CASE STUDY: REFINERY

Customer saved $6 million USD by using the LIFESPAN blending model to increase profitability and avoid process unit fouling

CHALLENGES

• Uncalculated risk when purchasing opportunity cargo

  – Blend data is unavailable at decision time because sampling takes too long

  – Unknown impact on asphaltene stability increases the risk of an unstable blend

• Negative impact on operations and profitability

  – Risk of increased OPEX due to processing issues resulting from blend incompatibility

  – Lost profits due to the reduced market value of an unstable fuel oil blend

SOLUTION

• Used the **LIFESPAN™ blending model** to rapidly predict blend stability ahead of cargo arrival

  – Assay data on incoming cargo was fed into the proprietary LIFESPAN blending model

  – The model predicted the asphaltene stability risk of multiple possible blends, based on historically similar crudes

• Managed blend stability risk over time

  – LIFESPAN model projected blend behavior over 30-, 60-, and 90-days

  – This data was used by the customer to develop and implement mitigation strategies for less stable blends
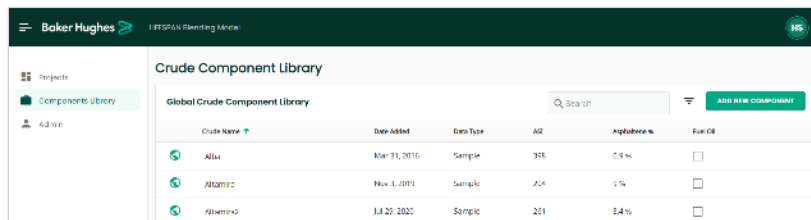
RESULTS

$1 million USD
Approximate profit on incremental throughput of opportunity feedstocks

$5 million USD
OPEX savings by avoiding crude unit shutdown from blend incompatibility

"The LIFESPAN blending model helped the customer make faster and more informed purchasing decisions while avoiding costly processing problems."

  – **Ralph Navarrete**
    Product Line Director

Example view of existing and user-created components

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