Work Order Details

SP233529: UNIT 4 DA (#4 FWH) ANNUAL OUTAGE INSPECTION

UNIT 4 DA (#4 FWH) ANNUAL OUTAGE INSPECTION

Asset:	SP5724 Unit 04 Condensate System Deaerator Storage Tank	**Model:**	
Location:	SP04.WA.CD.D Unit 04 Condensate System Deaerator Storage Tank	**Product Version:**	

Sched Start:	9/29/2024
Sched Finish:	9/29/2024
Target Start:	9/1/2024
Target Finish:	9/1/2024
Actual Start:	10/15/2024
Actual Finish:	10/15/2024
Report Date:	2/27/2024
Craft:	M3M4
Unit:	4
Outage:	Outage

Business Unit:	SPUR-Spurlock Station
Priority:	3 (Low - Routine)
Work Type:	PM-Preventative Maint
Status:	WCMP
Parent:	
Failure Class:	
Problem Code:	
PM Number:	PM2905
GL Account:	513000~SP04~400~3000~03700~BASE~00~00000~00000
UNID:	

Job Plan:	M3M4.O.073
Supervisor:	
Lead:	02513
Vendor:	
Reported by:	03659
Reported by:	Mike Stanton
Defect Tag:	NO
Commodity:	
Comdty Grp:	
Classification:	

Tasks

WO Task	Task ID	Craft	Description	Status	Sched Start	Sched Finish	Est Hours	Actual Start	Actual Finish
SP233530	10	M3M4	LOTO	WCMP	9/29/24	9/29/24	1		
Instructions:									
SP233531	20	M3M4	OPEN DA & STORAGE TANK ACCESS DOORS	WCMP	9/29/24	9/29/24	2		
Instructions:									
SP233532	30	M3M4	INSPECT SPRAY NOZZLES	WCMP	9/29/24	9/29/24	2		
Instructions:									
SP233533	40	M3M4	INSPECT BASKETS	WCMP	9/29/24	9/29/24	2		

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Tasks

WO Task	Task ID	Craft	Description	Status	Sched Start	Sched Finish	Est Hours	Actual Start	Actual Finish
Instructions:									
SP233534	**50**	**M3M4**	**INSPECT DA & STORAGE TANK INTERIOR SHELL FOR EROSION/COROSION**	**WCMP**	**9/29/24**	**9/29/24**	**2**		
Instructions:									
SP233535	**60**	**M3M4**	**CLOSE DA & STORAGE TANK ACCESS DOORS**	**WCMP**	**9/29/24**	**9/29/24**	**2**		
Instructions:									

Planned Labor

Task ID	Craft	Skill Level	Labor	Vendor	Contract	Qty	Hours	Rate	Line Cost
10	M3M4					1	01:00		
20	M3M4					1	02:00		
30	M3M4					2	02:00		
40	M3M4					2	02:00		
50	M3M4					2	02:00		
60	M3M4					1	02:00		
							Total Planned Labor:		

Log

Date	Class	Created By	Description
10/15/2024 12:39:38 PM	WORKORDER	02663 Justin Tackett	Work complete
DA tank was opened for inspection. Jordan Schaffer performed the inspection. Repairs was made based off of the inspection and job plan that was provided.			
10/15/2024 12:39:10 PM	WORKORDER	02301 Cody Dicken	

Inspection completed by J. Schaeffer. Indications found in 2023 were ground out and welded. NDE completed by Team. Timmy, Dave, Hutch

Work Order Details

SP233529: UNIT 4 DA (#4 FWH) ANNUAL OUTAGE INSPECTION

Report EK_woprint.rptdesign

Date: 9/18/2024	**Inspected by:** EKPC (J.Schaeffer)	**Unit:** 4	**Item:** 1

Component Inspected: U4 Deaerator

Condition Assessment: The extraction steam inlet nozzle, internal weld, had a distinct line visible between the toe of the weld and the nozzle. It appears as if the original internal weld did not have fusion with the nozzle from ~3:00-6:00.

Recommendations: In 2024, plan to

1. Incorp - remove insulation and flashing on the West end of the heater head.
2. M3/4 – Wire wheel around the extraction steam inlet nozzle to repad to head welds.
3. M3/4 – At the 7:00 position, lightly grind a smooth contour into the existing weld. Add a weld pass over this area to build back to the original internal weld profile.
4. M3/4 – From the 3:00-6:00 position, grind out the internal weld to expose the original extraction steam inlet nozzle to shell head interface.
    a. Re-weld to original ¼" fillet as identified in the job plan.
    b. Wire wheel entire internal nozzle to head weld for NDE.
5. NDE Crew – Perform WFMT on the extraction steam piping to inlet nozzle weld.
6. NDE Crew – Perform WFMT on the extraction steam inlet nozzle to repad weld.
7. NDE Crew – Perform WFMT on the repad to shell head weld.
8. NDE Crew – Perform WFMT on the internal weld, after M3/4 completes weld repair.
9. M3/4 – Lightly grind out the prior weld concavity from 7:30-8:30 on extr. Steam inlet piping to nozzle weld. Add weld pass over area.

*Note that a separate job plan will be prepared for M3/4.

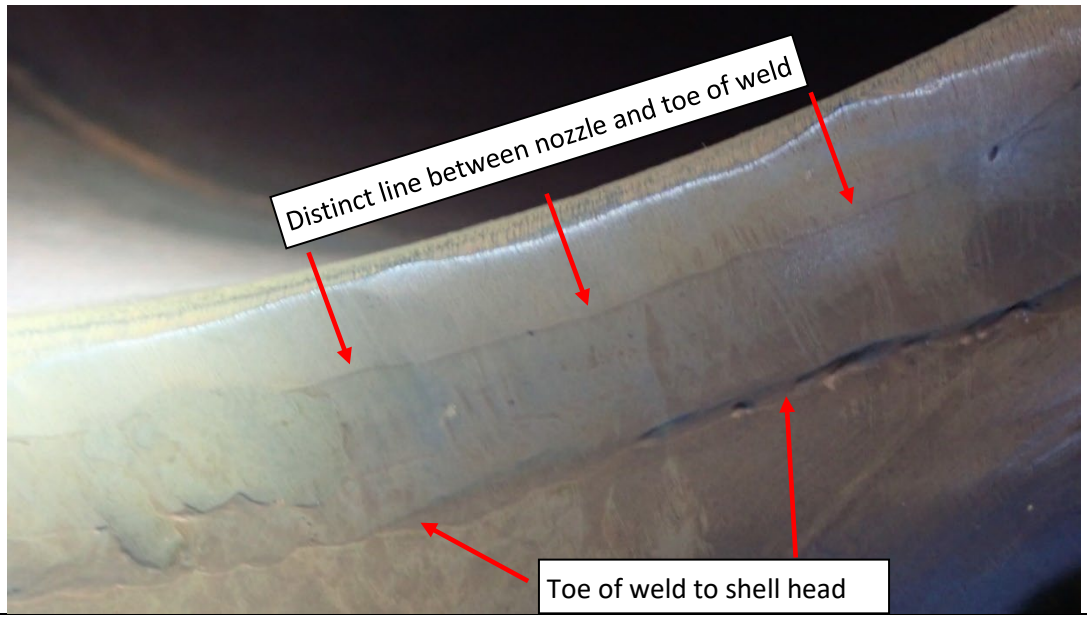
Priority: P1 - 2024

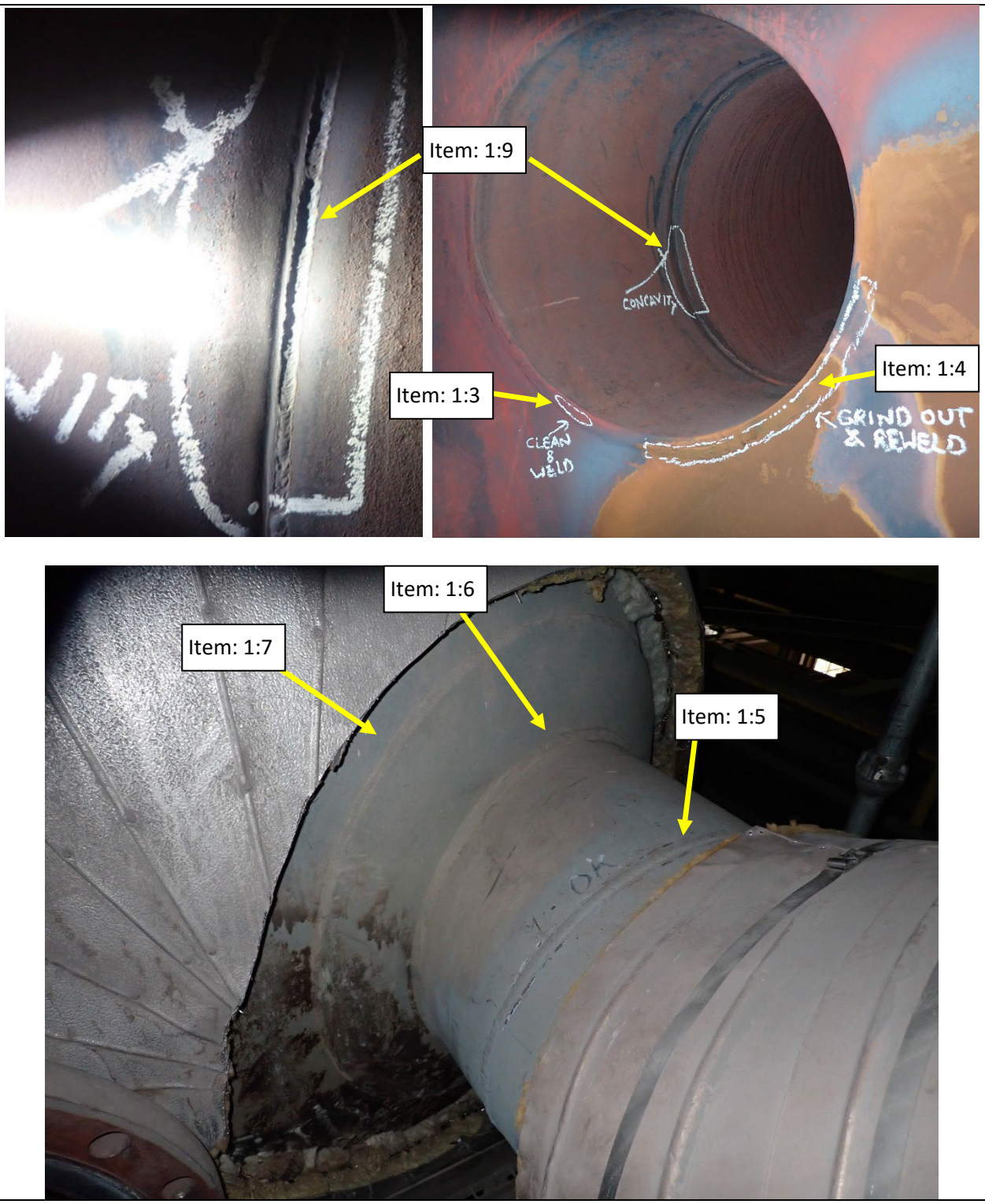
Risk if NOT Performed:

Cost Estimates:

Action Taken:

Photos:




Item: 1:9
CONCAVITY
Item: 1:4
Item: 1:3
CLEAN & WELD
GRIND OUT & REWELD
Item: 1:6
Item: 1:7
Item: 1:5

Date: 9/18/2024	**Inspected by:** EKPC (J.Schaeffer)	**Unit:** 4	**Item:** 2

Component Inspected: U4 Deaerator

Condition Assessment: The Southwest tray enclosure support foot had flashing damage on the leading edge of it, and appears to have created a pit in the weld. It has also eroded into original undercut on the foot to shell weld.

Recommendations: Burr bit out the pit. Do not dig straight in; open the pit up large enough to prevent any cracking to propagate from the edges of the pit.
Re-weld over shell side of weld and burred out area on support foot side of the weld.

Heater shell is ½" THK, SA516-70 material and the tray enclosure support foot was verified carbon steel with a materials analyzer.

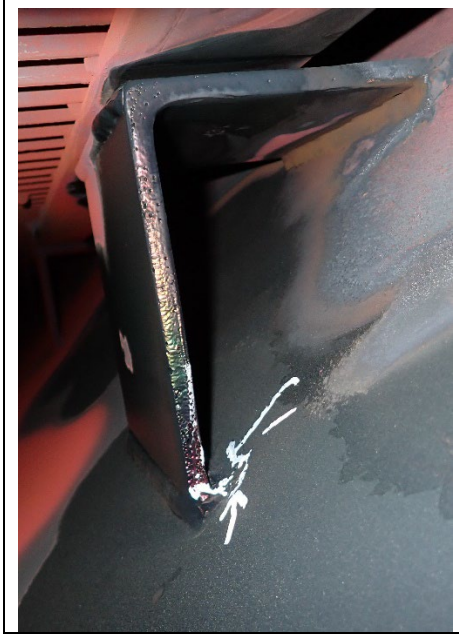
Priority: P2 - 2024

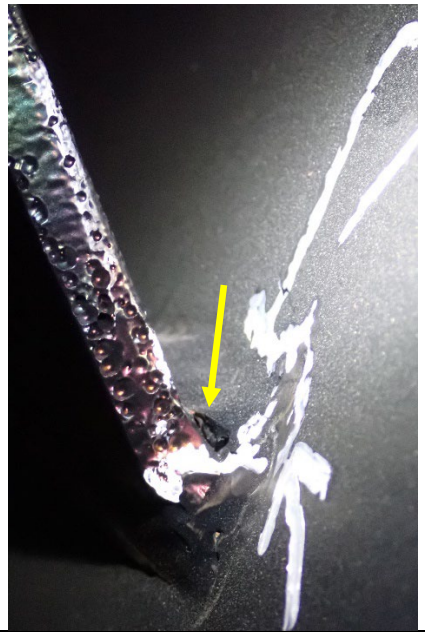
Risk if NOT Performed:

Cost Estimates:

Action Taken:

Photos:





Date: 9/18/2024	**Inspected by:** EKPC (J.Schaeffer)	**Unit:** 4	**Item:** 3

Component Inspected: U4 Deaerator

Condition Assessment: The East side of the East downcomer/equalizer nozzle had a small crack identified on the weld at the corner of where the nozzle welds to the shell.

Recommendations: Grind out the crack, which extends through a prior weld repair. Use a burr bit to grind this out along a 1" length but don't dig deep into it, as you need to feather out the edges to create a smooth, wide valley. Then, re-weld over this area.
Downcomer/equalizer nozzle is SA516-70 material.

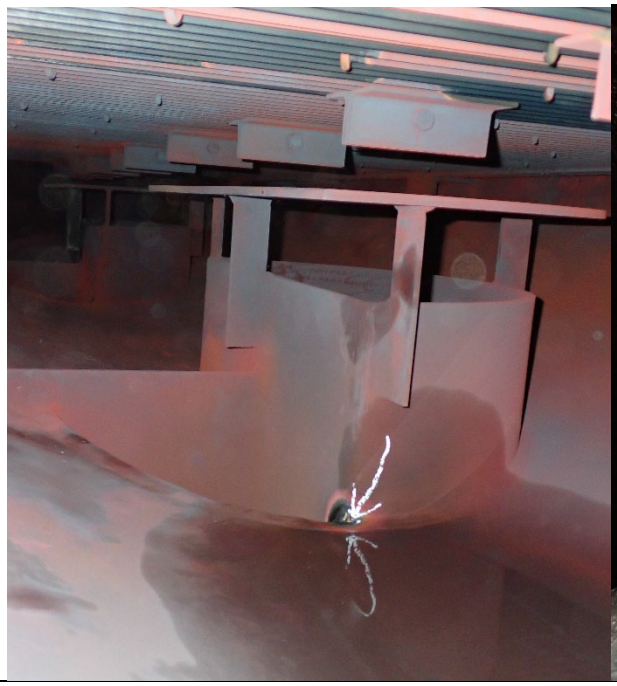
Priority: P2

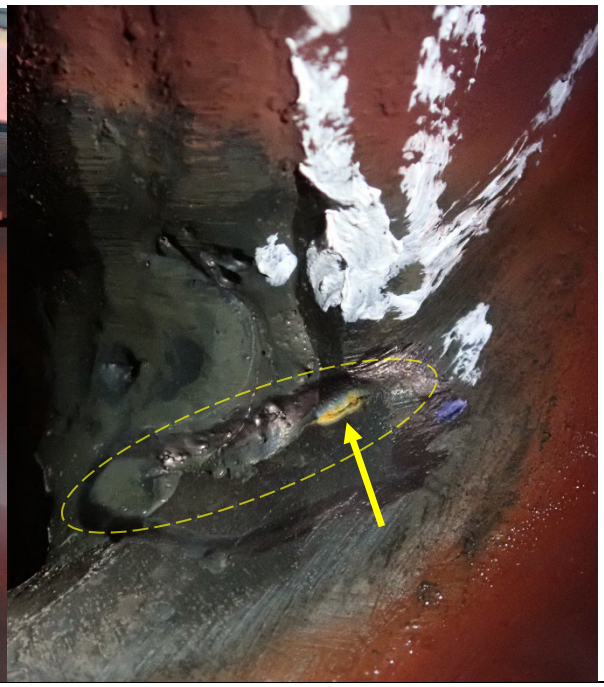
Risk if NOT Performed:

Cost Estimates:

Action Taken:

Photos:





Date: 9/18/2024	**Inspected by:** EKPC (J.Schaeffer)	**Unit:** 4	**Item:** 4
Component Inspected: U4 Deaerator			
Condition Assessment: A couple of the tray spray nozzles were tight, and I could not get one to move with just my hands.			
Recommendations: Use channel locks or something to grip the spray nozzle and see if it will pull down and spin around as it's originally designed.			
Priority: P2			
Risk if NOT Performed:			
Cost Estimates:			
Action Taken:			

Photos:

Date: 9/18/2024	**Inspected by:** EKPC (J.Schaeffer)	**Unit:** 4	**Item:** 5

Component Inspected: U4 Deaerator

Condition Assessment: The South end of the tray enclosure had a 14” long crack, and one side was folded in.

Recommendations:

1. Stop-drill the ends of the cracks with a 1/8” drill bit.
2. Grind out the original weld. The two split lines will not push together easily if it’s not ground, as the one side has two weld stubs sticking out.
3. Use a screw-dog to force the two halves back flush with each other, and re-weld at split line.
4. Install 1”x3”x3/16” or ¼” S.S. THK bands across the weld line.
    a. Planner may have to see if we have some SS plate onsite to cut these bands out, or else may be some over in WHS6.

Tray enclosure is 304L SS

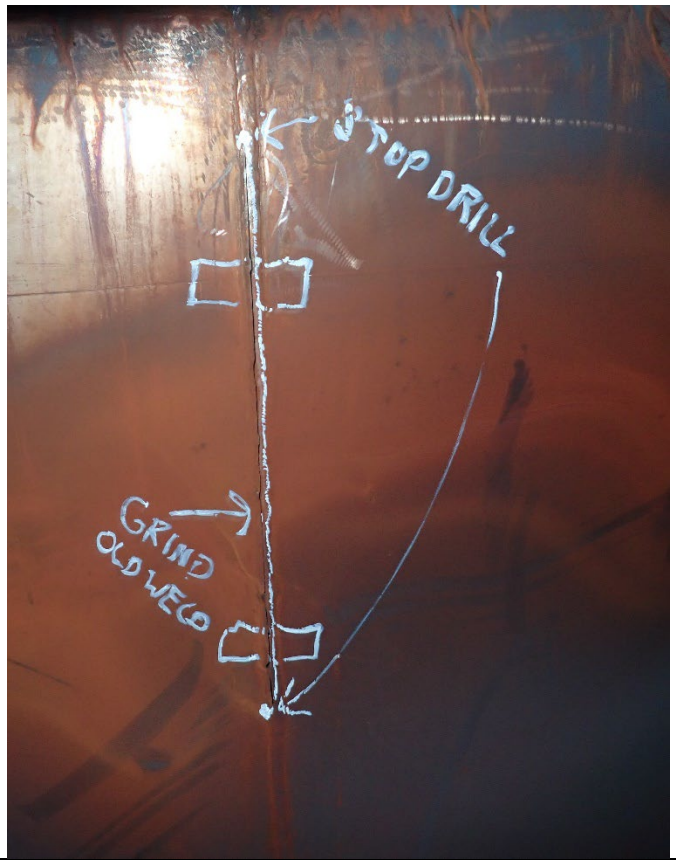
Priority: P2

Risk if NOT Performed:

Cost Estimates:

Action Taken:

Photos:



Date: 9/18/2024	**Inspected by:** EKPC (J.Schaeffer)	**Unit:** 4	**Item:** 6
Component Inspected: U4 Deaerator			
Condition Assessment: The North end of the tray enclosure had a 4” long crack at the weld line.			
Recommendations: Stop drill the ends of the cracks, VEE out the original weld, and re-weld. *Tray enclosure is 304L SS*			
Priority: P2			
Risk if NOT Performed:			
Cost Estimates:			
Action Taken:			
Photos: 			

Date: 9/18/2024	**Inspected by:** EKPC (J.Schaeffer)	**Unit:** 4	**Item:** 7
Component Inspected: U4 Deaerator			
Condition Assessment: The East tray enclosure door had a loose nut on the door weights.			
Recommendations:			
Priority: P2			
Risk if NOT Performed:			
Cost Estimates:			
Action Taken:			
Photos: 			

Date: 9/18/2024	**Inspected by:** EKPC (J.Schaeffer)	**Unit:** 4	**Item:** 7
Component Inspected: U4 Deaerator			
Condition Assessment: The South side of the DA shell still had deposits at the 2nd tray enclosure stiffener in from the East side.			
Recommendations: Use a putty knife duct-taped to a broom stick, and scrape off all deposits in 2025. Save deposits for Engineering to get a deposit analysis, and notify Engineering once complete so an inspection can be performed to ensure no under-deposit corrosion has taken place.			
Priority: 2025			
Risk if NOT Performed:			
Cost Estimates:			
Action Taken:			
Photos: