

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS As required by the Provisions of the ASME Code Rules, Section VIII, Division I

1. Manufactured by WESTERN SUPPLY COMPANY, Tulsa, Oklahoma
(Name and address of Manufacturer)

2. Manufactured for Calhoun, Inc.
(Name and address of Purchaser)

3. Type Horizontal Kind Rock Exch. Vessel No. 12966 (Mfrs. Serial) (State & State No.) Natl. Bd. No. 1688 Yr. Built 1970

Items 4-9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of heat exchangers.

4. SHELL: Material SA-240-316L T. S. 90,000 Nominal Thickness 1/8 In. Corrosion Allowance 0 In. Dia. 6.25 Ft. In. Lth. 10 Ft. In.

5. SEAMS: Long Welded H. T. No R. T. Spot Sectioned No Efficiency 85 %
(Welded, Dbl., Single, Lap, Butt) (Yes or No.) (Spot or Complete) (Yes or No.)

Girth Welded H. T. No R. T. Spot Sectioned No No. of Courses 2

6. HEADS (a) Material SA-240-316L T. S. 90,000 (b) Material SA-240-316L T. S. 90,000
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure (Convex or Concave)

(a) Top, bottom, ends 1/8 0 0 0 0 0 0 0 0 0 0

(b) Channel 1/8 0 0 0 0 0 0 0 0 0 0

If removable, bolts used SA-240-316L Other fastening None
(Material, Spec. No., T. S., Size, Number) (Describe or Attach Sketch)

7. STAYBOLTS: SA-240-316L If hollow No Attachment Threaded Pitch 12 X 1/2 Diam. 1/2
(Material) (Size of Hole) (Threaded, Welded) (Horiz.) (Vert.) (Nominal)

8. JACKET CLOSURE: None
(Describe as ogee & weld, bar, etc. If bar, give dimensions, if bolted, describe or sketch)

9. Constructed for max. allowable working press² 150 psi at max. temp. 400 °F. less than -20° 0 °F. Min. temp. (when Hydrostatic or Pneumatic or Combination Test Press. 150 psi.

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA-240-316L Diam. 1.315 In. Thickness 1/8 In. Attachment Welded
(Kind & Spec. No.) (Subject to Pressure) (Welded, Bolted)

Floating. Material SA-240-316L Diam. 1.315 In. Thickness 1/8 In. Attachment Welded
(Kind & Spec. No.)

11. TUBES: Material SA-240-316L O. D. 1.315 In. Thickness 1/8 In. For Gage Number 2446 Type Seamless
(Kind & Spec. No.) (Straight or U)

Items 12-15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

12. SHELL Material SA-240-316L T. S. 90,000 Nominal Thickness 1/8 In. Corrosion Allowance 0 In. Dia. 6.25 Ft. In. Lth. 10 Ft. In.

13. SEAMS: Long Welded H. T. No R. T. Spot Sectioned No Efficiency 85 %
(Welded, Dbl., Single, Lap, Butt) (Yes or No.) (Spot or Complete) (Yes or No.)

Girth Welded H. T. No R. T. Spot Sectioned No No. of courses 2

14. HEADS (a) Material SA-240-316L T. S. 90,000 (b) Material SA-240-316L T. S. 90,000 (c) Material SA-240-316L T. S. 90,000
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure (Convex or Concave)

(a) Top, bottom, ends 1/8 0 0 0 0 0 0 0 0 0 0

(b) Channel 1/8 0 0 0 0 0 0 0 0 0 0

(c) Floating 1/8 0 0 0 0 0 0 0 0 0 0

If removable, bolts used (a) SA-240-316L (b) SA-240-316L
(Material, Spec. No., T. S., Size, Number) (Describe or Attach Sketch)

(c) None Other fastening None
(Describe or Attach Sketch)

15. Constructed for max. allowable working press² 150 psi at max. temp. 400 °F. less than -20° 0 °F. Min. temp. (when Hydrostatic or Pneumatic or Combination Test Press. 150 psi.

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number 1 Size 1/2 Location Top

FORM U-1 (back)

17. NOZZLES

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Steam Inlet	1	2"	Flange	SA-106-B	3/16"	None	Welded
Water Inlet	2	2"	Flange	SA-106-B	3/16"	None	Welded

18. INSPECTION Manholes, No. _____ Size _____ Location _____
 OPENINGS: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____
 19. SUPPORTS: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
 (Yes or No) (Number) (Number) (Describe) (Where & How)

20. REMARKS: _____

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooler, etc. State contents of each part.)

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 I.

Date _____ 19____ Signed WESTERN SUPPLY COMPANY By _____
 (Manufacturer)

Certificate of Authorization Expires December 31, 1970

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY WESTERN SUPPLY COMPANY at Tulsa, Oklahoma

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or The State or Province N.B. and employed by EMPLOYERS COMMERCIAL INSURANCE CO. of AMERICA have inspected the pressure vessel described in this manufacturer's data report on _____ 19____, and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel 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 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 _____ 19____

 Inspector's Signature Commissions _____ Nat'l Board or State and No.

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 _____ 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 the applicable sections of the ASME Boiler and Pressure Vessel Code. 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 _____ 19____

 Inspector's Signature Commissions _____ Nat'l Board or State and No.

FORM R-1 REPORT OF REPAIR

HE-300

in accordance with provisions of the National Board Inspection Code

1. Work performed by Munroe, Inc. (name of repair organization) (Form R No.)
12 Century Drive, Ambridge, PA 15003 SO# 19567 (address) (P.O. No. Job No. etc.)

2. Owner Sunoco Chemicals (name)
1019 Haverhill-Ohio Furnace Road, Haverhill, OH 45636 (address)

3. Location of installation Sunoco Chemicals (name)
200 Neville Road, Pittsburgh, PA 15225 (address)

4. Unit identification Heat exchanger Name of original manufacturer Western Supply Company
(boiler, pressure vessel)

5. Identifying nos.: 12548 3698 --- --- 1970
(mfg serial no.) (National Board No.) (jurisdiction no.) (other) (year built)

6. NBIC Edition/Addenda: 2001 edition 2001 addenda
(edition) (addenda)

Original Code of Construction for Item: ASME Section VIII, Division I
(name/section/division) (edition/addenda)

Construction Code Used for Repair Performed: ASME Section VIII, Division I 2001 edition / 2002 addenda
(name/section/division) (edition/addenda)

7. Repair Type: ☒ Welded ☐ Graphite Pressure Equipment ☐ FRP Pressure Equipment

8. Description of work: (use supplemental sheet Form R-4, if necessary)
Repaired the inside of (2) SA-515 channel heads by pad welding 10 to 12 wasted areas approximately 1 square inch each. Welding was performed by operators qualified to Munroe's WPS SM-13. NDE and PWHT was neither performed nor required.

Pressure Test, if applied --- psi MAWP: 25 shell/ 100 tube psi

9. Replacement Parts: Attached are Manufacturer's Partial Data Reports or Form R-3s properly completed for the following items of this report:

(name of part, item number, data report type, mfg's name and identifying stamp)

10. Remarks:
Routine repair

CERTIFICATE OF COMPLIANCE

I, Lance Oros, certify that to the best of my knowledge and belief the statements in this report are correct and that all material, construction, and workmanship on this Repair conforms to the National Board Inspection Code.

National Board 'R' Certificate of Authorization No. 403 expires on 2/17/05.

Date 7/28/03 Munroe, Inc.

(name of repair organization)

Signed

Lance Oros
(authorized representative)

CERTIFICATE OF INSPECTION

I, Kimberly Wolfgang, holding a valid Commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of PA and employed by HSB CT of Hartford, CT have inspected the work described in this report on 8-12-03 and state that to the best of my knowledge and belief this work complies with the applicable requirements of the National Board Inspection Code.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date 8-12-03

Signed

Kimberly D. Wolfgang
(inspector)

Commissions

NB11144 PA2714

(National Board and jurisdiction, and no.)