Product Note

Error in Temperature and Pressure compensation in Ocean 2014

Problem Report

Users of Ocean 2014, version 2015.01.22.158 (software release RTI2015.1A), have reported that the temperature and pressure compensation does not work when using ion chamber with the Piranha. The error has been confirmed to be present in the mentioned release.

Effects of the Problem

The effect of the error is that the measured dose (and dose rate) is not compensated for temperature and pressure even if set values are given in Ocean 2014. The magnitude of a non-compensated value is approximately 0.3% per °C, with 20 °C as reference temperature, and approximately 1% per kPa, with 101.3 kPa as reference pressure.

Note that the bug only relates to use of ion chambers, since solid state detectors are not affected by variation in temperature and pressure.

Risk Analysis

May cause measuring error		Probability		Magnitude if happens	
No	☐	Low	☒	Low	☒
Yes	☒	Medium	☐	Medium	☐
		High	☐	High	☐

The risk analysis above is based on what RTI assumes to be a typical user of the equipment. Individual users may not be affected at all, or may face a significantly higher effect than have been assumed in the risk analysis.

Action from RTI

The error will be fixed in the Ocean 2014 release that is planned to be released in end of May 2015.

Product versions

The bug is present only in Ocean 2014 version 2015.01.22.158 (software release RTI2015.1A)

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