

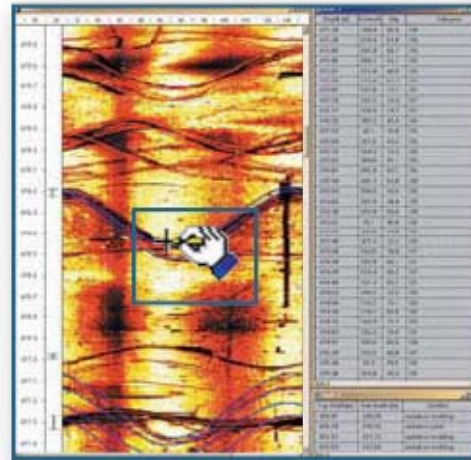
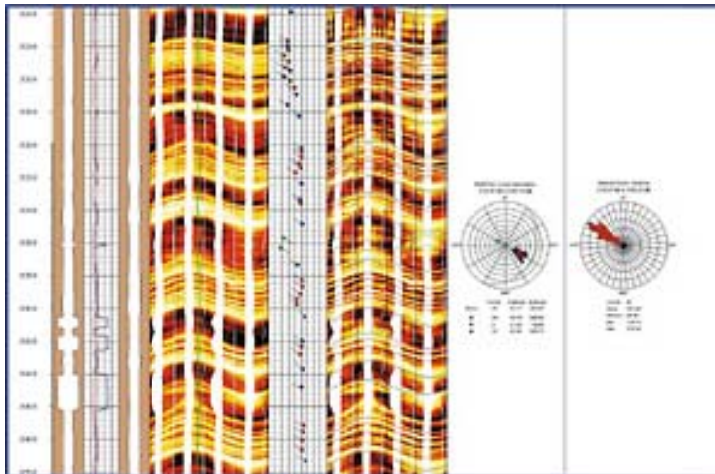


BOREHOLE IMAGE ANALYSIS

Data import

Borehole image data from a variety of tools including acoustic televiewer, optical televiewer, corescaned images, FMI, FMS, CAST, CBIL, UBI and STAR and Sondex MIT are supported.

For data available in LIS/DLIS format files, you will have to use the **LIS/DLIS add-on module**.



Interactive structure/
Fracture picking

Data processing

Before any form of analysis is performed, the data needs to be processed. This involves the creation of a reliable high quality image from raw tool measurements. It consists of a number of procedures.

Log quality control (check both image and orientation measurements)

Reconstruction of the data for variation in tool properties or at acquisition time

Corrections of the actual measurements. A number of processing options are available for enhancing the quality of the data.

These includes:

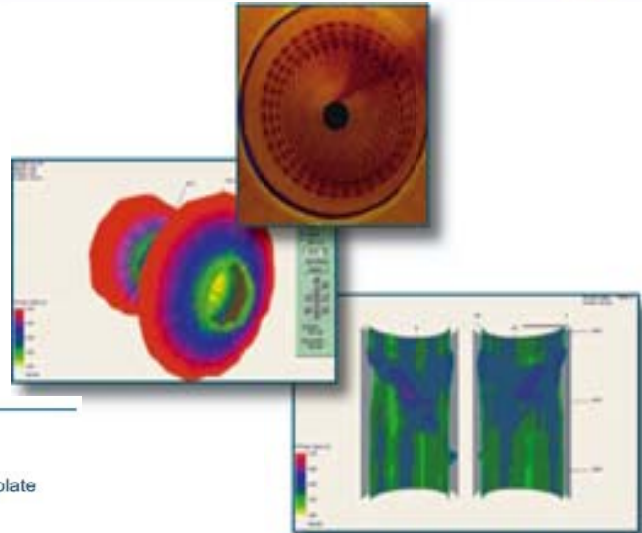
- Bad trace interpolation
- Amplitude normalization
- Despiking filters
- Correction of decentralization
- Image orientation



Data presentation

Data can be displayed as an image (user definable image color palette), as curves (shifted or stacked curves) or as 3D cylinder display (mimic a virtual core)

Data can be visualised as 3D images using 3D borehole view (ideal to visualise breakouts, well deformation, pipe corrosion)



- ▶ intuitive user interface
- ▶ Help buttons and on line manual
- ▶ All settings are stored with the document template
- ▶ Flexibility
- ▶ Parameter settings preview

Data can be oriented to North or Highside, or rotated by a user defined input (magnetic North to true North correction)

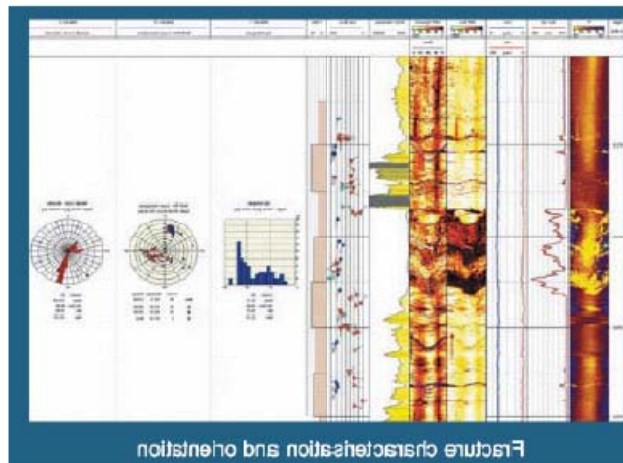
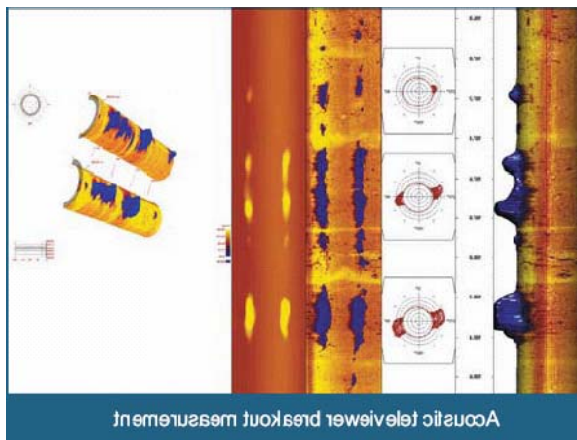
Data interpretation

Any number of sinus curves can be interactively picked recording azimuth and dip values. Each pick can be qualified into user definable categories (ToadCAD)

Picks can be displayed as sinus, tadpole or stick plot.

Fully interactive structure interpretation including polar and rose diagram (stereonet analysis).

The modules include specific process such as, caliper calculation from travel time images, extraction of curves indicating rock strength, reflectivity from images.

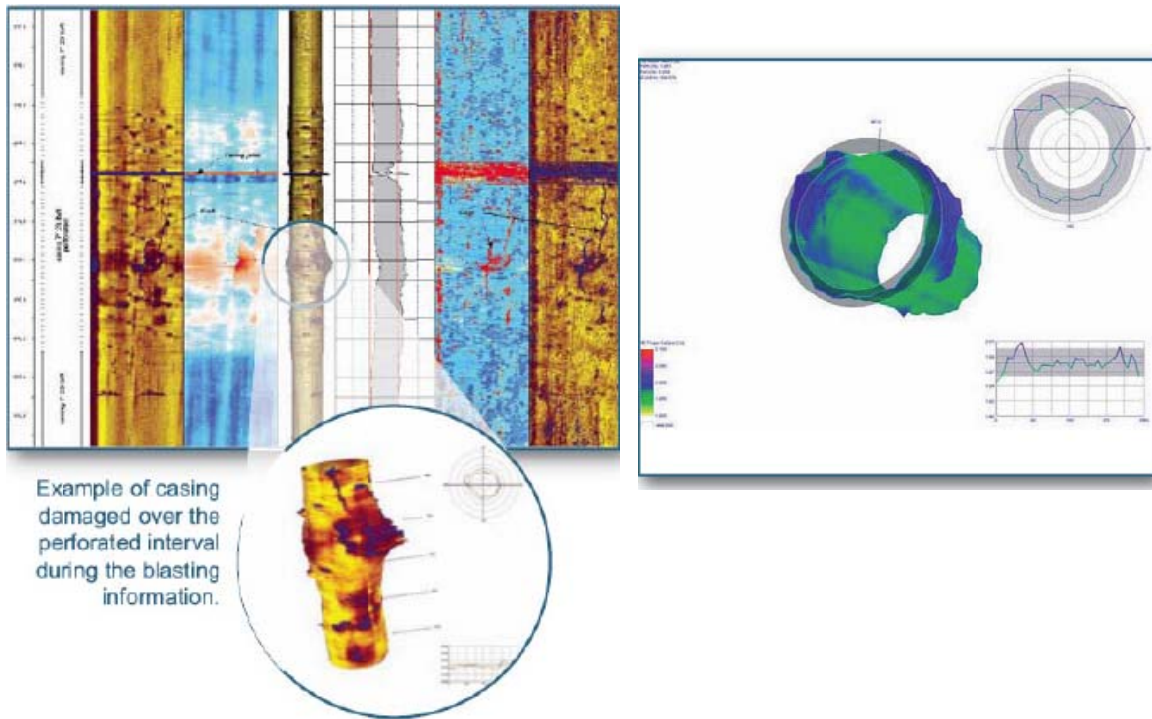




Corrosion evaluation

Mapping distribution, configuration, orientation and severity of corrosion through the entire borehole. (Through or detailed analysis) WellCAD 3D data virtual borehole reality can help to identify internal deposits, localize pipe deformity or pipe buckling.

The software includes specific process such as metal loss calculation for multi-arm caliper.



Example of casing damaged over the perforated interval during the blasting information.