

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. 12 Day 4 Signed _____

PROVINCIAL REGISTRATION

3 # 10157 BLUESTAR
DATE _____
DATE 8/05

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) _____
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)

	GMAW	SMAW
Specification No. (SFA)	<u>SFA 5.18</u>	<u>SFA 5.1</u>
AWS No. (Class)	<u>ER70S-2</u>	<u>E10018-D2</u>
F-No.	<u>F6</u>	<u>F4</u>
A-No.	<u>A1</u>	<u>A11</u>
Size	<u>.030 to .045 in. inclusive</u>	<u>3/32 to 1/4 in. inclusive</u>
Filler Metal Product Form	<u>Solid wire without the addition of supplementary fillers</u>	
Deposited Weld Metal Thickness Range:		
Groove	<u>2.79 mm (0.110 in.) max.</u>	<u>50.8 mm (2.0 in.) max.</u>
Fillet	<u>All fillet sizes</u>	<u>All fillet sizes</u>

POSITION (QW-405)

Position of Groove	<u>GMAW: All</u>	<u>SMAW: Flat</u>
Position of Fillet	<u>GMAW: All</u>	<u>SMAW: Flat & Horizontal</u>
Weld Progression	<u>GMAW: Vertical down</u>	<u>SMAW: N/A</u>

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
QGI _____ DATE _____
QCM 1/12/05 DATE Mar 8/05



CONTINUITY LOG

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

JOB # 10252 **BLUESTAR**

QCI **DATE**

QCM *HCW* **DATE** *May 8/05*

Kerry Brown
(AJ)

AOQP No. 7111

WELDER PERFORMANCE QUALIFICATION CARD

NAME: KERRY BROWN ABSA FILE No. 12982

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: Kerry Brown

Welding Examiner (Print/Type): PETER WOODCOCK, C.E.T. Card No. 2037

PERFORMANCE QUALIFICATION Card No. 2037

Process(es)	<u>GMAW/MMAW</u>	Materials (P. No.)	<u>P1. P1</u>
Filler Metal Group (F. No.)	<u>6/4</u>	Min. Outside Diameter	<u>2 3/8"</u>
Max Deposited Weld Metal	<u>0.275"</u>	Position(s) Qualified	<u>2G 5G</u>
Backing	<u>W/M</u>	Backing Gas	<u>Co2</u>
Progression	<u>uphill</u>		

P.Q. Expiry Date: Aug 1/05 Welding Examiner Signature: Peter Woodcock Certification No. W658

Leon Skracki
(AP)

AOQP No. 7111

WELDER PERFORMANCE QUALIFICATION CARD

NAME: LEON SKRAKI ABSA FILE No. 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 Skracki

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

PERFORMANCE QUALIFICATION Card No. 2035

Process(es)	<u>GMAW/MMAW</u>	Materials (P. No.)	<u>P1. P1</u>
Filler Metal Group (F. No.)	<u>6/4</u>	Min. Outside Diameter	<u>2 3/8"</u>
Max Deposited Weld Metal	<u>0.275" + 0.25"</u>	Position(s) Qualified	<u>2G, 5G</u>
Backing	<u>W/M</u>	Backing Gas	<u>Co2</u>
Progression	<u>uphill</u>		

P.Q. Expiry Date: Aug 1/05 Welding Examiner Signature: Peter Woodcock Certification No. W658

Josh Skelly
(BA)

AOQP No. 7111

WELDER PERFORMANCE QUALIFICATION CARD

NAME: JOSH SKELLY ABSA FILE No. W-2199

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

Welding Examiner (Print/Type): Barry Nichol Card No. 3125

Card No. 3125

PERFORMANCE QUALIFICATION

Process(es)	<u>SWAW</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" .130"</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. W60092

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

Welding Examiner (Print/Type): Barry Nichol Card No. 3124

Card No. 3124

PERFORMANCE QUALIFICATION

Process(es)	<u>SWAW</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" .130"</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. W60092

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

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

Card No. 3008

PERFORMANCE QUALIFICATION

Process(es)	<u>SWAW</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" to 0.466"</u>	Position(s) Qualified	<u>all</u>
Backing	<u>W/M</u>	Backing Gas	<u>-</u>
Progression	<u>uphill</u>		

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

QC- '0252 BLUESTAR
DATE
QC- DATE 8/05