

NEWS RELEASE www.jogmec.go.jp



Japan Oil, Gas and Metals National Corporation

Contact: Technical Solutions Project Group TEL: +81-3-6758-8671
Media Relations: Public Relation Division TEL: +81-3-6758-8106

SCWC technology Pilot plant test launched in Canada

~Technical Solution Project "Pilot plant test of Supercritical Water Cracking (SCWC) technology" operation launched~

JOGMEC (President: Hirobumi Kawano), along with JGC (Chairman: Masayuki Sato) have been conducting a Technical Solution Project "Pilot plant test of Supercritical Water Cracking (SCWC) technology". Hereby, both organizations announce the operation of the test starting from March 3rd, 2015 on a Pilot plant of 5 barrel/day (approx. 800 liter/day) inside the property of a Canadian government research agency, located in Alberta, Canada. Further research at this site will push the project further to the next phase, oversea demonstration test at the plant scale.

SCWC (Supercritical Water Cracking) technology refers to the technology which enables easy handling of oil sands and extra heavy oil (hereinafter collectively noted as extra heavy oils).

These extra heavy oils show high viscosity and specific gravity, making it difficult for pipeline transportation. By partially upgrading these extra heavy oils using only water on site, the viscosity and specific gravity can be lowered, which enables pipeline transportation. It is expected as an important technology that will further enhance the development/production of extra heavy oils in an environment friendly, simple, and economical way.

The Pilot plant test of 5 barrel/day (approx. 800 liter/day) has been conducted since March 3rd, 2015. Until this day, results equivalent to that of laboratory-scale (0.15 barrel/day: approx. 24 liter/day) has been confirmed, which indicates the success of a scale up.

Hereafter, the optimization of operating conditions and flow scheme will be conducted for long-term operation. Also, acquisition of engineering data for further scale up is being planned. Along with the Pilot plant test, promotions against Canadian extra heavy oil

development companies are under consideration, for the next demonstration phase.

Collaborative research overview

Research title: Pilot plant test of Supercritical Water Cracking
Term: Date of execution of agreement until the end of 2015FY
Content: Data acquisition for scale up, long term operation
Place: Devon, Alberta state, Canada
Plant capacity: 5 barrel/day (approx. 800 liter/day)



Pilot module of SCWC