



DEPARTMENT OF ENERGY

Office of River Protection

HANFORD SITE

Tank Waste Committee Double-Shell Tank AY-102 Update

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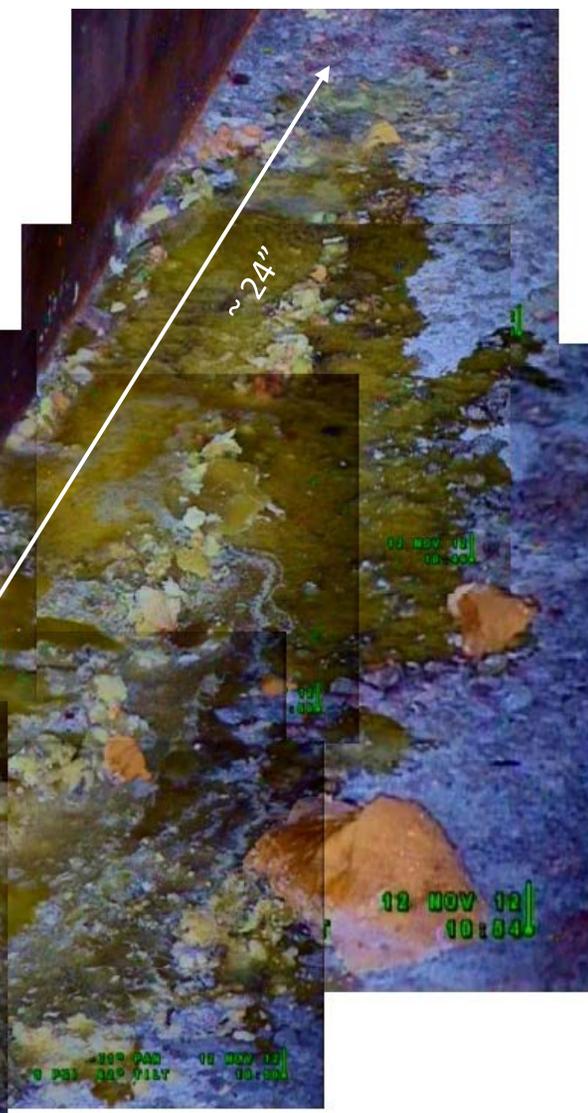
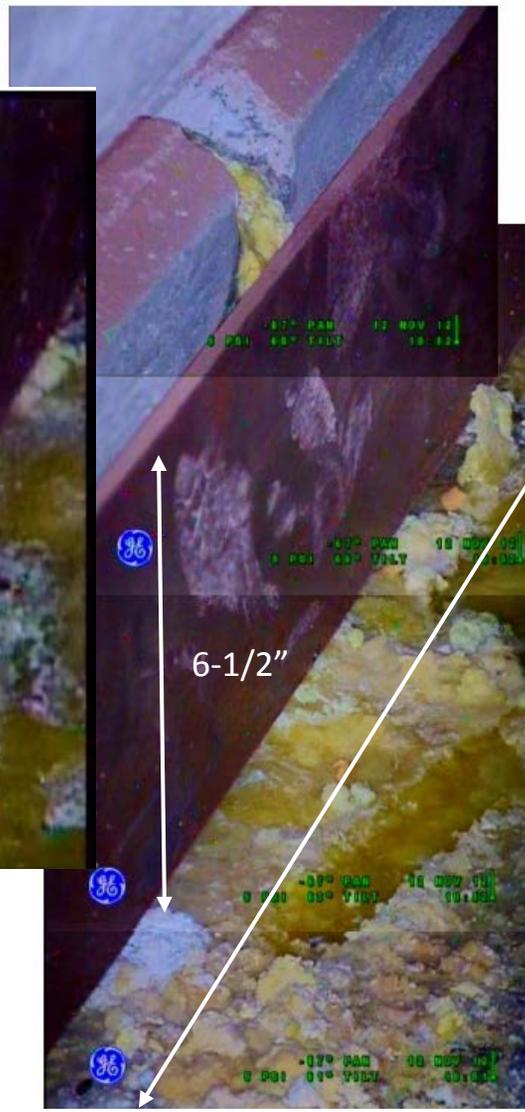


Double-Shell Tank AY-102 Monitoring

- Riser 83 weekly inspections show some sign of slow changes
- Primary tank liquid level is continuously monitored with no abnormal change
- Annulus liquid level monitors show no indication of liquid
- Annulus Continuous Air Monitor (CAM) shows no sign of change
- Leak Detection Pit sampled twice with no indication of waste outside the secondary liner



AY-102 Riser 83





Extent of Condition Evaluations

- 100% visual inspection of six similar Double Shell Tanks (DSTs)
 - Currently evaluating three of six DSTs
 - AY-101 completed with no anomalies seen
 - Expect to complete spring 2013

- Review of archived construction documentation for all DSTs
 - Expect to complete by end of 2013

- For the remaining DSTs, evaluating changes to frequency and methods of the current visual inspection program



AY-101 Annulus Inspection

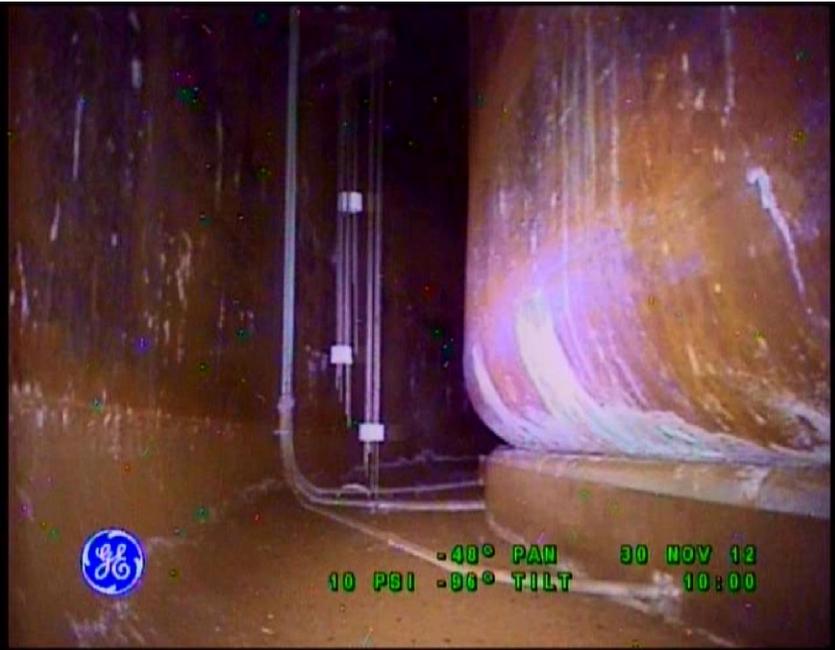
Riser 84 11-28-2012





AY-101 Annulus Inspection

Riser 77 11-30-2012





AY-101 Annulus Inspection

Riser 78 1-2-2013





Status of AY-102 Pumping Preparedness

- Liquid Only
- Procedures developed
- Primary tank to alternate double-shell tank
 - Power supplied to AY-02A Pump
 - Procuring safety significant rigid jumpers that will allow operational flexibility and keep AY-101 connected to the DST transfer system
- Annulus to primary tank
 - Fabricated and tested general service jumpers
 - Inspected pits and tested transfer line
 - Tested and performed maintenance on pump
 - Equipment staged onsite for quick deployment



AY-102 Integrated Project Team Update

Initial Recommendations

- Maximize tank space availability by accelerating evaporator campaigns and completing AP Tank Farm level rises
 - Maintain space for retrieval of C-Farm and next 9 tanks as well as AY-102
- Deploy equipment capable of removing sludge/supernatant from AY-102
- Secretary's team evaluating Tank Farm Waste Pre-Treatment Requirements/Facilities should consider additional tank space for emergency response and operational considerations
- Additional recommendations are forthcoming
 - Alternatives for providing emergency pumping space