

Date: 1/13/2026

Region: 4A

FEMS No.: 3462255

FAC ID: NY052

Maximo WO No.: 20920



Asset #: NA

Priority: Routine

## Original Work Request:

Install new check valves on all 3 circulating pumps in boiler room. Check valves are starting to fail.

## Description of Repairs Needed:

Labor and material to a.) shut down all three pumps b.) lock them out, c.) isolate the circulating lines and drain them, d.) Zone 1 - cut the line back past the gate valve, e.) removing the gate valve and check valve that is failing, f.) install a new ball valve(replacing gate valve), g.) install new check valve, h.) install copper lines and re-insulate, i.) Zone 2 - remove all the black iron piping in the loop between the pump flange and the 2" copper line that is corroded and failing to include the check valve and gate valve, j.) install a new ball valve, k.) install new check valve, l.) install copper lines and re-insulate, m.) Zone 3 - remove all the iron piping, check valve, and gate valve that is failing and corroding, n.) install new copper piping, o.) install new ball valve, p.) install new check valve, q.) re-insulate, r.) install new air vents on the three zones in order to remove the air from the lines, s.) recharge the lines, t.) check for leaks, after no leaks found, u.) run the pumps, testing for further leaks, air removal, and proper operation of the new check valves, v.) clean up and properly dispose of all spent materials.

Labor	Labor Hrs	Labor Rate	Total
Tidewater Technician	30	\$ 100.00	\$ 3,000.00
		\$ -	\$ -

## Material List:

	Quantity	Cost	Total
Air Vent one port, top port, 1/2"MNPT 150 psi max, 240F Max Bottom 46A962	3	\$ 59.20	\$ 177.60
Swing check valve, inline valve body, 1 1/2" pipe size, FNPT x FNPT 4EVJ8	2	\$ 437.00	\$ 874.00
Swing check valve, inline valve body, 1 1/4" pipe size, FNPT x FNPT 1JML3	1	\$ 317.25	\$ 317.25
Tubing copper 1 1/4" Type L 10' straight 3ZA94	1	\$ 261.55	\$ 261.55
Tubing copper 1" Type L 10' straight 6K222	1	\$ 156.86	\$ 156.86
Tubing copper 3/4" Type L 10' straight 6K221	1	\$ 77.14	\$ 77.14
Tubing copper 1 1/2" Type L 10' straight 3ZA95	1	\$ 246.39	\$ 246.39
Manual two-way ball valve, 1 1/4", straight, press x press, two-piece 566E099	1	\$ 292.58	\$ 292.58
Manual two-way ball valve, 1 1/2", straight, press x press, two-piece 566E01	2	\$ 359.46	\$ 718.92
Manual two-way ball valve, 1 1/2", straight, FNPT x FNPT, std port ball port 40D902	1	\$ 467.49	\$ 467.49
Crimp fitting 90 elbow, 1 1/4" CTS x 1 1/4" pipe, press-fit x press-fit 395TP5	2	\$ 28.70	\$ 57.40
Crimp fitting 90 elbow, 1 1/2" CTS x 1 1/2" pipe, dimple center stop 48RH56	6	\$ 73.94	\$ 443.64
Crimp fitting adapter, straight, 1 1/4" CTS x 1 1/4" CTS press-fit x MNPT 816Z31	4	\$ 37.29	\$ 149.16
Crimp fitting union, straight, 1 1/4" CTS x 1 1/4" CTS press-fit x MNPT 250D24	1	\$ 97.68	\$ 97.68
Crimp fitting union, straight, 1 1/2" CTS x 1 1/2" CTS press-fit x MNPT 250D25	2	\$ 93.26	\$ 186.52
Crimp fitting adapter, straight, 1 1/2" CTS x 1 1/2" CTS press-fit x MNPT 816Z34	6	\$ 56.58	\$ 339.48
Crimp fitting 45 elbow, 2 1/2" CTS x 2 1/2" pipe sz 250A78	4	\$ 134.99	\$ 539.96
Crimp fitting 45 elbow, 1 1/2" CTS x 1 1/2" pipe sz press-fit x FTG 48RH51	6	\$ 61.10	\$ 366.60
Crimp fitting adapter, straight, 1 1/4" CTS x 1 1/2" CTS sz press-fit x MNPT SUMC7	1	\$ 60.00	\$ 60.00
Crimp fitting tee, 1 1/2" CTS x 1" pipe x 1 1/2" pipe sz 250C26	1	\$ 112.65	\$ 112.65
Crimp fitting tee, 1 1/2" CTS x 1 1/2" pipe x 3/4" pipe sz 1RRC9	1	\$ 93.33	\$ 93.33
Crimp fitting tee, 1 1/2" CTS x 1 1/2" pipe x 1" pipe sz 816YY5	1	\$ 59.11	\$ 59.11
Crimp fitting 90 elbow, 3/4" CTS x 3/4" pipe sz press-fit x press-fit 395TR0	4	\$ 7.10	\$ 28.40
Crimp fitting 90 elbow, 1" CTS x 1" pipe sz press-fit x press-fit 48RH54	4	\$ 20.73	\$ 82.92
Crimp fitting coupling straight, 3/4" CTS x 3/4" pipe sz no center stop 1RPH1	2	\$ 19.23	\$ 38.46
Crimp fitting coupling straight, 1" CTS x 1" pipe sz press-fit x press-fit 1RPH2	2	\$ 24.28	\$ 48.56
Crimp fitting straight, 1" CTS x 3/4" pipe sz press-fit x press-fit 816YGM5	2	\$ 14.39	\$ 28.78
Pipe insulation tube, fiberglass, slit with adhesive & flap, 1" thick, 3' lg 45NE09	3	\$ 13.49	\$ 40.47
Pipe fitting insulation, tee, fiberglass, slit, 1" thick, 1 1/4" inside dia 6MRC6	2	\$ 25.39	\$ 50.78
Pipe fitting insulation, 90 elbow, fiberglass, slit, 1" thick, 1 1/4" PVC jacket facing 6WYDQ	1	\$ 17.56	\$ 17.56
Pipe fitting insulation, 90 elbow, fiberglass, slit, 1" thick, 1 1/2" PVC jacket facing 6WYD1	6	\$ 22.28	\$ 133.68
Pipe insulation tape, all-service jacketing (ASJ) 150' 3" wd 4LFJ3	1	\$ 46.18	\$ 46.18
Pipe fitting insulation, tee, fiberglass, slit, 1" thick, 1 1/2" inside dia 6MRC7	6	\$ 31.26	\$ 187.56
Pipe insulation tube, fiberglass, slit with adhesive & flap, 1/2" thick, 1/2" ps 2" ins dia 811VG6	1	\$ 16.05	\$ 16.05
Pipe insulation tube, fiberglass, slit with adhesive/flap, 1/2" thick 1/2" ps 1 1/2" ins dia 811VG5	4	\$ 15.18	\$ 60.72
Crimp fitting coupling, straight 2" CTS x 1 1/2" pipe sz 249Z86	2	\$ 102.74	\$ 205.48
Thread sealant tape, 1/2" x 43" blue 800K14	1	\$ 5.96	\$ 5.96
Pipe thread sealant TFE brush-top can, off-white 23YA83	1	\$ 21.83	\$ 21.83
Shipping and Handling	1	\$ 181.99	\$ 181.99

## Equipment List:

	Quantity	Cost	Total
		\$ -	\$ -
		\$ -	\$ -
		\$ -	\$ -

## PM WO History:

NA

## Estimate Summary:

Labor	Material	Equipment
\$3,000.00	\$7,290.69	\$0.00

Sub Total	G&A 12%	Fee 6%	Total Estimate
\$10,290.69	--	--	\$10,290.69

Note: G&amp;A and Fee are not applied on top of work performed by Tidewater.

## Prepared by:

 Tidewater, Inc.  
 6625 Selkirk Drive, Suite A  
 Elkridge, MD 21075

## Prepared for:

 CMI Management, Inc.  
 5285 Shawnee Road Suite 510  
 Alexandria, VA 22312-2334

 Date: 1/13/2026  
 FAC ID: NY052

 FEMS #: 3462255  
 WO #: 20920

DESCRIPTION OF WORK			
Labor and material to a.) shut down all three pumps b.) lock them out, c.) isolate the circulating lines and drain them, d.) Zone 1 - cut the line back past the gate valve, e.) removing the gate valve and check valve that is failing, f.) install a new ball valve(replacing gate valve), g.) install new check valve, h.) install copper lines and re-insulate, i.) Zone 2 - remove all the black iron piping in the loop between the pump flange and the 2" copper line that is corroded and failing to include the check valve and gate valve, j.) install a new ball valve, k.) install new check valve, l.) install copper lines and re-insulate, m.) Zone 3 - remove all the iron piping, check valve, and gate valve that is failing and corroding, n.) install new copper piping, o.) install new ball valve, p.) install new check valve, q.) re-insulate, r.) install new air vents on the three zones in order to remove the air from the lines, s.) recharge the lines, t.) check for leaks, after no leaks found, u.) run the pumps, testing for further leaks, air removal, and proper operation of the new check valves, v.) clean up and properly dispose of all spent materials.			

LABOR	QTY	UNIT/RATE	TOTAL
Tidewater Technician	30	\$100.00	\$3,000.00
		\$0.00	\$0.00
MATERIAL	QTY	UNIT/RATE	TOTAL
Air Vent one port, top port, 1/2"MNPT 150 psi max, 240F Max Bottom 46A962	3	\$59.20	\$177.60
Swing check valve, inline valve body, 1 1/2" pipe size, FNPT x FNPT 4EVJ8	2	\$437.00	\$874.00
Swing check valve, inline valve body, 1 1/4" pipe size, FNPT x FNPT 1JML3	1	\$317.25	\$317.25
Tubing copper 1 1/4" Type L 10' straight 3ZA94	1	\$261.55	\$261.55
Tubing copper 1" Type L 10' straight 6KZ22	1	\$156.86	\$156.86
Tubing copper 3/4" Type L 10' straight 6KZ21	1	\$77.14	\$77.14
Tubing copper 1 1/2" Type L 10' straight 3ZA95	1	\$246.39	\$246.39
Manual two-way ball valve, 1 1/4", straight, press x press, two-piece 56ED99	1	\$292.58	\$292.58
Manual two-way ball valve, 1 1/2", straight, press x press, two-piece 56EE01	2	\$359.46	\$718.92
Manual two-way ball valve, 1 1/2", straight, FNPT x FNPT, std port ball port 40D902	1	\$467.49	\$467.49
Crimp fitting 90 elbow, 1 1/4" CTS x 1 1/4" pipe, press-fit x press-fit 395TP5	2	\$28.70	\$57.40
Crimp fitting 90 elbow, 1 1/2" CTS x 1 1/2" pipe, dimple center stop 48RH56	6	\$73.94	\$443.64
Crimp fitting adapter, straight, 1 1/4" CTS x 1 1/4" CTS press-fit x MNPT 816Z31	4	\$37.29	\$149.16
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Crimp fitting union, straight, 1 1/2" CTS x 1 1/2" CTS press-fit x MNPT 250D25	2	\$93.26	\$186.52
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Crimp fitting 45 elbow, 2 1/2" CTS x 2 1/2" pipe sz 250A78	4	\$134.99	\$539.96
Crimp fitting 45 elbow, 1 1/2" CTS x 1 1/2" pipe sz press-fit x FTG 48RH51	6	\$61.10	\$366.60
Crimp fitting adapter, straight, 1 1/4" CTS x 1 1/2" CTS sz press-fit x MNPT 5UMC7	1	\$60.00	\$60.00
Crimp fitting tee, 1 1/2" CTS x 1" pipe x 1 1/2" pipe sz 250C26	1	\$112.65	\$112.65
Crimp fitting tee, 1 1/2" CTS x 1 1/2" pipe x 3/4" pipe sz 1RRC9	1	\$93.33	\$93.33
Crimp fitting tee, 1 1/2" CTS x 1 1/2" pipe x 1" pipe sz 816YY5	1	\$59.11	\$59.11
Crimp fitting 90 elbow, 3/4" CTS x 3/4" pipe sz press-fit x press-fit 395TR0	4	\$7.10	\$28.40
Crimp fitting 90 elbow, 1" CTS x 1" pipe sz press-fit x press-fit 48RH54	4	\$20.73	\$82.92
Crimp fitting coupling straight, 3/4" CTS x 3/4" pipe sz no center stop 1RPH1	2	\$19.23	\$38.46
Crimp fitting coupling straight, 1" CTS x 1" pipe sz press-fit x press-fit 1RPH2	2	\$24.28	\$48.56
Crimp fitting straight, 1" CTS x 3/4" pipe sz press-fit x press-fit 816YMS	2	\$14.39	\$28.78
Pipe insulation tube, fiberglass, slit with adhesive & flap, 1" thick, 3' lg 45NE09	3	\$13.49	\$40.47
Pipe fitting insulation, tee, fiberglass, slit, 1" thick, 1 1/4" inside dia 6MRC6	2	\$25.39	\$50.78
Pipe fitting insulation, 90 elbow, fiberglass, slit, 1" thick, 1 1/4" PVC jacket facing 6WYD0	1	\$17.56	\$17.56
Pipe fitting insulation, 90 elbow, fiberglass, slit, 1" thick, 1/2" PVC jacket facing 6WYD1	6	\$22.28	\$133.68
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Pipe thread sealant TFE brush-top can, off-white 23YA83	1	\$21.83	\$21.83
Shipping and Handling	1	\$181.99	\$181.99
EQUIPMENT	QTY	UNIT/RATE	TOTAL
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
SUB-TOTAL COSTS:		LABOR TOTAL	\$3,000.00
SUB-TOTAL COSTS:		MATERIAL TOTAL	\$7,290.69
SUB-TOTAL COSTS:		EQUIPMENT TOTAL	\$0.00
TOTAL COST:			<b>\$10,290.69</b>

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_