

## **Technical Bulletin**

Place a copy of this bulletin in the front of each Blueprints Manual. Redline drawings as needed and include a TB reference note. Reference TB implementation on site Action Item Box-chart and/or site tool history management log.

 Number:
 107b

 Date Issued:
 06/09/17

 Rev B
 08/02/17

 Expiration Date:
 n/a

| Subject/Key Words:            | Random Conductivity Probe PFA Coating Failures           |   |
|-------------------------------|--|---|
|                               | PVDF Coated Probes Available for SC2 and HF Applications |   |
| Classification:               | ■ Informational ■ Mandatory                              | □ Safety Alert ■ PM Impact  |
|                               | ☐ Warranty ☐ Purchase Parts                              | No Charge For Parts expires//  Reference this TB# when ordering NC parts. |
| Applicable Akrion Procedures: | Follow Akrion RMA procedure for all returned parts.      |   |

<u>Issue</u>: PFA coating on probes manufactured by Hach®, crack for no apparent reason

either when the probe is in use or on the shelf. Affected probes are those with

serial numbers between 1608xxxxxx and 1705xxxxxx.

Symptoms: High metals in chemistry; Incorrect concentrations (wrong conductivity capture);

Improper conductivity readings; or no visible indications

## Solution: Akrion Actions:

- 1. Continuing to work with the supplier on cracking PFA coating.
- 2. Working on solution(s) for SC1 applications.
- 3. Qualifying alternative manufacturers.
- 4. Customers will be notified as additional solution(s) become available.
- 5. We will replace Hach® PFA probes purchased through Akrion that fall within the serial number range listed at no charge.
- 6. We will replace Hach® PFA probes <u>not</u> purchased through Akrion that fall within the serial number range listed for a nominal fee.

## **Customer Recommendations:**

- 1. Replace probes in HF and SC2 applications with PVDF version;
  - a. Part number 244133-001 for PVDF sensor housings.
  - b. Part number 244134-001 for TFM sensor housings.
- 2. Contact <a href="mailto:parts@Akrionsystems.com">parts@Akrionsystems.com</a> for an RMA number and instructions for return/exchange of affected PFA probes.
- 3. If you choose to continue using PFA probes
  - a. Perform SPV (surface photovoltage) tests daily.
  - b. TXRF or ICPMS tests can be done performed in lieu of SPV.
  - c. Carefully inspect new PFA coated probe before installing it.
  - d. During extended tool downtime, DO NOT ALLOW THE PROBE TO BE DRY. Always keep the tank and circulation loop filled with DI water.
- 4. Or, remove probes from service and spike by time or lot.

If you have technical questions or require more information, please contact Akrion Systems Technical Support Department via e-mail at <a href="mailto:techsupport@akrionsystems.com">techsupport@akrionsystems.com</a>. Authorized service personnel can obtain copies of the latest Akrion Systems procedures and controlled documents from the Akrion Systems Document Control department at <a href="mailto:doccontrol@akrionsystems.com">doccontrol@akrionsystems.com</a>. Customers must direct all inquires to their local Akrion Systems field service representative. (Form QA1656F1AC)