

WC-8822  
Job No.

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 Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by **Ward Tank & Heat Exchanger Corp., 6670 E. Harris Blvd., Charlotte, North Carolina, 28215**  
(Name and address of manufacturer)
2. Manufactured for **Invista, El Paso, Texas, 79998-2253**  
(Name and address of purchaser)
3. Location of Installation **Invista, 12455 Strang Road, LaPorte, Texas, 77571**  
(Name and address)
4. Type **Vertical** **WC-8822** **N/A** **2013-WC-8822 Rev. 1** **4858** **2014**  
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (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 **2010** to **2011**  
(year) (Addenda, if applicable (Date))
- N/A** **N/A**  
(Code Case numbers) (Special Service per UG-120(d))
6. Shell: **SA240 S31803/S32205** **.375"** **.062"** **6' (ID)** **20'**  
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) (Length (overall))
7. Seams: **1** **Spot** **85%** **N/A** **N/A** **1,3** **Spot** **85%** **3**  
(Long. welded, dbl., sngl., lap, butt) R.T. (Spot or Full) Eff. (%) (H.T. temp) Time (hr) (Girth. welded, dbl., sngl., lap, R.T. (spot or full) Eff. (%) No. of Courses
8. Heads: (a) Material **SA240 S31803/S32205** (b) Material **SA240 S31803/S32205**  
(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"	.062"	N/A	N/A	2:1	N/A	N/A	N/A	Concave
(b)	Bottom	.25"	.062"	N/A	N/A	2:1	N/A	N/A	N/A	Concave

If removable, bolts used (describe other fastenings)

9. MAWP **100 psi** **N/A** at max. temp. **300 °F** **300 °F**  
(Internal) (External) (Internal) (External)
- Min. design metal temp. **-20 °F** at **100 psi** Hydro, pneu., or comb. test pressure **HYDRO at 135 psi**
- Proof test **N/A**

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Drain, Level	3	2"	150# RFLWN	SA182 F51	---	.530"	.062"		Welded	---	Shell
Vent	1	8"	150# LJ	SA790 S31803/S32205	SA105 Galv.	.322"	.062"	SA240 S31803/S32205	Welded	---	Shell
Manway w/blind & davit	1	24"	150# LJ	SA240 S31803/S32205	SA105 Galv.	.375"	.062"		Welded	---	Shell
Temp.	1	1.5"	150# RFLWN	SA182 F51	---	.560"	.062"		Welded	---	Head
Liquid outlet w/vortex breaker	1	16"	150# LJ	SA240 S31803/S32205	SA105 Galv.	.375"	.062"	SA240 S31803/S32205	Welded	---	Head
Vapor Inlet	1	20"	150# LJ	SA240 S31803/S32205	SA105 Galv.	.375"	.062"		Welded	---	Shell

Additional Nozzles - See Attached U-4...

11. Supports: Skirt **No** Lugs **2** Legs **N/A** Other **N/A** Attached **Shell/Welded**  
(Yes or no) (Number) (Number) (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:

**N/A**

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

**The customer is responsible for the pressure relief device as per UG-125a.**

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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. **18365** expires **February 17, 2014**

Date **02/21/2014** Co. name **Ward Tank & Heat Exchanger Corp.** Signed **[Signature]**  
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by **Ward Tank & Heat Exchanger Corp.** at **6670 E. Harris Blvd., Charlotte, North Carolina, 28215**, I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province **NC** and employed by **HSB Global Standards, of Hartford, CT** have inspected the component described in this Manufacturer's Data Report on **February 21, 2014** and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her 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 **02/21/2014** Signed **[Signature]** Commissions **10652AB, NC1206**  
(Authorized Inspector) (National Board (incl. endorsements), State, Province and number)



WC-8822  
Job No.

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Ward Tank & Heat Exchanger Corp., 6670 E. Harris Blvd., Charlotte, North Carolina, 28215  
(Name and address of Manufacturer)

2. Manufactured for Invista, El Pasco, Texas, 79998-2253  
(Name and address of Purchaser)

3. Location of installation Invista, 12455 Strang Road, LaPorte, Texas, 77571  
(Name and address)

4. Type Vertical N/A WC-8822  
(Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Manufacturer's serial number)

N/A 2013-WC-8822 Rev. 1 4858 2014  
(CRN) (Drawing number) (National Board number) (Year built)


Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Liquid Inlet	1	14"	150# LJ	SA240 S31893/S32205	SA105Galv.	.5"	.062"		Welded	---	Shell

Certificate of Authorization: Type "U" No. 18365

Date 02/21/2014 Name Ward Tank & Heat Exchanger Corp.  
(Manufacturer)

Date 02/21/2014 Name  Commissions:  
(Authorized Inspector)

Expires February 17, 2014

Signed   
(Representative)

10652AB, NC1206  
(National Board (incl. endorsements))