NATIONAL ENERGY EQUIPMENT INC.

Date: Jun/25/2018

Prepared for: Loren Rutherford Branch: Moncton

Sample Description: Weld Coupons - 5052 Welder ID Number: 5301

Standard/Specification: ASME IX: QW-160 Guided Bend Test

Test Results

Sample ID	Visual Examination of Weld	Location	Bend Test	Comments
1G	Pass	Face	Pass	
2G	Pass		Pass	
3G	Pass		Pass	
4G	Pass		Pass	
1G	Pass	Root	Pass	
2G	Pass		Pass	
3G	Pass		Pass	
4G	Pass		Pass	

Test Findings

Coupons passed bend test for all positions.

Recommendations

No recommendations needed.

Test Preformed By: Scott Gira

Test Date: Jun/25/2018

NATIONAL ENERGY EQUIPMENT INC.	Welding Performance Qualification (WPQ)
Form Number:NEE-FRM-019 Page 1 of 1	Revision: 0

Welders Name: Loren Rutherford
WPS Used: A-MBF-1
Base Metal: 5052-H32

Identification Number: 5301
Test Coupon: 1G
Thickness: 1/4"

	Actual Values	Range Values
Welding process	GMAW	GMAW
Type of Welder	Semi Auto	Semi Auto
Plate or Pipe	Plate	Plate
Base Metal	5052-H32	5052-H32
Filler Metal Spec	AWS 510	AWS 510
Filler Metal Class	ER 5356	ER 5356
Filler Metal	Aluminum	Aluminum
Consumable Insert		
Filler Type	Wire	Wire
Position /Progression	Flat (1G) / UH	Flat (1G) / UH
Inert Gas Used	99.99 % Ar	99.99 % Ar
Voltage	22.5	22-25
Amperage	Auto	230-260
Transfer Mode	Spray Arc	Spray Arc
Welder Polarity	DCRP	DCRP
Cleaning Type	Wire Brush	Wire Brush

Welder and Welding Supervisor are responsible for the test coupons being prepared and welded in accordance with requirements of Section IX of the ASME Code.

Welding Supervisor: Derek Lutes
Signature: [signature]
Location: NEET - Moncton NB

Results of Bend Test

Visual Examination of Complete Weld: Pass
Type of Test: Bend
Root or Face (Face circled)
Code: ASME IX
Result: Pass

Visual Examination of Complete Weld: Pass
Type of Test: Bend
Root or Face (Root circled)
Code: ASME IX
Result: Pass

Mechanical Test Preformed by: Scott Gira
Signature: [signature]
Location: : NEE Winnipeg

We certify that the statement in the record is correct and that the test coupons were tested in accordance with the requirements of Section IX of ASME Code.

Date: Jun/25/2018
Name: [signature]
Organization: National Energy Equipment
Signature: [signature]

NATIONAL ENERGY EQUIPMENT INC.

Welding Performance Qualification (WPQ)

Form Number:NEE-FRM-019 | Page 1 of 1 | Revision: 0

Welders Name: Loren Rutherford
WPS Used: A-MBH-1
Base Metal: 5052-H32

Identification Number: 5301
Test Coupon: 2G
Thickness: 1/4"

	Actual Values	Range Values
Welding process	GMAW	GMAW
Type of Welder	Semi Auto	Semi Auto
Plate or Pipe	Plate	Plate
Base Metal	5052-H32	5052-H32
Filler Metal Spec	AWS-510	AWS-510
Filler Metal Class	ER 5356	ER-5356
Filler Metal	Aluminum	Aluminum
Consumable Insert		
Filler Type	Wire	Wire
Position /Progression	Horizontal (2G) / UH	Horizontal (2G) / UH
Inert Gas Used	99.99 % Ar	99.99 % Ar
Voltage	24	21-24
Amperage	Auto	205-220
Transfer Mode	Spray Arc	Spray Arc
Welder Polarity	DCRP	DCRP
Cleaning Type	Wire Brush	Wire Brush

Welder and Welding Supervisor are responsible for the test coupons being prepared and welded in accordance with requirements of Section IX of the ASME Code.

Welding Supervisor: Derek Lytes
Location: NEEI - Moncton NB
Signature:

Results of Bend Test

Visual Examination of Complete Weld: Pass
Type of Test: Bend
Code: ASME IX
Root or (Face)
Result: Pass

Visual Examination of Complete Weld: Pass
Type of Test: Bend
Code: ASME IX
(Root) or Face
Result: Pass

Mechanical Test Preformed by: Scott Gira
Location: : NEE Winnipeg
Signature:

We certify that the statement in the record is correct and that the test coupons were tested in accordance with the requirements of Section IX of ASME Code.

Date: Jun/25/2018
Name: Chris Cerullo
Organization: National Energy Equipment
Signature:

NATIONAL ENERGY EQUIPMENT INC.

Welding Performance Qualification (WPQ)

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Welders Name: Loren Rutherford
WPS Used: A-MBV-1
Base Metal: 5052 - H32

Identification Number: 5301
Test Coupon: 3G
Thickness: 1/4"

	Actual Values	Range Values
Welding process	GMAW	GMAW
Type of Welder	Semi Auto	Semi Auto
Plate or Pipe	Plate	Plate
Base Metal	5052 - H32	5052 - H32
Filler Metal Spec	AWS 510	AWS 510
Filler Metal Class	ER 5356	ER 5356
Filler Metal	Aluminum	Aluminum
Consumable Insert		
Filler Type	Wire	Wire
Position /Progression	Verticle (3G) / UH	Verticle (3G) / UH
Inert Gas Used	99.99% Ar	99.99% Ar
Voltage	22.5	21-24
Amperage	Auto	185-205
Transfer Mode	Spray Arc	Spray Arc
Welder Polarity	DCRP	DCRP
Cleaning Type	Wire Brush	Wire Brush

Welder and Welding Supervisor are responsible for the test coupons being prepared and welded in accordance with requirements of Section IX of the ASME Code.

Welding Supervisor: Derek Lutes
Location: NEEI - Moncton NB
Signature:

Results of Bend Test

Visual Examination of Complete Weld: Pass
Type of Test: Bend (Root or Face)
Code: ASME IX
Result: Pass

Visual Examination of Complete Weld: Pass
Type of Test: Bend (Root or Face)
Code: ASME IX
Result: Pass

Mechanical Test Preformed by: Scott Giza
Location: : NEE Winnipeg
Signature:

We certify that the statement in the record is correct and that the test coupons were tested in accordance with the requirements of Section IX of ASME Code.

Date: Jun/25/2018
Name: Chris Leveille
Organization: National Energy Equipment
Signature:

NATIONAL ENERGY EQUIPMENT INC.

Welding Performance Qualification (WPQ)

Form Number:NEE-FRM-019 Page 1 of 1 Revision: 0

Welders Name: Loren Rutherford
WPS Used: A-MBO-1
Base Metal: 5052-H32

Identification Number: 5301
Test Coupon: 4G
Thickness: 1/4"

	Actual Values	Range Values
Welding process	GMAW	GMAW
Type of Welder	Semi Auto	Semi Auto
Plate or Pipe	Plate	Plate
Base Metal	5052-H32	5052-H32
Filler Metal Spec	AWS-510	AWS-510
Filler Metal Class	ER 5356	ER 5356
Filler Metal	Aluminum	Aluminum
Consumable Insert		
Filler Type	Wire	Wire
Position /Progression	Overhead (4G) / UH	Overhead (4G) / UH
Inert Gas Used	99.99 % Ar	99.99 % Ar
Voltage	24	21-24
Amperage	Auto	200-280
Transfer Mode	Spray Arc	Spray Arc
Welder Polarity	DCRP	DCRP
Cleaning Type	Wire Brush	Wire Brush

Welder and Welding Supervisor are responsible for the test coupons being prepared and welded in accordance with requirements of Section IX of the ASME Code.

Welding Supervisor: Derek Hutes Signature:
Location: NEEI-Moncton NB

Results of Bend Test

Visual Examination of Complete Weld: Pass
Type of Test: Bend Root or (Face)
Code: ASME IX Result: Pass

Visual Examination of Complete Weld: Pass
Type of Test: Bend (Root) or Face
Code: ASME IX Result: Pass

Mechanical Test Preformed by: Scott Giza Signature:
Location: : NEE Winnipeg

We certify that the statement in the record is correct and that the test coupons were tested in accordance with the requirements of Section IX of ASME Code.

Date: Jun/25/2018 Organization: National Energy Equipment
Name: Chris Lewis Signature: