

NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY



An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism

July 18, 2025

Memo: Expanded Chemical Testing Initiative - 2025

The independent 2024 Investigative Report of seawater quality issues relating to larval survival rates provides recommendations for both HOST Park and Keahole Point Larval Group (KPLG) hatcheries aimed at addressing the challenges of marine animal larval rearing systems and potentially resolving the issues. One of the recommendations for HOST Park included launching a chemical testing initiative to identify chemical factors in surface seawater that could be the cause of the larval mortality. Suggested parameters in the report included organic toxins, heavy metals, petroleum-based contaminants, pesticides, or others. These additional chemical testing parameters are beyond the current in-house laboratory capability of the NELHA Water Quality Laboratory.

The NELHA Water Quality Laboratory contracted the environmental testing laboratory, Eurofins, to analyze surface and deep seawater samples collected at NELHA to more fully characterize and assess the quality of the delivered seawater at HOST Park.

The four (4) seawater sample locations submitted for testing were:

- 1. SSW-28" sump northern pump station
- 2. SSW-55" sump southern pump station
- 3. DSW-40" sump northern pump station
- 4. DSW-55" sump southern pump station

The five (5) analytical constituents of interest were:

- 1. Total dissolved gases
- 2. Trace elements / metals
- 3. Herbicides
- 4. Pesticides
- 5. Total petroleum hydrocarbons

The chosen analytical constituents were of interest because of the location of the Kona airport at our northern property boundary, the private Kohanaiki golf club at our southern property boundary, and observational reports of supersaturation within the pipeline system.

The results from the expanded chemical testing do not identify any chemical component as a contaminant of concern. To date, the causative agent of the seawater quality issues affecting larval rearing clients has not been identified.

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