159227-C
Sales Order No.

64405
National Board No.

# 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 **Tranter, Inc., 1900 Old Burk Highway, Wichita Falls, Texas, 76306, USA**
(Name and address of Manufacturer)

2. Manufactured for **VALERUS COMPRESSION SERVICES, 782 FM 1432, VICTORIA, Texas, 77905, USA**
(Name and address of Purchaser)

3. Location of installation **VALERUS COMPRESSION SERVICES, 782 FM 1432, VICTORIA, Texas, 77905, USA**
(Name and address)

4. Type **Vertical** (Horizontal, vertical, or sphere) | **PLATE TYPE HEAT EXCHANGER** (Tank, separator, jkt. vessel, heat exch., etc.) | **01SC1479** (Manufacturer's serial number)

**N/A** (CRN) | **D-6-159227-C** (Drawing number) | **64405** (National Board number) | **2015** (Year built)

5. ASME Code, Section VIII, Div. 1 **2013/ N/A** [Edition and Addenda, if applicable (date)] | **2766** (Code Case Number) | **N/A** [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) **0** (b) Overall length **0'**

| 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 | 21" ID | 65.125" | SA516-70N | 1.75" | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

| Body Flanges on Shells | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Bolting | | | |
| No. | Type | ID | OD | Flange Thk | Min Hub Thk | Material | How Attached | Location | 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 | 10 - 1 1/4" | SA193-B7 W/ SA-194-2H (20) | N/A | N/A |

7. 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 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Bolting | | | |
| No. | Location | Type | ID | OD | Flange Thk | Min Hub Thk | Material | How Attached | 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 |

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

If bar, give dimensions **N/A** If bolted, describe or sketch.

9. MAWP **150 PSI** (Internal) **N/A** (External) at max. temp. **260 °F** (Internal) **N/A** (External) Min. design metal temp. **-20 °F** at **150 PSI**

10. Impact test **NO, UCS-66a & UHA-51(d)(1)** [Indicate yes or no and the component(s) impact tested] at test temperature of **N/A**

11. Hydro., pneu., or comb. test pressure **Hydro. at 195 PSI** Proof test **N/A**

*Items 12 and 13 to be completed for tube sections.*

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

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

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

## FORM U1-(Cont'd)

NB Number 64405

*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 |

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

| No. | 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 | |
| INLET | 2 | 4.26 | RFSO Cl 150 | SA403-316L | SA-182F-316L | 0.12 | 0 | | WLD | WLD | END FRAME |
| OUTLET | 2 | 4.26 | RFSO Cl 150 | SA403-316L | SA-182F-316L | 0.12 | 0 | | WLD | WLD | END FRAME |

20. Supports: Skirt **No** (Yes or no) Lugs **N/A** (Number) Legs **3** (Number) Others **N/A** (Describe) Attached **BOLTED TO END FRAME** (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

**O.A. LENGTH: 23.49**
**MODEL: GXD-042-L-6-UR-153**
**SUPERCHANGER TO CARRY: API 40**
**PLATES: SA240-316**
**PLATE QTY: 153**
**PLATE THK: 0.0236**

## 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 **8698** Expires **December 14, 2015**

Date 05/01/2015 Name **Tranter, Inc.** (Manufacturer) Signed (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 **May 1, 2015**, 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 05/01/2015 Signed (Authorized Inspector) Commissions: **12397A, OK9, TX1938, KS 717, MS 4844, AR 1568, LA 1650** [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 _____ (Assembler) Signed _____ (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 _____ (Authorized Inspector) Commission _____ [National Board (incl. endorsements)]