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Service Report

SBE Job Number: 38985

Date: 15, April 2005

Customer: US Department of Commerce, NOAA

Customer Identified Problem:

1. Calibrate SBE 3 temperature sensors, S/N 031075 and 031652.
2. Calibrate SBE 4 conductivity sensors, S/N 041335 and 041347.
3. Verify operation of SBE 5 pump, S/N 051027.
4. Calibrate SBE 43 DO sensors, S/N 430140 and 430154.

Problems Found:

1. SBE 4 conductivity sensor, S/N 041335.
The conductivity cells were found to be cracked.
2. SBE 4 conductivity sensor, S/N 041347.
The conductivity cell was found to have failed.
3. SBE 43 DO sensor, S/N 430154.
The sensor was found to have excessive drift.

Services Performed:

1. Calibrations performed on SBE 3 temperature sensors, S/N 031075 and 031652.*
Post calibrated the sensors.
2. Calibrations and services performed on SBE 4 conductivity sensors, S/N 041335 and 041347.*
Post calibrated the sensors.
Replaced the conductivity cell.
Replaced the main piston "O"-Rings.
Performed hydrostatic pressure test.
Re-calibrated the sensor.
Performed full diagnostic evaluation.

3. Services performed on SBE 5 pump, S/N 051027.
Replaced the main piston "O"-Rings.
Replaced the impeller thrust washers.
Performed hydrostatic pressure test.
Performed full diagnostic evaluation.
4. Calibrations and services performed on SBE 43 DO sensor, S/N 430140.
Post calibrated the sensor.
Performed full diagnostic evaluation.
5. Calibrations and services performed on SBE 43 DO sensor, S/N 430154.
Post calibrated the sensor.
Replaced the lid and membrane assembly.
Re-backfilled the sensor's electrolyte reservoir.
Backfilled the pressure compensation bag with saline solution.
Re-calibrated the sensor.
Performed full diagnostic evaluation.

* We were unable to perform the custom pressure test at this time.