

S/O#

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 Challenger Process Systems Co., 21249 Hwy. 110 South, Troup, Texas, 75789, USA

(Name and address of Manufacturer)

2. Manufactured for CPSC STOCK

(Name and address of Purchaser)

3. Location of Installation NOT KNOWN

(Name and address)

4. Type Horizontal 5A669-01-01 NA EOG27-01-1 REV 4 2920 2014
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (Year built)5. ASME Code, Section VIII, Division 1 2013/ NA NA NA
[Edition and Addenda, if applicable (date)] (Code Case numbers) (Special service per UG-120(d))6. Shell: SA 516-70 .875" .25 in 72" (OD) 15'
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) (Length (overall))

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

7. Seams: TYPE 1 FULL 100% N/A N/A TYPE 1 SPOT 100% 2
[Long. (welded, dbl., sngl., lap, butt)] [R.T.(spot or full)] (Eff.,%) (H.T. temp) (Time, hr) [Girth. (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff., %) (No. of courses)8. Heads: (a) Material SA 516-70 (b) Material SA 516-70
(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)	END	.741	.25	N/A	N/A	2:1	N/A	N/A	N/A	Concave
(b)	END	.741	.25	N/A	N/A	2:1	N/A	N/A	N/A	Concave

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

9. MAWP 275 psi NA at max. temp. 150 °F NA
(Internal) (External) (Internal) (External)Min. design metal temp. -20 °F at 275 psi Hydro, pneu., or comb. test pressure HYDRO at 358 psiProof test NA

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	
INLET	2	16"	PIPE/RFSO	SA 106B	SA 105	.844"/300#	.25	INHERENT	UW16.1a	UW21	SHELL
LIQUID OUTLET	1	4"	PIPE/RFWN	SA106B	SA105	.674"/300#	.25	INHERENT	UW16.1c	APPENDIX 2-4(6)	SHELL
BRIDLE	2	2"	RFLWN	SA105		300#	.25	INHERENT	UW16.1i		HEAD
SITE GLASS	2	2"	CPLG	SA105		6000#	.25	INHERENT	UW16.1c		HEAD
TEMP IND	1	2"	COUPLET	SA105		6000#	.25	INHERENT	UW16.1bb		SHELL
TEMP IND VISUAL	1	2"	CPLG	SA105		6000#	.25	INHERENT	UW16.1c		HEAD
PRESS. IND.	1	2"	COUPLET	SA105		6000#	.25	INHERENT	UW16.1bb		SHELL
PRESS. IND. VISUAL	1	2"	CPLG	SA105		6000#	.25	INHERENT	UW16.1c		HEAD
LEVEL TRANSMITTER	1	2"	PIPE/RFWN	SA106B	SA105	.436"/300#	.25	INHERENT	UW16.1c	APPENDIX 2-4(6)	SHELL
RELIEF VALVE	1	4"	PIPE/RFWN	SA106B	SA105	.674"/300#	.25	INHERENT	UW16.1c	APPENDIX 2-4(6)	SHELL

Additional Nozzles - See Attached U-4...

11. Supports: Skirt NO Lugs 2 Legs 2 Other PSV BRACE, NAMEPLATE BRACKET Attached SHELL WELD
(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:

ROLLED CYLINDER SERIAL# 14-1090, TEXAS STEEL PROCESSING, INC. 47262

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

IMPACT EXEMPT PER UG-20(F)
NON-LETHAL SERVICE

CERTIFICATE OF SHOP/FIELD COMPLIANCE

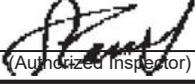
We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number 21574 expires July 24, 2016.

Date 09/15/2014 Co. name Challenger Process Systems Co. Signed 
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Challenger Process Systems Co. at 21249 Hwy. 110 South, Troup, Texas, 75789, USA
I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards, of Hartford, CT

have inspected the component described in this Manufacturer's Data Report on September 11, 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 09/18/2014 Signed  Commissions 11944A, MO0376, IL1931
(Authorized Inspector) (National Board (incl. endorsements))

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 Challenger Process Systems Co., 21249 Hwy. 110 South, Troup, Texas, 75789, USA
(Name and address of Manufacturer)

2. Manufactured for CPSC STOCK
(Name and address of Purchaser)

3. Location of installation NOT KNOWN
(Name and address)

4. Type Horizontal N/A 5A669-01-01
(Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Manufacturer's serial number)

NA EOG27-01-1 REV 4 2920 2014
(CRN) (Drawing number) (National Board number) (Year built)

Data Report
Item Number **Remarks**

Additional 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	
MANWAY	1	24"	PIPE/RFSO	SA106B	SA105	.375"/300#	.25	INHERENT	UW16.1a	UW21(1)	SHELL

Certificate of Authorization: Type "U" No. 21574 Expires July 24, 2016

Date 09/15/2014 Name Challenger Process Systems Co. Signed 
(Manufacturer) (Representative)

Date 09/18/2014 Signed  Commissions 11944A, MO0376, IL1931
(Authorized Inspector) (National Board Authorized Inspector Commission number)

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM)
A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer

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

1. Manufactured and certified by Texas Steel Processing, Inc. 5480 Windfern Road Houston, Texas 77041
(Name and address of Manufacturer)
2. Manufactured for Challenger Process Systems Co., 21249 Hwy - 110 south, Troup, Texas 75789
(Name and address of Purchaser)
3. Location of installation: Unknown
(Name and address)
4. Type Shell 14-1089 thru 14-1090 ---
[Description of vessel part (shell, two-piece head, tube bundle)] (Manufacturer's serial number) (CRN)
- --- --- 2014
(National Board number) (Drawing number) (Drawing prepared by) (Year built)
5. ASME Code, Section VIII, Div. 1 2013 Edition --- ---
[Edition and Addenda, if applicable (date)] (Code Case number) [Special service per UG-120(d)]

6. Shell: (a) Number of course(s) 2 (b) Overall length 15'-0"

No.	Course(s)		Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment				
	Diameter	Length	Spec./Grade or Type	Nom.	Corr.	Type	Full	Spot	None	Eff.	Type	Full	Spot	None	Eff.	Temp.	Time
1	72" OD	10'-0"	SA-516 70	.750"	---	1	Full	---	---	1	Full	---	---	---	---	---	---
1	72" OD	5'-0"	SA-516-70	.750"	---	1	Full	---	---	---	---	---	---	---	---	---	---
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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	
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7. Heads: (a) --- (b) ---
(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)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
(b)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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)	---	---	---	---	---	---	---	---	---	---	---	---	---
(b)	---	---	---	---	---	---	---	---	---	---	---	---	---

8. MAWP --- --- at max. temp. --- --- . Min. design metal temp. --- at ---
(Internal) (External) (Internal) (External)

9. Impact test NO at test temperature of ---
[Indicate yes or no and the component(s) impact tested]

10. Hydro-, pneu., or comb. test pressure --- Proof test ---

11. 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	
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12. Identification of part(s)

Name of Part	Quantity	Line No.	Mfr's. Identification No.	Mfr's. Drawing No.	CRN	National Board No.	Year Built
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13. Supports: Skirt NO Lugs --- Legs --- Other --- Attached ---
(Yes or no) (Number) (Number) (Describe) (Where and how)

14. Remarks " NO DESIGN FUNCTIONS PERFORMED BY Texas Steel Processing, Inc. "

CERTIFICATE OF SHOP / FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this pressure vessel part conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

U Certificate of Authorization No. 47,262 Expires 11/18/2016

Date 07-30-2014 Name Texas Steel Processing, Inc. Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP / FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by TUV Rheinland AIA Services, LLC of Houston, Texas

have inspected the pressure vessel part described in this Manufacturer's Data Report on 7-30-14

and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel part 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 part 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 7-30-14 Signed [Signature] Commissions NB11244 A
(Authorized Inspector) [National Board (incl. endorsements)]