Suggested Format A for Welder performance Qualification (WPQ)
(see QW-301 Section IX ASME Boiler and Pressure Vessel Code)

Welder's Name **Jason Braden** Identification no. **5844**

Identification of WPS followed **GMAW-AL-01** Test Coupon ■ Production Weld ☐

Specification of base material **P22 to P22** Thickness **0.25" Plate** Date Welded **July 30, 2019**

Testing conditions and Qualification Limits		
Welding Variables (QW-350)	*Actual Values*	*Range Qualified*
Welding process	**GMAW**	**GMAW**
Type (ie. manual, semi-automatic used)	**Semi-Automatic**	**Semi-Automatic**
Backing (with/without)	**With Backing (Back-gouged)**	**With Backing**
Plate or Pipe (enter diameter if pipe or tube)	**0.25" Plate**	**1/16" to 0.5" Fillet - All thicknesses**
Base metal P no. or S no. joined to P no. or S no.	**P22**	**P21 through P26**
Filler metal or electrode specification (SFA)	**A5.10**	**A5.10**
Filler metal or electrode classification (info. only)	**ER5356**	**Any**
Filler metal F no.	**F22**	**F21 through F26**
Consumable insert (GTAW or PAW)	**N/A**	**N/A**
Filler Metal Production Form	**Solid Wire**	**Solid Wire**
Deposit thickness for each process	**~0.25 in**	**~0.5 in**
Process 1 (GMAW) 3 layers minimum YES ☐ NO ☑	**—**	**—**
Position qualified (2G, 6G, 3F etc.)	**2G, 3G-U, 4G**	**Horizontal, Vertical(UP), Overhead**
Vertical progression (uphill or downhill)	**N/A**	**N/A**
Type of Shielding gas (GMAW)	**100% Argon**	**Any**
Type of Backing gas	**N/A**	**N/A**
Transfer mode (spray / globular or pulse to short circuit)	**Spray**	**Global, Spray or Pulsed**
GTAW current type/polarity (AC, DCEP, DCEN)	**N/A**	**N/A**

Results		
Visual Examination of Welds	QW 302.4	**Acceptable**
Transverse Side bends	QW 462.2	**N/A**
Transverse Face and Root Bends	QW 462.3a	**Acceptable**
Longitudinal Bends	QW 462.3b	**N/A**
Pipe Bends Corrosion Resistant Overlay	QW 462.5c	**N/A**
Plate Bends Corrosion Resistant Overlay	QW 462.5d	**N/A**
Pipe Macro Test for Fusion	QW 462.5b	**N/A**
Plate Macro Test for Fusion	QW 462.5e	**N/A**

QW 302.4	Alternative Radiographic Examination	**N/A**
QW 180	Fillet Weld Fracture Test Fracture Test Length and % Defects	**N/A**
QW 184	Macro Examination fillet size & concavity and convexity	**N/A**
QW 304	Specimens Evaluated by	**National Energy Equiment**
	Welding Supervised by	**Zanyar Farhadi**
	Mechanical Tests Conducted by Lab	**Industrial Technology Centre**
	Lab Test No.	**MT010-17920**

We certify that the statements in this record are correct and that the test coupons were prepared, welded and tested in accordance with the requirements Section IX of ASME Boiler and Pressure Vessel Code

Date of Issue: August 09, 2019

Certified by: *Zanyar Farhadi*
Organization: *National Energy Equipment*

Industrial Technology Centre
200-78 Innovation Drive | Winnipeg, MB | R3T 6C2
TEL: (204) 480-3333 | FAX: (204) 480-0345 | 1-800-728-7933
www.itc.mb.ca

Mechanical Test Laboratory Report

Prepared for: Mr Chris Gerullis
Service Manager
National Energy Equipment Inc.
1431 Church Ave.
Winnipeg MB R2X 1G5

Report No: **17920-3**
Date: 9 Aug 2019
Phone: (204) 632-0043
Fax: (204) 633-8574

SCC Accredited LAB
LAB Accrédité CCN

Sample Description: Aluminum Welds – Welder 5844 in positions GMAW 2G, 3G, 4G
Parent Material: 5052 (1/4" Thick), Filler Metal: ER5356

Standard/Specification: ASME IX: ✓ QW-160 Guided Bend Tests

Tests accredited by the Standards Council of Canada to ISO/IEC 17025 indicated with ✓.
Note: Samples will be retained by ITC for 90 days from test date unless by other arrangement.

Test Results

Table 1: Weld Bend Test Results

Sample ID	Pass/Fail	Comments
5844-2G – Face	Pass	No Visible Cracks
5844-2G – Root	Pass	No Visible Cracks
5844-3G – Face	Pass	No Visible Cracks
5844-3G – Root	Pass	No Visible Cracks
5844-4G – Face	Pass	No Visible Cracks
5844-4G – Root	Pass	No Visible Cracks

End of Report

Prepared by: _____
Daniel Godin, C.E.T.
Project Technologist - Mechanical

Reviewed by: _____
Tom Manson, P. Eng.
Mechanical Engineer

Notes

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