

NEEM - SITREP no. 16, Sunday 8 August 2010

This SITREP covers the period August 2- August 8, 2010 (inclusive).

Movement of personnel:

No movement of personnel

Movement of cargo:

August 2 2339 kg ice core from SFJ to CPH by Air Greenland.

August 3 620 kg ice core gas samples from SFJ to CPH by Air Greenland.

Camp activities:

This week work has been dominated by activities on the surface: Shallow ice core drilling, testing of the new DK intermediate winch and Swiss elevated tower, setting up of the NZ drill, NZ drill tests, pit studies and sampling, measuring strain-net around NEEM up to 60 km away. In the trenches: Processing of shallow cores and NEEM main core brittle zone ice and logging the deep hole with U.K. logger. Snow has been removed from the roof of science trench and drill trench, items have been brought from the cargo line to over winter shelter and carpenters storage garage has been made ready for packing down. Due to bad weather all surface activities have been halted since Friday evening. Several small tents, including the outhouses, had to be rescued in the strong wind. On Thursday a necessary major repair on the main generator was done. After much preparation, camp switched to smaller backup generators, while the engine and the alternator were taken apart to replace a leaking seal. During repairs, the main dome did not have heating and running water and work in the trenches was stopped. At 16:10 repairs were completed and the main generator is now on-line again. In preparation for the mobile shallow drilling campaign at Camp Century and Dye-3, the crew trained in fast assembly and disassembly of the DK shallow drill.

Skiway:

Skiway was in good shape until the storm hit. It will be groomed as soon as weather permits.

Drilling:

Deep drilling has been terminated.

Driller's depth: 2522.08 m, final depth

Logging depth: 2537.36 m, final depth

Science trench:

Brittle ice processing continued until Wednesday, where the crew switched to shallow ice core processing.

Brittle ice processing production this week (ECM, DEP, Cutting): 66.00 m

Processing depth: 1027.40 m

Left in the buffer for next year is now the ice from 1027.4 m to 1154.40 m, bags 1869 – 2099.

Shallow core NEEM 2010 S2 has been processed to 100.65 m

Drill trench: -15C

Connecting tunnel: -20C

Core buffer: -20C

Science trench: -15C

Ice cave: -24C

Associated programs:

After assembly of the tower and drill, a 5 m deep trench was excavated behind the mechanics garage and the drill put in place with the Pistenbully crane. The first cores with the NZ drill were drilled on Friday.

The DK-3" shallow drill has been drilling hole 2010 S3 to 81.00 m. Core sections are split between a Japanese dielectric program (S.Fujita) and a Canadian Hg (mercury) program (J.Zheng). A 2 m pit at this drill site has been sampled for high-resolution water isotopes and cosmogenic 10-Be.

Work on assembling the new DK intermediate winch and Swiss elevated tower. The intermediate winch with 780m of cable was tested with the Swiss elevated tipping tower. The system has been successfully tested with tensions up to 6000N. The tests suggest that the descent and ascent speed for the 4 inch HT drill in a 130 mm bore hole will be 1.5 m/s. The intermediate drill can carry 1400m of cable.

After fixing some problems with the logger winch, the U.K. logger has been in action from Tuesday to Friday. Three separate digital optical televiewer (OPTV) logs were successfully recorded from the NEEM hole to a depth of 630 m. These revealed numerous features, including natural phenomena such as repeated, discrete clear ice layering and included bubbles, and drilling-related artefacts such as anti-torque grooving and variations in cutting pitch. In addition to these OPTV logs, several 20 KHz sonic logs were successfully recorded, revealing the acoustic structure of the upper 630 m of the borehole.

NEEM iridium numbers:

Primary no.: +8816 224 34860

Secondary no.: +8816 414 39 863

Weather at NEEM:

The week began with fine weather at NEEM: Some clouds; but mostly sunshine and some ground fog. Daytime temperatures between -5C and -9C, and night temperatures between -14C and -21C. Wind from various directions with speeds of 3 kt to 11 kt. Friday a blizzard hit camp with overcast, snow and blowing snow. Temperatures rose to -6 C without day/night cycle. Winds at 20 kt– 30 kt with stronger gusts from SW. The blizzard is expected to pass by Sunday evening.

NEEM camp population: 23

Kangerlussuaq activities:

During the week, we have worked on readying overwintering cargo for the pull out week and cleaning and sorting out field clothes. Monday and Tuesday we shipped a lot of ice cores to Denmark. This ice has been

received in good order in Denmark and is now in freezers. The freezer in Kangerlussuaq has now capacity to take all ice during pull out. Also, we are involved with coordination of the flights by a Twin Otter next week.

Weather in Kangerlussuaq/SFJ:

Mostly sunny and nice. Day temperatures between 8C and 15C. Mosquitoes are gone. Less mushrooms and blue berries.

Tel.: +299 84 11 51

Mobile: +299 52 41 25

Kangerlussuaq/SFJ iridium number: +8816 2144 2402

NEEM Field Operations office,

Jørgen Peder Steffensen

Inger Seierstad