

Whillans Ice Stream Subglacial Access Research Drilling



Project Field Progress Report, 26 November, 2012

1. Summary

- Good progress was made on the WISSARD equipment and field preparations during the reporting period 19-25 November, and the project continues on track to meet the planned testing and traverse schedule. The drill was successfully wet-tested, and prepared for transit to the test site. The NIU and UCSC instruments were cleaned prior to testing, and a significant amount of work was done on the interiors of the NIU workshop and control vans.

2. Environment, Health, and Safety

- Nothing to report

3. WISSARD Personnel:

- Seven WISSARD personnel arrived on station - Science team: Amanda Achberger, Peyton Adkins, Susan Kelly, Ken Mankoff, Alex Michaud, Tristy Vick. Contractor team: Jeremy Lucke. Trainings and orientations for new arrivals began.
- Drill team on site (7 total): Blythe, Burnett, Carpenter, Duling, Gibson, Lemery, Roberts
- Science team on site (12 total): Achberger, Adkins, Edwards, Hodson, Kelly, LeBaron, Mankoff, Michaud, Osment, Powell, Vick, Winans

4. Field conditions:

- Generally fine, warm (20-30° F) weather, with only one windy day. There was no lost work time. The sea ice is period 2 (-10° to -5° C) and starting to thin. The airfield move from the ice runway to Pegasus is scheduled for 30 Nov, which is one week earlier than normally scheduled. The WISSARD drill and most heavy equipment will to be moved from SPoTSA to the test site or Scott Base transition prior to the airfield move.

5. Activity Progress:

- The UNL slickline winch (backup for multi-purpose winch) was delivered along with small drill and much of the science cargo. We are still waiting on NIU cabling and connectors necessary to complete NIU instrument testing, as well as electrical components needed by ASC. The crane and LARS platform components are the only heavy cargo still to be delivered; a significant amount of science cargo is still en route.

- The rack and crescent system was mounted on the Reel Container Unit, and the entire assembly moved to SPoTSA. The melt tank, water tank, heater/pump units, filtration/compressor unit were successfully wet tested this week. Work continued on electrical wiring, E-stop and sensor installation, and fitting of external cable trays. The entire system was prepared for traversing to the WISSARD test site. Daily drill project reports are available at: <http://www.wissard.org/publications/drill-reports>
- ASC electricians worked with the drill team, and carpenters replaced door handles and locksets on drill and NIU vans when the originals proved unsuitable for field conditions.
- Finish carpentry work continued on the field labs (at Scott Base transition).
- Initial testing began on the multi-purpose winch.
- Bench top testing of the NIU instruments was begun, and finish work on the NIU workshop and control van continued.
- The Percussion Corer, IPSIE racks and outer sleeves, and the Geothermal Probe were moved to the MEC shop for pressure washing and scrubbing, then returned to the workshop van for traverse to the WISSARD test site.
- The access road and site pad were completed at the test site.
- Geo-micro lab supplies were received and set-up was begun in the Crary Lab.

6. Upcoming activities:

- Move heavy drill and science components from SPoTSA to WISSARD test site.
- 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.
- ASC cabinetry and finish work on the field labs.
- Delivery and construction of LARS and crane components.
- STLS telecon: Monday, 19 Nov, 1300 MST
- PI telecon: Wednesday, 21 Nov, 1400 MST
- Arrival of WISSARD science personnel.

7. Figures



- Mounting the rack and crescents on the reel container unit



- Wet testing a heater/pump unit



- Preparing to move to WISSARD test site.



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