

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by NORTHLAND STAINLESS, INC., 1119A BRIDGE STREET, TOMAHAWK, WISCONSIN 54487
(Name and address of manufacturer)

2. Manufactured for Eli Lilly and Company, 1650 Lilly Rd, Lafayette, IN 47909 P.O.# 4900053607
(Name and address of purchaser)

3. Location of Installation Unknown
(Name and address)

4. Type: Vertical Tank 03-16726 16726, ID 3392 2003
(Horiz. or vert. tank) (Mfg's serial No.) (CRN) (Drawing no.) (Natl 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 2001
Year

6. Shell: A02 8A-240 316 .375 3'-11 1/4" 2'-5 1/4"
(Addenda (Date)) (Code Case No.) (Spec. No., Grade) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (overall) (ft. & in.))

7. Seams: Welded Single Butt 70 Welded Double Butt 1
(Long. (Welded, Dbl., Sngl., Lap, Butt)) (R.T. (Spot or Full)) (Ext. (%) (H.T. Temp. (°F)) (Tens (ksi)) (Girth (Welded, Dbl., Sngl., Lap, Butt)) (R.T. (Spot, Partial, or Full)) (No. of Courses

8. Heads: (a) 8A-240 316 .375" Nom. (b) 8A-240 316 .375" Nom.
(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	Flare Diameter	Stitch to Pressure (Convex or Concave)
(a)	TOP	.310	0	38.4	5	-	-	-	-	Convex & Concave
(b)	BOTTOM	.335	0	-	3	-	61	-	-	Convex & Concave

If removable, bolts used (describe other fastenings)

9. MAWP 150/15 External 450 °F
Min. design metal temp. -20 °F at 150/15 psi Hydro. 199 psi

10. Nozzles, inspection and safety valve openings: Over pressure protection device supplied by others

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
Mainway	1	18.25 I.D.	Custom	SA-240 316	.375	SA-240 316	Welded	Top Head
Lift, Spray, Press.	3	3	150#SO	SA-312 316	SCH 40	None	Welded	-
Site, Airt, Rupt.	3	4	150#SO	SA-312 316	SCH 40	None	Welded	-
Sightglass	1	4 I.D.	Pad Plg	SA-240 316	1.5	None	Welded	-

11. Supports: Skirt - Lugs 4 Legs - Other - Attached Shell, Welded
(Yes or no) (No) (No) (Describe) (Where and how)

12. 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, Mfg's name and identifying stamp)

Additional Nozzles, Item 10: Outlet 1 10 150#SO SA-312 316 SCH 40 None Welded --

Nitrogen In 1 2 150#SO SA-312 316 SCH 40 None Welded --

All Material of Construction is Dual Certified 316/316L, Item 9: Impact Test Exemption per UHA-51. Radiograph - None; Top Head Ipe, Ex-85

CERTIFICATE OF SHOP / FIELD 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. <u>12346</u> expires <u>8/28/2004</u>			
Date <u>10-24-03</u>	Co. Name <u>NORTHLAND STAINLESS, INC.</u>	Signed <u>[Signature]</u>	(Representative)
CERTIFICATE OF SHOP / FIELD INSPECTION			
Vessel constructed by <u>NORTHLAND STAINLESS, INC.</u> at <u>1119A BRIDGE STREET TOMAHAWK, WISCONSIN 54487</u>			
I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Wisconsin</u> and employed by <u>Hartford Steam Boiler of CT</u> have inspected			
the component described in this Manufacturer's Data Report on <u>OCT 14, 2003</u> , 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 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 <u>10-24-03</u>	Signed <u>[Signature]</u>	Commission <u>UBI 1988165</u>	(Natl Board, (incl. endorsements) State, Prov. and No.)