

Customer Testimonial



Monolec® R & O Compressor / Turbine Oil (6403)

North American Hydro – Alpena, Mich.

Turbines & Exciters

- Cooler operating temperatures
- Less friction
- Longer oil life

Customer Profile

North American Hydro is a hydroelectric company located in Alpena, Michigan. They own and operate four hydroelectric dams and two water storage dams in the Thunder Bay River Basin. They have been an LE customer since 1991.

Application

North American Hydro use nine turbines manufactured by G.E. Lufell, Wellman, Seavor and Morgan for power generation.

Challenge

The turbines were giving inconsistent operation. The commercial grade oil was breaking down and they were experiencing some sludge and emulsification of the lubricant.

LE Solution

Greg Klang, LE lubrication consultant, recommended Monolec® R & O Compressor / Turbine Oil (6403), which offers excellent oxidation resistance, separates readily from water, protects against corrosive wear and is extremely long lasting and non-foaming in service.

Results

Lubrication Engineers was used exclusively since 1991 at North American Hydro. In 1998 they elected to test a commercial grade turbine oil.

A test was started with the other product installed in Unit 1, which runs intermittently. After eight years, LEAP™ was run on all units. Unit 3 runs continuously on Monolec 6403 and after ten years, showed less than half the wear as the



G.E. turbines



Reservoir for Monolec 6403 to main turbine bearings



competitive product with eight years run time. All test units were converted back to Monolec 6403 and North American Hydro is now testing LE in other locations.

Rick Craner, maintenance manager, stated, "Anyone who operates equipment will soon realize better lubrication, cooler operating temperatures, less friction, and longer oil life using LE products."

Other Products Used

- Quinplex® Food Machinery Lubricant (4024) is used on the flow control gates.
- Quinplex® Food Machinery Lubricant (4025) is used on all heavily loaded bearings on screens and gates with high loads.
- L-X® Heavy-Duty Chemical Supplement (2300)
- Monolec® Two-Cycle Engine Oil (8104)
- Oil Safe® containers are used at all dam locations.



Flow control gates lubricated with Quinplex 4024

Thank you to Rick Craner, maintenance manager, Grace Phillips, eastern regional manager, and to Greg Klang, LE lubrication consultant (pictured), for providing the information used in this report.



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Based on actual user experience. Individual results may vary. Not intended to supersede manufacturer specifications.