



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Dave Moroz ABSA File No.: W-12763 Stamp No.: Z
 Identification of WPS followed by welder during welding of test coupon: #100 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 11.07mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	SMAW		SMAW	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: P1 To P Number:	P1 to P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	60.3mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	7.9mm	6.4mm	15.8mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	6G		All	
Vertical Progression (Uphill or Downhill):	All		All	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____
 Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Pass/Acceptable				
2 Face Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services
 Welding supervised by: Dale Lanuik
 Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: [Signature] Examiner File No. E-00176 Date: AUG 09 2013
 P.Q. Card No. (When issued): RJV# 313 Performance Test Reference No.: Z
 Test Coupon I.D. No.: Z Date Coupon is to be retained to: SEP 09 2013



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Dallas Hoffman ABSA File No.: W-27746 Stamp No.: T

Identification of WPS followed by welder during welding of test coupon: #100 W.P. Reg. # WP-1312.2

Base material(s) welded: SA-106-B P1 Thickness: 11.07mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	SMAW		SMAW	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: P1 To P Number:	P1 to P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	60.3mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	7.9mm	6.4mm	15.8mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	6G		All	
Vertical Progression (Uphill or Downhill):	All		All	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)

Root Pass (Describe Discontinuity if Unacceptable): _____

Completed Weld (Describe defects if unacceptable): _____

Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]

Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]

Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Pass/Acceptable				
2 Face Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____

Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____

Length and Per Cent of Defects: _____ inches

Macro Test-Fusion: _____

Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.

Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services

Welding supervised by: Dale Lanuik

Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19, 2015

Certified by: _____ Examiner File No. E-00176 Date: AUG 26 2013

P.Q. Card No. (When issued): RJV# 314 Performance Test Reference No.: T

Test Coupon I.D. No.: T Date Coupon is to be retained to: SEP 26 2013



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Bernie Sorbara ABSA File No.: W-6819 Stamp No.: C
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 11.07mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	SMAW		SMAW	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: P1 To P Number:	P1 to P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	60.3mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	7.9mm	6.4mm	15.8mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	6G		All	
Vertical Progression (Uphill or Downhill):	All		All	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____
 Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Pass/Acceptable				
2 Face Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services
 Welding supervised by: Dale Lanuik
 Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19, 2015

Certified by: [Signature] Examiner File No. E-00176 Date: NOV 04 2013

P.Q. Card No. (When issued): RJV# 315 Performance Test Reference No.: C

Test Coupon I.D. No.: C Date Coupon is to be retained to: DEC 04 2013



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Andy Rudyk ABSA File No.: W-14996 Stamp No.: P
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 11.07mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	SMAW		SMAW	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: P1 To P Number:	P1 to P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	60.3mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	7.9mm	6.4mm	15.8mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	6G		All	
Vertical Progression (Uphill or Downhill):	All		All	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____
 Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Pass/Acceptable				
2 Face Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches _____
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services
 Welding supervised by: Dale Lanuik
 Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: _____ Examiner File No. E-00176 Date: DEC 06 2013
 P.Q. Card No. (When issued): RJV# 318 Performance Test Reference No.: P
 Test Coupon I.D. No.: P Date Coupon is to be retained to: JAN 06 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Shane Babysh ABSA File No.: W-22799 Stamp No.: B
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 11.07mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	SMAW		SMAW	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: P1 To P Number:	P1 to P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	60.3mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4		
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	7.9mm	6.4mm	15.8mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	6G		All	
Vertical Progression (Uphill or Downhill):	All		All	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____

- Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Pass/Acceptable				
2 Face Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services
 Welding supervised by: Dale Lanuik
 Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: [Signature] Examiner File No. E-00176 Date: DEC 17 2013
 P.Q. Card No. (When issued): RJV# 320 Performance Test Reference No.: B
 Test Coupon I.D. No.: B Date Coupon is to be retained to: JAN 17 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Mauvy Kushnir ABSA File No.: W-17008 Stamp No.: N
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 11.07mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	SMAW		SMAW	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: P1 To P Number:	P1 to P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	60.3mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	7.9mm	6.4mm	15.8mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	1G		Flat	
Vertical Progression (Uphill or Downhill):	Flat		Flat	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____

Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Pass/Acceptable				
2 Face Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services
 Welding supervised by: Dale Lanuik
 Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19, 2015

Certified by: [Signature] Examiner File No. E-00176 Date: JAN 10 2014

P.Q. Card No. (When issued): RJV# 321 Performance Test Reference No.: N

Test Coupon I.D. No.: N Date Coupon is to be retained to: FEB 10 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Jeremy Tchir ABSA File No.: W-28281 Stamp No.: A
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 11.07mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	SMAW		SMAW	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: P1 To P Number:	P1 to P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	60.3mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	7.9mm	6.4mm	15.8mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	6G		All	
Vertical Progression (Uphill or Downhill):	All		All	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____
 Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Pass/Acceptable				
2 Face Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services
 Welding supervised by: Dale Lanuik
 Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: [Signature] Examiner File No. E-00176 Date: JAN 16 2014
 P.Q. Card No. (When issued): RJV# 322 Performance Test Reference No.: A
 Test Coupon I.D. No.: A Date Coupon is to be retained to: FEB 16 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Marvin Boe ABSA File No.: W-6943 Stamp No.: M
 Identification of WPS followed by welder during welding of test coupon: #107 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 18.26mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
	G.M.A.W	S.M.A.W	G.M.A.W	S.M.A.W
Welding Process(es) Used:	Man/Sem Aut	Manual	Man/Sem Aut	Manual
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Man/Sem Aut	Manual	Man/Sem Aut	Manual
Base Metal P Number: or S Number To P Number:	P1 To P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	168mm O.D.		73mm /	73mm
Backing (metal, weld metal, double-welded, etc.):	None	Metal	With/Without	with
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.18	5.1		
Filler Metal or Electrode Classification(s) (info only):	ER70S-6	E7018		
Filler Metal or Electrode F-Number(s):	F6	F4	F6	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):		N/A		N/A
Consumable Insert for GTAW or PAW:		N/A		N/A
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	15mm	3.5mm	30mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	1G	1G	1G	1G
Vertical Progression (Uphill or Downhill):	Flat	Flat	Flat	Flat
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	CO2/Argon		CO2/Argon	
Transfer Mode (spray/globular or pulse to short circuit- GMAW):	Short Circ.D.C.	D.C. Reverse	Short Circ. D.C.	D.C. Reverse
GTAW Current Type/Polarity (AC, DCEP, DCEN):		N/A		N/A

Results

Visual Examination of Fit-Up; Root Gap: 4mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____
 Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
3 Face Bends	Pass/Acceptable				
3 Root Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches _____
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: Dale Laniuk Company: RJV Gas Field Services
 Welding supervised by: Dale Laniuk
 Mechanical tests conducted by: N/A Laboratory test no.: N/A
 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.
 ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19,2015
 Certified by: [Signature] Examiner File No. E-00176 Date: April 11,2014
 P.Q. Card No. (When issued): RJV#324 Performance Test Reference No.: M
 Test Coupon I.D. No.: M Date Coupon is to be retained to: May 11,2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Jordan Charuk ABSA File No.: C19261 Stamp No.: R
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 14.02mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	S.M.A.W.		S.M.A.W.	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: To P Number:	P1	To P1	P1	to P1
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	73mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	1.32mm	12.7mm	2.64mm	Maximum
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	1G		1G	
Vertical Progression (Uphill or Downhill):	Flat		Flat	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____
 Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Face Bends	Pass/Acceptable				
2 Root Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)
 R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: Dale Laniuk Company: RJV Gas Field Services
 Welding supervised by: Dale Laniuk
 Mechanical tests conducted by: N/A Laboratory test no.: N/A
 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.
 ACCREDITED ORGANIZATION: RJV Gas Field Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: _____ Examiner File No. E-00176 Date: June 12, 2014
 P.Q. Card No. (When issued): RJV# 325 Performance Test Reference No.: R
 Test Coupon I.D. No.: R₁ Date Coupon is to be retained to: July 12, 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Jason Moore ABSA File No.: W-29041 Stamp No.: K

Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2

Base material(s) welded: SA-106-B P1 Thickness: 14.02mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	S.M.A.W.		S.M.A.W.	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: To P Number:	P1	To P1	P1	to P1
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	73mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	1.32mm	12.7mm	2.64mm	Maximum
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	1G		1G	
Vertical Progression (Uphill or Downhill):	Flat		Flat	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)

Root Pass (Describe Discontinuity if Unacceptable): _____

Completed Weld (Describe defects if unacceptable): _____

Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]

Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]

Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Face Bends	Pass/Acceptable				
2 Root Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____

Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____

Length and Per Cent of Defects: _____ inches

Macro Test-Fusion: _____

Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.

Other Tests: _____

Record Information

Film or Specimens Evaluated by: Dale Laniuk Company: RJV Gas Field Services

Welding supervised by: Dale Laniuk

Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gas Field Services AOQP No.: 7040 Expiry Date: August 19, 2015

Certified by: _____ Examiner File No. E-00176 Date: June 12, 2014

P.Q. Card No. (When issued): RJV# 326 Performance Test Reference No.: K

Test Coupon I.D. No.: K Date Coupon is to be retained to: July 12, 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Chris Gaudet ABSA File No.: W-30227 Stamp No.: L
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 14.02mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	S.M.A.W.		S.M.A.W.	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: To P Number:	P1	To P1	P1	to P1
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	73mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	1.32mm	12.7mm	2.64mm	Maximum
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	1G		1G	
Vertical Progression (Uphill or Downhill):	Flat		Flat	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____

- Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Face Bends	Pass/Acceptable				
2 Root Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: Dale Laniuk Company: RJV Gas Field Services
 Welding supervised by: Dale Laniuk
 Mechanical tests conducted by: N/A Laboratory test no.: N/A
 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.
 ACCREDITED ORGANIZATION: RJV Gas Field Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: [Signature] Examiner File No. E-00176 Date: June 12, 2014
 P.Q. Card No. (When issued): RJV# 327 Performance Test Reference No.: L
 Test Coupon I.D. No.: L Date Coupon is to be retained to: July 12, 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Dallas Hoffman ABSA File No.: W-27746 Stamp No.: T
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 14.02mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	S.M.A.W.		S.M.A.W.	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: To P Number:	P1	To P1	P1	to P1
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	73mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	1.32mm	12.7mm	2.64mm	Maximum
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	1G		1G	
Vertical Progression (Uphill or Downhill):	Flat		Flat	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____

Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Face Bends	Pass/Acceptable				
2 Root Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches _____
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: Dale Laniuk Company: RJV Gas Field Services
 Welding supervised by: Dale Laniuk
 Mechanical tests conducted by: N/A Laboratory test no.: N/A
 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.
 ACCREDITED ORGANIZATION: RJV Gas Field Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: [Signature] Examiner File No. E-00176 Date: June 12, 2014
 P.Q. Card No. (When issued): RJV# 328 Performance Test Reference No.: T
 Test Coupon I.D. No.: T Date Coupon is to be retained to: July 12, 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Jacob Regeir ABSA File No.: C-19886 Stamp No.: J
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 14.02mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	S.M.A.W.		S.M.A.W.	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: To P Number:	P1	To P1	P1	to P1
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	73mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	1.32mm	12.7mm	2.64mm	Maximum
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	1G		1G	
Vertical Progression (Uphill or Downhill):	Flat		Flat	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____

- Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Face Bends	Pass/Acceptable				
2 Root Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches _____
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: Dale Laniuk Company: RJV Gas Field Services
 Welding supervised by: Dale Laniuk
 Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gas Field Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: [Signature] Examiner File No. E-00176 Date: June 26, 2014
 P.Q. Card No. (When issued): BIV# 329 Performance Test Reference No.: J
 Test Coupon I.D. No.: J Date Coupon is to be retained to: July 26, 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Ian Males ABSA File No.: W32305 Stamp No.: U
 Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP- 1312.2
 Base material(s) welded: SA-106-B P1 Thickness: 14.02mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	S.M.A.W.		S.M.A.W.	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: To P Number:	P1	To P1	P1	to P1
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	73mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	1.32mm	12.7mm	2.64mm	Maximum
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	1G		1G	
Vertical Progression (Uphill or Downhill):	Flat		Flat	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)
 Root Pass (Describe Discontinuity if Unacceptable): _____
 Completed Weld (Describe defects if unacceptable): _____

- Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]
 Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]
 Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Face Bends	Pass/Acceptable				
2 Root Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____
 Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____
 Length and Per Cent of Defects: _____ inches _____
 Macro Test-Fusion: _____
 Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.
 Other Tests: _____

Record Information

Film or Specimens Evaluated by: Dale Laniuk Company: RJV Gas Field Services
 Welding supervised by: Dale Laniuk
 Mechanical tests conducted by: N/A Laboratory test no.: N/A
 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.
 ACCREDITED ORGANIZATION: RJV Gas Field Services AOQP No.: 7040 Expiry Date: August 19, 2015
 Certified by: _____ Examiner File No. E-00176 Date: July 14, 2014
 P.Q. Card No. (When issued): RJV# 330 Performance Test Reference No.: U
 Test Coupon I.D. No.: U Date Coupon is to be retained to: August 16, 2014



the pressure equipment safety authority

WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Marvin Boe ABSA File No.: W-6943 Stamp No.: M

Identification of WPS followed by welder during welding of test coupon: #115 W.P. Reg. # WP-1312.2

Base material(s) welded: SA-106-B P1 Thickness: 11.07mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding Process(es) Used:	SMAW		SMAW	
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual		Manual	
Base Metal P Number: P1 To P Number:	P1 to P1		P1 to P1	
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	60.3mm O.D.		25mm and over	
Backing (metal, weld metal, double-welded, etc.):	None		With	None
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.1	5.1		
Filler Metal or Electrode Classification(s) (info only):	E6010	E7018		
Filler Metal or Electrode F-Number(s):	F3	F4	F3	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):	N/A		N/A	
Consumable Insert for GTAW or PAW:	N/A		N/A	
Deposit Thickness for each process or electrode type, etc. (in.):	3.2mm	7.9mm	6.4mm	15.8mm
Process/Electrode 1: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Welding Position (2G, 6G, 3F, etc.):	6G		All	
Vertical Progression (Uphill or Downhill):	All		All	
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	N/A		N/A	
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 Fit-Up; Root Gap: 3mm Tack Welds: 3 (Length: 9mm Number: 3)

Root Pass (Describe Discontinuity if Unacceptable): _____

Completed Weld (Describe defects if unacceptable): _____

Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]

Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]

Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Pass/Acceptable				
2 Face Bends	Pass/Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____

Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____

Length and Per Cent of Defects: _____ inches

Macro Test-Fusion: _____

Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.

Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services

Welding supervised by: Dale Lanuik

Mechanical tests conducted by: N/A Laboratory test no.: N/A

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 19,2015

Certified by: _____ Examiner File No. E-00176 Date: NOV 14 2014

P.Q. Card No. (When issued): RJV# 335 Performance Test Reference No.: M

Test Coupon I.D. No.: M Date Coupon is to be retained to: DEC 14 2014



WELDER QUALIFICATION RECORD (WQR)

AB-76A 2010-09

Welder's Name: Trevor McKain ABSA File No.: C-26252 Stamp No.: W

Identification of WPS followed by welder during welding of test coupon: 101 W.P. Reg. # WP-1312.2

Base material(s) welded: SA-106-B and P1 Material Thickness: 14.02mm Test Coupon Prod. Weld

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
	GMAW	SMAW	GMAW	SMAW
Welding Process(es) Used:	Manual	Manual	Manual	Manual
Type of Welding (i.e., Manual, Semi-Automatic) Used:	Manual	Manual	Manual	Manual
Base Metal P Number: P1toP1 To P Number:	SA-106-B	SA-106-B	P1	P1
<input type="checkbox"/> Plate <input checked="" type="checkbox"/> Pipe (enter diameter if pipe or tube):	73mm	73mm	25mm & Over	25mm & Over
Backing (metal, weld metal, double-welded, etc.):	N/A	Weld Metal	N/A	Weld Metal
Filler Metal or Electrode Specification(s) (SFA) (info only):	5.18/5.1	5.18/5.1		
Filler Metal or Electrode Classification(s) (info only):	ER70S-6	E7018		
Filler Metal or Electrode F-Number(s):	F6	F4	F6	F4
Filler Type (solid/metal or flux cored/powder) (GTAW or PAW):				
Consumable Insert for GTAW or PAW:				
Deposit Thickness for each process or electrode type, etc. (in.):	2.6mm	Maximum	2.6mm	Maximum
Process/Electrode 1: 3 layers minimum <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Process/Electrode 2: 3 layers minimum <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Welding Position (2G, 6G, 3F, etc.):	6G	6G	6G	6G
Vertical Progression (Uphill or Downhill):	Uphill	Uphill	Uphill	Uphill
Fuel Gas for OFW or Inert Gas Backing for GTAW, PAW, GMAW:	CO ²		CO ²	
Transfer Mode (spray/globular or pulse to short circuit- GMAW):	Short Circ. D.C.	D.C. Reverse	Short Circ. D.C.	D.C. Reverse
GTAW Current Type/Polarity (AC, DCEP, DCEN):				

Results

Visual Examination of Fit-Up; Root Gap: 4mm Tack Welds: 3 (Length: 9mm Number: 3)

Root Pass (Describe Discontinuity if Unacceptable): _____

Completed Weld (Describe defects if unacceptable): _____

Bend Test: Transverse Root and Face [QW-462.3(a)] Longitudinal Root and Face [QW-462.3(b)] Side [QW-462.2]

Pipe Bend Specimen, corrosion-resistant overlay [QW-462.5(c)] Plate Bend Specimen, corrosion-resistant overlay [QW-462.5(d)]

Macro Test for Fusion [QW-462.5(b)] Macro Test for Fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
2 Root Bends	Acceptable				
2 Face Bends	Acceptable				

(For alternative qualification of groove welds by volumetric examination to QW-191)

R.T. Results: _____ U.T. Results: _____

Fillet Weld - Fracture Test (Describe location, nature and size of any crack or tearing of specimen): _____

Length and Per Cent of Defects: _____ inches

Macro Test-Fusion: _____

Appearance-Fillet Size (leg.): _____ X _____ inch. Convexity: _____ inch. or Concavity: _____ inch.

Other Tests: _____

Record Information

Film or Specimens Evaluated by: RJV Company: RJV Gasfield Services

Welding supervised by: Dale Lanuik

Mechanical tests conducted by: Dale Lanuik Laboratory test no.: _____

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.

ACCREDITED ORGANIZATION: RJV Gasfield Services AOQP No.: 7040 Expiry Date: August 12, 2017

Certified by: [Signature] Examiner File No. E-00176 Date: April 6, 2015

P.Q. Card No. (When issued): RJV #337 Performance Test Reference No.: W

Test Coupon I.D. No.: W Date Coupon is to be retained to: May 6, 2015