

FORM QW-484A SUGGESTED FORMAT A FOR WELDER PERFORMANCE QUALIFICATIONS (WPO)
(See QW-301, Section IX, ASME Boiler and Pressure Vessel Code)

Welder's name Vitor Santos Identification no. S

Test Description

Identification of WPS followed WPS 001 Test coupon Production weld
 Specification and type/grade or UNS Number of base metal(s) SA106 Grade B NPS2 Sch. 80 Thickness 0.218

Testing Variables and Qualification Limits

| Welding Variables (QW-350) | Actual Values | Range Qualified |
|---|----------------------------|----------------------------|
| | SMAW | SMAW |
| Type (i.e.; manual, semi-automatic) used | Manual | Manual |
| Backing (with/without) | F-3 No Backing F-4 Backing | F-3 No Backing F-4 Backing |
| <input type="checkbox"/> Plate <input type="checkbox"/> Pipe (enter diameter if pipe or tube) | NPS2 | 1" - Unlimited |
| Base metal P-Number to P-Number | P-1 | QW-423.1 |
| Filler metal or electrode specification(s) (SFA) (info. only) | SFA5.1 | SFA5.1 |
| Filler metal or electrode classification(s) (info. only) | E6010/E7018 | QW-433 |
| Filler metal F-Number(s) | F-3/F4 | |
| Consumable insert (GTAW or PAW) | N/A | N/A |
| Filler Metal Product Form (solid/metal or flux cored/powder) (GTAW or PAW) | N/A | N/A |
| Deposit thickness for each process | | |
| Process 1 <u>0.100</u> 3 layers minimum <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 0.100" | 0.200" |
| Process 2 <u>0.118</u> 3 layers minimum <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 0.118" | 0.236" |
| Position qualified (2G, 6G, 3F, etc.) | 6G | All Positions |
| Vertical progression (uphill or downhill) | Uphill | Uphill |
| Type of fuel gas (OFW) | N/A | N/A |
| Inert gas backing (GTAW, PAW, GMAW) | None | None |
| Transfer mode (spray/globular or pulse to short circuit-GMAW) | N/A | N/A |
| GTAW current type/polarity (AC, DCEP, DCEN) | N/A | N/A |

RESULTS

Visual examination of completed weld (QW-302.4) Satisfactory
 Transverse face and root bends [QW-462.3(a)] Longitudinal bends [QW-462.3(b)] Side bends [QW-462.2]
 Pipe bend specimen, corrosion-resistant weld metal overlay [QW-462.5(c)]
 Plate bend specimen, corrosion-resistant weld metal overlay [QW-462.5(d)]
 Pipe specimen, macro test for fusion [QW-462.5(b)] Plate specimen, macro test for fusion [QW-462.5(e)]

| Type | Result | Type | Result | Type | Result |
|-----------------|--------------|-----------------|--------------|------|--------|
| FB: 1 Face Bend | Satisfactory | FB: 3 Face Bend | Satisfactory | | |
| RB: 2 Root Bend | Satisfactory | RB: 4 Root Bend | Satisfactory | | |

Alternative Volumetric Examination Results (QW-191): _____ RT or UT (check one)

Fillet weld — fracture test (QW-181.2) _____ Length and percent of defects _____

Fillet welds in plate [QW-462.4(b)] Fillet welds in pipe [QW-462.4(c)]

Macro examination (QW-184) _____ Fillet size (in.) _____ × _____ Concavity/convexity (in.) _____

Other tests _____

Film or specimens evaluated by _____ Company _____

Mechanical tests conducted by Triangle Engineering Laboratory test no. T30911-2

Welding supervised by _____ Gary Frank, QCM

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 of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE.

Organization American Boiler Company

Date 3/25/2015

Certified by  Gary Frank, QCM