

# TerraNotes

Current TerraStation II version: v7.440

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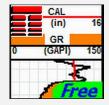
# **New Android App for Viewing LAS files**

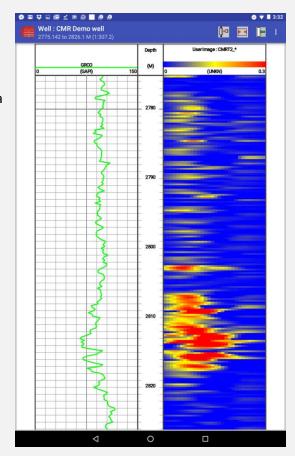
We have recently created and released an 'app' for Android based tablets and phones. It is called TLAS and is for the display of LAS data. The app comes in two forms; a free ad supported version, and a Pro version which is ad free and has more display capabilities.

The Pro version allows users to define and save their own display template, as well as display LWD images and other circumferential images. The Pro version costs US\$25 and is free of advertising.

You can find TLAS by going to the Google Play Store and searching for TERRASCIENCES. The Play Store can be found here: <a href="https://play.google.com/store">https://play.google.com/store</a>.



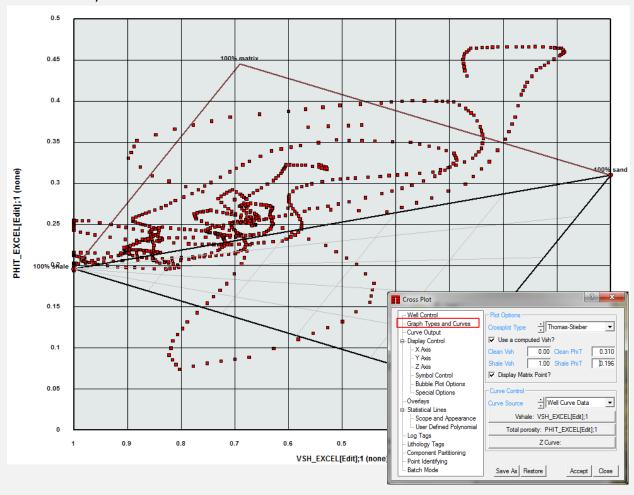




# **Enhanced Thomas-Stieber Crossplot**

The latest version of the software has an enhanced variant of the classic Thomas-Stieber crossplot. This capability allows you to obtain structural shale, matrix and effective porosity curves as well as the dispersed and laminar shale component that you always have been able to obtain.

The option is in the petrophysical Analysis module under the Crossplot options. That means it is available to anyone with a Base TerraStation license.



On the **Graph Type and Curves** panel...

Set the Crossplot Type to Thomas-Steiber.

Check the "Use a Computed Vsh?" checkbox.

Check the "Display Matrix Point?" checkbox.

Select an input **Vshale** curve and an input **Total Porosity** curve.

Also set your desired clean and shale point values for the Vshale and total porosity. In this example, Vshale end points are 0.0 and 1.0, total porosity end points are 0.31 (clean) and 0.196 (shale).

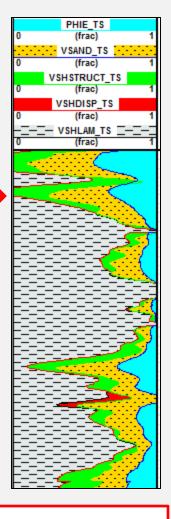
Press the <u>Accept</u> button on the control panel. Six output curves will then be computed with the following names automatically assigned:

Curve Name	Contents of Curve
VSH_TS	Total shale
VSHDISP_TS	Dispersed Shale
VSHLAM_TS	Laminar shale
VSHSTRUCT_TS	Structural shale
VSAND_TS	The matrix component (sand)
PHIE_TS	Effective Porosity

You can display these curves in an IMAGELog curve track to show the distribution of each computed component with depth.

The matrix point is computed as 1-Phit(clean) on the porosity axis, and Phit(clean) + Phit(shale)\*(1-Phit(clean)) on the shale axis.

Note: At present to use this enhanced variant of the crossplot, the input 'shale' curve **must** be a computed Vshale.



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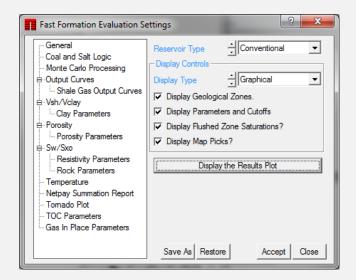
# **Interactive Geologic Parameter Zone editing in the Fast Formation Evaluation module**

For users of the Fast Formation Evaluation option, there is now a way to add and delete zones of the geologic parameter file using the mouse. You must have a Petrophysical license (more specifically a KOBRA1 license). The option is under the **Analysis** menu of the petrophysics module. It is the first item on the menu.

The first thing you see is the main control panel for the Fast FE module.

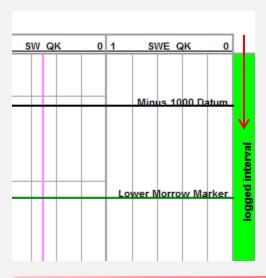
On this make sure the <u>Display Geological Zones</u> checkbox is checked. Additionally you may want to check the <u>Display Parameters and Cutoffs</u> checkbox.

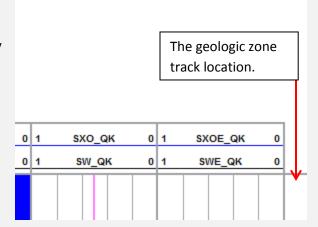
Set up the rest of the inputs for the display as desired (Vshale, Sw, Porosity etc), and when ready press the <u>Accept</u> button to bring up the main display.



Assuming you do not currently have any geologic zone defined, then you should see a narrow track down the right hand edge of the display that has nothing in it.

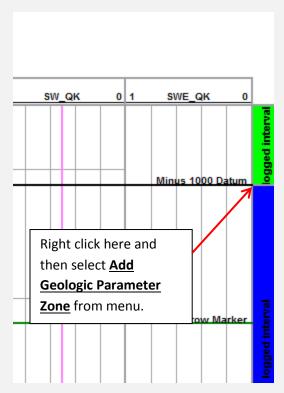
You can initialize the geologic parameter file by simply right-clicking anywhere in this track and selecting <u>Add</u> <u>Geologic Parameter Zone</u> from the short menu that appears.





As soon as you do that, the first geologic parameter zone will be created covering the entire well interval. You will see the zone track now has one zone (colored green) with the name 'logged interval' in it.

Now if you want to add a second zone, then simply right-click on the zone track at the depth where you wish to split the current zone in two. Again select **Add Geologic Parameter Zone** from the menu.



Note that there are now two zones in the zone track. They both have the same name at this point. The original zone was split at the point where you right clicked.

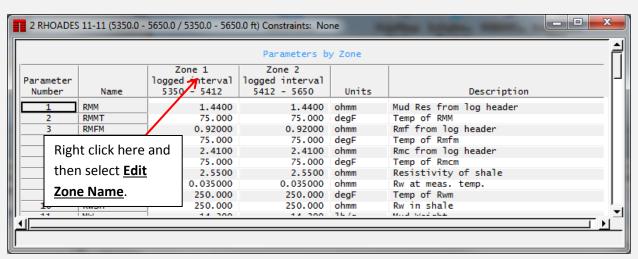
To remove a zone simply right-click somewhere in the zone and choose **Delete Geologic Parameter Zone** from the menu.

Note: As you define zones, the color coding of the zones is automatic.

You can edit the parameter file by simply right clicking in the zone track and selecting **Edit Geologic Parameter File** from the menu.

This allows you to then change the zone name as well as zone top, bottom or any of the zone parameter values.

Here is what our newly created zone file currently looks like...



Notice both zones have the same name. To edit the name of a zone simply right-click in the column heading area of the zone and select **Edit Zone Name** from the menu that appears. Then type in the name for the zone in the small text entry box that appears. Rename all your zones in this way.

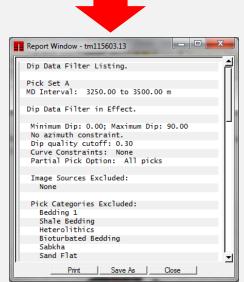
When finished, simply close the parameter file edit window and the associated Well Properties window. Press <u>Accept</u> to redraw the main display and your new zone names should be seen.

## **Pick Filter Report**

We have added a reporting facility that greatly assists in figuring out why your picks may not all be being displayed on tadpole tracks, stereonets, and anywhere else where pick data may be used. The option is located on the Pick Data Options control window, on the Pick Filtering panel.

There are three options for the report. The first is **Show Filter**. When you press the **Prepare Report** button the current data filtering settings are displayed.





The second setting is the **Picks Off** setting. This is potentially the most useful. It shows all the picks NOT being displayed and gives a reason why each pick is missing from the plot.

For example ...

