

# **ATTACHMENT**

**BOILER INSPECTION REPORTS  
AF1222**

**FORT STEWART VISIT NO. 1  
OCTOBER 27-31, 2003**

**DECEMBER 1, 2003**

**BOILER OR PRESSURE VESSEL  
INSPECTION REPORT**

1. TYPE OF INSPECTION	
Internal and External	<input checked="" type="checkbox"/> BA <input type="checkbox"/> VA
Internal/External with Hydrostatic Test (same day)	<input type="checkbox"/> BB <input type="checkbox"/> VB
External Under Operation	<input type="checkbox"/> BC <input type="checkbox"/> VC
External Under Hydrostatic Test	<input type="checkbox"/> BD <input type="checkbox"/> VD
Expansion/Receiver Tank or Internal with UT	<input type="checkbox"/> BE <input type="checkbox"/> VE

2. INSTALLATION <i>Ft Stewart</i>		2A. CITY	3. STATE <i>GA</i>	4. ZIP CODE <i>31314</i>	5. PLANT OR BLDG. <i>Bldg. 350</i>
6. DATE OF INSPECTION <i>10/30/03</i>	7. DATE OF LAST INSPECTION <i>N/A</i>	8. DELIVERY ORDER NO.		9. CONTRACT NO.	
10. OBJECT <input type="checkbox"/> Fire Tube <input type="checkbox"/> Cast Iron <input checked="" type="checkbox"/> Water Tube <input type="checkbox"/> Expansion Tank <input type="checkbox"/> Pressure Vessel			11. PLANT <input checked="" type="checkbox"/> Manned <input type="checkbox"/> Unmanned		
11A. PRESSURE PREVIOUS INSPECTION <i>1st recorded inspection</i>	11B. PRESSURE THIS INSPECTION <i>0</i>	12A. YEAR BUILT <i>1998</i>	12B. YEAR INSTALLED <i>1998</i>		
13A. PRIMARY FUEL (Boiler) <i>NAT. GAS</i>	13B. SECONDARY FUEL (Boiler) <i>oil</i>	14. DESIGN WORKING PRESSURE OR TEMPERATURE <i>150 PSI</i>			
15. MANUFACTURER <i>FULTON</i>	16. MANUFACTURER'S RATING MBTU /LBS. / HR <i>15=11175/14</i>	17. NATIONAL BOARD NUMBER <i>NB2621</i>	18. USAF NUMBER <i>#1</i>		
19. USE <input type="checkbox"/> Power <input type="checkbox"/> Steam Heating <input type="checkbox"/> Process <input type="checkbox"/> Storage <input type="checkbox"/> HTHW Heating <input checked="" type="checkbox"/> Heat Exchange <input type="checkbox"/> Other (Specify)					
20. METHOD OF FIRING (Boilers) <i>AUTO BURNER</i>	21. SAFETY/RELIEF VALVES SETTING <i>100 PSI</i>	22. EXPLAIN IF PRESSURE CHANGED <i>N/A</i>	23. PRESSURE GAGE TESTED <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
24. PURPOSE OF HYDROSTATIC TEST <input type="checkbox"/> New <input type="checkbox"/> Retest <input type="checkbox"/> Repair	25. LAST HYDROSTATIC TEST Date: <i>N/A</i> PSI: <i>N/A</i>	26. HYDROSTATIC TEST <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date: <i>N/A</i> PSI: <i>N/A</i>			

**STATEMENT OF BASE CIVIL ENGINEER**

27. REPAIRS MADE SINCE LAST INSPECTION  
 None  Other (Specify)  
*This boiler HAS NEVER BEEN INSPECTED*

**INTERNAL INSPECTION**

28. DESCRIBE INSPECTION FULLY (State location of any damage or deposits, i.e., scale, grease, oil, etc.; any corrosion, pitting, grooving, cracking or lamination; any evidence of overheating, broken or loose items, etc.)  
*This THERMAL Fluid Coil HEATER IS NOT EQUIPPED WITH INSPECTION ACCESS TO THE WET SIDE.*

**EXTERNAL INSPECTION**

29. CONDITION OF BOILERS, VESSELS AND PLANT (Describe fully and state location of any corrosion, leakages, evidence of overheating, soot or other destructive accumulations, or safety or ASME/NB violations, etc.)  
*No adverse conditions noted.*

30. SETTINGS, LININGS, SUPPORTS AND BAFFLES

*Good*

**INSPECTION OF SAFETY DEVICE**

31. SAFETY/RELIEF VALVES	32. SIZE Number: <i>1-2", 1-1/2"</i>	33. TOTAL CAPACITY CFM: BTU/HR: LB/HR: <i>12,117</i>	34. CONDITION AND HOW TESTED <i>Usually Good, Not tested</i>
35. PRESSURE GAGES	38. CORRECTION TAKEN (if none give reason) <i>SAT</i>		
37. OTHER APPLIANCES	38. CONDITION <i>SAT</i>		
39. REGULATORS AND CONTROLS	40. CONDITION <i>Usually SAT. Not tested, boiler Idle</i>		
41. ASME CODES Does plant comply with code, welding, materials, configuration, etc? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain)			

INSPECTOR STATEMENT

42. WAS BOILER OR VESSEL PREPARED FOR THOROUGH EXAMINATION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

43. WAS BOILER OR VESSEL ENTERED FOR THE INSPECTION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

REMARKS AND RECOMMENDATIONS OF THE INSPECTOR

44. LIST ALL DEFICIENCIES TO BE CORRECTED OR REPAIRED (Use a continuation sheet if necessary.)

No recommendations

45. TYPE OR PRINT NAME OF INSPECTOR

Fred Lawrence

45A. SIGNATURE OF INSPECTOR

*Fred Lawrence*

45B. DATE OF SIGNATURE

10/30/03

45C. INSPECTOR'S NATIONAL BOARD NO.

NB11658

46. PRINT NAME AND TITLE OF REPRESENTATIVE ACCOMPANYING INSPECTOR

Randy Parks QAE

46A. SIGNATURE

*Randy Parks*

46B. DATE OF SIGNATURE

31 Oct 03

46C. REPRESENTATIVE'S TELEPHONE NUMBER

912-767-1676

47. DATE AND ACTION TAKEN OR TO BE TAKEN

ACTION TAKEN ON RECOMMENDATIONS

48. TYPE OR PRINT NAME, TITLE AND GRADE OF OFFICER IN CHARGE

49. SIGNATURE OF OFFICER IN CHARGE

50. DATE OF SIGNATURE

# BOILER OR PRESSURE VESSEL INSPECTION REPORT

1. TYPE OF INSPECTION	
Internal and External	<input type="checkbox"/> BA <input type="checkbox"/> VA
Internal/External with Hydrostatic Test (same day)	<input type="checkbox"/> BB <input type="checkbox"/> VB
External Under Operation	<input checked="" type="checkbox"/> BC <input type="checkbox"/> VC
External Under Hydrostatic Test	<input type="checkbox"/> BD <input type="checkbox"/> VD
Expansion/Receiver Tank or Internal with UT	<input type="checkbox"/> BE <input type="checkbox"/> VE

HSBCT CONTRACT NUMBER

2. INSTALLATION <i>FT. STEWART</i>		2A. CITY	3. STATE <i>GA</i>	4. ZIP CODE <i>31314</i>	5. PLANT OR BLDG. <i>Bldg. 350</i>
6. DATE OF INSPECTION <i>27 OCT. 2003</i>	7. DATE OF LAST INSPECTION <i>N/A</i>	8. DELIVERY ORDER NO.		9. CONTRACT NO.	
10. OBJECT <input type="checkbox"/> Fire Tube <input type="checkbox"/> Cast Iron <input checked="" type="checkbox"/> Water Tube <input type="checkbox"/> Expansion Tank <input type="checkbox"/> Pressure Vessel			11. PLANT <input checked="" type="checkbox"/> Manned <input type="checkbox"/> Unmanned		
11A. PRESSURE PREVIOUS INSPECTION <i>N/A</i>	11B. PRESSURE THIS INSPECTION <i>90</i>	12A. YEAR BUILT <i>1984</i>	12B. YEAR INSTALLED <i>1984</i>		
13A. PRIMARY FUEL (Boiler) <i>NAT. GAS</i>	13B. SECONDARY FUEL (Boiler) <i>N/A</i>	14. DESIGN WORKING PRESSURE OR TEMPERATURE <i>225</i>			
15. MANUFACTURER <i>UNILUX</i>	16. MANUFACTURER'S RATING MBTU / LBS. / HR <i>6,250 16/HR</i>	17. NATIONAL BOARD NUMBER <i>NB 56</i>	18. USAF NUMBER <i>#2</i>		
19. USE <input type="checkbox"/> Power <input checked="" type="checkbox"/> Steam Heating <input type="checkbox"/> Process <input type="checkbox"/> Storage <input type="checkbox"/> HTHW Heating <input type="checkbox"/> Heat Exchange <input type="checkbox"/> Other (Specify)					
20. METHOD OF FIRING (Boilers) <i>AUTO BURNER</i>	21. SAFETY/RELIEF VALVES SETTING <i>125</i>	22. EXPLAIN IF PRESSURE CHANGED		23. PRESSURE GAGE TESTED <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
24. PURPOSE OF HYDROSTATIC TEST <input type="checkbox"/> New <input type="checkbox"/> Retest <input type="checkbox"/> Repair	25. LAST HYDROSTATIC TEST Date: PSI:	26. HYDROSTATIC TEST <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date: PSI:			

### STATEMENT OF BASE CIVIL ENGINEER

27. REPAIRS MADE SINCE LAST INSPECTION  
 None  Other (Specify)

### INTERNAL INSPECTION

28. DESCRIBE INSPECTION FULLY (State location of any damage or deposits, i.e., scale, grease, oil, etc.; any corrosion, pitting, grooving, cracking or lamination; any evidence of overheating, broken or loose items, etc.)  
*Type "C" inspection*

### EXTERNAL INSPECTION

29. CONDITION OF BOILERS, VESSELS AND PLANT (Describe fully and state location of any corrosion, leakages, evidence of overheating, soot or other destructive accumulations, or safety or ASME/NB violations, etc.)  
*RUST & CORROSION ALONG THE LEFT LOWER CASING. THIS BOILER HAS ONLY ONE LWCO AND NO MANUAL RESET. THE ACTUATION LEVEL OF THE LWCO IS APPROX. 1" LOWER THAN THE LOWEST POINT IN THE GAGE GLASS. THE 1ST SAFETY VALVE IS THE WRONG ONE FOR THIS APPLICATION*

30. SETTINGS, LININGS, SUPPORTS AND BAFFLES

*PACKAGE boiler, not accessible*

### INSPECTION OF SAFETY DEVICE

31. SAFETY/RELIEF VALVES	32. SIZE Number: <i>2-1/4</i>	33. TOTAL CAPACITY CFM: BTU/HR: LB/HR:	34. CONDITION AND HOW TESTED <i>Wrong Type / Capacity</i>
35. PRESSURE GAGES	36. CORRECTION TAKEN (If none give reason) <i>SAT</i>		
37. OTHER APPLIANCES	38. CONDITION <i>Clean &amp; Clear</i>		
39. REGULATORS AND CONTROLS	40. CONDITION <i>LWCO failed to shut the boiler down.</i>		

41. ASME CODES

Does plant comply with code, welding, materials, configuration, etc?  Yes  No (Explain)

INSPECTOR STATEMENT

42. WAS BOILER OR VESSEL PREPARED FOR THOROUGH EXAMINATION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

43. WAS BOILER OR VESSEL ENTERED FOR THE INSPECTION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

REMARKS AND RECOMMENDATIONS OF THE INSPECTOR

44. LIST ALL DEFICIENCIES TO BE CORRECTED OR REPAIRED (Use a continuation sheet if necessary.)

1. ONE OF THE SAFETY VALVE IS THE WRONG TYPE FOR HIGH PRESSURE STEAM BOILERS. IT IS DESIGNED AS A RELIEF VALVE FOR HIGH PRESSURE WATER SYSTEMS. A NEW BOILER SAFETY VALVE MUST BE INSTALLED. THE TOTAL CAPACITY OF THE 2 SAFETY VALVES MUST BE GREATER THAN THE BOILER CAPACITY.
2. THE ACTUATION LEVEL OF THE LWCO INCORRECTLY SET. AS PRESENTLY CONFIGURED, THE TOP ROW OF TUBES ARE EXPOSED BEFORE THE BOILER SHUTS DOWN. THE MANUFACTURER'S DRAWING SHOULD BE CONSULTED FOR THE PROPER HEIGHT OF THE LWCO.
3. THERE IS NO MANUAL RESET ON THE LWCO. ASME CSD-1, CW140 REQUIRES 2 LWCO'S. ONE MUST BE EQUIPPED WITH A MANUAL RESET.

45. TYPE OR PRINT NAME OF INSPECTOR

Fred LAWRENCE

45A. SIGNATURE OF INSPECTOR

*Fred Lawrence*

45B. DATE OF SIGNATURE

10/27/03

45C. INSPECTOR'S NATIONAL BOARD NO.

NB11658

46. PRINT NAME AND TITLE OF REPRESENTATIVE ACCOMPANYING INSPECTOR

Randy Parks QAE

46A. SIGNATURE

*Randy Parks*

46B. DATE OF SIGNATURE

31 Oct 03

46C. REPRESENTATIVE'S TELEPHONE NUMBER

912-767-1676

47. DATE AND ACTION TAKEN OR TO BE TAKEN

ACTION TAKEN ON RECOMMENDATIONS

48. TYPE OR PRINT NAME, TITLE AND GRADE OF OFFICER IN CHARGE

49. SIGNATURE OF OFFICER IN CHARGE

50. DATE OF SIGNATURE

# BOILER OR PRESSURE VESSEL INSPECTION REPORT

1. TYPE OF INSPECTION	
Internal and External	<input checked="" type="checkbox"/> BA <input type="checkbox"/> VA
Internal/External with Hydrostatic Test (same day)	<input type="checkbox"/> BB <input type="checkbox"/> VB
External Under Operation	<input type="checkbox"/> BC <input type="checkbox"/> VC
External Under Hydrostatic Test	<input type="checkbox"/> BD <input type="checkbox"/> VD
Expansion/Receiver Tank or Internal with UT	<input type="checkbox"/> BE <input type="checkbox"/> VE

HSBCT CONTRACT NUMBER

2. INSTALLATION <i>ST. STEWART</i>	2A. CITY	3. STATE <i>GA</i>	4. ZIP CODE <i>31314</i>	5. PLANT OR BLDG. <i>Bldg. 1412</i>
6. DATE OF INSPECTION <i>10/27/03</i>	7. DATE OF LAST INSPECTION <i>N/A</i>	8. DELIVERY ORDER NO.	9. CONTRACT NO.	
10. OBJECT <input type="checkbox"/> Fire Tube <input type="checkbox"/> Cast Iron <input checked="" type="checkbox"/> Water Tube <input type="checkbox"/> Expansion Tank <input type="checkbox"/> Pressure Vessel		11. PLANT <input checked="" type="checkbox"/> Manned <input type="checkbox"/> Unmanned		
11A. PRESSURE PREVIOUS INSPECTION <i>N/A</i>	11B. PRESSURE THIS INSPECTION <i>0</i>	12A. YEAR BUILT <i>2001</i>	12B. YEAR INSTALLED <i>2001</i>	
13A. PRIMARY FUEL (Boiler) <i>NAT. GAS</i>	13B. SECONDARY FUEL (Boiler) <i>oil</i>	14. DESIGN WORKING PRESSURE OR TEMPERATURE <i>300 PSI</i>		
15. MANUFACTURER <i>English</i>	16. MANUFACTURER'S RATING MBTU / LBS. / HR <i>50,000 lb/hr</i>	17. NATIONAL BOARD NUMBER <i>NB254</i>	18. USAF NUMBER <i>#1</i>	
19. USE <input type="checkbox"/> Power <input checked="" type="checkbox"/> Steam Heating <input type="checkbox"/> Process <input type="checkbox"/> Storage <input type="checkbox"/> HTHW Heating <input type="checkbox"/> Heat Exchange <input type="checkbox"/> Other (Specify)				
20. METHOD OF FIRING (Boilers) <i>Auto Burner</i>	21. SAFETY/RELIEF VALVES SETTING <i>245/250</i>	22. EXPLAIN IF PRESSURE CHANGED	23. PRESSURE GAGE TESTED <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
24. PURPOSE OF HYDROSTATIC TEST <input type="checkbox"/> New <input type="checkbox"/> Retest <input type="checkbox"/> Repair	25. LAST HYDROSTATIC TEST Date:                      PSI:	26. HYDROSTATIC TEST <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date:                      PSI:		

### STATEMENT OF BASE CIVIL ENGINEER

27. REPAIRS MADE SINCE LAST INSPECTION  
 None  Other (Specify)

*1st Recorded inspection*

### INTERNAL INSPECTION

28. DESCRIBE INSPECTION FULLY (State location of any damage or deposits, i.e., scale, grease, oil, etc.; any corrosion, pitting, grooving, cracking or lamination; any evidence of overheating, broken or loose items, etc.)

*INDICATION OF ACTIVE OXYGEN CONTAMINATION ALONG WATERLINE AND TOP ROW OF TUBES. BURNER REFRACTORY CRACKED EXCESSIVELY AND LOOSE*

### EXTERNAL INSPECTION

29. CONDITION OF BOILERS, VESSELS AND PLANT (Describe fully and state location of any corrosion, leakages, evidence of overheating, soot or other destructive accumulations, or safety or ASME/NB violations, etc.)

*No Adverse conditions noted*

### 30. SETTINGS, LININGS, SUPPORTS AND BAFFLES

*Appears Good*

### INSPECTION OF SAFETY DEVICE

31. SAFETY/RELIEF VALVES	32. SIZE Number: <i>2-2 1/2</i>	33. TOTAL CAPACITY CFM:                      BTU/HR:                      LB/HR: <i>69,511</i>	34. CONDITION AND HOW TESTED <i>NEW, NOT TESTED, Bldg. Idle</i>
35. PRESSURE GAGES	36. CORRECTION TAKEN (if none give reason) <i>SAT.</i>		
37. OTHER APPLIANCES	38. CONDITION <i>Clean &amp; Clear</i>		
39. REGULATORS AND CONTROLS	40. CONDITION <i>Visually SAT. not tested, boiler idle</i>		

Does plant comply with code, welding, materials, configuration, etc?  Yes  No (Explain)

INSPECTOR STATEMENT

42. WAS BOILER OR VESSEL PREPARED FOR THOROUGH EXAMINATION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

43. WAS BOILER OR VESSEL ENTERED FOR THE INSPECTION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

REMARKS AND RECOMMENDATIONS OF THE INSPECTOR

44. LIST ALL DEFICIENCIES TO BE CORRECTED OR REPAIRED (Use a continuation sheet if necessary.)

1. GIVEN THE PLANT CONFIGURATION, IT MAY BE ADVISABLE TO INJECT TREATMENT CHEMICALS DIRECTLY INTO THE BOILER.
2. THE BURNER REFRACTORY HAS A LARGE CRACK APPROXIMATELY 1/2" WIDE THAT DOES NOT APPEAR TO BE CLOSING UP WHEN THE BOILER IS FIRED. A PIECE OF THIS REFRACTORY IS LOOSE AND HANGING INTO THE COMBUSTION AIR FLOW. THE BURNER REFRACTORY SHOULD BE REPAIRED AS SOON AS POSSIBLE.

45. TYPE OR PRINT NAME OF INSPECTOR

Fred LAWRENCE

45A. SIGNATURE OF INSPECTOR

*Fred Lawrence*

45B. DATE OF SIGNATURE

10/27/03

45C. INSPECTOR'S NATIONAL BOARD NO.

NB 11658

46. PRINT NAME AND TITLE OF REPRESENTATIVE ACCOMPANYING INSPECTOR

Randy Parks QAE

46A. SIGNATURE

*Randy Parks*

46B. DATE OF SIGNATURE

31 Oct 03

46C. REPRESENTATIVE'S TELEPHONE NUMBER

912-767-1676

ACTION TAKEN ON RECOMMENDATIONS

47. DATE AND ACTION TAKEN OR TO BE TAKEN

48. TYPE OR PRINT NAME, TITLE AND GRADE OF OFFICER IN CHARGE

49. SIGNATURE OF OFFICER IN CHARGE

50. DATE OF SIGNATURE

# BOILER OR PRESSURE VESSEL INSPECTION REPORT

1. TYPE OF INSPECTION	
Internal and External	<input type="checkbox"/> BA <input type="checkbox"/> VA
Internal/External with Hydrostatic Test (same day)	<input type="checkbox"/> BB <input type="checkbox"/> VB
External Under Operation	<input checked="" type="checkbox"/> BC <input type="checkbox"/> VC
External Under Hydrostatic Test	<input type="checkbox"/> BD <input type="checkbox"/> VD
Expansion/Receiver Tank or Internal with UT	<input type="checkbox"/> BE <input type="checkbox"/> VE

HSBCT CONTRACT NUMBER \_\_\_\_\_

2. INSTALLATION <b>FT. STEWART</b>	2A. CITY	3. STATE <b>GA.</b>	4. ZIP CODE <b>31314</b>	5. PLANT OR BLDG. <b>1412</b>
6. DATE OF INSPECTION <b>10/27/03</b>	7. DATE OF LAST INSPECTION <b>10/21/02</b>	8. DELIVERY ORDER NO.	9. CONTRACT NO.	

10. OBJECT <input type="checkbox"/> Fire Tube <input type="checkbox"/> Cast Iron <input checked="" type="checkbox"/> Water Tube <input type="checkbox"/> Expansion Tank <input type="checkbox"/> Pressure Vessel		11. PLANT <input checked="" type="checkbox"/> Manned <input type="checkbox"/> Unmanned	
11A. PRESSURE PREVIOUS INSPECTION <b>190</b>	11B. PRESSURE THIS INSPECTION <b>160</b>	12A. YEAR BUILT <b>1976</b>	12B. YEAR INSTALLED <b>1976</b>
13A. PRIMARY FUEL (Boiler) <b>NAT. GAS</b>	13B. SECONDARY FUEL (Boiler) <b>oil</b>	14. DESIGN WORKING PRESSURE OR TEMPERATURE <b>250</b>	
15. MANUFACTURER <b>NEBRASKA</b>	16. MANUFACTURER'S RATING MBTU / LBS. / HR <b>48,500 lb/hr</b>	17. NATIONAL BOARD NUMBER <b>NB1711</b>	18. USAF NUMBER <b>#2</b>

19. USE <input type="checkbox"/> Power <input checked="" type="checkbox"/> Steam Heating <input type="checkbox"/> Process <input type="checkbox"/> Storage <input type="checkbox"/> HTHW Heating <input type="checkbox"/> Heat Exchange <input type="checkbox"/> Other (Specify)			
20. METHOD OF FIRING (Boilers) <b>Auto Burner</b>	21. SAFETY/RELIEF VALVES SETTING <b>245/250</b>	22. EXPLAIN IF PRESSURE CHANGED	23. PRESSURE GAGE TESTED <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
24. PURPOSE OF HYDROSTATIC TEST <input type="checkbox"/> New <input type="checkbox"/> Retest <input type="checkbox"/> Repair	25. LAST HYDROSTATIC TEST Date: _____ PSI: _____	26. HYDROSTATIC TEST <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date: _____ PSI: _____	

### STATEMENT OF BASE CIVIL ENGINEER

27. REPAIRS MADE SINCE LAST INSPECTION

None  Other (Specify)

### INTERNAL INSPECTION

28. DESCRIBE INSPECTION FULLY (State location of any damage or deposits, i.e., scale, grease, oil, etc.; any corrosion, pitting, grooving, cracking or lamination; any evidence of overheating, broken or loose items, etc.)

**TYPE "C" INSPECTION**

### EXTERNAL INSPECTION

29. CONDITION OF BOILERS, VESSELS AND PLANT (Describe fully and state location of any corrosion, leakages, evidence of overheating, soot or other destructive accumulations, or safety or ASME/NB violations, etc.)

**AIR AND WATER LEVEL ARE BEING CONTROLLED IN REMOTE MANUAL. THE FORCED DRAFT FAN IS MISSING SEVERAL VANES, COMBUSTION AIR CANNOT BE ACCURATELY CONTROLLED. NO MANUAL RESET ON THE LOW WATER FUEL CUT-OUT DEVICE. INDICATION OF TUBE LEAKAGE EVIDENCED BY TREATMENT CHEMICALS AROUND SKIRTS AND FOUNDATION. RJP per EWL 12/1/03**

30. SETTINGS, LININGS, SUPPORTS AND BAFFLES

**Good**

### INSPECTION OF SAFETY DEVICE

31. SAFETY/RELIEF VALVES	32. SIZE Number: <b>2-2 1/2"</b>	33. TOTAL CAPACITY CFM: _____ BTU/HR: _____ LB/HR: <b>57,245</b>	34. CONDITION AND HOW TESTED <b>TEST SAT BY HAND</b>
35. PRESSURE GAGES	36. CORRECTION TAKEN (If none give reason) <b>SAT.</b>		
37. OTHER APPLIANCES	38. CONDITION <b>Clean &amp; Clear</b>		
39. REGULATORS AND CONTROLS	40. CONDITION <b>LWCO AND FIRE-EYE TEST SAT. AUTOMATIC CONTROLS INOPERABLE</b>		

41. ASME CODES

Does plant comply with code, welding, materials, configuration, etc?  Yes  No (Explain)

INSPECTOR STATEMENT

42. WAS BOILER OR VESSEL PREPARED FOR THOROUGH EXAMINATION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

43. WAS BOILER OR VESSEL ENTERED FOR THE INSPECTION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

REMARKS AND RECOMMENDATIONS OF THE INSPECTOR

44. LIST ALL DEFICIENCIES TO BE CORRECTED OR REPAIRED (Use a continuation sheet if necessary.)

THE AUTOMATIC boiler controls must operate properly for the safe operation of this boiler. It is strongly recommended that new controls are installed on this unit without further delay.

SEVERAL DAMPER/VANES ARE MISSING FROM THE FD FAN. THIS COMBINED WITH THE LACK OF boiler controls, create unsafe operating conditions. THE F.D. FAN MUST BE IN good condition for proper combustion.

ASME CSD-1, CW140 REQUIRES A MANUAL RESET ON THE LOW WATER FUEL CUT OUT DEVICE. THIS VERY IMPORTANT SAFETY DEVICE MUST NEVER BE disabled OR by-passed.

THE BOILER SHOULD BE HYDROSTATICALLY TESTED TO DETERMINE IF ANY TUBES ARE LEAKING. ANY LEAKING TUBES MUST BE PLUGGED. RJR, per FWL 12/1/03

45. TYPE OR PRINT NAME OF INSPECTOR

Fred LAWRENCE

45A. SIGNATURE OF INSPECTOR

*Fred Lawrence*

45B. DATE OF SIGNATURE

10/27/03

45C. INSPECTOR'S NATIONAL BOARD NO.

NB11658

46. PRINT NAME AND TITLE OF REPRESENTATIVE ACCOMPANYING INSPECTOR

Bandy Parks QAE

46A. SIGNATURE

*Bandy Parks*

46B. DATE OF SIGNATURE

31 Oct 03

46C. REPRESENTATIVE'S TELEPHONE NUMBER

912-767-1676

ACTION TAKEN ON RECOMMENDATIONS

47. DATE AND ACTION TAKEN OR TO BE TAKEN

48. TYPE OR PRINT NAME, TITLE AND GRADE OF OFFICER IN CHARGE

49. SIGNATURE OF OFFICER IN CHARGE

50. DATE OF SIGNATURE

**BOILER OR PRESSURE VESSEL INSPECTION REPORT**

1. TYPE OF INSPECTION	
Internal and External	<input type="checkbox"/> BA <input type="checkbox"/> VA
Internal/External with Hydrostatic Test (same day)	<input type="checkbox"/> BB <input type="checkbox"/> VB
External Under Operation	<input checked="" type="checkbox"/> BC <input type="checkbox"/> VC
External Under Hydrostatic Test	<input type="checkbox"/> BD <input type="checkbox"/> VD
Expansion/Receiver Tank or Internal with UT	<input type="checkbox"/> BE <input type="checkbox"/> VE

2. INSTALLATION <i>F. STEWART</i>		2A. CITY	3. STATE <i>GA</i>	4. ZIP CODE <i>31314</i>	5. PLANT OR BLDG. <i>Bldg. 1412</i>
6. DATE OF INSPECTION <i>10/30/03</i>	7. DATE OF LAST INSPECTION <i>10/25/02</i>	8. DELIVERY ORDER NO.		9. CONTRACT NO.	
10. OBJECT <input type="checkbox"/> Fire Tube <input type="checkbox"/> Cast Iron <input checked="" type="checkbox"/> Water Tube <input type="checkbox"/> Expansion Tank <input type="checkbox"/> Pressure Vessel				11. PLANT <input checked="" type="checkbox"/> Manned <input type="checkbox"/> Unmanned	
11A. PRESSURE PREVIOUS INSPECTION <i>190</i>	11B. PRESSURE THIS INSPECTION <i>175</i>	12A. YEAR BUILT <i>1978</i>	12B. YEAR INSTALLED <i>1978</i>		
13A. PRIMARY FUEL (Boiler) <i>NAT. GAS</i>	13B. SECONDARY FUEL (Boiler) <i>oil</i>	14. DESIGN WORKING PRESSURE OR TEMPERATURE <i>250 psi</i>			
15. MANUFACTURER <i>TRANE</i>	16. MANUFACTURER'S RATING MBTU / LBS. / HR <i>58,764 lb/hr</i>	17. NATIONAL BOARD NUMBER <i>NB460</i>	18. USAF NUMBER <i>#3</i>		
19. USE <input type="checkbox"/> Power <input checked="" type="checkbox"/> Steam Heating <input type="checkbox"/> Process <input type="checkbox"/> Storage <input type="checkbox"/> HTHW Heating <input type="checkbox"/> Heat Exchange <input type="checkbox"/> Other (Specify)					
20. METHOD OF FIRING (Boilers) <i>Auto Burner</i>	21. SAFETY/RELIEF VALVES SETTING <i>245/250</i>	22. EXPLAIN IF PRESSURE CHANGED		23. PRESSURE GAGE TESTED <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
24. PURPOSE OF HYDROSTATIC TEST <input type="checkbox"/> New <input type="checkbox"/> Retest <input type="checkbox"/> Repair	25. LAST HYDROSTATIC TEST Date:                      PSI:		26. HYDROSTATIC TEST <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date:                      PSI:		

**STATEMENT OF BASE CIVIL ENGINEER**

27. REPAIRS MADE SINCE LAST INSPECTION  
 None  Other (Specify)

**INTERNAL INSPECTION**

28. DESCRIBE INSPECTION FULLY (State location of any damage or deposits, i.e., scale, grease, oil, etc.; any corrosion, pitting, grooving, cracking or lamination; any evidence of overheating, broken or loose items, etc.)  
*TYPE "C" INSPECTION*

**EXTERNAL INSPECTION**

29. CONDITION OF BOILERS, VESSELS AND PLANT (Describe fully and state location of any corrosion, leakages, evidence of overheating, soot or other destructive accumulations, or safety or ASME/NB violations, etc.)  
*Automatic Controls disabled - FIRE-EYE MALFUNCTIONED DURING OPERATIONAL TEST - MANUAL RESET ON LUCO disabled - SAFETY VALVE DISCHARGE CAPACITY INSUFFICIENT - INDICATION OF TUBE LEAKAGE - MAIN STEAM STOP LEAKING BY - NO CLEARANCE ON SAFETY VALVE ESCAPE PIPING.*

30. SETTINGS, LININGS, SUPPORTS AND BAFFLES

*External Corrosion around bottom skirt*

**INSPECTION OF SAFETY DEVICE**

31. SAFETY/RELIEF VALVES	32. SIZE Number: <i>1-2"; 1-2 1/2"</i>	33. TOTAL CAPACITY CFM:                      BTU/HR:                      LB/HR: <i>57,253</i>	34. CONDITION AND HOW TESTED <i>TEST SAT BY HAND</i>
35. PRESSURE GAGES	36. CORRECTION TAKEN (If none give reason) <i>SAT</i>		
37. OTHER APPLIANCES	38. CONDITION <i>Clean &amp; Clear</i>		
39. REGULATORS AND CONTROLS	40. CONDITION <i>FLAME SENSOR MALFUNCTIONED, WOULD NOT ALLOW BURNER TO RE-LIGHT.</i>		

41. ASME CODES  
Does plant comply with code, welding, materials, configuration, etc?  Yes  No (Explain)

INSPECTOR STATEMENT

42. WAS BOILER OR VESSEL PREPARED FOR THOROUGH EXAMINATION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)

Yes  No

43. WAS BOILER OR VESSEL ENTERED FOR THE INSPECTION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)

Yes  No

REMARKS AND RECOMMENDATIONS OF THE INSPECTOR

44. LIST ALL DEFICIENCIES TO BE CORRECTED OR REPAIRED (Use a continuation sheet if necessary.)

- THE AUTOMATIC CONTROLS MUST OPERATE CORRECTLY FOR THE SAFE OPERATION OF THIS BOILER. IT IS STRONGLY RECOMMENDED THAT NEW CONTROLS ARE INSTALLED ON THIS BOILER WITHOUT FURTHER DELAY.
- ALL SAFETY DEVICES ON THIS BOILER MUST BE REPAIRED BEFORE THE BOILER IS RETURNED TO SERVICE.
- THE BOILER SHOULD BE HYDROSTATICALLY TESTED. ANY LEAKING TUBES SHOULD BE RE-ROLLED AND THE BOILER RE-TESTED UNTIL ALL LEAKING TUBES ARE REPAIRED.
- CORRECT SAFETY VALVES MUST BE INSTALLED AND ADEQUATE CLEARANCE ALLOWED FOR EXPANSION.

45. TYPE OR PRINT NAME OF INSPECTOR

Fred Lawrence

45A. SIGNATURE OF INSPECTOR

45B. DATE OF SIGNATURE

45C. INSPECTOR'S NATIONAL BOARD NO.

*Fred Lawrence*

10/30/03

NB 11658

46. PRINT NAME AND TITLE OF REPRESENTATIVE ACCOMPANYING INSPECTOR

Randy Parks QAE

46A. SIGNATURE

46B. DATE OF SIGNATURE

46C. REPRESENTATIVE'S TELEPHONE NUMBER

*Randy Parks*

31 Oct 03

912-767-1676

ACTION TAKEN ON RECOMMENDATIONS

47. DATE AND ACTION TAKEN OR TO BE TAKEN

48. TYPE OR PRINT NAME, TITLE AND GRADE OF OFFICER IN CHARGE

49. SIGNATURE OF OFFICER IN CHARGE

50. DATE OF SIGNATURE

# BOILER OR PRESSURE VESSEL INSPECTION REPORT

1. TYPE OF INSPECTION	
Internal and External	<input checked="" type="checkbox"/> BA <input type="checkbox"/> VA
Internal/External with Hydrostatic Test (same day)	<input type="checkbox"/> BB <input type="checkbox"/> VB
External Under Operation	<input type="checkbox"/> BC <input type="checkbox"/> VC
External Under Hydrostatic Test	<input type="checkbox"/> BD <input type="checkbox"/> VD
Expansion/Receiver Tank or Internal with UT	<input type="checkbox"/> BE <input type="checkbox"/> VE

HSBCT CONTRACT NUMBER		2A. CITY	3. STATE	4. ZIP CODE	5. PLANT OR BLDG.
			GA	31314	Bldg. 1412

2. INSTALLATION <i>FT. STEWART</i>	6. DATE OF INSPECTION <i>10/30/03</i>	7. DATE OF LAST INSPECTION <i>10/25/02</i>	8. DELIVERY ORDER NO.	9. CONTRACT NO.
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10. OBJECT <input type="checkbox"/> Fire Tube <input type="checkbox"/> Cast Iron <input checked="" type="checkbox"/> Water Tube <input type="checkbox"/> Expansion Tank <input type="checkbox"/> Pressure Vessel			11. PLANT <input checked="" type="checkbox"/> Manned <input type="checkbox"/> Unmanned	
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11A. PRESSURE PREVIOUS INSPECTION <i>0</i>	11B. PRESSURE THIS INSPECTION <i>0</i>	12A. YEAR BUILT <i>1983</i>	12B. YEAR INSTALLED <i>1983</i>
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13A. PRIMARY FUEL (Boiler) <i>Wood</i>	13B. SECONDARY FUEL (Boiler) <i>oil</i>	14. DESIGN WORKING PRESSURE OR TEMPERATURE <i>850 psi</i>
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15. MANUFACTURER <i>Keeler</i>	16. MANUFACTURER'S RATING MBTU / LBS. / HR <i>94,900 lb/hr</i>	17. NATIONAL BOARD NUMBER <i>NB5500</i>	18. USAF NUMBER <i>#4</i>
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19. USE <input type="checkbox"/> Power <input checked="" type="checkbox"/> Steam Heating <input type="checkbox"/> Process <input type="checkbox"/> Storage <input type="checkbox"/> HTHW Heating <input type="checkbox"/> Heat Exchange <input type="checkbox"/> Other (Specify)				
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20. METHOD OF FIRING (Boilers) <i>stoker</i>	21. SAFETY/RELIEF VALVES SETTING <i>260/270/280</i>	22. EXPLAIN IF PRESSURE CHANGED	23. PRESSURE GAGE TESTED <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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24. PURPOSE OF HYDROSTATIC TEST <input type="checkbox"/> New <input type="checkbox"/> Retest <input type="checkbox"/> Repair	25. LAST HYDROSTATIC TEST Date: PSI:	26. HYDROSTATIC TEST <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date: PSI:
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### STATEMENT OF BASE CIVIL ENGINEER

27. REPAIRS MADE SINCE LAST INSPECTION  
 None  Other (Specify) *Repaired induced DRAFT FAN, REPAIRED REFRACTORY around AIR INJECTION Nozzles.*

### INTERNAL INSPECTION

28. DESCRIBE INSPECTION FULLY (State location of any damage or deposits, i.e., scale, grease, oil, etc.; any corrosion, pitting, grooving, cracking or lamination; any evidence of overheating, broken or loose items, etc.)  
*SCRUBBER SCREENS DETERIORATED, LOOSE Baffle PLATES, FEEDWATER distribution trough broke loose, CHEMICAL injection piping loose. Boiler Tube HAVE WARPED AND deformed beyond acceptable limits*

### EXTERNAL INSPECTION

29. CONDITION OF BOILERS, VESSELS AND PLANT (Describe fully and state location of any corrosion, leakages, evidence of overheating, soot or other destructive accumulations, or safety or ASME/NB violations, etc.)  
*No adverse conditions noted*

### 30. SETTINGS, LININGS, SUPPORTS AND BAFFLES

*SAT.*

### INSPECTION OF SAFETY DEVICE

31. SAFETY/RELIEF VALVES	32. SIZE Number: <i>1-3", 1-2 1/2"</i>	33. TOTAL CAPACITY CFM: BTU/HR: LB/HR:	34. CONDITION AND HOW TESTED <i>Not tested, b/c. Idle</i>
35. PRESSURE GAGES	36. CORRECTION TAKEN (if none give reason) <i>SAT</i>		
37. OTHER APPLIANCES	38. CONDITION <i>Clean &amp; Clear</i>		
39. REGULATORS AND CONTROLS	40. CONDITION <i>Not tested, boiler Idle</i>		

41. ASME CODES  
 Does plant comply with code, welding, materials, configuration, etc?  Yes  No (Explain)

INSPECTOR STATEMENT

42. WAS BOILER OR VESSEL PREPARED FOR THOROUGH EXAMINATION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

43. WAS BOILER OR VESSEL ENTERED FOR THE INSPECTION (If NO, state what was not and why in Remarks and Recommendations of Inspector.)  
 Yes  No

REMARKS AND RECOMMENDATIONS OF THE INSPECTOR

44. LIST ALL DEFICIENCIES TO BE CORRECTED OR REPAIRED (Use a continuation sheet if necessary.)

The tubes as viewed from the firebox have bowed severely. Several tubes have pulled away from the buckstays and married to other tubes.

The tubes appear to have been exposed to extreme heat. It is recommended that a tube sample be taken from each section of the boiler and metallogically tested. If the tubes are not damaged, a repair vendor experienced in boiler repair should be contracted to repair the refractory and re-attach the tubes to the buckstays.

45. TYPE OR PRINT NAME OF INSPECTOR

Fred Lawrence

45A. SIGNATURE OF INSPECTOR

*Fred Lawrence*

45B. DATE OF SIGNATURE

10/30/03

45C. INSPECTOR'S NATIONAL BOARD NO.

NB11658

46. PRINT NAME AND TITLE OF REPRESENTATIVE ACCOMPANYING INSPECTOR

Randy Parks QAE

46A. SIGNATURE

*Randy Parks*

46B. DATE OF SIGNATURE

31 Oct. 03

46C. REPRESENTATIVE'S TELEPHONE NUMBER

912-767-1676

ACTION TAKEN ON RECOMMENDATIONS

47. DATE AND ACTION TAKEN OR TO BE TAKEN

48. TYPE OR PRINT NAME, TITLE AND GRADE OF OFFICER IN CHARGE

49. SIGNATURE OF OFFICER IN CHARGE

50. DATE OF SIGNATURE