GeoX Software Value Assessment

Achieving production objectives with full stochastic evaluations

**APPLICATIONS**

- Assessment of after-tax economic value and reserves
- Hubs, clusters, blocks, and plays
- Conventional and unconventional assets

**BENEFITS**

- Rapid assessment with model-based generation production and cash flows
- Full stochastics value assessment honoring all risks and uncertainties
- Common database for effective management of the exploration portfolio
- Global fiscal library for consistent evaluation of international opportunities

**FEATURES**

- Fully integrated with assessment of prospect risks and resources
- Staged and conditional exploration and exploitation activities
- Field-based and well-based production models
- Relational database and global fiscal library

The GeoX\(^*\) exploration risk, resource, and value assessment software provides a comprehensive and flexible approach to model exploration, development, and production activities. Combined with an innovative activity-based modeling approach for associated cost and revenue, GeoX software supports consistent probabilistic evaluation of after-tax NPV and commercial risks.

The GeoX software value assessment provides a comprehensive, flexible approach to model:

- exploration, development, and production activity durations
- costs and revenues that drive project after-tax economic return
- activity-based scenarios with consistent probabilistic evaluation of after-tax NPV and commercial risks.

Full-cycle evaluation of leads and prospects focuses on commercial opportunities from the beginning. Unique documentation, validation, and interpretation functions—combined with an integrated database—support and promote effective decision making.

The GeoX software evaluates the results of drill-out forward exploration projects, providing:

- probability of achieving economic and production objectives
- variation of project composition guides
- selection of an optimal exploration portfolio.

Rapid, activity-based economics

The GeoX software provides full-cycle screening to create a model that directly relates to the underlying subsurface risk and resource assessment. Using an intuitive activity-based modeling framework allows the integrated analysis of exploration, appraisal, development, and production activities. Uncertain durations and costs are linked to well performance parameters or predefined standard templates. The activity model generates full stochastic production and cash flow profiles, calculating after-tax NPV, internal rate of return, and probability index. The native trial browser allows rapid analysis of individual or combined outcomes. The GeoX software also enables the review of outcomes to validate, interpret, and communicate results.
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Integrated assessment workflows
The GeoX software database links full-cycle value assessments with subsurface risk and resource assessments as well as rigorous exploration portfolio evaluations. Full-cycle models mirror the structure, risks, and uncertainties in the subsurface to handle clusters, hubs, and incremental exploration opportunities with staged and conditional exploration and exploitation activities. Updates to subsurface estimates are directly reflected in full-cycle evaluations and exploration portfolio results.

International portfolio with best opportunities
Optimizing and ranking of international portfolios—through project performance related to the differential impact of fiscal terms—is enabled in the GeoX software. Full-cycle analysis provides accurate modeling of concessions and production shared contract (PSC) fiscals with fiscal terms and click-and-point definitions of special terms.

Portfolio composition evaluation
The GeoX software provides a complete overview of your portfolio versus your objectives, which enables
- assessment of corporate portfolios to determine the forward exploration plan
- analysis of commitment wells while optimizing overall exploration portfolio performance
- evaluation of exploration opportunities around a hub or concession
- alternative portfolio evaluations and portfolio optimization assessment
- various reports such as wedge diagram, probability profile, NPV, color bar chart, and portfolio composition bubble charts.

The GeoX software validation and interpretation functions—combined with an integrated database—facilitate, support, and promote effective decision making.