

October 15, 2019

Attention: Tanya Francis
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO, ON M9W 6N9

The design submission, tracking number 2019-05629, originally received on August 13, 2019 was surveyed and accepted for registration as follows:

CRN : 0G20110.2 **Accepted on:** October 15, 2019
Reg Type: NEW DESIGN **Expiry Date:** October 15, 2029
Drawing No. : SCOPE OF CRN REGISTRATION DATED 13-OCT-19
Fitting type: SAFETY RELIEF VALVES
Design registered in the name of : ARI-ARMATUREN USA LP

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

TSSA Service Request No.: 2659502

The scope of this registration is for 1/2" thru 10" Category G certified capacity-rated safety relief valves. Additional details are provided in the scope of registration including the models, catalog figure numbers, sizes, end connections, materials, and class ratings.

This design has been reviewed and accepted based on the understanding that SA-352-LCC and SA-494-M-35-1 material may be utilized as per Code Case 1750-25. These materials shall not be welded, except as otherwise permitted by this Code Case.

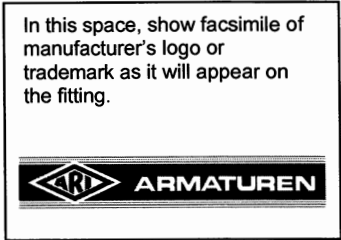
Safety relief valves made from SA-494-M-35-1 and SA-494-CW-12MW material shall not have flanged ends.

Safety relief valves made form SA-494-CW-12MW material shall not be welded or brazed as per Section II, Part D, note W1. Therefore only threaded ends are permitted for this material.

This registration includes the following National Board certificates: 73000, 73011, 73044, 73055, 73145, 73156, 73167, 73178, 73202, 73213, 73224, and 73235.

As indicated on the AB-41 Statutory Declaration form and submitted documentation the code of construction is ASME Section VIII, Division 1.

STATUTORY DECLARATION Registration of Fittings



I, KEEFE FRENTZ, QUALITY MANAGER of ARI-ARMATUREN USA, LP located at 125 MAGELLAN CIRCLE, WEBSTER, TX, 77598

do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (check one)

- comply with the requirements of ASME SECTION VIII DIV.1 (1) which specifies the dimensions, materials of construction, pressure/temperature ratings and identification marking of the fittings, or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with as supported by the attached (title of code of construction or other applicable document) data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, ISO 9001:2015 TUV as being suitable for the manufacture of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are

G - CERTIFIED CAPACITY RATED PSV (brief description of fittings)

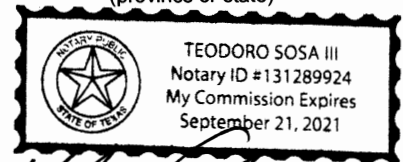
In support of this application, the following information, calculations and/or test data are attached:

SCOPE OF CRN, REPORTS, CATALOGS, NATIONAL BOARD LISTING (2)

DECLARED before me at Webster in the State of Texas

this 23rd day of April, 2019

(print) Teodoro Sosa III (a Commissioner of Oaths or Notary Public)



(sign) [Signature] (a Commissioner of Oaths or Notary Public)

[Signature] (signature of applicant)

For ABSA Office Use Only:

NOTES: (1) Code edition is 2017. (2) Scope is dated 13-Oct-19.

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Clause 4.2, and is accepted for registration in Category G

Registration Number: 0G20110.2 (Signature of the Administrator/SCO)

Date Registered: OCT 15 2019 Expiry Date: Oct 15 2029

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in the Pressure Equipment Discipline.

"See Acceptance Letter for the comments and/or conditions of registration"

ARI-ARMATURE USA, LP

125 MAGELLAN CIRCLE
 WEBSTER, TX
 77598, USA



13-Oct-19

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SCOPE OF CRN REGISTRATION

Product Description	Models	Design Code	Code Stamp	Size Range	End Connection	Standard Body and Bonnet Material (Note 1)	Nominal Pressures (Note 1,2,3,4)
Full-Nozzle Safety Relief Valves	R, RB, RO, RBO, (Fig. 971, 973, 974)	ASME Section VIII Division 1	ASME UV	NPS 1" thru NPS 10"	ASME B16.5 Flanged	Carbon Steel ASME SA216-WCC	ANSI 150, 300, 600 900, 1500, 2500 Limited by the Set Pressure.
Full-Nozzle Safety Relief Valves	RL14, RLO14, RL40, RLO40, RL41, RLO41 (Fig. 966, 968, 969)	ASME Section VIII Division 1	ASME UV	NPS 1/2" thru NPS 2"	Female NPT, Male NPT, Socket Weld, Buttweld, ASME B16.5 Flanged	Carbon Steel ASME SA216-WCC	ANSI 150, 300, 600 900, 1500, 2500 Limited by the Set Pressure.

ABSA
 SAFETY CODES ACT - PROVINCE OF ALBERTA
 REGISTRATION OF FITTINGS
 REGISTRATION NO. **0G20110.2**
 DWG. NO. or CAT. NO. *Scope of CRN Registration dated 13-Oct-19*
 TYPE OF FITTINGS *Safety Relief Valves*
OCT 15 2019 INITIALS *Keith Rudolf*
 Date KEITH RUDOLF, P.Eng.
 DESIGN SURVEY ENGINEER

"See Acceptance Letter for the comments and/or conditions of registration"

Note 1: The following other ASME Section II materials may be supplied. In all cases the maximum pressure-temperature ratings are to be limited to the National Board Listing set pressures.

- ASME SA217-WC6
- ASME SA351-CF8M
- ASME SA352-LCC
- ASME SA494 M-35-1
- ASME SA217-C12
- ASME SA351-CN7M
- ASME SA494 CW-12MW
- ASME SA995-4A CD3MN

Note 2: In all cases the pressure-temperature ratings of the valves may be limited by the seat and seal materials. Consult ARI-Armature.

Note 3: For temperatures below -20F products shall conform to the rules of the applicable codes under which they are used.

Note 4: For material ASME SA494 CW-12MW no welding or brazing is permitted per ASME Section II Part D Note W1.

Note 5: Materials ASME SA494 CW-12MW and SA494 M-35-1 are not listed in ASME B16.5 therefore valves shall not be supplied with flanges ends when these materials are used.

Note 6: See attached copy of National Board Listing.

ARI - Armaturen USA, LP (TAR)

NB#: 73000

location: 125 Magellan Circle, Webster, TX 77598 United States

ARI - Armaturen USA, LP (TAR)

location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73000** Design Series or catalog number: **Reyco R, RB & RO (Fig. 971, 973, 974)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 19, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.86 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring****0G20110.2**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 - 3 NPS	0.122 sq in	[D] 0.394 in	0.12 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1
		0.217 sq in	[E] 0.526 in	0.16 in	15 - 2900 psi	Steam	VIII Div. 1
1.5 NPS	2 - 3 NPS	0.34 sq in	[F] 0.658 in	0.2 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.558 sq in	[G] 0.843 in	0.26 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 4905 psi	Air	VIII Div. 1
	3 NPS	0.869 sq in	[H] 1.052 in	0.32 in	15 - 2900 psi	Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.427 sq in	[J] 1.348 in	0.41 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.036 sq in	[K] 1.61 in	0.49 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.16 sq in	[L] 2.006 in	0.61 in	15 - 2900 psi	Air	VIII Div. 1
					Steam	VIII Div. 1	
4 NPS	6 NPS	3.987 sq in	[M] 2.253 in	0.69 in	15 - 1600 psi	Air	VIII Div. 1
					Steam	VIII Div. 1	
		4.807 sq in	[N] 2.474 in	0.75 in	15 - 1600 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.24 sq in	[Q] 3.948 in	1.2 in	15 - 925 psi	Air	VIII Div. 1
					Steam	VIII Div. 1	
		17.72 sq in	[R] 4.75 in	1.45 in	15 - 350 psi	Air	VIII Div. 1
8 NPS	10 NPS	29.75 sq in	[T] 6.155 in	1.84 in	15 - 325 psi	Air	VIII Div. 1
					Steam	VIII Div. 1	

ARI - Armaturen USA, LP (TAR)

NB#: 73011

Location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73011** Design Series or catalog number: **Reyco R, RB, RO, RBO (Fig. 971, 973, 974) (liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 27, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.724 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

0G20110.2

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2, 2.5, 3 NPS	0.122 sq in	[D] 0.394 in	0.12 in	15 - 6250 psi	Water	VIII Div. 1
		0.217 sq in	[E] 0.526 in	0.16 in	15 - 6250 psi	Water	VIII Div. 1
1.5 NPS	2 - 3 NPS	0.34 sq in	[F] 0.658 in	0.2 in	15 - 6250 psi	Water	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.558 sq in	[G] 0.843 in	0.26 in	15 - 4905 psi	Water	VIII Div. 1
	3 NPS	0.869 sq in	[H] 1.052 in	0.32 in	15 - 3300 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.427 sq in	[J] 1.348 in	0.41 in	15 - 3300 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.036 sq in	[K] 1.61 in	0.49 in	15 - 3300 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.16 sq in	[L] 2.006 in	0.61 in	15 - 2900 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.987 sq in	[M] 2.253 in	0.69 in	15 - 1600 psi	Water	VIII Div. 1
		4.807 sq in	[N] 2.474 in	0.75 in	15 - 1600 psi	Water	VIII Div. 1
		7.07 sq in	[P] 3 in	0.92 in	15 - 1600 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.24 sq in	[Q] 3.948 in	1.2 in	15 - 925 psi	Water	VIII Div. 1
	8, 10 NPS	17.72 sq in	[R] 4.75 in	1.45 in	15 - 350 psi	Water	VIII Div. 1
8 NPS	10 NPS	29.75 sq in	[T] 6.155 in	1.84 in	15 - 325 psi	Water	VIII Div. 1

Certification Number: **73044** Design Series or catalog number: **RL-14 & RLO-14**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 08, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.23 SCFM/PSIA**Certified Value (alternate medium): **3.46 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.078 sq in	0.315 in	0.078 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

ARI - Armaturen USA, LP (TAR)

NB#: 73055

location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73055** Design Series or catalog number: **RL-14 & RLO-14 (Liquids)**

Type Classification: **Safety Relief Valve**
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 04, 2010**
 Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**
 Certified Value: **1.88 GPM/SQ.RT. PSID**
 Test Medium: **Water**
 Certified Medium: **Liquid**
 Special Service: **None**
 Set Pressure Definition: **First Steady Stream**
 Blowdown: **Fixed**

0G20110.2

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.078 sq in	0.315 in	0.078 in	15 - 5000 psi	Water	VIII Div. 1

Certification Number: **73145** Design Series or catalog number: **RL40, RLO40, RL41, RLO41**

Type Classification: **Safety Relief Valve**
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 10, 2010**
 Method of Establishing Relieving Capacity: **Flow Capacity, Slope**
 Certified Value: **1.86 SCFM/PSIA**
 Certified Value (alternate medium): **5.23 PPH/PSIA**
 Test Medium: **Steam & Air/Gas**
 Certified Medium: **Steam & Air/Gas**
 Special Service: **None**
 Set Pressure Definition: **Pop**
 Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1 NPS	1-2 NPS	0.152 sq in	0.44 in	0.365 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Certification Number: **73156** Design Series or catalog number: **RL40, RLO40, RL41, RLO41 (Liquids)**

Type Classification: **Safety Relief Valve**
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 26, 2010**
 Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**
 Certified Value: **2.684 GPM/SQ.RT. PSID**
 Test Medium: **Water**
 Certified Medium: **Liquid**
 Special Service: **None**
 Set Pressure Definition: **First Steady Stream**
 Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1 NPS	1-2 NPS	0.152 sq in	0.44 in		15 - 5000 psi	Water	VIII Div. 1

ARI - Armaturen USA, LP (TAR)

NB#: 73167

Location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73167** Design Series or catalog number: **RL40, RL040 (0.847 in. orif.)**

Type Classification: **Safety Relief Valve**
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 03, 2010**
 Method of Establishing Relieving Capacity: **Flow Capacity, Slope**
 Certified Value: **8.86 SCFM/PSIA**
 Certified Value (alternate medium): **24.89 PPH/PSIA**
 Test Medium: **Air**
 Certified Medium: **Steam & Air/Gas**
 Special Service: **None**
 Set Pressure Definition: **Pop**
 Blowdown: **Fixed**

0620110.2

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 - 2 NPS	2 NPS	0.563 sq in	0.847 in		15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **73178** Design Series or catalog number: **RL40, RL040 (0.847 in. orif.)(liquid)**

Type Classification: **Safety Relief Valve**
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 03, 2010**
 Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**
 Certified Value: **13.05 GPM/SQ.RT. PSID**
 Test Medium: **Water**
 Certified Medium: **Liquid**
 Special Service: **None**
 Set Pressure Definition: **First Steady Stream**
 Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 - 2 NPS	2 NPS	0.563 sq in	0.847 in		15 - 1500 psi	Water	VIII Div. 1

Certification Number: **73202** Design Series or catalog number: **RL14 & RLO14 (0.394 in.)**

Type Classification: **Safety Relief Valve**
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 30, 2014**
 Method of Establishing Relieving Capacity: **Flow Capacity, Slope**
 Certified Value: **1.637 SCFM/PSIA**
 Certified Value (alternate medium): **4.60 PPH/PSIA**
 Test Medium: **Steam & Air/Gas**
 Certified Medium: **Steam & Air/Gas**
 Set Pressure Definition: **Pop**
 Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.122 sq in	0.394 in	0.0985 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

ARI - Armaturen USA, LP (TAR)

NB#: 73213

location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73213** Design Series or catalog number: **RL14 & RLO14 (0.394 in.) (Liquid)**

Type Classification: Relief Valve
 Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 30, 2014
 Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor
 Certified Value: 3.021 GPM/SQ.RT. PSID
 Test Medium: Water
 Certified Medium: Liquid
 Set Pressure Definition: First Steady Stream
 Blowdown: Fixed

0620110.2

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.122 sq in	0.394 in	0.0985 in	15 - 5000 psi	Water	VIII Div. 1

Certification Number: **73224** Design Series or catalog number: **RL40, RLO40, RL41, RLO41 (0.547 in orifice), Design Rev. A**

Type Classification: Safety Relief Valve
 Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 04, 2014
 Method of Establishing Relieving Capacity: Flow Capacity, Slope
 Certified Value: 3.76 SCFM/PSIA
 Certified Value (alternate medium): 10.53 PPH/PSIA
 Test Medium: Steam & Air/Gas
 Certified Medium: Steam & Air/Gas
 Set Pressure Definition: Pop
 Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	1-2 NPS	0.235 sq in	0.547 in	0.137 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1

Certification Number: **73235** Design Series or catalog number: **RL40, RLO40, RL41, RLO41 (0.547 in. orifice) (Liquid), Design Rev. A**

Type Classification: Relief Valve
 Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 04, 2014
 Method of Establishing Relieving Capacity: Flow Capacity, Slope
 Certified Value: 5.635 GPM/SQ.RT. PSID
 Test Medium: Liquid
 Certified Medium: Liquid
 Set Pressure Definition: First Steady Stream
 Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	1-2 NPS	0.235 sq in	0.547 in	0.137 in	15 - 3000 psi	Water	VIII Div. 1

CERTIFICATE



TUV Rheinland of North America, Inc.
295 Foster Street, Suite 100, Littleton, MA 01460

0G20110.2

Hereby certifies that



ARI-Armaturen USA, LP

**125 Magellan Circle
Webster, TX 77598**

has established and maintains a quality management system for the

**Design, Manufacture and Distribution of Safety Relief Valves,
Control Valves, Isolation Valves and Steam Systems**

An audit was performed and documented in Report No 3762.
Proof has been furnished that the requirements according to

ISO 9001:2015

are fulfilled.

Further clarification regarding the scope of this certificate and the applicability of
ISO 9001:2015 requirements may be obtained by contacting TRNA.

Certificate Registration No.

74 300 3762

Certificate Issue Date
January 15, 2017

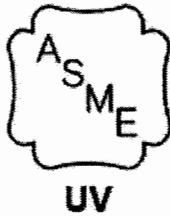
Certificate Expiration Date
January 14, 2020



Reissue Date: 2/25/2018

Robert Djuonic

Certification of Management Systems



0G20110.2

CERTIFICATE OF AUTHORIZATION

The named company is authorized by the American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the certification mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with this certification mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.

COMPANY:

**ARI-Armaturen USA, LP
125 Magellan Circle
Webster, Texas 77598**

SCOPE:

Manufacture of pressure vessel pressure relief valves at the above location only

AUTHORIZED:

August 8, 2018

EXPIRES:

December 16, 2021

CERTIFICATE NUMBER:

39,160

Handwritten signature of Richard R. Stevenson in black ink.

Board Chair, Conformity Assessment

Handwritten signature of Joseph J. ... in black ink.

Managing Director, Conformity Assessment

