

Tailings Reclamation Barge

Design, procurement, construction, and commissioning of a barge to reclaim water from an oilsands plant's Thin Fine Tailings (TFT) storage pond. Detailed engineering included architectural, process, structural, piping, mechanical, HVAC, instrumentation & controls, and electrical design. Additional coordination was provided for experts specializing in pump intakes, rotating equipment, and stress analysis. A marine engineering specialist oversaw the design of the hull and pontoons and was responsible for overall barge stability.

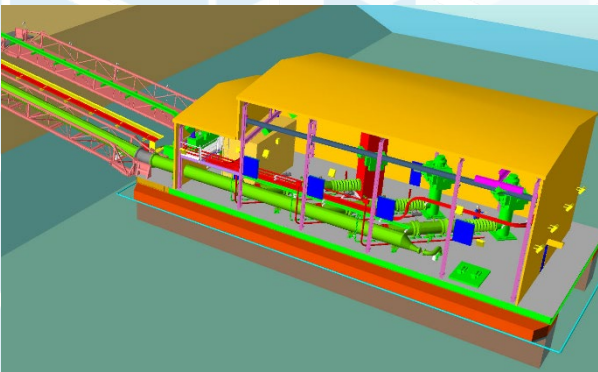


Tailings Reclamation Barge

Alberta

Oil Sands & SAGD

\$15M TIC



ENGINEERING & DESIGN SERVICES

The barge was designed for extreme northern winter cold conditions, and work was completed in accordance with robust oilsands industry standards. Rally's design scope included:

- Confirmation of process hydraulic design.
- Specification and selection of TFT pumps and auxiliary systems.
- Design calculations including thermal stress and transient analysis (i.e., water hammer).
- Detailed engineering work packages for: piping and mechanical systems, pump intake structures, pump house building, HVAC systems, and electrical distribution and control systems.
- Material take-offs.
- QA/QC of engineering and design documents.

ADDITIONAL MANAGEMENT SERVICES

In addition to the design work, Rally provided project planning, scheduling, and procurement services plus field support during barge fabrication, assembly, launch and commissioning.