

INSTALLATION OR REPAIR/ALTERATION PERMIT

Form LIB-0001 06/10

Any installation, repair or alteration of a boiler or pressure vessel must be performed under an installation permit by a licensed contractor. The permit fee as listed in Table 6 of the Appendix of the Regulations must be submitted with each permit as required for **each boiler or pressure vessel** being installed, repaired or altered.

We require the fully completed Installation Permit accompanied by the appropriate fee in order to process the permit.

Exemptions:

The following items are exempt under the Legislation:
(Further exemptions may also apply as described in the legislation.)

Heating boilers of 3 square metres heating surface or less;
Power boilers of 2 square metres heating surface or less;
Pressure vessels of 152 mm inside diameter or less; or
Pressure vessels of 0.0425 cubic metres of internal volume or less.

Refrigeration Plants and Refrigeration Vessels:

Refrigeration plants require only one permit. All vessels included in the plant must have their data reports attached to this application. If replacing or adding a new vessel to an existing plant, the fee for the vessel is based on the tonnage of refrigeration for the existing plant.

Please check the purpose of the permit below:

☒ Installation ☐ Repair ☐ Alteration

If a repair or alteration, please fill out the Repair/Alteration form and submit with this form. Please omit Section II below.

I. Location: (where item is to be installed or repair/alteration being performed)

Building or Oilfield Name	Northminster		
Address or Land	10-19-050-27W3		
Location	Street Address		
	Town/City	Province	Postal Code
GPS Location (If available)			

II. Description of Item (Installation only)

<input type="checkbox"/> Boiler	
Manufacturer	Model
Type <input type="checkbox"/> Cast Iron <input type="checkbox"/> Coil <input type="checkbox"/> FinTubed <input type="checkbox"/> Firetube <input type="checkbox"/> Water Tube <input type="checkbox"/> Steam Traction Engine <input type="checkbox"/> Electric <input type="checkbox"/> Other	
Serial Number	Heating Surface _____ (square m - bare tube for coil or fin tube)
CRN or National Board Number	Date of Manufacture _____ (yyyy/mm/dd)
Data Report Attached <input type="checkbox"/> Yes <input type="checkbox"/> No	
If No, please explain _____	
Service <input type="checkbox"/> Hot Water <input type="checkbox"/> Steam <input type="checkbox"/> Thermal	Maximum Allowable Working Pressure _____ (kPa)
<input type="checkbox"/> Low Pressure <input type="checkbox"/> High Pressure	

☒ Pressure Vessel: (for Refrigeration Plants, please attach a list of vessels being installed)

Manufacturer	Natco Canada LTD.		
Serial Number	42586-55		
Type	<input type="checkbox"/> Hot Water Tank <input type="checkbox"/> Air Receiver <input type="checkbox"/> Oilfield Treater <input type="checkbox"/> Gas & Oil Separator <input type="checkbox"/> Heat Exchanger <input type="checkbox"/> Sterilizer <input type="checkbox"/> Cooker <input type="checkbox"/> Propane Dispensing Tank <input type="checkbox"/> Free Water KO <input type="checkbox"/> Fired Process HTR <input type="checkbox"/> NH ₃ Tank <input type="checkbox"/> NH ₃ Dispensing Tank <input type="checkbox"/> Expansion Tank <input type="checkbox"/> Scrubber <input type="checkbox"/> Hydro-pneumatic Tank <input type="checkbox"/> Propane Vehicle Fuel Tank <input type="checkbox"/> De-aerator <input type="checkbox"/> Blowdown Vessel <input type="checkbox"/> Flash Tank <input type="checkbox"/> Propane Tank <input type="checkbox"/> Refrigeration Plant <input type="checkbox"/> Refrigeration Vessel <input checked="" type="checkbox"/> Other		
Dimensions: Overall Length	2.08	(metres)	Outside Diameter
Refrig Plants & Refrig Vessels: # of Vessels(New Plant)			Refrig Type
CRN or National Board Number	P6749.23	Date of Manufacture	2001
Data Report Attached	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If No, please explain _____	
Service	Sweet Natural Gas		
	(i.e. Air, Water, Propane, etc.)		
Maximum Allowable Working Pressure	1965kPa		
	kPa		

III. Owner Information:

Name	Husky Energy		
Mailing Address	4429 44th street		
	Street Address		
	Lloydminster	Saskatchewan	S9v 0Z8
	Town/City	Province	Postal Code
Contact Person	Adrian Rogers (BAR Engineering)		Junior Engineer
			Title
Telephone	(780)875-1683		Fax (780)875-2728

IV. Installer/Contractor Information:

Name	Carson Energy Service LTD.		
Mailing Address	Box 12188		
	Street Address		
	Lloydminster	Alberta	T9V 3C4
	Town/City	Province	Postal Code
Contractor's Licence No.	3415	(for installations, repairs or alterations)	
QCS or QMS Licence No.		(for repairs or alterations only)	
Date work to commence	2011/09/12	Date item available for inspection	2011/09/22
	yyyy/mm/dd		yyyy/mm/dd
Contact Person	Clinton Etson	Foreman	QA/QC
			Title
Telephone	(780)808-8450		Fax (780)808-8455

IMPORTANT NOTE: Please telephone our office or send an e-mail to boilerpermits@tsask.ca if there is any change in the "available for inspection" date after you have submitted this form.

V. Authorizing Signature

I hereby state that, to the best of my knowledge, the information contained within this document is complete and correct.

Clint Etson	<i>Clinton Etson</i>
Please print name here	Signature
<i>Sept. 1/11</i>	QA/QC
Date	Position with organization

VI. Fee:

Attached Fee \$32	Method of Payment	Cheque
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For Internal Use Only

Authorization #	Date Processed	/	/	
Authorized by	Signature			
Comments				

**Permit Fees for Installation, Alteration or Repair of Boiler, Pressure Vessel
or Refrigeration Plant**

Boilers**Capacity (Kilowatts)**

	Fee
250 or less	\$50
More than 250 but not more than 750	\$81
More than 750 but not more than 1,000	\$119
More than 1,000 but not more than 2,000	\$162
More than 2,000 but not more than 3,000	\$243
More than 3,000 but not more than 4,500	\$297
More than 4,500 but not more than 10,000	\$376
More than 10,000 but not more than 15,000	\$454
More than 15,000 but not more than 20,000	\$513
More than 20,000 but not more than 25,000	\$599
More than 25,000	\$778

Pressure Vessels**Multiple (Outside Diameter or Width x Overall Length - square meters)**

	Fee
0.6 or less	\$26
More than 0.6 but not more than 1.5	\$32
More than 1.5 but not more than 3	\$52
More than 3 but not more than 6	\$92
More than 6 but not more than 9	\$124
More than 9 but not more than 12	\$162
More than 12 but not more than 14	\$200
More than 14 but not more than 28	\$243
More than 28 but not more than 56	\$340
More than 56	\$432

Refrigeration Plant**Capacity (tonnes)**

	Fee
30 or less	\$54
More than 30	\$103

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
 (Alternative Form for Single Chamber, Completely Shop – Fabricated Vessels Only)
 As Required by the Provisions of the ASME Code Rules, Section VIII, Division I

A465646

1. Manufactured and certified by: NATCO CANADA LTD., 5710 – 17TH STREET, EDMONTON, ALBERTA, T6P 1S4
 (Name and address of manufacturer)

2. Manufactured for: HUSKY OIL OPERATIONS LIMITED., 707-8TH AVE. SW., CALGARY, AB., T2P 1H5
 (Name and address of purchaser)

3. Location of installation: HUSKY OIL LIMITED, LLOYDMINSTER
 (Name and address)

4. Type: VERTICAL 42586-55 P6749.2 42586-55 REV 2 N/A 2001
 (Horiz. Or vert. tank) (Mfg'r'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 I. 1998
 (Year)

to 2000 N/A N/A
 Addenda (Date) Code Case Nos. Special Service per UG-120 (d)

6. Shell: SA-53-B 0.375" 0.0625" 20" 6'-0" S/S
 Mat'l. (Spec. No. Grade) Nom. Thk (in) Corr. Allow (in) Diam O.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: SMLS N/A 100% N/A N/A TYPE I *SPOT I
 Long (Welded, Dbl, R.T. (Spot or Eff. (%) H.T. Temp. Time (hr) Girth (Welded, Dbl, R.T. (Spot, Partial, Full) No. of Singl., Lap Butt) (°F) Singl., Lap Butt) Courses

8. Heads: (a) Mat'l. SA-516-70N / TOP (b) Mat'l. SA-516-70N / BOTTOM
 (Spec. No. Grade) (Spec. No. Grade)

	Location (Top Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispheric Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	TOP	0.438"	0.0625"			2:1				CONCAVE
(b)	BOTTOM	0.205"	0.0625"			2:1				CONCAVE

If removable, bolts used (describe other fastenings):

9. MAWP 285 psi at max. Temp., 100 °F
 Min. design metal temperature -20 °F at 285 psi (Hydro, pneu., or comb. test pressure 371 psi)
 (Mat'l. spec. No., Gr., Size, No.)

10. Nozzles inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Material	Nom. Thick.	Reinforcement Mat'l.	How Attached	Location
See Attached U-4								

11. Supports: Skirt YES Lugs ---- Legs ---- Other ----- Attached BTM HEAD/WELDED
 (Yes or 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: CLOSURE, #15, R & M ENERGY SYSTEM, MV 192
 (Name of part, item number, Mfg's name and identifying stamp)

IMPACT TEST EXEMPT PER UG-20(f) & UCS-66, TOTAL VOLUME 0.36 CU. M. / 12.69 CU. FT

CONSTRUCTION DRAWING 42586-55 REV 2, PSV LOCATION IS AT C1

RT-2 AS PER UW-11(a)5(b), R & M ENERGY CLOSURE HEAD MIN. THICKNESS 0.750"

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 I. 'U' Certificate of Authorization No 24 376 expires July 17, 2004.

Date: NOVEMBER 5, 2001 Co. Name NATCO CANADA, LTD. Signed J. Benbow
 (Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by NATCO CANADA LTD. at EDMONTON, ALBERTA. I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of ALBERTA and employed by ALBERTA BOILERS SAFETY ASSOCIATION have inspected the component described in this Manufacturer's Data Report on NOVEMBER 5, 2001 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 I. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in these 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: NOVEMBER 5, 2001 Signed: [Signature] Commissions: ALBERTA #87
 (Authorized Inspector) (Nat'l Board incl. endorsements, State, Prov. and No.)

SHOP ORDER # 42586

A465646

<u>P6749.2</u> (CRN)	<u>42586-55 REV 2</u> (Drawing No)	<u>N/A</u> (Nat'l. Bd. No.)	<u>2001</u> (Year built)
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[illegible]

Certificate of Authorization

Type	11	No.	24,376	Expires	JULY 17, 2004
Date	NOVEMBER 5, 2001	Name	NATCO CANADA LTD.	Signed	<i>J. Hantwerker</i>
			(Manufacturer)		(Representative)
Date	NOVEMBER 5, 2001	Name	<i>Harold Rube</i>	Commission	ALBERTA #87
			(Authorized Inspector)		(Natl. Board incl. endorsement), State, Province and No.)
				Shop Order #:	42586

SO No **8503407**

PO No. _____

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATE FORM)**A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1****A465646**

1. Manufactured and certified by **R&M ENERGY SYSTEMS 10906 FM 2920 TOMBALL, TEXAS 77375**
(Name and address of Manufacturer)
2. Manufactured for **R & M ENERGY SYSTEMS CANADA 8750-58TH AVE, EDMONTON, ALBERTA, CANADA T6E 6G6**
(Name and address of Purchaser)
3. Location of installation **UNKNOWN**
(Name and address)
4. Type: **(2) 12" VERTICAL CLOSURE**
(Description of vessel part (shell, two-piece head, tube bundle))
N/A **50D12V-R0** **R&M ENERGY SYSTEMS** **OH2363.2134568Y**
(Nat'l Bd. No.) (Drawing No.) (Drawing prepared by) (CRN)
2001
(Year Built)
5. ASME Code, Section VIII, Div. 1 **1998 ADDENDA 00** **N/A** **N/A**
(Edition and Addenda (Date)) (Code Case No.) (Special service per UG-120(d))
6. Shell (a) No. of course(s) **1** (b) Overall length (ft. and in.): **0-05.5**

Course(s)			Material	Thickness, in.		Long Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter, in	Length, ft+in	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp., F	Time
1	12.000	0-05.5	SA 350 LF2	0.438	0.063	S	NONE	1	S	NONE	1	N/A	N/A

7. Heads: (a) SA 350 LF2 (b) N/A														
(Mat'l Spec. no., Grade or Type)(H.T. - Time and Temp.)														
	Location (Top, Bottom Ends)	Thickness, in.		Radius, in.		Elliptical	Conical	Hemispherical	Flat	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle	Ratio	Apex Angle	Radius	Diameter	Convex	Concave	Type	Full, Spot, None	Eff.
(a)	END	0.750	0.063								X	S	NONE	1
(b)														

If removable, bolts used (describe other fastening)

8. MAWP **285** **PSI @ max temp. = 100** °F. Min Design Metal Temp **-20** °F at **285** PSI
(Material Spec., Grade, Size, No.)
Internal external Internal external

9. Impact test **Yes - CAP & HUB** At a test temp of **-50 & -50** °F
Indicate yes or no and the component(s) impact tested

10. Hydro., pneu., or comb. Test pressure **SEE REMARKS** Proof Test: **UG-101(o) TESTED & ACCEPTED 01-17-00**

11. Nozzles, inspection, and safety valve openings: **UG-125(a)** At **3600 PSIG**

Purpose (Inlet, Outlet, Drain, etc.)	No.	Dia. or Size, in.	Flange Type	Material		Nozzle Thickness, in		Reinforcement	How Attached		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Material	Nozzle	
SEE REMARKS											
PAV	1	1/2" NPT	TH'D	SA 350 LF2		N/A	N/A	INHERENT	INT THD		SHELL

12. Supports: Skirt **Lugs** **Lags** **Others** **Attached**
(Yes or No) (No.) (No.) (Describe) (Where and How)

13. Remarks: **THIS TEMPERATURE APPLICABLE TO CLOSURE METAL COMPONENTS ONLY. ACTUAL SERVICE TEMPERATURE IS DETERMINED BY TEMPERATURE LIMITATIONS OF O-RING MATERIAL.**
UG-120, c.2 DESIGN & CALCULATION BY R&M ENERGY SYSTEMS. CLOSURE ASSEMBLY IS NOT HYDROSTATICALLY TESTED, PRESSURE ALERT VALVE FURNISHED.

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 Code for Pressure Vessels, Section VIII, Division 1.

U Certificate of Authorization No. **10052** Expires: **July 16, 2002**

Date: **09/21/01** Name: **R&M ENERGY SYSTEMS** Signed: **James R. Duval**
(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/or the State or Province of **TEXAS** and employed by **HARTFORD STEAM BOILER INSPECTION & INSURANCE CO. of CONNECTICUT** have inspected the pressure vessel part described in this Manufacturer's Data Report on **09-21-2001**, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel part 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 part 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: **09-21-01** Signed: **[Signature]** Commissions: **TEXAS 755**
(Authorized Inspector) (National Board Inc. Endorsement, State, Province and No.)

NATCO CANADA
P.O. No.: **070436**
DATE: **09/21/01**
W.O. No.: **4238656**
INITIAL: **56008**

Application for Licence to Operate

This Application form must be filled in completely and returned to the Authority with payment of the fee. Failure to do so may result in a delay in the processing of your application. **Only one piece of pressure equipment per application**, please refer to **LIB-0003** Client Authorization Payment Form for payment options. You can download all forms at www.tsask.ca

LIB-0002

I. Owner's Information

Owner's Name: Husky Energy

Address: 4429 44 st Lloydminster, SK S9V 0Z8
(Apt/Street) (City, Prov) (Postal Code)

Phone #: (780) 845-1683 **Fax #:** (780) 875-2728

Contact Name: Adam Stafievsky **Contact Phone #:** (780) 825-1282

Email: Adam.Stafievsky@huskyenergy.com **Contact Fax #:** (780) 825-1199

To the best of my knowledge, this application and all supporting documents are accurate. I understand that a false or misleading statement in this application or in any of the reference or other evidence of qualification submitted by myself or on my behalf may result in the Chief Inspector denying this application.


(Signature of Owner or delegate)

09/06/2011

(Date -MM DD YYYY)

II. Equipment Information

☒ **New Installation** ☐ **Existing Installation** **Equipment Licence #:** _____
(if known, change of ownership)

Equipment type: ☐ **Boiler** ☒ **Pressure Vessel** ☐ **Refrigeration Plant**
Revenue Codes: (17710-428703) (17710-428702) (17710-428704)

Serial #: 42586-55

CRN #: P6749.23

Operated under a Quality Management System: ☒ **Yes**

QMS #: QCM-826-07-04

III. Fee Information

Capacity or Multiple: 1.06 ☐ **kilowatts** ☐ **tonnes** ☒ **meters**

Fee attached: \$32

Method of Payment: _____

IV. Office Use Only

Authorization #: _____

Date Entered: _____

Entered by: _____

Signature: _____

Comments: _____

V. Fee Schedule

TABLE 7,8,9
[Subsection 40(2) and 41(4)]

Fees for Licence to Operate as Owner – High and Low Pressure Boilers,
Pressure Vessels & Refrigeration Plants

<i>Capacity of Boiler (kilowatts)</i>	<i>Fee</i>
250 or less	\$ 50
more than 250 but not more than 750	\$ 81
more than 750 but not more than 1,000	\$ 119
more than 1,000 but not more than 2,000	\$ 162
more than 2,000 but not more than 3,000	\$ 243
more than 3,000 but not more than 4,500	\$ 297
more than 4,500 but not more than 10,000	\$ 376
more than 10,000 but not more than 15,000	\$ 454
more than 15,000 but not more than 20,000	\$ 513
more than 20,000 but not more than 25,000	\$ 599
more than 25,000	\$ 778
 <i>Diameter or Width x Length of Pressure Vessel (multiple)</i>	 <i>Fee</i>
0.6 or less	\$ 26
more than 0.6 but not more than 1.5	\$ 32
more than 1.5 but not more than 3	\$ 52
more than 3 but not more than 6	\$ 92
more than 6 but not more than 9	\$ 124
more than 9 but not more than 12	\$ 162
more than 12 but not more than 14	\$ 200
more than 14 but not more than 28	\$ 243
more than 28 but not more than 56	\$ 340
more than 56	\$ 432
 <i>Capacity of Refrigeration Plant (tonnes)</i>	 <i>Fee</i>
30 or less	\$ 54
more than 30	\$ 103

Please refer to **LIB-0003 Client Authorization Payment form** for payment options.
You can download all forms at www.tsask.ca

VI. Misc. Information

For more information, visit our website or contact Boiler and Pressure Vessel Safety at:

Toll free in SK only

Phone: (866) 530-8599

Fax: (866) 760-9255

In Regina

Phone: (306) 787-1443

Fax: (306) 787-9273

FAXED

REGISTRATION APPROVAL

14-Nov-01

Natco Canada, Ltd. - Edmonton
5710 - 17th Street
Edmonton, Alberta
T6P 1S4

Our File 30118 [0V]

ATTENTION : Larry Fraser

With reference to your submission respecting the registration of the item below, for legal use in the province, please note we have surveyed, approved and registered this design as noted.

MANUFACTURER :	Natco Canada, Ltd. - Edmonton	
ITEM :	DRAWING NUMBER :	CRN:
Desi-dri Vessel	42586-55 Rev2	P6749.23

We wish to point out that every vessel must be constructed strictly in accordance with the registered design.

In addition to stamping every vessel with the registration number given above and as required in CSA Code B51, a Manufacturer's Data Report must be forwarded to this office immediately at the time a vessel is shipped. Such forms may be obtained upon request.

Sincerely,

Copy of original
Mike Beriault

Codes and Standards Compliance

REMARKS: CRN registered under reciprocal agreement.