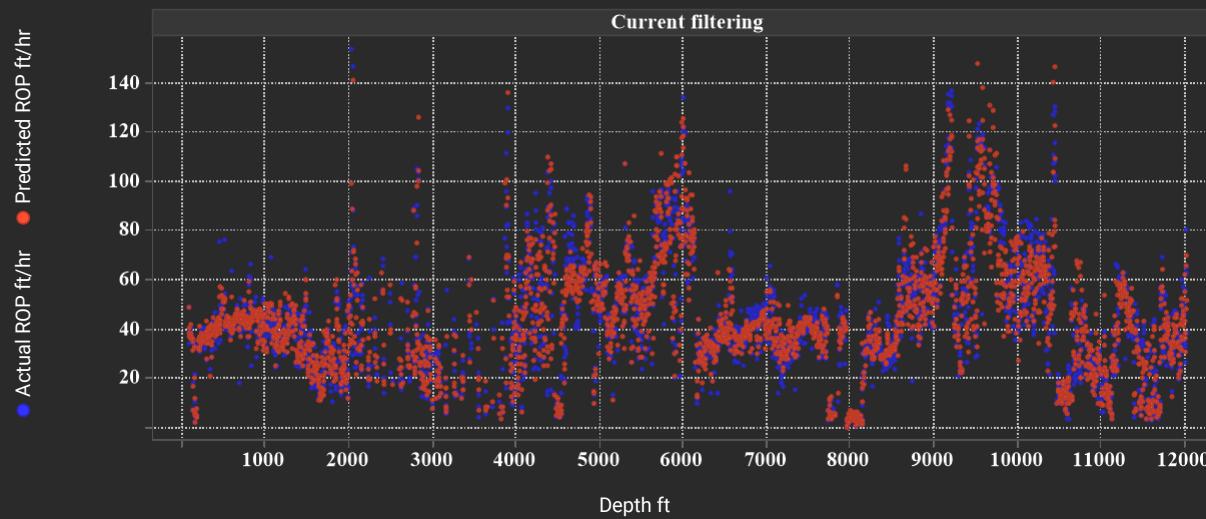


## Project

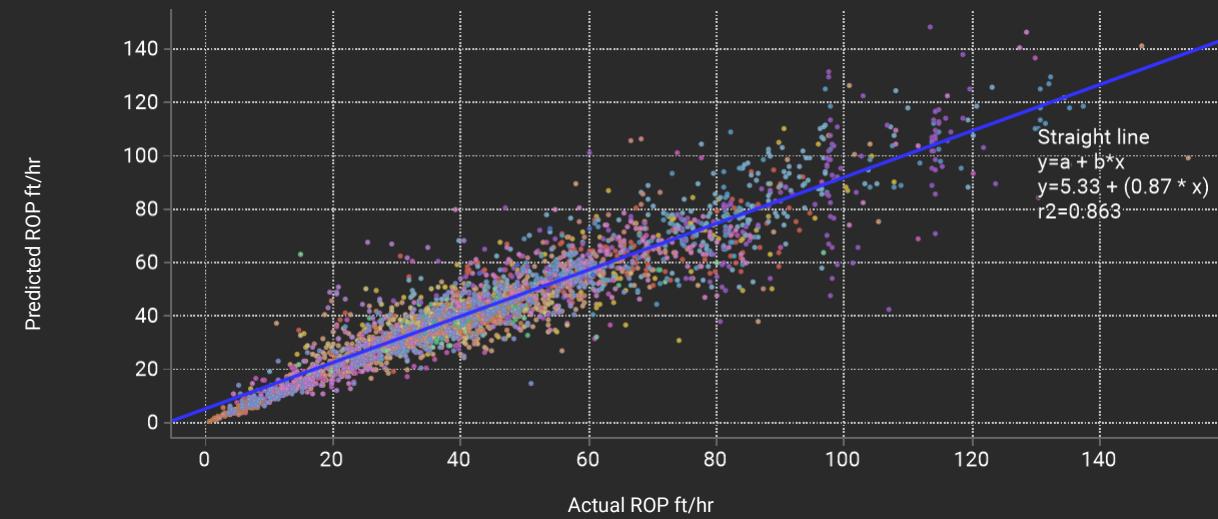
Column	(Subsets)	
Depth ft	All data	2
r	All data	
RPM	All data	
Torque f-p	All data	3
Flow gpm	All data	
SPP Psi	All data	
ECD lb/gal	All data	
ppg psi/ft	All data	
ToothWear	All data	
Reynold Num...	All data	
Actual ROP ft...	All data	
Predicted RO...	All data	
Optimized ROP	All data	
inputRowIndex	All data	
Marked 10:19...	All data	

## 18 columns from Project

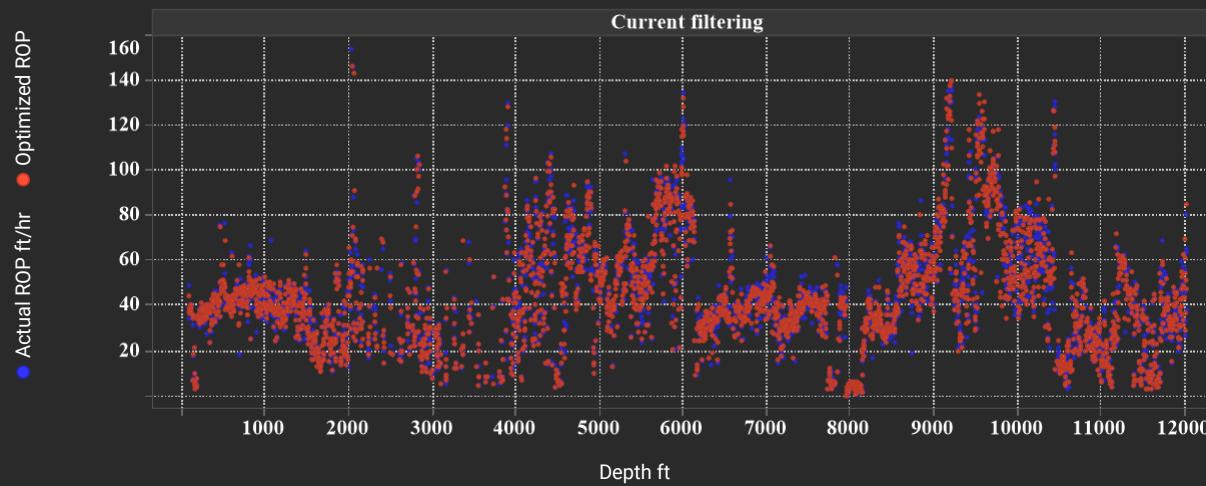
Actual ROP ft/hr, Predicted ROP ft/hr vs. Depth ft



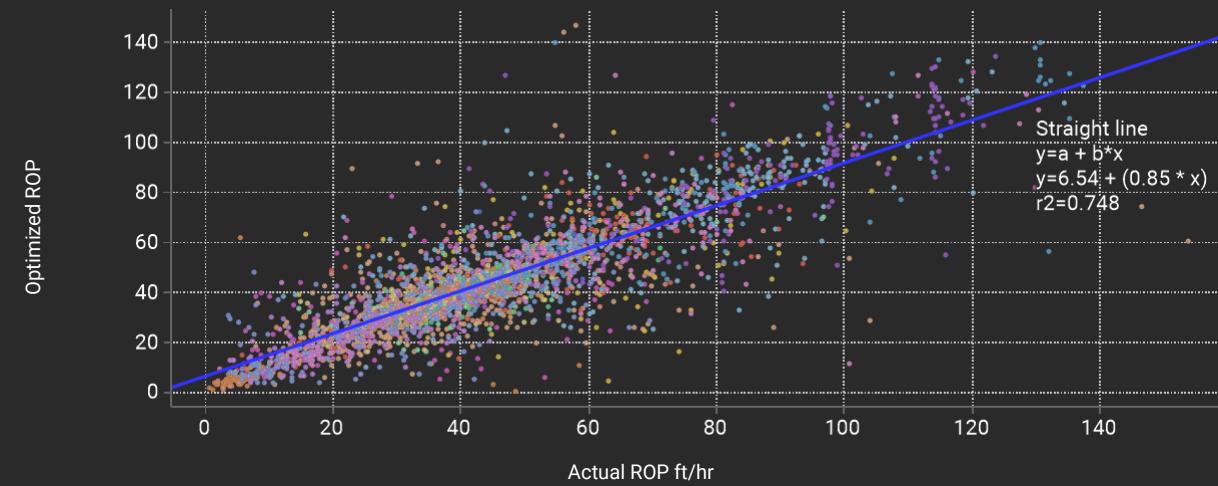
Predicted ROP ft/hr vs. Actual ROP ft/hr



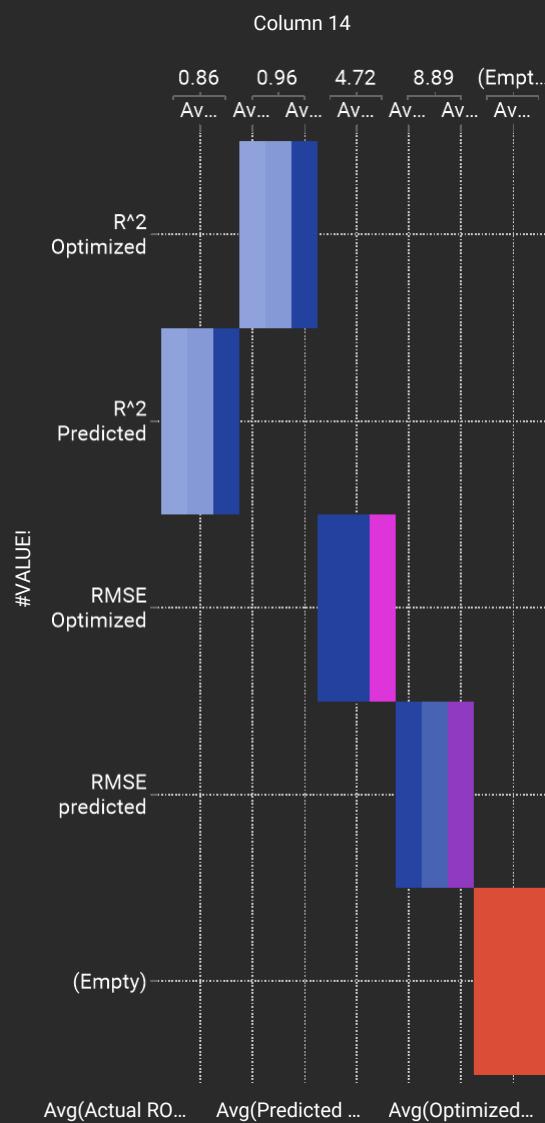
Actual ROP ft/hr, Optimized ROP vs. Depth ft



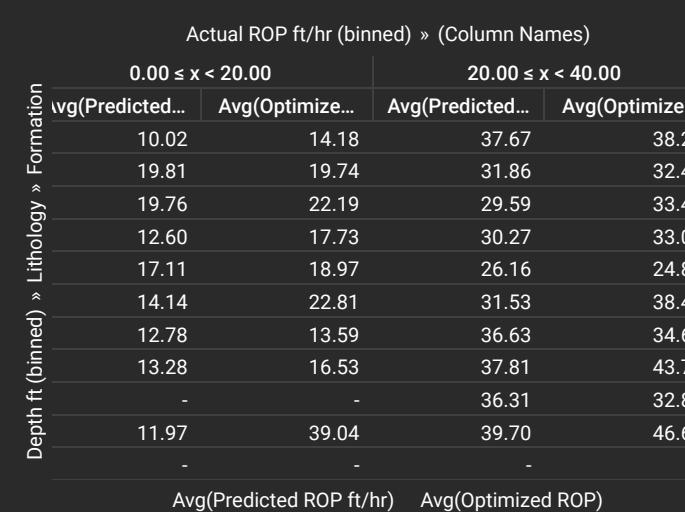
Optimized ROP vs. Actual ROP ft/hr



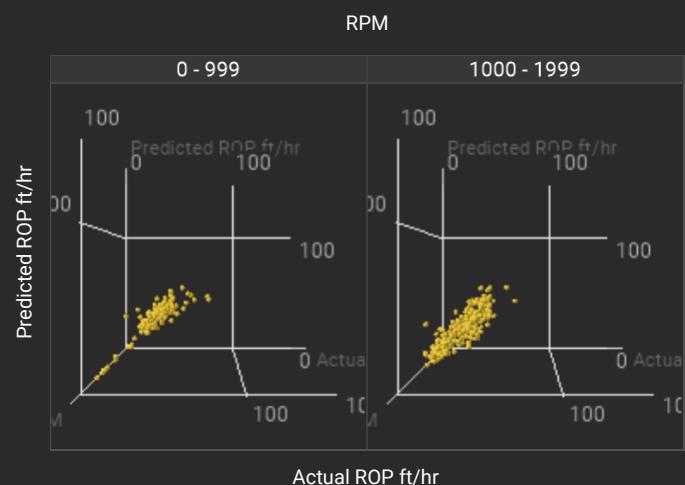
Actual ROP ft/hr, Predicted ROP ft/hr...



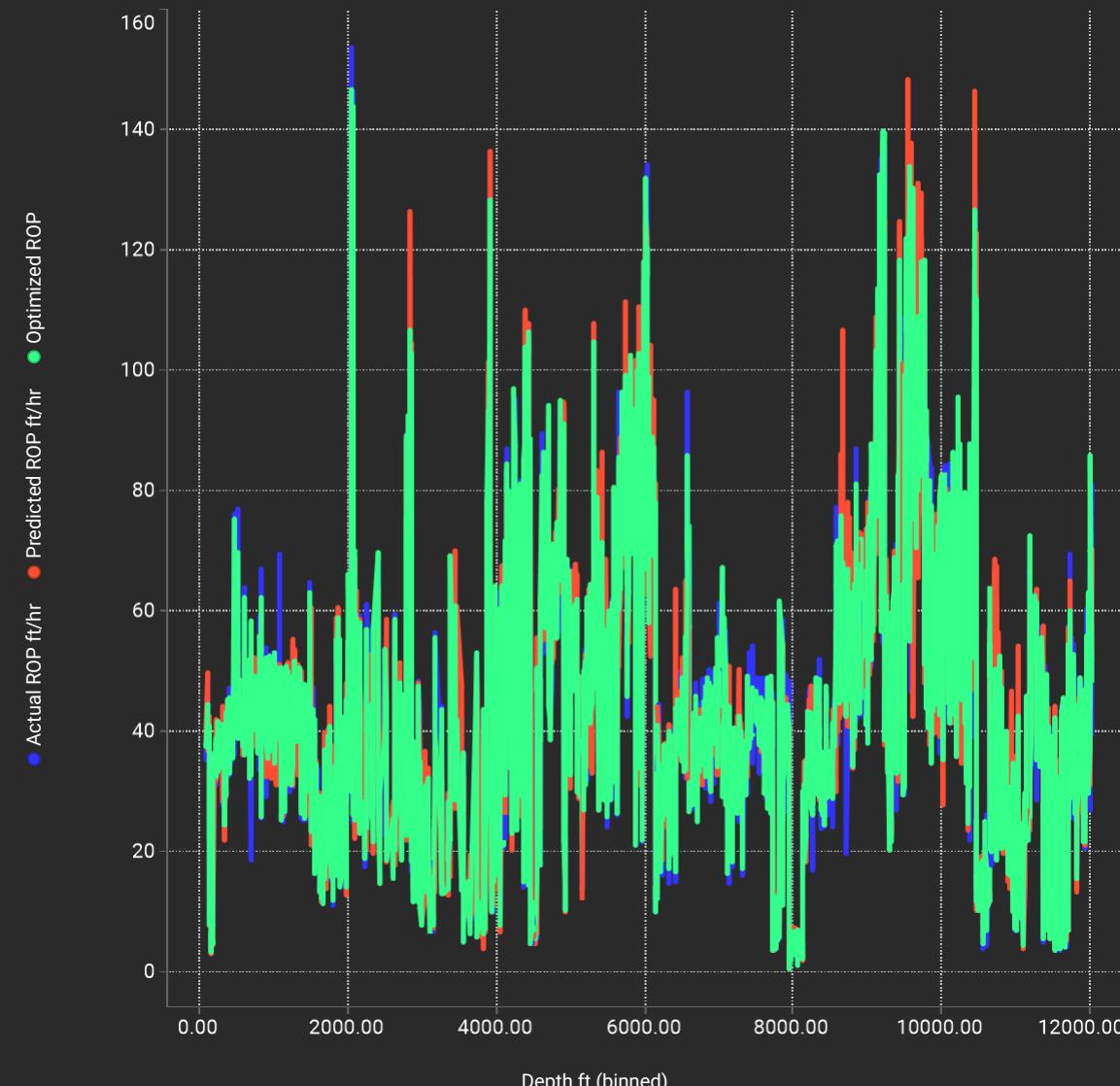
Predicted ROP ft/hr, Optimized ROP per Dept...



RPM vs. Actual ROP ft/hr and Predicted ROP ...

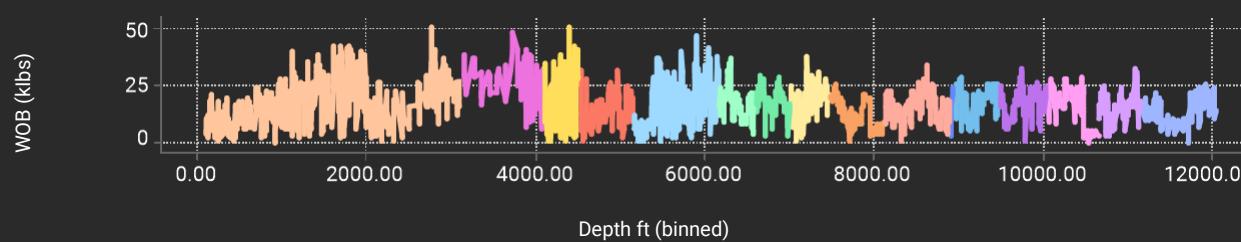


Actual ROP ft/hr, Predicted ROP ft/hr, Optimized ROP – Depth ft

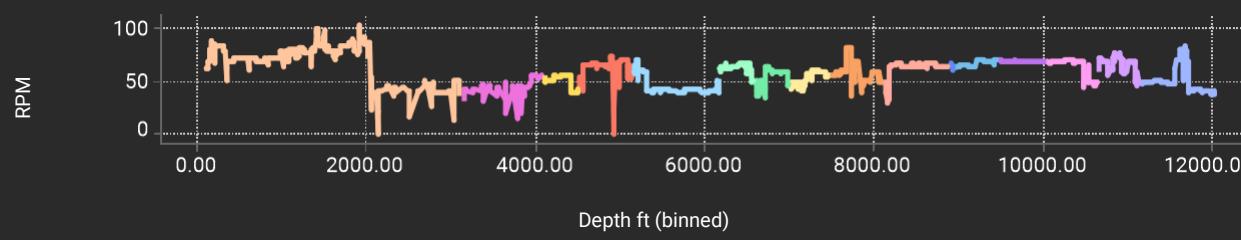


## The Parameters that affect on Rate of Penetration

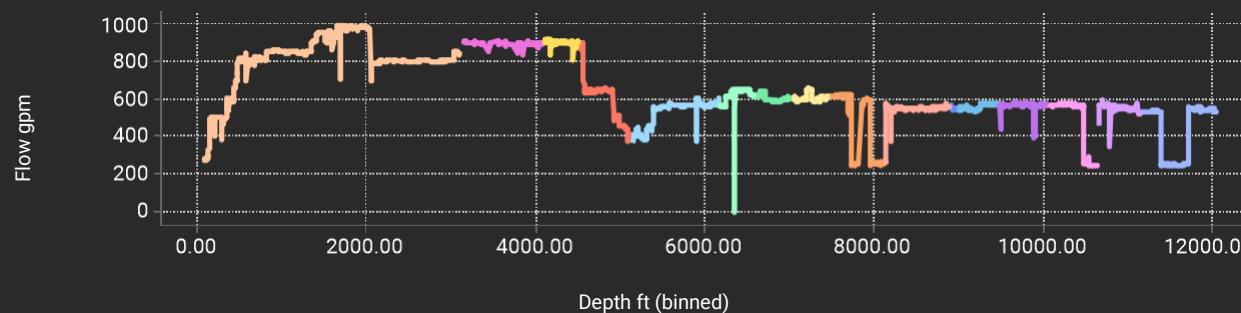
WOB (klbs) – Depth ft



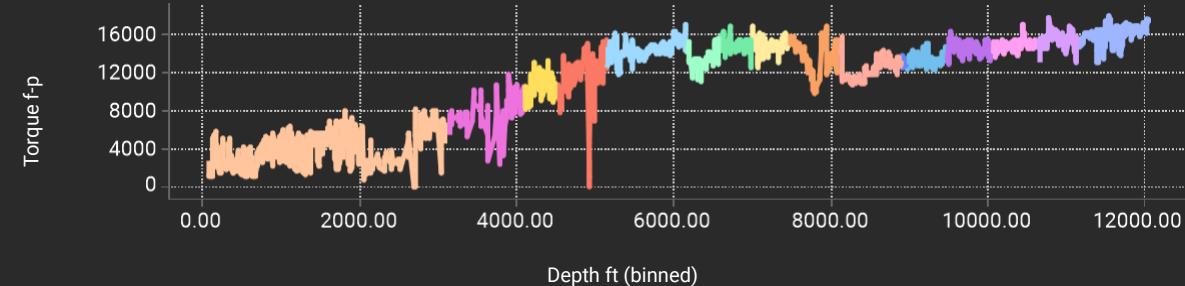
RPM – Depth ft



Flow gpm – Depth ft



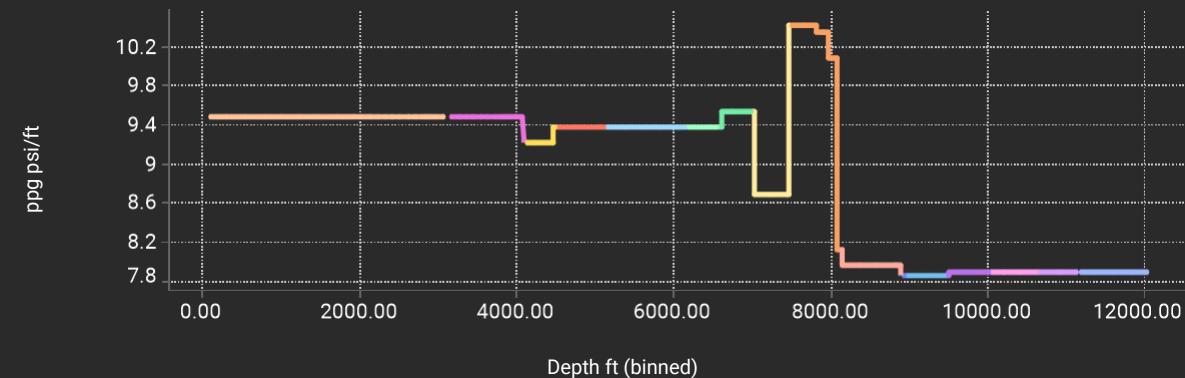
Torque f-p – Depth ft



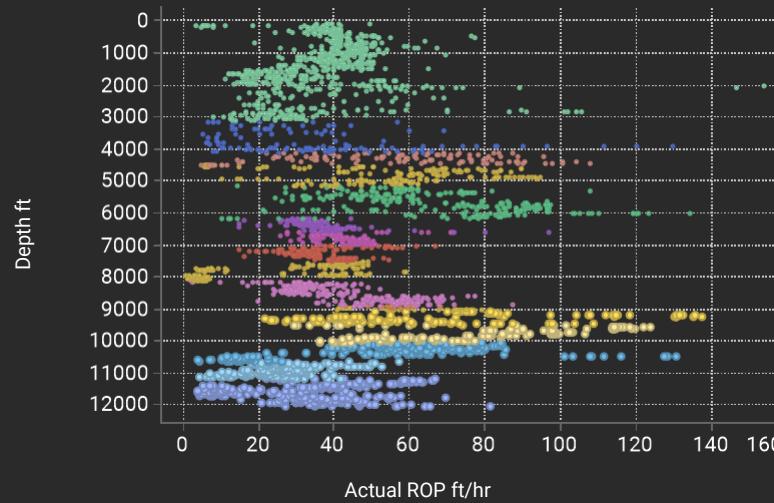
SPP Psi – Depth ft



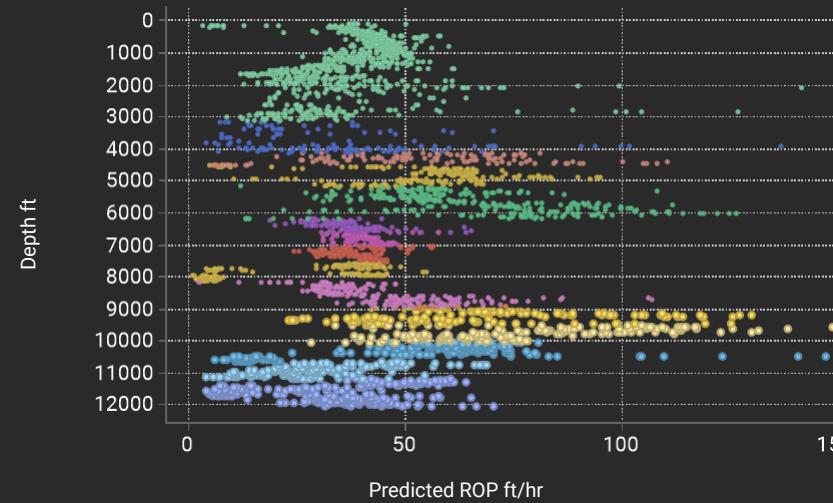
ppg psi/ft – Depth ft



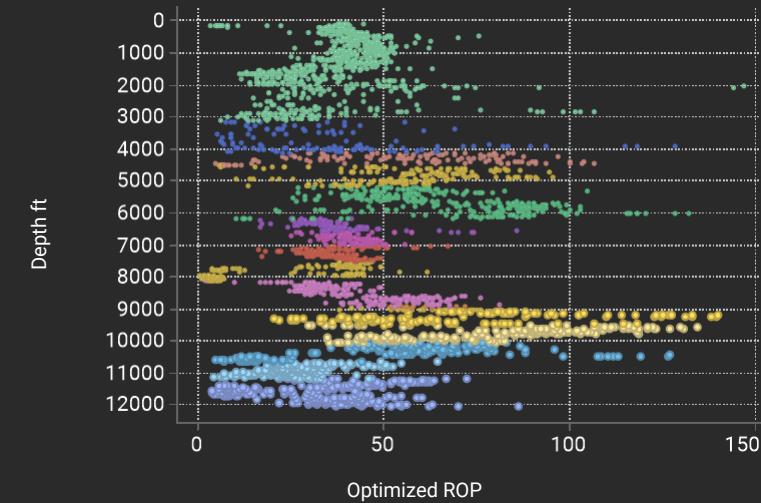
Depth ft vs. Actual ROP ft/hr



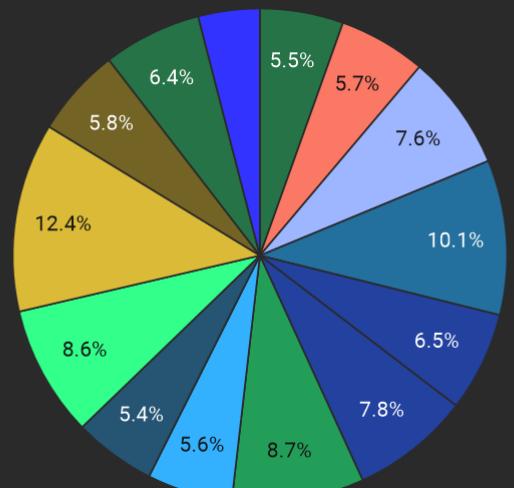
Depth ft vs. Predicted ROP ft/hr



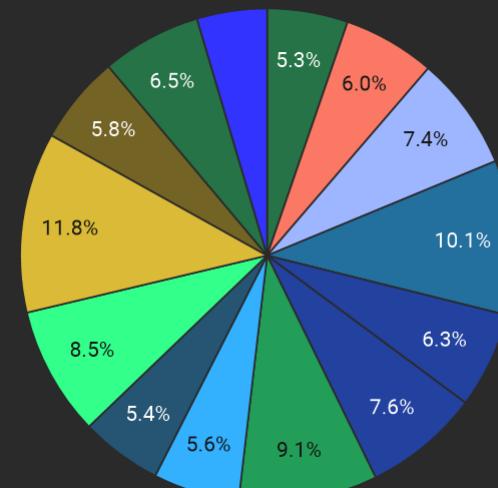
Depth ft vs. Optimized ROP



Avg(Actual ROP ft/hr) per Lithology



Avg(Predicted ROP ft/hr) per Lithology

Avg(Predicted ROP ft/hr)  
per Lithology

Data table:

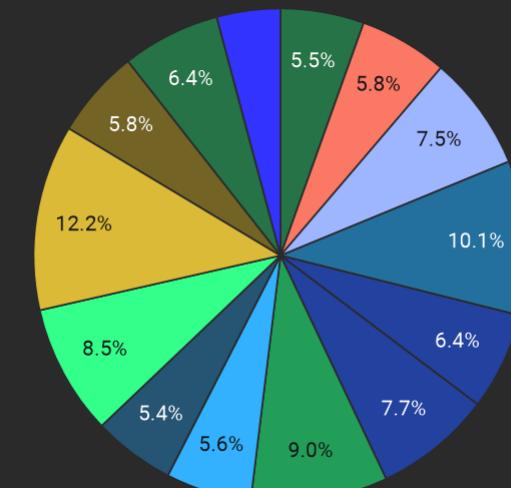
Project

Color by:

Lithology

- Anhydrites interbedded dolomites
- Chalky, Marly and Clay dolomites
- Limestone
- Limestone and Dolomites
- Limestone with Dolomites
- Limestone with dolomites
- Limestone with marl
- Limestone with plastic
- Limestone with shale

Avg(Optimized ROP) per Lithology



## Actual ROP ft/hr, Predicted ROP ft/hr, Optimized ROP per Formation, Lithology, ...

