

Project: T-350-M  
Project Principal Investigator: Dr. Charles Bentley  
Report No: 4 for period 12-6-10 through 12-12-10  
Prepared by: Kristina Dahnert Date: 12-12-10

IDDO Personnel on Site:

Patrick Cassidy (WSD as of 12/8/10)  
Kristina Dahnert (WSD as of 11/22/10)  
Dave Ferris (WSD as of 12/8/10)  
Chris Gibson (MCM as of 12/9/10)  
Josh Goetz (WSD as of 12/1/10)  
Mike Jayred (WSD as of 12/1/10)  
Jim Koehler (WSD as of 11/22/10)  
Jay Kyne (MCM from Lake Vida)  
Nicolai Mortensen (WSD as of 12/1/10)  
Elizabeth Morton (WSD as of 12/8/10)  
Steve Polishinski (WSD as of 12/2/10)  
John Robinson (WSD as of 12/8/10)

ACTIVITIES DURING PERIOD

- 🍏 Moved winch cabinet into Arch with 953 and connected cables
- 🍏 Installed tower control box on back of winch cabinet
- 🍏 Installed computer and Glassman high voltage racks in control room
- 🍏 Checked torque on screen cleaning system, centrifuge and gantry bolts
- 🍏 Shoveled out bulk fluid tanks and fluid berm, filled tanks and plumbed tanks to Arch fluid system
- 🍏 Fluid system batch controllers calibrated and tested
- 🍏 Installed hose on hot air blower and tested system
- 🍏 Finished assembly of core barrel with cutter head
- 🍏 Installed new LVDT board in winch cabinet and tested level wind travel and limit switches
- 🍏 Restrung nitrogen purge hose for sonde
- 🍏 Slot excavation was completed on the control room side; prior to operations next season, the slot ventilation ducting will likely need to be excavated and recessed and the opposite slot wall cut back
- 🍏 Verified all winch cabinet connections and powered up cabinet
- 🍏 Powered up and adjusted winch brake pump unit
- 🍏 Edited winch layout block diagram and reviewed junction boxes and winch wiring for schematic updates
- 🍏 Installed stabilizer pads on core and screen barrels

- 🍏 Tightened hardware on turning fixture
- 🍏 Organized wire storage racks in Arch
- 🍏 Calibrated DISC air monitor
- 🍏 Installed manual winch control station
- 🍏 Elizabeth, Dave, Patrick and John arrived at WSD on Wednesday, 12/8/10
- 🍏 IT techs from McMurdo returned to repair the GOES satellite link and install wireless for the Arch Jamesway and MECC; many emails have been delayed for several days due to this work
- 🍏 Moose door excavated and now open
- 🍏 Met with camp, SCO and NICL management to discuss shift work operations, meals and house mousing.
- 🍏 Picked weight off of winch drum and shifted tower, winch and level wind toward control room side; also re-leveled tower feet
- 🍏 Installed new 1 hp motor in brake fan unit and tested system
- 🍏 Installed level wind and reaction sheaves
- 🍏 Cleaned slot drip pans and re-leveled borehole pan
- 🍏 Re-wired hole cover switch, installed and tested
- 🍏 Installed ventilation hoods on roof of MECC
- 🍏 Resealed and taped screen cleaning system drip pan junctions
- 🍏 General Arch cleaning in preparation for the anticipated start of drilling this week and the NSF visit on Monday
- 🍏 Used jig transit to align core transfer truss, core barrel, FED, core receiving table and core tray
- 🍏 Jay Kyne and Chris Gibson are expected to arrive at WSD this coming week and Mike Jayred and Jim Koehler will depart WSD

#### SAFETY

- 🍏 Elizabeth is working on startup checklist items in preparation for the start of drilling
- 🍏 Steve Mikel, the refrigeration technician, has installed the batteries in the Arch fire alarm system and performed a system test. The alarm could not be heard on the core processing side of the Arch. A fire technician from McMurdo is arriving on Monday to inspect this system as well as the large DISC Drill Halotron fire extinguisher.

COMMENTS

(Problems, Concerns, Recommendations, Etc.)

● Cindy, the WAIS Divide Cargo Coordinator in McMurdo resigned this week.

Fleet Ops will now handle both pax manifests and cargo, and the South Pole

Cargo Coordinator will handle camp resupply.