



P.U.T RockLog Package

User's Guide

Version 2.1

1384-2005

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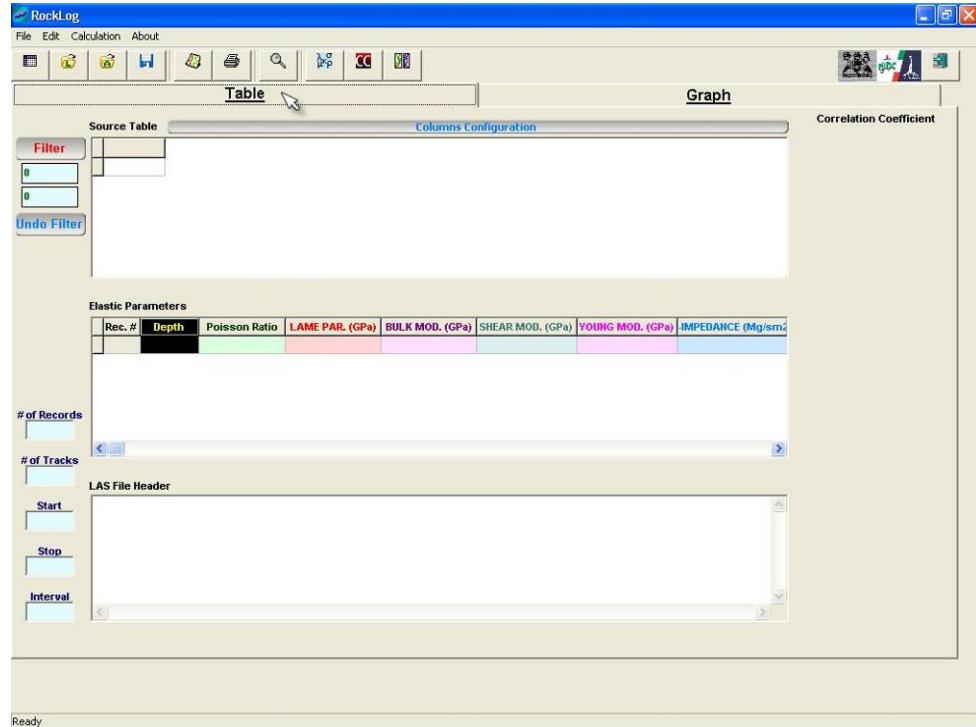
Executing the Program

We execute the drive program by clicking on its icon  on the desktop. The splash screen of the package would be shown and the program is run.

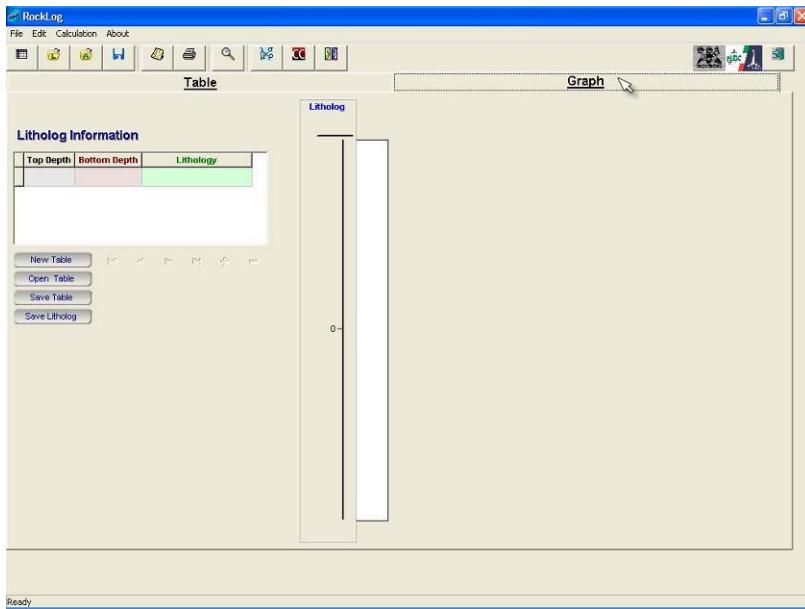


Program Pages

The program consists of two main pages which are Table and Graph pages. In Table page, file data are shown and in Graph page, related logs could be viewed.

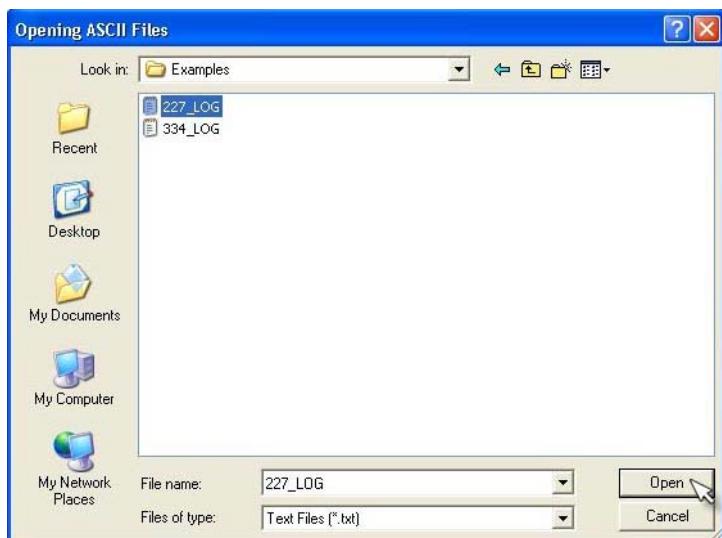
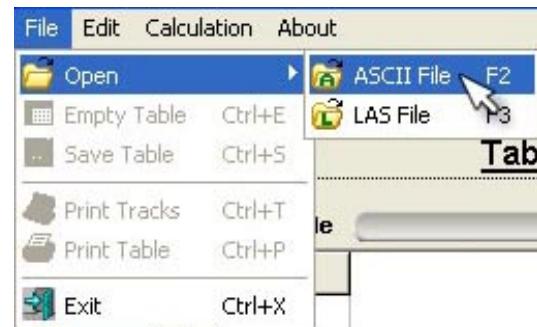


Graph page is shown below.



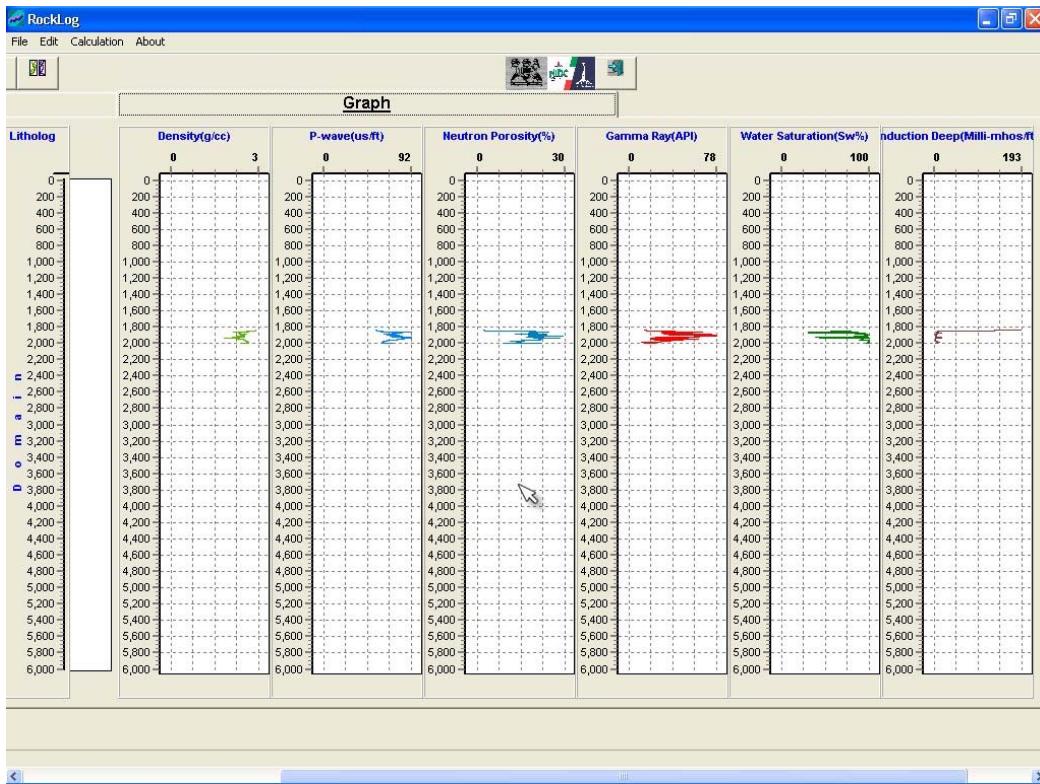
Open ASCII File

Now, we can open an ASCII file format by pressing ASCII button or F2 and LAS file format by pressing LAS button or F3. Also, we can open these files by selecting proper menu icon. Procedure to open an ASCII file is shown below.



Select the file you want to read and click on Open button.

Related logs could be viewed in the Graph page.



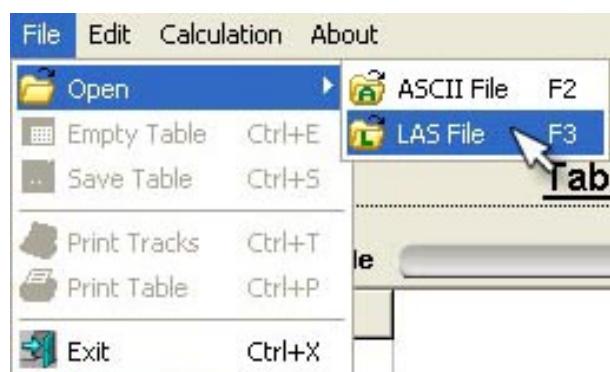
Empty Table

If you want to open another file, previous file should be closed. To empty table, press Empty Table button or **CTRL+E** or select File/Empty Table as shown below.

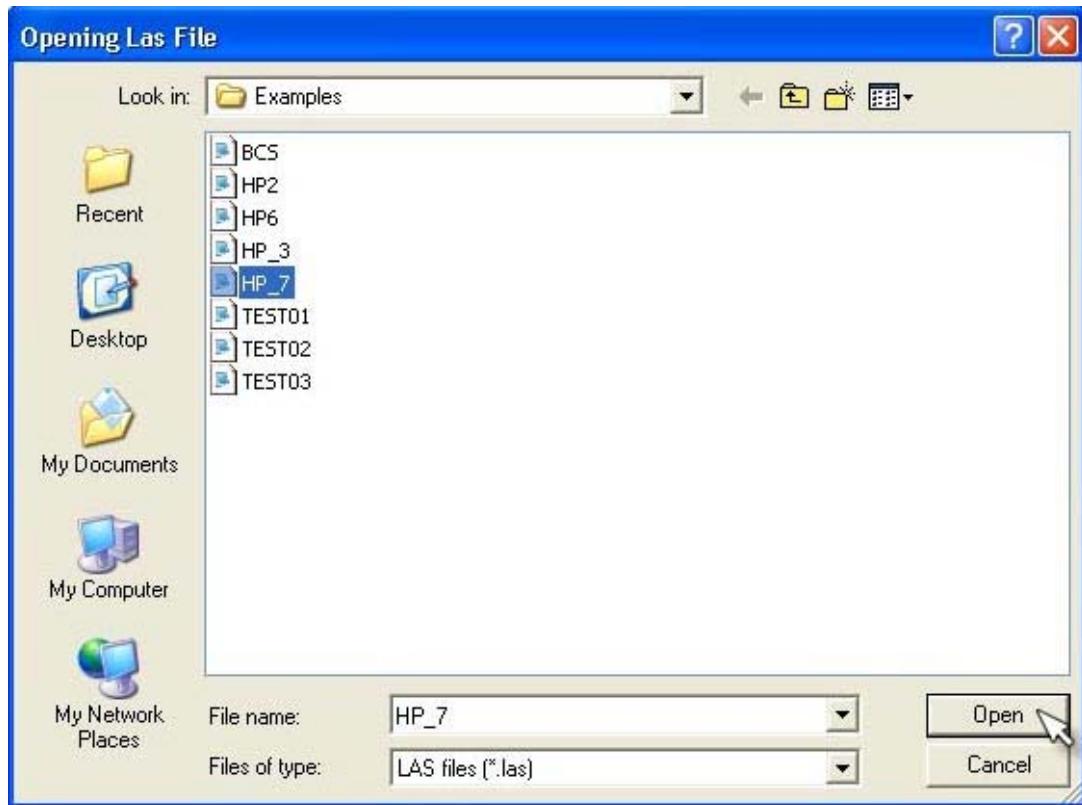


Open LAS File

Now, we can open another file. Let's try a LAS file. Click on the LAS file button or press **F3** or select File/Open/LAS File as shown below.



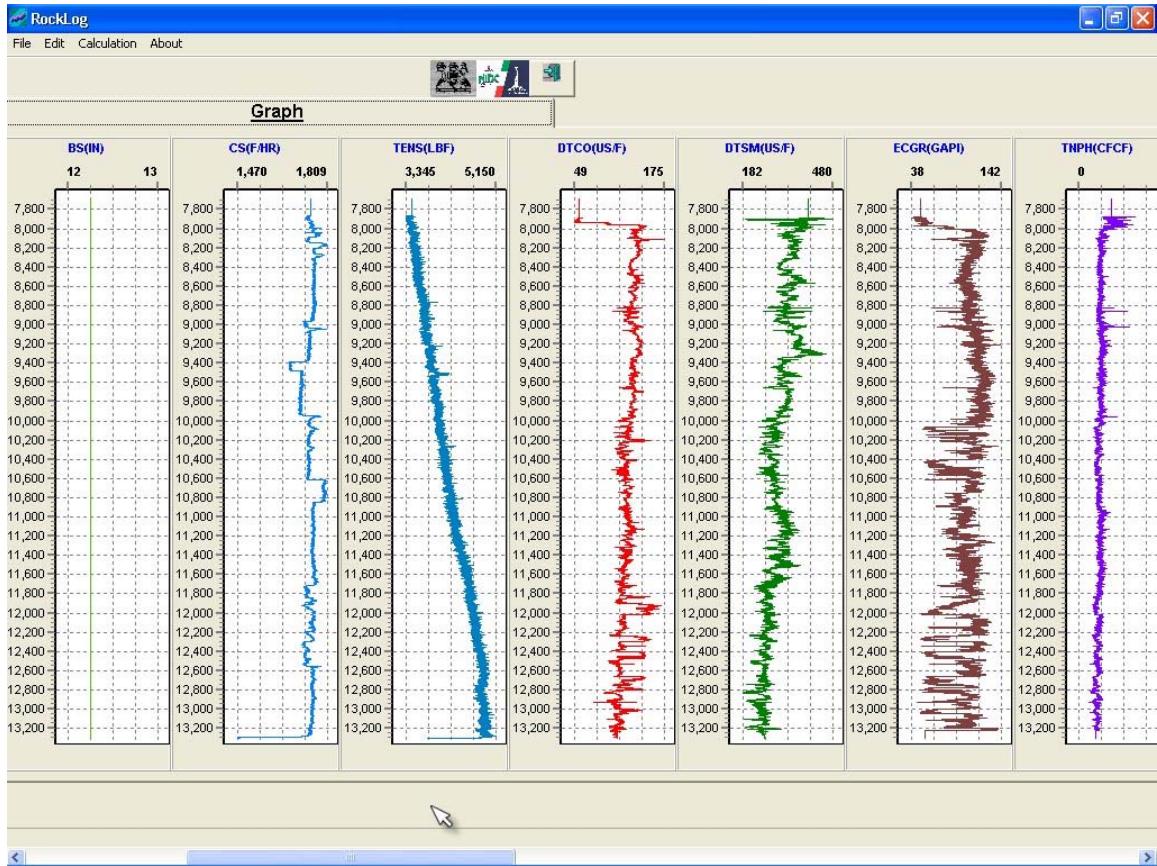
Select a LAS file and click on Open button.



File data are inserted into the source table.

Source Table									Graph		Correlation Coefficient
Filter	Rec. #	Columns Configuration									
		DEPT(F)	BS(IN)	CS(F/HR)	TENS(LBF)	DTCO(US/F)	DTSM(US/F)	ECGR(GAPI)	TNPH(CFCF)		
7672.0000	11273	13308	12.25	1481.0399	3924	109.2196	254.9077	53.848	0.3639		
13310.0000	11274	13308.5	12.25	1481.0638	3936	109.2196	254.9077	53.848	0.3639		
	11275	13309	12.25	1481.0912	3869	109.2196	254.9077	53.848	0.3639		
	11276	13309.5	12.25	1480.9482	3802	109.2196	254.9077	53.848	0.3639		
	11277	13310	12.25	1480.8721	3783	109.2196	254.9077	53.848	0.3639		

Now, click on the Graph page to see the logs.

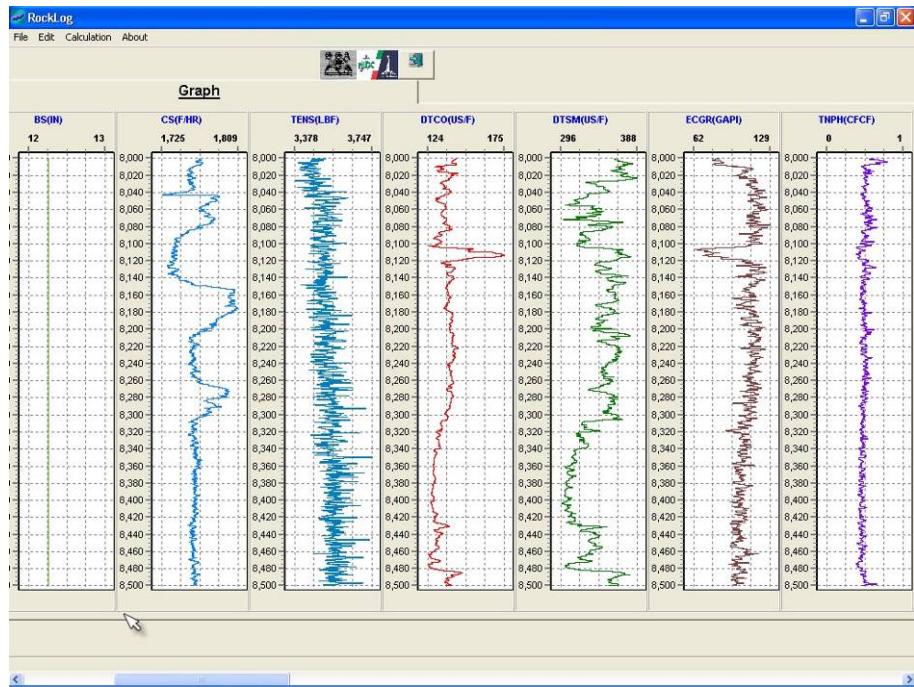


Filter Data

If logs have wide range, we can apply a filter on them so that range of data would be filtered. Logs data would also be filtered.



Logs after applying filter on data are shown below.

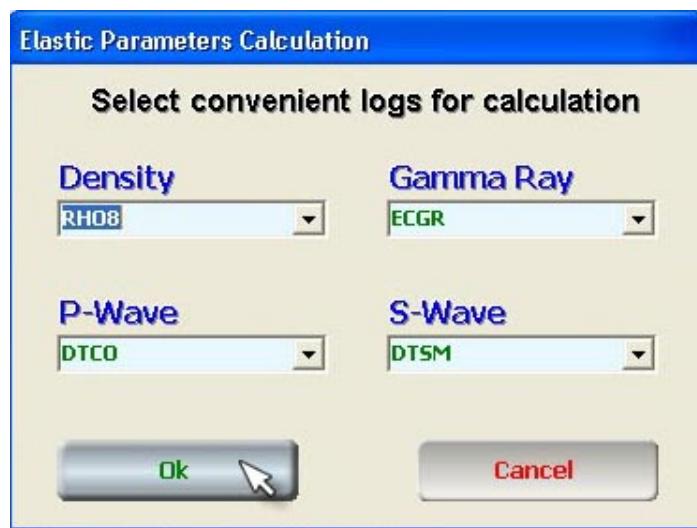


Elastic Parameters

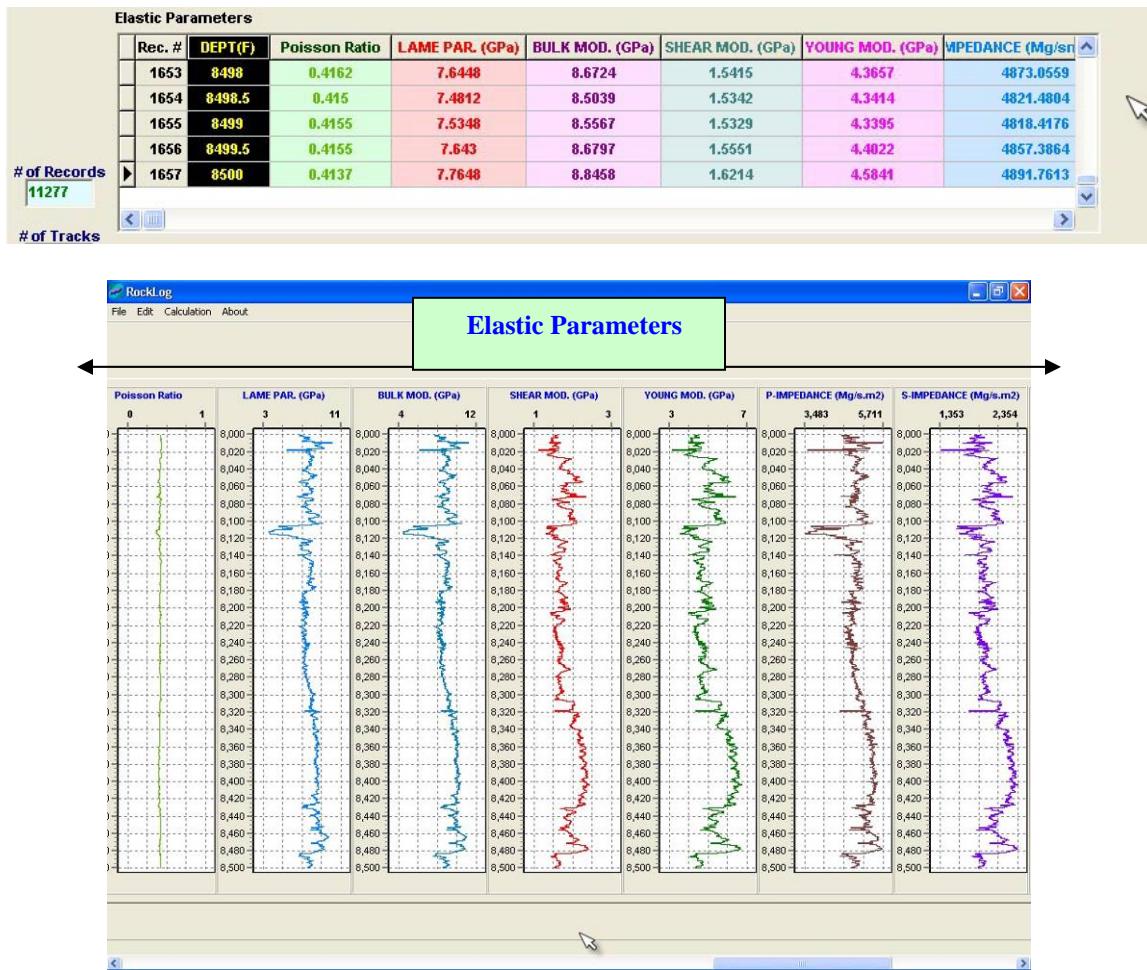
Now, we can calculate Elastic Parameters by pressing Elastic Parameters button or F5 or selecting Calculation/Elastic Parameters.



Now a dialog box would be opened so that we can select which density and DT logs to be used for calculation. Click on Ok to start calculation.



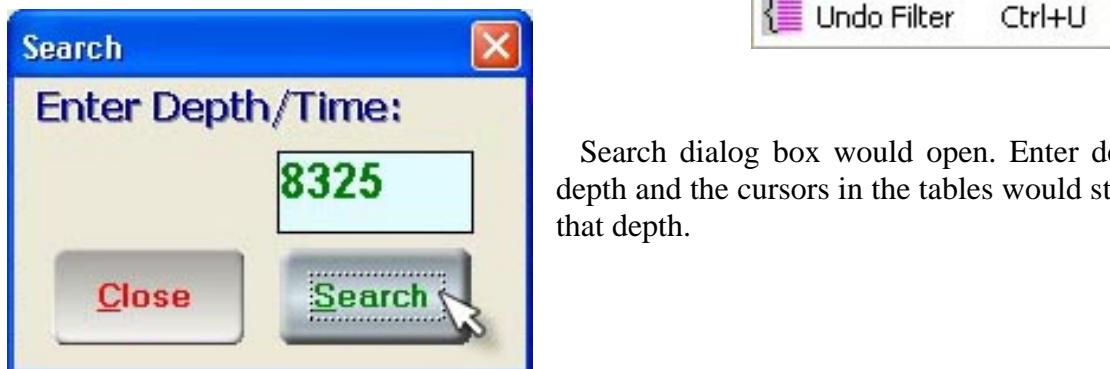
Elastic parameters would be calculated and related log models are added to the end of the Graph page.



Search

To find data of a specific depth, press CTRL+F or use Find option in the Edit menu or just click on the

Find button.



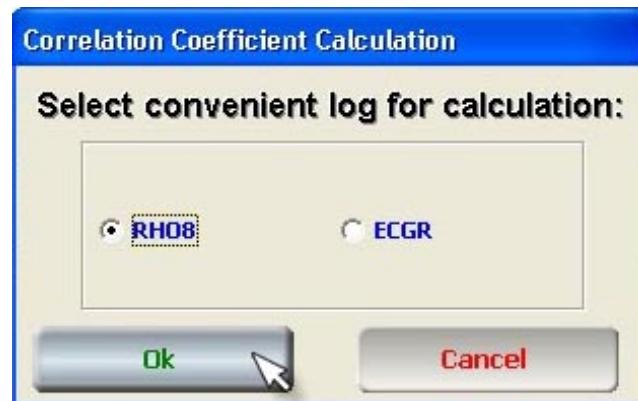
Search dialog box would open. Enter desired depth and the cursors in the tables would stop on that depth.

Correlation Coefficient

Now, we can calculate Correlation Coefficients for these logs. For this case, press CC button or F6 or select Calculation/Correlation Coefficient.



Correlation Coefficient dialog box would be opened. In this dialog box, we can select which log to be used as the reference for calculation.



Calculation results are shown at the right side of the tables. Use scrollbars to scroll down and see other values.

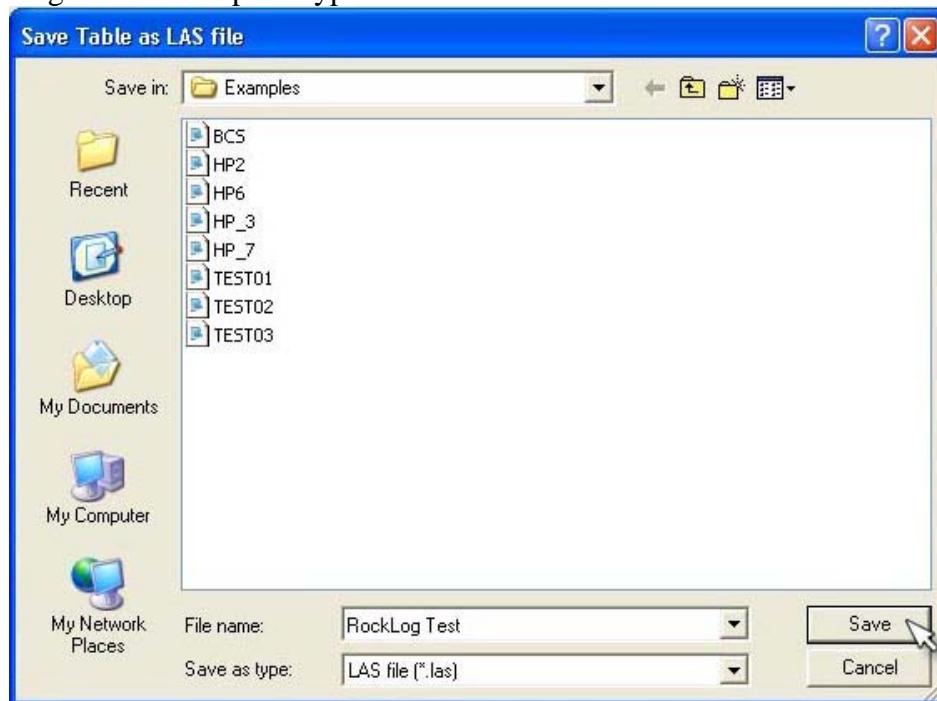
Reference:	RHO8
BS	0.9997
CS	0.9997
TENS	0.9996
DTCO	0.9978
DTSM	0.9969
ECGR	0.9958
TNPH	0.9941
GDEV	0.6508
TVDE	0.9997
AHO10	0.9676
AHT20	0.9405
AHT30	0.9597
AHF60	0.9773
AHTCA	0.9997
RXOI	0.6444
HCAL	0.9975
HDRA	-0.9428
PEF8	0.9897
RHO8	1.0000
Poisson Ratio	0.9994
Lame Constant	0.9960
Bulk Modulus	0.9962
Shear Modulus	0.9912
Young Modulus	0.9918

Save Table

To save Elastic parameters data in a LAS file, select File/Save Table or press Ctrl+S or click on the Save button .

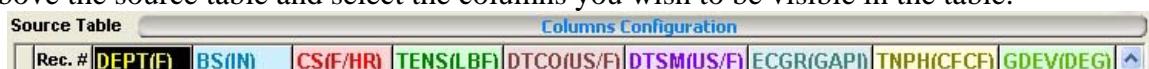


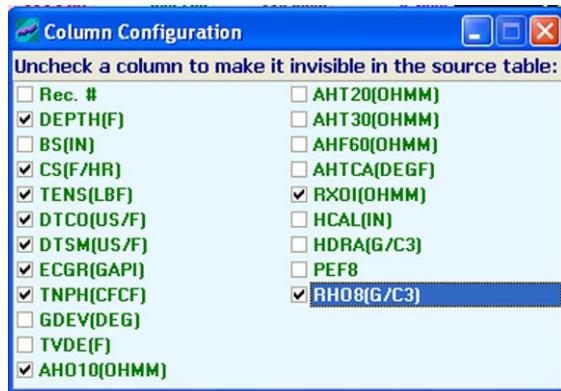
Save dialog box would open. Type a name for the file and click on the Save button.



Print Tables

To print source table, it is better to select desired columns to be printed if the width of the table is greater than the paper width. To do so, press Column Configuration button above the source table and select the columns you wish to be visible in the table.

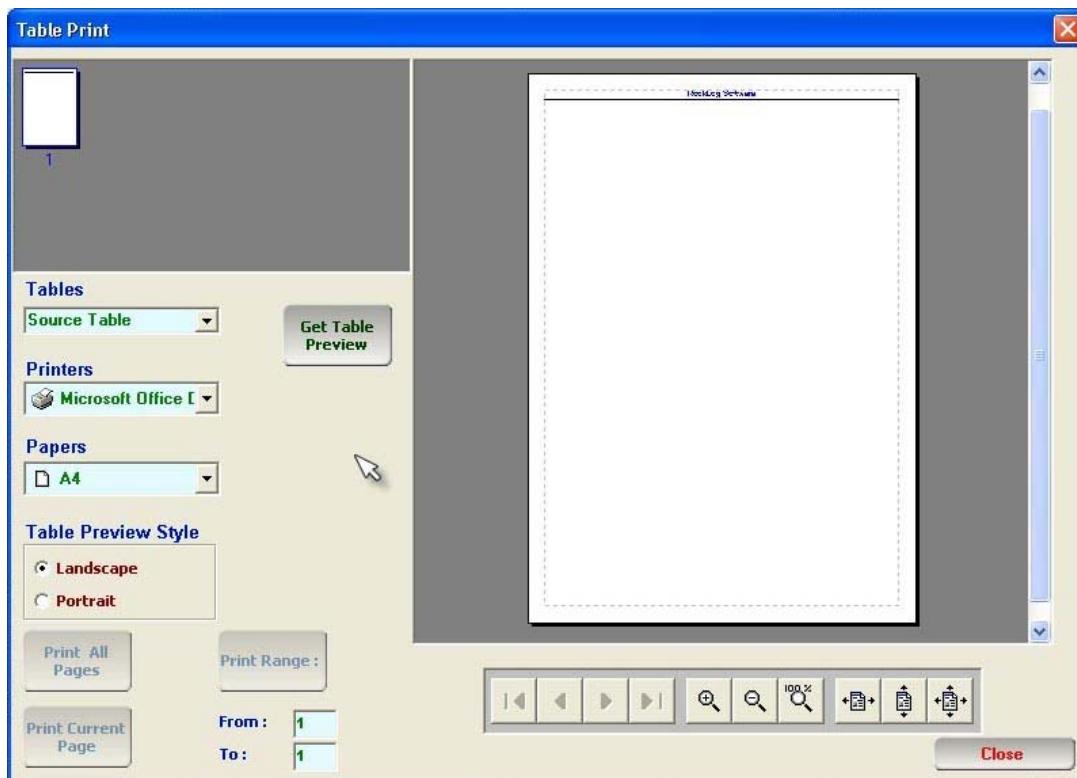




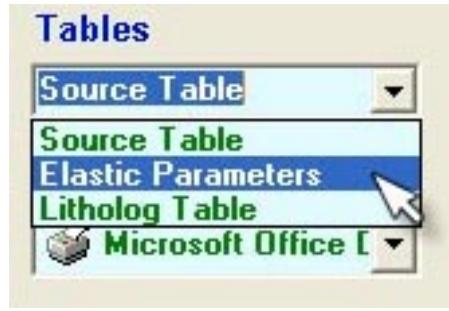
Now, we can print tables. To do so, select File/Print Table or press Ctrl+P or click on the Print Table button .



Table Print page would open.



Select which table you want to print.



Select printer, paper type and preview style and then click on Get Table Preview button.

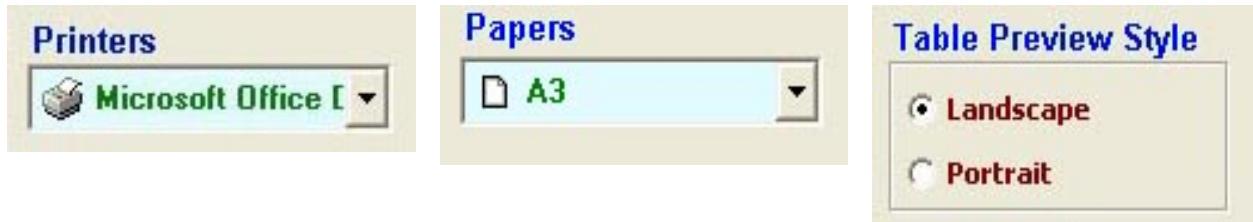
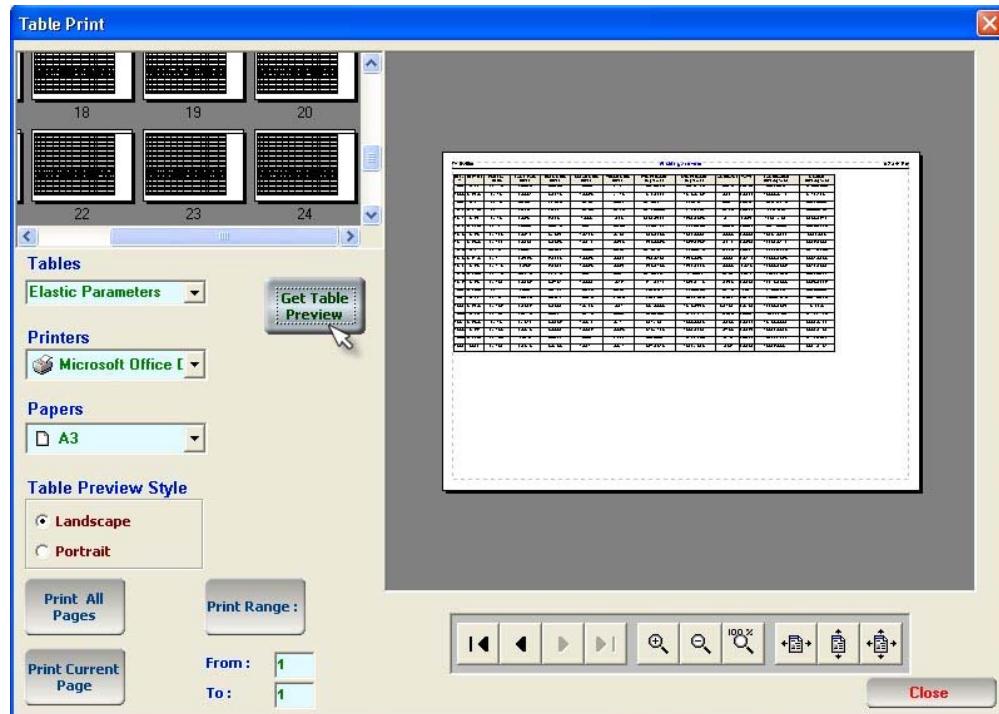


Table preview is shown.



There are three print options:

- Print All Pages: Prints all the pages.
- Print Current Page: Prints the current page in the preview box.
- Print Range: Specifies a range of paper numbers for printing.

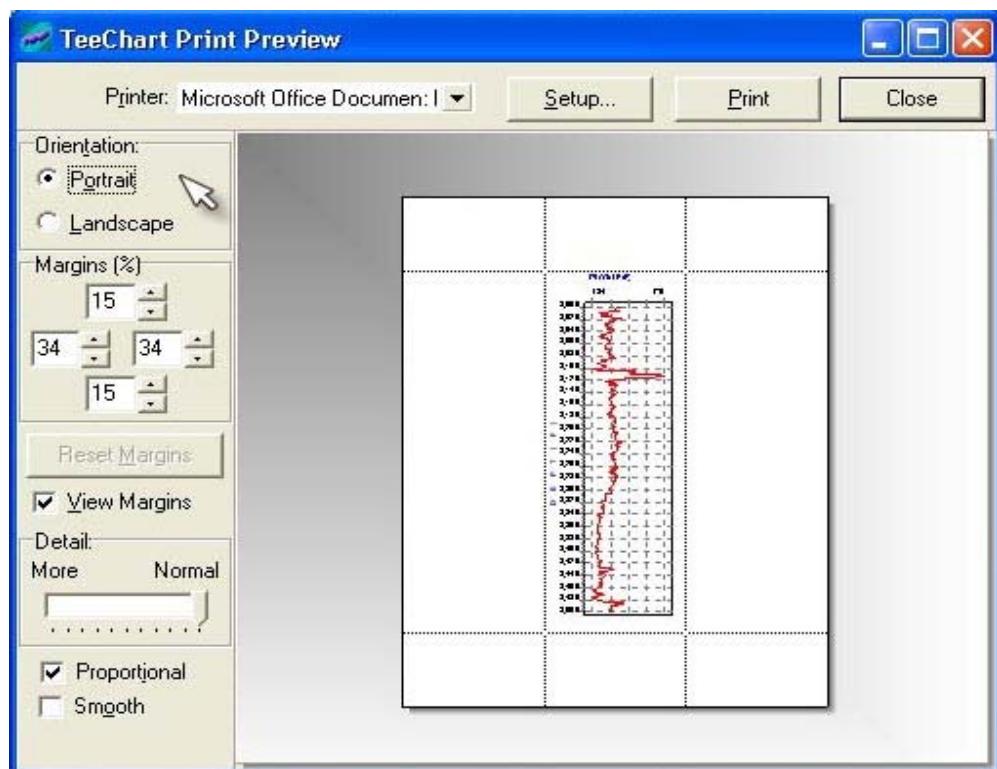
Click on the Close button to come back to the main page.

Print Track

To print each log, a popup window is provided. Right click on any track so that the popup window would open.

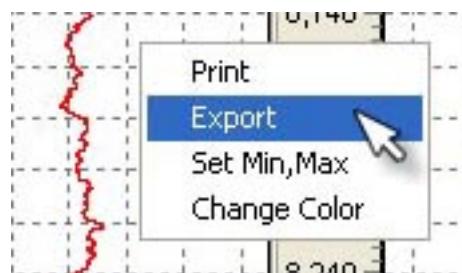


Click on Print option so that the print preview page would open. Click on Print button to print the log.

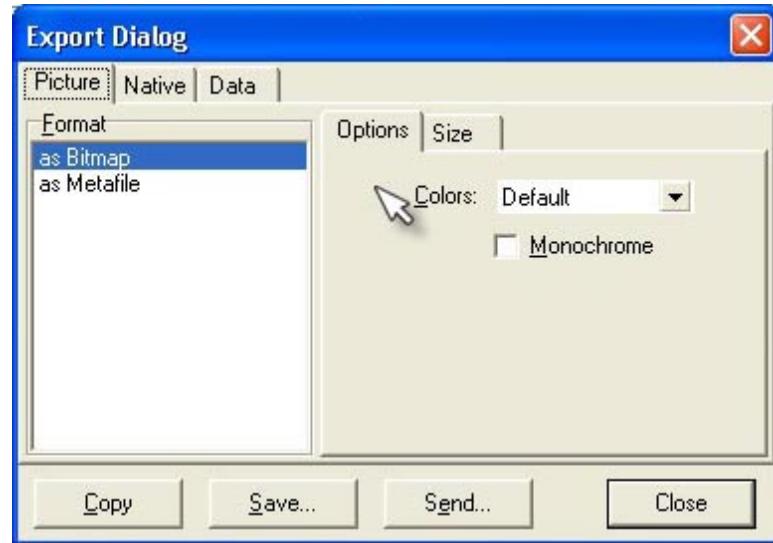


Export Track Data

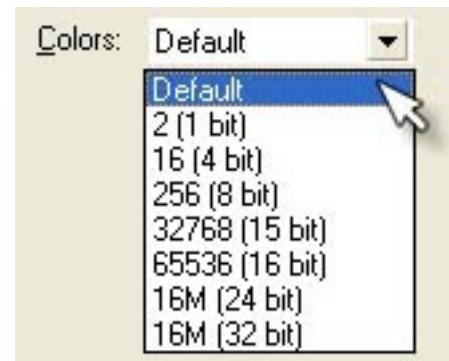
Other options of the popup menu are Export, Set Min, Max and Change Color. Click on Export option so that Export dialog box would open.



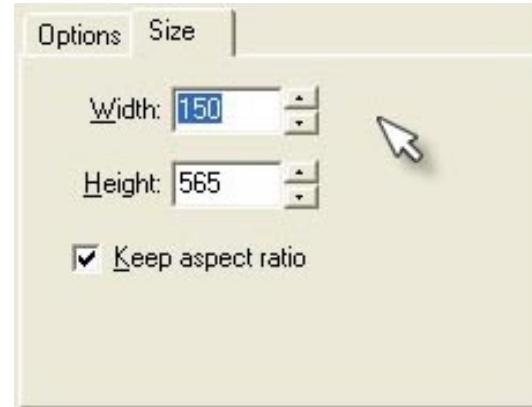
Export page consists of three pages which two of them are more important. In the Picture page, we can save the log in either Bitmap file or Metafile.



Number of colors could be changed.



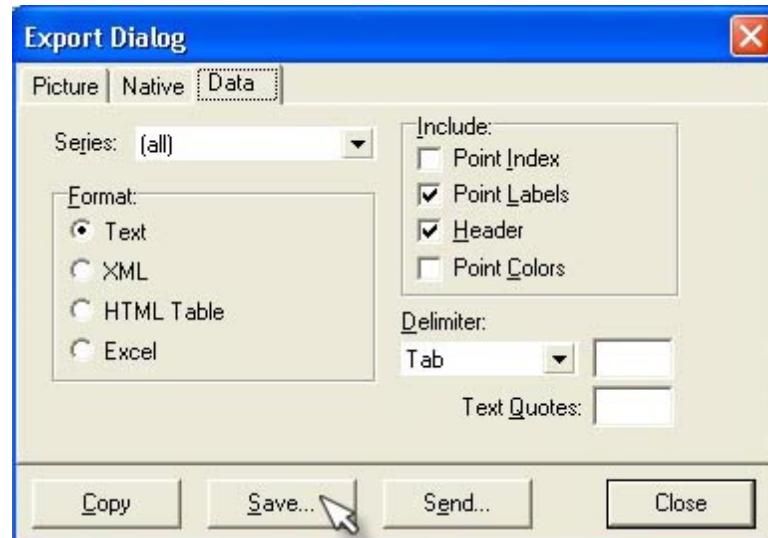
Also, size of the picture may be changed.



In the Data page, log data could be exported as various file formats including:

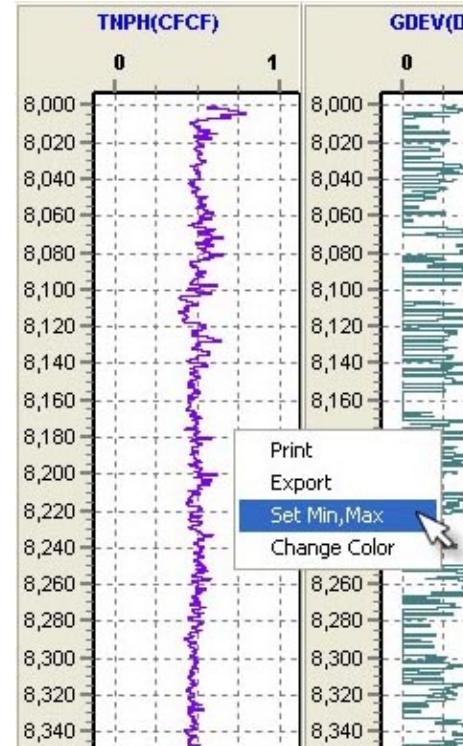
- Text file with delimiter
- XML
- HTML Table
- Excel

Press Save button to save the track data.

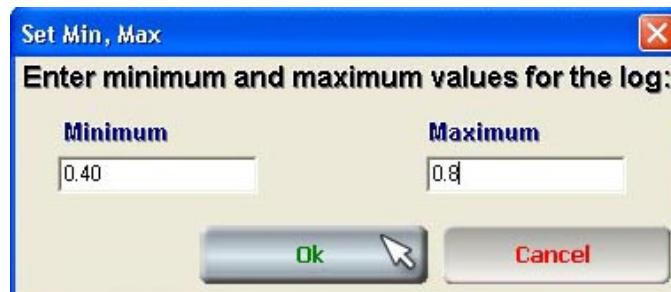


Change Minimum and Maximum

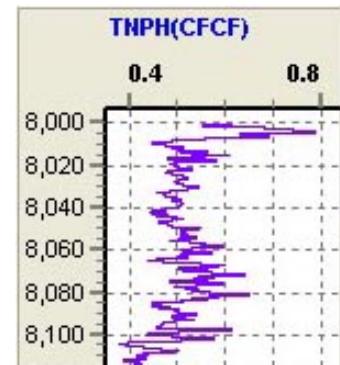
If you want to change the default minimum and maximum of a log, use Set Min, Max option in the popup window.



Set Min, Max page would open. Type desired range and press Ok to apply the range specified.

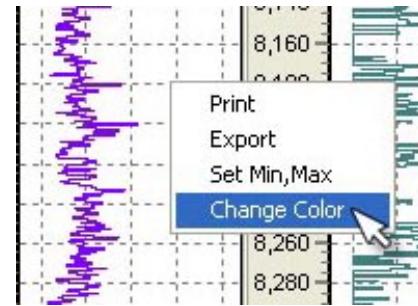


The track after changing its range is shown below.



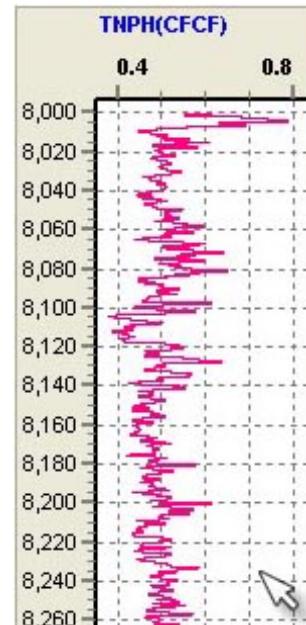
Change Log Color

To change color of a log, use Change Color option in the popup window.



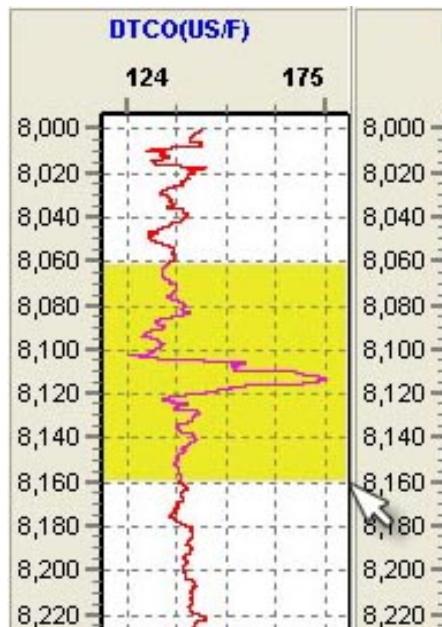
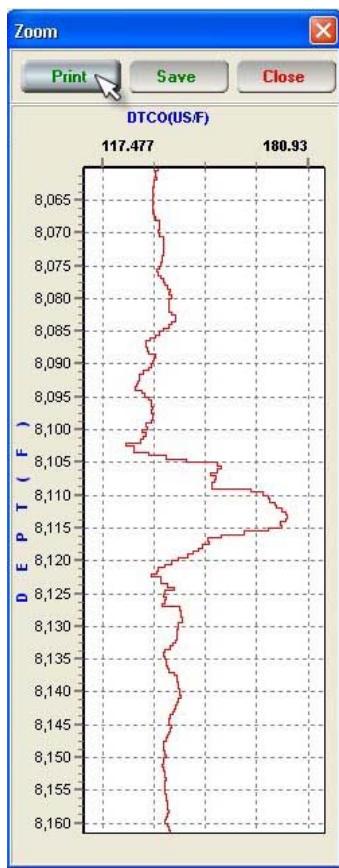
Color box would open.

Select desired color and press Ok button to change the color.



Zoom

If you want to zoom a part of a log, hold down left mouse button and drag it down-right so that the yellow zoom box would appear.



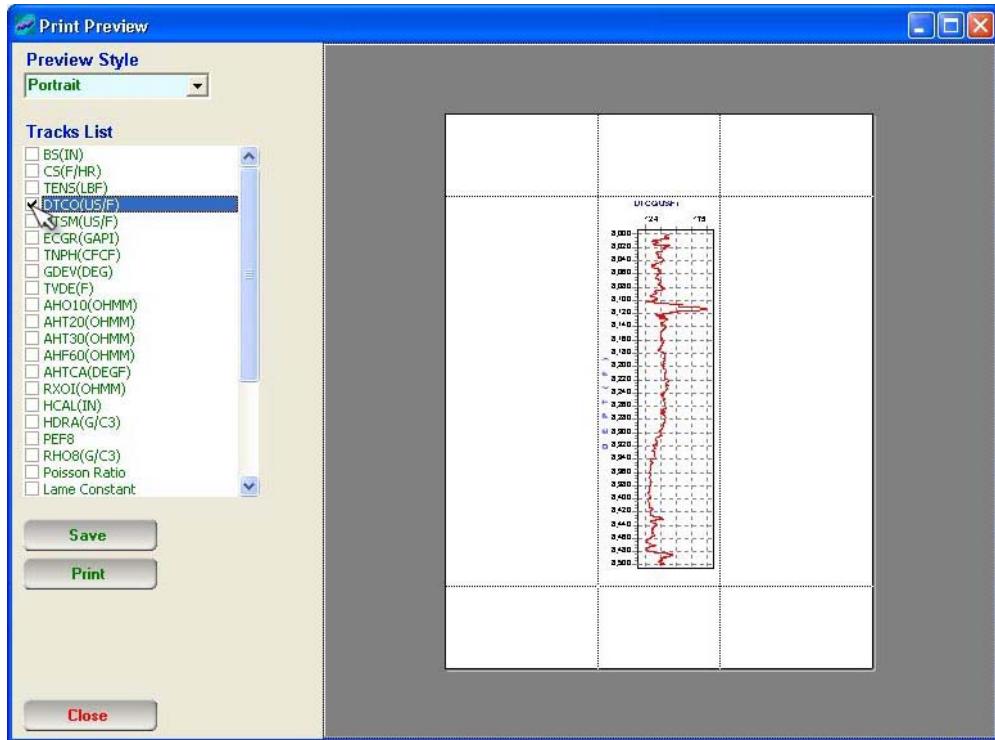
Release mouse button and the zoom page would open. Zoom page log could be either printed or saved as a Bitmap file.

Print a Number of Tracks

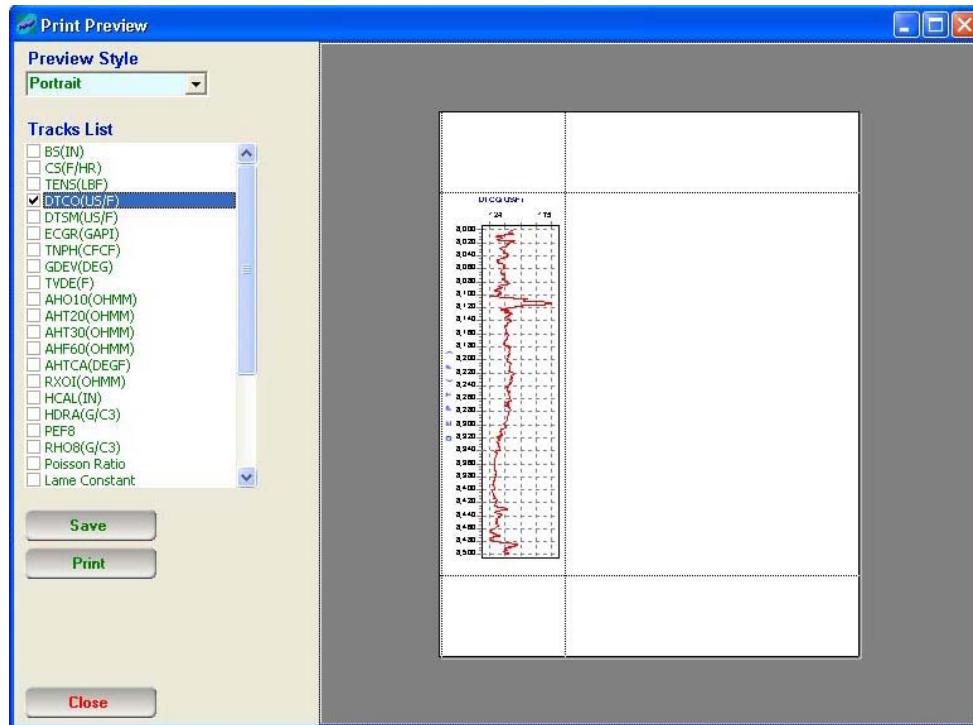
To print more than one log in one page, press Print Tracks button  or Ctrl+T or select File/Print Tracks.



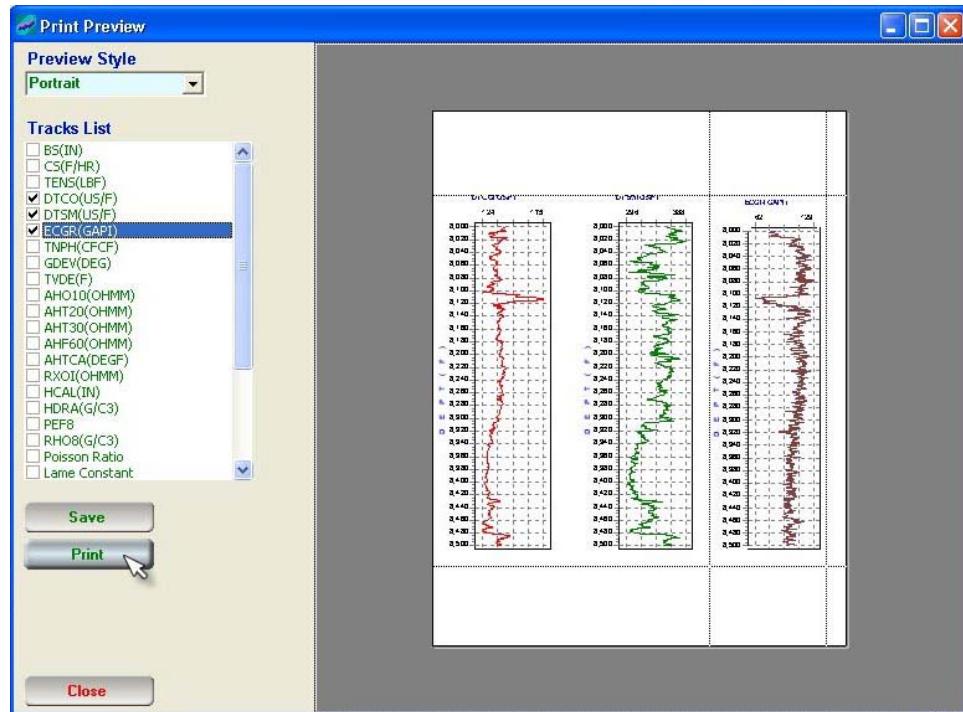
Select logs that you want to print.



Having selected a log, we can move the log preview by holding down the left mouse button on it and dragging.



Select desired logs and press Print button to print the logs. To save the preview image as a bitmap file, click on the Save button.



Elastic Correlations

There are some combination logs to be used for interpretation. To see these logs, press Elastic

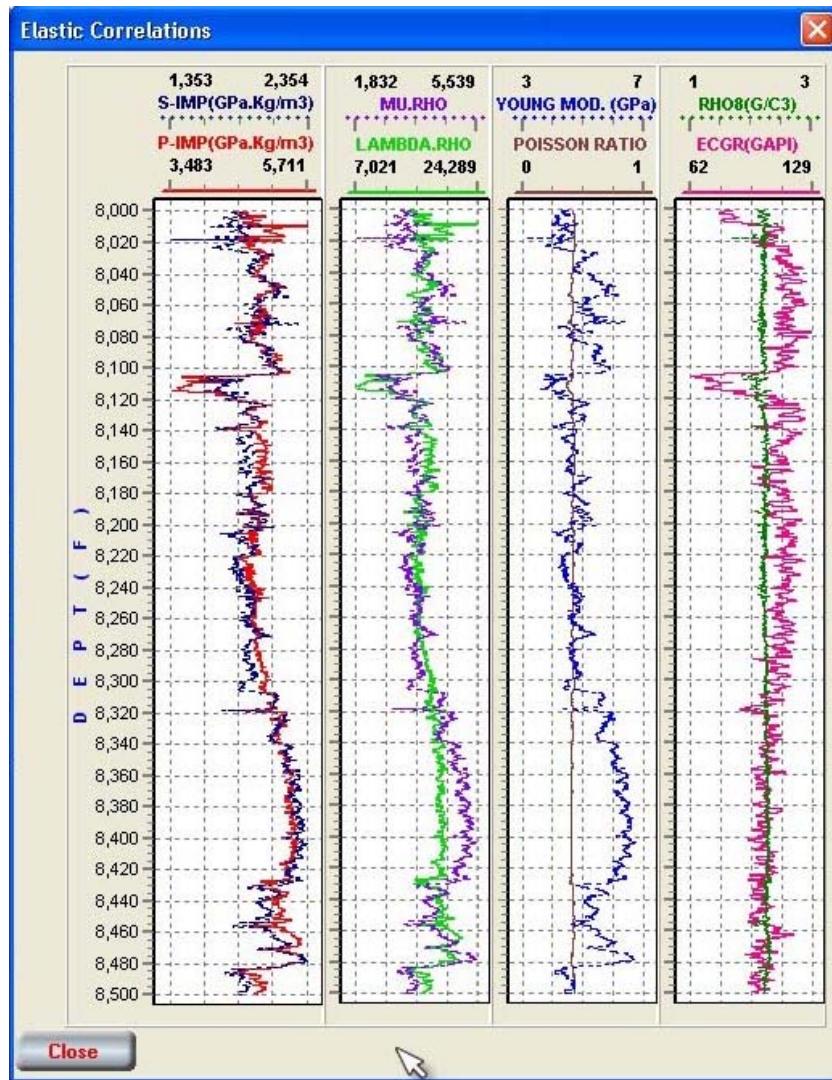
Correlations button  or F7 or select Calculation/Elastic Correlations.



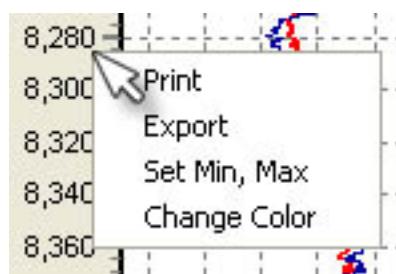
A box would open that we can select which density and gamma ray log to be used in the combinations logs.



Click on Ok button to see the combination logs.

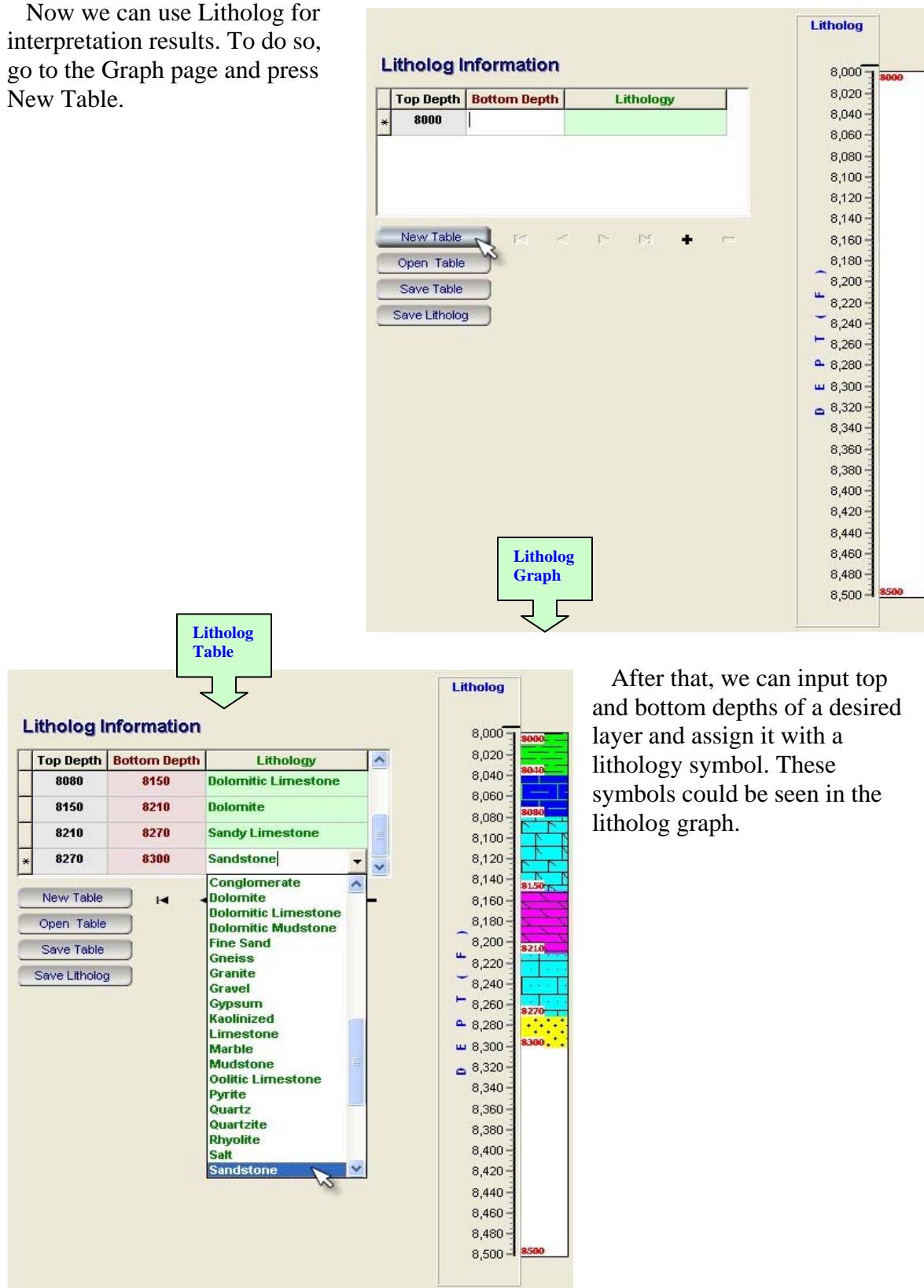


Changing minimum and maximum, printing, exporting and changing color are also available for these logs via popup menu.



Litholog

Now we can use Litholog for interpretation results. To do so, go to the Graph page and press New Table.



After that, we can input top and bottom depths of a desired layer and assign it with a lithology symbol. These symbols could be seen in the litholog graph.

Litholog information table may be saved as an ASCII file. This file may be used in future to insert data into litholog table. To save the table, click on Save Table button.

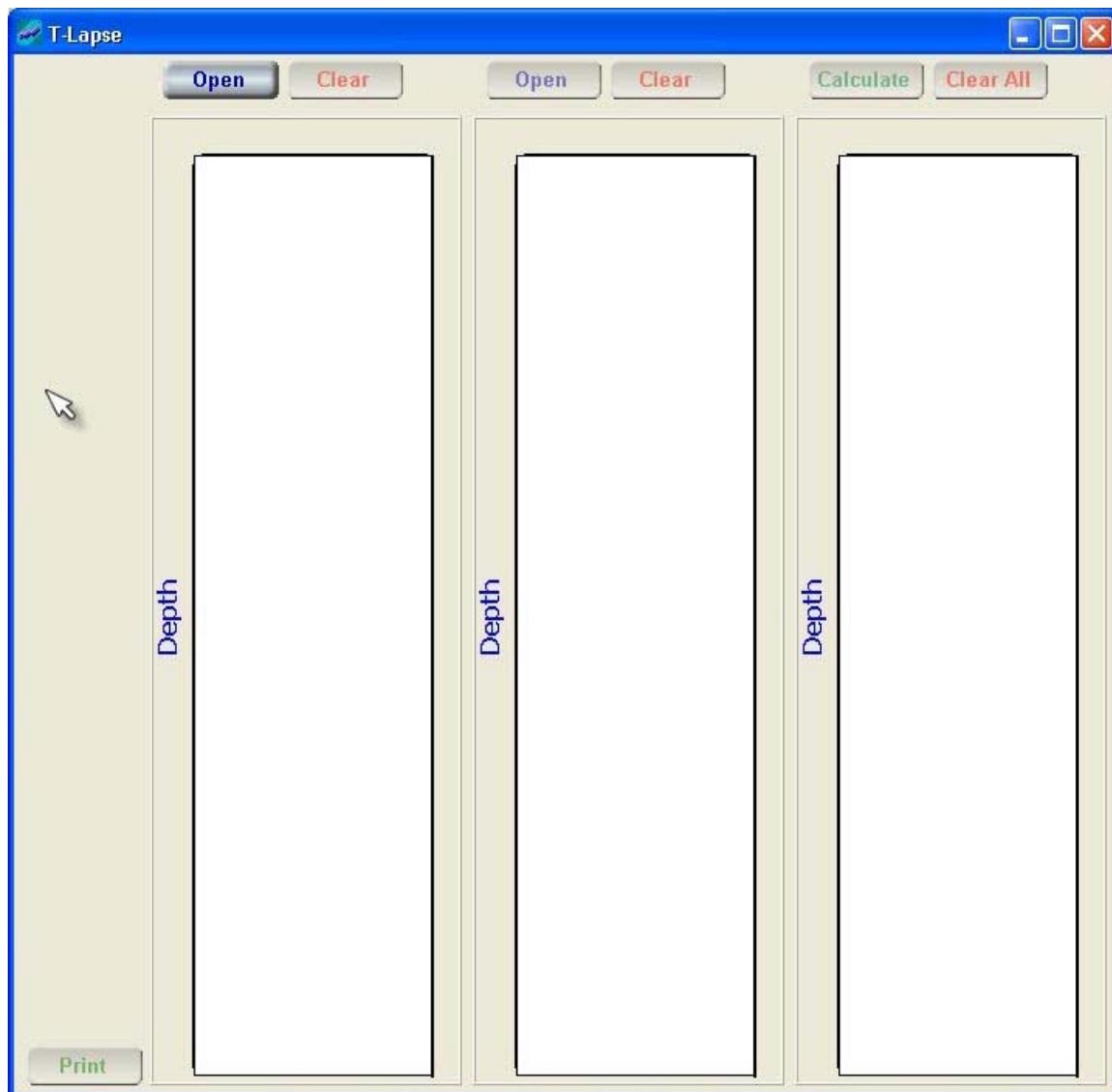


To save Litholog image, click on Save Litholog button.

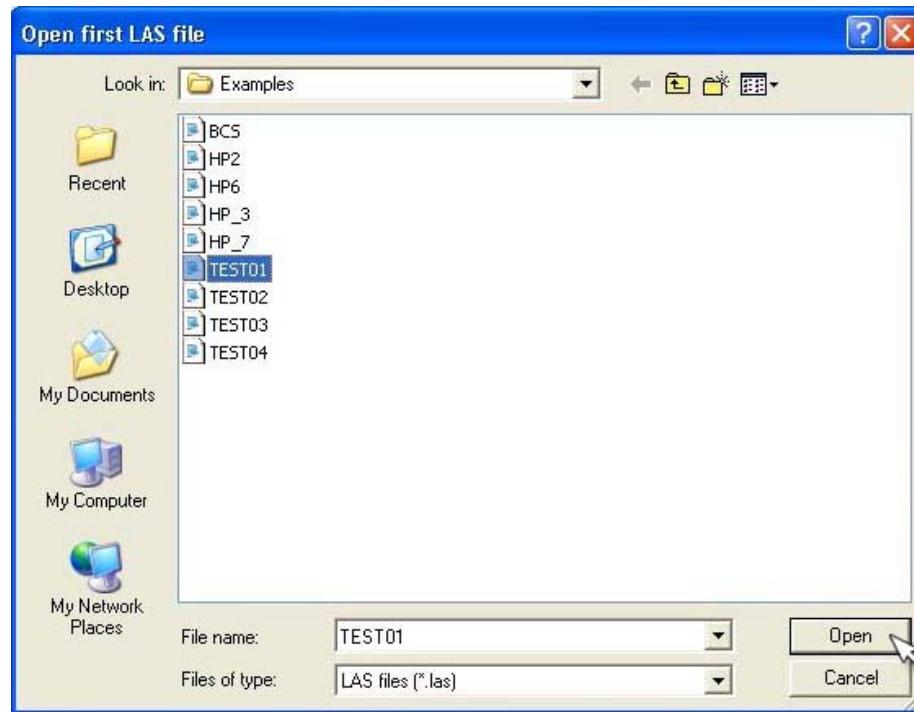


T-Lapse

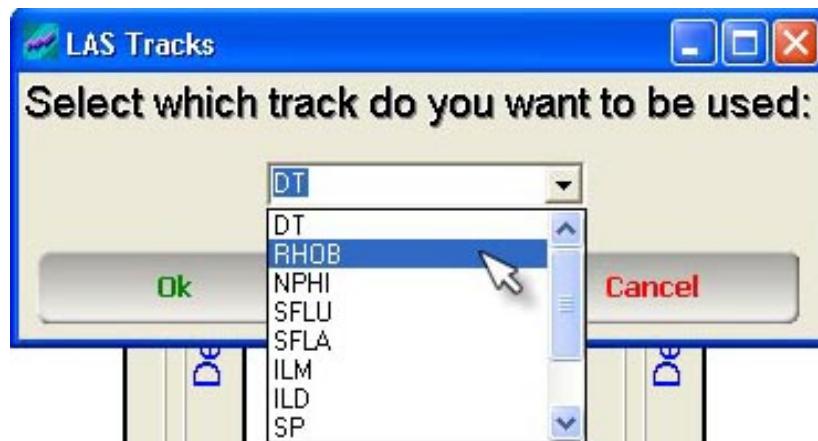
To compare two logs with each other, T-Lapse page is provided. Select Calculation/T-Lapse  or press F8 to open the T-Lapse Page.



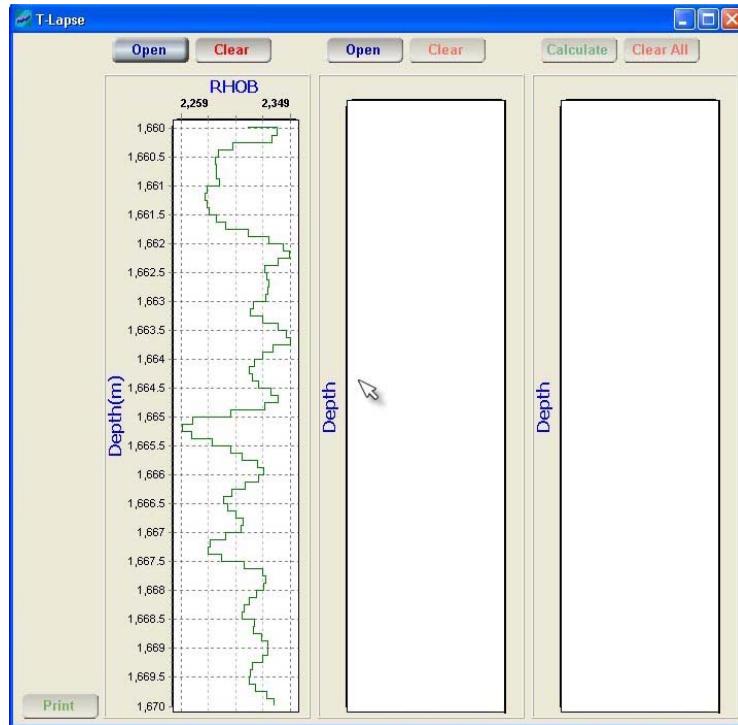
Press Open button above the first log to select first file.



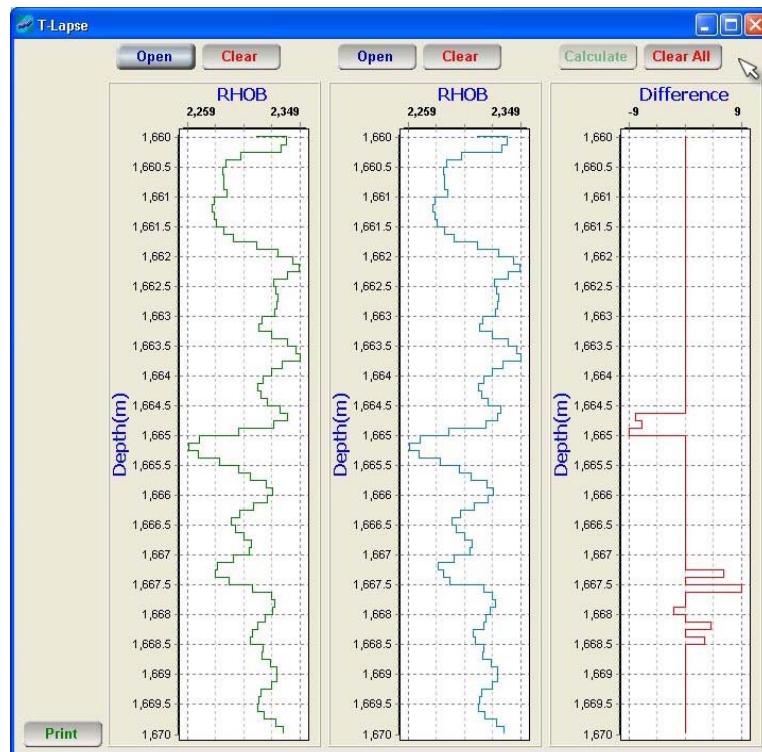
Now select which log you wish to read.



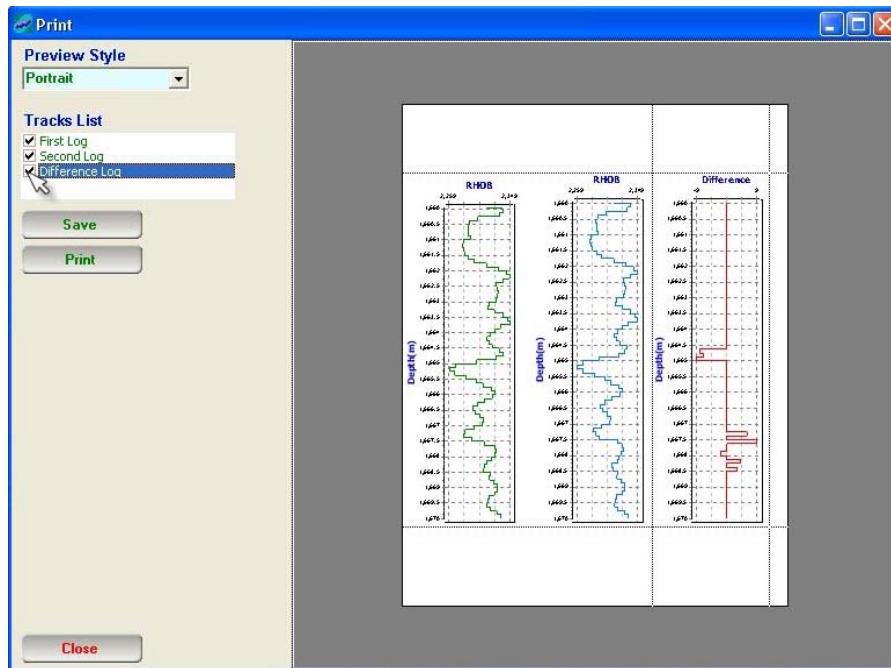
Log data are inserted into the track.



Repeat the previous procedure for the second file. At last, click on Calculate button to calculate differences between them.



To print the three logs, click on Print button and Print page would be shown.



Exit

To exit the program package, press Exit button or Ctrl+X or select Exit icon from File menu.

