

Whillans Ice Stream Subglacial Access Research Drilling



Project Field Progress Report, 26 November - 2 December, 2012

1. Summary

A major milestone was reached when all the heavy WISSARD cargo was delivered to McMurdo on time and in good condition. A large number of personnel arrived and the team is almost to full strength for the test period. Most of the WISSARD field equipment was moved to the test site near the old ANDRILL MIS location. Prep work and testing of the NIU containers, multi-purpose winch, and instruments is underway and the microbiologists are busy setting up the laboratory in McMurdo and outfitting the WISSARD field laboratory vans.

2. Environment, Health, and Safety

- Nothing to report

3. WISSARD Personnel:

- Ten WISSARD personnel arrived on station - Science team: John Priscu, Andy Fisher, Rudy Schlepp, Betty Trummel, Jill Mikucki, Mark Skidmore. Drill team: Robin Bolsey, Adam Melby, Frank Rack. Russian AE observer: Irina Alekhina. Trainings and orientations for new arrivals began.
- Drill team on site (10 total): Bolsey, Blythe, Burnett, Carpenter, Duling, Gibson, Lemery, Melby, Rack, Roberts.
- Science team on site (18 total): Achberger, Adkins, Edwards, Fisher, Hodson, Kelly, LeBaron, Mankoff, Michaud, Mikucki, Osment, Powell, Priscu, Schlepp, Skidmore, Trummel, Vick, Winans
- Science observer (RAE, 1 total): Alekhina
- Priscu departed for short-term work with the MCM Dry Valley LTER.

4. Field conditions:

- Weather continued fine, with generally warm temperatures and low winds. One day there was light snow, and one day cooler and windy. There was no lost work time.

5. Activity Progress:

- With the delivery of the LARS (Launch and Recovery System) sled decks, all heavy WISSARD cargo was delivered before the last early season C-17. More than 300,000 lbs was moved over an eight week period.
- Some science cargo is still en route, as well as grating for the LARS and electrical parts.

- Most drill and WISSARD science components were moved from the SPoTSA sea ice assembly site to the WISSARD test site, near the previous ANDRILL MIS location. The NIU workshop was moved prematurely, but there was no significant damage to instruments and equipment inside. By the end of the week, traverse ops was fully tasked with preparing and executing the ice runway equipment move to Pegasus.
- The LARS components were staged at the SPoTSA site, and initial assembly by ASC was begun.
- Significant progress was made on the assembly of drill manifolds, hoses, and cables at the test site, including fuel, glycol, electrical, and water systems. Installation of the control system and Reel Container Unit components (RCU) was begun. Daily drill project reports are available at: <http://www.wissard.org/publications/drill-reports>
- ASC electricians continued working with the drill team on drill system and camp power systems.
- Field labs were inspected by science team, and finish carpentry work was largely completed (at Scott Base transition).
- Finish work on the NIU workshop and control van continued.
- Bench top testing of the NIU instruments continued.
- Geo-micro lab set-up, testing of instruments, and receipt of cargo continued.

6. Outreach:

- A tour of the test site and drill components was held for NSF, ANZ, and ASC environmental visitors.
- A webinar was held for K-12 students.
- Website improvements and blogging continued.
- Video was collected during deployment and McMurdo familiarization activities.

7. Upcoming activities:

- Complete LARS assembly and installation of crane and multi-purpose winch.
- Continue assemble of drill and preparations for test.
- Continue NIU instrument testing, and finish work in workshop and control van.
- Continue geo-micro lab prep for test.
- Site visit by NSF-sponsored media and outreach personnel.
- PI telecon: Wednesday, 28 November, 1400 MST

8. Figures



- Inspecting cleaning benches in sediment lab.



- \Multi-purpose winch prior to mounting on LARS.



- Finishing exterior ductwork on chem lab.



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