## PROBATIONARY WELDER QUALIFICATION PWQ No.: PWQ - S - Fillet (CSA W47.1 clause 8.2.3) Date: July 10, 2019 Ref. WPS: SMAW-CS CSA W47.1 RC Technical Services Ref. Standards: 512 MacDougall Road CSA W59 MacDougall Settlement, N.B. Base Metal: Filler Metal / Classification CSA W59, Table 11.1, G40.21: 300W (44W) **CSA W48:** E4918-H8 or -H4, E4918-1-H8 or -H4, Yield strength: 345 MPa and under AWS A5.1: E7018-H8 or -H4, E7018-1-H8 or -H4 **SMAW** Test Plate Thickness: 6mm (1/4") to 10mm (3/8") Flat, Hor., V-up, Over Head Position: **Backing Thickness:** N.A. LAP, CORNER, TEE N.A. **Backgouging Method:** Joint Type: **FILLET** N.A. Weld Type: **Backgouging Depth:** Eff. Throat Thickness: ETT = 0.7SShielding Gas: N.A. 10°C & Table 5.3 W59 Gas Flow Rate: N.A. Preheating Temp.: 260°C (500°F) MAX N.A. Interpass Temp.: **Electrode Stick out:** Thickness = T = 6mm $(1/4") \le T \le 10mm (3/8")$ Suggestion: use 2 pieces of 6mm (1/4") or 10mm (3/8") plate Reference: CSA W47.1, figure 6 $S = Fillet size = 2/3T \le S \le 10mm (3/8")$ Suggestion: 6mm (1/4") plate, use a 5mm (3/16") fillet weld. Т 10mm (3/8") plate, use a 6mm (1/4") fillet weld. 100mm Specimen Macro-Etch 25mm S Fracture Specimen 150mm min. 150<sub>mm</sub> min. 150mm min. Stop and restart arc in the center portion of the first pass Welding Parameters: Weld Size, S Side Layer **Pass** Electrode Current **Amperes WFS** Volts Arc Travel Diameter Polarity mm in in / min. in / min inch Min Max Min Max Min Max Min Max 1/8 **DCRP** 90 160 5/32 **DCRP** 110 220 Welder's Name: Positions tested and accepted by the CWB welding supervisor: Test Date: CWB Welding Supervisor's name: Method of testing: CWB Welding Supervisor's signature:

2 MACRO-ETCH & 1 FRACTURE