

## FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

Additional Drawing No.

(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)

Header Volume (cu.ft.)

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

1. Manufactured and certified by Air-X-Changers, A Harsco Company, 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA

(Name and address of manufacturer)

2. Manufactured for VALERUS, ATTN: ACCOUNTS PAYABLE, 919 MILAM, SUITE 1000, HOUSTON, TX, 77002-5386, USA

(Name and address of purchaser)

3. Location of Installation UNKNOWN

(Name and address)

4. Type Heat Exchanger 090317.3 N/A HDR-3, REV0 66844 2009  
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing No.) (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 2007 to A08N/A

(Code Case numbers)

N/A

(Special Service per UG-120(d))

(year)

[Addenda (Date)]

6. Shell: SA516 70(N) 2 in 0 in N/A N/A  
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) [Length (overall)]7. Seams: Corner Joint N/A C=.20 N/A N/A N/A N/A N/A N/A N/A  
[Long. (welded, dbl., singl., lap, butt)] R.T. (Spot or Full) Eff. (%) (H.T. temp) Time (hr) [Girth. (welded, dbl., singl., lap, butt)] [R.T. (spot or full)] Eff. (%) No. of Courses8. Heads: (a) Material SA516 70(N) (b) Material SA516 70(N)  
(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, BTM	1.375"	0	N/A	N/A	N/A	N/A	N/A	7.5" x 93.5"	N/A
(b)	ENDS	1.125"	0	N/A	N/A	N/A	N/A	N/A	7.5" x 9.375"	N/A

If removable, bolts used (describe other fastenings)

N/A

(Material, spec. number, grade, size, number)

9. MAWP 1440 psi N/A at max. temp. 350 °F N/A  
(Internal) (External) (Internal) (External)Min. design metal temp. -10 °F at 1440 psi Hydro, pneu., or comb. test pressure HYDRO. at 1872 psi

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	Number	Diameter or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached	Location
IN/OUT	2	8"	900# RFWN	SA105/SA106 GR.B	SCH-80	Weld	Welded	Header
AUX	1	3"	900# RFWN	SA105/SA106 GR.B	SCH-80	Weld	Welded	Header
DRAIN	1	0.75"	CPLG	SA105	6000#	Weld	Welded	Header

11. Supports: Skirt NO Lugs N/A Legs N/A Other Structure Attached Bolted  
(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)

Line 6 - -Tube and Plug Dimensions OR Header Dimensions: 12.1250" X 2.0" X 7' 9.5000"Straight length of tubes, OR, Distance between the headers: 34' 0.0"(A) TUBES: 203 x 1" OD, Gauge: 16BWG, Material: SA214 Rolled Tube Sheet (B) INSP. OPENINGS: 406,Type: 1-1/8X12UNF-Threaded, Material: SA105 (C) IMPACT REQUIREMENTS: PIPE AND FLANGE IMPACTAdditional Remarks - See Attached U-4...

## 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. 4241 expires December 31, 2011Date 07/02/2009

Co. name

Air-X-Changers, A Harsco Company

(Manufacturer)

Signed

Irish Lowe  
(Representative)

## CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Air-X-Changers, A Harsco Company at 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province OK and employed by OneBeacon America Insurance Co., of Lynn, MA have inspected the component described in this Manufacturer's Data Report on June 25, 2009 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 07/02/2009

Signed

[Signature]  
(Authorized Inspector)

Commissions

11672A, OK765

(National Board (incl. endorsements), State, Province and number)

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 <u>Air-X-Changers, A Harsco Company, 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA</u>			
(Name and address of Manufacturer)			
2. Manufactured for <u>VALERUS, ATTN: ACCOUNTS PAYABLE, 919 MILAM, SUITE 1000, HOUSTON, TX, 77002-5386, USA</u>			
(Name and address of Purchaser)			
3. Location of installation <u>UNKNOWN</u>			
(Name and address)			
4. Type	<u>Heat Exchanger</u>	<u>N/A</u>	<u>090317.3</u>
	(Horizontal, vertical, or sphere)	(Tank, separator, heat exch., etc.)	(Manufacturer's serial number)
	<u>N/A</u>	<u>HDR-3, REV0</u>	<u>66844</u>
	(CRN)	(Drawing number)	(National Board number)
	<u>2009</u>		
	(Year built)		
Data Report Item Number	Remarks		

Additional Remarks:

EXEMPT PER: UG-20(F). PLATE: IMPACT EXEMPT PER: UCS-66(a) & FIG. UCS-66 CURVE D. Constructed in conformance with Appendix 28.

Certificate of Authorization: Type <u>"U"</u>		No. <u>4241</u>	Expires <u>December 31, 2011</u>
Date <u>07/02/2009</u>	Name <u>Air-X-Changers, A Harsco Company</u>	Signed <u>Irish Lowe</u>	(representative)
	(Manufacturer)		
Date <u>07/02/2009</u>	Signed <u>[Signature]</u>	Commissions <u>11672A, OK765</u>	(National Board Authorized Inspector Commission number)
	(National Board Inspector)		