

# FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

as required by the provisions of the ASME Code rules, Section VIII, Division 1

1/3

#103351

1. Manufactured and certified by OHMSTEDE, INC. - LAPORTE PLANT 12415 LAPORTE RD. LAPORTE, TX 77571  
(name and address of manufacturer)
2. Manufactured for M.W. KELLOGG / TENNECO OIL CO. P.O. BOX 1307 LAPORTE, TX 77572-1307  
(name and address of purchaser)
3. Location of installation TENNECO OIL CO. 1200 N. BROADWAY LAPORTE, TX 77571  
(name and address)
4. Type: HORIZ. HT. EXCH. 28393 N/A 28393 164 1991  
(horiz. or vert. tank) (infr. serial no.) (CRN) (drawing no.) (Mat'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 Code, Section VIII, Division 1: 1989  
(year)

1989 A  
(addenda (Date))

N/A  
(Code Case no.)

N/A  
(special service per UG-120(d))

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

6. Shell: SA516-70N 3/4" 1/8" 3' - 3" 16' - 11 15/16"  
(mat'l (spec. no., grade)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))
7. Seams: DBL-BUTT SPOT 85% N/A N/A DBL-BUTT SPOT 2  
(long (dbl., singl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (girth (dbl., singl.)) (RT (spot, partial, or full)) (no. of courses)
8. Heads: (a) SA516-70N (b) N/A  
(mat'l (spec. no., grade)) (mat'l (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)	END	3/4"	1/8"			2:1				CONCAVE
(b)	N/A									

If removable, bolts used (describe other fastenings): N/A

(mat'l. spec. no., gr., size, no.)

9. Type of jacket: N/A Proof test: \_\_\_\_\_
10. Jacket closure: N/A If bar, give dimensions: \_\_\_\_\_ If bolted, describe or sketch: \_\_\_\_\_  
(describe as edge & weld bar, etc.)

11. MAWP: 390 at max. temp. 650° Min design metal temp.: 10° at 390 Hydro. XXXXXXX test pressure 585  
(psi) (°F) (°F) (psi)

Items 12 and 13 to be completed for tube sections

12. Tubesheets: SA350-LF2 38 7/8" 4 1/8" 1/8" BOLTED  
(stationary mat'l (spec. no., gr.)) (dia. (in.) (subject to pressure)) (nom. thickness (in.)) (corr. allow. (in.)) (attachment (welded, bolted))
- N/A  
(floating mat'l (spec. no., gr.)) (dia. (in.)) (nom. thickness (in.)) (corr. allow. (in.)) (attachment)
13. Tubes: SA214 3/4" .083" (MW) 439 U  
(mat'l (spec. no., gr.)) (OD (in.)) (nom. thickness (in. or gauge)) (no.) (type (straight or U))

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

14. Shell: SA516-70 1/2" 1/8" 3' - 3" 1' - 11"  
(mat'l (spec. no., gr.)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))
15. Seams: DBL-BUTT SPOT 85% N/A N/A DBL-BUTT SPOT 1  
(long (dbl., singl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (girth (dbl., singl.)) (RT (spot, partial, or full)) (no. of courses)
16. Heads: (a) SA516-70 (b) N/A  
(mat'l (spec. no., grade)) (mat'l (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)	END	1/2"	1/8"			2:1				CONCAVE
(b)										

If removable, bolts used (describe other fastenings): (56) 7/8" SA193-B7 STUDS WITH (2) SA194-2H NUTS EACH.

(mat'l. spec. no., gr., size, no.)

17. MAWP: 278 at max. temp. 650° Min design metal temp.: 10° at 278 Hydro. XXXXXXX test pressure 417  
(psi) (°F) (°F) (psi)



18. Nozzles, inspection and safety valve openings: PER UG 125 NOTE 39

[illegible]

19. Supports: Skirt NO Lugs 2 Legs NO Other (2) HORIZ. SUPPORTS Attached WELDED TO SHELL  
(yes or no) (no) (no) (describe) (where and how)

20. **Remarks:** Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: MINIMUM DESIGN METAL TEMPERATURE PER UC20  
(name of part, item number, mfr's name and identifying stamp)

ROLLED AND WELDED CYLINDERS MANUFACTURED BY OHMSTEDE, INC. - LAKE CHARLES PLANT UNDER  
AUTHORIZATION # 17397 AND SERIAL #'S: 28393-1 AND 28393-2  
CUSTOMER ITEM # 06E-115

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. 18673 expires JUNE 27, 19 92

Date 9-30-91 Name OHMSTEDE, INC. - LAPORTE

Signed  J. Edgar Hoover

Vessel constructed by OHMSTEDE, INC. - LAPORTE PLANT at LAPORTE, TX

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or prov-  
ince of TEXAS and employed by H. S. B. I. & I. CO.

Report on 9-30 19 91 of HARTFORD, CT have inspected the pressure vessel described in this Manufacturers Data 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 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 9-30-91 Signed E. Smith (Authorized Inspector) Commissions NB 9263

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 \_\_\_\_\_ Name \_\_\_\_\_ (assembler that certified and constructed field assembly) Signed \_\_\_\_\_ (representative)

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

\_\_\_\_\_ of \_\_\_\_\_ have compared the statements in this Manufacturers' Data Report with the described pressure vessel and state that parts referred to as data items \_\_\_\_\_, not included in the

Report with the described pressure vessel and state that particular vessel is 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 the 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 \_\_\_\_\_ (Authorized Inspector) Commissions \_\_\_\_\_ (Nat'l. Bd. (incl. endorsements) state *perm* *test* *reg*)



FORM U-2A MANUFACTURERS' PARTIAL DATA REPORT (ALTERNATIVE FORM)  
A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer  
as required by the provisions of the ASME Code rules, Section VIII, Division 1

NBH 16/7/94  
J. H. C. S. 1/3

1. Manufactured and certified by Ohmstede, Inc., Lake Charles Plant, Sulphur, LA 70669  
(name and address of manufacturer)

2. Manufactured for Ohmstede, Inc., LaPorte Plant, 12415 LaPorte Rd., LaPorte, TX 77572  
(name and address of purchaser)

3. Location of Installation Unknown  
(name and address)

4. Type: Unknown 28393 - 1 --- 28393 Sh R-0 --- 1991  
( horiz. or vert., tank) (mfr's. serial no. of part) (CRN) (drawing no.) (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 construction, and workmanship conform to ASME Code, Section VIII, Division 1: 1989  
A 90 --- ---  
(addenda (date)) (Code Case no.) (special service per UG-120(d))

6. (a) Drawing prepared by Ohmstede, Inc. (b) Description of part inspected Cylinder

7. Postweld heat treatment: temperature --- °F. Time ---

8. Shell: SA 516-70N 3/4" Unknown 3'-3" 16'-11 15/16" 2  
(mat'l. spec. no., grade) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.)) (no. of courses)

9. Seams: Dbl Butt spot 85 Dbl Butt spot  
(long.) (RT) (eff. (%)) (girth) (RT)

10. Heads: (a) --- (b) ---  
(mat'l. spec. no., grade) (mat'l. 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)										
(b)										

If removable, bolts used (describe other fastenings): ---  
(mat'l. spec. no., gr., size, no.)

11. MAWP --- at max. temp. --- Min. design metal temp.: --- at --- Test press.: --- in the ---  
(psi) (°F) (°F) (psi) (hydro, pneu., or comb. (psi)) (position)

12. Nozzles and inspection openings:

Purpose (inlet, outlet, drain, etc.)	Number	Dia. or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached	Location

13. Supports: Skirt --- Lugs --- Legs --- Other --- Attached ---

14. Remarks: Design data by others

Item #10 through #13 are non-applicable

Formed in accordance with UCS 79(d)

PO# 204507  
**MILL TEST REPORT**  
Job-28393 Kellars, Hennes  
Insp  
QCM 7/23/91

CERTIFICATE OF SHOP COMPLIANCE

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

"U" Certificate of Authorization no. 17,397 expires June 4, 1994  
Date 7-12-91 Name Ohmstede, Inc. Signed ---  
(manufacturer) (representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of Louisiana and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the pressure vessel part described in this Manufacturers' Data Report on 7-12, 1991

and state that to the best of my knowledge and belief, the manufacturer has constructed this part of a pressure vessel in accordance with the 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 part described in the 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 7-12, 1991 Signed Paul E. Muntz Commissions LA-1148  
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements); state, prov. and no.)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43226



**FORM U-2A MANUFACTURERS' PARTIAL DATA REPORT (ALTERNATIVE FORM)**  
**A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer**  
as required by the provisions of the ASME Code rules, Section VIII, Division 1

3201 Swisco Rd.  
#1A  
W.B.H. (uncy) 3/3

1. Manufactured and certified by Ohmstede, Inc., Lake Charles Plant, Sulphur, LA 70669  
(name and address of manufacturer)

2. Manufactured for Ohmstede, Inc., LaPorte Plant, 12415 LaPorte Rd., LaPorte, TX 77572  
(name and address of purchaser)

3. Location of Installation Unknown  
(name and address)

4. Type: Unknown 28393 - 2 --- 28393 R-0 --- 1991  
(honz. or vert. tank) (mfr's. serial no. of part) (CRN) (drawing no.) (Mat'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 construction, and workmanship conform to ASME Code, Section VIII, Division 1: 1989  
A 90 --- ---  
(addenda (date)) (Code Case no.) (special service per UG-120(d))

6. (a) Drawing prepared by Ohmstede, Inc. (b) Description of part inspected Cylinder

7. Postweld heat treatment: temperature --- °F. Time ---

8. Shell: SA 516-70 1/2" Unknown 3' - 3" 1' - 11" 1  
(mat'l. (spec. no., grade)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.)) (no. of courses)

9. Seams: Dbl Butt spot 85 --- ---  
(long.) (RT) (eff. (%)) (girth) (RT)

10. Heads: (a) --- (b) ---  
(mat'l. (spec. no., grade)) (mat'l. (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)										
(b)										

If removable, bolts used (describe other fastenings): ---  
(mat'l. spec. no., gr., size, no.)

11. MAWP --- at max. temp. --- Min. design metal temp.: --- at --- Test press.: --- in the ---  
(psi) (°F) (°F) (psi) (hydro, pneu., or comb. (psi)) (position)

12. Nozzles and inspection openings:

Purpose (inlet, outlet, drain, etc.)	Number	Dia. or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached	Location

13. Supports: Skirt --- Lugs --- Legs --- Other --- Attached ---

14. Remarks: Design data by others  
Item #10 through #13 are non-applicable  
Formed in accordance with UCS 79(d)  
28393 mmtelleg  
7/23/91

**CERTIFICATE OF SHOP COMPLIANCE**

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

"U" Certificate of Authorization no. 17,397 expires June 1, 1994

Date 7-12-91 Name Ohmstede, Inc. Signed [Signature]  
(manufacturer) (representative)

**CERTIFICATE OF SHOP INSPECTION**

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of Louisiana and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the pressure vessel part described in this Manufacturers' Data Report on 7-12, 1991 and state that to the best of my knowledge and belief, the manufacturer has constructed this part of a pressure vessel in accordance with the 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 part described in the 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 7-12 19 91 Signed Fred R. Memmelle Commissions LA-1148  
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) state, prov. and no.)