

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

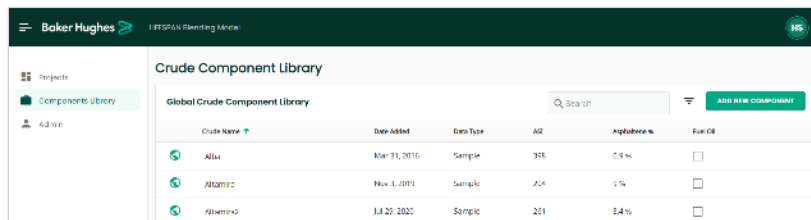
Approximate profit on incremental throughput of opportunity feedstocks

\$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 Data'. 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 of data are visible, each with a green circular icon to the left of the Crude Name.

Crude Name	Date Added	Data Type	API	Asphaltene %	Fuel Oil
Alba	Mar 31, 2016	Sample	385	0.5 %	<input type="checkbox"/>
Alamir2	Nov 3, 2019	Sample	204	1 %	<input type="checkbox"/>
Alamir42	Jul 20, 2020	Sample	201	0.4 %	<input type="checkbox"/>

Example view of existing and user-created components