

PROJECT SITUATION REPORT

DISC Drill 2011-12 Season

Project: T-350-M
Project Principal Investigator: Dr. Charles Bentley
Report No. 5 for period: 12-11-11 **through:** 12-17-11
Prepared by: Kristina Dahnert **Date:** 12-18-11

IDDO Personnel Onsite:

- Kristina Dahnert
- Josh Goetz
- Mike Jayred
- Elizabeth Morton (logging)
- Paul Sendelbach
- Chuck Zander (arrived at WAIS Divide on 12/16/11)

ACTIVITIES DURING PERIOD

- Worked on Sunday, 12/11/11, to prepare for cable spooling
- Issue encountered with lack of crown sheave encoder and levelwind encoder communication. While the load pins still read tension, a working levelwind encoder was needed prior to spooling on the new cable. A spare encoder was machined and installed. This encoder will be moved to the crown sheave for drilling operations and spare encoders are on order.
- Spooled new 4200 meter cable onto winch drum
- Installed fluid mixing tank batch controllers
- Installed centrifuge PLC and tested operation of the system
- Lagged down centrifuge
- Chuck Zander arrived in McMurdo on Monday, 12/12/11, and at WAIS Divide on Friday, 12/16/11
- Stretch test of logging cable conducted
- Night shift grooming of core processing side of Arch; access for heavy equipment now complete
- Unloaded blue sonde crate
- Torqued all screws on screen barrels
- Tightened core barrel set screws
- Fluid barrel berm excavated and barrel pumps and tools staged
- Fluid tank pad groomed above and outside of drill side doors
- Fluid bulk tanks filled, parked outside Arch and plumbed to building
- Fluid mixing tank and pump function tested
- Excavated snow around slot drip pans to relieve pressure and bowing; Re-leveled borehole drip pan
- Greased winch motors
- Torqued bolts on gantry cranes
- Parts received for 953 CAT and Pisten Bully; 953 repaired on Friday, 12/16/11
- Moose door dig out continues with excellent progress

- Thomas (tin knocker) and Tirzah (carpenter) arrived on Friday, 12/16/11, and started re-installation of slot ventilation on Saturday, 12/17/11
- Series of planned generator shutdowns occurred between 8:00pm on Friday night through 8:00am Saturday morning for seismic work
- Drill cable terminated and Farmor potted
- Round 1 of temperature, optical, sonic and seismic borehole logging complete! Round 2 will begin after borehole deepening.

SAFETY

- Weather remains pleasant, though a storm is forecasted for this week. Camp continues to be well-groomed and driveways into both ends of the Arch are excellent. Excavation of the third Arch egress (i.e. the Moose door) is in progress and will be completed in time for drilling operations to begin.

COMMENTS

(Problems, Concerns, Recommendations, Etc.)

- Round 1 of borehole logging is complete and had good success. All loggers are currently processing data. We will soon know how much further the borehole is to be deepened.
- Shortly after the 953 CAT was back up and running, the D4 CAT went down on Saturday afternoon. Our mechanic Shawn speculates this is an issue with fuel delivery in the CAT and parts are likely available in McMurdo.