

# Upstream Data Analyzer (UDA) - NPT Reduction

## Business Challenges

- Non-productive time (NPT) is the actual time (in man hrs) when drilling operations do not occur. NPT accounts for 20% - 30% of the total drilling operations costs and NPT due to “waiting” factor
- Significant waiting delays (in days) for data relays from the drilling sites to the Rig Automation/ Analytics Center and vice versa
- Processing time constraints of drilling and well logs (in hrs), with a typical offshore oil platform generating between 1TB and 2TB of data per day
- Challenges in getting insights from combining structured, unstructured and real-time data sources

## Business Objective

- Adopt On-demand, predictive and agile data-to-insights (d2i) platform
- Solution should enable combined data-to-insights process (d2i) to manage both structured and unstructured data sources
- Platform should allow instant analysis to identify lithology patterns, hydrocarbon zones or deviations in the sub-surface zones
- In addition, it should support custom rule-sets & models to be applied on each or any combination of E&P data source(s)

## Solution

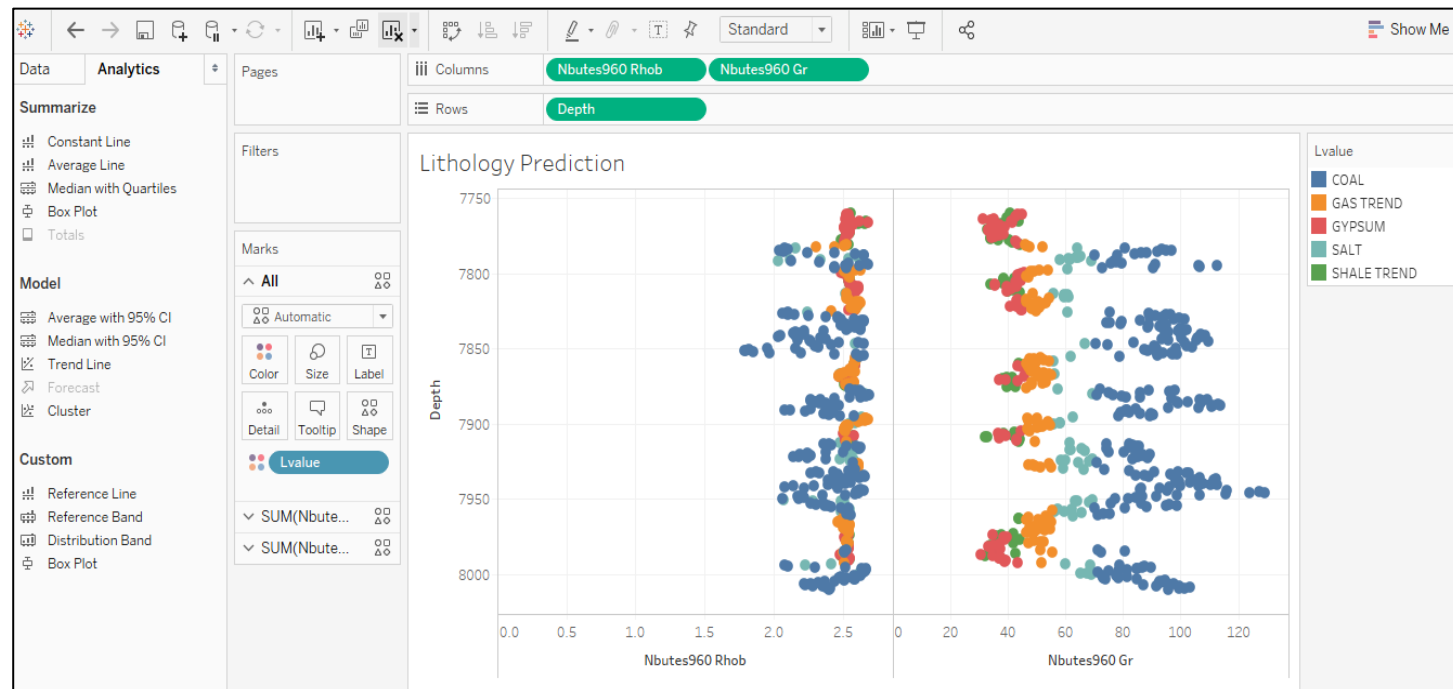
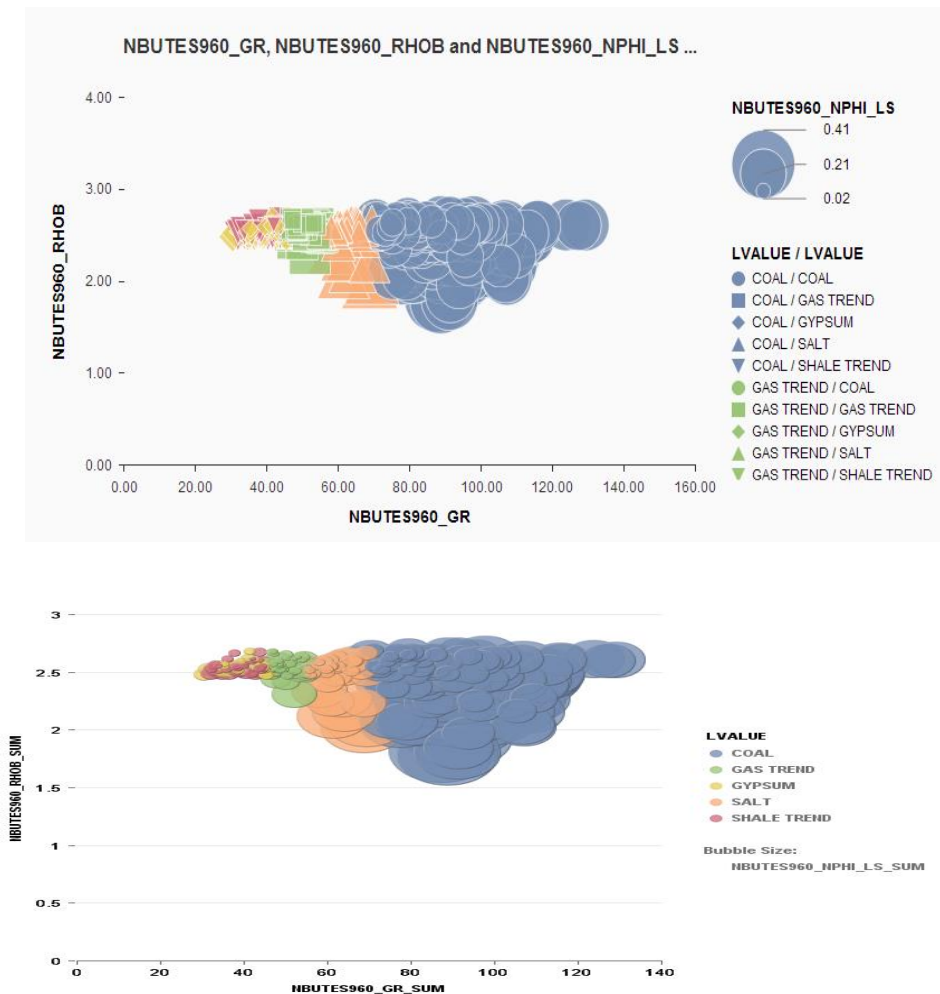
- Uses prediction models for sub-surface characteristics, drilling plans, production, etc.
- Supports application of AI/ML algorithms for NPT reduction strategies and lithology prediction
- Monitors events to avoid drilling surprises/incidents.
- Uses prediction and forecasting models for sub-surface characteristics, drilling plans, production, etc.
- Flexibility to be deployed on clients' private cloud for enterprise access as well as access at the offshore project sites.

## Business Value

- Ready implementation framework to perform advanced analytics on upstream oil & gas data
- Solution can be plugged in as part of Digital Oil Field (DOF) strategy for an upstream oil & gas firm
- Using the solution leads up to 30-35% reduction of NPT (nonproductive time) factor “waiting time” related to drilling operations
- Customers can analyze several terabytes of data from multiple E&P data clusters instantly such as from seismic, drilling, well logging, reservoir and production scenarios

The client is a major E&P operator based out of India

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# Upstream Data Analyzer (UDA)

- ü SAP Certified Solution
- ü Ready implementation framework to perform advanced analytics on upstream oil & gas data
- ü Combined data-to-insights process managing structured and unstructured data sources
- ü SAP HANA as primary database for fast data processing, analysis and reporting
- ü Private/Public cloud deployment
- ü SAP SFP technical validation
- ü Referenced in IDC publications

