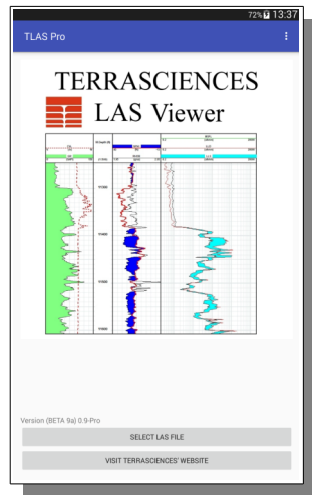
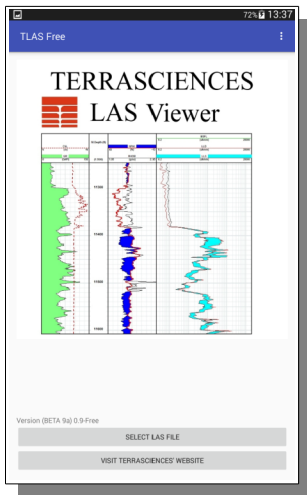


# TERRASCIENCES



# TLAS

TERRASCIENCES' LAS Viewer for Android devices



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# Introduction

Welcome to TLAS, [TERRASCIENCES'](#) Android app for displaying the contents of LAS files.

TLAS will read files that conform to the LAS 1.2, 2.0 and 3.0 specification, as defined by the Canadian Well Logging Society. For more information, visit the [CWLS website](#).

TLAS will read and use curve data and some parameter data from LAS files. Other data blocks will be ignored.

There are various ways to get a LAS file onto your Android device. Common ones include as email attachments or via a cloud storage service such as Google Drive or Dropbox. You can also use Bluetooth file transfer, or even an SD card written on another device.

Whichever method you use, you need to save the file to your device's filesystem (which can include an SD card) before TLAS can read it.

Files saved from emails or cloud storage services usually end up in your Download folder.

TLAS is available from the Google Play Store in two flavours, [TLAS Free](#) and [TLAS Pro](#). Both will run on any phone or tablet running Android 4.3 (Jellybean) or later.



# Help

The online help for TLAS 1.2 is hosted on TERRASCIENCES' UK website. Selecting the Help entry from the dropdown menus will cause TLAS to attempt to open your web browser on the TLAS Help page.

This manual may be downloaded from a link on the TLAS Help page.



# TLAS Free



The Free flavour of TLAS allows you to read a LAS file and display one of two preset plots – either the [All Curves](#) plot or the [Triple-Combo](#) plot. It also allows you to view a [Summary](#) of the curves and header items in your LAS dataset.

You may [pan and zoom](#) around the plot, and [toggle the track headers](#) on and off.

As with all things “free”, there is a tradeoff – in this case it's in the form of adverts. But rather than showing you random Google adverts, we've just included some for our own software, so they appear when you're offline as well.

After reading in your selected LAS file, you get an advert for [TERRASCIENCES](#) that stays on-screen for approximately 5 seconds before making way for the All Curves plot of your data. And a small slice at the bottom of the plot display is taken up with a banner advert for our software, which, if you tap it, will take you to our website.

Neither of these adverts appears in the Pro version, so if you're tired of them, or just want to be able to use the entire screen to view your data, you can always purchase TLAS Pro from the Google Play Store (and get all the extra functions that version provides as a bonus).



## TLAS Pro



The Pro flavour of TLAS gives you all the functions contained in the Free flavour (minus the adverts), and adds the following extras :

- The ability to [create](#) and [modify](#) custom logplots, and save them to use with other LAS datasets. Custom logplots can include image columns (both preset and user-defined) and colour-coded curve columns, as well as shading between curves and either constants or other curves.
- A [Go-to-depth](#) option so you can quickly find the zone of interest in your dataset.
- An All Images plot, allowing you to see any LWD images that we have detected in your dataset. This will also present any Array Resistivity curve sets that are found as pseudo-images.

We hope that you will find that the extra functionality and the freedom from adverts is worth the cost of TLAS Pro.



## Permissions

Depending on the version of Android you have, TLAS will either be granted the permissions it requires when you install it from the Google Play Store, or ask for them when you first run it.

TLAS needs the following permissions to run :

- **READ External Storage**  
obviously, otherwise it can't read your LAS files
- **WRITE External Storage**  
to save your LAS file location and (in the Pro version) saved logplot setups.  
Also needed to unbundle the online help (this manual) so that it can be passed to your PDF reader for viewing.

*Granting WRITE External Storage permission automatically grants READ External Storage permission as well, so the app will only ask for WRITE permission.*



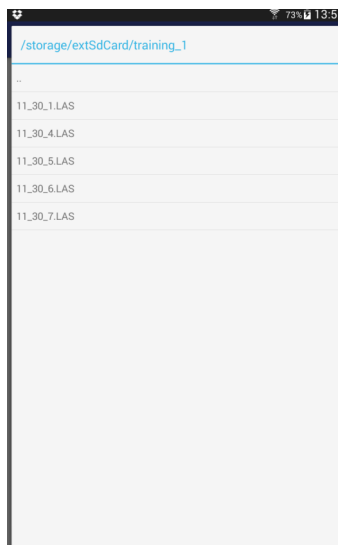


## Reading a LAS file

When you tap the Select LAS File button on the opening screen, you will be presented with a file selector that looks something like this :

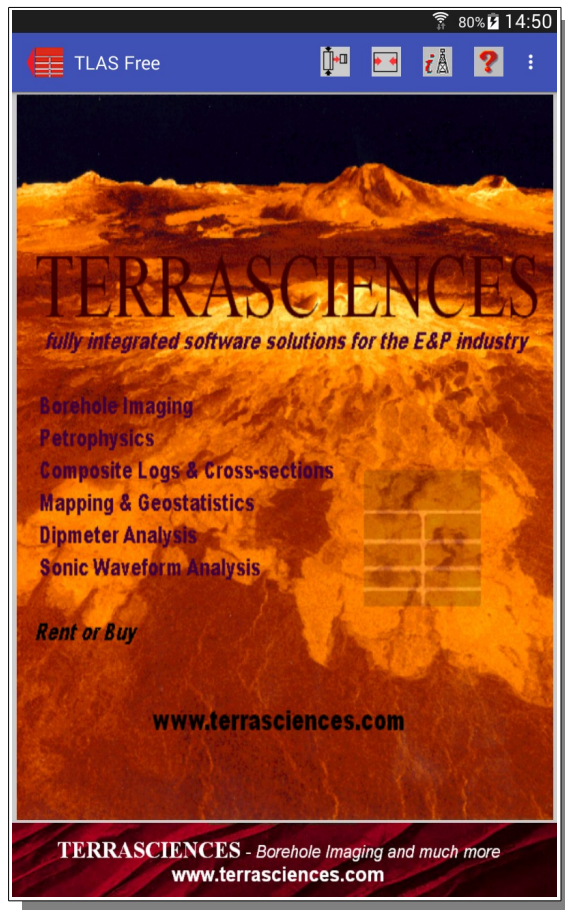
Tap on the LAS file you wish to load.

If the file you want is not in the list, you need to navigate to find it. Use the “..” item at the top of the list to move up a folder, or tap on a folder to open it. Once you have found your LAS file, tap on it's name to load it.



*TLAS remembers the location of the last LAS file you loaded, and will start the file selector in that folder.*

A progress bar is shown as the LAS file is loaded, after which the [All Curves](#) plot is displayed (with the Free version there is a short pause for you to read the TERRASCIENCES advert before the All Curves plot appears).



Tap on the banner at the bottom of the screen in TLAS Free to start your browser and visit TERRASCIENCES' website.



*TLAS version 1.2, July 2019*



## The Title Bar

The title bar at the top of the plot screen contains a number of important items.



- The “Back” button, which takes you back to the start screen so that you can select a different LAS dataset. 
- The Well name, as read from the LAS file
- The depth range of the data currently displayed on screen (note how this changes as you move up and down through your data).
- The current display scale (note how this changes as you zoom in and out).
- Up to four icons, which you can tap to access functions associated with them. How many icons you will see will depend on the size and resolution of your screen – a small cellphone may not show you any at all. Any icons which cannot be displayed will be replaced by items on the drop-down menu
- A drop-down menu, accessed by tapping the vertical row of three dots at the right end of the title bar. 



## Moving around the plot

You can move around the plot by holding your finger on the screen inside the plot area and dragging it. The display moves in the direction of your finger.

You can zoom in and out by holding two fingers on the screen and then pinching them together (to zoom out, ie fit more of the plot on the screen) or moving them apart (to zoom in).



You can scale the plot so that the entire dataset fits on screen. This function will either appear as an icon on the title bar at the top of the screen, or as an item on the drop-down menu (accessed by tapping the vertical row of dots at the right end of the title bar), depending on the size of your screen.



You can scale the plot so that all tracks fit across the width of the screen. This function will either appear as an icon on the title bar at the top of the screen, or as an item on the drop-down menu (accessed by tapping the vertical row of dots at the right end of the title bar), depending on the size of your screen.



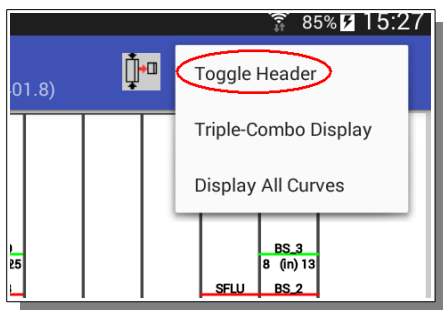
TLAS Pro also has a “Go to Depth...” function. Depending on the size of your screen, this will either appear as an icon on title bar at the top of the screen, or as an item on the drop-down menu (accessed by tapping the vertical row of dots at the right end of the title bar).

This function asks you to enter a depth, and then repositions the plot so that depth is at the top of the display area.



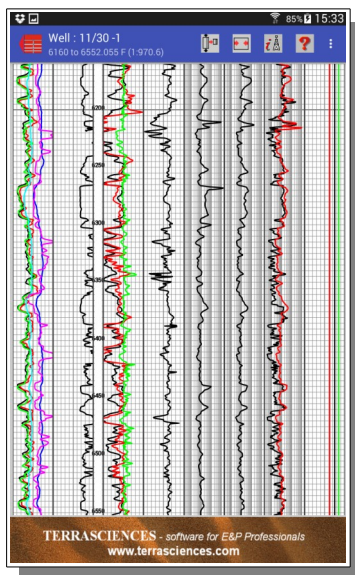
## Toggle Track Headers

If you are viewing your data on a small screen, perhaps a smaller cellphone, you may wish to toggle the track headers off in order to see more data on the screen.



To do this, select “Toggle Header” from the drop-down menu, accessed by tapping the vertical row of dots at the right end of the title bar.

To redisplay the headers, just select “Toggle Header” again.

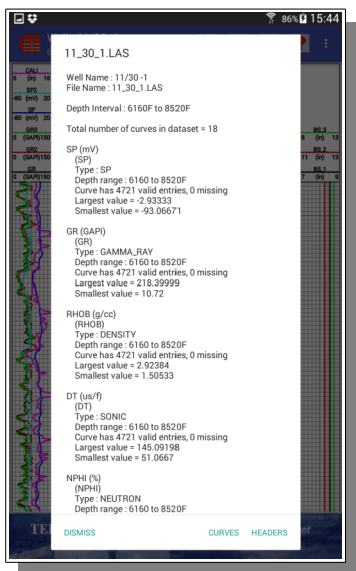




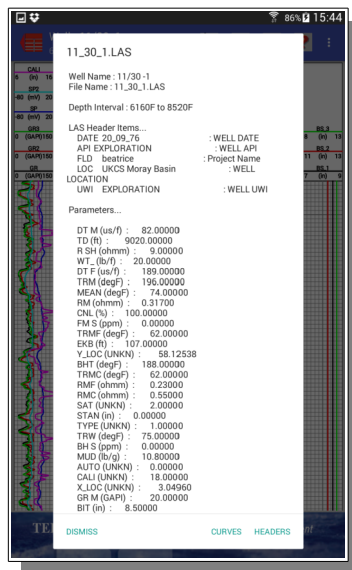
## Summary



The Summary function displays a list of the curves in your LAS dataset with various items of information about each curve. It is accessed either via an icon on the title bar (Free version, if there is room on the bar) or via the Summary item on the drop-down menu, accessed by tapping the vertical row of dots at the right end of the title bar.



Tap the “Headers” button at the bottom to change the display to show header and parameter information from the LAS file.



Tap the “Curves” button to revert to the curve summary.

Tap “Dismiss” to return to your logplot.



## The All Curves Plot

This display will plot all of the curves found in your LAS file at an initial scale of 1:500. It will be automatically displayed when your LAS file has been read. To select it when a different plot is on screen, select “Display All Curves” from the drop-down menu at the right of the title bar.

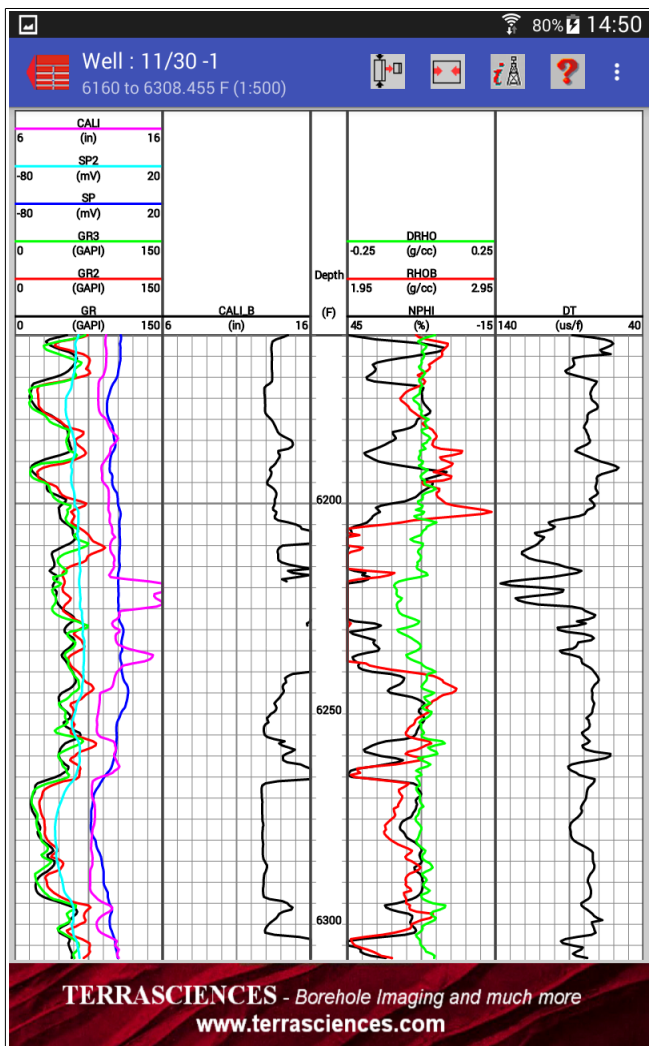
The displayed curves are split into the following groups :

- [Gamma Ray](#), [Spontaneous Potential](#) and [Caliper](#)
- [Spectral Gamma Ray](#)
- [Neutron](#), [Density](#) and [Density Correction](#)
- [Sonic](#)
- [Porosity](#) and [Permeability](#)
- [Temperature](#)
- [Array Resistivity](#) sets
- Other [Resistivity](#)
- [Conductivity](#)
- [PhotoElectric absorbtion Factor](#)
- anything else

A depth track is plotted between the Spectral Gamma Ray and Neutron/Density tracks.

Each group is plotted in one or more tracks, with no track containing more than 6 curves. If the dataset contains no curves of a particular type, that set of tracks is omitted.

In each track, curves are plotted in different colours. Curves that appear to contain discrete, rather than continuous, data are plotted using symbols rather than lines.







## The Triple-Combo Plot

The Triple-Combo plot is a commonly used format in the Oil industry. It consists of the following tracks :

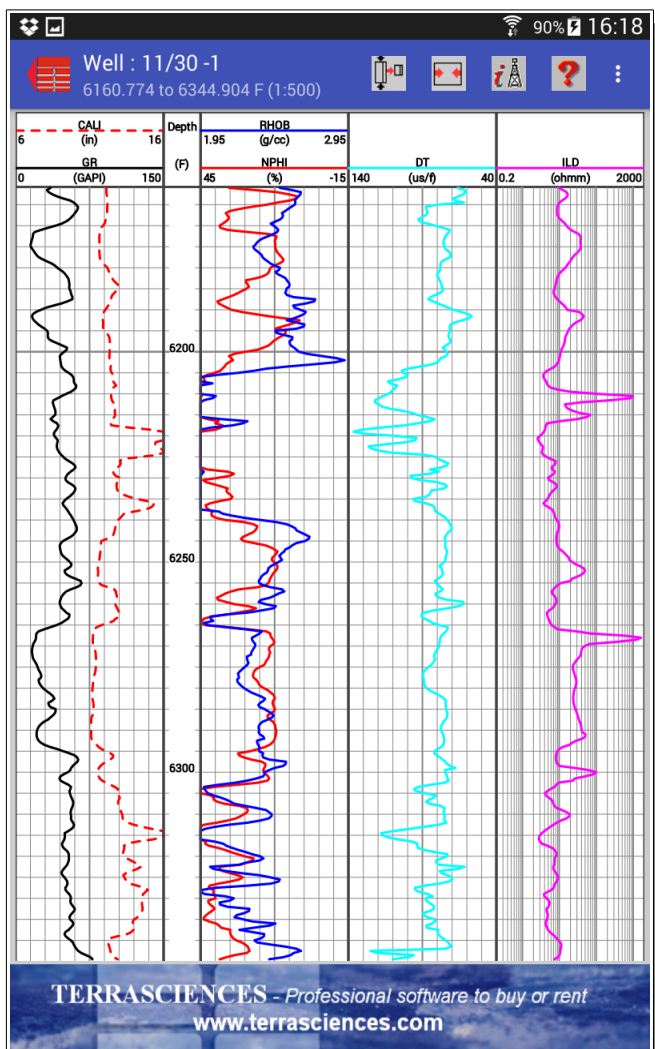
1. [Gamma Ray](#) and [Caliper](#) curves. TLAS selects the first one of each of these that it finds in the LAS dataset.
2. Depth
3. [Neutron](#) and [Density](#) curves. TLAS selects the first one of each of these that it finds in the LAS dataset.
4. [Sonic](#) curve. TLAS selects the first sonic curve that it finds in the LAS dataset.
5. [Resistivity](#) curves.

If there are [Array Resistivity](#) curve sets in the dataset, and the largest of these contains more curves than the set of resistivity curves that do not belong to an Array Resistivity set, then that Array Resistivity curve set is plotted.

Otherwise, all Resistivity curves that do not belong to an Array Resistivity set are plotted in this track.

The initial scale is set to 1:500.

The Triple-Combo plot is displayed by selecting “Triple-Combo Display” from the drop-down menu at the right of the title bar.





## The All Images Plot

This display is only available in TLAS Pro.

All [Borehole Images](#) recognised by TLAS from amongst the curves in the LAS dataset are displayed, each in a separate column.

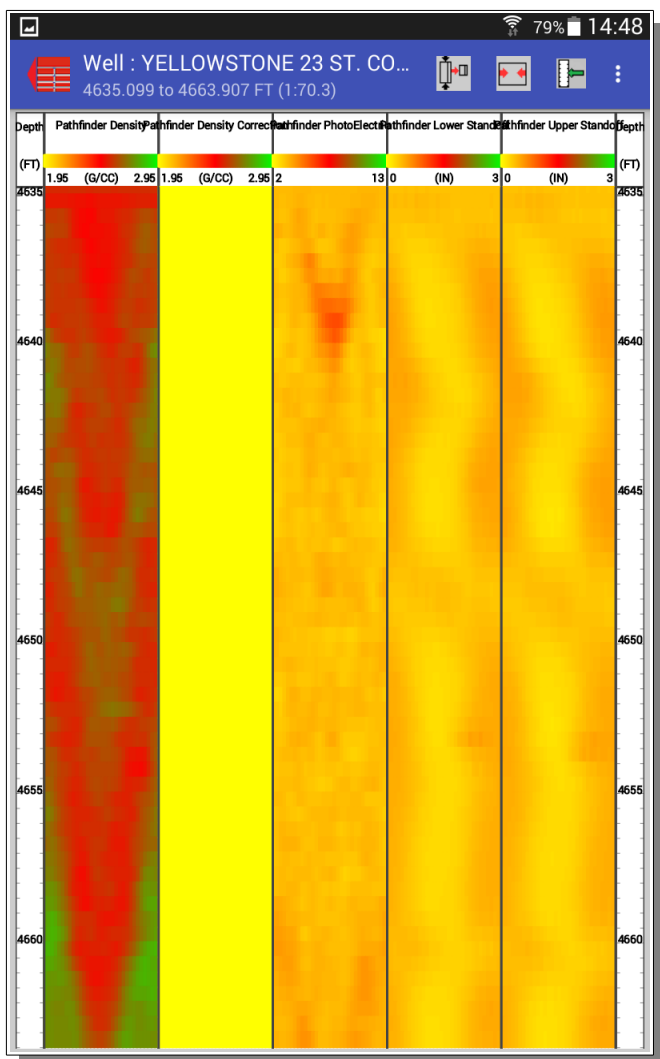
In addition, any [Array Resistivity](#) curve sets recognised by TLAS will be displayed in the same way (effectively as a series of colour-coded curves plotted side-by-side).

Depth tracks are included as the first and last tracks for this plot. If there are no Borehole Images or Array Resistivity sets recognised in your LAS file, a single depth column will be all that is plotted.

The initial scale is set to 1:50, and each image is displayed using a colour map that goes from yellow on the left through red in the centre to green on the right.

The mapping of values to colours in the colour map is determined by the range of the first curve in the image. If this curve is one that is normally displayed on a logarithmic scale, the colour mapping is done logarithmically, otherwise it is done linearly.

The All Images plot is displayed by selecting “Display All Images” from the drop-down menu at the right of the title bar.



TLAS version 1.2, July 2019



## Custom Plots

Only available in TLAS Pro.

Whilst the standard plots are useful, often you will want to create your own plot layout for viewing your data.

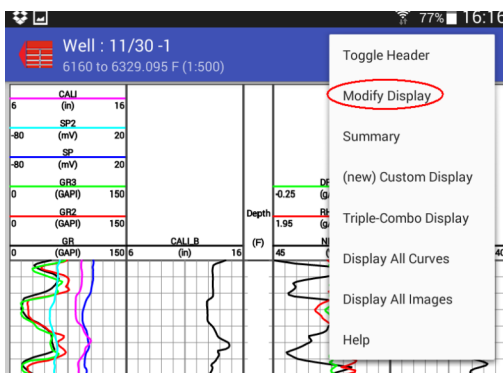
To do this, select “(new) Custom Plot” from the drop-down menu at the right of the title bar. A new, empty plot layout will be created, and the [Setup dialog](#) will be presented to allow you to add the tracks of your choice to it.

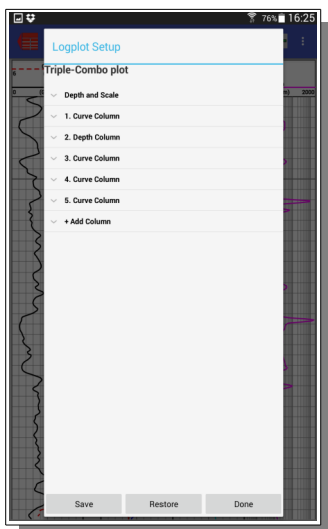
## The Plot Setup Dialog

Only available in TLAS Pro.

The Plot Setup Dialog allows you to add, modify or delete tracks (columns) from the current logplot.

It is automatically invoked when you create a new Custom Plot, or you can invoke it from any logplot display (including the Triple Combo, All Curves or All Images plots) by selecting “Modify Display” from the drop-down menu at the right of the title bar.



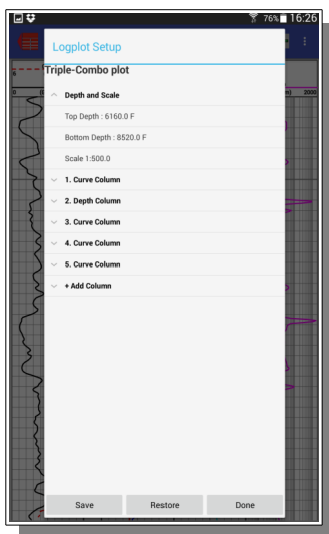


When it first appears, the Setup dialog displays a list consisting of a “Depth and Scale” item, an item for each column that currently exists in the current plot and finally an “Add Column” item.

The name of the current plot is displayed above the list – you can set this if/when you save the logplot for future use.

Three buttons at the bottom of the dialog allow you to [save the logplot](#), [restore a previously saved logplot](#) and exit from the dialog.

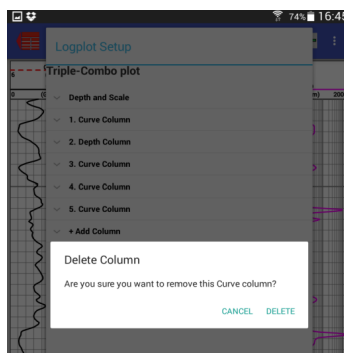
Tapping on the “Depth and Scale” item opens a sub-list. Tapping on items in this list allows you to set the top and bottom depth of the data to be displayed (useful if your LAS file contains a lot of data outside the zone of interest to you) and the scale. In each case, a pop-up box will appear with the current value in it, and you will be able to change that value.





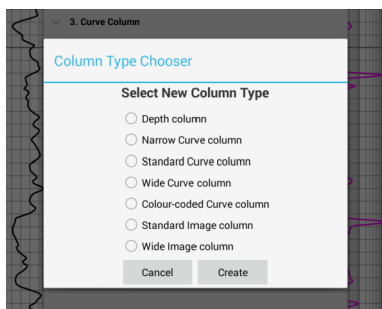
Pressing and holding your finger on any of the column items in the list will cause that column to be deleted from the plot setup.

A pop-up will appear asking you to confirm that you wish to delete the column, so you have a chance to back out if you do this accidentally.



Tapping on an existing column will toggle the display of its sub-entries. Tapping on a sub-entry will take you to the appropriate setup dialog for that item.

Tapping the “Add Column” entry brings up a list of the column types that you may have in TLAS logplots.



Select the column type that you wish to add and then tap Create. It will be added to the end of your column list (so it will appear on the right of your logplot).



## ***Horizontal Grid increment***

The distance between horizontal grid lines (depth lines) depends on the vertical scale, which changes as you zoom in and out. The current scale is displayed on the title bar, under the well name and after the current depth limits.

<b>Scale</b>	<b>Grid Increment (depth units)</b>
less than 1:10	0.1
1:10 to 1:50	0.5
1:50 to 1:100	1.0
1:100 to 1:500	5.0
1:500 to 1:1000	10.0
1:1000 to 1:5000	50.0
greater than 1:5000	100.0

A heavier line or tick is plotted every 10<sup>th</sup> increment.

## ***Depth Column***

Depth columns are a quarter of the width of a standard curve column. They contain ticks at the grid increment, with heavier ticks and a depth value every 10<sup>th</sup> grid increment.

There are no user settings for Depth columns.





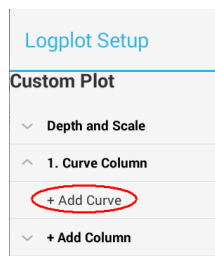
## ***Curve Column (narrow, standard or wide)***

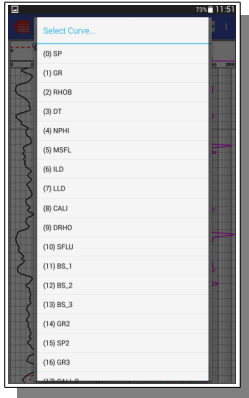
When you create a Curve column you set it to either narrow, standard or wide width. This cannot be subsequently changed.

Narrow curve columns are half the width of standard ones, whereas wide curve columns are twice the width of standard ones.

Curve columns always contain a grid. The [horizontal lines](#) are determined by the vertical scale but the vertical lines depend on the first curve selected for the column. If this curve is normally plotted on a logarithmic scale, the vertical grid lines will be spaced logarithmically, with heavier lines every decade, otherwise there will be 10 vertical grid lines evenly spaced, with a heavier line down the middle of the column.

To add a curve to a curve column, tap the column in the column list to expand it (if it is not already expanded). Then tap the “Add Curve” item, and you will be presented with a list of the curves in your LAS dataset.





Tap to select the one you want to add.

Curve columns can contain as many curves as you like, but only the first 6 will be displayed in the track header.

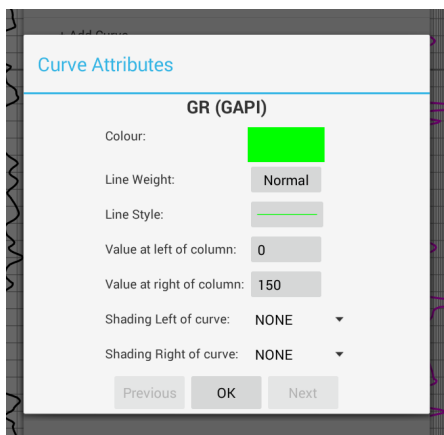
After selecting your curve, you will be taken to the [Curve Attributes](#) dialog to set its display properties. You will also be taken to the [Curve Attributes](#) dialog if you click on the name of a curve under a Curve column in the Plot Setup dialog.

To remove a curve from a Curve column, press and hold your finger on its name in the Plot Setup dialog. You will be prompted to confirm that you really want to remove it from that column in the logplot.



## Curve Attributes

The Curve Attributes dialog allows you to set the colour, style and weight of the line that will be used to plot that curve, the curve range (the values that correspond to the left and right edges of this curve column) and any shading associated with that curve.



The Previous and Next buttons at the bottom of the dialog allow you to move to other curves in the same curve column without exiting the Curve Attributes dialog. They are inactive if you only have a single curve in this column.

The OK button dismisses the dialog, applying any changes you have made.

Tap the Colour button to select the colour to plot the curve in. The button changes colour to reflect your chosen colour.

Tap the Line Weight button to select the line weight – choose between Thin, Normal and Heavy. The text on the button will update to reflect your choice.



Tap the Line Style button to select the linestyle to use for this curve. You have a choice of Solid, Dotted, Dashed, Dot-Dash and four different symbol linestyles.

The symbol linestyles plot the chosen symbol at each data point, rather than joining the points to produce a continuous line. These are useful if you have curves in your dataset that represent discrete, rather than continuous, measurements. If a curve does not show up on a logplot when plotted with a continuous linestyle, try changing to a symbol linestyle to see if there are just a few valid values present.

The Line Style button changes to show your selected linestyle.

The curve range (values at the left and right of the column) are initially set to a sensible default, which is determined when the LAS file is loaded. If the curve has been [recognised](#) by TLAS, a standard range will have been set according to the curve type and units. Otherwise, the default range is set so that it includes all the values present in the curve.

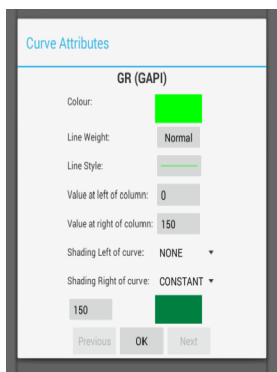
As bad readings or differently calibrated tools can sometimes mean you wish to display the data on a different range, you can tap the left or right values and enter new ones.



## Shading

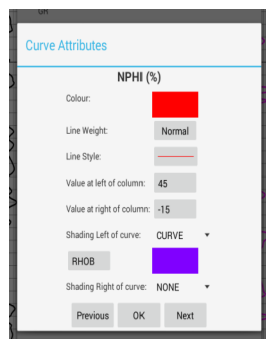
You may apply shading to the left and/or right of each curve in your curve column.

Shading is done in a solid colour, limited by the curve it is attached to on one side and either another curve or a constant value on the other.



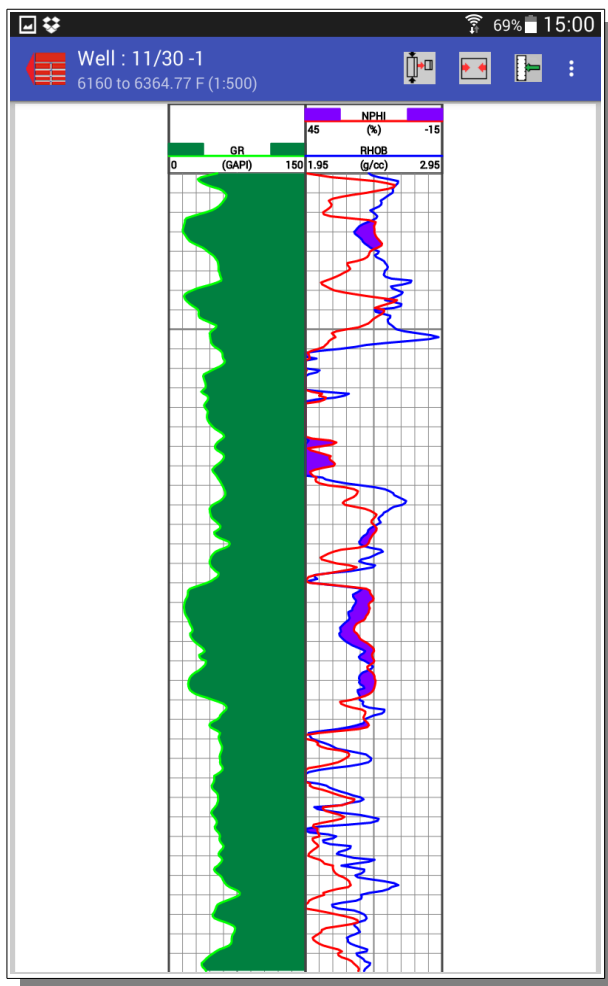
For instance, to shade to the right of a Gamma Ray curve, set the “Shading Right of curve” toggle to CONSTANT, then tap the value that appears underneath it to set the constant value (in this case, set it to the same as the value at the right of the column). Tap the colour button to change the shade colour (which by default is the same as the curve colour).

Or, to shade between a Neutron and a Density curve, on the setup for the Neutron curve set the “Shading Left of curve” toggle to CURVE, tap the curve button to select the Density curve and tap the colour button to set the shade colour (you could get the same effect by shading to the right of the Density curve and selecting Neutron as the shade-to curve).





This is the result of applying the previous two shading definitions:



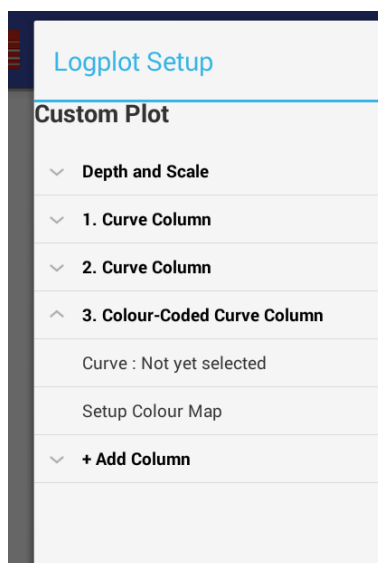


## Colour-coded Curve Column

A Colour-coded Curve column is half the width of a standard Curve column. It displays a single curve from your LAS dataset, but instead of a line it draws a bar of colour at each depth, with the curve values mapping to a range of colours.

To set up a Colour-coded column after creating it, tap on the column in the Plot Setup dialog so that it expands to show you the Curve and Colour Map entries.

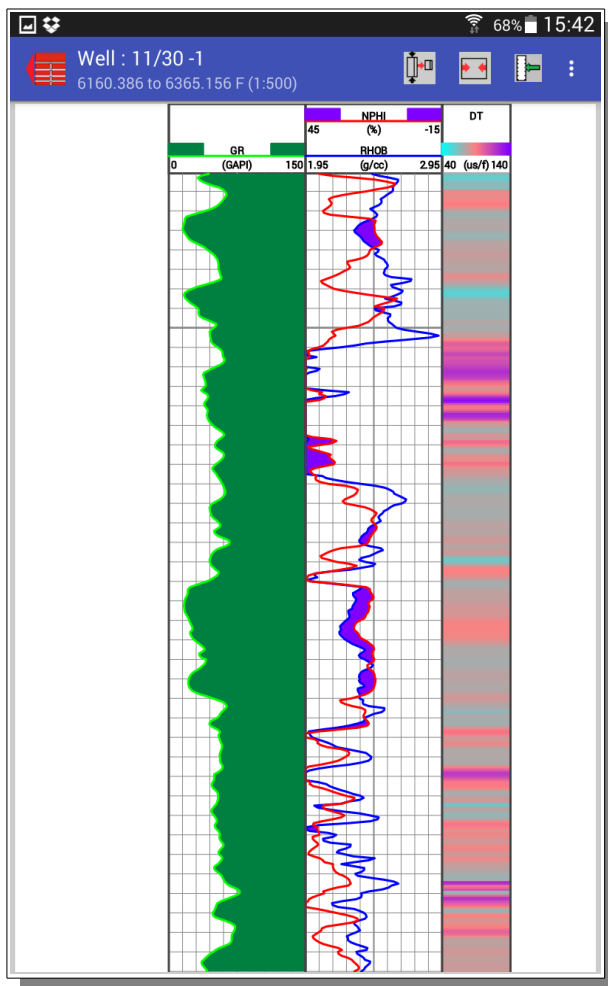
Then tap on the Curve item (this will be set to “Not yet selected” if you haven't yet selected the curve). The curve selector will pop up to allow you to select the curve you wish to use in this column.



Next you should set up the [colour map](#) to use with this curve. If the curve is normally displayed on a logarithmic scale, colours will be mapped to the natural log of the curve values, otherwise a linear mapping will be applied.



This is how the previous logplot looks with a colour-coded curve column added to it:



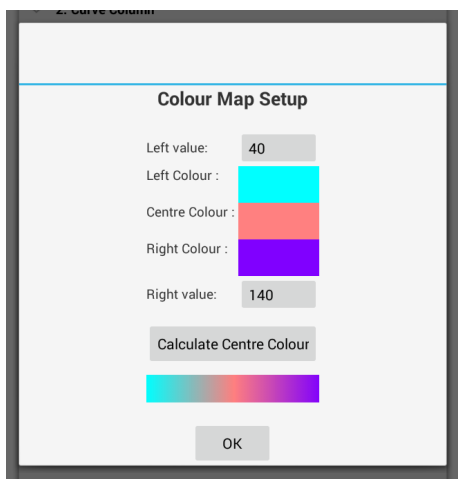




## Colour Map Setup

The Colour Map Setup dialog is used by both Image columns and Colour-coded Curve columns.

Colour Maps are defined by three colours – one at either end of the colour map and one in the middle. Intermediate values are calculated by linear interpolation between these colours.



The left value is mapped to the left colour. Set the value by tapping the button and entering a new number, and set the colour by tapping the button and selecting the colour you wish to use.

The right value is mapped to the right colour. Again, these are set by tapping the

appropriate button and entering a value or selecting a colour.

The mid-point of the colour map can either be explicitly set by tapping the Centre Colour button and selecting a colour, or by tapping the “Calculate Centre Colour” button, which sets it to a colour that is mathematically half-way between the left and right colours.

A preview of the colour map is shown between that button and the OK button. Tap OK to accept the colour map.



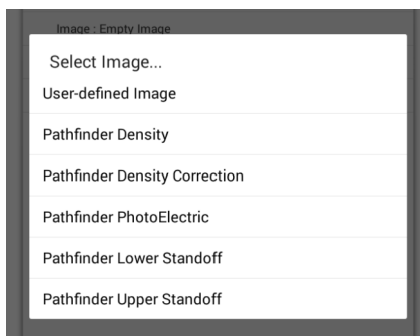
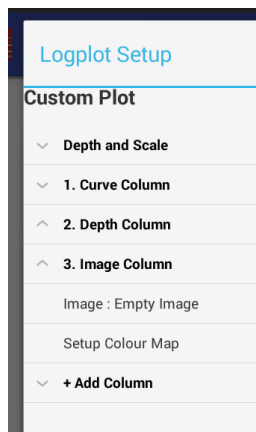
## ***Image Column (standard or wide)***

Image columns display a related, ordered set of curves as colour-coded strips. They are typically used to display Borehole Image data. The values of each curve are mapped to a rectangle of colour via a [Colour Map](#).

Standard Image Columns are the same width as Standard Curve columns. Wide Image Columns are twice as wide as Standard ones.

To set up an Image column after creating it, tap on the column in the Plot Setup dialog so that it expands to show you the Image and Colour Map entries.

Then tap on the Image item (this will be set to “Empty Image” if you haven't yet selected the image). The image selector will pop up to allow you to select the image you wish to use in this column.



This shows you all of the [images that TLAS has recognised](#) from your dataset, plus a “[User-defined image](#)” option to allow you to display unrecognised images.

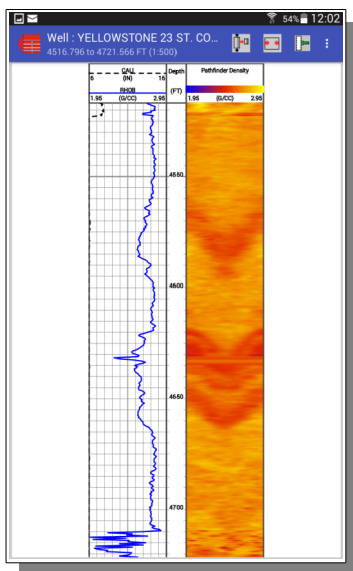


Select the image you wish to display by tapping it in the list.

If you have selected “[User-defined Image](#)”, you will be prompted to define your image.

Once your image has been selected, you should then tap the Setup Colour Map item and define the [colour map](#) to use with this image. If the first curve that makes up this image is normally displayed on a logarithmic scale, colours will be mapped to the natural log of the image values, otherwise a linear mapping will be applied.

The picture below shows a Pathfinder Density Image.

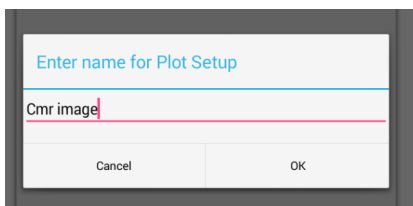
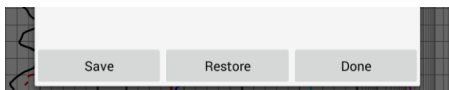




## ***Saving and Restoring Logplots***

TLAS Pro allows you to save and restore logplot setups, so you can use your custom layouts on other LAS datasets.

The Save and Restore functions are accessed via buttons at the bottom of the [Plot Setup](#) dialog.

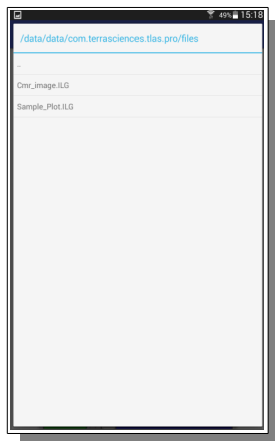


Tap the Save button to save the current logplot setup. You will be asked to enter or modify the name of this setup, and it will then be saved when you tap OK.

Beware that if you enter the same name as an existing setup, that setup will be overwritten without warning.

Tap the Restore button to restore a previously saved logplot setup. You will be presented with a list of saved setups, just tap the one you want to restore.

TLAS will apply the setups to your current dataset. Any curves or images defined in the setup that are not present in the current dataset will be ignored, although the columns will be drawn.





# Curve Mnemonics recognised by TLAS

Note that mnemonic recognition for curve names and units is not case sensitive, so GR = gr = Gr = gR.

## ***Gamma Ray curves***

- GR, SGR, CGR, GR\*
- any other curve with units of GAPI or API

## ***Spectral Gamma Ray curves***

- URAN, U, URA, UZ, UCPS, URAN\* (*Uranium component*)
- POTA, K, KCPS, POTA\* (*Potassium component*)
- THOR, TH, TCPS, THOR\* (*Thorium component*)

## ***Caliper curves***

- CALI, CAL, CAL2, C1, C2, C3, C4, C5, C6, RAD1, RAD2, RAD3, RAD4, RAD5, RAD6, BS, CAL\*

## ***Neutron curves***

- CNL, NEUT, SNP, NPHI, CN, PHIN
- any other curve with units of PU or POR%



## **Density curves**

- DENS, RHOB, RHO, RHOC, ZDEN
- any other curve with units of G/CC, G/C3, KG/M, KG/M3 or K/M3

## **Density Correction curves**

- DRHO, CORR, ZCOR

## **Sonic curves**

- SONI, DT, DTS, DTC
- any other curve with units of US/F, US/M or NS/M

## **Resistivity curves**

- LLS, LLM, LLD, ILS, ILM, ILD, LL8, MSFL, RILM, RILD
- any other curve with units of OHMM, OHM-M or M.OHM

*note that individual members of [array resistivity curve sets](#) are also classified as resistivity curves.*

## **Conductivity curves**

- CILM, CILD
- any other curve with units of MMHO



### ***Permeability curves***

- PERM, KCOATES, KCMR
- any other curve with units of MD

### ***Porosity curves***

- PHI, POR, DPOR, DPHI, PHI\*
- any other curve with units of CFCF

### ***PEF (PhotoElectric Absorbtion Factor) curves***

- PEF, PE, PEFC
- any other curve with units of B/E

### ***Spontaneous Potential curves***

- SP
- any other curve with units of MV

### ***Temperature curves***

- CTEM, GTEM, TEMP
- any other curve with units of DEGC or DEGF



## **Resistivity Curve Sets**

For the All Curves and Triple Combo standard plots, TLAS attempts to identify and split out related sets of resistivity curves so that they are plotted together. In addition, known Array Resistivity curve sets are detected and displayed as images in the All Images plot in TLAS Pro.

### ***Array Resistivity curve sets***

Array Resistivity curve sets consist of a set of mnemonics with a common prefix followed by a number. The numbers are usually from the set {10, 20, 30, 60, 90}. So a typical set might consist of the mnemonics AF10, AF20, AF30, AF60 and AF90.

TLAS detects Array Resistivity curve sets with the following mnemonic prefixes :

AHT, AN, AE, AF, AHF, AHO, AI, AO, HT, AT, HO,  
DR, RT and RO

### ***Miscellaneous Resistivity curve sets***

TLAS also attempts to keep other related resistivity curves together in the All Curves and Triple Combo plots. These sets are :

- ILS, ILM & ILD
- LLS, LLM & LLD





## Images recognised by TLAS

When you set up an Image track in TLAS Pro, the app will search through your dataset for sets of curves that form a borehole image. Usually these are LWD data, and represent from 4 to 32 sectors around the borehole, one curve per sector.

The set of curves forming the image will have mnemonics that start with a common root and then append a sequential number, normally starting with 1 (or 01 in some cases).

TLAS will start with the first curve and then look for each successive one until it doesn't find it, so is not tied to a fixed number of sectors for any particular image. However, this does mean that if there are missing numbers in the sequence, the displayed image will have less sectors than you expect

If your dataset contains an image that TLAS does not recognise, you can still use it – you just have to select [User-defined Image](#) from the list that is presented and define it yourself.



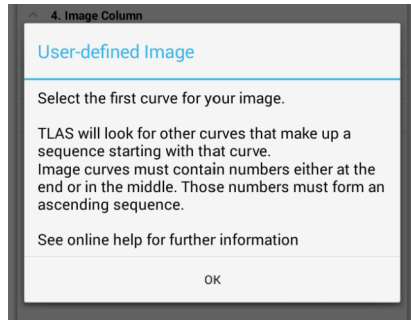
TLAS can currently recognise the following images, provided that they have the standard mnemonics used by the logging company...

- Pathfinder Density (IRHOB\*)
- Pathfinder Density Correction (IDRHO\*)
- Pathfinder Near Window Density (IRHBN\*)
- Pathfinder Far Window Density (IRHBF\*)
- Pathfinder PhotoElectric (IPE\*)
- Pathfinder Lower Standoff (ILSO\*)
- Pathfinder Upper Standoff (IUSO\*)
- Pathfinder Azimuthal Gamma (IGR\*)
- Generic Dipmeter (PAD\*)
- Halliburton ALD HS Density (HD\*)
- Halliburton ALD HS PhotoElectric (HP\*)
- Halliburton ALD HS DRho (HR\*)
- Inteq Acoustic Caliper (RADP\*)
- General Electric RMI (K\*)
- Baker Density (ABDC\*M or ABDCQ\*M)
- Baker Azimuthal Gamma (GRAS\*M or GRAQ\*M)



## User-defined Images

When you select a User-defined image, you will see the following prompt :



Tap OK, and you will be taken to the curve selector to select the first curve in the sequence for your image.

User images are defined by a set of curves whose mnemonics consist of a common root plus a sequence number. TLAS attempts to find the sequence number in the mnemonic of the curve you select, then takes the rest of the mnemonic as the root.

The sequence number is then incremented, and a curve is looked for with that root and number, and if one is found it is added to the image. The sequence must be continuous, so when TLAS fails to find the next curve in the sequence it stops looking for more curves for the image.

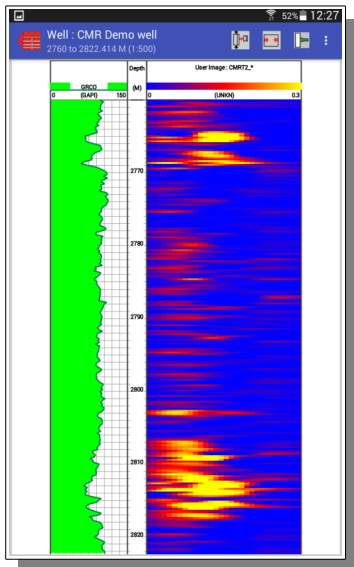
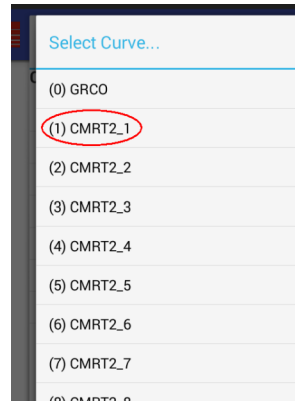


For example, a LAS dataset might have a set of curves called CMRT2\_1, CMRT2\_2, CMRT2\_3,... up to CMRT2\_30.

When presented with the list of curves, select CMRT2\_1.

TLAS will inspect the selected curve name and decide that the root mnemonic is “CMRT2\_” and the sequence number is 1

It will then look for CMRT2\_2, CMRT2\_3, and so on, adding them to the image when it finds them.



When the sequence number reaches 31, it will look for CMRT2\_31 and fail to find it in the dataset, so it will stop searching and the displayed image will consist of the 30 curves it has found.



# TERRASCIENCES

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