

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by ALLOY FAB, INC., 200 RYAN ST. SO. PLAINFIELD, N.J.
(Name and address of manufacturer)
2. Manufactured for LOCKWOOD GREENE, ATLANTA, GEORGIA
(Name and address of purchaser)
3. Location of installation NORAMCO/GALAXY, ATHENS, GEORGIA
(Name and address)
4. Type VERT. TANK 3022-2 -- D-1838 1872 1987
(Horiz. or vert. tank) (Mfg's serial No.) (CRN) (Drawing) (Nat'l Bd No.) (Year built)
5. 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 Rules, Section VIII, Division 1. 1986
Year
- WINTER 1986 -- --
Addenda (date) Code Case (date) Special service per UG 120(d)

Items 6-11 incl. to be completed for single wall vessels, jackets of jacketed vessels, or sheets of heat exchangers

6. Shell: SA-240-04L .109 -- -- --
Mat'l (Spec No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (Overall) (ft. & in.)
7. Seams: FILLET -- 60 --
Long (Dbl. Sngl.) R.T. (Spot or Full) Eff. (%) H.T. Temp. (F.)
- FILLET -- (9) TURNS @ 9/16"
Time Girth (Dbl. Sngl.) R.T. (Spot, Partial, or Full) No. of Courses
8. Heads: (a) Mat'l. SA-312-304L (b) Mat'l. --
(Spec No., Grade) (Spec No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	BTM.	.120"	--	1.75"	--	--	--	--	--	CONCAVE
(b)										

If removable, bolts used (describe other fastenings) WELDED TO HEAD

(Mat'l. Spec No., Gr., Size No.)

9. Type of Jacket 3" HALF PIPE COIL (3) TURNS @ 4 1/2 Proof Test UG-101(a)
10. Jacket Closure MITER & WELD If bar, give dimensions -- If bolted, describe or sketch.
(Describe as ogee & weld, bar, etc.)
11. MAWP 100 psi at max. temp. 212 °F. Min. temp. (when less than -20°F) -- °F.
Hydro., pneu., or comb. test press. 150 psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: -- -- -- --
Stationary Mat'l (Spec No., Gr.) Diam. (in.) (Subject to pressure) Nom. Thk. (in.) Corr. Allow. (in.) Attach (Welded, Bolted)
- -- -- --
Floating Mat'l (Spec No., Gr.) Diam. (in.) Nom. Thk. (in.) Corr. Allow. (in.) Attach
13. Tubes: -- -- -- --
Mat'l (Spec No., Gr.) O.D. (in.) Nom. Thk. (in. or Gauge) Number Type (Straight or U)

Items 14-17 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers

14. Shell: SA-240-316L .25 -- 5'-0" 6'-1"
Mat'l (Spec No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (Overall) (ft. & in.)
15. Seams: WELDED DBL. BUTT -- 70 --
Long (Dbl. Sngl.) R.T. (Spot or Full) Eff. (%) H.T. Temp. (F.)
- WELDED DBL. BUTT -- 1
Time Girth (Dbl. Sngl.) R.T. (Spot, Partial, or Full) No. of Courses
16. Heads: (a) Mat'l. SA-240-316L (b) Mat'l. --
(Spec No., Grade) (Spec No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	TOP &	.25"	--	60"	3.75"	--	--	--	--	CONCAVE &
(b)	BTM.									CONVEX

If removable, bolts used (describe other fastenings) --

(Mat'l. Spec No., Gr., Size No.)

17. MAWP F.V./15 psi at max. temp. 212 °F. Min. temp. (when less than -20°F) -- °F.
Hydro., pneu., or comb. test press. 23 psi.

Form U-1 (Back)

18. Nozzles, Inspection and Safety Valve Openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Dim. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
MANWAY	1	18"x24"	RING	SA-240-316L	.25"	SA-240-304W/10"	HATCH	TOP HEAD
SIGHT GLASS	2	4"-150#	S.O.	SA312-316L	SCH. 10	--	WELDED	TOP HEAD
PROCESS	1	8"-150#	PAD	SA-240-316L	1.1875"	--	WELDED	--
PROCESS	1	4"-150#	S.O.	SA-312-316L	SCH. 10	--	WELDED	--
PROCESS	2	3"-150#	S.O.	SA-312-316L	SCH. 10	--	WELDED	--
PROCESS	1	3"-150#	PAD	SA-240-316L	1.1875"	--	WELDED	--
PROCESS	6	3"-150#	S.O.	SA-312-304L	SCH. 10	--	WELDED	--
PROCESS	3	1"-3000#C' PLG.		SA-182F-304L	TH'D.	--	WELDED	--
PROCESS	1	2"-150#	PAD	SA-240-316L	1.1875"	--	WELDED	--
PROCESS	1	2"-150#	S.O.	SA-312-316L	SCH. 10	--	WELDED	--
PROCESS	1	1 1/2"-150#	S.O.	SA-312-316L	SCH. 10	--	WELDED	--

19. Supports: Skirt NO Lugs 4 Legs -- Other -- Attached WELDED TO SHELL
(Yes or no) (No) (No) (Describe) (Where and how)

20. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: _____
(Name of part, item number, mfr's name and identifying stamp)

770 GALLON H.P.C.J. CRYSTALLIZER P.O. #GAL-103 EQUIP. # R-510

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

"U" Certificate of Authorization No. 7130 expires JANUARY 31, 1990
 Date 12-22-87 Co. name ALLOY FAB, INC. Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by ALLOY FAB, INC. at SOUTH PLAINFIELD,
 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 NEW JERSEY and employed by COMMERCIAL UNION INSURANCE CO. of BOSTON, MASSACHUSETTS

have inspected the pressure vessel described in this Manufacturer's Data Report on 12-23, 1987, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in the Manufacturer's 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 12-23-87 Signed [Signature] Commissions NB 2739 NJ 286
(Authorized Inspector) (Nat'l Board, State, Province and No.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code.

"U" Certificate of Authorization No. _____ expires _____ 19____
 Date _____ Co. 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 the statements in this Manufacturer's Data Report with the described pressure vessel and state that 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 has constructed and assembled this pressure vessel in accordance with ASME Code, Section VIII, Division 1. The described vessel 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 pressure vessel described in this Manufacturer's 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 Board (incl endorsements), State, Prov., and No.)

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Remarks

This form (E00118) is available from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017