

POWER SUITE

2015 Addendum Manual



The Intelligent Geological Software Solution

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Overview

Version 2015 Revisions

Added the ability to **Print out Striplogs and Core Logs to a continuous tiff file (no page breaks)** including Striplog headers, location maps, survey views, legends and formation tops.

Added an option on the **View menu** to extend the Curve display in the **TVD and SS display** in both Power*Log and Power*Core to display the curve data past the old limitations of 2 subsequent 90 degree or 1 survey greater than 90 degree that would cut the entire display off. **The user now has the ability to keep the curve display going.**

Bit Record Report - We have added the Additional fields required for the latest PDC and Roller Cone IADC Bit Classification as well as 2 more liner sizes (surface, intermediate and main) to the Pump data section. The printed reports also reflect these changes.

Added a **1:1 Depth Scale ratio** to the log scale menu selection to see the core photos in real life scale.

Added a **Core Photo Cropping tool** to easily crop core photos from the core box pictures and add them to a core log for depth correction.

Added a **Core Photo Stacking layer / track** with the ability to crop photos, rotate photo, identify rubble or slough intervals, split and lock photos to a depth, shrink and stretch individual core sleeves or all sleeves between to lock points and move all cored intervals up or down. This layer should be able to depth correct core photos to log data quickly and easily.

Added a **Core # and Sleeve data layer / track** to display the data determined in the Core photo stacking layer and give the user the ability to export this data for Core Photo annotations.

Added an **Interpretive Facies layer / track** that mimics the Interpretive Lithology layer to handle all bed restricted layers so that when you change a facies interval all bed restricted layers will amend with those revisions. This layer also has the Dean Stark test intervals imbedded into them with a min / max test interval, and a maximum lost core interval to give the user the ability to automate the Dean Stark interval calculations so the test will never go over facies boundaries or areas of lost core too large.

Added an **Automated Dean Stark or NMR test intervals calculator layer / track** which enables the user to easily indicate the test intervals and export that data for the laboratory to perform their tests. The user also can modify this data if they so wish.

Added an **Automated Test Intervals calculator layer / track** which enables the user to easily indicate the other test intervals (PSD, MB, SI, Sieve, VOB, OB and Coulter) which can be locked to the Dean Stark intervals and export that data for the laboratory to perform their tests. The user also can modify this data if they so wish.

Added a **Single Test Intervals indicator layer** which enables the user to easily indicate the single point tests (XRD, SEM, Thin Sections) and export that data for the laboratory to perform their tests

Revised the **Percent layer / track** to add a manual keyboard entry to go along with the mouse pointer entry we had previously and import ASCII file data.

Added a **Ranged Data layer / track** to display this type of data (1212 – 1214m, 2.321 microns) and the ability to manually input data or import ASCII file data.

Added a **V Shale Gamma Ray (GR) layer / track** to calculate the volume of shale from a gamma ray curve in the various calculation methods (Index ratio, Steiber, Clavier, Tertiary Rocks and Older Rocks).

Added a **V Shale Porosity (POR) layer / track** to calculate the volume of shale from the Neutron Density Porosity curves.

Added a **V Shale Minimum (Min) layer / track** to calculate the volume of shale from the lesser of the two calculated curves Volume shale GR and Volume shale POR curves.

The user can now **control the Bed Restricted layers** with either an **Interpretive Facies Layer** or an **Interpretive Lithology Layer**. By doing so we have added another **system log for both Metric and Imperial for Interpretive Facies logs**.

Interpretive Lithology Layer / Track – We have added the ability to Insert a Lithology to a Facies. If an Interpretive Facies has been inserted the user can now **CTRL Key** depressed and **double click** with the mouse to fill in a selected rock type into the top and base depths of the preexisting Facies.

Interpretive Lithology Layer / Track – We have added the Ability to Delete Multiple Lithology or Bed Intervals.

Interpretive Lithology Layer / Track – We have added an Interval Button to the builder to enable the user to find any really small beds that are not discernable to the eye.

Print WE / AM and Reports to word. We have added subsea values to the Morning reports and the Survey Reports. We have also added the AER UWI requirements to all the reports as well as the Strip and Core log headers.

Revised **LAS Export Utility for Curve data** to include the TVD and Subsea Values to the export file data and included the AER board requirements from Directive 80.

Revised **LAS Export of Well data** to include only certain well log data including only relevant log data and creating a menu item to easily get to the LAS Well data file creation.

We have added to the Import Toolbar / Menu Item the ability to **Import Percent Data** (ie 1200-1202m, 34%), **Import Ranged data** (ie 1200-1202m, 3.24 microns) and **Import Core Photos** to the Core Photo stack layer.

We have added to the Export Toolbar / Menu Item the ability to **Export** the automated **Dean Stark** tests intervals, the **Interval test intervals**, the **single point test** points and **Core Sleeve data** including Slough and rubble zones.

Right Click menu options. We have added the Layers Organizer to the Edit Options selection.

We have added the ability to **Export** Power*Suite **Data** in **Wellsight Format**.

Reformatted the **Import** and **Export File** menu items to group them better.

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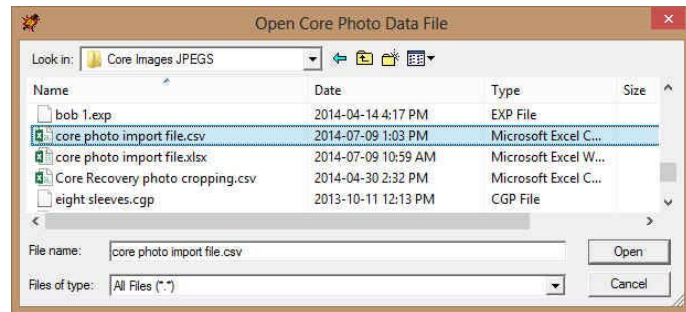
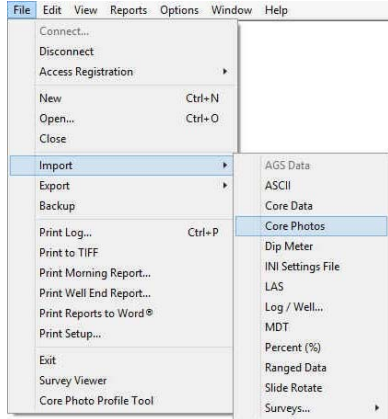
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
File Menu – Import Menu - Core Photos

This method will allow the user to import ASCII or csv file formats into our database. We cannot import xls or any other type of spreadsheet format. If the data comes that way you must resave it in another format before attempting to import the data. The actual core photos are not imported into the database. With MS Access the database is limited to 2GB and core photos can be up to 60MB each. This would seriously hinder the amount of data so we need to have the files stored on the hard drive of the computer. You will need a **photo cropping template and location, photo name and location, Core #, Core top, Core Base and Recovery** in a file.

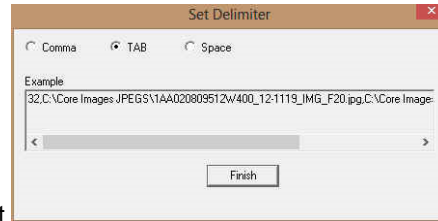
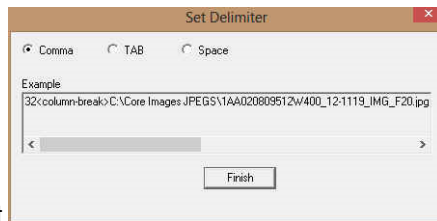
How to Import Core Photos



- To access the Core Photos Import window, click on **Import** under **File** to activate the pop-out menu and then select **Core Photos** or click on the  **Import Core Photos Icon** on the **Import Toolbar**. This will activate the open Core Photo data file window as shown below.

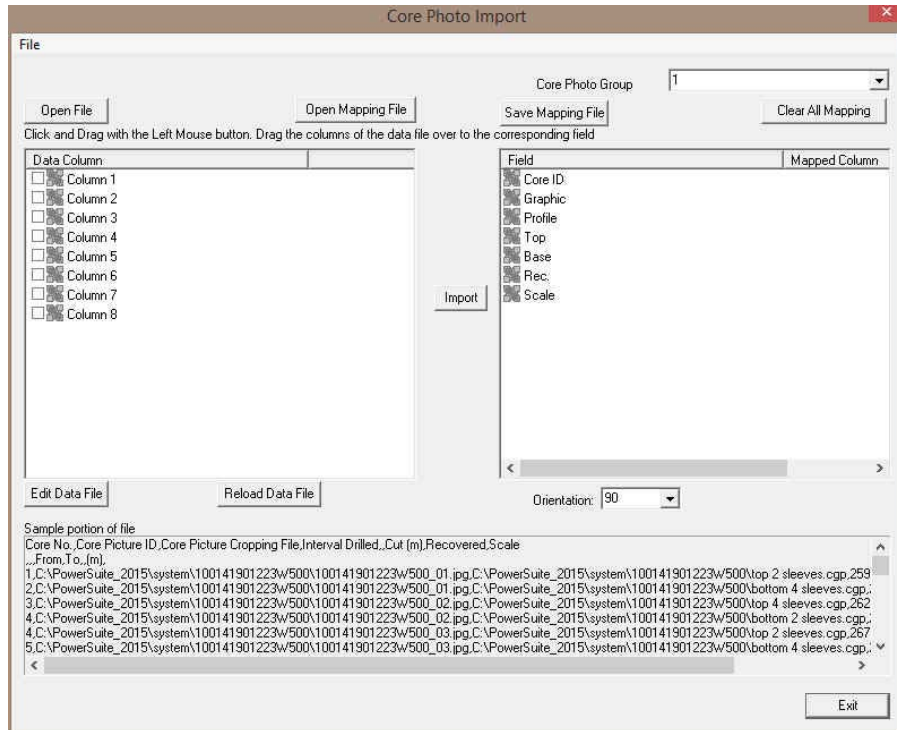


- Select the file from the folder or drive with the corresponding navigational tools provided and either **double click** on the **file name** or **click once** on the file name and **click** on the  **Open** button. This will activate the **Set delimiter** window as shown below.

N.B. The one on the left the delimiter is set correctly the one on the right the delimiter is set incorrectly.



- Highlight the correct corresponding  button beside Comma, TAB or Space delimiter (if shown correctly the Example should read **<column-break>** between the data columns. If you see this then **click** on the  **Finish** button to close this window and activate the Directional survey import window shown on the next page.



Overview of the window.

The **left hand side** of the **Core Photo Data Import window** allows the user to view the different data columns represented in the file numbered in ascending order.

The **right hand side** of the **Core Photo Data Import window** allows the user to see the data fields associated with the Core Plug Data Table supplied by Power*Suite.

Open File Button allows the user to open another Core Photo data file after the Import window has been opened.

Open Mapping File Button allows the user to utilize the mapping file saved from above to remap data columns in the survey file to database fields in the survey point table in the database.


Save Mapping File Button allows the user to save the mapping between data columns in the survey file to database fields in the Core Photo table in the database. Once the initial mapping has been done and saved, the user can utilize this mapping file so you do not have to repeat the clicking of dragging of data columns to database fields in the survey point table again and again if you do not want to.

Clear All Mapping Button allows the user to undo all the mapping from data columns in the survey file to database fields in the survey point table that was done either by dragging or by utilizing the mapping file.

Edit Data File Button allows the user to open the file in Word pad to look at the file format and possibly make changes to the data file prior to importing the files data.

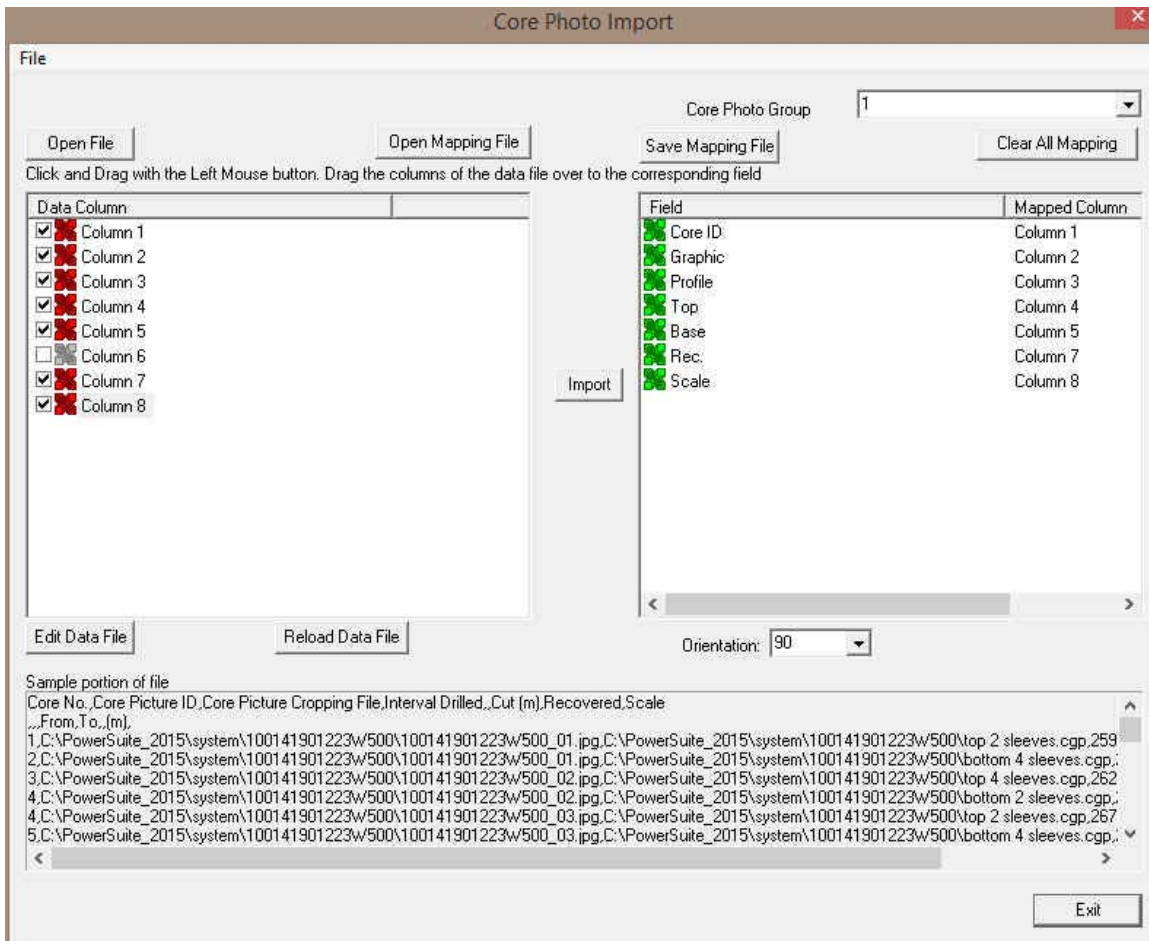
Reload Data File Button reloads the data into the sample portion of the file window.

Importing / Mapping of Core Photo data.

1. **On the left side** of the window **Click and drag** the **data column** you wish to import to the corresponding **table field on the right side** and release it when the field becomes highlighted. If mapped the field  will turn green on the right and red on the left.

N.B. The user can **Right click** on the **Field** to remove the mapping.

2. Repeat the Clicking and Dragging of data columns to fields until all the columns that you want have been mapped.



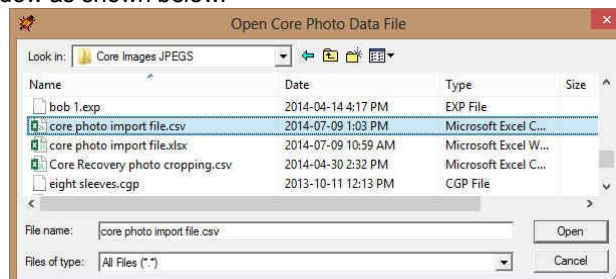
- The user can save this mapping procedure at this time by clicking on the **Save Mapping File** button and giving this procedure a file name and folder to be used again at a later date when you would have to import this data again.
- Click on the **Import** button. After the data has been imported you will be prompted with a system message.



- Acknowledge** the Import message. Click on the **OK** button and then click on the to exit or click on the **Exit** button to close the Window.

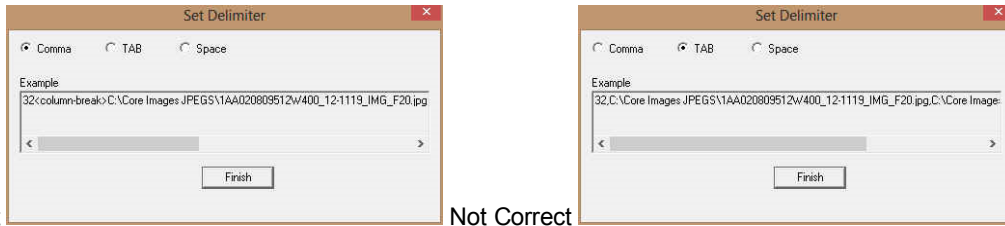
How to Import Core Photo Data with an Existing mapping file.

- To access the Core Plug Import window, click on **Import** under **File** to activate the pop-out menu and then select **Core Photos** or click on the **Import Core Photo Icon** on the **Import Toolbar**. This will activate the open Core Photo data file window as shown below.



2. **Select the file** from the folder or drive with the corresponding navigational tools provided and either **double click** on the **file name** or **click once** on the file name and **click** on the **Open** button. This will activate the **Set delimiter** window as shown below.

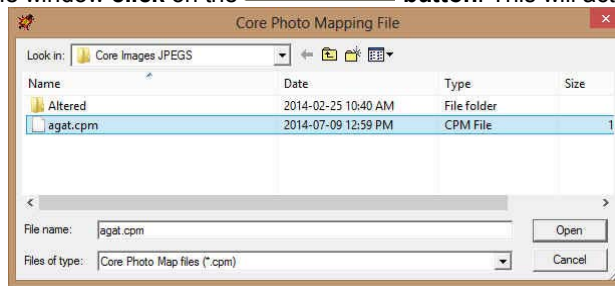
N.B. The one on the left the delimiter is set correctly the one on the right the delimiter is set incorrectly.



Correct

Not Correct

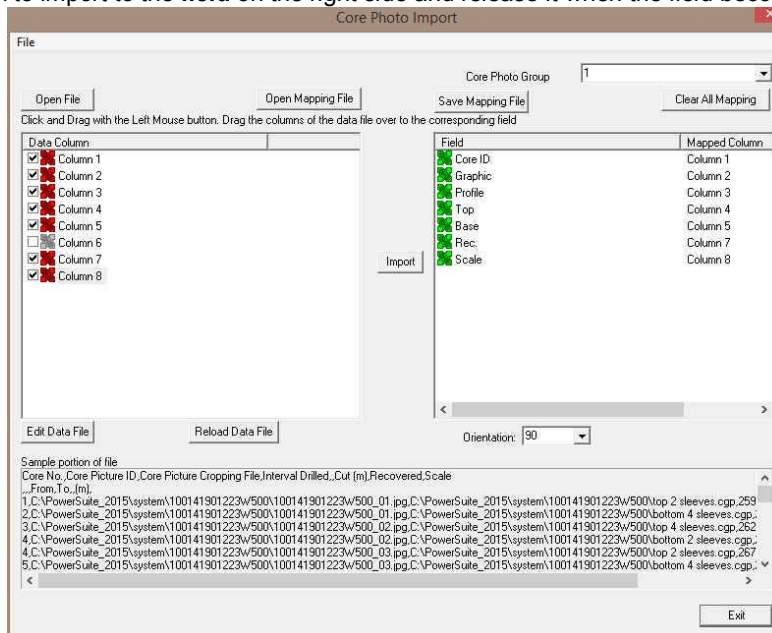
3. Highlight the correct corresponding button beside Comma, TAB or Space delimiter (if shown correctly the Example should read <column-break> between the data columns. If you see this then **click** on the **Finish** button to close this window and activate the Directional survey import window shown on the next page.
4. In the upper portion of the window **click** on the **Open Mapping File** button. This will activate an open file window.



5. Select the mapping file with the *.cpm saved from previous imports of similar core data files to your core plug table by highlighting the file and **clicking** on the **Open** button or double clicking on the file name. Once the file has been opened it will refresh with the current mapping configuration as shown below.

N.B. The user can **Right click** on the **Field** to remove the mapping.

6. The user can map more data columns on the left side of the window **by Clicking and dragging** the **data column** you wish to import to the **field** on the right side and release it when the field becomes highlighted.



7. **Click** on the **Import** button. After the data has been imported you will be prompted with a system message.



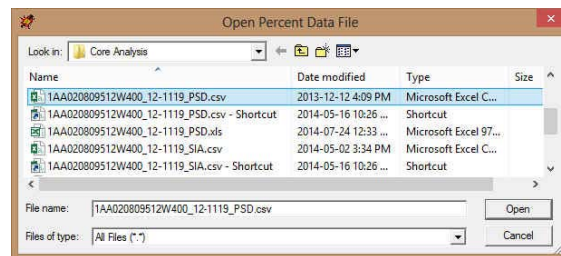
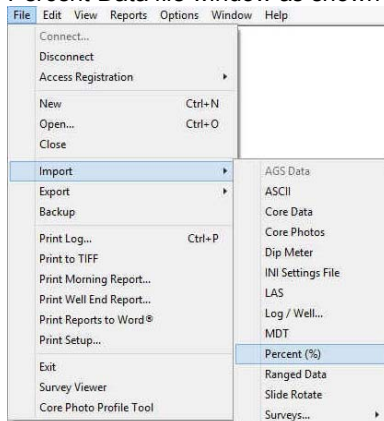
8. **Acknowledge** the Import message. **Click** on the **OK** button and then click on the to exit or **click** on the **Exit** button to close the Window.

File Menu – Import Menu - Percent Data

This method will allow the user to import ASCII, space, comma or tab delimited file formats into our database. We cannot import EXCEL or any other type of spreadsheet format. If the data comes that way you must resave it in another format before attempting to import the data. Also a Percent Layer must be added to your log for you to be able to import data into the percent data tables.

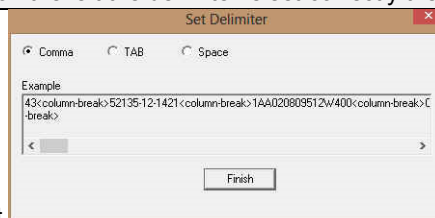
Importing Percent Data

1. To access the Percent Data Import window, click on **Import** under **File** to activate the pop-out menu and then select **Percent (%)** or click on the **Import Percent (%)** button on the **Import Toolbar**. This will activate the open Percent Data file window as shown below.

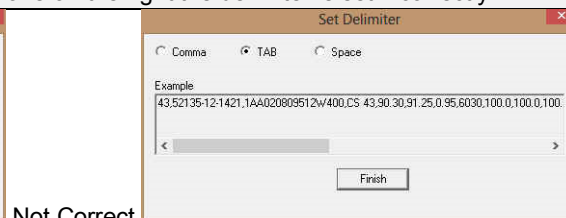


2. **Select the file** from the folder or drive with the corresponding navigational tools provided and either **double click** on the **file name** or **click once** and **click** on the **Open** button. This will activate the **Set delimiter** window as shown below.

N.B. The one on the left the delimiter is set correctly the one on the right the delimiter is set incorrectly.

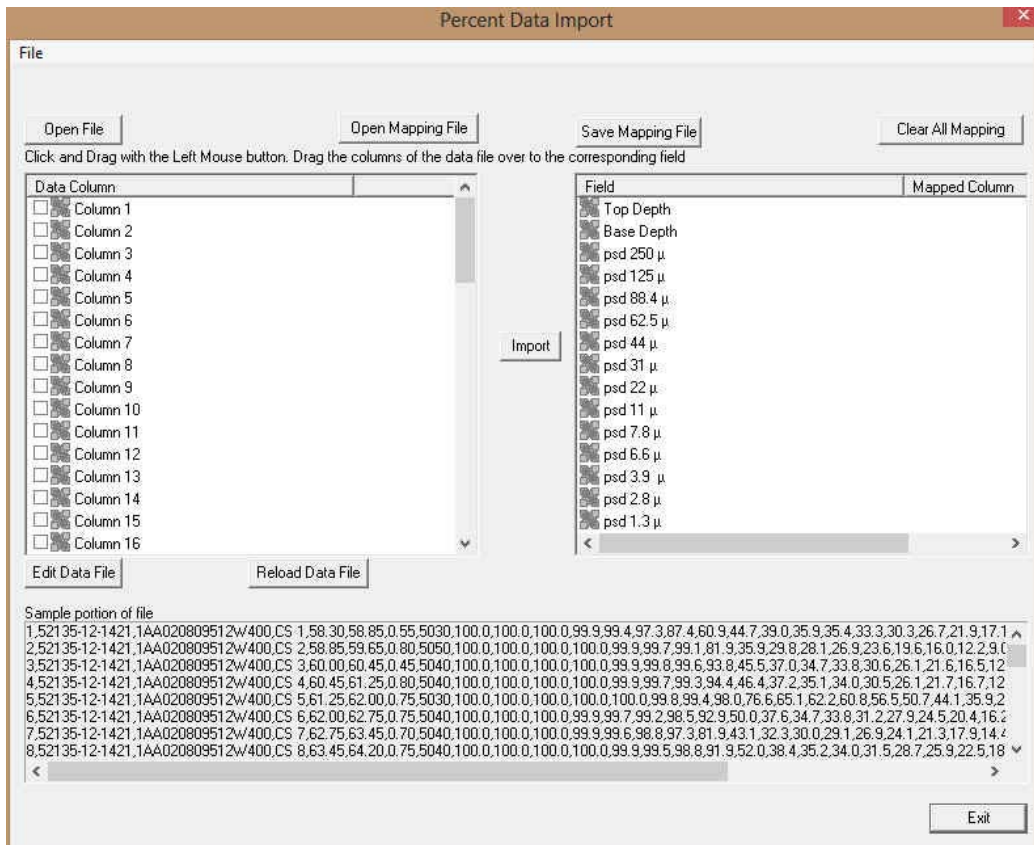


Correct



Not Correct

3. Highlight the correct corresponding button beside Comma, TAB or Space delimiter (if shown correctly the Example should read <column-break> between the data columns. If you see this then **click** on the **Finish** button to close this window and activate the Percent Data Import window shown below.



Overview of the window.

The **left hand side** of the **Percent Data Import window** allows the user to view the different data columns represented in the file numbered in ascending order.

The **right hand side** of the **Percent Data Import window** allows the user to see the data fields associated with the Dip Meter Table supplied by Power*Suite.

Open File Button allows the user to open another Slide data file after the Import window has been opened.

Open Mapping File Button allows the user to utilize the mapping file saved from above to remap data columns in the Percent data file to database fields in the Percent table in the database.

Save Mapping File Button allows the user to save the mapping between data columns in the Percent data file to database fields in the Percent table in the database. Once the initial mapping has been done and saved, the user can utilize this mapping file so you do not have to repeat the clicking of dragging of data columns to database fields in the dip meter table again and again if you do not want to.

Clear All Mapping Button allows the user to undo all the mapping from data columns in the slide data file to database fields in the Slide table that was done either by dragging or by utilizing the mapping file.

Edit Data File Button allows the user to open the file in Word pad to look at the file format and possibly make changes to the data file prior to importing the files data.

Reload Data File Button reloads the data into the sample portion of the file window.

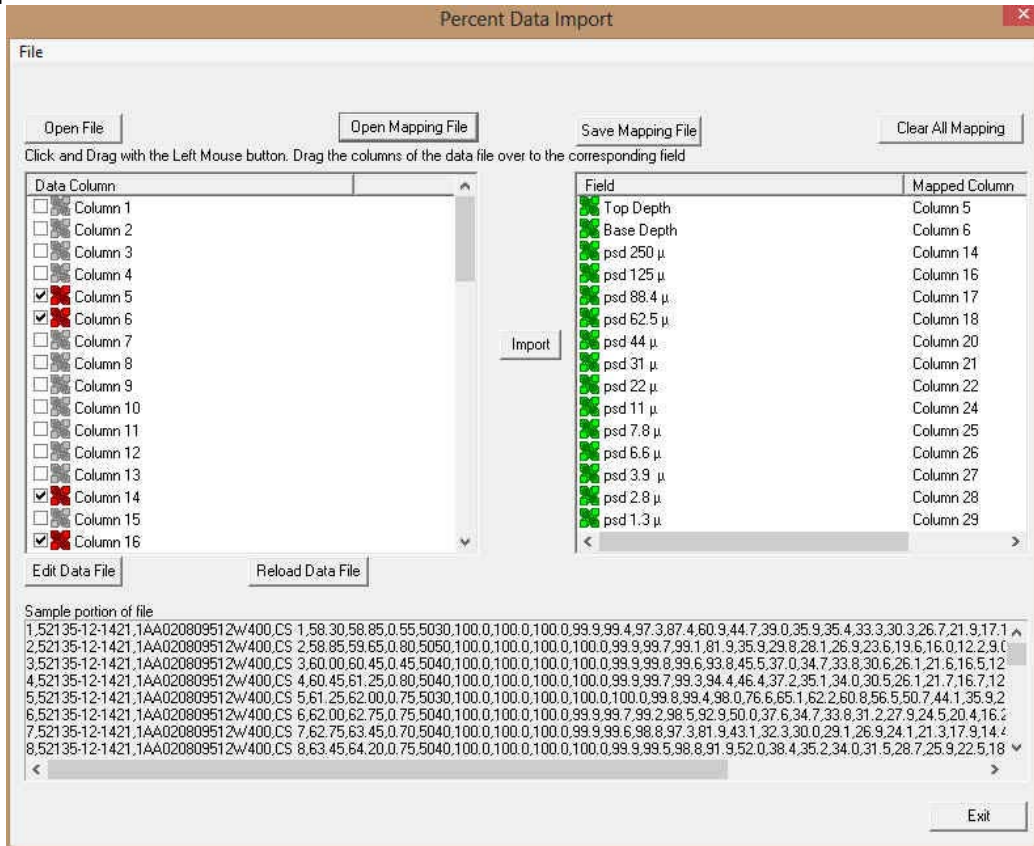
Importing / Mapping of Percent data.

A Percent Data Layer should already have been added through the Log configuration builder so that the user has a Percent Data type layer to import to. Otherwise it would be impossible to import any data.

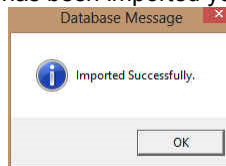
1. **On the left side** of the window **Click and drag** the **data column** you wish to import to the corresponding **table field on the right side** and release it when the field becomes highlighted. If mapped the field will turn green on the right and red on the left.

N.B. The user can **Right click** on the **Field** to remove the mapping.

- Repeat the Clicking and Dragging of data columns to fields until all the columns that you want have been mapped.



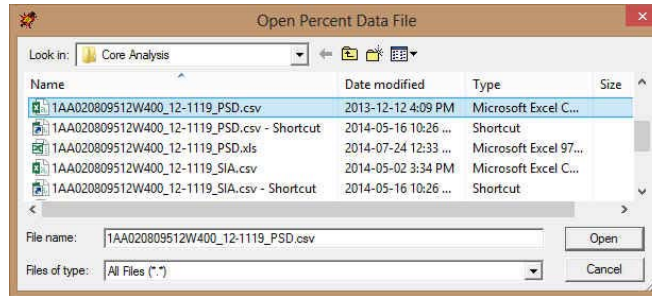
- The user can save this mapping procedure at this time by **clicking** on the **Save Mapping File** button and giving this procedure a file name and folder to be used again at a later date when you would have to import this data again.
- Click** on the **Import** button. After the data has been imported you will be prompted with a system message.



- Acknowledge** the Import message. **Click** on the **OK** button and then click on the **Exit** button to close the Window.

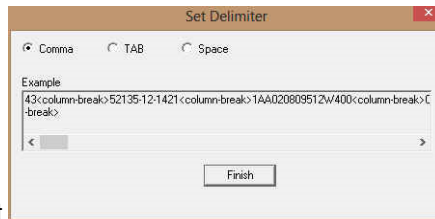
How to Import Percent Data with an Existing mapping file.

- To access the Percent Data Import window, click on **Import** under **File** to activate the pop-out menu and then select **Percent (%)** or click on the **% Import Percent data** button on the **Import Toolbar**. This will activate the Open Percent Data file window as shown below.

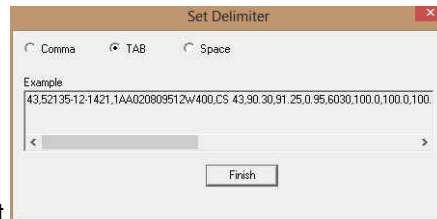


2. Select the file from the folder or drive with the corresponding navigational tools provided and either double click on the file name or click once and click on the **Open** button. This will activate the **Set delimiter** window as shown below.

N.B. The one on the left the delimiter is set correctly the one on the right the delimiter is set incorrectly.

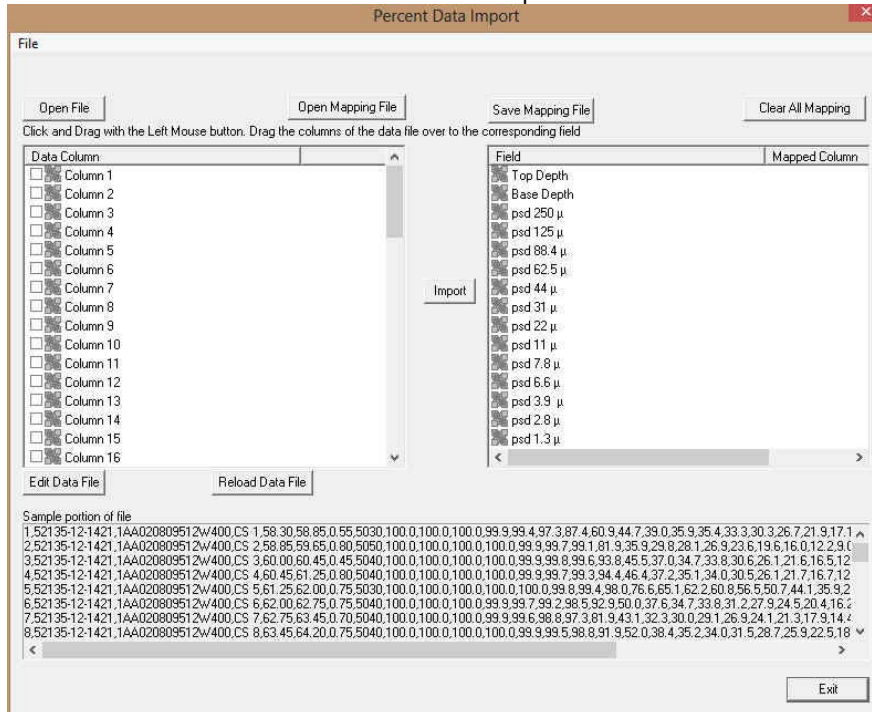


Correct

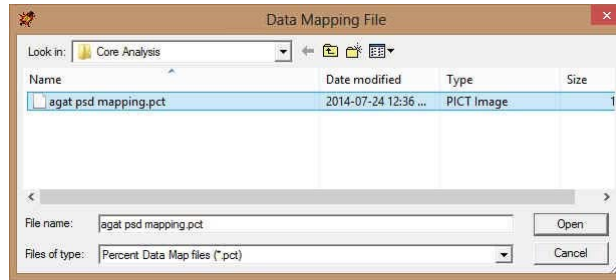


Not Correct

3. Highlight the correct corresponding button beside Comma, TAB or Space delimiter (if shown correctly the Example should read <column-break> between the data columns. If you see this then click on the **Finish** button to close this window and activate the Percent Data Import window shown below.



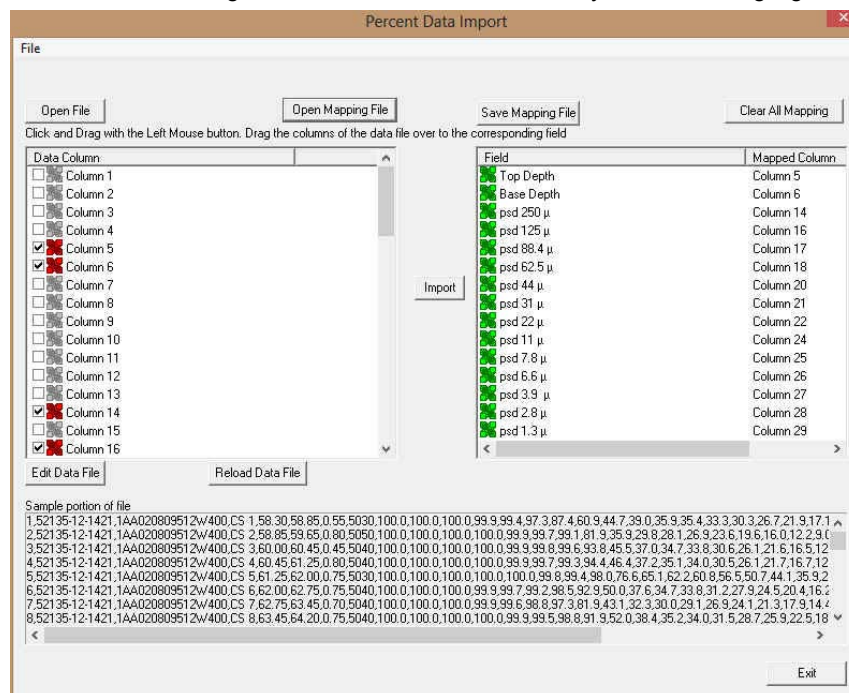
4. In the upper portion of the window click on the **Open Mapping File** button. This will activate an open file window.



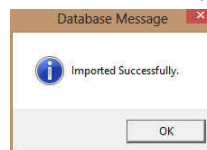
5. Select the mapping file with the *.pct saved from previous imports of similar Percent data files to your percent table by highlighting the file and clicking on the **Open** button or double clicking on the file name. Once the file has been opened it will refresh with the current mapping configuration as shown below.

N.B. The user can **Right click** on the **Field** to remove the mapping.

6. The user can map more data columns on the left side of the window by **Clicking and dragging** the **column** you wish to import to the **field** on the right side and release it when the layer becomes highlighted.



7. Click on the **Import** button. After the data has been imported you will be prompted with a system message.

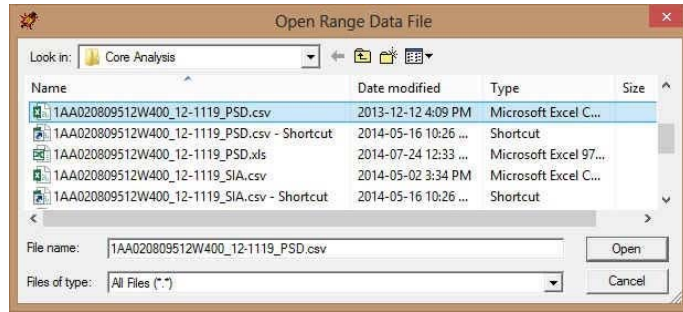
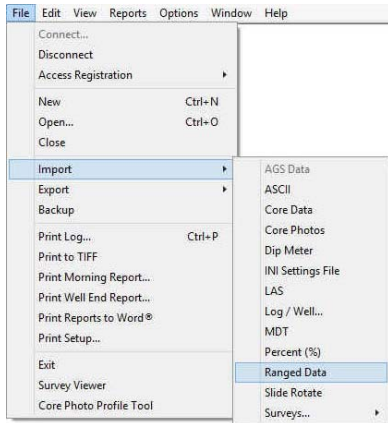


8. Acknowledge the Import message. Click on the **OK** button and then click on the **X** to exit or click on the **Exit** button to close the Window.

File Menu – Import Menu - Ranged Data

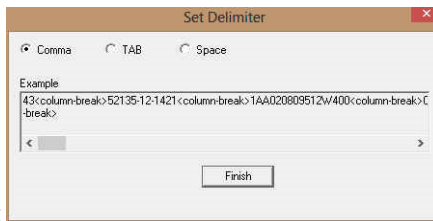
This term may not mean much to you but it is similar to curve data but has a value over a range of depths. To successfully import Range Data you must first add a range data type layer or track to your log.

1. To access the Ranged Data Import window, click on **Import** under **File** to activate the pop-out menu and then select **Ranged Data** or click on the **Rg** **Ranged Import** button on the **Import Toolbar**. This will activate the open Ranged Data file window as shown below.

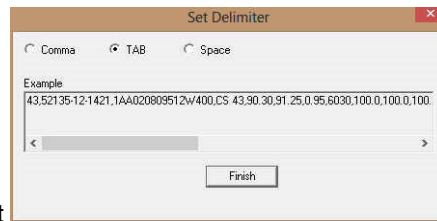


2. **Select the file** from the folder or drive with the corresponding navigational tools provided and either **double click** on the **file name** or **click once** and **click** on the **Open** button. This will activate the **Set delimiter** window as shown below.

N.B. The one on the left the delimiter is set correctly the one on the right the delimiter is set incorrectly.

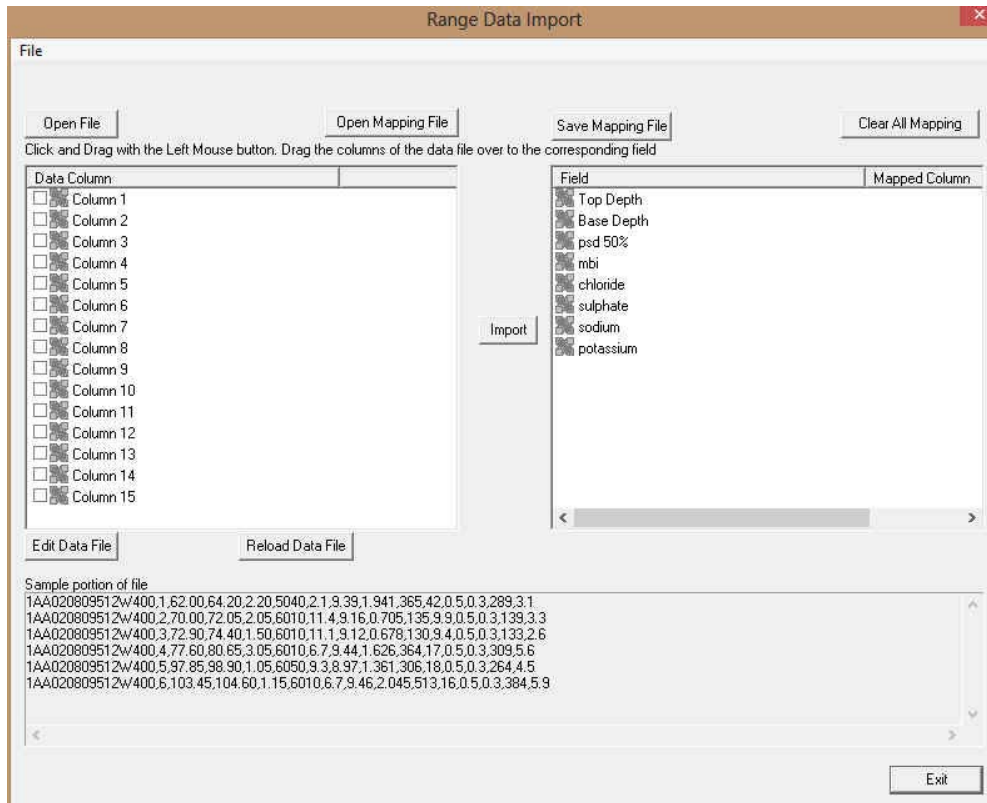


Correct



Not Correct

3. Highlight the correct corresponding button beside Comma, TAB or Space delimiter (if shown correctly the Example should read <column-break> between the data columns. If you see this then **click** on the **Finish** button to close this window and activate the Range Data Import window shown below.



Overview of the window.

The **left hand side** of the **Range Data Import window** allows the user to view the different data columns represented in the file numbered in ascending order.

The **right hand side** of the **Range Data Import window** allows the user to see the data fields associated with the Dip Meter Table supplied by Power*Suite.

Open File Button allows the user to open another Range data file after the Import window has been opened.

Open Mapping File Button allows the user to utilize the mapping file saved from above to remap data columns in the Slide data file to database fields in the Range table in the database.

Save Mapping File Button allows the user to save the mapping between data columns in the Range data file to database fields in the Range Data table in the database. Once the initial mapping has been done and saved, the user can utilize this mapping file so you do not have to repeat the clicking of dragging of data columns to database fields in the dip meter table again and again if you do not want to.

Clear All Mapping Button allows the user to undo all the mapping from data columns in the slide data file to database fields in the Range data table that was done either by dragging or by utilizing the mapping file.

Edit Data File Button allows the user to open the file in Word pad to look at the file format and possibly make changes to the data file prior to importing the files data.

Reload Data File Button reloads the data into the sample portion of the file window.

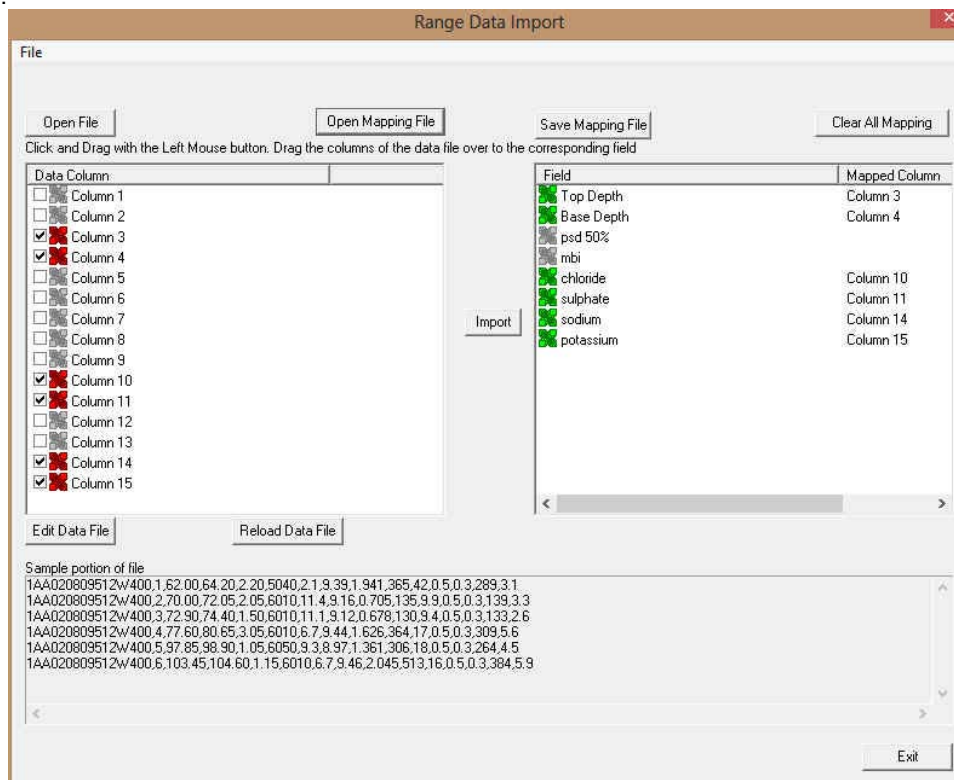
Importing / Mapping of Ranged data.

A Range Data Layer should already have been added through the Log configuration builder so that the user can see their imported Ranged data layer when you import the data. Otherwise you will not be able to import this data.

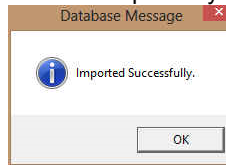
1. **On the left side** of the window **Click and drag** the **data column** you wish to import to the corresponding **table field on the right side** and release it when the field becomes highlighted. If mapped the field will turn green on the right and red on the left.

N.B. The user can **Right click** on the **Field** to remove the mapping.

2. Repeat the Clicking and Dragging of data columns to fields until all the columns that you want have been mapped.



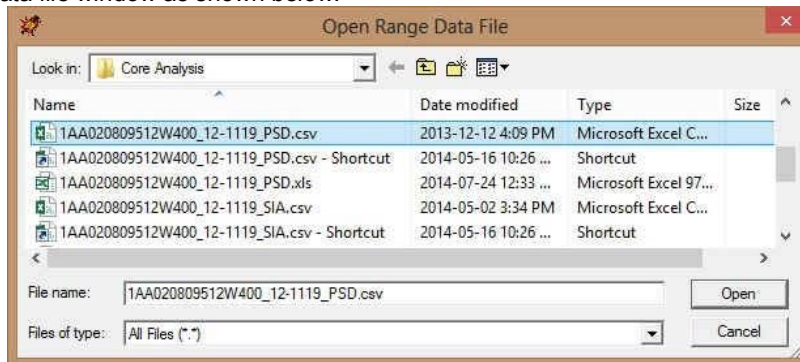
- The user can save this mapping procedure at this time by **clicking** on the **Save Mapping File** button and giving this procedure a file name and folder to be used again at a later date when you would have to import this data again.
- Click** on the **Import** button. After the data has been imported you will be prompted with a system message.



- Acknowledge** the Import message. **Click** on the **OK** button and then click on the **Exit** button to close the Window.

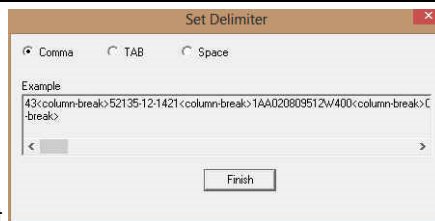
How to Import Ranged Data with an Existing mapping file.

- To access the Ranged Data Import window, click on **Import** under **File** to activate the pop-out menu and then select **Percent (%)** or **click** on the **Import Percent data** button on the **Import Toolbar**. This will activate the Open Percent Data file window as shown below.

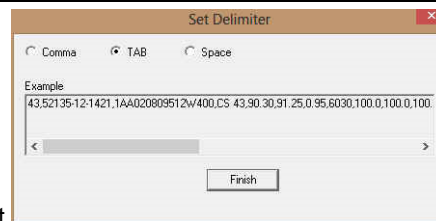


- Select the file** from the folder or drive with the corresponding navigational tools provided and either **double click** on the **file name** or **click once** and **click** on the **Open** button. This will activate the **Set delimiter** window as shown below.

N.B. The one on the left the delimiter is set correctly the one on the right the delimiter is set incorrectly.

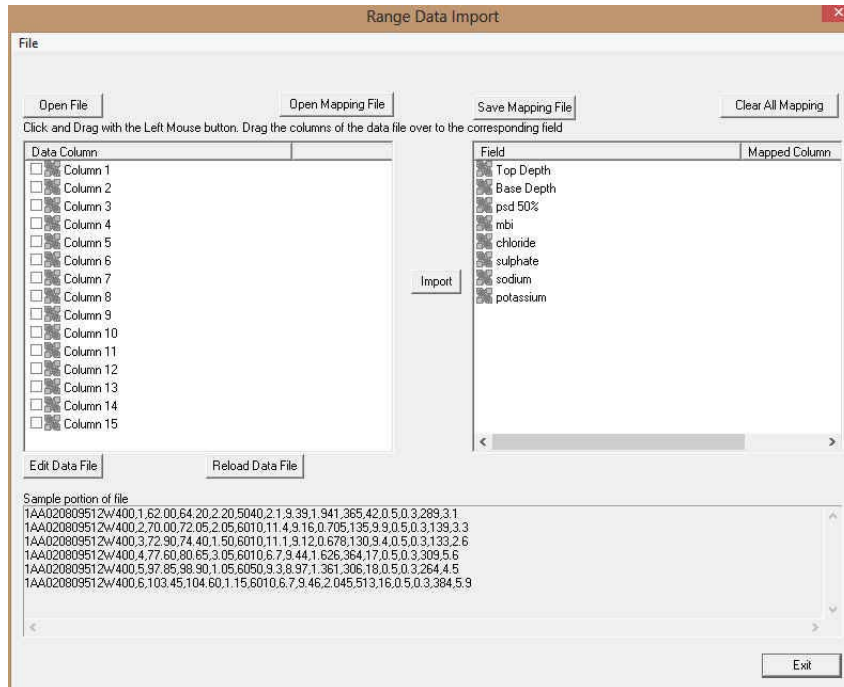


Correct

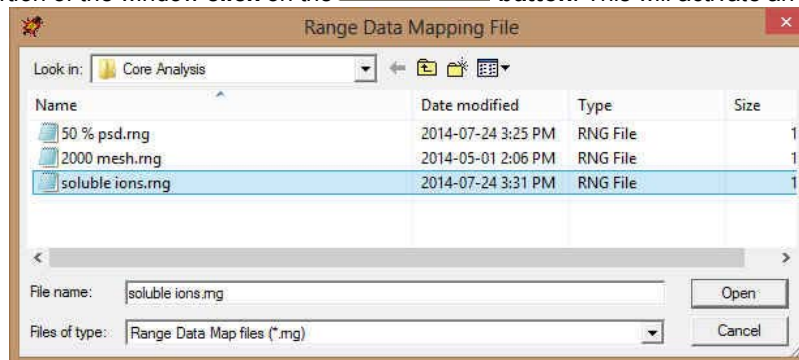


Not Correct

- Highlight the correct corresponding button beside Comma, TAB or Space delimiter (if shown correctly the Example should read `<column-break>` between the data columns. If you see this then **click** on the **Finish** button to close this window and activate the Percent Data Import window shown below.



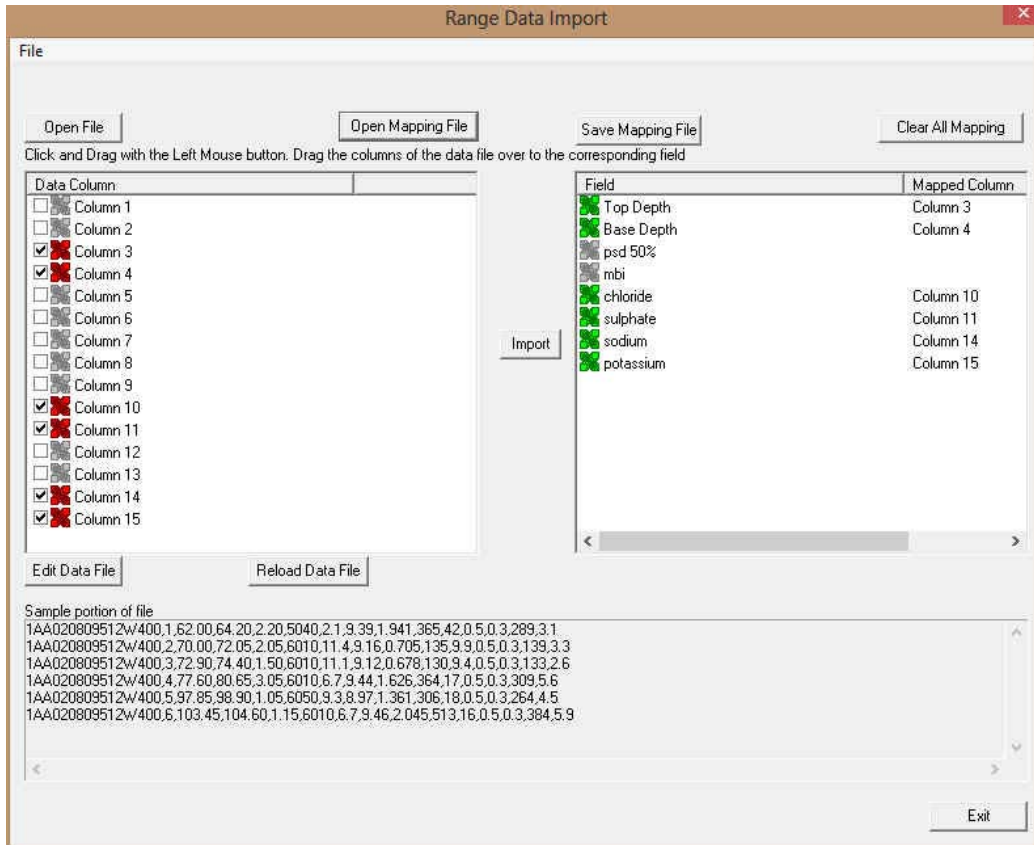
- In the upper portion of the window **click** on the **Open Mapping File** button. This will activate an open file window.



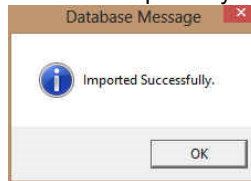
- Select the mapping file with the *.mg saved from previous imports of similar Range data files to your range data table by highlighting the file and **clicking** on the **Open** button or double clicking on the file name. Once the file has been opened it will refresh with the current mapping configuration as shown below.

N.B. The user can **Right click** on the **Field** to remove the mapping.

- The user can map more data columns on the left side of the window **by Clicking and dragging** the **column** you wish to import to the **field** on the right side and release it when the layer becomes highlighted.



7. Click on the **Import** button. After the data has been imported you will be prompted with a system message.




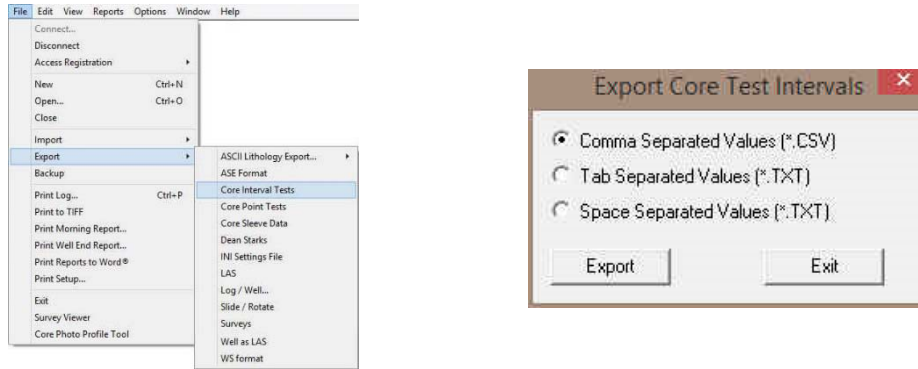
8. Acknowledge the Import message. Click on the **OK** button and then click on the **Exit** button to close the Window.

File Menu - Export Menu - Core Interval Test Data

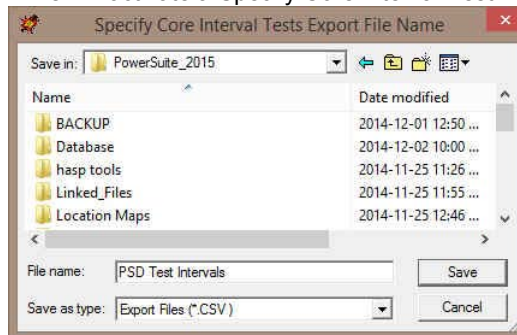
This utility exports your Core Interval Test data (that can be locked to the Dean Stark Intervals or can be random) to pass back to the Laboratory for different Test Intervals to be done on the core. The Core Interval Test data contains the Test #, Test Type (layer name) along with the top and bottom of each Test. This data can be exported into 3 file formats which can then be used by other applications.

Exporting Core Interval Test Data

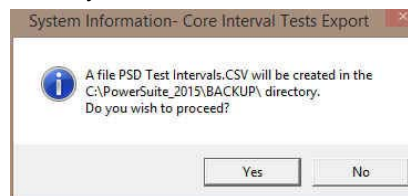
To access the Core Test Interval Data export window, click on **Export** under **File** to activate the pop-out menu and then **select Core Interval Test**. You can also select the  icon on the Export toolbar. This will activate the Export Core Test Intervals window.



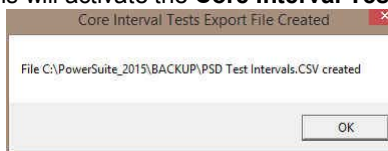
1. Click on the radio button next to the type of the file that you would like to create.
2. Click on the **Export** button. This will activate a Specify Core Interval Test Export File Name window.



3. Type in a file name and select the drive and directory you wish the survey to be exported to. Then, click on the **Save** button. This will activate the System Information window asking you if you wish to proceed.



4. Click on the **Yes** button. This will activate the Core Interval Test Export File Created window.




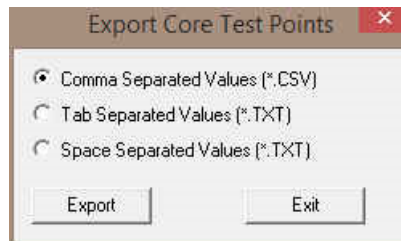
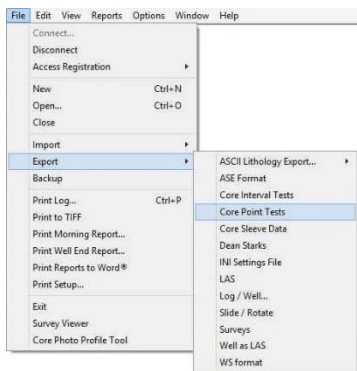
5. Click on the **OK** button to exit Export Interval Test window.

File Menu - Export Menu - Core Test Points Data

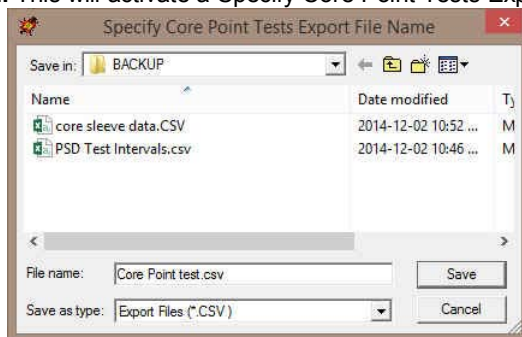
This utility exports your Core Point Test data to pass back to the Laboratory for different Test Points to be performed on the core. The Core Point Test data contains the Test #, Test Type (layer name) along with test point for each Test. This data can be exported into 3 file formats which can then be used by other applications.

Exporting Core Test Points Data

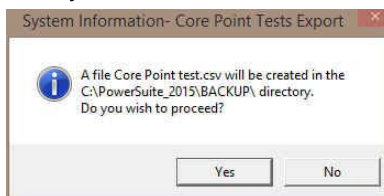
To access the Core Test Points Data export window, click on **Export** under **File** to activate the pop-out menu and then **select Core Point Tests**. You can also select the  icon on the Export toolbar. This will activate the Export Core Test Point window.



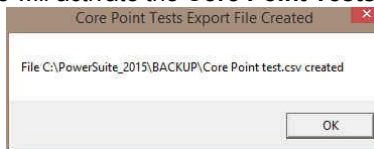
1. Click on the radio button next to the type of the file that you would like to create.
2. Click on the **Export** button. This will activate a Specify Core Point Tests Export File Name window.



3. Type in a file name and select the drive and directory you wish the survey to be exported to. Then, click on the **Save** button. This will activate the System Information window asking you if you wish to proceed.



4. Click on the **Yes** button. This will activate the Core Point Tests Export File Created window.




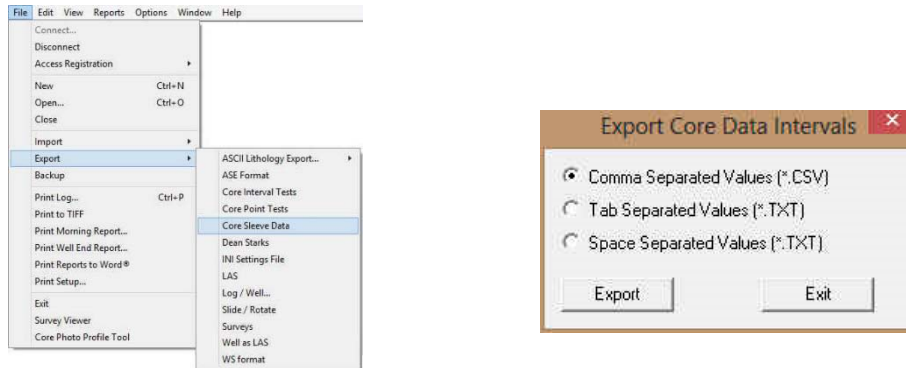
5. Click on the **OK** button to exit Export Point Tests window.


File Menu - Export Menu - Core Sleeve Data

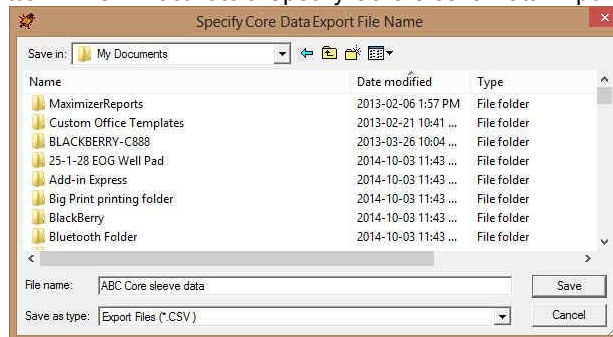
This utility exports your (presumably) depth corrected Core Sleeve data after the Core Photos have been imported and cleaned up to pass back to the Laboratory label the core photos with the corrected depths. The Core sleeve data contains the Core #, Sleeve # along with the top and bottom of each sleeve. Also contained in this data are the core designation types for rubble and slough. This data can be exported into 3 file formats which can then be used by other applications.

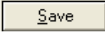
Exporting Core Sleeve Data

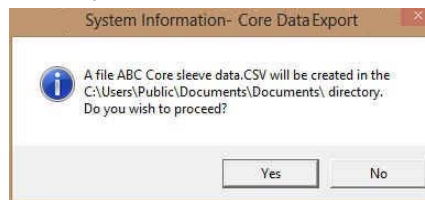
To access the Export Core Sleeve Data window, click on **Export** under **File** to activate the pop-out menu and then **select Export Core Sleeve data**. You can also select the  icon on the Export toolbar. This will activate the Export Core Sleeve Data Intervals window.

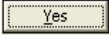


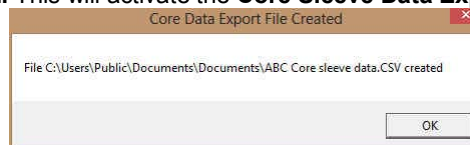
1. Click on the radio button next to the type of the file that you would like to create.
2. Click on the  button. This will activate a Specify Core Sleeve Data Export File Name window.




3. Type in a file name and select the drive and directory you wish the survey to be exported to. Then, click on the  button. This will activate the System Information window asking you if you wish to proceed.



4. Click on the  button. This will activate the Core Sleeve Data Export File Created window.




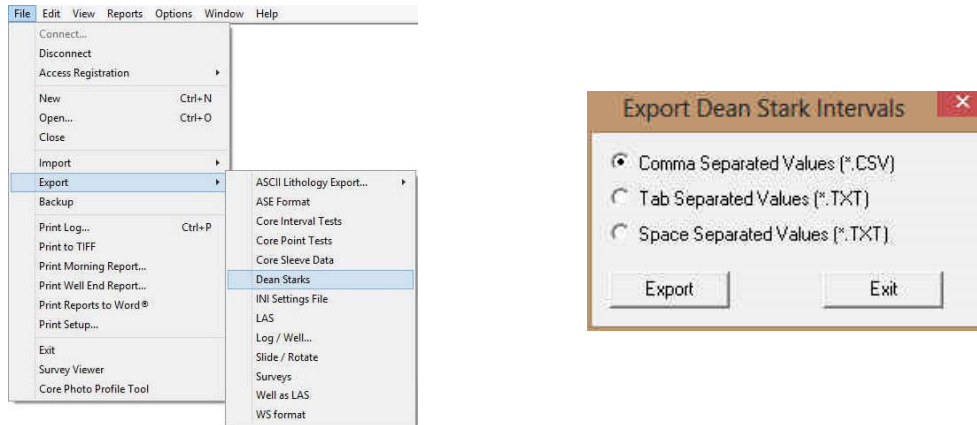
5. Click on the  button to exit Export Core Sleeve Data window.


File Menu - Export Menu - Dean Starks Test Data

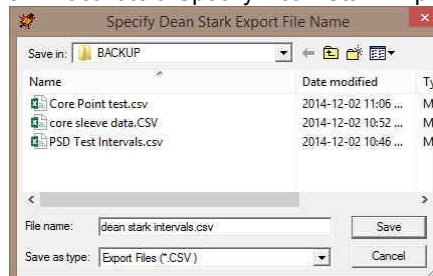
This utility exports your Calculated Dean Starks Intervals automated by the system with the help of the Interpretive Facies layer. This data will be pass back to the Laboratory for the Dean Stark intervals to be performed on the core. The data contains the Test Type (layer Name), Test #, along with the top and bottom of each test interval. This data can be exported into 3 file formats which can then be used by other applications.

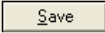
Exporting Dean Starks Test Data

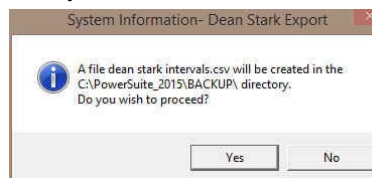
To access the Export Dean Starks Test Data window, click on **Export** under **File** to activate the pop-out menu and then select Export Dean Starks Test Data. You can also select the  icon on the Export toolbar. This will activate the Export Dean Starks Test Data window.



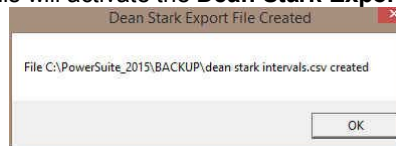
1. **Click** on the radio button next to the type of the file that you would like to create.
2. **Click** on the  button. This will activate a Specify Dean Stark Export File Name window.




3. Type in a file name and select the drive and directory you wish the survey to be exported to. Then, **click** on the  button. This will activate the System Information window asking you if you wish to proceed.



4. **Click** on the  button. This will activate the Dean Stark Export File Created window.

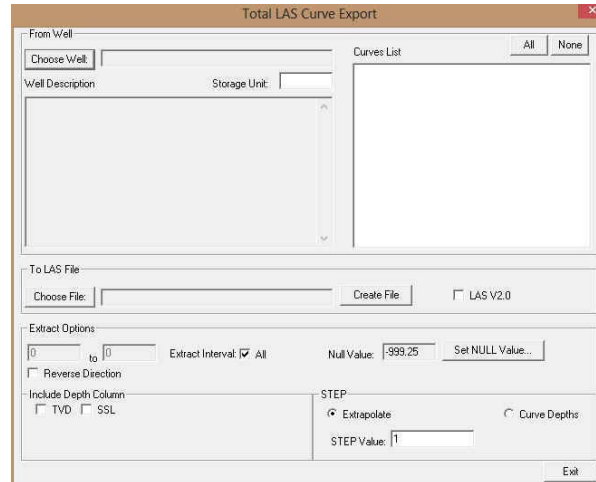
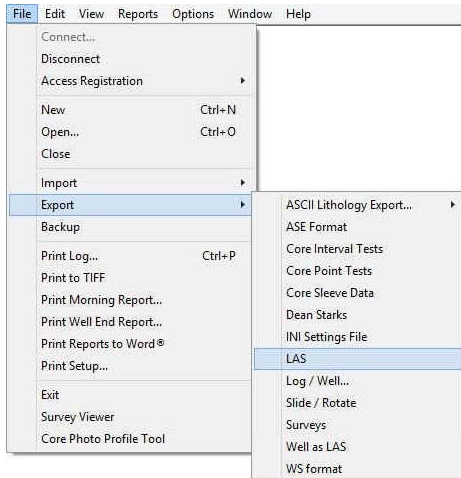


5. **Click** on the  button to exit Export Dean Stark Data window.

File Menu – Export - LAS Files (Curves)

The Power*Suite LAS Export Utility program can be accessed through the Power*Suite folder and facilitates the export of Power*Suite curve data into an LAS File.

- Under the **File** menu selection, click on **Export**, click on **LAS**. You can also select the  Icon on the Export toolbar. This will activate the **LAS Export window**.

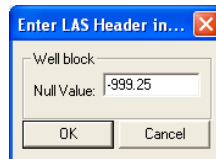


- Click on the **Choose Well** button. This will activate a list of all the wells in your Database.
- Select the well you wish to export your LAS Curve data for by **clicking on the well name** and then **clicking on the Select** button or by **double click on the well**. You should now see your well name in the field beside the **Choose Well** button. Also, you should see a list of curves in the **Curve List** field. An example of this is shown on the next page.
- Click on the **Choose File** button and **type in a file name** and path for that file in the window. Click on the **OK** button when you have done.
- LAS V2.0 The user can export **Version 2 (checked)** or **Version 3 file format (unchecked)**.
- Select the Curves you wish to create a file for by **click on the curve name** in the Curve name field or by **clicking on the All** button to select all the curves.
- Select the **step type** you wish to use for the export.

Extrapolate will give you the best incremental data utilizing a constant step extrapolating the data to replicate this constant step. The **Curve depths** selection will merge the curves (if more than one curve is selected) and will export the data as it has been collected into the database.

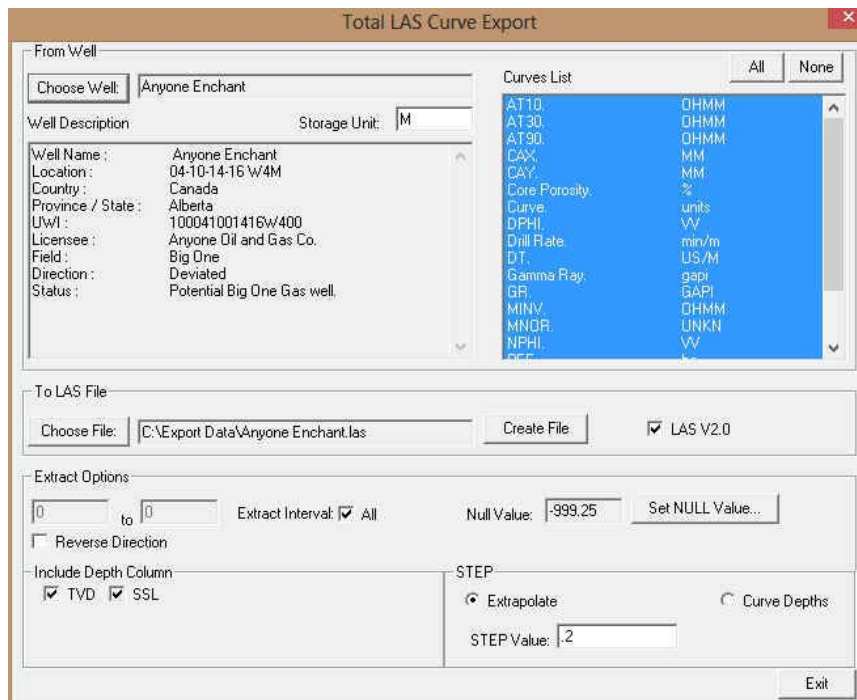
- Type in an appropriate **step** (depth increment) or utilize the default 1 m depth increment.
- Optional** Type in an interval in the From and To fields and deselect the Extract Interval All check box if you wish to export just a portion of the curve data.
- Optional** If the user wishes to Change Null Value.

- Click on the **Set NULL Value...** button. This will activate a Null Value window.



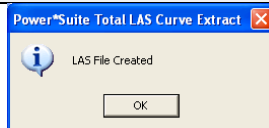
- Type in another Null value if the default null value of –999.25 is not what you want for a null value and then **click on the OK** button.

- Optional** Select the reverse direction check box if you want the data in descending order.
- Optional** Select the other depth units other than (MD) Measured Depth (default) to be included with your LAS file. Click on one or both of the check boxes TVD SSL beside the other such selections as (TVD) True Vertical Depth or (SSL) Subsea Level.



13. Click on the **Create File** button. This will activate a LAS file generation window indicating which curves are being exported. Then the process amalgamates all the curve data into a single LAS File. When the file generation has been completed a System Message will be generated.

Note: There may be a message box encountered during this process indicating some of the curves selected have no data. You will have a choice of not including these curves in the LAS Export file.




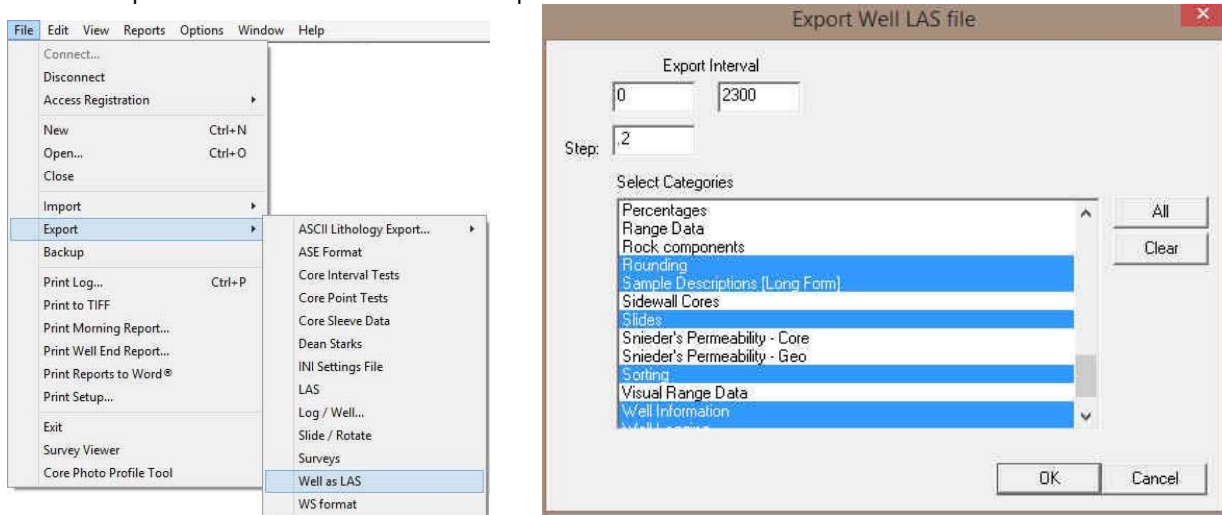
14. Once the File has been created acknowledge the ensuing message by clicking on the **OK** button.
15. Click on the **Exit** button to Close the application or repeat steps 2-13 to create more LAS Curve data files.

File Menu – Export Menu - Well Data as LAS Version 3.

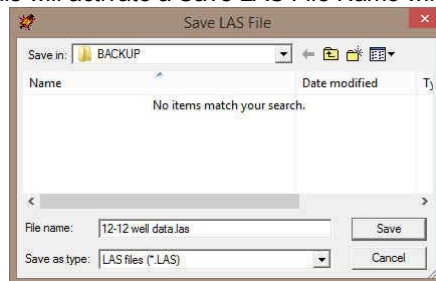
This utility exports all your well data including curve data from your database in LAS Version 3 format.

Exporting LAS Well Data

Click on **Export** under **File** to activate the pop-out menu and then **select Well as LAS**. You can also select the  icon on the Export toolbar. This will activate the Export Well LAS File.



1. Click on the **Data Types** you want in the LAS File. The data types highlighted will be included. You can turn on / off the highlight by clicking on the data types.
2. The button will select all the data categories and the button will deselect all the data categories.
3. Define the **Export Interval** for your data.
4. Define the **step** interval for your data.
5. Click on the button. This will activate a Save LAS File Name window.




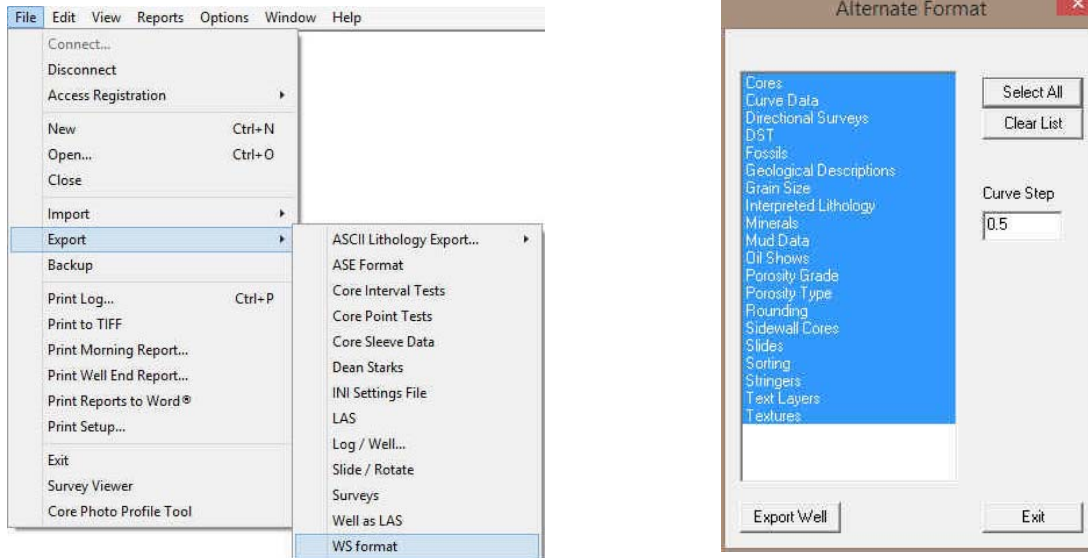
6. Type in a file name and select the drive and directory you wish the survey to be exported to. Then, click on the button. Your file name will be created in the folder you directed it to.





File Menu – Export Menu – WS Format (Wellsight file format)

This utility exports some of your well data including curve data from your database in Wellsight format.

Exporting Well Data

1. **Click on Export** under **File** to activate the pop-out menu and then **select WS format**. You can also select the  icon on the Export toolbar. This will activate the Alternate Format window.



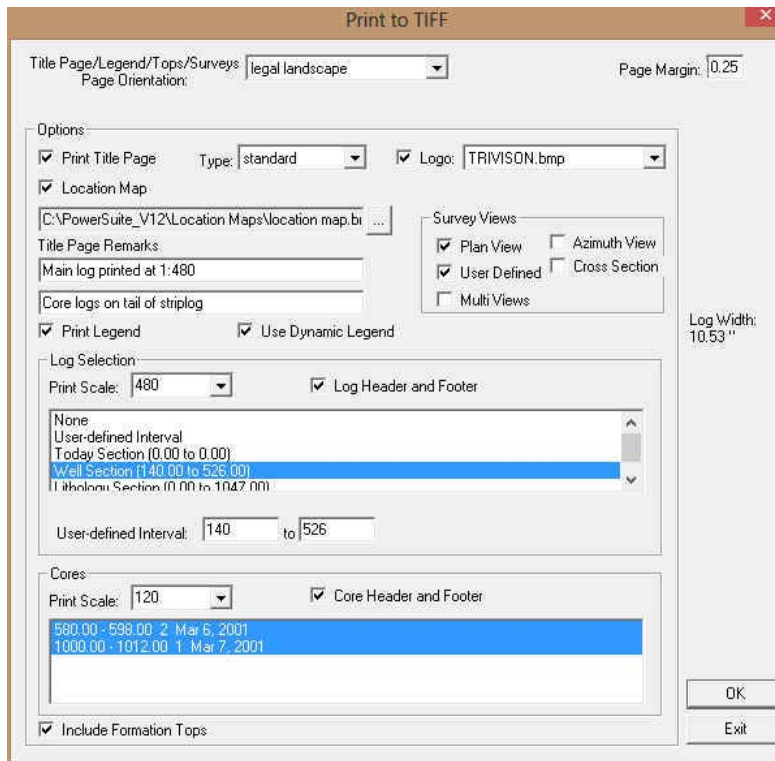
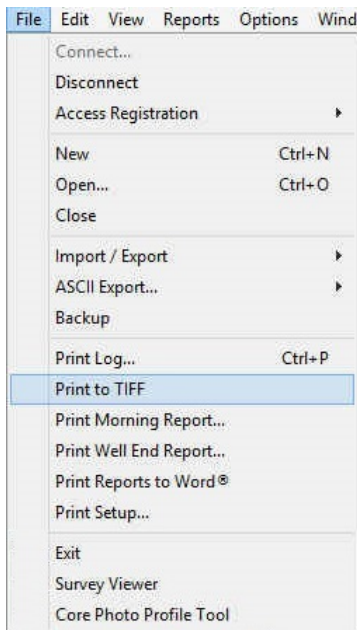
2. **Click on the Data Types** you want in the WS Data File. The data types highlighted will be included. You can turn / off the highlight by clicking on the data types.
3. The  **button** will select all the data categories and the  **button** will deselect all the data categories.
4. **Define** the Curve Step you want for the curve data in the Curve step field. All other data will be exported with ½ meter step.
5. **Click** on the  **button**. This will activate a Save Alternate format File Name window.
6. Type in a file name and select the drive and directory you wish the survey to be exported to. Then, **click** on the  **button**. Your file name will be created in the folder you directed it to.

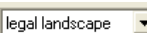
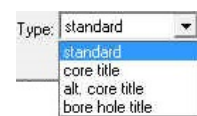
File Menu - Print to TIFF (file format)

Prints all or part of your log/well along with the Title page, location map, legends, survey views, individualized cores and formation tops on a continuous basis in a tiff file format.

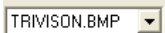
1. Under the **File** menu selection, **click** on **Print to TIFF** or **click** on the  **Print to TIFF button** on the Toolbar to activate the **Print to TIFF** window shown below:

Note: The depth views associated with the Print TIFF window are defaulted to the Depth View that Power*Log / Curve / Core is in at the time of the activation of the Print to TIFF window.

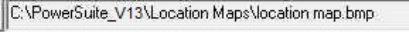



2.  Select the appropriate paper orientation from this drop box field and the **Title Page, Legend, and Formation Tops** will automatically conform to the selected orientation. There are four (6) types of paper orientation to choose from: **letter (8.5"x11") portrait or landscape, legal (8.5"x14") portrait or landscape, tabloid (11"x15") portrait or landscape** settings.
3. **Print Title Page** Activate this check box , if you wish to printout a Title Page.
4. The Type (Title Page) drop box displayed on the right allow you to pick the appropriate title page format to print. The standard selection prints out our full blown title page with most of the Wells data. You can also select our abbreviated title pages that handle core and borehole logs 
5. **AER UWI Format** If you are printing the Standard Title page and you are in Alberta the AER format should be selected.

N.B. This format changes our UWI printout from 100121605812W500 to 00/12-16-058-12W5/0 only on the Striplog Title page. All other UWI formats remain the same.

6. **Logo** Activate this check box , if you wish to printout a logo, and then select a logo from the  **Logo** drop box field.

Note: The logo file format must be a bitmap image file (*.bmp) if you want a logo printed out on the title page. Also, it is recommended that the bitmap image should be a square image, because **Power*Suite** will shrink or expand the image to fit the logo space on the **Title Page**. This bitmap must be placed in the **Powersuite_2015\logo** directory for the application to find it.

7. Type any pertinent comments into the **Title Page Remarks** field and they will be displayed accordingly on the **Strip Log Title Page only**.
8. **Location Map**  Activate this check box , if you wish to printout a location map following the title page, and then the user select a location map from your computers drives by clicking on the  and finding the file you want to print out as a location map.

Note: The location map file format must be a bitmap image file (*.bmp) if you want a location map to be printed out. Also, the bitmap image must be a square image, because **Power*Suite** will shrink or expand the image to fit the location map space following the **Title Page**. This bitmap can be placed anywhere as the file location is saved within the Power*Suite ini file.

9. Survey views **Plan View** Activate this check box , if you wish to have the plan view (view of the well bore from surface) printed out in the striplog header as captured in the Survey View application.
10. Survey views **User Defined** Activate this check box , if you wish to have the user defined view (view of the well bore as manipulated by the user) printed out in the striplog header as captured in the Survey View application.
11. Survey views **Azimuth View** Activate this check box , if you wish to have the azimuth view (view of the well bore along the target azimuth) printed out in the striplog header as captured in the Survey View application.
12. Survey views **Cross Section** Activate this check box , if you wish to have the cross section view (view of the well bore at right angles to the target azimuth) printed out in the striplog header as captured in the Survey View application.
13. Survey views **Multi Views** Activate this check box , if you wish to have all the views printed out in the striplog header as captured in the Survey View application.
14. **Legend** Activate this check box , if you wish to have our entire legend printed out.
15. **Use Dynamic Legend** Activate this check box , if you wish to have the legend **reflect only the symbols printed on the log or core portions of the printed intervals defined in the log and core portions of the print log window.**

In the Log portion of the Print Log window

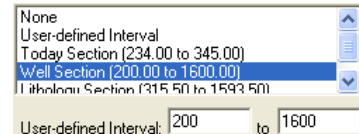
16. Log Scale: Select or type in the **Scale** for the main log to be printed out at, in the **Scale** drop box field.

Note: If you see 2" or some other inch related printing scale and you want to see a ratio type scale Change the System Options under the Options pull down menu and activate the Display Tab and Activate this check box beside Use Metric Style Scales.

The **Well Section** interval is derived from the **Top** and **Base Depth** values entered into the **Print Sections** window under the **Edit** pull down menu. (see **Print Sections**).

The **Lithology Section** interval is derived from what has been drawn into the interpretive lithology track of the well that is being printed.

17. **Log Header and Footer** Activate this check box to have the track headers /footers printed out with the main log.
18. **Core Accessories** Activate this check box to have the core accessories printed out on the main log.
19. Highlight the log printing options in the selection box. The user can select either **None**, **User-defined Interval** (requires that you manually enter the desired print interval depths), **Today Section**, **Well Section**, or **Lithology Section**.



Note: **Today Section** interval is derived from the **From** and **To** Depth values entered into the **Today's Section** portion of the Power*Log Data Transfer: Export window.

The **Well Section** interval is derived from the **Top** and **Base Depth** values entered into the **Print Sections** window under the **Edit** pull down menu. (see **Print Sections**).

The **Lithology Section** interval is derived from what has been drawn into the interpretive lithology track of the well that is being printed.

20. If user **defined interval** is chosen the user can select which depth type, either **measured depth**, **true vertical depth** or **subsea level depth** from the depth measurement drop box. The user must also type in the depth interval to be printed.

Note: The log itself must be displayed in whatever depth view you wish to print before you activate the print log window. To change the log to the desired format, refer to depth view under the view pull down menu.

In the Cores portion of the Print Log Window


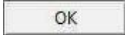
21. If you are printing out a **Core** log on the tail of the striplog, select the **Cores** you wish to print by highlighting them.
22. Cores Scale: Select or type in the **Scale** for the core log to be printed out at in the **Scale** drop box field.
23. **Core Header and Footer** Activate this check box to have the track headers / footers printed out with the core log.

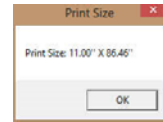
Note: A separate **Header Information Box** is automatically printed out with every **Core** and includes the **Core Scale**, **Core Date**, **Core Number**, **Cored Interval**, **Amount Cut**, **Amount Recovered**, and **Percentage**.

**A value must be entered into the Core Scale field in order to printout anything. **

24. **Formation Tops** Activate this check box if you wish to printout **Formation Tops** and the **Formation Tops** will be included on a separate page at the end of the log printout.

Page Margin: 0.25 The page margin field is available, primarily, when you are printing to Adobe Acrobat writer. When a numerical value in inches is typed into this field it will initiate a top and left margin for the templates (Title Page, Legend and Formation Tops) as well as a left margin for the main log.

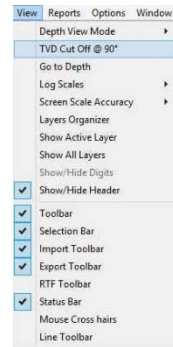
25. When you are ready to print your log, click on the  button.
26. This will activate a message box indicating the size of your printout. Click on the  button.
27. This will activate a file name window which should be filled in with your file name and location to where you can locate it for further reference.



Note: If you do exit from the Print to TIFF window, you will be asked if you wish to save the print settings. If you click on Yes, the program will remember every setting that you made to the Print to TIFF window and then will default to those settings the next time you enter the Print to TIFF window

View Menu - TVD Cut Off at 90°


When the user is in the TVD or SS depth mode this selection will either allow the curve data to extend past our basic cut off of angle of 90° or greater or not. This could help is figuring out where you could be in the section. This only applies to Curve data and applies to all curves in Power*Log or Power*Core applications that has the TVD module activated and has Directional Surveys.

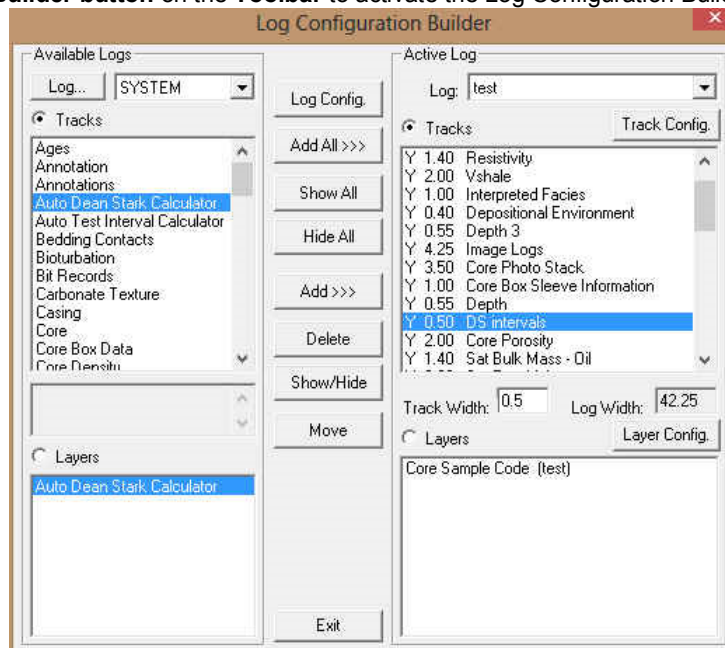


Automated Dean Stark Calculator Layer / Track

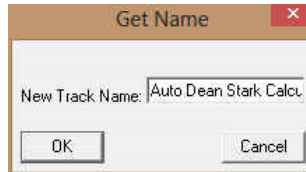
This layer allows the user to calculate Dean Stark Test Intervals automatically but this layer requires **Stacked Core Photos** and **Interpretive Facies Layers** data for this to work. This layer is only available with our Power*Core application Version 2015 and beyond. This automation will only be done if you have the Interpretive Facies filled along with the Core Photo's stacked. This should be the last thing you perform after the core has been depth corrected and the facies have been entered. The User can also enter in the data by mouse pointer or keypad methods.

How to Add a Dean Stark Test Intervals Track

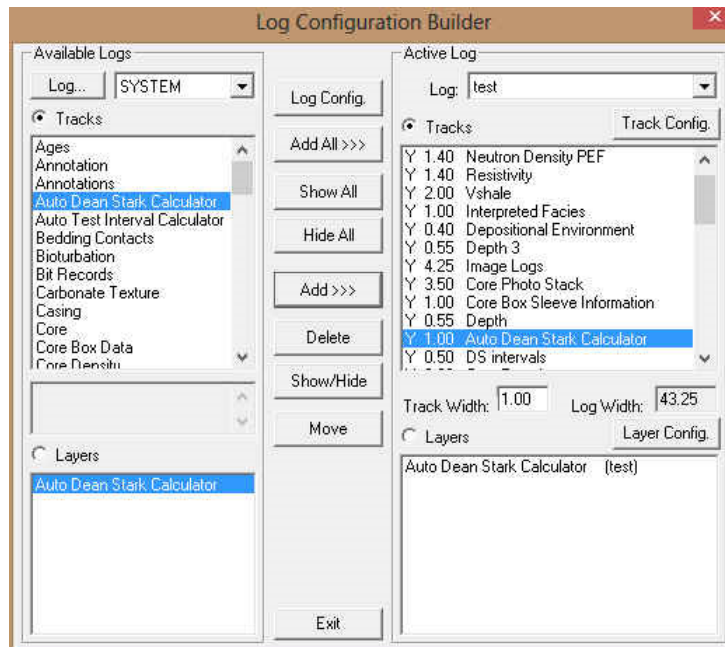
1. Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:



- On the **left hand side of the Log configuration window** scroll down the list of tracks and **click** on the **Auto Dean Stark Calculator** track. The track will become highlighted and the **Tracks** radio button Tracks will become activated.
- On the right hand side of the Log configuration window **click** on the Track you want it to go above or to the left of. In this example we will be adding the Auto Dean Stark Calculator track to the left of the DS Intervals. The track will become highlighted and the **Tracks** radio button Tracks will become activated.
- In the middle of the Log configuration window **click** on the **Add >>>** button. This will activate a System Message asking the user "Do you really want to ADD the selected (TRACK) from the available log to the active log?"
- Click** on the **Yes** button. This will activate a **Get Name** window allowing the user to name the track.



- Type in** a new Track name or keep the existing name and then **click** on the **OK** button. The track will be added above the **DS Intervals** Track or to the left on the log, and the Log Configuration Builder window will be shown.



- Click** on the **Exit** button. This will activate the **Log** with the new track and you will then be prompted with the Current Core Photo group that has been used for the Core Photo Stack layer. Drop the Group ID drop box and select the Photo Group for this layer.

Note: This Current core photo group is the same group that will be used in the Stacked Core Photo layer as well as the Core # and Sleeve data layer and the Automated Test Interval Calculator layers.

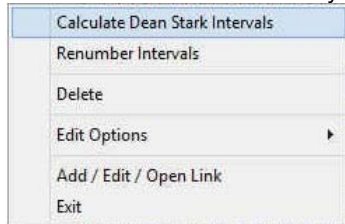


Automated Method

- Double click** on the **Auto Dean Stark Calculator** track / layer to activate the Dean Stark Test Intervals **Builder** window.



2. **Right click** anywhere on the **Auto Dean Stark Calculator** track / layer to activate the pop-up menu.



3. **Click** on the **Calculate Dean Stark Intervals** selection and the Intervals will be calculated for you. This will only be done if you have the Interpretive Facies filled along with the Core Photo's stacked. This should be the last thing you perform after the core has been depth corrected and the facies have been entered.
4. Press the **Esc** key on the keyboard to exit from the **Dean Stark Interval Builder** window.

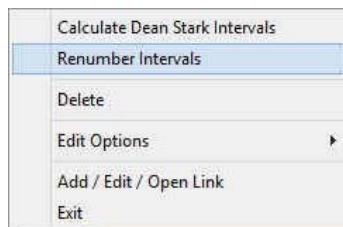
Manually entering a Test Interval

1. **Double click** on the **Auto Dean Stark Calculator** track / layer to activate the **Dean Starks Intervals Builder** window.



Mouse Pointer Method

2. **Click** on the **New** Button to clear the data entry form.
3. **Click and drag the Mouse Pointer** within the **Auto Dean Stark Calculator** track / layer.
4. **Release the mouse button** and the interval will be drawn with a 9999.
5. Repeat Steps 2 – 4 for more intervals.
6. When all your intervals have been entered you will want to **Right Click** on the layer to activate the pop out menu and **select Renumber Intervals**




Or Keypad Method

3. **Click** on the **New** Button to clear the data entry form.
4. **Type** in a **Top and Base Depth** into the builder and then **click** on the **Save** button.
5. Repeat Steps 3-4 for more intervals.
6. When all your intervals have been entered you will want to **Right Click** on the layer to activate the pop out menu and **select Renumber Intervals**

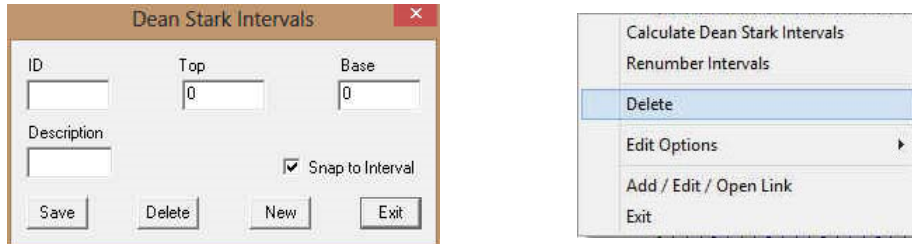
Resizing an Interval


1. **Double click** on the **Auto Dean Stark Calculator** track / layer to activate the **Dean Starks Intervals Builder** window.

2. **Move the mouse pointer over the interval** to be resized and **Click once**. This will activate the interval with the selection resize boxes.
3. **Hold the CTRL Key down** and mouse over the edges and **click and drag** to a different interval.
4. **OR type** in a new **top and / or base depth** and **click** on the  **button**.

Deleting a Single Interval

1. **Double click** on the **Auto Dean Stark Calculator** track / layer to activate the **Dean Starks Intervals Builder** window.



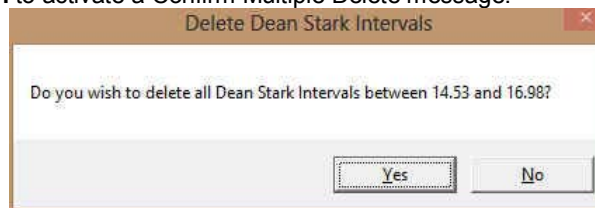
2. **Right click** anywhere within the interval you wish to delete to activate the pop-up menu.
3. **Click on Delete** option and the interval will be deleted accordingly.
4. Repeat **Steps 2 and 3** to delete more **Dean Stark** intervals from the **Dean Stark** track / layer.
5. Once all your Dean Stark test intervals have been deleted, you will want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
6. **Click** on the  **button** or Press the **Esc** key on the keyboard to exit from the **Dean Stark Builder** window.

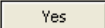

Deleting Multiple Intervals


1. **Double click** on the **Auto Dean Stark Calculator** track / layer to activate the **Dean Stark Intervals Builder** window.

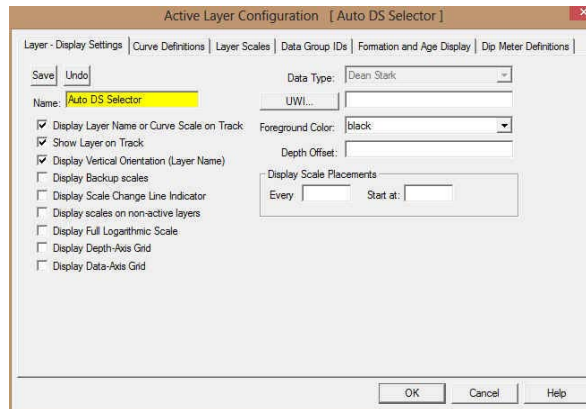


2. **Press and Hold the SHIFT Key** and then **click and drag an area** anywhere within the intervals you wish to delete.
3. **Release the mouse button** to activate a Confirm Multiple Delete message.



4. **Click** on the  **button** and the **Dean Stark** intervals encompassed with your drag will be deleted accordingly.
5. Once all your Dean Stark test intervals have been deleted, you will want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
6. **Click** on the  **button** or Press the **Esc** key on the keyboard to exit from the **Dean Stark Builder** window.

Note: Every type of layer in **Power*Log, Power*Core and Power*Curve** has a **Data Type** classification. The default settings for the **Auto Dean Stark Selector** layer are shown below. To access this window, click on the  **Layer Configuration** button on the **Toolbar**, when the layer is active.




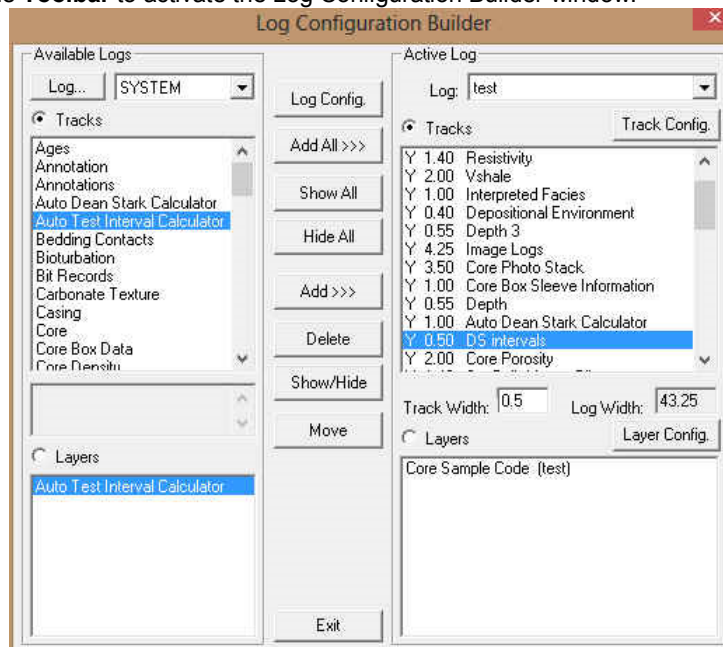
Automated Test Interval Calculator Layer / Track

This layer allows the user to calculate other Test Intervals automatically but this layer requires **Stacked Core Photos** and **Interpretive Facies Layers** data, and can be tied to the previously entered Dean Stark intervals test for this to work. This layer is only available with our PowerCore application Version 2015 and beyond. This automation will only be done if you have the Interpretive Facies filled along with the Core Photo's stacked. This should be the last thing you perform after the core has been depth corrected and the facies have been entered. The User can also enter in the data by mouse pointer or keypad methods.


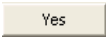
Note: If the Intervals are **locked** to the Dean Stark Intervals and the check box is activated then the intervals will be drawn in **Pink** and the intervals **not locked** to Dean Stark Intervals will be in **Grey**. Also Vice Versa, if the Locked option is unchecked then the locked intervals will be drawn in grey and the unlocked intervals will be drawn in pink. The user can only work with the intervals that are pink.

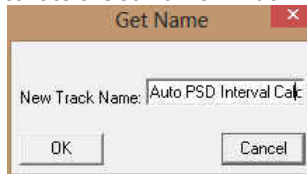
How to Add an Auto Test Intervals Track


1. Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:

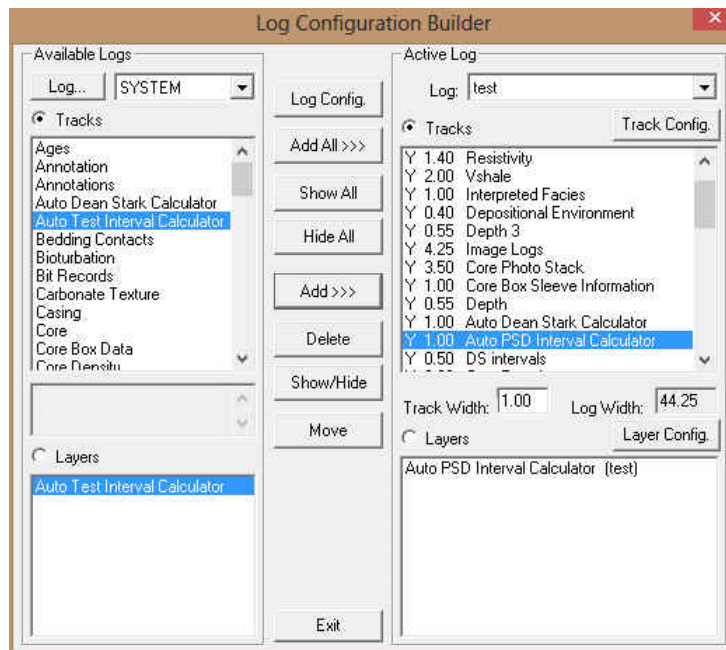


2. On the **left hand side of the Log configuration window** scroll down the list of tracks and click on the **Auto Test Interval Calculator** track. The track will become highlighted and the **Tracks** radio button **Tracks** will become activated.
3. On the right hand side of the Log configuration window click on the Track you want it to go above or to the left of. In this example we will be adding the Auto Test Interval Calculator track to the left of the DS Intervals. The track will become highlighted and the **Tracks** radio button **Tracks** will become activated.

- In the middle of the Log configuration window **click** on the  **button**. This will activate a System Message asking the user "Do you really want to ADD the selected (TRACK) from the available log to the active log?"
- Click** on the  **button**. This will activate a **Get Name** window allowing the user to name the track.

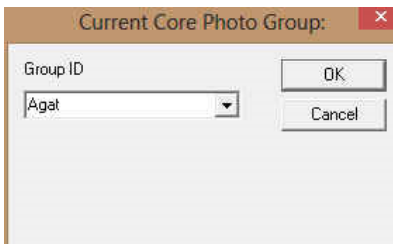


- Type in** a new Track name or keep the existing name and then **click** on the  **button**. The track will be added above the **DS Intervals** Track or to the left on the log, and the Log Configuration Builder window will be shown.



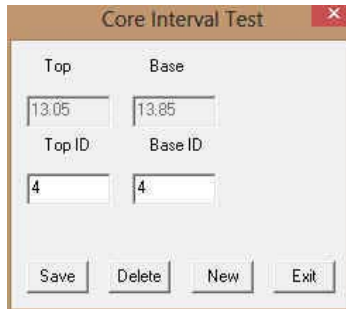
- Click** on the  **button**. This will activate the **Log** with the new track and you will then prompted with the Current Core Photo group that has been used for the Core Photo Stack layer. Drop the Group ID drop box and select the Photo Group for this layer.

Note: This core photo group is the same group that will be used in the Stacked Core Photo layer as well as the Core # and Sleeve data layer and the Automated Dean Starks Calculator layers.

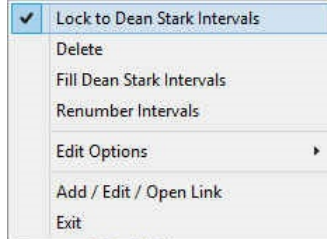


Automated Method

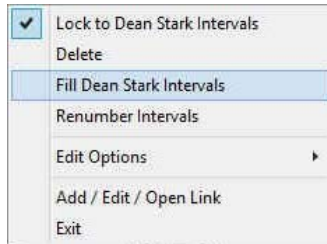
- Double click** on the **Auto Test Interval Calculator track / layer** to activate the **Core Interval Test Builder** window.



2. **Right click** anywhere on the **Auto Test Interval Calculator** track / layer to activate the pop-up menu.



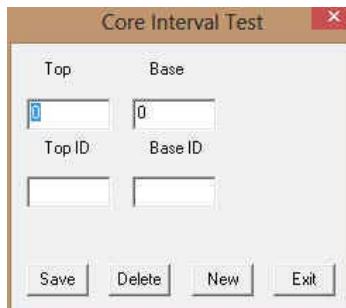
3. **Click** on the **Lock to Dean Stark Intervals** selection. This will lock the test intervals to the DS intervals previously entered.
4. **Right click** anywhere on the **Auto Test Interval Calculator** track / layer to activate the pop-up menu.



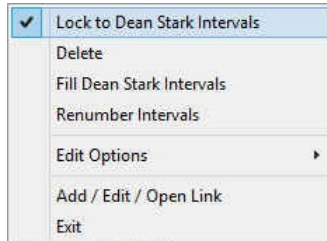
5. **Click** on the **Fill Dean Stark Intervals** selection. This will fill in the Test Intervals locked to the Dean Stark Intervals previously performed. This will only be done if you have the Dean Stark intervals were calculated.
6. Press the **Esc** key on the keyboard to exit from the **Test Interval Builder** window.

Manually entering a Test Interval

1. **Double click** on the **Auto Test Interval Calculator** track / layer to activate the **Core Interval Test Builder** window.



2. **Right click** anywhere on the **Auto Test Interval Calculator** track / layer to activate the pop-up menu.



3. **Click** on the **Lock to Dean Stark Intervals** selection. This will lock the test intervals to the DS intervals.

Mouse Pointer Method

4. **Click and drag the Mouse Pointer within the Core Test Interval Calculator track / layer.**
5. **Release the mouse button** and the interval will be drawn with respect to the previously entered DS Interval and will be represented in pink.

Note: If the Intervals are **locked** to the Dean Stark Intervals and the check box is activated then the intervals will be drawn in **Pink** and the intervals **not locked** to Dean Stark Intervals will be in **Grey**. Also Vice Versa, if the Lock is unchecked then the intervals will be drawn in grey. Now if you uncheck the Lock to Dean Stark Intervals the reverse will happen. The user can only work with the intervals that are pink.

6. Repeat Steps 4 – 5 for more intervals.
7. Once all your test intervals are entered or you have added more test intervals, you want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
8. **Click** on the **button** or Press the **Esc** key on the keyboard to exit from the **Core Point Test Builder** window.

Or Keypad Method

7. **Click** on the **Button** to clear the data entry form.
8. **Type** in a **Top and Base Depth** into the builder and then **click** on the **button**.
9. Repeat Steps 7-8 for more intervals.
10. Once all your test intervals are entered or you have added more test intervals, you want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
11. **Click** on the **button** or Press the **Esc** key on the keyboard to exit from the **Core Interval Test Builder** window.

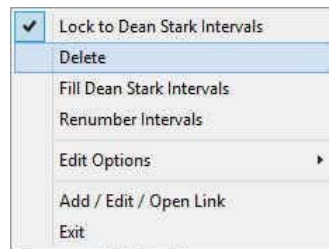
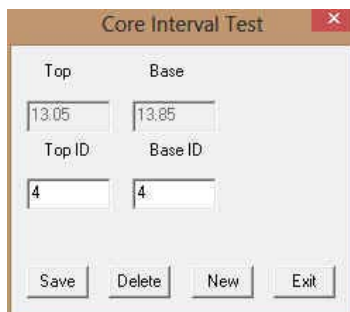
Resizing an Interval

This is only available to Intervals that are not locked with the DS Intervals.

1. **Double click** on the **Auto Test Interval Calculator** track / layer to activate the **Core Interval Test Builder** window.
2. **Move the mouse pointer over the interval** to be resized and **Click once**. This will activate the Builder with the depths of the Selected Test Interval
3. **Type** in a new **top and / or base depth** and **click** on the **button**.

Deleting a Single Interval

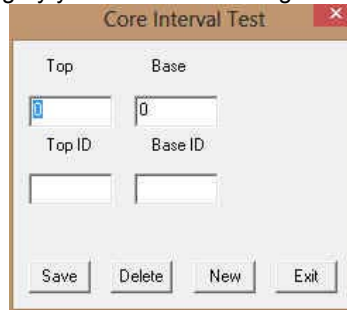
1. **Double click** on the **Auto Test Interval Calculator** track / layer to activate the **Core Interval Test Builder** window. To delete an interval it must be pink. If it is grey you will have to change the Lock to Unlock or vice versa.



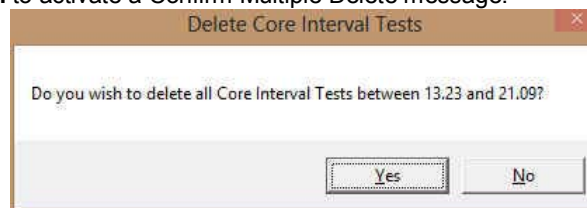
2. **Right click** anywhere within the interval you wish to delete to activate the pop-up menu.
3. **Click on Delete** and the interval will be deleted accordingly.
4. Repeat **Steps 2 and 3** to delete more **Core Interval Test** from the layer.
5. Once all your test intervals have been deleted, you will want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
6. **Click** on the **button** or Press the **Esc** key on the keyboard to exit from the **Core Interval Test Builder** window.

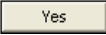

Deleting Multiple Intervals


1. **Double click** on the **Core Test Interval** track / layer to activate the **Core Interval Test Builder** window. To delete an interval it must be pink. If it is grey you will have to change the Lock to Unlock or vice versa.

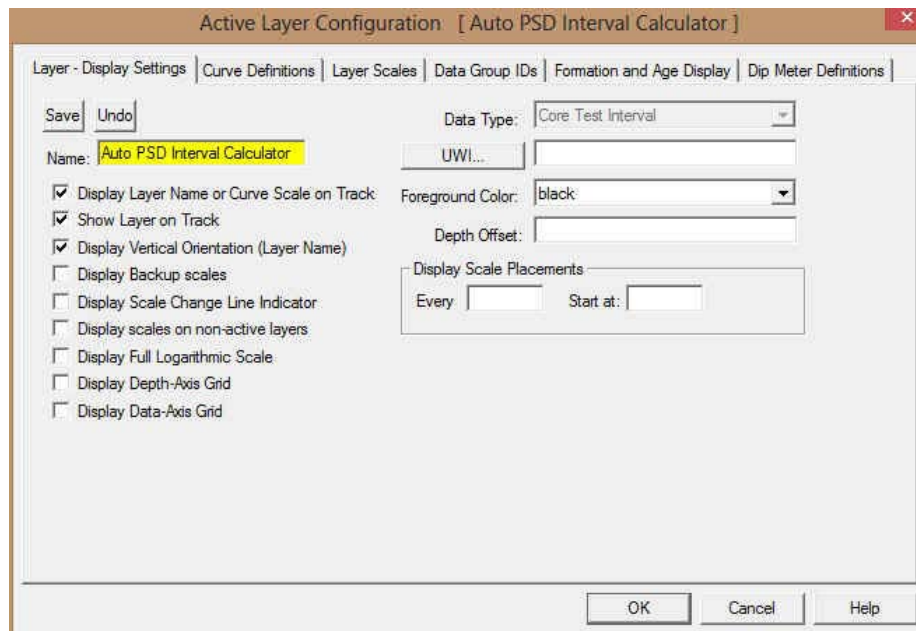


2. **Press and Hold the SHIFT Key** and then **click and drag an area** anywhere within the intervals you wish to delete.
3. **Release the mouse button** to activate a Confirm Multiple Delete message.



4. **Click on**  **button** and the **Core Interval Test** encompassed with your drag will be deleted accordingly.
5. Once all your test intervals have been deleted, you will want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
6. **Click on the**  **button** or Press the **Esc** key on the keyboard to exit from the **Core Interval Test Builder** window.

Note: Every type of layer in **Power*Log, Power*Core and Power*Curve** has a **Data Type** classification. The default settings for the **Auto Core Test Interval Selector** layer are shown below. To access this window, click on the  **Layer Configuration** button on the **Toolbar**, when the layer is active.



Core Photo Magnifier Layer / Track

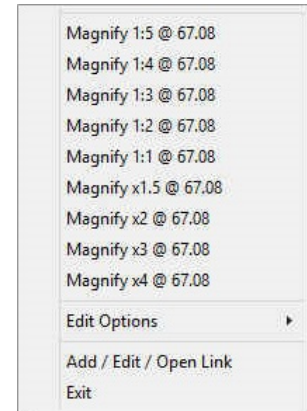
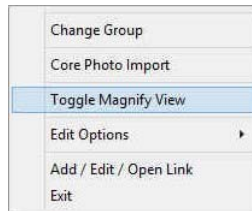
This layer enables the user to magnify what is being displayed in the Core Photo Stack layer / track. The Core photos are displayed on the stacked layer and the sleeve data can be viewed on the sleeve data display layer. This track is automatically added when you add the Core Photo Stack Layer / track and will give you a magnification for the core sleeves to zoom in on a particular contact or feature that you wish to magnify without having to change the log viewing scale. These photos can be added individually or can be imported by way of an ASCII file with the correct information. These layers are only available in Power*Core.

Right Click Menu Items

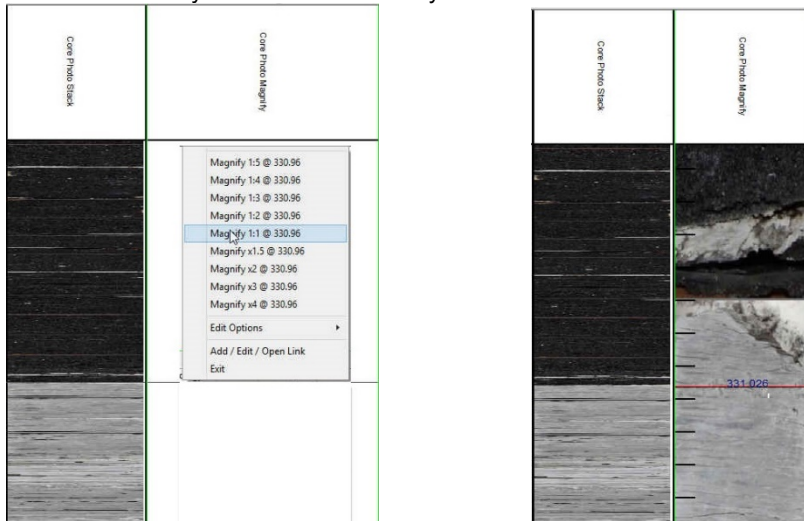
The user has the ability to magnify the Core Photos that are stacked in the Core Photo Stack layer / track at any given depth. If you select 1:1 to 1:5 you could also use the Log Scale drop box and select or type in the scale you pick from the right click option. The difference would be that you would see far less of the rest of your Core Log when you change the log scale.

How to Magnify the Core Photos.

1. If the Core Photo Magnify Track is not being displayed **Right Click** on the **Core Photo Stacking Layer** and **select the Toggle Magnify View**. This will turn on the Core Photo Magnify Track.



2. **Right Click** on the **Core Photo Magnify** track at a specific depth and **select** one of the **magnify Views**. This will display the core photos at the scale you selected on this layer. These actions are shown below.




Note: You will see black ruler style lines on the magnify view. The ruler markings are 1cm divisions to allow the user to figure out at what depth the contact or physical structure you wish to identify is located. You will have to utilize the depth where you right clicked (red line with blue depth markings) at to help you figure out the location you wish to utilize.

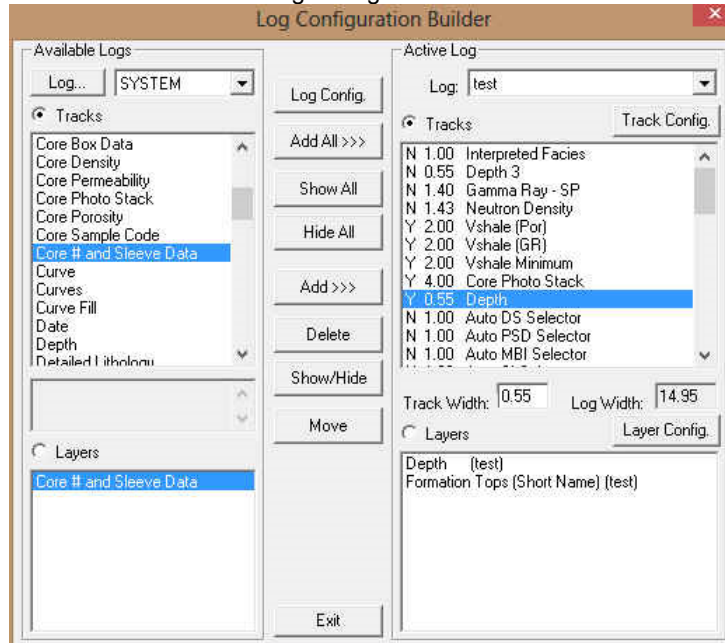
Note: You may want to turn on the Mouse Hair Option under the View menu Selection and change you mouse pointer accuracy to .05 or .01 to fine tune your right click.


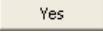
Core # and Sleeve Data Layer / Track

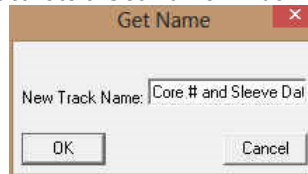
This layer displays the Core Photo sleeve data that have been cropped from Core Box photos generated by a photographer. The Core photos are displayed on the Core Photo Stack layer and the sleeve data can be viewed on the Core # and sleeve data display layer. The layers data only reflects the Core Sleeve Number and whether the core is whole or rubble. This data can be exported in an ASCII format for ease of testing or formatting the core photos. This layer is only available in Power*Core.

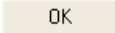
How to Add a Core # and Sleeve Data Layer / Track

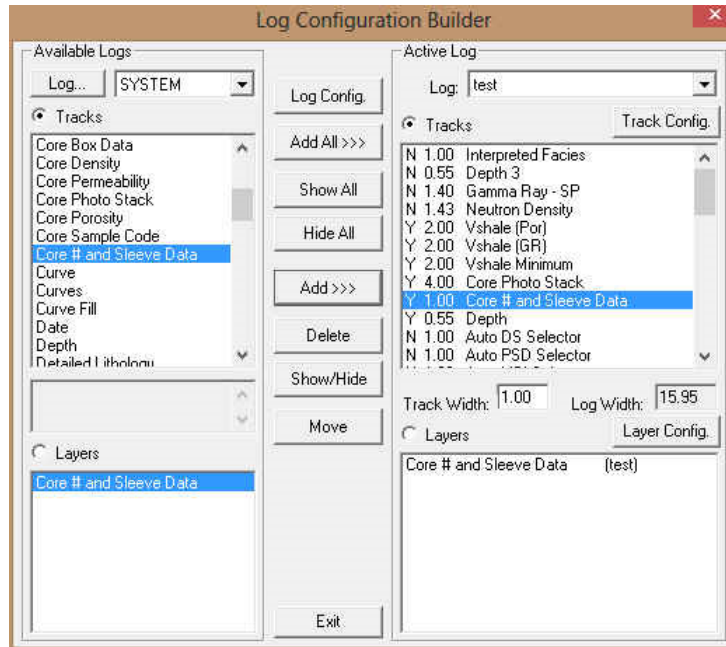
1. Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:



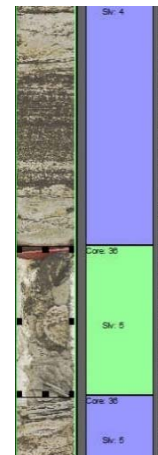
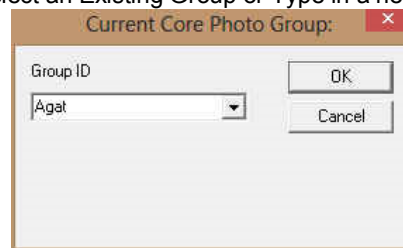
2. On the **left hand side of the Log configuration window** scroll down the list of tracks and **click** on the **Core # and Sleeve Data** track. The track will become highlighted and the **Tracks** radio button **Tracks** will become activated.
3. On the right hand side of the Log configuration window **click** on the Track you want it to go above or to the left of. In this example we will be adding the Core # and Sleeve Data track to the left of the Depth Track. The track will become highlighted and the **Tracks** radio button **Tracks** will become activated.
4. In the middle of the Log configuration window **click** on the  **button**. This will activate a System Message asking the user “Do you really want to ADD the selected (TRACK) from the available log to the active log?”
5. **Click** on the  **button**. This will activate a **Get Name** window allowing the user to name the track.



6. **Type in** a new Track name or keep the existing name and then **click** on the  **button**. The track will be added above the **Depth** Track or to the left on the log, and the Log Configuration Builder window will be shown.



7. Click on the **Exit** button. This will activate the **Log** with the new track and you will then be prompted with the Current Core Photo Group window for the Core Photo Stack layer. Drop the Group ID drop box and select an Existing Group or Type in a new Group ID for this layer.

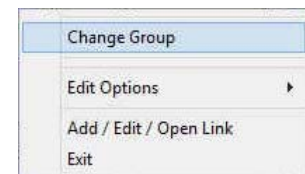



Note: This Core Photo group will be the same for this layer, as well as the Core Photo Stacked layer, Automated Dean Starks Calculator, Automated Test Interval Calculator and the Test Point Indicator layers.

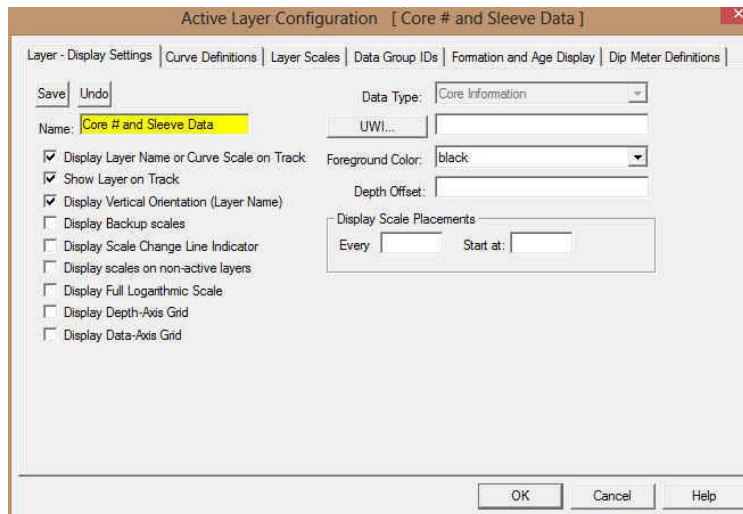
This Layer / Track is only a display layer for the Core sleeves that have been stacked in the Core Photo Stack layer. It displays the Core # along with the extents of the Core along with the sleeve # and the Rubble (green) / Core (blue) Indications.

Right Click Menu Selections

Change Group- This selection will allow the user to change the Photo Group associated with this layer. If you change it for this layer all the layers associated with this group must also be changed.



Note: When you add any layer to a log, it is always associated with a **Data Type**. Every data type in **Power*Log / Core & Curve** has a default setting. The default settings for a **Core # and Sleeve Data** layer are shown below. To access this window, click on the  **Layer Configuration** button on the **Toolbar**, when the layer is active.




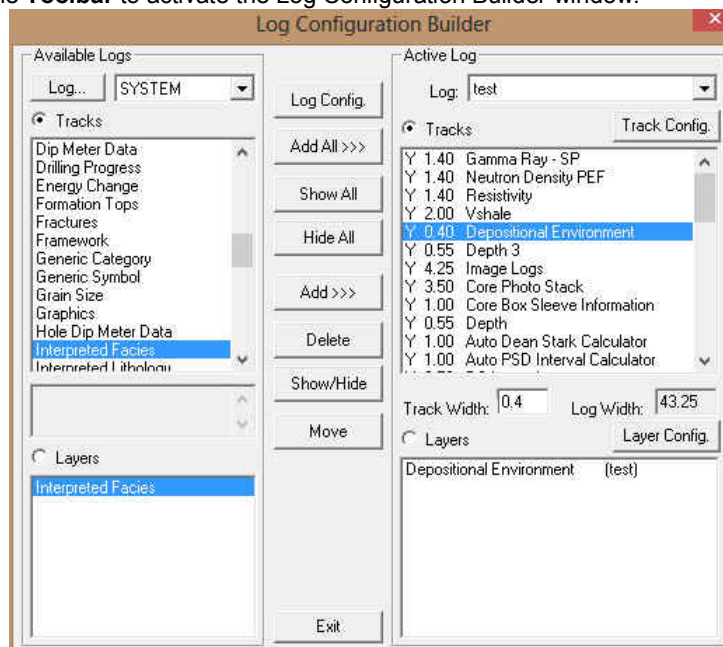
Interpreted Facies Layer - Facies Builder




This Builder will allow you to draft on the Interpreted Facies Layer. The user can utilize this layer if they have the Power*Core Module. In a **Facies Log** this layer will control the entry of all Bed Restricted Layers. If you do not have an interval of Interpretive Facies you cannot enter any bed restricted data. Consequently if you resize or delete a Facies all bed restricted data will also be affected.

How to Add an Interpretive Facies Track.

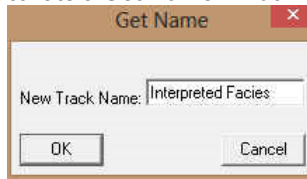
To fully utilize this track / layer the Log Format type must be Facies Log.

8. Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:

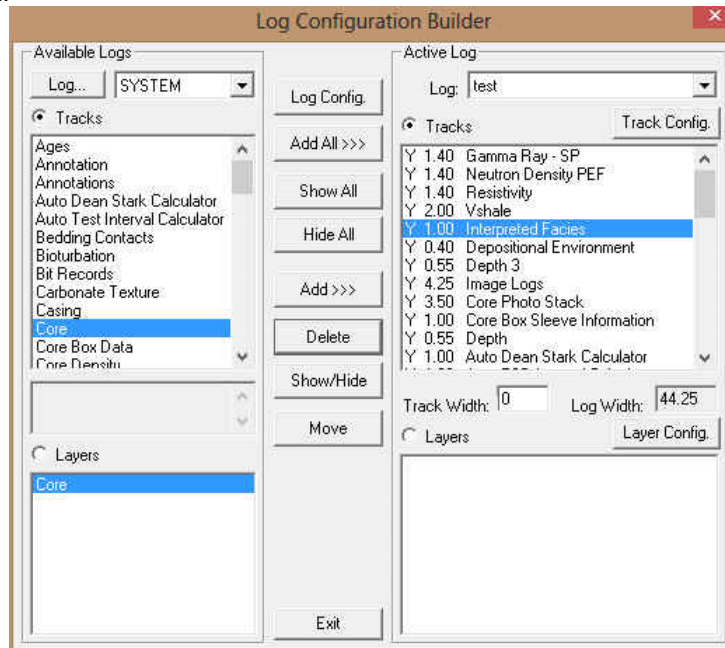


9. On the **left hand side of the Log configuration window** scroll down the list of tracks and **click** on the **Interpreted Facies** track. The track will become highlighted and the **Tracks** radio button  will become activated.
10. On the right hand side of the Log configuration window **click** on the Track you want it to go above or to the left of. In this example we will be adding the Interpretive Facies track to the left of the Depositional Environment Track. The track will become highlighted and the **Tracks** radio button  will become activated.
11. In the middle of the Log configuration window **click** on the  **Add >>>** button. This will activate a System Message asking the user "Do you really want to ADD the selected (TRACK) from the available log to the active log?"

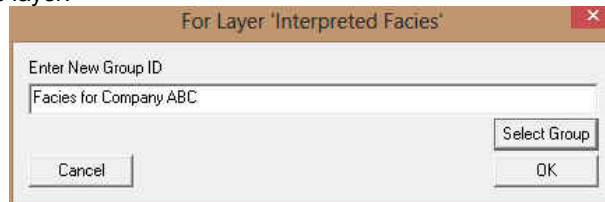
12. Click on the **Yes** button. This will activate a **Get Name** window allowing the user to name the track.



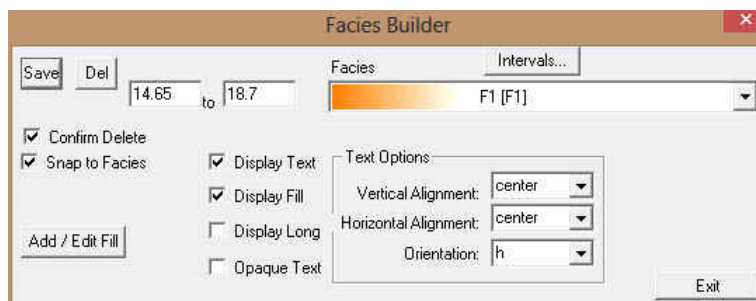
13. **Type in** a new Track name or keep the existing name and then **click on the** **OK** button. The track will be added above the **Depositional Environment** Track or to the left on the log, and the Log Configuration Builder window will be shown.



14. Click on the **Exit** button. This will activate the **Log** with the new track and you will then prompted with the Enter New Group for the Interpretive Facies. Drop the Group ID drop box and select an Existing Group or Type in a new Group ID for this layer.

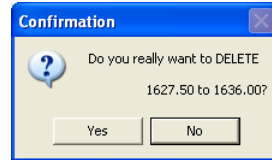


Overview of Facies Builder window.



- Save** Button The user can enter the depths into the two depth fields with Facies selected and then **click on the** **Save** button. Their interval will now be drawn on the Interpretive Facies Track.

Del Button: The user can click on an existing interpretive Facies interval and the corresponding data will be shown in the builder. The user can then **click** on the **Del button** to delete the interval.



Confirm Delete: **Check box** when activated will prompt the user with a Confirmation window Do you really want to delete? If this **Confirm Delete** is unchecked the Facies Interval will be deleted without any system message.

Snap to Facies: This **Check box** when activated will not allow spaces between beds on the Interpretive Facies Layer when you are using the mouse (not the keypad) when entering Lithology Intervals. This function will work if you are within 1/4" of an existing Interval and will snap to the facies interval already drawn on your log.

Intervals... **Button** will activate a list of the Interpretive Facies Intervals in your active well. The user can select any interval from this list and can then modify or delete this interval.

Add / Edit Fill **Button** allows the user to Add, Change or Delete Existing Facies Fill Types.

Display Text check box allows the user to turn / off the Text in the drawn facies.

Display Fill check box allows the user to turn / off the Color Fill in the drawn facies.

Display Long check box allows the user to Display the Long Name of the drawn facies if the Text option is selected.

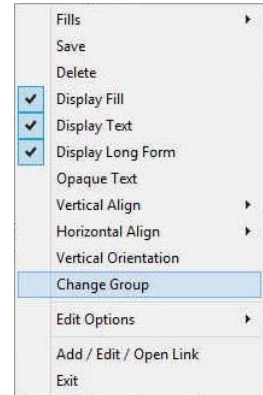
Opaque Text check box allows the user to Display the Name with an Opaque background of the drawn facies if the Text option is selected.

Vertical Alignment: drop box allows the user to Display the Name of the drawn facies if the Text option is selected at the top centre or bottom of the drawn interval.

Horizontal Alignment: drop box allows the user to Display the Name of the drawn facies if the Text option is selected at the left centre or right of the drawn interval.

Orientation: drop box allows the user to Display the Name of the drawn facies if the Text option is either vertically or horizontally within the facies.

Exit **Button** will close the Facies builder.



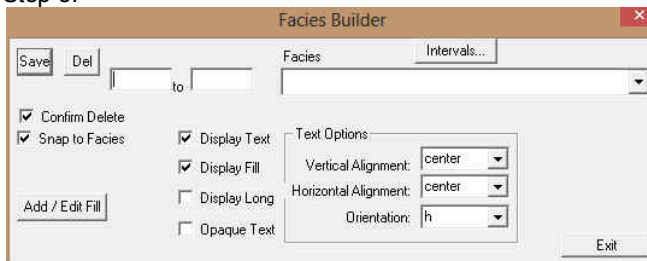
Right Click Menu Items

All these menu items are described above as they are part of the Facies Builder as well. Once the display is the way you prefer them you will find that every time you work with this layer the default will now be the same as when you left the builder.

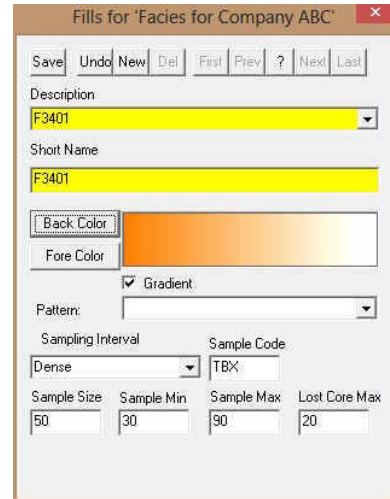
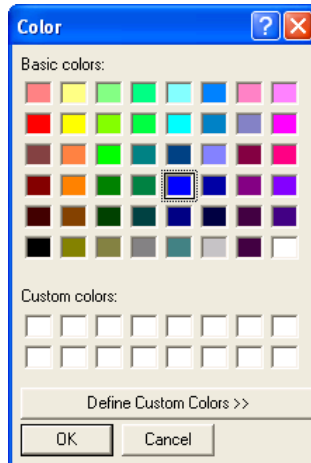
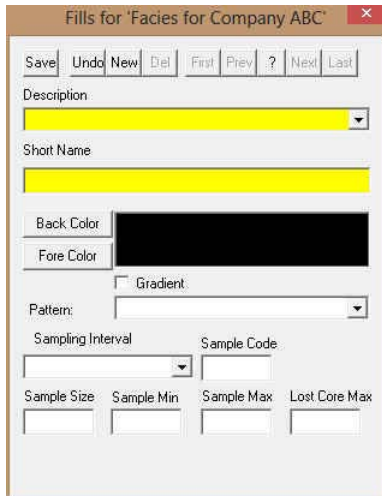
Change Group Selection allows the user to switch to a different FACIES group.

Adding Fill Types to the Interpretive Facies Builder

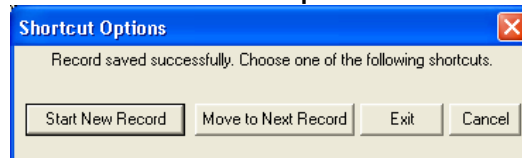
- 1) **Double click** anywhere within the **Interpretive Facies** track to activate the **Facies Builder** window. If no fills have been added skip to Step 3.



- 2) **Click** on the **Add / Edit Fill** **button**. This will activate the window show below. If the window has a fill already displayed and you want to start a new fill then **click** on the **New** **button** to clear the window to add a new facies.



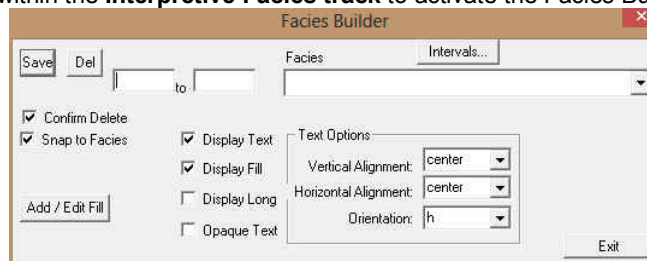
- 3) **Type** the Facies long name into the **Description** field.
- 4) **Type** the Facies short name into the **Short Name** field.
- 5) **Click** on the **Back Color** button and **select a color** from the palette and then **click** on the **OK** button.
- 6) **Click** on the **Fore Color** button and **select a color** from the palette and then **click** on the **OK** button.
- 7) **Click** on the **Gradient** **Gradient** to activate a check mark if you want the gradient option.
- 8) **Click** on the **Pattern** field box arrow to select a specific pattern type.
- 9) **Pick a sampling type** from the drop box.
- 10) **Type in a Sample Code**. This is a secondary display on the Name when displayed on the Facies Interval.
- 11) **Type in a Sample Size (optimum) Minimum and Maximum sample size in the fields provided** for the Automated Dean Stark Calculator layer / track to work with in the automation process. These sizes are in cm's (1 meter = 100 cm).
- 12) **Type in the Lost Core Maximum Value for the Automation for sampling to be straddled over**.
- 13) **Click** on the **Save** button or press **ALT-S**. The **Shortcut Options** window will be shown.



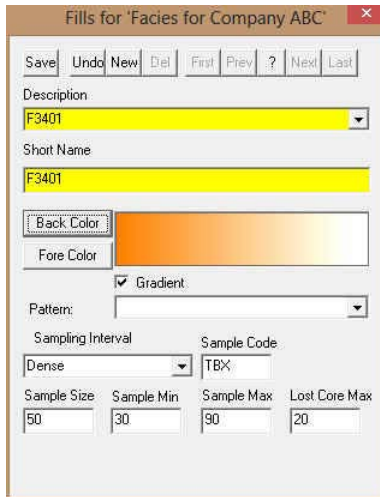
- 14) To enter another Fill for Facies, **click** on the **Start New Record** button and repeat **Steps 3 to 13** OR
- 15) **Select** **Exit** from the ensuing **Shortcut Options** window. This will exit the window and the new Facies has been added.

Editing Interpretive Facies Fill Types

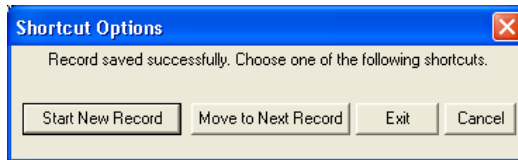
1. **Double click** anywhere within the **Interpretive Facies** track to activate the Facies Builder window.



2. **Click** on the **Facies** drop box and select the fill to be edited.
3. **Click** on the **Add / Edit Fill** button. Your selection will be shown in the Fill Type window.



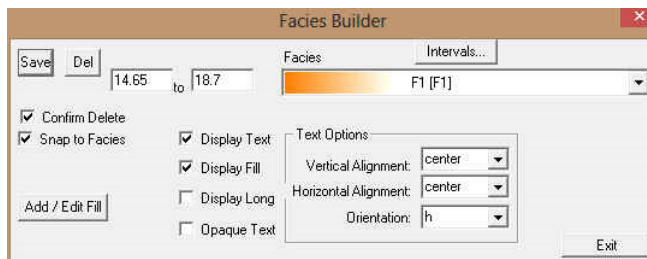
4. Make the necessary changes and click on the **Save** button. The Shortcut Options window will be shown.



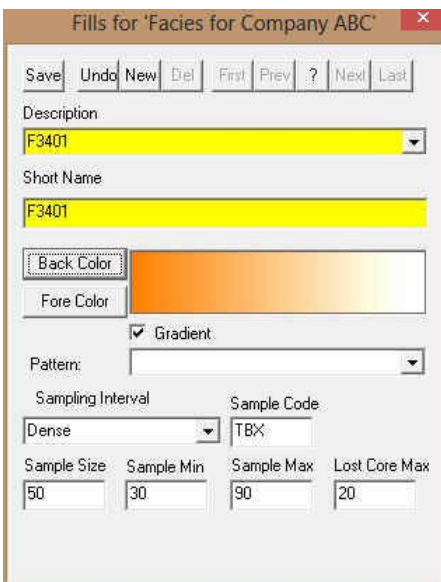
5. Select **Exit** from the ensuing **Shortcut Options** window. This will clear the window and allow the user to edit a new record.


Deleting Facies Fill Types

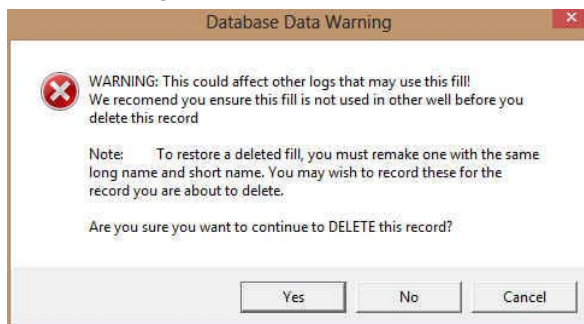
1. **Double click** anywhere within the **Interpretive Facies** track to activate the **Facies Builder** window.

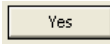


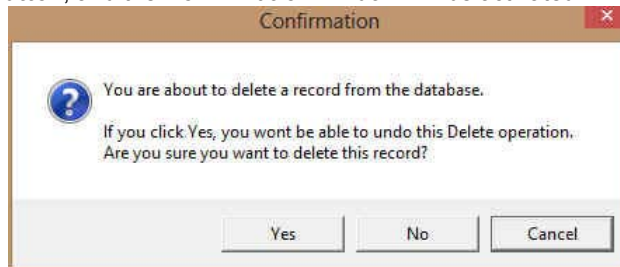
2. **Click** on the drop box arrow in the **Facies** window and select any of the Facies from the resulting choice list that you would like to delete.
3. **Click** on the **Add / Edit Fill** button, and the **Fills for 'Environment'** window will be shown.



4. Click on the  button, and the **Warning** window will be activated.



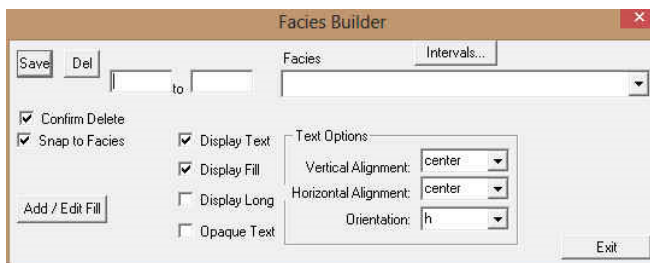
5. Click on the  button, and the **Confirmation** window will be activated



6. Click on the  button, and the **Facies** will be deleted.

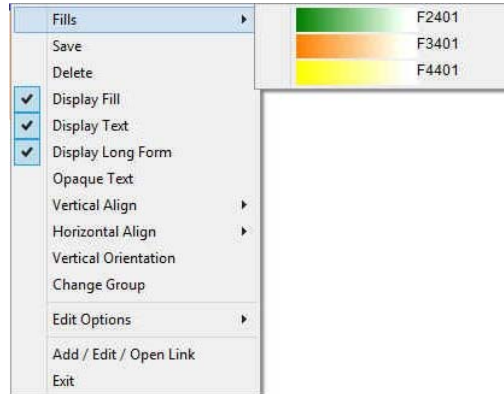
Drafting an Interpreted Facies Interval

1. **Double click** anywhere within the **Interpreted Facies** track to activate the **Facies Builder** window.



2. **Select a Facies.** There are 3 ways to select a Facies Fill, some faster than others.

- The user can **right click** anywhere within the **Interpretive Facies** track to activate the pop-up menu shown below. Then select by **clicking once** on the desired **Facies** from the pop-up menu.
- The user can select a **Facies** from the **Facies** field within the **Facies Builder** window.
- The user can also **click** on a **previously drawn Facies** that is the same as you wish to draw with. If done correctly the selected Facies will be automatically displayed in the **Facies** field within the **Facies Builder** window.



3. **Click and drag** up or down within a specific track to define the Facies interval. **Or**, If there is a Facies defined above and below (within 100 meters) and you want to fill in the interval simply **double click** in the interval and it will fill in.

Note: This can be done on any track but more often than not the Interpretive Lithology Track is the most convenient. With the **Snap to Lithology** activated the Facies being drawn will snap to the previous Facies either above or below depending on your drag if you are within 1/4" of already drawn lithology.

4. **Release** the mouse button and the interval will be drawn accordingly.

Inserting a Facies within an existing Facies

You are able to insert thinner Facies of a different **Facies Type** into an existing Facies. This prevents you from having to re-enter the properties of the main Facies above and beneath the inserted thinner Facies.

1. **Double click** anywhere within the **Interpreted Facies** track to activate the **Facies Builder** window.
2. **Select a Facies type**. There are 3 ways to select a Facies Fill.
 - The user can **right click** anywhere within the **Interpretive Facies** track to activate the pop-up menu and mouse over the Fills Menu item. Then select by **left clicking once** on the desired **Facies Fill** from the pop-up menu.
 - The user can select a **Facies** from the **Facies** field within the **Facies Builder** window.
 - The user can also **click** on a **previously drawn Facies** that is the same as you wish to draw with.
3. If done correctly the selected Facies will be automatically displayed in the **Facies** field within the **Facies Builder** window.
4. **Click and drag** the mouse button up or down within a specific track to define the **Facies** interval.
5. **Release** the mouse button, and you will be prompted with a message asking, "**Do you want to add an interbedded interval?**"
6. **Click** on the button and the thinner bed will be drawn accordingly.
7. Press the **Esc** key on the keyboard to exit from the **Rock Type Builder** window.

Resizing an Existing Facies Fill

1. **Double click** on the **Interpreted Facies** track to activate the **Facies Builder** window.
2. **Press and hold** the **Ctrl** key on the keyboard **down**, while moving the mouse pointer over the Facies Fill boundary you wish to resize, the mouse pointer will turn into a resize \updownarrow , (remember if two Fills are touching to look into the builder to see if you have the correct one selected)
3. **Clicking and dragging** the **left** mouse button up or down the **Interpreted Facies** track to either shrink or enlarge the selected interval.

Note: You are not allowed to overlap an existing facies entirely and if you attempt to do so, you will receive an "**Unsupported Add Sequence**" system message.

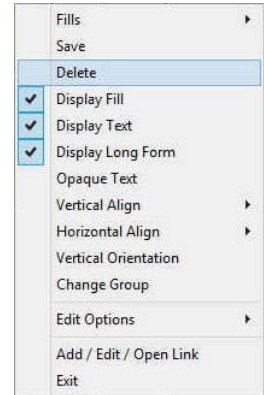
4. **Release** the mouse button at the desired depth, followed by the release of the **Ctrl** key on the keyboard, and the following system message will be activated, "**Do you really want to RESIZE the interval from _ to _ ?**"

Note: Resizing a **Facies** will result in a resizing its associated bed restricted description category information, i.e. **Grain Size, Porosity Grade**, and so on.

5. Press the **Esc** key on the keyboard to exit from the **Facies Builder** window.

Deleting a Single Facies Fill.

1. **Double click** on the **Interpreted Facies** track to activate the **Facies Builder** window.
2. **Right click** anywhere within the **Interpreted Facies** track to activate the pop-up menu.
3. **Click on Delete** and the following system message will be activated, "**Do you really want to DELETE _ to _ ?**" **Click** on the **button** to confirm the deletion.

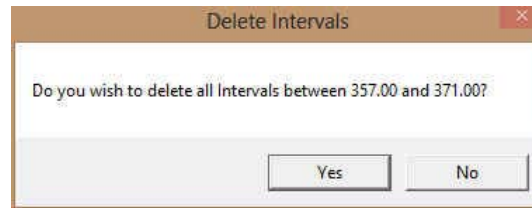


Note: When you delete a **Facies Fill**, you will also delete its associated bed restricted rock description information, i.e. **Grain Size, Porosity Grade, Type, Oil Show** and all other bed restricted data.

4. Press the **Esc** key on the keyboard to exit from the **Facies Builder** window.

Deleting a Multiple Facies Fills


1. **Double click** on the **Interpreted Facies** track to activate the **Facies Builder** window.
2. **Hold the SHIFT Key down** and then **click and drag** anywhere within the **Interpreted Facies track** and then let go of the **Shift Key** and **left mouse button**. This will activate a **Delete Intervals** message box.

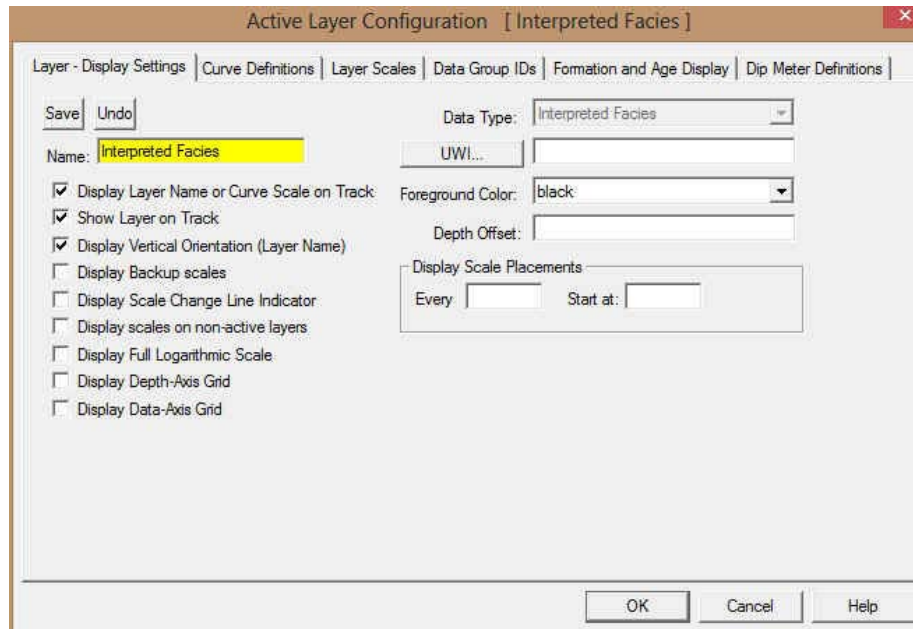


3. **Click on** **button** and the Intervals dragged over will be deleted.

Note: When you delete a **Facies Fill**, you will also delete its associated bed restricted rock description information, i.e. **Grain Size, Porosity Grade, Type, Oil Show** and all other bed restricted data.

4. Press the **Esc** key on the keyboard to exit from the **Rock Type Builder** window.

Note: Every type of layer in **Power*Log/Curve** has a **Data Type** classification. The default settings for the **Interpreted Facies** layer are shown below. To access this window, **click** on the  **Layer Configuration** button on the **Toolbar**, when the **Interpreted Lithology** layer is active.

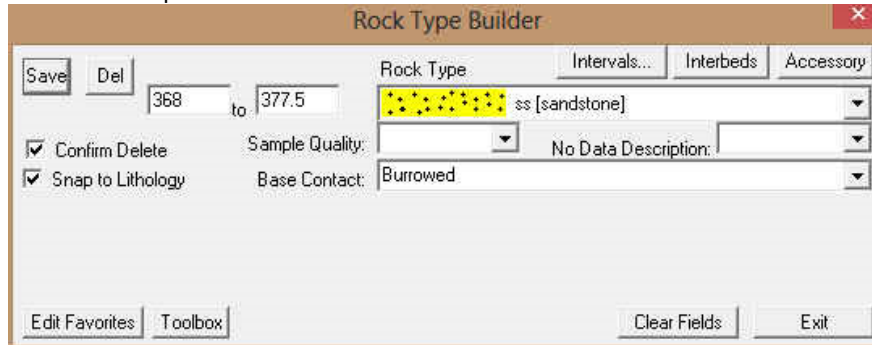


Interpretive Lithology Layer / Track

Added the ability to Insert Lithology to a Facies. If an Interpretive Facies has been inserted the user can now **CTRL Key** depressed and **double click** with the mouse to fill in a selected rock type into the top and base depths of the preexisting Facies.

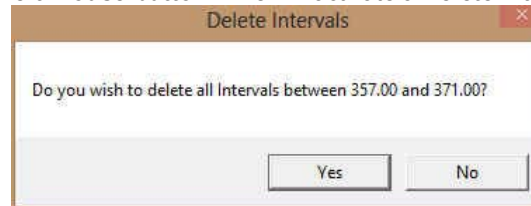
Added an **Intervals...** button into the builder to be able to select small beds that get entered and are not really visible. You can now select them from a list and delete them from the builder.

Added the Ability to Delete Multiple Rock / Bed Intervals.



Deleting Multiple Rock Types or Beds

1. **Double click** on the **Interpreted Lithology** track to activate the **Rock Type Builder** window.
2. **Hold the SHIFT Key down** and then **click and drag** anywhere within the **Interpreted Lithology** track and then **let go of the Shift Key and left mouse button**. This will activate a **Delete Intervals** message box.



3. **Click on** **Yes** button and the Intervals dragged over will be deleted.

Note: When you delete a **Rock Type**, you will also delete its associated bed restricted rock description information, i.e. **Grain Size, Porosity Grade, Type, Oil Show** and all other bed restricted data.

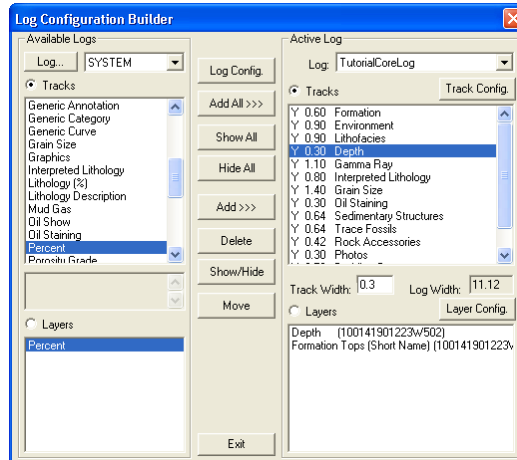
4. Press the **Esc** key on the keyboard to exit from the **Rock Type Builder** window.

Percent Layer

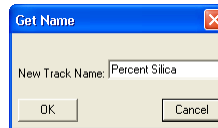
Percent can be added either as a track or a layer to your log. When you add a Percent as a layer to your log, you must assign it to a specific track.

How to Add a Percent Track / Layer

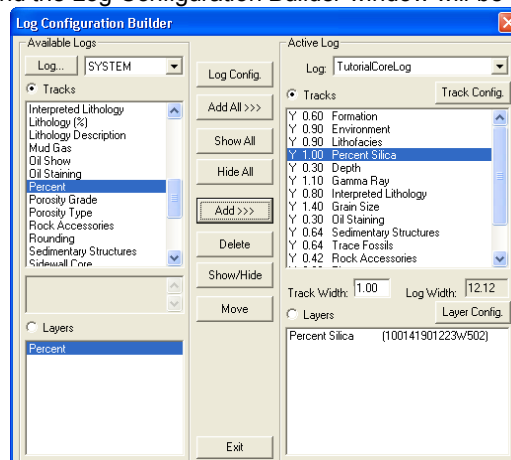
1. Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:



2. On the **left hand side of the Log configuration window** scroll down the list of tracks and **click on the Percent** track. The track will become highlighted and the **Tracks** radio button Tracks will become activated.
3. On the right hand side of the Log configuration window **click on the Track** you want it to go above or to the left of. In this example we will be adding the Percent track to the left of the Depth track or above the Depth track in the horizontal application. The track will become highlighted and the **Tracks** radio button Tracks will become activated.
4. In the middle of the Log configuration window **click on the Add >>>** button. This will activate a System Message asking the user “Do you really want to ADD the selected (TRACK) from the available log to the active log?”
5. **Click on the Yes** button. This will activate a **Get Name** window allowing the user to name the track.

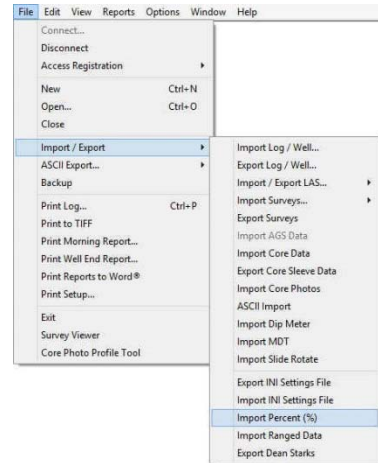


6. **Type in a percent name** and then **click on the OK** button. The track will be added above the **Depth** Track or to the left on the log, and the Log Configuration Builder window will be shown.

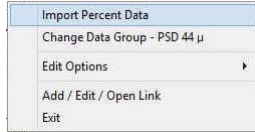


7. **Click on the Exit** button. This will activate the **Log**, and the new track will be added to your log.

The User can now Import Percent data from an ASCII file. To access the import utility you can **right click** on the layer and select the **Import Percent Data** from the pop out menu or you can use the **File Menu** illustrated to the right or **click** on the **Import % Icon** on the Import Toolbar.



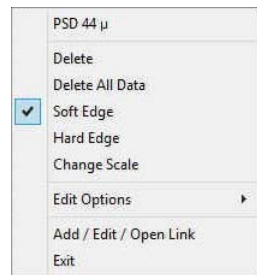
Right Click Menu Items



Import Percent Data Selection will open the Import Utility.

Scale Selection will activate the Scale and Units window to the user can change the scale.

Change Data Group Selection will allow the user to select a different data group to show on this layer.



Right Click Menu Items with the builder Open

Delete Selection will delete the data where the user has right clicked. You can also delete the data in the Data Entry window.

Delete All Selection will allow the user to delete all the data. You will not be able to recover the data if you do select this option.

Scale Change Selection will activate the Layer Configuration window, Layer Scales Tab and fill in the left and right scales that fit your requirements.

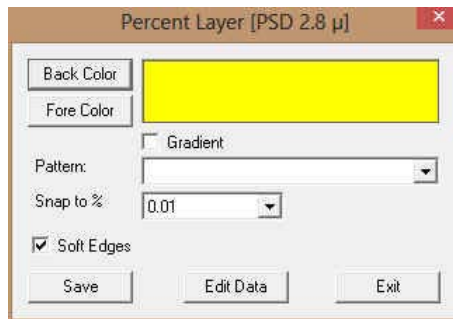
Soft Edge Selection will change the fill from squared off blocks to wavy rounded blocks.

Hard Edge Selection will change the fill from wavy rounded blocks to squared off blocks.

Line Width Selection will allow the user to change the line width if Point to Point is activated.

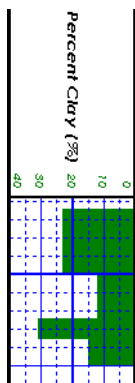
Drawing Percent Data (Mouse Pointer Method)

1. **Double click** on the **Percent track** to activate the Percent Layer window.

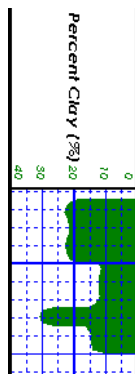


The default is a black histogram. The user has the ability to modify this.



2. **Click** on the **Back Color** button and **select a color** from the palette and then **click** on the **OK** button.
3. **Click** on the **Fore Color** button and **select a color** from the palette and then **click** on the **OK** button.
4. **Click** on the **Gradient** Gradient to activate a check mark if you want the gradient option.
5. **Click** on the **Pattern** field box arrow to select a specific pattern type.
6. **Click** on the **Snap to** field box arrow in the **Fills for Environment** window and select any of the percent from the resulting choice list. This allows the mouse to move or less precision when dragging in a percentage.
7. **Soft Edges** Soft Edges: When checked will round off the percent and will present the percent edges with sine wave lines instead of strain lines.



Percent Hard edges

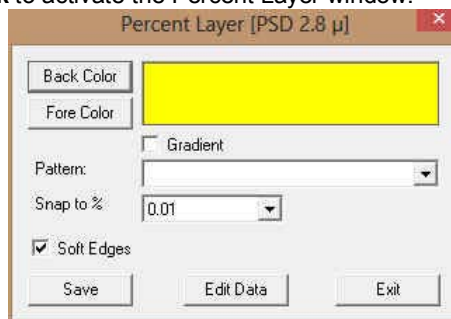


Percent Soft edges

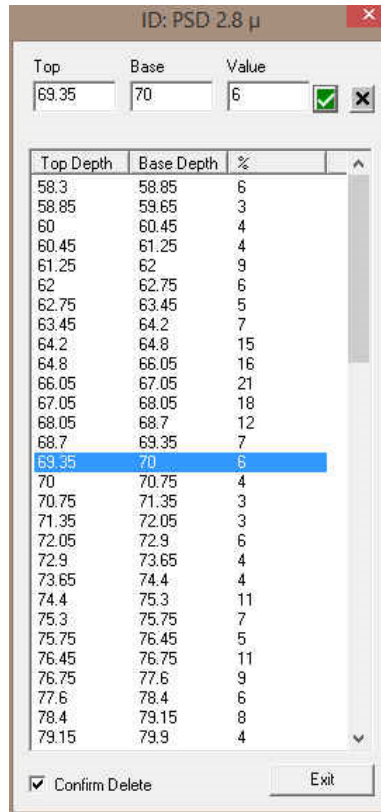
8. Click on the  button.
9. Define the desired interval by **clicking and dragging** the mouse pointer from a specific **Measured Depth** and **Percent (%)**, as indicated within the mouse pointer display box to another **Measured Depth** on the **Percent (%)** track.
10. **Release** the mouse button and the percent interval will be drawn accordingly.
11. **Repeat** steps 8-9 to define more intervals.
12. Click on the  button to exit the window.

Drawing Percent Data (Keypad Method)

1. Double click on the **Percent track** to activate the Percent Layer window.



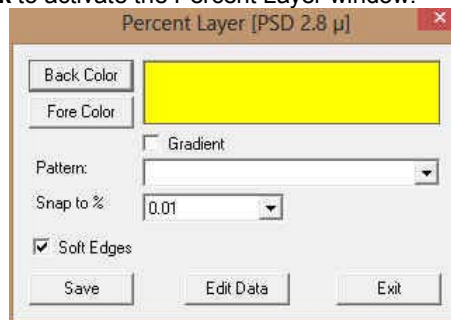
2. Click on the  button. This will activate the Data Entry window.



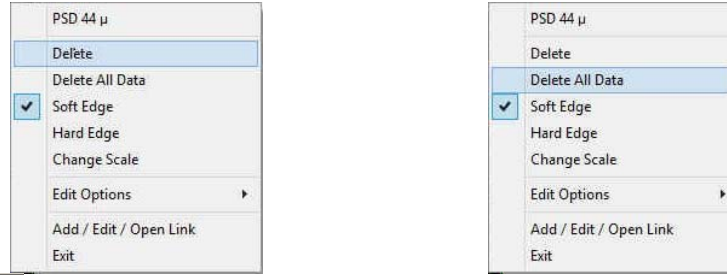
3. **Double Click** in the Top Depth Field and **type** in a **top depth**. **Depress the Tab Key**.
4. **Type** in a **base depth** in the Base Depth Field. **Depress the Tab Key**.
5. **Type** in a **percent Value** in the Value field.
6. **Click** **button** or the **Enter key** on your keypad and the data will be entered.
7. **Repeat Steps 3-6** to enter more percent data.
8. **Click** on the **button** to exit the data editor and **Save** the data.


Deleting Percent Entry (Mouse Pointer method)

1. **Double click** on the **Percent track** to activate the Percent Layer window.



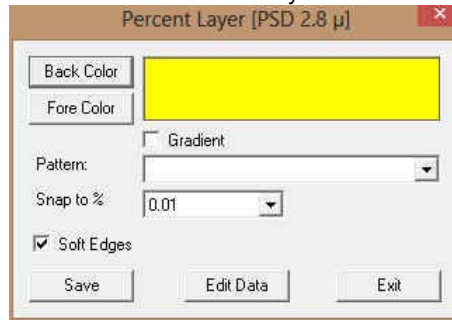
2. **Right click on the interval** within the Percent track that you want to delete and **select Delete** from the pop out menu. The interval will be deleted. To delete all the intervals select **Delete All Data** instead.




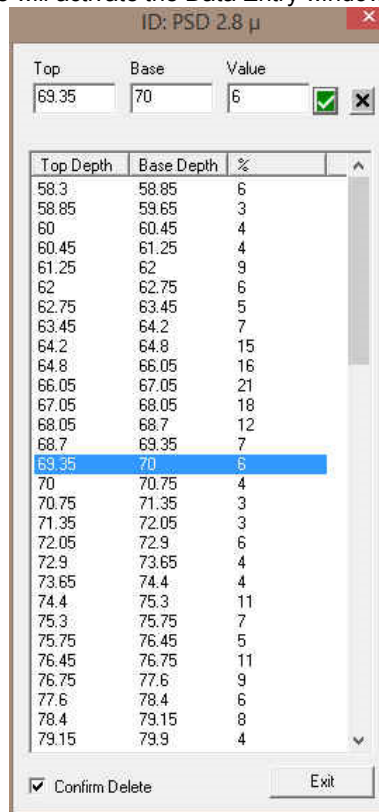
3. Click on the  button and the **Percent Layer** window will be closed.


Deleting Percent Data (Keypad Method)

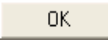
1. Double click on the **Percent track** to activate the Percent Layer window.



2. Click on the  button. This will activate the Data Entry window.




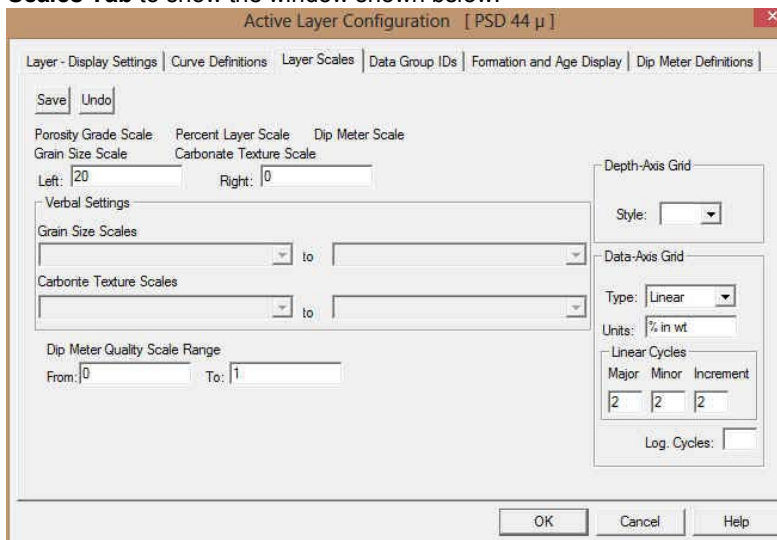
3. Click the line of data you wish to delete. The user can use the **SHIFT** key to select a range of data and the **CTRL** key to pick more than one data line with the aid of the mouse click.
4. Click  button and the data will be deleted.
5. Repeat Steps 3-4 to delete more percent data.



6. Click on the  button to exit the data editor and **Save** the data.


Changing the Percent Scale

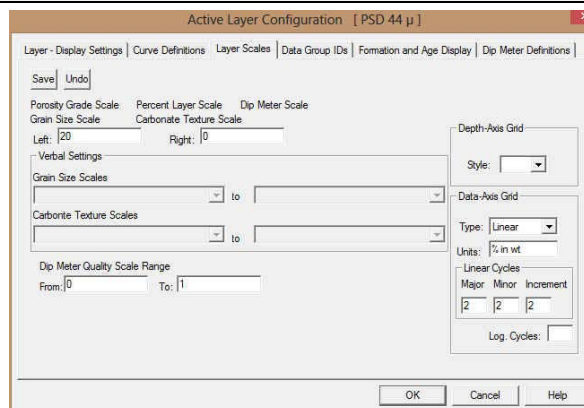
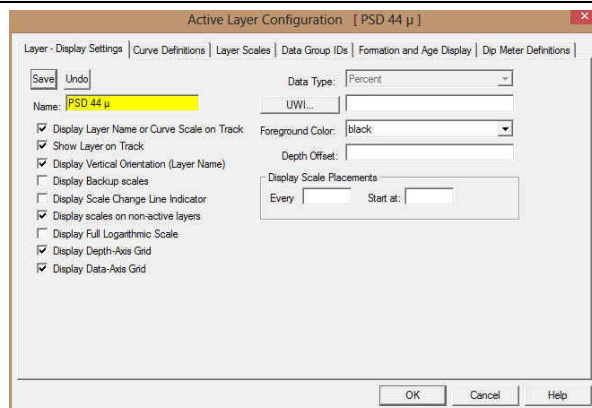
Percent scale can be changed through the **Layer Configuration** window or the user can utilize the **right click** pop out menu item.

1. Click on the  **Layer Configuration** button on the **Toolbar**, when the **Percent** layer is active. This will activate the **Layer Configuration** window.
2. Click on the **Layer Scales Tab** to show the window shown below.



3. Notice that the default scale (when the percent was originally added to the log) was **0 to 100%** as you would see in your window. To change the original scale from **0 – 100%** to **0 – 20%**, simply adjust the **Left Scale** value to **40** by **double clicking** in the **Left Scale** field and typing in a value of **420**.
4. The user can also change the **layer grid pattern** by changing the Linear Cycles portion of the window.
5. Click on the  button and select  from the **System Message** window to exit the Layer Configuration window.


Note: Every type of layer in **Power*Log, Power*Core and Power*Curve** has a **Data Type** classification. The default settings for the **Generic Category** are shown below. To access this window, click on the  **Layer Configuration** button on the **Toolbar**, when the **Percent** layer is active.

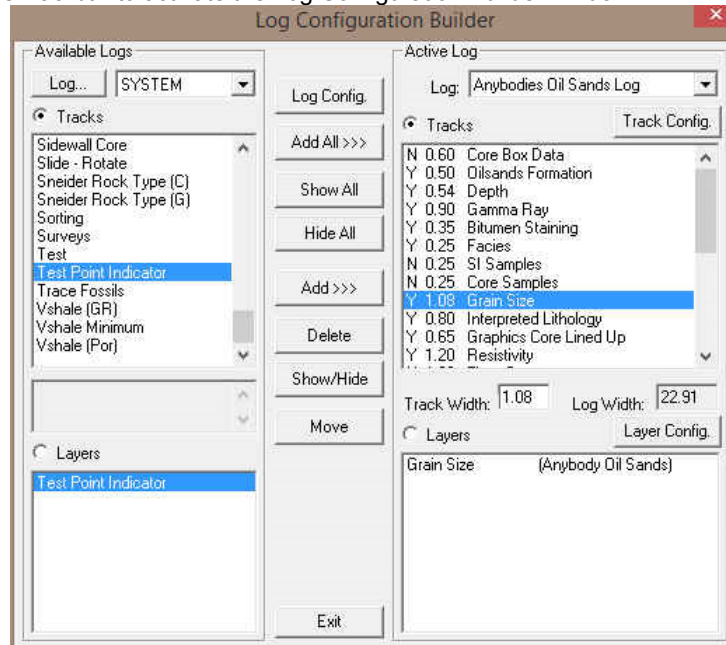



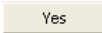
Test Point Indicator Layer / Track

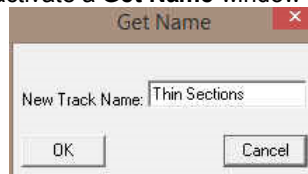
This layer allows the user to indicate other Test points. The layer is only available with our Power*Core application Version 2015 and beyond. The User can also enter in the data by mouse pointer or keypad methods.


How to Add a Test Point Track

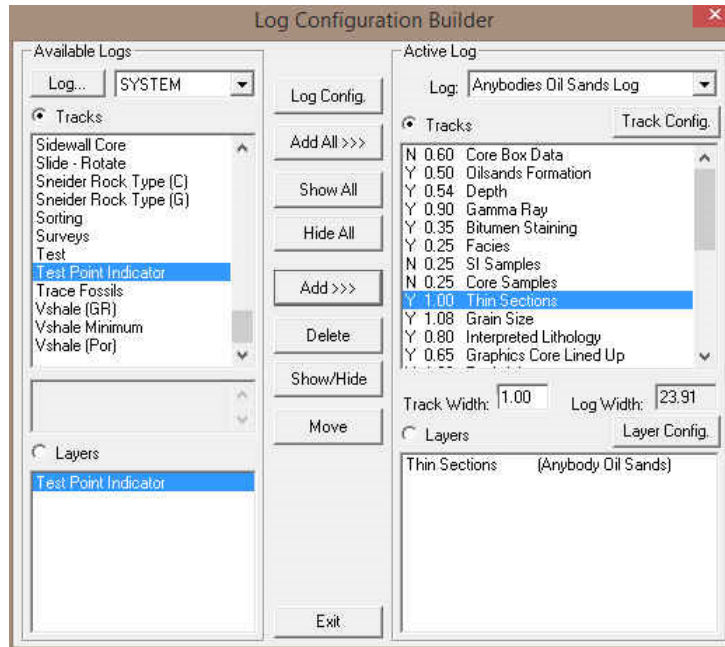
1. Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:



2. On the **left hand side of the Log configuration window** scroll down the list of tracks and **click** on the **Test Point Indicator** track. The track will become highlighted and the **Tracks** radio button Tracks will become activated.
3. On the right hand side of the Log configuration window **click** on the Track you want it to go above or to the left of. In this example we will be adding the Test Point Indicator track to the left of the Grains Size Track. The track will become highlighted and the **Tracks** radio button Tracks will become activated.
4. In the middle of the Log configuration window **click** on the  **button**. This will activate a System Message asking the user "Do you really want to ADD the selected (TRACK) from the available log to the active log?"
5. **Click** on the  **button**. This will activate a **Get Name** window allowing the user to name the track.



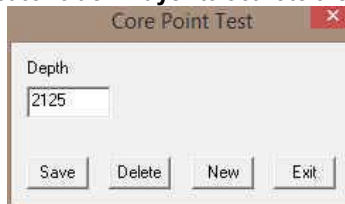
6. **Type in** a new Track name or keep the existing name and then **click** on the  **button**. The track will be added above the **Grain Size** Track or to the left on the log, and the Log Configuration Builder window will be shown.



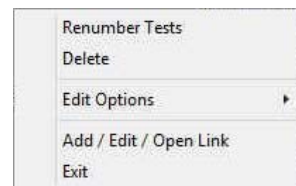
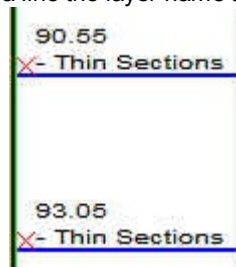
7. Click on the  button. This will activate the Log with the new track


Entering Test Points (Mouse Pointer Method)

1. Double click on the **Test Point Indicator** track / layer to activate the **Core Point Test Builder** window.



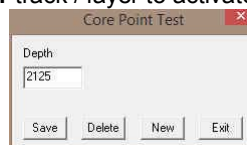
2. Double Click anywhere on the **Core Point Test Indicator** track / layer to initiate a test point. The test point will be drawn with a line the layer name and a depth.





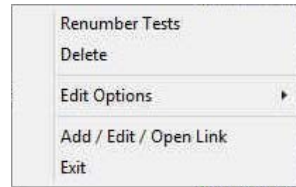
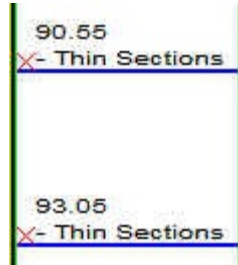
3. Once all your test points are entered or you have added more test points, you want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
4. Click on the  button or Press the **Esc** key on the keyboard to exit from the **Core Point Test Builder** window.


Entering Test Points (Key Pad Method)

1. Double click on the **Core Point Indicator** track / layer to activate the **Core Point Test Builder** window.



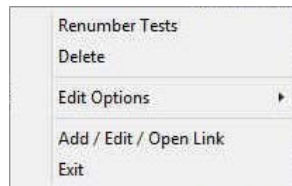
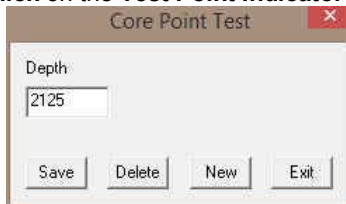
2. Click on the  button and **Type** in a **Value** in the Depth field.
3. Click on the  button.
4. Repeat Steps 2-3 to enter more Test point data.





5. Once all your test points are entered or you have added more test points, you want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
6. Click on the  button or Press the **Esc** key on the keyboard to exit from the **Core Point Test Builder** window.

Deleting a Single Interval

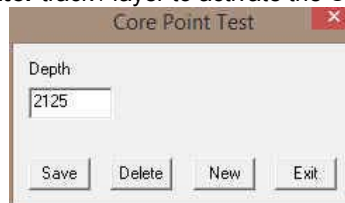
1. Double click on the **Test Point Indicator track / layer** to activate the **Core Point Test Builder** window



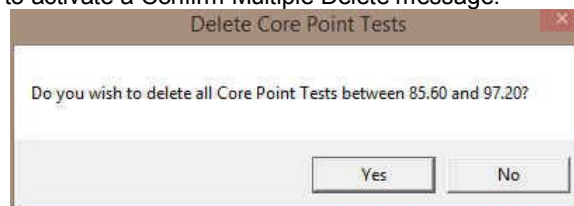
2. **Right click** on the **red X** indicating the Test point to activate the Pop out menu and **select Delete**.
3. **OR** the User can also **type** in a corresponding **value** in the builder and **click** on the  button.
4. Repeat **Steps 2** to delete more **Core Point Test** from the layer.
5. Once all your test points are entered or you have added more test points, you want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
6. Click on the  button or Press the **Esc** key on the keyboard to exit from the **Core Point Test Builder** window.

Deleting Multiple Intervals


1. Double click on the **Core Point Indicator track / layer** to activate the **Core Point Test Builder** window.




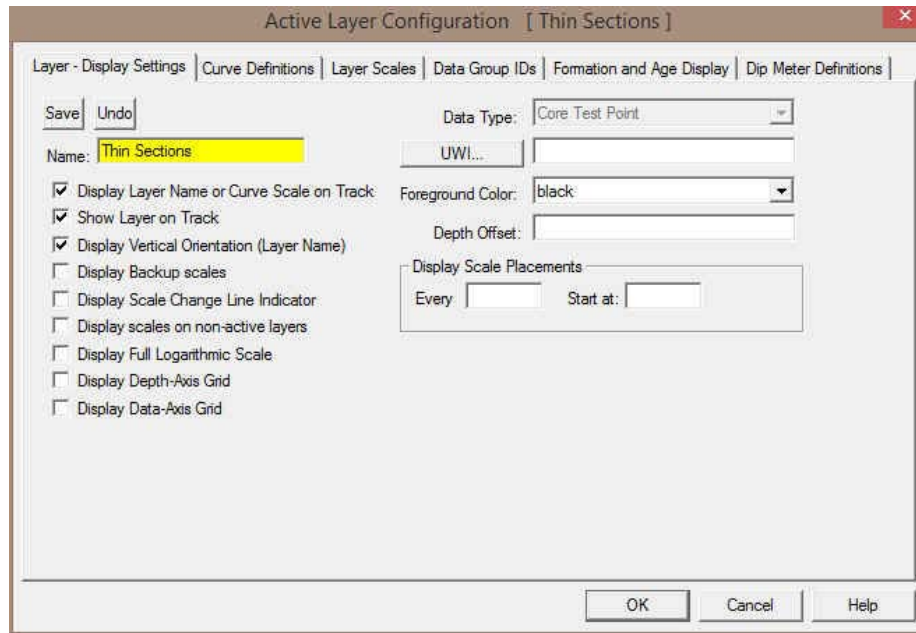
2. **Press and Hold the SHIFT Key** and then **click and drag an area** anywhere within the intervals you wish to delete.
3. **Release the mouse button** to activate a Confirm Multiple Delete message.



4. Click on  button and the **Core Point Test** encompassed with your drag will be deleted accordingly.

- Once all your test points are deleted, you want them to come out sequentially by depth in the Export Utility you will want to **right click** on the track to activate the pop out menu and select **Renumber Tests**.
- Click on the  **Exit** button or Press the **Esc** key on the keyboard to exit from the **Core Point Test Builder** window.

Note: Every type of layer in **Power*Log, Power*Core and Power*Curve** has a **Data Type** classification. The default settings for the **Core Test Point Indicator** layer are shown below. To access this window, click on the  **Layer Configuration** button on the **Toolbar**, when the layer is active.

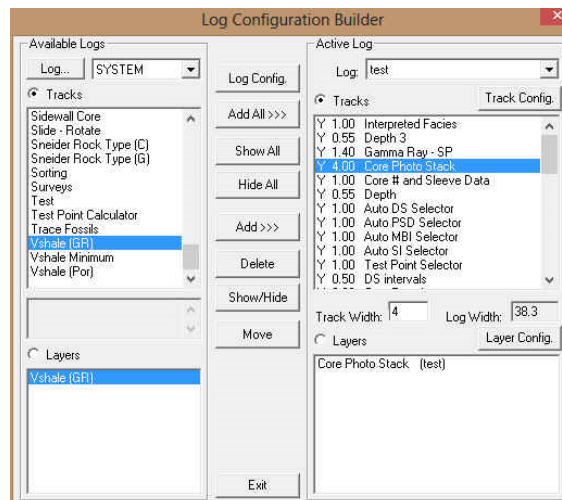


V Shale GR Layer

V Shale GR layer will calculate the V shale from all the different calculation methods available if using a normal Gamma Ray curve. This will utilize an existing GR Curve that has to be available from preexisting data.

How to Add a V Shale (GR) Track / Layer

- Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:

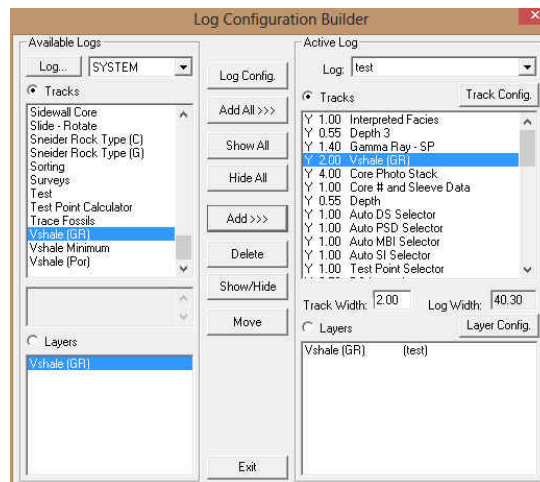


On the **left hand side of the Log configuration window** scroll down the list of tracks and **click on the V Shale (GR) track**. The track will become highlighted and the **Tracks** radio button Tracks will become activated.

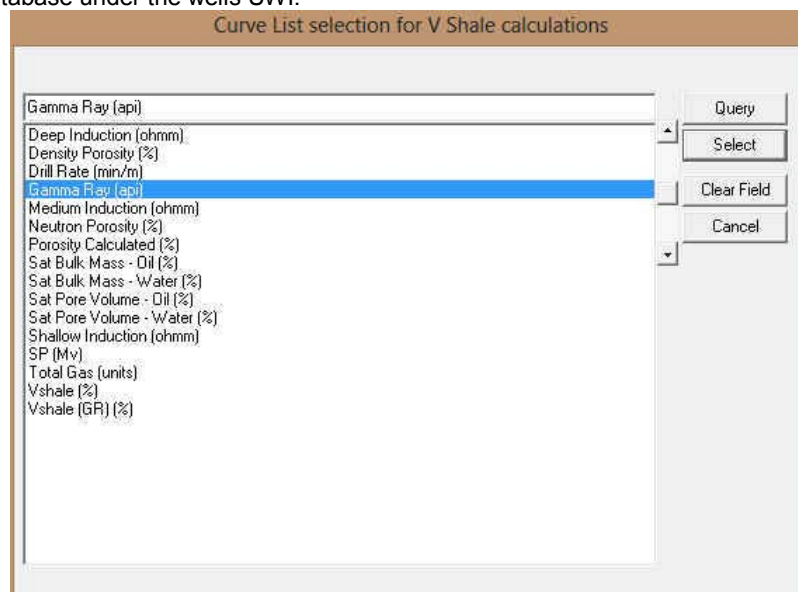
- On the right hand side of the Log configuration window **click on the Track** you want to go above or to the left of. In this example we will be adding the Vshale (GR) track to the left of the Core Photo Stack track. The track will become highlighted and the **Tracks** radio button Tracks will become activated.
- In the middle of the Log configuration window **click on the** button. This will activate a System Message asking the user “Do you really want to ADD the selected (TRACK) from the available log to the active log?”
- Click on the** button. This will activate a **Get Name** window allowing the user to name the track.



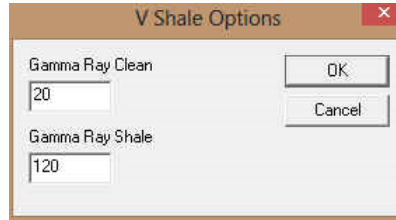
- Type in a new name if you like** and then **click on the** button. The track will be added above the Core Photo Stack Track or to the left on the log, and the Log Configuration Builder window will be shown.



- Click on the** button. This will activate the **Log**, and the new track will be added to your log and will also activate the Curve List Selection for V Shale calculations window. This will be a list of all the curves you have in your database under the wells UWI.



7. **Highlight** the **GR** Curve you want to use and **click** on the **Select** button. This will activate the V Shale Options Window.



8. **Type** in your appropriate **Values** and then **Click** on the **OK** button to finish adding the track.

Right Click Menu Items

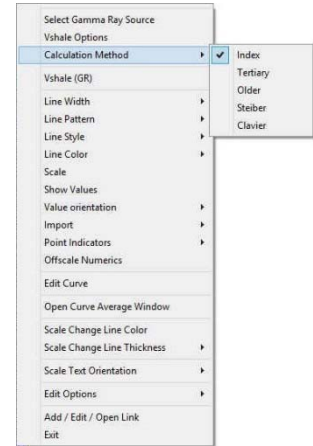
Right click on the V Shale GR layer to activate the pop-out menu. The active layers Curve Name is displayed in the upper portion of the pop-out menu.

Select Gamma Ray Source Selection activates the Curve List Selection for V Shale Calculations and allows the user to select a different the GR Curve for the application to calculate from.

V Shale Options Selection activates the V Shale Options window so the user can see or change the Min and Max values for Clean GR and Shale GR counts.

Calculation Method Selection allows the user to Change the GR calculations. V Shale Formulas Show below.

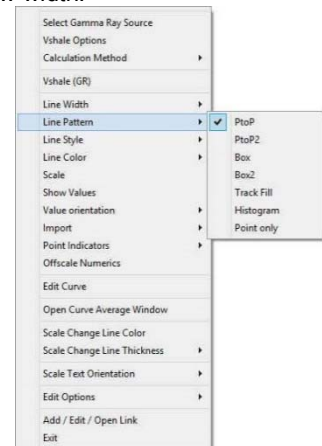
$V_{sh} = I_{GR} = \frac{GR_{log} - GR_{min}}{GR_{max} - GR_{min}}$	Steiber (1970) $V_{sh} = \frac{I_{GR}}{3 - 2 \times I_{GR}}$	Larionov (1969) for Tertiary rocks $V_{sh} = 0.083(2^{3.7I_{GR}} - 1)$
	Clavier (1971) $V_{sh} = 1.7 - [(3.38 - (I_{GR} + 0.7)^2)^{1/2}]$	Larionov (1969) for older rock $V_{sh} = 0.33 \times (2^{2I_{GR}} - 1)$



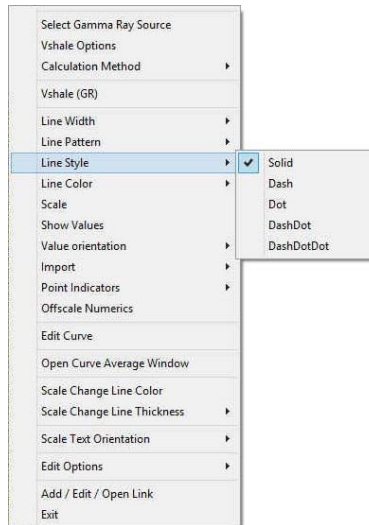
Line Width Selection indicates the width of the curve in pixels. To change the line width, **right click** on an active curve layer, move the mouse pointer over the Line Width selection and clicking on a new width.

Line Pattern Selection indicates the pattern of the curve. To change the line pattern, **right click** on an active curve layer, move the mouse pointer over the Line Pattern selection and **click** on a new line pattern

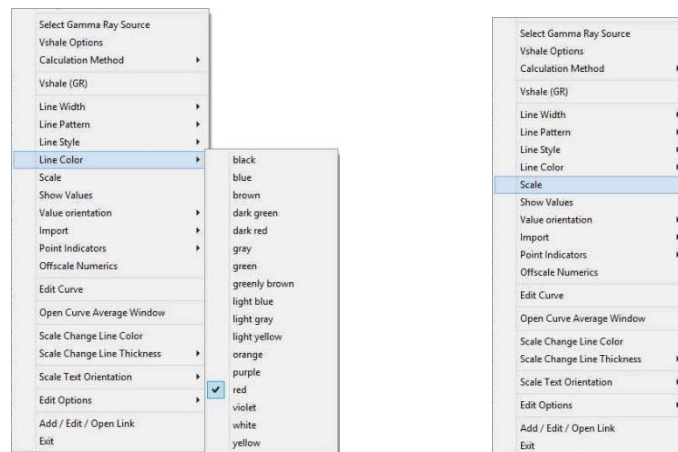
- | | |
|------------|---|
| PtoP | point to point curve (stops curve at null values) |
| PtoP2 | point to point curve (disregards null values [continuous curve]) |
| Box | histogram or box curve (stops curve at null values) |
| Box2 | histogram or box curve (disregard nulls values [continuous curve]) |
| Track Fill | fills track with color determined in the pgeology32.ini |
| Histogram | draws a colored histogram the width of the line width from the data point back to the lowest value track edge. |
| Point Only | shows only the data points and defaults to circles if nothing defined in the point indicator portion of curve definitions |



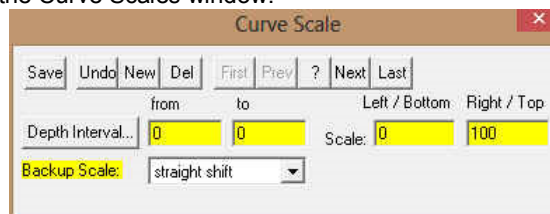
Line Style Selection indicates the associated with the curve. This field is changed by right clicking on an active curve layer, moving the mouse pointer over the Line Style selection and clicking on a new Selection.



Line Color Selection indicates the line color associated with the curve. To change the line color **right click** on an active curve layer, move the mouse pointer over the Line Color selection and **click** on a new line color.



Scale Selection enables the user to get quickly at the curve scales for the active curve. Then, the user can change, add or delete existing scales in the Curve Scales window.



Notice that the **Depth Interval** (From) and **Interval** (To) values, respectively, have defaulted to "0" to "0" with the **Scale** (Left), **Scale** (Right), and **Backup Scale** defaulting to the values last entered by the user. An interval of 0 to 0 represents the entire Depth Interval for the curve.

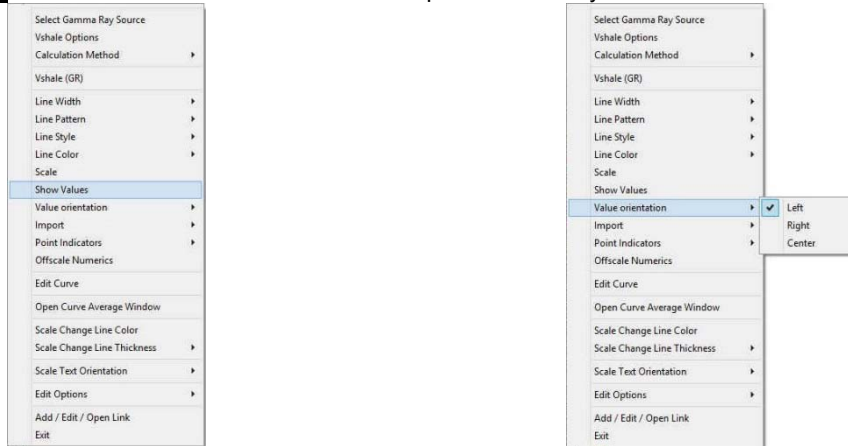
Editing a Curve Scale

Note: There are many ways to access **Curve Scale** window, the user can right click on the active layer shown above, access it from the **Curve Editor** window, access it through the curve layer window, access it through the well window.

1. **Select** the appropriate **depth interval you wish to change** by scrolling through the records using the database navigational button or click on the Depth Interval Button and selecting the appropriate depth interval by double clicking on it.
2. **Enter a new value** into the **Left / Bottom** and or **Right / Top** scale values.

3. Click on the **Save** button or press **ALT-S** and select the **Exit** button from the ensuing **Shortcut Options** window.
4. Click on the **Save** button or press **ALT-S** and then click on the appropriate button when prompted with the **Shortcut Options** system window.

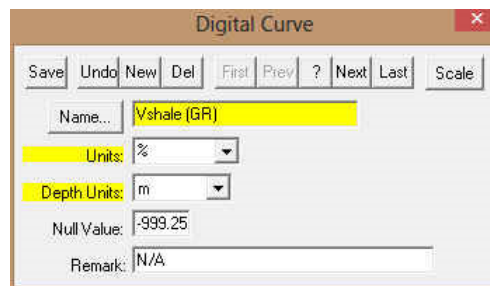
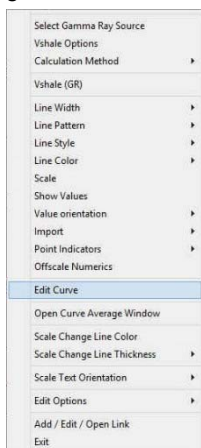
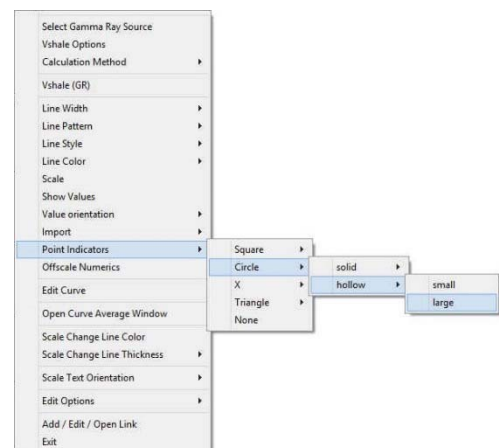
The **Show Values** Selection draws the values of the data points on the layer.



The **Value Orientation** Selection indicates where the values will be drawn on the layer

The **Point Indicators** Selection indicates where the data points on the curve are being drawn with. This field is changed by right clicking on an active curve layer, moving the mouse pointer over the Point Indicators selection and clicking on any of the pop out menu selections. If point indicators are turned on these will also be presented in the **Track header**.

The **Edit Curve** Selection allows the user to view and change the digital Curve attributes as well as access the scale.



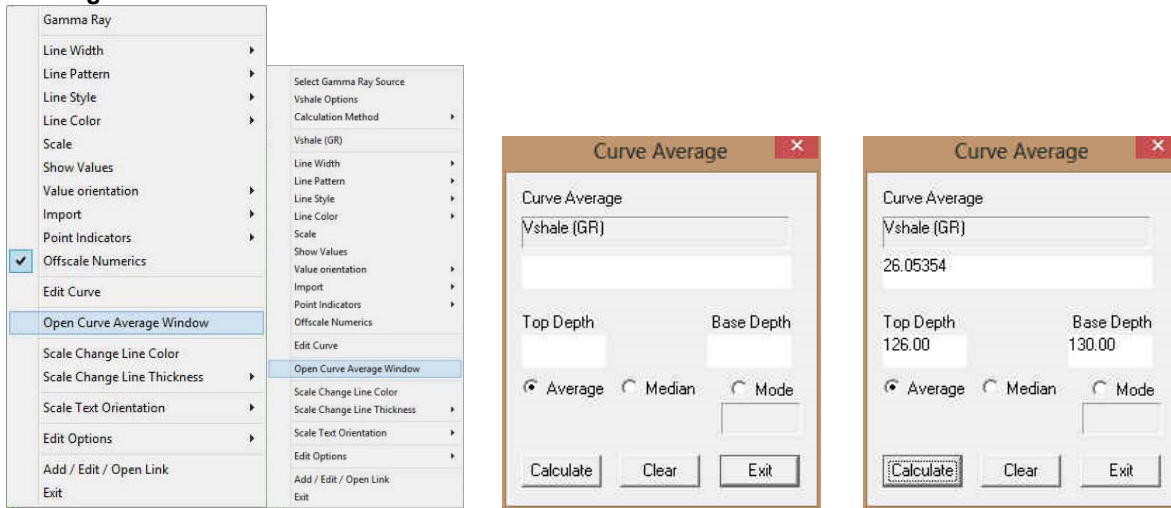
Changing Digital Curve Attributes (Units / Null Value)

You can use the **Layer Configuration** window to edit Curve Units, Scales, Colors, and Styles. The User can also edit the Curve attributes in the **Well Window**. The User can also right click on the layer and select **Edit Options**.

1. If the curve layer is active **right click on the layer** to activate the pop out menu and **select Edit Curve**.
2. You can now select (or type in), new units, change the null value, or add/change the remarks.
3. Click on the **Save** button or press **ALT-S** and then click on the **Exit** button when prompted with the **Shortcut Options** system window.


Open Curve Average Window Selection allows the user to determine the curve average, median or mode over a depth interval.

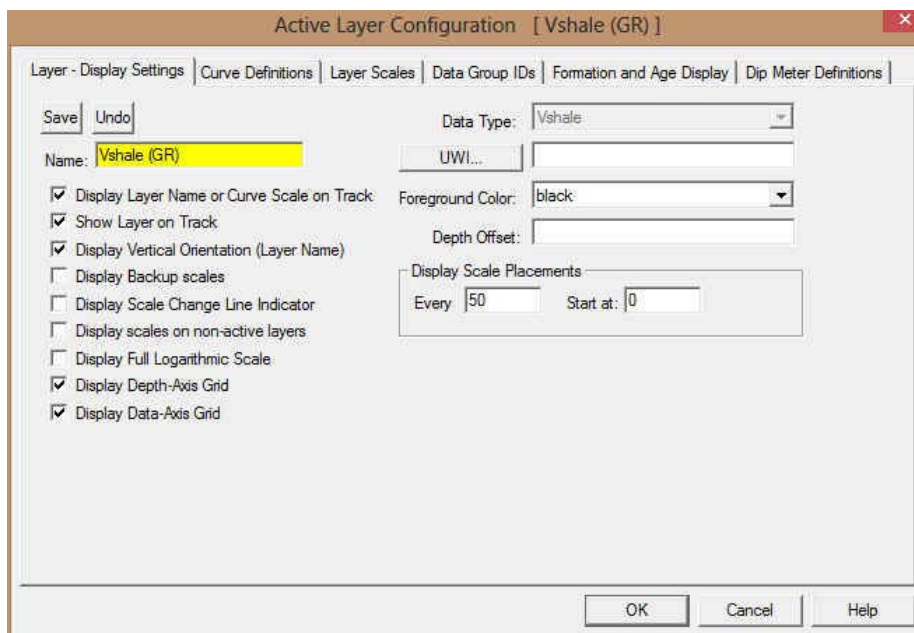
1. If the curve layer is active **right click on the layer** to activate the pop out menu and **select Open Curve Average Window**. This will activate the window shown below.



2. Click on the appropriate radio button Average Median Mode to determine what you want to calculate.
 - Average = is the quotient obtained by dividing the sum total of a set of figures by the number of figures.
 - Median = applies to the value that represents the point at which there are as many instances above as there are below.
 - Mode = the most frequent value of a set of data.
3. Define the top and base depths by **typing** in their **depths** or **clicking and dragging** an interval on the log.
4. Click on the **Calculate** button and the result will be displayed under the Curve name field. If mode was selected then the mode is displayed and the frequency is displayed in the field under the mode radio button.

Scale Text Orientation Selection allows the user to change the scale text in the main body of the log from a Vertical Orientation to a Horizontal Orientation.


Note: Every type of layer in **Power*Log, Power*Core and Power*Curve** has a **Data Type** classification. The default settings for the **Vshale (GR)** layer are shown below. To access this window, click on the  **Layer Configuration** button on the **Toolbar**, when the **Vshale (GR)** layer is active.

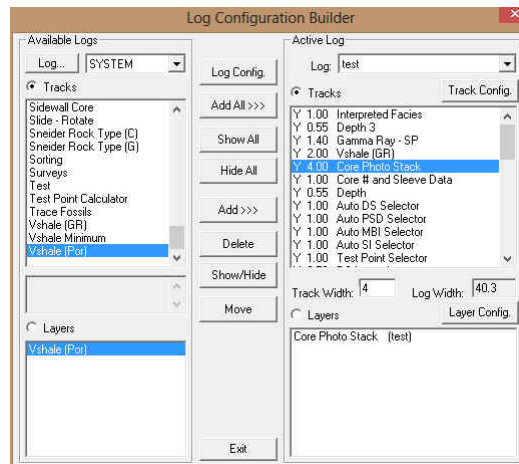


V Shale Porosity (Por) Layer

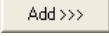
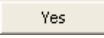
V Shale Porosity (Por) layer will calculate the V shale from the different calculation methods from the Neutron Density Cross plots. This will utilize the existing Neutron and Density log data that has to be available from preexisting data.

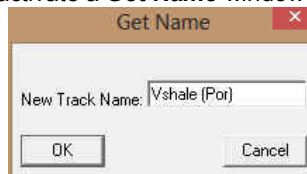
How to Add a V Shale Porosity (Por) Track / Layer

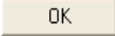
1. Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:

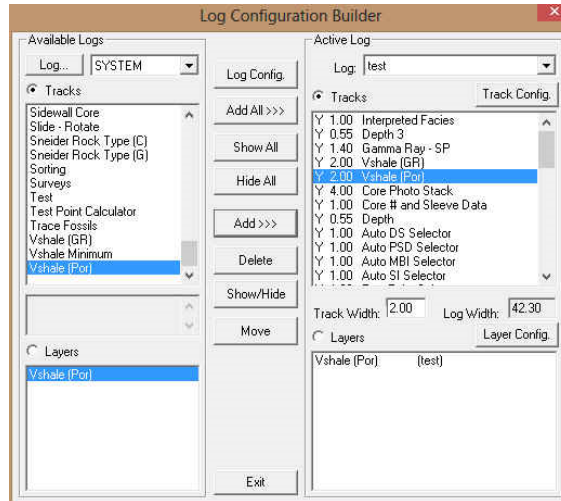


On the **left hand side of the Log configuration window** scroll down the list of tracks and **click on the V Shale (Por) track**. The track will become highlighted and the **Tracks** radio button **Tracks** will become activated.

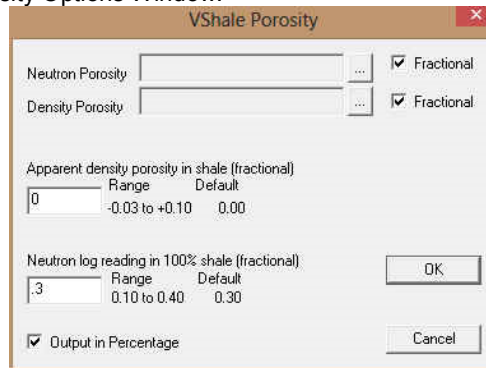
2. On the right hand side of the Log configuration window **click on the Track** you want it to go above or to the left of. In this example we will be adding the Vshale (Por) track to the left of the Core Photo Stack track. The track will become highlighted and the **Tracks** radio button **Tracks** will become activated.
3. In the middle of the Log configuration window **click on the  button**. This will activate a System Message asking the user "Do you really want to ADD the selected (TRACK) from the available log to the active log?"
4. **Click on the  button**. This will activate a **Get Name** window allowing the user to name the track.



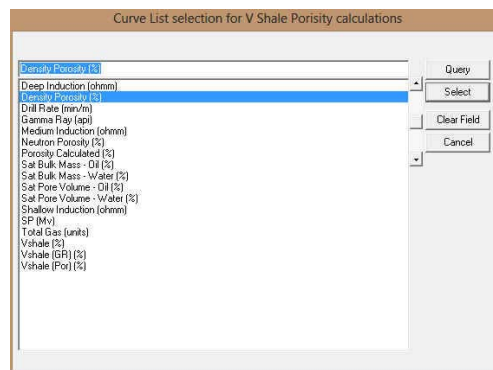
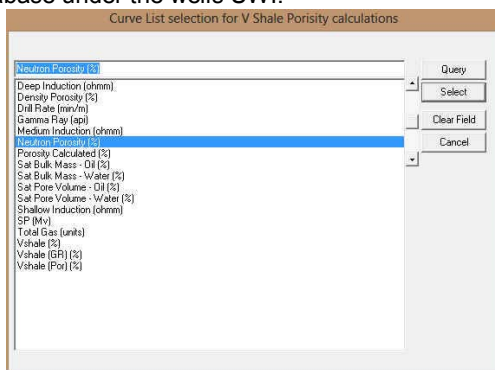
5. **Type in a new name if you like** and then **click on the  button**. The track will be added above the Core Photo Stack Track or to the left on the log, and the Log Configuration Builder window will be shown.



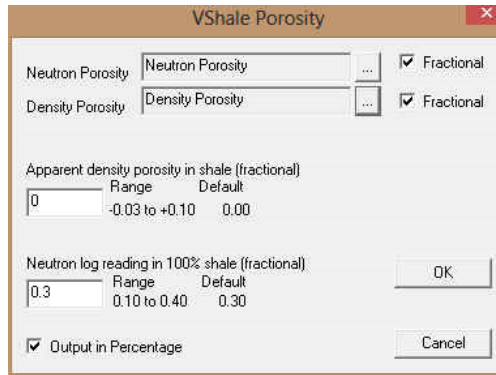
- Click on the **Exit** button. This will activate the **Log**, and the new track will be added to your log and will also activate the V Shale Porosity Options Window.




- Click on the **...** buttons beside the Neutron Porosity and then Density Porosity display field to activate the Curve List Selection for V Shale Porosity calculations window. This will be a list of all the curves you have in your database under the wells UWI.



- Highlight the **Neutron** Curve you want to use and click on the **Select** button. Repeat the steps to pick the **Density Porosity** Curve. This will fill in the V Shale Options Window.
- Determine if the values in the Neutron / Density Curves are **fractional** (0.231) or **percentage** (23.1) and uncheck the fractional check box if percentage data.



10. **Type** in your appropriate **default Values**.
11. Depending on your layers scales **0 to 100** you would **check the output in percentage** checkbox and if you scales are **0 to 1** then **uncheck the output in Percentage** check box.
12. **Click** on the  **button** to finish adding the track.

Right Click Menu Items

Right click on the V Shale Por layer to activate the pop-out menu. The active layers Name is displayed in the upper portion of the pop-out menu.

V Shale Options Selection activates the V Shale Porosity Options window so the user can see or change the curves and the density and neutron readings for shale shown above.

The Calculation Method V Shale Formulas Shown below.

$Vshxnd = (PHIN - PHID) / (PHINSH - PHIDSH)$ where:

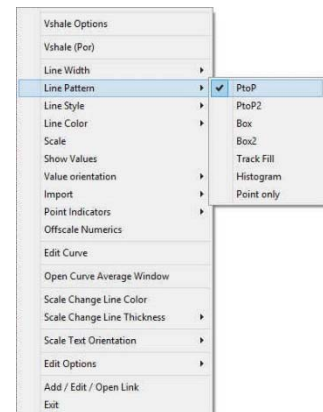
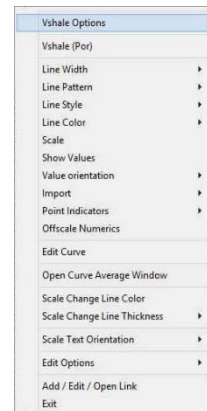
- PHIN = Neutron log reading
- PHID = Density log reading
- PHINSH = Neutron log reading in 100% shale
- PHIDSH = log reading in 100% shale

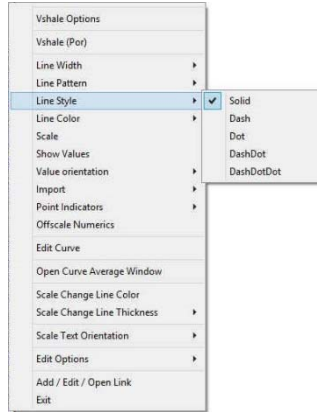
Line Width Selection indicates the width of the curve in pixels. To change the line width, **right click** on an active curve layer, move the mouse pointer over the Line Width selection and clicking on a new width.

Line Pattern Selection indicates the pattern of the curve. To change the line pattern, **right click** on an active curve layer, move the mouse pointer over the Line Pattern selection and **click** on a new line pattern

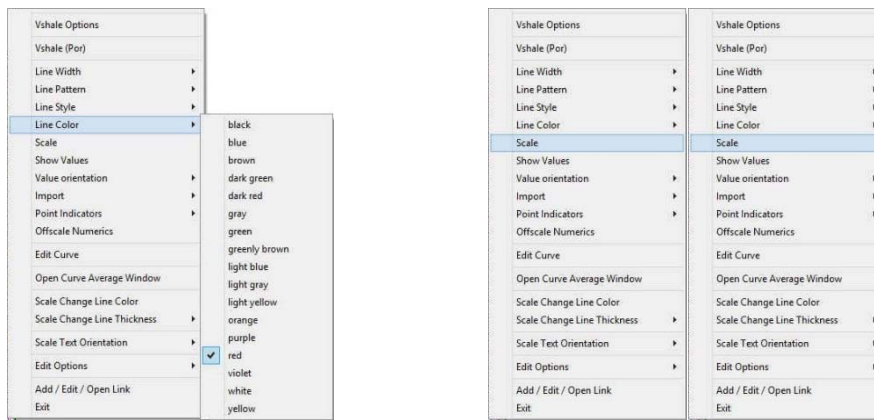
- | | |
|------------|---|
| PtoP | point to point curve (stops curve at null values) |
| PtoP2 | point to point curve (disregards null values [continuous curve]) |
| Box | histogram or box curve (stops curve at null values) |
| Box2 | histogram or box curve (disregard nulls values [continuous curve]) |
| Track Fill | fills track with color determined in the pgeology32.ini |
| Histogram | draws a colored histogram the width of the line width from the data point back to the lowest value track edge. |
| Point Only | shows only the data points and defaults to circles if nothing defined in the point indicator portion of curve definitions |

Line Style Selection indicates the associated with the curve. This field is changed by right clicking on an active curve layer, moving the mouse pointer over the Line Style selection and clicking on a new Selection.

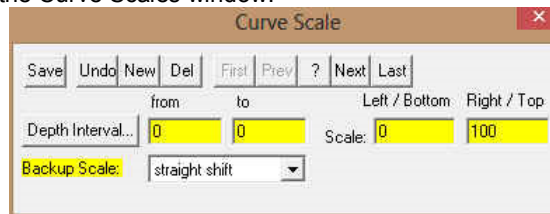




Line Color Selection indicates the line color associated with the curve. To change the line color **right click** on an active curve layer, move the mouse pointer over the Line Color selection and **click** on a new line color.



Scale Selection enables the user to get quickly at the curve scales for the active curve. Then, the user can change, add or delete existing scales in the Curve Scales window.



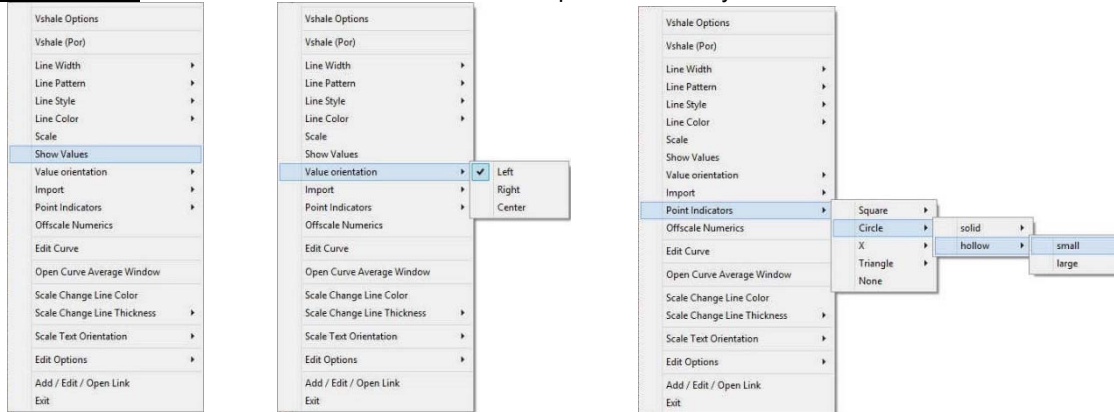
Notice that the **Depth Interval** (From) and **Interval** (To) values, respectively, have defaulted to "0" to "0" with the **Scale** (Left), **Scale** (Right), and **Backup Scale** defaulting to the values last entered by the user. An interval of 0 to 0 represents the entire Depth Interval for the curve.

Editing a Curve Scale

Note: There are many ways to access **Curve Scale** window, the user can right click on the active layer shown above, access it from the **Curve Editor** window, access it through the curve layer window, access it through the well window.

1. **Select** the appropriate **depth interval you wish to change** by scrolling through the records using the database navigational button or click on the Depth Interval Button and selecting the appropriate depth interval by double clicking on it.
2. **Enter a new value** into the **Left / Bottom** and or **Right / Top** scale values.
3. **Click** on the **Save** button or press **ALT-S** and select the **Exit** button from the ensuing **Shortcut Options** window.
4. **Click** on the **Save** button or press **ALT-S** and then **click** on the appropriate button when prompted with the **Shortcut Options** system window.

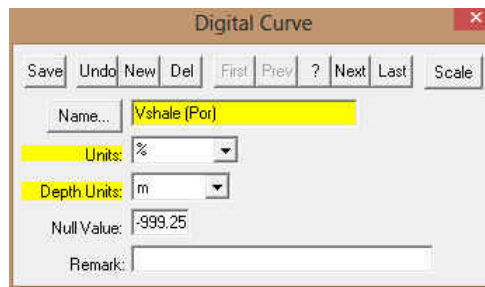
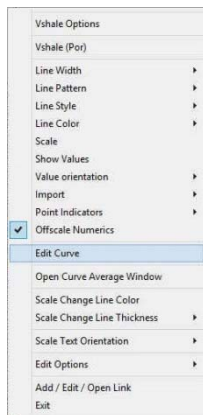
The **Show Values** Selection draws the values of the data points on the layer.



The **Value Orientation** Selection indicates where the values will be drawn on the layer

The **Point Indicators** Selection indicates where the data points on the curve are being drawn with. This field is changed by right clicking on an active curve layer, moving the mouse pointer over the Point Indicators selection and clicking on any of the pop out menu selections. If point indicators are turned on these will also be presented in the Track header.

The **Edit Curve** Selection allows the user to view and change the digital Curve attributes as well as access the scale.



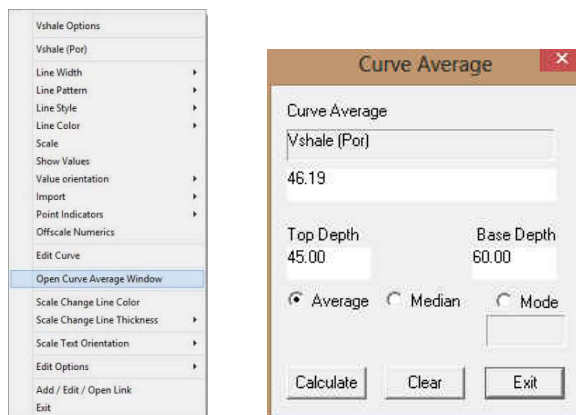
Changing Digital Curve Attributes (Units / Null Value)

You can use the Layer Configuration window to edit Curve Units, Scales, Colors, and Styles. The User can also edit the Curve attributes in the Well Window. The User can also right click on the layer and select Edit Options.

1. If the curve layer is active **right click on the layer** to activate the pop out menu and **select Edit Curve**.
2. You can now select (or type in), new units, change the null value, or add/change the remarks.
3. **Click on the Save button or press ALT-S** and then **click on the Exit button** when prompted with the **Shortcut Options** system window.


Open Curve Average Window Selection allows the user to determine the curve average, median or mode over a depth interval.

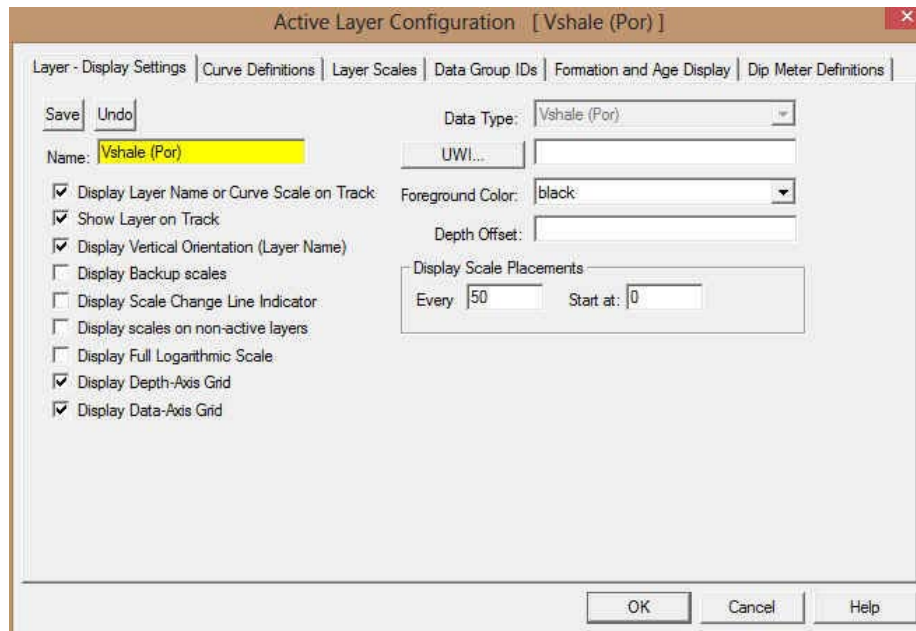
1. If the curve layer is active **right click on the layer** to activate the pop out menu and **select Open Curve Average Window**. This will activate the window shown below.



2. Click on the appropriate radio button Average Median Mode to determine what you want to calculate.
 - Average = is the quotient obtained by dividing the sum total of a set of figures by the number of figures.
 - Median = applies to the value that represents the point at which there are as many instances above as there are below.
 - Mode = the most frequent value of a set of data.
3. Define the top and base depths by **typing** in their **depths** or **clicking and dragging** an interval on the log.
4. Click on the **Calculate** button and the result will be displayed under the Curve name field. If mode was selected then the mode is displayed and the frequency is displayed in the field under the mode radio button.

Scale Text Orientation Selection allows the user to change the scale text in the main body of the log from a Vertical Orientation to a Horizontal Orientation.


Note: Every type of layer in **Power*Log, Power*Core and Power*Curve** has a **Data Type** classification. The default settings for the **Vshale (Por)** layer are shown below. To access this window, click on the  **Layer Configuration** button on the **Toolbar**, when the **Vshale (Por)** layer is active.

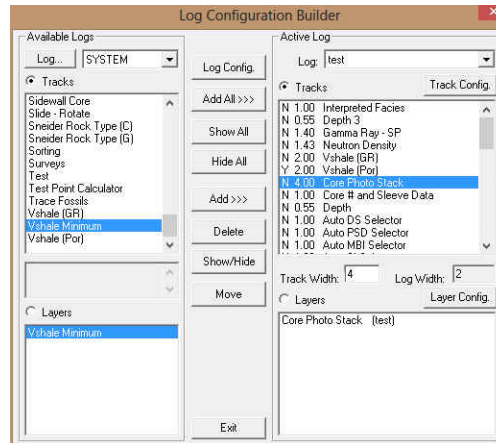


V Shale Min Layer

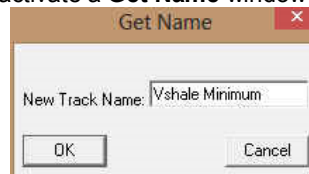
V Shale Min layer will calculate the V shale minimum from the two different calculation methods from the V Shale Por from the Neutron Density Cross plots and the V Shale GR. This will utilize the existing V Shale GR (that you calculated) and the V Shale Por (that you calculated) that has to be available from preexisting data.

How to Add a V Shale (Min) Track / Layer

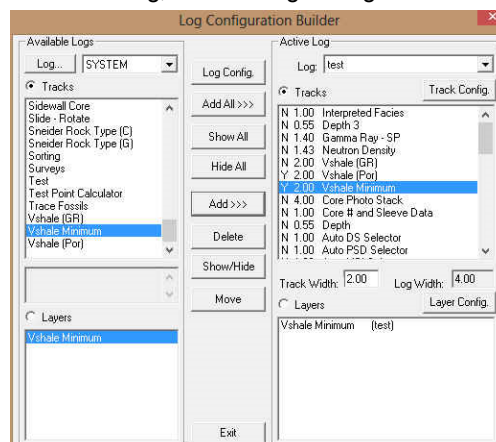
1. Click on **Log Configuration Builder** under the **Options** menu selection or click on the  **Log Configuration Builder** button on the **Toolbar** to activate the Log Configuration Builder window:

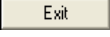


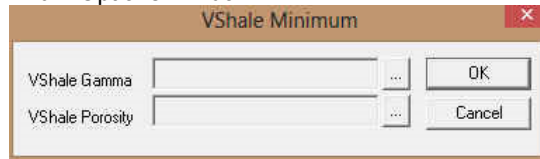
2. On the **left hand side of the Log configuration window** scroll down the list of tracks and **click on the V Shale Minimum** track. The track will become highlighted and the **Tracks** radio button **Tracks** will become activated.
3. On the right hand side of the Log configuration window **click on the Track** you want it to go above or to the left of. In this example we will be adding the Vshale Minimum track to the left of the Core Photo Stack track. The track will become highlighted and the **Tracks** radio button **Tracks** will become activated.
4. In the middle of the Log configuration window **click on the Add >>>** button. This will activate a System Message asking the user "Do you really want to ADD the selected (TRACK) from the available log to the active log?"
5. **Click on the Yes** button. This will activate a **Get Name** window allowing the user to name the track.




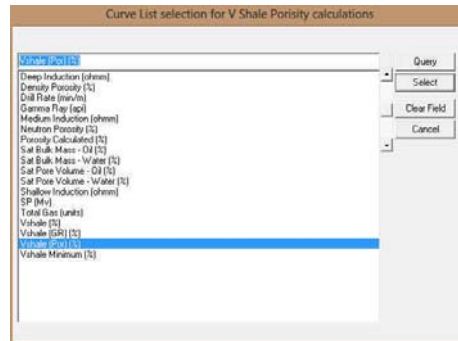
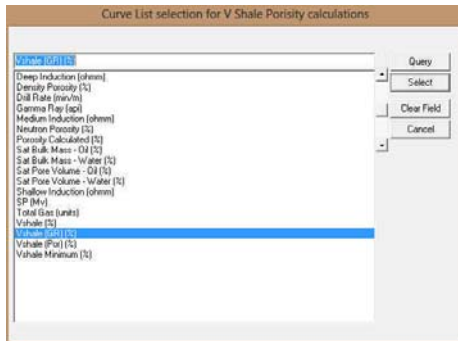
6. **Type in a new name if you like** and then **click on the OK** button. The track will be added above the Core Photo Stack Track or to the left on the log, and the Log Configuration Builder window will be shown.




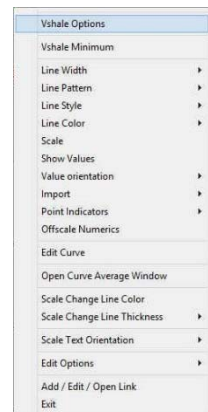
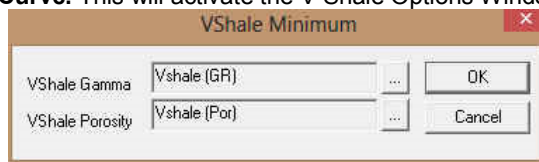
- Click on the  button. This will activate the Log, and the new track will be added to your log and will also activate the V Shale Minimum Options Window.



- Click on the  button beside the V Shale Gamma and then the V Shale Porosity display field to activate the Curve List Selection for V Shale Minimum calculations window. This will be a list of all the curves you have in your database under the wells UWI.



- Highlight the V Shale GR Curve you want to use and click on the  button. Repeat the steps to pick the V Shale Por Curve. This will activate the V Shale Options Window.



- Click on the  button to finish adding the track.

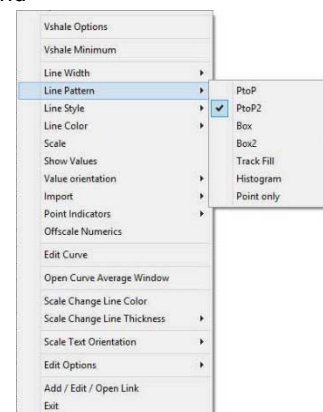
Right Click Menu Items

Right click on the V Shale Minimum layer to activate the pop-out menu. The active layers Name is displayed in the upper portion of the pop-out menu. **V Shale Options** Selection activates the V Shale Minimum Options window so the user can see or change the curves for the Minimum values for V Shale shown above.

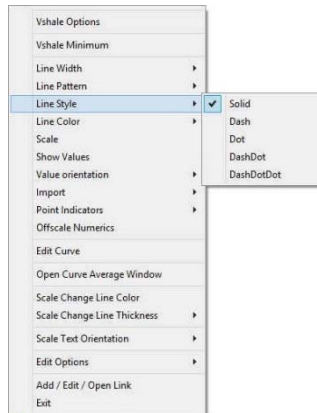
Line Width Selection indicates the width of the curve in pixels. To change the line width, right click on an active curve layer, move the mouse pointer over the Line Width selection and clicking on a new width.

Line Pattern Selection indicates the pattern of the curve. To change the line pattern, right click on an active curve layer, move the mouse pointer over the Line Pattern selection and click on a new line pattern

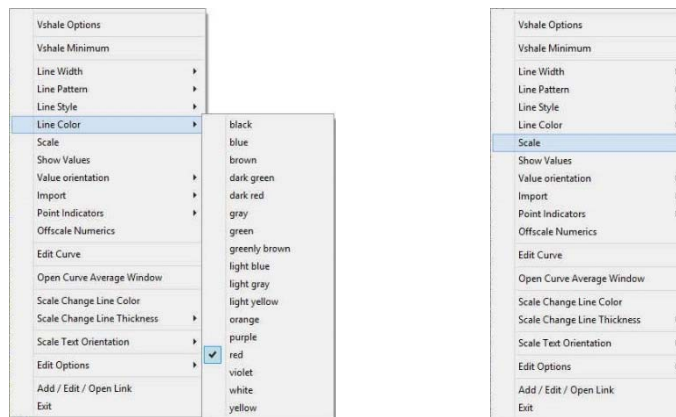
- PtoP point to point curve (stops curve at null values)
- PtoP2 point to point curve (disregards null values [continuous curve])
- Box histogram or box curve (stops curve at null values)
- Box2 histogram or box curve (disregard nulls values [continuous curve])
- Track Fill fills track with color determined in the pgeology32.ini
- Histogram draws a colored histogram the width of the line width from the data point back to the lowest value track edge.
- Point Only shows only the data points and defaults to circles if nothing defined in the point indicator portion of curve definitions



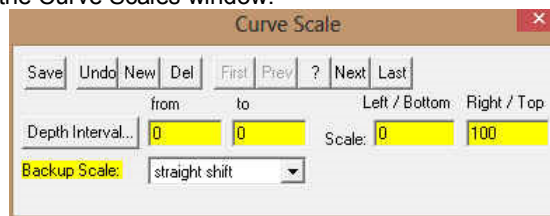
Line Style Selection indicates the associated with the curve. This field is changed by right clicking on an active curve layer, moving the mouse pointer over the Line Style selection and clicking on a new Selection.



Line Color Selection indicates the line color associated with the curve. To change the line color **right click** on an active curve layer, move the mouse pointer over the Line Color selection and **click** on a new line color.



Scale Selection enables the user to get quickly at the curve scales for the active curve. Then, the user can change, add or delete existing scales in the Curve Scales window.



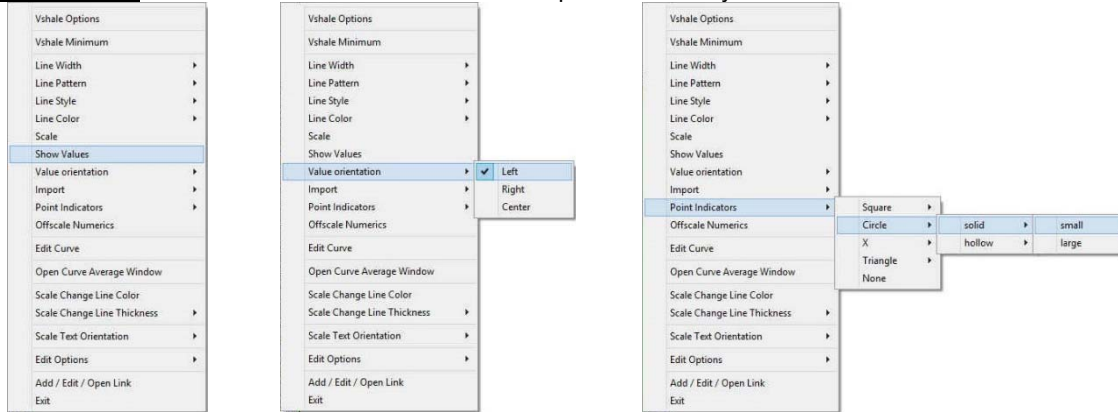
Notice that the **Depth Interval** (From) and **Interval** (To) values, respectively, have defaulted to "0" to "0" with the **Scale** (Left), **Scale** (Right), and **Backup Scale** defaulting to the values last entered by the user. An interval of 0 to 0 represents the entire Depth Interval for the curve.

Editing a Curve Scale

Note: There are many ways to access **Curve Scale** window, the user can right click on the active layer shown above, access it from the **Curve Editor** window, access it through the curve layer window, access it through the well window.

1. **Select** the appropriate **depth interval you wish to change** by scrolling through the records using the database navigational button or click on the Depth Interval Button and selecting the appropriate depth interval by double clicking on it.
2. **Enter a new value** into the **Left / Bottom** and or **Right / Top scale** values.
3. **Click** on the **Save** button or press **ALT-S** and select the **Exit** button from the ensuing **Shortcut Options** window.
4. **Click** on the **Save** button or press **ALT-S** and then **click** on the appropriate button when prompted with the **Shortcut Options** system window.

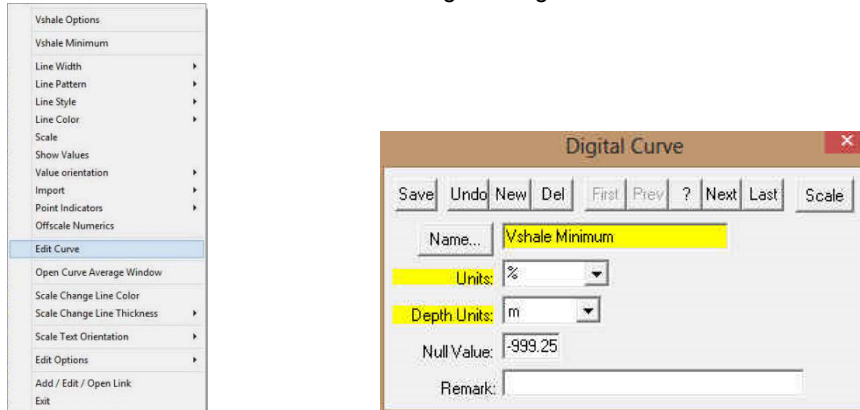
The **Show Values** Selection draws the values of the data points on the layer.



The **Value Orientation** Selection indicates where the values will be drawn on the layer

The **Point Indicators** Selection indicates where the data points on the curve are being drawn with. This field is changed by right clicking on an active curve layer, moving the mouse pointer over the Point Indicators selection and clicking on any of the pop out menu selections. If point indicators are turned on these will also be presented in the Track header.

The **Edit Curve** Selection allows the user to view and change the digital Curve attributes as well as access the scale.



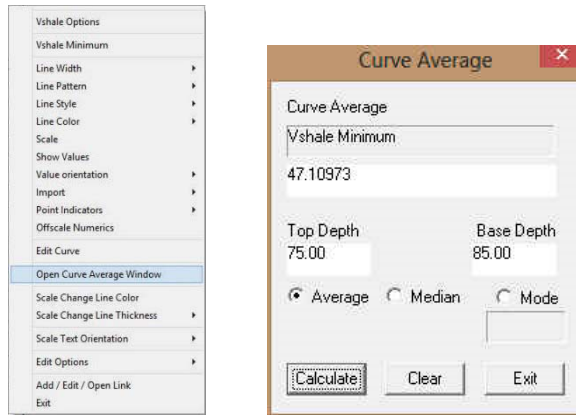
Changing Digital Curve Attributes (Units / Null Value)

You can use the Layer Configuration window to edit Curve Units, Scales, Colors, and Styles. The User can also edit the Curve attributes in the Well Window. The User can also right click on the layer and select Edit Options.

1. If the curve layer is active **right click on the layer** to activate the pop out menu and **select Edit Curve**.
2. You can now select (or type in), new units, change the null value, or add/change the remarks.
3. **Click on the Save button or press ALT-S** and then **click on the Exit button** when prompted with the **Shortcut Options** system window.


Open Curve Average Window Selection allows the user to determine the curve average, median or mode over a depth interval.

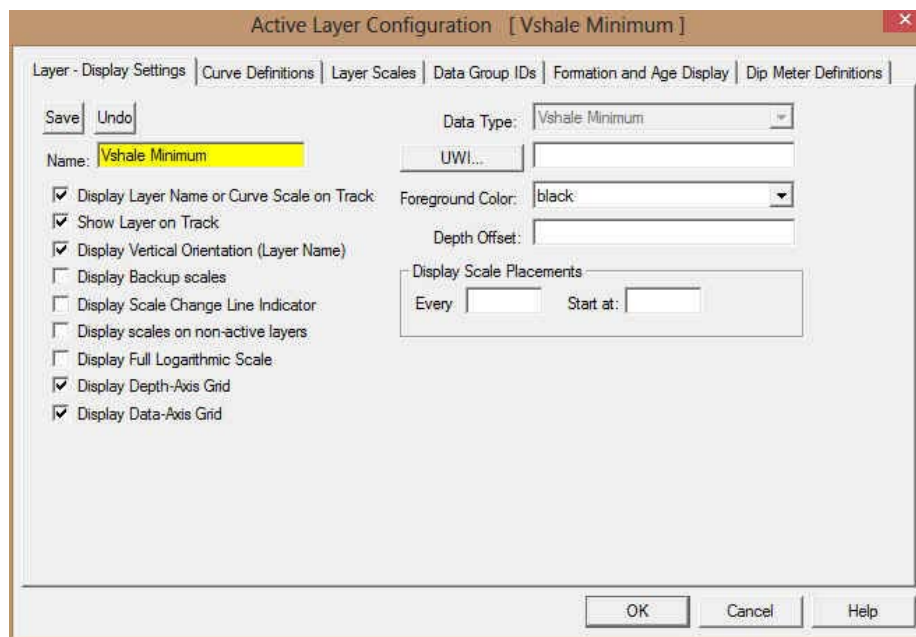
1. If the curve layer is active **right click on the layer** to activate the pop out menu and **select Open Curve Average Window**. This will activate the window shown below.



2. Click on the appropriate radio button Average Median Mode to determine what you want to calculate.
 - Average = is the quotient obtained by dividing the sum total of a set of figures by the number of figures.
 - Median = applies to the value that represents the point at which there are as many instances above as there are below.
 - Mode = the most frequent value of a set of data.
3. Define the top and base depths by **typing** in their **depths** or **clicking and dragging** an interval on the log.
4. Click on the **Calculate** button and the result will be displayed under the Curve name field. If mode was selected then the mode is displayed and the frequency is displayed in the field under the mode radio button.

Scale Text Orientation Selection allows the user to change the scale text in the main body of the log from a Vertical Orientation to a Horizontal Orientation.



Note: Every type of layer in **Power*Log, Power*Core and Power*Curve** has a **Data Type** classification. The default settings for the **Vshale Minimum** layer are shown below. To access this window, click on the  **Layer Configuration** button on the **Toolbar**, when the **Vshale Minimum** layer is active.

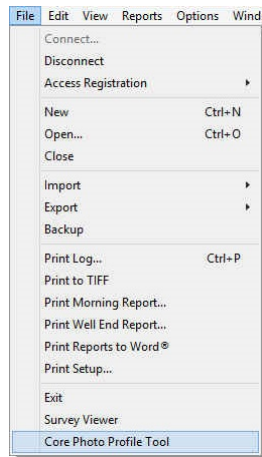


Core Photo Profile Tool Module

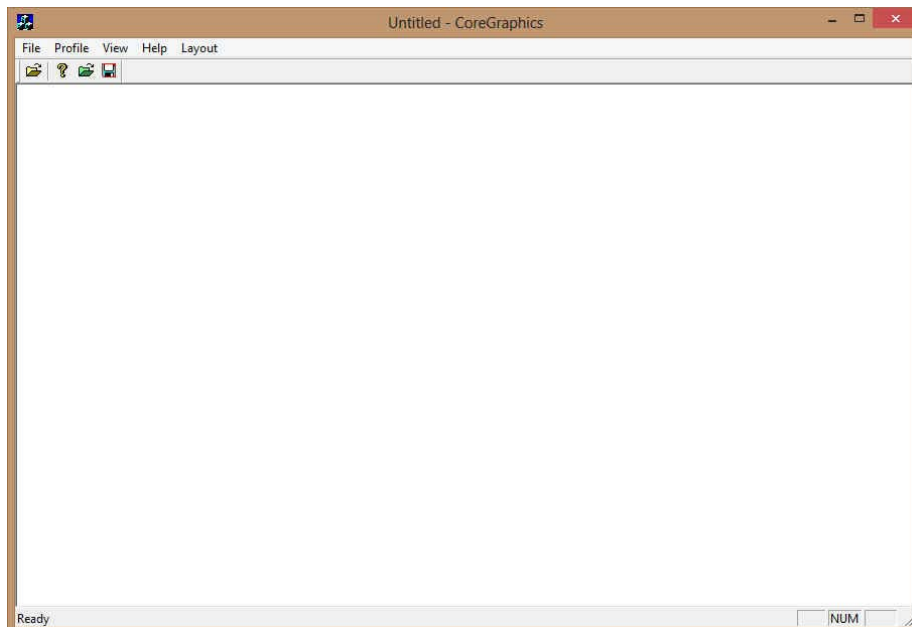
This module allows the user to specify the cropping area of a Core photo. This could be the upper 4 core sleeves in a set of 8 sleeves, the lower 4 core sleeves in a set of 8 or all 8 sleeves in the core photo. Once the core photo areas are profiled this information will be passed along with the Core photo, along with the top and base depths of the core and the core recovery to insert the cropped core photos into the Core Log in the Stacked Core Photo layer.

Operating Procedures

1. Click on the  button, select **Programs**, select **POWER*SUITE_2015**. Then, select **Utilities** and click on the **Core Photo Profile Tool** selection, or if you are in the applications select **Core Photo Profile Tool**  icon on the Power*Core Toolbar OR go under the **File Menu** in Power*Core and select the **Core Photo Profile Tool**.



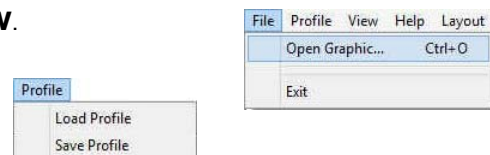
1. This will activate the Core Photo Cropping tool window shown below.



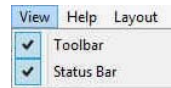
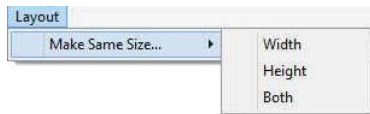
Overview of Core Photo Cropping tool window.

File Menu allows you to open a Core Graphic in this application.

Profile Menu allows the user to Load a cropping profile that you have already done or save one that you are presently doing.



View Menu allows the user to turn on / off the Toolbar and or Status bar.

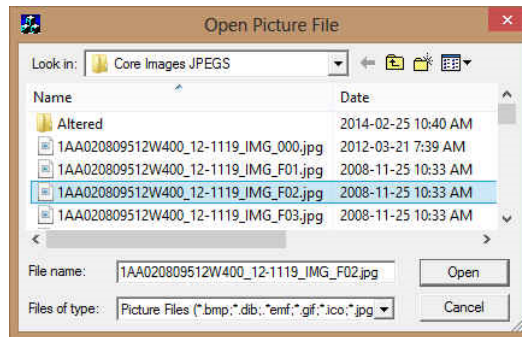
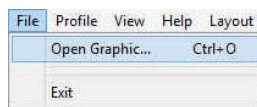


Layout Menu allows the user to make all the cropping areas the same size as the highlighted rectangle when the make same size selection is activated.

Note: It is important to be aware of your picture size. Laboratory photos will be taken at a very high resolution (~25mb) and can slow down the performance of your computer. You may wish to resize these pictures to increase the screen refresh issues that may occur.

How to Create a Core Graphic profile.

- Once the Core Photo Cropping tool window has been open (shown above). The user can now **click** on the **Open Graphic** button on the toolbar or click on **Open Graphic** from the **File** menu selection to activate the Open Picture File window.




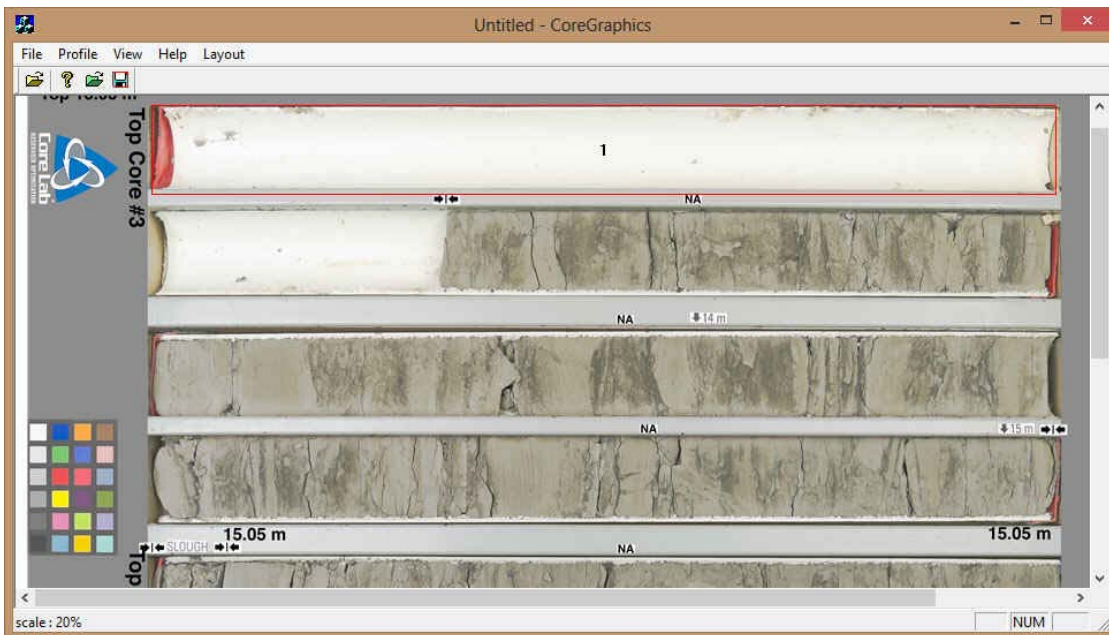
- Locate your Core Photo and either **double click** on the **file name** or **Click once** on the **file name** and **click** on the **Open** button. This will open the core photo in the Cropping window.

Note: The user can **zoom in or out** with their **roller button** on the mouse or **right click** on the image and **select scale** to change the size of the photo. The user can also scroll the picture by using the scroll bars on the right and bottom of the application is the picture is bigger than the viewing area.

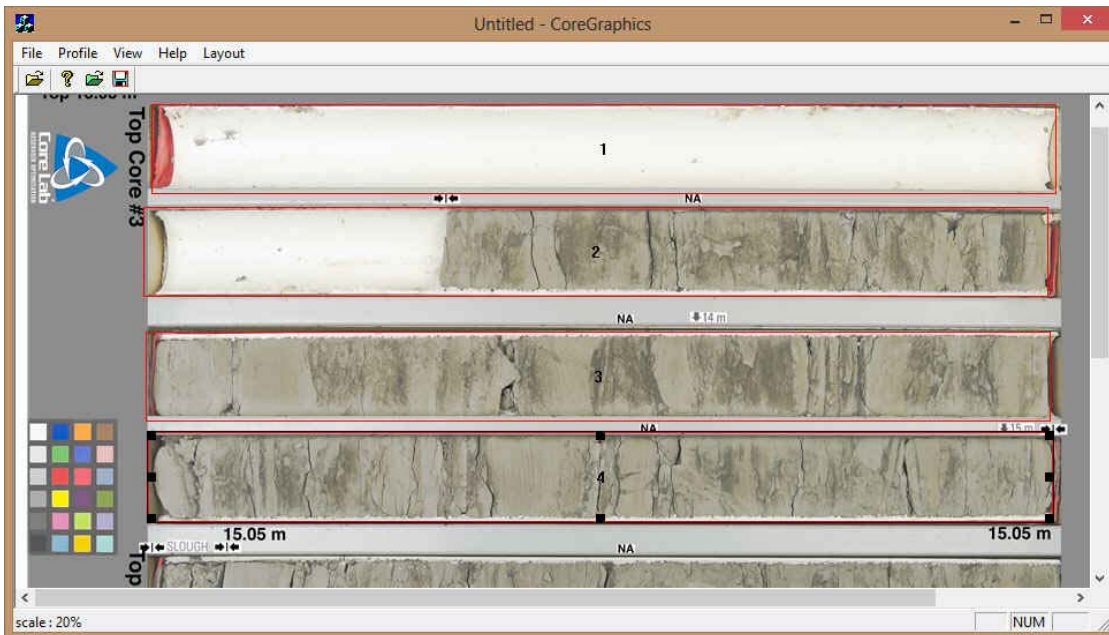




- Now **click and drag an area** around the first core sleeve. You will notice an outline where you have dragged following your mouse pointer. Let go your left mouse button and you will see a red outline around the area with a 1 in the middle of it. This is shown on the below.

Note: If you already have a profile and wish to modify the crops you can now open the cropping file by clicking on the **Profile Menu** and select **Load Profile** or the user can click on the  icon on the toolbar. You will be looking for a file with the *.cgp file extension.




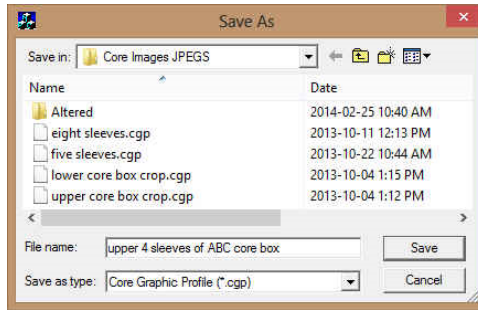
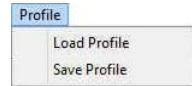
- Now you can **click and drag more outlines** for the cropping you wish to do. After each drag you will see a sequential number inside the red designated cropped areas. The illustration on the next page has four (4) cropped areas at the top of an eight (8) sleeve photo.

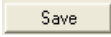


- To **Resize or Move** you must first **click on the defined area** to activate it (area 4 shown above) and then you can move  by moving inside the defined cropping area, or resize  by mousing over the corners or sides over the black boxes and then click and drag to perform the resize or move.
- Once you have the right size (height and width) on one of your profiles (remains highlighted) you can then make all the other areas the same size by clicking on the **profile menu selection** and selecting height or width. This will activate the appropriate window and then **Click** on the **button**.



7. The user can also **align all the cropping areas** left or right with the **CTRL and Left or Right arrow keys** on your keypad.
8. The user can also **fine tune** the placements of the cropping areas by clicking on a cropping area and utilize the **Up / Down / Left / Right arrow keys** on your keypad.
9. Now, once you finalize the cropping regions the user must save the profile by **clicking** on the **Profile Menu** selection and **select Save Profile** menu item OR **click** on the  icon on the toolbar. This will activate Save as window.



10. **Type** in a **file name** and save in a location where you can access it later on the automated or manual import utility.
11. **Click** on the  **button**.

You can save as many profiles as you wish. Upper four (4) sleeves, Lower four (4) sleeves or all eight (8) sleeves etc. You now have some profiles which you can crop your core photos and stack them in the Core Photo stacked layer.