

BLUE STAR WELDING,
Division of 570147 Alta. Ltd.

RR #2, Site 7, Box 20
Grand Prairie, Alberta T8V 2Z9

WELDING PROCEDURE SPECIFICATION NO.: _____ BSW-4130

WELDING PROCEDURE QUALIFICATION RECORD NO.(S): _____ BSW-4130-1

QUALIFIED FOR

Restricted Applications: API 6A, PSL LEVELS 1-3, SOUR SERVICE (75 ksi min. yield)
Base Metal (Typical): AISI 4130 to AISI 4130
Process(es): GMAW / SMAW Weld Types: GROOVE & FILLET
Position: FLAT & HORIZONTAL Diameter: ALL DIAMETERS
Filler Metal: ER70S-2, E10018-D2

BASE METAL CONDITIONS & THICKNESS RANGE QUALIFIED:

NOTCH TOUGHNESS APPLICATIONS TO -46°C WITH P.W.H.T.
ASME SECTION IX 15.8 to 50.8 mm (0.625 to 2.0 in.) inclusive

ALBERTA BOILERS SAFETY ASSOCIATION
PROVINCE OF ALBERTA
SAFETY CODES ACT
WELDING PROCEDURE
RESTRICTED APPLICATION *

Reg. No. WP 1779.2 Spec. No. BSW-4130
Weld Process GMAW / SMAW
Matl. No. AISI-4130 to Matl. No. AISI-4130
Elec. Gr. F No. 6+4 A No. 1+11
Th. Qual. For 15.8 to 50.8 mm P.W.H.T. YES
* Limited To: NON-ASME CODE USE APPLICATION
WELL HEAD / PIPELINE
NOT UNDER JURISDICTION OF SAFETY CODES
Yr. 01 Mo. 13 Day 4 Signed _____

PROVINCIAL REGISTRATION

OB # 10252 BLUESTAR
ICI _____ DATE _____
ICMP [Signature] DATE Feb 28/05

QW-482 WELDING PROCEDURE SPECIFICATION (WPS)

BLUESTAR WELDING, A division of 570147 Alta. Ltd.

RR#2, Site 7, Box 20 Grande Prairie, Alberta T8V 2Z9

Welding Procedure Specification No. BSW-4130 Date November 27, 2001

Supporting PQR No.(s) BSW-4130-1

Welding Process(es) GMAW / SMAW Type(s) Semi-automatic / Manual

JOINTS (QW-402)

Joint Design All groove & fillet joint details permitted by API 6A are qualified

Backing With or without Root Opening 0 - 6.35 mm (0 - 1/4 in.)

Retainers Not required

BASE METALS (QW-403)

P-Number AISI 4130 (75 ksi min. yield) To P-Number AISI 4130 (75 ksi min. yield)

Thickness Range: Groove See cover page for thickness qualified by governing code

Fillet All base metal thicknesses

Pipe Diameter Ranges: Groove All diameters

Fillet All diameters

Deposited Weld Metal (Per Pass) 12.7 mm (0.500 in.) maximum

FILLER METALS (QW-404)

Specification No. (SFA) GMAW SFA 5.18 SMAW SFA 5.1

AWS No. (Class) ER70S-2 E10018-D2

F-No. F6 F4

A-No. A1 A11

Size .030 to .045 in. inclusive 3/32 to 1/4 in. inclusive

Filler Metal Product Form Solid wire without the addition of supplementary fillers

Deposited Weld Metal Thickness Range:

Groove 2.79 mm (0.110 in.) max. 50.8 mm (2.0 in.) max.

Fillet All fillet sizes All fillet sizes

POSITION (QW-405)

Position of Groove GMAW: All SMAW: Flat

Position of Fillet GMAW: All SMAW: Flat & Horizontal

Weld Progression GMAW: Vertical down SMAW: N/A

PREHEAT (QW-406)

Preheat Temperature (Minimum) 177°C (350°F)

Interpass Temperature (Maximum) 288°C (550°F)

Preheat Maintenance 177°C prior to welding. Preheat maintenance is not required if welding is interrupted or after the completion of welding unless required by the code of construction.

WELDERS LOG

JOB # 10252 BLUESTAR

QCI _____ DATE _____

QCM NAU DATE Feb 23 / 05

CONTINUITY LOG						
WELDERS NAME FILE NUMBER	SYMBOL	PROCESS	APR. - JUN. 2004	JUL. - SEPT. 2004	OCT. - DEC. 2004	JAN. - MAR. 2005
Leon Skrocki W-17456	AP	GMAW /	Yes	Yes	Yes	Yes
		SMAW	C-7	C-7	C-7	C-7
Kerry Brown W-12986	AJ	GMAW /	Yes	Yes	Yes	Yes
		SMAW	C-7	C-7	C-7	C-7
Terry Cote W-21655	BC	SMAW			Yes	Yes
					C-7	C-7
Josh Skelly W-21989	BA	SMAW	Yes	Yes	Yes	Yes
			C-7	C-7	C-7	C-7
Rod Langstroth W-21708	AW	SMAW	Yes	Yes	Yes	Yes
			C-7	C-7	C-7	C-7

JOB #10252 BLUESTAR

QCI _____ DATE _____

QCM DATE Feb 18 / 05

Leon Skrocki
(AP)

AOQP No. 7111

WELDER PERFORMANCE QUALIFICATION CARD

NAME: LEON SKROCKI ABSA FILE No. W-17456

This card is issued pursuant to the Safety Codes Act and the Pressure Welders' Regulations. The performance qualification is in accordance with Section IX of the ASME Code and subject to the limitations on the reverse side.

Date of Test: AUG 1/03 Signature of Welder or Machine Operator: Leon M. Skrocki

PETER WOODCOCK, C.E.T. Welding Examiner (Print/Type) Card No. **2035**

Card No. **2035**

PERFORMANCE QUALIFICATION

Process(es)	<u>GMAW/SMW</u>	Materials (P. No.)	<u>P1-P1</u>
Filler Metal Group (F. No.)	<u>6 4</u>	Min. Outside Pipe Diameter	<u>2 7/8"</u>
Max Deposited Weld Metal	<u>0.275" + 0.5"</u>	Position(s) Qualified	<u>2G, 5G</u>
Backing	<u>w/m T=0.775"</u>	Backing Gas	<u>CO2</u>
Progression	<u>uphill</u>		

P.Q. Expiry Date: Aug 1/05 Welding Examiner Signature: Peter Woodcock Certification No.: W600192

Kerry Brown
(AJ)

AOQP No. 7111

WELDER PERFORMANCE QUALIFICATION CARD

NAME: KERRY BROWN ABSA FILE No. W-12986

This card is issued pursuant to the Alberta Safety Codes Act and the Pressure Welders' Regulation. The performance qualification is in accordance with Section IX of the ASME Code and subject to the limitations on the reverse side.

Date of Test: Apr. 03/04 Signature of Welder or Machine Operator: Kerry Brown

BARRY NICHOL Welding Examiner (Print/Type) Card No. **3122**

Card No. **3122**

PERFORMANCE QUALIFICATION

Process(es)	<u>SMW</u>	Materials (P. No.)	<u>P1-P1</u>
Filler Metal Group (F. No.)	<u>F3 F4</u>	Min. Outside Pipe Diameter	<u>1" OD</u>
Max Deposited Weld Metal	<u>0.25" .438"</u>	Position(s) Qualified	<u>ALL</u>
Backing	<u>None w/m</u>	Backing Gas	<u>-</u>
Progression	<u>uphill</u>		

P.Q. Expiry Date: Apr. 13/06 Welding Examiner Signature: Barry Nichol Certification No.: W600192

Terry Cote
(BC)

AOQP No. 7111

WELDER PERFORMANCE QUALIFICATION CARD

NAME: TERRY COTE ABSA FILE No. W-21655

This card is issued pursuant to the Alberta Safety Codes Act and the Pressure Welders' Regulation. The performance qualification is in accordance with Section IX of the ASME Code and subject to the limitations on the reverse side.

Date of Test: May 5/03 Signature of Welder or Machine Operator: Terry Cote

PETER WOODCOCK, C.E.T. Welding Examiner (Print/Type) Card No. **3008**

Card No. **3008**

PERFORMANCE QUALIFICATION

Process(es)	<u>SMW</u>	Materials (P. No.)	<u>P1-P1</u>
Filler Metal Group (F. No.)	<u>3 4</u>	Min. Outside Pipe Diameter	<u>1 IN</u>
Max Deposited Weld Metal	<u>0.25" + 0.406"</u>	Position(s) Qualified	<u>all</u>
Backing	<u>w/m T=0.688"</u>	Backing Gas	<u>-</u>
Progression	<u>uphill</u>		

P.Q. Expiry Date: May 5/05 Welding Examiner Signature: Peter Woodcock Certification No.: W58

Josh Skelly
(BA)

AOQP No. 7111

WELDER PERFORMANCE QUALIFICATION CARD

NAME: JOSH SKELLY ABSA FILE No. W-21987

This card is issued pursuant to the Alberta Safety Codes Act and the Pressure Welders' Regulation. The performance qualification is in accordance with Section IX of the ASME Code and subject to the limitations on the reverse side.

Date of Test: Apr. 13/04 Signature of Welder or Machine Operator: Josh Skelly

BARRY NICHOL Welding Examiner (Print/Type) Card No. **3125**

Card No. **3125**

PERFORMANCE QUALIFICATION

Process(es)	<u>SMW</u>	Materials (P. No.)	<u>P1-P1</u>
Filler Metal Group (F. No.)	<u>F3 F4</u>	Min. Outside Pipe Diameter	<u>1" OD</u>
Max Deposited Weld Metal	<u>0.25" .438"</u>	Position(s) Qualified	<u>ALL</u>
Backing	<u>None w/m</u>	Backing Gas	<u>-</u>
Progression	<u>uphill</u>		

P.Q. Expiry Date: Apr. 13/06 Welding Examiner Signature: Barry Nichol Certification No.: W600192

Rod Langstroth
(AW)

AOQP No. 7111

WELDER PERFORMANCE QUALIFICATION CARD

NAME: RODNEY LANGSTROTH ABSA FILE No. W-21708

This card is issued pursuant to the Alberta Safety Codes Act and the Pressure Welders' Regulation. The performance qualification is in accordance with Section IX of the ASME Code and subject to the limitations on the reverse side.

Date of Test: Apr. 13/04 Signature of Welder or Machine Operator: Rodney Langstroth

BARRY NICHOL Welding Examiner (Print/Type) Card No. **3124**

Card No. **3124**

PERFORMANCE QUALIFICATION

Process(es)	<u>SMW</u>	Materials (P. No.)	<u>P1-P1</u>
Filler Metal Group (F. No.)	<u>F3 F4</u>	Min. Outside Pipe Diameter	<u>1" OD</u>
Max Deposited Weld Metal	<u>0.25" .438"</u>	Position(s) Qualified	<u>ALL</u>
Backing	<u>None w/m</u>	Backing Gas	<u>-</u>
Progression	<u>uphill</u>		

P.Q. Expiry Date: Apr. 13/06 Welding Examiner Signature: Barry Nichol Certification No.: W600192