

Unconventionals Analyst

Plan Well Developments and Evaluate Reserve Areas

Unconventionals Analyst is an extension to Esri's ArcMap and ArcGIS Pro software for use in unconventional resource projects such as shale gas, shale oil, coal bed methane (CBM) or coal seam gas (CSG). It enables land, drilling and subsurface teams to holistically plan field developments in order to streamline operations; and to evaluate reserve areas and forecast volumes during production.

USES

Using Unconventionals Analyst, you can dramatically cut complex, time-consuming and data intensive well planning and reserve area evaluation workflows:

- Identify allowable areas for operations by creating setbacks from access, land use and environmental factors.
- Manage sub-surface constraints to positioning well bores at depth.
- Assess how many well sticks can be placed throughout your area of interest.
- Identify the most efficient well development plan, placing pads and laterals so that you minimize surface footprint while maximizing lateral lengths.
- Easily run complex map-based statistical workflows such as PRMS and SPEE "Monograph 3".
- Forecast reserve addition through time.

BENEFITS

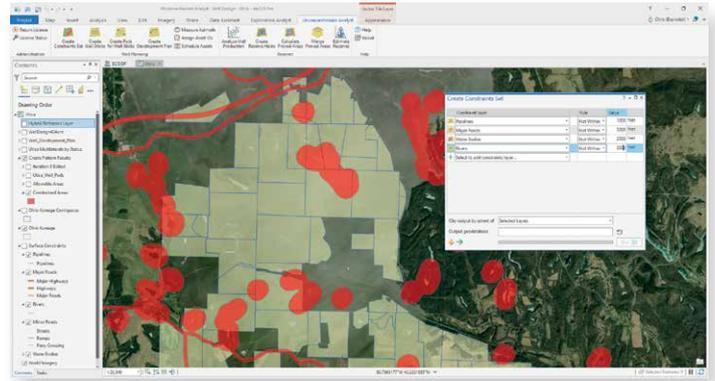
The benefits of using Unconventionals Analyst are as follows:

- Reduce well development planning projects from months to days.
- Avoid pad redesign costs by holistically planning field developments up-front.
- Plan for alternate development scenarios under different price environments.
- Improve communication between land, drilling and subsurface teams.
- Ensure regulatory compliance in reserve area management and booking.
- Easily run and iterate "Monograph 3" workflow to statistically determine the proved area of a resource play.

KEY FUNCTIONALITY & FEATURES

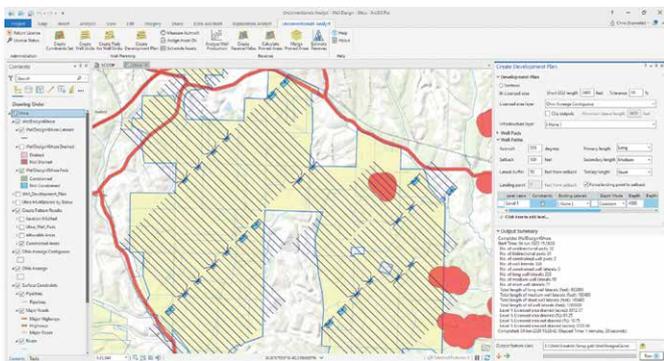
ANALYZE SETBACKS

When planning unconventional developments it is likely that there will be zones where you cannot place a well or pad. This may be due to pre-existing operations, land access, environmental sensitivities or human developments. Use the Create Constraint Sets tool to create setbacks by specifying multiple layers of constraining features and creating setback rules to ensure that operations are not planned in prohibited areas.



MODEL WELLS

Use the Create Well Sticks tool to quickly assess how many wells are required to work up a given set of contiguous leases, or to estimate reserves using a “per well” methodology. The tool classifies wells based on the amount they overlap with leases and pre-existing wells.

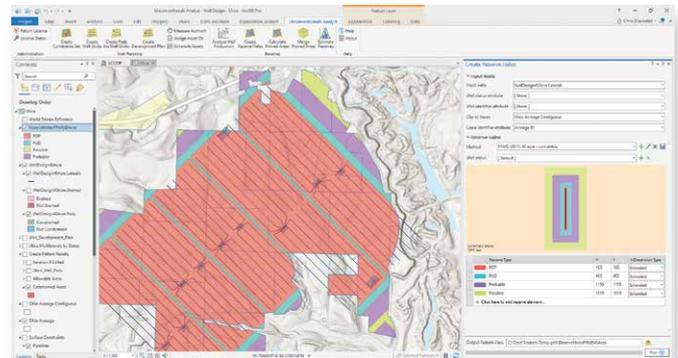


PLAN DEVELOPMENTS

Use the Create Development Plan tool to create a holistic plan of well pads and multilaterals within a set of sections or contiguous leases. The tool identifies the most efficient mixture of lateral lengths and pads to minimize surface footprint while maximizing lateral lengths for increased production. Surface setbacks are applied to ensure optimum well pad location, and subsurface constraints can be defined to flag where the horizontal section of a well will meet interference.

EVALUATE RESERVE AREAS

Unconventionals Analyst enables you to calculate accurate reserve areas using configurable deterministic reserve classification methods (e.g. PRMS) and the SPEE “Monograph 3” statistical workflow for determining the proved area of a resource play. Users can select between spacing unit and expanding concentric radii methods, while supporting tools are provided to investigate well production distributions and assess minimum well sample sizes for running the workflow at sub-Monograph target/confidence precision.



To learn more about Unconventionals Analyst email software@exprodat.com or visit www.exprodat.com

ABOUT EXPRODAT

Transform your company performance by putting Exprodat's unique solutions at the heart of your E&P processes; enabling your users with enhanced analytics, mapping and data integration. Get a competitive advantage across the oil-field lifecycle by increasing operational efficiency, improving decision making and transforming your shale developments and reserves management.

