

PROJECT SITUATION REPORT

DISC Drill 2011-12 Season

Project: T-350-M
Project Principal Investigator: Dr. Charles Bentley
Report No. 2 for period: 11-20-11 **through:** 11-26-11
Prepared by: Kristina Dahnert **Date:** 11-27-11

ACTIVITIES DURING PERIOD

- Tested the DISC Drill computer rack in McMurdo; both computers function well
- Spoke to Cara Ferrier about meeting incoming T-350-M personnel at the Chalet right after their McMurdo orientation. She will show everyone around town and verify people's training schedules. This will be particularly helpful for our new people coming down.
- Our original flight to WAIS scheduled for Monday, 11/21/11, was cancelled due to weather at WAIS Divide.
- Checked in with the IDDO Monday morning meeting on 11/22/11.
- Emailed most incoming drillers their McMurdo Snow School and Environmental training schedules, if known.
- Krissy, Josh, Mike, Elizabeth, Don Voigt (SCO), two riggers, one Comms tech, two IT personnel, and a sheet metal worker transported to the McMurdo airfield at 17:00 on Tuesday, 11/22/11. Departed McMurdo at 20:10 and landed at WAIS Divide at 23:35.
- Set up tents and unpacked personnel gear
- Transferred DNF cargo to Science Rac Tent
- Assessed Arch damage with Science Construction crew. Additional settling of floor at sides and ends of drilling Arch. Core processing side sustained very little, if any, damage or heaving. Drilling side sustained considerable heaving of floor panels between the core transfer truss and the slot entry hatch. This is the same area that sustained substantial heaving last season. At the start of the 2010-2011 season, a measurement from the side of the Arch to center line at the slot entry hatch showed 11" of elevation increase. This season, the same measurement showed 19" total rise in elevation.
- Carpenter crew removed several floor panels and underlying SIP panels to reduce elevation of the floor. 2x6's inserted underneath floor panels for stability.
- Carpenter crew also leveled sloping railings around drill slot prior to our arrival.
- Powered up drill tower and tilted toward vertical several inches at a time while shaving protruding spots in the slot wall on the screen cleaning side.
- Installed VFD's in both gantry cranes; both cranes powered up fine and moved down the rails for slot excavation purposes.
- Carpenter crew foreman, Doug 'Dog' Forsythe, has ordered shims from McMurdo for underneath the crane rails. This will provide the wheels with more ease of travel than in recent years.

- Unpacked, labeled and tested handheld radios, chargers, VHF base station, Iridium phone and other Comms equipment
- Leveled centrifuge
- WAIS Divide flight with most of the logging crew cancelled on Wednesday, 11/23/11 and Thursday, 11/24/11 due to weather in McMurdo
- Moved MECC into place and set up the interior
- Covered borehole casing for protection during cutting of snow blocks from the slot wall
- Leveled control room
- Dig out of the Arch back doors continues with excellent progress made this week. Excavated down to the base of the drill Arch doors. Efforts in the upcoming week will be to decrease the pitch of the driveway into the Arch and to groom an apron in the surrounding area. Most of the work is being done with the D4, as the 953 is on light duty due to worn cogs on the track. Parts should be arriving from Christchurch shortly.
- Placed fire extinguishers in the Arch and MECC
- Ventilation ducting removed from the slot for rework
- Carpenter crew began chainsawing side wall of the slot closest to the screen cleaning table. The other side was cut back last year and should be adequate for the remainder of the project.
- The kitchen staff invited volunteers to make pies for Thanksgiving dinner. The drillers and Don Voigt made two traditional pumpkin custard pies. They were delicious!
- A few from our group have battled illness this week, complete will congestion, coughing and sleepless nights, but morale is high and we're ready to keep moving.
- On Friday evening, everyone noticed it was getting a bit darker than normal in the Galley (we have 24 hours of daylight this time of year). Much to our surprise, there was a $\frac{3}{4}$ solar eclipse outside. Amazing!
- A delicious Thanksgiving dinner was enjoyed by all on Saturday, 11/26/11, complete with a 25 lb. turkey and all the fixin's!

SAFETY

- Nothing to report

COMMENTS

(Problems, Concerns, Recommendations, Etc.)

- Things are progressing very well at WAIS Divide Camp this season. Camp Manager Dean Einerson has a phenomenal crew on hand. Everyone is excited to be here and anxious to get the science activities rolling. At this point, we are waiting for the next flight to arrive with most of the logging personnel and the majority of our cargo (blue sonde crate and winch cabinet), as we have not had a flight since our arrival at WAIS Divide last Tuesday evening. Our priority at the moment is for the carpenters to finish excavation of the slot wall at the borehole end so that slot work will not disturb logging operations that are scheduled to

begin this week. Our second priority is full excavation of the Arch back doors so that cable upspooling and spooling operations can begin.