INSPECTION REPORT-BOILERS

NAVFAC 9-11014/41 (3/67)
Supersedes NAVDOCKS 2544
S/N 0105-LF-004-0000

DATE OF INSPECTION: 3 NOV. 22 NOV. 1982

TYPE OF INSPECTION: A ☐ INTERNAL & EXTERNAL B ☒ INTERNAL & EXTERNAL WITH PRESSURE TEST C ☒ OPERATIONAL

1. FROM: BASE MAINT. OFFICER
CAMP LEJEUNE, N. C.

2. TO: NAVFACENGCOM
NORFOLK, VA

14. CERTIFICATE ISSUED ☒ YES ☐ NO
EXPIRES 22 NOV. 1983

15. BOILER INSPECTOR: Thomas L Lanier
NAVY OR NATIONAL BOARD NO.: NAVFAC 239

16. REASON FOR NOT ISSUING CERTIFICATE:

BOILER DATA

3. MANUFACTURER: KEWANEE BOILER CORP

4. PROPERTY NO.	5. MFG. SERIAL NO.	6. MFG. MODEL NO.
30	637171	M-45 KX
7. BUILDING NO.	**8. YEAR BUILT**	**9. CAPACITY**
TT-44	1982	450,000 BTU/HR

10. FUEL (Check): ☐ COAL ☒ OIL ☐ GAS

11. PRESSURE: DESIGNED 30 psi; OPERATING 12 psi; TEST 45 psi

12. FEED WATER TREATMENT: ☐ SATISFACTORY ☐ UNSATISFACTORY

13. TYPE: ☐ WATER TUBE ☒ FIRE TUBE ☐ C. I.

17. BOILER USE: HEATING

18. COMBUSTION CONTROL (Mfg. Name): HONEYWELL

19. COMBUSTION: 12.7 % CO_2 _____ % EXCESS O_2

20. FLUE GAS TEMPERATURE: AFTER BOILER 250 °F : AFTER HEAT TRAP _____ °F

SAFETY DEVICES

SAFETY VALVES

21. MANUFACTURER	22. NUMBER AND SIZE	23. PSI SETTING	24. CONDITION
WATTS	1 - 3/4	30	NEW

STEAM PRESSURE GAUGE

25. MANUFACTURER: MARSHALL TOWNE

26. CORRECTIONS: WATER LEG CONSTANT _____ psi; OTHER _____ psi

27. REASON IF NOT TESTED:

FIRING EQUIPMENT

ITEM	IN SERVICE	ALTERNATE
28. MANUFACTURER	PEABODY GORDON-PIATT	
29. TYPE	NOZZLE SPRAY	
30. FUEL GRADE	#2	

31. INSPECTOR'S COMMENTS:
NEW BOILER INSTALLED UNDER CONTRACT # N62470-82-C-4571
WILL RETAIN SAME PROPERTY # AS OLD BOILER # 30

32. ATTACHMENT(S) (Check): ☐ COPY OF INSPECTOR'S REPORT ☐ SPECIAL COMMENTS

33. SIGNATURE: ORIG WAS SIGN BY Dillon
BY DIRECTION

★ U. S. GOVERNMENT PRINTING OFFICE: 1978—604—467

MFGRS. SERIAL NO.: 637171

MFGRS. MODEL NO.: M-45 KX

MANUFACTURER: KEWANEE Boiler CORP

DATE OF SHEET: 23 NOV 1982

TYPE OF SUPERHEATER: NONE

TEMPERATURE AT SUPERHEATER OUTLET: N/A °F

NORMAL FEEDWATER TEMPERATURE: ____ °F

(See Reverse Side for Fittings)

FURNACE VOLUME: ____ CU. FT

HEATING SURFACE (SQ. FT.)

BOILER: 63

WATER WALL: ____

ECONOMIZER: ____

SUPERHEATER: ____

DRUMS

NO. ____

DIAMETER ____ IN.

LENGTH ____ FT. ____ IN.

- [ ] RIVETED
- [ ] FORGE WELDED
- [ ] FUSION WELDED

OPERATION

- [X] AUTOMATIC
- [ ] SEMI-AUTOMATIC
- [ ] MANUAL

PRESSURE (psig)

30 DESIGN

30 MAWP

12 INSTALLED WP

AIR HEATER

- [ ] NONE
- [ ] TUBULAR
- [ ] REGENERATIVE
- [ ] STEAM

USE

- [ ] EXPORT
- [ ] ELEC. POWER GENERATION
- [ ] LAID UP - WET
- [ ] LAID UP - DRY
- [X] HEATING

CAPACITY

____ HP

____ LB./HR

____ EDR

450,000 BTU/HR.

DATE BUILT: ____

DATE INSTALLED: ____

BOILER

TYPE

- [ ] C.I.
- [ ] WATER TUBE
- [X] FIRE TUBE

DRAFT

- [ ] NATURAL
- [X] FORCED
- [ ] INDUCED

PRODUCES

- [ ] STEAM
- [X] LOW TEMP. WATER
- [ ] HIGH TEMP. WATER

CIRCULATION

- [X] NATURAL
- [ ] FORCED

FUEL

FUEL & FIRING EQUIPMENT IN SERVICE

COAL

- [ ] ANTHRACITE
- [ ] BITUMINOUS

OIL

- [ ] COMMERCIAL 1, (2), 4, 5, 6
- [ ] NAVY
- [ ] OTHER ____

GAS

- [ ] NATURAL
- [ ] MANUFACTURED

ALTERNATE FUEL & FIRING EQUIPMENT

COAL

- [ ] ANTHRACITE
- [ ] BITUMINOUS

OIL

- [ ] COMMERCIAL 1, 2, 4, 5, 6
- [ ] NAVY SPECIAL
- [ ] OTHER ____

GAS

- [ ] NATURAL
- [ ] MANUFACTURED

FIRING EQUIPMENT

FUEL & FIRING EQUIPMENT IN SERVICE

- [ ] COAL-HAND FIRED

COAL - STOKER

- [ ] UNDERFEED - MULTIPLE RETORT
- [ ] UNDERFEED - SINGLE RETORT
- [ ] SPREADER - DUMP GRATE
- [ ] SPREADER - VIBRATING GRATE
- [ ] SPREADER - TRAVELING GRATE
- [ ] CHAIN GRATE

GAS

- [ ] GAS RING
- [ ] VENTURI TYPE

COAL - PULVERIZER

- [ ] ATTRITION
- [ ] BALL & RACE
- [ ] BOWL MILL
- [ ] TUBULAR

OIL BURNERS

- [X] MECHANICAL
- [ ] STEAM ATOMIZED
- [ ] AIR ATOMIZED
- [ ] ROTARY CUP

ALTERNATE FUEL & FIRING EQUIPMENT

- [ ] COL-HAND FIRED

COAL - STOKER

- [ ] UNDERFEED - MULTIPLE RETORT
- [ ] UNDERFEED - SINGLE RETORT
- [ ] SPREADER - DUMP GRATE
- [ ] SPREADER - VIBRATING GRATE
- [ ] SPREADER - TRAVELING GRATE
- [ ] CHAIN GRATE

GAS

- [ ] GAS RING
- [ ] VENTURI TYPE

COAL - PULVERIZER

- [ ] ATTRITION
- [ ] BALL & RACE
- [ ] BOWL MILL
- [ ] TUBULAR

OIL BURNERS

- [ ] MECHANICAL
- [ ] STEAM ATOMIZED
- [ ] AIR ATOMIZED
- [ ] ROTARY CUP

FIRING EQUIPMENT MANUFACTURER

PROPERTY NO.: 30

BUILDING OR LOCATION: TT-44

BOILER 30

ACTIVITY: NCBCL

DATA RECORD SHEET - BOILERS
NAVFAC 9-11014/40 (9-69) Supersedes NAVDOCKS 2509

FITTING	NUMBER	SIZE	MANUFACTURER	TYPE	SETTING	RANGE	PRESSURE CLASS
SAFETY VALVES	1	3/4	WATTS		30		
STEAM OUTLET VALVES							
BLOW-OFF VALVES							
FEEDWATER VALVES							
WATER COLUMN							
FEEDWATER REGULATOR	1	1/2	TACO	334-1	12	30	
WATER GAGES	1		MARSHALL TOWN			60° - 260° 0 - 60	TEMP. WATER
STEAM GAGES							
SOOT BLOWERS							
FUSIBLE PLUGS							

LWCO - MC DONNELL NO. 64 B SIZE 1"

SAFETY VALVE - 1 - 3/4" WATTS, SET - 30 PSIG - 510,000 BTU/HR

↓

330

REQUEST FOR START-UP OR SERVICE

Origin of Call: [illegible] Date: 11/22/02

Request for Service P.O.# _____ Job Location: [illegible]

BOILER/HEATER Mfr. [illegible] Model No. [illegible] Type [illegible]

Rated Input _____ MBH 4.00 GPH# [illegible] Oil @ _____ " W.C. Overfire

BURNER Model No. R1 4.0-05-[illegible] Serial No. [illegible]

ML No. _____ S.O. No. 70410

Appointment Date: 11/22/02 With Whom: John Loesch Phone No. 919-455-3555

Copies To: Jon Lanier

Job Name: [illegible] Invoice To: _____

STACK Height 30' Size _____

BREECHING Size 6" Length _____ #Els 3

UNIT OUTLET DAMPER -% Open _____

BAROMETRIC DAMPER Size 6" Mfr Dunham

SEQUENCE DAMPER CONTROL:

Mfr _____ Model _____

COMBUSTION AIR INLET Size [illegible]

OIL TANK: ☐ Above Burner ☒ Below Burner

Distance from Tank 40' Vertical Lift 8'

Suction Line Size 3/8 ☐ Pipe ☒ Tubing

BURNER READINGS	GAS LO	GAS HI	OIL LO	OIL HI
INPUT: MBH/GPH				2.75 gph
FUEL PRESSURE:				300#
Orifices-"WC/Nozzle-PSIG				300#
Oil Return/Air-PSIG				
OIL TEMPERATURE-°F:				60°
Inlet				
Outlet				
PUMP DATA:				
Vacuum-"Hg				
Discharge-PSIG				300#
COMBUSTION TESTS:				
CO_2-%				12.7
O_2-%				
CO-%/Smoke No.				2
DRAFT:				
Overfire-"WC				.14
Outlet-"WC				
Temp. °F Room 65° Outlet				
Air Inlet Louver-"Open				1/2"
Primary Air Adjustment Pos.				
Drawer Position				
Flame Signal-MA/DC				

Motor Data @ Hi-Fire

	L1 V	L1 A	L2 V	L2 A	L3 V	L3 A
Blower	115					
Oil Pump						
Air Comp						

ALL SAFETY CONTROLS MUST BE TESTED

REMARKS _____

INST. MANUAL REC'D BY _____

STARTUP BY Larry Lisk

APPROVED BY _____

DATE _____

SAFETY CONTROL CHECK

1. Lo-Water Cut-Off ✓
2. Second Lo-Water Cut-Off —O—
3. Limit Control ✓ Setting 190°
4. Operating Control ✓ Setting 180°
5. Firing Rate Control _____ Setting _____
6. Pilot Turn Down Test _____
7. Flame Failure Test ✓
8. Low Gas Pressure Switch _____ Setting _____
9. High Gas Pressure Switch _____ Setting _____
10. Low Oil Pressure Switch _____ Setting _____
11. Low Air Atomizing Pressure Switch _____ Setting _____
12. Low Oil Temp. Switch _____ Setting _____

TIME INCURRED

Hrs on Job	+ Hrs Trvld	X No. Persons	= Total Hrs

INSTRUCTIONS TO SERVICEMAN

Continued on Back Side

INSPECTION REPORT-BOILERS
NAVFAC 9-11014/41 (3/67)
Supersedes NAVDOCKS 2544
S/N 0105-LF-004-0000

DATE OF INSPECTION: 25 NOV. 1981

TYPE OF INSPECTION: A ☐ INTERNAL & EXTERNAL B ☐ INTERNAL & EXTERNAL WITH PRESSURE TEST C ☒ OPERATIONAL

1. FROM: BASE MAINT. OFFICER, CAMP LEJEUNE, N. C.

2. TO: NAVFACENGCOM, NORFOLK, VA.

14. CERTIFICATE ISSUED ☐ YES ☐ NO
EXPIRES 25 NOV. 1982

15. BOILER INSPECTOR: Thomas L Lassiter
NAVY OR NATIONAL BOARD NO.: NAVFAC 239

16. REASON FOR NOT ISSUING CERTIFICATE:

BOILER DATA

3. MANUFACTURER: SPENCER

4. PROPERTY NO.	5. MFG. SERIAL NO.	6. MFG. MODEL NO.
30	5043	C-188
7. BUILDING NO.	**8. YEAR BUILT**	**9. CAPACITY**
TT-44	1950	432,000 BTU/HR

10. FUEL (Check): ☐ COAL ☒ OIL ☐ GAS

11. PRESSURE: DESIGNED 30 psi; OPERATING 12 psi; TEST (HW) 45 psi

12. FEED WATER TREATMENT: ☐ SATISFACTORY ☐ UNSATISFACTORY

13. TYPE: ☐ WATER TUBE ☒ FIRE TUBE ☐ C. I.

17. BOILER USE: HEATING

18. COMBUSTION CONTROL (Mfg. Name):

19. COMBUSTION: 5.5 % CO_2 _____ % EXCESS O_2

20. FLUE GAS TEMPERATURE: AFTER BOILER 400 °F ; AFTER HEAT TRAP _____ °F

SAFETY DEVICES

SAFETY VALVES

21. MANUFACTURER	22. NUMBER AND SIZE	23. PSI SETTING	24. CONDITION
WATTS	1-1¼"	30	GOOD

STEAM PRESSURE GAUGE

25. MANUFACTURER: ASME STD.

26. CORRECTIONS: WATER LEG CONSTANT _____ psi; OTHER _____ psi

27. REASON IF NOT TESTED:

FIRING EQUIPMENT

ITEM	IN SERVICE	ALTERNATE
28. MANUFACTURER	AMERICAN STD.	
29. TYPE	NOZZIE	
30. FUEL GRADE	#2	

31. INSPECTOR'S COMMENTS:
① REPAIR INSULATION ON Boiler
② INSTALL COVERS ON Elec. Controls boxes

32. ATTACHMENT(S) (Check): ☐ COPY OF INSPECTOR'S REPORT ☐ SPECIAL COMMENTS

33. SIGNATURE: R.M. Killen BY DIRECTION

★ U. S. GOVERNMENT PRINTING OFFICE: 1978—604—467

OPNAV 5216/144 (REV. 6-70)
S/N-0107-778-8099

DEPARTMENT OF THE NAVY

Memorandum

MAIN/TH/spk
DATE: 11370
30 October 1980

FROM Director, Utilities

TO Director, Operations Division (Attn: F. Cone)

SUBJ Replacement of No. 30 Boiler, Building TT-44

1. The subject boiler is in poor condition, and combustion efficiency is low. The boiler inspector has recommended that the unit be replaced. Accordingly, it is requested that a project be developed to replace the boiler.

T. Hatcher

T. HATCHER, P.E.