CASCADE NATURAL GAS CORPORATION
A Subsidiary of MDU Resources Group, Inc.

8113 W. GRANDRIDGE BLVD., KENNEWICK, WASHINGTON 99336-7166
TELEPHONE 509-734-4500 FACSIMILE 509-737-9803
www.cngc.com

September 17, 2020

Sean Mayo – Pipeline Safety Director
Washington Utilities and Transportation Commission
PO Box 47250
Olympia, WA 98504-7250

Subject: CNGC follow-up response to Probable Violation and Area of Concern RE: 2020 Natural Gas Investigation – Cascade Natural Gas Corporation (CNGC) – Bremerton District – (Insp. No. 8203)

Dear Mr. Mayo,

This letter is Cascade Natural Gas Corporation's (CNGC) follow-up response to the response letter submitted on August 10, 2020 addressing one probable violation and one area of concern stemming from the random field crew inspection on May 28, 2020 at 6228 Illahee Road NE in Bremerton, Washington in Cascade Natural Gas Corporation's (CNGC) Bremerton District (Inspection No. 8203).

In the response letter dated August 10, 2020, CNGC compiled a list of locations where Unit F0739, the Michels weld truck (identified on May 28, 2020 as having a gas scope, pyrometer, half-cell, and gauges with expired calibration dates), was present and where equipment with an expired calibration date was used during the installation of CNGC facilities. A review of the work performed at these job sites has been completed. This review included calibration records, time records, as-built documentation, and operator qualifications of involved Michels personnel. Results of the review are as follows:

Calibration Records
The pyrometer with serial number 41690274WS that was used past the calibration expiration date from March 15, 2020 to May 28, 2020 was calibrated by Robb Precision Tool Services on June 10, 2020. The calibration report indicates the instrument was received in tolerance, thus indicating temperature readings taken were accurate. (See Figure 1.) The multimeter with serial number 41430029 that was used past the calibration expiration date from March 18, 2020 to May 28, 2020 was calibrated by JJ Calibrations, Inc. on June 12, 2020. The calibration report indicates the instrument was received in tolerance, thus indicating pipe and wire potentials taken were accurate. (See Figure 2.) The half cell with serial number C6462 that was used past the calibration expiration date from April 3, 2020 to May 28, 2020 was calibrated by M.C. Miller Co., Inc. on August 25, 2020. The calibration report indicates the instrument was received in tolerance, thus indicating pipe and wire potentials taken were accurate. (See Figure 3.)

CNGC determined that the facilities installed with the equipment described above with an expired calibration date used during the installation of CNGC facilities do not require remedial action because the equipment was received in tolerance.

As stated in the response letter dated August 10, 2020, the gas scope with an expired expiration date was used on May 28, 2020 during the installation of a 336-foot service line at 6228 Illahee Road NE, Bremerton. Per CNGC Policy Statement *OPS 603 – Pipeline Purging and Cleaning*, a combustible gas indicator (i.e. gas scope) is required to verify 100% gas of one-inch service lines 150 feet or longer. Because 6228 Illahee Road NE has a meter and the customer is using natural gas, we know the service line was properly purged of air prior to being placed into service.

Time Records
In lieu of time records, CNGC conducted an exhaustive review of GPS records for Unit F0739. The review identified ten additional CNGC job sites where Unit F0739 was present and tools with an expired calibration date may have been used during the installation of CNGC facilities.

As-built Documentation
In addition to the review of the fourteen locations reported in the August 10, 2020 response, CNGC reviewed the as-built records of the ten additional locations. CNGC identified one gauge serial number entry that did not match those assigned to Unit F0739; however, ultimately determined it was a data entry error.

Operator Qualifications

Seventeen Michel's employees were present at one or more of the twenty-four locations where Unit F0739 was present and equipment with an expired calibration date was used or may have been used during the installation of CNGC facilities. CNGC Compliance department personnel reviewed the Operator Qualification records of the seventeen Michel's employees. Each location had employees qualified for the covered tasks required for the equipment with expired calibration dates: Plastic Pipe: Butt Heat Fusion, Plastic Pipe: Sidewall Heat Fusion, Pipe-to-Soil Testing, and Purging.

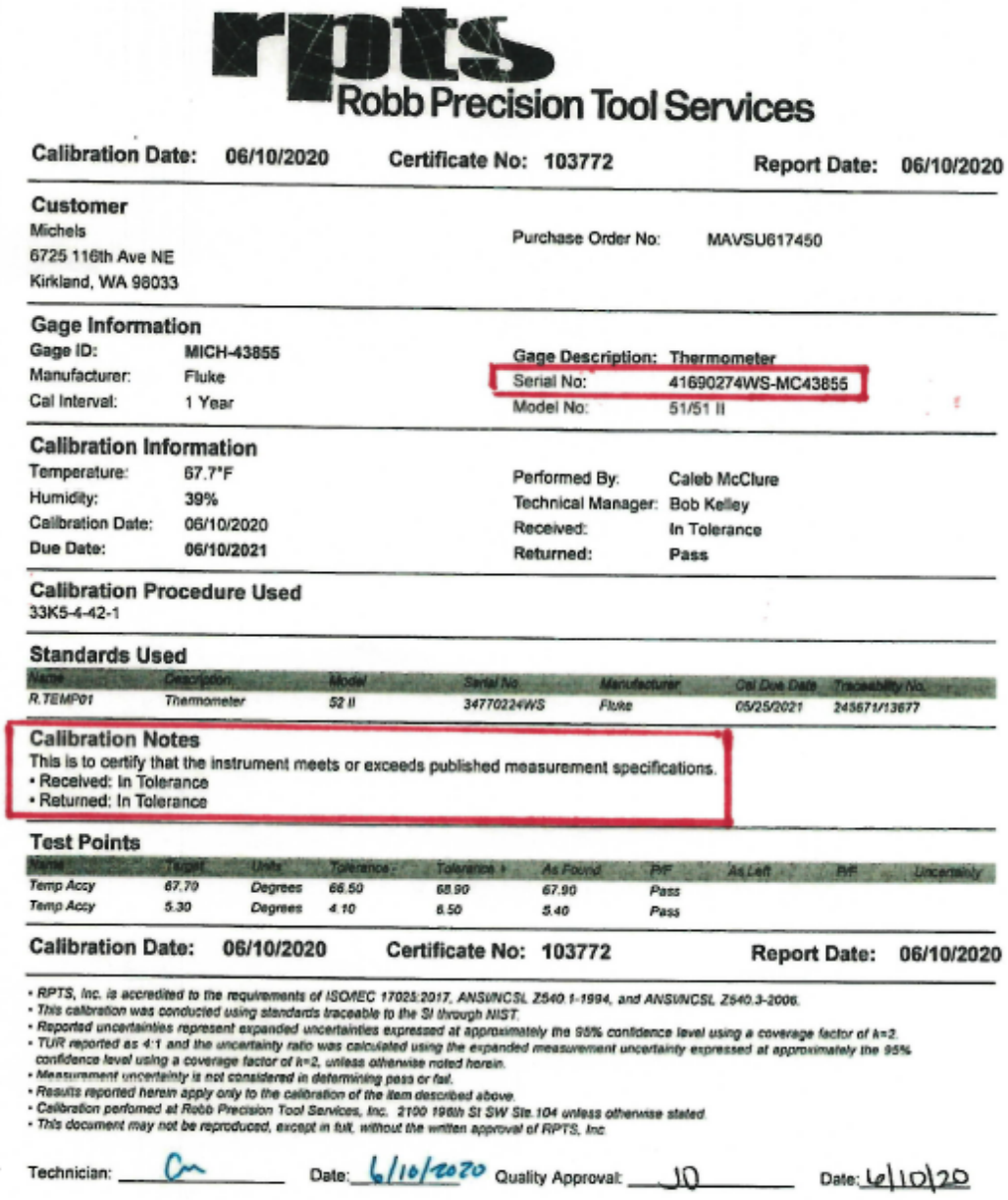
CNGC has concluded that the use of equipment from Unit F0739 between March 15, 2020 and May 28, 2020 did not affect the safety or integrity of its pipelines or facilities; therefore, CNGC believes no further mitigation is necessary. CNGC will continue to periodically monitor equipment calibration expiration dates during inspections conducted by our Quality Control Department.

Please contact Josh Sanders at (701) 222-7773 with questions or comments.

Respectfully Submitted,

Pat Darras
Vice President, Engineering & Operations Services
Cascade Natural Gas Corporation

FIGURE 1 – Pyrometer SN: 41690274WS



rpts
Robb Precision Tool Services

Calibration Date: 06/10/2020 **Certificate No:** 103772 **Report Date:** 06/10/2020

Customer
Michels
6725 116th Ave NE
Kirkland, WA 98033

Purchase Order No: MAVSU617450

Gage Information

Gage ID:	MICH-43855	Gage Description:	Thermometer
Manufacturer:	Fluke	Serial No:	41690274WS-MC43855
Cal Interval:	1 Year	Model No:	51/51 II

Calibration Information

Temperature:	67.7°F	Performed By:	Caleb McClure
Humidity:	39%	Technical Manager:	Bob Kelley
Calibration Date:	06/10/2020	Received:	In Tolerance
Due Date:	06/10/2021	Returned:	Pass

Calibration Procedure Used
33K5-4-42-1

Standards Used

Name	Description	Model	Serial No	Manufacturer	Cal Due Date	Traceability No
R.TEMP01	Thermometer	52 II	34770224WS	Fluke	05/25/2021	245671/13677

Calibration Notes
This is to certify that the instrument meets or exceeds published measurement specifications.
- Received: In Tolerance
- Returned: In Tolerance

Test Points

Name	Target	Units	Tolerance -	Tolerance +	As Found	P/F	As Left	P/F	Uncertainty
Temp Accy	67.70	Degrees	66.50	68.90	67.90	Pass			
Temp Accy	5.30	Degrees	4.10	6.50	5.40	Pass			

Calibration Date: 06/10/2020 **Certificate No:** 103772 **Report Date:** 06/10/2020

- RPTS, Inc. is accredited to the requirements of ISO/IEC 17025:2017, ANSI/NCSL Z540.1-1994, and ANSI/NCSL Z540.3-2006.
- This calibration was conducted using standards traceable to the SI through NIST.
- Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.
- TUR reported as 4:1 and the uncertainty ratio was calculated using the expanded measurement uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2, unless otherwise noted herein.
- Measurement uncertainty is not considered in determining pass or fail.
- Results reported herein apply only to the calibration of the item described above.
- Calibration performed at Robb Precision Tool Services, Inc. 2100 196th St SW Ste.104 unless otherwise stated.
- This document may not be reproduced, except in full, without the written approval of RPTS, Inc.

Technician: CM Date: 6/10/2020 Quality Approval: JD Date: 6/10/20

2100 196th St. SW, Suite 104 • Lynnwood, Washington 98036 • Phone: 425 672 7307 • Page 1 of 1

FIGURE 2 – Multimeter SN: 41430029

Certificate of Calibration

Certificate Number: **726590**

JJ Calibrations, Inc.
7724 SE Aspen Summit Drive
Portland, OR 97266-9217
Phone 503.786.3005
FAX 503.786.2994

ROBB PRECISION TOOL SERVICES
2100 196th St. SW
Suite 104
Lynnwood, WA 98036

PO: MICH-20162
Order Date: 06/11/2020
Authorized By: N/A
Calibrated on: 06/12/2020
*Recommended Due: 06/12/2021
Environment: 22 °C 54 % RH
As Received: Within Tolerance
As Returned: Within Tolerance
Action Taken: Calibrated
Technician: 146

Property #: MICH-45596
User: N/A
Department: N/A
Make: Fluke
Model: 177
Serial #: 41430029
Description: Digital Multimeter, Handheld
Procedure: 400009
Accuracy: Refer to Mfg. Specs.

Remarks: * Many factors may cause the unit to drift out of calibration before the recommended due date. Any reported error is the absolute value between the reference and the unit.

Returned with probes

Standards Used

Std ID	Manufacturer	Model	Nomenclature	Due Date	Trace ID
446A	Fluke	5500A-SC600	Calibrator W/600MHz	04/10/2021	721704
73A	General Radio	1409-T	STD, CAPACITOR	05/10/2021	700470

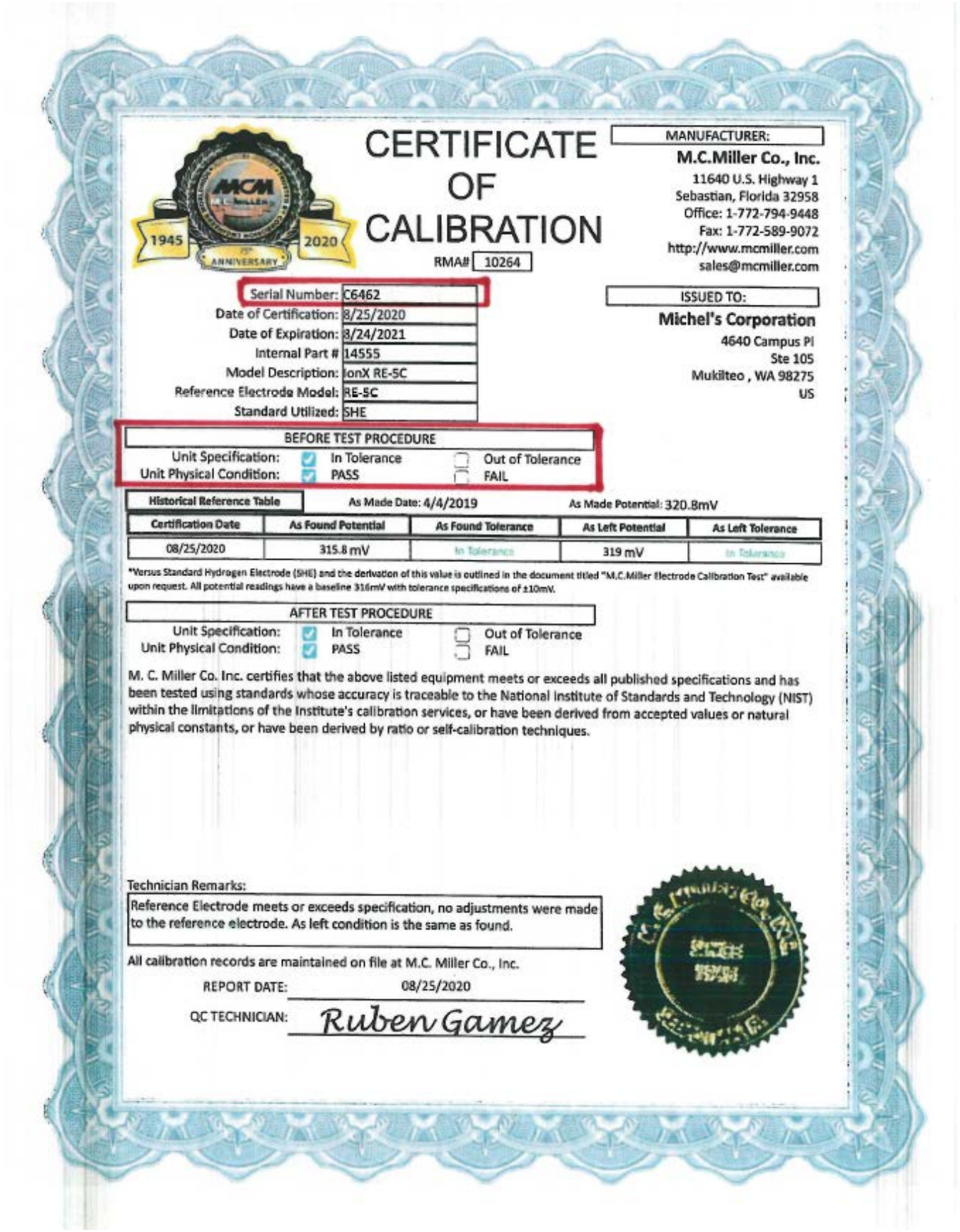
This instrument has been calibrated in accordance with the JJ Calibrations Quality Assurance Manual and is traceable to either the SI or to National Institute of Standards and Technology (NIST). The quality system and this certificate are in compliance with ANSI/NCSL Z540-1-1994, ISO/IEC 17025-2017, ISO 10012-1, the ISO 9000 family and QS 9000. The expanded uncertainties of measurements for this calibration are based upon 95% (2 sigma) confidence limits. Unless stated in the comments, certificates reflect the "Simple Acceptance Rule" as specified by JCGM 106:2012. Unless otherwise stated, a test accuracy ratio (TAR) of 4:1, if achievable, is maintained. The results reported herein apply only to the calibration of the item described above. This report may not be reproduced, except in full, without written approval of JJ Calibrations.

Reviewer

Issued 06/16/2020 Rev # 15

Inspector

FIGURE 3 – HALF CELL SN: C6462



CERTIFICATE OF CALIBRATION

1945 2020 75th ANNIVERSARY

RMA# 10264

MANUFACTURER:
M.C.Miller Co., Inc.
11640 U.S. Highway 1
Sebastian, Florida 32958
Office: 1-772-794-9448
Fax: 1-772-589-9072
http://www.mcmiller.com
sales@mcmiller.com

ISSUED TO:
Michel's Corporation
4640 Campus Pl
Ste 105
Mukilteo , WA 98275
US

Serial Number:	C6462
Date of Certification:	8/25/2020
Date of Expiration:	8/24/2021
Internal Part #	14555
Model Description:	IonX RE-5C
Reference Electrode Model:	RE-5C
Standard Utilized:	SHE

BEFORE TEST PROCEDURE

Unit Specification: ☑ In Tolerance ☐ Out of Tolerance
Unit Physical Condition: ☑ PASS ☐ FAIL

Historical Reference Table As Made Date: 4/4/2019 As Made Potential: 320.8mV

Certification Date	As Found Potential	As Found Tolerance	As Left Potential	As Left Tolerance
08/25/2020	315.8 mV	In Tolerance	319 mV	In Tolerance

*Versus Standard Hydrogen Electrode (SHE) and the derivation of this value is outlined in the document titled "M.C.Miller Electrode Calibration Test" available upon request. All potential readings have a baseline 316mV with tolerance specifications of ±10mV.

AFTER TEST PROCEDURE

Unit Specification: ☑ In Tolerance ☐ Out of Tolerance
Unit Physical Condition: ☑ PASS ☐ FAIL

M. C. Miller Co. Inc. certifies that the above listed equipment meets or exceeds all published specifications and has been tested using standards whose accuracy is traceable to the National Institute of Standards and Technology (NIST) within the limitations of the Institute's calibration services, or have been derived from accepted values or natural physical constants, or have been derived by ratio or self-calibration techniques.

Technician Remarks:
Reference Electrode meets or exceeds specification, no adjustments were made to the reference electrode. As left condition is the same as found.

All calibration records are maintained on file at M.C. Miller Co., Inc.

REPORT DATE: 08/25/2020

QC TECHNICIAN: Ruben Gamez