

**BOILERS - BURNERS
SERVICE REPORT**

DATE: 8/12/86

JOB NAME: Amphibious Maintenance Shop Facility CONTR: SNEEDEN INC.

ADDRESS: Camp Lejeune NC ADDRESS: Wilmington NC

BOILER-MFG: York Shipley MODEL NO. SAW11-80-2 S/N NO: 85-16046 H. NO.: 8836

STEAM: PSI WATER 190 °F

BURNER-MFG: York Shipley MODEL NO: FV20 S/N NO: 85-16046

OIL

GAS

NO. 2 NO. 5

NAT. PROPANE

| | OIL | | | GAS | |
|---------------------|---------|----------|---------------------|---------|----------|
| | NO. 2 | NO. 5 | | NAT. | PROPANE |
| | HI FIRE | LOW FIRE | | HI FIRE | LOW FIRE |
| GPH | 24 | | MANIFOLD GAS PRESS. | | |
| PUMP PRESSURE | 110# | 115 | CFH | | |
| PUMP VAC | 14" | | METER GAS PRESS. | | |
| NOZZLE OIL PRESS. | Full | Flow | CO ² | | |
| AIR COMP. PRESS. | — | — | STACK TEMP. TOTAL: | | |
| MICRO AMPS | 5 | 5 | STACK TEMP. NET: | | |
| D.C. VOLTS | — | — | SMOKE TEST | | |
| CO ² | 12.8% | 9% | WINDBOX PRESS. | | |
| STACK TEMP. - TOTAL | 450° | 350° | EFFICIENCY | | |
| STACK TEMP. - NET | 390° | 260° | PILOT PRESSURE: | | |
| SMOKE TEST: | 1.0+ | 0- | MICRO AMPS: | | |
| EFFICIENCY | 85% | 85% | D.C. VOLTS: | | |
| WINDBOX PRESS. | — | — | FIREBOX PRESSURE: | | |
| OIL TEMPERATURE | — | — | GAS PRESS TO REG. | | |

OPERATION: Lo Hi-Lo-Off
 Full Mod.
 Hi-Off

OPERATION: 02 Hi-Fir = 2.9

Hi-Lo-Off
 Full Mod.
 Hi-Off

NOZZLE SIZE: ② 7.5 60° PIP TYPE: ① 8.5 60° PIP MONARCH.

OIL PUMP-VOLTS: Direct AMPS: 2.5 Amps
 BURNER MOTOR VOLTS: 480 AMPS 2 H.P.

FIREBOX PRESSURE .02" STACK

FLAME SAFETY: MODEL R4140 L 1014

FEEDWATER TEMP. — °F.

HI LIMIT SETTING: 210°

STACK HEIGHT 30 Ft.

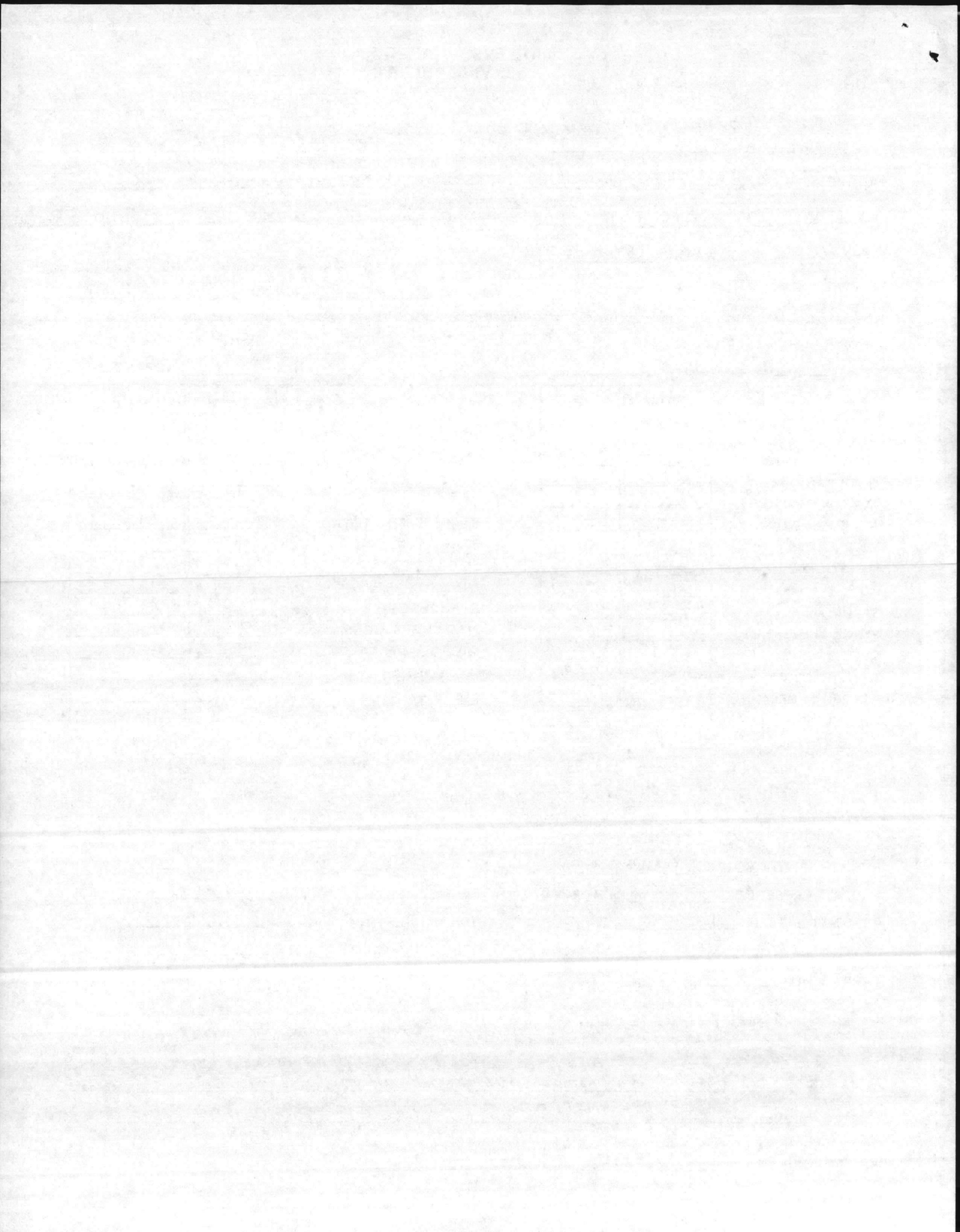
OPERATING CONTROL SET: 190°

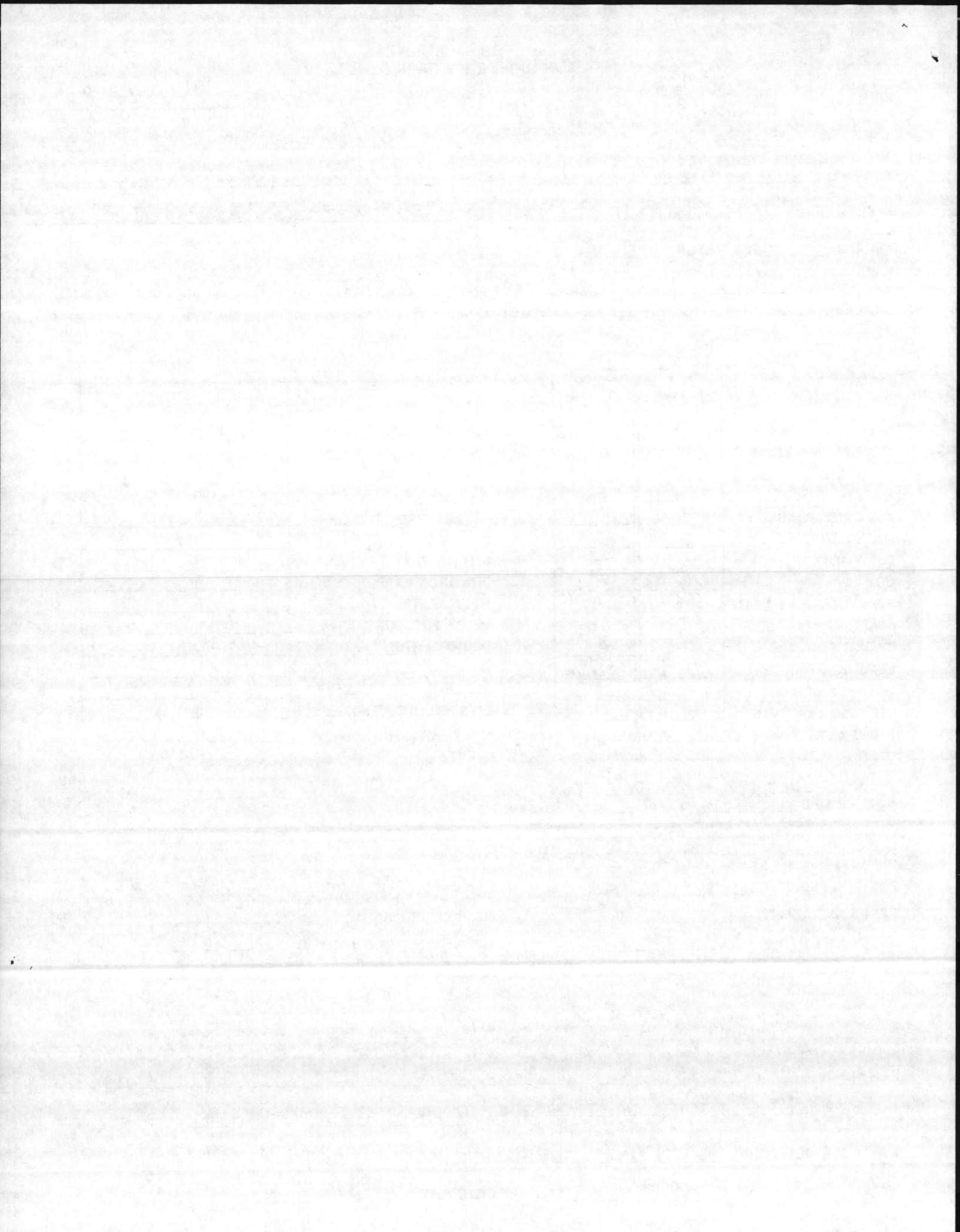
FLUE DRAFT: — "W.C.

REMARKS: Packing Glands leaking around 3-way Antia Shock Valve.
Burner pulsates. but has good 02 + No smoke except for slight tr.
Burner has all the same settings as all burners (don't see problems
with ~~02~~ pulsation; Oil pump pull's hi vacuum.

W.W.D. SERVICEMAN: Steve Hennis

WITNESS: _____ COMPANY: _____





INSPECTION REPORT-BOILERS
 NAVFAC 9-11014/41 (3/87)
 Supersedes NAVDOCKS 2544
 S/N 0105-LF-004-0000

DATE OF INSPECTION
 1 AUG - 23 OCT 1986

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 1 AUG 1987
 15. BOILER INSPECTOR
Thomas L. Lanier
 NAVY OR NATIONAL BOARD NO.

BOILER DATA

3. MANUFACTURER **YORK SHIPLEY** MODEL # **SPWV-80-2**

4. PROPERTY NO. **51** 5. MFG. SERIAL NO. **85-16046** 6. MFG. MODEL NO. **NB. 23092**

7. BUILDING NO. **A-47** 8. YEAR BUILT **1985** 9. CAPACITY **2,678,000 BTU/HR.**

10. FUEL (Check) COAL OIL GAS 11. PRESSURE
 DESIGNED **60** psi OPERATING **40** psi TEST **90** psi

12. FEED WATER TREATMENT SATISFACTORY UNSATISFACTORY 13. TYPE WATER TUBE FIRE TUBE C. I.

16. REASON FOR NOT ISSUING CERTIFICATE
NAVFAC 239

17. BOILER USE **HEATING** 18. COMBUSTION CONTROL (Mfg. Name) **HONEYWELL**

19. COMBUSTION **12.8** % CO₂ **2.9** % EXCESS O₂ 20. FLUE GAS TEMPERATURE
 AFTER BOILER **380** °F ; AFTER HEAT TRAP _____ °F

**SAFETY DEVICES
 SAFETY VALVES**

21. MANUFACTURER **WATTS** 22. NUMBER AND SIZE **1-1/4"** 23. PSI SETTING **60** 24. CONDITION **SAT**

STEAM PRESSURE GAUGE

25. MANUFACTURER **U.S. GAGE** 26. CORRECTIONS
 WATER LEG CONSTANT _____ psi; OTHER _____ psi

27. REASON IF NOT TESTED

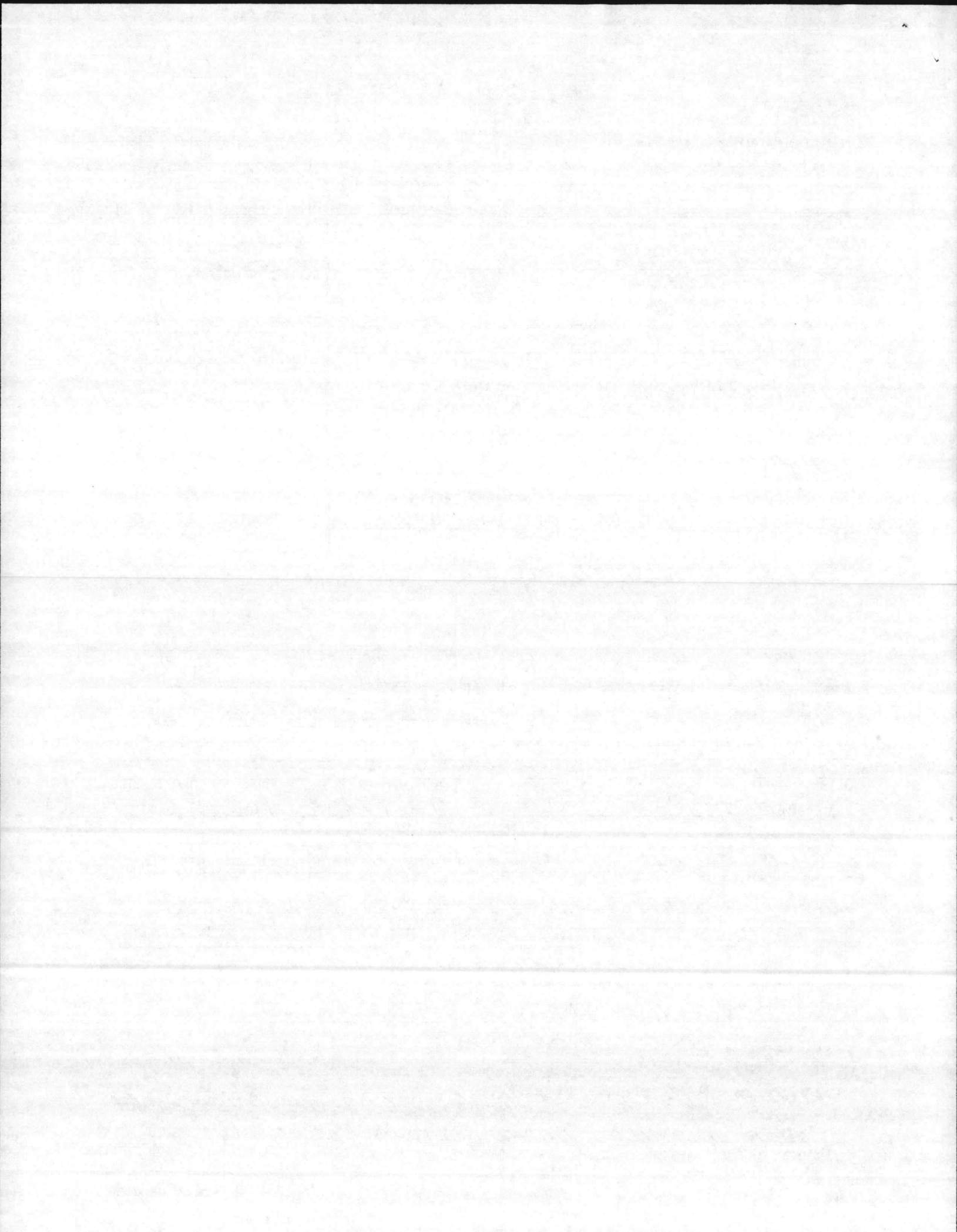
FIRING EQUIPMENT

| ITEM | IN SERVICE | ALTERNATE |
|------------------|---------------------|-----------|
| 28. MANUFACTURER | YORK SHIPLEY | |
| 29. TYPE | NOZZLE SPRAY | |
| 30. FUEL GRADE | #2 | |

31. INSPECTOR'S COMMENTS
**BURNER PULSATES BUT HAS GOOD CO2 AND O2 READINGS
 BOILER INSTALLED UNDER CONTRACT # 81-1642**

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

33. SIGNATURE
Thomas L. Lanier
 BY DIRECTION



BOILER INSPECTION CHECK LIST

| | | | | |
|--------------------------|------------------------|--|---|--|
| LOCATION | 81-1642 | BLDG NO. | BOILER NO. | DATE |
| YEAR 1985 | "BOAT BASEN" | A-47 | 57 | 4 SEPT. 86 12 AUG. 86 |
| BOILER MFG. | YORK SHIPLEY (YORK PA) | CAP. | 28 OCT. 86 | |
| SERIAL NO. | 85-16046-18836 | MODEL NO. | SPNV-80-2 | N.B. NO. 23092 |
| BURNER MFG. | YORK SHIPLEY | FIRING RATE: | 24 G.P.H. | |
| STEAM GAGE NAME: | US GAGE | PRESS. | 80-320 °F 0-200 PSF | TEST |
| SV MFG | WATTS | CAP | 3,560,000 BTU/HO | NO. 1 SIZE 1 1/4" |
| NO. 1 | SET 60- | OPEN | 65 ^{TEST GAGE} @ 65 | CLOSE |
| NO. 2 | SET | OPEN | | CLOSE |
| NO. 3 | SET | OPEN | | CLOSE |
| CO2% | 13.4 | 02% | 2.9 | STACK TEMP 193 NET COMB. EFF. PURGE TIME |
| NO. 1 FIREYE | C/O | OK (3 SEC) | A/L | A/L |
| NO. 2 FIREYE | C/O | | | A/L |
| HI-STEAM TEMP. | C/O | OK @ 190 °F | | A/L |
| EXCESS WATER STEAM TEMP. | C/O | OK @ 204 | | A/L |
| HI OIL TEMP. | C/O | | | A/L |
| HI OIL PRESS. | C/O | | | A/L |
| LO OIL TEMP. | C/O | | | A/L |
| LO OIL PRESS. | C/O | | | A/L |
| LO ATM AIR/STEAM | C/O | | | A/L |
| NO. 1 LW | C/O | OK A/L - ALSO CUT OUT 3" ABOVE TUBES. MANUALLY LOWER WATER | | A/L |
| NO. 2 LW | C/O | | | A/L |
| LO FURNACE DRAFT | C/O | OK | A/L | L/O |
| LO FIRE START | C/O | REMOVED WIRE # 48 - OK | | A/L |
| TYPE OF FUEL | #2 | | | A/L |

MAWP 60 PSF WATER

REMARKS: PURGE AIR FLOW SWITCH - REMOVED WIRE # 49 - OK

HI-LOW FIRE CONTROL - OK

- AIR LEAK AT BURNER-RING TO BOILER.
- LEAK AT 3 WAY VALVE TOP OF BOILER. (PACKING GLAND 2 EA)
- LEAK IN MAKE UP WATER LINE TO BOILER. 1" SIZE - OK
- * NEED MORE COMBUSTION AIR TO BOILER ROOM
- SV will NOT OPEN @ 69 PSF @ 290 °F ON BOILER GAGE. OK

TEST GAGE SHOWS 65 PSF UNSAT.

(OVER)

GAGE PRESS IN BOILER - 32 PSI

LO - FIRE

02'

9/4/84
TESTED NEW S/U
OPEN @ 65 - SAT

PRESS GAGE ABOUT 15 PSI HIGHER - UNSAT

10/23/84

INSTALLED NEW ALTITUDE GAGE

MFG. - U S GAGE

RANGE - 0-50 PSI

TEMP. 60-260

PRESSURE RANGE ON GAGE IS TOO LOW
WE NEED A 0-100 PSI RANGE.

MFGRS. SERIAL NO.

85-16046 H-88360

MFGRS. MODEL NO.

2-96413 Dmk
SPWV-80. ~~80~~

MANUFACTURER

YORK SHIPLEY

DATE OF SHEET

12 AUG-85

TYPE OF SUPERHEATER

N/A

FURNACE VOLUME

CU. FT.

OPERATION

- AUTOMATIC
 SEMI-AUTOMATIC
 MANUAL

USE

- EXPORT
 ELEC. POWER GENERATION
 LAID UP - WET
 LAID UP - DRY

DATE BUILT

85 1984

TEMPERATURE AT SUPERHEATER OUTLET

N/A °F

HEATING SURFACE (SQ. FT.)

BOILER 400

WATER WALL

ECONOMIZER

SUPERHEATER

PRESSURE (psig)

60 WATER

DESIGN

MAWP

INSTALLED WP

CAPACITY

80

HP

LB./HR

EDR

BTU/HR.

2,678,000 out put

DATE INSTALLED

AUG-86

BOILER

TYPE

- C.I.
 WATER TUBE
 FIRE TUBE

DRAFT

- NATURAL
 FORCED
 INDUCED

PRODUCES

- STEAM
 LOW TEMP. WATER
 HIGH TEMP. WATER

CIRCULATION

- NATURAL
 FORCED

NORMAL FEEDWATER TEMPERATURE

N/A °F

DRUMS

NO. 1

DIAMETER _____ IN.

LENGTH _____ FT. _____ IN.

- RIVETED
 FORGE WELDED
 FUSION WELDED

AIR HEATER

- NONE
 TUBULAR
 REGENERATIVE
 STEAM

(See Reverse Side for Fittings)

FUEL & FIRING EQUIPMENT IN SERVICE

FUEL

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

- 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

- MECHANICAL
 STEAM ATOMIZED
 AIR ATOMIZED
 ROTARY CUP

- 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

- MECHANICAL
 STEAM ATOMIZED
 AIR ATOMIZED
 ROTARY CUP

FIRING EQUIPMENT MANUFACTURER

YORK SHIPLEY FV-20

PROPERTY NO.

51

BUILDING OR LOCATION

A-47

ACTIVITY

BOILER 47

MCBCL

| FITTING | NUMBER | SIZE | MANUFACTURER | TYPE | SETTING | RANGE | PRESSURE CLASS |
|---|--------|--------|--------------|-----------|---------|-------------------------|---------------------|
| SAFETY VALVES | 1 | 1 1/4" | WATTS | | 60 | | |
| WATER STEAM OUTLET VALVES | 1 | 4" | GRINNELL | BUTER-FLY | | | |
| BLOW-OFF VALVES | 1 | 1 1/2" | UNITED | GLOBE | | | 400 WOG 200 WSP. |
| FEEDWATER VALVES | 2 | 3/4" | GRINNELL | GATE | | | 125 SWP 200 WOG |
| WATER COLUMN | | N/A | | | | | |
| FEEDWATER REGULATOR | 1 | 3/4" | WILKINS | | 48 | 25-75 | 300 |
| WATER GAGES | 1 | 4" | U.S. GAGE | ALTITUDE | | 0-200 PSI 80-320 °F. | |
| STEAM GAGES | | N/A | | | | | |
| SOOT BLOWERS | | N/A | | | | | |
| FUSIBLE PLUGS | | N/A | | | | | |

S/V - WATTS - SET 60 PSI SIZE 1 1/4" CAP - 3,560,000 BTU/HR. MODEL M, NO 740

N.B. # 23092

MAWP - 60 WATER

H-S. 400

OIL BURNER - MFG. YORK-SHIPLEY, SIZE FV-20 TYPE 2, SERIAL # 85-16046
FIRING RATE 24.0 GPH, MAX LOW FIRE 8.0 GPH.

3 NOZZLE SIZE - 8.5-60° LOW FIRE, (7.5 GPH 60° HIGH-FIRE - 2EA)
CONTROL - HONEYWELL R4140L1014

DATE OF INSPECTION

11 SEPT 1985

TYPE OF INSPECTION

A INTERNAL & EXTERNAL

B INTERNAL & EXTERNAL WITH PRESSURE TEST

C OPERATIONAL

1 FROM

COMMANDING GENERAL
 MCB, CAMP LEJEUNE, NC

14.

CERTIFICATE ISSUED YES NO

2 TO

NAVFACENGCOM
 NORFOLK, VA

15. BOILER INSPECTOR

Thomas L. Lanier
 NAVY OR NATIONAL BOARD NO.

NAVFAC 239

16. REASON FOR NOT ISSUING CERTIFICATE

Boiler REMOVED
 UNDER CONTRACT
 # 84-7866

BOILER DATA

3 MANUFACTURER

FITZGIBBONS

4. PROPERTY NO.

51

5. MFG. SERIAL NO.

32223

6. MFG. MODEL NO.

R-M-530

7. BUILDING NO.

BB-48

8. YEAR BUILT

1959

9. CAPACITY

810,000 BTU/HR.

10. FUEL (Check)

COAL OIL GAS

11. PRESSURE

DESIGNED

30 psi

OPERATING

12 psi

TEST

— 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

20. FLUE GAS TEMPERATURE

% CO₂

% EXCESS O₂

AFTER BOILER

°F

AFTER HEAT TRAP °F

SAFETY DEVICES

SAFETY VALVES

21. MANUFACTURER

WATTS

22. NUMBER AND SIZE

1-3"

23. PSI SETTING

30

24. CONDITION

—

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 | NOZZLE SPRAY | |
| 30. FUEL GRADE | #2 | |

31. INSPECTOR'S COMMENTS

Boiler WAS REMOVED UNDER CONTRACT # 84-7866

32. ATTACHMENT(S) (Check)

COPY OF INSPECTOR'S REPORT

SPECIAL COMMENTS

33. SIGNATURE

WMM Rwi

BY DIRECTION

