

APPLICATION PROFILE

OIL SANDS EQUIPMENT

Lubricating Oil System

Challenge: **SUB-ARCTIC LUBE OIL SYSTEM FOR CENTRIFUGAL PUMP**

Location: **NEW YORK/ALBERTA, CANADA**

Flodraulic's RHM team has a customer that is a highly regarded centrifugal pump manufacturer.

The customer required an API 614 Ch. 2 Special Purpose pressure lube skid for uninterrupted, critical operation in a sub-arctic environment. The lubricated pump/driver train transports crude oil products between extraction and processing. The RHM system provides continuous cool, clean and filtered lubricant to the pumps rotating components.

This oil skid was purchased as an auxiliary support system on a centrifugal pump skid. RHM designed the skid from ground up, using best practices and following the stringent requirements of API 614. It is a fully redundant lube oil system designed for twenty-five years of uninterrupted operation. The skid was subject to extensive non-destructive examination (NDE) and positive material identification (PMI). It is a custom modular skid designed for "drop-in" installation at the end customer's location.

The installation at the Athabasca Oil Sands in Northern Canada offers no local shelter or environmental controls. RHM designed the entire skid to withstand the elements of the environment and operate unsheltered at -50° F year round. Cold weather materials, custom insulation, heated instrumentation control boxes and electrical heat tracing were employed throughout the system.

RHM's expertise and experience with API 614 Ch. 3 (General Purpose) and API 614 Ch. 2 (Special Purpose) systems set it apart from the market. Add in the impressive existing number of systems already installed with Canadian Natural Resources Limited in Ft. McMurray and it is easy to see why RHM was selected its OEM customer for this difficult application.

