

## Data Sources

- Ignition SCADA

## Calculations and Capsules

- Value Search to create capsules for Drive Gain above 60%.
- Signal from Condition to find the duration of capsules.

# Field Wide Analysis

## Challenge

Data analysis is changing the landscape of the oil and gas industry. Operators are turning to the power of data to identify operational upsets throughout the field. Separation is one of the cornerstones of upstream operations. When separation problems occur, leading to gas blowby and liquid carryover, engineers need to be alerted of the situation so that they can correct it. Coriolis meters are frequently used because of their ability to tolerate sand, debris, and gas coming out of solution. Production engineers are challenged with identifying meters with high Drive Gain, a percent of input power, indicating potential process upsets such as entrained gas or bad meter calibration. An engineer could have hundreds of meters per area they have to monitor for operational efficiency. The challenge is finding a scalable, automated solution to analyze meters field-wide with minimal manual effort.

## Solution

Seeq provides the ability to scale valuable analyses to meters across the entire field. Utilizing Seeq's Python SDK, engineers have the ability to search an asset tree for area-specific tags. Using Seeq's prebuilt tools, engineers can identify meters with consistently high (>60%) Drive Gain and rank meters by previous-day duration above 60%. A script can be automatically run every morning to generate a new set of ranked worksheets to provide a holistic view of all field operations.

## Benefits

Utilizing Seeq to perform a field-wide analysis of the Drive Gain on Coriolis meters provides engineers with the right data on a daily basis with minimal manual effort. Engineers are now equipped with the data necessary to make informed operational decisions. Engineers can also easily apply this process to other analyses that need to be scaled field-wide. This not only increases engineer productivity, but it also improves production, and has a direct effect on the company's bottom line.

## Summarizing Results

Seeq Workbook contains a Worksheet of each offending asset, ranked in order of worst at the top of the list.