

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

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

1. Manufactured and certified by Refrigeration Valves and Systems Corporation, 1520 Crosswinds Drive, Bryan, Texas, 77808  
(Name and address of Manufacturer)
2. Manufactured for STERLING INDUSTRIAL REFRIGERATION, 598 AIRPORT BLVD., MORRISVILLE, North Carolina, 27560  
(Name and address of Purchaser)
3. Location of installation GOLD CREEK FOODS, 2255 WHITE SULPHUR RD., GAINESVILLE, Georgia  
(Name and address)
4. Type Vertical 60" X 9' 3" RECIRCULATOR 51653  
(Horizontal, vertical, or sphere) (Tank, separator, jkt. vessel, heat exch., etc.) (Manufacturer's serial number)
- N/A 51653D REV.0 28231 2016  
(CRN) (Drawing number) (National Board number) (Year built)
5. ASME Code, Section VIII, Div. 1 2015/ N/A N/A N/A  
[Edition and Addenda, if applicable (date)] (Code Case Number) [Special Service per UG-120(d)]

Items 6-11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multichamber vessels.

6. Shell: (a) Number of course(s) 1 (b) Overall length 6' 5"

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	60" OD	6' 5"	SA516-70	.5	0	1	SPOT	85%	2	NONE	65%	N/A	N/A

Body Flanges on Shells													
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting				
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Heads: (a) SA516-70 NO HT (b) SAME  
(Material spec. number, grade or type) (H.T. - time and temp.) (Material spec. number, grade or type) (H.T. - time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	TOP	.4375	0	N/A	N/A	2:1	N/A	N/A	N/A		X	N/A	N/A	N/A
(b)	BTM	.4375	0	N/A	N/A	2:1	N/A	N/A	N/A		X	N/A	N/A	N/A

Body Flanges on Heads													
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting				
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material	
(a)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A

8. Type of jacket N/A Jacket closure N/A  
(Describe as ogee & weld, bar, etc.)

If bar, give dimensions; if bolted, describe or sketch N/A

9. MAWP 250 psi N/A at max. temp. 300 °F N/A Min. design metal temp. -20 / -50 at 250 / 85  
(Internal) (External) (Internal) (External)

10. Impact test NO UCS-66-b at test temperature of N/A  
[Indicate yes or no and the component(s) impact tested]

11. Hydro., pneu., or comb. test pressure Hydro. at 325 psi Proof test N/A

Items 12 and 13 to be completed for tube sections.

12. Tubesheet N/A N/A N/A N/A N/A  
[Stationary (material spec. no.)] [Diameter (subject to press.)] (Nominal thickness) (Corr. allow.) Attachment (welded or bolted)

- N/A N/A N/A N/A N/A  
[Floating (material spec. no.)] (Diameter) (Nominal thickness) (Corr. allow.) (Attachment)

13. Tubes N/A N/A N/A N/A N/A  
(Material spec. no., grade or type) (O. D.) (Nominal thickness) (Number) [Type (Straight or U)]

Items 14-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell: (a) No. of course(s) N/A (b) Overall length N/A

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Body Flanges on Shells**

No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting				
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

15. Heads: (a) N/A (Material spec. number, grade or type) (H.T. - time and temp.) (b) N/A (Material spec. number, grade or type) (H.T. - time and temp.)

Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A			
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Body Flanges on Heads**

Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting				
								Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

16. MAWP N/A (Internal) N/A (External) at max. temp. N/A (Internal) N/A (External) Min. design metal temp. N/A at N/A

17. Impact test N/A at test temperature of N/A  
 [Indicate yes or no and the component(s) impact tested]

18. Hydro., pneu., or comb. test pressure N/A Proof test N/A

19. 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	
MISC.	1,1	10,8	WE	SA106B		S/40	0	INHERENT	*		
PUMP	2	4	WE	SA106B		S/40	0	SA516-70	*		
MISC.	2,4	2,1-1/2	WE	SA106B		S/80	0	INHERENT	*		
MISC.	1,4	1-1/4,3/4	WE	SA106B		S/80	0	INHERENT	*		

20. Supports: Skirt No (Yes or no) Lugs 0 (Number) Legs 3 (Number) Others NONE (Describe) Attached WELDED TO SHELL AND BOTTOM HEAD (Where and how)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report (list the name of part, item number, Manufacturer's name, and identifying number):


N/A

22. Remarks

PRESSURE RELIEF DEVICE SUPPLIED BY OTHERS. \*WELDED IN ACCORDANCE WITH FABRICATION DRAWING. FOR NON-LETHAL, NON-CORROSIVE SERVICE. SERIAL NUMBER STAMPED NEAR NAMEPLATE BRACKET.

**CERTIFICATE OF SHOP COMPLIANCE**

We certify that the statements 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 Number 18912 Expires October 10, 2019

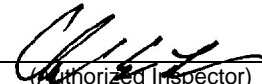
Date 10/17/2016 Name Refrigeration Valves and Systems Corporation Signed   
 (Manufacturer) (Representative)

**CERTIFICATE OF SHOP INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by **OneCIS Insurance Company, of Lynn, MA**

have inspected the pressure vessel described in this Manufacturer's Data Report on October 9, 2016, 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 10/18/2016 Signed  Commissions: 12355A, TX1681  
 (Authorized Inspector) [National Board (incl. endorsements)]

**CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE**

We certify that the statements made in this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. U Certificate of Authorization Number \_\_\_\_\_ Expires \_\_\_\_\_

Date \_\_\_\_\_ Name \_\_\_\_\_ Signed \_\_\_\_\_  
 (Assembler) (Representative)

**CERTIFICATE OF FIELD ASSEMBLY INSPECTION**

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

have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items \_\_\_\_\_, not included in the certificate of shop inspection, have been inspected by me and to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of \_\_\_\_\_. 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 \_\_\_\_\_ Signed \_\_\_\_\_ Commission \_\_\_\_\_  
 (Authorized Inspector) [National Board (incl. endorsements)]