Fast track your play-based exploration with confidence.

With diminishing numbers of new play ideas, the oil and gas exploration sector is becoming stale. Limited resources and a decline in expertise hamper our industry’s efforts to innovate new play concepts and reduce subsurface uncertainty. Regional geological interpretations underpinned by a globally consistent stratigraphic framework are therefore a fundamental requirement to efficiently, effectively, and confidently predicting the presence of new play concepts and understanding the associated subsurface risks.

Neftex® Predictions delivers the most comprehensive integrated regional framework available for exploration, underpinned by an unrivalled infrastructure for subsurface prediction. This cloud-deployed suite of integrated tools enables you to efficiently delve into over 600 million years of global geoscience to identify global analogues and predict play potential in both mature and data poor regions.

The ability to predict into frontier regions allows you to explore new ideas, reduce subsurface uncertainty, and gain a better appreciation of the risks associated with potential plays. With these insights available, you can rapidly evaluate opportunities for organic and inorganic growth and expand your exploration portfolio with confidence.

EXPLORATION STARTS HERE

- **Get in Front Stay in Front**
  Accelerate your exploration with access to integrated digital multidisciplinary geoscience.

- **Thinking Outside the Box**
  Inform your play-based exploration by leveraging a high-resolution global stratigraphic framework.

- **Proceed with Confidence**
  Make more informed subsurface predictions by leveraging the power of globally informed models.
NEFTEX® PREDICTIONS

BENEFITS

**KNOWLEDGE ACQUISITION**
Increase the rate of learning for the exploration team through immediate access to compiled and consumable geoscience information and insights.

**DO MORE WITH LESS**
Unlock “Ready-to-go” geoscience data and content to perform immediate play-based exploration workflows into which proprietary data can be integrated and interpretations refined.

**BRIDGE GAPS IN EXPERTISE**
Access to a suite of tools that fill and bridge subject matter expertise gaps in the workforce.

**SUPERIOR SUBSURFACE CONSTRAINT**
High resolution temporal and spatial enablement deliver a user defined geoscience evaluation of the subsurface by geological age and location.

**BIG PICTURE UNDERSTANDING**
A regional/global context in which new interpretations can be sensed checked against regional and global events, comparisons made, and analogues identified.

**CRITICAL INSIGHTS**
A greater appreciation for the plausibility of certain interpretations and the level of confidence that can be applied to an interpretation in order to better understand exploration potential.

**INFORMED EXTRAPOLATION**
Leveraging fundamental geoscience principles and state-of-the-art Earth system modelling to drive predictions away from data control.

**UNDERSTANDING RISKS**
Higher resolution interpretations, constrained by data and cutting-edge modelling, help provide more detailed understanding of the presence and distribution of potential petroleum system elements.

**IDENTIFY UNTAPPED POTENTIAL**
Evaluate proven and possible play potential through the application of analogues and an appreciation of the wider geological context.
BIBLIOGRAPHIC DATABASE
Earthsearch® is a comprehensive bibliographic database, containing >400,000 fully indexed citations derived from publicly available literature. Information captured includes the essential citation information, the language the paper is published in, the geography and geological time interval that the paper/book relates to, and the specific data types that the paper/book contains. Literature from 5,745 publishers and over 4,880 different journals and books in 42 main languages have been catalogued. Citations can be accessed easily via a filterable search engine, with quick links direct to content on publisher websites is included.

WELL AND OUTCROP DATABASE
A vast global library of well and outcrop data can be searched and interrogated. This consistently structured data has been interpreted within our proprietary sequence stratigraphic model and used to inform the creation of chronostratigraphic charts, gross depositional environment, and palinspastically reconstructed maps. This data is accessible via an intuitive webmapper application with online well chart interrogation tools.

BIOSTRATGRAPHIC DATABASE
A searchable online species dictionary captures the stratigraphic and paleoenvironmental distribution of key species, and dynamic charts of expertly calibrated biostratigraphy data can be created for major micro and macro taxonomic groups. Data packs can also be downloaded that are compatible with TimeScale Creator Pro and StrataBugs.

ORGANIC GEOCHEMICAL DATABASE
An extensive global database of organic geochemistry information for proven and potential source rocks and produced fluids includes key geochemical parameters used in exploration. Data are spatially located and temporally sequenced for greater confidence and higher resolution interpretation. This data is accessible via an intuitive webmapper application, dashboard, and data downloader.
NEFTEX® PREDICTIONS

FEATURES

ROCK PROPERTIES DATABASE
An extensive global database of rock properties data, which are spatially located and temporally sequenced, allow rapid assessment of the time interval of interest and helps place quantitative constraints key for play elements to help reduce subsurface uncertainty and understand associated risks. This data is accessible via an intuitive webmapper application, dashboard, and data downloader.

HARD-ROCK GEOLOGY DATABASE
An extensive database of integrated geochronology, detrital geochronology, and mineral deposit data is continually updated from hundreds of publications from all over the world. The information captured includes geological age and error, isotopic system and analytical methods used, interpretation of the age meaning, and the tectonic setting at the time of formation. This data informs the understanding of the tectonic evolution and helps constrain the Geodynamic Model and associated maps. This data can be accessed and interrogated through the web mapper and QuickPlates application.

CHRONOSTRATIGRAPHIC CHARTS
A global network of 100’s of chronstratgraphic charts spanning the Phanerozoic capture the preserved stratigraphy along discrete lines of section, which intersect the worlds petroliferous basins and frontier regions. Each chart is annotated with key geological features, the data that was used in its construction, and a comprehensive set of notes, which can be tied to publicly available literature.

GROSS DEPOSITIONAL ENVIRONMENT MAPS
A series of over 290 gross depositional maps depicting global lowstands and maximum flooding surfaces as defined by the Neftex® sequence stratigraphic model capture the location of potential source, reservoir, and seal facies in their present-day location. Each map is accompanied with supporting data and comprehensive notes, which can be tied to publicly available literature.
GLOBAL GEODYNAMIC MODEL
A global plate tectonic model that spans 595 million years. This model is the most comprehensive geodynamic model on the market and has over 1,800 continental geodynamic units and consistent plate boundary line work. The model is constrained by the wealth of Neftex knowledge and also has over 14,000 tectonically informed supporting data including hard rock geochronology, geochemistry, and mineral deposit datasets, as well as constraint from >100,000 ocean isochron picks.

PALINSPTASTICALLY RESTORED MAPS
Palinspastically restored gross depositional environment maps have been reconstructed using the Neftex® plate tectonic model and are accompanied by a wealth of additional content, including supporting information, online documentation, key geodynamic features, and modelled consumed oceanic crust. These maps can be viewed and interrogated using the QuickPlates application, PaleoGIS, or GPlates.

DIGITAL ELEVATION MAPS
Paleo Digital Elevation Model Maps for 52 key surfaces produced using the Neftex® plate tectonic model. These models depict how the Earth looked and changed through geological time showing detailed topography and bathymetry.

PAELOCLIMATE & PALEOTIDAL MAPS
A unique combination of cutting-edge Earth System models, which include topography, drainage, tidal, and climate models, with Neftex® content produces high temporal and spatial resolution data and map results to assess the likelihood of occurrence, and potential and quality of petroleum system elements with outputs tailored for play-based exploration.
FEATURES

DEPTH SURFACES
Regional-scale structure depth models for key stratigraphic horizons are constrained by a wide variety of data, including structural sections, wells, seismic lines, gravity/magnetic surveys, isopach, and depth structure maps. They are delivered in DecisionSpace® 365 software and GIS formats.

PLAY CROSS SECTIONS
Summary schematics along discrete lines of section capture the structure, stratigraphy, and present day oil and gas windows, and identify a number of proven and speculative plays that are linked to our global database of proven, analogue, and frontier play concepts.

WEBMAPPER APPLICATION
Online browser based application at the heart of everything Neftex® produces. View and interact with all map and data layers brought together in our spatially and temporally enabled tectonostratigraphic framework. Using our unique time-slider, insights are efficiently gained through visualizing key information in the correct temporal context. Use this geographical interface to step out into the integrated data visualization applications.