Weekly Reporting SNS PPU

WBS P.02.03 Cryomodule Integration (JLab Scope)

March 31, 2023

**Issues:** None

**Accomplishments this week:**

Management:

* PPU activities are continuing with cryomodule assembly.
* Off-site work efforts continue in the procurement area on end cans.
* Ashley Mitchell takes over as CAM for the remainder of the project. The org chart has been updated.

Engineering & Design:

* Sustaining engineering activities are continuing in order to revise drawing packages based on feedback during the procurement phase.
* Plan for transmitting complete set of CM drawings – Doc Control Group is preparing drawing package. Shared folder at ORNL is identified.

Procurement:

* One JLab visitor visited the end can vendor on March 28 to witness REC 7 bridging tube leak test. A leak was identified in the shield line (e-8 range), and was repaired in-situ. Subsequent testing showed no leaks. No leaks identified in any other lines.
* Supply End Cans (SECs):

|  |  |  |
| --- | --- | --- |
| S/N | Status | Estimated Delivery Date |
| 01 | Installed on CM-03 | - |
| 02 | Installed on CM-04 | - |
| 03 | Installed on CM-01 | - |
| 04 | Welded onto CM-05 | - |
| 05 | Welded onto CM-06 | - |
| 06 | Delivered to JLab on 6/6. Uncrated, inspections started. Phase 1 dimensional inspection done. Bridge tube angle is off by ~5 degrees. JLAB will try installation of SEC 06 and exercise loosening the hardware at both ends of the elbow/bellows and see how well it corrects. Plan to use on PPU-07. | - |
| 07 | Installed on CM-02 | - |
| 08 | At the vendor. Working on spools under the top plate. | May 26 |

* Return End Cans (RECs):

|  |  |  |
| --- | --- | --- |
| S/N | Status | Estimated Delivery Date |
| 01 | Installed on CM-03 |  |
| 02 | Installed on CM-01 |  |
| 03 | Installed on CM-05 which will be shipped to ORNL by end of the month. Vendor will prepare a nonconformity report on the leaks discovered during final testing. |  |
| 04 | Installed on CM-02 |  |
| 05 | Final testing done and good. Received at JLab on 31-Mar. | Mar 31 |
| 06 | Installed on CM-04.  |  |
| 07 | Performed leak check on all circuits (Primary, Return, Shield and Pressure Tap Line). Continue to work on the bridging tube section. The remainder of the bridging tube structure/vacuum jacket will be going on this week/early next week, after which it will have the test cap installed and move into final testing. | Apr 17 |
| 08 | Vendor received a JT valve inner bellows from ORNL. All sub-assemblies are done other than the inner of the JT. | June 9 |

Production:

* Cryomodule Status:
* CM05: Shipped on March 30.
* CM06: Awaiting REC delivery. Moved to Final Assembly area.
* CM07: Moved to Final Assembly area. Preparing for installation of SEC.
* CM08: Welding FPC bellows on cold mass assembly.

Project Management:

* Collected Progress Sheets
* Held Progress Meeting
* Provided Director’s Review Information
* Updated The CAM Notebook

Quality Assurance:

* Continue to monitor quality data for possible trends.
* Continuing to gather data deliverables for CM05.

Project Photos: