

Customer: Upstream Oil & Gas Company

Basin: Anadarko

Business Impact:

Ability to analyze cost and production data estimates based on multiple versions of a drilling schedule

Capital Budget Reports Reduced from 3 days to 10 minutes



Business Challenges

Upstream oil and gas companies value efficiencies throughout the well lifecycle - better processes and visibility into data enable better business decisions. The ability to make faster decisions and streamline data from various systems was critical to this independent upstream oil & gas company drilling in the Anadarko basin.

The company spent a considerable amount of time scheduling and reviewing wells to prepare reports based on economic, finance, and land information to support key strategic goals, marketing, expirations, and other corporate requirements.

They struggled with a manual process for scheduling and preparing reports from disparate systems and Excel files. Every week engineers dealt with the consuming task of collecting data from multiple sources and then applying analytics to determine optimal drilling decisions, the process required engineers to:

- Compare well data and well type curve data.
- Create multiple versions of the rig schedule, approved schedule, and pending schedules.

To expedite and automate the internal processes for pre-drilling decisions the company determined that they needed a rig scheduling solution. They also required the ability to run various scenario calculations based on the drill schedule and dynamically generate cost estimates for approved or pending schedules to determine the economic viability of future wells.

The Answer?

SigmaFlow's Well Delivery & Rig Scheduling Solution.

Solution

The company opted to use SigmaFlow's Well Delivery & Rig Scheduling solution as their repository for all pre-drilling information. SigmaFlow's automated workflow capabilities expedited both the pre-drilling processes and the collection of data from external systems. SigmaFlow also provided the ability to create multiple schedules, both approved and pending, to use for analysis.

As the central repository for pre-drilling information, the information residing in SigmaFlow included:

- Scheduled data for a well, including customized calculations for determining drilling duration and when to complete the well.
- Imported learning curve data for calculating production and completions scheduling, including data for estimating oil reserves in a region or area.
- Imported production data, including calculated data based on learning curve or type curve.
- Imported cost data, including budgeted costs, AFE costs, engineer's estimates, and current cost estimates.

SigmaFlow's workflow process collected all the data and rig schedules and enabled the company to integrate the data into an existing analysis engine. They were able to create reports leveraging the SigmaFlow data for analysis to compare the effects of the different schedules for:

- Capital Burn Rate
- Projected Costs
- Projected Production Data

Summary

Prior to SigmaFlow, there was a three day turnaround in creating reports that included the capital burn rate and production forecast.

The SigmaFlow solution enabled engineers to quickly create various rig schedules, collect external data, and store that data in a centralized repository and then export the data into an external visualization and analytics engine reducing their reporting time from three days to 10 minutes.