

## ENERGY

# IHS Petra<sup>®</sup> Production Group Plot Module

Display and analyze historical and average production data for any set of wells.

The IHS Petra integrated Production Group Plot Module allows you to analyze trends, devise depletion strategies and manage reservoirs. Its simple interface makes it easy to display monthly production data for a set of wells, including summing, averaging, or time-normalizing production data.

### Compare Historical and Average Production

The Production Group Plot Module enables you to predict decline behavior of new wells, recompletions and stimulations by rapidly comparing historical and average production between well sets based on differences in:

- Completion or Stimulation Techniques
- Reservoir Properties
- Well Placement in Reservoir

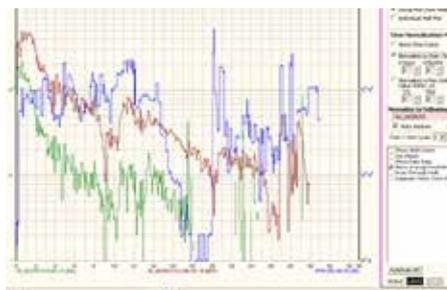
### Flexible Well Selection

Selecting wells for use in the Production Group Plot Module is easy. Wells can be selected from an existing Well List, from a query result or via the Petra Map Module.

### Group Selected Wells

The Well Grouping Method offers two options for grouping your selected wells:

- Group Plot (Sum Wells): This method sums the selected wells' production streams. The data can be shown as either a cumulative or an average plot.
- Individual Well Plot: This method plots the individual production streams for each selected well.



Display and analyze historical and average production data for any set of wells. Rapidly time-normalize average and historical production information using Petra's Group Production Plot.

## Calculate & Display Ratios

Ratios that can be calculated and displayed using the Production Group Plot Module include:

- Water-oil ratio
- Gas-oil ratio
- Oil-gas ratio or condensate yield
- Gas-liquids ratio
- Water cut
- Oil cut
- Plus a number of user-defined ratios

## Time Normalize Production Streams

The Time Normalization method adjusts a well's production to start date or maximum rate to time equals zero by default. You can modify the start date to a specific year and month using a counter with the option to turn off normalization.

- **Raw Data:** This option shows production data through time without adjusting to a single start time. Raw data plotted against cumulative values shows historical production for selected wells.
- **Normalize to Start Time:** This option adjusts each well's production to a common start point and helps eliminate partial month production or spurious data at the beginning of production.
- **Normalize to Max Data Value:** This option adjusts each well's maximum rate to a common start point. This is useful to normalize wells that reach maximum production within differing time periods.

## Store Multiple Production Streams

Petra can store multiple production streams for an individual well. These streams typically include monthly totals for oil, gas and water with formation-specific streams, if captured. The customizable display allows you to view only the information you need.

For more information [www.ihsmarket.com](http://www.ihsmarket.com)

### PETRA CUSTOMER CARE

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### User Forum

[ihscommunity.com/energy](http://ihscommunity.com/energy)

## About IHS Markit

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

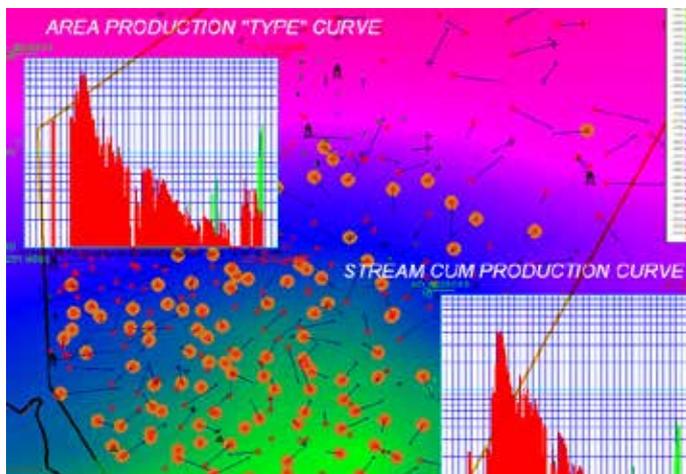
## Comment & Report

The Production Group Plot Comment & Report provides export of all plotted production information to a text file and user-specified annotation on the plot. The report includes all plotted curves with monthly rates. This is ideal when grouping wells together to obtain total production for a lease, group of wells or specific formation.

## Choose from Additional Plotting Options

The Production Group Plot Module offers a number of plotting options to maximize flexibility, including:

- Chart Axis Cycles
- Well Count
- Monthly and Daily (Averaged) Rates
- Value of Monthly Production / Active Wells
- Suppress Yearly Cums in Report
- And more



View and analyze groups of wells instead of being limited to just one well at a time. Generate Production Type Curves in seconds rather than days.