

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 **Steel Fab, A Div. of Samuel Strapping Systems, Inc., 17403 Lee Highway, Abingdon, Virginia, 24210-7833**

(Name and address of manufacturer)

2. Manufactured for **Steel Fab - Stock**

Husky Oil Operations

(Name and address of purchaser)

3. Location of Installation **Unknown**

Hot Water Vapor Project

(Name and address)

4. Type **Vertical** **672380 to 672403** **L4036.5C** **A10053 R13** **672380-672403** **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** to **No**

(year) [Addenda, if applicable (Date)]

None **None**
(Code Case numbers) (Special Service per UG-120(d))

6. Shell: **SA414-G** **.200"** **None** **2' 6" (OD)** **5' 7.5"**
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) (Length (overall))

7. Seams: **Type No. 1** **None** **70%** **N/A** **N/A** **Type No. 2** **None** **85%** **1**
(Long. (welded, dbl., singl., lap, butt)) R.T. (Spot or Full) Eff. (%) (H.T. temp) Time (hr) (Girth. (welded, dbl., singl., lap, butt)) (R.T. (spot or full)) Eff. (%) No. of Courses

8. Heads: (a) Material **SA414-G** (b) Material **SA414-G**
(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)	TOP	.174"	None	N/A	N/A	2:1	N/A	N/A	N/A	Concave
(b)	BOTTOM	.174"	None	N/A	N/A	2:1	N/A	N/A	N/A	Concave

If removable, bolts used (describe other fastenings)

None

(Material spec. number, grade, size, number)

9. MAWP **200 psi** **N/A** at max. temp. **400 °F** **N/A**
(Internal) (External) (Internal) (External)

Min. design metal temp. **-20 °F** at **200 psi** Hydro, pneu., or comb. test pressure **HYDRO. at 260 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	
Inspection	2	2.000"	Threaded Fitting	SA181 CL 70		UG11(a)(1)		Inherent	FigUW16.2(c)		Shell
Inlet/Outlet/Valve	3	2.000"	Threaded Fitting	SA181 CL 70		UG11(a)(1)		Inherent	FigUW16.2(c)		
Drain	1	1.000"	Threaded Fitting	SA181 CL 70		UG11(a)(1)		Inherent	FigUW16.2(c)		
Spare	2	1.000"	Threaded Fitting	SA181 CL 70		UG11(a)(1)		Inherent	FigUW16.2(c)		

Additional Nozzles - See Attached U-4...

11. Supports: Skirt **Yes** Lugs **0** Legs **0** Other **None** Attached **Heads - Welded**
(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:

N/A

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

Constructed under the provision of UG-90 (c) (2). No safety device provided per UG-125 (a). UG-20 (f) applies.

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. **23846** expires **November 28, 2012**

Date **09/07/2011** Co. name **Steel Fab, A Div. of Samuel Strapping Systems, Inc.** Signed **[Signature]**
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by **Steel Fab, A Div. of Samuel Strapping Systems, Inc.** at **17403 Lee Highway, Abingdon, Virginia, 24210-7833**, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province **VA** and employed by **OneBeacon America Insurance Co. of Lynn, MA** have inspected the component described in this Manufacturer's Data Report on

September 6, 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 **09/07/2011** Signed **[Signature]** Commissions **12048A, VA921**
(Authorized Inspector) (National Board (incl. endorsements), State, Province and number)

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(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

NW895

1. Manufactured and certified by **Steel Fab, A Div. of Samuel Strapping Systems, Inc., 17403 Lee Highway, Abingdon, Virginia, 24210-7833**

(Name and address of manufacturer)

2. Manufactured for **Stock**

(Name and address of purchaser)

3. Location of Installation **Unknown**

(Name and address)

4. Type **Vertical** **675331 to 675354** **L4034.5C** **A10049 R12** **675331-675354** **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

to

No

(year)

[Addenda, if applicable (Date)]

None

(Code Case numbers)

None

(Special Service per UG-120(d))

6. Shell: **SA414-G** **.164"** **None** **2' 0" (OD)** **4' 7.5"**

(Material spec. number, grade)

(Nominal thickness)

(Corr. allow.)

(Inner diameter)

(Length (overall))

7. Seams: **Type No. 1** **None** **70%** **N/A** **N/A** **Type No. 2** **None** **85%** **1**

(Long. (welded, dbl., singl., lap, butt))

R.T. (Spot or Full)

Eff. (%)

(H.T. temp)

Time (hr)

(Girth. (welded, dbl., singl., lap, butt))

(R.T. (spot or full))

Eff. (%)

No. of Courses

8. Heads: (a) Material

SA414-G

(Spec. no., grade)

(b) Material

SA414-G

(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	.149"	None	N/A	N/A	2:1	N/A	N/A	N/A	Concave
(b)	BOTTOM	.149"	None	N/A	N/A	2:1	N/A	N/A	N/A	Concave

If removable, bolts used (describe other fastenings)

None

(Material spec. number, grade, size, number)

9. MAWP **200 psi** **N/A** at max. temp. **400 °F** **N/A**

(Internal)

(External)

(Internal)

(External)

Min. design metal temp. **-20 °F** at **200 psi** Hydro, pneu., or comb. test pressure **HYDRO. at 260 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	
Inspection	2	2.000"	Threaded Fitting	SA181 CL70		UG-11(a)(1)		Inherent	FigUW16.2(c)		Shell
Unknown	2	2.000"	Threaded Fitting	SA181 CL70		UG-11(a)(1)		Inherent	FigUW16.2(c)		
Unknown	1	1.500"	Threaded Fitting	SA181 CL70		UG-11(a)(1)		Inherent	FigUW16.2(c)		
Unknown	2	1.000"	Threaded Fitting	SA181 CL70		UG-11(a)(1)		Inherent	FigUW16.2(c)		

Additional Nozzles - See Attached U-4...

11. Supports: Skirt **Yes** Lugs **0** Legs **0** Other **None** Attached **Head - Welded**

(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:

N/A

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

Constructed under the provision of UG-90 (c) (2). No safety device provided per UG-125 (a). UG-20 (f) applies.

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. **23846** expires **November 28, 2012**Date **10/07/2011** Co. name **Steel Fab, A Div. of Samuel Strapping Systems, Inc.** Signed **Quinn Woods**

(Manufacturer)

(Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by **Steel Fab, A Div. of Samuel Strapping Systems, Inc.** at **17403 Lee Highway, Abingdon, Virginia, 24210-7833**, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province **VA** and employed by **OneBeacon America Insurance Co. of Lynn, MA** have inspected the component described in this Manufacturer's Data Report on **October 9, 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 **10/09/2011** Signed **[Signature]** Commissions **12048A, VA921**

(Authorized Inspector)

(National Board (incl. endorsements), State, Province and number)