SOFTWARE

NeuraLog 6
Automated Log Digitizing and Preparation of Log Data
The most widely used application for well log digitizing, depth registration, and QC in the industry.

NeuraMap 8
Volumetrics, Reserves, and Map Digitizing
The industry’s leading application for calculating volumetrics and reserves. It is also used for data conversion, geo-referencing, and capturing map data.

NeuraSection 10
Geology, Correlation, Cross Sections, Mapping, Reserves and Montages
Our geological interpretation solution to evaluate leases, generate prospects, and answer your E&P questions in one application.

Desktop 12
Well, Log, and Document Management with GIS-based Data Visualization
An application designed for accessing and visualizing company data. Logs and documents related to wells and regions can be archived and then visualized through Desktop or ESRI ArcMap plug-in.

NeuraView 14
Well Log Scanning and Image Editing
The industry solution to display, edit, process, annotate, convert, and print large document files.

HARDWARE

NeuraScanner 16
The Global Standard for Well Log Scanning
Durable, fast and portable, for safeguarding archives of paper-based logs.

300X 18
The Premier High-Speed Inkjet Well Log Printer
The fastest and highest quality ink-based option available.

Neuralog Z3 20
The Most Dependable Full-Color Log Printer
A fast and reliable printer with support for most well log file formats and automatic media handling for cutting, loading, and folding.

TRAINING & SUPPORT 23
Neuralog offers practical, intuitive solutions to work with legacy and modern well log data. From data capture, preparation, and evaluation to management and delivery, Neuralog increases your personal and organizational productivity to help you “turn paper into petroleum.”

Neuralog solutions are used in more than 70 countries by geoscientists, engineers, and others working in E&P, IT, and service industries. Since 1991, independent geologists and major corporations have been relying on Neuralog’s products and services to get the job done.

Neuralog is the industry leader in data capture and conversion, powered by the widely used digitizing technology of NeuraLog and NeuraMap software. NeuraScanner, Neuralog 300x, and Neuralog Z3 complement these solutions to easily capture and print well log data. NeuraSection provides geological evaluation and interpretation of prospects using modern and legacy data. Neuralog Desktop, coupled with an ESRI GIS-based interface, allows management, customization, and visualization of gathered data across multiple departments and software platforms into one interface.

Neuralog training and support ensures that your team has the capability and expertise to optimize your workflows. Our support team has extensive knowledge of Neuralog products as well as other common applications you may use. Ultimately, our goal is to facilitate your success with our products.

**Training**

Introductory courses and custom workshops are available to meet your organization’s specific needs. Training is offered at our Houston headquarters or can be scheduled at your location. One- or two-day introductory courses cover the basics of each product and allow for hands-on lab time using your data. Custom workshops can be arranged to cover special topics and allow for more in-depth focus.

**Support**

Neuralog’s dedicated support staff is available by phone, email, and online to answer questions and resolve potential problems. Online support includes answers to FAQs, product updates, and real-time problem resolution using the latest technology to get you back on track.
NeuraLog digitizing software quickly and accurately transforms scanned logs into quality workstation-ready digital data.

Whether you need to depth-calibrate rasters; capture curves, dipmeters, point data, lithology, and text descriptions; or QC and process your digital data, NeuraLog is the tool for you.

NeuraLog is the most widely used log digitizing solution in the oil and gas industry. NeuraLog’s automated tracing enhances productivity by streamlining workflows to obtain reliable data for time-critical projects. NeuraLog can correct for image distortion while quickly and accurately transforming raster images (color, grayscale, or black and white) into reliable digital data ready for analysis.
Data quality control is straightforward using NeuraLog’s Virtual Light Table, Log Quality Index, and interactive editing. The Curve Calculator adds both log processing for QC and log analysis. User and data-related errors are quickly identified and corrected whether the log was originally digitized in-house or outsourced.

QC and Processing

NeuraLog software displays both the raster log image and traced data directly on your monitor. The Virtual Light Table feature overlays the original image and digital data, providing immediate QC.

NeuraLog’s comprehensive LAS tools include Customizable LAS Curve Template, LAS Curve Edit, Baseline Shift, Depth Shift, LAS File Merge, and LAS Curve Calculator with pre-loaded equations.

Data Input:
Scanned Image Formats
IHS Well Fixed 297, GeoGraphix WellBase V2 (from GeoGraphix or PETRA), Generic ASCII or Excel.

Data Output:
Scanned Image Formats
LAS (1.2 & 2.0), IHS PETRA ASCII Well Data, PETRA Log Image Calibration (LIC).
NeuraMap enables you to automatically recognize and capture map symbols on-the-fly to improve workflow efficiency and increase digitizing speed.

Using proprietary technology, the auto-tracing process is quick and precise. Symbol recognition enables you to capture base, geologic, seismic, and other map types into your project workflow.

NeuraMap applies fundamental technology on a wide variety of map types to calculate areas, volumes, and reserves with industry-standard equations for simple and modified methods. Results are available in custom reports for use in presentations, audits, or other documents.
NeuraMap

Volumetrics, Reserves and Map Digitizing

Calibration of legacy maps can be problematic in other software packages. NeuraMap utilizes Blue Marble projections and coordinate transformations for accurately calibrating maps. These proprietary tools permit users to eliminate image stretch and skew.

Additionally, to ensure data accuracy, our QC tools include Check Plot, Grid Check Calibration, and Error Finder. Data may be exported as vectors or GeoTIFFs in a wide variety of industry-standard formats, allowing users to transform output data for use in any industry-standard application.

Volumetrics and Reserves

NeuraMap works with a range of map types in either relative scale or absolute coordinates. This gives you the ability to calculate distances, areas, volumes, and reserves contained by faults, leases, and other boundaries. Volumetric methods include many different mathematical algorithms—both standard and modified.

A Closer Look At NeuraMap

Automated Digitizing

Auto-tracing and auto-symbol search can digitize and capture different line types, basemap perimeter, wells, shotpoints, and other point data.

Display and Merge

Combine raster images and digital data from a variety of sources into your workflow.

Quality Control

QC is made simple with NeuraMap tools. Digital data, such as seismic lines or contour maps from other workstations, can be overlaid on the original image. Point and click interaction with auto-tracing and editing tools enable edits to be made immediately.

Data Formats

In addition to scanned images, NeuraMap can input the most common file formats, including DXF, GeoTIFF, and NeuraMap NDS formats. NeuraMap also gives you the ability to output files in many of the most popular formats, including DXF, Shapefile, Formatted ASCII, and even Landmark Graphics ZMAP+ ASCII.
NeuraSection allows you to evaluate and display all available geological data, enabling you to create and present a total E&P concept.

Collecting and loading suitable data is your primary obstacle to accurate evaluation. NeuraSection solves this problem by giving you the flexibility to use various vendor formats and your proprietary data, which will help manage costs and save money.

Users can visualize, analyze, and annotate for quick evaluation of leases, new well locations, recompletions, and more by using logs, maps, and sections. A montage can then be created to present the total E&P concept as the capstone of your evaluation.

Visualization is a critical step to developing a comprehensive understanding of all of your geological data. NeuraSection provides a variety of specialized tools for visualization. After loading data, logs and maps can automatically post with tops, faults, completions, IP, and other associated well data, as well as, any other user-specified variables of a selected formation. Cross-Sections can display on-the-fly according to predefined templates or user-defined customization. Logs, maps, and sections are dynamically linked, so changes in one are reflected in the others.

Interpretation and integration are the final steps in completing your evaluation. Using NeuraSection’s workflow wizards, you can complete an evaluation using whatever geological data you have available. Flexible correlation enables interactive interpretation of single logs or simultaneous interpretation of multiple logs. NeuraSection uses a unique single or multi-surface mapping system with auto-contouring that honors every data point and allows you to modify contours dynamically.
Interactive map editing allows you to fine-tune and take direct control of your interpretation. Calculate reserves from your maps using the volumetrics tool in NeuraSection.
Neuralog Desktop is a GIS-based application that facilitates the organization, access, and visualization of your project data within a single map view.

Data can be stored in a single SQL or Access database or broken up into smaller project databases for convenience. Neuralog Desktop empowers your E&P teams to make the best use of their data and interactively share analytical results with team members to drive a project forward.
Neuralog Desktop enables your organization to use an easy-to-navigate map interface to manage projects, E&P documents and database information across the corporate workspace.

Well header data, logs, reports, and any other related documents can be conveniently stored at the well, lease, or field level or any user-defined entity and accessed immediately. Our Data Grids simplify management of well headers, file paths, surfaces, and interpreter information.

Neuralog Desktop opens up power and functionality to Esri ArcMap users by working directly with logs, maps, and sections from a single desktop application. Esri users can utilize integrated Neuralog toolbars to view and archive documents, create cross sections and define AOIs, directly from ArcMap. Log, map, and other data from multiple applications can be captured, edited, and saved in Neuralog Desktop and shared with others to drive your project forward.

Visualization
- Logs—view spatially, data grids, trees, charts, and reports from multiple sources.
- Documents—for wells and regions, view in user’s native handler.
- Cross-sections—create in NeuraSection to be seen and opened from the map.
- Maps—create and view spatial displays with pie charts, etc.
- Reports—generate well header, well documents, deviation data, scout tickets, etc.
- Charts—create and view log coverage and statistics, production decline curves, and custom cross plots.

Connect or Load, Organize and Manage
Neuralog Desktop can load or reference all E&P document types, i.e., AFEs, core reports, production data, leases, and 2D seismic and field reports.
- Project management can be applied to restrict different user levels.
- Users can locate data with simple and powerful filters or queries and view them on your ESRI map.
- Well information can be imported from external databases.

Export
- Export well and log data with coordinate conversion capabilities to various vendor types.
NeuraView is the solution for quickly viewing, processing, editing, converting and printing your raster and vector files.

Developed specifically to handle large documents such as well logs, and process industry-standard formats such as TIFF, JPG, BMP, PDS, PDF, CGM, EMF, and LAS.
NeuraView makes it easier than ever to enhance your logs or documents using layout, annotation, crop, and stitch tools. Create type logs, quickly add notes, eliminate tracks, and combine logs or maps before you start your analysis. Our LAS features allow you to open and view LAS files, as well as customize your LAS display. Curve fill can be quickly added to indicate properties, zones of interest, and more.

NeuraView can open and view several logs of different formats simultaneously. The side-by-side display allows you to compare offset wells and even if they are different file types. It is also ideal for image editing when combining separate log runs into one composite log file, as well as stitching maps together or laying out a presentation. NeuraView allows you to see and create the bigger picture.

Once editing is complete, logs or images can be saved and printed directly to a Neuralog printing solution for closer analysis, presentation, and a permanent record of your work.

Load, View, and Edit
Open and edit various file formats including JPG, BMP, TIFF, LAS, PDF, PDS, EMF, and CGM.
• Control log colors while viewing images.

LAS Support
View LAS files in log format to verify curves and customize layout.
• Apply custom templates, use full LAS header, set custom logos.
• Set curve style, color, and type.

PDF Support
NeuraView handles PDF Multipage files with ease, reassembling your log into a single TIFF image for printing.
• Automatically remove page breaks.
• Export to PDF, JPEG, and TIFF formats.

Crop and Stitch
NeuraView can stitch together logs or scanned maps for viewing and presenting.
• Assemble scanned maps and logs.
• Make composite logs.
• Clean up borders of scanned images.

Instant Rescan
• Virtually rescan poor quality images to better visualize your data. A threshold adjustment helps to clear up curve and grid quality.

Scanning, Printing, and Copying
• Combine the NeuraScanner with the Z3 or 300x for an instant log copying solution.
• Automatically scale logs to print on various size media without altering the vertical scale.
NeuraScanner is the industry-leading solution for your well log capture. It is the only scanner designed with a single purpose – scanning well logs and other continuous documents anywhere.

Digitizing your paper well logs is an essential business function in the E&P industry. The NeuraScanner is the preeminent scanning solution essential to safeguarding archives of paper-based logs. It can also be used to scan maps, core photos, outcrop descriptions, reports, and other data commonly found in the E&P environment.
NeuraScanner

The Global Standard for Well Log Scanning

Easy Operation

The NeuraScanner scans at speeds up to 10 inches per second with a resolution up to 600dpi, while producing smaller, cleaner images than larger and more expensive scanners. The included software allows on-the-fly control of image settings, including brightness and detail, whether scanning grayscale or color logs. The NeuraScanner easily works with originals printed on paper, mylar, or even photographic film (with optional film lid) up to 12” wide and any length.

With NeuraScanner, you have full control of the log data.

For more delicate or poor original logs, a slower speed and smooth paper handling is built-in, ensuring that even the oldest and longest documents flow through the NeuraScanner to produce crisp raster images.

Lightweight and Portable

The NeuraScanner’s compact size measures just 15” W x 9” D x 2.5” H while weighing less than 10 pounds, so it can be carried anywhere from the office, data room, or rig. Built to perform in even the most rugged environments, it is constructed of lightweight 7075 aluminum with stainless steel fasteners—the same materials used in many jet aircraft. The image sensor is shock mounted, and the light source is LED for durability and long life. Key surfaces are machined and anodized for smooth fit and feel.

Works With NeuraView

View, Edit and Print Well Logs and Maps

NeuraView is the ultimate solution for quickly viewing, editing, and printing the most common well log formats including LAS, TIFF, PDF, and many more. Critical processing features are incorporated for image manipulation and text annotation. Together, these create a total image tool for your E&P workflow.

Automated and quickly customizable templates simplify the viewing and printing of digital log data. Any portion of a log can be isolated with the selection tool and then saved or printed. NeuraView is the one-stop application for industry-standard log and map data.
The Neuralog 300x is the industry standard for desktop log printers.

The 300x instantly revolutionizes well log printing, with the power to print full-color well logs at speeds faster than any other printer on the market.
Neuralog 300x
The Premier High-Speed Inkjet Well Log Printer

Neuralog ViewPE
A complimentary license of NeuraViewPE is included with your Neuralog 300x printer. This application allows you to effortlessly view, edit, and print industry-standard log formats, including LAS, TIFF, PDF, and so many more. You can crop and stitch images and incorporate text and graphical annotations to make image manipulation and preparation simple.

Versatility and Performance
The 300x features a 500-sheet paper tray, allowing you to use it as your preferred office printer. In addition, the built-in duplexer gives you the flexibility to print single- or double-sided documents, helping you to reduce waste.

The 300x reproduces critical detail at resolutions up to 2400dpi using Neuralog pigment inks that will not run, streak, or fade. Additionally, our high-capacity ink cartridges can print over 6,600 full-color pages or 9,200 black and white pages, keeping your cost of operation low. This printer easily fits on a desk with a small footprint of only 20.3” wide by 15” deep.

Printing well logs can be a time-consuming process, and your time is valuable. The 300x printer is simply built to be fast and dependable by utilizing HP’s PageWide printing technology. This innovative feature is constructed around a stationary printhead that spans the full width of the page. As a result, the 300x prints in a single pass with fewer moving components, dramatically increasing the printer’s speed and reliability. With 512MB of built-in memory, the 300x is capable of processing and printing well logs at 14 inches per second.
The Neuralog Z₃ Well Log Printer is a proven solution to produce incredibly detailed well log documents. Using the most advanced multilevel LED printhead and unique microfine toner technology adds exceptional speed and image clarity.
The Neuralog Z3 Well Log Printer is an enterprise-class commercial printer that uses HD Color Printing technology to provide sharp detail with rich, dramatic colors at a resolution of 1200x600 dpi.

The Z3 is fast. Single Pass Color digital technology prints at speeds of 30 feet per minute with the highest quality for immediate presentation or preservation.

**Flexibility And Speed**

The patented Continuous Feeder Attachment (CFA) allows for accurate and fast printing of continuous well log media. In fact, the Z3 will begin printing the first full-color page in as few as nine seconds. The CFA automatically loads and cuts paper, keeping the media perfectly aligned in your printer. A convenient stacking tray is included to efficiently stack your printed well log.

The Z3 supports a wide variety of industry-standard well log formats and works with numerous software titles to print any standard-sized office document with a 530-sheet paper tray. The Z3 fits in the space of a standard office printer, and its footprint measures only 32” wide by 17” deep. This allows you to use the Z3 as your standard office printer, eliminating the need for multiple printers.

**Low Cost Of Ownership**

The Z3 is your cost-effective solution for printing well logs. It is designed with two-piece CMYK toner cartridges, which reduces your cost of consumables. On average, the toner cartridges produce as many as 11,000 pages, printer drums can easily last 20,000 pages, and the fuser and belt last 60,000 pages, further reducing your costs.

**Included With Our Printers**

**Warranty & Support**

The Neuralog Z3 and 300x Support includes technical advice as well as driver, firmware, and software updates. Warranty support is included for the first year with an extended warranty available for subsequent years.