

## **17th September 2010 Ryan Chouest Status Report, Cruise 16 – Day 1.**

### **Sample locations and Fluorescence, DO and methane Traces.**

The day was slightly overcast with occasional sunshine. The winds were easterly throughout the day and between 10 to 15 knots. Seas were between 3 to 5 ft wave height.

The objective of Cruise 16 is to re-occupy sites which have been identified as being possible natural hydrocarbon seeps and to acquire water samples from within vicinity of the seeps for chemical analysis.

Station RC001 was the first site to be investigated. It is located 29.4 NM Northwest from the well-head in a water depth of 438m and was previously investigated during Ryan Chouest cruises 10, 11, 12 and 14). A strong contact was made with the EK-60 echosounder immediately on passing over the site. Several more passes with the echosounder were made in order to characterize the suspected seep. An averaged coordinate derived from three contacts was selected as the location to perform the cast at N28 51.032 W 88 54.133.

The station was characterized by a distinct methane signal at 402m depth. The fluorescence trace showed no peaks and no excursions in dissolved oxygen were seen at depth.

Water samples were collected at 428m, 415, 402, 324, and 224m for further chemical analysis.











