



14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario
Canada M8X 2X4
Tel.: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772

www.tssa.org

November 09, 2015

MARIA TOTH
M TOTH ENGINEERING LIMITED
9 ATLANTIC AVE
UNIONVILLE ON L3P 7B6
CA

Service Request Type: BPV-Fitting Registration
Service Request No.: 1733458 & 1752150
Your Reference No.: SIZE 2.5 TO 15, GALLON BLADDER ACCUMULATOR SHELL
Registered to: BUCC INDUSTRIES INC

Dear MARIA TOTH,

Technical Standards and Safety Authority (TSSA) is pleased to inform you that your submission has been reviewed and registered as follows:

CRN No.: R1989.5 (For sizes 14 & 15 Gallons)
CRN No.: R1989.5FITG (For sizes 2.5, 5, 10 & 11 Gallons)
Main Design No.: 3600-D REV B

A stamped copy of the approved registration and invoice for engineering services will be mailed to you shortly. Should you have any questions or require further assistance, however, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail customerservices@tssa.org. We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Zivko Gacevic P. Eng.
Mechanical Engineer, BPV
Tel.: 416-734-3429
Fax: 416-231-6183
Email: zgacevic@tssa.org



505 - 6th Street, Suite 200
New Westminster, BC V3L 0E1

Toll Free: 1-866-566-SAFE
Fax: (778) 396 - 2064
www.safetyauthority.ca

M. TOTH ENGINEERING LTD
9 ATLANTIC AVENUE
MARKHAM ON L3P 7B6

Date: December 1, 2015
Account #: 16027
Journal #: 64145
Our File #: 5565340

Attn: MARIA TOTH

Re: Application for Design Registration

The design, as detailed in your, Dwg: 3600-D, for a Pressure Vessel is accepted for registration as follows:

Registered To: BUCC INDUSTRIES
INCORPORATED

CRN: R1989.51

MDMT: -65 deg F

MAWT: 200 deg F

Drawing #: 3600-D

Drawing Revision: B

Conditions Of Registration:

Registration of 2.5, 5, 10, 11, 14 & 15 Gal Bladder Accumulator Shell. MAWP: 3000/3600.

This design was registered based on a technical review performed by the province of initial registration in accordance with the Association of Chief Inspectors policy on reciprocal recognition of design review.

Contact me if you have any questions. The invoice for registration will be forwarded under separate cover.

SHARON PETERS

boiler.designregistration@safetyauthority.ca
Design Administration

cc:

January 05, 2016

Attention: Maria Toth
M TOTH ENGINEERING LTD.
CONSULTING ENGINEERS
9 ATLANTIC AVENUE
MARKHAM, ON L3P 7B6

The design submission, tracking number 2015-08275, originally received on November 25, 2015 was surveyed and accepted for registration as follows:

CRN : R1989.52

Accepted on: January 05, 2016

Reg Type: New Design

Drawing No. : 3600-D Rev B As Noted

Design registered in the name of : BUCC INDUSTRIES INC

Description	MAWP	Design Temperature	MDMT
Internal Pressure	20684 kPa	93 °C	-54 °C
Internal Press (App 22)	24821 kPa	93 °C	-54 °C

The registration is conditional on your compliance with the following notes:

The scope of this registration is limited to the forged bladder accumulator shell only and does not include any attachments, fittings, or assemblies. This note shall appear on the Manufacturer's Data Report.

The CE pressure/temperature rating and stamping is not part of this registration.

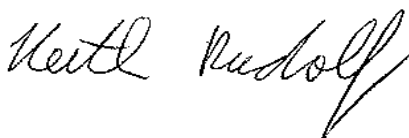
As per UG-84(c)(4)(-b) and Figure UHT-6.1, the lateral expansion shall not be less than 15 mils.

The hydrostatic test pressure is higher than required. As per UG-99(d), if the specified hydrostatic test pressure is exceeded, either intentionally or accidentally, to the degree that the vessel is subjected to visible permanent distortion, the Inspector shall reserve the right to reject the vessel.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 3344 or fax (780) 437-7787 or e-mail Rudolf@absa.ca.

Sincerely,



RUDOLF, KEITH, P. Eng.

REGISTRATION OF DESIGN

07-Jan-16

M. Toth Engineering Limited
9 Atlantic Avenue
Markham, ON
L3P 7B6

ATTENTION : Maria Toth

File Number: 50804 [0 V]

With reference to your submission respecting the registration of the item below, for legal use in the province, please note we have surveyed and registered this design in accordance with The Boiler and Pressure Vessel Act.

MANUFACTURER :	BUCC Industries, Inc.	
ITEM :	DRAWING NUMBER :	CRN:
Bladder Accumulator Shell	3600-D Rev. B	R1989.53

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,



Williams Uju, P.Eng.
Codes and Standards Compliance

REMARKS: CRN registered under reciprocal agreement.



Inspection and Technical Services Manitoba

500 - 401 York Avenue

Winnipeg Manitoba R3C 0P8

T (204) 945-3373

F (204) 948-2309

www.firecomm.gov.mb.ca/codes_steam_pressure.html

January 21, 2016

M. Toth Engineering Limited
9 Atlantic Ave.
Markham, ON
L3P 7B6

Attn: Maria Toth

REGISTRATION OF DESIGN

Manufacturer: BUCC Industries Inc.

The design(s) for the following Boiler/Pressure Vessel/Heat Exchanger has been received by us and has been examined and accepted for registration in the Province of Manitoba as follows.

MAIN DRAWING	REVISION	CRN	PRESSURE	TEMPERATURE	FILE
3600-D	B	R1989.54	3600 psi	200°F	36054

An invoice covering survey and registration fees is enclosed.

NOTE: *CRN registered under reciprocal agreement & is conditional based on compliance with the notes set by the original issuing Jurisdiction: **ABSA**.*

In addition to stamping every vessel with the registration number given above, and as required by CSA Code B51, a **Manufacturer's Data Report must be forwarded to this office** immediately at the time a unit is shipped to Manitoba.

The registration of this design does not relieve the manufacturer, the owner or his agent of the responsibility for the design or construction of a boiler, pressure vessel, or fired heater coil in accordance with the applicable Acts, Codes and Standards. Inspection and Technical Services assumes no responsibility by registering designs, examining plans and/or inspecting equipment or facility.

Yours truly,

Rabie Harb, E.I.T.

Design Surveyor

Office of the Fire Commissioner

Inspection and Technical Services Manitoba

500 - 401 York Avenue

Winnipeg, Manitoba, R3C 0P8

Phone: 204-945-3373

Email: rabie.harb@gov.mb.ca



February 2, 2016

Mrs. Maria Toth
M. TOTH ENGINEERING LIMITED
9 Atlantic Avenue
Markham ON
Canada L3P 7B6

Type of device: BLADDER ACCUMULATOR

Manufacturer: BUCC INDUSTRIES INC.
201 FOUNDATION AVE.
LA HABRA CALIFORNIA
U.S.A. 90631

Dear Madam,

According to our law respecting pressure vessels, your design has been reviewed and registered as follows:

CRN N°: R1989.56

Our reference No: 956913

Main Design No. : 3600-D REV. B

Note: If the CRN is a five digit number following the letter and start with a 0, the 0 is not considered to be an integral part of the CRN.

Yours truly,

TS for

Geneviève Noel-de-Tilly

Inspecteur autorisé (e)
Direction de l'inspection de la fabrication
d'appareils sous pression

ACI Central Inc.

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

Recommendation to Register – Pressure Vessel Design

To: Eben Creaser

Date: 12/01/2015

From: ACI Central Inc.

Manufacturer: BUCC Industries Inc.
201 Foundation Avenue
La Habra, CA 90631

Manufacturer #: PV-664

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: R1989.5

Unit Description	Drawing Number	Service	Design Code
Accumulator	3600-D Rev B	Non Lethal	ASME Sect VIII Div. 1, APP22

Shell Side

Tube Side

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
3000 PSI @ 200 F/3600 PSI A	-65 F @ 3600 PSI		

Test Pressure: Hydro: 5400 PSI Pneu:	Test Pressure: Hydro: Pneu:
--------------------------------------	-----------------------------

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 372 F70	0.370	0.382	-	100			OD": 8.78"	
								OAL": 72"	
								W":	
								H":	
								HS FT²:	

Notes:

- 1- The return of this form, bearing the signature and stamp of the Jurisdiction will legally establish the CRN shown on this form.
- 2- A copy of the Design bearing the CRN will be sent to the Manufacturer.
- 3- Details including service conditions will be posted on the 'Silent Inspector' Bulletin Board.
- 4- Copies of the Design and Specifications are available to ACIC Members on demand.
- 5- The form will be a permanent ACIC record.
- 6- To reduce turnaround times to a minimum fax your response to 902-566-3133.

ACIC Log#: 23451

Description: Accumulator 8.78" OD
ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature

New Brunswick
Brunswick

DEPT OF PUBLIC SAFETY
BOILER & PRESSURE VESSEL ACT

REGISTRATION ONLY

CRN

R1989.57

EXAMINED

for

CHIEF BOILER INSPECTOR

DATE:

12/04/2015



BLRs



PVs



FITTINGS



COMPONENTS

ACI Central Inc.

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

Recommendation to Register – Pressure Vessel Design

To: Peter Dodge

Date: 12/01/2015

From: ACI Central Inc.

Manufacturer: BUCC Industries Inc.
201 Foundation Avenue
La Habra, CA 90631

Manufacturer #: PV-664

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: R1989.5

Unit Description	Drawing Number	Service	Design Code
Accumulator	3600-D Rev B	Non Lethal	ASME Sect VIII Div. 1, APP22

Shell Side

Tube Side

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
3000 PSI @ 200 F/3600 PSI A	-65 F @ 3600 PSI		

Test Pressure: Hydro: 5400 PSI Pneu:	Test Pressure: Hydro: Pneu:
--------------------------------------	-----------------------------

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 372 F70	0.370	0.382	-	100			OD": 8.78"	
								OAL": 72"	
								W":	
								H":	
								HS FT²:	

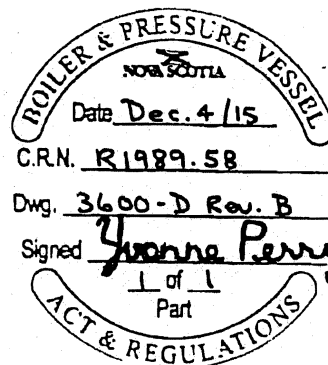
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ACI Central Inc.

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

Recommendation to Register – Pressure Vessel Design

To: Steve Townsend

Date: 12/01/2015

From: ACI Central Inc.

Manufacturer: BUCC Industries Inc.
201 Foundation Avenue
La Habra, CA 90631

Manufacturer #: PV-664

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: R1989.5

Unit Description	Drawing Number	Service	Design Code
Accumulator	3600-D Rev B	Non Lethal	ASME Sect VIII Div. 1, APP22

Shell Side

Tube Side

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
3000 PSI @ 200 F/3600 PSI A	-65 F @ 3600 PSI		

Test Pressure: Hydro: 5400 PSI Pneu:	Test Pressure: Hydro: Pneu:
--------------------------------------	-----------------------------

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 372 F70	0.370	0.382	-	100			OD": 8.78"	
								OAL": 72"	
								W":	
								H":	
								HS FT ² :	

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ACIC Log#: 23451

Description: Accumulator 8.78" OD
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ACCEPTED
PROVINCE OF PRINCE EDWARD ISLAND
ENVIRONMENT, LABOUR & JUSTICE

C.R.N.

R1989.59

DATE:

Dec 7/15

INSPECTION SERVICES SECTION
BOILER/PRESSURE VESSEL BRANCH

ACI Central Inc.

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

Recommendation to Register – Pressure Vessel Design

To: Stephen Higdon

Date: 12/01/2015

From: ACI Central Inc.

Manufacturer: BUCC Industries Inc.
201 Foundation Avenue
La Habra, CA 90631

Manufacturer #: PV-664

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: R1989.5

Unit Description	Drawing Number	Service	Design Code
Accumulator	3600-D Rev B	Non Lethal	ASME Sect VIII Div. 1, APP22

Shell Side

Tube Side

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
3000 PSI @ 200 F/3600 PSI A	-65 F @ 3600 PSI		

Test Pressure: Hydro: 5400 PSI Pneu:	Test Pressure: Hydro: Pneu:
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Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 372 F70	0.370	0.382	-	100			OD": 8.78"	
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ACIC Log#: 23451

Description: Accumulator 8.78" OD
ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature

Newfoundland
Laborator
Service Inc.

Registered R1989.50
Date 07 DEC 2015

Engineering and Inspection Services

Registered by 

UNDER THE AUTHORITY OF THE
PUBLIC SAFETY ACT AND
THE REGULATIONS PRESSURE VESSEL AND
COMPRESSED GAS REGULATIONS

ACI Central Inc.

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

Recommendation to Register – Pressure Vessel Design

To: Paul Christensen

Date: 12/01/2015

From: ACI Central Inc.

Manufacturer: BUCC Industries Inc.
201 Foundation Avenue
La Habra, CA 90631

Manufacturer #: PV-664

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: R1989.5

Unit Description	Drawing Number	Service	Design Code
Accumulator	3600-D Rev B	Non Lethal	ASME Sect VIII Div. 1, APP22

Shell Side

Tube Side

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
3000 PSI @ 200 F/3600 PSI A	-65 F @ 3600 PSI		

Test Pressure: Hydro: 5400 PSI Pneu:	Test Pressure: Hydro: Pneu:
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Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
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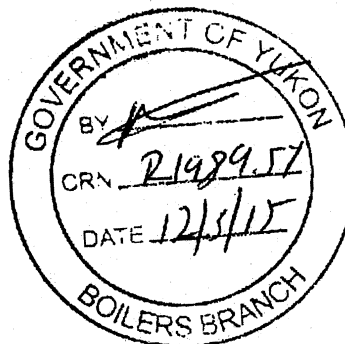
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ACIC Log#: 23451

Description: Accumulator 8.78" OD
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ACI Central Inc.

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

Recommendation to Register – Pressure Vessel Design

To: Matthias Mallman

Date: 12/01/2015

From: ACI Central Inc.

Manufacturer: BUCC Industries Inc.
201 Foundation Avenue
La Habra, CA 90631

Manufacturer #: PV-664

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: R1989.5

Unit Description	Drawing Number	Service	Design Code
Accumulator	3600-D Rev B	Non Lethal	ASME Sect VIII Div. 1, APP22

Shell Side

Tube Side

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
3000 PSI @ 200 F/3600 PSI A	-65 F @ 3600 PSI		

Test Pressure: Hydro: 5400 PSI Pneu:	Test Pressure: Hydro: Pneu:
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Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 372 F70	0.370	0.382	.	100			OD": 8.78"	
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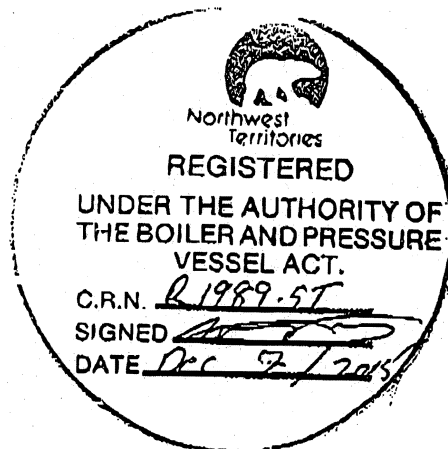
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ACIC Log#: 23451

Description: Accumulator 8.78" OD
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82-00

ACI Central Inc.

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

Recommendation to Register – Pressure Vessel Design

To: Muhammad Wani

Date: 12/01/2015

From: ACI Central Inc.

Manufacturer: BUCC Industries Inc.
201 Foundation Avenue
La Habra, CA 90631

Manufacturer #: PV-664

Subject: ACI Central Design Review

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CRN: R1989.5

Unit Description	Drawing Number	Service	Design Code
Accumulator	3600-D Rev B	Non Lethal	ASME Sect VIII Div. 1, APP22
Shell Side		Tube Side	
MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
3000 PSI @ 200 F/3600 PSI A	-65 F @ 3600 PSI		

Test Pressure: Hydro: 5400 PSI	Pneu:	Test Pressure: Hydro:	Pneu:
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Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 372 F70	0.370	0.382	-	100			OD": 8.78"	
								OAL": 72"	
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NUNAVUT

Boilers and
Pressure Vessels Act

REGISTERED

CRN R1989.5 N

Date DEC 4 2015

Signed [Signature]

Chief Inspector

Territorial Registration Fee