

6413 LOW TOX[®] TURBINE OIL

SEAWORLD FLORIDA, Orlando, FL

Various Pumps • SIC 7996 Amusement Parks

DRAIN INTERVALS EXTENDED FROM EVERY 4 MONTHS TO ONCE A YEAR!

CUSTOMER TESTIMONIAL



CUSTOMER PROFILE

SeaWorld Florida in Orlando, Florida, is known throughout the world. They have been an LE customer since 1995.

APPLICATION

SeaWorld must maintain a delicate chemical balance of both salt water and fresh water in state-



of-the-art animal habitats. SeaWorld has chosen LE's 6413 Low Tox Turbine Oil for its low toxicity value and superior lubricating ability. SeaWorld uses nearly 2000 pumps at the Orlando location, all of which are lubricated with LE's 6413 Low Tox Turbine Oil.

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AREA OF INTEREST

While using one competitive type lubricant, the pumps were experiencing a lot of heat and moisture along with bearing and seal failures. Because of these failures, the drain intervals were at only 4 months. When SeaWorld switched to another competitive lubricant, the intervals went to 6 months, however, the failures of the bearings and seals continued.



Durco 750 GMP Pumps

LE SOLUTION

The local LE Lubrication Consultant recommended LE's 6413 Low Tox[®] Turbine Oil to Henry Johnson, Water Quality Mechanical Shop Lead. [LE's 6413 is a low toxicity turbine oil designed with advanced product technology that exceeds the performance of premium turbine oils, yet affords low eco-toxicity to address environmental concerns.](#) It also has a low order of toxicity compared to standard commercial turbine oils and biodegradable turbine oils. LE's Low Tox Turbine Oils meet or exceed OEM requirements for many generators, turbines and governors.



20 main plant filtration pumps 700 GPM each of salt water



Fybroc carbon filter pump. It pumps 6,000 gallons per minute of salt water. It is protected with LE's 6413 Low Tox Turbine Oil.



Bell & Gossit pump moves 3,200 gallons of chilled water per minute to the live animal attractions.

CUSTOMER COST SAVINGS

With LE's 6413, drain intervals on the pumps were set at 6 months. After the first six months and no failures, the drain intervals were extended out to once a year, with still no failures.

Also, with the previous two competitive products, an oil change required an electrician to shut the pumps down and lock it out. Since switching to LE's 6413, the oil is changed while the pumps are still running, thus saving a lot of labor hours. In 1995, the labor was estimated at 2,560 hours with 230 gallons of oil being used. In 1997, labor was estimated at 640 hours with only 60 gallons of oil being used. **This is a savings of 1,920 hours and 170 gallons of oil.**

Henry Johnson states, "I think LE products are the most long lasting and cost effective products available. I am completely satisfied."



Henry Johnson, Water Quality Mechanical Shop Lead, was awarded LE's "Excellence in Maintenance" Award as a result of the documented savings he has realized for SeaWorld.

OTHER PRODUCTS USED

SeaWorld Florida also uses LE's 1275 Almaplex[®] Industrial Lubricant for their bearings and in their electric motors and pump packing.

We would like to thank Henry Johnson, Water Quality Mechanical Shop Lead and the local LE Lubrication Consultant for the information provided to prepare this report.

