

September 10, 2005

**IODP EXPEDITION 311:
CASCADIA MARGIN GAS HYDRATES
WEEK 2 REPORT**

OPERATIONS

TRANSIT TO ASTORIA, OREGON: As of midnight Saturday, 10 September, we have transited 2896 nmi at an average speed of 11.2 knots. We have another 1030 nmi remaining before arriving at the Astoria pilot station. At this time we anticipate an arrival at ~1600 hr on Thursday, 15 September with a possibility of a morning arrival. Transit across the Columbia River bar to Pier No. 1 in Astoria will likely take another 2.0 to 2.5 hours. During this past week we switched from the Atlantic RigNet satellite to the Pacific satellite. A few hours of no communication was experienced during this period while RigNet made a hardwire change. Once this was accomplished the ship was able to maintain a 24-hr internet connection. Engineering and operations personnel reviewed H₂S safety videos.

TECHNICAL SUPPORT ACTIVITIES: The IR track was installed on the catwalk. Completion of the installation awaits the Astoria port call. Furniture constructed for the reefer van was completed. Labs were prepared for the upcoming expedition. Technicians worked with the J-CORES team in testing the software. There was a fire and boat drill on September 6. The METs team responded with six members to a fire in the cement pump room. The rest of the technicians and scientists reported to their lifeboat stations. Technicians finished watching safety videos about H₂S and received training in using the fixed air supply breathing apparatus.

ENGINEERING DEVELOPMENT ACTIVITIES: The Fugro request for standpipe pressure sampled at 8 Hz will be accomplished by tapping off of the rig instrumentation standpipe sensor output. A 4/20mA transmitter will be installed at the RIS sensor interface in the RIS data box, which is located in the Subsea shop. A laptop is being configured at TAMU with a data acquisition card to record and display the 8 Hz data. The preliminary floor plan for the IODP refrigerated van has been completed. The IODP van will be installed on the Lab Stack roof in Astoria and will house the GeoTek vertical logger, 3 gas sampling manifold stations for the PCS, and a rack for 10 "Parker" gas hydrate pressure vessels. Two benches have been fabricated by the technical staff to go in the van. The third-party APC3 temperature tool prototype will be hand carried to the ship.

J-CORES TESTING: Test 2 (Visual Core Description): The J-CORES VCD testing that began on Sept. 3 was scheduled to end on Sept. 5. This is the most complex application in the J-CORES system and testing continued through Saturday, Sept. 10. Note: Test 2 (Uploader) was completed the previous week. Test 4 (Stratigraphy): The J-CORES Stratigraphy application includes magnetostratigraphy, chronostratigraphy, biostratigraphy and lithostratigraphy. A training session was given on Sept. 6. Testing of this application was completed on Sept. 7. Test 5 (Composite Log Viewer): The J-CORES Composite Log Viewer (CLV) is used to display all data in J-CORES system, hence it was being used from the beginning of testing. Training on some not-so-familiar aspects of CLV was also presented and then was tested for 2 days. This concludes major testing of the J-CORES system. The remaining days will be used to finalize test reports and discuss some other issues of interest to IODP-MI (e.g., IODP-MI Curation Management System (ICMS) and Information Portal for IODP (IPI)).