

# 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**

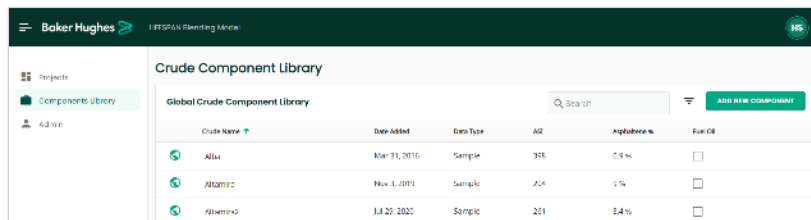
Approximate profit on incremental throughput of opportunity feedstocks

**\$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



The screenshot shows the Baker Hughes LIFESPAN Blending Model interface. It features a sidebar with navigation options like 'Projects', 'Components Library', and 'Add New Component'. The main area displays a 'Global Crude Component Library' table with columns for Crude Name, Date Added, Data Type, API, Asphaltene %, and Fuel Oil. Three rows are visible, representing different crude samples.

Crude Name	Date Added	Data Type	API	Asphaltene %	Fuel Oil
Alba	Mar 31, 2016	Sample	385	0.5 %	<input type="checkbox"/>
Alamir2	Nov 3, 2011	Sample	264	1 %	<input type="checkbox"/>
Alamir42	Jul 20, 2020	Sample	281	0.4 %	<input type="checkbox"/>

Example view of existing and user-created components