



Baseline FAC Inspection Hunterstown Generating Station

2025 ACC Users Group

Granbury, TX

Company Confidential

Hunterstown Generating Station



Objective



TUBE SHEET STATUS

- Establish complete baseline inspection of Hunterstown ACC
 - Visual + ultrasonic wall thickness measurements on tubes
 - Map entire ACC to support future trend analysis
- Inspection timed just prior to **Anodamine** addition to steam cycle

**BEFORE
ANODAMINE**



Inspection
Cycles

March 2025

**AFTER
ANODAMINE**

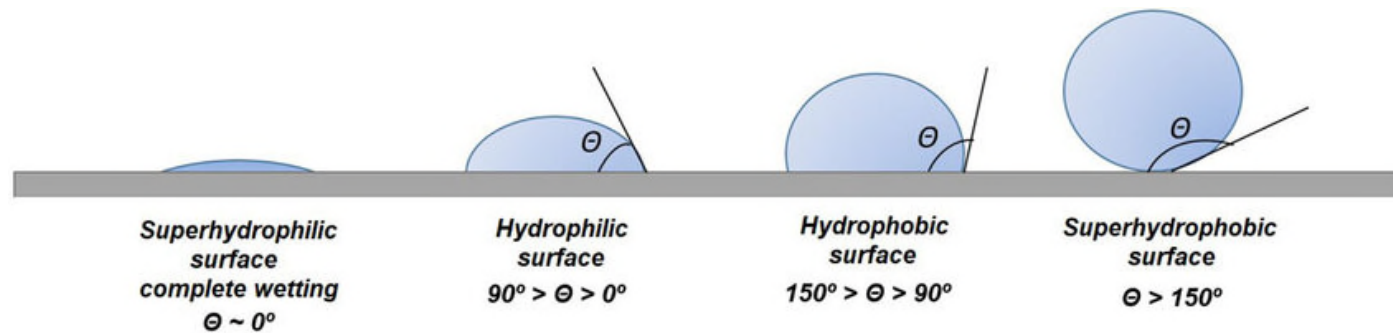


Inspection
Cycles

Why now



- Long-term FAC tracking begins with a proper baseline
- Enable year-over-year wall loss comparison
- Supports informed inspection planning and maintenance targeting
- Serves as a reference point for measuring **Anodamine** effectiveness



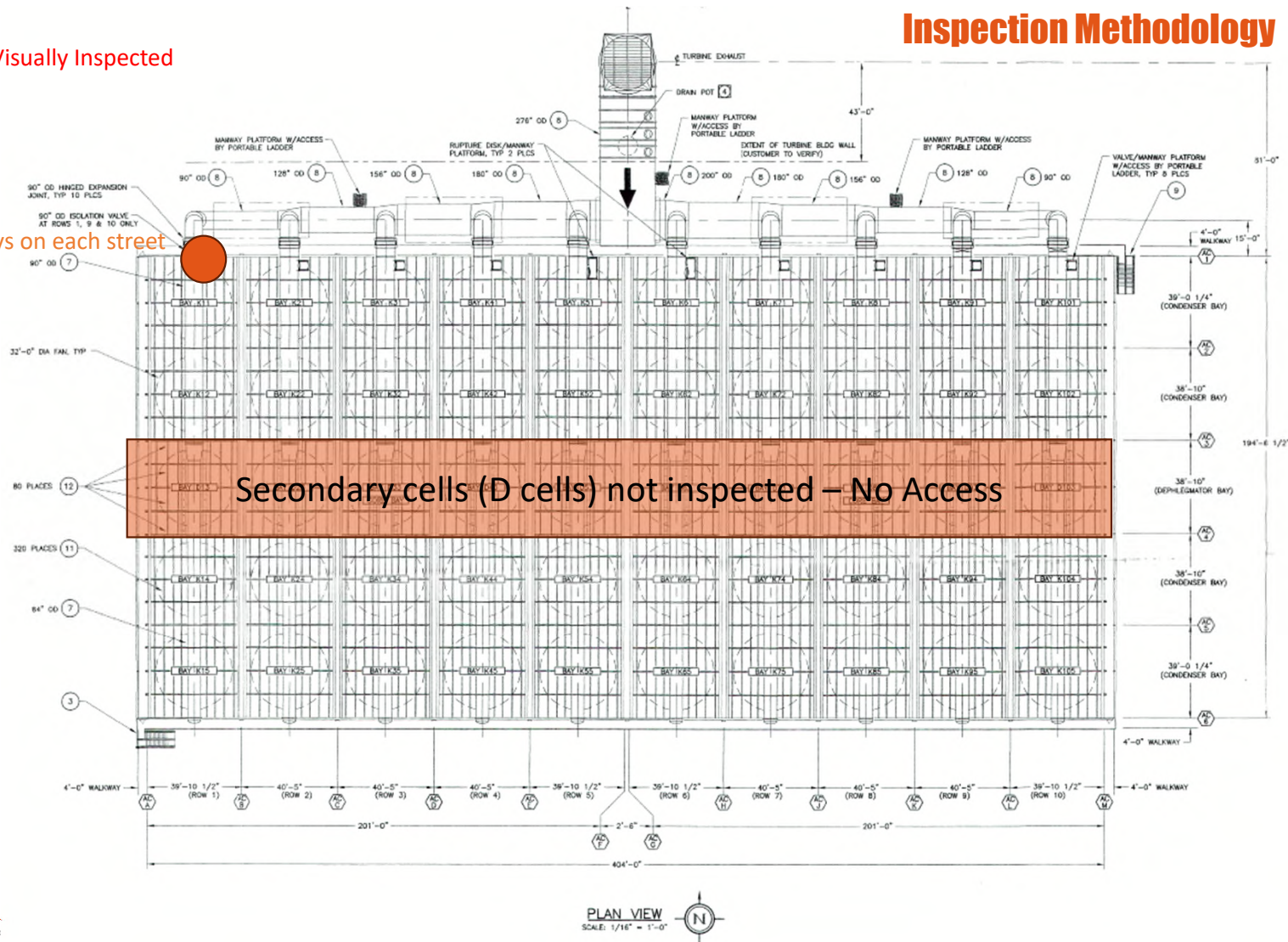
CreditL azogrou.com

36,800 Tubes Visually Inspected

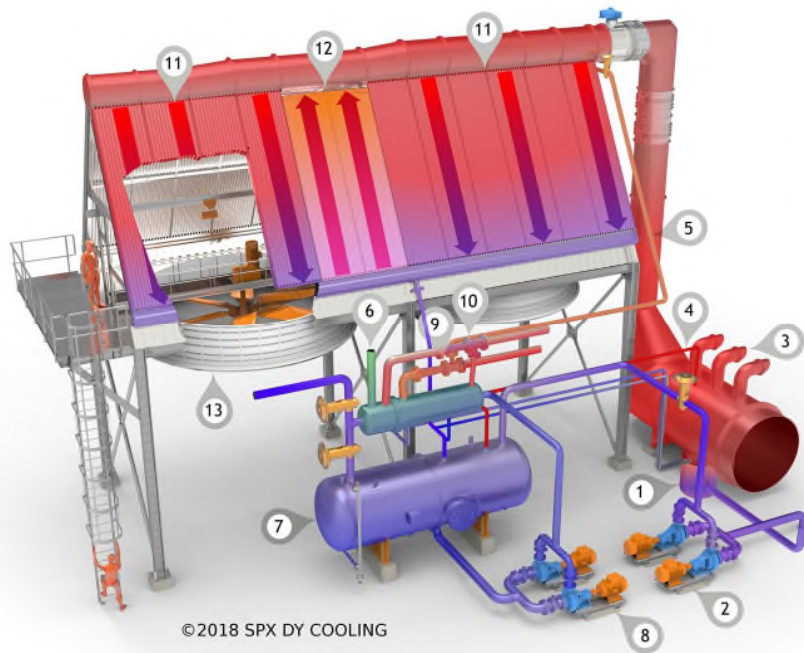
Inspection Methodology



Access via manways on each street



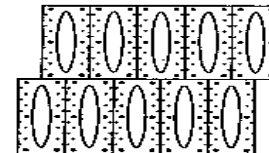
Hunterstown Layout and Tube Technology



- 1 Drain pot
- 2 Drain pump
- 3 Bursting Disks
- 4 Equalizing Line
- 5 Non Condensable Extraction
- 6 Air to Atmosphere
- 7 Condensate Tank
- 8 Condensate Pump
- 9 First Stage Ejector
- 10 S.nd Stage Ejector
- 11 Primary Bundles
- 12 S.ndary Bundles
- 13 Axial Fans

ACC Fin Tubes

- GEA A-Tube
 - HDG Carbon Steel
 - 2 Rows
 - Elliptical



COOLING AIR



DHACI (Dooley Howell ACC Corrosion Index)



1. Tube entries in relatively good shape (maybe some dark deposited areas)

2. Various black/grey deposits on tube entries as well as flash rust areas, but no white bare metal areas

3 - Few white bare metal areas on a number of tube entries. Some black areas of deposits

4 - Serious white bare metal areas on/at numerous tube entries. Lots of black areas of deposition adjacent to white areas.

5 - Most serious. Holes in the tubing or welding. Obvious corrosion on many tube entries.

TUBE SHEET STATUS

DHACI

1 

2 

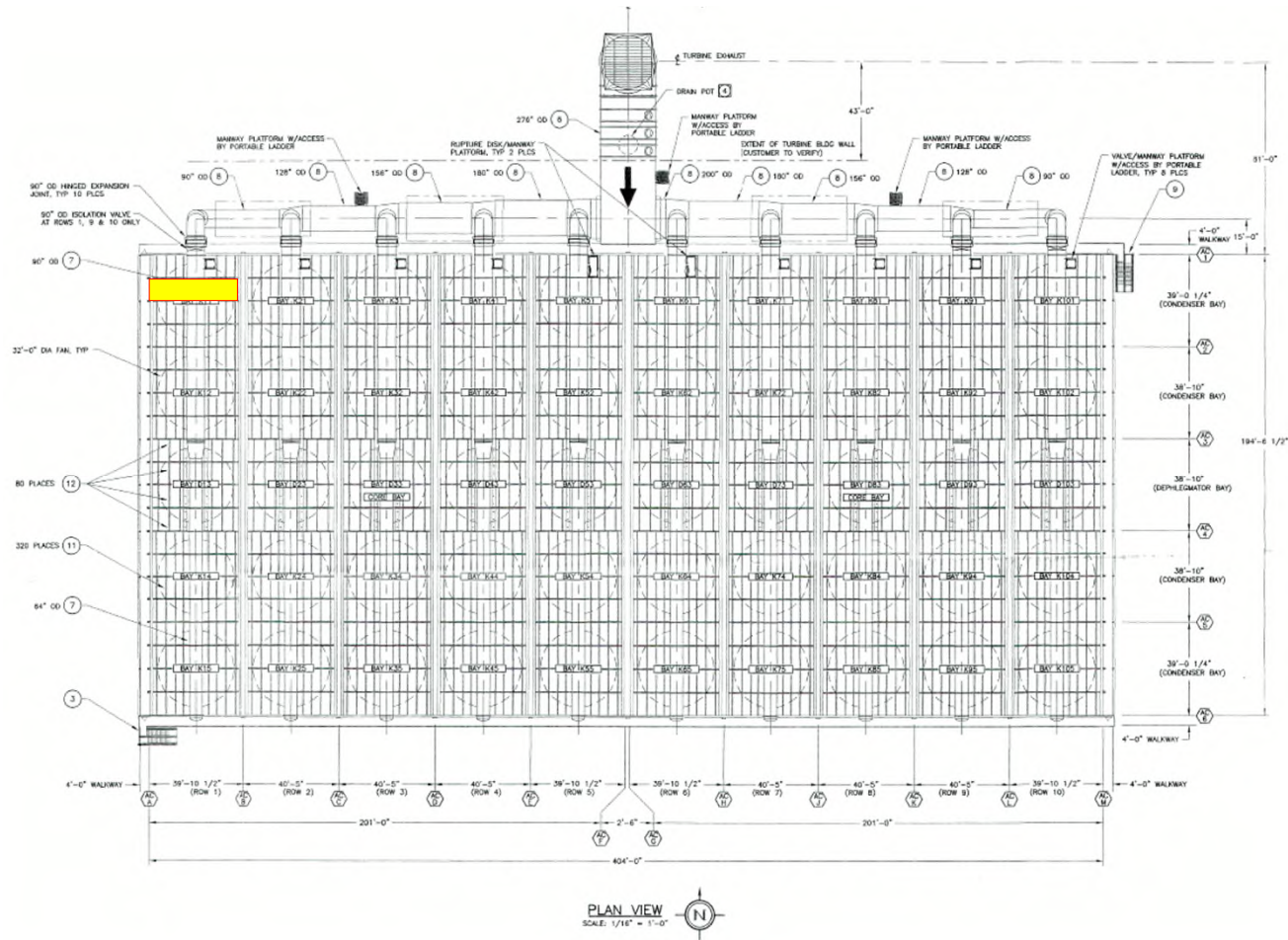
3 

4 

5 

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Inspection Methodology



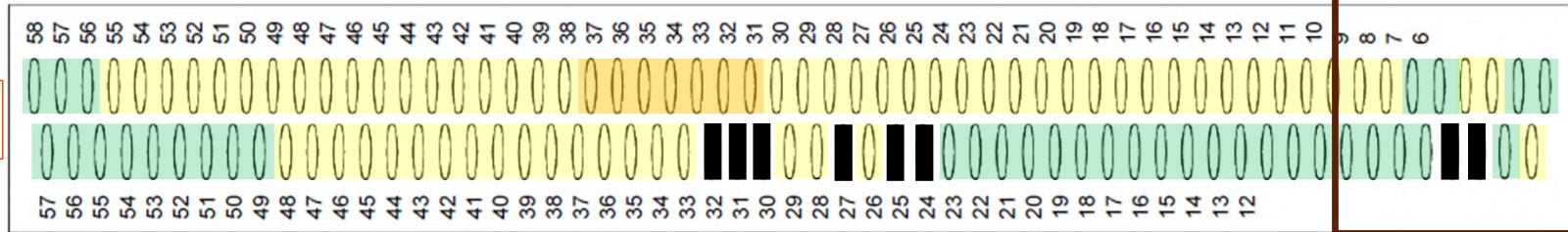
Street 1, Bay K11, Bundle 1



West



Tubes blanked
March 2018



TUBE SHEET STATUS

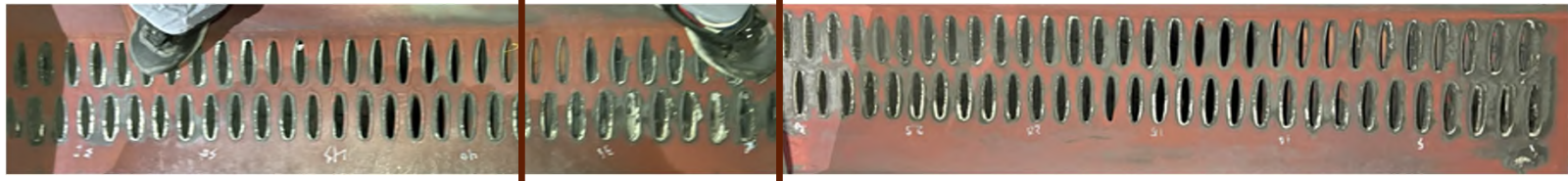
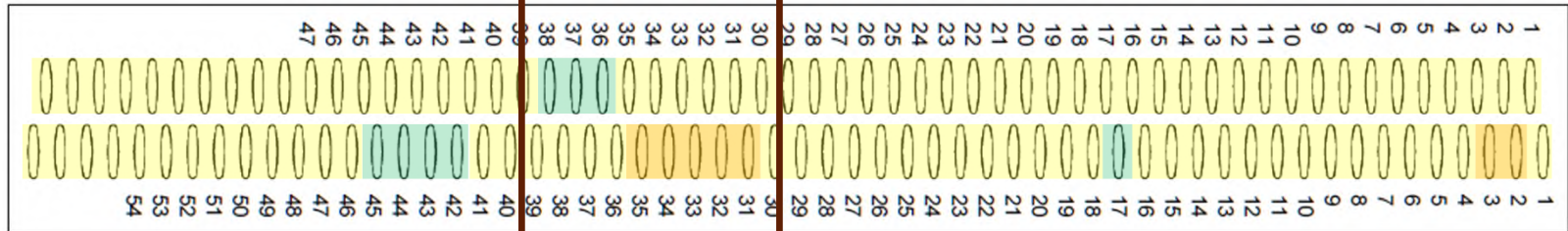
DHACI

- 1 ■
- 2 ■
- 3 ■
- 4 ■
- 5 ■

Blanked ■

Steam Flow

East



Inspection Methodology

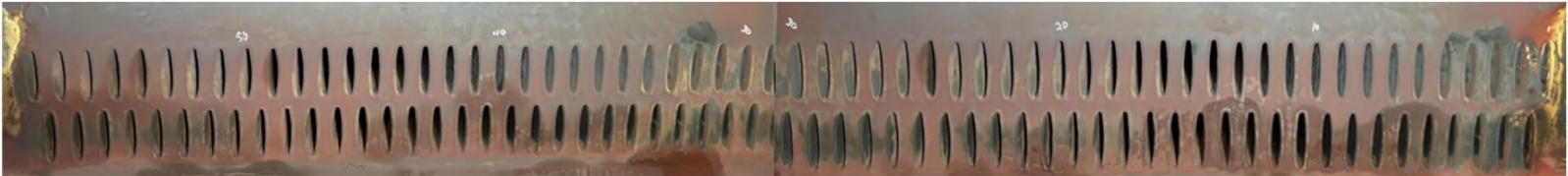




Street 6, Bay K65, Bundle 1



West



TUBE SHEET STATUS

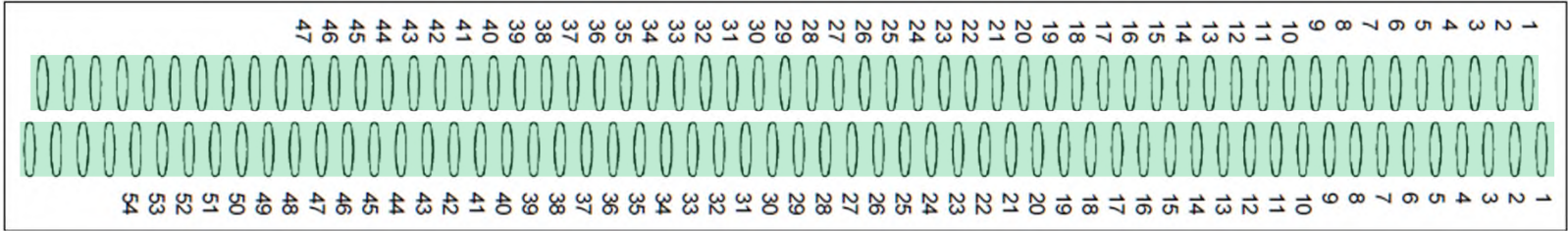
DHACI

1	
2	
3	
4	
5	



← Steam Flow →

East



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Street 9, Bay K91, Bundle 1
Looking South



Street 9, Bay K92/D93 Connection



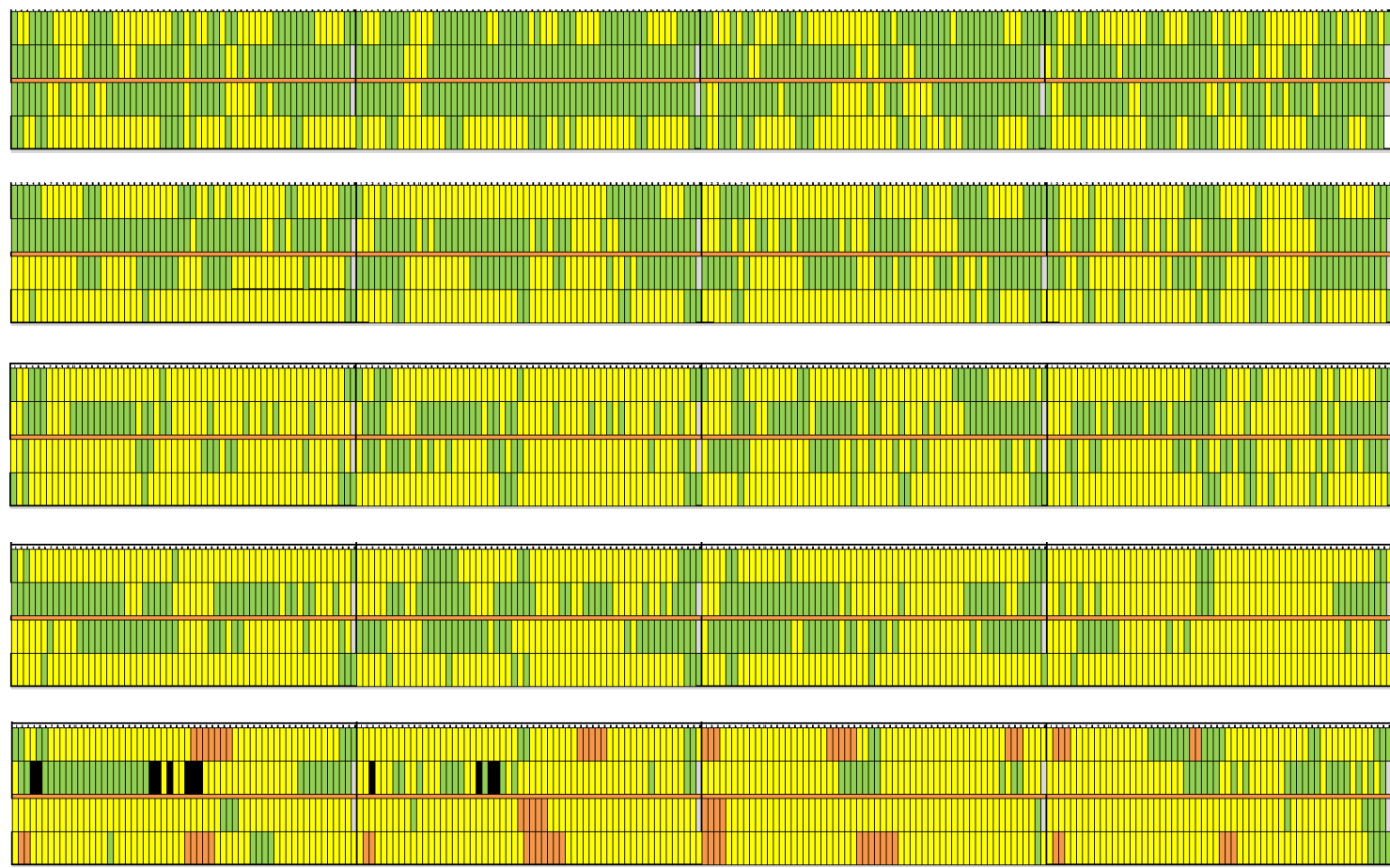
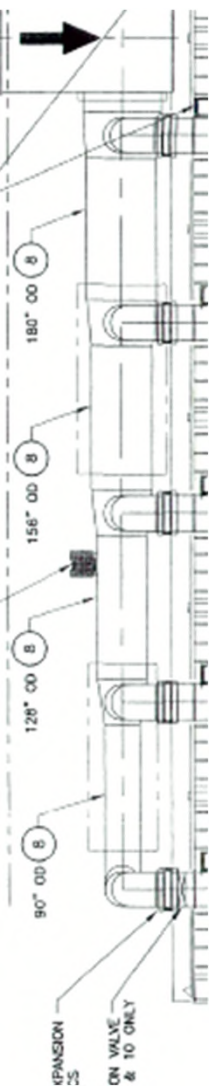
Notes: Bare metal exposure consistent on all SDM round cross members. Very little iron oxide accumulation at the South end of the SDM (K95).

Ultrasonic Testing for Thickness Results



- UT measurements taken on targeted tubes with DHACI = 4
- No tubes found $<0.058''$ wall thickness (1.47 mm)
- UT values help correlate DHACI scale with true wall condition
- Some weld repairs performed following findings
- Root cause discussion: localized flow disturbance? Design edge?





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Results



TUBE SHEET STATUS

DHACI

1	
2	
3	
4	
5	

Blanked



What Comes Next



- **Continue compiling heat map data for full ACC**
- **Compare with future inspection cycles to identify FAC progression**
- **Monitor effect of Anodamine addition**



Engineered
Solutions
for your
Cooling Assets

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