



PROJECT SITUATION REPORT DISC Drill 08-09 Season

Project:	T-350-M				
Project Principal Investigator:	Dr. Charles Bentley				
Report No:	3	for period	12-08-08	through	12-14-08
Prepared by:	Jay Johnson			Date:	12-14-08

ICDS Personnel on Site:	Kristina Dahnert Jay Johnson Bill Mason Paul Sendelbach John Robinson Patrick Cassidy Elisabeth Morton Dave Ferris Bill Neumeister Nicolai Mortensen
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ACTIVITIES DURING PERIOD

- Patrick, Elisabeth, Bill N., and Dave arrived at WAIS on Tuesday.
- Reinstalled the winch power cabinet and control room computers. The winch powered up without any problems.
- Assembled the upper sonde and connected it to the cable. Anti-torque section "A", instrument section "J", and motor section "X". The gray fiber in the anti-torque section optical slip ring was found to be bad. We switched over to the spare fiber in the slip ring and everything ran fine on the bench. Once the drill was on the tower the computer reported intermittent problems communicating through the fibers. Rotating the fiber optic slip ring caused the problem to come and go, so Monday we will be swapping in a different anti-torque section.
- Realigned the tower with the bore hole. The tower base needed to be shifted about 1" towards the control room. The sonde rollers did not need realigning. The barrel connections went together smoothly.
- Installed the balancing valve for the tower hydraulic system and tuned it. The tower has a slight chatter at one speed when tilting vertical, but not near as bad as it was in Greenland. The tower moves smoothly when tilting horizontal.
- The ground fault protection circuit for the Glassman is randomly tripping. Nicolai is working on trouble shooting this.
- Installed the crown sheave drip pan.
- Finished installing the new duct work for the chip blower. We will be using the old chip hopper for the start of drilling because the Cat 953 loader is still down.
- On Saturday we ran the drill down the bore hole and touched off the bottom. Paul reports finding the bottom to be within .1m of last season's final depth. He was unable to verify it with higher accuracy because the WOB sensor was not

working due to the communications problem with the fibers.

- The fluid level in the bore hole is still at 75m! There was no change in the fluid level over the winter. This means the ice to casing seal is fluid tight at this time.
- Finished plumbing the fluid handling system.
- Modified the wiring in the fluid handling batch controller to control the solenoid valves added this season.
- Replumbed the barrel pumps so they can be used to fill the bulk fluid tanks.
- Plumbed the bulk fluid tanks, filled them with drilling fluid, and connected them to the fluid handling system.
- Powered up both cranes and tested them.
- The drill side of the arch is about 3" narrower at its mid point than it was last season. With this much floor movement we had to move one of the crane rails so the cranes could traverse the length of the arch with out binding.
- Installed and aligned the core transfer table, which includes the new FED and core tray rests on the core handing side.
- Cleaned and inspected the slot drip pans. The casing has risen, or the slot has settled depending on how you want to look at it, about 4"-6". We still have plenty of clearance between the drill and the casing so the casing does not need to be shortened. However, some shimming needs to be done on the piece of drip pan surrounding the casing to ensure drilling fluid flows into the bore hole.
- Powered up and tested the centrifuge. The centrifuge needed to be leveled due to the floor heaving.
- Powered up and tested the screen cleaning system.
- Calibrated both air monitors

COMMENTS

(Problems, Concerns, Recommendations, Etc.)

- On Saturday we were going to drill the first core, however the generator went down in the early morning on Saturday and the power outage went undetected for several hours. It took until late morning to get the core handling computers and refrigeration units back up and running so we decided to delay drilling the first core until Monday.