**CASE STUDY: BRAZIL**

Baker Hughes specialty chemicals reduces ocean sheen by 90%, helps save offshore producer’s operating license

**CHALLENGES**
- Ocean sheen caused by iron, oil, and other solids in discharge water plagued offshore operator for seven years.
- Local regulators were close to suspending operator’s production license due to ongoing environmental threats posed by ocean sheen.
- Previous chemical treatments to eliminate ocean sheen were ineffective as production operations changed.

**SOLUTION**
Baker Hughes Oilfield and Industrial Chemicals delivered a detailed analytical method and chemical program comprising:
- Advanced light-scattering analysis to quantify solids content in ocean samples.
- High-resolution digital imaging of particles in flowing fluid samples.
- Spectroscopic measurements for rapid monitoring of metal solids in oil sheen.
- Optimized chemical treatment combining RBW405 green coagulant and SPC698 water clarifier for improved solids control and metal removal.

**RESULTS**
- Eliminated more than 90% of sheen, reducing ocean sheen line from more than 2 miles to less than 100 m.
- Reduced solids, iron, and asphaltene content in overboard water by more than 90%.
- Saved time and money on treatment while lowering risks of overboard water upsets and improving production by 67%.
- Boosted efficiency of crude oil treatment and reduced workovers on the platform by 70%.
- Improved operator’s standing with regulators and saved the E&P operating license.

“I’ve never seen a field trial as successful as this one with Baker Hughes. I think they’ve delivered the best solution for our long-term ocean sheen challenges.”

− Offshore operator’s production engineer

The combined coagulant/water clarifier treatment effectively removed the miles-long ocean sheen to minimize the operation’s environmental impact.