

# Athabasca Oil Opts for GE's Water Treatment Technologies



TREVOSE, PA. and CALGARY, ALBERTA, CANADA — September 11, 2012 — Athabasca Oil Corp. has awarded GE (NYSE: GE) a contract to design and supply an integrated evaporator system for its 12,000 barrels per day Hangingstone oil sands operation located near Fort McMurray in northeastern Alberta, Canada.

GE's produced water evaporation process will enable the reliable treatment of produced water from the Hangingstone facility's steam-assisted gravity drainage (SAGD) process, combined with the use of brackish makeup water in lieu of fresh makeup water. The water treatment system will recover 97 percent of the produced water and brackish makeup water fed to the system as boiler feedwater to drive the SAGD process.

"The demand for innovative water treatment technologies that lessen the environmental impact of production facilities while improving project economics continues to increase. We have pioneered and optimized the utilization and efficiency of evaporators and crystallizers in oil sands applications. We are proud to help meet the unique water needs of this industry," said Bill Heins, general manager, thermal systems — water and process technologies for GE Power & Water.

GE's patented produced water evaporation solution has become the technology of choice for SAGD projects in the Canadian oil sands region as it helps producers minimize water consumption and water disposal, reduce environmental footprint and improve operating efficiencies.

Athabasca's Hangingstone project exemplifies the growing trend of using produced water evaporation systems for greenfield SAGD projects, due in part to the economic and environmental benefits offered by evaporators and drum boilers compared to traditional water treatment and once-through, steam-generation technologies. With the addition of GE's proprietary contaminant reduction system, the technology can produce a high-quality distillate suitable for use as feedwater for high-pressure drum boilers.

GE will be providing Athabasca with two evaporator units, which will include GE's split sump design for enhanced energy efficiency. The system also will incorporate GE's fifth-generation module design to meet the customer's need for an enhanced

## Athabasca Oil Opts for GE's Water Treatment Technologies

Published on Chem.Info (<http://www.chem.info>)

---

project schedule and cost certainty. GE will deliver the equipment to the site in the third quarter of 2013 with commercial operation expected to begin in 2014.

According to the Canadian Energy Research Institute's March 2012 report entitled "Canadian Oil Sands Supply Costs and Development Projects (2011-2045)," crude oil production in the oil sands region is expected to increase from 1.6 million barrels per day (MMBPD) in 2011 to 3.3 MMBPD by 2020. Therefore, as projects in Alberta's oil sands continue to develop, so will the potential for production activities to create large quantities of wastewater. Developers of oil sands resources are increasingly turning to GE's evaporative and zero-liquid discharge technologies to address this critical issue.

In early 2010, GE established a heavy oil solutions organization dedicated to bringing new technologies to the industry. GE has established a Heavy Oil Centre of Excellence within GE Canada's Innovation Centre in Calgary. This new center of excellence includes heavy oil commercial and engineering industry experts who, working with customers and other stakeholders such as the Alberta government, seek to define new solutions for industry challenges related to power, water, productivity and project execution. GE also operates an oil sands support center in Fort McMurray to provide greater local support for customers seeking to improve efficiency and reduce environmental impacts.

*For more information, please visit [www.ge.com](http://www.ge.com) [1].*

*Find GE at WEFTEC Booth #4059, Hall F*

### **Source URL (retrieved on 10/01/2014 - 8:09pm):**

<http://www.chem.info/articles/2012/09/athabasca-oil-opts-ge%E2%80%99s-water-treatment-technologies>

### **Links:**

[1] <http://www.ge.com/>