

## Pipeline Flushing and Filtering Campaign



**Location:** Gulf of Mexico

**Date:** Summer 2017

### Challenge

CFAST Environmental Services was called on to pump, pig, and treat the returning fluid from 20 pipelines as part of a large pipeline campaign. These 20 pipelines varied in size, length, and volumes, making the need for our application to be particularly versatile. Also, the customer had limited deck space and requested a low amount of media consumption.

The goal was to significantly reduce the levels of total organic carbon, lead, oil and grease, and total suspended solids to be in compliance with the permitting regulations of the Department of Environmental Quality of Louisiana.

### Action

- Mobilized our CORE Unit (media-less) pipeline package along with two 500bbl tanks to minimize deck space.
- Set up so that we could separate out and store all hydrocarbons for customer resale.
- After receiving fluid straight from the pipelines, we would de-gas the fluids through our 115bbl tank and gas buster.
- Following the de-gassing, the fluid was then routed into the CORE Unit for the bulk of our filtration and separation process.
- After the fluids were separated, we then routed the fluid to one of our 200bbl tanks then discharged NPDES quality water overboard.
- Throughout the entire process CFAST's highly-qualified personnel would sample and run tests on the overboard fluid to ensure we were within regulation.

## Results



- Treating and discharging the water overboard on site saved the customer the costs and liability that would have been associated with disposing of the water by other means such as trucking and disposal fees.
- Reduced nonproductive time by treating and discharging on site which resulted in speedier overall operating time.
- Ensured the discharged water was in compliance with all NPDES standards, limiting the long-term liability and association with the waste, avoiding fines and negative public opinion.
- In using the CORE Unit we eliminated the cost and inconvenience of exhausted media, saving both money and deck space.
- Daily testing reports by our operators gave us and the customer real time data on the operation. This data included flow rates, oil and grease concentrations, IR tests, sheen tests, total fluid overboard, and total hydrocarbons collected.
- Over the life of the project we filtered an estimated 45,000bbls with no wasted media byproducts.

| LOCATION     | SEGMENT # | INFO              | VOLUME (bbls) | WD (ft) |
|--------------|-----------|-------------------|---------------|---------|
| BS 41 B      | 15213     | RE-FLUSH ABN      | FLUSHED       | 35      |
| EC 172 A     | 11730     | FLUSH TO PLATFORM | 500           | 72      |
| EI 053 B     | 9211      | PIG PIPELINE      | 665           | 23      |
| EI 120 14    | 11601     | FLUSH TO PLATFORM | FLUSHED       | 40      |
| EI 158 B     | 18614     | RE-FLUSH ABN      | FLUSHED       | 100     |
| EI 175 C-PRD | 18832     | RE-FLUSH ABN      | FLUSHED       | 83      |
| EI 281 A     | 9289      | FLUSH TO PLATFORM | 1,296         | 210     |
| EI 281 A     | 1127      | GEL PIG PIPELINE  | 4,990         | 220     |
| EI 254 A     | 11339     | PIG PIPELINE      | 160           | 138     |
| HI 116 A     | 18789     | FLUSH TO PLATFORM | 5856          | 45      |
| HI 120 AP    | 18240     | RE-FLUSH ABN      | FLUSHED       | 50      |
| HI 130 C     | 16077     | PIG PIPELINE      | 126           | 50      |
| HI 167 AP    | 8378      | RE-FLUSH ABN      | FLUSHED       | 57      |
| HI A446 A    | 5844      | PIG PIPELINE      | 10,835        | 165     |
| MP 112 2     | 9006      | FLUSH             | 1,251         | 60      |
| MP 116 A     | 8372      | FLUSH             | 677           | 60      |
| MP 116 B     | 8373      | FLUSH             | 677           | 69      |
| VR 60 A      | 4789      | FLUSH TO PLATFORM | 354           | 45      |
| WC 130 B     | 18228     | PIG PIPELINE      | 1,095         | 46      |
| WC 314 A     | 8020      | PIG PIPELINE      | 585           | 62      |

**NOTE: ALL FLUID WAS RETURNED AND FILTERED THROUGH OUR CFAST CORE FILTRATION SYSTEM**