## SITREP 4, December 11, 2011, Day 19 at WSD

Donald Voigt, Chief Scientist, WAIS Divide Written at WAIS Divide

- I. Passenger movements
  - A. SCO
    - 1. N/A
  - B. IDDO
    - 1. P. Sendelback arrived from McMurdo
- II. Cargo Movements
  - A. Cargo arriving from CONUS
    - 1. N/A
  - B. Cargo arriving from McMurdo
    - 1. Ice core boxes
    - 2. O2 Monitor
- III. Camp Activities
  - A. Current camp population, 42, 1 A-108, 2 A-357, 5 T-350, 1 I-477, 1 I-122, 3 I-161, 3 I-162, 2 I-168, 19 RPSC, 5 NANA; All is well
  - B. Camp continues to be kept in outstanding condition. Drifts are regularly groomed. We have finally had a few days with light winds.
  - C. The 953 Cat is seeing limited duty. The Pisten Bully is hard down. Both are in need of parts that could easily have been available in McMurdo
  - D. The loss of these two pieces of equipment along with the storms that have plagued us at the start of this season have made clearing of the Moose Door (the third egress from the Arch) next to impossible. I have summarized the problem in an e-mail to M. Kippenhan who has forwarded it on to J. Rand and others for comment. Camp is making every effort to keep the Arch clear and open the Moose Door, but safety of the entire Camp population is also a concern that takes time and effort of the Staff.
  - E. Work continues on keeping the Arch doors cleared. The processing-side door has been drifting more than in past years forming a dangerous cornice. This area has been heavily flagged. Access to the processing-side doors is being maintained but, as there is no immediate need to drive forks to the processing side, other tasks have been completed first.
  - F. S. Mikel, the Refrigerator Tech, stayed to monitor the freezer units after startup. Another Tech will be out to camp to check the units sometime during December.
  - G. The generators has been monitored by Camp Staff and IDDO personnel, and has suffered no further shutdowns.

- H. Two science teams (A-108 and A-357) arrived and space was made for them in the Science Rac Tent. With help from the Camp Staff quick work was made of both projects and both events have completed their work successfully.
- I. Ed Waddington presented a talk at our (newly established) Monday Night Science Series.
- J. Saturday was Stromboli Night.

## IV. Drill Depth and Time

- A. T-350 has been working to prepare the drill for borehole deepening. The old cable has been spooled off and the new cable will be loaded on the winch this week.
- V. Status of Drilling (# of runs, meters of ice drilled, core quality)
  - A N/A
- VI. Status of Borehole Logging
  - A. The initial round of logging has been directed towards measuring the thickness of ice remaining in the borehole. This work has been completed and the data is being analyzed.
    - 1. Temperature logging; Two complete temperature logs have been obtained and the results are being processed (Clow).
    - 2. Two complete round-trip optical logs were complete and are of excellent quality (Bay).
    - 3. The sonic log was obtained to 2000 meters. At this point communications with the tool was lost. Repairs are being attempted (Waddington).
    - 4. Seismic logging was completed. The locking arm was tested at 100 meters and failed to retract. The tool was brought to the surface successfully and the locking arm worked at the surface. However, it was my decision that the locking arm not be used any further to avoid any risk of damage to the borehole. The Logging team concurred with this decision. The seismic tool was deployed and used successfully with a sequence of seismic shots with the tool at the bottom of the hole, at 3000 meters, 2500 m and 2000 m. These shots were also recorded on an array of surface seismometers. The weather cooperated and the winds died down in time for the seismic shoot.

## VII. Other

A. A request was made to replace the fixed ventilation ducting in the trench with flexible hose in order to save time and effort and to alleviate the problem of the ducting being crushed as the trench walls close in. The request was denied and the original ducting will be replaced before drilling starts.

- B. Safety continues to be a primary focus of all residents at WAIS Divide.
- C. K. Dahnert, E. Morton, G. Clow and D. Voigt have continued to inspect the worksites at the Arch and Logging Winch to evaluate progress and assess the work environment. Safety concerns have been addressed with the Camp Manager and corrections continue to be made.