

**FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS**  
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by Doyle & Roth Mfg. Co., Inc. One Morse Avenue Simpson, PA 18407  
(Name & address of Manufacturer)

2. Manufactured for NewPoint Gas Services Inc.  
(Name & address of Purchaser)

3. Location of installation unknown  
(Name & address)

4. Type: Horizontal Heat Exchanger S-1725-3 - B-11680-2 20412 2007  
(Horiz., vert., or sphere) (tank, separator, jkt. vessel, heat exh., etc) (Mfg's serial no.) (CRN) (Drawing No.) (Nat'l Bd. No.) (Year built)

5. ASME Code, Section VIII, Div 1 2004 (A-06) - -  
Edition and Addenda (date) Code Case No. 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 multi-chamber vessels.

6. Shell (a) No. of course(s): 2 (b) Overall length (ft & in): 18'9-1/2"

Course(s)			Material		Thickness		Long. Joint (Cat A)			Circum. Joint (Cat A, B, & C)			Heat Treatment	
No.	Dia, in.	Length (ft & in)	Spec/Grade or Type		Nom	Corr	Type	Full, Spot, None	Eff	Type	Full, Spot, None	Eff	Temp	Time
2	28.125	9'4-3/4"	SA516-70		.375	.0625	1	Spot	85	1	Spot	85	-	-
-	-	-	-		-	-	-	-	-	-	-	-	-	-
-	-	-	-		-	-	-	-	-	-	-	-	-	-

7. Heads: (a) SA516-70 (b) -  
(Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp) (Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp)

	Location (Top, Bottom, Ends)	Thickness		Radius		Ellip Ratio	Conical Apex Angle	Hemi Rad	Flat Dia	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff
(a)	Center	.375	-	-	1-1/8"	-	-	-	-	-	-	-	-	-
(b)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

If removable, bolts used (describe other fastening)

(Mat'l Spec. No., Grade, size, no)

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

If bar, give dimensions - If bolted, describe or sketch.

9. MAWP 150 - psi at max temp 450 - °F Min design metal temp -20 °F at 150 psi.  
(internal) (external) (internal) (external)

10. Impact test no per UG20(f) & UHA51 at test temperature of - °F.  
(Indicate yes or no and the component(s) impact tested)

11. Hydro test press 195 Proof test -

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: SA516-70 32.75 1.75 .125 Welded  
[Stationary (Mat'l Spec No.)] [Dia., in. (subject to pressure)] (Nom thk., in) (Corr. Allow., in) [Attachment (Welded or bolted)]

- - - - -  
[Floating (Mat'l Spec No.)] (Dia., in) (Nom thk., in) (Corr. Allow., in) (Attachment)

13. Tubes: SA249 304L .75 .065" 664 Straight  
(Mat'l Spec No., Grade or Type) (O.D. in.) (Nom thk., in or gauge) (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): 2 (b) Overall length (ft & in): 4'0-1/4"

Course(s)			Material		Thickness		Long. Joint (Cat A)			Circum. Joint (Cat A, B, & C)			Heat Treatment	
No.	Dia, in.	Length (ft & in)	Spec/Grade or Type		Nom	Corr	Type	Full, Spot, None	Eff	Type	Full, Spot, None	Eff	Temp	Time
1	28.0	2'5-3/4"	SA516-70		.375	.125	1	Spot	85	1	Spot	85	-	-
1	28.0	1'6-1/2"	SA516-70		.375	.125	1	Spot	85	1	Spot	85	-	-
-	-	-	-		-	-	-	-	-	-	-	-	-	-

15. Heads: (a) SA516-70 (b) -  
(Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp) (Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp)

	Location (Top, Bottom, Ends)	Thickness		Radius		Ellip Ratio	Conical Apex Angle	Hemi Rad	Flat Dia	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff
(a)	Ends	.375	.125	-	-	2:1	-	-	-	X	X	-	-	-
(b)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

If removable, bolts used (describe other fastening)

Alloy SA193 B7 & SA194-2H 3/4" (28)

(Mat'l Spec. No., Grade, size, no)



16. MAWP 75 15 psi at max temp 300 300 °F Min design metal temp -20 °F at 75&15 psi.  
 (Internal) (external) (internal) (external)

17. Impact test no per UG20(f) & UHA51 at test temperature of - °F.  
 (Indicate yes or no and the component(s) impact tested)

18. Hydro test press 100 Proof test -

19. Nozzles, inspection, and safety valve openings:

Purpose(Inlet, Outlet, Drain, etc.)	No.	Dia or size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How Attached		Location (Insp.Open)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Inlet Outlet	1	14"	RFSO	SA106B	SA105	Sch 20	.125	-	uw16.1c	fig2-4(3)	-
Inlet Outlet	1	8"	RFSO	SA106B	SA105	Sch 30	.125	-	uw16.1c	fig2-4(3)	-
Inlet Outlet	2	10"	RFSO	SA106B	SA105	Sch 30	.0625	-	uw16.1c	fig2-4(3)	-
Drain/Vent/PV	2	.75"	Cplg	SA105	-	3000#	.0625	-	uw16.1z-1	-	-
Drain/Vent/PV	2	.75"	Cplg	SA105	-	3000#	.125	-	uw16.1z-1	-	-
Drain Vent	2	.50"	Cplg	SA105	-	3000#	.125	-	uw16.1z-1	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

20. Supports: Skirt - Lugs - Legs - Others 2 Saddles Attached Welded to shell  
 (Yes or No) (No.) (No.) (Describe) (Where & 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, mfg's. name and identifying number)

22. Remarks: Horizontal Shell and Tube Heat Exchanger

Tag Equip No: 300 GPM Reboiler

Head Flanges: (2) 32.75" OD x 2.25" tk SA181 Cl. 60 Ring Flanges

Shellside inspection openings omitted per UG46(a)

**CERTIFICATE OF SHOP 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 Code for Pressure Vessels, Section VIII, Division 1,

U Certificate of Authorization No. 982 Expires January 31, 2008  
 Date 4-23-07 Name Doyle & Roth Mfg. Co., Inc. Signed Frank V. Caserio  
 (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 the State or Province of PA and employed by One CIS Ins. Co. of Boston, MA and have inspected the pressure vessel described in this Manufacturer's Data Report on April 23 2007, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 4-23-07 Signed Dalton E. Tillery Commissions NB 8845 'D' Pa 2361  
 (Authorized Inspector) (Nat'l Board inc. endorsement, State, Province and No.)

**CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE**

We certify that the statements on this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME Code, Section VIII, Division 1,

U Certificate of Authorization No. \_\_\_\_\_ 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 & Pressure Vessel Inspectors and the State or Province of \_\_\_\_\_ and employed by \_\_\_\_\_ of \_\_\_\_\_ 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 ASME Code, Section VIII Division 1. The described vessel was inspected and subjected to a hydrostatic test of \_\_\_\_\_ psi. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his 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 \_\_\_\_\_ Commissions \_\_\_\_\_  
 (Authorized Inspector) (Nat'l Board incl. endorsement, State, Province and No.)