# **TACHYUS**

www.tachyus.com

# Optimizing energy production for the oil and gas industry

Our Solutions

#### **Back Allocation**

Fully automated physics based hydrocarbon back allocation integrating well test, pressure and temperature data of your surface network.



#### Subsurface Back Allocation

Understand layer-level production and injection allocation for every well across the whole history of the field simultaneously.



### Waterflood Management

Make all key waterflood management decisions quickly and easily with Data Physics driven fast simulation models that matches all your historical data and honors reservoir physics.



### **Waterflood Optimization**

Maximize production by discovering the optimal configuration of producers and injectors. Reduce costs by reducing water injection while maintaining production.



# Probabillistic Decline Curve Analysis

Fully automated probabilistic DCA leveraging state-of-the-art machine



## **Cyclic Steam Optimization**

Maximize production or minimize steam costs by focusing on only the best cyclic steam opportunities. Reduce steam costs by reducing steam injection while maintaining production.



## Steamflood Optimization

Maximize production by discovering the optimal configuration of producers and injectors. Reduce steam costs by reducing steam injection while maintaining production.



### CO<sub>2</sub>-flood Optimization

Predict production response and redistribute CO2 accordingly.
Reduce costs by reducing CO2 injection while maintaining production.



### **Shale Optimization**

Optimize completion design to minimize frac cost and maximize initial production rates.





Uses well known physical models and state-of-the-art machine learning techniques



Very fast and independent of interpretation bias, full field allocations can be done in hours



Can run locally or on Tachyus Cloud, with no infrastructure footprint



Data can be exported easily to other visualization and analysis tools