



Farris Pressure Management  
a Division of Spartan Controls

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY INSPECTION TEST REPORT

<b>CUSTOMER</b>		<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Toromont Energy Systems Inc.		775102	775102-01	PSV-112
PO: MP505126				
		<b>Sup. Tag:</b>		

  

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26JA12A-120/00	2600	3"300RFx4"150RF	J	484642-18-A10	OG8442.5C

  

<b>SERVICE:</b>		<b>StampSymbol:</b>
Gas		UV NB
<b>CAPACITY:</b> 282.6 M3/MIN		<b>Metric Only:</b> Yes (Per CC:2116)

  

<u>Set Pressure</u>	<u>Back Pressure</u>	<u>Diff</u>	<u>Cold Diff</u>	<u>Temp. Corr.</u>	<u>Temperature</u>
2690 KPAG	0 KPAG	2690 KPAG	2690 KPAG	0 KPAG	60 F (16 C)

  

<b>MATERIAL/HEAT NUMBER ASSIGNMENT:</b>	
<b>Body</b> K239	<b>Nozzle</b> E42428
<b>Bonnet</b> Y4928	<b>Disc</b> 9S157

  

<b>PERFORMANCE TEST DATA:</b>	
<b>TEST FLUID</b>	<input checked="" type="checkbox"/> Air
	<input type="checkbox"/> Water
	<input type="checkbox"/> Air Over Water
<b>Final Test Pressure</b>	2690 KPAG
<b>Upper B.D.R. Setting:</b>	
<b>Lower B.D.R. Setting:</b>	
<b>Shop Test Gauges Used:</b>	1. 8A 2. 8B

  

<b>BACK PRESSURE TEST:</b>	
<input type="checkbox"/> Not Applicable, (Open Bonnet / Cap Design)	
<input checked="" type="checkbox"/> 120 PSIG Air	

  

<b>SEAT TIGHTNESS TEST (API 527)</b>	
<b>TEST FLUID</b>	<b>Req'd At</b>
<input checked="" type="checkbox"/> Air	<input checked="" type="checkbox"/> 90%
<input type="checkbox"/> Water	<input type="checkbox"/> 95% Of Set Pressure
<input type="checkbox"/> Air Over Water	
<b>Leak Test Pressure</b>	2421 PSIG
<b>No Visible Leaks</b>	<input type="checkbox"/>
<b>Leak Rate</b>	0 B.P.M.
<b>Final Inspection / Tech Tested</b>	1/5
<b>Date Completed</b>	2-23-07

  

<b>FOR WITNESS TESTING ONLY</b>	
<b>Tested By:</b> _____	<b>Date:</b> _____
<b>Customer Witness:</b> _____	<b>Farris Witness:</b> _____



**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 Code Rules, Section VIII, Division 1**

1. Manufactured and certified by Toromont Process Systems, 10121 Barlow Trail NE, Calgary, Alberta, Canada, T3J 3C6 0571408  
(Name and address of manufacturer)  
Manufactured for Husky Energy Inc. 707 - 8th Avenue S.W. Calgary, Alberta T2P 3G7  
(Name and address of purchaser)  
3. Location of installation Site: Ansell Gas Plant  
(Name and address)  
4. Type Horizontal 12306200 U0192.213 12306-401 Rev0 - 2007  
(Horiz. or vert., tank) (Mfr's serial No.) (CRN) (Drawing No.) (Natl. Bd. No.) (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 2004  
to 2006  
Addenda (Date) Code Case Nos. Special Service per UG-120(d)  
6. Shell: SA516-70N .625" 0.0625" 3' 10.75" 16' -0"  
Matl. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)  
7. Seams: Type 1 Full 1.0 --- --- Type 1 Spot .70 2  
Long. (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr) Girth, (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) No. of Courses  
8. Heads: (a) Matl. SA516-70N (b) Matl. SA516-70N  
(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)	<u>End</u>	<u>0.5625"</u>	<u>0.0625"</u>	<u>-</u>	<u>-</u>	<u>SE 2:1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>Concave</u>
(b)	<u>Datum End</u>	<u>0.5625"</u>	<u>0.0625"</u>	<u>-</u>	<u>-</u>	<u>SE 2:1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>Concave</u>

If removable, bolts used (describe other fastenings) -

9. MAWP 390 - psi at max. temp. 150 - °F.  
(internal) (external) (internal) (external)  
Min. design metal temp. -20 °F at 390 Psi. Hydro., pneu., or comb. test pressure 507 psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
			<u>SEE</u>	<u>ATTACHED</u>	<u>U4</u>	<u>FORM</u>		

11. Supports: Skirt No Lugs No Legs No Other Saddle Attached Shell & Welded  
(Yes or no) (No.) (No.) (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: -

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

Item: V101 Volume: 228 Cubic Feet Vessel Type: Inlet Separator Construction Drawing: 12306-401 Rev.1B  
Impact Testing: Exempt, per UG-20(f)

**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 Code for Pressure Vessels, Section VIII, Division 1. "U" Certificate of Authorization No. 33,658  
expires November 26, 2008

Date 22 Mar 07 Co. name Toromont Process Systems Signed [Signature]  
(Manufacturer) (Representative)

**CERTIFICATE OF SHOP/FIELD INSPECTION**

Vessel constructed by Toromont Process Systems at Calgary, Alberta, Canada  
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Alberta and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on March 22/07 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 a loss of any kind arising from or connected with this inspection.

Date 7/3/22 Signed [Signature] Commissions altis  
(Authorized Inspector) (Natl' Board (incl. endorsements), State, Prov. and No.)



Commissions 2505-  
(Nat'l Board (incl. endorsements), State, Prov. and No.)



(A573808)



RECEIVED  
INFORMATION SERVICES DIVISION

11/2

NOV 19 1963

MAIL ROOM

MAIL ROOM

NOV 19 1963

220520

2007

NOV 19 1963

009723





**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 Code Rules, Section VIII, Division 1

1 Manufactured and certified by E S S Corp, 1565 Britannia Rd. E #36-37; #32-33, Mississauga, ON, L4W 2V6, Canada  
(Name and address of manufacturer)

2 Manufactured for ESG Filtration Ltd. #11, 6025-12 Street S.E. Calgary, Alberta T2H 2K1  
(Name and address of purchaser)

3 Location of installation Unknown  
(Name and address)

4 Type Vertical filter 2777 U0407.2 REG CLV12-CS-390 R0 -- 2007  
(Horiz. or vert., tank) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l Bd. No.) (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 2004  
to 2006 -- --  
(Addenda (Date)) (Code Case Nos.) (Special Services per UG-120(d))

6 Shell: SA-106 B 0.375" 1/16" 12 5'-7 1/2"  
(Mat'l (Spec. No., Grade)) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (overall) (ft. & in.))

7 Seams: S None 85 -- -- Type 1 None 85 1  
(Long. (Welded, Dbl., Sngl. Lap, Butt)) (R.T. (Spot or Full)) (Eff. (%)) (H.T. Temp. (°F)) (Time (hr)) (Girth (Welded Dbl. Sngl. Lap Butt)) (R.T. (Spot, Partial, or Full)) (Eff. (%)) (No. of Courses)

8 Heads: (a) Mat'l SA-105 (b) Mat'l SA-234 WB  
(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	Bfig12" 300#	1/16"	--	--	--	--	--	15"	Flat
(b)	Bottom	0.2954"	1/16"	--	--	2:1	--	--	--	Concave

If removable, bolts used (describe other fastenings) SA-193-B7, 16 PCS. 1 1/8" Dia. Studs with SA-194-2 Heavy Hex Nuts  
(Mat'l, Spec. No., Gr., Size, No.)

9 MAWP 390 n/a psi at max temp 300 n/a °F  
(Internal) (external) (internal) (external)

Min design metal temp -20 °F at 390 psi Hydro, pneu. or comb test pressure 507 psi

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet Outlet Drain)	No	Diam. or Size	Type	Mat'l	Nom Thk	Reinforcement Mat'l	How Attached	Location
Inlet / Outlet	2	6"	RFSO	SA-106 B	Sch 80	weld metal	uw16.1c	Shell
Drain / Bottom Drain	2	1"	H/CPLG	SA-105	3000#	weld metal	uw16.1a	Shell / B. Head
DP Gauge	2	1/2"	H/CPLG	SA-105	6000#	weld metal	uw16.1a	Shell
Vent	1	3/4"	H/CPLG	SA-105	3000#	weld metal	uw16.1a	Top Head

11. Supports: Skirt no Lugs no Legs 3 Other -- Attached Welded to B/Head & Shell  
(Yes or no) (No.) (No.) (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: --  
(Name of part, item number, Mfg's name and identifying stamp)

Tested in vertical position.

Exempt from impact testing per UG 20f & UCS 66

Safety relieve valve by others. MANUFACTURED PER ESS DRAWING 2777-D001 R0

**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 Code for Pressure Vessels Section VIII Division 1 'U' Certificate of Authorization No 34666 expires 30-Jul 2007  
Date Feb 28 107 Co name ESS CORP. Signed Toung  
(Manufacturer) (Representative)

**CERTIFICATE OF SHOP/FIELD INSPECTION**

Vessel constructed by ESS CORP at 1565 Britannia Rd. E #36-37; Mississauga, ON  
I the undersigned holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of ONTARIO and employed by TECHNICAL STANDARDS AND SAFETY AUTHORITY, ONTARIO  
have inspected the component described in this Manufacturer's Data Report on FEB 28 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 a loss of any kind arising from or connected with this inspection  
Date FEB 28, 2007 Signed [Signature] Commissions ONT. 20  
(Authorized Inspector) (Nat'l Board (incl. Endorsements), State, Prov. And No.)



U

W

390

300

-20

320

2777

2007

U0407.2

CLV12-36L-6F-CS-390

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and the role of the accounting system in providing reliable financial information. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various components of the accounting system, including the general ledger, subsidiary ledgers, and the trial balance. It explains how these components work together to ensure the accuracy and integrity of the financial data.

3. The third part of the document focuses on the process of closing the books at the end of each accounting period. It describes the steps involved in transferring the balances from the temporary accounts to the permanent accounts, ensuring that the financial statements reflect the correct ending balances.

4. The fourth part of the document discusses the importance of internal controls in preventing errors and fraud. It highlights the need for a strong internal control system that includes segregation of duties, authorization, and documentation.

5. The fifth part of the document provides a summary of the key points discussed in the previous sections and emphasizes the overall importance of the accounting system in providing reliable financial information for decision-making.



**Filtration Ltd.**

VESSEL P/N: EBD6 006 12 03.H

ELEMENT # UPMK4536-30A

REGISTERED PRESSURE 15.3 BAR

CRN: UO 07.2 YEAR BUILT 2007

MAWP: 39.0 PSI @ 300.0 °F

S/N: ES2 27.7.7

TAG # F-112





# CONSTRUCTION DATA REPORT FOR PIPING SYSTEMS

**In accordance with the provisions of the Safety Codes Act**

Shop Construction ☒;      Field Construction ☐;      Final Data Report ☒;  
Partial Data Report ☐ (from one ABSA-authorized Contractor to another  
ABSA- authorized Contractor).

**Complete both sides of this Form**

1. Constructed By: Toromont Process Systems Owner's Job No: 12306  
(Name of ABSA authorized primary contractor or subcontractor)  
10121 Barlow Trail NE Calgary Alberta T3J 3C6  
(Address)

Alberta Quality Program No. AOP-1405 (S) Expiry Date: November 26 2008

2. Constructed For: Same As Above  
(Name of primary contractor if different from above)

Same As Above  
(Address)

**Alberta Quality Program No. AQP-** \_\_\_\_\_ **Expiry Date:** \_\_\_\_\_  
(Required when the primary contractor undertakes some/all of the quality functions, e.g., Mat'l supply, NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

3. Owner: Husky Energy Inc. 707 - 8<sup>th</sup> Avenue SW Calgary, Alberta. T2P 3G7  
(Name and address)  
Ansell Gas Plant  
(Location of installation)

Alberta Quality Program No. AQP-\_\_\_\_\_ - \_\_\_\_\_ Expiry Date: \_\_\_\_\_ - \_\_\_\_\_  
(Required when the owner undertakes some/all of the quality functions, e.g., Mat'l supply, NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

4. Piping Design Alberta Registration No.: PP-\_\_\_\_\_ (Required if aggregate piping volume is over 0.5m<sup>3</sup>)

5. WP No.: WP-496.2 ; Company: Toromont Process Systems ; Owner's WP No. (If used): WP- -  
 (Alberta Registration No.) (Alberta Registration No.)  
 WPS No(s). used: : WP # 1,5,6 ; Owner's WPS No(s). (If used): -

6. Code: ASME B31.1 Non Boiler External Piping ☐; ASME B31.1 Boiler External Piping ☐;  
ASME B31.3 ☒ - Service category: Normal ☒, D ☐, M ☐, High Pressure ☐; B31.5 ☐; B31.9 ☐.

[illegible]

Partial Data Reports, properly identified and certified by ABSA-authorized contractors, as listed below are attached to and form part of this Data Report ☐

No.	Line No.	Spool No.	Drg. No. (with Rev. No.)	Contractor (Name)	AQP No.	Expiry date

**Remarks:** Provide additional comments including noting any code work that was not performed by the ABSA-authorized contractor(s) supplying this document as a Partial Data Report but which must be completed by another ABSA-authorized contractor who assumes overall responsibility for conformance with the Safety Codes Act & Regulations and applicable ASME Codes, and who assures that all required code work is completed prior to putting the piping system into service.

### Endorse certificate 'A' or 'B'

#### A. CERTIFICATE OF COMPLIANCE

Signed by the subcontractor when supplying this certificate as a  
Partial Data Report

We certify that the statements in this Data Report are correct and that materials, construction and workmanship of the piping fabrication conform to the registered quality system and the applicable Piping code(s).

Date: \_\_\_\_\_  
Subcontractor

\_\_\_\_\_  
Print Authorized Representative's Name      Signature

**This certificate is not valid unless it forms part of a Final Data Report signed by Primary Contractor**

#### B. CERTIFICATE OF COMPLIANCE

Signed by the primary contractor when supplying this certificate as a  
Final Data Report

We certify that the statements in this Data Report are correct and that piping job no. 12306

described in this Data Report was constructed in accordance with the Province of Alberta Safety Codes Act and Regulations, and applicable ASME Piping Code(s).

Date: Mar 12, 2007 Toromont Process Systems

\_\_\_\_\_  
Print Authorized Representative's Name      Signature

### CERTIFICATE OF INSPECTION

I, the undersigned, employed by \_\_\_\_\_ have inspected the piping  
job no. \_\_\_\_\_ described in this Construction Data Report and state that, to the best of my

knowledge and belief, the Contractor has constructed this piping in accordance with the applicable Sections of the ASME Piping Codes and Province of Alberta Safety Codes Act and Regulations.

Date: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_  
Print Owner's Inspector's Name      Owner's Inspector's Signature

Name: \_\_\_\_\_ Sign.: \_\_\_\_\_

ABSA Safety Codes Officer  
(BOILER EXTERNAL PIPING ONLY)