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**Customer: PRINCETON PLASMA PHYSICS LAB**

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**Part: SE120-002 / PPPL NCSX VVSA**

Drawing ID: SE120-002                      Revision: 0

Customer P.O.: S005243-F/Ln:1  
Qty: 1

Reported By: DOUG MCCORKLE  
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**Problem: Thermal cycle**

1. During vessel ramp up: One zone (approximately 12 x 29") reached 524F while the rest of the shell was at about 314F. This exceeds the 90 Deg. F maximum temperature gradient (by 130F) allowed during the cycle. Located from the tangent of the large radius of port 12 towards the center region between ports 5 and 7.
2. During port ramp up Port 7W reached 320F (9F above high limit)
3. During port ramp up, Port 11W reached 333F (22F above high limit)
4. During port soak, Port 10E temperature increased to 555F (244F above high limit). The port was above the high limit of tolerance approximately 45 minutes.

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**Proposed Disposition:**

Customer disposition required.

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Number of additional pages: \_\_\_\_\_

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**Customer Disposition:**     Use As Is     Rework     Repair     Scrap     Replace

**Technical Contact Approval:** \_\_\_\_\_

**Title:** \_\_\_\_\_    **Date:** \_\_\_\_\_

**Buyer Approval:** \_\_\_\_\_

**Title:** \_\_\_\_\_    **Date:** \_\_\_\_\_

**Major Tool Implemented By:** \_\_\_\_\_

**Title:** \_\_\_\_\_    **Date:** \_\_\_\_\_

## Nonconformance Report: Major Tool NC19232

This is for **SE120-002 / PPPL NCSX VVSA**

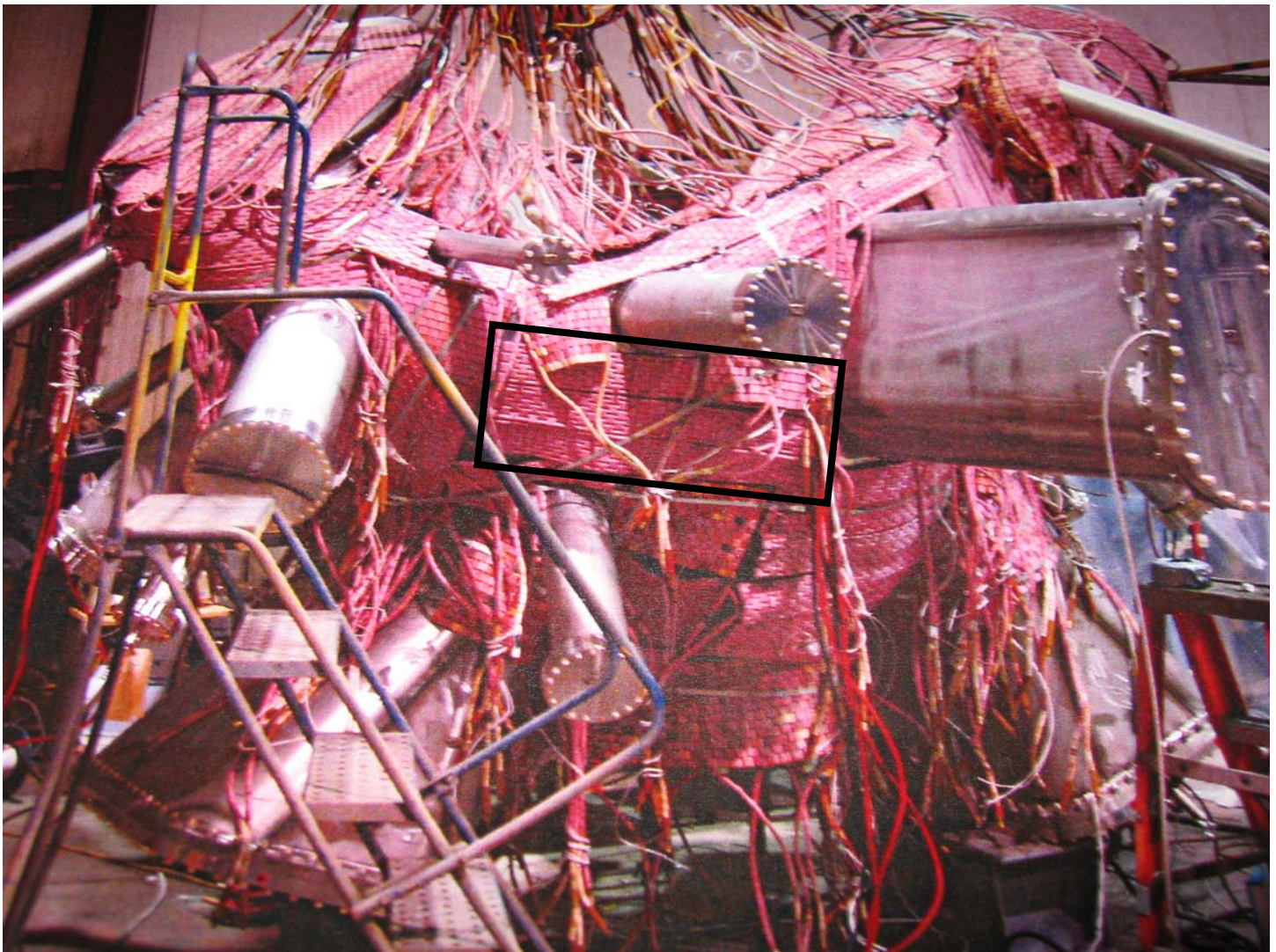
### Problem:

#### Thermal cycle:

1. During vessel ramp up: One zone (approximately 12 x 29") reached 524F while the rest of the shell was at about 314F. This exceeds the 90 Deg. F maximum temperature gradient (by 130F) allowed during the cycle. Located from the tangent of the large radius of port 12 towards the center region between ports 5 and 7.
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Doug McCorkle

Photo added by M. Viola for clarification (Note boxed region of 3 pads):



**Project Disposition:**

We acknowledge the thermal cycle deviations and based on the information received so far, project disposition is use-as-is. However, this disposition will need to be revisited if damage from the heat excursions is detected.

**Approvals:**

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Procurement Technical Representative

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Responsible Line Manager:

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Project Quality Assurance: