

TerraStation II – Base License

Technical Specifications

These are the capabilities that comprise the Base TerraStation.

Project Management

- Create projects. Up to 10,000 wells per project. 99 map data sets, each with up to 2,000 map variables (structures, isopachs, etc.)
- Coordinate Systems. Supports most spheroids and projections, including WGS 84, Clark 1866 (NAD 27) and many others.
- Concurrent user access to projects.
- Project sub setting capability – make smaller projects from larger one.

Data Import

- Log data from LAS/LBS, LIS, DLIS, BIT/EBIT, fixed column, comma/tab/space delimited, .CSV files, WITSML, , IES ASCII format.
- Batch loading of curve data in LAS or ASCII delimited formats.
- Map data from fixed column, comma/tab/space delimited, Geoscout, LogSleuth, Geoframe ASCII, GCS, PI 197 and 297, Tobin (WCS).
- Borehole Image data from LAS, LIS, DLIS.
- Auxiliary data for wells from comma/tab/space delimited. Includes core analysis, lithology, dip/azimuth data.
- Photographic data in JPEG, TIFF or BMP.
- Batch loading of core photographs.
- Loading of directional survey data from ASCII format files. Batch loading of surveys also available.
- Geopolitical data import from SHAPE, DLG, Tobin, CDF v1.0, ASCII DXF, MapInfo DIF, TIFF or GeoTIFF image.

Data Export

- Well curve data exported as LAS, LIS, DLIS, ASCII comma, space, tab delimited, RMS, WellLogML. Batch export available.
- Borehole Image Data exported as LIS or DLIS.
- Map data exported as Tab, comma delimited, fixed column, Geoscout ASCII, Petrel ASCII, One Z per line ASCII.

Curve Data Handling

- Curve splicing, depth shifting, baseline shifting, normalizing, editing.
- Curve Utilities for copying, merging, interpolating, rescaling curves.
- Percentile tables of a curve.
- Generic arithmetic operations of one or two input curves to create an output.
- Curve filtering – mean, median, despiking, user definable filter capability (up to 1000 elements).
- Thickness curve generation, bed boundary identification, de-sanding option, curve blocking function.
- Synthetic curve builder – create model and then apply to other wells.
- Environmental corrections for many logging tools and from most major logging vendors.
- Matrix conversion options – limestone/dolomite/sandstone for several neutron tools.

Curve Data Display

- Statistical summary table of all curves on well.
- Histograms displays – single well or multiwell, up to 9 histograms per screen. Combine data or plot separately.
- Ternary diagrams – three component system plots.
- Bar graphs – multiwell or single well/multi zone display of data range and means in a single display.
- Composite well log creation and display (See IMAGELog tech spec sheet for details).
- Crossplot – single well and multiwell. Specialty crossplots including: MNP, MID, SP-Rwa, Pickett, Thomas-Steiber, Buckles, Winland (pore throat radii), Lucia RFN and GHE rock typing, pressure depth analysis. Interactive interrogation, line fitting, point grouping. Also provides bubble graphs and 3D crossplots.
- Scatter plot matrix display – plot groups of curves against each other – display crossplot of each curve combination to evaluate trends between data.
- Composite well log display (not including borehole imaging or sonic waveform capabilities).

Map Functionality

- Display well location maps.
- Display well composite displays at well locations.
- Perform arithmetic operations on map Z variables including truncate above or below, addition, subtraction, multiplication, division of one Z by another, isopach computation.
- Geopolitical data editor.

True Vertical Depth Module

- Compute TVD, TST and TVT from directional survey.
- Display of well in 2D and 3D.

Dip Analysis Module

- Stereonet based analysis tool for dip/azimuth data. Schmidt, Wulff, 3D and Tangential stereonet.
- Rose diagrams, strike plots, cumulative dip plots, azimuth vs dip plot, Mohr circle plots, Azimuth vector and dip walkaway plots.

Stress Analysis Module

- Display stresses including well tangential stresses, compression failure as mud pressure or rock strength, compression failure angle, tensile failure angle and mud pressure.
- Failure criteria include Mohr-Coulomb, Modified Lade, Inscribed and Circumscribed Drucker-Prager.
- Define stress field magnitudes and stress regime (Normal, Strike/Slip, Thrust/Reverse, Inclined).
- Pressure modeling capability.

Graphics Output

- Generate graphical output in JPEG, PDF, CGM, EMF, TIFF, Postscript and TerraStation .PLT format.
- Paste any graphical display to Windows clipboard.
- Provides a graphical editor/montage utility for TerraStation .PLT files.
- A well header and map title box editor tool.



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