



## RECOVERING AN ALTERNATE SOURCE OF ENERGY WITH A HIGH PRESSURE RECOVERY VESSEL

PORT COQUITLAM, BC – The recently launched ISE 130HP 4000 meter rated Remotely Operated Vehicle (ROV) is equipped with the first set of deep diving High Pressure Recovery Vessels (HPRV), thermally insulated equipment designed to recover frozen gas hydrates, maintaining the hydrates at their original pressure.

The equipment was developed for the Guangzhou Marine Geology Survey (GMGS), a division of China's Ministry of Land and Resources. GMGS is ready to recover identified gas hydrates in the South China Sea.

Gas hydrates are deposits of frozen methane located on or under the deep ocean floor. These hydrates are a potentially viable energy alternative. With ISE's HPRV, science and research organizations like GMGS are now able to perform the high pressure recovery of the gas hydrates.

This month, GMGS sent personnel to Port Coquitlam, BC to commence training on all aspects of ROV operations including the gas hydrate samplers. Other equipment includes six cameras, Imagenex scanning sonar, science skid, and seven and five functioning manipulators, all controlled by ISE's common control system, ACE. Trainees spent 11 days onboard the ISE trials and training vessel – The Researcher – where they practiced piloting and bottom sampling. Onboard training is followed by technical sessions at ISE's Port Coquitlam office and shop.



GMGS HYSUB 130HP ROV



HPRV in action at depth of 200 meters

## ABOUT INTERNATIONAL SUBMARINE ENGINEERING LTD.

Based in British Columbia, Canada, International Submarine Engineering Ltd has been involved in the design and development of autonomous and remotely operated vehicles for over 34 years. ISE's experience is represented by the over 215 underwater vehicles built and delivered to clients in 20 countries.