WC-8068A
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

1-12806
FL-0001R

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 BHS Filtration, 9123 - 445 Monroe Road, Charlotte, North Carolina, 28270
(Name and address of purchaser)

3. Location of Installation BHS Filtration, 700 Sam Newell Road, Matthews, North Carolina, 28106
(Name and address)

4. Type						
Vertical	WC-8068 A	N/A	2011-WC-8068 Rev. 1	4465	2011	
(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 (year) to N/A [Addenda, if applicable (Date)]

N/A (Code Case numbers) N/A (Special Service per UG-120(d))

6. Shell:				
SA240 T316/316L	.375"	0 in	5' 6" (ID)	11' 11.50"
(Material spec. number, grade)	(Nominal thickness)	(Corr. allow.)	(Inner diameter)	[Length (overall)]

7. Seams:									
A-1 Welded, Double	Spot	85	N/A	N/A	B-1 Welded, Double	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 T316/316L (Spec. no., grade) (b) Material SA240 T316/316L (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	.3114"	0	53"	6.5"	N/A	N/A	N/A	N/A	Concave
(b)	Bottom	.3725"	0	N/A	N/A	N/A	60	N/A	N/A	Concave

If removable, bolts used (describe other fastenings) (72) 7/8" x 14" Studs SA193 B7, (144) 7/8" Nuts SA194 2H.
(Material spec. number, grade, size, number)

9. MAWP 150 psi (Internal) 15 psi (External) at max. temp. 350 °F (Internal) N/A (External)

Min. design metal temp. -20 °F at FV/150 . Hydro, pneu., or comb. test pressure HYDRO at 195 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	
Sightglasses	2	4"	150# Pad	SA240 T316/316L	---	1.5"	0	N/A	Welded	N/A	Shell
Vent/Filtrate out	2	6"	150# RFSO	SA312 T316/316L	SA182 F316/316L	S80	0	N/A	Welded	Welded	Head,Shell
Slurry Feed	1	6"	150# RFSO	SA312 T316/316L	SA182 F316/316L	S40s	0	SA240 T310/304L	Welded	Welded	Head
Process	8	2"-8"	150# RFSO	SA312 T316/316L	SA182 F316/316L	S40s	0	N.A	Welded	Welded	Shell, Heads

11. Supports: Skirt No (Yes or no) Lugs (4) (Number) Legs N/A (Number) Other N/A (Describe) Attached Welded to Shell (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 per UG-125a.Customer P.O. No. 45074974, Customer Equip. No. FL-010.

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 11/18/2011 Co. name Ward Tank & Heat Exchanger Corp. (Manufacturer) Signed (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 CT, of Hartford, CT have inspected the component described in this Manufacturer's Data Report on November 18, 2011 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 11/18/2011 Signed (Authorized Inspector) Commissions 10652AB, NC1206 (National Board (incl. endorsements), State, Province and number)