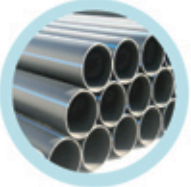




CASE STUDY



conserving water. protecting the environment



HAWAII

CASE STUDY

LOCATION:

Island of Hawaii near Keahole Point

PROJECT SCOPE:

Pumping near-freezing water from 3,000 feet under the ocean into a test laboratory

APPLICATION:

Nine 1,000-foot sections of HDPE fused together

PROJECT DATES:

October 2001

KEY CONTACTS:

Tom Daniel, project scientist for Natural Energy Laboratory of Hawaii Authority (NELHA)

SUMMARY

Natural Energy Laboratory of Hawaii Authority

HDPE pipe has a history of success in many different applications, conditions, and environments. But it was unheard of to be under the Pacific Ocean. The Natural Energy Laboratory of Hawaii Authority (NELHA) near Keahole Point on the Big Island needed near-freezing water from 3,000 feet under the ocean pumped up into their laboratories. What sort of pipe could withstand that? HDPE.

“It works,” said Tom Daniel, one of the project scientists with NELHA, when articulating the benefits of HDPE. “The flexibility and strength have proven to be ideal. The buoyancy and flexibility of HDPE allow cost-effective deployments.”

NELHA needed the water for its Ocean Thermal Energy Conversion (OTEC) experiments. According to Daniel, “OTEC has tremendous potential for large-scale energy generation in the future.” The Earth’s oceans have an enormous capacity for heat energy, and NELHA needed HDPE pipe to advance its various projects.

Nine, 1,000 foot sections of HDPE were successfully fused together on land and deployed into the ocean in October of 2001. No other pipe could do a job like this.

Source: *Plastics Pipe Institute*

*Please do not hesitate to contact the Alliance with any questions or comments.
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