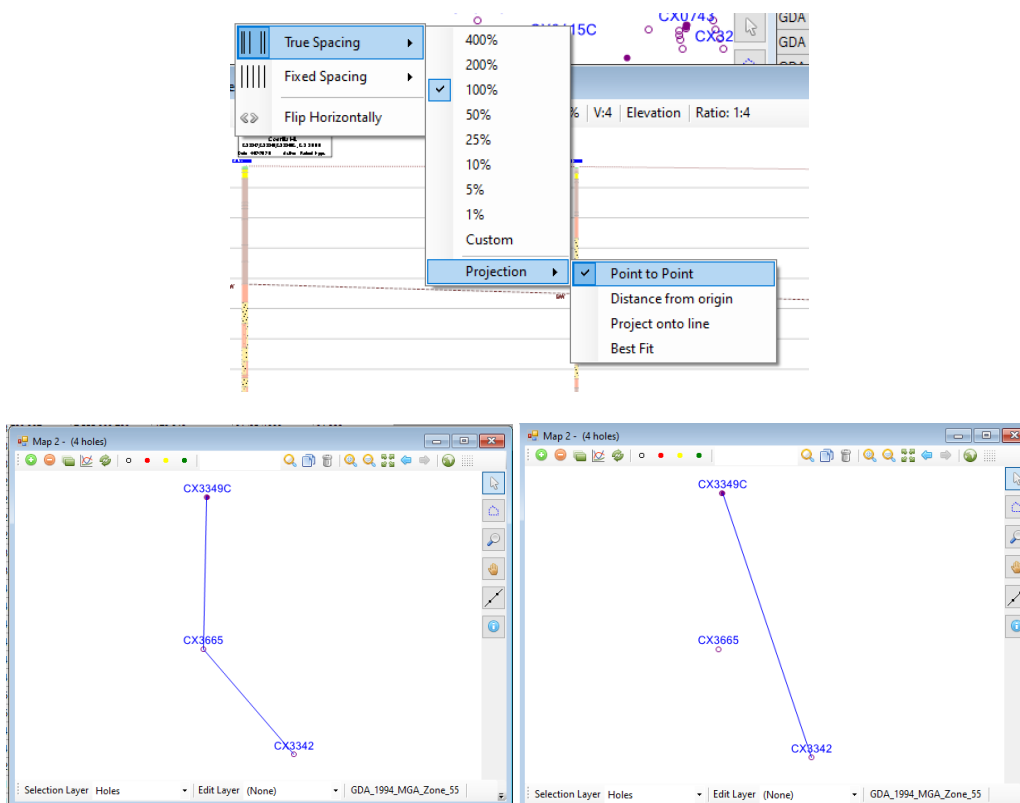
The horizontal scale determines how the holes are spaced horizontally on the cross section. There are two modes. True Spacing and Fixed Spacing

True Spacing

True Spacing is where the holes are spaced proportionally according to their real world distance from each other. The default spacing is 100%, choose from one of the provided scale factors or select Custom to enter a value manually.

Projection Modes

There are four true spacing/projection modes. When all the holes lie on a straight line the four modes should look more or less the same. When the holes do not lie on a straight line there can be significant differences between the modes so it is worth experimenting to see which gives you the desired result.



Point to Point

In Point to Point mode, the horizontal distance between each hole on the section is proportional to the actual distance between the two holes. This creates a jagged line following the path of the holes rather than taking a straight line from the first to last holes. I.e. the line of sight distance from the first to last holes will be less than the sum of the distances between each pair of holes. This mode is useful when your holes are not in a straight (or near straight) line and you want to follow the path from hole to hole.

Distance from Origin

In Distance from Origin mode the horizontal distance between each hole is proportional to the distance from the first hole in the cross section. In this mode, holes can be some distance apart but can appear closer if they are a similar distance from the origin. This mode has little practical use and may be discontinued in a future release. Better results can be obtained from the other available projection modes.

Project onto line

In Project onto Line mode, each hole is projected onto a virtual line. An imaginary line is drawn between the first and last holes, all other holes are projected at right angles onto this line.

Best Fit

In Best Fit mode, 1PD attempts to find a line of best fit using a “Least Squares” formula. It then attempts to plot the holes along this line.

Fixed Spacing

Fixed Spacing is where the holes are spaced at regular intervals regardless of their real world distance from each other. This mode is useful when the distance between holes is not relevant such as when checking seam correlations or when visual aesthetics are more important.

Flip Horizontally

This option reverses the image as if to view the cross section from the opposite side.

Vertical Scale

The vertical scale applies a vertical exaggeration which can make it easier to see more detail in the lithology. Use a combination of different horizontal and vertical scale settings to find the ones that give you the best view of your data.

Aspect Ratio

Be aware that different horizontal and vertical scales will yield varying aspect ratios. Some examples are shown in the table below:

Horizontal True Spacing%	Vertical Exaggeration	Aspect Ratio	Comments
100%	1	1:1	
200%	2	1:1	
400%	4	1:1	
100%	4	1:4	Depth is 4 x width
400%	1	4:1	Width is 4 x depth

Depth Mode

The depth mode determines how the holes are arranged vertically on the cross section.

Elevation (Collar RL)

Elevation mode plots the holes vertically from their elevation (or collar RL) creating an artificial topography (ground level) or height above sea level.

Depth

Depth mode plots the holes vertically from the same depth creating a flat artificial topography.

Seam

Seam mode plots the holes vertically aligned on the base of a selected seam.

Horizon

Horizon mode plots the holes vertically aligned on the base of a selected horizon/formation.

Custom

Custom mode allows you to manually align the holes vertically on any arbitrary depth. When selecting Custom mode you will be prompted to reset the custom depths to the current view. If you select Yes the custom depths will be reset to match the current view. If you select No, the previous custom depths will be used. Once in Custom depth mode you can freely moving holes vertically as well as horizontally. In all other modes you can only move holes horizontally.

LAS Curve Spacing

LAS curve spacing can be set from 0 to 10 where 0 means all curves overlap each other and 10 means all curves are spaced as far apart as possible.

Seam Correlations

This option allows you to quickly turn all seam correlations on/off or set them to wireframe mode. In wireframe mode the correlations are not filled in which makes other details easier to see. Individual seam correlations can also be turned on/off by right-clicking on the cross section.

Horizon Correlations

This option allows you to quickly turn all horizon correlations on/off or set them to wireframe mode.

Grid Lines

This option allows you to turn the grid/scale on/off and/or set the scale interval value.

Show Coal Only

This option replaces the standard lithology plotting symbols with a simple black & white symbol (black for coal, white for non coal).

Show Seam Boundaries

This option displays a horizontal dashed line representing the top and base of each seam

Keep Hole Names Visible

Hole name labels are usually displayed at the top of each hole. However, if you zoom in and pan down, the hole names can be lost. This option forces the hole name labels to remain at a constant position at the top of the screen regardless of the view. When turning this option off you may need to re-correlate or manually move the labels back to their default position.

Save Default Layout

This option saves the current layout settings (scaling, display options etc) as the default. When you open a new section window the default layout settings will be used.

Show/Hide Hidden Objects

You can hide objects on the section by right clicking and un-ticking the "Visible" option. The object is not removed from the section, just hidden. To make it visible again, select this option to show

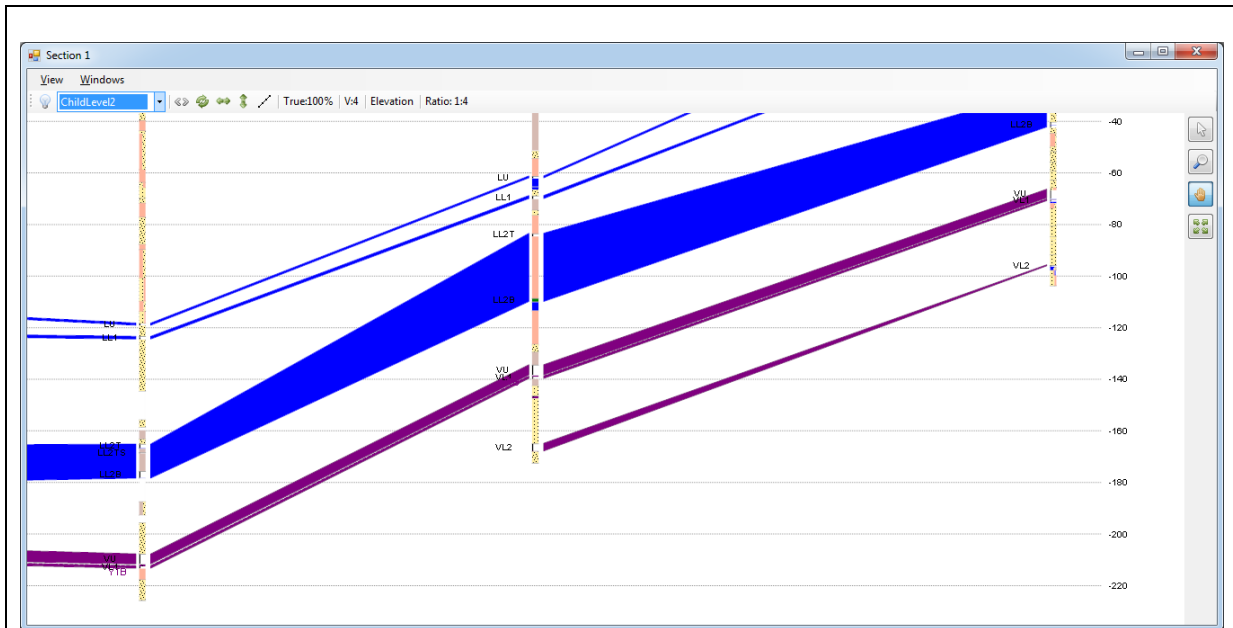
hidden objects, you will then be able to select the object and tick the visible option. You can then hide hidden objects again.

Remove Hidden Objects

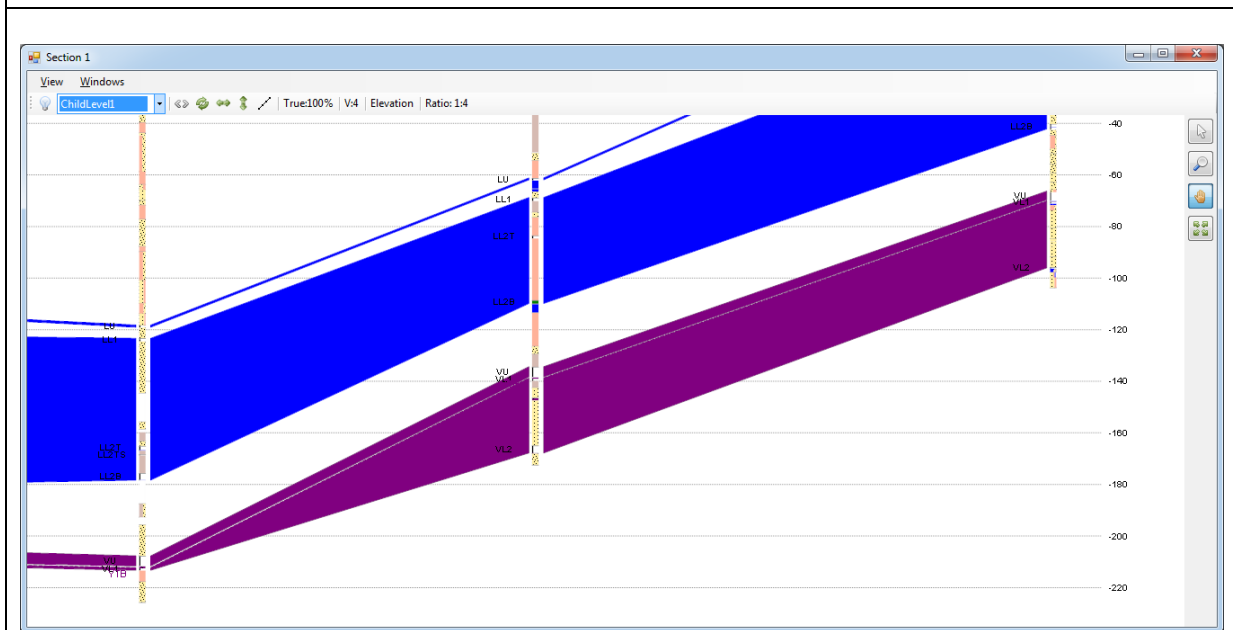
This option removes any hidden objects from memory. It serves no real practical purpose for the user apart from freeing up some memory. It would only be beneficial if you have hidden a large number of objects.



This can also be used to force parent seams to correlate with child seams and vice versa:



Child Level 2 – VL1 and VL2 plies correlate independently



Child Level 1 – VL1 and VL2 plies correlate together

Cross Section Tools

A number of functions are available by right-clicking on the cross section

New...

The “New” menu contains a number of options to add new components to the cross section. In most cases the component is added at the point where the mouse button was clicked.

Hole

This option creates a new hole on the cross section and attempts to insert seams at the appropriate depths. This is useful for hole planning to give you approximate depths where you can expect to hit specific seams. Note that depths are only approximate and assume flat terrain, consistent seam dip and no faulting. This feature is still under development and may produce unexpected results. Your feedback would be most welcome.

Label

This option creates a new label. Labels can contain any text and can be formatted as required. If a title box is selected then the new label will be appended at the bottom of any existing labels in the title box. Otherwise the label can be freely moved anywhere on the section.

Legend

This option creates a new legend window. The legend window contains a symbol and description for each unique lithology/qualifier combination used in the current section. If you subsequently add or remove holes from the section you may need to remove and re-create the legend.

Inset Map

This option inserts a new inset map window. The map window is based on and linked to an existing map window. If the linked map window is changed, the inset map updates accordingly, i.e. changing view, zoom, layers, labels etc.

Shape

This option is currently not available. Once implemented it will allow you to add arbitrary shapes such as rectangles, circles etc for cosmetic purposes. They may also be able to be used as containers for other objects.

Title Box

This option creates a new title box. Title boxes can contain one or more labels. You can have multiple title boxes.

Scale Bar

This option creates a new scale bar. Scale bars indicate the true distance horizontally regardless of horizontal scaling. Scale bars are only visible when using True Spacing mode.

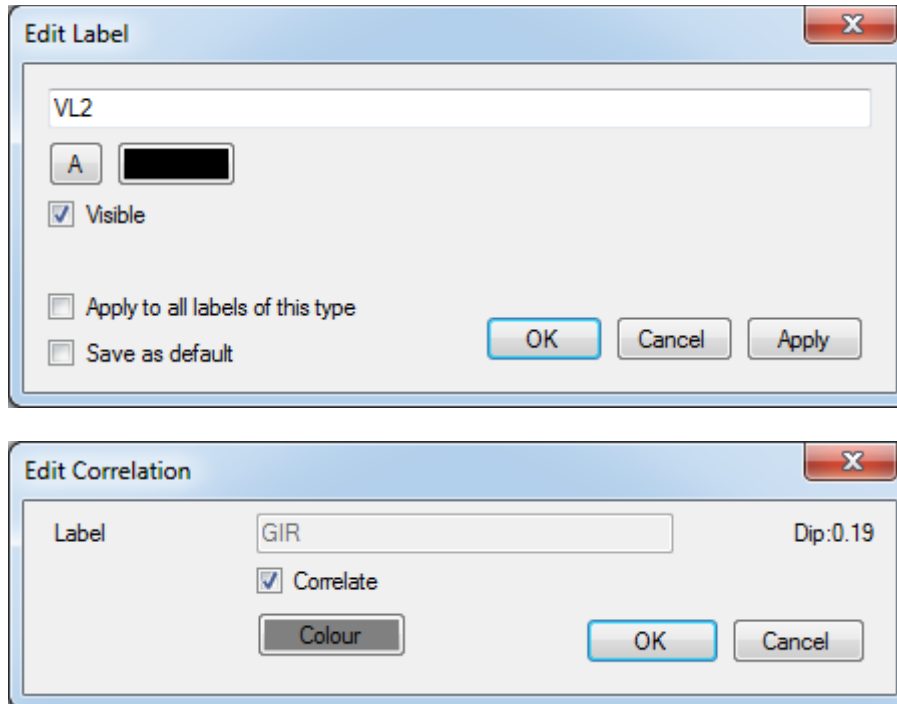
Fault

This option attempts to create a fault zone on the section. This effectively breaks any correlations between holes either side of the fault zone. 1PD attempts to project any existing seam correlations, this works best when there are two or more holes either side of the fault zone. This function is still under development and may produce unexpected results.

Editing Objects

Double click on any object to edit it. Most objects are editable such as all labels, correlations etc. Holes are not editable directly but double clicking will open a graphic log window where you can edit it.

When editing a label, the font and colour can be applied to all labels of the same type by ticking the box before clicking OK or Apply.



Align

This option allows you to select multiple labels and align them. This function is still under development and does not always perform as expected.

Seam Correlations, Horizon Correlations, Other Correlations

These options allow to enable/disable individual seams, horizon and other correlations

Correlation Hole Skip

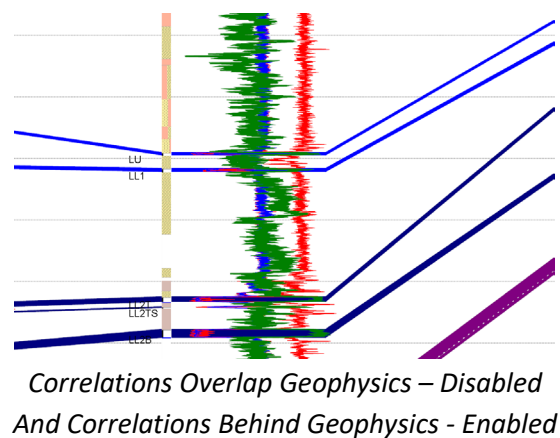
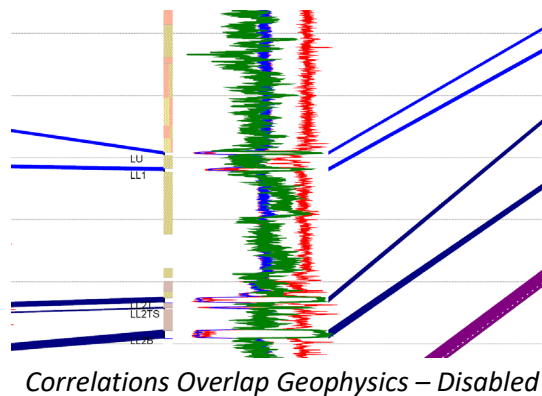
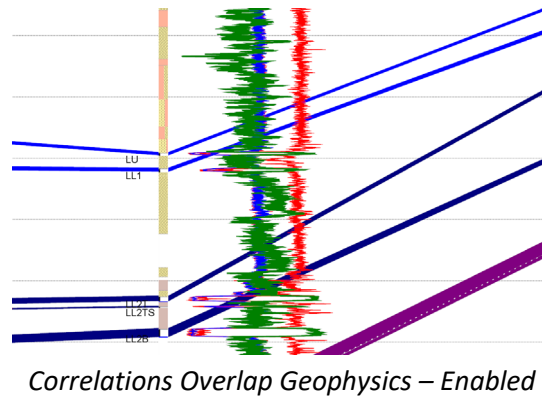
This option will allow correlations to jump across one or more holes where the target is not found. For example, if holes 1 and 3 contain an A seam but hole 2 does not, normally 1PD would not correlate across from hole 1 to hole 3. With correlation hole skip enabled, 1PD will correlate across hole 2

Correlations Overlap Geophysics.

This option will plot correlations so they overlap the space occupied by geophysics. Turning this option off will create a buffer space between the lithology and the correlations so they do not overlap the geophysics.

Correlations Behind Geophysics

This option can be used when the above overlap option is disabled to plot a horizontal correlation behind the geophysics



Rename Seam

If you select a seam label, this option will allow you to rename the seam. You can either rename just the occurrence in the selected hole, or rename the seam across all holes in the section. I.e. if the seam appears to be incorrectly correlated in the hole, just rename this occurrence. If you want to rename the seam entirely, select the option to rename it in all selected holes. The cross section will re-correlate after you apply the change so you can see the effect.

Follow Me

This option allows you to use the current section window as an overview and all other section windows will “follow” when you click on the overview window.

To use this effectively, open two section windows with the same hole selection. Set both windows to the same horizontal and vertical scaling. Size the first window to be fairly small and zoom to show all holes. Size the second window to be as large as possible and zoom in so you can comfortably see as much detail as you require. Right click on the first window and select “Follow Me”. Now when you click anywhere on this window, the second window will display that area of the section. This feature can be tricky to setup and we are working on ways to improve it.

Zoom Max Width, Zoom Max Height

These options zoom the current view to fit the entire section either horizontally or vertically.

Previous View

This option reverts to the previous view after zooming or panning

Toolbar Functions

A number of tools are available as buttons on the section window toolbar. Some of these are duplicates of functions mentioned previously so I will not elaborate on those.



Show/Hide Hidden Objects



[See Show/Hide Hidden Objects](#)

Seam Correlation Level



This option allows you to step up through the parent/daughter relationship levels to correlate anything from the top level parent seam down through to the smallest ply. For this to work successfully you must first configure the parent/daughter relationships using the seam hierarchy editor.

Flip Section Horizontally



[See Flip Section Horizontally](#)

Re-Correlate



This tool will re-correlate the seams & horizons in the current section. This may be necessary if you have changed seam/horizon names in any logs and the section has not updated automatically. Furthermore, if you manually re-order the position of one or more holes, re-correlating will re-sort the holes in the new sequence so that correlations appear correctly.

Zoom Max Width/Height



[See Zoom Max Width/Zoom Max Height](#)

Output

Sections can be saved as an image file or PDF. They can also be exported to MapInfo or Google Earth.

Export to MapInfo

Select File, Export, MapInfo and select a filename. A series of MIF (MapInfo Interchange Format) files will be created. If you have the MapInfo Universal Translator tool installed on your system and configured in 1point Desktop's settings, the MIF files will then be converted to TAB files and a workspace (WOR) file created. The various components of the section will be represented as different layers (.tab files) in the workspace. I.e. one for lithology, one for labels, one for the grid etc. You can then use MapInfo to further enhance your section.

Export to Google Earth

Select File, Export, KML and select a filename. This will generate an image of the section geographically located in Google Earth. The image size and location may vary depending on your section settings. For best results use Horizontal Scale - True Spacing, 100% with projection "Distance from origin". Vertical Scale 1. If you find the section difficult to see in Google Earth try using higher vertical scales but remember that this won't be a true representation. To verify position, export your map view to KML also and check that the hole locations are roughly aligned with the holes on your section.

Note: This is not intended as a true, accurate 3D model, it is a quick and simple way to visualise multiple cross sections of your boreholes to get a feel for the structure.

Multi-Log View

The multi log view can be thought of as a cross between a graphic log and a cross section. It is essentially multiple graphic log views stacked side by side with seam correlations. This essentially gives you a zoomed in pseudo cross section with the detail of a graphic log. It is very useful for correlating seams from geophysics where a high level of detail is required.

You can manually pan around the screen moving between holes. You can also move individual holes around to align on a given seam or depth by holding down the SHIFT key.

Seam correlations can be turned on/off or set to wireframe mode if they are too obtrusive.

Right click to select a seam to align all holes on, or to rename a seam in a specific hole.

Reports

Reports offer a quick summary of loaded hole information. Some reports will not produce the expected results if one or more holes have been “quick loaded” as only header information will be available for those holes. For accurate results ensure all holes are fully loaded before running reports.

Borehole Summary (NSW Dept)

Generates a hole summary in a specific format for the NSW department.

Drilling Summary

The drilling summary report lists the hole location, total depth, hole type, core size and whether the hole was geophysically logged.

English Log

Generates a table with English Log style descriptions of the lithology.

Geophysics Summary

The geophysics summary report lists the hole location and which geophysics tools were run.

Geophysics Pseudo Log

Generate a calculated coal thickness for each hole using geophysics to estimate lithology types.

Hole Statistics

Generates general statistics such as number of holes by type and seam min/max/average thickness,

Horizon Depths

The horizon summary report lists every horizon including depth and elevation with one row per hole and each horizons in a separate column

Horizon Summary

The horizon summary report lists every horizon including depth and elevation with each horizon on a separate row.

Seam Statistics

Thickness

Cross tabulation of hole vs seam thickness

Depth

Cross tabulation of hole vs seam depth

Summary

Summary report for each seam (min/max/average depth & thickness)

Seam Summary

The seam summary report lists every seam including depth, elevation, thickness, loss and parting

Strip Ratio

The Strip Ratio report calculates total thickness, overburden, interburden and strip ratio for selected seams.

Sample Summary

The sample summary reports lists every sample including depth, thickness and elevation

File Reports

File Summary

Summary report showing file dates and LAS file count

Missing LAS File

Lists all holes missing LAS files

MapInfo Reports

Generate Holes File

Generates a MapInfo TAB file containing hole locations symbolised by hole type

Generate English Logs

Generates English Logs in PDF format

Generate Graphic Logs

Generates Graphic Logs in PDF format using the selected layout & scale

Generate Well Completion Reports

Generates Well Completion Reports which combine English Logs, Graphic Logs, Core Photos and Rehab photos in a single PDF for each hole.

Generate Hole Summary Sheets

Generates a hole summary sheet for each hole.

Tools

Dictionary Editor

This section allows you to view and edit the installed coding dictionaries. This includes the default CoalLog dictionary plus any custom dictionaries that have been installed.

The CoalLog dictionary cannot be edited however you can supplement or replace categories of the CoalLog dictionary via custom dictionaries.

Custom dictionaries are used to add codes and/or categories not included in the CoalLog standard such as Project codes, Company codes, Geologist names etc.

In most cases you can provide all your custom codes in a single custom dictionary. In some cases it may be necessary to split codes into multiple custom dictionaries. A common example of this is where the same seam code has a different meaning in another project area. In this case you could create a generic custom dictionary for most of your custom codes, then a separate custom dictionary for each project area. Each project specific dictionary should contain the project code(s) plus any other codes (i.e. seam codes) specific to that project/dictionary. You can separate out other codes by project as well but generally it's only necessary where there is a conflict, it's generally easier to keep global/common codes in a single dictionary.

Dictionary codes have the following parameters, most of which are optional.

Code (Required) – Short code representing item, length varies between categories and is generally an abbreviation of the description.

ParentCode (Optional) – Used to define hierarchy for Seam codes only. For example, the parent code for LU1 might be LU

Short Description (Required) – Short description of item. Used in English Log generation and display on graphic logs

Long Description (Optional) – Long description of item. Used for reference only.

DBCode (Optional) – Used only with databases where the database code differs from the above code

ValidationOnly (Yes/No) – Indicates that the code is only for validation of historical codes and should not be used for new data

Folder (Optional) – Used when translating codes for [folder settings](#) where the description does not match the folder name. Applies only to Lease_No, Project and Company categories.

Seam Hierarchy Editor

This section allows you to create a seam parent/daughter relationship and set seam colour coding which can then be used in the cross section generator to correlate seams.

You can setup seam parent/daughter relationships in two ways:

1. Set the ParentCode in the dictionary editor.

OR

2. Use the Seam Hierarchy Editor

You can use either method interchangeably as they both do the same thing under the hood.

To use the dictionary method simply create the parent and daughter seam codes separately then set the ParentCode in the daughter to the parent seam code.

I.e. create a V code for Vermont Seam, then create a VL code for the Vermont Lower seam and set its parent code to V. Then create a VL1 code for Vermont Lower 1 (if required) and set its parent to VL.

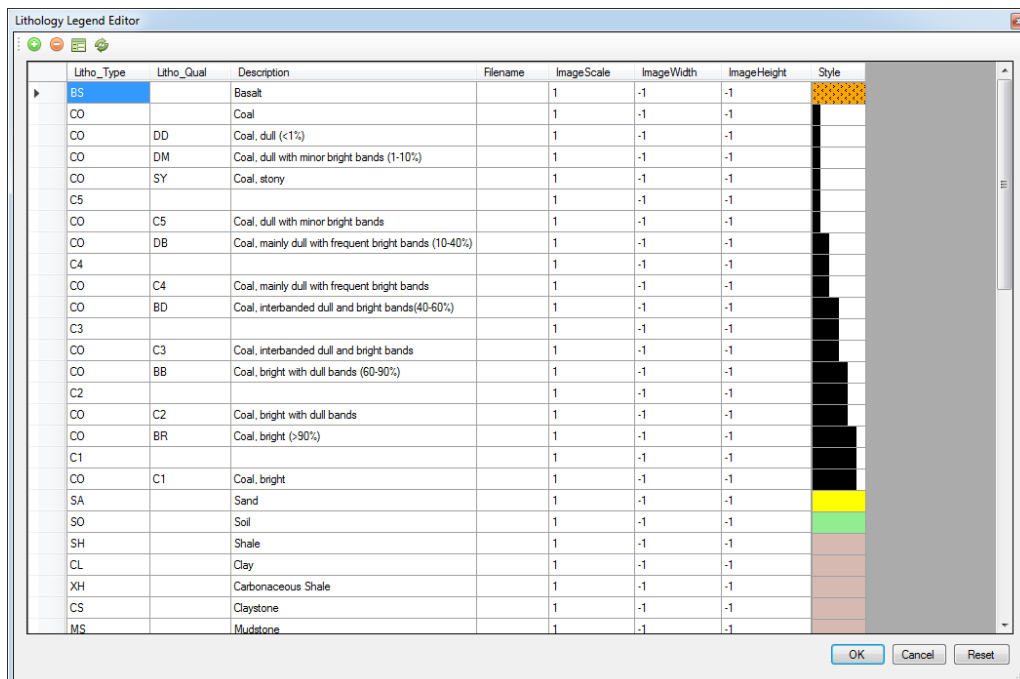
You can also include splits and rider seams setting the parent code to the appropriate seam code.

The seam hierarchy editor does the same thing visually. It's usually easier to create the codes first in the dictionary editor then use the hierarchy editor to move them into the appropriate parent/daughter relationship. You can do this by either dragging the daughter seam into the appropriate parent or using the arrow keys in the tool bar to move the seams up/down/left/right etc.

Lithology Plotting Legend Editor

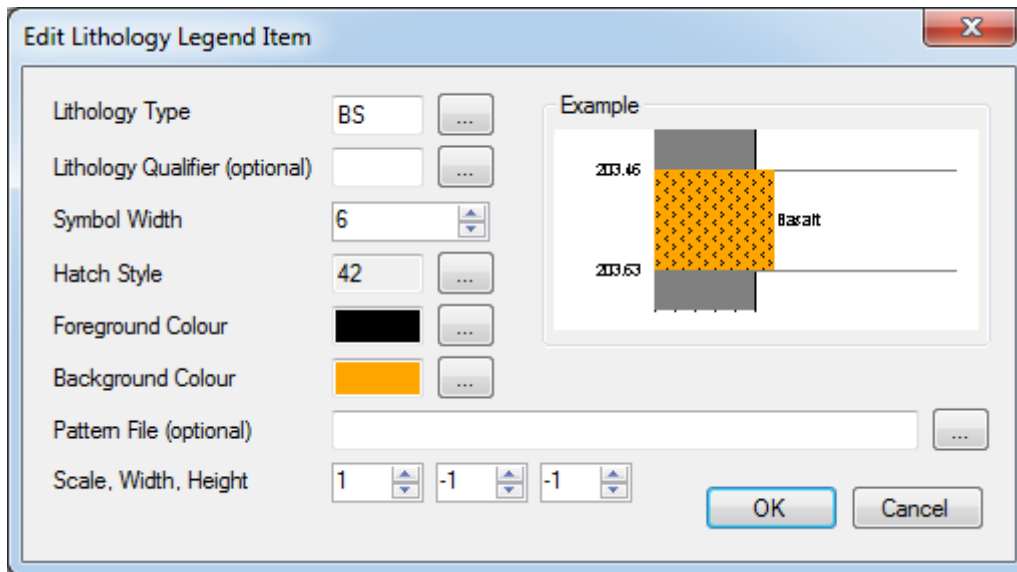
View/Edit lithology plotting legend

The Lithology Plotting Legend Editor allows you to change the way lithology is plotted on graphic logs and cross sections.



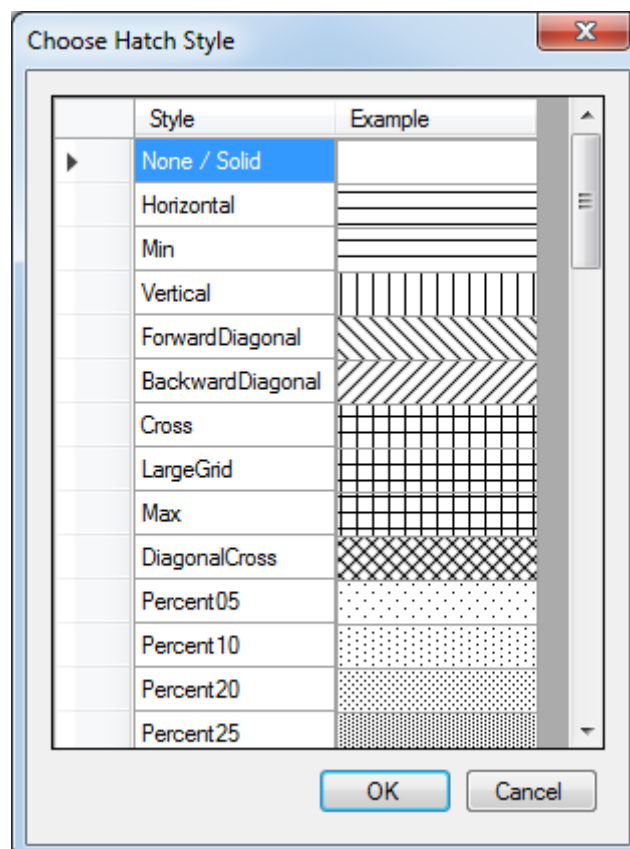
Double-click an entry or click the Edit button in the tool bar to edit an existing pattern.

The Reset button in the bottom right hand corner will restore the factory default legend.



Choose the Lithology Type and Qualifier (if required) then set the symbol width, hatch style and colours.

Ignore the pattern file and scale/width/height options for now, these are reserved for the CoalLog V2.0 Plotting Patterns which are not yet fully supported.

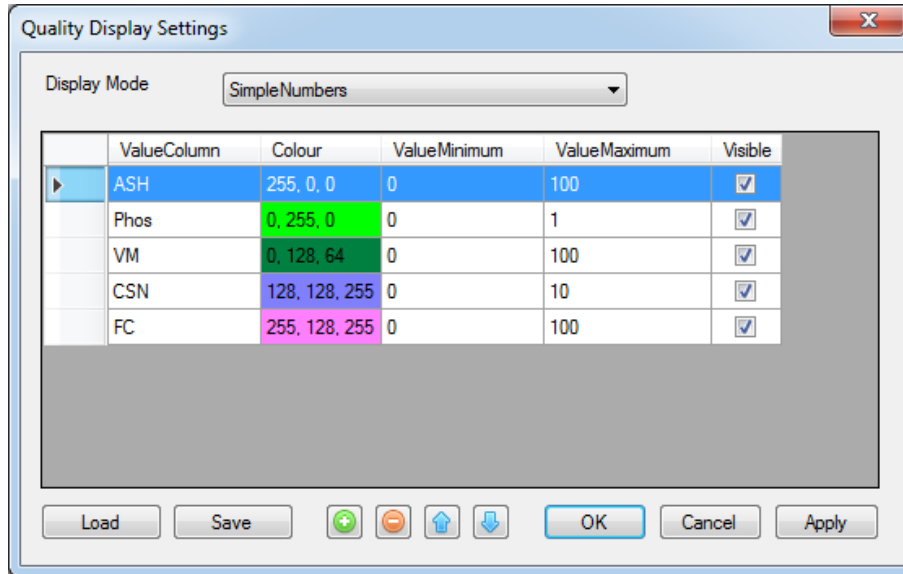


Note that some hatch styles are not supported in all export formats such as MapInfo



Coal Quality Display Settings

The Coal Quality Display Settings determine how coal quality information is displayed on graphic logs and cross sections. There are several modes available and multiple parameters can be displayed in each mode.



The available modes are:

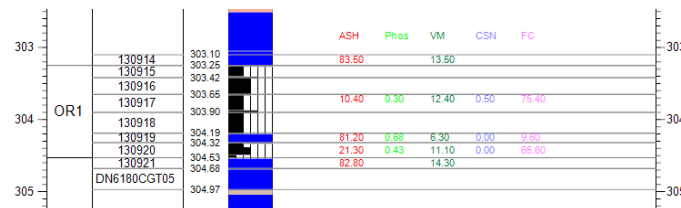
None

In this mode all coal quality information is hidden

For the following modes, each parameter must be assigned a column label, colour and range of values (min/max).

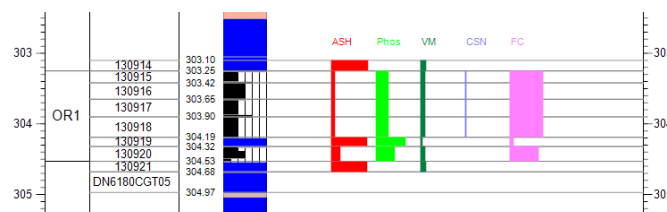
Simple Numbers

In this mode, coal quality parameters are displayed as simple numerical values arranged horizontally in the order they are selected



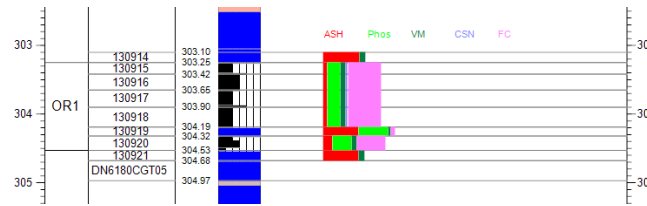
Simple Histogram

In this mode, coal quality parameters are displayed as a simple histogram arranged horizontally in the order they are selected. The bars are evenly spaced.



Stacked Histogram

This is the same as the Simple Histogram above except that the bars are stacked horizontally on top of each other rather than evenly spaced.



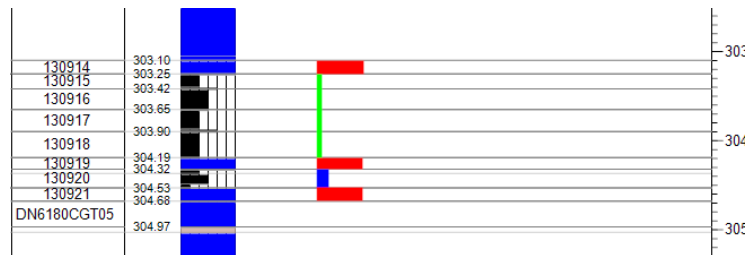
For the following modes, each parameter must be assigned additional colour values.

Range Histogram

In this mode, multiple entries are made for different ranges of values with different colours. For example:

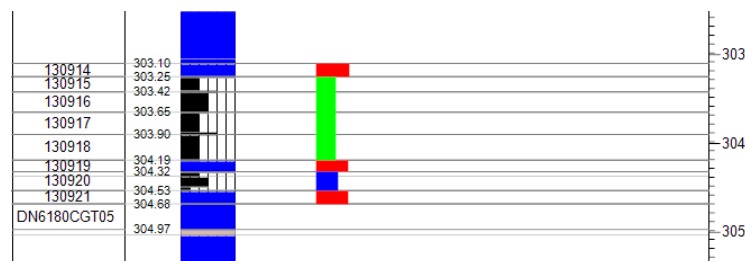
- ASH 0-30 Green
- ASH 31-60 Yellow
- ASH 61-100 Red

This creates a “traffic light” effect where high ash values are shown in red and low ash values shown in green.



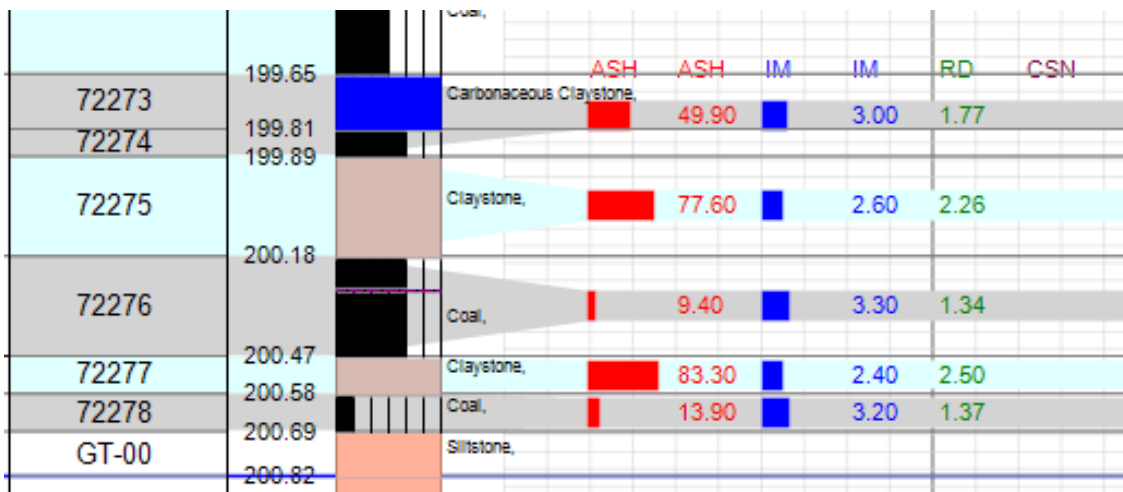
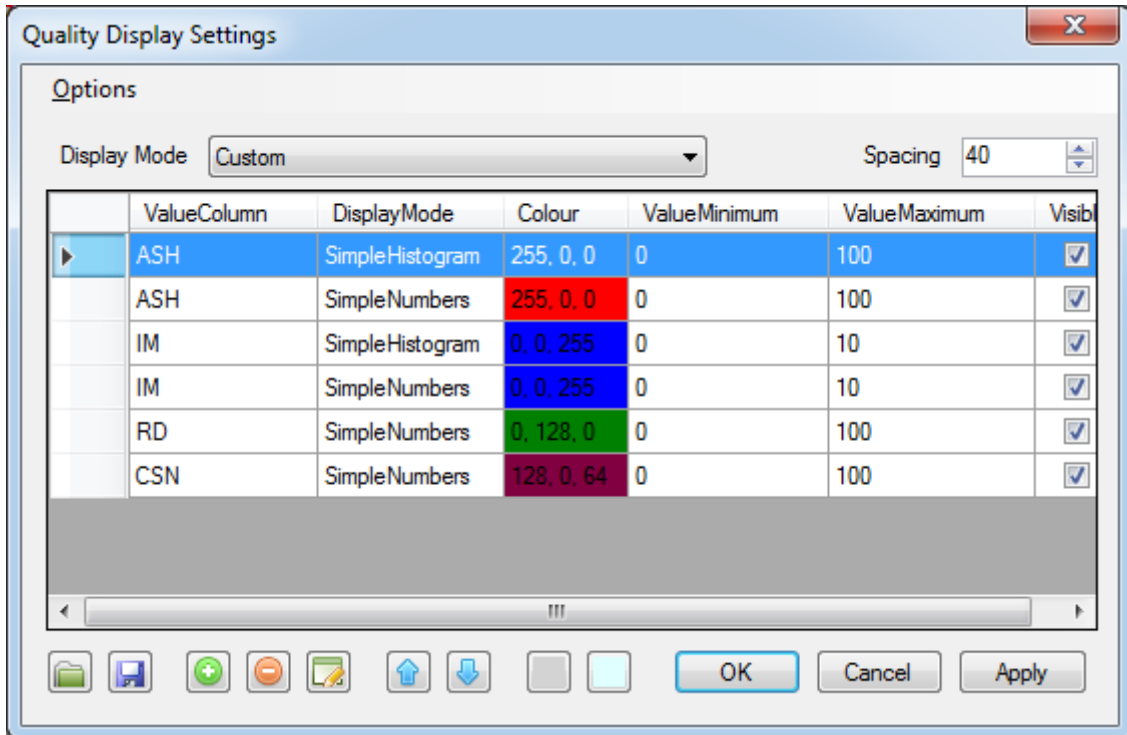
Multi Histogram

In this mode you can plot two parameters together. One parameter determines the width of the histogram bar (as with a simple histogram), the other parameter determines the colour (as with a range histogram). For example the bar width could represent the IM value but the colour could represent the ASH value as in the Range Histogram example.

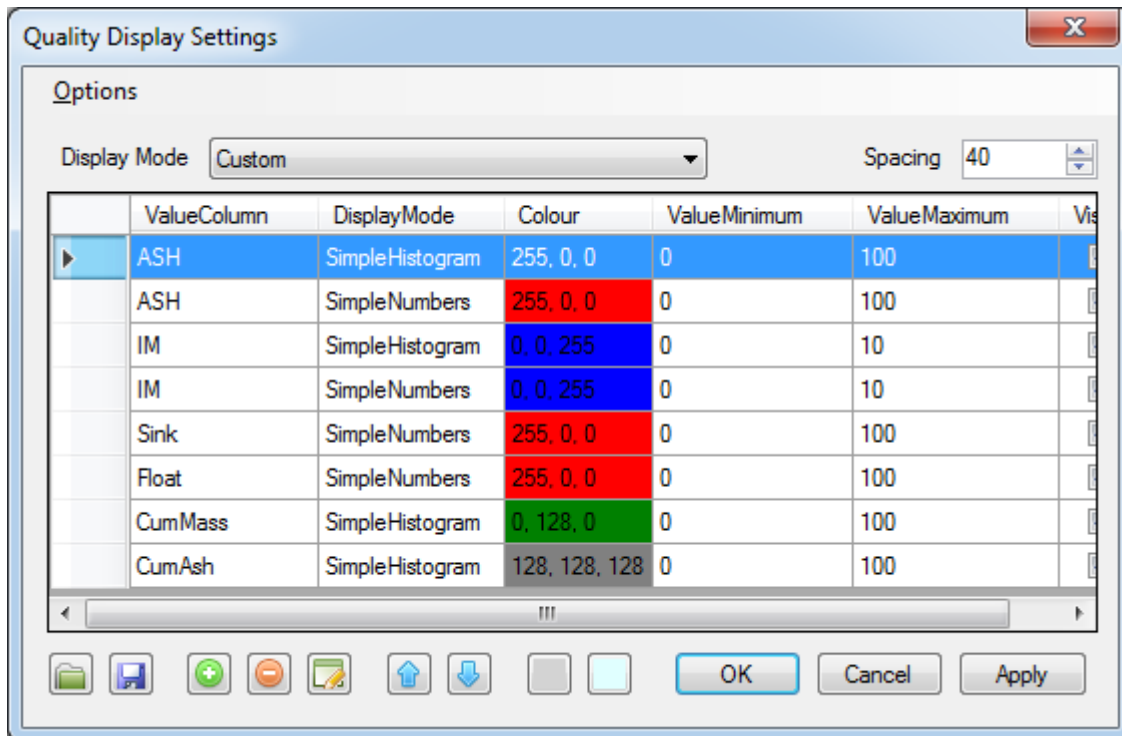


Custom

In custom mode you can combine both Simple Numbers and Simple Histogram in the same display. This is useful if you want to show both the histogram to give a visual representation but also show the actual value for accuracy.



This is also useful for displaying Washability data



Generating Composites and Testing Advice

This document describes the process for generating composites samples, combining existing samples/composites, generating lab/testing advices and generating sample tracking reports.

Configuration

Before using these functions some configuration is required:

1. Enable Outlook emails (Fig 1)
 - a. Go to Tools, Settings, Email
 - b. Tick “Use Outlook”
2. Set default lab (Fig 2)
 - a. Go to Tools, Settings, Non Coal Log, Sample Advice
 - b. Enter ALS in the Default Lab
3. Set procedures folder (Fig 3)
 - a. Go to Tools, Settings, Coal Quality, Lab Results
 - b. Select the Procedures Folder
4. Set lab email addresses (Fig 4)
 - a. Go to Tools, Settings, Coal Quality
 - b. Set the Lab “to” email and “cc” email addresses. You can have multiple address on each separated by semi-colons
5. Disable Beta features (optional) (Fig 5)
 - a. Go to Tools, Settings, Debug
 - b. Untick Beta

Generating Composites and Testing Advice

1. Load hole as per normal
2. Select the composites tab to check that there's no composites already created
 - a. If there are some either delete them or reset (see below)
3. Select to the Quality tab
4. Right click and select Quick Composite (Fig 6)
 - a. Most of the defaults should be ok
 - b. Default Lab can be set under Tools, Settings, Non Coal Log, Sample Advice
 - c. Select procedure (i.e. Stage 1 - Raw Coal Analysis) (Fig 7)
5. For Stage 1 this may be all that's required – skip to step 9 below to Save & Send
6. Select which samples to combine (via Composites tab or graphic log) (Fig 8)
7. Right click on the composites and select Combine Samples (Fig 9)
 - a. Defaults should be sufficient for all except stage 3 where you may need to enter additional clean coal composite instructions
8. Repeat steps 6-7 for other composites
9. Right click and select “Save to Database, Excel & Email” which will: (Fig 10)
 - a. Save the composite samples to the database
 - b. Generate a draft email in Outlook with the preconfigured address (Fig 11)
 - c. Attach the testing advice Excel file
 - d. Attach any linked procedure documents

Note: It is not strictly necessary to save the composites to the database when generating an advice. They will get generated automatically when the results come in. The only advantage is it gives us a date reference point when the advice was generated for sample tracking. Also, there's a potential for duplicate/conflicts if you attempt to save the same composite twice. If you run into any issues with this, let me know and then hit ignore/continue to carry on.

Analysis Procedures

There is an option under Database, GeoCore Admin called Analysis Procedures where we can add new procedures and link the documents. Before using this it is necessary to set the procedures folder in settings. Refer to Configuration.

	PROJECT	TREATMENT_PRO	DOCUMENT_NAM	ACTIVE	DOCUMENT_VER	DOCUMENT_DAT	COMMENTS
▶	2017	COP_2019_RAW	COP_SC_20140...	<input checked="" type="checkbox"/>	1	19/03/2014	Raw coal analysi...
	2017	COP_2019_Small...	COP_SC_20140...	<input checked="" type="checkbox"/>	1	19/03/2014	Small coal wash...
	2017	Prox. RD, TS, AA...		<input checked="" type="checkbox"/>	1	14/10/2022	
	3840	CD_2019_RAW	YE_SC_2019071...	<input checked="" type="checkbox"/>	1	17/07/2019	
	3847	Stage 1 - Do not ...		<input checked="" type="checkbox"/>	1	17/10/2022	
	3847	Stage 1 - Raw C...		<input checked="" type="checkbox"/>	1	17/10/2022	
	3847	Stage 1 - Stone ...		<input checked="" type="checkbox"/>	1	17/10/2022	
	3847	Stage 2 - Washa...		<input checked="" type="checkbox"/>	1	17/10/2022	
	3847	Stage 3 - Coking ...		<input checked="" type="checkbox"/>	1	17/10/2022	
	3847	Stage 3 - PCI Co...		<input checked="" type="checkbox"/>	1	17/10/2022	
	3847	Stage 3 - Thema...		<input checked="" type="checkbox"/>	1	17/10/2022	
	3874	CX_2014_RAW	CA_SC_2014112...	<input checked="" type="checkbox"/>	1	1/12/2014	
	3874	CX_2019_RAW	YE_SC_2019071...	<input checked="" type="checkbox"/>	1	17/07/2019	
	ANY	DO NOT TEST		<input checked="" type="checkbox"/>	1	20/11/2019	Do not test this s...
	ANY	GENERIC RAW ...		<input checked="" type="checkbox"/>	1	20/11/2019	Use provided RA...
	ANY	GENERIC STON...		<input checked="" type="checkbox"/>	1	20/11/2019	Use provided ST...

Adding a new procedure

To add a new procedure:

1. Click the green plus button.
2. Select the project (or All Projects)
3. Enter the procedure name
4. Click the Browse button to link the procedure document
5. Adjust date and version if required
6. Click OK to Save

Note: The procedure document MUST be located in the procedures folder as defined in settings. Even though the browse button will allow you to select other folders, the database only saves the filename, not the full path.

Remove/Reset Composites

If you make a mistake or wish to change an existing composite, use one of the following methods.

Note: None of these methods make any changes to the database. Changes are not saved until you select the Save to Database menu option. If you attempt to create a composite that already exists, you will receive an error.

Change Existing Composite

Simply double-click on an existing composite to edit it.

Remove Existing Composite(s)

To remove one or more existing composites, simply select them then right click and select “Remove Composite(s)”. To quickly remove all composites, click in the top left corner header cell on the composites tab. This will select all cells. Then right click and select “Remove Composite(s)”

Reset Composites

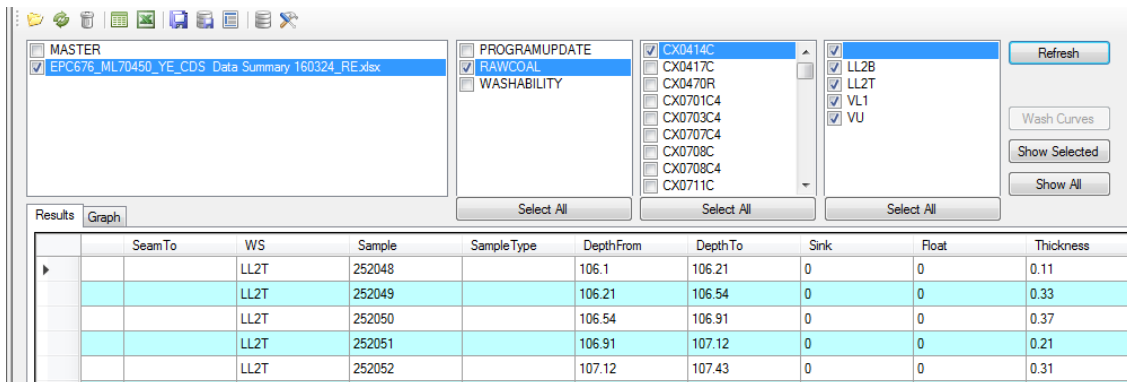
To reset the composites back to their original values. Right click and select “Reset Composites”. Select the result type to use as the basis, generally WS or CCC. This will remove all existing composites and replace them based on the selected results.

Sample Tracking

Finally, there is a report under Reports called Sample Tracker. However this is a work in progress and requires Beta features enabled to access it. It simply collates all the information from sample dispatch, composite samples and results. Example screen shot below (Fig 12)

Coal Quality Viewer

Load coal quality data, transfer coal quality data to graphic logs, view washability curves, create composites, and save to database.



Coal Quality data is notoriously complex and difficult to read, interpret, validate and view. 1PD provides some basic abilities to do this.

Firstly, the Coal Quality Viewer provides the ability to read/import most data in Excel format. Some formats are recognised automatically, others may require some assistance.

Table Mapping

After loading an Excel file via the Open button, if data does not appear in the second column you may need to adjust the Table Mapping. This defines the header and data rows of the worksheets and maps column headers to internal parameters.

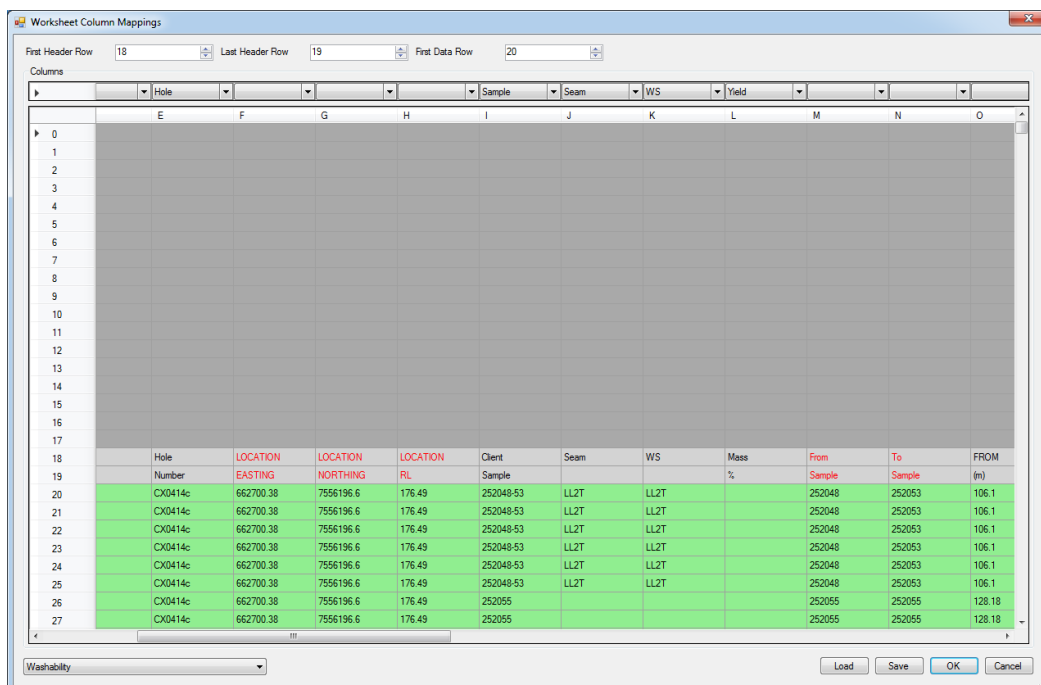
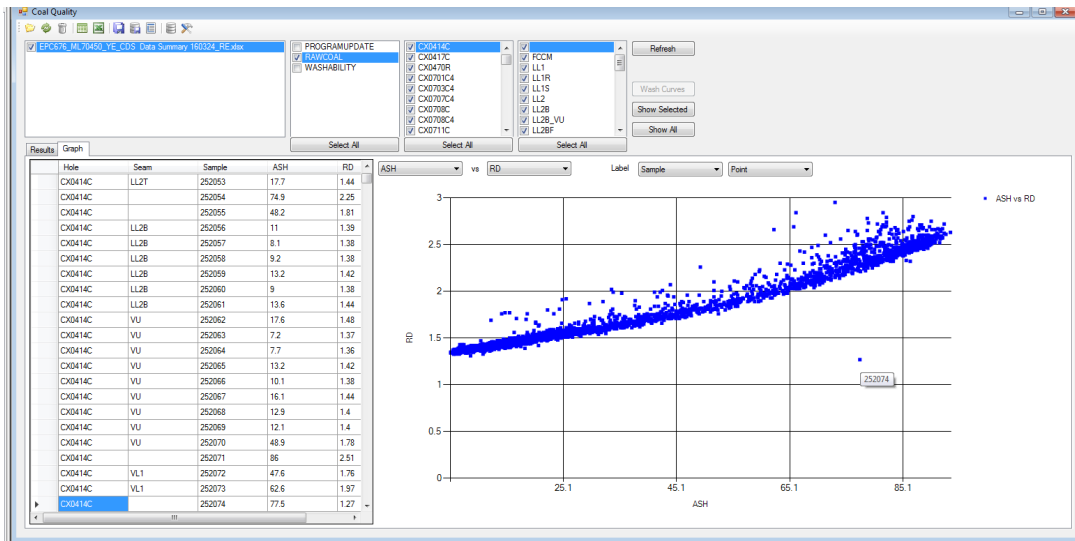
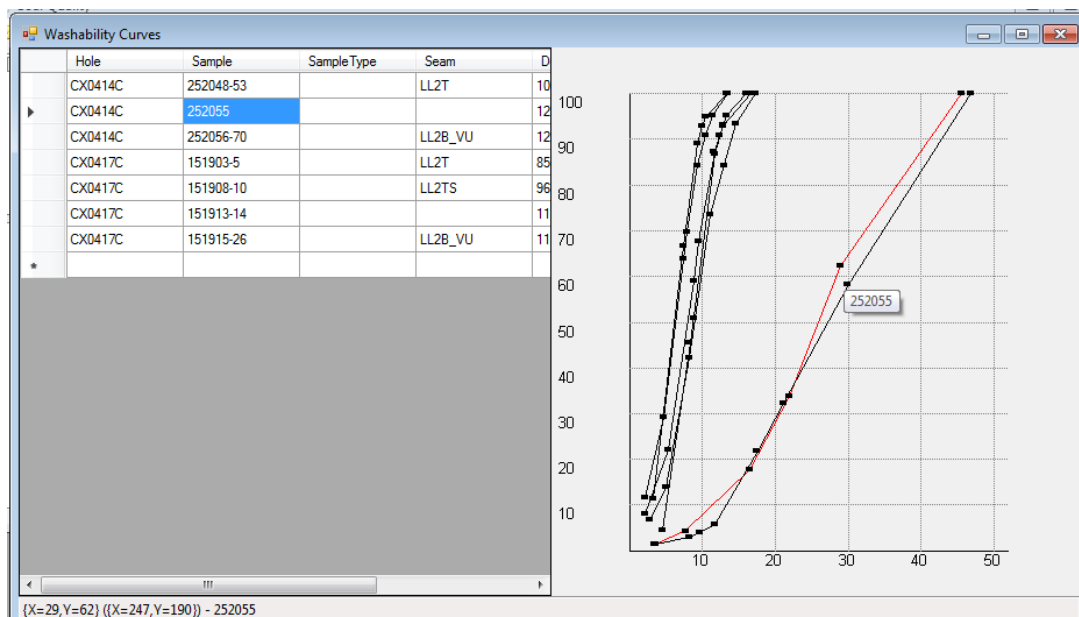


Table Mapping

Once the table mapping is configured correctly, the data should appear in the subsequent columns and can be selected and viewed. Data can be viewed as a table, two parameters can be selected and graphed or washability data can be plotted as Wash Curves.



ASH vs RD plot



Washability Curve Plot

Additionally, basic raw coal results can be viewed on graphic logs either as numeric values or as histograms. Refer to [Coal Quality Display Settings](#) for more information.

Weighted Average / Composites

Results	Graph	Select All	Select All	Select All						
SeamTo	WS	Sample	SampleType	DepthFrom	DepthTo	Sink	Float	Thickness	Product	MassAR
		151907		95.82	96	0	0	0.18	RAWCOAL	1.283
	LL2TSK	151908		96	96.38	0	0	0.38	RAWCOAL	1.503
	LL2TSK	151909		96.61	97.06	0	0	0.45	RAWCOAL	1.114
	LL2TSK	151910		97.06	97.44	0	0	0.38	RAWCOAL	1.309
	LL2TSK	151911		97.44	97.52	0	0	0.08	RAWCOAL	0.409
		151912		113.58	114.24	0	0	0.66	RAWCOAL	3.962
		151913		114.24	114.48	0	0	0.24	RAWCOAL	1.106
		151914		114.48	114.52	0	0	0.04	RAWCOAL	0.32
	LL2B	151915		114.52	114.98	0	0	0.46	RAWCOAL	1.602
	LL2B	151916		114.98	115.4	0	0	0.42	RAWCOAL	1.384
	LL2B	151917		115.4	115.83	0	0	0.43	RAWCOAL	1.742
	LL2B	151918		115.83	116.03	0	0	0.2	RAWCOAL	0.641
	LL2B	151919		116.03	116.42	0	0	0.39	RAWCOAL	1.376
	LL2B	151920		116.42	116.74	0	0	0.32	RAWCOAL	1.420
	LL2B	151921		116.74	117.5	0	0	0.76	RAWCOAL	2.809
	VU	151922		117.5	118	0	0	0.5	RAWCOAL	1.671
	VU	151923		118	118.69	0	0	0.69	RAWCOAL	2.418
	VU	151924		118.69	119.36	0	0	0.67	RAWCOAL	2.538
	VU	151925		119.36	120.14	0	0	0.78	RAWCOAL	3.005
	VU	151926		120.14	120.84	0	0	0.7	RAWCOAL	2.298

	LL2B	151915-21		114.52	117.5	0	0	2.98		10.974

If you select multiple rows in the main table, a weighted average result for the selected samples can be viewed in the lower table.

Similar functionality can be found in the graphic log screen where you can combine samples to create raw coal composites. These can then be used to generate testing advices for further analysis.

Core Photo Renaming/Resizing Tool

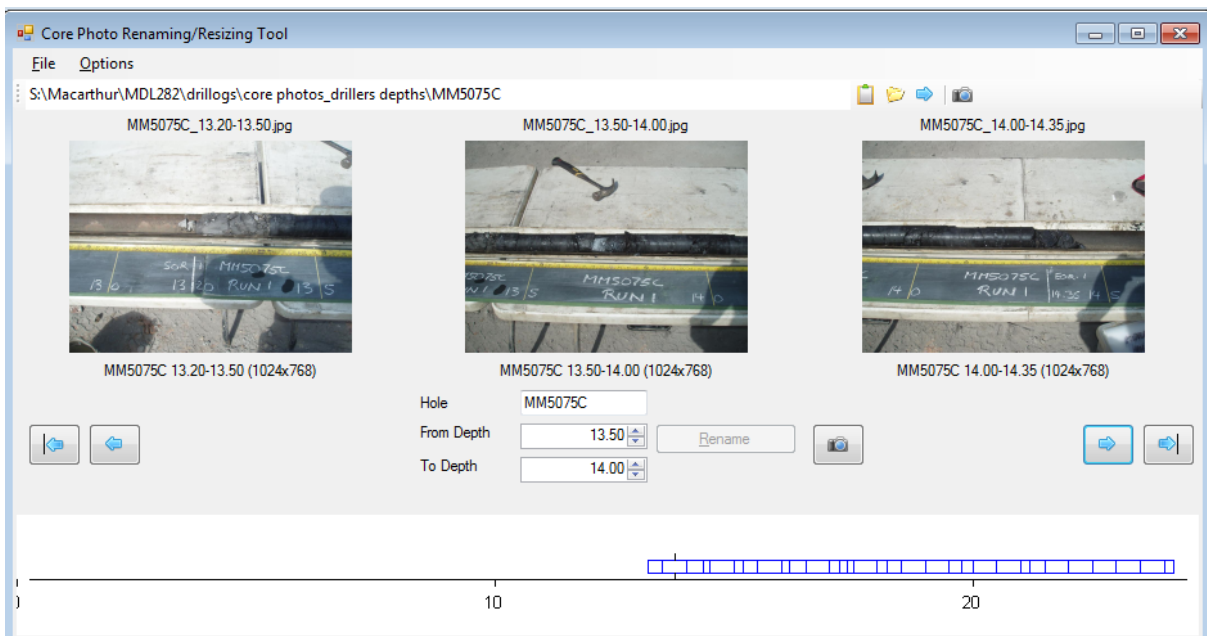
The core photo renaming tool can be used to rename photo files with the hole name and depths. It can also resize the photos to a predefined size to ensure consistency and minimum file size.

Core Photo Renaming Settings

Before launching the Core Photo Renaming Tool, first check a couple of settings:

Under Tools, Settings, Core Photos check that the Core Photo Increment is appropriate for your photos. Common settings are either 0.5 for half meter intervals or 3.0 for 3m core box style intervals. If you wish to use the image resizing option as well, set the resize width to suit your needs. 1024 pixels is the default and usually sufficient for most needs. This creates a small file with enough detail to be readable.

Launch the Core Photo Renaming Tool either from the Tools menu or by right clicking on the Core Photo in the graphic log window.



Core Photo Renaming/Resizing Tool

If the photos are not already loaded, either because of a configuration problem or because you launched the tool independently from the main tools menu, select the folder via the File menu or the folder icon in the toolbar.

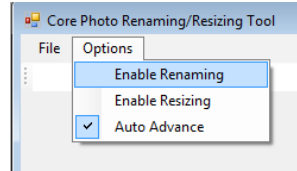
You should then see the core photos displayed sequentially across the page. Assuming the files have not already been renamed they will generally be named with sequential numbers.

Four arrow buttons allow you to select the first, previous, next and last photos.

A preview window/scale bar appears at the bottom of the screen. This can be used to show your position and/or select a photo anywhere in the sequence.

Renaming Core Photos

As a safety feature, the renaming and resizing options are disabled by default. This allows you to browse the photos without fear of making any accidental changes. Enable these features as required from the Options menu.



Enable renaming/resizing features

Select the first photo either by clicking the “Select First” button or clicking the first small blue square in the scalebar/preview window.

Enter the hole name in the box provided and the from/to depths for this photo.

Click the Rename button. The current photo will be renamed (and resized if this option is enabled) using the recommend naming convention. The tool will then automatically move to the next photo and add 0.5m (or the pre-defined increment) to the depths. In most cases you can simply keep clicking the Rename button until you reach the end of the core run where you may need to make a slight adjustment to the depths. Repeat for the next core run until you reach the end of the sequence.

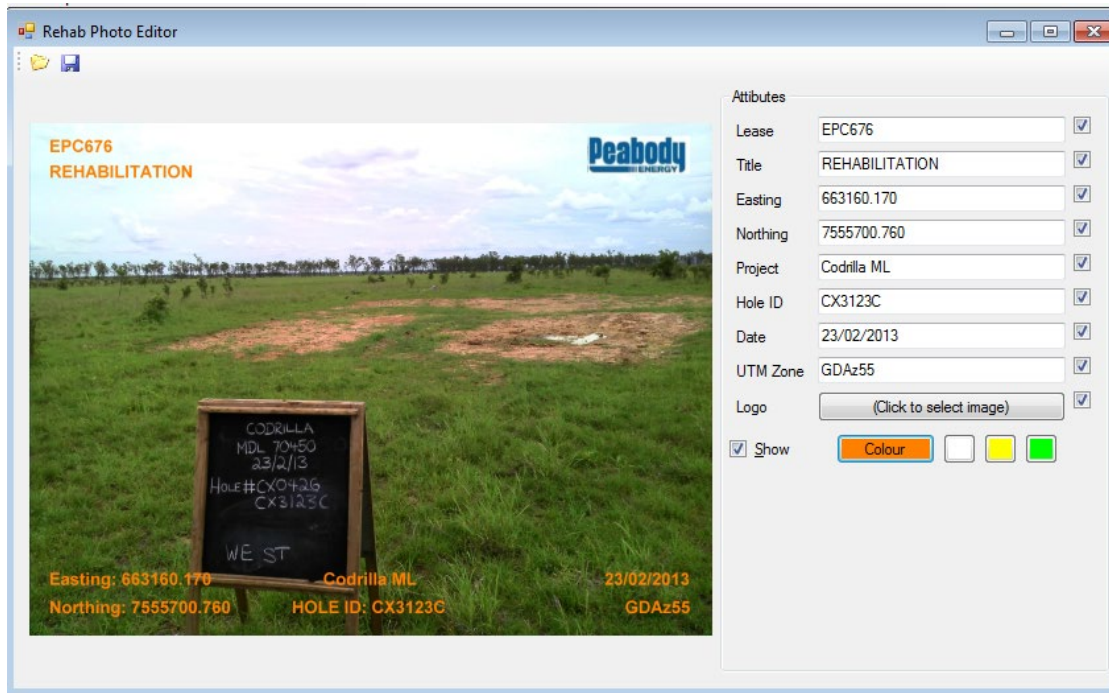
If all goes well you should be able to rename dozens of photos in a few minutes.

Taking Photos

If your device is equipped with a forward-facing camera you can take photos and name them with the appropriate depths automatically. After taking each photo, the depths automatically increment by the pre-set amount and you can take the next photo. You may need to tweak the depths at the end of each core run as per the renaming method.

Rehab Photo Editor

The rehab photo editor allows you to place labels on the rehab photos to show Lease, Project, Location, Date etc.



Launch the Rehab Photo Editor either from the Tools menu or by right clicking or double clicking on the Rehab Photo in the graphic log window.

If launched from the graphic log window the attributes will automatically be populated from the hole information. If launched directly from the Tools menu the attribute will need to be entered manually although the Date Taken will be extracted from the image EXIF information or file date/time stamp.

Modify the attributes as required and select a different colour if the default is not appropriate. This will depend on the colours within the photo itself. I.e. if the photo includes lots of white clouds then white text may not be clearly visible. Choose one of the preset colours or click the Colour button to pick your own.

Un-tick the "Show" check box to temporarily hide the attributes and view the original image.

Un-tick the individual attribute check boxes if that information is not required on the photo.

When you're happy with the result, click the Save button in the toolbar to save the image as a new file. We do not recommend overwriting the original file unless you already have a backup or do not wish to keep the original.

Note: The attributes are written directly onto the image and cannot easily be removed once saved.

Taking Photos

If your device is equipped with a front-facing camera you can take a photo and have it annotated automatically.

Obtaining Location

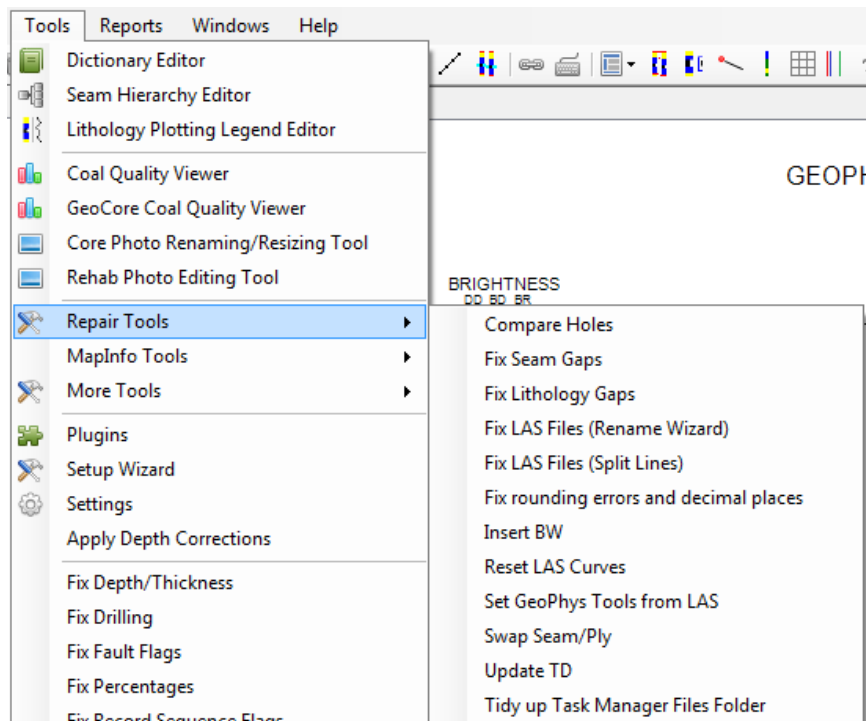
If your device is equipped with a compatible GPS (or similar location device) you can click the “Get Current Location” button to obtain the current coordinates.

Note: Accuracy of location and conversion to current coordinate system cannot be guaranteed. These should be treated as approximate and should not replace proper surveyed coordinates.

Other Tools

Repair Tools

The repair tools menu contains a number of functions for dealing with common data problems.



Compare Holes

This will compare two holes and list any differences.

Fix Seam Gaps

This will fill any single row seam gaps with the seam name above or below the unit where those units are the same (except UN)

Fix Lithology Gaps

Fix lithology gaps by inserting NR records

Fix LAS Files (Rename Wizard)

Provides various options for renaming LAS files and updating the WellName.

Fix LAS Files (Split Lines)

This will re-format a LAS file where the columns spill over onto the next row.

Fix rounding errors and decimal places

This will round all lithology depths and thicknesses to the current decimal place setting and fix any rounding errors. This will not proceed if there are any depth gaps/overlaps greater than 0.01m

Insert BW

This will insert a zero thickness row for BW. This is not CoalLog recommended practice but is required by some systems/organisations.

Reset LAS Curves

Reset LAS curves to default selection

Set GeoPhys Tools from LAS

This function will update the GeoPhys tools in the hole status sheet based on the curve information in the LAS header.

Swap Seam/Ply

This function simply swaps the values in the Seam and Ply columns.

Update TD

Updates the TD (Total Depth) in one of several ways:

Updates the header TD to match the lithology or LAS TD, or appends an NR record to lithology to match the header TD

Auto (LAS/Lith) – Use the greater of LAS or Lith TD

LAS – Update header TD to match LAS TD

Lith – Update header TD to match Lith TD

Header – Retain header TD (used in conjunction with Insert NR function below)

Force – Update the TD even if the header TD is greater

Insert NR's – Append an NR record to lithology to match the new TD

Tidy up 1point Desktop Files folder

This function will re-organise your 1point Desktop Files folder and related Folder settings. The default folder settings place a lot of customisation related files into the 1point Desktop Files folder. This can get quite messy so this function will break these files up into separate folders for things like Dictionary Files, Settings, Logs, Layouts etc.

This process cannot be reversed automatically, if you decide to go back you will have to manually change the folder settings and move the related files.

MapInfo Tools

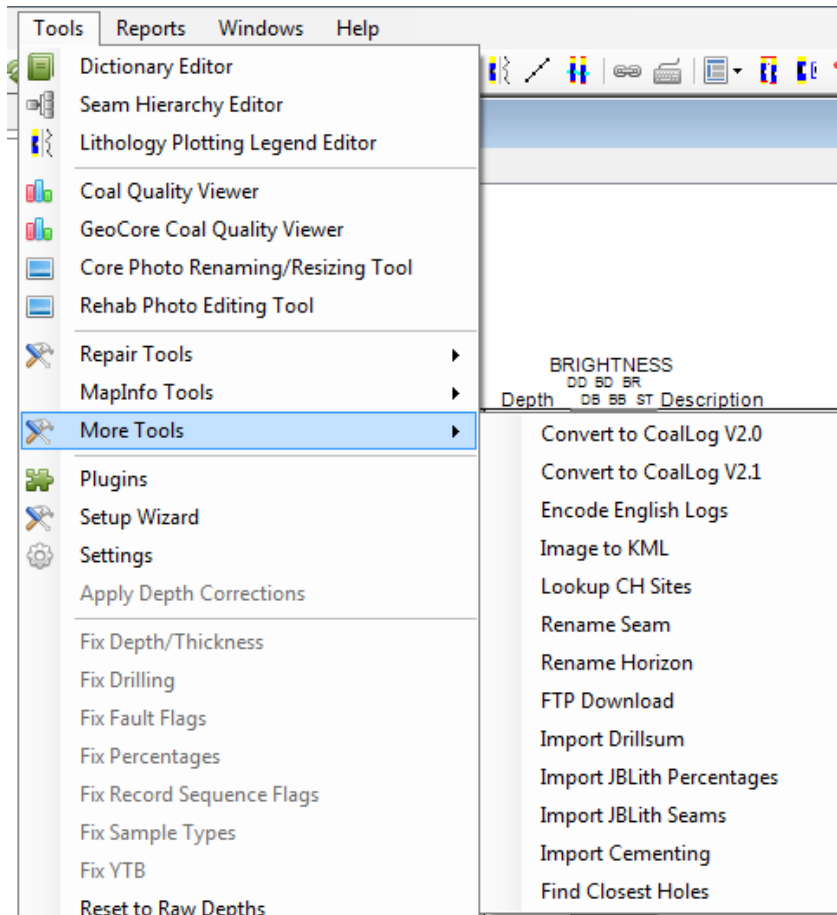
Uses the MapInfo Universal Translator to convert various file types

DXF to TAB

SHP to TAB

More Tools

The More Tools menu contains various functions for importing and converting data.



Convert to CoalLog V2.0/V2.1

This function will convert selected logs from CoalLog V1.x to CoalLog V2.0 or V2.1.

This is a one way conversion and cannot be reversed, we therefore recommend backing up your original V1.x files prior to conversion and/or saving the resulting V2.x files to a different filename or location.

The main difference between the two versions is additional drilling sheets in V2.x. Most of our internal testing has been with V1.x so some 1PD functionality may not function as expected with V2.x logs.

To convert logs:

1. Load your V1.x logs as normal
2. Click Select All from the Edit menu
3. Go to Tools, More Tools, Convert to CoalLog V2.x

This will convert all the logs but doesn't save them immediately.

You then have a few options:

1. Click Save All to overwrite your existing logs with the new V2.x versions (make sure you have a backup of the original logs)
2. Click File, Save as to save each log individually to a new filename/folder.
3. Click File, Export, CoalLog Excel Logs to save all logs to a new folder

Encode English Logs

This function attempts to encode lithology from English log descriptions. It is currently designed for a specific format but may be expanded later to support other formats.

Image to KML

Plots a 2D image in 3D space using a series of XYZ coordinates.

Image can be plotted as a single segment or multiple segments in order to follow a given path.

Useful for dropping seismic images into Google Earth for quick visualization.

[See also Exporting Cross Sections to Google Earth](#)

Lookup CH Sites

Rename Seam

Bulk rename a seam in selected holes

Rename Horizon

Bulk rename a horizon in selected holes

Import DrillSum

tba

Import JBLith Percentages

Tba

Import JBLith Seams

Tba

Import Cementing

Tba

Find Closest Holes

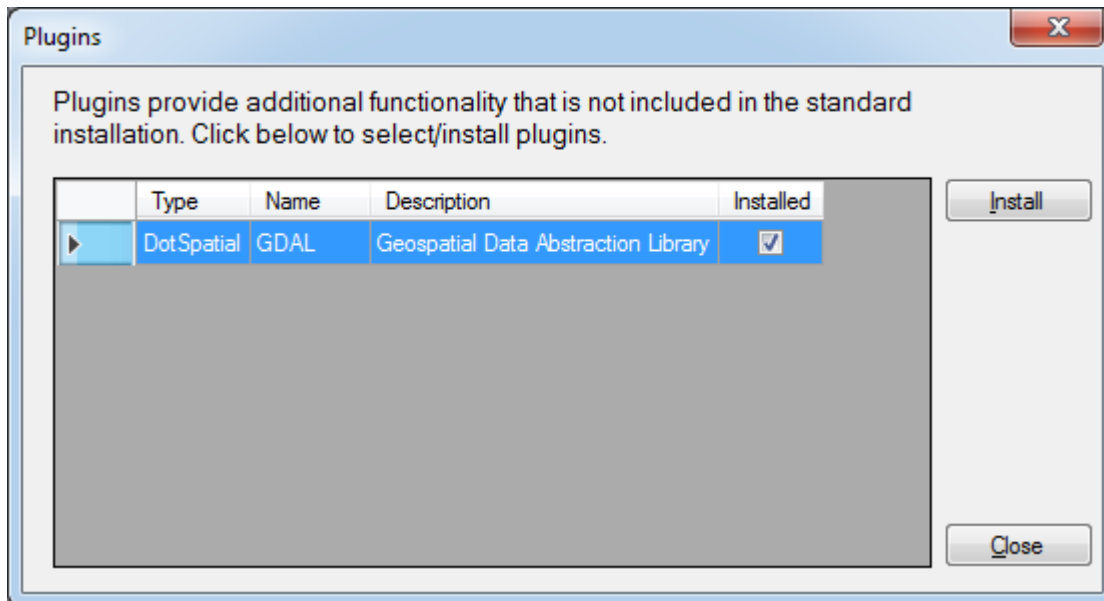
The function will find all holes within a given radius for the selected holes. This is useful for finding nearby holes for seam correlation/comparison.

FTP Download

Simple tools for downloading files from an FTP server

Plugins

Enable/Disable third party plugins for the DotSpatial mapping component. Specifically the GDAL plugin to enable loading of additional file types.



Enabling the GDAL plugin does incur some performance cost so only enable it if you need to open a specific file type that it supports. See [Performance Tips](#)

Setup Wizard

Configure 1PD settings and files by running a script (wizard) file.

The Setup Wizard allows you to provide a text file which configured specific settings and installs files for the end user. This is preferable to using the settings import/export which changes ALL settings as some settings are user specific and ideally should not be changed.

To create a Wizard file, use Notepad or your favourite text editor and enter commands as follows:

SETTING=SettingName=SettingValue

Examples:

```
SETTING=LASFiles.DefaultCurves=BRD,DENB,DENL,GRDE,GAM,BRDU,DEN(LS),DEN(SS)
```

```
SETTING=Files.GraphicLogSuffix=_detail
```

```
SETTING=Folders.GraphicLogLayoutsFolder=Z:\1PD\Layouts
```

```
SETTING=CrossSection.SaveDefaultLayoutOnExit=true
```

```
SETTING=GraphicLog.WeatheringCode=BW,BHWE
```

```
SETTING=DataEntryDefaults.HeaderDefaults.UTMZoneHemisphere=S
```

```
SETTING=DataEntryDefaults.HeaderDefaults.UTMZone=55
```

```
SETTING=DataEntryDefaults.HeaderDefaults.State=QLD
```

```
SETTING=NonCoalLog.ActivitiesSheet=false
```

```
SETTING=NonCoalLog.SampleDispatchSheet=true
```

SETTINGS=filename

Download a settings file from the server and install it

Note: You will need to supply us with the file to upload to our sever

DICTIONARY=filename

Download a custom dictionary file from the server and install it

Note: You will need to supply us with the file to upload to our sever

DOWNLOAD=sourcefile=targetfolder

Download an arbitrary file from the server and save it in the target folder.

Target folder can include tokens

Note: You will need to supply us with the file to upload to our sever

COPYFILE=sourcefolder=targetfolder

Copy all files from sourcefolder to targetfolder

SourceFolder and TargetFolder may contain tokens

UNZIP=sourcefile=targetfolder

Unzip the sourcefile to the target folder

Available tokens are:

{root}	Root Data Folder
{custom_dictionary_folder}	Custom Dictionary Folder
{patterns_folder}	Patterns Folder
{graphic_log_layouts_folder}	Graphic Log Layouts Folder
{reporting_templates_folder}	Reporting Templates Folder
{section_layouts_folder}	Section Layouts Folder
{table_layouts_folder}	Table Layouts Folder
{my documents}	Current user's Documents folder

Settings

Configure 1PD settings manually.

Filter Holes Dialog

The filter holes dialog window is used in many areas to make hole selections including [Table Windows](#), [Map Windows](#) and also [exporting data](#).

There are several options in this window, some are obvious, others require a little more explanation.

- All Holes
All loaded holes (all holes loaded in 1point Desktop and displayed in the holes list)
- Selection
Selected holes (all holes selected with a tick in the holes list)
- Filters
Hole selection based on an existing saved filter (see below)
- Table Windows
Selection based on an existing table window
- Section Windows
Selection based on an existing section window
- Map Windows
Selection based on an existing map window
 - Can also be restricted to the holes currently in view

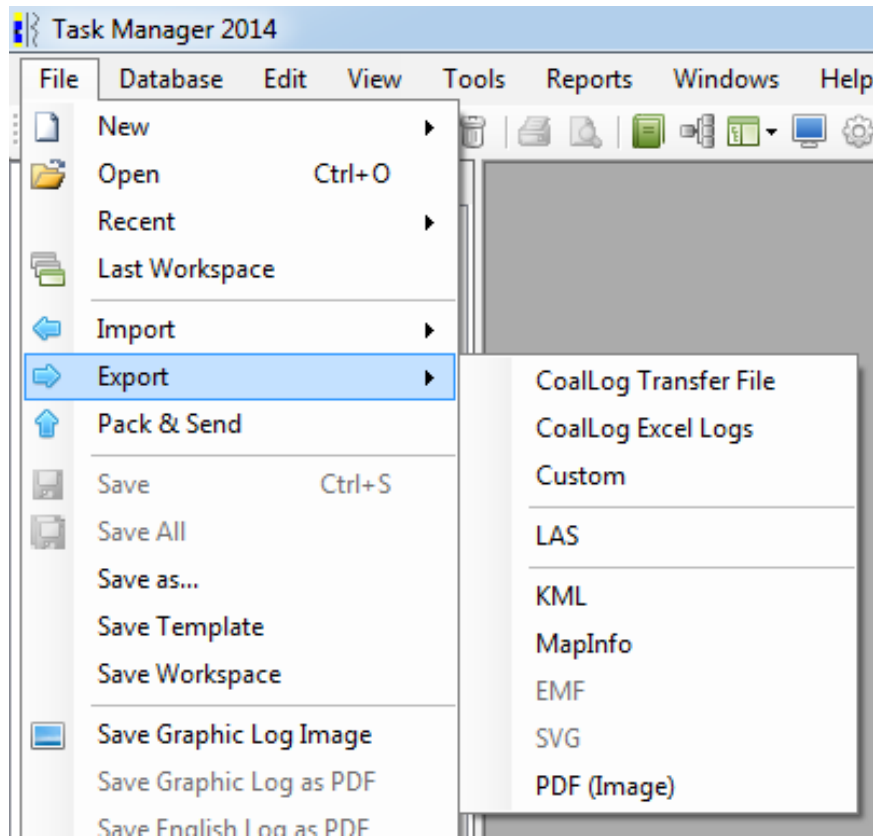
Additional Filters

After making the base selection above, additional filters can also be applied to further refine the selection. Currently these filters are restricted to a few basic parameters but this list will be expanded to include all data fields.

To save these additional filter settings, enter a title in the box provided and tick the “New Filter” box. This filter will then be saved and appear in the Filters selection above the next time to need to make a selection.

Exporting Data

Data can be exported in various forms the most common being the CoalLog Transfer File:



CoalLog Transfer File

Exports one or more holes to a collection of CSV files as specified by the CoalLog standard. I.e. one csv file for headers, one for lithology, one for drilling etc. Refer to the CoalLog standard for more details. Some additional columns can also included that are not part of the standard and their column headings can be prefixed with the default/recommended prefix being “Custom_”

For Peabody/GeoCore users, the “Exclude holes based on model flag” option allows you to exclude holes that are flagged as such in the database.

Options

Include Custom Columns

Includes custom columns that may have been imported.

Prefix

Filename prefix for each csv file (usually project name etc)

Exclude holes based on model flag (Peabody/GeoCore only)

Don't export holes where their exclude model flag is set

Include un-corrected depths

Include columns for un-corrected depths

Transformations

The following transformations can be applied to the export data. These may be required in certain circumstances depending on your target audience.

BW on separate zero thickness row

This option creates a separate lithology row for the Base of Weathering horizon. The CoalLog specification states that horizons do not need to be on a zero thickness row however some modelling packages may require this.

Zero Thickness Row

Inserted BW row must have zero thickness

Move BW to Seam

Move's any BW codes from horizon column to seam column

Generate combined strat/seam column

This option creates an additional column with the Seam and Horizon columns combined/concatenated.

Flag KL > 5% (default is 5%)

This option will create an additional column with a flag set where a seam contains more than 5% core loss. The actual percentage can be modified.

Convert to...

Convert coordinates to specified datum

Currently supports AMG84, MGA94, MGA2020 and Local Grid

Split RMU & Defects

Splits the RMU_Defects csv file into two separate csv files, one for RMU and one for Defects

Fix Record Sequence Flags

Fix record sequence flags prior to export

CoalLog Version

Allows you to specify the CoalLog version used for the export. All selected holes will be converted to the specified version prior to export. Logs can only be upgraded to a higher version, not downgraded to a lower version. I.e. if one or more logs are already V2.1, your only options will be V2.1 or V3.0

After the export, the logs will remain in their original version.

File Separation

None – Generates a single csv file for each data type (I.e. Headers, Lithology etc)

Project – Generates a separate csv file for each project/data type.

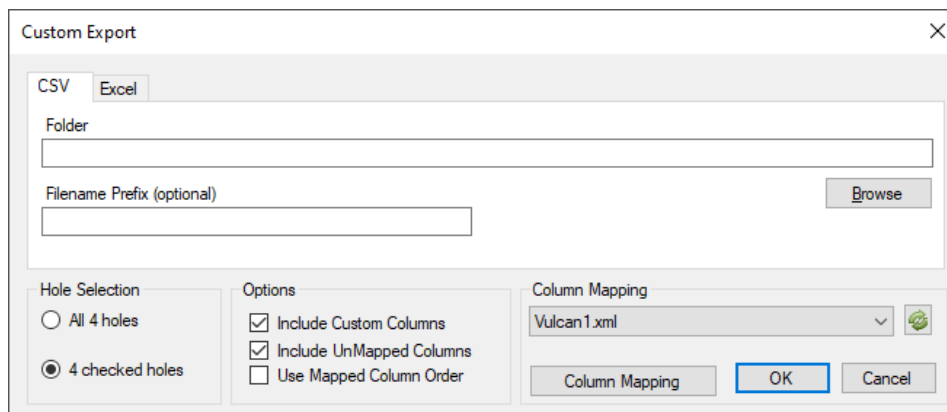
Hole – Generates a separate csv file for each hole/data type.

CoalLog Excel Logs

This function exports one or more holes individually as an Excel file. Each file represents one hole with tabs/sheets for the various data types (I.e. Hole Status, Lithology, Drilling etc). The format is the default 1PD for loading/saving data to file and is identical to the CoalLog V1.x recommended logging sheet (digital data entry).

Custom Exports

Custom Exports allow you to map CoalLog columns to other column headings. Typically this is used to export data to external systems such as Vulcan. Two Vulcan mapping files are provided as an example and can be modified as required.



Exports can be as a single Excel file with multiple sheets or multiple CSV files. When exporting to CSV files you select the folder where the files are to be saved and an optional prefix. The CSV filename will comprise of the prefix followed by the sheet name.

Include Custom Columns

Custom Columns can be included but are only relevant when working with imported data. When data is imported, any non-standard/CoalLog columns are retained as “Custom Columns”. These cannot be edited within 1PD although they can be displayed on graphic logs. When you subsequently export the holes, these custom columns can also be included.

Include UnMapped Columns

UnMapped Columns are CoalLog columns that do not have a column mapping provided. These can be included/excluded as required.

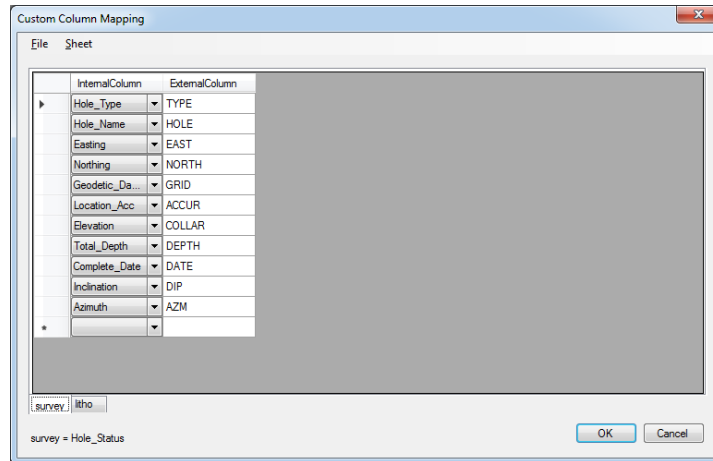
Use Mapped Column Order

This option instructs the export to arrange the columns in the order they appear in the mapping file, rather than the default column order.

Column Mapping

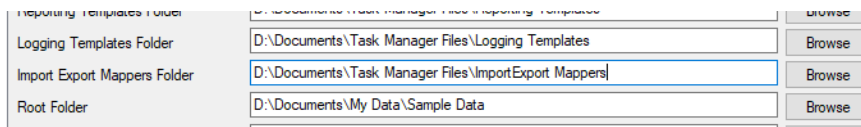
Column Mapping files describe two way mapping between internal 1PD/CoalLog columns and external columns and can be used for both importing and exporting data.

Column Mapping can be configured by clicking the Column Mapping button, however it is often easier to create the mapping manually by editing a csv file.



Column Mapping can be customised by clicking the “Column Mapping” button.

Mapping files can be found in your 1point Desktop Files folder, usually under “ImportExport Mappers”. Check the location via Tools, Settings, Folders, Import Export Mappers Folder:



Folder Location for Import Export Mapper files

The mapper file contains four (4) columns:

- InternalSheetName** The 1PD/CoalLog data source (I.e. Lithology)
- ExternalSheetName** The output file sheet name (only for Excel files, not required for CSV)
- InternalColumnName** The 1PD/CoalLog column name (I.e. Litho_Type)
- ExternalColumnName** The output file column name (I.e. LITHO)

Columns that are not required can either be left blank or removed entirely.

	A	B	C	D
1	InternalSheetName	ExternalSheetName	InternalColumnName	ExternalColumnName
2	Lithology	Sheet1	Hole_Name	Hole_Id
3	Lithology	Sheet1	Project	Project_Id
4	Lithology	Sheet1	From_Depth	Depth_From
5	Lithology	Sheet1	To_Depth	Depth_To
6	Lithology	Sheet1	Recovered_Thick	Recovered_Thick
7	Lithology	Sheet1	UnCorrectedFromDepth	
8	Lithology	Sheet1	UnCorrectedToDepth	
9	Lithology	Sheet1		Record
10	Lithology	Sheet1	Record_Seq_Flag	Record_Seq_Flag
11	Lithology	Sheet1	Seam	Seam
12	Lithology	Sheet1	Ply	Ply

Example Mapper File

acquire Export

The acquire export is a simplified custom export which exports Collar, Lithology, RMU's and Defects.

A translation file is required which contains three columns:

Sheet – CoalLog sheet to export (Collar, Lithology, RMU or Defects)

CoalLogColumn – The CoalLog column within the selected sheet

acquireColumn – The translated/mapped acquire column heading

The columns headings in the translation file are not important, the position is important.

	A	B	C	D
1	Sheet	CoalLog	acquire	
2	Lithology	From_Depth	GEOLFROM	
3	Lithology	To_Depth	GEOLTO	
4	Lithology	Recovered_Thick	GEOLTHK	
5	Lithology	Litho_Type	LITH	
6	Lithology	Adjective_1	ADJ1	
7	Lithology	Adjective_2	ADJ2	
8	Lithology	Adjective_3	ADJ3	
9	Lithology	Adjective_4	ADJ4	
10				

Example of an acquire Mapping/Translation file

The mapping file **MUST** at least contain the following acquire columns:

	A	B	C	D
1	Sheet	CoalLog	acquire	
2	Lithology	From_Depth	GEOLFROM	
3	Lithology	To_Depth	GEOLTO	

A PRIORITY column will also be added automatically.

LAS

This function exports selected loaded LAS data as a single CSV file

KML

This function exports either a list of hole locations or the current cross section as a KML file

MapInfo

Exports holes, cross sections or map layer to MapInfo

EMF

Exports cross section or graphic log view to EMF file

SVG

Exports cross section view to SVG file

PDF (Image)

Exports cross section or graphic log view to a PDF file (as an embedded image)

Combining Windows

You can combine windows of compatible types into a single window. For example, if you have created several table windows with various hole selections you can combine them into a single window.

From the Windows menu select Combine Windows.

Tick the windows you want to combine (right click for some quick selections)

Choose the type of new window you want to create with the combined selection

Tick the “Close original windows” box if you don’t want to keep the old windows open

Click the OK button.

Appendix A - Lithology Functions

Special functions can be used to display calculated values in table and map windows or for creating contours. Available functions are as follows:

Depth Functions

Depth functions return the depth to the top or base from the top of the hole (i.e. overburden)

`baseofseam(seam)` – Base (to) depth of selected *seam*

`baseofhorizon(horizon)` – Base (to) depth of selected *horizon*

`topofseam(seam)` – Top (from) depth of selected *seam*

`topofhorizon(horizon)` – Top (from) depth of selected *horizon*

`overburden(seam)` – *Same as top of seam, included for simplicity*

Elevation Functions

Elevation functions are essentially the same as the above depth functions subtracted from the hole elevation. These are typically used for generating structure contours.

`baseofseamrl(seam)` – Base elevation of selected *seam*

`baseofhorizonrl(horizon)` – Base elevation of selected *horizon*

`topofseamrl(seam)` – Top elevation of selected *seam*

`topofhorizonrl(horizon)` – Top elevation of selected *horizon*

Thickness Functions

Thickness functions return the thickness of a given interval.

`seamthick([seam1,seam2,seamN])` – Total thickness of selected seams

`horizonthick(horizon)` – Thickness of selected horizon*

`coalthick([seam])` – Sum thickness of CO units for selected seam or entire hole if seam omitted

`interburden([seam1,seam2,seamN])` – Sum thickness of units between selected seams

`overburden([seam1,seam2,seamN])` – Thickness of material above the first seam(or top of first seam)

`totalburden([seam1,seam2,seamN])` – interburden plus overburden

`stripratio([seam1,seam2,seamN])` – totalburden divided by seamthick

For all above functions, seams are optional and default is all seams

interburden is calculated as the sum of recovered thickness not allocated to a seam between the top depth of the first seam and the base depth of last seam.

Other Functions

`seams([seam])` – Returns a list of all seams in the hole

`samples()` – Returns a list of all samples in the hole. The sample list is abbreviated where possible using the sample number notation convention.

`cq(seam,parameter)` – Returns the weighted average of the selected raw coal parameter for the given seam. i.e. `cq(VU,ASH)`

`calc(equation)` - Performs simple calculations such as addition, subtraction, multiplication and division.

Standard order or precedence applies, i.e. division first, then multiplication, subtraction, addition.

Wildcards

For each of the above functions, seam and horizon can be a specific seam/horizon code or a wildcard (*) can be used to select multiple related units. I.e. `V*` would select V, VL, VU, VL1, VL2 etc

Labels

Any custom function can be prefixed with a label which will be used as the column heading in a table view.

Syntax is: *label=function* where *label* is your nominated label and *function* is any combination of the above functions.

Examples

`BaseVU=baseofseamrl(vu)`

Creates a custom label/column which calculates the base RL of the VU seam and calls it BaseVU

`BaseOfV=baseofseam(v*)`

Creates a custom label/column which calculates the base depth of any seam starting with V and calls it BaseOfV

`NonCoal=calc(seamthick(vu)-coalthick(vu))`

Creates a custom label/column which calculates the thickness of the VU seam and subtracts the sum thickness of CO units within VU and calls it NonCoal

Appendix B - Conventions

File Naming Conventions

Drill Logs

1point Desktop does not require any strict naming convention for hole names, however the following is recommended. *Note that this is not a CoalLog convention.*

PPHHHHS

PP=Prefix – 2 letter prefix usually indicating the area where the hole was drilled

HHHH=Hole Number – (At least) 4 digit hole number

S=Suffix – Optional combination of letters and numbers indicating type of hole

C – Cored/Partly Cored hole

C4 – Large diameter (4 inch)

FC – Fully cored

R – 1st Redrill

R2 – 2nd redrill

R3 – 3rd redrill

Examples

AA1234 – Chip hole

AA1234R – Redrilled chip hole

AA1234C – Core hole

AA1234CR – Redrilled core hole

Drill log filenames should match the hole name. I.e. AA1234C.xlsx

LAS Files

1point Desktop can be configured to recognise other suffixes but the default (and recommended) settings are shown below. The most common types are _GN – General Log (typically 10cm interval) and _DA,_DB...Dn – Detail Logs (typically 1cm interval), other common types are GV/VT/VP for Verticality, _DEN for density, _SON for Sonic etc

Detail logs were often used when file size was a restriction. Rather than creating a single log for the entire hole at a 1cm interval, a General log was generated with a 10cm interval and separate Detail logs were generated just for the coal seams with 1cm intervals. These days, a general log at 1cm is more common and detail logs are not required.

PPHHHHS_LL.las

PPHHHHS = Hole name as specified above.

LL = 2 letter suffix indicating log type

GN = General Log

DA, DB, DC...DZ = Detail logs

RN = General log – logged thru rods

RA, RA, RC...RZ (excluding RN) = Detail logs – logged through rods

Examples

AA1234CR_GN.las

AA1234CR_RA.las

Core Photos

Core photos should be named with the hole name and the from/to depths applicable to that photograph. This enables 1point Desktop to quickly locate the photo for a specific depth.

A Core Photo Renaming Tool is provided in 1point Desktop to quickly and easily renaming photos to this convention.

Note that depths are generally uncorrected drillers depths so there may be some discrepancy between these and geophysically corrected depths in the log.

Format:

holename_FF.FF-TT.TT.jpg

Where FF.FF = From Depth and TT.TT = To Depth

The number of decimal places is not enforced but 2 or 3 is normal.

Examples:

AA1234C_20.03-20.53.jpg

AA1234C_145.50-146.00.jpg

Sample Number Notation Convention

Sample numbers should be numeric only and preferably sequential especially if they are likely to be combined later for composite testing.

Sample numbers can be prefixed with non numeric characters and/or suffixed with “_GT” to denote Geotech samples or the hole number. However this is not necessary as the sample type will show that.

When a group of sample numbers (sample range) is displayed it is generally converted to a simplified/abbreviated notation where possible. See examples below.

Therefore using prefixes or anything other than purely numeric sample numbers may cause issues.

Sample Numbers	Abbreviated Notation	Comments
1000,1001,1002,1003,1004	1000_4	
	1000_04	Optional leading zero for readability
1000,2008,2009,2010,2011,2012	1000,2008_12	
	1000+2008_12	Plus can be used in place of comma
12345,12348,12357,12358,12359	12345,12348,12357_9	
	12345,48,57_59	Common prefix (123) can be dropped
	12345+48+57_59	Plus used in place of comma

As of version 1.0.672 the characters used to determine sample ranges can be defined via settings.

Under Tools, Settings, Coal Quality there are two new settings:

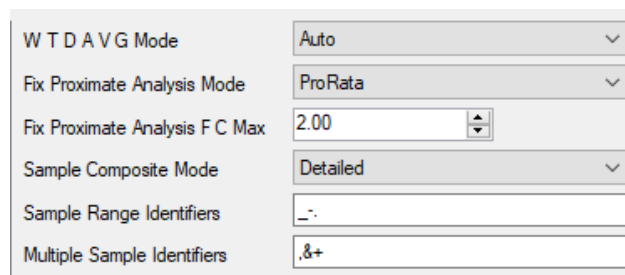
Sample Range Identifiers

The sample ranger identifiers are the characters that can denote a range of samples. I.e. 1000_4 uses the underscore character to denote the range 1000 to 1004. Any one character in this list can be used. The default characters are underscore, hyphen and period (full stop).

Multiple Sample Identifiers

The multiple sample identifiers are the characters that can denote two or more separate samples or ranges of sample. I.e. 1000,2008_12 uses the comma to denote the range 1000 and 2008 to 2012.

*NOTE: Multiple sample identifiers are not used when the Sample Composite Mode is set to **Simple**. In **Simple** mode only the first and last sample are used.*



The screenshot shows a settings panel with the following configurations:

- W T D A V G Mode: Auto
- Fix Proximate Analysis Mode: ProRata
- Fix Proximate Analysis F C Max: 2.00
- Sample Composite Mode: Detailed
- Sample Range Identifiers: _.-
- Multiple Sample Identifiers: ,&+

Folder Naming Conventions / Folder Structure

1point Desktop can be configured to work with a wide variety of folder structures. This is accomplished by using a series of tokens in the folder settings. Refer to [Folder Settings](#) for more information or [Folder Configuration Examples](#) for more examples.

Folder Configuration Examples

The folder configuration can be difficult to get right but is worth the effort and necessary for automated loading of LAS files, core photos and rehab photos.

The following are more examples to help explain how this works.

Example 1 – No tokens

In this example, all data is stored in one folder so no token translation is required.

Folder Configuration

Root Folder	C:\My Data
LAS Folder	C:\My Data\Drilling\LAS

Drill Log

Hole Status																							
Drilling Lithology Water Obs. Defects Point Loads Activities Samples Seams Horizons Sample Dispatc																							
Hole Status Geologists Casing Cementing																							
Selected	Company	Project	Hole_Name	Lease_No	Site_Id	Hole_Type	Data_Status	Hole_Purpose	Hole_Purpose	Redrill_Of	Geodetic_Dat	UTM_Zone	Height_Datum	Location_Acc	Easting	Nothing	Elevation	Inclination	Azimuth	Survey_Comp	Survey_Date	Start_Date	Complete_Dat
<input type="checkbox"/>	TP	AB2345	EPC1234			R					55			0	0	0					8/06/2017	9/06/2017	

Translation

No translation is required, so the LAS folder simply points to:

C:\My Data\ Drilling\LAS

Example 2 – Simple token translation

In this example we simple translate the root folder and hole name to obtain the correct folder.

Folder Configuration

Root Folder	C:\My Data
LAS Folder	{Root}\Drilling\LAS\{hole}

Drill Log

Hole Status		Drilling	Lithology	Water Obs.	Defects	Point Loads	Activities	Samples	Seams	Horizons	Sample Dispatc													
Hole Status		Geologists	Casing	Cementing																				
	Selected	Company	Project	Hole_Name	Lease_No	Site_Id	Hole_Type	Data_Status	Hole_Purpose	Hole_Purpose	Redill_Ot	Geodetic_Dat	UTM_Zone	Height_Datum	Location_Acc	Easting	Northing	Elevation	Inclination	Azimuth	Survey_Comp	Survey_Date	Start_Date	Complete_Dat
	<input type="checkbox"/>	TP	AB2345	EPC1234			R					55			0	0	0					8/06/2017	9/06/2017	

Translation

{root} translates directly to “C:\My Data”

{hole} translates directly to “AB2345”

Therefore, the full translation is:

C:\My Data\Drilling\LAS\AB2345

Example 3 – Lease_Name translation

This example is a little more complex as we are using the dictionary to translate the Lease_No code to a Lease_Name

Folder Configuration

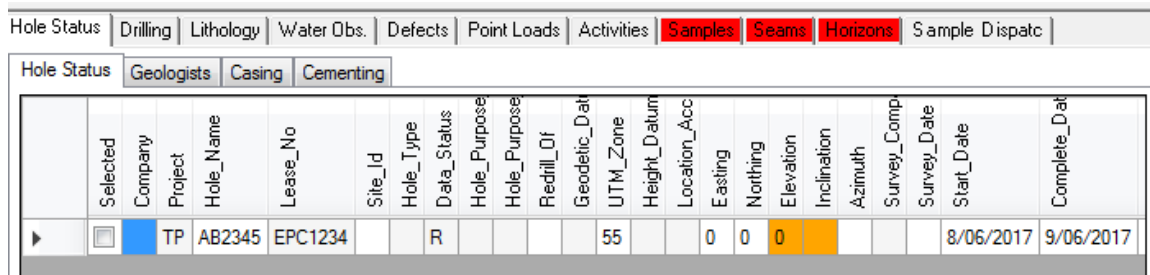
Root Folder	C:\My Data
LAS Folder	{root}\{lease_name}\Drilling\LAS\{hole}

Dictionary

Category	Code	Short Description
Lease_No	EPC1234	EPC1234 Woop Woop
Project	TP	Test Project

Note: The project code is not required for this example but is included for consistency.

Drill Log



Selected	Company	Project	Hole_Name	Lease_No	Site_Id	Hole_Type	Data_Status	Hole_Purpose	Redill_Dt	Geodetic_Dat	UTM_Zone	Height_Datum	Location_Acc	Easting	Northing	Elevation	Inclination	Azimuth	Survey_Comp	Survey_Date	Start_Date	Complete_Dat
<input type="checkbox"/>		TP	AB2345	EPC1234		R					55			0	0	0				8/06/2017	9/06/2017	

Translation

{root} translates directly to “C:\My Data”

{lease_name} translates the Lease_No “EPC1234” (via the dictionary) to “EPC1234 Woop Woop”

{hole} translates directly to “AB2345”

Therefore, the full translation is:

C:\My Data\EPC1234 Woop Woop\Drilling\LAS\AB2345

Alternate Folder

If the folder name does not match the code or description you can use the Folder parameter in the dictionary to define it:

Category	Code	Short Description	Folder
Lease_No	EPC1234	EPC1234 Woop Woop	Woop Woop
Project	TP	Test Project	

If Folder is not defined, Short Description is used. However, in this case we have defined the folder as “Woop Woop” therefore the translation would be C:\My Data\Woop Woop\Drilling\LAS\AB2345

Example 4 – Completion Date

This example is similar to the last one plus we translate the year part of hole completion date

Folder Configuration

Root Folder	C:\My Data
LAS Folder	{Root}\{Project_Name}\{Complete_Date,YYYY}\LAS\{hole}

Dictionary

Category	Code	Short Description
Lease_No	EPC1234	EPC1234 Woop Woop
Project	TP	Test Project

Drill Log

Hole Status		Drilling	Lithology	Water Obs.	Defects	Point Loads	Activities	Samples	Seams	Horizons	Sample Dispatc													
Hole Status		Geologists	Casing	Cementing																				
	Selected	Company	Project	Hole_Name	Lease_No	Site_Id	Hole_Type	Data_Status	Hole_Purpose	Hole_Purpose	Redrill_Of	Geodetic_Dat	UTM_Zone	Height_Datum	Location_Acc	Easting	Northing	Elevation	Inclination	Azimuth	Survey_Comp	Survey_Date	Start_Date	Complete_Dat
▶	<input checked="" type="checkbox"/>	TP	AB2345	EPC1234			R					55			0	0	0					8/06/2017	9/06/2017	

Translation

{root} translates directly to “C:\My Data”

{project_name} translates the project code “TP” (via the dictionary) to “Test Project”

{complete_date,YYYY} translates the year component of the hole completion date to “2017”

{hole} translates directly to “AB2345”

Therefore, the full translation is:

C:\My Data\Test Project\2017\ LAS\AB2345

Appendix C – Supported File Types

The following file types are supported by 1point Desktop

Category	File Type	Description
Drill Data	.csv/.zip	CoalLog standard transfer format
Drill Data	.xlsx	CoalLog standard Excel file / 1PD default
Drill Data	.xls	1PD2008 Excel Drill Log File
Drill Data	.dbf	LogCheck .dbf file
Header / Lithology	.csv/.xls/.xlsx	Header & Lithology data in Vulcan format
Header / Lithology	.csv/.xls/.xlsx	Header & Lithology data in Minex format
Header / Lithology	.csv / .dbf	Header & Lithology data in LogCheck .dbf or .csv format
Lithology	.dat	Lithology data in ProLog .dat format (limited)
Geophysics	.las	Standard ASCII LAS file
Geophysics	.csv/xls/xlsx	LAS data in tabular format
Coal Quality	.csv/xls/xlsx	Data Summary (various formats)
Survey	.csv/xls/xlsx	TRB Survey Data
Grid	.csv/xls/xlsx	Gridded horizon data (Vulcan export)
Grid	.grd	Gridded horizon data (Grid format)
X,Y, Thick	.csv/xls/xlsx	X, Y and thickness data for contouring
Image	.jpg	Image file (usually core photos)
Image / Map Layer	.bmp, .emf, .exf, .gif, .ico, .jpg, .mbp, .png, .tif, .wmf	Image files as map layers
Map Layer	.shp	Shape file
Map Layer	.bgd	Raster file
Workspace	.tmw	1PD workspace file
Layout	.xml	1PD graphic log layout file
Wizard	.wizard	1PD configuration wizard file

Most of these formats have been derived from available documentation and/or examples provided by customers and should not be assumed to represent official format specifications.

Drill Data

CoalLog Standard Transfer Format

This is a standard format consisting of a collection of CSV files, one for each type of data. Refer to the CoalLog standard for more details.

CoalLog Standard Excel Format

This is an Excel template as prescribed by the CoalLog standard and is the default format for loading and saving drill data in 1PD

TM2008 Drill Log Format

This is the Excel template used by a previous version of 1PD which can be imported into 1PD and converted to the CoalLog template and dictionary.

If you have data in another format please contact us as we may be able to provide additional importers/converters.

Geophysics

LAS files

Standard ASCII LAS file format V1.x or V2.0

Refer to:

[LAS File Settings](#)

[Loading LAS files](#)

[LAS file naming convention](#)

Excel/CSV files

LAS data in tabular format

First row should contain column headings, the first column must contains the hole name, the second column depth and curve mnemonic from column 3 onwards. The file may contain multiple holes.

Column	Type
Hole_Name	Text
Depth	Numeric
Value1	Numeric
Value2	Numeric
ValueN	Numeric

Example

Hole	Depth	BRDU	DENL	GRDE
AA1234	107.000	-999.25	-999.25	-999.25
AA1234	106.900	17663.56	2.37	92.53
AA1234	106.800	18632.73	2.49	94.72

Vulcan Header/Lithology Data

1PD supports two types of Vulcan data as described below:

Note: V1 and V2 do not indicate any particular version of CoalLog or Vulcan, they are simply two different formats observed from client supplied data.

Header (V1)

Column	Type	Description
Hole	Text	Hole name
Site	Text	Site name
East	Numeric	Easting
North	Numeric	Northing
CrI	Numeric	Collar Reduced Level / Elevation
Td	Numeric	Total Depth

Lithology (V1)

Column	Type	Description
Hole	Text	Hole name
Top	Numeric	From/Top Depth
Base	Numeric	To/Base Depth
Tk	Numeric	Thickness
Strat	Text	Strat/Seam Name
Frm	Text	Formation Name
Samnum	Text	Sample Number
Rock	Text	Rock / Litho Type
Perc	Numeric	Percentage
Litadj1 / Litadj	Text	Adjective 1
Litadj2	Text	Adjective 2
Litadj3	Text	Adjective 3
Shade	Text	Shade
Hue / Col1	Text	Colour / Hue
Tint	Text	Tint
Grain	Text	Grain Size
weath	Text	Weathering

Header (V2)

Column	Type	Description
Hole / HoleId	Text	Hole name
Proj	Text	Project Name
East	Numeric	Easting
North	Numeric	Northing
RI / Collar	Numeric	Collar Reduced Level / Elevation
Totdep / depth	Numeric	Total Depth
Srvmet / accur	Text	Survey/Location Accuracy
Grid	Text	Geodetic Datum
Dip	Numeric	Dip / Inclination
Azm	Numeric	Azimuth
Date	Date	Hole Completion Data

Holtyp / type	Text	Hole Type
Holpur	Text	Hole Purpose
Holesz	Numeric	Hole Size
Coresz	Numeric	Core Size
Geopco	Text	Geophysics Company
Gphdep	Numeric	Geophysics Depth (not used)
Gphrun	Text	Logs Ran
Logsts	Text	unknown

Lithology (V2)

Column	Type	Description
Hole / Holeid	Text	Hole name
Topdep	Numeric	From/Top Depth
Botdep / Depth	Numeric	To/Base Depth
Thick	Numeric	Thickness
Seam	Text	Strat/Seam Name
Horizn	Text	Horizon/Formation Name
Fldsam	Text	Sample Number
Littyp / Rock	Text	Rock / Litho Type
Litper	Numeric	Percentage
Litqu1 / Lith1	Text	Adjective 1
Litqu2 / Lith2	Text	Adjective 2
Litqu3 / Lith3	Text	Adjective 3
Shade	Text	Shade
Hue	Text	Hue
Colour	Text	Colour
Grain / Grnsiz	Text	Grain Size
Weath	Text	Weathering
Rokstr	Text	Hardness
Cont	Text	Continuation
Corstt	Text	Core State (not used)
Inttype	Text	Interval Type (not used)
Mstate	Text	Mech State

Note: Internally the above lithology is initially imported into a TM2008 style drill log format, then converted to the 1PD/CoalLog format.

In V2 format, additional columns not listed above are added as custom/pass through columns and will be included in any exports. See [Custom Columns](#)

Seam Picks (Excel/CSV)

1PD can import seam picks and merge them with existing lithology, splitting lithology units as required.

Your seam pick file must be an Excel or CSV file with four columns as below. The actual column name are not important but the column positions are. I.e. the Hole Name must be in the first column etc.

Hole Hole Name

From From Depth

To To Depth

Seam Seam Name

The file can contain seams from multiple holes, hence the Hole Name column.

The holes must be loaded in 1PD prior to importing the seam picks.

The depths do not need to match existing lithology depths, 1PD will split existing lithology rows to accommodate the seam depths. Obviously the depths cannot exceed the existing lithology. If your existing lithology is incomplete, add an NR record of sufficient depth.

Seam Picks (.pck file)

1PD can also support importing and exporting seam pick (.pck) files. These are fixed width text files with the following format:

Hole Name – 18 Characters (left justified)

From Depth – 10 Characters (right justified)

To Depth – 10 Characters (right justified)

Seam Name – 10 Characters (left justified)

All types of seam pick files can be used with the [interval importer](#) which provides options for appending and splitting lithologies among others.

Minex Model Format

Column	Type	Description
BOREID	Text	Hole name
EASTING	Numeric	From/Top Depth
NORTHING	Numeric	To/Base Depth
ELEVATION	Numeric	Elevation/RL
TOTAL_DEPTH	Numeric	Total Depth
FROM_DEPTH	Numeric	From/Top Depth
TO_DEPTH	Numeric	To/Base Depth
THICKNESS	Numeric	Thickness
SEAM	Text	Seam Name
CLASS	Text	Seam Class (NOT USED)
ROCK_TYPE	Text	Litho_Type
INTERREL	Text	Lithology Interrelationship
PERCENT	Numeric	Lithology Percentage

Columns in bold text must appear exactly as shown. Other columns can be named different but must appear in the column position shown. I.e. BOREID must be called BOREID and be the first column. Easting can be called anything but must be in the second column.

Coal Quality

Various file formats are supported for coal quality data. Additionally columns and sheets can be mapped manually. Refer to [Loading Coal Quality data](#) for more information.

Survey

TRB Survey Data

Column	Type
Borehole ID	Text
MGA East	Numeric
MGA North	Numeric
AHD RL	Numeric
Remarks	Text
Date Surveyed	Date
Surveyor	Text

Other

X,Y,Thick

A CSV file with three columns labelled Easting, Northing and Thick or X, Y, Thick. This can be imported directly into a Map window as points. From here contours can be generated based on the Thick column.

Other CSV or Excel files can also be opened in a [generic table view](#). This allows you to map columns and import/export data such as survey data. It is currently limited to data in the hole status sheet only.

Custom Import

1point Desktop also has a Custom import/export feature whereby columns can be mapped from your Excel/CSV file to CoalLog columns for Header, Drilling, Lithology and Seam pick files

See [Custom Exports](#) and [Custom Column Mapping](#) for more information

Appendix D - Revision History

This has been moved to a separate document. Check under the Help menu.

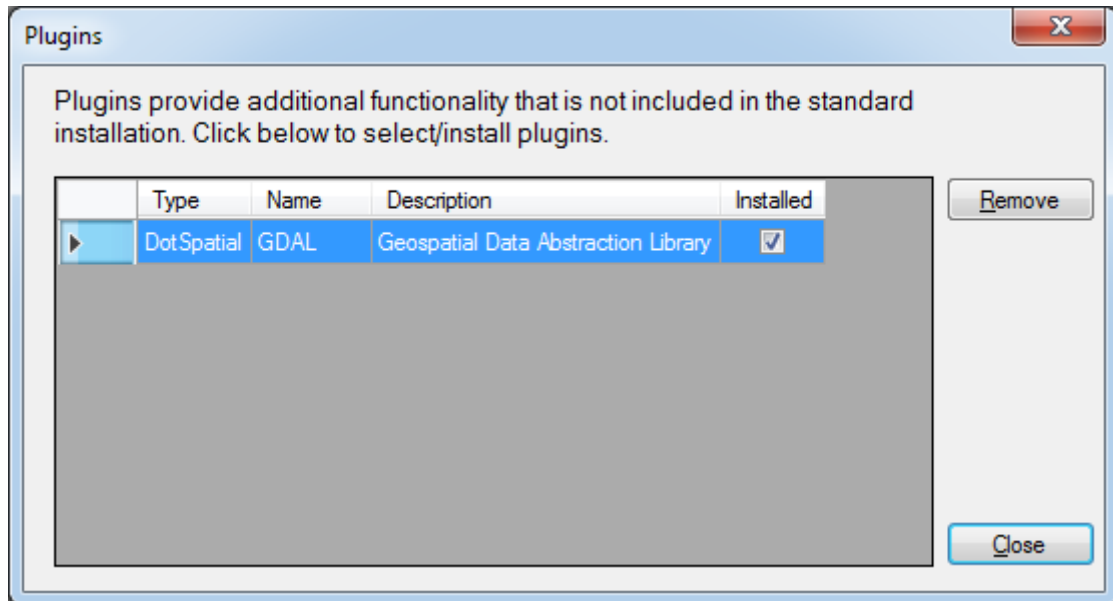
Appendix E – Performance Tips

The following tips may help to improve performance

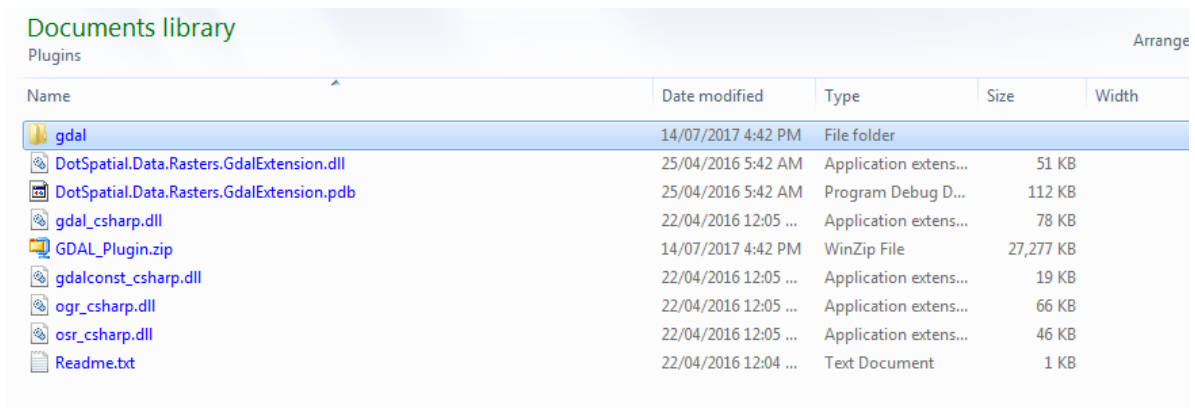
General hints and tips can be found in [Appendix G – Hints, Tips and FAQ's](#)

Disable plugins

The mapping module can use optional plugins which provide additional functionality but take time to load. If you don't need the extra functionality, disable these under Tools, Plugins for best performance.



If you encounter a problem removing the GDAL plugin, try closing 1PD and manually deleting or renaming the “gdal” folder under 1point Desktop Files/Plugins



Disable Auto Validation

When entering data in the graphic log screen the data is validated every time a value changes. This process is fairly quick but may be noticeable on slower machines. You can disable this feature by clicking on “AUTO VALIDATE” in the status bar at the bottom of the screen. Note that any validation errors will not be picked up until you either re-enable the AUTO VALIDATE feature or perform a manual validation.



CTRL SHIFT AUTOSAVE **AUTO VALIDATE**

Addendum: Performance improvements introduced in version 1.0.0.427 make this tip redundant. However if you notice any lag during validation you may still want to try disabling it.

Turn off photos in holes list

If you expand the holes list you will see any LAS files plus core photos and rehab photos. These photos are only loaded when the individual tree node is expanded. When loading many LAS files each node is expanded after the LAS files for that hole are loaded, this in turn causes the photos to be loaded which can take some time. Turning off photos will speed up LAS loading, you can turn them back on afterwards if required.

This is largely redundant now as photos are only loaded when you click on the tree node, they are not loaded automatically when the node is expanded. You may still wish to disable photos if you do not use them frequently and they are cluttering your screen.

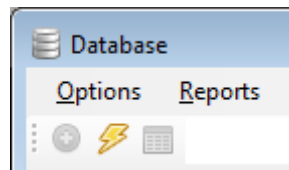
Load LAS headers only

If you just want to run a Geophysics Summary report or populate the Geophys_Log tools in the Hole Status sheet. Select the option to only load LAS headers when loading LAS files. This will load the well and curve information but not the actual data. This speeds up LAS loading slightly and uses a lot less memory when loading LAS for a large number of holes. If you need to look at the actual LAS data you can re-load the LAS for individual holes as required.

Use Quick (Partial) Load

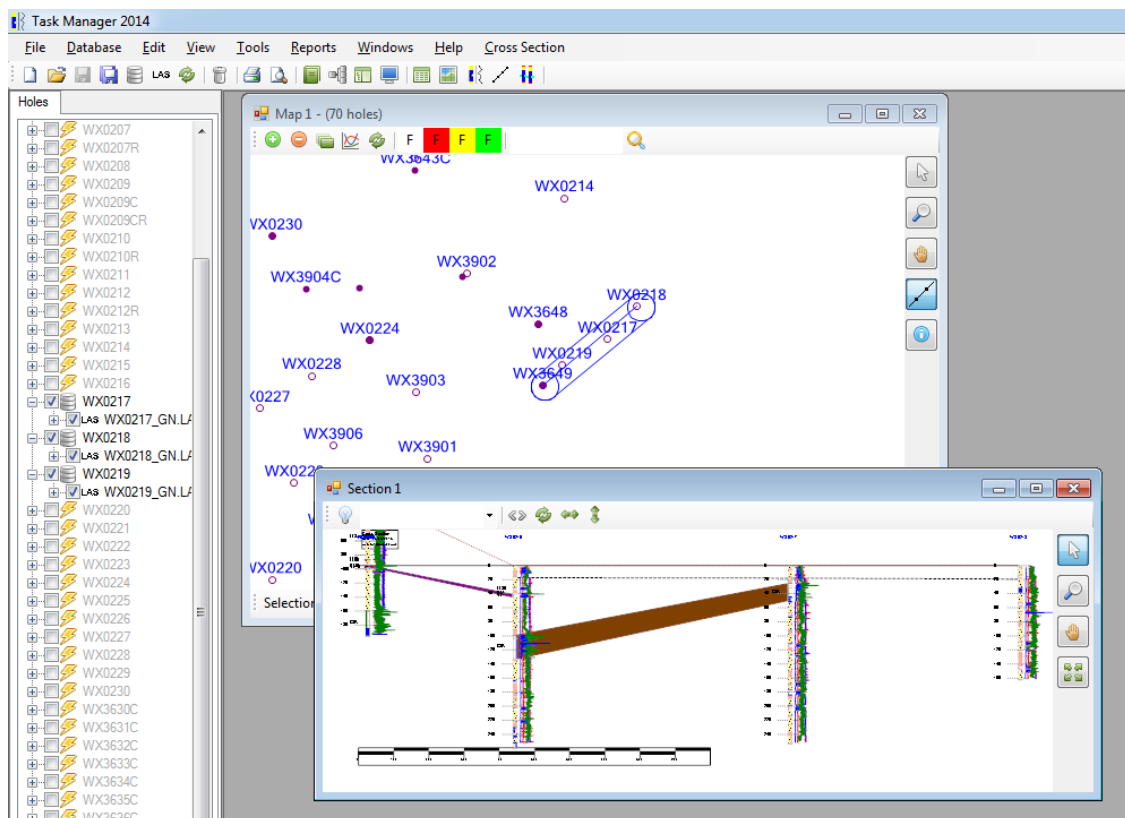
When loading holes from the database, always use the quick load option. This only loads the header information and is almost instantaneous. Additional data is then loaded later on demand. This is particularly useful when creating cross sections as you can quick load all the holes for a project, then open a map window and use the section tool to select holes. When you create the section window the selected holes are fully loaded from the database.

NOTE: Some functionality may be restricted for quick loaded holes such as reports. You can optionally include specific information such as Rehab Date and Drilling Dates by selecting these under Tools, Settings, Database, Quick Load. However this will affect performance.



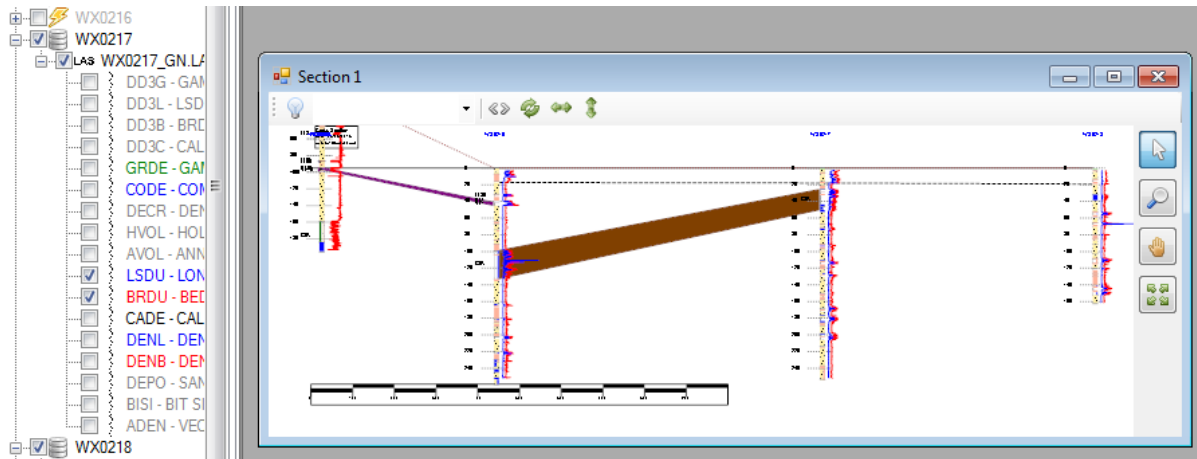
Don't load all LAS files

Try not to load more LAS files than you really need. Don't load both general and detailed log files if only one is required. Don't load LAS files for all holes if you don't need to. Using the above quick load example, after creating your section window click the Load LAS Files button and only load LAS files for "Selected Holes". This will load LAS files just for the holes in your section.



Turn off LAS curves when not required

Drawing the geophysical response curves requires significant computing time, particularly on cross sections with many holes. Minimizing the number of curves displayed will greatly improve the redraw time.



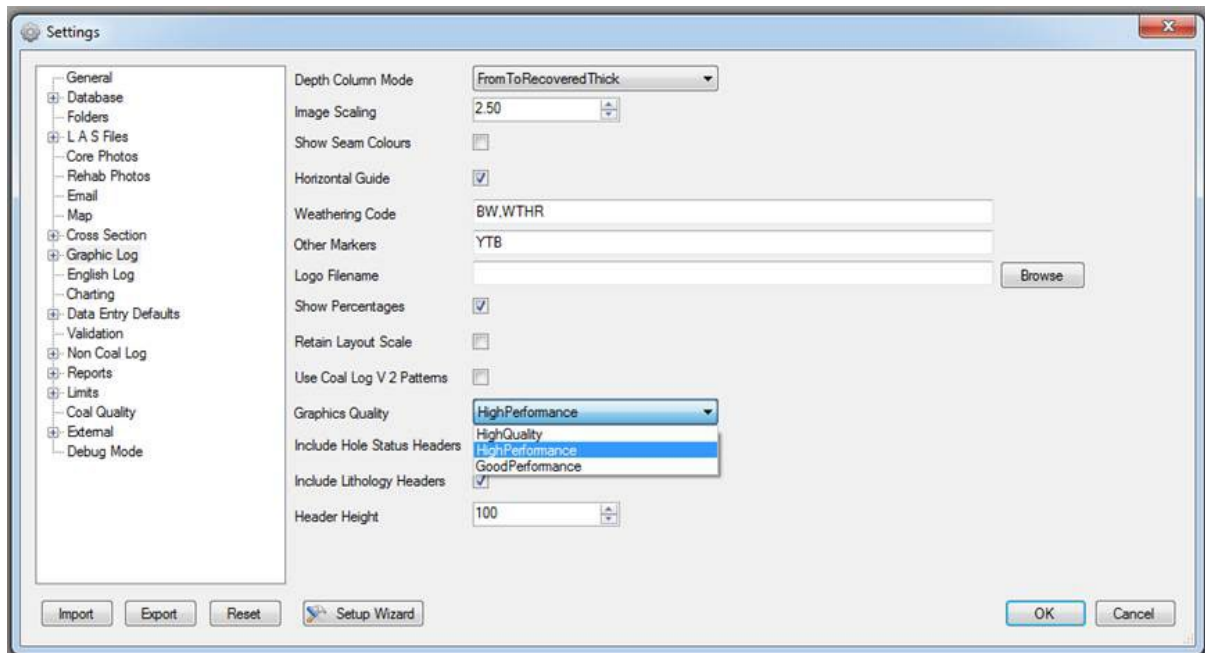
Turn off features in graphic logs

Turning off the following features will improve responsiveness

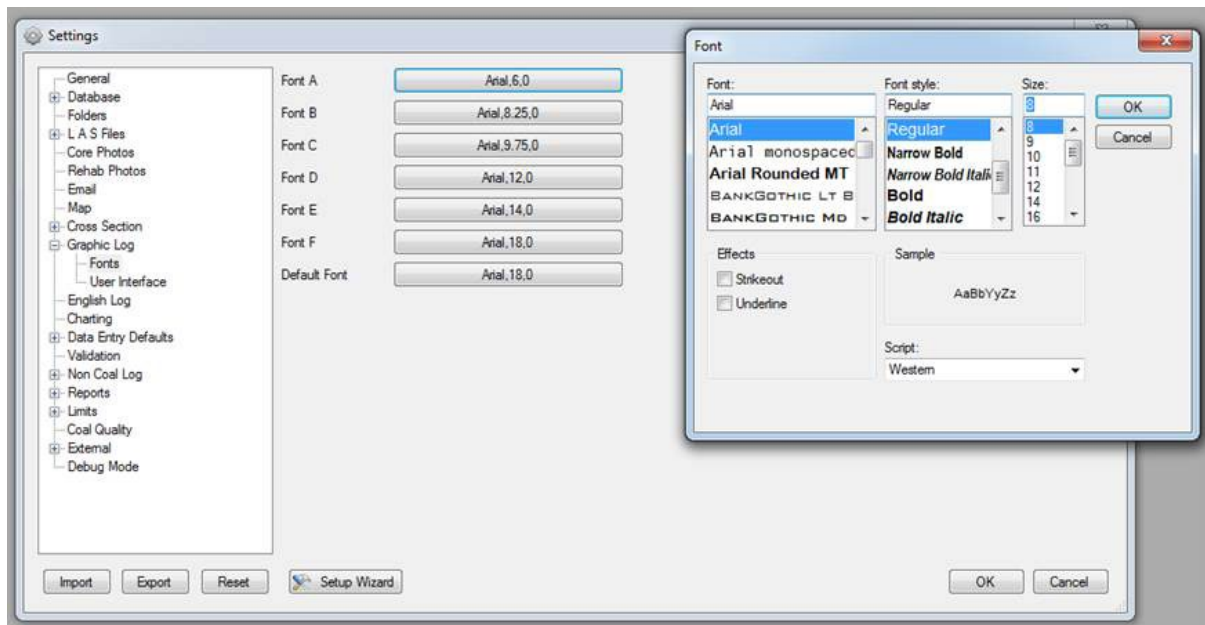
- LAS Grid
- Core Photos
- LAS Curves
- Horizontal Guide

Enabled High Performance Graphics Mode

For faster graphic log and cross section drawing, try setting your graphic log quality to “High Performance”.



However, if you do this some of the smaller text on the graphic log may become unreadable. If this happens try increasing the font size slightly:



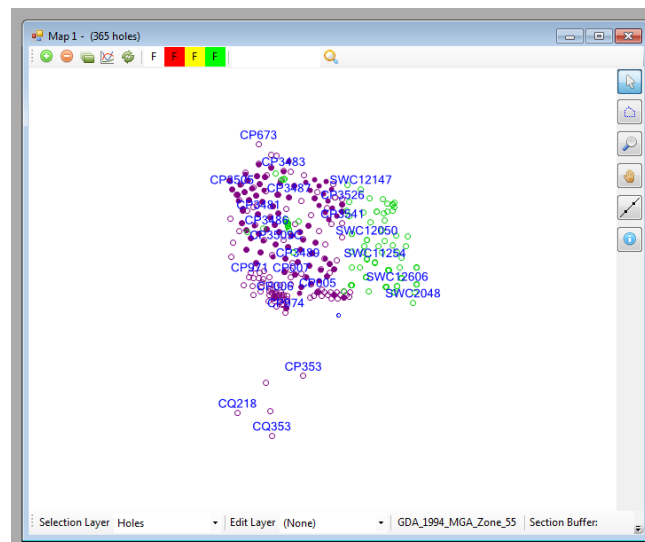
The smallest text uses “Font A”, the default size for this is 6 which is actually smaller than the minimum for that particular font. Therefore, in High Performance mode it’s unable to scale properly. Changing this font size to 8 should fix this.

Create subset map windows

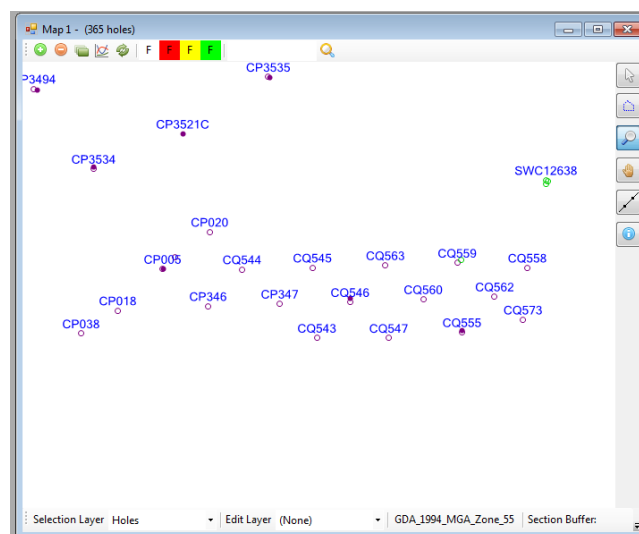
If you're working with a large number of holes, hole selection within map windows may feel slow. Rather than using a single map window with all holes listed, open additional map windows with a subset of holes while you're working in those areas.

1. Zoom into the area of interest
2. Open a new map window
3. Select the current map window and tick "Current View only"

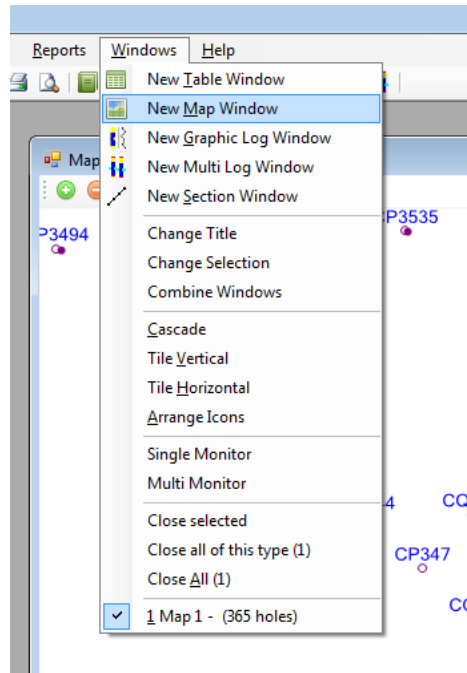
This will create a new map window with only the holes from the previous map extents. You will find this new smaller map window will be far more responsive. Once you've finished working in that area, close the smaller map window and repeat the process for the next area.



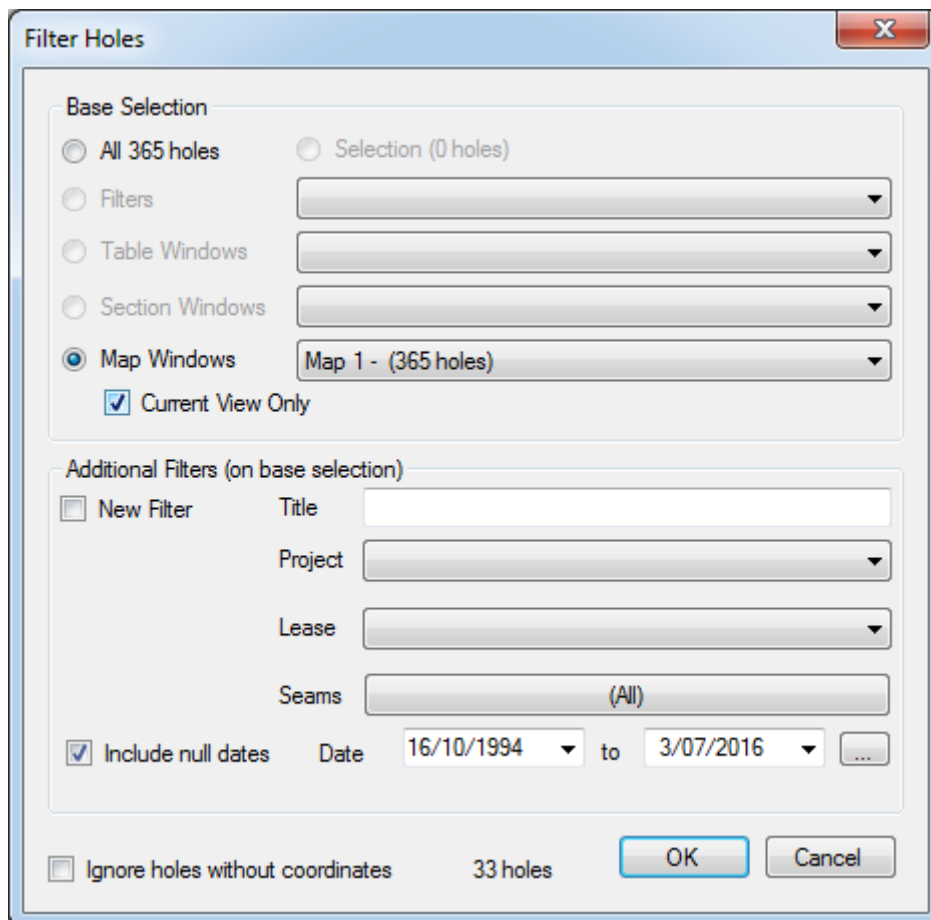
Original Map Window



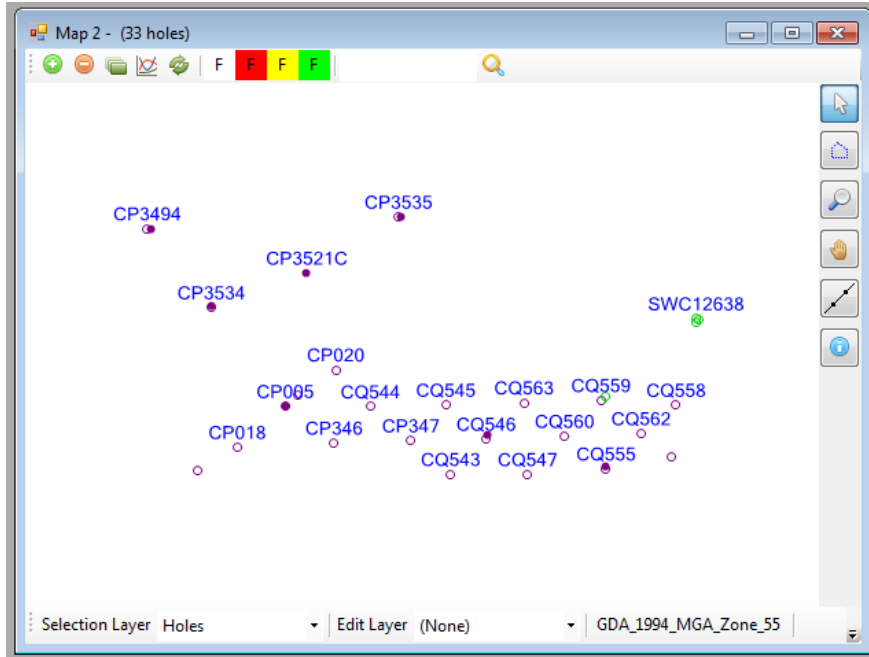
Original Map Window zoomed into area of interest



New Map Window



Select existing Map Window (Current View Only)



New subset map window

Appendix F – Application Errors and Known Issues

The following is a list of known issues and workarounds where available. These may be bugs that we are working on or known limitations due to hardware and/or software.

Installation Errors

There are different distributions of 1point Desktop. The main distribution is referred to as the Public version that is available from our web site:

<http://www.epsoft.net.au/TM2014/publish.htm>

Other private distributions are made available for corporate clients for installation within their corporate networks. This is usually due to firewall restrictions preventing download or installation of program files from public web sites.

Peabody users should install 1PD from the following link:

<\\brspfp02\MapInfo Data\SOFTWARE\TM>

All distributions have the same basic features and receive the same bug fixes and other updates. Some private distributions have additional client specific functionality such as connectivity to proprietary databases.

In most cases you should be able to install the public version. If you are unable due to corporate firewall issues, contact us to see if a private distribution is available.

Application cannot be started

If you receive the following error message when attempting to install 1PD:

“Application cannot be started” and/or “Value does not fall within the expected range”

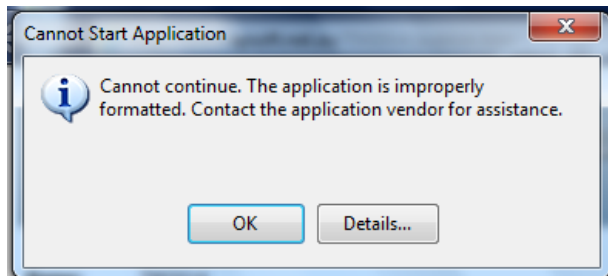
This is an issue caused by the Microsoft ClickOnce technology used to distribute the application.

1. Clear the ClickOnce application cache
 - First try running the following command
 - (Start - Run...): `rundll32 dfshim CleanOnlineAppCache`
 -
 - If you still are having issues, try opening the folder:
 - %LocalAppData%\Apps\2.0
 - and then delete all of the subfolders there
2. Check whether your antivirus software is quarantining any files during the download process. If it is try excluding the files.

Application is improperly formatted

If you received the following error message when attempting to install 1PD:

“Cannot Start Application” and/or “The application is improperly formatted”.



This is because your system does not have the required .NET Framework version installed.

1PD required .NET Framework 4.0 or 4.5 depending on 1PD version.

Windows 8 and Windows 10 both come pre-installed with .NET 4.5 or higher. Windows 7 comes with .NET 3.5 but you can install it

https://en.wikipedia.org/wiki/Template:.NET_Framework_version_history

Install the .NET Framework 4.7 from the following link:

<https://www.microsoft.com/en-us/download/details.aspx?id=55170>

Application Errors

Terminology

The following terminology is used in this section:

Software Bug

Bugs are errors in the application code that were missed during testing. Traditional software development involves lots of planning, design, development then rigorous testing. This takes time and significantly increases the cost. If you're building an auto pilot system for an A380 or a rocket guidance system, the traditional method is still valid. For less critical systems there are for efficient methods. We employ a rapid development cycle to get new features and updates out to you as soon as possible. Unfortunately, this increases the chances of bugs creeping in and we endeavour to correct such bugs as quickly as possible, usually within 24-48 hours.

Bad Data

1PD frequently expects to see certain types of data in specific places. For example, if it encounters text where it's expecting numbers or dates this can cause problems. We try to anticipate this as much as possible but inevitably some get past us. These types of errors may manifest as an "Unhandled exception" such as "NullReferenceException" or "InvalidCastException".

A NullReferenceException is where a NULL (blank/empty cell) is found when a value is expected.

An InvalidCastException is where the program is expecting one type of data but receives another. I.e. expecting a date value but receives text. In some cases the types can be converted, but not always.

In the majority of cases, if we can have a look at the data we can usually identify the cause and either build in functionality to handle it or provide guidance to modify the data.

Hardware/System Software Error

Sometimes events beyond our control can cause problems such as hardware failure, operating system errors, viruses etc. Generally there's not much we can do about these types of error except provide guidance and/or workarounds where possible.

Unhandled exception has occurred in your application...

An unhandled exception basically means something unexpected happens. This can be caused by a software bug, hardware problem or by unusual/unexpected data. In many cases you can click Continue and carry on however the last action performed may not have completed. You should save your work immediately and it may be necessary to close and re-launch the application.

Unhandled exceptions can occur anywhere, any time and should always be reported to Epssoft. If they are caused by a software bug we can usually rectify them with 48 hours. If they are caused by bad data we may require samples of that data to identify the cause and provide a fix/patch to handle the specific circumstances and/or provide guidance on how to modify the data to avoid the error.



If you find yourself in this situation, **do not** click Quit as the application will close without saving any changes. Click **Continue** and immediately save any unsaved changes if you can. In some cases this may not be possible hence it is important to save frequently and utilise the auto save and auto backup features. Then close and re-launch the application and attempt to reproduce the problem. Collate as much information as possible including screen shots where applicable and send this to Epssoft for diagnosis.

If the issue only occurs with a specific data set, send a copy of the data to Epssoft if possible along with the above diagnostic information so we can attempt to reproduce the error.

If the issue only occurs after a recent update, try [reverting back to the previous version](#) until a fix/patch/update is released.

Known Issues

If you are experiencing any of the following issues, we are aware of them but don't have an immediate fix/solution. If the issue is of significance to you please let us know and we will attempt to move it up the priority list.

The issue numbers shown related to items logged via the YouTrack Issue Tracker.

Graphic Log Window slow to open

Issue# TM-593

If the graphic log window is very slow to open it could be because the default printer is not set or the default printer is offline.

1PD uses the default printer to determine paper size settings when drawing the graphic log. If the default printer is not available 1PD can get hung up waiting for a response. Change the default printer to one that is always available such as a PDF driver will fix the issue.

Reducing decimal places can cause rounding errors

Issue# TM-451

If you reduce the decimal places via Tools, Settings, Data Entry, Decimal places (say from 3dp to 2dp), when you save the log the depths are rounded down to the new decimal places and may result in rounding errors and/or depth gap/overlap errors.

If you need to reduce decimal places, perform a manual validation and fix any depth errors prior to saving.

Correlation colours re-set when re-correlating

Issue# TM-260

If you change the colour of a seam correlation in a cross section then re-correlate, the colour will reset to the default seam colour. To permanently change the seam/correlation colour, modify the seam colour either in the [Dictionary Editor](#) or [Seam Hierarchy Editor](#).

Auto Progression moves backwards when SHIFT key held down.

Issue# TM-179

The Auto Progression feature automatically moves to the next cell when a certain number of characters have been entered. I.e. if the dictionary has a maximum code length of 2 for a given category, then once two characters have been entered the focus automatically moves to the next cell.

If the SHIFT key is being held down in order to type upper case characters, the auto progression action actually moves back/left instead of forward/right. This is due to the fact that the auto progression works by sending an additional TAB keystroke to the interface and the SHIFT key reverses that action.

To avoid this situation, avoid holding down the SHIFT key during code entry. This is not required as codes will automatically be converted to upper case anyway. Alternatively you can disable the Auto Progression feature via Tools, Settings, Data Entry Defaults, Auto Progression.

Multiple Seams with Same Name

Issue# TM-60 – Fixed as of version 1.0.0.581 – 31/01/18

~~1PD does not currently support multiple seams with the same name. Each seam must have a unique seam code. If you use the same seam code multiple times (i.e. UN), 1PD will treat this as one very thick seam. Differentiate each seam by adding a suffix (i.e. UN1, UN2, UN3 etc). This allows 1PD to calculate from/to/thick for each unique seam and also correlate seams in cross sections.~~

Note: This is no longer an issue, multiple seams with the same name are now supported correctly.

Cannot display graphic logs side by side with different scales if using same layout

Issue# TM-355

If you display two or more graphic logs using the same layout, you cannot display them with different scales (or any other layout options) as they share the same layout. In order to display the logs differently you must switch one of the graphic log windows to use a different layout. You can then change the layout options independently.

Coding Dictionary is NOT enforced

Issue# TM-56

When entering codes, 1PD warns you in the form of validation errors when codes are not in the relevant dictionary. Some systems will not allow you to enter invalid codes which seems obvious so why does 1PD allow it?

The design philosophy behind this feature was twofold:

1. Allows for importing non-CoalLog data
2. Allows for faster data entry especially when codes are not known

Importing/Viewing Non CoalLog Coded Data

Non CoalLog coded data can be imported and converted as required. However you can still view the unconverted data provided that sufficient conversion is performed and/or the plotting legend is modified to support the foreign coding dictionary.

Faster Data Entry

If you know the codes, it's generally faster to type them than choose them from a list. If you're not sure of a code you can stop and look it up or you can type something/anything that you can update later to the correct code. For example, if you didn't know the code for Siltstone, just type SILT for now and fix it later. When you've finished entering the data, double click the SILT "code", select the correct ST code and tick the "Change all" box. This will change all occurrences of SILT to ST

Having said all that, this feature has been requested and we are considering adding an option to enforce code validation in a future release.

CoalLog V2.0 Plotting Patterns

Issues# TM-16

This feature is partially implemented but has some issues with tile sizing and overlap. We recommend not using this feature in its current state. Improvements were made in V1.0.0.567 on 29/08/17 however there are still some cosmetic issues.

No colour is used in the CoalLog plotting patterns, the default 1PD patterns use colour which are easier to see. You may prefer to use the 1PD patterns for data entry and switch to the CoalLog patterns for final printing.

GDA94 projection does not always align correctly

Issue# TM-9

When plotting holes in GDA94 projection then adding lease boundaries in Lat/Long, the holes do not always align correctly with the tenement boundaries. Switching between projection modes usually fixes it but it can be tedious and prone to error. When viewing maps with mixed projections be aware that there may be some issues.

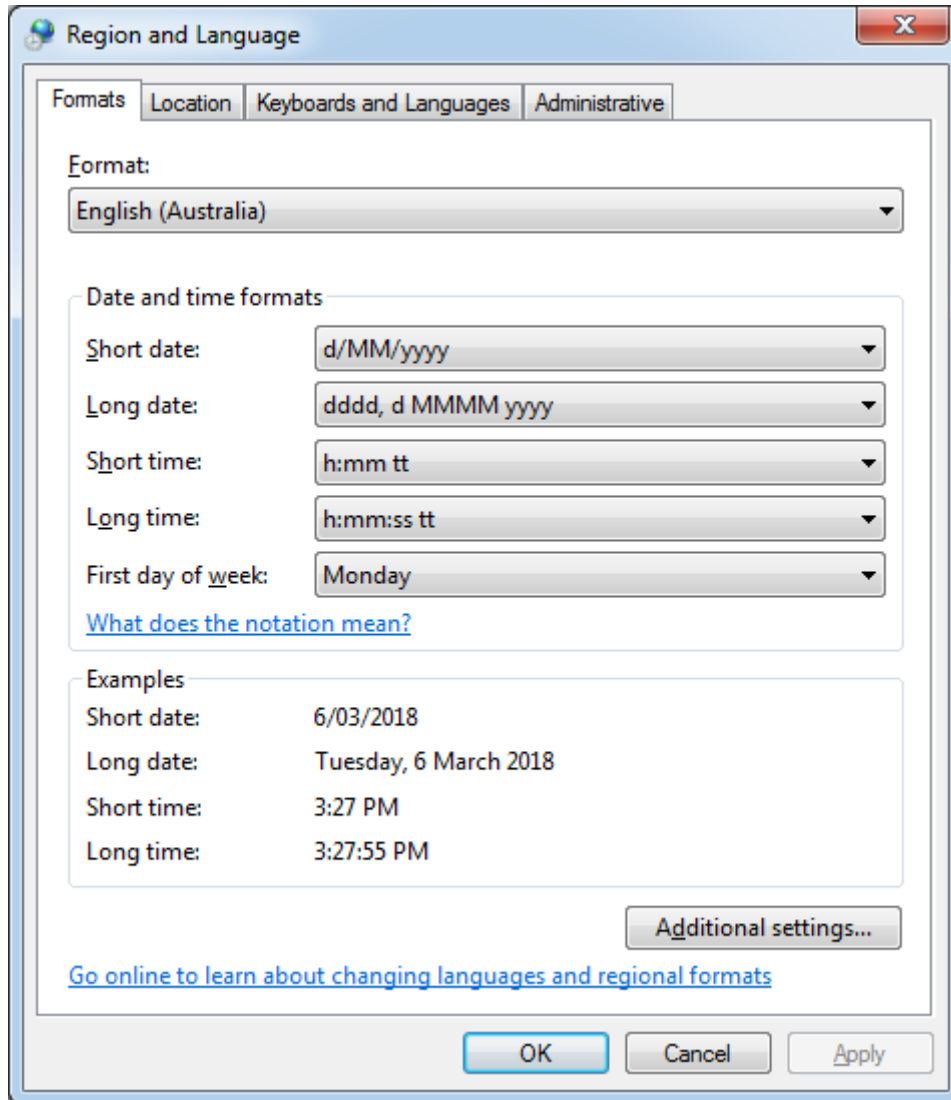
Undo/Redo

Issue# TM-4

The Undo/Redo functionality is very limited. Simple code changes and single cell edits can be undone and redone but more complex operations cannot. We recommend saving frequently and using the auto save and auto backup features. You can then reload the log at any time to undo any recent changes.

Dates not appearing in English Logs

If dates are not appearing in the English Logs, in particular Drilling Dates and Survey Date, check the Long Date format in your Regional Settings under Control Panel.



Appendix G – Hints, Tips and FAQ's

For more hints & tips refer to [Appendix E – Performance Tips](#)

Graphic Log Window

- Q. Every time I open a new Graphic Log window I must resize the panels and select my preferred view. How can I save and recall my preferred layout?
- A. Once you have the graphic log window setup the way you like, save the layout via View, Layout, Save Layout, (New) and give it a suitable name. In future, to restore this view simply select View, Layout and select the required layout from the list. To make a layout the default view, simply select View, Layout, Save as Default Layout. New Graphic Logs windows will always use the Default layout.

- Q. What's the difference between the **Samples** sheet and the **Sample Dispatch** sheet?
- A. The **Samples** data sheet is just a summary of the sample numbers in the lithology sheet. The **Samples** sheet cannot be edited directly. The **Sample Dispatch** sheet is similar in that it contains a summary of the lithology samples however it must be generated manually and re-generated periodically. The **Sample Dispatch** sheet contains additional information that can only be entered on that sheet such as Laboratory, Date Dispatched etc and can contain both corrected and un-corrected depths.
- Q. I cannot see the Sample Dispatch sheet?
- A. As this was not a standard CoalLog sheet until V2.1 it is disabled by default. Enable it via Tools, Settings, Non-Coal Log, Sample Dispatch. For a more detailed Sample Dispatch sheet, enable Sample Dispatch B. If you prefer the CoalLog V2.1 sheet, use Sample Dispatch 21
- Q. The Save To Database button is greyed out, I can load from the database but can't save.
- A. Ensure "Read Only Mode" is not ticked in Tools, Settings, Database

Note: As of V1.0.0 580 – 25/01/18, Read Only mode is disabled by default.

- Q. How do I reset LAS curve customisations back to the default values.
- A. LAS curve customisations are saved in xml files in your 1point Desktop Files folder. To reset these settings to factory default, simply delete or rename these files.

Example: Curve_SSD_DisplaySettings.xml contains the customisations for the SSD mnemonic

- Q. How can I quickly create a new log from geophysics
- A. Create a new log, load the LAS files. Then double click at the appropriate depth to create lithology units. Each new unit will extend from the previous TD to the clicked depth and you can assign a basic lithology type. You can then go back and edit the log in more detail as per normal.

Cross Section Window

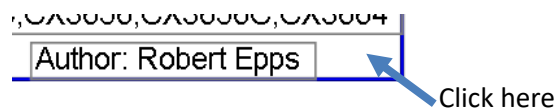
- Q. My cross section is all squashed up and messy. How do I clean it up?
- A. Try enlarging the section by using a combination of increased horizontal and vertical spacing. To maintain a 1:1 aspect ratio, use the corresponding values for each:

Horizontal - True Spacing%	Vertical Exaggeration
50%	0.5 (Custom)
100%	1
200%	2
400%	4
500% (Custom)	5
800% (Custom)	8

Non-standard values can be entered as Custom values.

- Q. I have several holes very close together and all bunched up, even after increasing the horizontal spacing.
- A. You have two options, either switch to fixed horizontal spacing or manually separate the offending holes using the move tool
- Q. How do I vertically align my cross section to the base of weathering (or other horizon).
- A. Select View, Depth Mode, Horizon, select desired horizon

- Q. How can I move a hole up or down in a section?
- A. The vertical position of a hole is generally determined by the Depth Mode. You can use the Move tool to click and drag a hole horizontally but not vertically. However, when the Depth Mode is set to Custom you can manually click and drag to move a hole in any direction.
- Q. When I switch to a Depth Mode other than Elevation or Depth I lose the background scale and instead see a separate scale for each hole. Why is this?
- A. In Elevation or Depth modes, every hole is plotted against a common scale. In all other modes, each hole is plotted in its own vertical space which may or may not relate to the holes around it. Therefore, each hole is plotted with its own scale.
- Q. I have configured seam colours in the dictionary but all my seam correlations are cyan coloured?
- A. Ensure that your dictionary contains the Company and Project code matching the hole. 1PD uses the Company and Project codes to determine which custom dictionary to use.
- Q. How do I select/move the title box
- A. Moving the title box can be tricky. The title box is made up of several independent text boxes that are grouped together. When you click on the title box you tend to select one of the text boxes rather than the title box itself. The trick to selecting/moving the actual title box is to click near the bottom right corner as the default "Author" text box generally doesn't extend the full width of the title box. This gives you a small window where you can click to select the underlying title box.



Use Table Windows for bulk edits

If you need to make bulk changes to multiple holes, such as updating coordinates, datums, rehab dates etc, use a table window in edit mode. If using a database, this can also be used in combination with the database quick load feature for making changes to hole status information without having to load the entire hole (drilling, lithology etc).

You can also do bulk edits of drilling and lithology data (for all holes) via the Reports menu. This will display all drilling or all lithology data in a single table which can be edited including bulk changes.

NOTE: You cannot remove rows or add new rows, you can only edit existing rows.

Licencing

- Q. My 30 day trial period is up, can I get an extended trial?
- A. Certainly, just contact us and tell us what you need.
- Q. My licence says it's due to expire, what do I do?
- A. Don't panic! When your licence expires it will automatically roll into a 30 day grace period with full functionality. Contact your manager/supplier to arrange for a new licence before the grace period ends to prevent downtime.
- Q. My grace period is almost up, what do I do?
- A. After the grace period you will be restricted to read-only mode. You can still view your data, including graphic logs, cross sections etc, you can't save any changes while in read-only mode. If you have not received a new licence by this time, contact your manager/supplier to obtain a new licence.

Appendix H – Validation Rules

The following validation rules are either hard coded or can be defined and will display as validation errors in the Validation tab.

Hole_Status/Header Sheet Validation

Required Values

In the Hole_Status sheet, the Project, Company, Hole_Name and Total_Depth values are required/cannot be blank/empty.

Start/Complete Dates

The start date cannot be after the complete date.

Total Depth Mismatch

The Total_Depth in the Hole_Status sheet should match the last lithology To_Depth

BHWL/SW_Level Mismatch

The SW_Level in the Hole_Status sheet should match the BHWL horizon depth in the lithology sheet.

Dictionary Code Errors

Any data entry table column that corresponds to a dictionary category is validated against that dictionary code list. Any code entered that does not exist in the dictionary for that category will be highlighted as an error.

The screenshot displays the 'Hole_Status' data entry table and a validation error log. The data entry table has columns for From Depth, To Depth, Recovered Th, Record Sequ, Seam, Seam Confid, Fault, Ply, Horizon, Horizon Conf, Sample Type, Sample Number, Interval, Interval Status, Lithology %, Lithology, Lithology Qual, Lith. Modifier, Shade, Hue, Colour, and Adjective 1. A validation error is highlighted in red in the table, indicating an invalid lithology type 'X'.

From Depth	To Depth	Recovered Th	Record Sequ	Seam	Seam Confid	Fault	Ply	Horizon	Horizon Conf	Sample Type	Sample Number	Interval	Interval Status	Lithology %	Lithology	Lithology Qual	Lith. Modifier	Shade	Hue	Colour	Adjective 1
0.000	1.000	1.000						TE				A	SA	MM						O	
1.000	5.000	4.000						TE				A	SA	MM						Y	
5.000	18.000	13.000						TE				A	CL					W		O	
18.000	44.000	26.000						TE				A	CL					W		U	
44.000	48.000	4.000						TE				A	SA	MM						W	
48.000	52.000	4.000						TE				A	CS					W		U	
52.000	54.000	2.000						TE				A	CS							U	
54.000	57.000	3.000						R...				A	X							O	
57.000	58.000	1.000										A	MS								
58.000	59.000	1.000										A	MS							Y	
59.000	62.000	3.000	A									A	MS					G		Y	
62.000	62.000	0.000	B					BW				A	NR								
62.000	66.000	4.000										A	MS			D		G		TY	
66.000	68.000	2.000										A	ST			D		G		TY	
68.000	69.700	1.700										A	XM			D		G			
69.700	70.600	0.900										A	MS			D		G		TY	
70.600	71.110	0.510										A	XM			D		G			
71.110	71.740	0.630										A	XM			D		G			
71.740	71.910	0.170										A	XM			D		G			
71.910	72.120	0.210										A	XM			D		G			
72.120	72.130	0.010										A	KL								
72.130	73.030	0.900										A	XM			D		G			

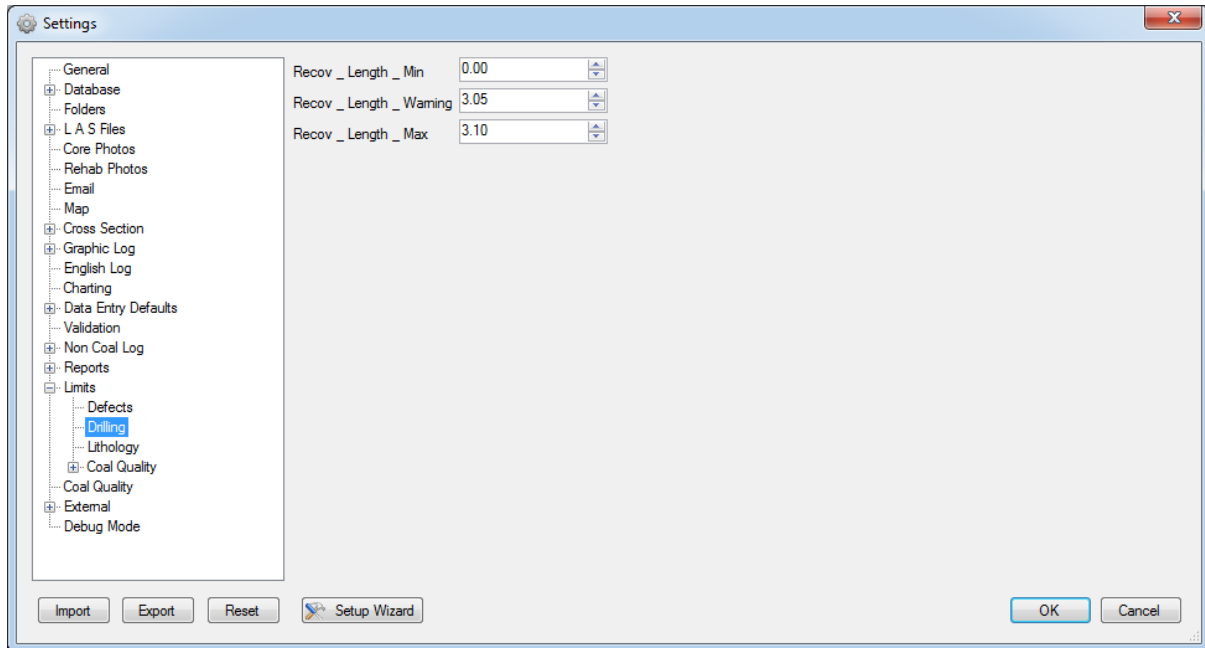
The validation error log shows the following error:

Hole	Sheet	Row	Column	Depth	Code	Category	ValidationCategory	Message
DV3092C	Lithology	110	21	116.760		RawCoal	CoalQualityHighAshCoal	ASH > 30% cannot be coal?
DV3092C	Drilling	7	1	111.050		Drillers_From_Depth	DepthThicknessError	Depth gap from 82.550 to 111.050
DV3092C	Lithology	8	21	57.000	X	Litho_Type	CodeError	Litho_Type X invalid code!

Drilling Sheet Validation Rules

The Recovered_Length should be between the Min and Max values. Additionally a warning message will be shown when the Warning value is exceeded. Default values are shown below but can be adjusted in Tools, Settings, Limits.

Parameter	Minimum	Warning	Maximum
Recovered_Length	0	3.05	3.10



Lithology Sheet Validation Rules

Lithology Depth/Thickness Error

Lithology depths and thickness should add up with no gaps or overlaps.

Sample_Type cannot be blank

If a Sample_No is entered, a Sample_Type is required.

Litho_Type cannot be blank

A Litho_Type code must be entered for each Lithology row.

A	SA	MM				W
A	CS				W	U
A	CS					U
A						O
A	MS					Y
A	MS				G	Y
A	MS					Y
A	NR					

Litho_Qual X invalid qualifier for Y

The selected Litho_Qual value is not a valid qualifier for the selected Litho_Type.

For example, the grain size code "FF" is valid for sandstone but not for coal.

QP	90367	A	CO	C5			K		
QP	90368	A	CO	BD			K	- 60	116 -
QP	90369	A	CO	C5			K		
QP	90370	A	CO	BD			K		
QP	90371	A	CO	DB			K		
QP	90372	A	CO	FF			K		
QP	90372	A	CO	SY			K		
QP	90373	A	CO	DB			K		
QP	90373	A	CO	BD			K		
QP	90374	A	CO	DB			K	- 120	56 -
QP	90375	A	CO	BD			K		

Lithology Percentages

Lithology percentages should add up to 100%

147.670	147.870	0.200					A	SS	FF		D
147.870	149.050	1.180					A		SS	S8	L
149.050	149.920	0.870	A				A	60	XT		
149.920	149.920	0.000	B				A	45	SS	FM	A
149.920	150.010	0.090					A		CS		L

Column	Depth	Code	Category	ValidationCategory	Message
10	149.920		Percentages	Lithology/Percentages	Percentages don't add up to 100% at 149.92(105.00%)
10	149.920		Percentages	Lithology/Percentages	Percentages don't add up to 100% at 149.92(105.00%)
11	155.350		RawCoal	CoalQualityHighAshCoal	ASH > 30% cannot be coal?
11	154.840		RawCoal	CoalQualityHighAshCoal	ASH > 30% cannot be coal?

Coal Quality / Sample Validation

Sample Depth Mismatch

Sample depth/thickness should match lithology.

Sample Seam Mismatch

Sample seam should match lithology

ASH > n% (default 30%)

ASH value should not exceed the value defined in settings and still be logged as Coal.

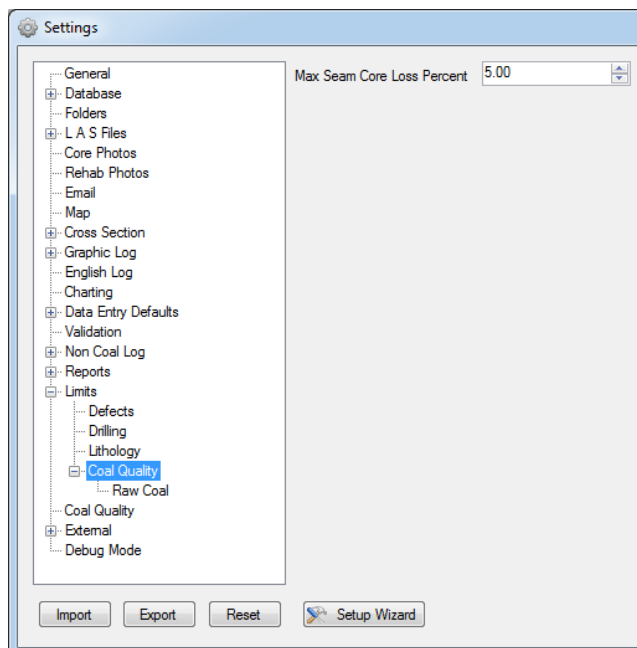
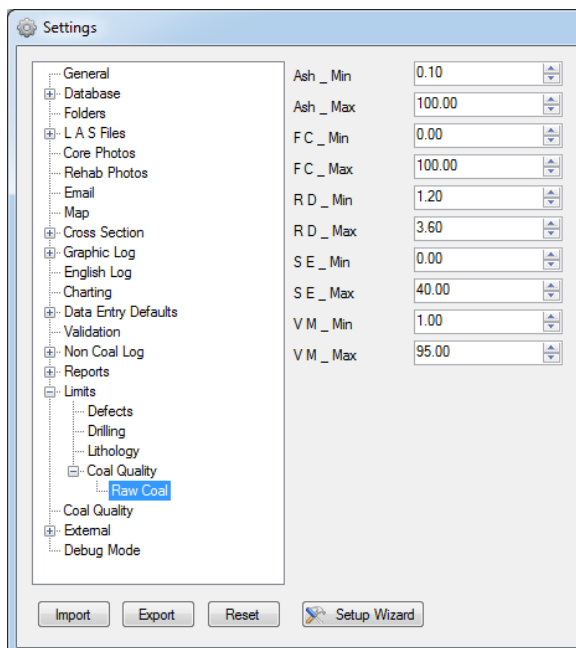
KL > n% (default 5%)

Sample core loss should not exceed value defined in settings (default 5%)

Raw Coal Limits

Raw coal results should not be outside the following ranges:

Parameter	Minimum	Maximum
ASH	0.1	100
FC	0	100
RD	1.2	3.6
SE	0.001	40
VM	1	95



Optional Validation Rules

The following optional validation rules can be applied

Base of Weathering on Separate Row

If selected, the Base of Weathering must be entered on a separate lithology row with zero thickness

Zero Thickness Horizons

If selected, all Horizons must be on a separate row with zero thickness.

Note: This is NOT the CoalLog recommended method but may be required for some modelling packages.

User Limits

The following user defined limits can be validated

See [Limits](#)

Appendix I - Advanced Customisation

Custom Settings

Custom Settings can be used to customise aspects of 1PD. Currently this is limited to customising the data entry column headings.

Custom Column Headings

Custom Column Headings can be used to change the column header text, either to abbreviate the existing column name, use a more meaningful description or another language.

They can also be used to change the meaning of the column entirely including linking to a different dictionary category.

To use custom column headings, create an Excel file called “custom_settings.xlsx” in your 1point Desktop Files folder. Use the following format:

Sheet	Column	Heading	Category
Lithology	Adjective_4	TEST	Colour
Lithology	Adjective_3	Adj3	

The first example changes the “Adjective_4” column heading to “TEST” using the Colour dictionary category.

The second example merely abbreviates the “Adjective_3” column heading to “Adj3”

Hole Status	Drilling	Lithology	Water Obs.	Defects	Point Loads	Activities	Samples	Seams	Horizons	Sample Dispatc										
	Interval_Statu	Lithology %	Lithology	Lithology Qua	Lith_Modifier	Shade	Hue	Colour	Adjective_1	Adjective_2	Adj3	TEST	Bivalves	Clasts	Dewatering	Interrrelationsh	Weathering	Estimated Stre	Bed_Spacing	Defect_Type
*																				

The dictionary category can be any existing CoalLog dictionary category or a new custom dictionary category. This means the column can potentially be used for data entirely unrelated to CoalLog.

Note: This may enable you to use 1PD for situations it was not designed for and could issues for exports/reports etc. You cannot use non text based columns such as numeric/date etc.

Index (incomplete)

- Coal Quality, 53, 88, 109, 110, 111, 155, 163, 196, 201, 234, 236
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