Water Purification Example by LAKE-LYFTER

SO-EN CO.,LTD

Example.1 Uragami Reservoir 1

■Installation Place

Name : Uragami reservoir (For tap water)

Volume of Water : 1,790,000 m³

· Warter depth: 13 m

■ Specification

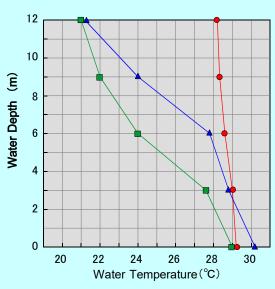
Model : LSN-50-0500

· Number of Machines : 1 Unit

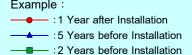
Compressor: 7.5 kw× 1

■Outline

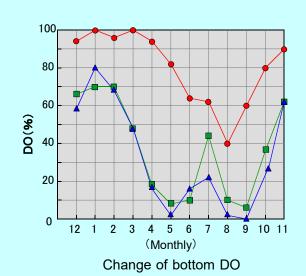
Compared water quality data of two years before LAKE-LYFTER installation with five years before, and one year after installation. In vertical distribution of water temperature, although it was a low temperature in bottom area, improved by circulation and became uniform temperature. Regarding the water quality index, as oxygen was supplied to the bottom layer area, dissolved oxygen (DO) increases, the algae such as chlorophyll-a etc was restrained by ammonium nitrogen decrease. pH is going down as photosynthesis by algae decrease. Development of odor declines in both of bottom layer and surface layer by these synergistic effect, water quality is improved in water area.

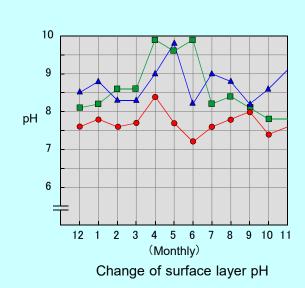












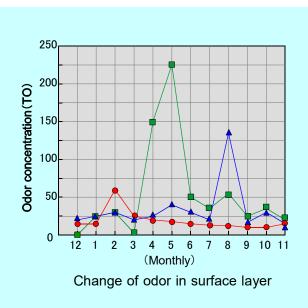
Water Purification Example by LAKE-LYFTER

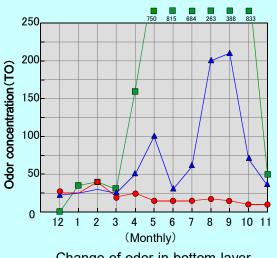
CO.,LTD

◆Example.1 Uragami Reservoir 2

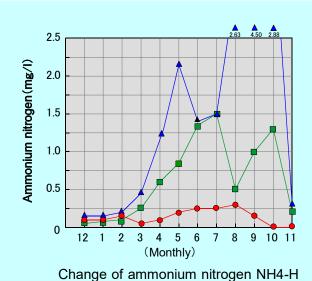
Example: :1 Year after Installation

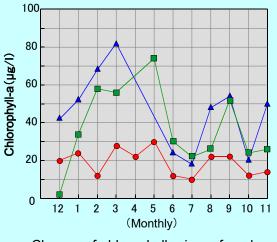
:5 Years before Installation :2 Years before Installation



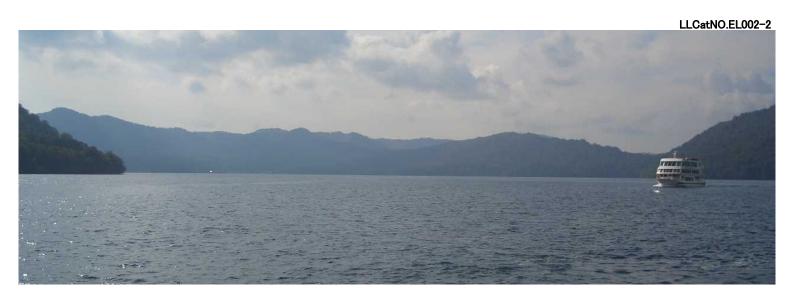


Change of odor in bottom layer





Change of chlorophyll-a in surface layer



Water Purification Example by LAKE-LYFTER

SO-EN CO.,LTD

◆Example.2 Sakuna Dam

■Installation Place

Name : Sakuna dam (For tap water reservoir)

Volume of Water : 630,000 m³

· Water Depth: 20m

■ Specification

Model : LSN-30-0800

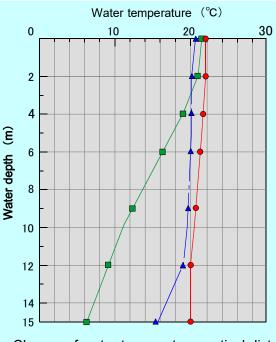
Number of Machines : 2 Units

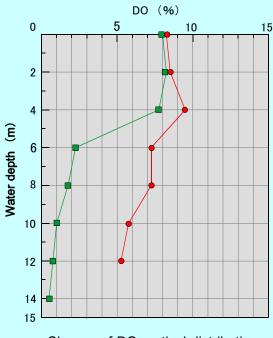
Compressor: 3.7kw× 1

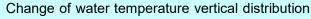
■ Outline

Compared water quality data in water depth of three years before LAKE-LYFTER installation with it after installation. In vertical distribution of water temperature, although it was a low temperature in bottom area, improved by circulation and became uniform temperature. As for water quality, dissolved oxygen (DO) increases since oxygen was supplied to the bottom layer area, chlorophyll-a decreases by ammonium nitrogen decrease, water quality is improved.

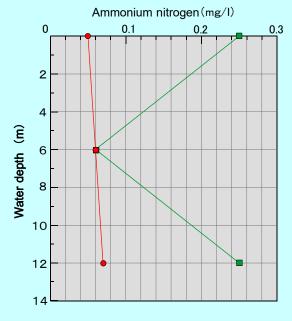
Example: :21 days after installation: :10 days after installation: :3 years before installation

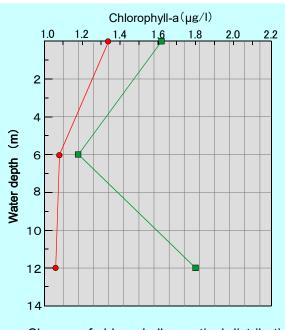












Change of ammonium nitrogen vertical distribution

Change of chlorophyll-a vertical distribution