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Oskarshamn site investigation

Complete chemical characterisation in KLX17A

Results from two investigated borehole sections: 416.0–437.5 m, 642.0–701.9 m

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Description

When the method "Complete Chemical Characterization" is performed, the redox potential (Eh) of the groundwater is recorded *in situ* on-line in the borehole and the result is reported in a table in the P-report.

In addition, a method for the determination of the amount and size of colloid particles in the groundwater is applied (Laser Induced Breakdown Detection; LIBD). The sampling of the groundwater for the colloid determination is performed *in situ* in the borehole, usually in two sample containers (PVB), which are immediately transported to the laboratory. At the laboratory, the groundwater is analysed with respect to a number of parameters including Eh. For comparison, the Eh value measured at the laboratory is reported in a result table together with the *in situ* on-line recorded Eh value.

Errata 1

Borehole section [m]	Eh** [mV]
416.0–437.5 PVB (LIBD)(1)****	-237 ^m
416.0–437.5 PVB (LIBD)(2)****	-217 ^m
642.0–701.1 PVB (LIBD)(1)****	–286 °
642.0–701.1 PVB (LIBD)(2)****	–278 °

^m = measured redox potential.

^c = redoxpotential calculated with PHREEQC.

Borehole section [m]	Eh** [mV]
416.0–437.5 PVB (LIBD)(1)****	-23 ^m
416.0–437.5 PVB (LIBD)(2)****	-3 ^m
642.0–701.1 PVB (LIBD)(1)****	–72 °
642.0–701.1 PVB (LIBD)(2)****	-64 °

^m = Redox, Eh (SHE) measured.

^c = Redox, Eh (SHE) calculated with PHREEQC.

Errata 2

P. 34, first paragraph in original p-report reads: "The recorded redox potentials from the on-line measurements were approximately –300 mV and in reasonable agreement with the calculated values from the LIBD experiment, while the measured redox potentials from the LIBD experiment were about 60–80 mV higher, which could be explained by the limited time of measurement."

Read as follows: "The recorded redox potentials from the on-line measurements were approximately -300 mV and considerably lower than the calculated values as well as the measured redox potentials from the LIBD experiment. This is expected as the risk of influence from oxygen is significant when the measurements are not performed *in situ*."