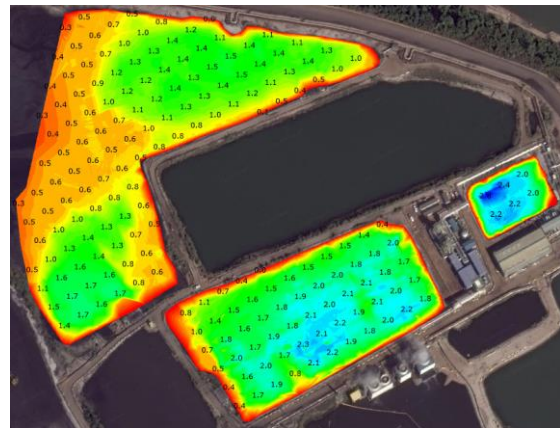


CEESCOPE™ Used for Industrial Effluent Water Surveys

Canada Pump and Power (AB, Canada) wanted to start bathymetric and volumetric surveys for their clients in support of effluent retention pond dredging projects, but they needed an easy-to-operate system suitable for operators unfamiliar with hydrographic surveying. By selecting the 33/200 kHz “all in one” CEESCOPE™ echo sounder, data logging and GNSS system, CPP were able to immediately complete urgent surveys of several tar sands mining effluent ponds.

With no echo sounding experience, Canada Pump and Power (CPP) came to CEE Hydro-Systems looking for an easy to use system for industrial bathymetry surveys. With a fast approaching deadline for a pre-dredge survey of a shallow contaminated pond in the Alberta Oil Sands, CPP needed an immediate solution.

The requirement was to obtain accurate bathymetry in very shallow water to measure sludge accumulation in an effluent water pond. The survey was needed prior to a program of dredging to maintain capacity in the basin, and to ensure proper estimation and payment for dredge material removal.



CPP fabricated a custom transducer installation on a small inflatable boat using CEE HydroSystems' Universal Mount. The dual frequency 33/200 kHz CEESCOPE™ provided bathymetry and position data while powered by its internal battery, keeping cables and components on the boat to a minimum.

For the first immediate survey, there was not even enough time to learn the real-time hydrographic acquisition software so CPP simply recorded the survey data on the CEESCOPE™ while checking data consistency on the echo sounder display. Later, all data were imported into Eye4Software Hydromagic for editing and product generation.



The CPP bathymetry program got off to a good start, with the pond sludge and water volumes determined on time for the client.

Future projects used Hydromagic software in real time as CPP gathered expertise in various types of industrial water surveys. Project manager Andrew Ambrocichuk of Canada Pump and Power was happy with the result: “We selected the CEESCOPE to make things easy for our field users, and to minimize downtime and headaches that we perceived might happen with a

solution based on several discrete components such as a GPS receiver, laptop, batteries, and an echo sounder. We can start surveying with very little mobilization downtime but the data quality we see is excellent. We decided to invest a little more up front in a high-quality survey system to ensure we did not cut corners on our product quality and QC for our projects”.