

the pressure equipment safety authority

9410 - 20 Ave N.W.
Edmonton, Alberta, Canada T6N 0A4
Tel: (780) 437-9100 / Fax: (780) 437-7787

Attention: Reddy Konepally
FOURSTAR RESOURCES INC
501 24 AVENUE
NISKU, AB T9E 8P2

Email: Konepally@inproinspection.com

The welding procedure, tracking number 2017-02777, originally received on May 09, 2017 was surveyed and accepted in accordance with the requirements of ASME section IX for registration as follows:

Reg. No. : WP-2617.2

Accepted on: May 11, 2017

Reg Type: New Design

Spec. No. : LT-8 REV 0

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 3342 or fax (780) 437-7787 or e-mail reinhardt@absa.ca.

Please note:

- (1) Construction shall be completed per the requirements of the applicable construction code, and*
- (2) the acceptance of this registration does not allow the use of this welding procedure in the construction, modification, on any boiler, pressure vessel, pressure piping system or fitting in Alberta unless the contractor/manufacturer has registered a Quality Control System for such work with ABSA.*

Sincerely,

REINHART, JASON, P. Eng.



the pressure equipment safety authority

Electronic

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AB-31 2016-06 Page 1 of 1

Please complete a separate form for each design/procedure you wish to register. **WP-2617.2**

Date of Application (yyyy/mm/dd): **2017/05/08**

☒ **New Submission**

☐ **Resubmission** Ref. Tracking No. _____

☐ **Revision** Ref. CRN _____

☐ **Repair or Alteration** Ref. CRN _____
(incl. 2 copies of the AB-230) Ref. A No. _____

☐ **Used Equipment Imported to Alberta****

☐ **For Registration in other Canadian provinces and territories****

☐ BC ☐ SK ☐ MB ☐ ON ☐ QC ☐ NB
☐ NS ☐ PE ☐ NL ☐ NT ☐ YT ☐ NU

For ABSA Office Use Only

Tracking No. **2017-02777**

Date Received **MAY 09 2017**

Assigned Surveyor **Jason**

Response Date **MAY 29 2017**

Quality Plan** (for recognized AQP holders only)

AQP No.: _____

RDR / RDS Name _____

For QP Initial Audit ☐ Yes ☐ No

Manufacturer's Full Legal Company Name and Address

(plant owner for piping) Fourstar Resources Inc.

Mailing Address: 501 - 24 AVENUE, NISKU,
Alberta, T9E 8P2

Contact Person: Wesley Tarnowski

Phone Number: (780) 955-5559

Fax Number: _____

Email Address: _____

Submitter's Full Legal Company Name and Address

☐ same as manufacturer ☒ see below

Fourstar Resources Inc.

Mailing Address: 501 - 24 AVENUE, NISKU,
Alberta, T9E 8P2

Contact Person: Reddy Konepally

Phone Number: (780) 370-1180

Fax Number: _____

Email Address: Konepally@InProInspection.com

Invoicing Instructions

The invoice will be sent and the documents will be returned to the Submitter.

☐ P.O. No. or Ref. No.: _____
(if required for payment)

☐ Call for sub _____

Additional Information

Include two sets of drawings (folded), one set of calculations and the applicable Form AB-31a or AB-31b.

☐ **Main Drawing No(s), Fitting Catalogue No., or Welding Spec No.:** _____

☐ **Vessel or Boiler** **ASME Sec.:** _____
Code of Construction **Div.:** _____
(incl. Form AB-31a)

☐ **Piping** (incl. 1 copy of the AB-31b and 2 copies of the AB-96*)
Ref. PP No.: _____

☐ **Fitting** (☐ New / ☐ Addition / ☐ Renewal)
(incl. 2 original copies of the AB-41* and 2 copies of the AB-257)
Ref. CRN (if applicable): _____

☒ **Welding Procedure**

☐ **Pneumatic Testing Procedure** (for piping)
Ref. PP No.: _____

☐ **Hot Tap Procedure** (for piping)
Ref. PP No.: _____

☐ **Reciprocal Design** (incl. proof of registration)
Reciprocal CRN: _____

☐ **Other** (specify) _____

Type of Pressure Equipment (check only one)

☐ Boiler ☐ Pressure Vessel ☐ Heat Exchanger

☒ **Rush Rate Authorized by:** Reddy Konepally

Date required: 10 May 2017

* Required Form

** See the ABS

absa.ca

Ma 20 Avenue Edmonton, AB Canada T6N 0A4

WELDING PROCEDURE SPECIFICATION

WPS No.: LT-8 Rev.0

SUPPORTING PQR No.(s): LT-8-1 Rev.0, LT-8-2 Rev.0, LT-8-2-1 Rev.0 & LT-8-3 Rev.0

in accordance with

ASME Section IX

qualified for

Process(s): GMAW/SMAW/SAW
 Positions: GMAW-All, SMAW- All & SAW-Flat & Horizontal
 Filler Metal F-No.: F6/F4/F6
 AWS Classification: ER 70S-6, E7018-1, F7A6-EM12K Weld Type(s): Groove / Fillet
 Base Metal: **P1 Group 1 or 2 to P1 Group 1 or 2**
Thickness Ranges

Base Metal Thickness Range

With Notch toughness requiremnt upto -55°F (-48°C)

ASME BPV Section.IX: 0.125" (3.2 mm) to 8" (203 mm)

Combined Deposited Weld Metal Thickness for Variuos Construction Codes

ASME B31.3: Maximum of 0.75" (19.1 mm)

ASME B31.1: Maximum of 0.75" (19.1 mm)

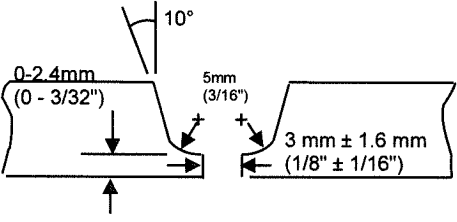
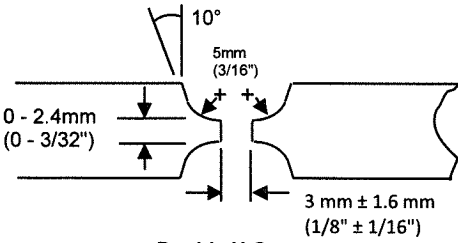
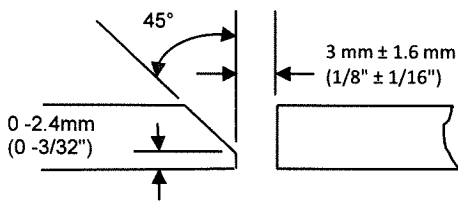
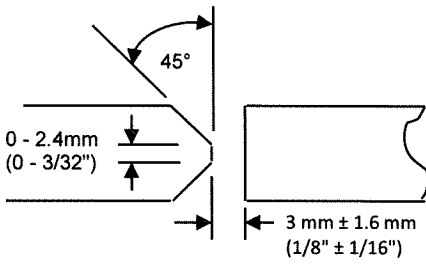
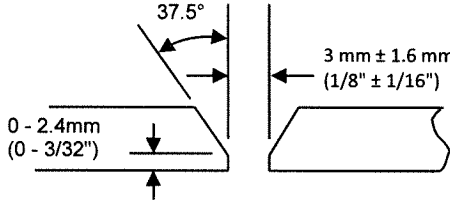
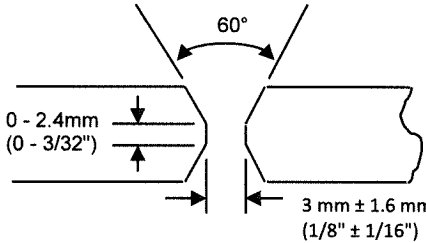
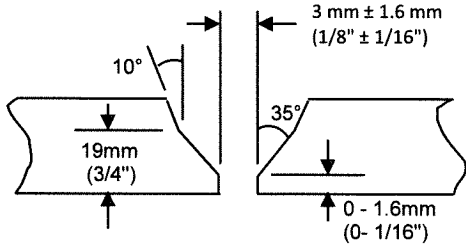
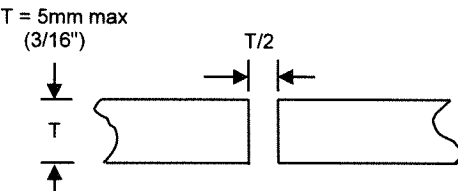
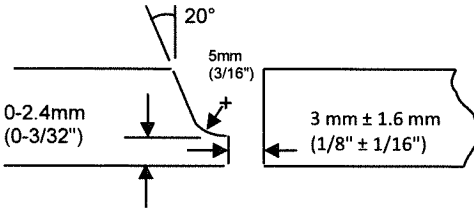
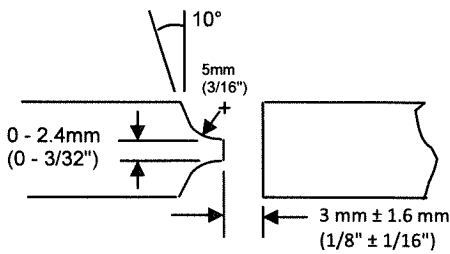
ASME Section VIII Div.1: Maximum of 1.5" (38.1 mm)

Provincial Registrations:

ABCA	
SAFETY CODES ACT - PROVINCE OF ALBERTA	
WELDING PROCEDURE	
Reg. No. WP	2617.2
Spec No.	LT-8 (Rev 0)
Weld Process	GMAW/SMAW/SAW
Matl. Gr. P No.	1Gr 1+2 to P No. 1Gr 1+2
Elect Gr. F No.	6+4+6 A No. *+1+1
Th. Qual For	203mm P.W.H.T. NO
Min Th Qual 3.2mm, CVN-48°C	
*ER70S-6	
Yr. 17 Mo. 5 Day 11	Signed <i>[Signature]</i>
JASON REINHART, PENG. WELDING SPECIALIST	

Company Name: Fourstar Resources Inc.						Date: 08 May, 2017																													
WPS No.: LT-8																																			
Revision No.: 0						Revision Date: 08 May, 2017																													
Supporting PQR No(s): LT-8-1 Rev.0, LT-8-2 Rev.0, LT-8-2-1 Rev.0 & LT-8-3 Rev.0																																			
Welding Process(es): GMAW, SMAW, SAW						Process(es) Mode: Semi-Automatic, Manual, Machine																													
JOINTS (QW-402)												JOINT DETAILS																							
Joint Design: All ASME joint designs.												Note: Refer construction drawings for joint details.																							
Backing: With or without Backing												Where joint details not specified, refer to typical joint detail sheet.																							
Retainers: None												(WPS page 4 of 4)																							
Backing Material (Type): (X) Metal () Nonfusing Metal () Nonmetallic () Other Shall be metal where backing is used.																																			
BASE METALS (QW-403)																																			
P-No.: 1 Group No.: 1 or 2 to P-No.: 1 Group No.: 1 or 2																																			
or																																			
Chemical Analysis and Mechanical Properties:												None																							
to																																			
Chemical Analysis and Mechanical Properties:												None																							
Base Metal Thickness Range:												Groove: 0.125" (3.2 mm) to 8" (203 mm)												Fillet: All											
Pipe Diameter Range:												Groove: All diameters												Fillet: All											
												Other: Maximum weld thickness per layer shall not to exceed 1/2" (12.7mm)																							
FILLER METALS (QW-404)																																			
Process:						GMAW						SMAW						SAW																	
Spec No. (SFA):						5.18						5.1						5.17																	
AWS No.:						ER70S-6						E7018-1						E7A6-EM12K																	
F-No.						F6						F4						F6																	
A-No.						*						A1						A1																	
Size:						0.030", 0.035", 0.045"						3/32", 1/8", 5/32", 3/16", 1/4"						5/64", 3/32", 1/8", 5/32", 3/16"																	
Filler Metal Product form						Solid Wire						Covered Electrode						Solid Wire																	
Supplemental Filler Metal						Without						Without						Without																	
Weld metal thickness**:						Groove: inch (mm)		Fillet:				Groove: inch (mm)		Fillet:				Groove: inch (mm)		Fillet:															
Base metal thickness upto 0.49"						0.11"(2.8)		All				0.188"(4.8)		All				0.055" (1.4mm)		All															
Base metal thickness: 0.49" to 1"						0.11"(2.8)		All				0.38"(9.7)		All				0.42"(10.7mm)		All															
Base metal thickness: 5/8" to 8"						0.1034"(2.6)		All				0.562"(14.23)		All				8"(203mm)		All															
Flux type and designation						N.A.						N.A.						Neutral (Lincoln 882 Flux)																	
Alloy Elements /Flux						Without additional fillers						N.A.						Without additional fillers or powders																	
*Chemical composition meets the requirements of ASME Section II, Part C SFA 5.18 for ER70S-6																																			
**Combined deposited weld metal thickness shall not exceed the maximum limits for various construction codes as specified in the page of this WPS.																																			

POSITIONS (QW-405)				POSTWELD HEAT TREATMENT (QW-407)				
	GMAW	SMAW	SAW					
Position(s);	All	All	Flat & Horizontal	Temp Range: None (No PWHT)				
Welding Progression:	Vertical down	Vertical up	N.A.	Time Range: None (No PWHT)				
PREHEAT (QW-406)				GAS (QW-408)				
Preheat Temp Min: 50°F(10°C), 200°F (93°C) if base metal > 1"(25.4mm)*				GMAW				
Interpass Temp Range: 550°F (315°C)				Shielding Gas(es) SFA 5.32 (75Ar + 25CO2)				
Preheat Maintenance: Required before the start/restart of welding				Flow Rate: 20 to 50 CFH (10 to 25 liters per minute)				
Other: *Refer construction code for additional requirement. Preheat shall not exceed 150°F(65°C) for base metal thickness from 1/8" to 5/8" (3.2mm to 16mm) and 250°F(121°C) for base metal thickness 5/8" to 8"(16mm to 203mm)				Trailing: None				
				Backing: None				
				Gas Cup Size: 0.375" (9.52mm) to 0.75" (19.1mm)				
ELECTRICAL CHARACTERISTICS (QW-409)								
Process:	GMAW		SMAW		SAW			
Current Type:	DC		DC		DC			
Polarity:	Reverse(Electrode Positive)		Reverse(Electrode Positive)		Reverse (Electrode Positive)			
Max Heat Input upto 0.49" base metal thickness	20110 J/in		22500 J/in		SAW: 36000 J/in			
Max Heat Input from 1/2" to 5/8" base metal thick	20520 J/in		42500 J/in		53760 J/in			
Max Heat Input from 5/8" to 8" base metal thick	22680 J/in		46200 J/in		81818 J/in			
Metal Transfer Mode:	Short Circute		N.A.		N.A.			
TECHNIQUE (QW-410)								
String or Weave Bead:	Weld layers shall be deposited by weave for GMAW, string or weave for SMAW and stringer for SAW.							
Initial Cleaning:	Base material shall be thoroughly cleaned of grease, rust, mill scale, oxidation, deleterious material, paint, primer, etc. at least one inch back on each side of the joint prior to welding by brushing, chipping or grinding as required.							
Interpass Cleaning:	Mandatory between passes and after final weld using chipping, wire brush/wheel or grinding disk.							
Inter-Layer Grinding:	Use a 3/16" or 1/4" thick grinding discs throughout the deposition of multi-layer welds.							
	Do not alter the geometric design of the original weld preparation							
Method of Back Gouging:	Back grinding or air carbon arc gouging followed by cleaning to solid clean metal.							
Oscillation:	Maximum 2 to 3 times diameter of electrode.							
Contact Tube to Work Distance:	GMAW: 0.25" to 0.75" (6 mm to 19 mm), SMAW: N.A., SAW: 0.5" to 1.5" (12.7mm to 38mm)							
Multiple or Single Pass per Side:	Multiple passes per side							
Multiple or Single Electrodes:	Single							
Peening:	Not permitted							
Use of thermal processes:	Not permitted							
TYPICAL WELDING PARAMETERS								
Process	Filler Metal		Current		AMPS	(Volts)	Travel Speed IPM	Other
	AWS Classification	Diameter	Type and Polarity	Amperage Range				
GMAW	ER70S-6	0.030"	DCEP	70 to 130	14-20	2 to 10		
	ER70S-6	0.035"	DCEP	80-180	15-22	2 to 25		Note: Number of weld layers and size of filler metal may vary with thickness of base material and position of weld.
	ER70S-6	0.045"	DCEP	115- 225	16-23	3 to 35		
SMAW	E7018-1	3/32"	DCEP	60-110	18-24	2 to 14		
	E7018-1	1/8"	DCEP	90-160	18-26	2 to 16		
	E7018-1	5/32"	DCEP	110-220	19-28	3 to 18		
	E7018-1	3/16"	DCEP	130-290	20-34	4 to 20		
	E7018-1	1/4"	DCEP	180-360	22-34	5 to 22		
SAW	F7A6-EM12K	5/64"	DCEP	200-450	25-32	6 to 30		
	F7A6-EM12K	3/32"	DCEP	250-500	25-33	8 to 32		
	F7A6-EM12K	1/8"	DCEP	300-600	26-34	8 to 35		
	F7A6-EM12K	5/32"	DCEP	400-700	26-34	12 to 40		
	F7A6-EM12K	3/16"	DCEP	500-1000	28-36	18 to 50		

TYPICAL JOINT DETAILS	
 10° 0-2.4mm (0 - 3/32") 5mm (3/16") 3 mm ± 1.6 mm (1/8" ± 1/16") Single U Groove *	 10° 5mm (3/16") 0 - 2.4mm (0 - 3/32") 3 mm ± 1.6 mm (1/8" ± 1/16") Double U Groove
 45° 0 - 2.4mm (0 - 3/32") 3 mm ± 1.6 mm (1/8" ± 1/16") Single Bevel Groove*	 45° 0 - 2.4mm (0 - 3/32") 3 mm ± 1.6 mm (1/8" ± 1/16") Double Bevel Groove
 37.5° 0 - 2.4mm (0 - 3/32") 3 mm ± 1.6 mm (1/8" ± 1/16") Single Vee Groove*	 60° 0 - 2.4mm (0 - 3/32") 3 mm ± 1.6 mm (1/8" ± 1/16") Double Vee Groove
 10° 19mm (3/4") 3 mm ± 1.6 mm (1/8" ± 1/16") 35° 0 - 1.6mm (0- 1/16") Modified Single Vee*	 T = 5mm max (3/16") T/2 Single Bevel Groove*
 20° 5mm (3/16") 0-2.4mm (0-3/32") 3 mm ± 1.6 mm (1/8" ± 1/16") Single J Groove*	 10° 5mm (3/16") 0 - 2.4mm (0 - 3/32") 3 mm ± 1.6 mm (1/8" ± 1/16") Double J Groove

TENSILE TEST (QW-150)						
Specimen No.	Width (in)	Thickness (in)	Area (sq in)	Ultimate Load (lbf)	Ultimate T Strength (kpsi)	Type of Failure and Location
Sample 1	0.745	0.239	0.178	14,230	79,900	Ductile failure at weld
Sample 2	0.751	0.23	0.173	13,840	80,100	Ductile failure at weld

GUIDED BEND TESTS (QW-160)		
Specimen #	Type and Figure No.	Result
1	Transverse Face Bend QW-462 3(a)	Satisfactory
2	Transverse Root Bend QW-462 3(a)	Satisfactory
3	Transverse Face Bend QW-462 3(a)	Satisfactory
4	Transverse Root Bend QW-462 3(a)	Satisfactory

TOUGHNESS TESTS (QW-170)						
Specimen No.	Notch Location	Notch Type	Test Temp	Impact Values ft-lb	% Shear	Lateral Expansion
1	Weld zone	V	-55°F (-48°C)	48	-	-
2	Weld zone	V	-55°F (-48°C)	45	-	-
3	Weld zone	V	-55°F (-48°C)	56	-	-
4	Heat affected zone	V	-55°F (-48°C)	40	-	-
5	Heat affected zone	V	-55°F (-48°C)	42	-	-
6	Heat affected zone	V	-55°F (-48°C)	62	-	-

Destructive Testing Comments: -

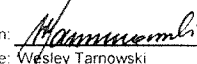
FILLET WELD TEST (QW-170)	
Result - Satisfactory: Yes _____ No _____	Penetration into Parent Metal: Yes _____ No _____
Macro Results: N/A	
Comments: Fillet weld test is not applicable.	

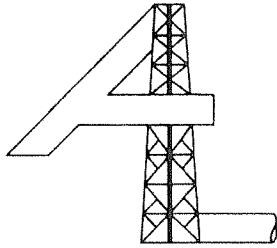
OTHER TESTS	
Type of Test:	Vickers Hardness Test
Deposit Analysis:	See attached laboratory test report
Other:	
Welder's Name:	Michael Opdendries
Welder's Name:	John Hudson
Tests Conducted By:	Alfor Metallurgical Company Ltd.
	Canada Weld Test & Training Inc.
ABSA File #	W-23699
Stamp No.	M
ABSA File #	W-14605
Stamp No.	U
Laboratory Test No.	File # 17-133
	File # P-17-16

We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Code.

Manufacturer: FOURSTAR RESOURCES INC.

Date: May 8, 2017

Sign: 
Name: Wesley Tarnowski



ALFOR METALLURGICAL COMPANY LTD.
CONSULTING ENGINEERS

Fourstar Resources Inc.
1906 - 4 Street
Nisku, Alberta T9E 7T8

FILE #17-133

May 8, 2017

METAL TEST REPORT

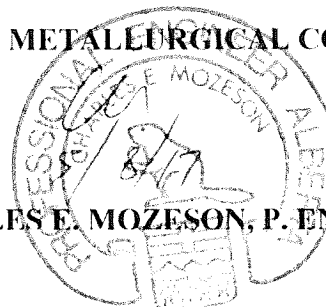
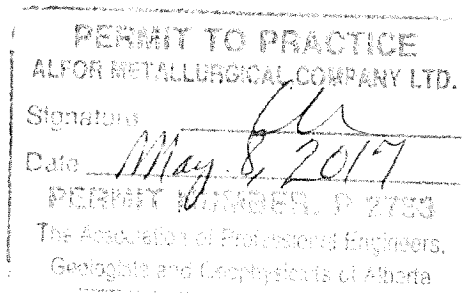
Material Description: ASME SA-516, Grade 60/70; 0.249"-thick, normalized plate; as-welded.

Specimen Type: Reduced-section tensile, as per Figure QW-462.1(a) of the ASME Code.

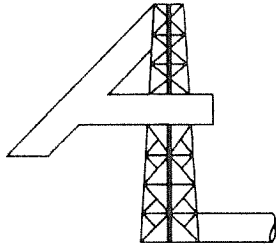
Results:	<u>Sample 1</u>	<u>Sample 2</u>
Width:	0.745 in.	0.751 in.
Thickness:	0.239 in.	0.230 in.
Area:	0.178 sq. in.	0.173 sq. in.
Ultimate Load:	14 230 lb	13 840 lb
Ultimate Tensile Strength:	79 900 psi	80 100 psi
Fracture Character:	Ductile	Ductile
Fracture Location:	Parent	Parent

Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.



CHARLES E. MOZESON, P. ENG.



ALFOR METALLURGICAL COMPANY LTD.
CONSULTING ENGINEERS

FILE #17-133

Fourstar Resources Inc.
1906 - 4 Street
Nisku, Alberta T9E 7T8

May 8, 2017

CHARPY V-NOTCH IMPACT TEST RESULTS

Material Description: ASME SA-516, Grade 60/70; 0.249"-thick, normalized plate; as-welded.

Specimen Type: Charpy V-notch 0.210 inch (5.33 mm)-sized weld zone and heat-affected zone impact specimen, as per Part UG-84 of the ASME Code.

Testing Temperature: -55 F.

Results:

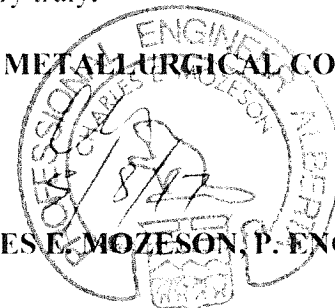
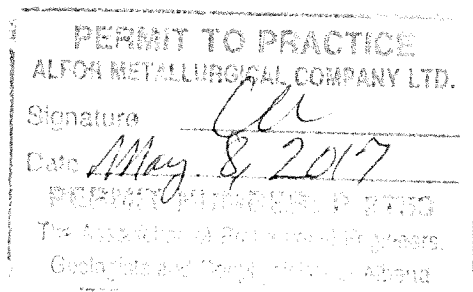
Weld zone: 48, 45, 56 ft-lb;

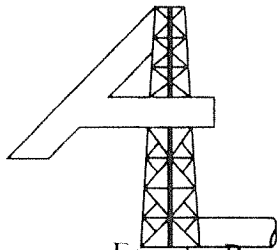
Heat-affected zone: 40, 42, 62 ft-lb.

Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.

CHARLES E. MOZESON, P. ENG.





ALFOR METALLURGICAL COMPANY LTD.

CONSULTING ENGINEERS

FILE #17-133

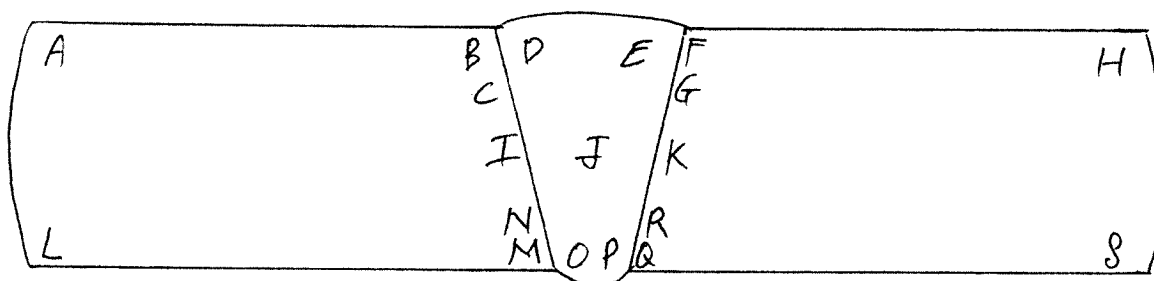
Fourstar Resources Inc.
1906 - 4 Street
Nisku, Alberta T9E 7T8

May 8, 2017

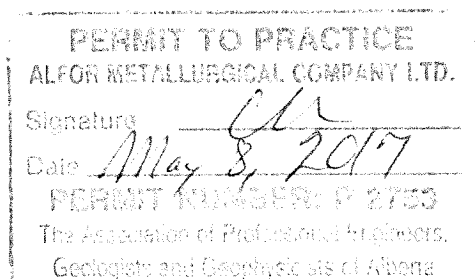
VICKERS HARDNESS TESTING OF WELDMENT

Material Description: ASME SA-516, Grade 60/70; 0.249"-thick, normalized plate; as-welded.

Vickers hardness testing at 10 kg mass (HV10) was performed on a prepared cross-section of the weldment, in accordance with NACE MR0175/ISO 15156-2 and ASTM E 92. The results are tabulated.



<u>Location</u>	<u>HV10</u>	<u>Location</u>	<u>HV10</u>	<u>Location</u>	<u>HV10</u>
A	162	H	157	O	178
B	207	I	188	P	174
C	189	J	183	Q	188
D	180	K	196	R	200
E	187	L	167	S	165
F	197	M	180		
G	200	N	185		



Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.

CHARLES E. MOZESON, P. ENG.





107, 3906-82nd Avenue, Leduc, AB, Canada T9E 8M4
Ph: (780) 612-8008 Email : Testing@CanadaWeld.ca

Client:

Four Star Resources Inc.
501 - 24 Avenue, Nisku, AB, T9E 8P2

Date: 02-May-2017

Report No: P-17-16

Attention: Wesley Tamowski

Sub: Bend Test Results: 0.25" thick coupon

Testing Specification: ASME Section IX, 2015 Edition

Sample type (Figure QW-462.3(a))	Specimen Number	Results
Transverse Face Bend	1	Satisfactory
Transverse Root Bend	2	Satisfactory
Transverse Face Bend	3	Satisfactory
Transverse Root Bend	4	Satisfactory

A handwritten signature in black ink, appearing to read "Reddy Konepally", with a stylized flourish at the end.

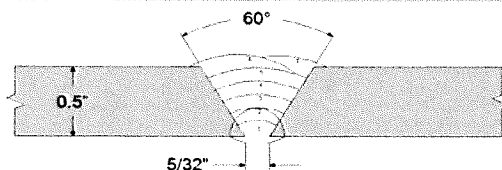
Tests conducted and certified by:

Reddy Konepally

Company Name: FOURSTAR RESOURCES INC.
PQR No.: LT-8-2 Rev.0
WPS No.: LT-8 Rev.0
Welding Process(es): GMAW/SMAW/SAW

Date: May 8, 2017

Mode: Semi-Automatic/Manual/Machine

JOINTS (QW-402)**BASE METALS (QW-403)**

Material Spec: SA 516 to SA 516
Type or Grade: Gr.70/Gr.60
P-No.: P1 group 1/2 to P-No.: P1 group 1/2
Thickness of Test Coupon: 0.5"
Diameter of Test Coupon: NA (Plate Product Form)
Other: CE= 0.416
Heat Number: P03342 FA75058401
Each pass thickness is less than 1/2"

POSTWELD HEAT TREATMENT (QW-407)

Temperature: NA
Holding Time: NA
Other: None

FILLER MATERIALS (QW-404)

	GMAW	SMAW	SAW
SFA Specification:	SFA 5.18	SFA 5.1	SFA 5.17
AWS Classification:	ER70S-6	E7018-1	F7A6-EM12K**
F-No.:	F6	F4	F6
A-No.:	*	A1	A1
Size:	0.035"	3/32", 1/8"	1/8"
Filler Metal Product form:	Solid wire	Covered electrode	Solid wire
Weld Metal Thickness:	0.1 in.	0.19 in.	0.21 in.
Flux:	N.A.	N.A.	Neutral (Lincoln Electric 882 flux)
Other:			

* Chemical composition meets ASME Sec II Part C, SFA 5.18 requirements for ER70S-6
** Lincoln Electric L61 solid wire electrode

SHIELDING GAS (QW-408): For GMAW

	Percent Composition			
	Gas(es)	Mixture	Flow Rate	Gas Specification
Shielding:	YES	75% Argon + 25% CO2	35 CFH	SFA 5.32, AWS SG-AC-25
Trailing:	Without	-	-	-
Backing:	Without	-	-	-

POSITION (QW-405)

	GMAW	SMAW	SAW
Position of Groove:	3G	1G	1G
Weld Progression:	Verticle down	N.A (Flat)	N.A.(Flat)
Other:	-	-	-

ELECTRICAL CHARACTERISTICS (QW-409)

	DC
Current:	Reverse (electrode positive)
Polarity:	
Amps:	GMAW - 84-86 SMAW - 100-150 SAW - 365-375
Volts:	GMAW - 17-18 SMAW - 20-24 SAW - 27-29
Transfer mode:	Short circuiting arc
Max. Heat Input:	GMAW: 21768 J/in, SMAW: 42450 J/in, SAW: 53080 J/in.

PREHEAT (QW-406)

Preheat Temperature: 50°F
Interpass Temperature: 500°F
Other: None

TECHNIQUE (QW-410)

	GMAW	SMAW	SAW
Travel Speed	4.1 IPM	4.1 to 4.5 IPM	12 to 17 IPM
String and/or Weave	Weave	String and Weave	String
Oscillation:	NA	Slight	N.A.
Single or Multi Pass:	Single	Multiple	Multiple
Single or Multiple Electrodes:	Single	Single	Single
Use of thermal processes:	None	None	None

TENSILE TEST (QW-150)						
Specimen No.	Width (in)	Thickness (in)	Area (sq in)	Ultimate Load (lbf)	Ultimate T Strength (kpsi)	Type of Failure and Location
Sample 1	0.748	0.496	0.370	30,450	82,400	Ductile failure at weld
Sample 2	0.759	0.492	0.373	30,550	81,800	Ductile failure at weld

GUIDED BEND TESTS (QW-160)		
Specimen #	Type and Figure No.	Result
1	Side Bend QW-462.2 (TSB)	Satisfactory
2	Side Bend QW-462.2 (TSB)	Satisfactory
3	Side Bend QW-462.2 (TSB)	Satisfactory
4	Side Bend QW-462.2 (TSB)	Satisfactory

TOUGHNESS TESTS (QW-170)						
Specimen No.	Notch Location	Notch Type	Test Temp	Impact Values ft-lb	% Shear	Lateral Expansion
1	Weld zone	V	-55°F (-48°C)	46	-	-
2	Weld zone	V	-55°F (-48°C)	14	-	-
3	Weld zone	V	-55°F (-48°C)	50	-	-
4	Heat affected zone	V	-55°F (-48°C)	181	-	-
5	Heat affected zone	V	-55°F (-48°C)	206	-	-
6	Heat affected zone	V	-55°F (-48°C)	136	-	-

Destructive Testing Comments: -

FILLET WELD TEST (QW-170)	
Result - Satisfactory: Yes ☐ No ☐	Penetration into Parent Metal: Yes ☐ No ☐
Macro Results: N/A	
Comments: Fillet weld test is not applicable.	

OTHER TESTS	
Type of Test:	Vickers Hardness Test
Deposit Analysis:	See attached laboratory test report
Other:	
Welder's Name:	Michael Opdendries
Welder's Name:	Garet Dumont
Tests Conducted By:	Alfor Metallurgical Company Ltd.
	Canada Weld Test & Training Inc.

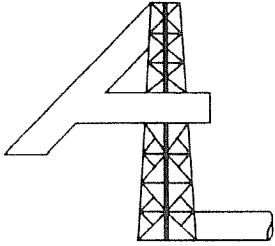
We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Code.

Manufacturer: FOURSTAR RESOURCES INC.

Date: May 8, 2017

Sign: *Wesley Tarnowski*

Name: Wesley Tarnowski



ALFOR METALLURGICAL COMPANY LTD.

CONSULTING ENGINEERS

FILE #17-107

Canada Weld Test & Training Inc.
Unit 7, 3906 - 82 Avenue
Leduc, Alberta T9E 8M4

April 12, 2017

METAL TEST REPORT

Material Description: ASME SA-516, Grade 70; 0.500"-thick, normalized plate; as-welded.

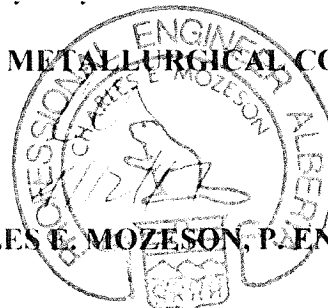
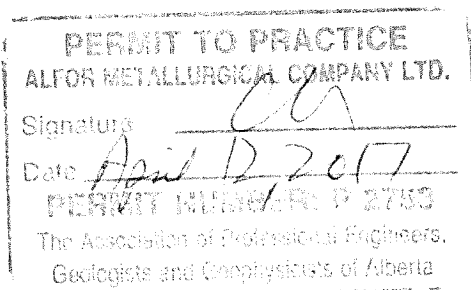
Specimen Type: Reduced-section tensile, as per Figure QW-462.1(a) of the ASME Code.

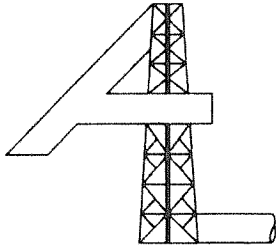
Results:	<u>Sample 1</u>	<u>Sample 2</u>
Width:	0.748 in.	0.759 in.
Thickness:	0.496 in.	0.492 in.
Area:	0.370 sq. in.	0.373 sq. in.
Ultimate Load:	30 450 lb	30 550 lb
Ultimate Tensile Strength:	82 400 psi	81 800 psi
Fracture Character:	Ductile	Ductile
Fracture Location:	Weld	Weld

Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.

CHARLES E. MOZESON, P.ENG.





ALFOR METALLURGICAL COMPANY LTD.
CONSULTING ENGINEERS

FILE #17-107

Canada Weld Test & Training Inc.
Unit 7, 3906 - 82 Avenue
Leduc, Alberta T9E 8M4

April 12, 2017

CHARPY V-NOTCH IMPACT TEST RESULTS

Material Description: ASME SA-516, Grade 70; 0.500"-thick, normalized plate; as-welded.

Specimen Type: Charpy V-notch full-sized weld zone and heat-affected zone impact specimen,
as per Part UG-84 of the ASME Code.

Testing Temperature: -55 F.

Results:

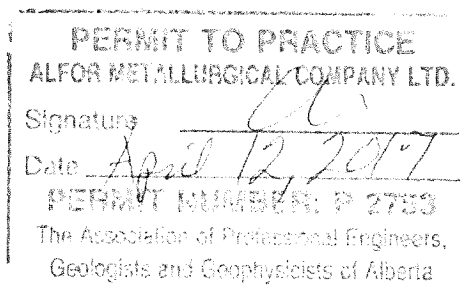
Weld zone: 46, 14, 50 ft-lb;

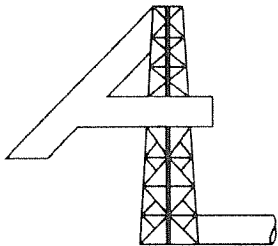
Heat-affected zone: 181, 206, 136 ft-lb.

Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.

CHARLES E. MOZESON, P.ENG.





ALFOR METALLURGICAL COMPANY LTD.

CONSULTING ENGINEERS

FILE #17-107

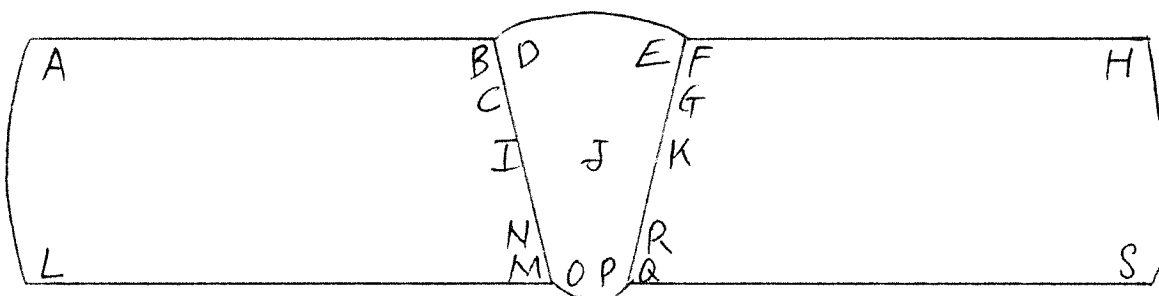
Canada Weld Test & Training Inc.
Unit 7, 3906 - 82 Avenue
Leduc, Alberta T9E 8M4

April 12, 2017

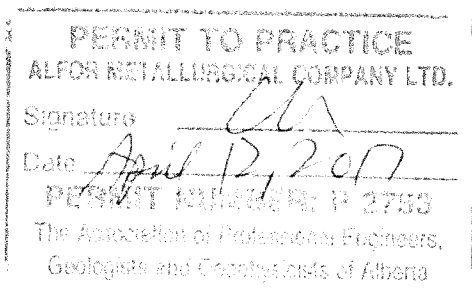
VICKERS HARDNESS TESTING OF WELDMENT

Material Description: ASME SA-516, Grade 70; 0.500"-thick, normalized plate; as-welded.

Vickers hardness testing at 10 kg mass (HV10) was performed on a prepared cross-section of the weldment, in accordance with NACE MR0175/ISO 15156-2 and ASTM E 92. The results are tabulated.



<u>Location</u>	<u>HV10</u>	<u>Location</u>	<u>HV10</u>	<u>Location</u>	<u>HV10</u>
A	168	H	161	O	167
B	190	I	171	P	167
C	182	J	151	Q	168
D	167	K	162	R	173
E	162	L	167	S	163
F	206	M	168		
G	204	N	170		



Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.

CHARLES E. MOZESON, P. ENG.





107, 3906-82nd Avenue, Leduc, AB, Canada T9E 8M4
Ph: (780) 612-8008 Email : Testing@CanadaWeld.ca

Client:

Four Star Resources Inc.
501 - 24 Avenue, Nisku, AB, T9E 8P2

Date: 07-Mar-2017

Report No: P-17-6

Attention: Wesley Tamowski

Sub: Bend Test Results: 0.5" thick coupon

Testing Specification: ASME Section IX, 2015 Edition

Sample type (Figure QW-462.2)	Specimen Number	Results
Transverse Side Bend	1	Satisfactory
Transverse Side Bend	2	Satisfactory
Transverse Side Bend	3	Satisfactory
Transverse Side Bend	4	Satisfactory

A handwritten signature in black ink, appearing to read "Reddy Konepally", with a stylized flourish at the end.

Tests conducted and certified by:

Reddy Konepally

Company Name: <u>FOURSTAR RESOURCES INC.</u>		Date: <u>May 8, 2017</u>	
PQR No.: <u>LT-8-2-1 Rev.0</u>			
WPS No.: <u>LT-8 Rev.0</u>			
Welding Process(es): <u>GMAW/SMAW/SAW</u>		Mode: <u>Semi-Automatic/Manual/Machine</u>	

JOINTS (QW-402)

BASE METALS (QW-403)		POSTWELD HEAT TREATMENT (QW-407)	
Material Spec:	<u>SA 516 to SA 516</u>	Temperature:	<u>NA</u>
Type or Grade:	<u>Gr.70/Gr.60</u>	Holding Time:	<u>NA</u>
P-No.: <u>P1 group 1/2</u>	to P-No.: <u>P1 group 1/2</u>	Other:	<u>None</u>
Thickness of Test Coupon:	<u>0.5"</u>		
Diameter of Test Coupon:	<u>NA (Plate Product Form)</u>		
Other:	<u>CE = 0.378</u>		
Heat Number:	<u>432585 70325-01</u>		

FILLER MATERIALS (QW-404)

	GMAW	SMAW	SAW
SFA Specification:	<u>SFA 5.18</u>	<u>SFA 5.1</u>	<u>SFA 5.17</u>
AWS Classification:	<u>ER70S-6</u>	<u>E7018-1</u>	<u>F7A6-EM12K**</u>
F-No.:	<u>F6</u>	<u>F4</u>	<u>F6</u>
A-No.:	<u>*</u>	<u>A1</u>	<u>A1</u>
Size:	<u>0.035"</u>	<u>3/32", 1/8"</u>	<u>1/8"</u>
Filler Metal Product form:	<u>Solid wire</u>	<u>Covered electrode</u>	<u>Solid wire</u>
Weld Metal Thickness:	<u>0.1 in.</u>	<u>0.19 in.</u>	<u>0.21 in.</u>
Flux:	<u>N.A.</u>	<u>N.A.</u>	<u>Neutral (Lincoln Electric 882 flux)</u>
Other:			

* Chemical composition meets ASME Sec II Part C, SFA 5.18 requirements for ER70S-6

** Lincoln Electric L61 solid wire electrode

Each weld pass thickness is less than 1/2"

SHIELDING GAS (QW-408): For GMAW

	Gas(es)	Mixture	Flow Rate	Gas Specification
Shielding:	<u>YES</u>	<u>75% Argon + 25% CO2</u>	<u>35 CFH</u>	<u>SFA 5.32, AWS SG-AC-25</u>
Trailing:	<u>Without</u>	<u>-</u>	<u>-</u>	<u>-</u>
Backing:	<u>Without</u>	<u>-</u>	<u>-</u>	<u>-</u>

POSITION (QW-405)	GMAW	SMAW	SAW	ELECTRICAL CHARACTERISTICS (QW-409)
Position of Groove:	<u>3G</u>	<u>3G</u>	<u>1G</u>	Current: <u>DC</u>
Weld Progression:	<u>Verticle down</u>	<u>Verticle up</u>	<u>N.A.(Flat)</u>	Polarity: <u>Reverse (electrode positive)</u>
Other:	<u>-</u>	<u>-</u>	<u>-</u>	Amps: <u>GMAW - 114 SMAW - 75-110 SAW - 460-480</u>
				Volts: <u>GMAW - 18 SMAW - 20-24 SAW - 28 to 30 V</u>
				Transfer mode: <u>Short circuiting arc</u>
				Max. Heat Input: <u>GMAW: 20520 J/in, SMAW: 42500 J/in, SAW: 53760 J/in.</u>

PREHEAT (QW-406)	TECHNIQUE (QW-410)
Preheat Temperature: <u>50°F</u>	Travel Speed
Interpass Temperature: <u>500°F</u>	String and/or Weave
Other: <u>None</u>	Oscillation:
	Single or Multi Pass:
	Single or Multiple Electrodes:
	Use of thermal processes:

TENSILE TEST (QW-150)						
Specimen No.	Width (in)	Thickness (in)	Area (sq in)	Ultimate Load (lbf)	Ultimate T Strength (kpsi)	Type of Failure and Location

GUIDED BEND TESTS (QW-160)	
Type and Figure No.	Result

TOUGHNESS TESTS (QW-170)						
Specimen No.	Notch Location	Notch Type	Test Temp	Impact Values ft-lb	% Shear	Lateral Expansion
1	Weld zone	V	-55°F (-48°C)	105	-	-
2	Weld zone	V	-55°F (-48°C)	108	-	-
3	Weld zone	V	-55°F (-48°C)	98	-	-
4	Heat affected zone	V	-55°F (-48°C)	137	-	-
5	Heat affected zone	V	-55°F (-48°C)	122	-	-
6	Heat affected zone	V	-55°F (-48°C)	128	-	-

Destructive Testing Comments: -

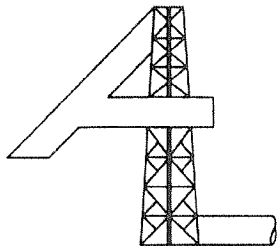
FILLET WELD TEST (QW-170)	
Result - Satisfactory: Yes ☐ No ☐	Penetration into Parent Metal: Yes ☐ No ☐
Macro Results: <u>N/A</u>	
Comments: Fillet weld test is not applicable.	

OTHER TESTS	
Type of Test:	<u>None</u>
Deposit Analysis:	<u>None</u>
Other:	
Welder's Name:	<u>Michael Opdendries</u> ABSA File # <u>W-23699</u> Stamp # <u>M</u>
Welder's Name:	<u>John Hudson</u> ABSA File # <u>W-14605</u> Stamp # <u>U</u>
Tests Conducted By:	<u>Alfor Metallurgical Company Ltd.</u> Laboratory Test No. <u>File # 17-133</u>

We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Code.

Manufacturer: FOURSTAR RESOURCES INC.

Date: May 8, 2017 Sign: [Signature]
Name: Wesley Tarnowski



ALFOR METALLURGICAL COMPANY LTD.
CONSULTING ENGINEERS

FILE #17-133

Fourstar Resources Inc.
1906 - 4 Street
Nisku, Alberta T9E 7T8

May 8, 2017

CHARPY V-NOTCH IMPACT TEST RESULTS

Material Description: ASME SA-516, Grade 60/70; 0.500"-thick, normalized plate; as-welded.

Specimen Type: Charpy V-notch full-sized weld zone and heat-affected zone impact specimen,
as per Part UG-84 of the ASME Code.

Testing Temperature: -55 F.

Results:

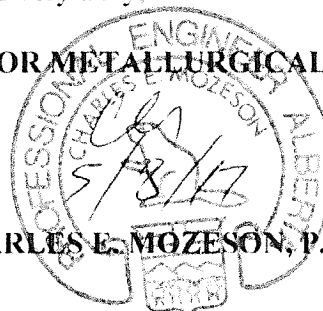
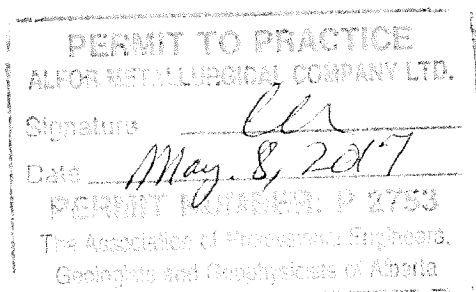
Weld zone: 105, 108, 98 ft-lb;

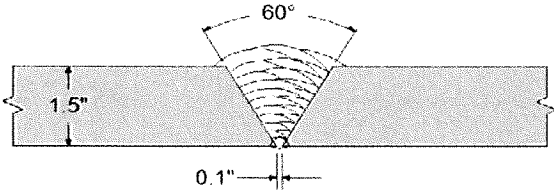
Heat-affected zone: 137, 122, 128 ft-lb.

Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.

CHARLES E. MOZESON, P. ENG.



Company Name: FOURSTAR RESOURCES INC.		Date: May 8, 2017																																											
PQR No.: LT-8-3 Rev.0																																													
WPS No.: LT-8 Rev.0																																													
Welding Process(es): GMAW/SMAW/SAW		Mode: Semi-Automatic/Manual/Machine																																											
JOINTS (QW-402)																																													
																																													
BASE METALS (QW-403)		POSTWELD HEAT TREATMENT (QW-407)																																											
Material Spec: SA 516 to SA 516		Temperature: NA																																											
Type or Grade: Gr.70/Gr.60		Holding Time: NA																																											
P-No.: P1 group 1/2 to P-No.: P1 group 1/2		Other: None																																											
Thickness of Test Coupon: 1.5"																																													
Diameter of Test Coupon: NA (Plate Product Form)																																													
Other: CE= 0.397																																													
Heat Number: 419597 27953-01																																													
FILLER MATERIALS (QW-404)																																													
GMAW		SMAW																																											
SFA Specification: SFA 5.18		SFA 5.1																																											
AWS Classification: ER70S-6		E7018-1																																											
F-No.: F6		F4																																											
A-No.: *		A1																																											
Size: 0.035"		3/32", 1/8"																																											
Filler Metal Product form: Solid wire		Covered electrode																																											
Weld Metal Thickness: 0.1 in.		0.281 in.																																											
Flux: N.A.		N.A.																																											
Other:																																													
* Chemical composition meets ASME Sec II Part C, SFA 5.18 requirements for ER70S-6		** Lincoln Electric L61solidwire electrode																																											
Each pass thickness is less than 1/2"																																													
SHIELDING GAS (QW-408): For GMAW																																													
Percent Composition																																													
<table><tr><td>Gas(es)</td><td>Mixture</td><td>Flow Rate</td><td>Gas Specification</td></tr><tr><td>Shielding: YES</td><td>75% Argon + 25% CO2</td><td>35 CFH</td><td>SFA 5.32, AWS SG-AC-25</td></tr><tr><td>Trailing: Without</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Backing: Without</td><td>-</td><td>-</td><td>-</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>				Gas(es)	Mixture	Flow Rate	Gas Specification	Shielding: YES	75% Argon + 25% CO2	35 CFH	SFA 5.32, AWS SG-AC-25	Trailing: Without	-	-	-	Backing: Without	-	-	-																										
Gas(es)	Mixture	Flow Rate	Gas Specification																																										
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Trailing: Without	-	-	-																																										
Backing: Without	-	-	-																																										
POSITION (QW-405)																																													
ELECTRICAL CHARACTERISTICS (QW-409)																																													
<table><tr><td>GMAW</td><td>SMAW</td><td>SAW</td><td>Current: DC</td></tr><tr><td>Position of Groove: 3G</td><td>3G</td><td>1G</td><td>Polarity: Reverse (electrode positive)</td></tr><tr><td>Weld Progression: Verticle down</td><td>Verticle Up</td><td>N.A.(Flat)</td><td>Amps: GMAW - 84-86 SMAW - 75-150 SAW - 480 to 500</td></tr><tr><td>Other: -</td><td>-</td><td>-</td><td>Volts: GMAW - 17-18 SMAW - 20-24 SAW - 28-30</td></tr><tr><td></td><td></td><td></td><td>Transfer mode: Short circuiting arc</td></tr><tr><td></td><td></td><td></td><td>Max. Heat Input: GMAW: 22680 J/in, SMAW: 46200 J/in, SAW: 81818 J/in.</td></tr></table>				GMAW	SMAW	SAW	Current: DC	Position of Groove: 3G	3G	1G	Polarity: Reverse (electrode positive)	Weld Progression: Verticle down	Verticle Up	N.A.(Flat)	Amps: GMAW - 84-86 SMAW - 75-150 SAW - 480 to 500	Other: -	-	-	Volts: GMAW - 17-18 SMAW - 20-24 SAW - 28-30				Transfer mode: Short circuiting arc				Max. Heat Input: GMAW: 22680 J/in, SMAW: 46200 J/in, SAW: 81818 J/in.																		
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PREHEAT (QW-406)																																													
TECHNIQUE (QW-410)																																													
<table><tr><td>Preheat Temperature: 150°F</td><td>GMAW</td><td>SMAW</td><td>SAW</td></tr><tr><td>Interpass Temperature: 500°F</td><td></td><td></td><td></td></tr><tr><td>Other: None</td><td></td><td></td><td></td></tr><tr><td></td><td>Travel Speed</td><td>4 IPM</td><td>3.5 to 4.5 IPM</td><td>11 to 18 IPM</td></tr><tr><td></td><td>String and/or Weave</td><td>Weave</td><td>String and Weave</td><td>String</td></tr><tr><td></td><td>Oscillation:</td><td>NA</td><td>Slight</td><td>N.A.</td></tr><tr><td></td><td>Single or Multi Pass:</td><td>Single</td><td>Multiple</td><td>Multiple</td></tr><tr><td></td><td>Single or Multiple Electrodes:</td><td>Single</td><td>Single</td><td>Single</td></tr><tr><td></td><td>Use of thermal processes:</td><td>None</td><td>None</td><td>None</td></tr></table>				Preheat Temperature: 150°F	GMAW	SMAW	SAW	Interpass Temperature: 500°F				Other: None					Travel Speed	4 IPM	3.5 to 4.5 IPM	11 to 18 IPM		String and/or Weave	Weave	String and Weave	String		Oscillation:	NA	Slight	N.A.		Single or Multi Pass:	Single	Multiple	Multiple		Single or Multiple Electrodes:	Single	Single	Single		Use of thermal processes:	None	None	None
Preheat Temperature: 150°F	GMAW	SMAW	SAW																																										
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	Oscillation:	NA	Slight	N.A.																																									
	Single or Multi Pass:	Single	Multiple	Multiple																																									
	Single or Multiple Electrodes:	Single	Single	Single																																									
	Use of thermal processes:	None	None	None																																									

TENSILE TEST (QW-150)						
Specimen No.	Width (in)	Thickness (in)	Area (sq in)	Ultimate Load (lbf)	Ultimate T Strength (kpsi)	Type of Failure and Location
Sample 1	0.712	1.565	1.114	80,800	72,500	Ductile failure at weld
Sample 2	0.711	1.555	1.106	79,950	72,000	Ductile failure at weld

GUIDED BEND TESTS (QW-160)		
Specimen #	Type and Figure No.	Result
1	Side Bend QW-462.2 (TSB)	Satisfactory
2	Side Bend QW-462.2 (TSB)	Satisfactory
3	Side Bend QW-462.2 (TSB)	Satisfactory
4	Side Bend QW-462.2 (TSB)	Satisfactory

TOUGHNESS TESTS (QW-170)						
Specimen No.	Notch Location	Notch Type	Test Temp	Impact Values ft-lb	% Shear	Lateral Expansion
1	Weld zone	V	-55°F (-48°C)	92	-	-
2	Weld zone	V	-55°F (-48°C)	34	-	-
3	Weld zone	V	-55°F (-48°C)	110	-	-
4	Heat affected zone-Top	V	-55°F (-48°C)	96	-	-
5	Heat affected zone-Top	V	-55°F (-48°C)	72	-	-
6	Heat affected zone-Top	V	-55°F (-48°C)	75	-	-
7	Heat affected zone-Bottom	V	-55°F (-48°C)	128	-	-
8	Heat affected zone-Bottom	V	-55°F (-48°C)	122	-	-
9	Heat affected zone-Bottom	V	-55°F (-48°C)	103	-	-

Destructive Testing Comments: -

FILLET WELD TEST (QW-170)	
Result - Satisfactory: Yes ☐ No ☐	Penetration into Parent Metal: Yes ☐ No ☐
Macro Results: N/A	
Comments: Fillet weld test is not applicable.	

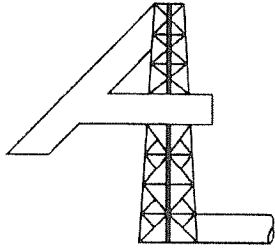
OTHER TESTS	
Type of Test:	Vickers Hardness Test
Deposit Analysis:	See attached laboratory test report
Other:	
Welder's Name:	Michael Opdendries
Welder's Name:	John Hudson
Tests Conducted By:	Alfor Metallurgical Company Ltd.
	Canada Weld Test & Training Inc.

We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Code.

Manufacturer: FOURSTAR RESOURCES INC.

Date: May 8, 2017

Sign: *Mammmomml*
Name: Wesley Tarnowski



ALFOR METALLURGICAL COMPANY LTD.

CONSULTING ENGINEERS

FILE #17-107

Canada Weld Test & Training Inc.
Unit 7, 3906 - 82 Avenue
Leduc, Alberta T9E 8M4

April 12, 2017

METAL TEST REPORT

Material Description: ASME SA-516, Grade 60/70; 1.500"-thick, normalized plate; as-welded.

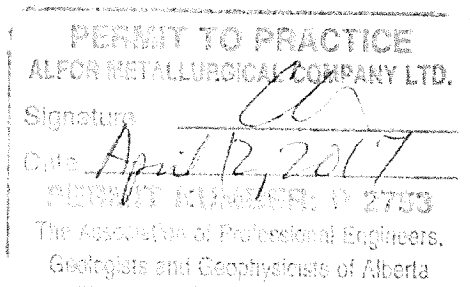
Specimen Type: Reduced-section tensile, as per Figure QW-462.1(a) of the ASME Code.

Results:

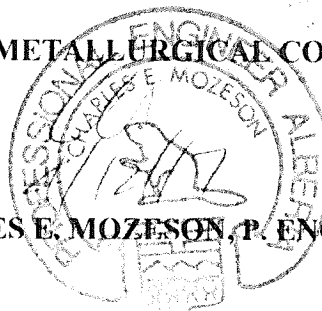
	<u>Sample 1</u>	<u>Sample 2</u>
Width:	0.712 in.	0.711 in.
Thickness:	1.565 in.	1.555 in.
Area:	1.11 sq. in.	1.11 sq. in.
Ultimate Load:	80 800 lb	79 950 lb
Ultimate Tensile Strength:	72 500 psi	72 000 psi
Fracture Character:	Ductile	Ductile
Fracture Location:	Weld	Weld

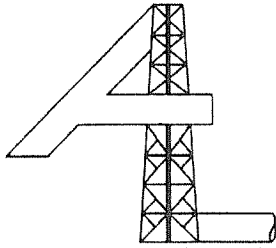
Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.



CHARLES E. MOZESON, P. ENG.





ALFOR METALLURGICAL COMPANY LTD.
CONSULTING ENGINEERS

FILE #17-107

Canada Weld Test & Training Inc.
Unit 7, 3906 - 82 Avenue
Leduc, Alberta T9E 8M4

April 28, 2017

CHARPY V-NOTCH IMPACT TEST RESULTS

Material Description: ASME SA-516, Grade 60/70; 1.500"-thick, normalized plate; as-welded.

Specimen Type: Charpy V-notch full-sized weld zone and heat-affected zone impact specimen.
as per Part UG-84 of the ASME Code.

Testing Temperature: -55 F.

Results:

Weld zone: 92, 34, 110 ft-lb;

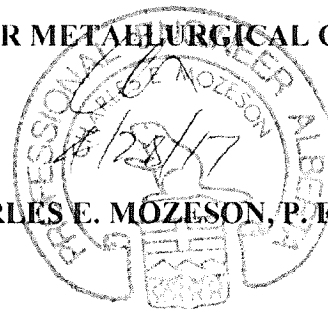
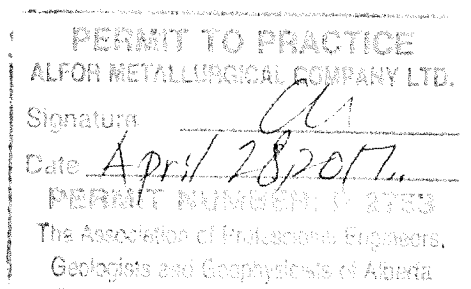
Heat-affected zone (top of weldment): 96, 72, 75 ft-lb;

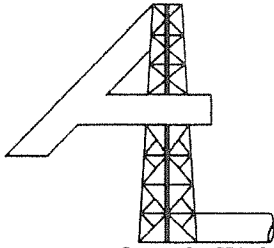
Heat-affected zone (bottom of weldment): 128, 122, 103 ft-lb.

Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.

CHARLES E. MOZESON, P. ENG.





ALFOR METALLURGICAL COMPANY LTD.
CONSULTING ENGINEERS

FILE #17-107

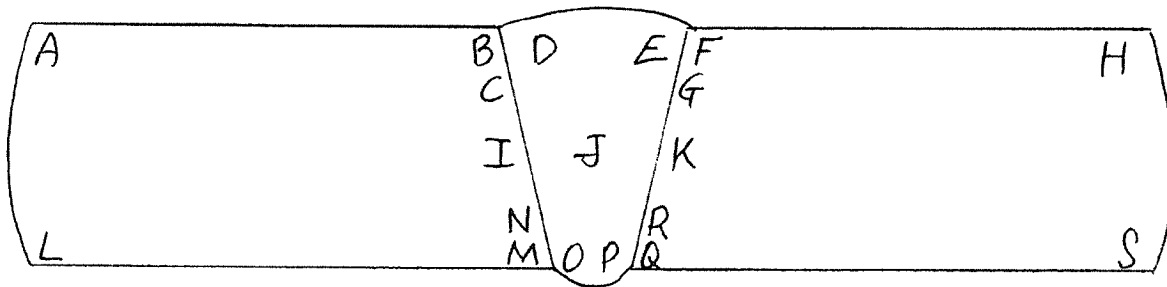
Canada Weld Test & Training Inc.
Unit 7, 3906 - 82 Avenue
Leduc, Alberta T9E 8M4

April 12, 2017

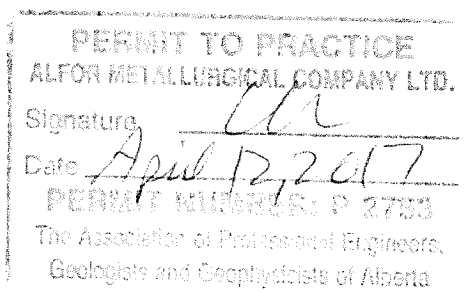
VICKERS HARDNESS TESTING OF WELDMENT

Material Description: ASME SA-516, Grade 60/70; 1.500"-thick, normalized plate; as-welded.

Vickers hardness testing at 10 kg mass (HV10) was performed on a prepared cross-section of the weldment, in accordance with NACE MR0175/ISO 15156-2 and ASTM E 92. The results are tabulated.



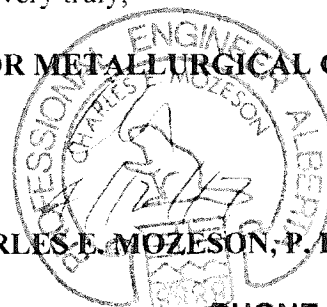
<u>Location</u>	<u>HV10</u>	<u>Location</u>	<u>HV10</u>	<u>Location</u>	<u>HV10</u>
A	164	H	166	O	200
B	220	I	200	P	195
C	229	J	172	Q	189
D	186	K	203	R	193
E	199	L	178	S	180
F	238	M	192		
G	229	N	185		



Yours very truly,

ALFOR METALLURGICAL COMPANY LTD.

CHARLES E. MOZESON, P. ENG.





107, 3906-82nd Avenue, Leduc, AB, Canada T9E 8M4
Ph: (780) 612-8008 Email : Testing@CanadaWeld.ca

Client:

Four Star Resources Inc.
501 - 24 Avenue, Nisku, AB, T9E 8P2

Date: 07-Mar-2017

Report No: P-17-8

Attention: Wesley Tamowski

Sub: Bend Test Results: 1.5" thick coupon

Testing Specification: ASME Section IX, 2015 Edition

Sample type (Figure QW-462.2)	Specimen Number	Results
Transverse Side Bend	1	Satisfactory
Transverse Side Bend	2	Satisfactory
Transverse Side Bend	3	Satisfactory
Transverse Side Bend	4	Satisfactory

A handwritten signature in black ink, appearing to read "Reddy Konepally", with a stylized flourish at the end.

Tests conducted and certified by:

Reddy Konepally