



# RTR SEA WATER FLASH EVAPORATOR (SWFE#5) PRODUCTION IMPROVEMENT

Air & Water Unit -October 18, 2017

By

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# Outline

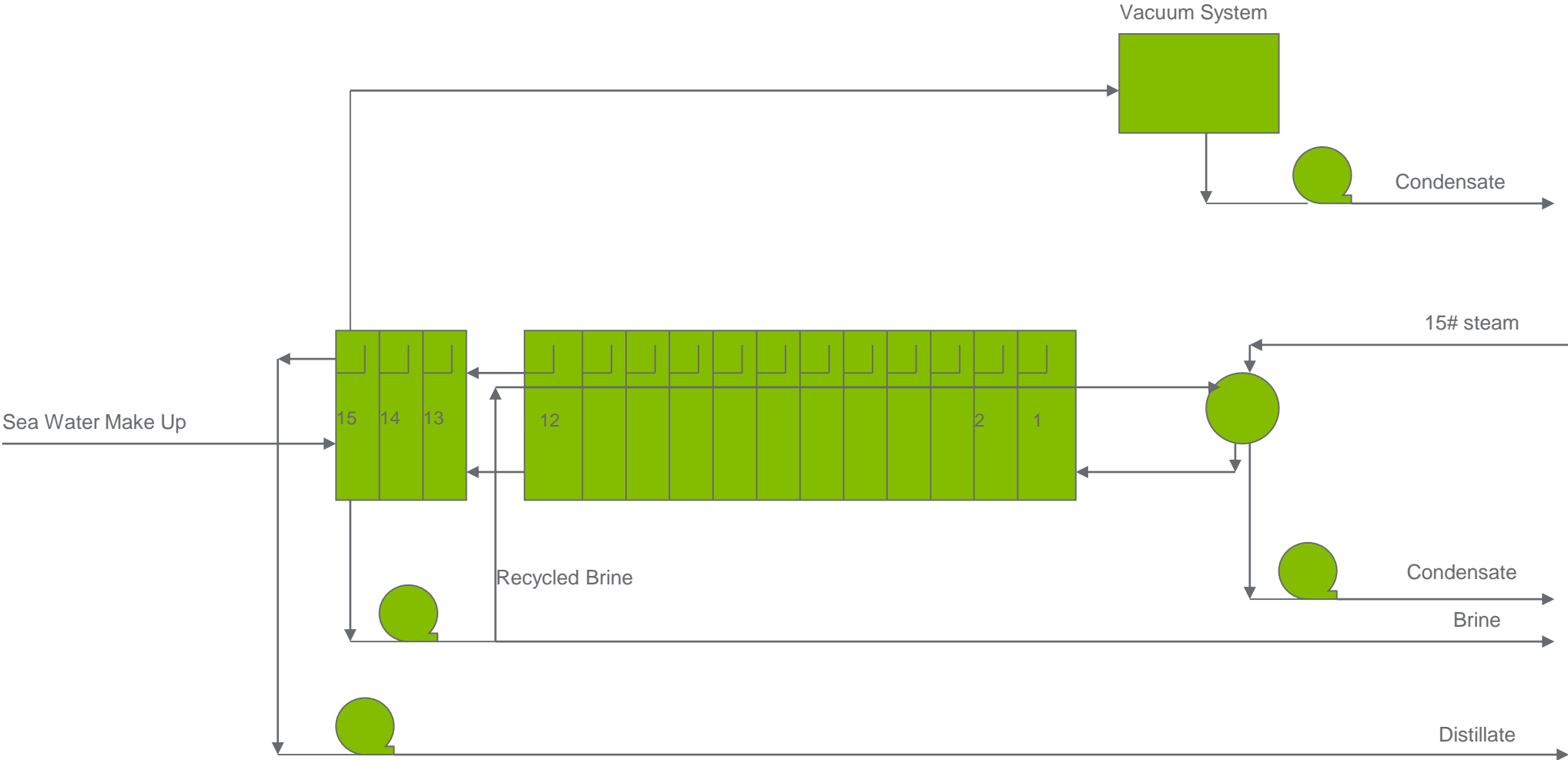
- Introduction
- System Description
- Challenges
- Recommendations & Actions
- Results

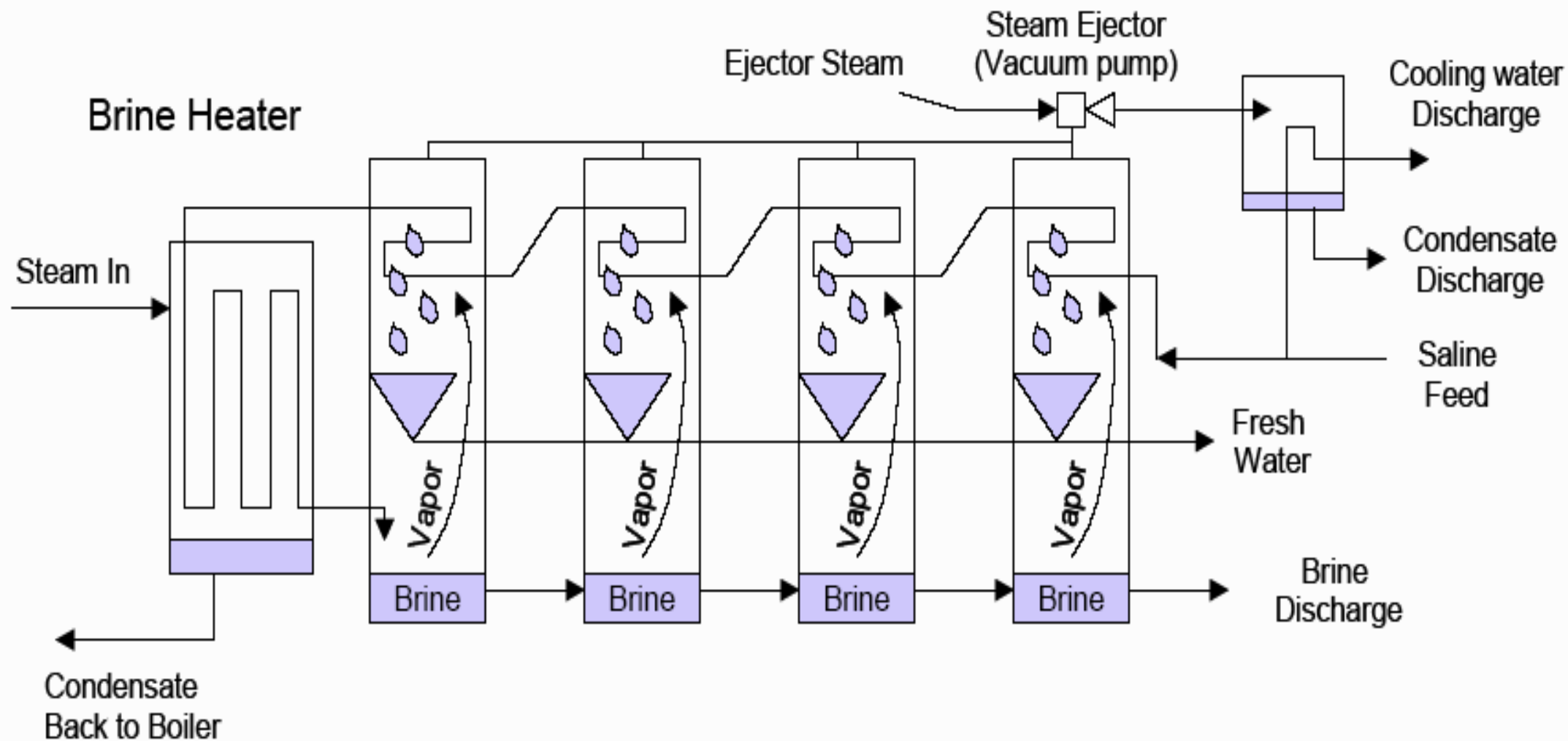
# AIR & WATER UNIT



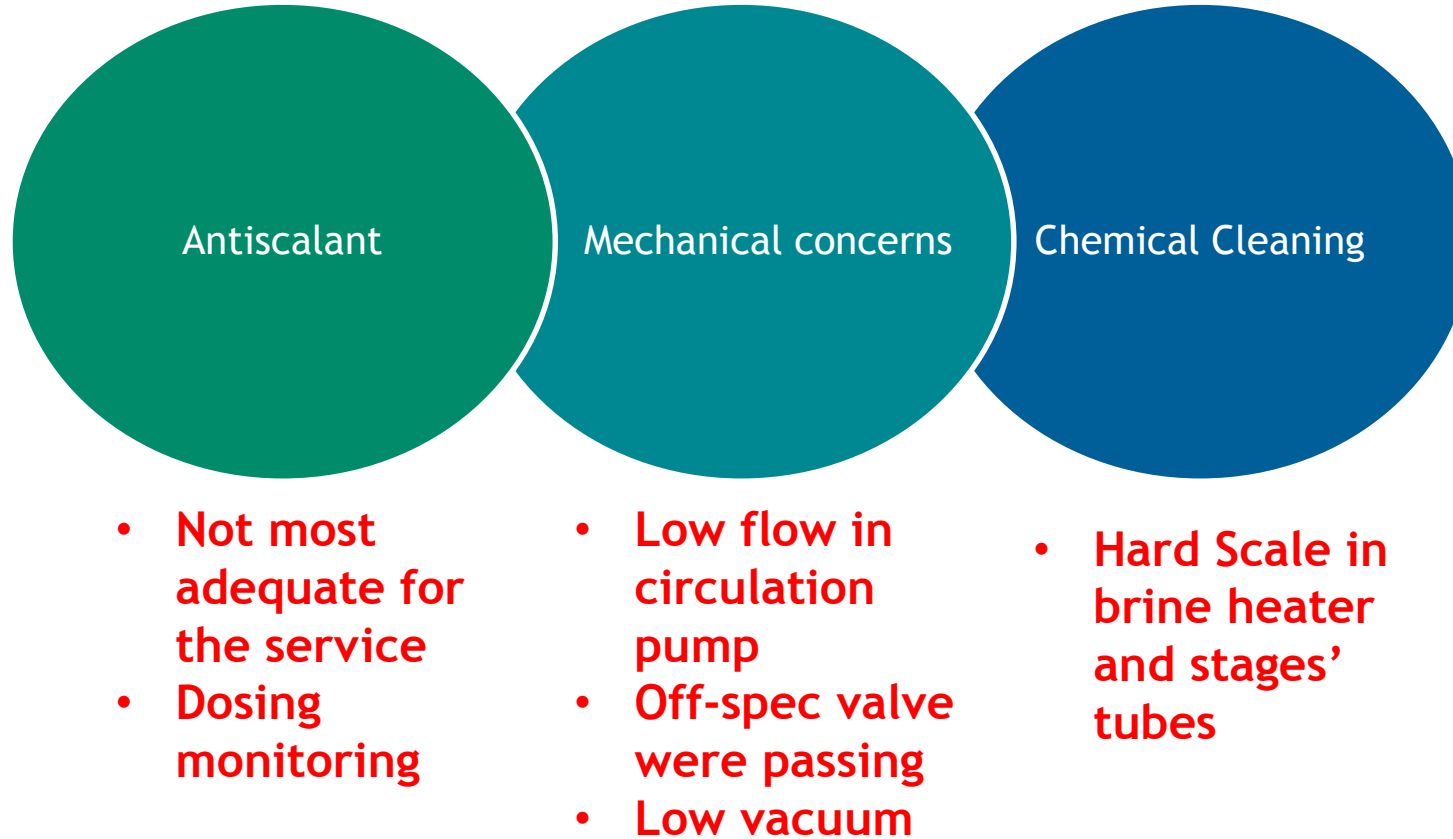
SWFE#5: 300 GPM

# System Description

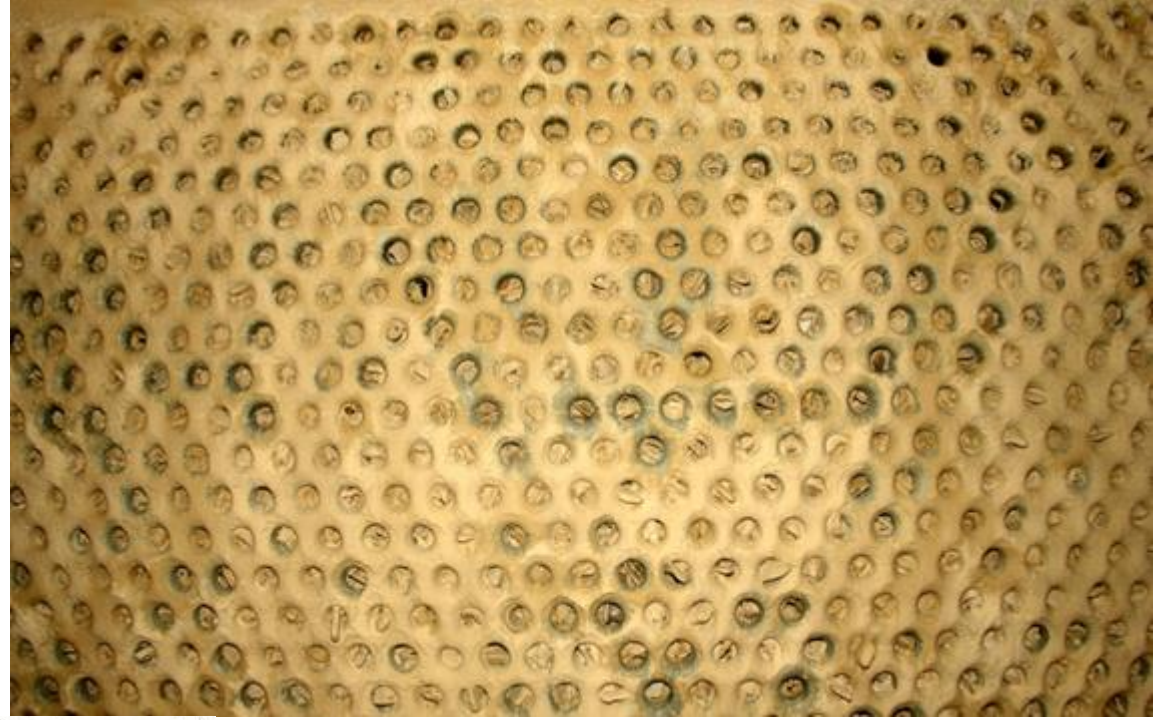
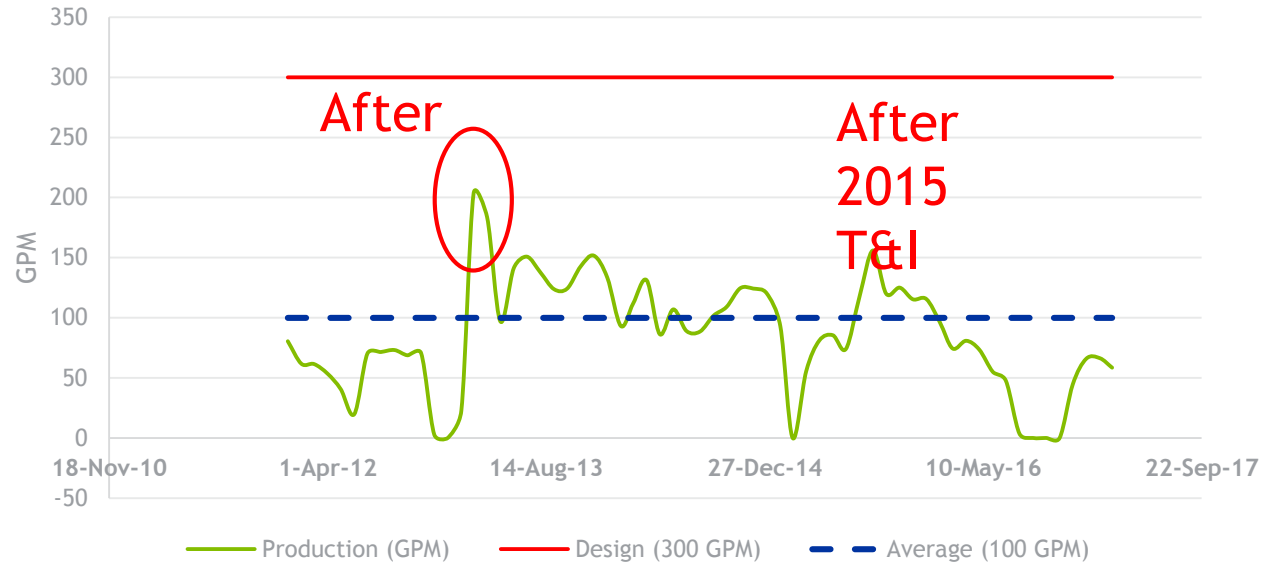




# Challenges



# SWFE#5 Production



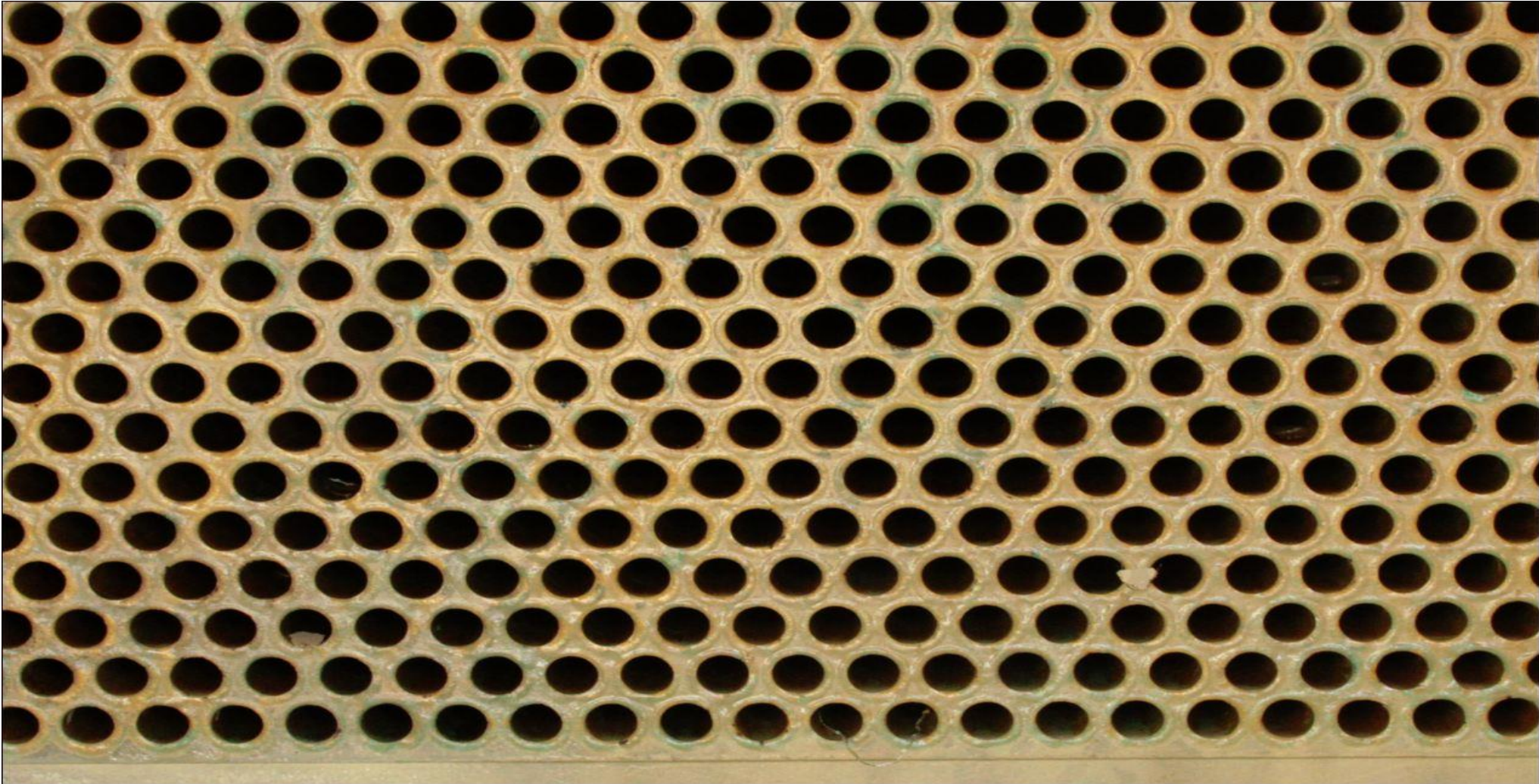
# Recommendations & Actions

Unit	Deficiencies	Action
SWFE#5	Hard scale in brine heater and stages	<ul style="list-style-type: none"> <li>• Expedite Shutdown to implement mechanical and chemical cleaning using HCl</li> </ul>
	High steam consumption	<ul style="list-style-type: none"> <li>• Use automated antiscalant dosing</li> <li>• Connect the antiscalant pump indications to DCS and add alarms</li> </ul>
	Vacuum leak	<ul style="list-style-type: none"> <li>• Replace all passing valves</li> <li>• Implement vacuum decay test</li> </ul>
	All 2" distillate dump valves on all stages are passing	Replace all defective and off-spec passing valves

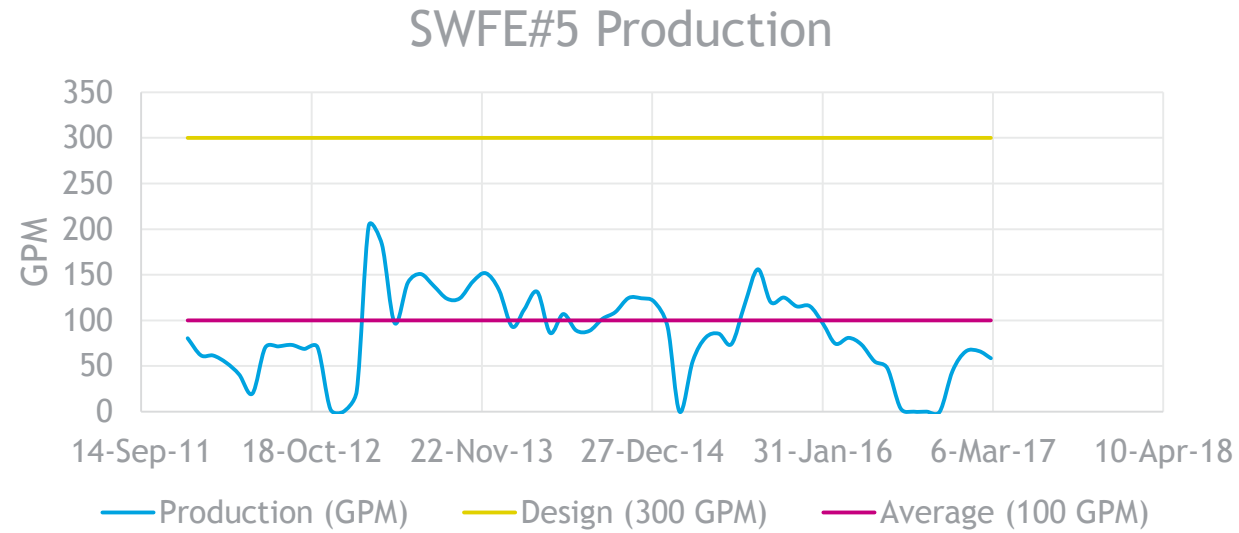


# Results

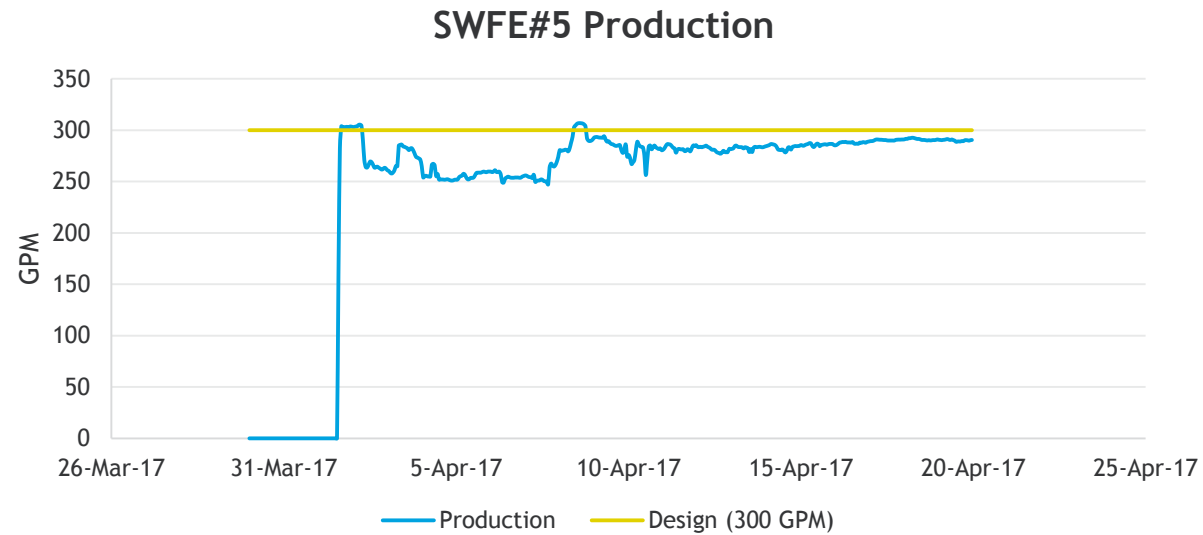
# Brine heater Tubes

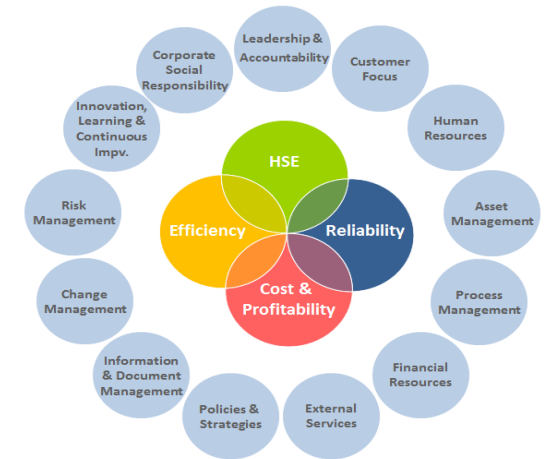


**Before**



**After**





# Thank you