MINERAL EXPLORATION REPORTING TEMPLATES

User’s Manual

**21/07/2011**

Department of Mines and Petroleum Western Australia

Table of Contents

[WHAT THE MRT SOFTWARE DOES 6](#_Toc295898082)

[BEFORE YOU START 6](#_Toc295898083)

[SUGGESTED FILE STRUCTURE 7](#_Toc295898084)

[RAW DATA FORMAT 8](#_Toc295898085)

[SO HOW DO I START? 10](#_Toc295898086)

[PROJECT DETAILS 11](#_Toc295898087)

[PROJECT HOLDERS 13](#_Toc295898088)

[MAP SELECTION 13](#_Toc295898089)

[REPORT DETAILS 15](#_Toc295898090)

[DRILL HOLE LOCATION DETAILS 16](#_Toc295898091)

[EDIT DRILLING CODES 18](#_Toc295898092)

[COLUMN SELECTOR 19](#_Toc295898093)

[DOWNHOLE SURVEY PAGE 24](#_Toc295898094)

[EDIT SURVEYING COMPANIES 25](#_Toc295898095)

[DOWNHOLE GEOCHEMISTRY PAGE 26](#_Toc295898096)

[EDIT SAMPLING CODES 27](#_Toc295898097)

[EDIT SAMPLE PREP 28](#_Toc295898098)

[EDIT ANALYSIS CODES 28](#_Toc295898099)

[DOWNHOLE GEOLOGICAL EVENT PAGE 29](#_Toc295898100)

[SURFACE GEOCHEMICAL/ANALYSIS PAGE 31](#_Toc295898101)

[FILE VERIFICATION LIST 34](#_Toc295898102)

[FILE EXPORT 35](#_Toc295898103)

[USING THE TOOLBAR 36](#_Toc295898104)

[USING THE TREE MENU 37](#_Toc295898105)

**Table of Figures**

[Figure 1 - Suggested File Structure 7](#_Toc295898106)

[Figure 2 - Welcome Page 10](#_Toc295898107)

[Figure 3 - Project Details Page without any Example Data 11](#_Toc295898108)

[Figure 4 - Project Details Page with Example Data 12](#_Toc295898109)

[Figure 5 - Project Holders Page 13](#_Toc295898110)

[Figure 6 - Map Selection Page 13](#_Toc295898111)

[Figure 7 - Report Details Selection Window 14](file:///\\Internal\Corp\UserData\Perth\HomeDrive\MIGSDCL\My%20Documents\USER%20MANUAL%20JULIA%20THOM.docx#_Toc295898112)

[Figure 8 - Report Details Page 15](#_Toc295898113)

[Figure 9 - Hole Location Page 16](#_Toc295898114)

[Figure 10 - Edit Drilling Codes Window 18](#_Toc295898115)

[Figure 11 - Column Selector: Browse to Raw data. 19](#_Toc295898116)

[Figure 12 - Column Selector 20](#_Toc295898117)

[Figure 13 - Assay Details Column Selector 22](#_Toc295898118)

[Figure 14 - Downhole Survey Page 24](#_Toc295898119)

[Figure 15 - Edit Surveying Company Window 25](#_Toc295898120)

[Figure 16 - Downhole Geochemical Analysis Page (top) 26](#_Toc295898121)

[Figure 17 - Downhole Geochemical Analysis Page (bottom - cont...) 27](#_Toc295898122)

[Figure 18 - Edit Sampling Codes Window 27](#_Toc295898123)

[Figure 19 - Edit Sample Prep Window 28](#_Toc295898124)

[Figure 20 - Edit Analysis Codes Window 28](#_Toc295898125)

[Figure 21 - Downhole Geological Event Page. 29](#_Toc295898126)

[Figure 22 - Surface Geochemistry/Analysis Page (top) 31](#_Toc295898127)

[Figure 23 - Surface Geochemistry/Analysis Page (bottom- cont.) 32](#_Toc295898128)

[Figure 24 - File Verification List Page 34](#_Toc295898129)

[Figure 25 - Example of the Tree Menu 37](file:///\\Internal\Corp\UserData\Perth\HomeDrive\MIGSDCL\My%20Documents\USER%20MANUAL%20JULIA%20THOM.docx#_Toc295898130)

Definitions

File Verification List: A list of ALL the digital files you are submitting as your report (including the text of the report, appendices, figures and plans and data files).

Geodetic datum: A mathematical surface on which a mapping or coordinate system is based (for a more detailed explanation [Click Here](http://www.dmp.wa.gov.au/4993.aspx))

Guidelines: The requirements for the submission of digital exploration data (the title of these guidelines varies from state to state).

Metadata: The series of headers that precede the data in the file that is required for statutory reporting.

Metadata Files: The final file created in the format required by the relevant authority.

MRT software: the software for creating Mineral Reporting Templates.

Raw Data: Your original field data.

Tree Menu: The hierarchy of files arranged in a tree and displayed in the left hand panel of the software window.

Toolbar: The bar across the top of the software window that contains buttons you can press to execute commands such as “Add Data Files”, “Export Files” etc.

Installing the MRT software

There is a link to the MRT software at the following locations: [Click Here](http://mapserver.doir.wa.gov.au/datacentre/datacentreDb.asp) (for the WA version) or [Click Here](http://www.geoscience.gov.au/) (for the National and all other states).

**If your computer is not running dotNetFx40, you will need to install this before you install the MRT software. It is free software. If it is not installed on your computer attempt to install the MRT software and you will be prompted how to install it.**

**The software will install in your program files on your C drive.**

**When the installation starts you must tick the box to accept the licensing agreement.**

**On installation an icon depicting a crossed pick and shovel is generated. You will be able to click this icon to open the program.**

Using the MRT software

# WHAT THE MRT SOFTWARE DOES

Once you have created your raw data files you can use MRT software to format them to regulatory requirements. You can then export the files ready to be submitted with your technical report.

# BEFORE YOU START

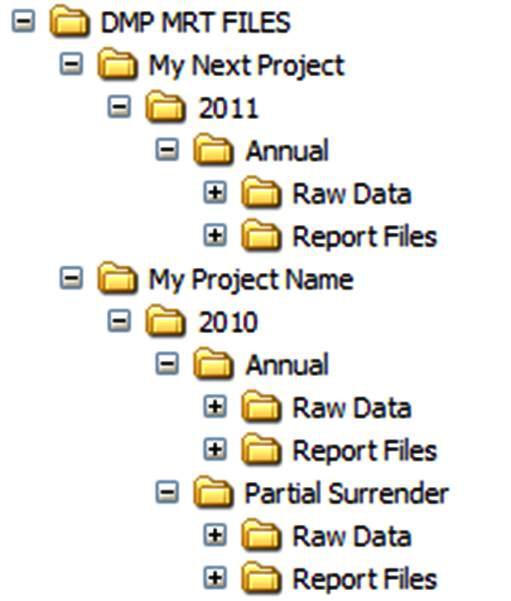
Organise your data into excel spreadsheets. Use the raw data templates which can be downloaded by clicking [Raw Data Templates](http://mapserver.doir.wa.gov.au/datacentre/datacentreDb.asp)

Set up files on your computer where you will save your data.

Below is a suggested file structure that you could use. This will be the structure used in the User’s Manual but you may set up alternative directories to suit your requirements.

However you are recommended to keep your raw data files and your final files in separate folders. Your raw data files should not be submitted with your written report and are not included on the File Verification List

## SUGGESTED FILE STRUCTURE



This is where your technical report, plans, appendices etc should go and where you will export your final data files with metadata headers. When you have finished you can burn everything in this folder to CD for submission to DMP

Your data, the data you have collected and put into excel spreadsheets

Type of report

Project name

Report year

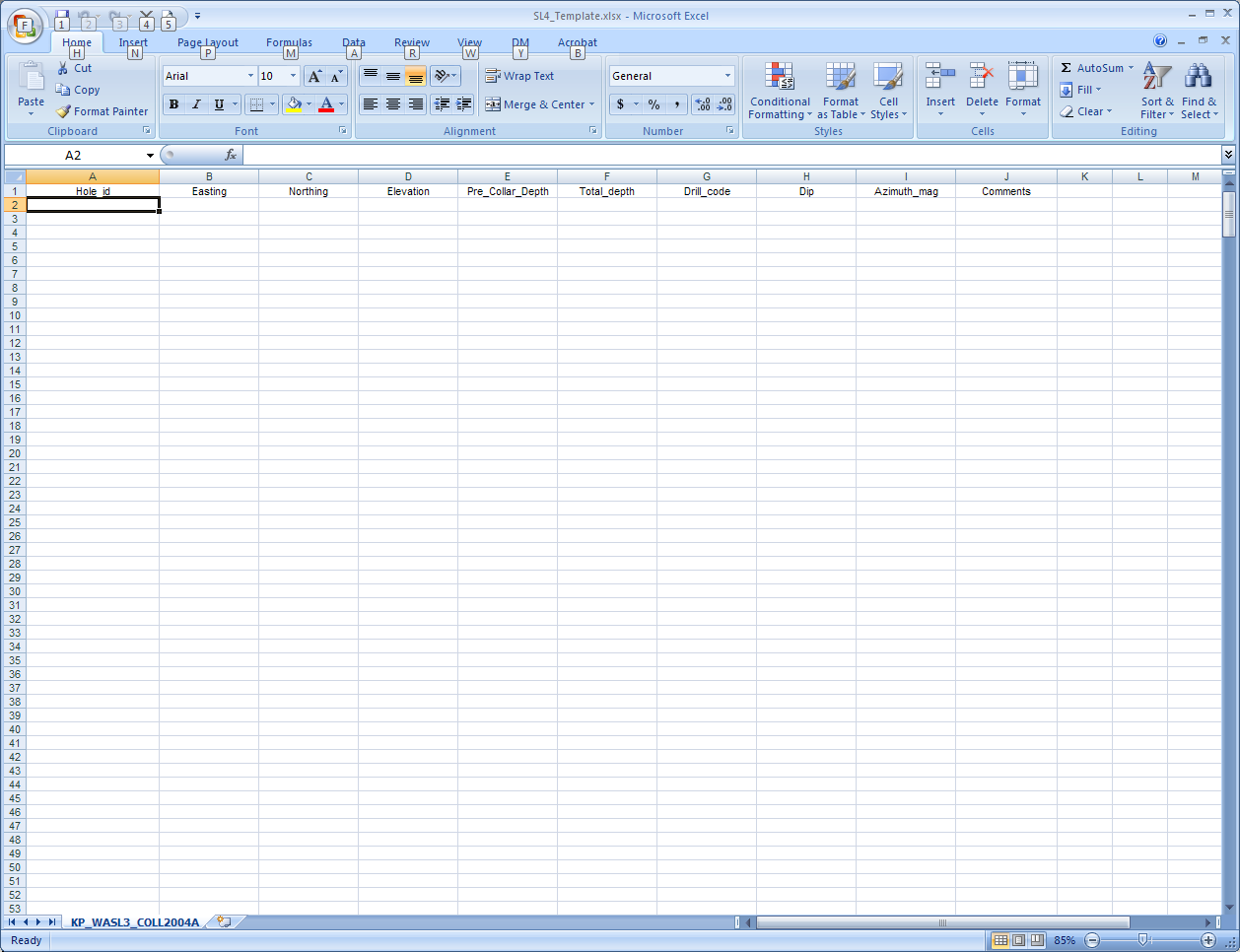
Figure - Suggested File Structure

## RAW DATA FORMAT

Browse to [Raw Data Templates](http://mapserver.doir.wa.gov.au/datacentre/datacentreDb.asp) for examples. To comply with reporting requirements you must submit all data collected. They can be appended to the right of the suggested column headers in the example data provided. To use the MRT software, there are some required fields. They are specified below.

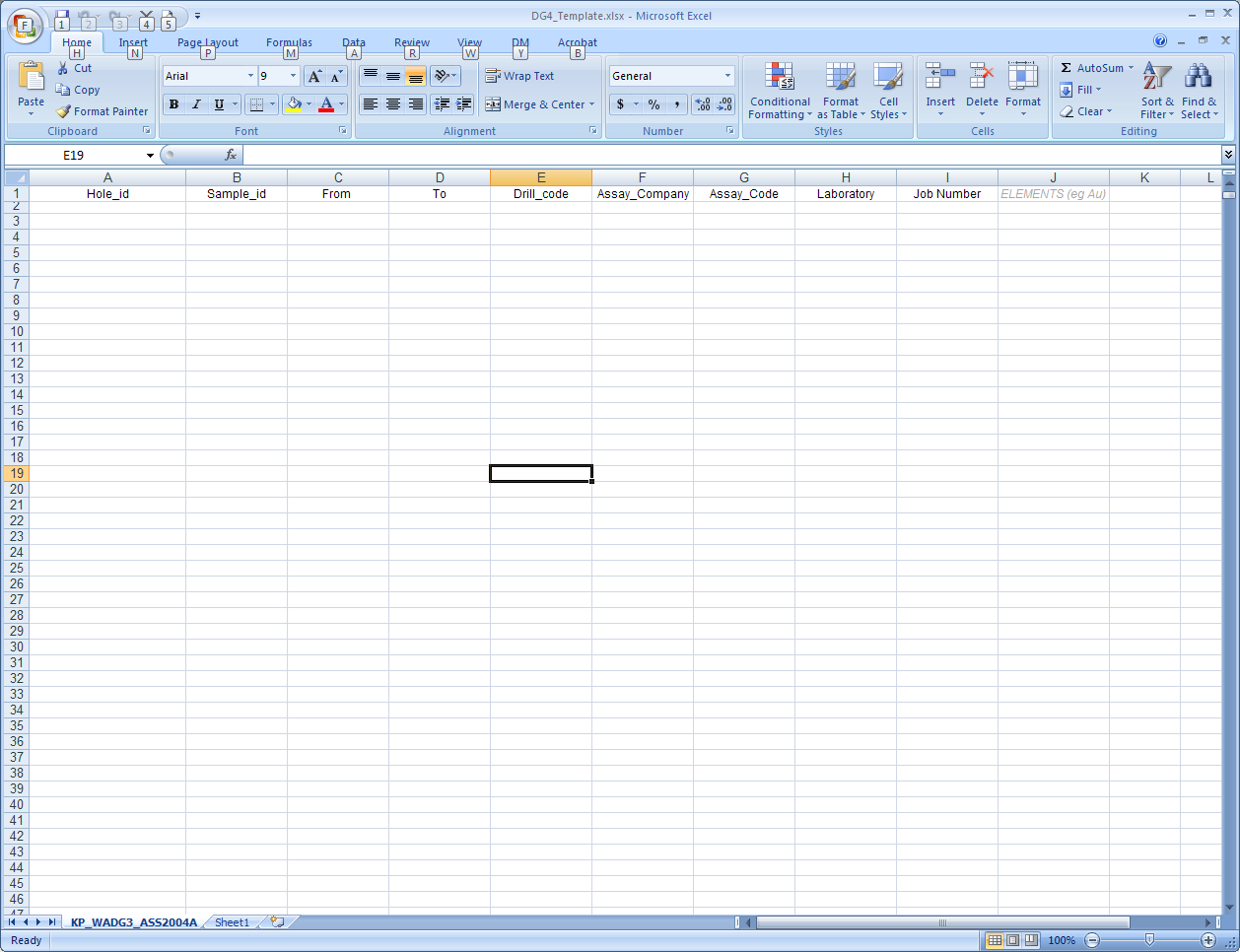
Put your drill hole locations (collars) on template SL4.

Required fields: Hole ID, Total depth, Drill Code/Hole Type, Elevation (RL), and an Easting and a Northing in national grid.



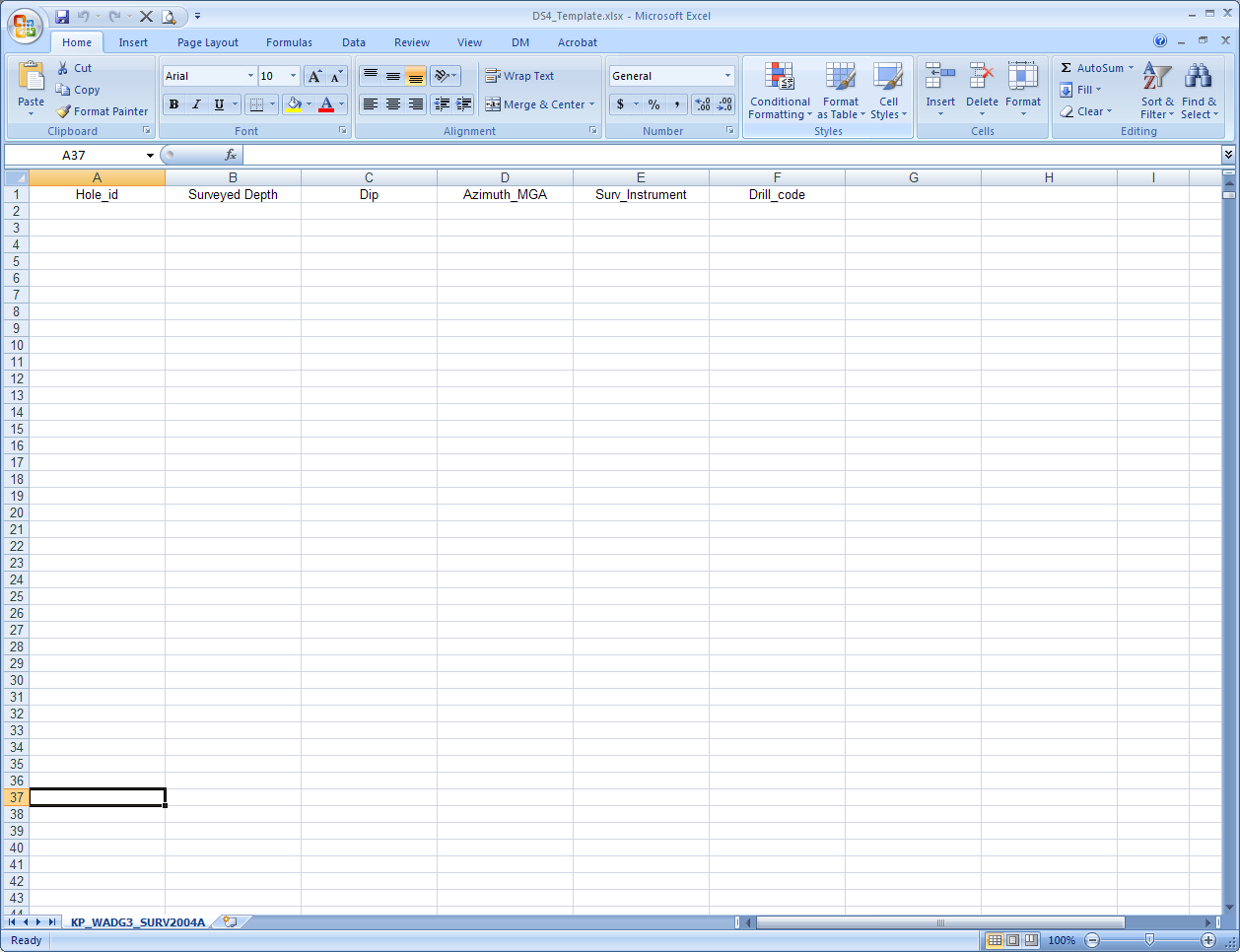
Put your downhole assays on template DG4

Required fields: Hole ID, Sample ID, From and To.



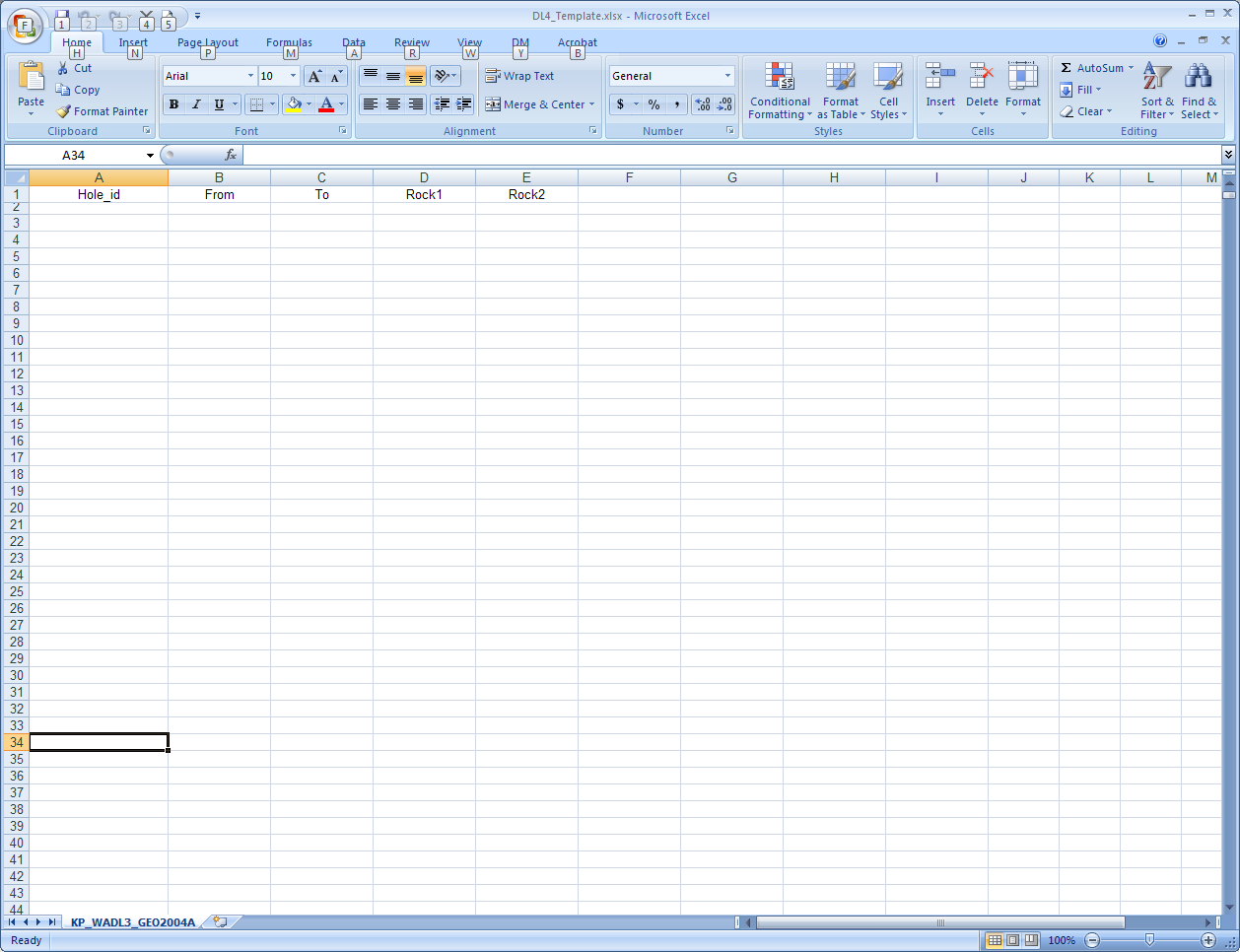
Put your downhole survey data on template DS4

Required fields: Hole ID, Surveyed Depth, Dip and Azimuth (magnetic or true north).



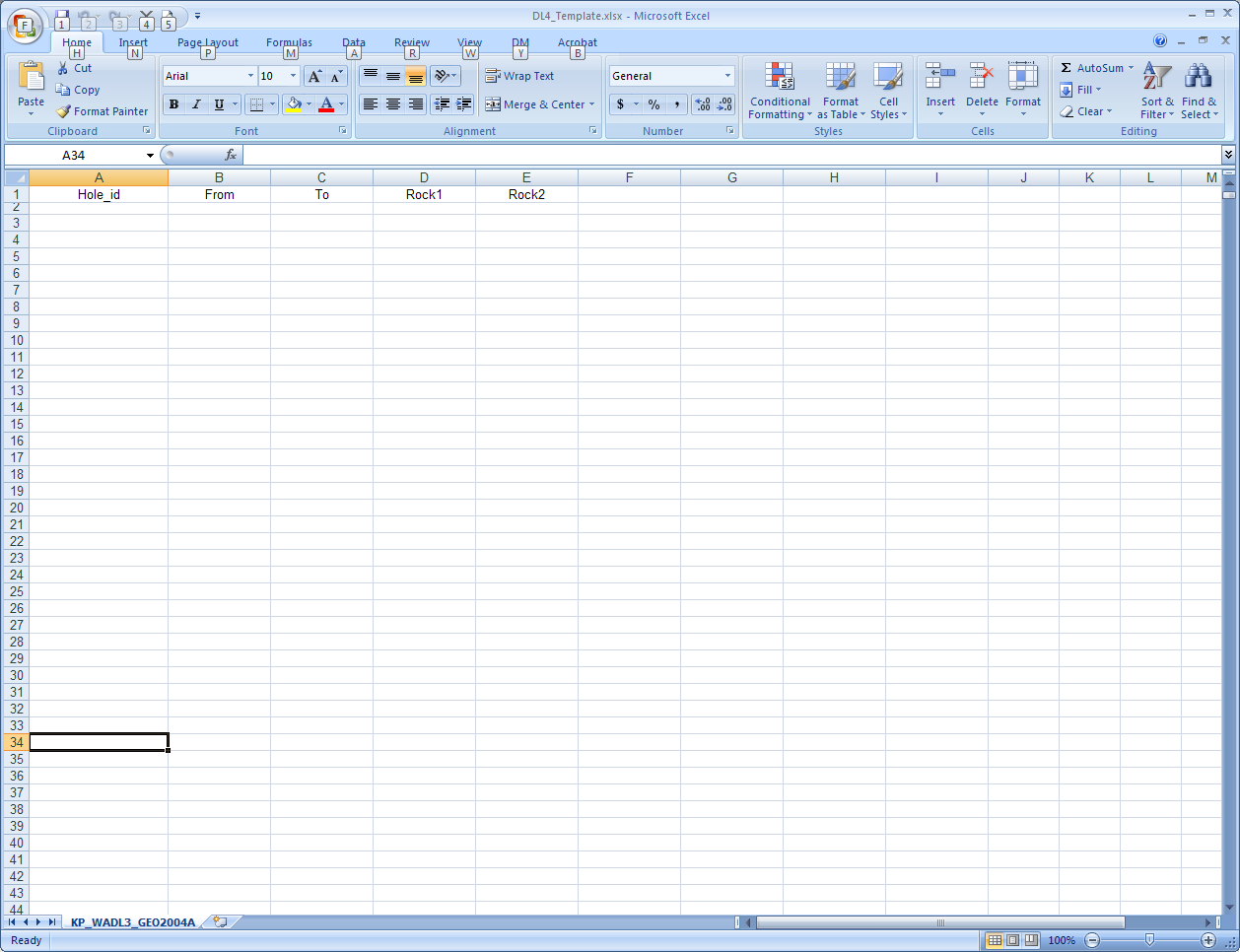
Put your downhole lithology (geology) on template DL4

Required fields: Hole ID and Depth From.



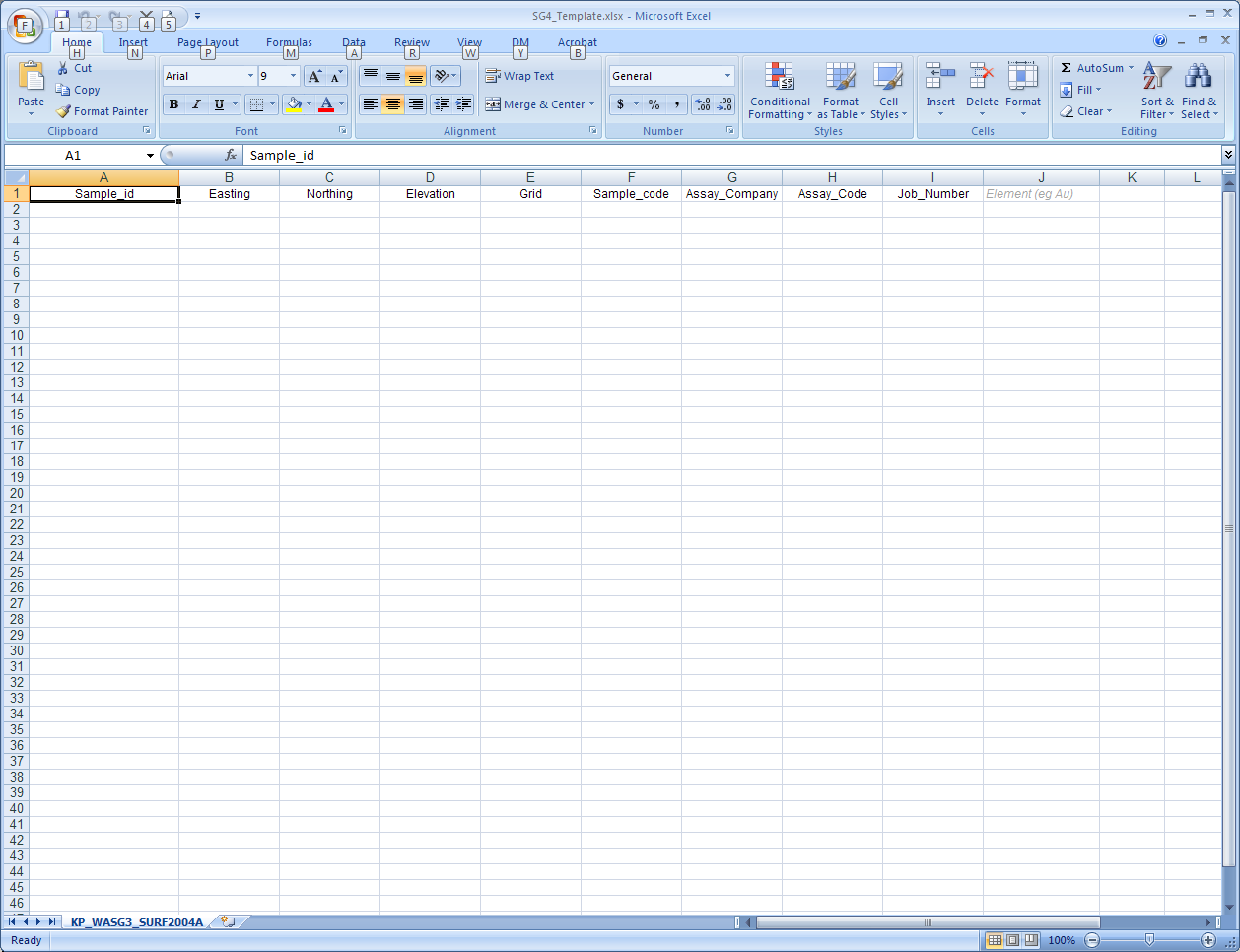
Put any other downhole events (structure, veining, weathering, etc) on template DL4

Required fields: Hole ID and Depth From. (Event files require only one depth measurement (use Depth From; whereas interval files require a From and To Depth.)



Put your surface geochemistry on template SG4

Required fields: Sample ID, Sample Type, Easting and Northing.



Once these files are complete, save them in the Raw Data folder in the SUGGESTED FILE STRUCTURE on page 7.

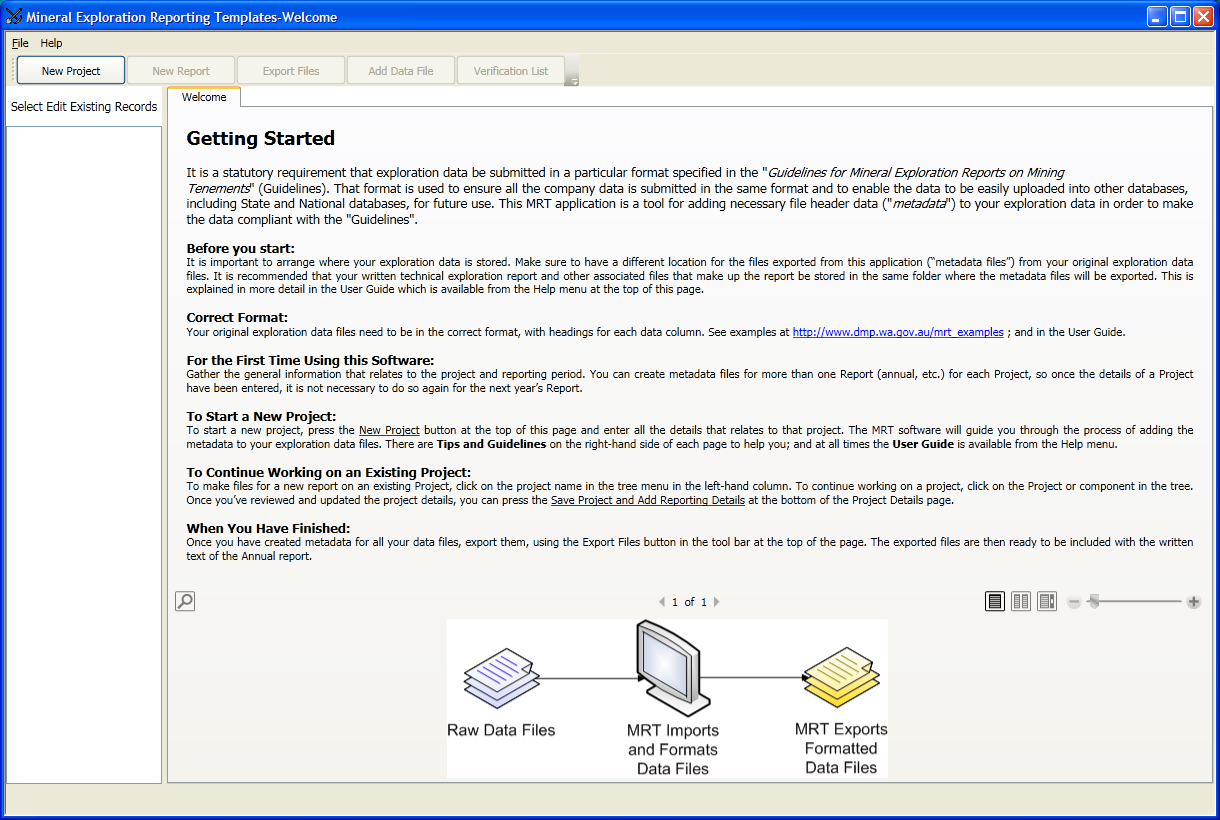
# SO HOW DO I START?



To start the software click the MRT.exe icon created on your desktop during the installation and the welcome page will open.

You can open this welcome page at any time through the Help menu on the tool bar and choosing Getting Started from the menu.

First you need to create a Project to store the details about the project that you want to report on. Press the New Project button at the top right of the screen.



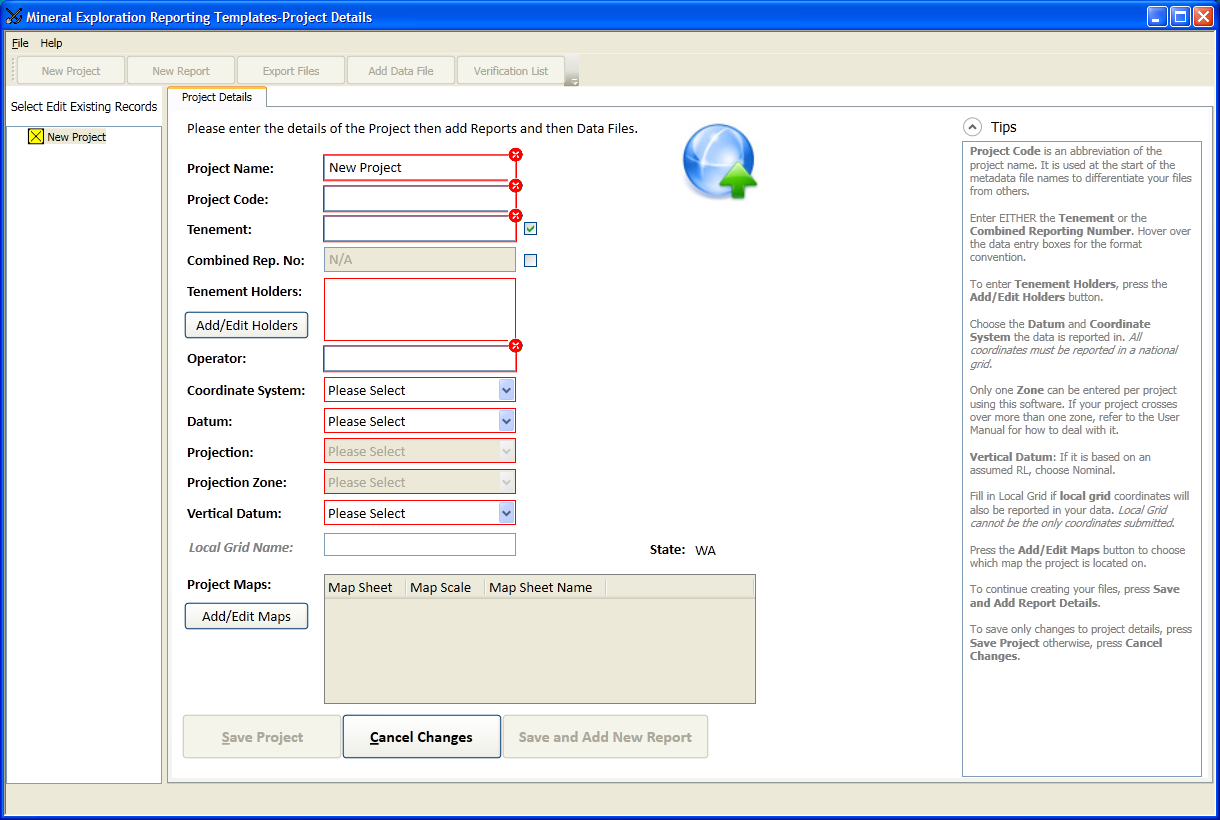
Press to create a new project

Figure - Welcome Page

# PROJECT DETAILS

The Project Details Page is where you will enter all the information for your project. The Project details can be saved and used from year to year.

ALL the red boxes must be completed



**12**

**8**

**7**

**6**

**5**

**11**

**1**

**2**

**3**

**4**

**10**

**9**

Figure - Project Details Page without any Example Data

1. **Type in the name of your Project.**
2. **Enter a Project Code.**

This is an abbreviation of your project name and will be used in the metadata file name to differentiate your files from others. It must be 2-5 characters in length.



1. **Enter your Tenement number** using the format E, M or P##/#####

OR

Tick the box on the right of the data entry box and

Enter your **Combined Reporting Number** using the format C###/####



1. **Add Tenement Holders** by pressing the **Add/Edit Holders** button.

As there are often multiple holders, you must add them in individually. See .

1. **Add Tenement Operator**.

This is the company that has completed and is reporting the work. If there is more than one operator, each submitting a separate report, create another project.

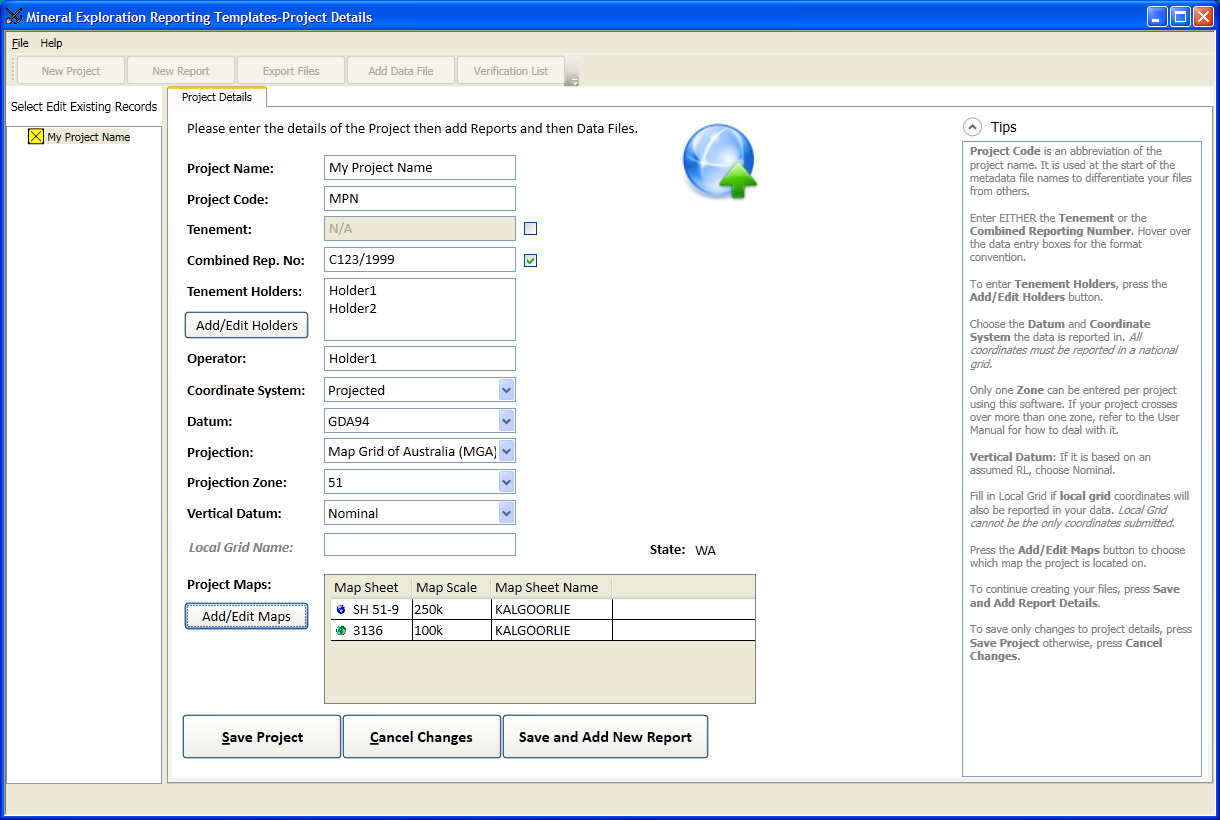
1. **Choose a Coordinate System**.

*All coordinates submitted must be in a national grid. (Projected or Longitude/Latitude)*

Projected Coordinate systems are formatted to allow measurements of the Earth in conventional units, such as metres, feet etc, as if it were flat.

A Geographic Coordinate System (latitude and longitude) measures a curved surface. It uses unconventional length measurements (i.e. degrees, seconds) but can be used over a much larger area.

For more details on coordinate systems [Click Here](http://www.dmp.wa.gov.au/4993.aspx)



**13.** Note that the Project Name appears in the side panel Tree Menu.

See USING THE TREE MENU on page 37 for more details**.**

**12**

**3**

**10**

**9**

**8**

**7**

**6**

**5**

**4**

**2**

**1**

**11**

Figure - Project Details Page with Example Data

1. **Choose a Datum**.

If you are working in a Local Grid, you must transform the coordinates to a national grid before submitting them.

If you are using more than one datum in a project, transform them all to match the datum selected here. If you cannot transform them, you will need to create a separate project.

1. **Projection.**

If a projected coordinate system is chosen, then the software will automatically choose the Projection based on the datum you have chosen. If it is not the projection you expected, check your datum.

See [Click Here](http://www.dmp.wa.gov.au/4993.aspx) on coordinate systems for more details.

1. **Pick a Projection Zone.**

Combined projects may cover more than one zone. This software only allows for one zone to be chosen. If your project crosses 2 zones and you have collected data in 2 zones, transform the coordinates into a geographic grid. If this is not possible, you may need to create 2 projects; one for each zone.

1. **Choose a Vertical Datum.**

Many coordinates are based on a Nominal RL that is relative to the Australian Height Datum (AHD). If you are choosing an RL at random, choose Nominal from the dropdown list.

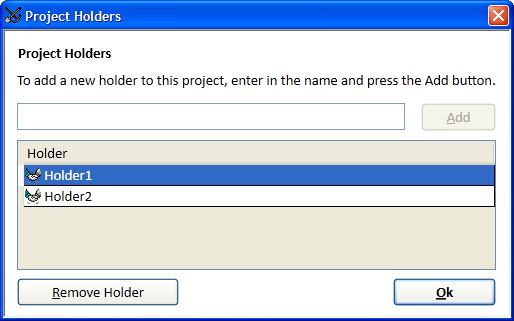
If you are recording an RL from a GPS or survey unit, it is most likely the Australian Height Datum (AHD).

1. **Enter the Local Grid Name** (if applicable).

If you have recorded data in a local grid, it should be submitted with your data; however a national grid *must* be submitted as well. The name of that Local Grid should be entered here.

1. **Add Maps to your Project** by pressing the **Add/Edit Maps** button.

Maps must be added down to the 100,000 map scale. See for more details.



**4b**

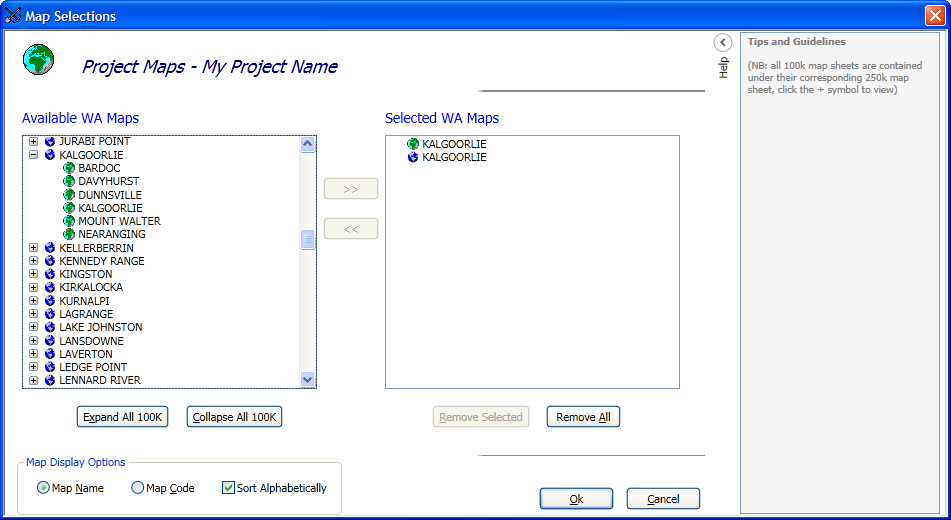
**4d**

**4c**

**4a**

**4e**

Figure - Project Holders Page



**12e**

**12g**

**12d**

**12c**

**12a**

**12f**

**12b**

Figure - Map Selection Page

## PROJECT HOLDERS

4a. Enter the Holder Name in full.

4b. Press **Add** to add the holder to the project.

4c. The company name will populate here.

*Repeat the above 3 steps for all holders.*

4d. If you would like to remove a holder, click on the holder name and then press the **Remove Holder** button.

4e. When you have finished entering all the holders, press OK.

## MAP SELECTION

12a. Scroll to the name of the 250K Map Sheet containing your project area. Expand the 250K Map Sheet to display the 100K Map Sheets by double clicking on the Map Name or pressing on the  beside the Map Name.

To select more than one 100K Map Sheet, hold down Ctrl while clicking on the Map Sheet Name.

12b. If you need to see all 100K Map Sheets you can press the **Expand All 100K** button. Similarly, if you no longer want all 100K Map Sheets displayed, press the **Collapse All 100K** to hide them.

12c. Once you have highlighted the map sheet(s) that correspond with your project area, press the  button to move the maps to the Selected WA Maps window or click and drag the map name from the Available WA Maps to Selected WA Maps.

12d. All selected maps will appear here.

12e. To remove selected maps, highlight them in the Selected WA Maps window and click on the **Remove Selected** button or press the  button

12f. If you would rather search by Map Code, you can change this in the Map Display Options.

12g. Press OK when finished.

Once all data is entered there are 3 buttons to choose from to continue.



If you press Save Project, it will save the details on this page. The project details will now be stored in the MRT software’s database and will not have to be re-entered every time you want to create metadata files for this project. This button will not navigate you to the next page.

If you press **Cancel Changes** and haven’t saved any project details prior to making changes, the page will disappear and you will need to press the **New Project** button to start again.

If you press **Cancel Changes** and have saved other details on this page before and returned to make a few changes, the data will revert to how it was last saved as.



To continue to make your metadata files, press **Save and Add Report Details**.

If this is your first report, this will take you to a new Report Details page.

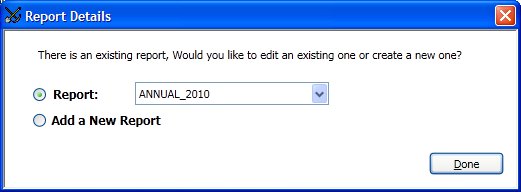


Figure - Report Details Selection Window

If you have already created a report for this project, then this window will open.

To continue to work on a report you have already started, choose the report name from the drop down list.

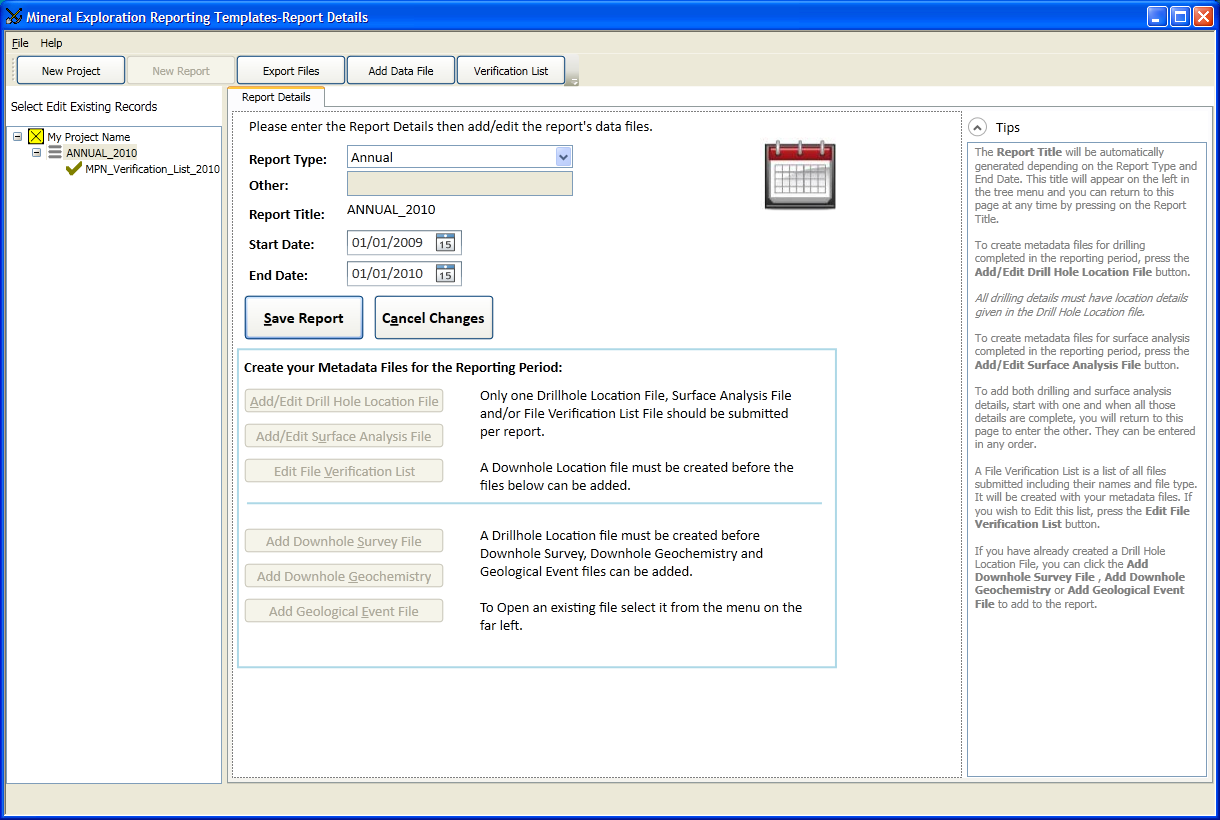
To start a new reporting period, tick the  button next to **Add a New Report**.

Press **Done** when finished.

# REPORT DETAILS

The Report Details Page is where you will enter the information for the reporting period. It is often referred to as the Report in the software, which shouldn’t be confused with the actual written technical report that will be submitted with the metadata files that are being created by this software.

This is also the page that you will return to when you want to *Create* and *Export* files.



**13.** Note that the Report Title along with a File Verification List appears in the side panel Tree Menu.

See USING THE TREE MENU on page 37 for more details**.**

**10**

**8**

**3**

**2**

**1b**

**1**

**9**

**7**

**5**

**6**

**4**

Figure - Report Details Page

1. **Choose the Report Type you are creating the metadata files for.**

If your report type does not appear on the list, choose Other and the Other data entry box (1b) will become active.

1. **The Report Title will be created automatically.**

This title is only used in the software. Do not confuse it with the title of your written report or metadata files.

1. **Enter the Start and End Date for the reporting period.**
2. **Press Save Report** to save the details just entered on this page.

*Once the Report Details are saved, navigation buttons will be activated.*

1. **Press Add/Edit Drill hole Location File** if you have drilling files to report.

All drilling data must have a location (collar) file submitted along with it even if the drilling wasn’t completed in the same year in which the analysis was carried out and the location file was submitted with a previous report.

Only *one* Drill Hole Location file can be created per report. Attempt to combine all

1. **Press Add/Edit Surface Analysis File** if you have Surface Analysis data to report.

Surface Analysis data includes any geochemistry, geophysical and geological data taken on the surface. It must have one location per reading.

More than one Surface Analysis file can be created per report.

1. **Press Edit File Verification List to update it.**

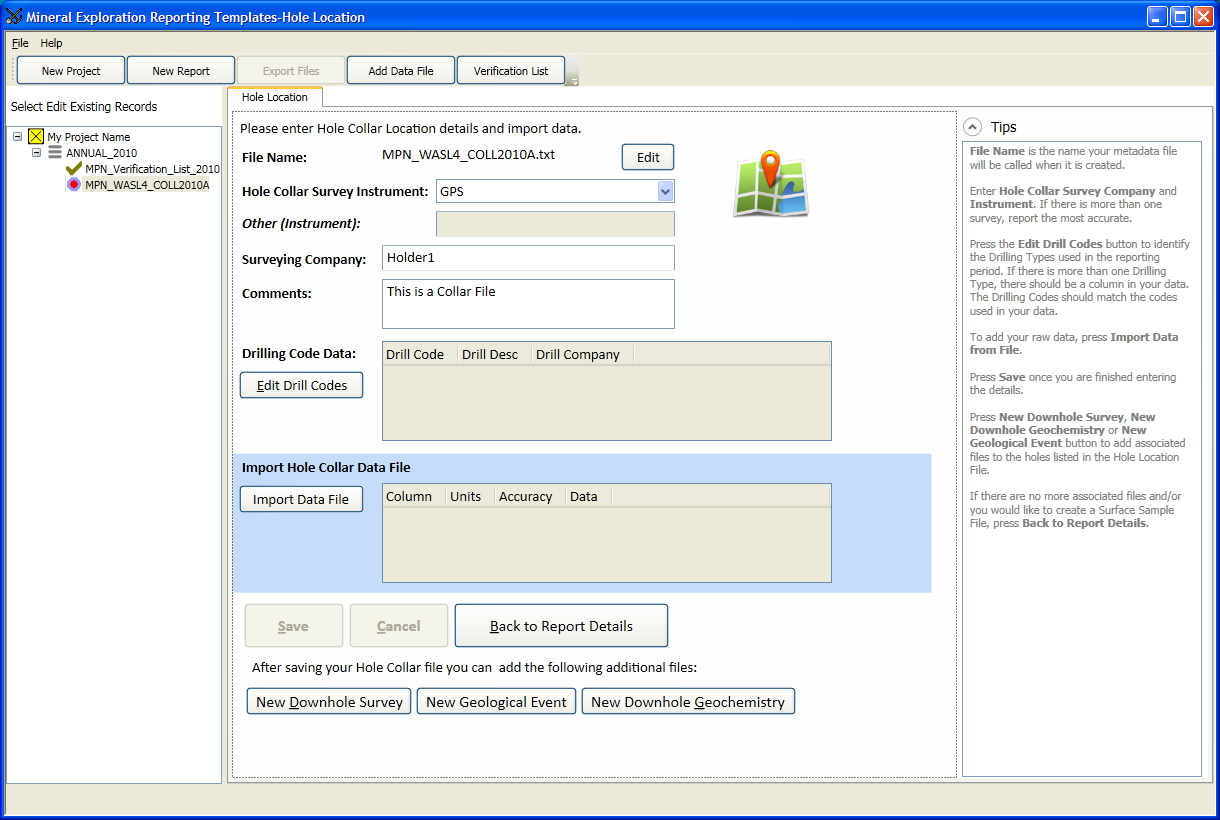
A File Verification List is a list of files that you have submitted with your report. It will include all the files completed by the MRT software and also the written and technical reports that are required to be submitted.

1. These buttons are all related to drilling and will become active once a Drill Hole Location File has been created. You will also be able to access these buttons from the Drill Hole Location Page.

# DRILL HOLE LOCATION DETAILS

The Drill Hole Location Details page is where you will enter the information about the drilling collars/locations for holes drilled in the reporting period. All associated downhole directional surveys, downhole geological events (including geological logs) and downhole geochemistry must have location details submitted in the same report so these details must be completed before any associated data can be entered in the system.

You will return to this page to enter the associated files until all associated files have been entered.

****

**10.** Note that the File Name appears in the side panel Tree Menu.

See USING THE TREE MENU on page 37 for more details**.**

**9**

**3**

**4**

**1**

**2**

**2b**

**7**

**6**

**5**

**8a**

**8b**

**8c**

Figure - Hole Location Page

1. The MRT software will automatically create a File Name for your metadata file based on the recommendations in the guidelines. You can press the Edit button to change the name, but only do so if necessary.
2. **Choose a Hole Collar Survey Instrument from the list.**

If the survey instrument/ technique you used to location the hole collar position is not on the list, choose *Other: Define?* and the Other box (2b) will become active.

1. **Enter a Surveying Company (if applicable)**

If your company completed the work, enter your company name or leave blank.

1. **Enter Comments** pertaining to the raw data file you are about to enter.

Any information about the file is helpful but not mandatory.

1. **Enter Drilling Code Data** by pressing the **Edit Drill Codes** button.

Drill codes are the abbreviations you use in your raw data to identify the drilling type. Drill Code is a required field in your raw data when using this software so a drill code column must appear in your data to clarify which drilling type was completed for which entry. See for more details.

1. **Import your raw data file** by pressing the **Import Data Files** button.

This is where you will “attach” your raw data to the metadata being created. Your raw data should already be saved in excel format with column headers before you press the Import Data File button. Return to RAW DATA FORMAT on page 8 for more details. See Figure 12 for more explanations on how to use the Column Selector.

1. **Press Save** to save the details just entered on this page or **Cancel** to clear.
2. **Choose one file and create metadata for it.** A detailed description of each button is on the next page.









**8a. Choose New Downhole Survey** to create a downhole directional survey metadata file.

A downhole survey file should not be confused with other downhole surveys completed on the drilling (i.e. geophysical surveys). It requires a survey depth, an azimuth (either true or magnetic north) and a dip (declination) reading. A downhole survey file is not required if no downhole directional surveys are completed. However the starting dip and azimuth of the drill hole must be recorded in the Hole Location (collar) file.

**8b. Choose New Geological Event** to create a geological event or interval metadata file (including geological logs).

All downhole data collected, besides downhole directional surveys and geochemical analysis, should be reporting on a Geological Event metadata file. Only Hole ID and Depth From are required to create a geological event metadata file with this software. However, according to the Guidelines, all data collected must be submitted. Create as many Geological Event files as you need by returning to this page after you have finished one and pressing the New Geological Event button again.

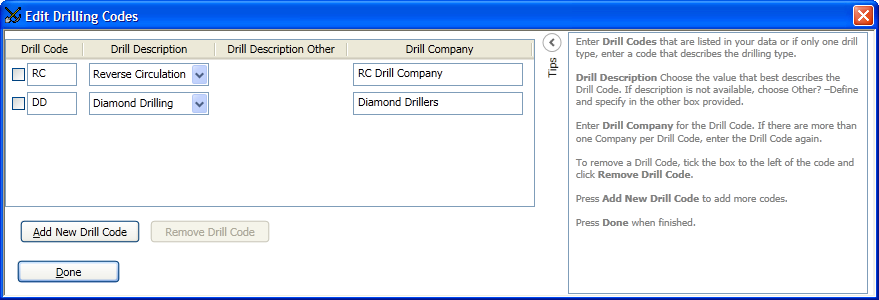
**8c. Choose New Downhole Geochemistry** to create a metadata file with analytical assays.

In the metadata, as explained in the Guidelines, Downhole Geochemistry files have more details that may need to be entered per element; for example, Units of Measure, Assay Method, Lower and Upper Detection Limits, and Laboratory. All Assays must be given a Unit of Measure. Assays with different Units of Measure must be split in to 2 different columns.

It is a requirement that all QA/QC data completed with the data analysis must be submitted on a separate metadata file.

1. **Press Back to Report Details** when you have finished entering data associated with the drilling, to enter a surface analysis file, to update the file verification list and/or to export your files.

## EDIT DRILLING CODES



**5f**

**5d**

**5b**

**5c**

**5a**

**5e**

**5g**

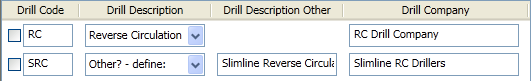
Figure - Edit Drilling Codes Window

**5a. Enter a Drill Code.**

A drill code is the codes you use in your raw data to define the drilling type. As every company may have different codes and there are various drilling techniques it is very important to describe them here to explain the data.

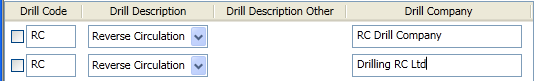
**5b. Choose a Drill Description.**

If there is nothing that describes the Drill Code/ Drilling Type, then choose Other? – define: in the dropdown menu and a box will become active in the Drill Description Other column (5c) where you can enter in a description.



**5d. Enter the full name of the Drill Company.**

If you have more than one Drill Company per Drill Code, enter the Drill Code twice.



**5e. Press Add New Drill Code** if you would like to add more drilling codes.

The Edit Drilling Codes window will open with only one spot to enter codes.

**5f. Remove Drill Code.**

You must tick the box  next to the Drill Code you would like to remove for the Remove Drill Code button to become active. Then press the remove button and that code will be deleted.

**5g. Press Done when finished.**

If the Done button is not activated, a required field has not been completed.

# COLUMN SELECTOR

The Column Selector takes your raw data file and matches (maps) the column headers from that file with a recognised column header and attaches it to the metadata files to comply with the guidelines.

This will be completed for all of your raw data files to convert them in to metadata files. Each page has an Import Data Files button that will take you through this process.

To start, press the **Select** **Your Raw Data File** button and browse the Raw Data folder created in the suggested file structure or where you have saved your raw data.

Which details do I import into which page?

**Hole Location** **page**

Import details of the collar location of your drill holes. For location details you must provide a national grid, hole Id(s), drilling details and hole depth.

**Downhole Survey page**

Import details of a downhole directional survey. You must provide a survey depth, hole Id(s), declination/dip and azimuth.

**Downhole Geological Event page**

Import any details of readings taken downhole. Only a hole Id and a survey depth or from/to depth are required along with the readings.

**Downhole Geochemical page**

Import all analysis completed downhole. A hole Id Sample Id and from/to depth are required.

**Surface Analysis page**

Import any details completed on the surface. You must provide sample id(s), location details given in national grid, and a sample type.

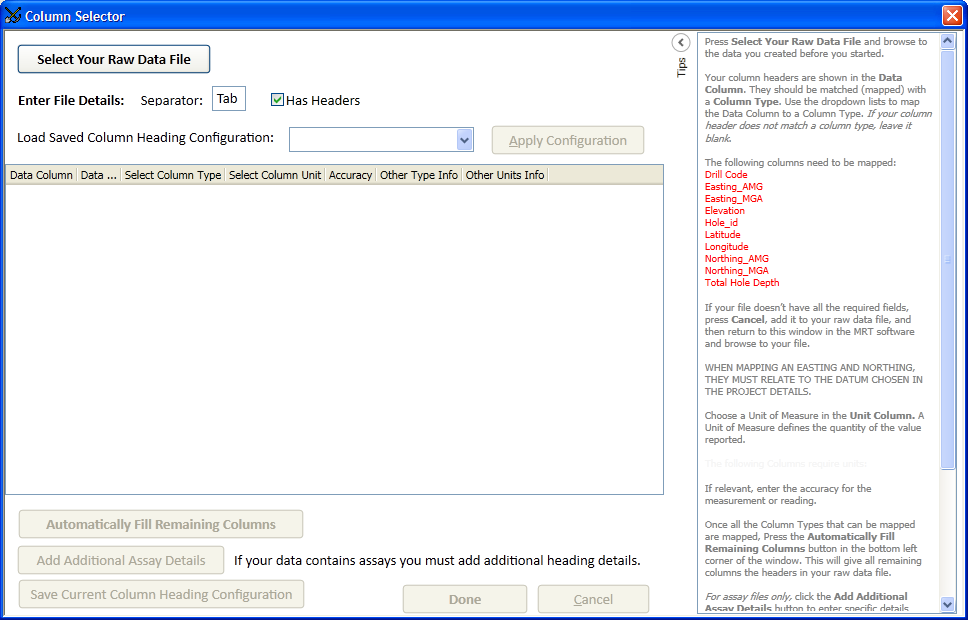
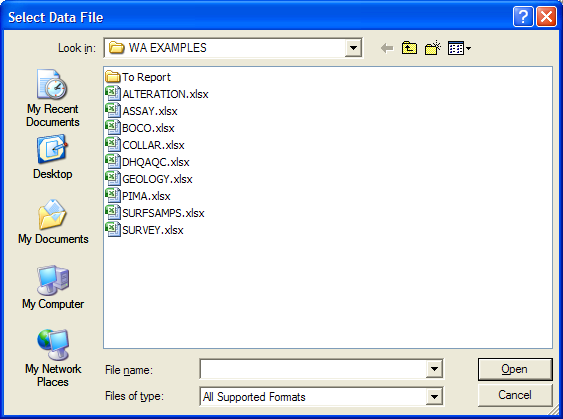
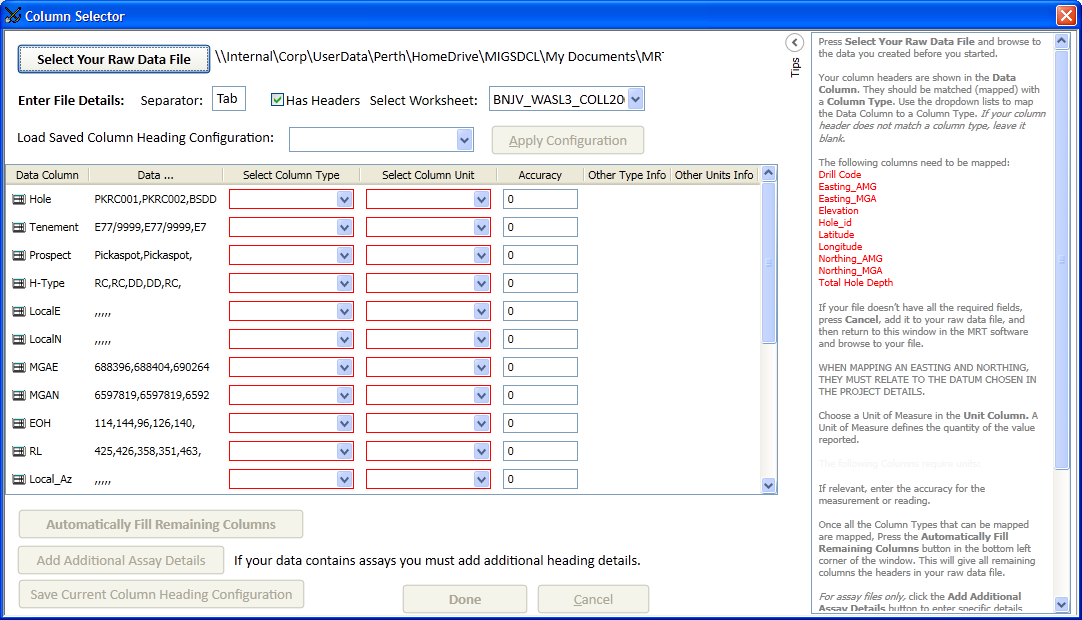


Figure - Column Selector: Browse to Raw data.



**10**

**9**

**8**

**13**

**14**

**6**

**12**

**11**

**10**

**7**

**5**

**4**

**3**

**2**

**1**

Figure - Column Selector

See the following pages for explanations of this window.

1. When you press the **Select Your Raw Data File** button, it will open a browser that you can navigate to your raw data files. The address showing beside the button is where the browser will open.
2. The Column Selector has built in options to make it easier to import your data. You can change the settings in the **Enter File Details** section to load many different files by the Column Selector. If your raw data doesn’t have column headings, you can untick the box beside *Has Headers* and you will still be able to use the Column Selector. However, it is recommended that you have your own headers in the raw data file to make the process easier. Also if your data is in Excel format and has more than one worksheet in the file, you can pick the sheet with your data from the Select Worksheet dropdown list.

*If you have followed the instructions in this User’s Manual to create your raw data files, leave the File Details as they appeared when you open the Column Selector.*

1. The **Data Column** will populate automatically with the headers provided in your raw data. The values shown in this example are from a random example. They will be different from yours.
2. The column labelled **Data...** will show examples of the data you have recorded in your raw data.
3. Select Column Type that best matches your column header. This is how you map your column headers.
4. There are certain values in red in the Tips on the right. These are required values for this software. As you map them with your column headers, they will be removed from this list. You will not be able to continue until all these fields are mapped. You will notice however that some fields will disappear if another one is mapped. For example, Easting\_AMG will disappear from the required values list if Easting\_MGA is mapped. You can still map more than one if your data contains both.

If your raw data is missing one of the required fields, you will need to press Cancel and update your raw data with the required data.

1. You will need to choose a Unit of Measure for all of your data. Mapped fields often choose the most likely unit of measure when they are picked from the list. Check them and make sure they are correct.
2. Enter accuracy for fields that require it. For example, if your Eastings and Northings are in whole numbers you may put 1. Or if you know that your GPS device works to 7m, you can put 7.
3. If there is no obvious match for your column header in the Column Type area, you can choose Other? – define: from the dropdown list. This will create a box in the Other Type Info column that will initially populate your raw data column header. You can alter these headers if required. The same will happen for the Units of Measure.
4. Once you have mapped all the fields that are required to be mapped, you can press the Automatically Fill Remaining Columns button and all other columns will be populated with Other? – define: in the first 2 columns and in your original column headers, the unit of measure NA will be pushed through to the last 2 columns.

**When the metadata file is created, it will have the column headers in either the Select Column Type column or in the Other Type Info column.**

1. Downhole Geochemistry and Surface Analysis files require more information in the metadata. This includes data such as upper and lower detection limits, assay company and assay methods. To enter these details, press the **Add Additional Assay Details** button.

The window below will open. Details for individual assays need to be recorded here. If some of the details are general to all assays, they do not have to be recorded here.

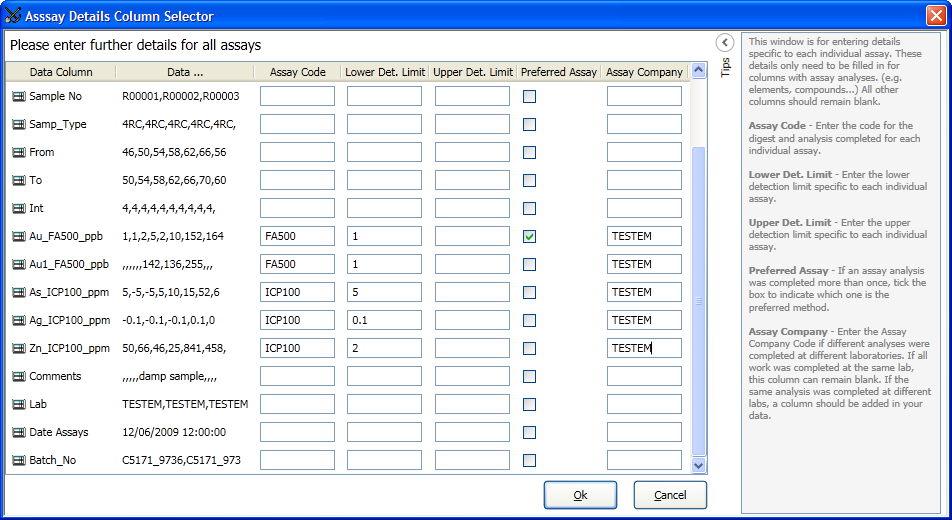
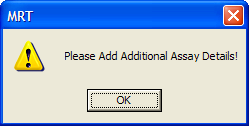
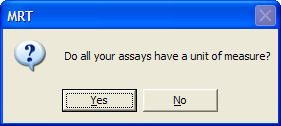


Figure - Assay Details Column Selector



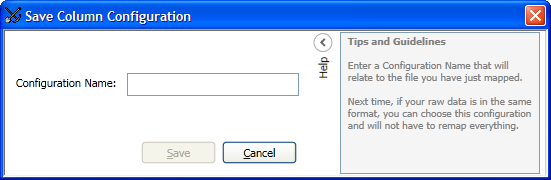
This warning will appear if you have not put any details in the Add Additional Assay Details. When you press OK, the Assay Details Column Selector will open automatically ().



This warning will appear when you press Done to remind your to give all assays a Unit of Measure. It is very important that Units of Measure are recorded for all assays. If you do not map your assays, then the Unit of Measure will be assumed as NA, which is not acceptable.

Assays with different Units of Measure will be in different columns.

1. Once you have finished entering all the data in the Column Selector, you can save the work you have completed by pressing the **Save Current Column Heading Configuration** button. You will need to ensure that your data is in the same format the next time you use the Column Selector.



Each file you import can have a different Configuration name. You will need to save it as something that is indicative of that raw data file.

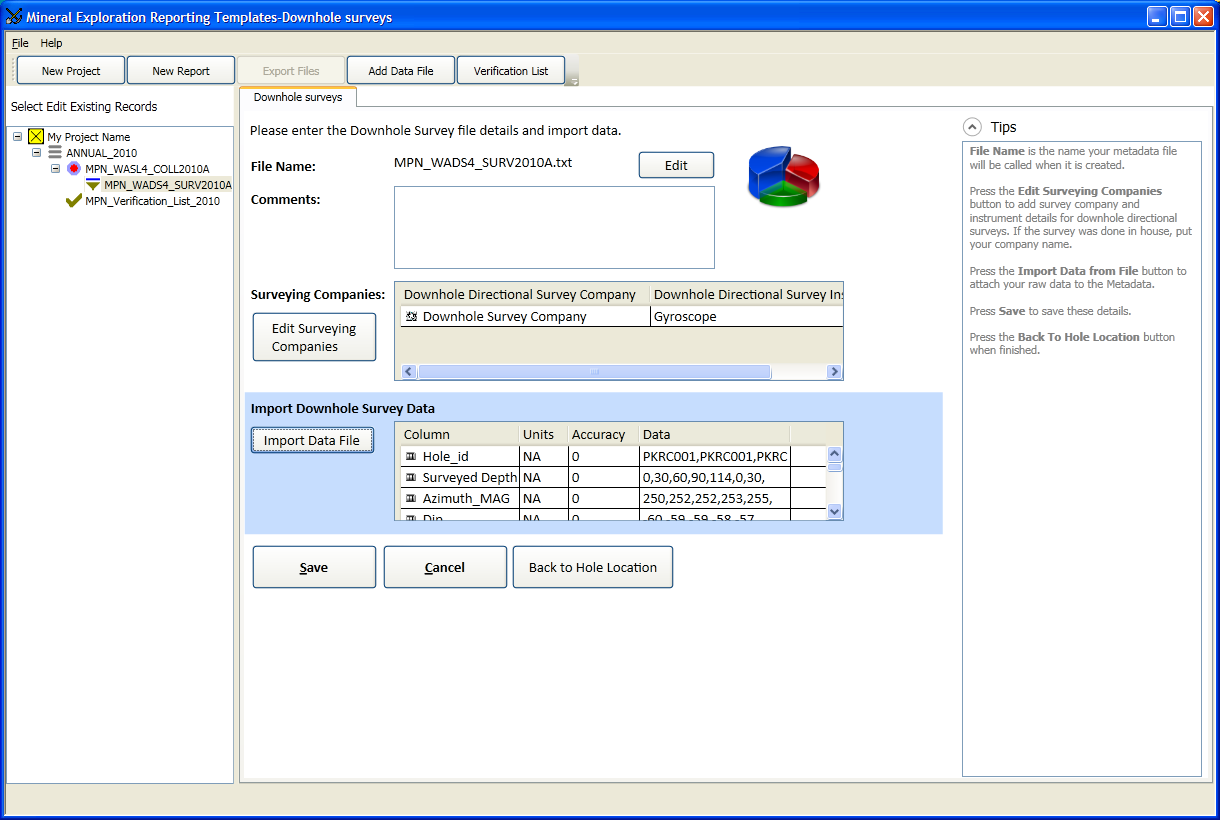
For example, COLLAR for hole location files.

1. When you use the Column Selector again, you can access this data by selecting the name from the **Load Saved Column Heading Configuration** dropdown list and pressing Apply Configuration. This will save you having to fill in all those details from year to year.
2. Press **Done** when finished.

# DOWNHOLE SURVEY PAGE

The Downhole Survey page is where you will enter the information about downhole directional surveys completed on the drill holes reported in the Hole Location page. A Downhole Survey file need not be submitted as long if no downhole directional surveys were completed and the starting or assumed dip and azimuth for the drill holes are reported in the Hole Location (Collar) file.

*Navigate to the Downhole Survey page by pressing the New Downhole Survey button on the Hole Location page once you have finished entering in the Hole Location details.*



**7.** Note that the File Name appears in the side panel Tree Menu.

See USING THE TREE MENU on page 37 for more details**.**

**6**

**5**

**4**

**3**

**2**

**1**

Figure - Downhole Survey Page

1. The MRT software will automatically create a File Name for your metadata file based on the recommendations in the guidelines. You can press the Edit button to change the name, but only do so if necessary.

1. **Enter Comments** pertaining to the raw data file you are about to enter.

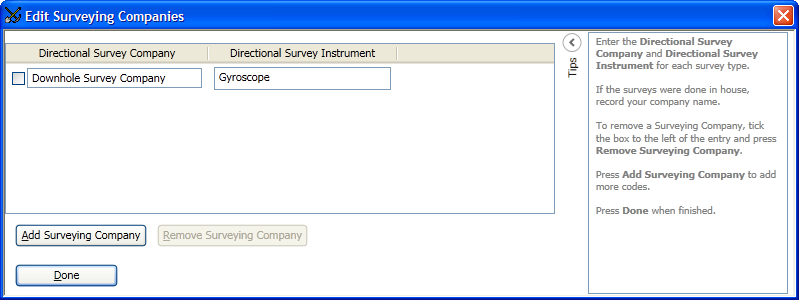
Any information about the file is helpful but not mandatory.

1. **Enter Surveying Companies** by pressing the **Edit Surveying Companies** button. If surveys were completed in house, you can put your company name in the Downhole Directional Survey Company column. See for more details.
2. **Import your raw data file** by pressing the **Import Data File** button.

This is where you will “attach” your raw data to the metadata being created. Your raw data should already be saved in excel format with column headers before you press the Import Data File button. Return to RAW DATA FORMAT on page 8 for more details. See for more explanations on how to use the Column Selector.

1. **Press Save** to save the details just entered on this page or **Cancel** to clear.
2. **Press Back to Hole Location** when finished and to add more files to the collars entered.

## EDIT SURVEYING COMPANIES



**3b**

**3c**

**3e**

**3d**

**3a**

Figure - Edit Surveying Company Window

**3a. Enter a Directional Survey Company**.

**3b. Enter the Directional Survey Instrument** that the company used.

**3c. Press Add Surveying Company** if you would like to add more survey companies.

The Edit Surveying Company window will open with only one spot to enter details.

**3d. Remove Surveying Company.**

You must tick the box  next to the Surveying Company you would like to remove for the Remove Surveying Company button to become active. Then press the remove button and that company will be deleted.

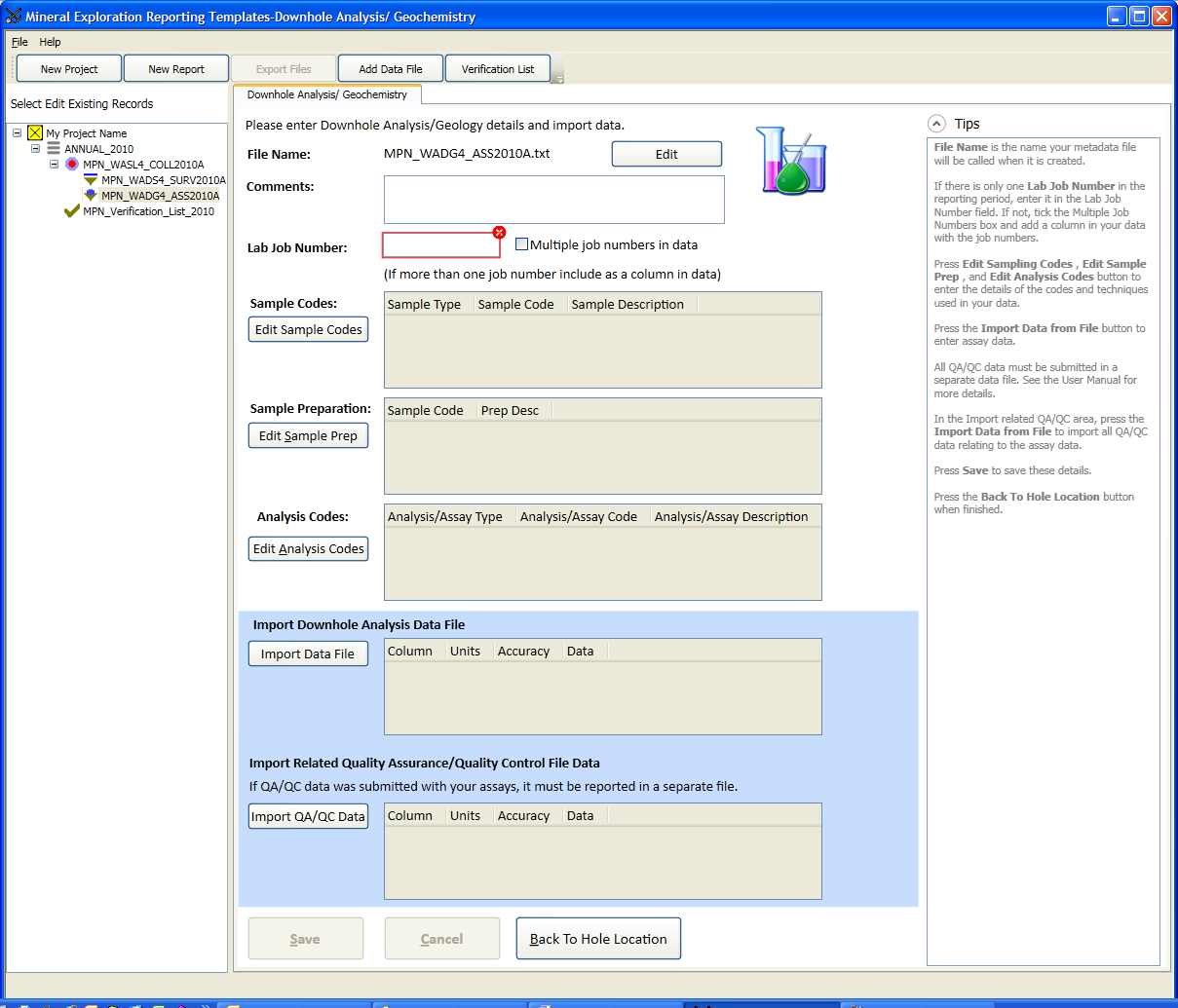
**3e. Press Done when finished.**

If the Done button is not activated is a required field that has not been completed.

# DOWNHOLE GEOCHEMISTRY PAGE

The Downhole Geochemistry page is where you will enter the information about downhole geochemical analysis completed on the drill holes reported in the Hole Location page.

You will require details of the assays and analyses completed. These can be found on the report you received from the assay laboratory.



**11.** Note that the File Name appears in the side panel Tree Menu.

See USING THE TREE MENU on page 37 for more details**.**

**10**

**9**

**6**

**5**

**4**

**3**

**2**

**1**

Figure - Downhole Geochemical Analysis Page (top)

1. The MRT software will automatically create a File Name for your metadata file based on the recommendations in the guidelines. You can press the Edit button to change the name, but only do so if necessary.

1. **Enter Comments** pertaining to the raw data file you are about to enter.

Any information about the file is helpful but not mandatory.

1. **Enter a Job Lab Number.**

This is the number the assay job/batch was given by the Laboratory. If there is more than one job number submitted per assay file, tick the box next to *Multiple job numbers in data*. You will need to add a column in your data to show which entry belongs to which lab number.

1. **Enter Sample Codes** by pressing the **Edit Sample Codes** button.

These are details of the field sampling procedures (See ).

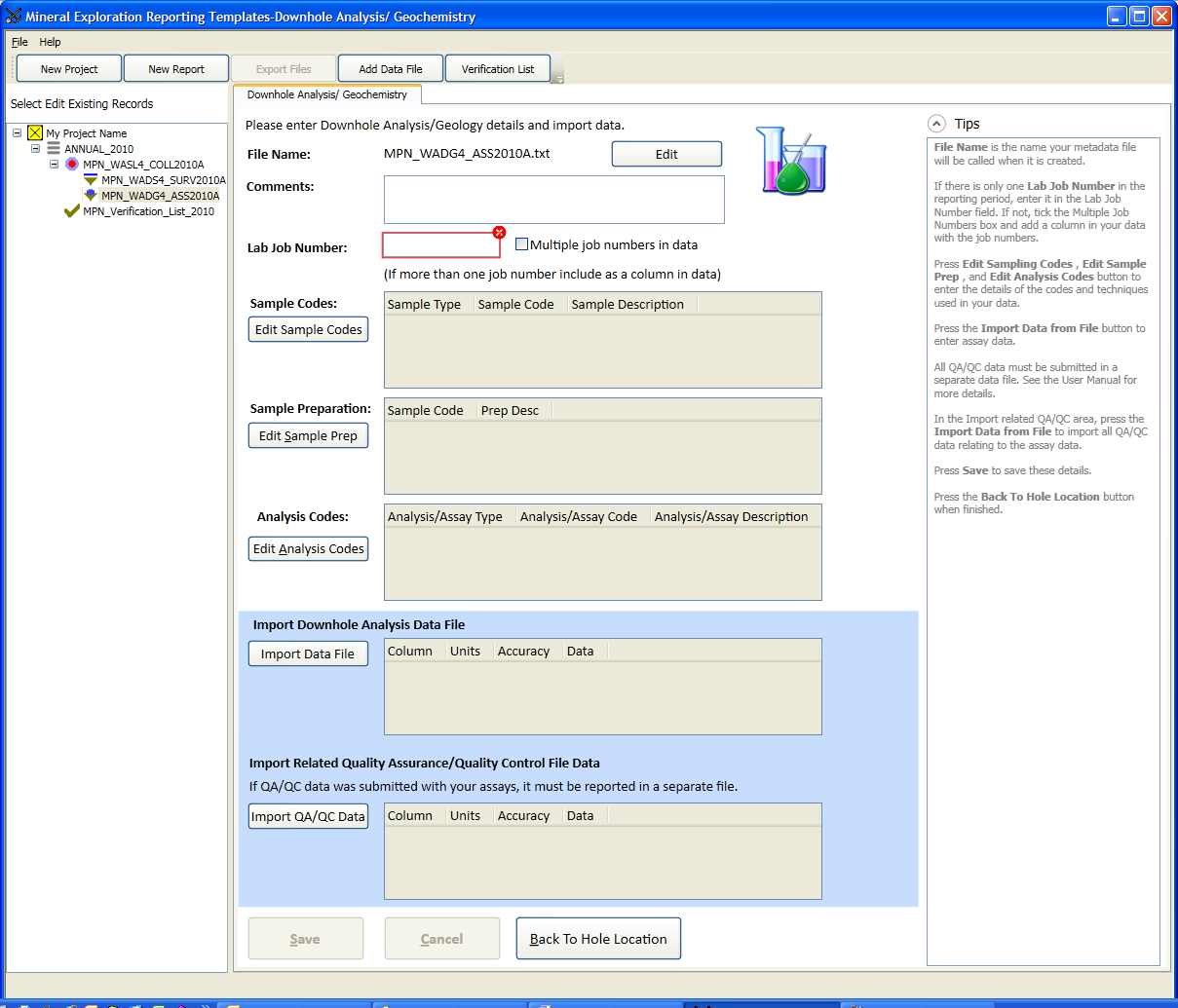
1. **Enter Sample Preparation details** by pressing the **Edit Sample Prep** button

These are details of the preparation completed by the lab before the analysis ().

1. **Enter Analysis Codes** by pressing the **Edit Analysis Codes** button.

These are details of the Lab Analysis methods and digests ().

Continue on the following page...



**10**

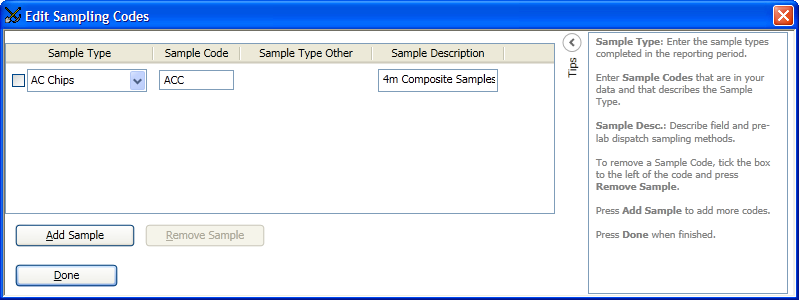
**9**

**8**

**7**

Figure - Downhole Geochemical Analysis Page (bottom - cont...)

## EDIT SAMPLING CODES



**4e**

**4a**

**4a**

**4b**

**4d**

**4f**

**4c**

Figure - Edit Sampling Codes Window

1. **Import your raw data file** by pressing the **Import Data File** button.

This is where you will “attach” your raw data to the metadata being created. Your raw data should already be saved in excel format with column headers before you press the Import Data File button. Return to RAW DATA FORMAT on page 8 for more details. See for more explanations on how to use the Column Selector.

1. **Import your QA/QC raw data file** by pressing the **Import QA/QC Data** button.

Version 4 of the Guidelines now states that if Quality Assurance and Quality Control data was submitted with your assays, it must be reported on a separate metadata file. It is imported here through the same Column Selector as the other files (See ).

1. **Press Save** to remember the details just entered on this page or **Cancel** to clear.
2. **Press Back to Hole Location** when finished and to add more files to the collars entered.

**4a. Choose a Sample Type** from the dropdown list.

If your sample type is not an option, choose Other? – Define: and a box will activate in the Sample Type Other column.

**4b. Enter a Sample Code** that is used in your data or best represents the Sample Type.

**4c. Enter a Sample Description.**

This box describes field and pre-lab dispatch sampling procedures.

**4d. Press Add Sample** if you would like to add more sample types.

The Edit Sampling Codes window will open with only one spot to enter details.

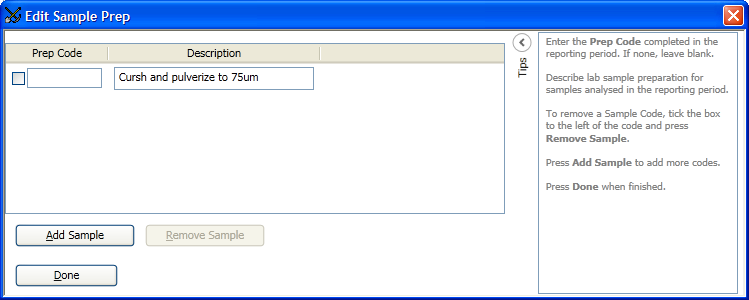
**4e. Remove Sample**

You must tick the box  next to the Sample type you would like to remove in order for the Remove Sample button to become active. Then press the remove button and that sample will be deleted.

**4f. Press Done when finished.**

If the Done button is not activated is a required field has not been completed.

## EDIT SAMPLE PREP



**5c**

**5d**

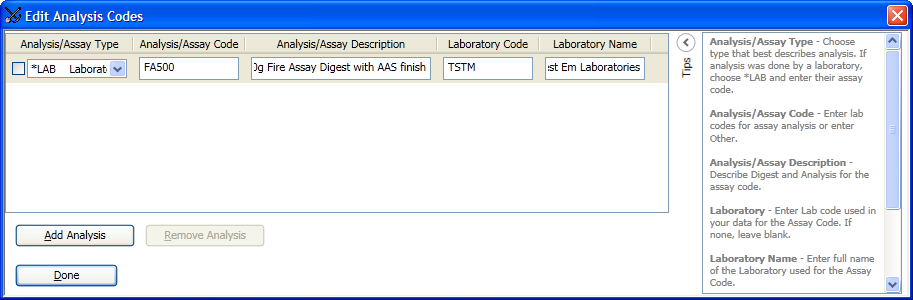
**5e**

**5b**

**5a**

Figure - Edit Sample Prep Window

## EDIT ANALYSIS CODES



**6h**

**6g**

**6f**

**6e**

**6d**

**6c**

**6b**

**6a**

Figure - Edit Analysis Codes Window

**5a. Enter a Prep Code**.

These are the codes given by the Laboratory. If there is no code, leave blank.

**5b. Enter the Sample Preparation Description.**

This is any sample preparation carried out on the sample before it is analysed and after dispatch.

**5c. Press Add Sample** if you would like to add more prep codes types.

The Edit Sample Prep window will open with only one spot to enter details.

**5d. Remove Sample.**

You must tick the box  next to the Prep Code you would like to remove in order for the Remove Sample button to become active. Then press the remove button and that code will be deleted.

**5e. Press Done when finished.**

If the Done button is not activated is a required field has not been completed.

**6a. Choose an Analysis/Assay Type**. Most analyses are completed in a commercial lab that often have their own Assay codes. These codes need to be reported by choosing *\*LAB Laboratory-Specific analysis method* and the Analysis/Assay Code box will activate to write the code.

**6b. Analysis/Assay Code.** This box will activate if \*LAB is chosen. It will also activate if you choose Other? – define: because your method was not done in a commercial lab and is not in the dropdown list.

**6c. Enter an Analysis/Assay Description** – These are the details of the digest and analysis related to the Assay Code.

**6d. Enter a Laboratory Code** only if one is used in your data. Otherwise leave blank.

**6e. Enter the Laboratory Name** in full.

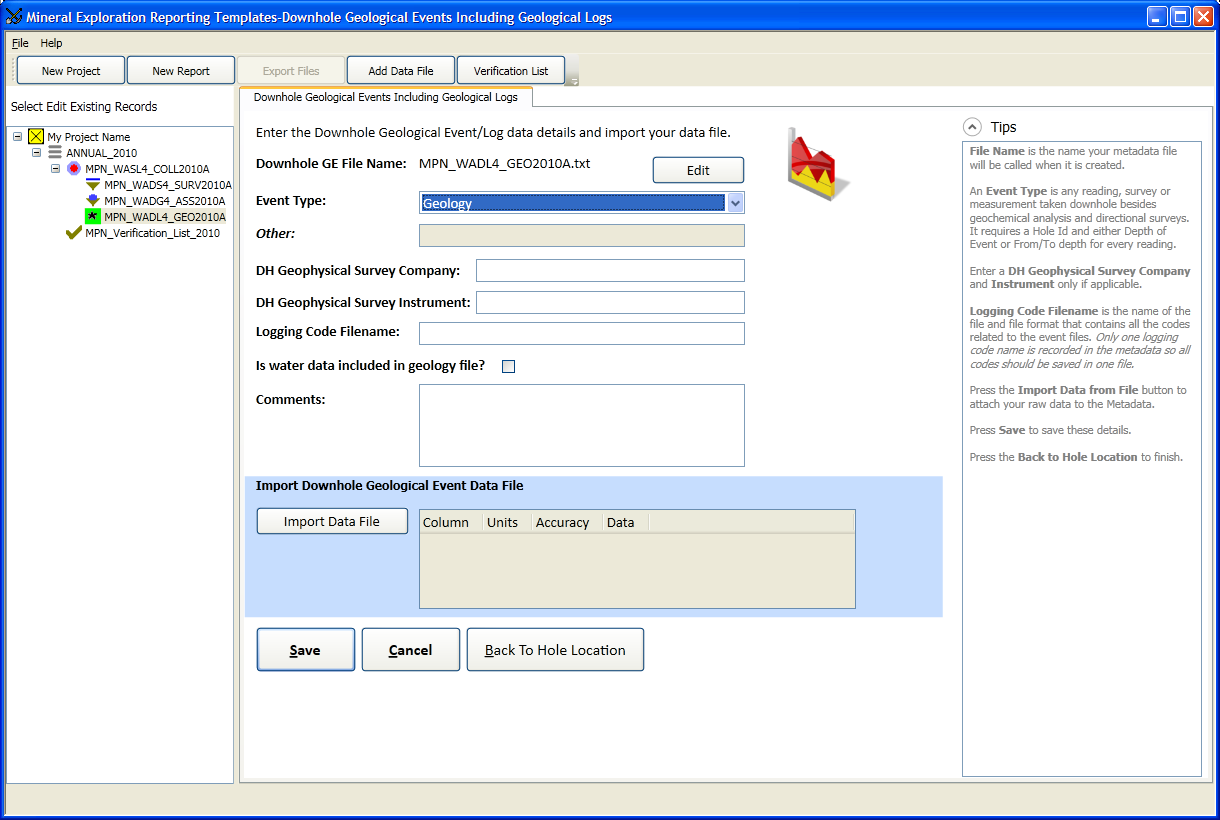
**6f. Press Add Analysis.** Same as 5c.

**6g. Remove Analysis.** Same as 5d.

**6h. Press Done when finished.**

# DOWNHOLE GEOLOGICAL EVENT PAGE

The Downhole Geological Event page is where you will enter the information about downhole analysis or readings completed on the drill holes reported in the Hole Location page. **This includes, but is not limited to, geological logs**.

****

**10.** Note that the File Name appears in the side panel Tree Menu.

See USING THE TREE MENU on page 37 for more details**.**

**3**

**2**

**2b**

**3**

**4**

**5**

**1**

**9**

**8**

**7**

**6**

Figure - Downhole Geological Event Page.

1. The MRT software will automatically create a File Name for your metadata file based on the recommendations in the guidelines. You can press the Edit button to change the name, but only do so if necessary.
2. **Choose an Event Type** from the list. See for descriptions and examples of Event Types. If your files do not match any of the event types on the list, choose Other? – define: and the Other box will become active (2b). Keep your description of your file to one or two words.
3. **Enter a DH Geophysical Survey Company and Instrument** if it is relevant to the Event Type you are entering.
4. **Enter a Logging Code Filename**. This is the file that contains all of your codes used in any geological event file. Only one filename will be reported on the metadata so make sure all your codes are in one file.
5. **Tick the box if water data is included in the geology** (logs). Water data may include water table levels and amount of water encountered in drill holes.

1. **Enter Comments** pertaining to the raw data file you are about to enter.

Any information about the file is helpful but not mandatory.

1. **Import your raw data file** by pressing the **Import Data File** button.

This is where you will “attach” your raw data to the metadata being created. Your raw data should already be saved in excel format with column headers before you press the Import Data File button. Return to RAW DATA FORMAT on page 8 for more details. See for more explanations on how to use the Column Selector.

1. **Press Save** to remember the details just entered on this page or **Cancel** to clear.
2. **Press Back to Hole Location** when finished and to add more files.

**You must go back to the hole location page to create/add a new downhole geological event file.**

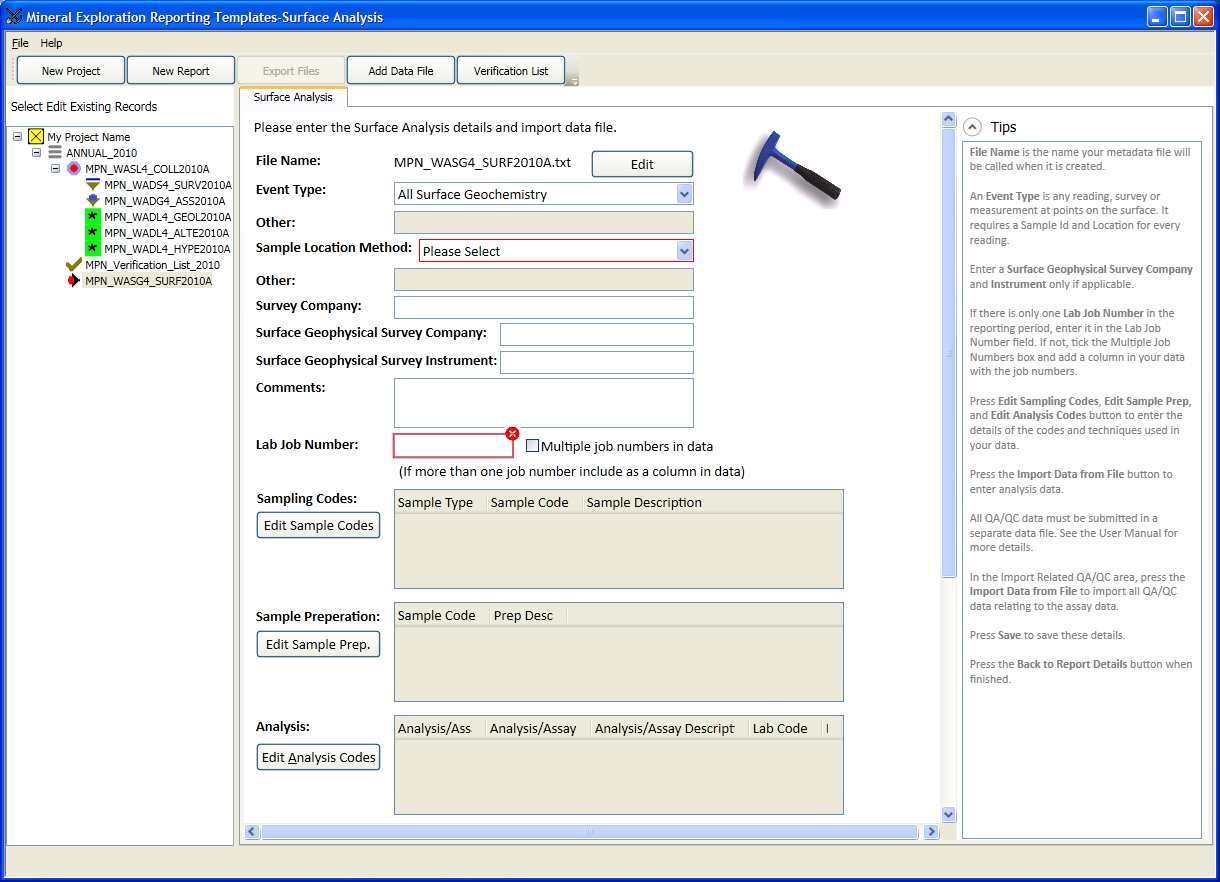
**Do not update this page as it will overwrite your other file.**

Table - Description of Event Types

|  |  |  |
| --- | --- | --- |
| EVENT | DESCRIPTION | EXAMPLES |
| Geology | All geological observations; including especially rock type however may include alteration, mineralogical, weathering, regolith and veining observations. | Geological Logs |
| Alteration | Chemical or hydrothermal alteration observations downhole (may be included in geology). | Alteration |
| Drilling Details | Details that refer directly to drilling. | Drilling Company; Rig Number; Hole Diameter |
| Event | General event that happens at one point down the hole. | Base of Weathering; Base of Oxidation |
| Geotechnical | Files that contain geotechnical data. | RQD; fractures per meter; Shearing; Hardness |
| Geophysics | Files that contain geophysical data. | Radiometrics; Induced Polarization; Downhole Electromagnetic Surveys |
| Hyperspectral | Readings taken downhole with a Hyperspectral Instrument. | PIMA; Hy-Logger; The Spectral Geologist/Assistant files |
| Mineralogy | Mineralogical and elemental observations downhole (may be included in geology). | Sulphide content; Mineralogy; Gold Count |
| Magnetic Susceptibility | Readings from a Magnetic Susceptibility Instrument. | Mag Susc |
| Core Recovery | Amount of core recovered during the drilling process. | Recovery |
| Regolith | Details of the regolith profile (may be included in geology). | Regolith |
| Specific Gravity | Specific gravity readings. | Specific Gravity |
| Structure | All observations of individual structures. | Alpha, Beta, Gamma readings; Faults; Shears; Lineations; Foliations... |
| Veining | Orientation, size, width and mineralogy of veins (may be included in geology). | Veining |
| Water | Any details that relate to water downhole or during drilling (may be included in geology). | Water table; water amount |
| Weathering | Chemical or physical weathering observations downhole (may be included in geology). | Weathering |

# SURFACE GEOCHEMICAL/ANALYSIS PAGE

The Surface Geochemical/Analysis page is where you will enter all details of geochemical analysis, geological observations, geophysical surveys or any other data collected at points on the Earth’s surface. Each point requires a location and sample/point ID. More than one Surface Analysis file can be submitted per report.

****

**14.** Note that the File Name appears in the side panel Tree Menu.

See USING THE TREE MENU on page 37 for more details**.**

**7**

**8**

**9**

**3**

**3**

**4**

**4**

**5**

**6**

**2b**

**2**

**1**

Figure - Surface Geochemistry/Analysis Page (top)

1. The MRT software will automatically create a File Name for your metadata file based on the recommendations in the guidelines. You can press the Edit button to change the name, but only do so if necessary.
2. **Choose an Event Type** from the dropdown list. See for descriptions and examples.

If there is nothing that matches your location method, choose Other? –define: and write the method in the Other box (2b)

1. **Choose a Sample Location Method** from the dropdown list.

If there is nothing that matches your location method, choose Other? –define:

If a survey company was used to locate the sample position, enter that in **Survey Company**.

1. **Enter a Geophysical Survey Company and Instrument** if applicable to the Event Type you are entering.
2. **Enter Comments** pertaining to the raw data file you are about to enter.

Any information about the file is helpful but not mandatory.

1. **Enter a Job Lab Number.**

This is the number the assay job/batch was given by the Laboratory. If there is more than one job number submitted per assay file, tick the box next to *Multiple job numbers in data*. A column will need to be included in your data to show which entry belongs to which lab job number.

1. **Enter Sample Codes** by pressing the **Edit Sample Codes** button.

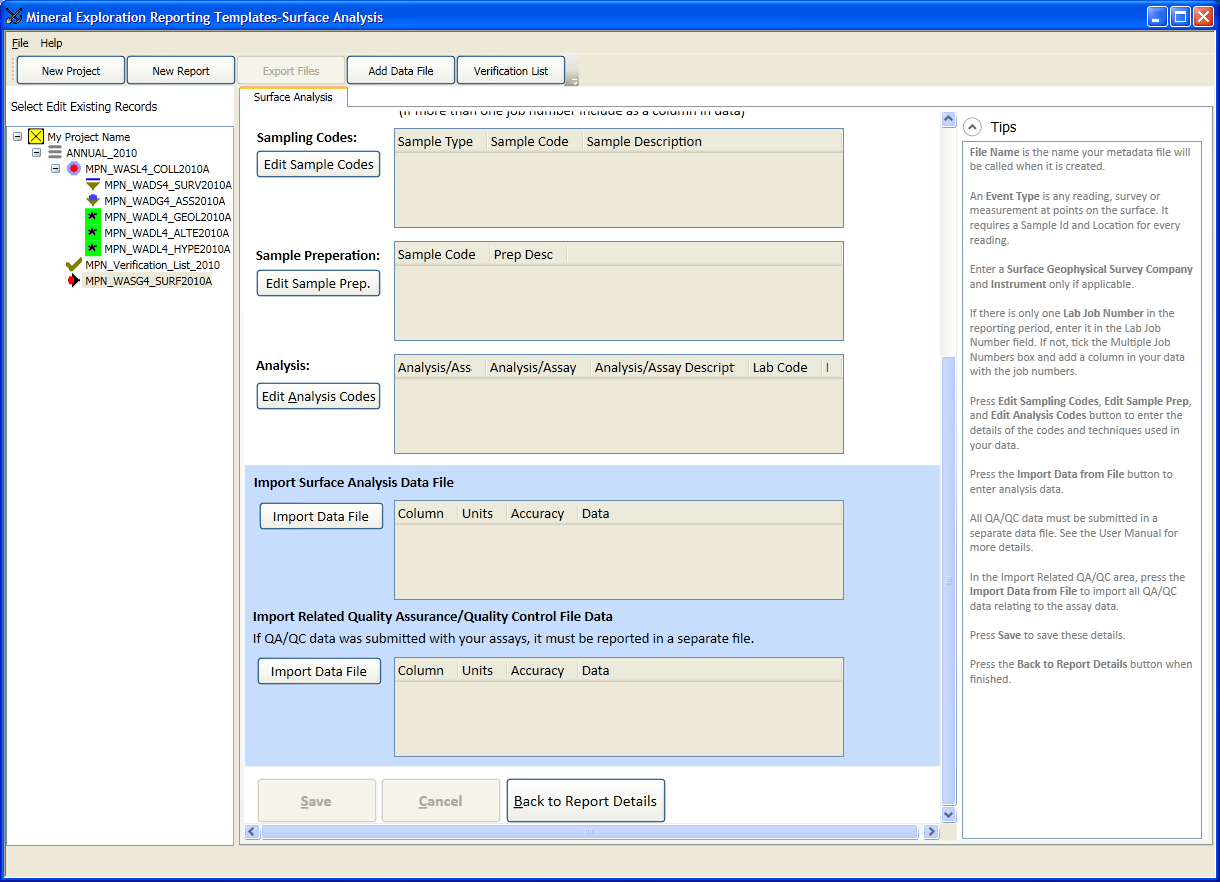
These are details of the field sampling procedures (See ).

1. **Enter Sample Preparation details** by pressing the **Edit Sample Prep** button

These are details of the sample preparation completed by the assay laboratory before the analysis ().

1. **Enter Analysis Codes** by pressing the **Edit Analysis Codes** button.

These are details of the Lab Analysis methods and digests ().

****

**13**

**12**

**11**

**10**

Figure - Surface Geochemistry/Analysis Page (bottom- cont.)

1. **Import your raw data file** by pressing the **Import Data File** button.

This is where you will “attach” your raw data to the metadata being created. Your raw data should already be saved in excel format with column headers before you press the Import Data file button. Return to RAW DATA FORMAT on page 8 for more details. See for more explanations on how to use the Column Selector.

1. **Import your QA/QC raw data file** by pressing the **Import QA/QC Data** button.

Version 4 of the Guidelines now states that if Quality Assurance and Quality Control data was submitted with your assays, it must be reported on a separate metadata file. It is imported here through the same Column Selector as the other files (See ).

1. **Press Save** to remember the details just entered on this page or **Cancel** to clear.
2. **Press Back to Report Details** when finished to add another Surface Analysis file, update the File Verification List or Export your files.

**You must go back to the report details page to create/add a new surface analysis file.**

**Do not update this page as it will overwrite your other file.**

Companies are encouraged to submit all surface sample geochemistry on one file. However, it is understood that there can be many different techniques and assay methods so it may just be easier and clearer to put them on different files. The Event Type dropdown list allows this to occur.

Table - Surface Sample Event Type

|  |  |  |
| --- | --- | --- |
| EVENT | DESCRIPTION | EXAMPLES |
| All Surface Geochemistry | All Surface Geochemistry includes any sample collected on the surface or just below the surface and has been submitted for geochemical testing.  *Make sure to have a sample type in your data.* | Includes soil, stream, rock, auger, vegetation and mine dumps and all their examples |
| Soil | Any surface sample collected | LAG; Channel; Float; Loam; Pisolites; BLEG |
| Stream Sediment | Samples collected in a stream or waterway that indicate the sample has been transported. | Stream Sediment |
| Rock | A sample collected from a outcrop or appears in situ | Outcrop; Subcrop; Gossans; Rock chips |
| Auger/ Shallow Drilling | A method where a sample is taken below the surface however only one sample is collected per location. | Auger; Interface drilling; Vacuum |
| Surface Mapping | Points taken on the surface where a geological observation was made and recorded. | Mapping; Petrology |
| Surface Geophysical | Geophysical readings taken on the surface. | Radiometrics; Induced Polarization; Downhole Electromagnetic Surveys |
| Surface Hyperspectral | Readings taken on the surface or samples collected on the surface with a Hyperspectral Instrument (This may include a sample taken from a drill hole but there can be only one reading per location). | PIMA; Hy-Logger; The Spectral Geologist/Assistant files |
| Vegetation | Samples taken from vegetation and submitted for geochemical testing. | Tree litter; Foliage; Bark |
| Mine Dumps/ Tailings | Samples taken from mine dump or processes. | Mine Dumps; Tailings |

# FILE VERIFICATION LIST

A File Verification List is simply a list of files that you have submitted. When your report is received the File Verification List is checked against the files received and to verify that all files on the list have been received. If there are more or less files on the list than were received you will be contacted for an explanation.

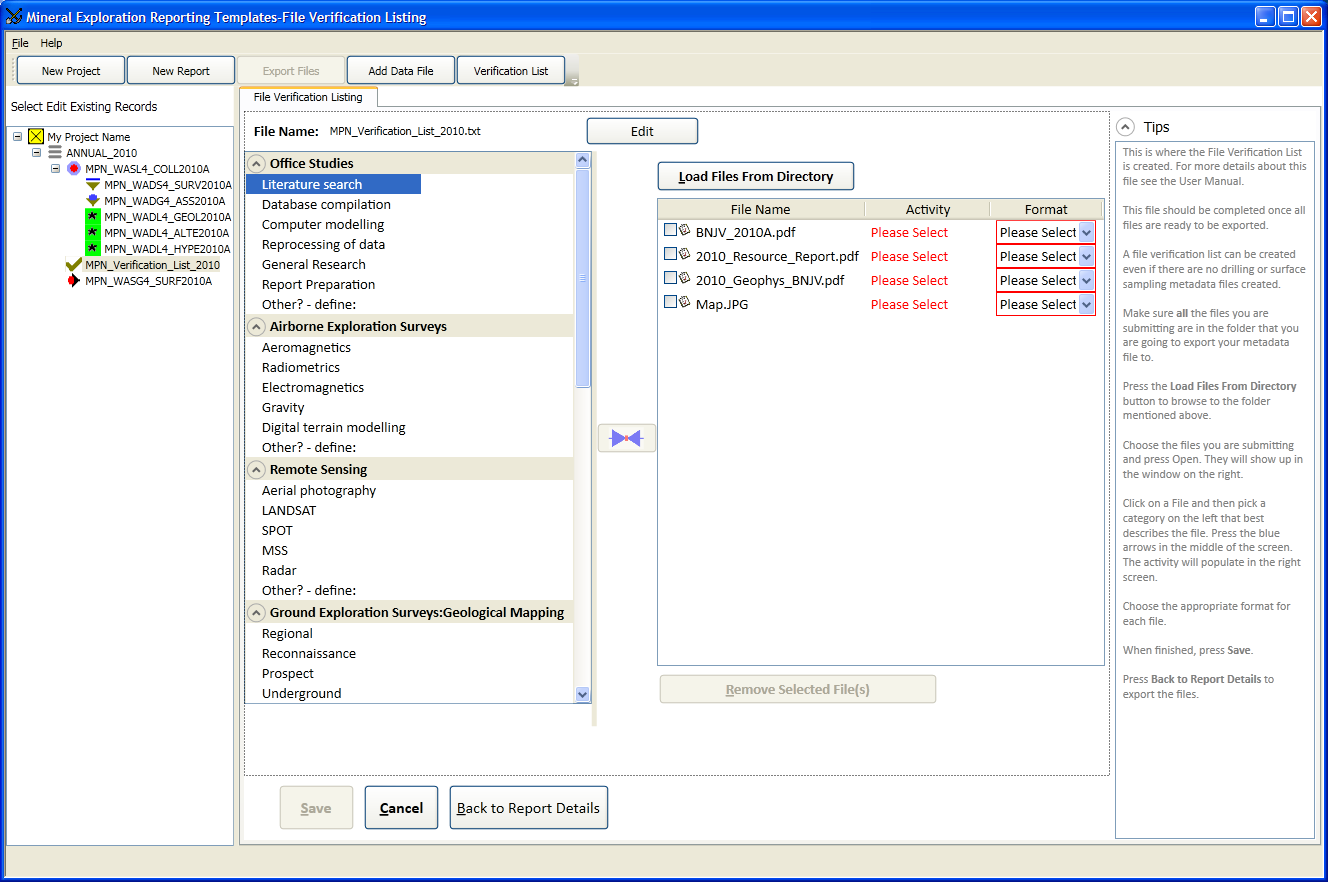
Make sure your written report and other associated reports, images, data and files are all in one folder.

**This is the last step *before* you export your files.**

1. The MRT software will automatically create a File Name for your File Verification List. You can press the Edit button to change the name, but only do so if necessary.
2. **Press Load Files From Directory** to browse to your files (report text, appendices, plans but NOT your metadata files). It is recommended to have all files in the same folder but if you need to get files from different folders on your computer, browse to one folder, select and add those file. Then press Load Files From Directory again and repeat.
3. **Highlight one of the files you just loaded in the right window.**
4. **Highlight the most appropriate Activity in the window on the left.**
5. **Press the blue arrows** between the two windows and the activity highlighted on the left should populate in the activity column beside your File Name.
6. **Choose a File Format** from the dropdown list beside your File Name.
7. **Remove a File**

You must tick the box  next to the File Name you would like to remove in order for the Remove Selected Files button to become active. Then press the remove button to delete.

1. **Press Save** to save your changes, or **Cancel** to clear.
2. **Press Back to Report Details** to Export your files.

****

**8**

**9**

**7**

**5**

**6**

**2**

**1**

**3**

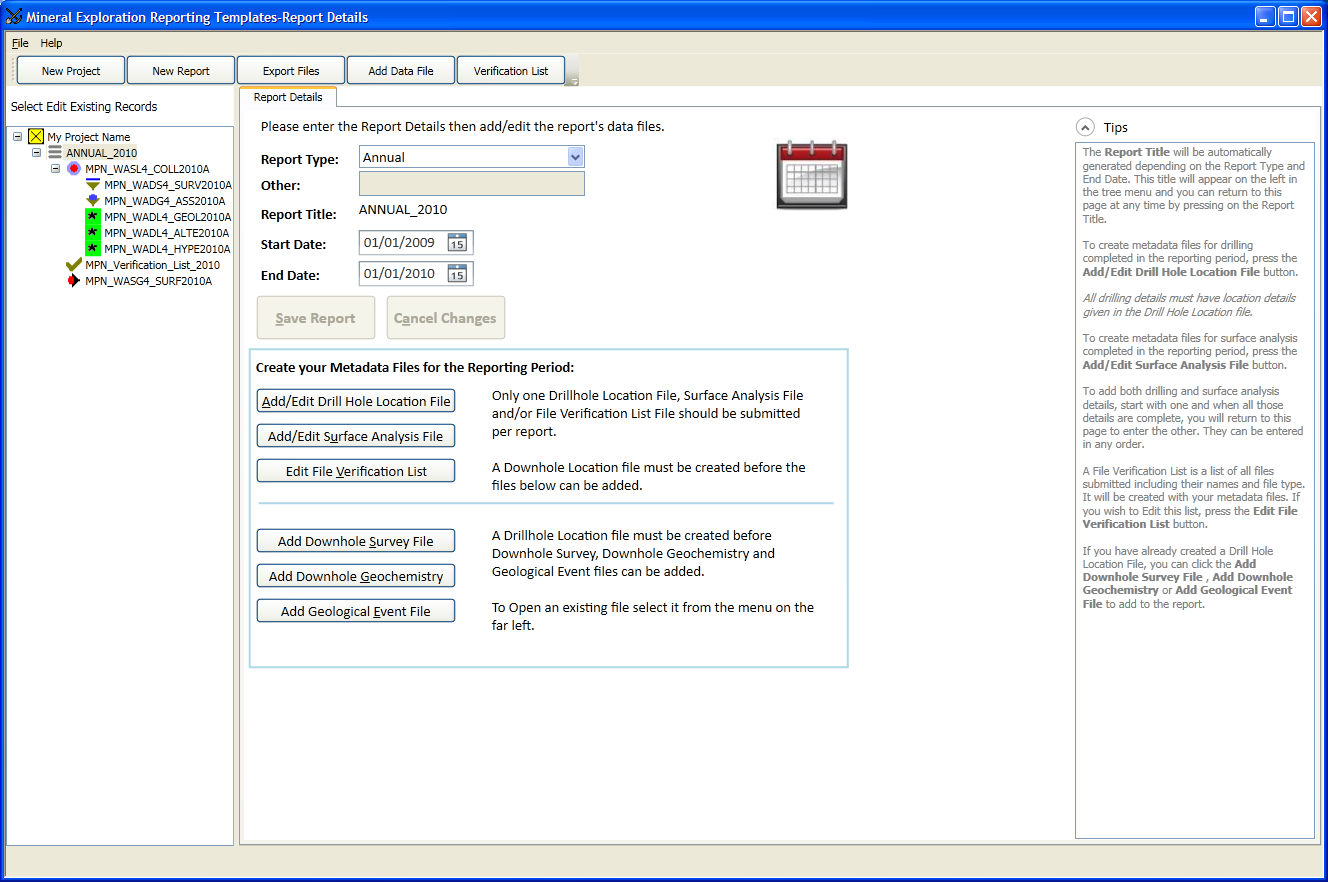
**4**

Figure - File Verification List Page

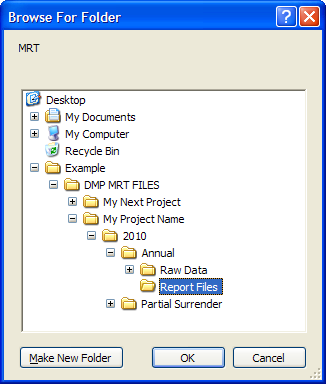
# FILE EXPORT

Now you will Export the metadata files in the correct format to the report folder you have previously set up.

To export your files, you must be on the Report Details page.

**** Once in the Report Details page, the Export Files button will activate along the top of the MRT software.

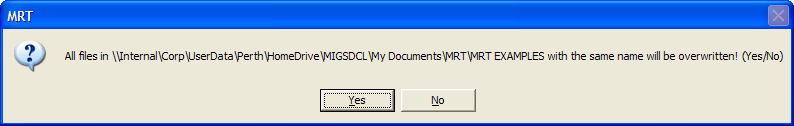
**Press the Export Files button.**



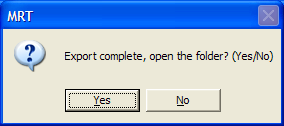
Browse to a folder where you would like to export your metadata files.

If you have set up your folder structure as suggested at the start of the User’s Manualbrowse to the Report Files folder you created earlier.

Wait until you have put all your data into the software before you export your files.

This warning message will pop up every time you export your files, whether there are files of the same name or not.

Press **Yes** if you are happy to continue. Press **No** and you will stop the export so you can move the files of the same name or choose another location to export to.

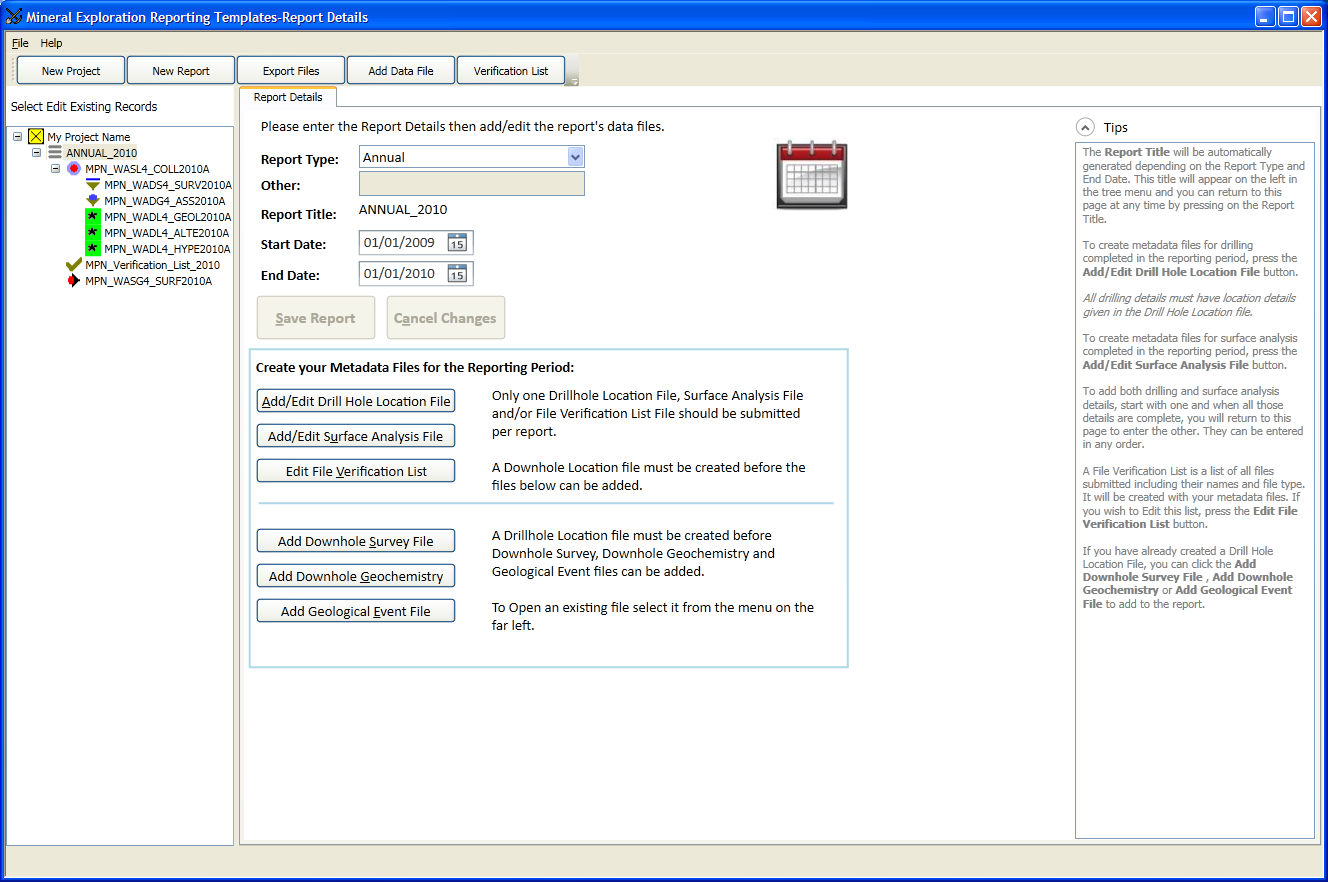


This message will appear when the files are exported.

Pressing **Yes** will open the file where your metadata files have been saved. If you saved them with the other files you are required to submit, you can copy the entire folder to a CD and submit it.

# USING THE TOOLBAR

Along the top of the MRT software window is a toolbar that is always visible. Use this toolbar helps to create new files at any time while using the software.



**5**

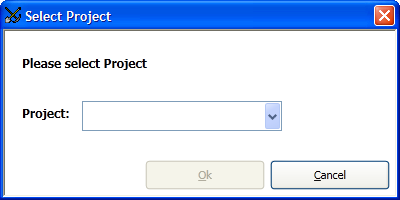
**4**

**2**

**3**

**1**

1. **New Project**. This button will start a new project. If pressed at any point it will create a new project and take you to the New Project page to start entering details. Go to the section PROJECT DETAILS on page 11 for more details.
2. **New Report.** This button will create a new Report Details page. A report must relate to a project so when you press the button the window below will open:

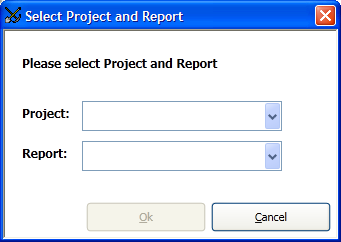
****

Choose the project you want to attach the report details to and press OK.

If you have not yet created the project, press cancel and press the New Project button.

Go to the REPORT DETAILS section on page 15 for more details.

1. **Export Files.** Press this button when you want to export files. You must be on the Report Details page to export your files. See FILE EXPORT section on page 35 for more details.
2. **Add Data File.** A data file is any of the files associated with the Report Details (i.e. Hole Location file). Data files require a project and reporting details before they can be created.

****

Choose a Project and Report from the dropdown lists and press OK. It will take you to that Report Details Page.

You can then choose which data file to add from the buttons on the screen. See on page 15 for details.

If you have not yet created either a project or report for the data files, press Cancel and then create those first.

1. **Verification List.** This button updates your File Verification List. It is best to wait until *after* all data files are created for the report but *before* you export your data to create it. You will need to select a Project and Report as you did for data files but instead of navigating to the report page, the file verification list will open. Go to the FILE VERIFICATION LIST section on page 34 for more details on File Verification Lists.

# USING THE TREE MENU

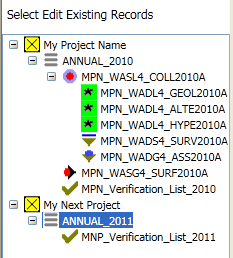


Figure - Example of the Tree Menu

As you create a page, the MRT software will create an icon in the window on the left hand side of the screen. This is known as a tree menu. You can use the tree menu to navigate to pages you have already created by clicking on the icon and file name. See for the descriptions of symbols in the tree menu.

Tree menus use a hierarchy where the required pages are further left and the other pages hang off them. To hide all associated file press the minus sign () beside the icon. To expand again, press the plus sign () next to the icon.

You can also delete a page in the tree menu by selecting the page you want to delete. Highlight the title by left clicking on it. It should have a box around it (see ANNUAL\_2011 in the figure on the left). If it is not highlighted, the title that is highlighted will be the one deleted. Then right click on the file and choose Remove Del (). All associated files will also be deleted so if you do not want that to happen, just update the page by clicking on it in the tree menu, make changes to the page and then click the Save button.

Table - Description of Symbols in Tree Menu

|  |  |  |  |
| --- | --- | --- | --- |
| Symbol | Page Type | File Name Shown | Level in the Tree |
|  | Project Details | Project Name | 1 |
|  | Report Details | Report Title | 2 |
|  | Hole Location Data File | File Name | 3 |
|  | Downhole Survey Data File | File Name | 4 |
|  | Downhole Geochemistry Data File | File Name | 4 |
|  | Downhole Geological Event Data File | File Name | 4 |
|  | Surface Analysis Data File | File Name | 3 |
|  | File Verification List | File Name | 3 |