



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

Trigen Energy – Oklahoma City, Okla.

Murray Steam Turbines

- Increased bearing life
- Extended oil drain intervals from one year to more than three years
- Reduced sludge by at least 85%
- Decreased waste oil by 75%

Customer Profile

Trigen Energy produces heat and cold air for customers in downtown Oklahoma City. They have been in business since 1962 and an LE customer since January 2002.

Application

Trigen Energy uses Murray steam turbines to drive refrigeration compressors.

Challenge

The pumps generate large amounts of water into the lubricating oil. The previous brand turbine oil would leave excessive amounts of sludge in the sump which required draining it and manually cleaning it every year.

LE Solution

The local LE lubrication consultant recommended Monolec® R & O Compressor / Turbine Oil (6403). Monolec 6403 is a rust and oxidation inhibited oil for reciprocating and rotary compressors, steam turbo generators, smaller industrial turbines, gears, bearings, and circulating systems. It separates readily from water and prevents corrosive wear. It is extremely long lasting and is nonfoaming in service.

Results

It is normal maintenance procedure to check bearing and thrust wear on the turbine bearings every year. After three years using Monolec 6403, there was no measurable wear on the bearings or thrust. With the previous oil, the bearings



needed to be replaced every three years on the average. With Monolec 6403 there is not even a swirl mark on the bearings.

Monolec 6403 is now in its fourth year of service. The previous commercial grade oil had to be changed every year.

Sludge in the sump has been reduced at least 85%.

Waste oil used to be a problem. After being pumped into the used oil container, it would contain so much water that the oil recovery company would not pick it up.

Since the conversion to Monolec 6403, this problem has been alleviated. In addition they now purchase 75% less oil and have 75% less to dispose of.

Lead mechanic, Jeff Tate stated, "I did not know there could be that much difference in oils."

Other Products Used

- Multilec® Industrial Oil (6802) – Gardner Denver rotary screw air compressors.



*Thank you to Jeff Tate, lead mechanic,
and to Michael Kidder, 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.

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