

FORM H-2 MANUFACTURERS DATA REPORT FOR ALL TYPES OF BOILERS
EXCEPT WATERTUBE AND THOSE MADE OF CAST IRON

As Required by the Provisions of the ASME Code Rules

AS-3502

- Manufactured and certified by SUPERIOR BOILER WORKS, INC.; 3524 E. 4TH; HUTCHINSON, KS 6750
(name and address of manufacturer)
- Manufactured for KINSTON PLUMBING & HEATING, P.O. BOX 637, KINSTON, NC 28502-0637
(name and address of purchaser)
- Location of installation MARINE CORPS BASE, BLDG. AS-3502, CAMP LEJEUNE, NC 28542
(name and address)
- Unit identification FIREBOX 9994 ---- ---- 9994 1987
(complete boiler, superheater, waterwall, economizer, etc.) (mfr's serial no.) (CRN) (drawing no.) (Nat'l. Bd. no.) (year built)
- The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction and workmanship conform to ASME Code, Section IV, 1986
(year) (addenda (date)) (Code Case no.)
- Shells or drums: 1 SA285C .312" 31 1/2" 38 1/2" ---- ----
(no.) (mat'l spec. gr.) (thickness (in.)) (dia (I.D.)) (length (overall)) (dia. (I.D.)) (length (overall))
- Joints: WELDED 85% ---- 1
(long (seamless, welded)) (eff. (as compared to seamless)) (girth (seamless, welded)) (no. of shell courses)
- Tubesheet: (2)SA285C .375" Tube holes: 47 2.025"
(mat'l spec. grade) (thickness) (if various, give max & min)
- Tubes: No. SA178A STRAIGHT Dia. 2" Length 17 @ 38-3/4" 30 @ 20-3/8" Gauge 13
(mat'l spec. grade) (straight or bent) (if various, give max & min) (or thickness)
- Heads: SA285C .687" FLAT ----
(mat'l specification no.) (thickness) (flat, dished, ellipsoidal) (radius of dish)
- Furnace: SA285C .312" 1 25-5/8" OD 20-3/8" 20-3/8" PLAIN Seams: WELDED
(mat'l spec. gr.) (thickness) (no.) (size (O.D. or W x H)) (length (each section)) (total) (type (plan, corrugated, etc.)) (type (seamless, welded))
- Staybolts: 28 3/4" SA36 --- NONE .4418" 9" 30
(no.) (size (dia)) (mat'l spec. gr.) (size) (teftale) (net area) (pitch (hor and vert.)) (MAWP (psi))
- Stays or braces:

Location	Mat'l Spec	Type	No & Size	Pitch	Total Net Area	Fig HG 343 U1	Dist Tubes to Shell	Area to be Stayed	MAWP psi.
(a) F.H. above tubes									
(b) R.H. above tubes									
(c) F.H. below tubes									
(d) R.H. below tubes	SA36	STR.	(9) 3/4"	9 1/2"	3.98"	---	---	---	30
(e) Through stays	SA36	STR.	(2) 3/4"	9"	.88"	---	---	---	30

- Other parts 1. INNER TUBESHEET 2. CROWNSHEET & SIDEWALLS 3. WATERLEG BASE
(Brief description - i.e. dome, boiler piping, etc.) 4. BURNER TUBE
- SA285C .687" 30 PSI
- SA285C .312" 30 PSI
- SA285C .312" 30 PSI
- SA53B 14"OD, 7"L, .375" 30 PSI
(mat'l spec. grade, size, material thickness, MAWP)

15. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	No	Dia or Size	Type	How Attached	Mat'l	Nom Thickness	Reinforcement Mat'l	Location
Handhole up to 3" x 4"	3	3" x 4"	ELLIP.	NA	NA	NA	NA	SHELL
Manhole	----							
Outlet	1	3"	CPL.	WELDED	SA105	.327"	NA	SHELL
Safety Valve	1	2"	CPL.	WELDED	SA105	.238"	NA	SHELL
Inlet	1	3"	CPL.	WELDED	SA105	.327"	NA	REAR TUBESHEET
Drain	4	2"	CPL.	WELDED	SA105	.238"	NA	(2) SHELL

(1) EA. TUBESHEET

- Boiler supports: 1 STEEL SKID BASE WELDED
(no.) (type (saddles, legs, lugs)) (attachment (bolted or welded))
- Design pressure: 30 Based on HG301 Heating surface 75 SQ. FT. Shop hydro. test 60
(psi) (Code per and/or formula) (sq ft or kW (total)) (psi (complete boiler))

18. Remarks: Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report: -----

(name of part, item number, mfr's name and identifying stamp)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this data report are correct and that all details of design, material, construction, and workmanship of this boiler conform to the ASME BOILER AND PRESSURE VESSEL CODE, SECTION IV.

"H" Certificate of Authorization no. 3967 expires MARCH 30, 19 88

Date Mar 4, 1987 Name SUPERIOR BOILER WORKS, INC. Signed Phillip J. Smith (manufacturer that constructed and certified boiler) (by representative)

CERTIFICATE OF SHOP INSPECTION

Boiler constructed by SUPERIOR BOILER WORKS, INC. at HUTCHINSON, KS

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the state or province of Mo. #194 and employed by H.S.B.I. & I. CO.

of HARTFORD, CT have inspected parts of this boiler referred to as data items 6 through 18 and have examined Manufacturers' Partial Data Reports for items -----

and state that, to the best of my knowledge and belief, the manufacturer has constructed this boiler in accordance with the applicable sections of the ASME BOILER AND PRESSURE VESSEL CODE.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the boiler described in this Manufacturers' Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3-4-87 Signed Paul Quinter Commissions NB 8286 (Authorized Inspector) (Nat'l Bd. (incl. endorsements) state, prov. and no.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this boiler conforms with the requirements of SECTION IV of the ASME BOILER AND PRESSURE VESSEL CODE.

"H" Certificate of Authorization no. _____ expires _____, 19 _____.

Date _____ Name _____ Signed _____ (assembler that certified and constructed field assembly) (by representative)

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

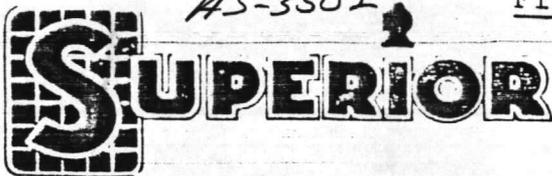
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the state or province of _____ and employed by _____

of _____ have compared statements in this Manufacturers' Data Report with the described boiler and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the manufacturer and/or the assembler has constructed and assembled this boiler in accordance with the applicable sections of the ASME BOILER AND PRESSURE VESSEL CODE.

The described boiler was inspected and subjected to a hydrostatic test of _____ psi.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the boiler described in this Manufacturers' Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____ Signed _____ Commissions _____ (Authorized Inspector) (Nat'l Bd. (incl. endorsements) state, prov. and no.)



AS-3502

FINAL

SALES ORDER NO. 50092 NAT'L BOARD NO. 9994
DATE RECEIVED: 1/27/87 SHIPPING DATE: WK. OF 3/30/87
STATUS: W.A.&R. [] RELEASED [X] DATE:
JOB: Camp Lejeune
Bldg. AS-3502

SOLD TO: Kinston Plbg. & Htg. p.o. no.
P. O. Box 637
Kinston, NC 28502-0637

SUBMITTAL REQ'D: 2 SETS CERTIFIED []

R & D SHEET [X] W.D. [] NUMBER:

DATE REQ'D: MANUALS REQ'D: 9 SETS [] SPARE PARTS LIST - SEND TO:

BOILER: MODEL NO. 3-5.3-75-S15-M
NOMINAL H.P. 14 OUTPUT 468 MBH
DESIGN PRESSURE 15 P.S.I.G. STEAM [X] WATER []
PER A.S.M.E. CODE SECTION IV

NAME PLATE: Osage PAINT: Blue
TURBULATORS: [] COMBUSTION RELIEF DOORS []

STEAM NOZZLE: STD [] SPL []

STACK DAMPER: PLAIN [] W/BEARINGS []

MOTORIZED [] ()

STACK THERMOMETER: (L)

DIA. STEM LGTH. RANGE °F

SAFETY VALVE(S): Kunkle (L)

(1) #740 SIZE 2X2 SET@ 15 PSIG

() SIZE SET@ PSIG

() SIZE SET@ PSIG

WATER COLUMN BLOWDOWN VALVE(S) ()

() TYPE SIZE

FEEDWATER VALVE(S): RS [] LS [] ()

() TYPE SIZE

() TYPE SIZE

MOTORIZED: ON-OFF [] MODULATING [] SOLENOID []

SIZE ()

3-VALVE BY-PASS: ()

() TYPE SIZE

() TYPE SIZE

BLOWDOWN VALVE(S) RS [] LS [] ()

() TYPE SIZE

() TYPE SIZE

SURFACE BLOWDOWN VALVE: RS [] LS [] ()

SIZE

BLENDING PUMPS: ()

SHUT-OFF VALVES TYPE SIZE ()

FLOW SWITCHES ()

SPECIAL INSTRUCTIONS: Burner mounting plate No pressuretrols or
Unit to have rear smoke for GP R6-0-03 junction box.
outlet - horizontal. direct spark.

CONTROL PACKAGE: VOLTAGE

BOILER JUNCTION BOX: N.E.M.A. RS [] LS []

WATER COLUMN: RS [] LS [] W/GAUGE GLASS [X] TRYCOCKS [X] (L)

PRIMARY L.W.C.O.: RS [] LS [] TOP []

MM157 (L)

AUX. L.W.C.O.: RS [] LS [] TOP []

MM47-2 (L)

HIGH WATER: RS [] LS [] TOP []

CUTOFF [] ALARM [] ()

GAUGE: PRESSURE [] W/ GAUGE/TEST COCKS []

TEMPERATURE [] TRIDICATOR [] RANGE

DIAL RANGE (L)

() OPERATOR RANGE ()

() LIMIT RANGE ()

() FIRING RATE RANGE ()

() RANGE ()

() RANGE ()

() RANGE ()

OIL PREHEATER: RS [] LS [] STEAM [] STEAM/ELECTRIC []

ELECTRIC [] WATER/ELECTRIC [] KW VOLTAGE

()

WATER PUMP: H.P. ()

() SHUT-OFF VALVE(S) SIZE ()

TEMP. REG. VALVE RG. SIZE ()

PRESS. RED. VALVE RG. SIZE ()

INLET PRESSURE PSIG DISCHARGE PRESSURE PSIG

TRAP SIZE ()

STRAINER SIZE ()

THERMOMETER RG. SIZE ()

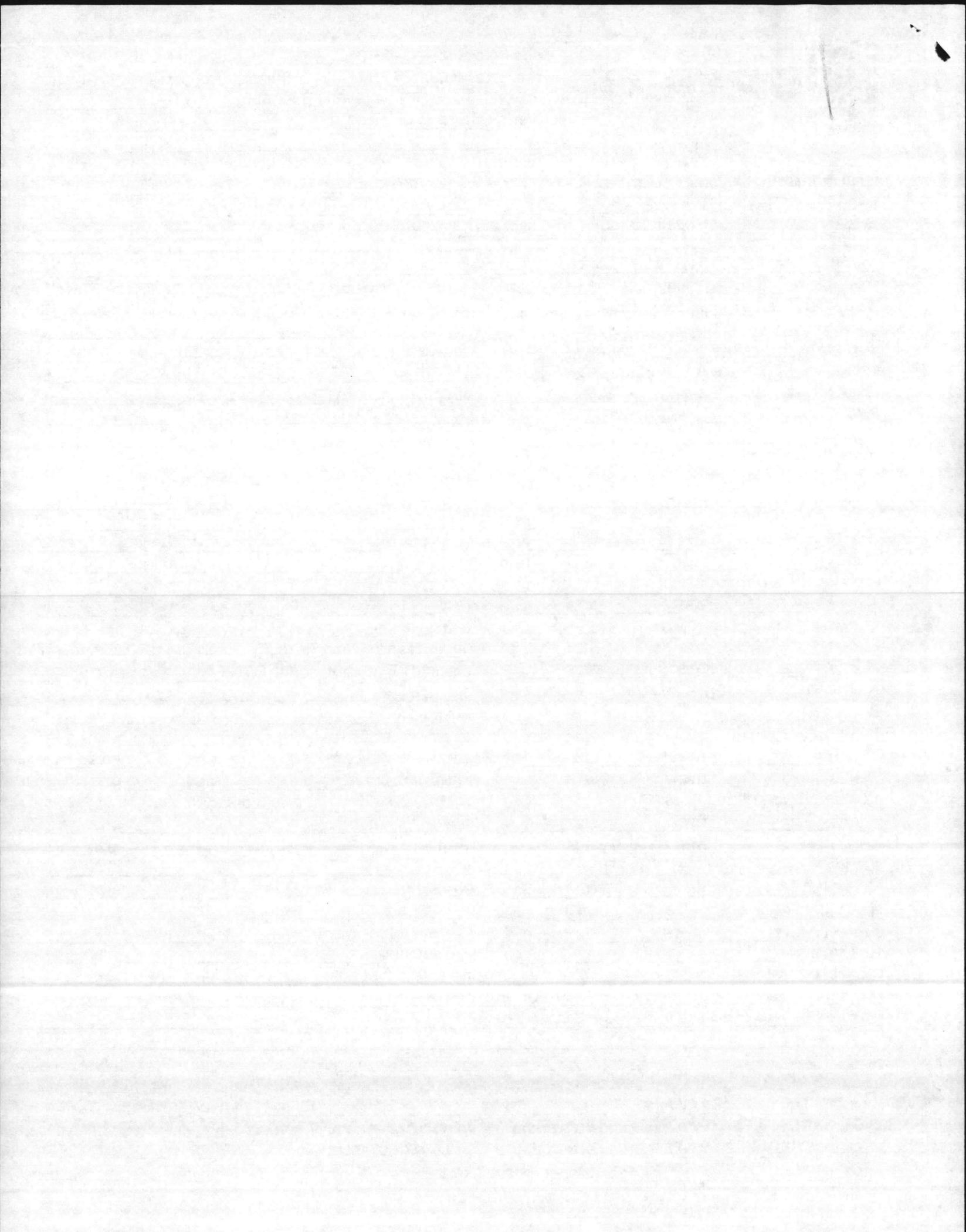
BY-PASS OIL RELIEF VALVE SIZE ()

SET @ PSIG

() OIL PRESS. GAUGE RANGE ()

() OIL STRAINER SIZE ()

Table with columns: COMPLETED BY, DATE, BOILER TO MEET THE FOLLOWING CODES, U.L. LABEL B, REVISIONS, REV., DATE, BY. Includes entries for JER, ALS, TJR and various codes like M, L, P.



BOILER INSPECTION CHECK LIST

LOCATION	BLDG NO.	BOILER NO.	DATE
	AS-3502	8	22 21 OCT. 87
BOILER MFG. <u>SUPERIOR</u>	OPERATING PRESS. <u>10</u>	DESIGN PRESS. <u>15</u>	CAP. <u>482 LB/HR.</u>
SERIAL NO. <u>9994</u>	MODEL NO. <u>3-5 3-75</u>	N.B. NO. <u>9994</u>	
BURNER MFG. <u>GORDON - PIATT</u>	FIRING RATE:		
STEAM GAGE NAME: <u>MARSHALL</u>	PRESS. <u>0-30 UAC</u>	TEST	
SV MFG <u>KUNKLE</u>	MODEL # <u>930-1</u>	CAP <u>3161 LB/HR</u>	NO. <u>1</u> SIZE <u>2"</u>
NO. 1	SET <u>15</u>	OPEN <u>16</u>	CLOSE <u>14</u>
NO. 2	SET	OPEN	CLOSE
NO. 3	SET	OPEN	CLOSE
CO2% <u>11.0</u>	O2% <u>6.0</u>	STACK TEMP. <u>570-450</u>	COIB. EFF. <u>81.5</u> PURGE TIME
NO. 1 FIREYE	C/O <u>OK (3 sec)</u>	<u>L/O</u>	A/L
NO. 2 FIREYE	C/O		A/L
HI-STEAM ^{PRESS} TEMP.	C/O <u>OK @ 10 PSI</u>		A/L
EXCESS STEAM ^{PRESS} TEMP.	C/O <u>OK @ 11.2 MAN-RSET</u>		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 ATOM AIR/STEAM	C/O		A/L
NO. 1 LW	C/O <u>OK</u>		A/L
NO. 2 LW	C/O <u>OK MAN-RSET</u>		A/L
LO FURNACE DRAFT	C/O		A/L
LO FIRE START	C/O		A/L
TYPE OF FUEL	YEAR BUILT <u>1987</u>		A/L
HEAT SURFACE	Boiler <u>75</u>	WATER WALL	
REMARKS:			
1. INSTALL HEAT IN OVER FLOW LINE IN CONDENSATE TANK			
2. PROVIDE A WAY TO SEPERATE SMOKE PASTACK FOR CLEANING.			
3. LOCATION OF BY-PASS VALVE ON LWCA & FEEDER COMBINATION:			

1. AUX - LWCO MCDONNELL MODEL NO. 47-2 - MAX 25 PSI - MAN-RESET
 2. LWCO - MCDONNELL MILLER NO 157 PUMP CONTROL & LWCO
 3. PROGRAMMER - HONEYWELL TYPE R7795
 4. NOZZLE - SIZE 2.5 GPH., HI-FIRE OIL PSI 300 - VACUUM 9"-7
 LO-FIRE OIL PSI 100 - VACUUM 13"-11
- 2.5 X

5. SMOKE TEST ABOUT $1\frac{1}{2}$ ON BACHARACH SMOKE SCALE.

10/21
 FEED PUMP
 OFF - $2\frac{3}{4}$
 ON - $2\frac{1}{4}$
 LWCO #1 - $1\frac{1}{8}$
 AUX FEED - 1
 LWCO #2 - $1\frac{5}{8}$

10/22
 FEED PUMP
 OFF — $2\frac{3}{8}$
 ON — $2\frac{1}{4}$
 AUX — $1\frac{5}{8}$
 LWCO #1 — $1\frac{7}{16}$
 LWCO #2 — $1\frac{3}{8}$

LWCO #2 - $1\frac{1}{16}$ WITH 5 PSI PRESSURE

... GAGE GIVES BOTTOM IS $2\frac{1}{2}$ " ABOVE ...

JOB Camp Lejeune Bldg. A53502

UNIT: Mfr Superior Size 45.3-75

Rated Input _____ MBH _____ GPH# 2 Oil

BURNER: Mod R6-0-03

UL Serial No 5660

COMBUSTION TESTS:

	GAS		OIL	
	HI	LO	HI	LO
CO ₂ -%			<u>11.0</u>	
CO-%/SMOKE-# <u>1 1/2</u>			<u>6.0</u>	
DRAFT: Overfire				
Outlet				
TEMP. Outlet			<u>510</u>	
Room			<u>160</u>	
FUEL PRESSURES:				
Orifice/Nozzle				
Bypass <u>Vacuum</u>			<u>7</u>	<u>11</u>
Atomizing Air				
PUMP: Disch-PSI			<u>300</u>	<u>100</u>
Suct. "Hg				
GAS INLET				
AIR COMP. PSI				
OIL TEMP-Deg. F-Inlet				
Outlet				
INLET LOUVER-"			<u>5/8"</u>	
PRI/SEC AIR-%			<u>2 1/2"</u>	
FLAME SIGNAL			<u>5</u>	<u>5</u>

Stack Height 25' ft. Size _____

Breeching: Size N/A Lgth N/A

DAMPER: Unit-%Open N/A Breeching N/A

Barometric Damper N/A Size N/A

Seq. Draft Control N/A

TANK: Location-Above/Below Burner

Dist. from pump 45' Vert. Lift 6'

Suct. Line Size 1/2 (Copper)/Pipe

COMBUSTION AIR INLET: Size 4' x 4'

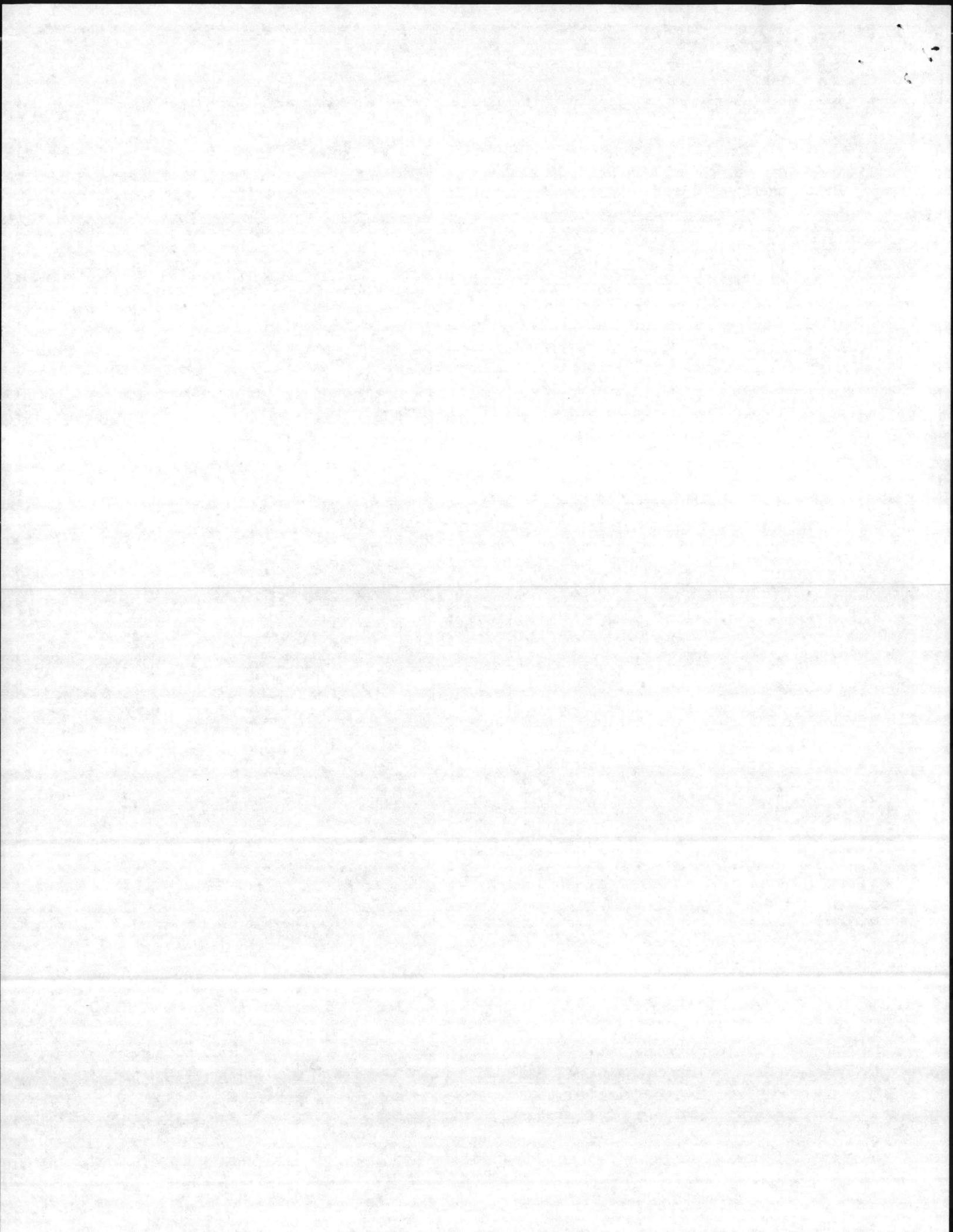
REMARKS oil dirty in tank
filter should be changed
on a regular basis.

Startup by Jim Davis

Owner Ham Linn

Date 6/22/87

Form No. 1210



MFGRS. SERIAL NO. 9994	MFGRS. MODEL NO. 3-5.3-75	MANUFACTURER SUPERIOR	DATE OF SHEET 21 OCT 87
TYPE OF SUPERHEATER	FURNACE VOLUME _____ CU. FT.	OPERATION <input checked="" type="checkbox"/> AUTOMATIC <input type="checkbox"/> SEMI-AUTOMATIC <input type="checkbox"/> MANUAL	USE <input type="checkbox"/> EXPORT <input type="checkbox"/> ELEC. POWER GENERATION <input type="checkbox"/> LAID UP - WET <input type="checkbox"/> LAID UP - DRY HEATING
TEMPERATURE AT SUPERHEATER OUTLET _____ °F	HEATING SURFACE (SQ. FT.) BOILER 75	PRESSURE (psig) DESIGN _____ MAWP 15 INSTALLED WP 10	DATE BUILT 1987 DATE INSTALLED 1987
NORMAL FEEDWATER TEMPERATURE _____ °F	ECONOMIZER _____ SUPERHEATER _____	CAPACITY 14 HP 482 LB./HR EDR _____ BTU/HR. _____	BOILER TYPE <input type="checkbox"/> C.I. <input type="checkbox"/> WATER TUBE <input checked="" type="checkbox"/> FIRE TUBE
(See Reverse Side for Fittings)	DRUMS NO. _____ DIAMETER _____ IN. LENGTH _____ FT. _____ IN. <input type="checkbox"/> RIVETED <input type="checkbox"/> FORGE WELDED <input type="checkbox"/> FUSION WELDED	AIR HEATER <input type="checkbox"/> NONE <input type="checkbox"/> TUBULAR <input type="checkbox"/> REGENERATIVE <input type="checkbox"/> STEAM	DRAFT <input type="checkbox"/> NATURAL <input checked="" type="checkbox"/> FORCED <input type="checkbox"/> INDUCED
			PRODUCES <input checked="" type="checkbox"/> STEAM <input type="checkbox"/> LOW TEMP. WATER <input type="checkbox"/> HIGH TEMP. WATER
			CIRCULATION <input checked="" type="checkbox"/> NATURAL <input type="checkbox"/> FORCED

FUEL	FUEL & FIRING EQUIPMENT IN SERVICE		ALTERNATE FUEL & FIRING EQUIPMENT	
	COAL	OIL	COAL	OIL
	<input type="checkbox"/> ANTHRACITE <input type="checkbox"/> BITUMINOUS	<input checked="" type="checkbox"/> COMMERCIAL 1, 2, 4, 5, 6 <input type="checkbox"/> NAVY <input type="checkbox"/> OTHER _____	<input type="checkbox"/> ANTHRACITE <input type="checkbox"/> BITUMINOUS	<input type="checkbox"/> COMMERCIAL 1, 2, 4, 5, 6 <input type="checkbox"/> NAVY SPECIAL <input type="checkbox"/> OTHER _____
	GAS <input type="checkbox"/> NATURAL <input type="checkbox"/> MANUFACTURED		GAS <input type="checkbox"/> NATURAL <input type="checkbox"/> MANUFACTURED	

FIRING EQUIPMENT	FUEL & FIRING EQUIPMENT IN SERVICE		ALTERNATE FUEL & FIRING EQUIPMENT	
	COAL - STOKER	COAL - PULVERIZER	COAL - STOKER	COAL - PULVERIZER
	<input type="checkbox"/> COAL-HAND FIRED <input type="checkbox"/> UNDERFEED - MULTIPLE RETORT <input type="checkbox"/> UNDERFEED - SINGLE RETORT <input type="checkbox"/> SPREADER - DUMP GRATE <input type="checkbox"/> SPREADER - VIBRATING GRATE <input type="checkbox"/> SPREADER - TRAVELING GRATE <input type="checkbox"/> CHAIN GRATE	<input type="checkbox"/> ATTRITION <input type="checkbox"/> BALL & RACE <input type="checkbox"/> BOWL MILL <input type="checkbox"/> TUBULAR	<input type="checkbox"/> COL-HAND FIRED <input type="checkbox"/> UNDERFEED - MULTIPLE RETORT <input type="checkbox"/> UNDERFEED - SINGLE RETORT <input type="checkbox"/> SPREADER - DUMP GRATE <input type="checkbox"/> SPREADER - VIBRATING GRATE <input type="checkbox"/> SPREADER - TRAVELING GRATE <input type="checkbox"/> CHAIN GRATE	<input type="checkbox"/> ATTRITION <input type="checkbox"/> BALL & RACE <input type="checkbox"/> BOWL MILL <input type="checkbox"/> TUBULAR
	GAS <input type="checkbox"/> GAS RING <input type="checkbox"/> VENTURI TYPE	OIL BURNERS <input type="checkbox"/> MECHANICAL <input type="checkbox"/> STEAM ATOMIZED <input type="checkbox"/> AIR ATOMIZED <input type="checkbox"/> ROTARY CUP	GAS <input type="checkbox"/> GAS RING <input type="checkbox"/> VENTURI TYPE	OIL BURNERS <input type="checkbox"/> MECHANICAL <input type="checkbox"/> STEAM ATOMIZED <input type="checkbox"/> AIR ATOMIZED <input type="checkbox"/> ROTARY CUP

FIRING EQUIPMENT MANUFACTURER GORDON PIATT - MODEL # R6-0-03	PROPERTY NO. 8	BUILDING OR LOCATION AS-3502	ACTIVITY MCAS
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DATA RECORD SHEET - BOILERS
 NAVFAC 9-1101/40 (9-69) Supercedes NAVDOCKS 2509
 S/N 0105-003-7010

BOILER 8

FITTING	NUMBER	SIZE	MANUFACTURER	TYPE	SETTING	RANGE	PRESSURE CLASS
SAFETY VALVES	1	2	KUNKLE		15		
STEAM OUTLET VALVES	1	3"	HAMMOND	GATE			200 WOG #895
BLOW-OFF VALVES	2	1 1/2"	HAMMOND	GATE			200 WOG
FEEDWATER VALVES	1	1 1/2"	HAMMOND	GATE			200 WOG
WATER COLUMN	1	1"	MCDONNELL MILLER	NO-157			150
FEEDWATER REGULATOR	1	1"	MCDONNELL MILLER	NO-157			150
WATER GAGES							
STEAM GAGES	1	3"	MARSHALL TOWN	COMPOUND		0-30 0-30	
SOOT BLOWERS							
FUSIBLE PLUGS							

NOZZLE SIZE 2.5 GPH. = 4.3 GPH @ 300 PSI

N.B. # 9994

PROGRAMMER - HONEYWELL - TYPE R7795