Project: T-350-M

Project Principal Investigator: Dr. Charles Bentley

Report No: 5 for period 12-12-10 through 12-18-10

Prepared by: Kristina Dahnert Date: 12-19-10

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 (WSD as of 12/17/10)

Josh Goetz (WSD as of 12/1/10)

Mike Jayred (MCM as of 12/17/10)

Jim Koehler (MCM as of 12/17/10)

Jay Kyne (WSD as of 12/17/10)

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

- Assembled drill on tower and performed down hole testing
- Debugged winch software
- Tested new motor handoff code and debugged
- Cleaned Arch and MECC thoroughly in preparation for operations
- John Rand, Julie Palais, Lynette Barna, Nathan Zeigler and Jim Karcher

came for an overnight visit and inspection of the Arch on Monday, 12/13/10

- Core transfer table drip pan installed near FED
- Troubleshooting for DGH modules in winch cabinet and communication with

## Yaskawas

- Aligned NICL saw table
- Completed Seasonal and Monthly Preventive Maintenance checklists
- Chip hopper moved to Arch and connected
- New motor controllers in Instrument sections J and L do not function

well when integrated into the system and put down hole; suspect issue with

added noise of new motor control boards

- Removed lifting chains and reinstalled winch drum drip pan
- First core of 2010-2011 season drilled on Thursday, 12/16/10!
- All drillers worked 1st shift on Friday, 12/17/10 for training purposes

and shift work then began on Saturday and Sunday

• Revisited screen cleaning heat tube, as thermostat readings appeared

faulty; the heat tube is performing well

ullet Motor section Y has blown a seal and will not hold hydraulic fluid; the

current drill configuration is now Anti-torque 'A', Instrument section 'K'

and Motor section 'Z'

- Cutter head J3 was installed with .7 x 5mm relieved-edge cutters
- Current clearance of stabilizer pads to the borehole wall is as follows:
- .05" at the core dogs and upper screen barrel and .02" at the top of the  $\,$

core barrel

• Mike Jayred and Jim Koehler returned to MCM on Friday, 12/17/10 and

Chris Gibson and Jay Kyne arrived at WSD

• Six cores were drilled last week; there was some discrepancy in our

bottom depth for a couple of runs, likely attributable to cable stretch

• Final driller's depth for the week: -2584.588 Total meters drilled this

week: 17.694m

• A beach-themed party was held on Saturday night, complete with excellent

decorations. A good time was had by all.

## SAFETY

• Elizabeth and I met with the camp managers, camp medics and the SCO

Representative, Gifford Wong, to discuss Arch emergency protocol

 $\bullet$  Completed Arch safety walkthrough with all Arch staff, camp managers and

camp medics

• Viewed and demonstrated the use of additional slot extraction medical

equipment with all drillers

- NICL air monitor calibrated
- DISC air monitor having 'Trouble' issues; Dave Ferris and Elizabeth

Morton are looking into this and suspect a problem with the hose running

over near the centrifuge; a new hose will be run if necessary

## COMMENTS

(Problems, Concerns, Recommendations, Etc.)

ullet I will now use a Sunday through Saturday format for the weekly reports.

This will aid in including up-to-date drill progress data from a full

workweek and allowing the reports to be sent in a timely manner.

• We are currently down two instrument sections and one motor section.

Nicolai Mortensen remains onsite and is working to determine a noise

reduction fix for instrument sections 'J' and 'L'. Motor section 'Z' is

running well and we have section 'X' as a spare.