Spotfire® for Energy - Field Development

Unite geoscience and engineering data to decide where, when, and how to develop your assets

Executive Summary

Field development decisions cut across every discipline: geology says where the rock is best, engineering says how wells actually perform, and the answer lives in both. But tops, structural surfaces, geochemistry, petrophysics, core data, surveys, completion records, and production histories sit in separate systems owned by separate teams. Spotfire Industry Pro connects them in one environment, alongside the specialist tools your teams already use. Asset teams overlay geoscience and engineering data in maps, cross-sections, and 3D views, then use multivariate and sensitivity analysis to isolate what actually drives well-level performance. Spotfire AI works inside that same analysis, so engineers can ask in their own words and build faster while every step stays visible, editable, and open to challenge. Test landing zones, lateral lengths, spacing, and completion designs against real results, and carry the winning design into the drill schedule.

Value

See every domain in one view
Geoscience and engineering data on one canvas.

Find what drives performance
Multivariate analysis isolates the real drivers.

Design the next well on evidence
Test targets, laterals, and completions on results.

Ask, then verify
Describe the analysis in your own words. Keep every step visible, editable, and open to challenge.

What's new in Spotfire this Quarter

SPOTFIRE AI
Ask Spotfire, Skills, and MCP connections
Describe a drill-down in plain language, capture methods as Skills, and connect to your other systems.

INSIGHT AGENTS
Suggest Well Log Views
Reads your LAS curves and recommends triple-combo, quad-combo, and lithology views.

WELL LOGS
LAS import, depth range marking, layered well log chart
Import LAS files directly and mark depth ranges to drive filtering and drill-down.

ADD-ONS
Trajectory, timeline, and wellbore add-ons
Analyze Well Trajectory, Task and Resource Timeline, and Wellbore Diagram for drilling and completion work.

Use Case Specific Functionality

Connectors
AVEVA PI, OPC-UA, LAS files, WITSML, Esri ArcGIS, DELFI and OpenSpirit, ComboCurve, Snowflake and Databricks push compute

Visualizations
Well Log Chart, Wellbore Diagram, 3D Line and Surface, Probit Plot, Ternary Diagram, Polar Plot, Task and Resource Timeline, Vertical Line Chart

Data Functions
Petrophysics Calculator, Dynamic Time Warping, Time Series Smoothing and Resampling, Geospatial Suite, Spatial Interpolation and Contouring, Statistical Testing, Statistica machine learning and geostatistics

Actions
Well Log Templates, Petrophysical Calculator, Analyze Well Trajectory, Visualize Correlations

Accelerators
Real-time Drilling, Completions, Production Surveillance, Drilling Effectiveness, Completion Survey, Well Inventory Accelerator

Spotfire AI
Ask Spotfire, Insight Agents (Suggest Well Log Views), Skills, MCP connections, Agent Registry

Spotfire AI for Field Development: Ask. Augment. Act.

Ask: investigate in your own words

- Describe what you need, from preparing data to building views with drill-down, and Ask Spotfire builds it inside your analysis.
- Ask about your data, have a visualization or page explained, or update many visuals at once.
- Everything Ask Spotfire creates is standard Spotfire content, so you can inspect, edit, and challenge it.

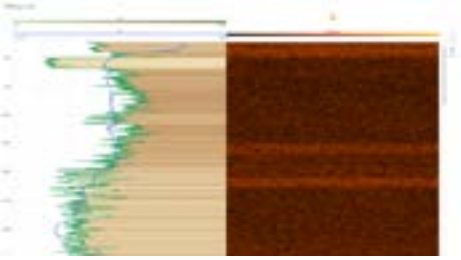
Augment: build faster, and trust the result

- Insight Agents surface trends, patterns, and anomalies in the data you mark, with recommended next steps, including Suggest Well Log Views for LAS data.
- Skills capture a method once as a plain-language workflow that anyone on the team can run.
- Add new Insight Agents from the Agent Registry between releases, or build your own around company rules and experience.

Act: close the loop from insight to action

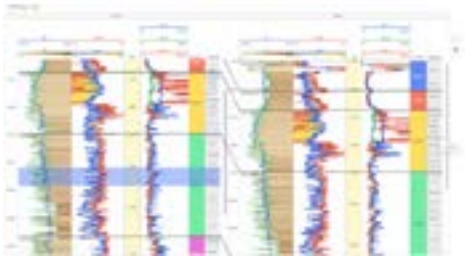
- MCP connections link Ask Spotfire, agents, and skills to systems that expose an MCP server, such as data catalogs and ERP.
- Retrieve context or trigger actions without leaving the analysis, with the expert deciding what happens.
- You choose the AI model and which groups can use it, and usage is logged and attributable.

Selected Workflows



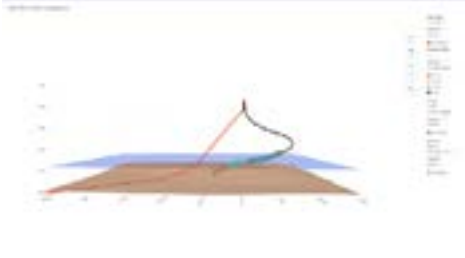
Subsurface Characterization

- Overlay tops, surfaces, and geology with well control on one map
- Interpolate well data into structure, isopach, and property maps
- Bring LAS files straight into the analysis without conversion
- Let the Suggest Well Log Views agent propose triple-combo and quad-combo views from your datasets
- Display core, mud log, and well test data beside log curves, depth-first
- Mark a depth interval to filter and drill into every linked view
- Compare log signatures across wells with dynamic depth warping
- Build 3D views of surfaces, well paths, and formation tops together



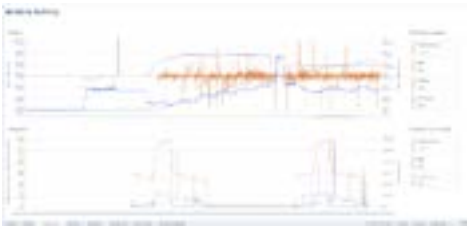
Landing Zone Identification

- Rank zones by rock quality, geochemistry, and offset performance
- Map producing intervals against structure and thickness trends
- Correlate landing depth to results across every producing well
- Test whether zone differences are real with t-test, ANOVA, and Mann-Whitney U functions
- Spot bypassed intervals with log, core, and production overlays
- Validate new zones against well tests before committing capital



Well Planning and Targeting

- Plot directional surveys and planned paths in coordinated 2D and 3D views
- Check target zone contact along the full lateral length
- Compare performance by lateral length to find the economic limit
- Screen offset interference before finalizing well plans
- Tie drilling results from LAS and WITSML imports back to the reservoir picture
- Carry the chosen target into a drill schedule, with tasks, dependencies, and rig and crew resources on one timeline



Completions Optimization

- Correlate proppant, fluid, and stage design to well results with built-in statistical and ML functions
- Normalize results by lateral length for fair design comparisons
- Benchmark completion designs against offset operators
- Test design changes against geology, not just averages
- Review plugs and perforations on a wellbore diagram beside results
- Track cost per stage against the production it delivers
- Find where bigger jobs stop paying with sensitivity analysis



Spacing and Development Scenarios

- Visualize spacing in gun barrel, map, and 3D views together
- Quantify parent-child effects from actual production data
- Test spacing cases by zone against recovery and economics
- Model wine-rack and cube development patterns visually
- Compare full development scenarios side by side in trellised views on shared assumptions
- Rank the drill schedule by expected value per location
- Start faster with the Well Inventory Accelerator



Production Driver Analysis

- Run multivariate analysis across geology, design, and operations
- Rank performance drivers with feature selection and random forest functions
- Separate rock quality effects from completion design effects
- Run sensitivities on any driver and watch results update live
- Cluster wells by performance to find repeatable patterns
- Compare many variables at once in parallel coordinate plots
- Feed confirmed drivers back into the next well designs

Enterprise deployment

Discover Insights. Surface Risks Early. Drive Operations Forward.

Spotfire unites geoscience, engineering, and operational data across the energy value chain, turning specialist-tool silos into one governed platform, with native analytical depth, AI-augmented investigation, and the agility to solve energy's most complex challenges faster. Spotfire AI is built in, with your choice of AI model, group-level control over who can use it, and usage that is logged and attributable.

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