

WellCAD™ 5.4 - release fact sheet

Highlights

New in FWS Processing

- Velocity Analysis Workspace
- complete review of the FWS Module

New in ISI & CoreCAD

- Core Shifter Workspace : depth match core to log data and reorient core image & structure data

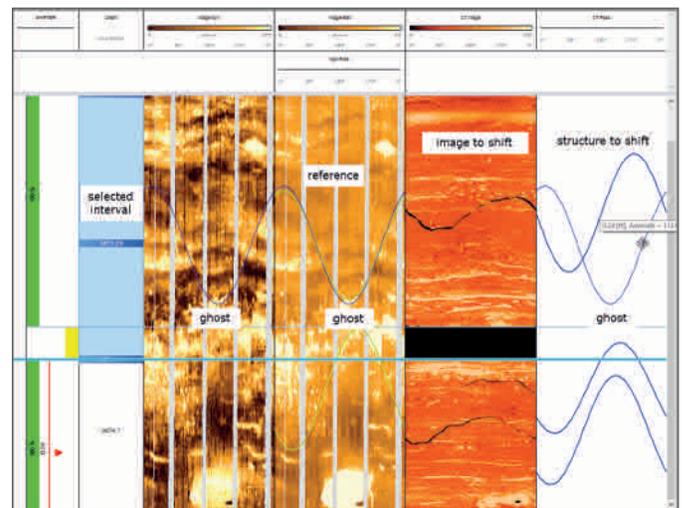
New in WellCAD Basic

- Dynamic Depth Scaling
- Most Frequently Used Menus,
- Tool Model Repository and more ...

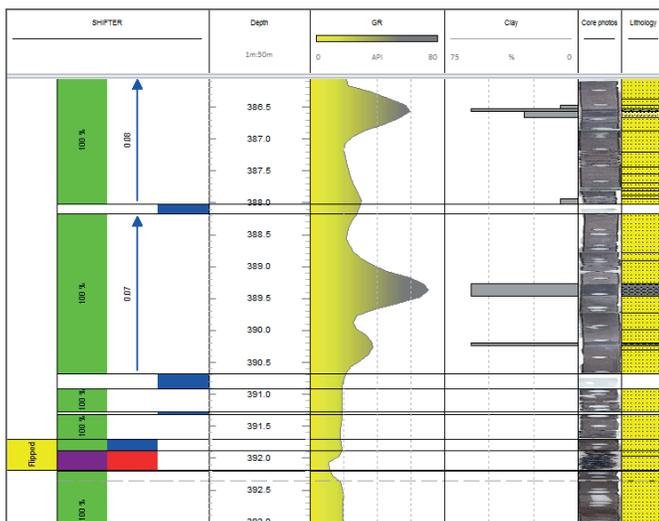
Core Image & Structure Reorientation

Reorient images and structure picks easily to reference images and picks. Use this new capability of the Core Shifter to close the gap between core and wireline log data. Combine the reorientation with a detailed depth match.

- Rotate CT or 3D core scan images to reference picks and images.
- Reorient structure and breakout picks.
- Import or add discontinuities interactively to rotate intervals of the same orientation.
- Combine rotation and depth shift in a single step.
- Adjust core to borehole caliper settings to make the sinusoids comparable.
- Correct Alpha & Beta angles to Dip and Dip Azimuth.
- The functionality is part of the Core Shifter and available with the ISI and CoreCAD add-on modules.



Drag the image or structure to align ghosts of it with the reference image / structure. The reorientation and depth shift will be applied to the entire selected interval.



Example of the Core Shifter workspace. The SHIFTER log (left) tracks and displays the different depth adjustment steps applied.

Core Shifter Workspace

Embedded in a comfortable workspace core and core related data can be depth matched to reference logs. Managing discontinuous and continuous core sections bulk shifting, expansion/compression and even depth reversals can be performed on an interval basis respecting consolidated core sections.

- Import or enter discontinuities to separate the data intervals to be shifted.
- Free selection of logs to be used as reference and to be shifted. All WellCAD log types are supported.
- User defined criteria to limit depth matching operations (e.g. warns when overwriting existing data).
- Visual and digital tracking of manipulations applied to the data.
- The Core Shifter is part of the ISI and CoreCAD add-on modules.

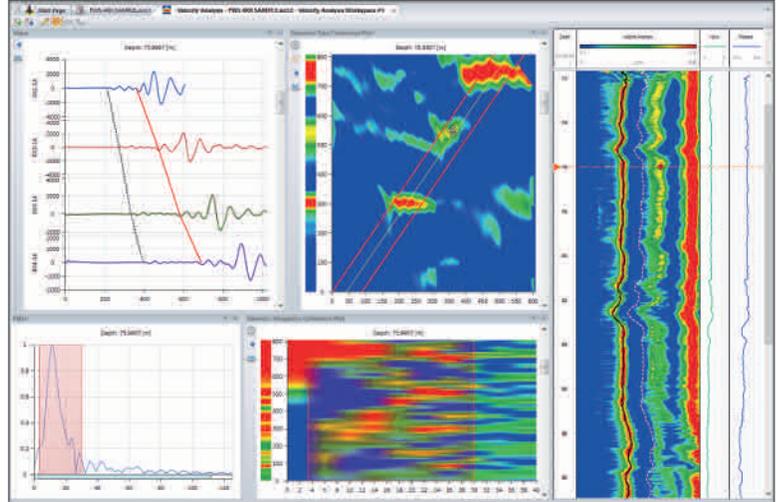


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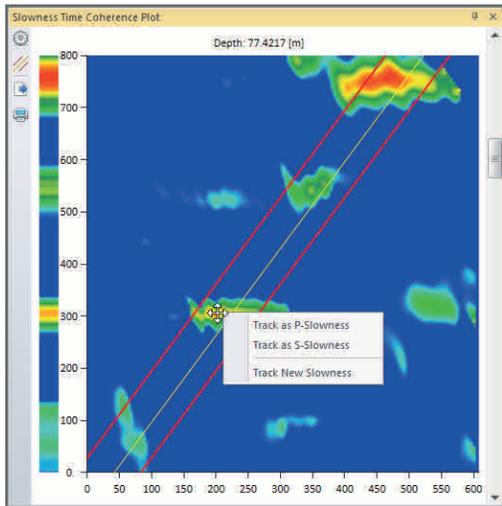
Velocity Analysis Workspace

The new workspace keeps the user in control of the Velocity Analysis process through dynamically linked diagrams and immediate result feedback. The waveform slowness can be picked correctly and in a time efficient and user friendly manner.

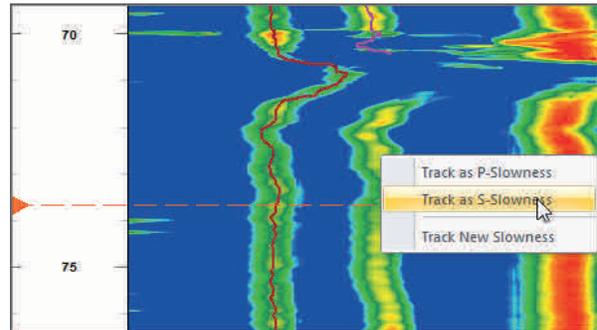
- Waveform view with superimposed waveform intercept time indicators.
- Frequency filter option.
- Dynamically linked Slowness-Time-Coherence diagram
- Increased performance
- Result feedback in Slowness-Coherence log.
- Included in the FWS Processing add-on module.



Waveform viewer, interactive Slowness-Time/Frequency-Coherence plots and a Filter option support the computation of the Slowness-Coherence log and picking of the waveform slowness.

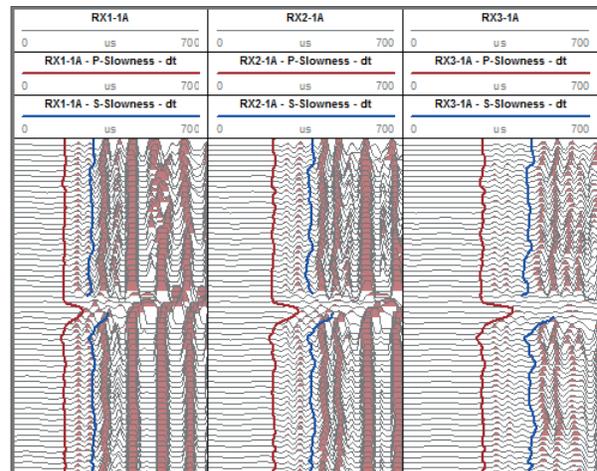


Commence picking directly from the STC diagram.



Use the Magic Pen or run the Slowness Tracking to pick the waveform slowness curves.

- Slowness-Time-Coherence diagram with mud-line and interactive tools to control performance and slowness picking.
- Smart automated, semi-automated and manual picking of waveform slowness.
- Quality control through Vp/Vs, Poisson's Ratio and Min Shear Wave curves.
- Export of all results including intercept times of picked waveforms.



Export the intercept times of the identified waveforms.

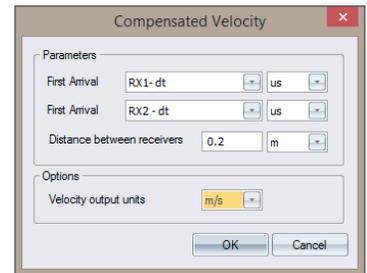
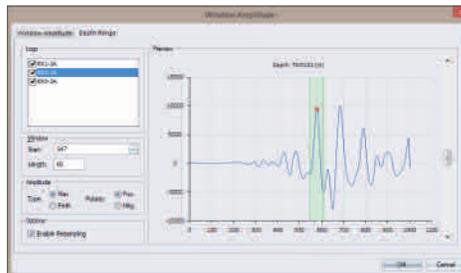
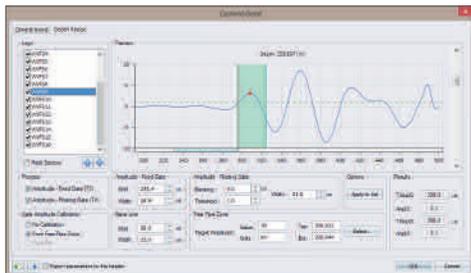
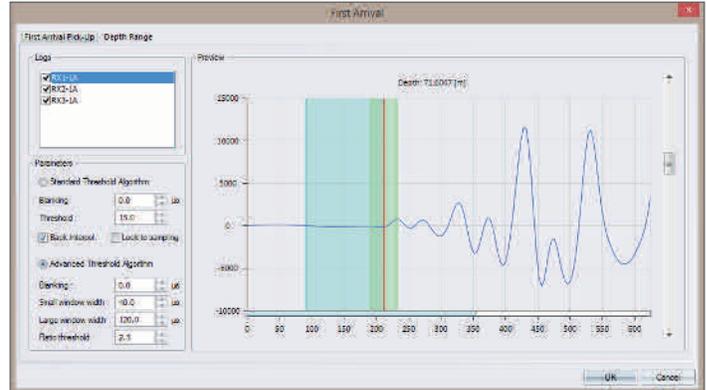


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FWS Module Review

The reviewed FWS processing module presents the user with newly designed dialog boxes and enhanced functionality.

- Result previews are shown to optimize the processing parameters.
- Interactive adjustment of processing parameters.
- Simultaneous processing of multiple receivers.
- Enhanced cement bond processing options (cement maps from RBT, calibration options, direct export or processing and calibration parameters to the document header).



Filter, Cement Bond and Extract Window Amplitude are just some of the dialog boxes which have been redesigned.

Dynamic Depth Scaling

To quickly change the depth scale you can now use the mouse wheel. Hold down the SHIFT key and scroll with the mouse wheel to change the depth scale of the document or workspace you are working on.

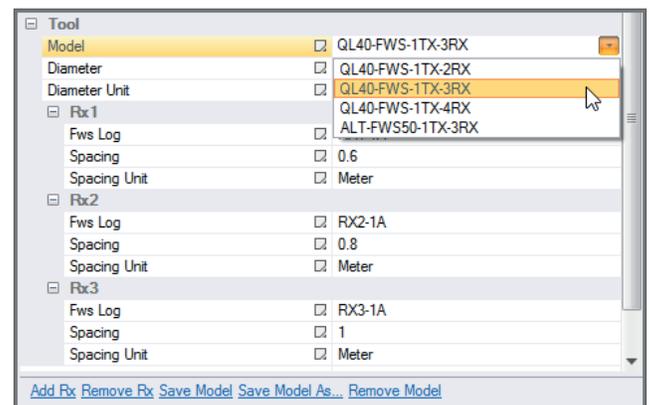


Hold down the SHIFT key and use the Mouse Wheel to change the depth scale dynamically

Tool Model Repository

Filling tool specific parameters into dialog boxes is easier than ever. Just select a tool model and the tool characteristics will be loaded from the tool model repository.

Tool models can easily be edited, amended and added to match different tool brands log title preferences.



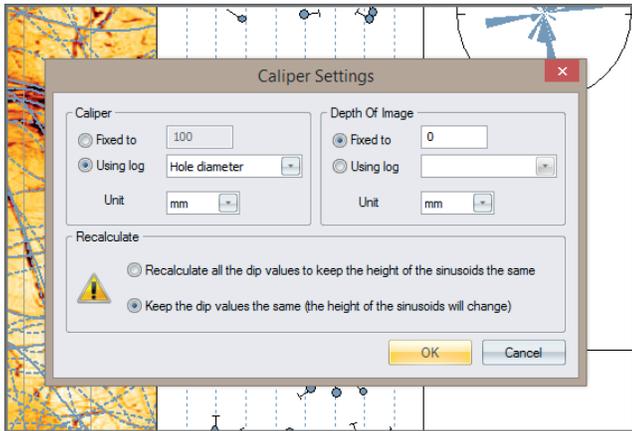
Select a tool model to initialize the parameters of a dialog box



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Caliper Settings

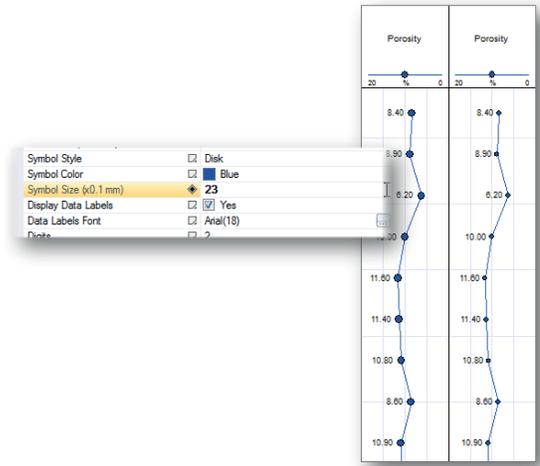
A more intuitive dialog box to predict the impact of changing the caliper settings for a Structure or Breakout Log has been added to log properties bar and ISI workspace.



More transparency to what happens when the caliper settings change

Mud Log – Symbol Size

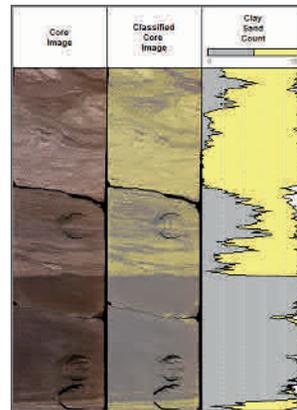
Use the Symbol Size property of the Mud Log type to control the extension of the data points when displayed in Symbol Style.



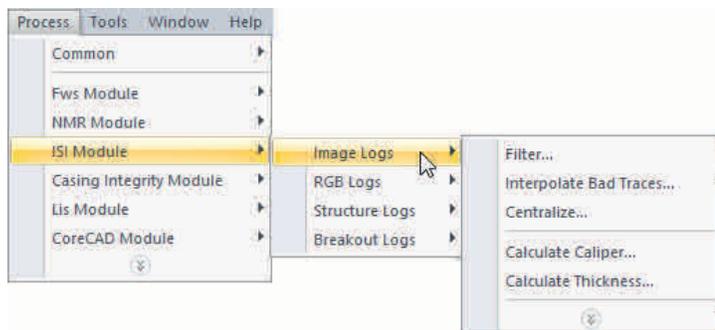
Color Classification in CoreCAD

The incorporation of core images like CT Scans and core photos into the interpretation workflow has seen an increased interest. Therefore the Color Classification process which was originally released as part of the ISI add-on module is now part of the CoreCAD add-on module as well.

This easy to use and intuitive process can for example be used to derive sand-shale fractions from a CT or optical scans within seconds.



Original optical core photo (left), classified image (middle) and resulting percentages for sand and shale (right).



Most Frequently Used Menus

Menus will now show the most recently used commands first. After selecting a command a couple of times it will automatically be added to the default menu.

The menus of all workspaces have been revised as well to display more sensible options.

