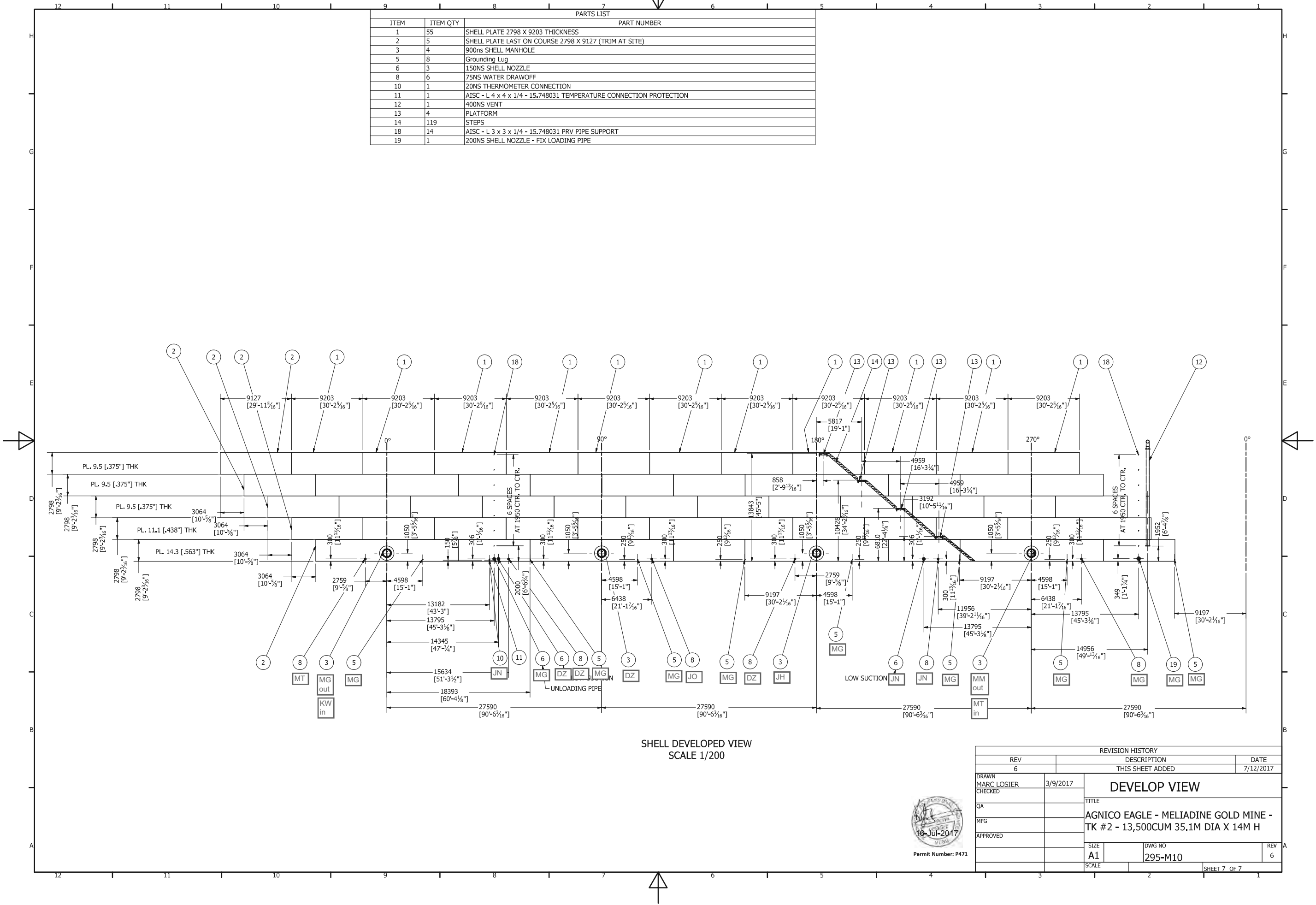


Item 14 - Nozzles - Weld Map

PARTS LIST		
ITEM	ITEM QTY	PART NUMBER
1	55	SHELL PLATE 2798 X 9203 THICKNESS
2	5	SHELL PLATE LAST ON COURSE 2798 X 9127 (TRIM AT SITE)
3	4	900ns SHELL MANHOLE
5	8	Grounding Lug
6	3	150NS SHELL NOZZLE
8	6	75NS WATER DRAWOFF
10	1	20NS THERMOMETER CONNECTION
11	1	AISC - L 4 x 4 x 1/4 - 15,748031 TEMPERATURE CONNECTION PROTECTION
12	1	400NS VENT
13	4	PLATFORM
14	119	STEPS
18	14	AISC - L 3 x 3 x 1/4 - 15,748031 PRV PIPE SUPPORT
19	1	200NS SHELL NOZZLE - FIX LOADING PIPE



Sub-Arc Systems Inc.

4605-47 Street
Vermillion, AB, T9X 1L6
780-608-9589

QUALITY CONTROL MANUAL

Exhibit 19, Rev A

DIMENSIONAL CHECK REPORT - PLUMBNESS

Customer: AGNICO EAGLE

Location: RANKIN INLET TK-02.

Equipment Tag No.:

Equipment Type:

Equipment Description:

Code Requiring Test: API 650

Reason for Test: New Construction

(The tank shell will be checked for plumb at 12" below the tank roof. Plumb measurements will be checked at 45 degree intervals or less, max. 20' spacing)

Test Date(s):

Tested by:

Seam Test Results:

TANK SHELL IS PLUMB IN ALL AREAS
THAT HAVE NOZZLES.

Sub-Arc Representative Signature: [Signature] Date: Aug 31/17

Client Representative Signature: _____ Date: _____

Client Signature: [Signature] Date: Sept 04/17

External Nozzle Dimension Report

External

Gls/8th

It is very important to note if tubular roof supports (pipes) are open (fills with product) or closed.

TANK No.: 2

**Enter SUMP details in
this first row ONLY**

op = Open Pipe
cp = Closed Pipe

ch = Channel

Height
FromOffice
Use[illegible]

Sub-Arc Systems Inc.

4605-47 Street
Vermillion, AB, T9X 1L6
780-608-9589

QUALITY CONTROL MANUAL

Exhibit 15c, Rev 1

VISUAL TEST REPORT

Customer: Agnico Eagle

Location: Rankin Inlet

Code Requiring Test: API 650 (section 8.5.2)

Reason for Test: New Construction

A weld shall be acceptable by visual examination if the inspection shows the following.

- There are no crater cracks, other surface cracks or arc strikes in or adjacent to the welded joints.
- Maximum permissible undercut is 0.4 mm (1/64 in.) in depth for vertical butt joints, vertically oriented permanent attachments, attachment welds for nozzles, manholes, flush-type openings, and the inside shell-to-bottom welds. For horizontal butt joints, horizontally oriented permanent attachments, and annular-ring butt joints, the maximum permissible undercut is 0.8 mm (1/32 in.) in depth.
- The frequency of surface porosity in the weld does not exceed one cluster (one or more pores) in any 100 mm (4 in.) of length, and the diameter of each cluster does not exceed 2.5 mm (3/32 in.).
- The reinforcement of the welds on all thicknesses:

Plate Thickness mm (in.)	Maximum Reinforcement Thickness mm (in.)	
	Vertical Joints	Horizontal Joints
≤ 13 (1/2)	2.6 (3/32)	3 (1/8)
> 13 (1/2) to 25 (1)	3 (1/8)	5 (3/16)
> 25 (1)	5 (3/16)	6 (1/4)

Surface Condition (As Welded)

Test Solution: N/A

Test Date(s): Aug 31/17

Tested by: Matt Mackenzie

Ambient Conditions: 10°

Items Tested:

SHELL NOZZLES.

Results:

ALL WELDING ACCEPTABLE ON SHELL NOZZLES.

Sub-Arc Representative Signature: Matt MackenzieDate: Aug 31/17

Client Representative Signature: _____

Date: _____

Client Signature: Olson BonicaDate: Sept 04/17

Sub-Arc Systems Inc.

4605-47 Street
Vermillion, AB, T9X 1L6
780-608-9589

QUALITY CONTROL MANUAL

Exhibit 12, Rev 1

AIR TEST REPORT - NOZZLE REINFORCEMENT PLATE WELDS

Customer: AGNICO EAGLELocation: RANKIN INLET TK-02

Equipment Tag No.:

Equipment Type:

Equipment Description:

Code Requiring Test: API 650

Reason for Test: New Construction

(An air pressure/soap solution test for nozzle reinforcement plate weld seams is required for new construction or major alterations, no visible leaks should be observed)

Test Pressure: 100 kPa (15 psi) Surface Condition (As Welded, Painted, Blasted)

Test Solution: Water / Snoop:

Test Date(s): AUG 31/17Tested by: MATT TURMEZPressure Gauge: 15 Ambient Conditions: 10°

Items Tested:

NOZZLE REPAIRS.

Results:

ALL NOZZLE REPAIRS WERE AIR TESTED.NO LEAKS WERE FOUND AT TIME OF INSPECTION.Sub-Arc Representative Signature: [Signature] Date: AUG 31/17.

Client Representative Signature: _____ Date: _____

Client Signature: [Signature] Date: Sept 04/17



Client :	Inukshuk Construction Ltd,	Date d'intervention : Intervention date :	2017-08-30
Adresse/Address :	PO Box 654 Rankin Inlet, Nunavut X0C 0G0	Date du rapport : Report date :	2017-09-08
Contact :	Marc Losier	N° dossier : File no :	INS-117107-01_R01
Entrepreneur : Contractor :	N/A	Commande : Order :	295-1046
Endroit du travail : Job location :	Rankin Inlet , Nunavut		

Page 1 de/of 3

INSP. VISUELLE VISUAL INSP.	☐	MAGNÉTOSCOPIE MAGNETIC PARTICLES	☒	RESSUAGE LIQUID PENETRANT	☐	ULTRASONS ULTRASONIC	☒
DESCRIPTION :							
<u>Magnetic particles inspection and Ultrasonic inspection on tank 2</u>							
The client is opting to use an ultrasonic testing, instead of radiographic testing							
Remark : Visual testing was performed by client I							
INSP. VISUELLE / VISUAL INSP.		NORME : SPECIFICATION :		N° équip. : Equip. no :		N/A	
MAGNÉTOSCOPIE MAGNETIC PARTICLES		NORME : SPECIFICATION : API 650		N° équip. : Equip. no :		MP-Q-27	
Ampérage : Amperage :	Culasse/Yoke	Continue Continuous	☒	Résiduelle Residual	☐	Humide Wet	☐
Longitudinale Longitudinal	☐	Circulaire Circular	☐	C.A. A.C.	☒	Sèche Dry	☒
RESSUAGE LIQUID PENETRANT		NORME : SPECIFICATION :		N° équip. : Equip. no :			
Pénétrant/Penetrant :		Émulsifiant/Emulsifier :		Révélateur/Developer :			
Temps/Time :		Temps/Time :		Temps/Time :			
ULTRASONS / ULTRASONIC		NORME : SPECIFICATION : API 650		N° équip. : Equip. no :			
ÉTALONNAGE/CALIBRATION :		Trou/Hole : N/A		C.A.D. /D.A.C. :		☒	
Bloc/Block : IIW Type 2							
APPAREIL/EQUIPMENT :		Couplant : Echogel		Échelle/Sweep length :			
Instrument : USM GO+		Palpeur/Transducer : 0° degré and 70° degré					
N° équip./Equip. no : UT-Q-34							
RÉSULTATS/RESULTS :							
For ultrasonic results: All spots are acceptable. See attached tables for locations.							
Magnetic particles inspection was performed on angle joint between the shell and nozzle, inside and outside the tank:							
-Inside tank, weld between shell/nozzle, with a 100%: magnetic particles inspection, is acceptable -Outside tank, weld between shell/pad & weld between pad/nozzle, with 100% (note 1): magnetic particles inspection, is acceptable.							
Note 1: Fourteen (14) nozzles including four (4) manholes and one nozzle outside, does not have pad . Please refer to drawing 295-M10; part section K-K item #10. This nozzle corresponds to a ¾" coupling for a water temperature gauge in the shell and the client has advised that no repad is needed for this specific coupling.							
Techniciens : Technicians :		Sylvain Germain CSA W178.2 level 2		Assistants:		Approuvé par : Approved by : Pierre Dostie Technical Supervisor CSA W178.2, niveau 3	

Ce rapport ne doit pas être reproduit, sinon en entier, sans l'autorisation écrite de SGS CANADA inc.

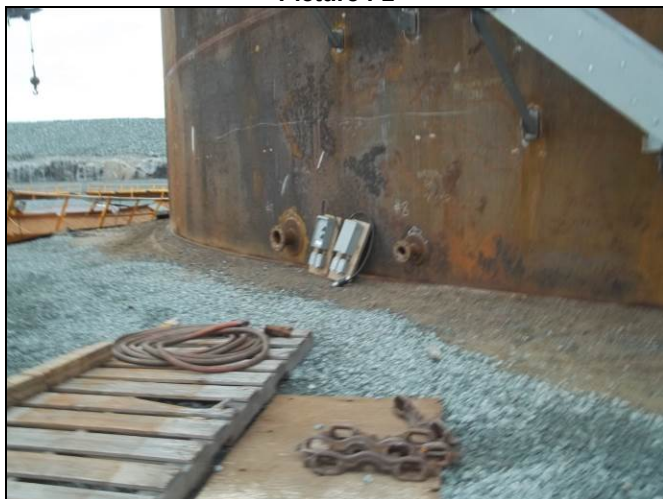
Le présent rapport est émis par la Société conformément à ses Conditions Générales de Service accessibles sur <http://www.sgs.ca/fr-FR/Terms-and-Conditions.aspx>

This report is confidential and shall not be reproduced without the written approval of SGS CANADA Inc

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.ca/en/Terms-and-Conditions.aspx>SGS Canada Inc. Services industriels / Industrial Services 1300, boul. du Parc Technologique, Québec, QC G1P 4S3 t (800) 361-1679 f (418) 683-6328 www.sgs.ca

Client :	Inukshuk Construction Ltd,	Date d'intervention :	2017-08-30
Adresse/Address :	PO Box 654 Rankin Inlet, Nunavut X0C 0G0	Intervention date :	
Contact :	Marc Losier	Date du rapport :	2017-09-08
Entrepreneur :	N/A	Report date :	
Contractor :		N° dossier :	INS-117107-01_R01
File no :		Commande :	295-1046
Endroit du travail :	Rankin Inlet , Nunavut	Order :	
Job location :			

Picture : 1



View of some nozzles

Picture : 2



View of tank 2

Techniciens :	Sylvain Germain	Assistants:		Approuvé par :	Pierre Dostie
Technicians :	CSA W178.2 level 2			Approved by :	Technical Supervisor
					CSA W178.2, niveau 3

Ce rapport ne doit pas être reproduit, sinon en entier, sans l'autorisation écrite de SGS CANADA inc.

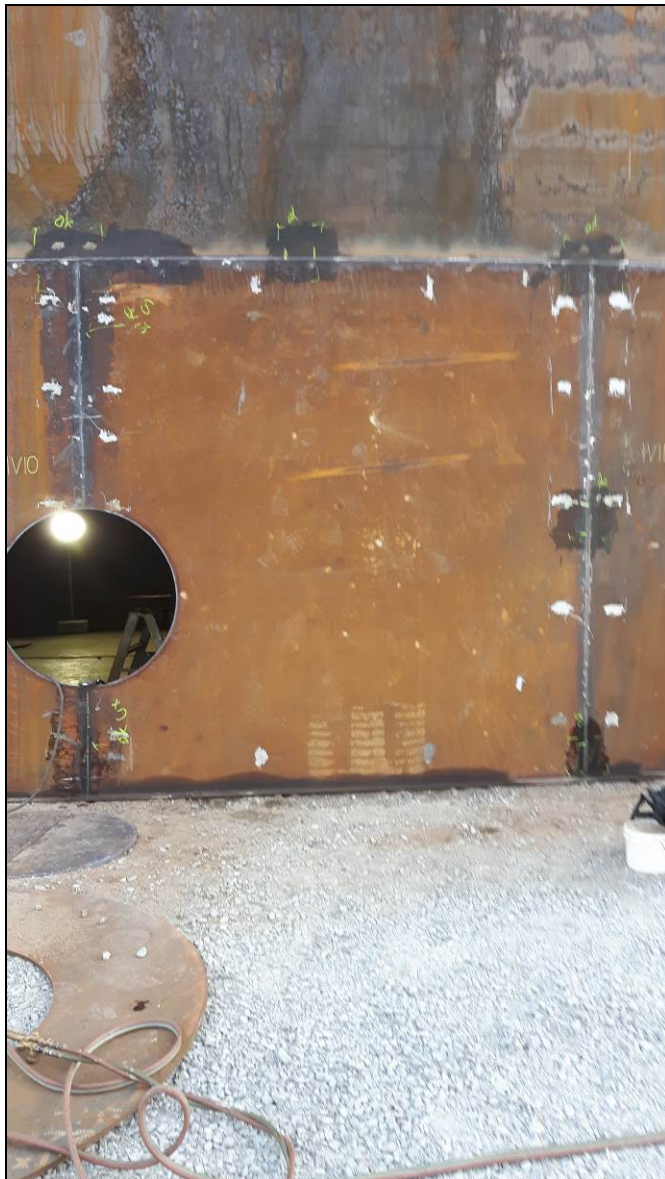
Le présent rapport est émis par la Société conformément à ses Conditions Générales de Service accessibles sur <http://www.sgs.ca/fr-FR/Terms-and-Conditions.aspx>

This report is confidential and shall not be reproduced without the written approval of SGS CANADA Inc

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.ca/en/Terms-and-Conditions.aspx>

Client :	Inukshuk Construction Ltd,	Date d'intervention :	2017-08-30
Adresse/Address :	PO Box 654 Rankin Inlet, Nunavut X0C 0G0	Intervention date :	
Contact :	Marc Losier	Date du rapport :	2017-09-08
Entrepreneur :	N/A	Report date :	
Contractor :		N° dossier :	INS-117107-01_R01
File no :		Commande :	295-1046
Endroit du travail :	Rankin Inlet , Nunavut	Order :	
Job location :			

Picture :3



View of manhole before padding

Techniciens :	Sylvain Germain	Assistants:		Approuvé par :	Pierre Dostie
Technicians :	CSA W178.2 level 2			Approved by :	Technical Supervisor
					CSA W178.2, niveau 3

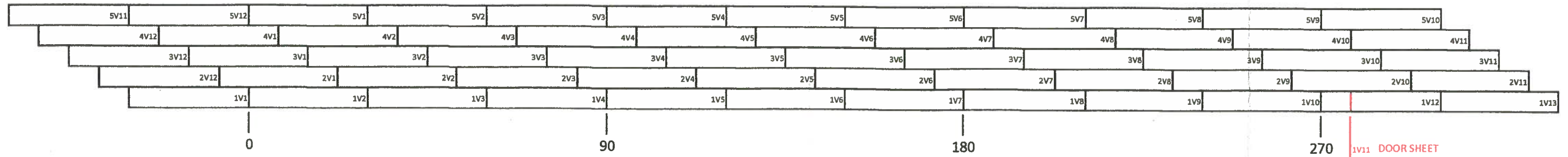
Ce rapport ne doit pas être reproduit, sinon en entier, sans l'autorisation écrite de SGS CANADA inc.

Le présent rapport est émis par la Société conformément à ses Conditions Générales de Service accessibles sur <http://www.sgs.ca/fr-FR/Terms-and-Conditions.aspx>

This report is confidential and shall not be reproduced without the written approval of SGS CANADA Inc

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.ca/en/Terms-and-Conditions.aspx>

Tank #2 Rankin Inlet (AEM)



NDT TECHNICIAN WILL INITIAL EACH BOX WHEN WELD IS ACCEPTABLE

B ----> BOTTOM OF THE VERT (0-6")

M ----> MIDDLE OF THE VERT (53"-59")

T ----> TOP OF THE VERT (104 3/16" - 110 3/16")

VERTICAL SEAMS MAPPING UT

	B	M	T	FULL
1V1	UT FULL BECAUSE NOZZLE INTO VERT			SC
1V2	SG	SG	SG	
1V3	SG	SG	SG	
1V4	UT FULL BECAUSE NOZZLE INTO VERT			SC
1V5	SG	SG	SG	
1V6	SG	SG	SG	
1V7	UT FULL BECAUSE NOZZLE INTO VERT			SG
1V8	SG	SG	SG	
1V9	SG	SG	SG	
1V10	UT FULL BECAUSE NOZZLE INTO VERT			SG
1V11 (DOOR SHEET)	SG	SG	SG	
1V12	SG	SG	SG	
1V13	SG	SG	SG	

	B	M	T
2V1	SG	SC	SG
2V2	SG	SG	SG
2V3	SG	SG	SG
2V4	SG	SG	SG
2V5	SC	SG	SC
2V6	SG	SG	SG
2V7	SG	SG	SG
2V8	SG	SG	SG
2V9	SG	SG	SG
2V10	SG	SG	SG
2V11	SG	SG	SG
2V12	SG	SG	SG

	B	T
3V1	SG	SG
3V2	SG	SG
3V3	SG	SG
3V4	SG	SG
3V5	SG	SG
3V6	SG	SG
3V7	SG	SG
3V8	SG	SG
3V9	SG	SG
3V10	SG	SG
3V11	SG	SG
3V12	SG	SG

	B	T
4V1	SG	SG
4V2	SG	SG
4V3	SG	SG
4V4	SG	SG
4V5	SG	SG
4V6	SG	SG
4V7	SG	SG
4V8	SG	SG
4V9	SG	SG
4V10	SG	SG
4V11	SG	SG
4V12	SG	SG

	B	T
5V1	SG	
5V2	SG	
5V3	SG	
5V4	SG	
5V5	SG	
5V6	SG	
5V7	SG	
5V8	SG	
5V9	SG	
5V10	SG	
5V11	SG	
5V12	SG	

HORIZONTAL SEAMS MAPPING UT

H1V2	48"-54"	SG
H1V8	60"-66"	SG
H1V10	42"-48"	SG

H2V3	48"-54"	SG
H2V9	72"-78"	SG

H3V1	60"-66"	SG
H3V7	42"-48"	SG

H4V5	30"-36"	SG
H4V11	72"-78"	SG

Sub-Arc Representative Signature: <i>[Signature]</i>	Date: <i>Aug 26/17</i>
Client Representative Signature: _____	Date: _____
NDT Representative Signature: <i>[Signature]</i>	Date: <i>August 26 2017</i>

Item 14 - Nozzles - PVRV Test Report

	Pressure/Vacuum Relief Valve (PVRV) Test Report		Emerson Process Management Regulator Technologies Tulsa, LLC 9932 East 56th Street Tulsa, OK 74146-6411 918-622-6161	

Customer Name	SPARTAN CONTROLS LTD	Customer P.O.		Project Name	
Sales Order No.		Factory Order No.	O0067397	Project No.	
Item / Line		Tag No.		Serial No.	A 30933

Work Order Number	Model Number	Part Number
74739373	950-12-111	E8552537

Test Stand ID# 2

Pressure / Vacuum Settings

Pressure Setting		z1.0		
Part No.	Qty.	Description	Equivalent Setting	
			Unit	Total
E8559902	1	Pallet Assy	0.5	0.5
E8550917	1	Weight	0.5	0.5

Vacuum Setting		z0.5		
Part No.	Qty.	Description	Equivalent Setting	
			Unit	Total
E8559901	1	Pallet Assy	0.5	0.5

Weights have been removed for shipping purposes. Weights must be installed prior to placing the PVRV into service; if PVRV is Spring loaded, settings will be adjusted at the factory and no installation is required. See operating manual for additional information.

Emerson certifies that the referenced product has been successfully pressure tested in accordance with our quality system procedures and exhibits a leakage rate not exceeding 1.0 SCFH at 90% of pressure and/or vacuum setting.

Test Date 9/7/2017

Tested By SW

Providing Responsive Solutions with Safety and Environmental Vapor Control Products



Declaration of Conformity

ATEX Directive 14/34/EU

Manufacturer: Emerson Process Management Regulator Technologies Tulsa, LLC

Address: 9932 East 58th Street, Tulsa, OK 74143-6411

Product: Emergency Pressure Vacuum Relief Vent & Pressure Vacuum Relief Vent

Model/Type: 450 & 850 (pipe-away) Combination pressure/vacuum relief valve
550 & 950 (vent-to-atmosphere) Combination pressure/vacuum relief valve
850 & 950 with Wireless Option

Conformity: This document certifies that the above equipment complies with the requirements of ATEX Directive 14/34/EU.

Standards

Compliance: EN 60079-0:2012, EN 60079-11:2012, EN 13463-1:2009 AND EN13463-5:2011

Based on EC-Type Examination Certificate:

DNV-08-ATEX-19407

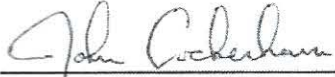
Quality System Audited by and EC-Type Examination Certificate Issued by Notified Body **0575:**

DET NORSKE VERITAS AS

Veritasveien 1, 1322 HOVIK

Norway, www.dnvcert.com

The product described in this Declaration of Conformity complies with the Applicable European Directives and relevant sections of the Applicable International Standards. The Signature on this document authorizes the distinctive European mark to be applied to the equipment described. A Technical Construction File is available for inspection by designated bodies.

 0575		 II 1 G c T6			
		 II 1 G c T5, Ex ia IIC T5 Ga			
		 II 2 G c T6			
		 II 2 G c T5, Ex ia IIC T5 Gb			
Authorized Signature					
DOC NO.	6300047	REV.	G	DATE:	04/20/2016

ENARDO

Item 14 - Nozzles - PVRV Test Report



Pressure/Vacuum Relief Valve (PVRV) Test Report

Emerson Process
Management Regulator
Technologies Tulsa, LLC
9932 East 56th Street
Tulsa, OK 74146-6411
918-622-6161

Customer Name	SPARTAN CONTROLS LTD	Customer P.O.		Project Name	
Sales Order No.		Factory Order No.	O0067397	Project No.	
Item / Line		Tag No.		Serial No.	A 30934

Work Order Number	Model Number	Part Number
74739370	950-12-111	E8552537

Test Stand ID# **2**

Pressure / Vacuum Settings

Pressure Setting			z1.35	
Part No.	Qty.	Description	Equivalent Setting	
			Unit	Total
E8559953	1	Pallet Assy	0.5	0.5
E8550917	1	Weight	0.5	0.5
E8550987	1	Weight	0.35	0.35

Vacuum Setting			z0.5	
Part No.	Qty.	Description	Equivalent Setting	
			Unit	Total
E8559901	1	Pallet Assy	0.5	0.5

Weights have been removed for shipping purposes. Weights must be installed prior to placing the PVRV into service; if PVRV is Spring loaded, settings will be adjusted at the factory and no installation is required. See operating manual for additional information.

Emerson certifies that the referenced product has been successfully pressure tested in accordance with our quality system procedures and exhibits a leakage rate not exceeding 1.0 SCFH at 90% of pressure and/or vacuum setting.

Test Date

9/7/2017

Tested By

SW

Providing Responsive Solutions with Safety and Environmental Vapor Control Products

Item 14 - Nozzles - PVRV Test Report



Declaration of Conformity

ATEX Directive 14/34/EU

Manufacturer: Emerson Process Management Regulator Technologies Tulsa, LLC

Address: 9932 East 58th Street, Tulsa, OK 74143-6411

Product: Emergency Pressure Vacuum Relief Vent & Pressure Vacuum Relief Vent

Model/Type: 450 & 850 (pipe-away) Combination pressure/vacuum relief valve
550 & 950 (vent-to-atmosphere) Combination pressure/vacuum relief valve
850 & 950 with Wireless Option

Conformity: This document certifies that the above equipment complies with the requirements of ATEX Directive 14/34/EU.

Standards

Compliance: EN 60079-0:2012, EN 60079-11:2012, EN 13463-1:2009 AND EN13463-5:2011

Based on EC-Type Examination Certificate:

DNV-08-ATEX-19407

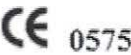
Quality System Audited by and EC-Type Examination Certificate Issued by Notified Body **0575:**

DET NORSKE VERITAS AS

Veritasveien 1, 1322 HOVIK

Norway, www.dnvcert.com

The product described in this Declaration of Conformity complies with the Applicable European Directives and relevant sections of the Applicable International Standards. The Signature on this document authorizes the distinctive European mark to be applied to the equipment described. A Technical Construction File is available for inspection by designated bodies.

 0575		II 1 G c T6			
		II 1 G c T5, Ex ia IIC T5 Ga			
		II 2 G c T6			
		II 2 G c T5, Ex ia IIC T5 Gb			
Authorized Signature					
DOC NO.	6300047	REV.	G	DATE:	04/20/2016

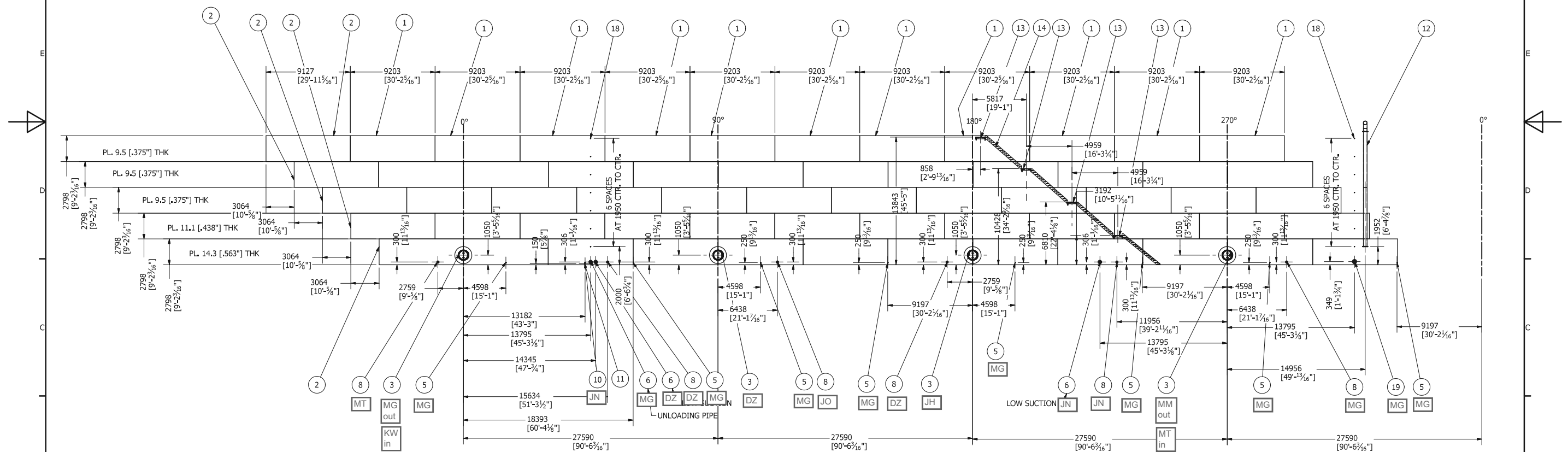
ENARDO

Item 15 – Manways

Contents

1. Weld Map
2. Visual Report
3. Dimension Report – Plumbness
4. Air Test Report
5. Bolting Pattern and Torque Wrench Photos
6. Torque Wrench Specs
7. MPI Report

PARTS LIST		
ITEM	ITEM QTY	PART NUMBER
1	55	SHELL PLATE 2798 X 9203 THICKNESS
2	5	SHELL PLATE LAST ON COURSE 2798 X 9127 (TRIM AT SITE)
3	4	900ns SHELL MANHOLE
5	8	Grounding Lug
6	3	150NS SHELL NOZZLE
8	6	75NS WATER DRAWOFF
10	1	20NS THERMOMETER CONNECTION
11	1	AISC - L 4 x 4 x 1/4 - 15,748031 TEMPERATURE CONNECTION PROTECTION
12	1	400NS VENT
13	4	PLATFORM
14	119	STEPS
18	14	AISC - L 3 x 3 x 1/4 - 15,748031 PRV PIPE SUPPORT
19	1	200NS SHELL NOZZLE - FIX LOADING PIPE



REVISION HISTORY				
REV		DESCRIPTION		DATE
6		THIS SHEET ADDED		7/12/2017
DRAWN MARC LOSIER		3/9/2017	DEVELOP VIEW TITLE AGNICO EAGLE - MELIADINE GOLD MINE - TK #2 - 13,500CUM 35.1M DIA X 14M H	
CHECKED				
QA				
MFG				
APPROVED				
		SIZE	DWG NO	REV
		A1	295-M10	6
		SCALE	SHEET 7 OF 7	



Permit Number: P471

Sub-Arc Systems Inc.

4605-47 Street
Vermillion, AB, T9X 1L6
780-608-9589

QUALITY CONTROL MANUAL

VISUAL TEST REPORT

Exhibit 15c, Rev 1

Customer: Agnico Eagle

Location: Rankin Inlet

Code Requiring Test: API 650 (section 8.5.2)

Reason for Test: New Construction

A weld shall be acceptable by visual examination if the inspection shows the following.

- There are no crater cracks, other surface cracks or arc strikes in or adjacent to the welded joints.
- Maximum permissible undercut is 0.4 mm (1/64 in.) in depth for vertical butt joints, vertically oriented permanent attachments, attachment welds for nozzles, manholes, flush-type openings, and the inside shell-to-bottom welds. For horizontal butt joints, horizontally oriented permanent attachments, and annular-ring butt joints, the maximum permissible undercut is 0.8 mm (1/32 in.) in depth.
- The frequency of surface porosity in the weld does not exceed one cluster (one or more pores) in any 100 mm (4 in.) of length, and the diameter of each cluster does not exceed 2.5 mm (3/32 in.).
- The reinforcement of the welds on all thicknesses:

Plate Thickness mm (in.)	Maximum Reinforcement Thickness mm (in.)	
	Vertical Joints	Horizontal Joints
≤ 13 (1/2)	2.5 (3/32)	3 (1/8)
> 13 (1/2) to 25 (1)	3 (1/8)	5 (3/16)
> 25 (1)	5 (3/16)	6 (1/4)

Surface Condition (As Welded)

Test Solution: N/A

Test Date(s):

Tested by:

Ambient Conditions:

Items Tested:

SHELL MANWAYS.

Results:

ALL WELDING ON SHELL MANWAYS ACCEPTABLE.Sub-Arc Representative Signature: Math McKeen Date: Aug 31/17

Client Representative Signature: _____ Date: _____

Client Signature: Alan Ponce Date: Sept 04/17

Sub-Arc Systems Inc.

4605-47 Street
Vermillion, AB, T9X 1L6
780-608-9589

QUALITY CONTROL MANUAL

Exhibit 19, Rev A

DIMENSIONAL CHECK REPORT - PLUMBNESS

Customer: AGNICO EAGLELocation: RANKIN INLET TK-02

Equipment Tag No.:

Equipment Type:

Equipment Description:

Code Requiring Test: API 650

Reason for Test: New Construction

(The tank shell will be checked for plumb at 12" below the tank roof. Plumb measurements will be checked at 45 degree intervals or less, max. 20' spacing)

Test Date(s): AUG 31/17Tested by: MATT MACKENZIE

Seam Test Results:

ALL SHELL IS PLUMB IN AREAS THAT HAVE MANWAYS.Sub-Arc Representative Signature: [Signature] Date: AUG 31/17

Client Representative Signature: _____ Date: _____

Client Signature: [Signature] Date: Sept 04/17

Sub-Arc Systems Inc.

4605-47 Street
Vermillion, AB, T9X 1L6
780-608-9589**QUALITY CONTROL MANUAL**

Exhibit 12, Rev 1

AIR TEST REPORT – NOZZLE REINFORCEMENT PLATE WELDSCustomer: AGNICO EAGLELocation: RANKIN INLET TK-2

Equipment Tag No.:

Equipment Type:

Equipment Description:

Code Requiring Test: API 650

Reason for Test: New Construction

(An air pressure/soap solution test for nozzle reinforcement plate weld seams is required for new construction or major alterations, no visible leaks should be observed)

Test Pressure: 100 kPa (15 psi) Surface Condition (As Welded, Painted, Blasted)

Test Solution: Water / Snoop:

Test Date(s): AUG 31/17.

Tested by:

Pressure Gauge: 15 Ambient Conditions: 10°

Items Tested:

MANWAYS.

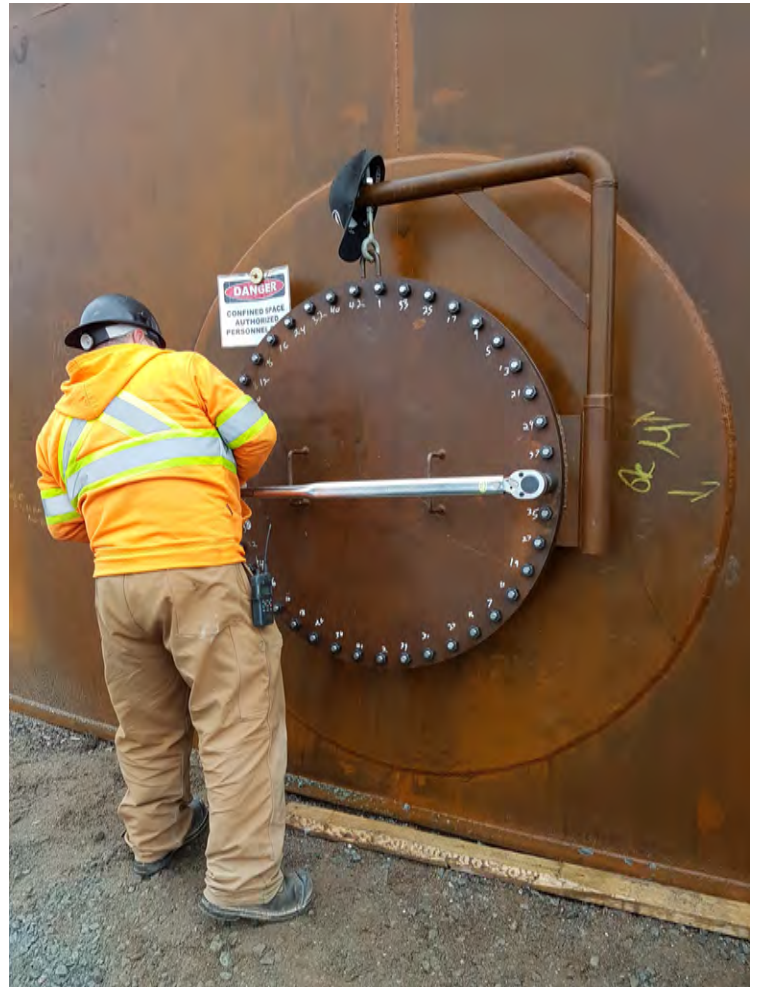
Results:

ALL MANWAYS WERE AIR TESTED. NO LEAKS WERE
FOUND AT TIME OF INSPECTION.Sub-Arc Representative Signature: [Signature] Date: AUG 31/17.

Client Representative Signature: _____ Date: _____

Client Signature: [Signature] Date: Sept 04/17

Item 15 - Manways Bolting Pattern and Torque Wrench Photos



Item 15 - Manways - Torque Wrench Specs

Certification of calibration					
Model : 8229239			Serial No : E20140301		
Calibrator :			Date : 2014-10-21		
Set Torque	Min	Max	Actual Readings		
100FT	96.0	104.0	101.2	101.6	101.9
400FT	384.0	416.0	400	407.1	407.9
700FT	672.0	728.0	712.1	712.3	712.5



Client :	Inukshuk Construction Ltd,	Date d'intervention : Intervention date :	2017-08-30
Adresse/Address :	PO Box 654 Rankin Inlet, Nunavut X0C 0G0	Date du rapport : Report date :	2017-09-08
Contact :	Marc Losier	N° dossier : File no :	INS-117107-01_R01
Entrepreneur : Contractor :	N/A	Commande : Order :	295-1046
Endroit du travail : Job location :	Rankin Inlet , Nunavut		

Page 1 de/of 3

INSP. VISUELLE VISUAL INSP.	☐	MAGNÉTOSCOPIE MAGNETIC PARTICLES	☒	RESSUAGE LIQUID PENETRANT	☐	ULTRASONS ULTRASONIC	☒
DESCRIPTION :							
<u>Magnetic particles inspection and Ultrasonic inspection on tank 2</u>							
The client is opting to use an ultrasonic testing, instead of radiographic testing							
Remark : Visual testing was performed by client I							
INSP. VISUELLE / VISUAL INSP.		NORME : SPECIFICATION :		N° équip. : Equip. no : N/A			
MAGNÉTOSCOPIE MAGNETIC PARTICLES		NORME : SPECIFICATION : API 650		N° équip. : Equip. no : MP-Q-27			
Ampérage : Amperage :	Culasse/Yoke	Continue Continuous	☒	Résiduelle Residual	☐	Humide Wet	☐
Longitudinale Longitudinal	☐	Circulaire Circular	☐	C.A. A.C.	☒	Sèche Dry	☒
RESSUAGE LIQUID PENETRANT		NORME : SPECIFICATION :		N° équip. : Equip. no :			
Pénétrant/Penetrant :		Émulsifiant/Emulsifier :		Révélateur/Developer :			
Temps/Time :		Temps/Time :		Temps/Time :			
ULTRASONS / ULTRASONIC		NORME : SPECIFICATION : API 650					
ÉTALONNAGE/CALIBRATION :		Trou/Hole : N/A		C.A.D. /D.A.C. : ☒			
Bloc/Block : IIW Type 2							
APPAREIL/EQUIPMENT :		Couplant : Echogel		Échelle/Sweep length :			
Instrument : USM GO+		Palpeur/Transducer : 0° degré and 70° degré					
N° équip./Equip. no : UT-Q-34							
RÉSULTATS/RESULTS :							
For ultrasonic results: All spots are acceptable. See attached tables for locations.							
Magnetic particles inspection was performed on angle joint between the shell and nozzle, inside and outside the tank:							
-Inside tank, weld between shell/nozzle, with a 100%: magnetic particles inspection, is acceptable -Outside tank, weld between shell/pad & weld between pad/nozzle, with 100% (note 1): magnetic particles inspection, is acceptable.							
Note 1: Fourteen (14) nozzles including four (4) manholes and one nozzle outside, does not have pad . Please refer to drawing 295-M10; part section K-K item #10. This nozzle corresponds to a ¾" coupling for a water temperature gauge in the shell and the client has advised that no repad is needed for this specific coupling.							
Techniciens : Technicians :		Sylvain Germain CSA W178.2 level 2		Assistants:		Approuvé par : Approved by : Pierre Dostie Technical Supervisor CSA W178.2, niveau 3	

Ce rapport ne doit pas être reproduit, sinon en entier, sans l'autorisation écrite de SGS CANADA inc.

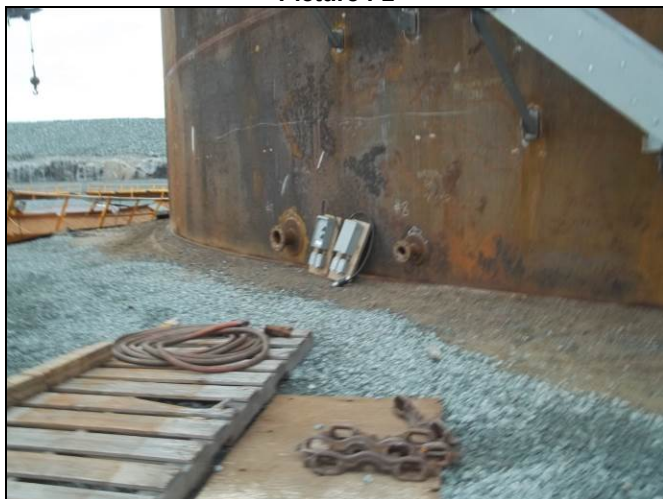
Le présent rapport est émis par la Société conformément à ses Conditions Générales de Service accessibles sur <http://www.sgs.ca/fr-FR/Terms-and-Conditions.aspx>

This report is confidential and shall not be reproduced without the written approval of SGS CANADA Inc

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.ca/en/Terms-and-Conditions.aspx>SGS Canada Inc. Services industriels / Industrial Services 1300, boul. du Parc Technologique, Québec, QC G1P 4S3 t (800) 361-1679 f (418) 683-6328 www.sgs.ca

Client :	Inukshuk Construction Ltd,	Date d'intervention :	2017-08-30
Adresse/Address :	PO Box 654 Rankin Inlet, Nunavut X0C 0G0	Intervention date :	
Contact :	Marc Losier	Date du rapport :	2017-09-08
Entrepreneur :	N/A	Report date :	
Contractor :		N° dossier :	INS-117107-01_R01
Endroit du travail :	Rankin Inlet , Nunavut	File no :	
Job location :		Commande :	295-1046
		Order :	

Picture : 1



View of some nozzles

Picture : 2



View of tank 2

Techniciens :	Sylvain Germain	Assistants:		Approuvé par :	Pierre Dostie
Technicians :				Approved by :	Technical Supervisor
	CSA W178.2 level 2				CSA W178.2, niveau 3

Ce rapport ne doit pas être reproduit, sinon en entier, sans l'autorisation écrite de SGS CANADA inc.

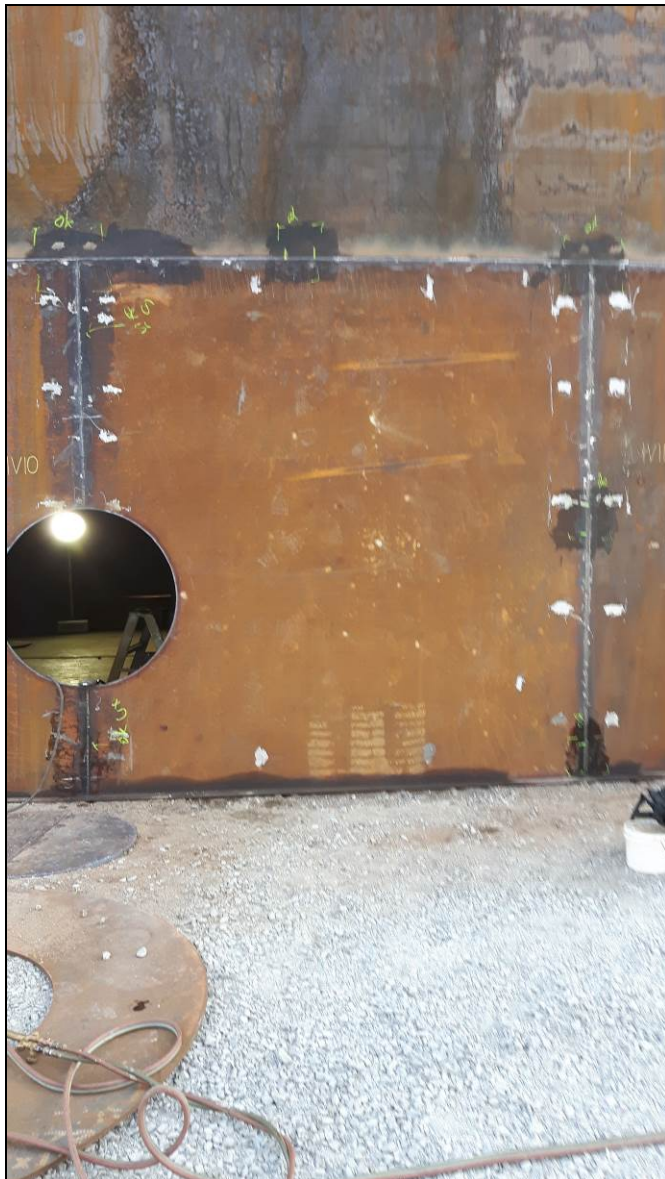
Le présent rapport est émis par la Société conformément à ses Conditions Générales de Service accessibles sur <http://www.sgs.ca/fr-FR/Terms-and-Conditions.aspx>

This report is confidential and shall not be reproduced without the written approval of SGS CANADA Inc

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.ca/en/Terms-and-Conditions.aspx>

Client : Inukshuk Construction Ltd, Adresse/Address : PO Box 654 Rankin Inlet, Nunavut X0C 0G0	Date d'intervention : 2017-08-30 Intervention date :
	Date du rapport : 2017-09-08 Report date :
Contact : Marc Losier	N° dossier : INS-117107-01_R01 File no :
Entrepreneur : N/A Contractor :	Commande : 295-1046 Order :
Endroit du travail : Rankin Inlet , Nunavut Job location :	

Picture :3

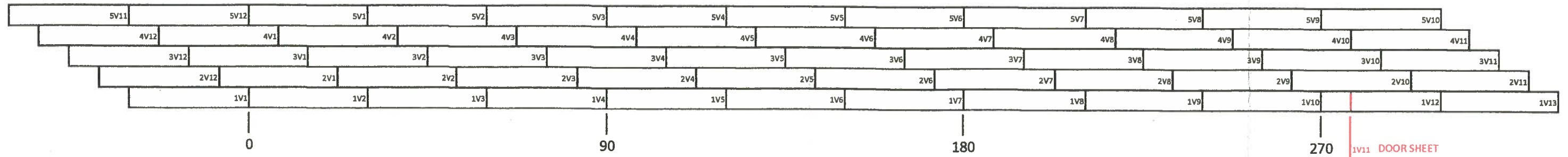


View of manhole before padding

Techniciens : Sylvain Germain Technicians : CSA W178.2 level 2	Assistants:	Approuvé par : Pierre Dostie Approved by : Technical Supervisor CSA W178.2, niveau 3
---	--------------------	--

Ce rapport ne doit pas être reproduit, sinon en entier, sans l'autorisation écrite de SGS CANADA inc.
Le présent rapport est émis par la Société conformément à ses Conditions Générales de Service accessibles sur <http://www.sgs.ca/fr-FR/Terms-and-Conditions.aspx>
This report is confidential and shall not be reproduced without the written approval of SGS CANADA Inc
This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.ca/en/Terms-and-Conditions.aspx>

Tank #2 Rankin Inlet (AEM)



NDT TECHNICIAN WILL INITIAL EACH BOX WHEN WELD IS ACCEPTABLE

B ----> BOTTOM OF THE VERT (0-6")

M ----> MIDDLE OF THE VERT (53"-59")

T ----> TOP OF THE VERT (104 3/16" - 110 3/16")

VERTICAL SEAMS MAPPING UT

	B	M	T	FULL
1V1	UT FULL BECAUSE NOZZLE INTO VERT			SC
1V2	SG	SG	SG	
1V3	SG	SG	SG	
1V4	UT FULL BECAUSE NOZZLE INTO VERT			SC
1V5	SG	SG	SG	
1V6	SG	SG	SG	
1V7	UT FULL BECAUSE NOZZLE INTO VERT			SG
1V8	SG	SG	SG	
1V9	SG	SG	SG	
1V10	UT FULL BECAUSE NOZZLE INTO VERT			SG
1V11 (DOOR SHEET)	SG	SG	SG	
1V12	SG	SG	SG	
1V13	SG	SG	SG	

	B	M	T
2V1	SG	SC	SG
2V2	SG	SG	SG
2V3	SG	SG	SG
2V4	SG	SG	SG
2V5	SC	SG	SC
2V6	SG	SG	SG
2V7	SG	SG	SG
2V8	SG	SG	SG
2V9	SG	SG	SG
2V10	SG	SG	SG
2V11	SG	SG	SG
2V12	SG	SG	SG

	B	T
3V1	SG	SG
3V2	SG	SG
3V3	SG	SG
3V4	SG	SG
3V5	SG	SG
3V6	SG	SG
3V7	SG	SG
3V8	SG	SG
3V9	SG	SG
3V10	SG	SG
3V11	SG	SG
3V12	SG	SG

	B	T
4V1	SG	SG
4V2	SG	SG
4V3	SG	SG
4V4	SG	SG
4V5	SG	SG
4V6	SG	SG
4V7	SG	SG
4V8	SG	SG
4V9	SG	SG
4V10	SG	SG
4V11	SG	SG
4V12	SG	SG

	B	T
5V1	SG	
5V2	SG	
5V3	SG	
5V4	SG	
5V5	SG	
5V6	SG	
5V7	SG	
5V8	SG	
5V9	SG	
5V10	SG	
5V11	SG	
5V12	SG	

HORIZONTAL SEAMS MAPPING UT

H1V2	48"-54"	SG
H1V8	60"-66"	SG
H1V10	42"-48"	SG

H2V3	48"-54"	SG
H2V9	72"-78"	SG

H3V1	60"-66"	SG
H3V7	42"-48"	SG

H4V5	30"-36"	SG
H4V11	72"-78"	SG

Sub-Arc Representative Signature: <i>[Signature]</i>	Date: <i>Aug 26/17</i>
Client Representative Signature: _____	Date: _____
NDT Representative Signature: <i>[Signature]</i>	Date: <i>August 26 2017</i>

Item 16 – Internals

Contents

1. Visual Report (SAS)
2. Visual Report of Water Draw off Extension (ICL)
3. Internal Dimensional Report (AmSpec)

QUALITY CONTROL MANUAL

Exhibit 15c, Rev 1

VISUAL TEST REPORT

Customer: Agrico Eagle

Location: Rankin Inlet TK-02

Code Requiring Test: API 650 (section 8.5.2)

Reason for Test: New Construction

A weld shall be acceptable by visual examination if the inspection shows the following:

- There are no crater cracks, other surface cracks or arc strikes in or adjacent to the welded joints.
- Maximum permissible undercut is 0.4 mm (1/64 in.) in depth for vertical butt joints, vertically oriented permanent attachments, attachment welds for nozzles, manholes, flush-type openings, and the inside shell-to-bottom welds. For horizontal butt joints, horizontally oriented permanent attachments, and annular-ring butt joints, the maximum permissible undercut is 0.8 mm (1/32 in.) in depth.
- The frequency of surface porosity in the weld does not exceed one cluster (one or more pores) in any 100 mm (4 in.) of length, and the diameter of each cluster does not exceed 2.5 mm (3/32 in.).
- The reinforcement of the welds on all thicknesses:

Pipe Thickness mm (in.)	Maximum Reinforcement (mm (in.))	
	Vertical Joints	Horizontal Joints
≤ 12 (1/2)	25 (1)	25 (1)
> 12.5 to 25 (1 1/4 to 1)	31 (1 1/4)	31 (1 1/4)
> 25 (1)	38 (1 1/2)	38 (1 1/2)

Surface Condition (As Welded)

Test Solution: N/A

Test Date(s): SEPT 3/17

Tested by: MATE MACLENNAN

Ambient Conditions: 5

Items Tested:

INTERNAL COLUMN REPAIRS + PIPE SUPPORTS.

Results:

VISUAL INSPECTION COMPLETED ON COLUMN REPAIRS
+ INTERNAL PIPE SUPPORTS. ALL WELDS ACCEPTABLE AT TIME OF INSPECTION.

Sub-Arc Representative Signature: [Signature] Date: Sept 3/17.

Client Representative Signature: _____ Date: _____

Client Signature: _____ Date: _____

Item 16 - Internals - Visual Report

All internal piping and structure was visually inspected and found to be acceptable.

6" pipe extensions were added to the water draw off valves as per ECN-001.

ICL Supervisor (Water Draw Off Extension)

Sign: Sheldon Berry

Print Name: Sheldon Berry

Tk # 2



Photo of Water Draw Off Valve with 6" Extension

It is very important to note if tubular roof supports (pipes) are open (fills with product) or closed.

TANK No.: 2

**Enter SUMP details in
this first row ONLY**

op = Open Pipe
cp = Closed Pipe

~~ch = Channel~~

Height
FromOffice
Use[illegible]

Item 17 - Externals

Contents

1. Visual Report (SAS)
2. External Nozzle Dimensional Report (AmSpec)

QUALITY CONTROL MANUAL

Exhibit 15c, Rev 1

VISUAL TEST REPORT

Customer: Agnico Eagle

Location: Rankin Inlet TK-02

Code Requiring Test: API 650 (section 8.5.2)

Reason for Test: New Construction

A weld shall be acceptable by visual examination if the inspection shows the following:

- There are no crater cracks, other surface cracks or arc strikes in or adjacent to the welded joints.
- Maximum permissible undercut is 0.4 mm (1/64 in.) in depth for vertical butt joints, vertically oriented permanent attachments, attachment welds for nozzles, manholes, flush-type openings, and the inside shell-to-bottom welds. For horizontal butt joints, horizontally oriented permanent attachments, and annular-ring butt joints, the maximum permissible undercut is 0.8 mm (1/32 in.) in depth.
- The frequency of surface porosity in the weld does not exceed one cluster (one or more pores) in any 100 mm (4 in.) of length, and the diameter of each cluster does not exceed 2.5 mm (3/32 in.).
- The reinforcement of the welds on all thicknesses:

Plate Thickness mm (in.)	Maximum Reinforcement (mm (in.))	
	Vertical Joints	Horizontal Joints
≤ 11 (3/4)	25 (1)	25 (1)
> 11 to ≤ 25 (1)	31 (1 1/4)	31 (1 1/4)
> 25 (1)	38 (1 1/2)	38 (1 1/2)

Surface Condition (As Welded)

Test Solution: N/A

Test Date(s): SEPT 9/17

Tested by: CHRIS JAMES

Ambient Conditions: 7°

Items Tested:

EXTERNAL BRACKETS/CABLE TRAY.

Results:

VISUAL INSPECTION COMPLETED. ON CABLE-TRAY SUPPORTS
+ BRACKETS FOR 16" PENT. ALL WELDS ACCEPTABLE AT
TIME OF INSPECTION.Sub-Arc Representative Signature: [Signature] Date: Sept 9, 17

Client Representative Signature: _____ Date: _____

Client Signature: _____ Date: _____

QUALITY CONTROL MANUAL

Exhibit 15c, Rev 1

VISUAL TEST REPORT

Customer: Agrico Eagle

Location: Rankin Inlet TK-02

Code Requiring Test: API 650 (section 8.5.2)

Reason for Test: New Construction

A weld shall be acceptable by visual examination if the inspection shows the following:

- There are no crater cracks, other surface cracks or arc strikes in or adjacent to the welded joints.
- Maximum permissible undercut is 0.4 mm (1/64 in.) in depth for vertical butt joints, vertically oriented permanent attachments, attachment welds for nozzles, manholes, flush-type openings, and the inside shell-to-bottom welds. For horizontal butt joints, horizontally oriented permanent attachments, and annular-ring butt joints, the maximum permissible undercut is 0.8 mm (1/32 in.) in depth.
- The frequency of surface porosity in the weld does not exceed one cluster (one or more pores) in any 100 mm (4 in.) of length, and the diameter of each cluster does not exceed 2.5 mm (3/32 in.).
- The reinforcement of the welds on all thicknesses:

Plate Thickness mm (in.)	Maximum Reinforcement (mm (in.))	
	Vertical Joints	Horizontal Joints
≤ 10 (3/8)	2.0 (5/16)	2.0 (5/16)
> 10 (3/8) to ≤ 25 (1)	3.0 (3/16)	3.0 (3/16)
> 25 (1)	3.0 (3/16)	3.0 (3/16)

Surface Condition (As Welded)

Test Solution: N/A

Test Date(s): SEPT 3/17

Tested by: Matt Mackenzie

Ambient Conditions: 5

Items Tested:

PAINTERS POST.

Results:

Visual inspection completed on ROOF PAINTER POST.
ALL WELDS ACCEPTABLE AT TIME OF INSPECTION.

Sub-Arc Representative Signature: [Signature] Date: SEPT 3/17

Client Representative Signature: _____ Date: _____

Client Signature: _____ Date: _____

Item 17 - External Nozzle Dimension Report (AmSpec 3rd Party)

Submit sketch for unusual deadwood
External

[illegible]

Gls/8th

Item 18 – Stairs and Platforms

Contents

1. Visual Reports
2. Visual Report of Changes Made (ICL)

QUALITY CONTROL MANUAL

Exhibit 15c, Rev 1

VISUAL TEST REPORT

Customer: Agrico Eagle

Location: Rankin Inlet TK-02

Code Requiring Test: API 650 (section 8.5.2)

Reason for Test: New Construction

A weld shall be acceptable by visual examination if the inspection shows the following.

- There are no crater cracks, other surface cracks or arc strikes in or adjacent to the welded joints.
- Maximum permissible undercut is 0.4 mm (1/64 in.) in depth for vertical butt joints, vertically oriented permanent attachments, attachment welds for nozzles, manholes, flush-type openings, and the inside shell-to-bottom welds. For horizontal butt joints, horizontally oriented permanent attachments, and annular-ring butt joints, the maximum permissible undercut is 0.6 mm (1/32 in.) in depth.
- The frequency of surface porosity in the weld does not exceed one cluster (one or more pores) in any 100 mm (4 in.) of length, and the diameter of each cluster does not exceed 2.6 mm (3/32 in.).
- The reinforcement of the welds on all thicknesses:

Pore (34.5 mm 1 3/8")	Maximum Reinforcement / Undercut mm (in.)	
	Vertical Joints	Horizontal Joints
< 12.5 mm	2.5 (1/8")	3.2 (1/8")
> 12.5 to 25.4 (1")	3 (1/8")	4 (1/4")
> 25.4	4 (1/4")	6 (1/2")

Surface Condition (As Welded)

Test Solution: N/A

Test Date(s): SEPT 3/17

Tested by: Matt Mackenzie

Ambient Conditions: 5

Items Tested:

STAIRCASE SUPPORT BRACKETS / REPAIRS

Results:

VISUAL INSPECTION COMPLETED ON STAIRCASE BRACKETS / REPAIRS.
ALL WELDS ACCEPTABLE AT TIME OF INSPECTION.

Sub-Arc Representative Signature: [Signature] Date: Sept 3/17

Client Representative Signature: _____ Date: _____

Client Signature: _____ Date: _____

Item 18 - Stairways and Platforms - Visual Report

Sub-Arc Systems Inc.

4605-47 Street
Vermillion, AB, T9X 1L6
780-608-9589

QUALITY CONTROL MANUAL VISUAL TEST REPORT

Exhibit 15c, Rev 1

Customer: Agnico Eagle

Location: Rankin Inlet

Code Requiring Test: API 650 (section 8.5.2)

Reason for Test: New Construction

A weld shall be acceptable by visual examination if the inspection shows the following.

- There are no crater cracks, other surface cracks or arc strikes in or adjacent to the welded joints.
- Maximum permissible undercut is 0.4 mm (1/64 in.) in depth for vertical butt joints, vertically oriented permanent attachments, attachment welds for nozzles, manholes, flush-type openings, and the inside shell-to-bottom welds. For horizontal butt joints, horizontally oriented permanent attachments, and annular-ring butt joints, the maximum permissible undercut is 0.8 mm (1/32 in.) in depth.
- The frequency of surface porosity in the weld does not exceed one cluster (one or more pores) in any 100 mm (4 in.) of length, and the diameter of each cluster does not exceed 2.5 mm (3/32 in.).
- The reinforcement of the welds on all thicknesses:

Plate Thickness mm (in.)	Maximum Reinforcement Thickness mm (in.)	
	Vertical Joints	Horizontal Joints
≤ 13 (1/2)	2.5 (3/32)	3 (1/8)
> 13 (1/2) to 25 (1)	3 (1/8)	5 (3/16)
> 25 (1)	5 (3/16)	6 (1/4)

Surface Condition (As Welded)

Test Solution: N/A

Test Date(s): AUG 31/17

Tested by: MATT MACKENZIE

Ambient Conditions: 10°

Items Tested:

STAIRS + PLATFORMS.

Results:

ALL WELDING ACCEPTABLE ON STAIRS + PLATFORMS.

Sub-Arc Representative Signature: Phil Mackenzie Date: AUG 31/17.

Client Representative Signature: _____ Date: _____

Client Signature: Clem Bonica Date: Sept 04/17

Item 18 - Stairs and Platforms Modifications - Visual Report

Visual Inspection of Stairway and Platforms was performed:

- Bottom step found to be too close to ground, potential issue with freeze/thaw expansion of the foundation
- Solution: Remove bottom step, this was completed by ICL (see below photo)
- Handrails were not connected making for potential pinch points at each platform
- Solution: Welded together handrails at each point where stairway handrail met platform handrails. This was completed by ICL and approved by Stephane Dubois (AEM).

ICL Supervisor

Sign: Sheldon Berry

Print Name: Sheldon Berry

TK # 2



Photo of stairway after bottom step removed

Item 19 – Bolts and Nuts

Contents

1. Fastener List
2. Torque Wrench Specs

Item 19 - Bolts and Nuts - Fastener List

Tank #	qty	Qty of Component	Connection	Description	Lght (in)
2	128.00	64	Shell to Rafter Connection	Bolt, Structural A325, 3/4"	2
2	64.00	32	Rafter to Center Column	Bolt, Structural A325, 3/4"	3.5
2	14.00	96	Rafter to intermediate beam	Bolt, Structural A325, 3/4"	2.25
2	112.00	7	Beam to top plate and intermediate column	Bolt, Structural A325, 3/4"	2.5
2	318.00			Nut, Structural heavy hex 3/4"	
2	636.00			Washer, type A, 3/4"	
2	168.00	4	36" Shell Manhole	Stud, L7, 3/4"	3 3/4
2	16.00	2	8" in/out Nozzle	Stud, L7, 3/4"	4 1/4
2	48.00	6	6" in/out Nozzle	Stud, L7, 3/4"	4
2	-	6	3" Water Drawoff	Stud, L7, 5/8"	3 1/2
2	60.00	3	24" Roof manhole	Stud, L7, 5/8"	2 1/4
2	20.00	1	24" Roof manhole emergency vent	Stud, L7, 5/8"	9.5
2	16.00	1	16" Vent	Stud, L7, 1"	5 1/4
2	8.00	1	8" Roof Nozzle	Stud, L7, 3/4"	4 1/4
2	8.00	1	6" Gauge Hatch	Stud, L7, 3/4"	4
2	8.00	1	4" Roof Nozzle	Stud, L7, 5/8"	3.5
2	32.00			Nut, A194, Gr. 4, 1"	
2	496.00			Nut, A194, Gr. 4, 3/4"	
2	176.00			Nut, A194, Gr. 4, 5/8"	
2	4.00	4	36" Shell Manhole	Gasket, Ring, Durlon 8500, 1/8", 1051 o.d. x 914 i.d.	
2	2.00	2	8" in/out Nozzle	Gasket, Ring, Durlon 8500, 1/8" x 8" x 150#	
2	6.00	6	6" in/out Nozzle	Gasket, Ring, Durlon 8500, 1/8" x 6" x 150#	
2	-	6	3" Water Drawoff	Gasket, Ring, Durlon 8500, 1/8" x 3" x 150#	
2	4.00	4	24" Roof manhole	Gasket, Ring, Durlon 8500, 1/16" x 762 x 610	
2	1.00	1	8" High Level	Gasket, Ring, Durlon 8500, 1/16" x 150#, 8"	
2	1.00	1	6" Gauge Hatch	Gasket, Full Face, Durlon 8500, 1/16" x 150#, 6"	

Item 19 - Bolts and Nuts - Torque Wrench Specs

Certification of Calibration For Torque Wrench Used to Seal Shell Manholes

Certification of calibration					
Model : 8229239			Serial No : E20140301		
Calibrator :			Date : 2014 - 10 - 21		
Set Torque	Min	Max	Actual Readings		
100FT	96.0	104.0	101.2	101.6	101.9
400FT	384.0	416.0	400	407.1	407.9
700FT	672.0	728.0	712.1	712.3	712.5

Item 20 - Final

Contents

1. Name Plate Scan
2. Punch List
3. Manufacturer's Certification (3rd Party)
4. Data Sheet (Innage)

Item 20 - Final - Name Plate Scan

API STANDARD 650			
APPENDIX	B, K, T	YEAR COMPLETED	2017
EDITION	TWELFTH	ADDENDUM NO.	2
NOMINAL DIAMETER	35.1M	NOMINAL HEIGHT	14M
MAXIMUM CAPACITY	13,500CUM	DESIGN LIQUID LEVEL	14M
DESIGN SPECIFIC GRAVITY	0.85	DESIGN METAL TEMP.	-40 DEG C
DESIGN PRESSURE	ATM	MAXIMUM OPERATING TEMP.	90 DEG C
MANUFACTURE'S SERIAL NO.	295-2	PARTIAL STRESS RELIEF	-
		PURCHASER'S TANK NO.	65TNK11602
FABRICATED BY	INUKSHUK CONSTRUCTION LIMITED		
ERECTED BY	SUB-ARC SYSTEMS INC.		
SHELL COURSE 1 TO 5	MATERIAL CSA G40.21M-260WT NORMALIZED TCVN 13FT/LBS@-45DEG F TRANSVERSE CHARPY TCVN 15FT/LBS@-45DEG F LONGITUDINAL CHARPY		

Site: Rankin Inlet

Initial When Complete

[illegible]

**MANUFACTURER'S CERTIFICATION FOR
A TANK BUILT TO API STANDARD 650**

To AGNICO EAGLE MINES LIMITED
(name and address of Purchaser)
145 KING STREET EAST, SUITE 400, TORONTO, ONTARIO M5C 2Y7

We hereby certify that the tank constructed for you at _____
(location)
RANKIN INLET, NUNAVUT - MELIADINE FIELD ERECTED TANKS PROJECT

and described as follows: TANK NO. 2, 35.1 M DIA X 14M HIGH, 13,500 M3, FIXED CONE ROOF
(serial or contract number, diameter, height, capacity, floating or fixed roof)
AEM PO: OC-568510

meets all applicable requirements of API Standard 650, 12th Edition, Addendum 2 Revision, Appendix
_____ dated JAN 2016 including the requirements for design, materials, fabrication, and erection.



Permit Number: P471

INUKSHUK CONSTRUCTION LIMITED
Manufacturer
Kyle Brown
Design Engineer
29-Oct-17
Date

GAUGE HEIGHT: 14.269 M

[illegible]

NOTE: TANK STRAPPED AND COMPUTED IN ACCORDANCE WITH API STANDARD MPMS CHAPTER 2.2C.

NOTE: CAPACITY TABLE REFLECTS AN OPERATING TEMPERATURE OF 60 DEGREES F

NOTE: LIQUID HEAD STRESS HAS BEEN APPLIED TO CAPACITY TABLE AT SPECIFIC GRAVITY 0.8500

NOTE: A 19 CM CONE BOTTOM HAS BEEN APPLIED BELOW 18 CM

DATE STRAPPED: 09/19/17 BY: R.I

DATE STRAPPED: 09/19/17 BY: RJ
DATE COMPLETED: 09/20/17 BY: WJA

DATE COMPUTED: 09/2

AMSPEC

Glynn Hall



Item 20 - Final - Data Sheet (Innage)

INNAGE TABLE

GAUGE HEIGHT: 14.269 M

[illegible]

NOTE: 42.0 GALLONS EQUAL 1.0 BARRELS
NOTE: 1 KILOLITER EQUALS 1 CUBIC METER

DATE STRAPPED: 09/19/17 BY: RJ
DATE COMPUTED: 09/26/17 BY: WLH
DATE ISSUED: 09/26/17

AMSPEC

John Hall

Item 20 - Final - Data Sheet (Innage)

GAUGE HEIGHT: 14.269 M

[illegible]

	5 M		mm	5 M		mm	5 M		mm	5 M		mm	5 M		mm	5 M		mm	5 M		mm	5 M		mm	5 M		mm	5 M		mm
0.000	4,780.490	0.100	4,877.115	0.200	4,973.739	0.300	5,070.364	0.400	5,166.988	0.500	5,263.613	0.600	5,360.240	0.700	5,456.873	0.800	5,553.505	0.900	5,650.138											
0.001	4,781.456	0.101	4,878.081	0.201	4,974.705	0.301	5,071.330	0.401	5,167.955	0.501	5,264.579	0.601	5,361.206	0.701	5,457.839	0.801	5,554.472	0.901	5,651.104											
0.002	4,782.423	0.102	4,879.047	0.202	4,975.632	0.302	5,072.296	0.402	5,168.921	0.502	5,265.545	0.602	5,362.173	0.702	5,458.805	0.802	5,555.438	0.902	5,652.070											
0.003	4,783.389	0.103	4,880.013	0.203	4,976.638	0.303	5,073.262	0.403	5,169.887	0.503	5,266.512	0.603	5,363.139	0.703	5,459.772	0.803	5,556.404	0.903	5,653.037											
0.004	4,784.355	0.104	4,880.980	0.204	4,977.604	0.304	5,074.229	0.404	5,170.853	0.504	5,267.478	0.604	5,364.105	0.704	5,460.738	0.804	5,557.371	0.904	5,654.003											
0.005	4,785.321	0.105	4,881.946	0.205	4,978.570	0.305	5,075.195	0.405	5,171.820	0.505	5,268.444	0.605	5,365.072	0.705	5,461.704	0.805	5,558.337	0.905	5,654.969											
0.006	4,786.288	0.106	4,882.912	0.206	4,979.537	0.306	5,076.161	0.406	5,172.786	0.506	5,269.410	0.606	5,366.038	0.706	5,462.671	0.806	5,559.303	0.906	5,655.936											
0.007	4,787.254	0.107	4,883.878	0.207	4,980.503	0.307	5,077.127	0.407	5,173.752	0.507	5,270.377	0.607	5,367.004	0.707	5,463.637	0.807	5,560.270	0.907	5,656.902											
0.008	4,788.220	0.108	4,884.845	0.208	4,981.469	0.308	5,078.094	0.408	5,174.718	0.508	5,271.343	0.608	5,367.971	0.708	5,464.603	0.808	5,561.236	0.908	5,657.868											
0.009	4,789.186	0.109	4,885.811	0.209	4,982.435	0.309	5,079.060	0.409	5,175.685	0.509	5,272.309	0.609	5,368.937	0.709	5,465.570	0.809	5,562.202	0.909	5,658.835											
0.010	4,790.153	0.110	4,886.777	0.210	4,983.402	0.310	5,080.026	0.410	5,176.651	0.510	5,273.275	0.610	5,369.903	0.710	5,466.536	0.810	5,563.168	0.910	5,659.801											
0.011	4,791.119	0.111	4,887.743	0.211	4,984.368	0.311	5,080.992	0.411	5,177.617	0.511	5,274.242	0.611	5,370.870	0.711	5,467.502	0.811	5,564.135	0.911	5,660.767											
0.012	4,792.085	0.112	4,888.710	0.212	4,985.334	0.312	5,081.959	0.412	5,178.583	0.512	5,275.208	0.612	5,371.836	0.712	5,468.469	0.812	5,565.107	0.912	5,661.734											
0.013	4,793.051	0.113	4,889.676	0.213	4,986.300	0.313	5,082.925	0.413	5,179.549	0.513	5,276.174	0.613	5,372.802	0.713																

Item 20 - Final - Data Sheet (Innage)

GAUGE HEIGHT: 14.269 M

	6 M	mm	6 M	mm	6 M	mm	6 M	mm	6 M	mm	6 M	mm	6 M	mm	6 M	mm	6 M	mm	6 M	mm
0.000	5,746.770	0.100	5,843.403	0.200	5,940.036	0.300	6,036.668	0.400	6,133.301	0.500	6,229.933	0.600	6,326.566	0.700	6,423.198	0.800	6,519.831	0.900	6,616.463	
0.001	5,747.737	0.101	5,844.369	0.201	5,941.002	0.301	6,037.634	0.401	6,134.267	0.501	6,230.900	0.601	6,327.532	0.701	6,424.165	0.801	6,520.797	0.901	6,617.430	
0.002	5,748.703	0.102	5,845.336	0.202	5,941.968	0.302	6,038.601	0.402	6,135.233	0.502	6,231.866	0.602	6,328.498	0.702	6,425.131	0.802	6,521.764	0.902	6,618.396	
0.003	5,749.669	0.103	5,846.302	0.203	5,942.934	0.303	6,039.567	0.403	6,136.200	0.503	6,232.832	0.603	6,329.465	0.703	6,426.097	0.803	6,522.730	0.903	6,619.362	
0.004	5,750.636	0.104	5,847.268	0.204	5,943.901	0.304	6,040.533	0.404	6,137.166	0.504	6,233.799	0.604	6,330.431	0.704	6,427.064	0.804	6,523.696	0.904	6,620.329	
0.005	5,751.602	0.105	5,848.235	0.205	5,944.867	0.305	6,041.500	0.405	6,138.132	0.505	6,234.765	0.605	6,331.397	0.705	6,428.030	0.805	6,524.663	0.905	6,621.295	
0.006	5,752.568	0.106	5,849.201	0.206	5,945.833	0.306	6,042.466	0.406	6,139.099	0.506	6,235.731	0.606	6,332.364	0.706	6,428.996	0.806	6,525.629	0.906	6,622.261	
0.007	5,753.535	0.107	5,850.167	0.207	5,946.800	0.307	6,043.432	0.407	6,140.065	0.507	6,236.697	0.607	6,333.330	0.707	6,429.963	0.807	6,526.595	0.907	6,623.228	
0.008	5,754.501	0.108	5,851.134	0.208	5,947.766	0.308	6,044.399	0.408	6,141.031	0.508	6,237.664	0.608	6,334.296	0.708	6,430.929	0.808	6,527.562	0.908	6,624.194	
0.009	5,755.467	0.109	5,852.100	0.209	5,948.732	0.309	6,045.365	0.409	6,141.998	0.509	6,238.630	0.609	6,335.263	0.709	6,431.895	0.809	6,528.528	0.909	6,625.160	
0.010	5,756.434	0.110	5,853.066	0.210	5,949.699	0.310	6,046.331	0.410	6,142.964	0.510	6,239.596	0.610	6,336.229	0.710	6,432.862	0.810	6,529.494	0.910	6,626.127	
0.011	5,757.400	0.111	5,854.033	0.211	5,950.665	0.311	6,047.298	0.411	6,143.930	0.511	6,240.563	0.611	6,337.195	0.711	6,433.828	0.811	6,530.461	0.911	6,627.093	
0.012	5,758.366	0.112	5,854.999	0.212	5,951.631	0.312	6,048.264	0.412	6,144.897	0.512	6,241.529	0.612	6,338.162	0.712	6,434.794	0.812	6,531.427	0.912	6,628.059	
0.013	5,759.333	0.113	5,855.965	0.213	5,952.598	0.313	6,049.230	0.413	6,145.863	0.513	6,242.495	0.613	6,339.128	0.713	6,435.761	0.813	6,532.393	0.913	6,629.026	
0.014	5,760.299	0.114	5,856.931	0.214	5,953.564	0.314	6,050.197	0.414	6,146.829	0.514	6,243.462	0.614	6,340.094	0.714	6,436.727	0.814	6,533.359	0.914	6,629.992	
0.015	5,761.265	0.115	5,857.898	0.215	5,954.530	0.315	6,051.163	0.415	6,147.796	0.515	6,244.428	0.615	6,341.061	0.715	6,437.693	0.815	6,534.326	0.915	6,630.958	
0.016	5,762.232	0.116	5,858.864	0.216	5,955.497	0.316	6,052.129	0.416	6,148.762	0.516	6,245.394	0.616	6,342.027	0.716	6,438.660	0.816	6,535.292	0.916	6,631.925	
0.017	5,763.198	0.117	5,859.830	0.217	5,956.463	0.317	6,053.096	0.417	6,149.728	0.517	6,246.361	0.617	6,342.993	0.717	6,439.626	0.817	6,536.258	0.917	6,632.891	
0.018	5,764.164	0.118	5,860.797	0.218	5,957.429	0.318	6,054.062	0.418	6,150.695	0.518	6,247.327	0.618	6,343.960	0.718	6,440.592	0.818	6,537.225	0.918	6,633.855	
0.019	5,765.131	0.119	5,861.763	0.219	5,958.396	0.319	6,055.028	0.419	6,151.661	0.519	6,248.293	0.619	6,344.926	0.719	6,441.559	0.819	6,538.191	0.919	6,634.824	
0.020	5,766.097	0.120	5,862.729	0.220	5,959.362	0.320	6,055.995	0.420	6,152.627	0.520	6,249.260	0.620	6,345.892	0.720	6,442.525	0.820	6,539.157	0.920	6,635.790	
0.021	5,767.063	0.121	5,863.696	0.221	5,960.328	0.321	6,056.961	0.421	6,153.593	0.521	6,250.226	0.621	6,346.859	0.721	6,443.491	0.821	6,540.124	0.921	6,636.756	
0.022	5,768.030	0.122	5,864.662	0.222	5,961.295	0.322	6,057.927	0.422	6,154.560	0.522	6,251.192	0.622	6,347.825	0.722	6,444.458	0.822	6,541.090	0.922	6,637.723	
0.023	5,768.996	0.123	5,865.628	0.223	5,962.261	0.323	6,058.894	0.423	6,155.526	0.523	6,252.159	0.623	6,348.791	0.723	6,445.424	0.823	6,542.056	0.923	6,638.689	
0.024	5,769.962	0.124	5,866.595	0.224	5,963.227	0.324	6,059.860	0.424	6,156.492	0.524	6,253.125	0.624	6,349.758	0.724	6,446.390	0.824	6,543.023	0.924	6,639.655	
0.025	5,770.929	0.125	5,867.561	0.225	5,964.194	0.325	6,060.826	0.425	6,157.459	0.525	6,254.091	0.625	6,350.724	0.725	6,447.356	0.825	6,543.989	0.925	6,640.622	
0.026	5,771.895	0.126	5,868.527	0.226	5,965.160	0.326	6,061.793	0.426	6,158.425	0.526	6,255.058	0.626	6,351.690	0.726	6,448.323	0.826	6,544.955	0.926	6,641.588	
0.027	5,772.861	0.127	5,869.494	0.227	5,966.126	0.327	6,062.759	0.427	6,159.391	0.527	6,256.024	0.627	6,352.657	0.727	6,449.289	0.827	6,545.922	0.927	6,642.554	
0.028	5,773.827	0.128	5,870.460	0.228	5,967.093	0.328	6,063.725	0.428	6,160.358	0.528	6,256.990	0.628	6,353.623	0.728	6,450.255	0.828	6,546.888	0.928	6,643.521	
0.029	5,774.794	0.129	5,871.426	0.229	5,968.059	0.329	6,064.692	0.429	6,161.324	0.529	6,257.957	0.629	6,354.589	0.729	6,451.222	0.829	6,547.854	0.929	6,644.487	
0.030	5,775.760	0.130	5,872.393	0.230	5,969.025	0.330	6,065.658	0.430	6,162.290	0.530	6,258.923	0.630	6,355.556	0.730	6,452.188	0.830	6,548.821	0.930	6,645.453	
0.031	5,776.726	0.131	5,873.359	0.231	5,969.992	0.331	6,066.624	0.431	6,163.257	0.531	6,259.889	0.631	6,356.522	0.731	6,453.154	0.831	6,549.787	0.931	6,646.420	
0.032	5,777.693	0.132	5,874.325	0.232	5,970.958	0.332	6,067.591	0.432	6,164.223	0.532	6,260.856	0.632	6,357.488	0.732	6,454.121	0.832	6,550.753	0.932	6,647.386	
0.033	5,778.659	0.133	5,875.292	0.233	5,971.924	0.333	6,068.557	0.433	6,165.189	0.533	6,261.822	0.633	6,358.455	0.733	6,455.087	0.833	6,551.720	0.933	6,648.352	
0.034	5,779.625	0.134	5,876.258	0.234	5,972.891	0.334	6,069.523	0.434	6,166.156	0.534	6,262.788	0.634	6,359.421	0.734	6,456.053	0.834	6,552.686	0.934	6,649.319	
0.035	5,780.592	0.135	5,877.224	0.235	5,973.857	0.335	6,070.489	0.435	6,167.122	0.535	6,263.755	0.635	6,360.387	0.735	6,457.020	0.835	6,553.652	0.935	6,650.285	
0.036	5,781.558	0.136	5,878.191	0.236	5,974.823	0.336	6,071.456	0.436	6,168.088	0.536	6,264.721	0.636	6,361.354	0.736	6,457.986	0.836	6,554.619	0.936	6,651.251	
0.037	5,782.524	0.137	5,879.157	0.237	5,975.790	0.337	6,072.422	0.437	6,169.055	0.537	6,265.687	0.637	6,362.320	0.737	6,458.952	0.837	6,555.585	0.937	6,652.218	
0.038	5,783.491	0.138	5,880.123	0.238	5,976.756	0.338	6,073.388	0.438	6,170.021	0.538	6,266.654	0.638	6,363.286	0.738	6,459.919	0.838	6,556.553	0.938	6,653.184	
0.039	5,784.457	0.139	5,881.090	0.239	5,977.722	0.339	6,074.355	0.439	6,170.987	0.539	6,267.620	0.639	6,364.252	0.739	6,460.885	0.839	6,557.518	0.939	6,654.150	
0.040	5,785.423	0.140	5,882.056	0.240	5,978.689	0.340	6,075.321	0.440	6,171.954	0.540	6,268.586	0.640	6,365.219	0.740	6,461.851	0.840	6,558.484	0.940	6,655.117	
0.041	5,786.390	0.141	5,883.022	0.241	5,979.655	0.341	6,076.287	0.441	6,172.920	0.541	6,269.553	0.641	6,366.185	0.741	6,462.818	0.841	6,559.450	0.941	6,656.083	
0.042	5,787.356	0.142	5,883.989	0.242	5,980.621	0.342	6,077.254	0.442	6,173.886	0.542	6,270.519	0.642	6,367.151	0.742	6,463.784	0.842	6,560.417	0.942	6,657.049	
0.043	5,788.322	0.143	5,884.955	0.243	5,981.588	0.343	6,078.220	0.443	6,174.853	0.543	6,271.485	0.643	6,368.118	0.743	6,464.750	0.843	6,561.383	0.943	6,658.016	
0.044	5,789.289	0.144	5,885.921	0.244	5,982.554	0.344	6,079.186	0.444	6,175.819	0.544	6,272.452	0.644	6,369.084	0.744	6,465.717	0.844	6,562.349	0.944	6,658.982	
0.045	5,790.255	0.145	5,886.885	0.245	5,983.520	0.345	6,080.153	0.445	6,176.785	0.545	6,273.418	0.645	6,370.050	0.745	6,466.683	0.845	6,563.316	0.945	6,659.948	
0.046	5,791.221	0.146	5,887.854	0.246	5,984.486	0.346	6,081.119	0.446	6,177.752	0.546	6,274.384	0.646	6,371.017	0.746	6,467.649	0.846	6,564.282	0.946	6,660.914	
0.047	5,792.188	0.147	5,888.820	0.247	5,985.453	0.347	6,082.085	0.447	6,178.718	0.547	6,275.351	0.647	6,371.983	0.747	6,468.616	0.847	6,565.248	0.947	6,661.881	
0.048	5,793.154	0.148	5,889.787	0.248	5,986.419	0.348	6,083.052	0.448	6,179.684	0.548	6,276.317	0.648	6,372.949	0.748	6,469.582	0.848	6,566.215	0.948	6,662.844	
0.049	5,794.120	0.149	5,890.753	0.249	5,987.385	0.349	6,084.018	0.449	6,180.651	0.549	6,277.283	0.649	6,373.916	0.749	6,470.548	0.849	6,567.181	0.949	6,663.813	
0.050	5,795.087	0.150	5,891.																	

Item 20 - Final - Data Sheet (Innager)

GAUGE HEIGHT: 14.269 M

	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	7 M	mm	
0.000	6,713.096	0.100	6,809.729	0.200	6,906.361	0.300	7,002.994	0.400	7,099.626	0.500	7,196.259	0.600	7,292.891	0.700	7,389.524	0.800	7,486.157	0.900	7,582.789												
0.001	6,714.062	0.101	6,810.695	0.201	6,907.328	0.301	7,003.960	0.401	7,100.593	0.501	7,197.225	0.601	7,293.858	0.701	7,390.491	0.801	7,487.123	0.901	7,583.756												
0.002	6,715.029	0.102	6,811.661	0.202	6,908.294	0.302	7,004.926	0.402	7,101.559	0.502	7,198.192	0.602	7,294.824	0.702	7,391.457	0.802	7,488.089	0.902	7,584.722												
0.003	6,715.995	0.103	6,812.628	0.203	6,909.260	0.303	7,005.893	0.403	7,102.525	0.503	7,199.158	0.603	7,295.790	0.703	7,392.423	0.803	7,488.056	0.903	7,585.688												
0.004	6,716.961	0.104	6,813.594	0.204	6,910.227	0.304	7,006.859	0.404	7,103.492	0.504	7,200.124	0.604	7,296.757	0.704	7,393.389	0.804	7,490.022	0.904	7,586.654												
0.005	6,717.928	0.105	6,814.560	0.205	6,911.193	0.305	7,007.825	0.405	7,104.458	0.505	7,201.091	0.605	7,297.723	0.705	7,394.356	0.805	7,490.988	0.905	7,587.621												
0.006	6,718.894	0.106	6,815.527	0.206	6,912.159	0.306	7,008.792	0.406	7,105.424	0.506	7,202.057	0.606	7,298.689	0.706	7,395.322	0.806	7,491.955	0.906	7,588.587												
0.007	6,719.860	0.107	6,816.493	0.207	6,913.125	0.307	7,009.758	0.407	7,106.391	0.507	7,203.023	0.607	7,299.656	0.707	7,396.288	0.807	7,492.921	0.907	7,589.553												
0.008	6,720.827	0.108	6,817.459	0.208	6,914.092	0.308	7,010.724	0.408	7,107.357	0.508	7,203.990	0.608	7,300.622	0.708	7,397.255	0.808	7,493.887	0.908	7,590.520												
0.009	6,721.793	0.109	6,818.426	0.209	6,915.058	0.309	7,011.691	0.409	7,108.323	0.509	7,204.956	0.609	7,301.588	0.709	7,398.221	0.809	7,494.854	0.909	7,591.486												
0.010	6,722.759	0.110	6,819.392	0.210	6,916.024	0.310	7,012.657	0.410	7,109.290	0.510	7,205.922	0.610	7,302.555	0.710	7,399.187	0.810	7,495.820	0.910	7,592.452												
0.011	6,723.726	0.111	6,820.358	0.211	6,916.991	0.311	7,013.623	0.411	7,110.256	0.511	7,206.888	0.611	7,303.521	0.711	7,400.154	0.811	7,496.786	0.911	7,593.419												
0.012	6,724.692	0.112	6,821.325	0.212	6,917.957	0.312	7,014.590	0.412	7,111.222	0.512	7,207.855	0.612	7,304.487	0.712	7,401.120	0.812	7,497.753	0.912	7,594.385												
0.013	6,725.658	0.113	6,822.291	0.213	6,918.923	0.313	7,015.556	0.413	7,112.189	0.513	7,208.821	0.613	7,305.454	0.713	7,402.086	0.813	7,498.719	0.913	7,595.351												
0.014	6,726.625	0.114	6,823.257	0.214	6,919.890	0.314	7,016.522	0.414	7,113.155	0.514	7,209.787	0.614	7,306.420	0.714	7,403.053	0.814	7,499.685	0.914	7,596.318												
0.015	6,727.591	0.115	6,824.224	0.215	6,920.856	0.315	7,017.489	0.415	7,114.121	0.515	7,210.754	0.615	7,307.386	0.715	7,404.019	0.815	7,500.652	0.915	7,597.284												
0.016	6,728.557	0.116	6,825.190	0.216	6,921.822	0.316	7,018.455	0.416	7,115.088	0.516	7,211.720	0.616	7,308.353	0.716	7,404.985	0.816	7,501.618	0.916	7,598.255												
0.017	6,729.524	0.117	6,826.156	0.217	6,922.789	0.317	7,019.421	0.417	7,116.054	0.517	7,212.686	0.617	7,309.319	0.717	7,405.952	0.817	7,502.584	0.917	7,599.217												
0.018	6,730.490	0.118	6,827.122	0.218	6,923.755	0.318	7,020.388	0.418	7,117.020	0.518	7,213.653	0.618	7,310.285	0.718	7,406.918	0.818	7,503.550	0.918	7,600.183												
0.019	6,731.456	0.119	6,828.089	0.219	6,924.721	0.319	7,021.354	0.419	7,117.987	0.519	7,214.619	0.619	7,311.252	0.719	7,407.884	0.819	7,504.517	0.919	7,601.149												
0.020	6,732.423	0.120	6,829.055	0.220	6,925.688	0.320	7,022.320	0.420	7,118.953	0.520	7,215.585	0.620	7,312.218	0.720	7,408.851	0.820	7,505.483	0.920	7,602.116												
0.021	6,733.389	0.121	6,830.021	0.221	6,926.651	0.321	7,023.287	0.421	7,119.916	0.521	7,216.552	0.621	7,313.184	0.721	7,409.817	0.821	7,506.449	0.921	7,603.082												
0.022	6,734.355	0.122	6,830.988	0.222	6,927.620	0.322	7,024.253	0.422	7,120.886	0.522	7,217.518	0.622	7,314.151	0.722	7,410.783	0.822	7,507.416	0.922	7,604.048												
0.023	6,735.322	0.123	6,831.954	0.223	6,928.587	0.323	7,025.219	0.423	7,121.852	0.523	7,218.484	0.623	7,315.117	0.723	7,411.750	0.823	7,508.382	0.923	7,605.015												
0.024	6,736.288	0.124	6,832.920	0.224	6,929.553	0.324	7,026.186	0.424	7,122.818	0.524	7,219.451	0.624	7,316.083	0.724	7,412.716	0.824	7,509.348	0.924	7,605.981												
0.025	6,737.254	0.125	6,833.887	0.225	6,930.519	0.325	7,027.152	0.425	7,123.784	0.525	7,220.417	0.625	7,317.050	0.725	7,413.682	0.825	7,510.315	0.925	7,606.947												
0.026	6,738.221	0.126	6,834.853	0.226	6,931.486	0.326	7,028.118	0.426	7,124.751	0.526	7,221.383	0.626	7,318.016	0.726	7,414.649	0.826	7,511.281	0.926	7,607.914												
0.027	6,739.187	0.127	6,835.819	0.227	6,932.452	0.327	7,029.085	0.427	7,125.717	0.527	7,222.350	0.627	7,318.982	0.727	7,415.615	0.827	7,512.247	0.927	7,608.880												
0.028	6,740.153	0.128	6,836.786	0.228	6,933.418	0.328	7,030.051	0.428	7,126.683	0.528	7,223.316	0.628	7,319.949	0.728	7,416.581	0.828	7,513.214	0.928	7,609.846												
0.029	6,741.120	0.129	6,837.752	0.229	6,934.385	0.329	7,031.017	0.429	7,127.650	0.529	7,224.282	0.629	7,320.915	0.729	7,417.547	0.829	7,514.180	0.929	7,610.813												
0.030	6,742.086	0.130	6,838.718	0.230	6,935.351	0.330	7,031.984	0.430	7,128.616	0.530	7,225.249	0.630	7,321.881	0.730	7,418.514	0.830	7,515.146	0.930	7,611.779												
0.031	6,743.052	0.131	6,839.685	0.231	6,936.317	0.331	7,032.950	0.431	7,129.582	0.531	7,226.215	0.631	7,322.848	0.731	7,419.480	0.831	7,516.113	0.931	7,612.745												
0.032	6,744.018	0.132	6,840.651	0.232	6,937.284	0.332	7,033.916	0.432	7,130.549	0.532	7,227.181	0.632	7,323.814	0.732	7,420.446	0.832	7,517.079	0.932	7,613.712												
0.033	6,744.985	0.133	6,841.617	0.233	6,938.250	0.333	7,034.883	0.433	7,131.515	0.533	7,228.148	0.633	7,324.780	0.733	7,421.413	0.833	7,518.045	0.933	7,614.678												
0.034	6,745.951	0.134	6,842.584	0.234	6,939.216	0.334	7,035.849	0.434	7,132.481	0.534	7,229.114	0.634	7,325.747	0.734	7,422.379	0.834	7,519.012	0.934	7,615.644												
0.035	6,746.917	0.135	6,843.550	0.235	6,940.183	0.335	7,036.815	0.435	7,133.448	0.535	7,230.080	0.635	7,326.713	0.735	7,423.345	0.835	7,519.978	0.935	7,616.611												
0.036	6,747.884	0.136	6,844.516	0.236	6,941.149	0.336	7,037.781	0.436	7,134.414	0.536	7,231.047	0.636	7,327.679	0.736	7,424.312	0.836	7,520.944	0.936	7,617.577												
0.037	6,748.850	0.137	6,845.483	0.237	6,942.115	0.337	7,038.748	0.437	7,135.380	0.537	7,232.013	0.637	7,328.646	0.737	7,425.278	0.837	7,521.911	0.937	7,618.543												
0.038	6,749.816	0.138	6,846.449	0.238	6,943.082	0.338	7,039.714	0.438	7,136.347	0.538	7,232.979	0.638	7,329.612	0.738	7,426.244	0.838	7,522.873	0.938	7,619.510												
0.039	6,750.783	0.139	6,847.415	0.239	6,944.048	0.339	7,040.680	0.439	7,137.313	0.539	7,233.946	0.639	7,330.578	0.739	7,427.211	0.839	7,523.843	0.939	7,620.476												
0.040	6,751.749	0.140	6,848.382	0.240	6,945.014	0.340	7,041.647	0.440	7,138.279	0.540	7,234.912	0.640	7,331.545	0.740	7,428.177	0.840	7,524.810	0.940	7,621.442												
0.041	6,752.715	0.141	6,849.348	0.241	6,945.981	0.341	7,042.613	0.441	7,139.246	0.541	7,235.878	0.641	7,332.511	0.741	7,429.143	0.841	7														



Item 20 - Final - Data Sheet (Innage)

INNAGE TABLE

GAUGE HEIGHT: 14.269 M

Page 9 of 14

AMSPEC

G. H. Hall

Item 20 - Final - Data Sheet (Innage)

GAUGE HEIGHT: 14.269 M

	9 M		mm		9 M		mm		9 M		mm		9 M		mm		9 M		mm		9 M		mm		9 M		mm		9 M		mm	
0.000	8,646.080	0.100	8,742.765	0.200	8,839.450	0.300	8,936.134	0.400	9,032.819	0.500	9,129.504	0.600	9,226.188	0.700	9,322.873	0.800	9,419.558	0.900	9,516.243													
0.001	8,647.047	0.101	8,743.732	0.201	8,840.417	0.301	8,937.101	0.401	9,033.786	0.501	9,130.471	0.601	9,227.155	0.701	9,323.840	0.801	9,420.525	0.901	9,517.209													
0.002	8,648.014	0.102	8,744.699	0.202	8,841.383	0.302	8,938.068	0.402	9,034.753	0.502	9,131.437	0.602	9,228.122	0.702	9,324.807	0.802	9,421.491	0.902	9,518.176													
0.003	8,648.981	0.103	8,745.666	0.203	8,842.350	0.303	8,939.035	0.403	9,035.720	0.503	9,132.404	0.603	9,229.089	0.703	9,325.774	0.803	9,422.458	0.903	9,519.143													
0.004	8,649.948	0.104	8,746.633	0.204	8,843.317	0.304	8,940.002	0.404	9,036.686	0.504	9,133.371	0.604	9,230.056	0.704	9,326.740	0.804	9,423.423	0.904	9,520.110													
0.005	8,650.915	0.105	8,747.599	0.205	8,844.284	0.305	8,940.969	0.405	9,037.653	0.505	9,134.338	0.605	9,231.023	0.705	9,327.707	0.805	9,424.392	0.905	9,521.077													
0.006	8,651.882	0.106	8,748.566	0.206	8,845.251	0.306	8,941.936	0.406	9,038.620	0.506	9,135.305	0.606	9,231.989	0.706	9,328.674	0.806	9,425.359	0.906	9,522.043													
0.007	8,652.848	0.107	8,749.533	0.207	8,846.218	0.307	8,942.902	0.407	9,039.587	0.507	9,136.272	0.607	9,232.956	0.707	9,329.641	0.807	9,426.326	0.907	9,523.010													
0.008	8,653.815	0.108	8,750.500	0.208	8,847.185	0.308	8,943.869	0.408	9,040.554	0.508	9,137.238	0.608	9,233.923	0.708	9,330.608	0.808	9,427.292	0.908	9,523.977													
0.009	8,654.782	0.109	8,751.467	0.209	8,848.151	0.309	8,944.836	0.409	9,041.521	0.509	9,138.205	0.609	9,234.890	0.709	9,331.575	0.809	9,428.259	0.909	9,524.944													
0.010	8,655.749	0.110	8,752.434	0.210	8,849.118	0.310	8,945.803	0.410	9,042.488	0.510	9,139.172	0.610	9,235.857	0.710	9,332.541	0.810	9,429.226	0.910	9,525.911													
0.011	8,656.716	0.111	8,753.400	0.211	8,850.085	0.311	8,946.770	0.411	9,043.454	0.511	9,140.139	0.611	9,236.824	0.711	9,333.508	0.811	9,430.193	0.911	9,526.878													
0.012	8,657.683	0.112	8,754.367	0.212	8,851.052	0.312	8,947.737	0.412	9,044.421	0.512	9,141.106	0.612	9,237.791	0.712	9,334.475	0.812	9,431.160	0.912	9,527.844													
0.013	8,658.649	0.113	8,755.334	0.213	8,852.019	0.313	8,948.703	0.413	9,045.388	0.513	9,142.073	0.613	9,238.757	0.713	9,335.442	0.813	9,432.127	0.913	9,528.811													
0.014	8,659.616	0.114	8,756.301	0.214	8,852.986	0.314	8,949.670	0.414	9,046.355	0.514	9,143.040	0.614	9,239.724	0.714	9,336.409	0.814	9,433.094	0.914	9,529.778													
0.015	8,660.583	0.115	8,757.268	0.215	8,853.952	0.315	8,950.637	0.415	9,047.322	0.515	9,144.006	0.615	9,240.691	0.715	9,337.376	0.815	9,434.060	0.915	9,530.745													
0.016	8,661.550	0.116	8,758.235	0.216	8,854.919	0.316	8,951.604	0.416	9,048.289	0.516	9,144.973	0.616	9,241.658	0.716	9,338.343	0.816	9,435.027	0.916	9,531.711													
0.017	8,662.517	0.117	8,759.202	0.217	8,855.886	0.317	8,952.571	0.417	9,049.255	0.517	9,145.940	0.617	9,242.625	0.717	9,339.309	0.817	9,435.994	0.917	9,532.679													
0.018	8,663.484	0.118	8,760.168	0.218	8,856.853	0.318	8,953.538	0.418	9,050.222	0.518	9,146.907	0.618	9,243.592	0.718	9,340.276	0.818	9,436.961	0.918	9,533.646													
0.019	8,664.451	0.119	8,761.135	0.219	8,857.820	0.319	8,954.505	0.419	9,051.189	0.519	9,147.874	0.619	9,244.558	0.719	9,341.243	0.819	9,437.928	0.919	9,534.612													
0.020	8,665.417	0.120	8,762.102	0.220	8,858.787	0.320	8,955.471	0.420	9,052.156	0.520	9,148.841	0.620	9,245.525	0.720	9,342.210	0.820	9,438.895	0.920	9,535.579													
0.021	8,666.384	0.121	8,763.069	0.221	8,859.754	0.321	8,956.438	0.421	9,053.123	0.521	9,149.808	0.621	9,246.492	0.721	9,343.177	0.821	9,439.861	0.921	9,536.546													
0.022	8,667.351	0.122	8,764.036	0.222	8,860.720	0.322	8,957.405	0.422	9,054.090	0.522	9,150.774	0.622	9,247.459	0.722	9,344.144	0.822	9,440.828	0.922	9,537.513													
0.023	8,668.318	0.123	8,765.003	0.223	8,861.687	0.323	8,958.372	0.423	9,055.057	0.523	9,151.741	0.623	9,248.426	0.723	9,345.110	0.823	9,441.795	0.923	9,538.480													
0.024	8,669.285	0.124	8,765.969	0.224	8,862.654	0.324	8,959.339	0.424	9,056.023	0.524	9,152.708	0.624	9,249.393	0.724	9,346.077	0.824	9,442.762	0.924	9,539.447													
0.025	8,670.252	0.125	8,766.936	0.225	8,863.621	0.325	8,960.306	0.425	9,056.990	0.525	9,153.675	0.625	9,250.360	0.725	9,347.044	0.825	9,443.729	0.925	9,540.413													
0.026	8,671.218	0.126	8,767.903	0.226	8,864.588	0.326	8,961.272	0.426	9,057.957	0.526	9,154.642	0.626	9,251.326	0.726	9,348.011	0.826	9,444.696	0.926	9,541.380													
0.027	8,672.185	0.127	8,768.870	0.227	8,865.555	0.327	8,962.239	0.427	9,058.924	0.527	9,155.609	0.627	9,252.293	0.727	9,348.978	0.827	9,445.663	0.927	9,542.347													
0.028	8,673.152	0.128	8,769.837	0.228	8,866.522	0.328	8,963.206	0.428	9,059.891	0.528	9,156.575	0.628	9,253.260	0.728	9,349.945	0.828	9,446.629	0.928	9,543.314													
0.029	8,674.119	0.129	8,770.804	0.229	8,867.488	0.329	8,964.173	0.429	9,060.858	0.529	9,157.542	0.629	9,254.227	0.729	9,350.912	0.829	9,447.596	0.929	9,544.281													
0.030	8,675.086	0.130	8,771.771	0.230	8,868.455	0.330	8,965.140	0.430	9,061.824	0.530	9,158.509	0.630	9,255.194	0.730	9,351.878	0.830	9,448.563	0.930	9,545.248													
0.031	8,676.053	0.131	8,772.737	0.231	8,869.422	0.331	8,966.107	0.431	9,062.791	0.531	9,159.476	0.631	9,256.161	0.731	9,352.845	0.831	9,449.530	0.931	9,546.215													
0.032	8,677.020	0.132	8,773.704	0.232	8,870.389	0.332	8,967.074	0.432	9,063.758	0.532	9,160.443	0.632	9,257.127	0.732	9,353.812	0.832	9,450.497	0.932	9,547.181													
0.033	8,677.986	0.133	8,774.671	0.233	8,871.356	0.333	8,968.040	0.433	9,064.725	0.533	9,161.410	0.633	9,258.094	0.733	9,354.779	0.833	9,451.464	0.933	9,548.148													
0.034	8,678.953	0.134	8,775.638	0.234	8,872.323	0.334	8,969.007	0.434	9,065.692	0.534	9,162.377	0.634	9,259.061	0.734	9,355.746	0.834	9,452.430	0.934	9,549.115													
0.035	8,679.920	0.135	8,776.605	0.235	8,873.289	0.335	8,969.974	0.435	9,066.659	0.535	9,163.343	0.635	9,260.028	0.735	9,356.713	0.835	9,453.397	0.935	9,550.082													
0.036	8,680.887	0.136	8,777.572	0.236	8,874.256	0.336	8,970.941	0.436	9,067.626	0.536	9,164.310	0.636	9,260.995	0.736	9,357.679	0.836	9,454.364	0.936	9,551.049													
0.037	8,681.854	0.137	8,778.538	0.237	8,875.223	0.337	8,971.908	0.437	9,068.592	0.537	9,165.277	0.637	9,261.962	0.737	9,358.646	0.837	9,455.333	0.937	9,552.016													
0.038	8,682.821	0.138	8,779.505	0.238	8,876.190	0.338	8,972.875	0.438	9,069.559	0.538	9,166.244	0.638	9,262.929	0.738	9,359.613	0.838	9,456.298	0.938	9,552.982													
0.039	8,683.788	0.139	8,780.472	0.239	8,877.157	0.339	8,973.841	0.439	9,070.526	0.539	9,167.211	0.639	9,263.895	0.739	9,360.580	0.839	9,457.265	0.939	9,553.949													
0.040	8,684.754	0.140	8,781.439	0.240	8,878.124	0.340	8,974.808	0.440	9,071.493	0.540	9,168.178	0.640	9,264.862	0.740	9,361.547	0.840	9,458.232	0.940	9,554.916													
0.041	8,685.721	0.141	8,782.406	0.241	8,879.090	0.341																										

Item 20 - Final - Data Sheet (Innage)

GAUGE HEIGHT: 14.269 M

	10 M	mm	10 M	mm	10 M	mm	10 M	mm	10 M	mm	10 M	mm	10 M	mm	10 M	mm	10 M	mm	10 M	mm	10 M	mm
0.000	9,612.927	0.100	9,709.612	0.200	9,806.296	0.300	9,902.981	0.400	9,999.666	0.500	10,096.350	0.600	10,193.035	0.700	10,289.719	0.800	10,386.404	0.900	10,483.089			
0.001	9,613.894	0.101	9,710.578	0.201	9,807.263	0.301	9,903.948	0.401	10,000.632	0.501	10,097.317	0.601	10,194.002	0.701	10,290.686	0.801	10,387.371	0.901	10,484.056			
0.002	9,614.861	0.102	9,711.545	0.202	9,808.230	0.302	9,904.915	0.402	10,001.599	0.502	10,098.284	0.602	10,194.969	0.702	10,291.653	0.802	10,388.338	0.902	10,485.022			
0.003	9,615.828	0.103	9,712.512	0.203	9,809.197	0.303	9,905.881	0.403	10,002.566	0.503	10,099.251	0.603	10,195.935	0.703	10,292.620	0.803	10,389.303	0.903	10,485.989			
0.004	9,616.794	0.104	9,713.479	0.204	9,810.164	0.304	9,906.848	0.404	10,003.533	0.504	10,100.218	0.604	10,196.902	0.704	10,293.587	0.804	10,390.272	0.904	10,486.956			
0.005	9,617.761	0.105	9,714.446	0.205	9,811.130	0.305	9,907.815	0.405	10,004.500	0.505	10,101.184	0.605	10,197.869	0.705	10,294.554	0.805	10,391.238	0.905	10,487.923			
0.006	9,618.728	0.106	9,715.414	0.206	9,812.097	0.306	9,908.782	0.406	10,005.467	0.506	10,102.151	0.606	10,198.836	0.706	10,295.521	0.806	10,392.205	0.906	10,488.890			
0.007	9,619.695	0.107	9,716.380	0.207	9,813.064	0.307	9,909.749	0.407	10,006.433	0.507	10,103.118	0.607	10,199.803	0.707	10,296.487	0.807	10,393.172	0.907	10,489.857			
0.008	9,620.662	0.108	9,717.346	0.208	9,814.031	0.308	9,910.716	0.408	10,007.400	0.508	10,104.085	0.608	10,200.770	0.708	10,297.454	0.808	10,394.139	0.908	10,490.824			
0.009	9,621.629	0.109	9,718.313	0.209	9,814.998	0.309	9,911.683	0.409	10,008.367	0.509	10,105.052	0.609	10,201.736	0.709	10,298.421	0.809	10,395.106	0.909	10,491.790			
0.010	9,622.595	0.110	9,719.280	0.210	9,815.965	0.310	9,912.649	0.410	10,009.334	0.510	10,106.019	0.610	10,202.703	0.710	10,299.388	0.810	10,396.073	0.910	10,492.757			
0.011	9,623.562	0.111	9,720.247	0.211	9,816.932	0.311	9,913.616	0.411	10,010.301	0.511	10,106.986	0.611	10,203.670	0.711	10,300.355	0.811	10,397.039	0.911	10,493.724			
0.012	9,624.529	0.112	9,721.214	0.212	9,817.898	0.312	9,914.583	0.412	10,011.268	0.512	10,107.952	0.612	10,204.637	0.712	10,301.322	0.812	10,398.006	0.912	10,494.691			
0.013	9,625.496	0.113	9,722.181	0.213	9,818.865	0.313	9,915.550	0.413	10,012.235	0.513	10,108.919	0.613	10,205.604	0.713	10,302.288	0.813	10,398.973	0.913	10,495.658			
0.014	9,626.463	0.114	9,723.147	0.214	9,819.832	0.314	9,916.517	0.414	10,013.201	0.514	10,109.886	0.614	10,206.571	0.714	10,303.255	0.814	10,399.940	0.914	10,496.625			
0.015	9,627.430	0.115	9,724.114	0.215	9,820.799	0.315	9,917.484	0.415	10,014.168	0.515	10,110.853	0.615	10,207.538	0.715	10,304.222	0.815	10,400.907	0.915	10,497.591			
0.016	9,628.397	0.116	9,725.081	0.216	9,821.766	0.316	9,918.450	0.416	10,015.135	0.516	10,111.820	0.616	10,208.504	0.716	10,305.189	0.816	10,401.874	0.916	10,498.558			
0.017	9,629.363	0.117	9,726.045	0.217	9,822.733	0.317	9,919.417	0.417	10,016.102	0.517	10,112.787	0.617	10,209.471	0.717	10,306.156	0.817	10,402.841	0.917	10,499.525			
0.018	9,630.330	0.118	9,727.015	0.218	9,823.699	0.318	9,920.384	0.418	10,017.069	0.518	10,113.753	0.618	10,210.438	0.718	10,307.123	0.818	10,403.807	0.918	10,500.492			
0.019	9,631.297	0.119	9,727.982	0.219	9,824.666	0.319	9,921.351	0.419	10,018.036	0.519	10,114.720	0.619	10,211.405	0.719	10,308.090	0.819	10,404.774	0.919	10,501.459			
0.020	9,632.264	0.120	9,728.949	0.220	9,825.633	0.320	9,922.318	0.420	10,019.002	0.520	10,115.687	0.620	10,212.372	0.720	10,309.056	0.820	10,405.741	0.920	10,502.426			
0.021	9,633.231	0.121	9,729.915	0.221	9,826.600	0.321	9,923.285	0.421	10,019.969	0.521	10,116.654	0.621	10,213.339	0.721	10,310.023	0.821	10,406.708	0.921	10,503.393			
0.022	9,634.198	0.122	9,730.882	0.222	9,827.567	0.322	9,924.252	0.422	10,020.936	0.522	10,117.621	0.622	10,214.305	0.722	10,310.990	0.822	10,407.675	0.922	10,504.359			
0.023	9,635.164	0.123	9,731.849	0.223	9,828.534	0.323	9,925.218	0.423	10,021.903	0.523	10,118.588	0.623	10,215.272	0.723	10,311.957	0.823	10,408.642	0.923	10,505.326			
0.024	9,636.131	0.124	9,732.816	0.224	9,829.501	0.324	9,926.185	0.424	10,022.870	0.524	10,119.551	0.624	10,216.239	0.724	10,312.924	0.824	10,409.608	0.924	10,506.293			
0.025	9,637.098	0.125	9,733.783	0.225	9,830.467	0.325	9,927.152	0.425	10,023.837	0.525	10,120.525	0.625	10,217.206	0.725	10,313.891	0.825	10,410.575	0.925	10,507.260			
0.026	9,638.065	0.126	9,734.750	0.226	9,831.434	0.326	9,928.119	0.426	10,024.804	0.526	10,121.488	0.626	10,218.173	0.726	10,314.857	0.826	10,411.542	0.926	10,508.227			
0.027	9,639.032	0.127	9,735.716	0.227	9,832.401	0.327	9,929.086	0.427	10,025.770	0.527	10,122.455	0.627	10,219.140	0.727	10,315.824	0.827	10,412.509	0.927	10,509.194			
0.028	9,639.999	0.128	9,736.683	0.228	9,833.368	0.328	9,930.053	0.428	10,026.737	0.528	10,123.422	0.628	10,220.107	0.728	10,316.791	0.828	10,413.476	0.928	10,510.160			
0.029	9,640.966	0.129	9,737.650	0.229	9,834.335	0.329	9,931.019	0.429	10,027.704	0.529	10,124.389	0.629	10,221.073	0.729	10,317.758	0.829	10,414.443	0.929	10,511.127			
0.030	9,641.932	0.130	9,738.617	0.230	9,835.302	0.330	9,931.986	0.430	10,028.671	0.530	10,125.356	0.630	10,222.040	0.730	10,318.725	0.830	10,415.410	0.930	10,512.094			
0.031	9,642.899	0.131	9,739.584	0.231	9,836.268	0.331	9,932.953	0.431	10,029.638	0.531	10,126.322	0.631	10,223.007	0.731	10,319.692	0.831	10,416.376	0.931	10,513.061			
0.032	9,643.866	0.132	9,740.551	0.232	9,837.235	0.332	9,933.920	0.432	10,030.605	0.532	10,127.289	0.632	10,223.974	0.732	10,320.659	0.832	10,417.343	0.932	10,514.028			
0.033	9,644.833	0.133	9,741.518	0.233	9,838.202	0.333	9,934.887	0.433	10,031.571	0.533	10,128.256	0.633	10,224.941	0.733	10,321.625	0.833	10,418.310	0.933	10,514.995			
0.034	9,645.800	0.134	9,742.484	0.234	9,839.169	0.334	9,935.854	0.434	10,032.538	0.534	10,129.223	0.634	10,225.908	0.734	10,322.592	0.834	10,419.277	0.934	10,515.962			
0.035	9,646.767	0.135	9,743.451	0.235	9,840.136	0.335	9,936.821	0.435	10,033.505	0.535	10,130.190	0.635	10,226.874	0.735	10,323.559	0.835	10,420.244	0.935	10,516.928			
0.036	9,647.733	0.136	9,744.418	0.236	9,841.103	0.336	9,937.787	0.436	10,034.472	0.536	10,131.157	0.636	10,227.841	0.736	10,324.526	0.836	10,421.211	0.936	10,517.895			
0.037	9,648.700	0.137	9,745.385	0.237	9,842.070	0.337	9,938.754	0.437	10,035.439	0.537	10,132.124	0.637	10,228.808	0.737	10,325.493	0.837	10,422.177	0.937	10,518.862			
0.038	9,649.667	0.138	9,746.352	0.238	9,843.036	0.338	9,939.721	0.438	10,036.406	0.538	10,133.090	0.638	10,229.775	0.738	10,326.460	0.838	10,423.144	0.938	10,519.829			
0.039	9,650.634	0.139	9,747.319	0.239	9,844.003	0.339	9,940.688	0.439	10,037.373	0.539	10,134.057	0.639	10,230.742	0.739	10,327.427	0.839	10,424.111	0.939	10,520.796			
0.040	9,651.601	0.140	9,748.285	0.240	9,844.970	0.340	9,941.655	0.440	10,038.339	0.540	10,135.024	0.640	10,231.709	0.740	10,328.393	0.840	10,425.078	0.940	10,521.763			
0.041	9,652.568	0.141	9,749.252	0.241	9,845.937	0.341	9,942.622	0.441	10,039.306	0.541	10,135.991	0.641	10,232.676	0.741	10,329.360	0.841	10,426.045	0.941	10,522.729			
0.042	9,653.535	0.142	9,750.219	0.242	9,846.904	0.342	9,943.588	0.442	10,040.273	0.542	10,136.958	0.642	10,233.642	0.742	10,330.327	0.842	10,427.012	0.942	10,523.696			
0.043	9,654.501	0.143	9,751.186	0.243	9,847.871	0.343	9,944.555	0.443	10,041.240	0.543	10,137.925	0.643	10,234.609	0.743	10,331.294	0.843	10,427.979	0.943	10,524.663			
0.044	9,655.468	0.144	9,752.153	0.244	9,848.838	0.344	9,945.522	0.444	10,042.207	0.544	10,138.891	0.644	10,235.576	0.744	10,332.261	0.844	10,428.945	0.944	10,525.630			
0.045	9,656.435	0.145	9,753.120	0.245	9,849.804	0.345	9,946.489	0.445	10,043.174	0.545	10,139.858	0.645	10,236.543	0.745	10,333.228	0.845	10,429.912	0.945	10,526.597			
0.046	9,657.402	0.146	9,754.087	0.246	9,850.771	0.346	9,947.456	0.446	10,044.140	0.546	10,140.825	0.646	10,237.51									

Item 20 - Final - Data Sheet (Innage)

GAUGE HEIGHT: 14.269 M

	11 M	mm	11 M	mm	11 M	mm	11 M	mm	11 M	mm	11 M	mm	11 M	mm	11 M	mm	11 M	mm	11 M	mm
0.000	10,579.773	0.100	10,676.458	0.200	10,773.158	0.300	10,869.878	0.400	10,966.597	0.500	11,063.316	0.600	11,160.035	0.700	11,256.754	0.800	11,353.474	0.900	11,450.193	
0.001	10,580.740	0.101	10,677.425	0.201	10,774.126	0.301	10,870.845	0.401	10,967.564	0.501	11,064.283	0.601	11,161.002	0.701	11,257.722	0.801	11,354.441	0.901	11,451.160	
0.002	10,581.707	0.102	10,678.392	0.202	10,775.093	0.302	10,871.812	0.402	10,968.531	0.502	11,065.250	0.602	11,161.970	0.702	11,258.689	0.802	11,355.408	0.902	11,452.127	
0.003	10,582.674	0.103	10,679.359	0.203	10,776.060	0.303	10,872.779	0.403	10,969.498	0.503	11,066.218	0.603	11,162.937	0.703	11,259.656	0.803	11,356.375	0.903	11,453.094	
0.004	10,583.641	0.104	10,680.325	0.204	10,777.027	0.304	10,873.746	0.404	10,970.466	0.504	11,067.185	0.604	11,163.904	0.704	11,260.623	0.804	11,357.342	0.904	11,454.062	
0.005	10,584.608	0.105	10,681.292	0.205	10,777.994	0.305	10,874.714	0.405	10,971.433	0.505	11,068.152	0.605	11,164.871	0.705	11,261.591	0.805	11,358.310	0.905	11,455.029	
0.006	10,585.575	0.106	10,682.259	0.206	10,778.962	0.306	10,875.681	0.406	10,972.400	0.506	11,069.119	0.606	11,165.838	0.706	11,262.558	0.806	11,359.277	0.906	11,455.996	
0.007	10,586.541	0.107	10,683.226	0.207	10,779.929	0.307	10,876.648	0.407	10,973.367	0.507	11,070.086	0.607	11,166.806	0.707	11,263.525	0.807	11,360.244	0.907	11,456.963	
0.008	10,587.508	0.108	10,684.193	0.208	10,780.896	0.308	10,877.615	0.408	10,974.334	0.508	11,071.054	0.608	11,167.773	0.708	11,264.492	0.808	11,361.211	0.908	11,457.930	
0.009	10,588.475	0.109	10,685.160	0.209	10,781.863	0.309	10,878.582	0.409	10,975.302	0.509	11,072.021	0.609	11,168.740	0.709	11,265.459	0.809	11,362.178	0.909	11,458.898	
0.010	10,589.442	0.110	10,686.127	0.210	10,782.830	0.310	10,879.550	0.410	10,976.269	0.510	11,072.988	0.610	11,169.707	0.710	11,266.426	0.810	11,363.146	0.910	11,459.865	
0.011	10,590.409	0.111	10,687.093	0.211	10,783.798	0.311	10,880.517	0.411	10,977.236	0.511	11,073.955	0.611	11,170.674	0.711	11,267.394	0.811	11,364.113	0.911	11,460.832	
0.012	10,591.376	0.112	10,688.060	0.212	10,784.765	0.312	10,881.484	0.412	10,978.203	0.512	11,074.922	0.612	11,171.642	0.712	11,268.361	0.812	11,365.080	0.912	11,461.799	
0.013	10,592.342	0.113	10,689.027	0.213	10,785.732	0.313	10,882.451	0.413	10,979.170	0.513	11,075.890	0.613	11,172.609	0.713	11,269.328	0.813	11,366.047	0.913	11,462.766	
0.014	10,593.309	0.114	10,689.994	0.214	10,786.699	0.314	10,883.418	0.414	10,980.138	0.514	11,076.857	0.614	11,173.576	0.714	11,270.295	0.814	11,367.014	0.914	11,463.734	
0.015	10,594.276	0.115	10,690.961	0.215	10,787.666	0.315	10,884.386	0.415	10,981.105	0.515	11,077.824	0.615	11,174.543	0.715	11,271.262	0.815	11,367.982	0.915	11,464.704	
0.016	10,595.243	0.116	10,691.928	0.216	10,788.634	0.316	10,885.353	0.416	10,982.072	0.516	11,078.791	0.616	11,175.510	0.716	11,272.230	0.816	11,368.949	0.916	11,465.666	
0.017	10,596.210	0.117	10,692.894	0.217	10,789.601	0.317	10,886.320	0.417	10,983.039	0.517	11,079.758	0.617	11,176.478	0.717	11,273.197	0.817	11,369.916	0.917	11,466.635	
0.018	10,597.177	0.118	10,693.861	0.218	10,790.568	0.318	10,887.287	0.418	10,984.006	0.518	11,080.725	0.618	11,177.445	0.718	11,274.164	0.818	11,370.883	0.918	11,467.602	
0.019	10,598.144	0.119	10,694.828	0.219	10,791.535	0.319	10,888.254	0.419	10,984.973	0.519	11,081.693	0.619	11,178.412	0.719	11,275.131	0.819	11,371.850	0.919	11,468.569	
0.020	10,599.110	0.120	10,695.795	0.220	10,792.502	0.320	10,889.221	0.420	10,985.941	0.520	11,082.660	0.620	11,179.379	0.720	11,276.098	0.820	11,372.817	0.920	11,469.537	
0.021	10,600.077	0.121	10,696.762	0.221	10,793.469	0.321	10,890.189	0.421	10,986.908	0.521	11,083.627	0.621	11,180.346	0.721	11,277.065	0.821	11,373.785	0.921	11,470.505	
0.022	10,601.044	0.122	10,697.729	0.222	10,794.437	0.322	10,891.156	0.422	10,987.875	0.522	11,084.594	0.622	11,181.313	0.722	11,278.033	0.822	11,374.752	0.922	11,471.471	
0.023	10,602.011	0.123	10,698.696	0.223	10,795.404	0.323	10,892.123	0.423	10,988.842	0.523	11,085.561	0.623	11,182.281	0.723	11,279.000	0.823	11,375.719	0.923	11,472.438	
0.024	10,602.978	0.124	10,699.662	0.224	10,796.371	0.324	10,893.090	0.424	10,989.809	0.524	11,086.529	0.624	11,183.248	0.724	11,279.967	0.824	11,376.686	0.924	11,473.405	
0.025	10,603.945	0.125	10,700.629	0.225	10,797.338	0.325	10,894.057	0.425	10,990.777	0.525	11,087.496	0.625	11,184.215	0.725	11,280.934	0.825	11,377.653	0.925	11,474.373	
0.026	10,604.911	0.126	10,701.596	0.226	10,798.305	0.326	10,895.025	0.426	10,991.744	0.526	11,088.463	0.626	11,185.182	0.726	11,281.901	0.826	11,378.621	0.926	11,475.340	
0.027	10,605.878	0.127	10,702.563	0.227	10,799.273	0.327	10,895.992	0.427	10,992.711	0.527	11,089.430	0.627	11,186.149	0.727	11,282.869	0.827	11,379.588	0.927	11,476.307	
0.028	10,606.845	0.128	10,703.530	0.228	10,800.240	0.328	10,896.959	0.428	10,993.678	0.528	11,090.397	0.628	11,187.117	0.728	11,283.836	0.828	11,380.555	0.928	11,477.274	
0.029	10,607.812	0.129	10,704.497	0.229	10,801.207	0.329	10,897.926	0.429	10,994.645	0.529	11,091.365	0.629	11,188.084	0.729	11,284.803	0.829	11,381.522	0.929	11,478.241	
0.030	10,608.779	0.130	10,705.463	0.230	10,802.174	0.330	10,898.893	0.430	10,995.613	0.530	11,092.332	0.630	11,189.051	0.730	11,285.770	0.830	11,382.489	0.930	11,479.209	
0.031	10,609.746	0.131	10,706.430	0.231	10,803.141	0.331	10,899.861	0.431	10,996.580	0.531	11,093.299	0.631	11,190.018	0.731	11,286.737	0.831	11,383.457	0.931	11,480.176	
0.032	10,610.713	0.132	10,707.397	0.232	10,804.109	0.332	10,900.828	0.432	10,997.547	0.532	11,094.266	0.632	11,190.985	0.732	11,287.705	0.832	11,384.424	0.932	11,481.143	
0.033	10,611.679	0.133	10,708.364	0.233	10,805.076	0.333	10,901.795	0.433	10,998.514	0.533	11,095.233	0.633	11,191.953	0.733	11,288.672	0.833	11,385.391	0.933	11,482.110	
0.034	10,612.646	0.134	10,709.331	0.234	10,806.043	0.334	10,902.762	0.434	10,999.481	0.534	11,096.201	0.634	11,192.920	0.734	11,289.639	0.834	11,386.358	0.934	11,483.077	
0.035	10,613.613	0.135	10,710.298	0.235	10,807.010	0.335	10,903.729	0.435	11,000.449	0.535	11,097.168	0.635	11,193.887	0.735	11,290.606	0.835	11,387.325	0.935	11,484.045	
0.036	10,614.580	0.136	10,711.265	0.236	10,807.977	0.336	10,904.697	0.436	11,001.416	0.536	11,098.135	0.636	11,194.854	0.736	11,291.573	0.836	11,388.293	0.936	11,485.012	
0.037	10,615.547	0.137	10,712.231	0.237	10,808.945	0.337	10,905.664	0.437	11,002.383	0.537	11,099.102	0.637	11,195.821	0.737	11,292.541	0.837	11,389.260	0.937	11,485.979	
0.038	10,616.514	0.1380	10,713.198	0.238	10,809.912	0.338	10,906.631	0.438	11,003.350	0.538	11,100.069	0.638	11,196.789	0.738	11,293.508	0.838	11,390.227	0.938	11,486.946	
0.039	10,617.480	0.139	10,714.165	0.239	10,810.879	0.339	10,907.598	0.439	11,004.317	0.539	11,101.037	0.639	11,197.756	0.739	11,294.475	0.839	11,391.194	0.939	11,487.913	
0.040	10,618.447	0.140	10,715.132	0.240	10,811.846	0.340	10,908.565	0.440	11,005.285	0.540	11,102.004	0.640	11,198.723	0.740	11,295.442	0.840	11,392.161	0.940	11,488.881	
0.041	10,619.414	0.141	10,716.099	0.241	10,812.813	0.341	10,909.533	0.441	11,006.252	0.541	11,102.971	0.641	11,199.690	0.741	11,296.409	0.841	11,393.129	0.941	11,489.848	
0.042	10,620.381	0.142	10,717.066	0.242	10,813.781	0.342	10,910.500	0.442	11,007.219	0.542	11,103.938	0.642	11,200.657	0.742	11,297.377	0.842	11,394.096	0.942	11,490.815	
0.043	10,621.348	0.143	10,718.033	0.243	10,814.748	0.343	10,911.467	0.443	11,008.186	0.543	11,104.905	0.643	11,201.624	0.743	11,298.344	0.843	11,395.063	0.943	11,491.782	
0.044	10,622.315	0.144	10,719.000	0.244	10,815.715	0.344	10,912.434	0.444	11,009.153	0.544	11,105.872	0.644	11,202.592	0.744	11,299.311	0.844	11,396.030	0.944	11,492.749	
0.045	10,623.282	0.145	10,719.967	0.245	10,816.682	0.345	10,913.401	0.445	11,010.120	0.545	11,106.840	0.645	11,203.559	0.745	11,300.278	0.845	11,396.997	0.945	11,493.716	
0.046	10,624.248	0.146	10,720.934	0.246	10,817.649	0.346	10,914.368	0.446	11,011.088	0.546	11,107.807	0.646	11,204.526	0.746	11,301.245	0.846	11,397.964	0.946	11,494.684	
0.047	10,625.215	0.147	10,721.901	0.247	10,818.616	0.347	10,915.336	0.4												

Item 20 - Final - Data Sheet (Innage)

GAUGE HEIGHT: 14.269 M

	12 M	mm	12 M	mm	12 M	mm	12 M	mm	12 M	mm	12 M	mm	12 M	mm	12 M	mm	12 M	mm
0.000	11,546.912	0.100	11,643.631	0.200	11,740.350	0.300	11,837.070	0.400	11,933.789	0.500	12,030.508	0.600	12,127.227	0.700	12,223.946	0.800	12,320.666	0.900
0.001	11,547.879	0.101	11,644.598	0.201	11,741.318	0.301	11,838.037	0.401	11,934.756	0.501	12,031.475	0.601	12,128.194	0.701	12,224.914	0.801	12,321.633	0.901
0.002	11,548.846	0.102	11,645.566	0.202	11,742.285	0.302	11,839.004	0.402	11,935.723	0.502	12,032.442	0.602	12,129.162	0.702	12,225.881	0.802	12,322.600	0.902
0.003	11,549.814	0.103	11,646.533	0.203	11,743.252	0.303	11,839.971	0.403	11,936.690	0.503	12,033.410	0.603	12,130.129	0.703	12,226.848	0.803	12,323.567	0.903
0.004	11,550.781	0.104	11,647.500	0.204	11,744.219	0.304	11,840.938	0.404	11,937.658	0.504	12,034.377	0.604	12,131.096	0.704	12,227.815	0.804	12,324.534	0.904
0.005	11,551.748	0.105	11,648.467	0.205	11,745.186	0.305	11,841.906	0.405	11,938.625	0.505	12,035.344	0.605	12,132.063	0.705	12,228.782	0.805	12,325.502	0.905
0.006	11,552.715	0.106	11,649.434	0.206	11,746.154	0.306	11,842.873	0.406	11,939.592	0.506	12,036.311	0.606	12,133.030	0.706	12,229.750	0.806	12,326.469	0.906
0.007	11,553.682	0.107	11,650.402	0.207	11,747.121	0.307	11,843.840	0.407	11,940.559	0.507	12,037.278	0.607	12,133.998	0.707	12,230.717	0.807	12,327.436	0.907
0.008	11,554.650	0.108	11,651.369	0.208	11,748.088	0.308	11,844.807	0.408	11,941.526	0.508	12,038.246	0.608	12,134.965	0.708	12,231.684	0.808	12,328.403	0.908
0.009	11,555.617	0.109	11,652.336	0.209	11,749.055	0.309	11,845.774	0.409	11,942.494	0.509	12,039.213	0.609	12,135.932	0.709	12,232.651	0.809	12,329.370	0.909
0.010	11,556.584	0.110	11,653.303	0.210	11,750.022	0.310	11,846.742	0.410	11,943.461	0.510	12,040.180	0.610	12,136.899	0.710	12,233.618	0.810	12,330.338	0.910
0.011	11,557.551	0.111	11,654.270	0.211	11,750.990	0.311	11,847.709	0.411	11,944.428	0.511	12,041.147	0.611	12,137.866	0.711	12,234.586	0.811	12,331.305	0.911
0.012	11,558.518	0.112	11,655.238	0.212	11,751.957	0.312	11,848.676	0.412	11,945.395	0.512	12,042.114	0.612	12,138.834	0.712	12,235.553	0.812	12,332.272	0.912
0.013	11,559.486	0.113	11,656.205	0.213	11,752.924	0.313	11,849.643	0.413	11,946.362	0.513	12,043.082	0.613	12,139.801	0.713	12,236.520	0.813	12,333.239	0.913
0.014	11,560.453	0.114	11,657.173	0.214	11,753.891	0.314	11,850.610	0.414	11,947.330	0.514	12,044.049	0.614	12,140.768	0.714	12,237.487	0.814	12,334.206	0.914
0.015	11,561.420	0.115	11,658.139	0.215	11,754.858	0.315	11,851.578	0.415	11,948.297	0.515	12,045.016	0.615	12,141.735	0.715	12,238.454	0.815	12,335.174	0.915
0.016	11,562.387	0.116	11,659.106	0.216	11,755.826	0.316	11,852.545	0.416	11,949.264	0.516	12,045.983	0.616	12,142.702	0.716	12,239.422	0.816	12,336.141	0.916
0.017	11,563.354	0.117	11,660.074	0.217	11,756.793	0.317	11,853.512	0.417	11,950.231	0.517	12,046.950	0.617	12,143.669	0.717	12,240.389	0.817	12,337.108	0.917
0.018	11,564.321	0.118	11,661.041	0.218	11,757.760	0.318	11,854.479	0.418	11,951.198	0.518	12,047.917	0.618	12,144.637	0.718	12,241.356	0.818	12,338.075	0.918
0.019	11,565.289	0.119	11,662.008	0.219	11,758.727	0.319	11,855.446	0.419	11,952.165	0.519	12,048.885	0.619	12,145.604	0.719	12,242.323	0.819	12,339.042	0.919
0.020	11,566.256	0.120	11,662.975	0.220	11,759.694	0.320	11,856.413	0.420	11,953.130	0.520	12,049.852	0.620	12,146.571	0.720	12,243.290	0.820	12,340.009	0.920
0.021	11,567.223	0.121	11,663.942	0.221	11,760.661	0.321	11,857.381	0.421	11,954.100	0.521	12,050.819	0.621	12,147.538	0.721	12,244.257	0.821	12,340.977	0.921
0.022	11,568.190	0.122	11,664.909	0.222	11,761.629	0.322	11,858.348	0.422	11,955.067	0.522	12,051.786	0.622	12,148.505	0.722	12,245.225	0.822	12,341.944	0.922
0.023	11,569.157	0.123	11,665.877	0.223	11,762.596	0.323	11,859.315	0.423	11,956.034	0.523	12,052.753	0.623	12,149.473	0.723	12,246.192	0.823	12,342.911	0.923
0.024	11,570.125	0.124	11,666.844	0.224	11,763.563	0.324	11,860.282	0.424	11,957.001	0.524	12,053.721	0.624	12,150.440	0.724	12,247.159	0.824	12,343.878	0.924
0.025	11,571.092	0.125	11,667.811	0.225	11,764.530	0.325	11,861.249	0.425	11,957.969	0.525	12,054.688	0.625	12,151.407	0.725	12,248.126	0.825	12,344.845	0.925
0.026	11,572.059	0.126	11,668.778	0.226	11,765.497	0.326	11,862.217	0.426	11,958.936	0.526	12,055.655	0.626	12,152.374	0.726	12,249.093	0.826	12,345.813	0.926
0.027	11,573.026	0.127	11,669.745	0.227	11,766.465	0.327	11,863.184	0.427	11,959.903	0.527	12,056.622	0.627	12,153.341	0.727	12,250.061	0.827	12,346.780	0.927
0.028	11,573.993	0.128	11,670.713	0.228	11,767.432	0.328	11,864.151	0.428	11,960.870	0.528	12,057.589	0.628	12,154.309	0.728	12,251.028	0.828	12,347.747	0.928
0.029	11,574.961	0.129	11,671.680	0.229	11,768.399	0.329	11,865.118	0.429	11,961.837	0.529	12,058.557	0.629	12,155.276	0.729	12,251.995	0.829	12,348.714	0.929
0.030	11,575.928	0.130	11,672.647	0.230	11,769.366	0.330	11,866.085	0.430	11,962.805	0.530	12,059.524	0.630	12,156.243	0.730	12,252.962	0.830	12,349.681	0.930
0.031	11,576.895	0.131	11,673.614	0.231	11,770.333	0.331	11,867.053	0.431	11,963.772	0.531	12,060.491	0.631	12,157.210	0.731	12,253.929	0.831	12,350.649	0.931
0.032	11,577.862	0.132	11,674.581	0.232	11,771.301	0.332	11,868.020	0.432	11,964.739	0.532	12,061.458	0.632	12,158.177	0.732	12,254.897	0.832	12,351.616	0.932
0.033	11,578.829	0.133	11,675.549	0.233	11,772.268	0.333	11,868.987	0.433	11,965.706	0.533	12,062.425	0.633	12,159.145	0.733	12,255.864	0.833	12,352.583	0.933
0.034	11,579.797	0.134	11,676.516	0.234	11,773.235	0.334	11,869.954	0.434	11,966.673	0.534	12,063.393	0.634	12,160.112	0.734	12,256.831	0.834	12,353.550	0.934
0.035	11,580.764	0.135	11,677.483	0.235	11,774.202	0.335	11,870.921	0.435	11,967.641	0.535	12,064.360	0.635	12,161.079	0.735	12,257.798	0.835	12,354.517	0.935
0.036	11,581.731	0.136	11,678.450	0.236	11,775.169	0.336	11,871.889	0.436	11,968.608	0.536	12,065.327	0.636	12,162.046	0.736	12,258.765	0.836	12,355.485	0.936
0.037	11,582.698	0.137	11,679.417	0.237	11,776.137	0.337	11,872.856	0.437	11,969.575	0.537	12,066.294	0.637	12,163.013	0.737	12,259.733	0.837	12,356.452	0.937
0.038	11,583.665	0.1380	11,680.385	0.238	11,777.104	0.338	11,873.823	0.438	11,970.542	0.538	12,067.261	0.638	12,163.981	0.738	12,260.700	0.838	12,357.419	0.938
0.039	11,584.633	0.139	11,681.352	0.239	11,778.071	0.339	11,874.790	0.439	11,971.509	0.539	12,068.229	0.639	12,164.948	0.739	12,261.667	0.839	12,358.386	0.939
0.040	11,585.600	0.140	11,682.319	0.240	11,779.038	0.340	11,875.757	0.440	11,972.477	0.540	12,069.196	0.640	12,165.915	0.740	12,262.634	0.840	12,359.353	0.940
0.041	11,586.567	0.141	11,683.286	0.241	11,780.005	0.341	11,876.725	0.441	11,973.444	0.541	12,070.163	0.641	12,166.882	0.741	12,263.601	0.841	12,360.320	0.941
0.042	11,587.534	0.142	11,684.253	0.242	11,780.972	0.342	11,877.692	0.442	11,974.411	0.542	12,071.130	0.642	12,167.849	0.742	12,264.568	0.842	12,361.288	0.942
0.043	11,588.501	0.143	11,685.220	0.243	11,781.940	0.343	11,878.659	0.443	11,975.378	0.543	12,072.097	0.643	12,168.816	0.743	12,265.536	0.843	12,362.255	0.943
0.044	11,589.468	0.144	11,686.188	0.244	11,782.907	0.344	11,879.626	0.444	11,976.345	0.544	12,073.064	0.644	12,169.784	0.744	12,266.503	0.844	12,363.222	0.944
0.045	11,590.436	0.145	11,687.155	0.245	11,783.874	0.345	11,880.593	0.445	11,977.312	0.545	12,074.032	0.645	12,170.751	0.745	12,267.470	0.845	12,364.189	0.945
0.046	11,591.403	0.146	11,688.122	0.246	11,784.841	0.346	11,881.560	0.446	11,978.280	0.546	12,074.999	0.646	12,171.718	0.746	12,268.437	0.846	12,365.156	0.946
0.047	11,592.370	0.147	11,689.089	0.247	11,785.808	0.347	11,882.528	0.447	11,979.247	0.547	12,075.966	0.647	12,172.685	0.747	12,269.404	0.847	12,366.124	0.947
0.048	11,593.337	0.148	11,690.056	0.248	11,786.776	0.348	11,883.495	0.448	11,980.214	0.548	12,076.933	0.648	12,173.652	0.748	12,270.372	0.848	12,367.091	0.948
0.049	11,594.304	0.149	11,691.024	0.249	11,787.743	0.349	11,884.462	0.449	11,981.181	0.549	12,077.900	0.649	12,174.620	0.749	12,271.339	0.849	12,368.058	0.949
0.050	11,595.272	0.150	11,691.991	0.250	11,788.710	0.350	11,885.429	0.450	11,982.148	0.550	12,078.868	0.650	12,175.587	0.750	12,272.306	0.850	12,369.025	0.950
0.051	11,596.239	0.151	11,692.958	0.25														

APPENDIX J

Inspection Report – Rankin Inlet Offsite and Onsite Fabrication



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☐ Complete, no further submission required.

By:

Date:

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No.

6515-C-270-007-141-QCR-0001 R: Sub003

DOCUMENT FOR INFORMATION

AGNICO EAGLE MINE

Contract No. 6515-C-270-007



C-22466T

Rankin Inlet

OffSite and OnSite Fabrication

Quality Control Documents

TABLE OF CONTENT

SECTION 1 – INSPECTION AND TEST PLAN

SECTION 1.1 – ITP-001- PUMPING STATION & ITP-002 - FUEL FARM – RANKIN INLET	#
SECTION 1.2 – PROCEDURES SUBMITTED AND APPROVED	#
SECTION 1.3 – DRAWINGS INDEX (IFC) LATEST REVISION	#

SECTION 2 – ITP-001 & ITP-002 SPECIFIC

SECTION 2.1 – NON-CONFORMANCE REPORT & LOG – AEM-GE-ITR-002 / AEM-GE-LOG-002	#
SECTION 2.2 – WELD PROCEDURES SUBMITTED AND APPROVED SPECIFICATION/PROCEDURE	#
SECTION 2.3 – WELDERS QUALIFICATION APPROVED	#
SECTION 2.4 – INSPECTION DEFICIENCY REPORT & LOG – AEM-GE-ITR-005 / AEM-GE-LOG-004	#

SECTION 3 – ITP-001 PREPARATION ELECTRICAL & PUMPIPING STATION (OFFSITE)

SECTION 3.1 – DIMENSION OF THE CONTAINER VERIFICATION – AIRMP REPORT	#
SECTION 3.2 – INSULATION AND CLADDING VERIFICATION – AIRMP REPORT	#
SECTION 3.3 – DOORS VERIFICATION – AIRMP REPORT	#
SECTION 3.4 – EXTERIOR PAINT VERIFICATION – AIRMP REPORT	#

SECTION 4 – ITP-002 FABRICATION (OFFSITE)

SECTION 4.1 – CATWALK	#
-----------------------	---

SECTION 5 – ITP-001 & ITP-002 MECHANICAL & PIPING (OFFSITE)

SECTION 5.1 – FABRICATION OF PIPING SPOOLS – AEM-WE-ITR-001 / AEM-GE-LOG-005	#
SECTION 5.2 – PAINTING OF PIPING SPOOLS – AEM-PI-ITR-002 / UNIES-FAB REPORT	#
SECTION 5.3 – PUMP INSTALLATION – AEM-ME-ITR-001	#
SECTION 5.4 – PIPING INSTALLATION – AEM-PI-ITR-002	#
SECTION 5.5 – SUPPORT FABRICATION AND INSTALLATION – AEM-PI-ITR-002	#
SECTION 5.6 – PERFORM ALL NON DESTRUCTIVE EXAMINATION – AEM-GE-LOG-005 / MISTRAS	#
SECTION 5.7 – INSPECTION RELEASE PRIOR TO SHIPMENT	#

SECTION 6 – ITP-001 & ITP-002 MECHANICAL & PIPING (ONSITE)

SECTION 6.1 – PIPING INSTALLATION – AEM-PI-ITR-002	#
SECTION 6.2 – PERFORM ALL NON DESTRUCTIVE EXAMINATION – AEM-GE-LOG-005 / MISTRAS	#
SECTION 6.3 – PIPING TESTING AND CLEANING – AEM-PI-ITR-001	#
SECTION 6.4 – IDENTIFICATION OF PIPING – AEM-PI-ITR-002	#
SECTION 6.5 – INSTALL CONNECTING PIPING – AEM-PI-ITR-002	#
SECTION 6.6 – FIRE PROTECTION - VIKING	#

SECTION 7 – ITP-001 & ITP-002 FINAL TURNOVER

SECTION 7.1 – CONSTRUCTION COMPLETION – AEM-GE-ITR-003	#
SECTION 7.2 – FINAL ACCEPTANCE OF TURNOVER PACKAGE	#
SECTION 7.3 – DECLARATION OF COMPLETION – AEM-GE-ITR-004	#
SECTION 7.4 – AS-BUILT DRAWINGS	#
SECTION 7.5 – WELD MAP	#



AGNICO EAGLE

Vendor Document Status

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By: **JEAN-FRANCOIS TREMBLAY**

Date:

2017-06-09

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle

No.

6515-C-270-007-141-TES-0031 R: Sub002

DOCUMENT FOR INFORMATION



Contract title:
Contract number:
Promec Ref.:

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T



AGNICO EAGLE

Approved on :
Approved by:

Approval Signature

Inspection and Testing Plan

ITP # AEM-ITP-001
Area Rankin Inlet
System Pumping container

Discipline Mechanical
Piping
Structure

Updated on:
2017-06-06

Legend
H - Hold
W - Witness
I - Inspect
R - Review

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to Installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
1.0 GENERAL								
1.1	Inspection and Test Plan	Promec / CLIENT		H/R		R		Approved ITP
1.2	Document review (Acquire and review all applicable documentation)	Promec / CLIENT	Quality Plan	H/R		R		
1.3	Procedures Submitted and Approved (Hydrostatic/Pneumatic Testing, Pre- Commissioning, etc.)	Promec / CLIENT	Quality Plan	H/R		R		All Applicable Approved Procedures
1.4	Drawing Index (IFC) to Latest Revision	Promec	Quality Plan	I/R				
2.0 ITP SPECIFIC								
2.1	Non-Conformance Report & Log (Both CLIENT & Contractor Issued)	Promec / CLIENT	Quality Plan	H/R		R		AEM-GE-ITR-002 (Non-Conformance Report) ▲ AEM-GE-LOG-002 (Non-Conformance Log)
2.2	Weld Procedures Submitted and Approved Specification/Procedure (WPS)	Promec / CLIENT	Quality Plan	H/R		R		Approved Procedure
2.3	Welders Qualification Approved	Promec / CLIENT	Quality Plan	H/R		R		Welders qualifications records AEM-GE-ITR-005
2.4	Inspect Material/Equipment for Damages or Deficiencies	Promec	Quality Plan	I/R		R		(Inspection Deficiency Report) ▲ AEM-GE-LOG-004 (Inspection Deficiency Log)



Contract title:
Contract number:
Promec Ref.:



AGNICO EAGLE

Approved on :
Approved by:

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T

Approval Signature

Inspection and Testing Plan

ITP # AEM-ITP-001
Area Rankin Inlet
System Pumping container

Discipline Mechanical Piping Structure

Updated on:
2017-06-06

Legend
H - Hold
W - Witness
I - Inspect
R - Review

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
3.0 Preparation of the electrical and pumping station containers (Offsite)								
3.1	Dimensions of the container verification	Promec / CLIENT / Third-Party	IFC Drawings	I/R		I		AirMP Report
3.2	Insulation and cladding verification	Promec / CLIENT / Third-Party	IFC Drawings	I/R		I		AirMP Report
3.3	Doors verification	Promec / CLIENT / Third-Party	6515-C-270-007-SPT-001_R3 (Technical Specifications)	I/R		I		AirMP Report
3.4	Exterior paint verification	Promec / CLIENT / Third-Party	AirMP specifications	I/R		I		AirMP Report
4.0 Preparation of the DEF containers (Offsite)								
4.1	Fabrication of the DEF containers	Promec / CLIENT / Third-Party	P.D.McLaren specifications	I/R		I		P.D.McLaren Report



Contract title:
Contract number:
Promec Ref.:

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T



AGNICO EAGLE

Approved on :
Approved by :

Approval Signature

Inspection and Testing Plan

ITP # AEM-ITP-001
Area Rankin Inlet
System Pumping container

Discipline
Mechanical
Piping
Structure

Updated on:
2017-06-06

Legend
H - Hold
W - Witness
I - Inspect
R - Review

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria	Verification Point				Verification Document(s)
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
5.0	Mechanical & Piping (Offsite)							
5.1	Fabrication of piping spools	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure)	W/R		W/R		AEM-WE-ITR-001 (Daily Weld Report) AEM-GE-LOG-005 (Weld Log)
5.2	Painting of the piping spools (Safety Orange)	Promec / CLIENT / Third-Party	6515-GGD-022_R0 (Project Standard paint specifications) AEM-PI-PRO-003 (Piping Erection Procedure)	I/R		I/R		Third-Party Report AEM-PI-ITR-002 (Check List for Pipe Systems)
5.3	Pump Installation	Promec / CLIENT	AEM-ME-PRO-001 (Pump Installation Procedure)	H/R		H/R		AEM-ME-ITR-001 (Pump Alignment Report)
5.4	Piping installation	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure) CODES / STANDARDS B31.3	I/R		I/R		AEM-PI-ITR-002 (Check List for Pipe Systems)
5.5	Support fabrication and installation	Promec / CLIENT / Third-Party	IFC Drawings AEM-PI-PRO-003 (Piping Erection Procedure)	W/R		W/R		Third-Party Report AEM-PI-ITR-002 (Check List for Pipe Systems)
5.6	Perform all non-destructive examination required (NDE)	Promec / CLIENT / Third-Party	AEM-WE-PRO-002 (Non-Destructive Exam. Procedure) 5%, by ultrasound or penetrating liquid	W/R		W/R		Third-Party Report AEM-GE-LOG-005 (Weld Log)
5.7	Inspection Release prior to shipment	Promec / CLIENT	7.01_R0_Packing_Shipping_Instruct (Shipping requirements for AEM)	H/R				Partial History Docket



Contract title:
Contract number:
Promec Ref.:

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T



AGNICO EAGLE

Approved on :
Approved by:

Approval Signature

Inspection and Testing Plan

ITP # AEM-ITP-001
Area Rankin Inlet
System Pumping container

Discipline

Mechanical
Piping
Structure

Updated on:

2017-06-06

Legend

H - Hold
W - Witness
I - Inspect
R - Review

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to Installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
6.0	Mechanical & Piping (Onsite)							
6.1	Piping installation	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure) STANDARDS B31.3	I/R		I/R		AEM-PI-ITR-002 (Check List for Pipe Systems)
6.2	Perform all non-destructive examination required (NDE)	Promec / CLIENT / Third-Party	AEM-WE-PRO-002 (Non-Destructive Exam. Procedure) 5%, by ultrasound or penetrating liquid	W/R		W/R		Third-Party Report AEM-GE-LOG-005 (Weld Log)
6.3	Piping Testing & Cleaning	Promec / CLIENT	AEM-PI-PRO-001 (Hydrostatic/Pneumatic Test Procedure)	H/R		H/R		▲ AEM-PI-ITR-001 (Pressure Test Report)
6.4	Identification of piping (tagging)	Promec / CLIENT	6515-C-270-007-SPT-001_R3 (Technical Specifications) AEM-PI-PRO-003	I/R		I/R		AEM-PI-ITR-002 (Check List for Pipe Systems)
6.5	Install connecting piping	Promec / CLIENT	(Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure)	W/R		W/R		AEM-PI-ITR-002 (Check List for Pipe Systems)



Approved on :
Approved by:

Updated on:
2017-06-06

ITP #	AEM-ITP-001
Area	Rankin Inlet
System	Pumping container

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T

Approval Signature

Updated on:
2017-06-06

Legend

H - Hold
W - Witness
I - Inspect
R - Review

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria	Verification Point				Verification Document(s)
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
7.0	FINAL TURNOVER							
7.1	Construction Completion (Contractor Punchlist & Joint Walkdown Punchlist)	Promec / CLIENT	Quality Plan AEM-PI-PRO-002 (Pre-Commissioning Piping Procedure)	H/R		H/R		▲ AEM-GE-ITR-003 (Punchlist)
7.2	Final Acceptance of Turnover Package	Promec / CLIENT	Quality Plan	H/R		H/R		Signed ITP History Docket
7.3	Declaration of Completion	Promec	Quality Plan	H/R		H/R		AEM-GE-ITR-004 (Notice of Final Completion)
7.4	As-Built Drawings	Promec	Quality Plan	H/R		H/R		All Required As-Built Drawings
7.5	Weld Map	Promec	Quality Plan	H/R		H/R		All Required Weld Maps

PROMIEC's Representatives		CLIENT's Representative	
QA/QC	Project Manager		
Name	Name	Name	
Signature	Signature	Signature	Date



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By: **JEAN-FRANCOIS TREMBLAY** Date: **2017-06-09**

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No.

6515-C-270-007-141-TES-0032 R: Sub002

DOCUMENT FOR INFORMATION



Contract title:
Contract number:
Promec Ref.:

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T



AGNICO EAGLE

Approved on :
Approved by:

Approval Signature

ITP #
Area
System
Discipline

AEM-ITP-002
Rankin Inlet
Fuel farm
Mechanical
Piping
Structure

Updated on:
2017-06-06

Legend
H - Hold
W - Witness
I - Inspect
R - Review

Inspection and Testing Plan

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to Installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
1.0 GENERAL								
1.1	Inspection and Test Plan	Promec / CLIENT		H/R		R		Approved ITP
1.2	Document review (Acquire and review all applicable documentation)	Promec / CLIENT	Quality Plan	H/R		R		
1.3	Procedures Submitted and Approved (Hydrostatic/Pneumatic Testing, Pre-Commissioning, etc.)	Promec / CLIENT	Quality Plan	H/R		R		All Applicable Approved Procedures
1.4	Drawing Index (IFC) to Latest Revision	Promec	Quality Plan	I/R		R		VDRL
2.0 ITP SPECIFIC								
2.1	Non-Conformance Report & Log (Both CLIENT & Contractor Issued)	Promec / CLIENT	Quality Plan	H/R		H/R		AEM-GE-ITR-002 (Non-Conformance Report) ▲ AEM-GE-LOG-002 (Non-Conformance Log)
2.2	Weld Procedures Submitted and Approved Specification/Procedure (WPS)	Promec / CLIENT	Quality Plan	H/R		R		Approved Procedure
2.3	Welders Qualification Approved	Promec / CLIENT	Quality Plan	H/R		R		Welders Qualifications Records
2.4	Inspect Material/Equipment for Damages or Deficiencies	Promec	Quality Plan	I/R		R		AEM-GE-ITR-005 (Inspection Deficiency Report) ▲ AEM-GE-LOG-004 (Inspection Deficiency Log)
3.0 Fabrication (Offsite)								
3.1	Catwalks	Promec / CLIENT / Third-Party	IFC Drawings	W/R		W/R		Third-party-report
3.2	Steel fuel tanks	Promec / CLIENT / Third-Party	6515-C-270-007-SPT-001_R3 (Technical Specifications)	W/R		W/R		Third-party-report



Contract title:
Contract number:
Promec Ref.:



AGNICO EAGLE

Approved on :
Approved by:

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T

Approval Signature

Inspection and Testing Plan

ITP #
Area
System

AEM-ITP-002
Rankin Inlet
Fuel farm

Updated on:
2017-06-06

Legend

H - Hold
W - Witness
I - Inspect
R - Review

Discipline
Mechanical
Piping
Structure

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
4.0 Mechanical & Piping (Offsite)								
4,1	Fabrication of piping spools	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure) CODES / STANDARDS B31.3	W/R		W/R		AEM-WE-ITR-001 (Daily Weld Report) AEM-GE-LOG-005 (Weld Log)
4,2	Painting of the piping spools (Safety Orange)	Promec / CLIENT / Third-Party	6515-GGD-022_R0 (Project Standard paint specifications) AEM-PI-PRO-003 (Piping Erection Procedure)	I/R		H/R		Third-Party Report AEM-PI-ITR-002 (Check List for Pipe Systems)
4,3	Support fabrication	Promec / CLIENT / Third-Party	IFC Drawings AEM-PI-PRO-003 (Piping Erection Procedure)	W/R		W/R		Third-Party Report AEM-PI-ITR-002 (Check List for Pipe Systems)
4,4	Perform all non-destructive examination required (NDE)	Promec / CLIENT / Third-Party	AEM-WE-PRO-002 (Non-Destructive Exam. Procedure) 5% by ultrasound or penetrating liquid	W/R		W/R		Third-Party Report AEM-GE-LOG-005 (Weld Log)
4,5	Inspection Release prior to shipment	Promec / CLIENT	7.01_R0_Packing_Shipping_Instruct (Shipping requirements for AEM)	H/R		H/R		Partial History Docket



Contract title:
Contract number:
Promec Ref.:

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T



AGNICO EAGLE

Approved on :
Approved by:

Approval Signature

ITP #
Area
System
Discipline

AEM-ITP-002
Rankin Inlet
Fuel farm

Mechanical
Piping
Structure

Updated on:
2017-06-06

Legend

H - Hold
W - Witness
I - Inspect
R - Review

Inspection and Testing Plan

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point			Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client	
				H W I R	Initials & Date	H W I R	
5.0	Mechanical & Piping (Onsite)						
5.1	Installation of the tanks	Promec / CLIENT	AEM-ME-PRO-002 (Fuel Tank Installation Procedure)	W/R		W/R	AEM-ME-ITR-003 (Fuel Tank Checklist)
5.2	Installation of the catwalks	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure)	I/R		I/R	AEM-ME-ITR-004 Catwalks & Stairways Checklist
5.3	Support fabrication and installation	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure)	W/R		I	AEM-PI-ITR-002 (Check List for Pipe Systems)
5.4	Piping installation	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure) CODES / STANDARDS B31.3	I/R		I/R	AEM-PI-ITR-002 (Check List for Pipe Systems)
5.5	Perform all non-destructive examination required (NDE)	Promec / CLIENT / Third-Party	AEM-WE-PRO-002 (Non-Destructive Exam. Procedure) 5%, by ultrasound or penetrating liquid	W/R		W/R	Third-Party Report AEM-GE-LOG-005 (Weld Log)
5.6	Piping Testing & Cleaning	Promec / CLIENT	AEM-PI-PRO-001 (Hydrostatic/Pneumatic Test Procedure)	H/R		H/R	▲ AEM-PI-ITR-001 (Pressure Test Report)
5.7	Identification of piping (tagging)	Promec / CLIENT	6515-C-270-007-SPT-001_R3 (Technical Specifications)	I/R		I	AEM-PI-ITR-002 (Check List for Pipe Systems)



Contract title:
Contract number:
Promec Ref.:



AGNICO EAGLE

Approved on :
Approved by:

Approval Signature

Meliadine Fuel Tanks Piping Supply and Installation
6515-C-270-007
C22466T

ITP #
Area
System
Discipline

AEM-ITP-002
Rankin Inlet
Fuel farm

Mechanical
Piping
Structure

Updated on:
2017-06-06

Legend

H - Hold
W - Witness
I - Inspect
R - Review

Inspection and Testing Plan

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria	Verification Point				Verification Document(s)
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
6.0	FINAL TURNOVER							
6.1	Construction Completion (Contractor Punchlist & Joint Walkdown Punchlist)	Promec / CLIENT	Quality Plan AEM-PI-PRO-002 (Pre-Commissioning Piping Procedure)	H/R		H/R		▲ AEM-GE-ITR-003 (Punchlist)
6.2	Final Acceptance of Turnover Package	Promec / CLIENT	Quality Plan	H/R		H/R		Signed ITP History Docket
6.3	Declaration of Completion	Promec	Quality Plan	H/R		H/R		AEM-GE-ITR-004 (Notice of Final Completion)
6.4	As-Built Drawings	Promec	Quality Plan	H/R		H/R		All Required As-Built Drawings
6.5	Weld Map	Promec	Quality Plan	H/R		H/R		All Required Weld Maps

PROMEC's Representatives	CLIENT's Representative
QA/QC	
Name	Name
Signature	Signature
	Date



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revised as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By: **JEAN-FRANCOIS TREMBLAY**

Date: **2017-05-08**

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No.

6515-C-270-007-141-TES-0035 R: **Sub001**

DOCUMENT FOR INFORMATION



Agnico-Eagle Mines Ltd.
Contract no. 6515-C-270-007

Hydrostatic / Pneumatic Test Procedure for Piping
AEM-PI-PRO-001

Area No.: All

System No.: All

PROMEC Approvals

Prepared by: Stéphane Doré Signature:  Date: 2017-04-26

Verified by: Jérémy Duval Signature:  Date: 2017-04-26

Approved by: Éric Poulin Signature:  Date: 2017-04-26

CLIENT Approvals

Verified by: Rene Fillion Signature: Date: 2017-05-07

Approved by: Signature: Date:

Table of Contents

	<u>Page</u>
1. PURPOSE	3
2. CODES AND STANDARDS	3
3. SAFETY AND ENVIRONMENT MEASURES	3
3.1 SAFETY MEASURES DURING THE PREPARATION OF THE TEST	3
3.2 DISPOSAL OF TEST MEDIUM	3
3.2.1 Glycols Diluted with Water	4
3.2.2 Test Water Release Authorization	4
3.2.3 Liquid Disposal Documents	4
4. GENERAL	5
4.1 INTRODUCTION	5
4.2 APPLIED REGULATIONS AND STANDARDS	6
4.3 HYDROSTATIC/PNEUMATIC TEST PACKAGE	6
5. PREPARATION FOR THE PRESSURE TEST	6
5.1 SPRING SUPPORTS	6
5.2 WIRELESS COMMUNICATION	6
6. HYDROSTATIC/PNEUMATIC TEST PROCEDURE	6
6.1 SYSTEM INSPECTION	6
6.2 SYSTEM WATER FILLING, AIR VENTING, DRAINING AND FLUSHING	7
6.3 WATER REQUIREMENTS	7
6.4 INSPECTION OF THE PRESSURIZED SYSTEM	7
6.5 ACCEPTABILITY STANDARD	7
6.6 HYDROSTATIC/PNEUMATIC TEST PROCEDURE COMPLETION	8
7. WATER RELEASE COMPLETION	8
8. RESPONSIBILITIES	8
8.1 RESPONSIBILITIES AND DUTIES OF CONTRACTORS	8
8.2 SUPERVISOR OF THE HYDROSTATIC TEST PROCEDURE (CLIENT)	8
9. PNEUMATIC TEST	9

APPENDIX C – STATUS OF INSTRUMENTS DURING PRESSURE TEST

APPENDIX D – ALL APPLICABLE ITRs & LOGs

1. PURPOSE

This procedure provides the requirements for hydrostatic & Pneumatic pressing testing of piping system.

2. CODES AND STANDARDS

- ASME B31.1
- ASME B31.3 (CSA B 51-03)

3. SAFETY AND ENVIRONMENT MEASURES

Promec will set the organisation and implement the safety measures with the help of CLIENT's staff.

Moving proper containments, for the disposal of spilled hydrostatic fluids and any contaminated soil that results hydrostatic fluids.

All activities must be fully documented and provided to R&E.

3.1 Safety Measures during the Preparation of the Test

- Define a specific area for each pressure test.
- Make a list of authorized personnel that will have access to the area during the test.
- Advise other sub-contractors of the terms of tests and the forbidden works to be performed in the area of the test.
- Inspect temporary installations and equipment before conducting the tests to comply with current safety measures.
- Inspect and check temporary scaffolding and lights for inspection, if required.
- List all equipment that will be handled during filling, pressurizing and drainage of the system.
- Check gauge calibration list for measurement and control equipment. (Pressure test gauges shall be calibrated once every six months).
- Ensure that all the test fluids shall be stored and/or disposed of in a safe and acceptable manner.

3.2 Disposal of Test Medium

The release of hydrostatic test water in an amount of 1,000 m³, or more, requires a registration number from AENV as proof of authorization to release hydrostatic test water. Contact R&E at least one month prior to beginning testing so applications can be completed and a registration number received the following information is required for applications:

- Name, address, fax and phone numbers of the person responsible for the testing.
- Type of pipeline, storage tank or vessel.
- Legal land descriptions for the beginning and end of the pipeline section(s), storage tank or vessel to be tested.

- Total length of pipeline to be tested.
- Inside diameter of the pipeline (mm) to be tested.
- Total volume of hydrostatic test water to be used (m³).
- Source of the hydrostatic test water: groundwater, surface water, municipal, or other.
- Origin or name of source water.
- Anticipated date of withdrawal of source water.
- Location of release of test water (legal land description).
- Start and end dates for release.
- Volume of release (m³).
- Approximate rate of release(s) (m³/hr).
- Name and location of receptor: land, surface water, injection well, other.
- Additives used (MSDS sheet(s) must be included).
- A description of the treatment and mitigative methods used prior to and during release.
- A map, diagram, or air photo of the release area showing release location, receiving land, direction of receiving water flow (if applicable) and sampling locations (soil and water).

If there are any changes to the registration information after submission, R&E must be notified immediately. The application must be signed by the person responsible for the pipeline/ storage tank indicating that the testing will be done in accordance with AENV's Code of Practice.

3.2.1 GLYCOLS DILUTED WITH WATER

Glycols diluted with water may be used for hydrostatic testing, but must be properly managed so as not to spill, contaminate soils, or contaminate ground or surface waters and must be disposed off site in an environmentally safe manner. All activities must be fully documented.

3.2.2 TEST WATER RELEASE AUTHORIZATION

Upon completion of testing and prior to release, a representative grab sample of the hydrostatic test water must be obtained from the testing pipes and analyzed as specified in Appendix A – "Monitoring Requirements and Limits for Release to Land" and Appendix B – "Monitoring Requirements and Limits for Release to Receiving Water". Hydrostatic test water must not be released before to obtain R&E approval.

3.2.3 LIQUID DISPOSAL DOCUMENTS

The testing crew supervisor must compile the following information for each hydrostatic test:

- A schematic diagram and details of the monitoring and release operations, including monitoring points, holding system, conveyance system, hydrostatic test water release flow rate and area of receiving water.



Agnico-Eagle Mines Ltd.
Hydrostatic/Pneumatic Test Procedure for Piping

PRO Number : AEM-PI-PRO-001
Contract no. : C22466T



- Where the release is to receiving water, the name of the receiving water, the estimated rate of flow of the receiving water at the time of the release and photographs taken before, during and after release at the point of release and downstream of a distance of at least 100 meters from the point of release for flowing water.
- Photographs of the sampling points, holding system and conveyance system.
- Where released to land, photographs of the land taken 7 days after the release is complete.
- All analytical results obtained for the hydrostatic testing.
- All information must be retained for a minimum of 5 years after completion of the hydrostatic testing.

4. GENERAL

4.1 Introduction

As the line designation total this procedure describes the pressure tests that have to be achieved on the following systems:

CH: Chemicals
CRW: Cold Recycle Waters
CWR: Cooling water return
CWS: Cooling water supply
DW: Drinking water
FW: Fire water
IWR: Inhibited water return
HC: High pressure condensate
HRW: Hot recycle water
HS: High pressure steam
IWS: Inhibited water supply
LC: Low pressure condensate
LS: Low pressure steam
IA: Instrument Air
LLS: Low low pressure steam
MS: Medium pressure steam
UA: Utility air
UW: Utility water
WRW: Warm recycle water
DR: Drain
EQT: Equipment trim
PA: Plant air



Agnico-Eagle Mines Ltd.
Hydrostatic/Pneumatic Test Procedure for Piping

PRO Number : AEM-PI-PRO-001
Contract no. : C22466T



4.2 Applied Regulations and Standards

The pressure tests will be conducted according to standard ASME B 31.1, Article 137, and ASME B 31.3 (CSA B 51-03) - Pressure Test.

4.3 Hydrostatic/Pneumatic Test Package

The Pressure Test Package consists of:

- Piping Pressure Test Record.
- Copy of the Line Designation Table.
- A copy of the P & ID showing the lines involved.
- Isometrics drawings.
- Copy of the drawings gauges calibration sheet.
- All NDE approved.

The Pressure Test Package will be submitted to CLIENT's for review and approval to proceed prior to testing.

5. PREPARATION FOR THE PRESSURE TEST

5.1 Spring Supports

If necessary, the spring supports must be blocked before filling.

Promec will check that all pipe supports are entirely installed according to the drawings.

5.2 Wireless Communication

To ensure at all times that communications are constant between the operator of the pressurizing pump and the workers monitoring the control gauge on the highest location of the piping system installation, two ways radio communication shall be used.

6. HYDROSTATIC/PNEUMATIC TEST PROCEDURE

6.1 System Inspection

- Promec shall check pipe loop with all approved documentation:
 - NDT/PWHT.
 - Check that all specified bolts and gaskets are installed.
 - Check that all vents and drains are installed.
 - Check that all pressure connections are installed correctly.
 - Check for direction of flow through filters and strainers, traps, check valve, etc.
 - Check that all temporary pipe supports have been removed.
 - Check that all in-one valves installed are completely open and protected (secured against unauthorized closing).
 - Check that temporary spools have been installed.
 - Check test medium for conformity to requirement
 - Check pressure gauge calibration.



Agnico-Eagle Mines Ltd.

Hydrostatic/Pneumatic Test Procedure for Piping

PRO Number : AEM-PI-PRO-001
Contract no. : C22466T



AGNICO EAGLE

6.2 System Water Filling, Air Venting, Draining and Flushing

Considering that the water filling for the pressure test is done for the first time, it is necessary to flush the piping system by filling and draining. For this purpose, water from the fire hydrant will be used. If fire hydrants are not available, water shall be trucked in and pumped into the system.

Promec shall ensure that the water that flows out in the period of drainage does not contain any hazardous contaminant for the environment so it can be directly poured into the sewer. One complete fillings and flushes should be enough.

Air venting is accomplished with valves installed for this purpose on the highest locations of the tested systems.

Air venting is completed when water is flowing from the air venting valves in a continuous flow free of air bubbles.

Speckable, blind, blinds flanges, temporary pipe plug or caps will be installed at locations indicated on isometrics and/ or P & ID's drawings.

Place of nozzles for connection on pressurised pump, gauges and air venting valve are shown on schematics, which will be attached for each hydrostatic testing system. The form to be used will be developed with CLIENT.

6.3 Water Requirements

For hydrostatic test, the test fluid shall be clean filtered water that will not corrode or damage the system being tested.

Approval must be obtained from CLIENT if the test fluid is anything other than clean water.

6.4 Inspection of the Pressurized System

The hydrostatic test must be performed during at least 10 minutes.

Visual inspection is mandatory. In the case of a leakage, the inspector will visibly mark the area with paint marker.

6.5 Acceptability Standard

The pressure test procedure is considered successfully conducted when:

- The test pressure is reached and kept constant.
- No trace of cracks, leaks and changes in the shape of parts of the system have been observed during inspection.
- The verification of the written report is noted and approved by all participants witnessing the pressure test.



Agnico-Eagle Mines Ltd.
Hydrostatic/Pneumatic Test Procedure for Piping

PRO Number : AEM-PI-PRO-001
Contract no. : C22466T



6.6 Hydrostatic/Pneumatic Test Procedure Completion

A test record shall be prepared for each piping system tested and shall include the following:

- Date of test
- Identification of piping system tested
- Test fluid
- Test pressure
- Duration of test
- Test fluid temperature
- Ambient temperature
- Pressure gauge number
- Certification of results by examiner with name and signature.
- Approval by CLIENT

N.B.: For testing an austenitic stainless steel piping, checked that the chlorine is under than 50 ppm.

7. WATER RELEASE COMPLETION

When the hydrostatic test is completed, the water stay in the pipe or in a holding vessel until Promec obtains the authorization for releasing the testing fluid. After, we use a truck to transport the water to the release area or, if possible, a water disposal ditch is used.

8. RESPONSIBILITIES

8.1 Responsibilities and Duties of Contractors

Promec's working team shall be responsible for the quality of work and for the compliance of the test procedure. Complete activities shall be registered in the hydrostatic test procedures log book. During the hydrostatic test, Promec shall provide a working team to cover the following activities:

- Water filling and air venting of system under test.
- Pressurizing of system.
- Control of pressure at highest point of system.
- Drainage of system after testing.

8.2 Supervisor of the Hydrostatic Test Procedure (CLIENT)

The hydrostatic test supervisor shall be nominated by CLIENT and coordinate the work with all other participants.



Agnico-Eagle Mines Ltd.

Hydrostatic/Pneumatic Test Procedure for Piping

PRO Number : AEM-PI-PRO-001
Contract no. : C22466T



AGNICO EAGLE

9. PNEUMATIC TEST

Wherever a hydrostatic test cannot be performed, a pneumatic test should be carried out upon CLIENT's approval.



Agnico-Eagle Mines Ltd.
Hydrostatic/Pneumatic Test Procedure for Piping

PRO Number : AEM-PI-PRO-001
Contract no. : C22466T



Appendix C

STATUS OF INSTRUMENTS DURING PRESSURE TEST

STATUS OF INSTRUMENTS DURING PRESSURE TEST

Remove:

- Control Valves
- Flow Instruments-Rotameters (Do not force reverse flow)
- Flow Meters-positive displacement type
- Flow Switches-van type
- Orifice Plates (Install after hydrotesting and line flushing)
- Pressure Regulators
- PSV's, TSV's- 3/4" & 1 " screwed

Block and Vents:

- Analyzers
- Flow Instruments-D/P cell & bellow types
- Flow Meters – turbine type
- Flow Indicating Switches-bellows type
- Level Instruments-C/P cell & bellows type
- Pressure Gauges
- Pressure Instruments-all types
- Pressure Switches

Blind Off:

- PSV's (Test gauge may be used if one is furnished; Blinds not required on PSV outlets discharging into a system being tested at 103kPa (15 PSI) or less.)

Include in Test:

- Gauge glasses
- Level Instruments-displacer type (Do not overpressure. If in doubt, block and drain instead.)
- Level Switches-float type (Do not overpressure. If in doubt, block and drain instead.)

To avoid damage due to freezing, all instruments shall be protected. As a good practice it is recommended that instruments be drained and process lead lines blown out with air or nitrogen in preparation for cold weather and during cold weather.



Agnico-Eagle Mines Ltd.
Hydrostatic/Pneumatic Test Procedure for Piping

PRO Number : AEM-PI-PRO-001
Contract no. : C22466T



Appendix D

ALL APPLICABLE ITRs & LOGs



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By:

JEAN-FRANCOIS TREMBLAY

JG

Date:

2017-05-16

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No.

6515-C-270-007-141-TES-0036 R: Sub001

DOCUMENT FOR INFORMATION



Agnico-Eagle Mines Ltd.
Contract no. 6515-C-270-007

Pre-Commissioning Piping Procedure
AEM-PI-PRO-002

Area No.: All

System No.: All

PROMEC Approvals

Prepared by: Stéphane Doré Signature:  Date: 2017-04-26

Verified by: Jérémy Duval Signature:  Date: 2017-04-26

Approved by: Éric Poulin Signature:  Date: 2017-04-26

CLIENT Approvals

Verified by: _____ Signature: _____ Date: _____

Approved by: _____ Signature: _____ Date: _____

Table of Contents

	Page
1. SCOPE.....	3
2. "SYSTEMS" METHODOLOGY.....	3
2.1 SYSTEM DEFINITION.....	3
3. PRE-COMMISSIONING	3
3.1 MECHANICAL COMPLETION (MC).....	3
3.1.1 <i>Conformity Check</i>	3
3.1.2 <i>Energized tests</i>	3
3.1.3 <i>Flushing and cleaning</i>	4
4. PUNCH LIST	4
5. RESPONSIBILITY MATRIX.....	4

APPENDIX A – RESPONSIBILITY MATRIX

1. SCOPE

This procedure summarizes Promec activities to achieve a "Ready for Pre-commissioning" status.

2. "SYSTEMS" METHODOLOGY

The basic principle of the plant completion scheduling will be to define, prepare, carry out and report all pre-commissioning by system.

2.1 System Definition

The partition of the plant into systems is a key preparation activity that has a major impact on all aspects of completion operation: the system must be defined so as to be independent as possible, not too small, but of the manageable size and exactly adapted to the start-up sequence.

The partition takes place as early as possible in accordance with precise system boundaries, system sequences and system numbering defined by the client and reported on marked-up P & ID's Single Line Diagrams as support documents.

3. PRE-COMMISSIONING

3.1 Mechanical Completion (MC)

A walk-down and punch list will be completed by the client and Promec on each system as early as practical before the end of the MC.

If both parties are satisfied that the system is mechanically completed enough to go into the commissioning phase, all outstanding deficiencies are noted on the punch list, and handover documents are completed and signed.

3.1.1 CONFORMITY CHECK

Carried out on each item of equipment or component, such as pressure gauges, valves, vents and drains, safety vales, etc. to verify the condition of the equipment, the quality of the installation, the compliance with project drawings and specifications, manufacturer's instruction, safety rules, codes, standards and good practice. These activities are generally carried out in an "un-energized" state, like no pressure in the pipe.

3.1.2 ENERGIZED TESTS

These "energized" tests concern the pressure testing of piping. This pressure testing will need to be done using the approved Promec's Procedure.

3.1.3 FLUSHING AND CLEANING

Piping systems must be flushed or air blown to remove construction debris. Under special circumstances, the client's approval is required to combine the hydrostatic/pneumatic test with the flushing activities.

4. PUNCH LIST

While the construction checks and tests are being performed, all discrepancies, damaged or missing equipment, malfunctions, missing documents, etc. are recorded in the punch list, if the situation was not able to be corrected immediately.

5. RESPONSIBILITY MATRIX

The Completion Activities are now further defined in the following Appendix A - "Responsibility Matrix".

This matrix provides a useful list of the piping completion activities and it establishes to which category they belong pre-commissioning (de-energized) and pre-commissioning (under-pres).

Appendix A

RESPONSIBILITY MATRIX



Agnico-Eagle Mines Ltd.
Pre-Commissioning Piping Procedure

PRO Number : AEM-PI-PRO-002
Contract no. : C22466T



Responsibility Matrix	Contractor Responsibility	CLIENT Responsibility
LEGEND		
X = Contractor responsibility	X	
O = CLIENT responsibility		O
A = CLIENT approval hold point		A
W = CLIENT witness notification		W
R = CLIENT documentation review		R

CLIENT's APPROVAL HOLD POINT (A)

When Promec is ready to pre-commission any part of any system, which is identified as requiring CLIENT's approval, Promec shall duly notify CLIENT's representative, with 4 days written notification. Timely Review Meetings shall also be conducted between Promec's Pre-commissioning Manager and CLIENT's Commissioning Representative for the purpose of advising CLIENT on the specific Status/ Timing of all Pre-Commissioning Activities Requiring CLIENT's approval.

CLIENT WITNESS POINT (W)

When Promec is ready to pre-commission any part of any system, which is identified as requiring CLIENT witness, Promec shall duly notify CLIENT's Representative, with two days written notification. Timely review meetings shall also be conducted between Promec's QA/QC and CLIENT's Commissioning Representative for the purpose of advising CLIENT on the specific status/ timing of all pre-commissioning activities requiring CLIENT witness.

CLIENT DOCUMENTATION REVIEW (R)

When Promec has drafted the pre-commissioning procedures, descriptive and operating manuals, maintenance manuals, system schedules, and/or related final documentation etc. pertaining to pre-commissioning of any system, Promec shall formally issue via transmittal to CLIENT's Representative, for review & comment purposes. These documents must be received by CLIENT 14 days in advance of final issue.

NOTES:

CLIENT Signatures on Pre-commissioning Documentation

CLIENT's Representative in attendance will personally sign only for the relevant Pre-commissioning Documentation for which he/she approves, witnesses or reviews.

Functional Test Certificates & CLIENT Signatures

Upon completion of a functional test and proven that it has been successful when referring to the Contract requirements, CLIENT and Promec representatives will sign the test certificate.



Agnico-Eagle Mines Ltd.
Pre-Commissioning Piping Procedure

PRO Number : AEM-PI-PRO-002
 Contract no. : C22466T



Ready for Commissioning Standard				
PIPING	Pre-Com De-energized	Pre-Com Energized	Comm.	Start- Up
1) Issue Piping Flushing & Cleaning Procedures	XR			
2) Complete Vendor Package Piping Punch Lists	XA			
3) Maintain As-Built/ Red Line Mark-Ups of P&IDS	XA			
4) Remove all In-Line Instruments prior to Hydro-Testing/Flushing & Cleaning including CA/s, Check & Safety Valves	X			
5) Remove all temporary supports, protections, bracings, sea fastening stops that were installed to prevent equipment damage during shipping, storage and erection	X			
6) Install temporary spool pieces	X			
7) Check conditions of equipment, quality of installation, compliance with Project Drawings, Manufacturers instructions, safety rules, specifications, structural supports, and good practice prior to hydrotest	XA			
8) Hydrostatic test / Pneumatic test		X		
9) Set or check pipe anchors, guides, spring hangers and supports after hydrotest. Provide cold and hot setting data	XR			
10) Define, provide, install and remove all temporary blanks and flushing connections.	X			
11) Execute & Perform Piping Flushing & Cleaning/ Pickling/ Air Blows and Draining as per the Approved Procedures (Except Steam Blows)		XA		
12) Execute & Perform Critical Body & Seat Testing TSO Valves at Site of All ESD, BDV		XA		
13) Carry out piping water or air flushing operations		XA		
14) Drain all lines including low points	XA			
15) Provide and Install all Permanent Blinds, Spacers, & Spades as per P&ID's in open/closed position as specified by CLIENT	XW			
16) Disposal of Test Medium following Hydro-Testing/ Flushing & Cleaning	XW			
17) Remove as necessary and transport all safety valves to and from test facilities	XW			



Agnico-Eagle Mines Ltd.
Pre-Commissioning Piping Procedure

PRO Number : AEM-PI-PRO-002
 Contract no. : C22466T



Ready for Commissioning Standard				
PIPING	Pre-Com De-energized	Pre-Com Energized	Comm.	Start- Up
18) Test, set and tag all safety valves, then carry out safety valves final installation		XW		
19) Perform all Gross Leak Tests Tightness & Service Tests (above & under ground)		X		
20) Remove all Temporary Blinds	X			
21) Supply/ Install & Issue As-Installed Blind List	XR			
22) Compile & Issue RFC Handover Package per System	XR			
23) Alleviate any excess piping stresses that may be imposed on pipes, compressors or pump flanges	XA			
24) Check packing and packing materials and lubrication of valves; repack and lubricate if necessary	XW			
25) Install corrosion probes	XA			
26) Prepare Punch List	XR			



AGNICO EAGLE

Vendor Document Status

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By:

JEAN-FRANCOIS TREMBLAY

Date:

2017-06-09

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No.

6515-C-270-007-141-TES-0037 R: Sub002

DOCUMENT FOR INFORMATION



Table of Contents

	<u>Page</u>
1. PURPOSE.....	3
2. PREREQUISITE	3
3. CODES AND STANDARDS.....	3
4. FIELD FABRICATION.....	3
4.1 PIPING	3
4.2 INTERNAL MISALIGNMENT	4
4.3 FLANGES AND FITTINGS	4
4.4 REINFORCING PADS.....	4
4.5 PIPING VERIFIED AGAINST THE ISOMETRIC DRAWINGS	5
4.6 FABRICATION TOLERANCES	5
5. ERECTION AND INSTALLATION	5
5.1 ERECTION.....	5
5.2 INSTALLATION	5
5.2.1 General.....	5
5.2.2 Flange Bolting.....	5
5.2.3 Supports.....	6
5.2.4 Branch Connections.....	6
5.2.5 Cleanliness of Piping.....	6
5.2.6 Field Pressure Testing.....	6

APPENDIX A – ALL APPLICABLE ITRs & LOGs



**Agnico-Eagle Mines Ltd.
Piping Erection Procedure**

**PRO Number : AEM-PI-PRO-003
Contract no. : C22466T**



1. PURPOSE

The purpose of this procedure is to specify the requirements for erection, joining and installation of shop fabricated spools. It will ensure that the right piece of pipe is installed at the right location and complies with the codes, standards, and isometric drawings.

2. PREREQUISITE

The following measures shall be taken before starting works:

- All technical documents are available (latest version):
 - Isometric drawings.
 - Line lists.
 - General Arrangement drawings.
- No other work is achieved on the same place of work.
- Piping spools and piping equipment have been identified and inspected.
- Transportation equipment and lifting equipment are available.
- Tools, lifting equipment, levelling equipment, etc. are available and have been inspected.

3. CODES AND STANDARDS

n/a

4. FIELD FABRICATION

4.1 Piping

Fabricator shall shape or bevel the joints to be field welded.

Adjacent sections of longitudinal welded pipe that are joined by butt welding shall have the longitudinal weld seams positioned so that they are at least 30 degrees apart and above the horizontal centerline.

Wherever possible, Promec shall not position the longitudinal weld seam on the top or bottom of the line so that branch connections such as couplings and stub-ons are located on the seam.



Agnico-Eagle Mines Ltd. Piping Erection Procedure

**PRO Number : AEM-PI-PRO-003
Contract no. : C22466T**



4.2 Internal Misalignment

Internal misalignment criteria shall be governed by the following:

- Pipe-to-pipe or pipe-to-fitting NPS (Nominal Pipe Size) 24 and smaller: $\pm 1/16$ of an inch deviation.
- Pipe-to-pipe or pipe-to-fitting NPS 26 and larger: $\pm 1/8$ of an inch deviation.
- If the deviation factors are exceeded, one of the following procedures shall be used:
 - Rotate the pipe or fittings to reduce misalignment to the acceptable tolerances (before attempting any of the following methods).
 - Use spreaders or internal or external lineup clamps to correct moderate out-of round condition.
 - Backweld the root pass.
 - Taper the wall of the component internally, after obtaining approval from the client, to ensure wall thickness is not reduced below the minimum required by the code.

4.3 Flanges and Fittings

Flange bolt holes are to be oriented as follows, unless otherwise indicated on the piping drawings:

- Flange face vertical: bolt holes to straddle vertical centerline.
- Flange face horizontal: bolt holes to straddle north-south centerline.
- Orifice flanges shall be fabricated with the taps in the exact orientation shown on the piping drawings. The up and down stream sections of pipe to which the orifice flanges are attached may be standard mill run pipe, but each piece shall be a choice hand-selected piece, and the interior of the pipe shall be round, smooth, and free from blisters and scale; welds shall be grounded flush. Field welds shall be kept at a maximum distance from the face of the orifice.
- Where line taps and 'olets are required, first attach the connection fitting then, the hole for each line tap shall be drilled square to the axial centerline, clean, sharp, and free from burrs, wire edges, or other irregularities.
- Slip-on flanges shall be welded inside and outside. Refer to Figure 328.5.2B of ASME B31.3. The weld shall be applied so that the flange face shall be free of weld spatter and does not require refacing.

4.4 Reinforcing Pads

Reinforcing pads shall be installed only where called for on the piping drawing. Pad material shall be the same as the pipe material, unless otherwise authorized by the client. Drawing will specify size and pad thickness.



Agnico-Eagle Mines Ltd. Piping Erection Procedure

**PRO Number : AEM-PI-PRO-003
Contract no. : C22466T**



4.5 Piping verified against the isometric drawings

Check that the position of the piping satisfied the isometric drawings informations: level, horizontal and vertical measurement, etc.

4.6 Fabrication Tolerances

The fabrication tolerances for fabricated piping shall be in accordance with client's specifications and standards.

5. ERECTION AND INSTALLATION

5.1 Erection

The following equipment will be used at different steps during pipe erection works: slings, shackles, mechanical or hydraulic jacks, come-along, measuring tapes, laser tool, temporary supports, boom trucks, etc.

5.2 Installation

5.2.1 GENERAL

Except where shown otherwise on the drawings, piping shall conform to the following:

- Be run level and plumb.
- Be run on North-South and East-West axis.

Evaluation of piping installation works sequence:

- Preparation of pipe to be welded: bevels, cleanliness, etc.
- Mounting of spools at ground level.
- Evaluation of how to handle the spools.
- Lifting of spools to their final location.
- Welding or assembling of spools.
- Identification of the welds.
- Installation of temporary supports.
- Etc.

Interior cleaning of piping:

- Marine Line, cleaning will be perform by pigging.
- Diesel Line (fuel farm and pumping station), cleaning will be perform by air blowing.

5.2.2 FLANGE BOLTING

Use a logical sequence of bolt tightening to ensure even gasket compression, as indicated in ASME B16.5



Agnico-Eagle Mines Ltd. Piping Erection Procedure

**PRO Number : AEM-PI-PRO-003
Contract no. : C22466T**



Unless specified otherwise, provide a bolt stress of 30,000 psi minimum or 45,000 psi maximum using a lubricant on the bolt threads (Refer to AEM-PI-PRO-004 Flanges Bolting Procedure).

Prior to bolt-up, examine flange faces. Flange faces shall be in as-new condition, and shall be wiped clean of any debris, excess oil, grease, and dirt. Restore damaged flange faces to as-new condition. Do not perform weld repairs on flange faces or flanges.

Do not use washers or spacers to make up bolt length. Bolt lengths are specified to prevent oversizing.

5.2.3 SUPPORTS

Install supports as indicated on the drawings.

Install spring supports in compliance with Manufacturer's instructions; keep them blocked until after line closure and hydrotest. Adjust them in the installed position and check them when operating conditions are reached.

Install all required temporary supports for hydrostatic testing.

Welding of supports shall be as indicated on the drawings.

5.2.4 BRANCH CONNECTIONS

Take care in shaping the ends of branch nozzles, as well as holes burned into the pipe for branch connections, to ensure fit with suitable provision for weld metal and so that the branch connections do not project inside the pipes.

5.2.5 CLEANLINESS OF PIPING

Open-end and flange protection shall be used throughout installation. Protect open pipes at times when work on them is not actually taking place.

Inspect individual pipe sections, prefabricated spools, and pipeline items internally during installation, and remove any foreign matter before final welding or bolting.

Piping contiguous with special equipment, which requires cleaning to the equipment Manufacturer's procedure, shall be inspected by and have cleaning supervised by the Manufacturer's representative.

5.2.6 FIELD PRESSURE TESTING

Testing of installed piping systems shall be in accordance with the previously referenced standards. (Refer to AEM-PI-PRO-001 Hydrostatic-Pneumatic Test Procedure for Piping).



**Agnico-Eagle Mines Ltd.
Piping Erection Procedure**

PRO Number : AEM-PI-PRO-003
Contract no. : C22466T



AGNICO EAGLE

Appendix A

ALL APPLICABLE ITRs & LOGs



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By: **JEAN-FRANCOIS TREMBLAY**

Date: **2017-06-22**

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No.

6515-C-270-007-141-TES-0033 R: Sub002

DOCUMENT FOR INFORMATION



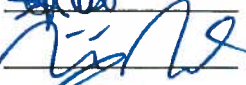
Agnico-Eagle Mines Ltd.
Contract no. 6515-C-270-007

Pump Installation Procedure
AEM-ME-PRO-001

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	<u>Stéphane Doré</u>	Signature:		Date:	<u>2017-04-26</u>
Verified by:	<u>Jérémy Duval</u>	Signature:		Date:	<u>2017-04-26</u>
Approved by:	<u>Éric Poulin</u>	Signature:		Date:	<u>2017-04-26</u>

CLIENT Approvals

Verified by:	_____	Signature:	_____	Date:	_____
Approved by:	_____	Signature:	_____	Date:	_____

Table of Contents

	<u>Page</u>
1. SCOPE.....	3
2. PREREQUISITE	3
3. VISUAL INSPECTION AND PREPARATION	3
4. LEVELLING AND FIXING	3
5. PUMP AUXILIARIES INSTALLATION	4
6. PIPING INSTALLATION	4
7. PRE-COMMISSIONING	4
8. FINAL ACCEPTANCE	4

APPENDIX A – ALL APPLICABLE ITRs & LOG



Agnico-Eagle Mines Ltd. Pump Installation Procedure

**PRO Number : AEM-ME-PRO-001
Contract no. : C22466T**



1. SCOPE

This procedure provides primary inspection and installation requirements pertaining to the pumps installation.

2. PREREQUISITE

- Relevant isometric drawings are up-to-date.
- Shop drawings, vendor manuals and technical specs up-to-date.
- Preservation and storage plan in place.
- Relevant team mobilized and ready.
- Pump Installation Procedure prepared and approved.
- Materials and tools available with calibration certificates and calibration log entries.

3. VISUAL INSPECTION AND PREPARATION

- Check equipment skid for any sign of damage prior to installation.
- Begin preservation program.
- Verify elevation and centerlines are correct and are clearly marked on foundation.
- Pump installation includes foundation preparation, confirmation of center lines and elevations, preliminary alignment, machinery distortion to be checked at piping bolt up, soft foot check, final alignment, flushing and recharging of lubricants (pump, gear-box, drivers and lube oil tanks) in accordance with the manufacturer's recommendations.
- Mark appropriately on the foundation the jacking screw pads and anchor bolts locations.
- Jack-up equipment skid with external jacks to allow jacking screws pads installation and secure it with temporary supports.
- Circular jackscrew leveling plate shall be made of 2-inche diameter, 12 mm thick, CSA grade 300 Structural Steel Plate, or equivalent type round stock material. The plate shall be clean and free of all scale and oil will be readjusted.

4. LEVELLING AND FIXING

- Install the jacking bolts in their respective screw location. Use the installed jacking bolts to bring the skid to the designed elevation. Ensure that pump nozzles are in proper orientation on the centerlines.
- Level the skid properly with an accurate leveling instrument using the equipment base machined faces. Align and adjust the pumps inlet and outlet flanges with the relevant pipe centerlines.
- After base plate leveling first alignment shall be performed. Soft-foot tolerance and coupling gaps shall be checked while the alignment is being confirmed. Coupling gap to be confirmed.



**Agnico-Eagle Mines Ltd.
Pump Installation Procedure**

PRO Number : AEM-ME-PRO-001
Contract no. : C22466T



5. PUMP AUXILIARIES INSTALLATION

- Lube oil console is brought to design elevation and centerlines by the use of stainless steel shims and external lifting.
- Lube oil piping is loosely installed to verify best position.
- Electrical and instrumentation will be done by those disciplines using the relevant ITP's and procedures.

6. PIPING INSTALLATION

- Piping will be cleaned and installed by the piping discipline.
- Interconnecting lube oil piping, cooling water, suction / discharge and steam piping will be subject to fit up measurements. Pipe strain measurements and adjustment shall be carried out.
- Seal flushing lines to be cleaned and connected.
- Distortion due to piping stress: If distortion exceeds allowances, piping alignment shall be re-worked and re-checked.
- All piping that is attached to the equipment for the purpose of field welding will be electrically isolated from the equipment by use of isolating kits.
- A final pipe strain check will be performed and recorded.

7. PRE-COMMISSIONING, (AEM STD TO APPLY, TO BE DETAILED BY AEM)

- If applicable, vendor presence requirements shall be requested prior to final work.
- Lube oil pipe strain to be witnessed
- Lube oil system to be flushed.
- Steam pipe blowing to be done by piping discipline.
- Running oil to be installed in lube oil console and pump bearing sumps.
- Motor bump test (uncoupled) to verify rotation will be performed on electric motor drive units.
- Final alignments with cold offsets to be witnessed.
- Pipe strain checks of steam lines and pump suction / discharge lines to be witnessed.
- All couplings and guards to be in place.
- Touch up painting will be completed.
- Mark in red on isometric drawing copy all final dimensions for as-built drawing preparation.

8. FINAL ACCEPTANCE, (AEM STD TO APPLY, TO BE DETAILED BY AEM)

- All inspection test records along with preservation records will be verified for handover to the turnover coordinator, along with relevant RFI's, NCR's and field trouble reports.
- A final punchlist will be cleared with no outstanding NCR's.
- Upon completion of work, final acceptance shall be obtained from CLIENT.



**Agnico-Eagle Mines Ltd.
Pump Installation Procedure**

PRO Number : AEM-ME-PRO-001
Contract no. : C22466T



AGNICO EAGLE

Appendix A

ALL APPLICABLE ITRs & LOGs



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY

Date: 2017-05-02

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No. 6515-C-270-007-141-TES-0034 R: Sub001

DOCUMENT FOR INFORMATION



Agnico-Eagle Mines Ltd.
Contract no. 6515-C-270-007

Fuel Tank Installation Procedure
AEM-ME-PRO-002

Area No.: All

System No.: All

PROMEC Approvals

Prepared by: Stéphane Doré Signature: [Signature] Date: 2017-04-26

Verified by: Jérémy Duval Signature: [Signature] Date: 2017-04-26

Approved by: Éric Poulin Signature: [Signature] Date: 2017-04-26

CLIENT Approvals

Verified by: _____ Signature: _____ Date: _____

Approved by: _____ Signature: _____ Date: _____

Table of Contents

	<u>Page</u>
1. SCOPE	3
2. PREREQUISITE.....	3
3. VISUAL INSPECTION AND PREPARATION.....	3
4. LEVELING AND FIXING	3
5. AUXILIARIES INSTALLATIONS & INSPECTION.....	3
6. PRE-COMMISSIONING.....	3
7. TOUCH-UP PAINTING	4
8. FINAL ACCEPTANCE.....	4

APPENDIX A – ALL APPLICABLE ITRs & LOGs



Agnico-Eagle Mines Ltd.
Fuel Tank Installation Procedure

PRO Number : AEM-ME-PRO-002
Contract no. : C22466T



1. SCOPE

- This procedure provides inspection steps and requirements pertaining to a fuel tank.
- Each package is composed of a single unit.

2. PREREQUISITE

- Relevant isometric drawings are up-to-date.
- Shop drawings, vendor's manual and technical specs up-to-date.
- Relevant team mobilized and ready.
- Pertaining material and tools are prepared and ready.

3. VISUAL INSPECTION AND PREPARATION

- Check equipment for any sign of damage prior to installation.
- Mark on the foundation center lines and elevation references.
- If required, clean the foundation and skid exposed surfaces using compressed air.

4. LEVELING AND FIXING

- Jack up the equipment skid using external jacks keeping the skid level up to design elevation and center lines.
- Level the skid properly with an accurate leveling instrument. Align and adjust vessels inlet and outlet flanges with the relevant pipe axes (see relevant isometric drawing).
- Leveling shims shall to be installed on both sides of each anchor bolt. Wherever the distance between adjacent anchor bolts exceed 800 mm, additional leveling pads shall be installed midway between the anchor bolts.

5. AUXILIARIES INSTALLATIONS & INSPECTION

- External-Interconnecting pipes to be installed. Promec piping ITP to be followed for piping gaskets, studs and flange bolt-up.
- Internal inspection and cleaning to be performed if required.
- Instrumentation installation and verification to be performed by Promec instrumentation team.
- Complete equipment closing record form.

6. PRE-COMMISSIONING

- Follow vendor's operation manual procedure.



Agnico-Eagle Mines Ltd.
Fuel Tank Installation Procedure

PRO Number : AEM-ME-PRO-002
Contract no. : C22466T



7. TOUCH-UP PAINTING

- Touch up painting shall be carried out on surfaces that have scratches or scrapes or other damages that have occurred during transportation and installation (paint is supplied by equipment vendor).

8. FINAL ACCEPTANCE

- All inspection and test records to be reviewed for completeness and securely filed for hand-over to turnover coordinator.
- Upon completion of works, final acceptance shall be obtained from the client.



Agnico-Eagle Mines Ltd.
Fuel Tank Installation Procedure

PRO Number : AEM-ME-PRO-002
Contract no. : C22466T



Appendix A

ALL APPLICABLE ITRs & LOGs



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY Date: 2017-05-02

Review and authorization to ~~fabricate~~ are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No. 6515-C-270-007-141-TES-0038 R: Sub001

DOCUMENT FOR INFORMATION



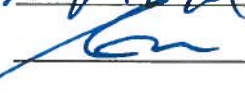
Agnico-Eagle Mines Ltd.
Contract no. 6515-C-270-007

Welding Control Procedure
AEM-WE-PRO-001

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	<u>Stéphane Doré</u>	Signature:		Date:	<u>2017-04-26</u>
Verified by:	<u>Jérémy Duval</u>	Signature:		Date:	<u>2017-04-26</u>
Approved by:	<u>Éric Poulin</u>	Signature:		Date:	<u>2017-04-26</u>

CLIENT Approvals

Verified by:	_____	Signature:	_____	Date:	_____
Approved by:	_____	Signature:	_____	Date:	_____

TABLE OF CONTENTS

	<u>Page</u>
1. SCOPE	3
2. REFERENCES	3
3. WELDING PROCEDURES	3
4. WELDER PERFORMANCE QUALIFICATION	3
5. WELDING MATERIAL CONTROL	4
6. FIT-UP AND WELDING	4
7. RADIOGRAPHIC INSPECTION	5

APPENDIX A – ALL APPLICABLE ITRs & LOGs

1. Scope

- This procedure describes the system for maintaining control of all production welding to the requirements of the applicable engineering specifications, codes and standards.

2. References

- ASME, Section IX - Welding and Brazing Qualifications
- ANSI, B-31.3 - Petroleum Refinery Piping
- ANSI, B-31.1 - Power Piping
- AWS, American Welding Society

3. Welding Procedures

- All welding performed on site will comply with applicable qualified welding procedures as specified in the Standard S40 05 13.
- Prime contractor's welders will be qualified to weld procedures in accordance with contract specifications. Prime contractor is responsible for certifying their own welders.
- Copies of the qualified welding procedures approved for that project shall be maintained on site by the Welding Foreman and Site Q/C Representative for reference and permanent retention.

4. Welder Performance Qualification

- It is the responsibility of the Site Q/C Representative to conduct or supervise the Welder Performance Qualification tests. At the discretion of the Corporate Quality Control Manager, a Welding Foreman or other qualified site supervisor may conduct these tests.
- Records attesting to the Welder Performance Qualification tests shall be generated and maintained by the Site Q/C Representative and the Welding Foreman.
- The Site Q/C Representative and the Welding Foreman shall maintain a complete listing of welders and welding operators employed. The form, Welder Qualification Log, is to be updated and reissued on a monthly basis and is to be distributed as required.

5. Welding Material Control

- The Site Q/C Representative and Welding Foreman shall make certain that the welding material used conforms to that of the welding procedure. No substitutions for the specified material will be made without written approval from the client.

6. Fit-Up and Welding

- Visual surveillance shall be performed to establish compliance to welding procedures. The inspection parameters listed below are recommended as guidelines
 - ✓ Inspect end preparation and joint configuration as established by applicable weld procedures and engineering specifications.
 - ✓ Inspect internal alignment and root opening prior to welding.
 - ✓ Check tack welds that are to be incorporated into the final weld, and be assured of proper blend grinding and absence of visual defects.
 - ✓ Check for proper welding materials and other essential variables of applicable weld procedures.
 - ✓ Check visually root pass for cracks, porosity, slag, fusion lines and quality workmanship (if required use LP).
 - ✓ Inspect completed welds for proper reinforcement. All welds should blend smoothly into the base metal and be free of cold lap or fusion at the toe.
 - ✓ Inspect weld for surface discontinuities such as undercut. Surface porosity is to be considered as an injurious defect and shall be repaired.
 - ✓ All repairs are to be made in accordance with approved procedures.
 - ✓ Each welder shall be responsible for stamping his assigned symbol immediately after completion of the weld. A smooth, flat spot shall be ground or filed on the reinforcement cap. The welder shall stamp his/hers identifying mark upon this spot.
- For ferrous material less than 1/4" (1/2" for nonferrous), the welder's symbol shall be recorded on the base metal by use of a halogen-free paint marker, or recorded on isometric drawings by the welding supervisor which shall be available to the Quality Control Inspector.



**Agnico-Eagle Mines Ltd.
Welding Control Procedure**

**PRO Number : AEM-WE-PRO-001
Contract no. : C22466T**



7. Radiographic Inspection

- The Site Q/C Representative or Welding Foreman will schedule radiographic inspections.
- Radiographic requirements shall be determined by the client standard to assure compliance to contract Codes and specifications.
- Welds requiring radiography will be flagged by a suitable means which will be consistent through contract completion.
- The Site Q/C Representative will complete the Radiographic Inspection Status Record, to indicate status of radio graphically-inspected welds. This form will be forwarded to appropriate supervision for distribution.
- In addition to the records generated under this procedure, marked-up isometric and orthographic drawings will be used as weld maps to indicate completion of radiographic inspection. This will allow a progressive record and give system status.



**Agnico-Eagle Mines Ltd.
Welding Control Procedure**

**PRO Number : AEM-WE-PRO-001
Contract no. : C22466T**



Appendix A

ALL APPLICABLE ITRs & LOGs



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY Date: 2017-05-02

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No. 6515-C-270-007-141-TES-0039 R: Sub001

DOCUMENT FOR INFORMATION



TABLE OF CONTENTS

	<u>Page</u>
1. Qualified Individual.....	3
2. Qualified Firm.....	3
3. NDE Purchasing Language.....	4

The Authorized Company for carrying out NDT and its personnel engaged in non-destructive examinations should be familiar with Promec's examination methods and the methods prescribed by the applicable drawings, specifications, codes and standards. The following list outlines the most commonly used examination methods on a Promec project:

- VT - Visual Testing
- LT - Leak Testing
- PT - Liquid Penetrant Testing
- RT - Radiographic Testing (X-ray)
- MT - Magnetic Particle Testing
- UT - Ultrasonic Testing

These methods as well as other methods may or may not, in whole or in part be sub-contracted to "qualified individuals" or firms to perform. The size and scope of the project dictates these conditions as well as the contract.

1. Qualified Individual

- The term "qualified individual" refers to the assigned person responsible for performing or reviewing the nondestructive examinations. All conflicts between the "qualified individual" and any other party will be resolved through the Project Manager and/or the Site Q/C Representative.

2. Qualified Firm

- The term "qualified firm" refers to a licensed NDE organization that performs NDE testing by subcontract for Promec. The qualified firms' contract must be governed by the contract between Promec and its client.
 - ✓ The selection of the NDE firm will be confirmed by the Corporate Quality Control Manager prior to awarding a contract.
 - ✓ The NDE firm will conduct its work in support of Promec.
 - ✓ All work performed by the NDE firm will meet the codes and specifications, quality and integrity.
 - ✓ The productivity and efficiency of the NDE firm shall be monitored to ensure that GSI and its client are receiving maximum value.

3. NDE Purchasing Language

- The following NDE Language shall be added to all Field PO's or subcontracts issued to a NDE firm. The following notes are to be used as a guide and the particular methods, codes and standards shall be verified prior to insertion into the P.O.
 - ✓ All work will be performed in accordance with ASME Section 5, Article 2 Radiographic Standards or ASME requirements.
 - ✓ All radiographic personnel shall be certified in accordance with CAN/CGSB-48.9712-2005 Latest Adopted Edition.
 - ✓ Prior to commencing any radiographic services, one copy of the following must be submitted to the Promec Quality Control Manager.
 - a) Liability Insurance Certificate. Retain copy and forward the original to the Site Project Manager.
 - b) State, Provincial and Federal Radiation Licenses (If Applicable).
 - c) All anticipated personnel certifications (For methods outlined in the contract).
 - d) Each radiographic technique procedure to be used (within the scope of the project).
 - ✓ Each crew shall have one (1) certified Level II Technician on site when working.
 - ✓ All subcontractor radiography shall be interpreted by the subcontractor for film quality and defects prior to surrendering the film and record sheets to the Promec Representative.
 - ✓ All record sheets shall be filled out completely, listing all weldment defects seen on film, whether the defects are acceptable or rejectable to codes or specifications, and shall be signed by the Subcontractor's Level II Technician.

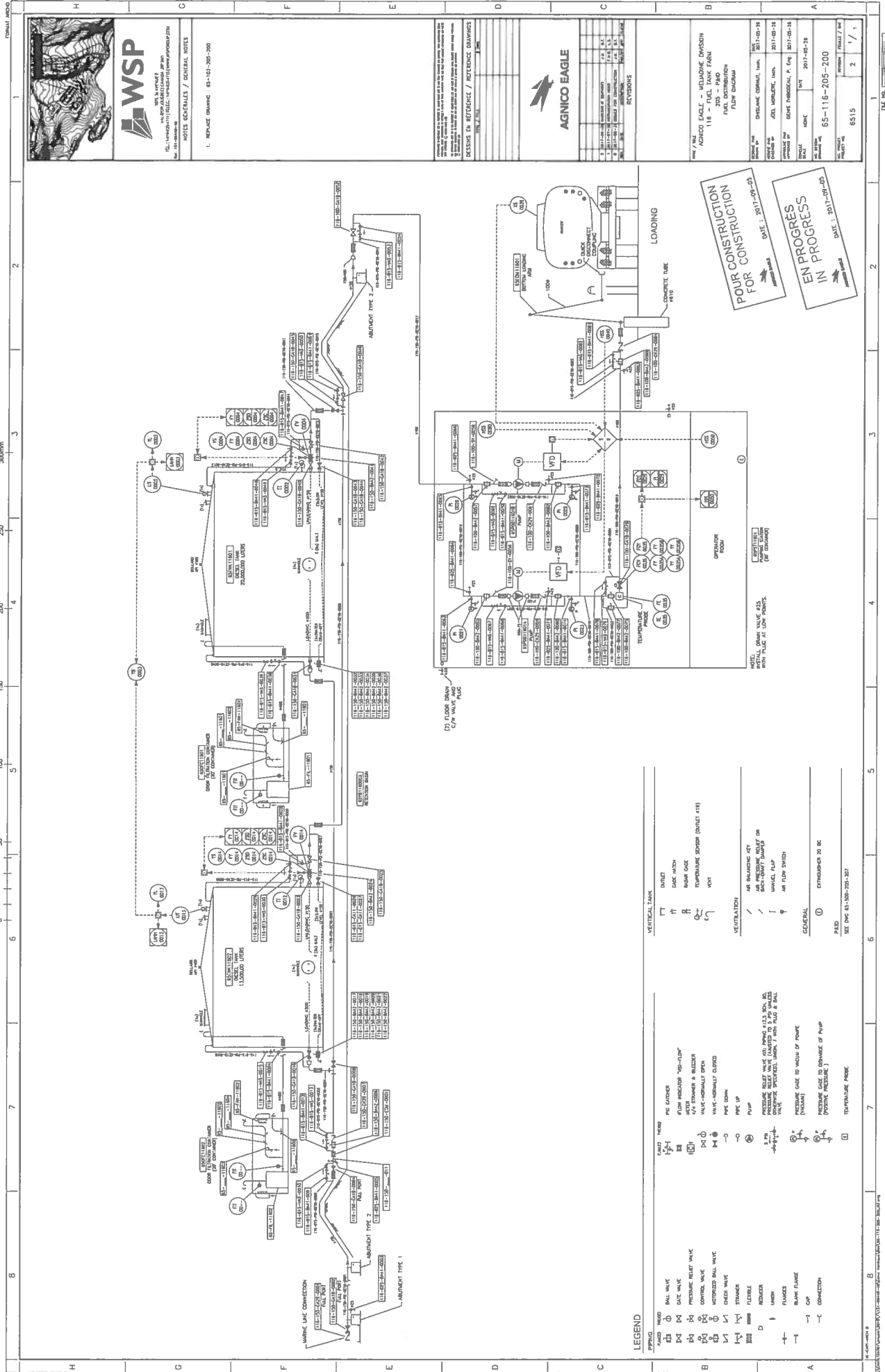
**TO BE VALIDATED
AT A LATER DATE**

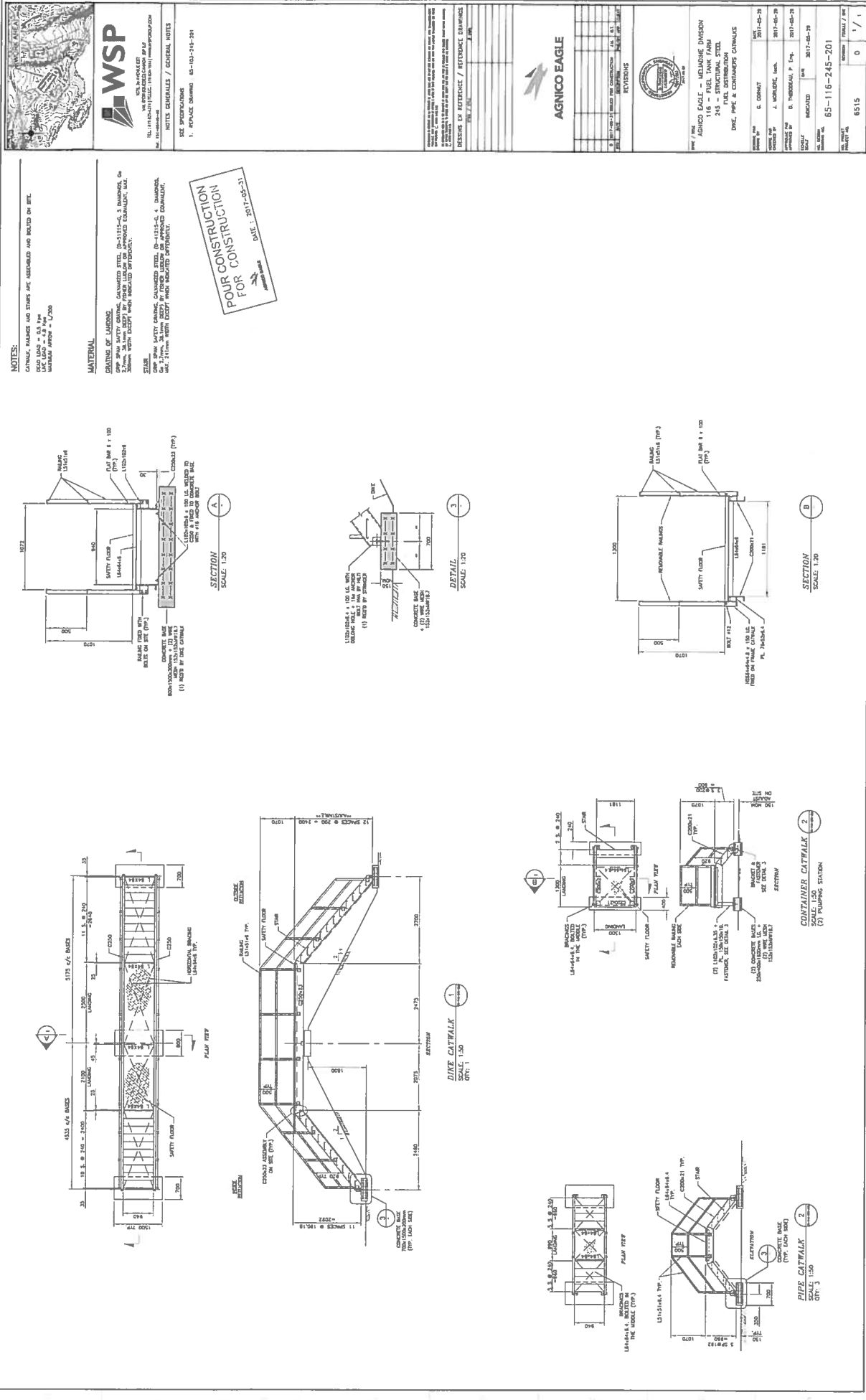
DRAWINGS INDEX (IFC) LATEST REVISION

DWG No.	Rev. No.	TITLE
65-116-205-200	2	116 - Fuel Tank Farm - 205 P&ID - Fuel Distribution - Flow Diagram
65-116-210-200	0	116 - Fuel Tank Farm - 210 General Arrangement - Fuel Distribution - Plan View
65-116-245-200	0	116 - Fuel Tank Farm - 245 - Structural Steel - Fuel Distribution - Modification & Additions at the Containers
65-116-245-201	0	116 - Fuel Tank Farm - 245 - Structural Steel - Fuel Distribution - Dike, Pipe & Containers Catwalks
65-116-260-200	0	116 - Fuel Tank Farm - 260 - Plateway - Tank #1 - 20 000 000 liters Ø43m x 14m H - General Arrangement
65-116-260-201	0	116 - Fuel Tank Farm - 260 - Plateway - Tank #2 - 13 500 000 liters Ø35.1m x 14m H - General Arrangement
65-116-260-202	0	116 - Fuel Tank Farm - 260 - Plateway - Tank #1 @ #6 - Details
65-116-270-200	0	116 - Fuel Tank Farm - 270 - Piping - Fuel Distribution - Details
65-116-270-201	0	116 - Fuel Tank Farm - 270 - Piping - Fuel Distribution - Details
65-ULT-116-MP-001	2	116 - Fuel Tank Farm - Fuel Distribution - General Arrangement - Plan View
65-ULT-116-MP-002	2	116 - Fuel Tank Farm - Fuel Distribution - General Arrangement - Plan View
65-ULT-116-MP-003	2	116 - Fuel Tank Farm - Fuel Distribution - General Arrangement - Plan View
116-100-PDI-CC10-0020_1 de 2	3	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from POD11601B to bottom Loading Arm 65EQM11601
116-100-PDI-CC10-0020_2 de 2	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from POD11601B to bottom Loading Arm 65EQM11601
116-100-PDI-CC10-0023_1 de 4	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from POD11601A to bottom Loading Arm 65EQM11601
116-100-PDI-CC10-0023_2 de 4	3	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from POD11601A to bottom Loading Arm 65EQM11601
116-100-PDI-CC10-0023_3 de 4	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from POD11601A to bottom Loading Arm 65EQM11601
116-100-PDI-CC10-0023_4 de 4	3	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from POD11601A to bottom Loading Arm 65EQM11601
116-150-PDI-CC10-0001_1 de 13	3	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_2 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_3 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_4 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_5 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_6 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_7 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_8 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_9 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_10 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_11 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_12 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0001_13 de 13	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601 & 65TNK11602
116-150-PDI-CC10-0004_1 de 3	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11601
116-150-PDI-CC10-0004_2 de 3	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11602
116-150-PDI-CC10-0004_3 de 3	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Marine Line to 65TNK11602
116-150-PDI-CC10-0006_1 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_2 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_3 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station

DRAWINGS INDEX (IFC) LATEST REVISION

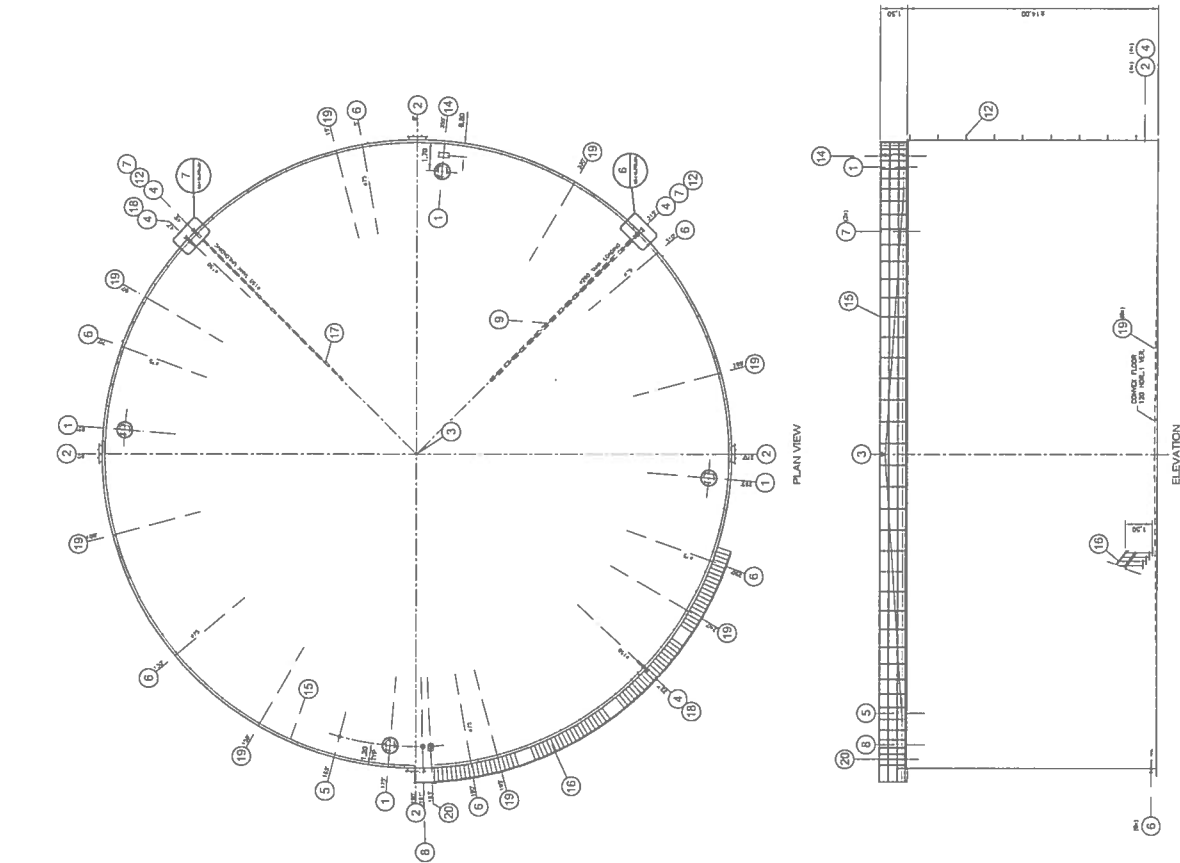
DWG No.	Rev. No.	TITLE
116-150-PDI-CC10-0006_4 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_5 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_6 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_7 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_8 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_9 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_10 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_11 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0006_12 de 12	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to Pumping Station
116-150-PDI-CC10-0007	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11602 to Pumping Station
116-150-PDI-CC10-0011_1 de 5	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 to Pumping Station
116-150-PDI-CC10-0011_2 de 5	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 to Pumping Station
116-150-PDI-CC10-0011_3 de 5	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 to Pumping Station
116-150-PDI-CC10-0011_4 de 5	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 to Pumping Station
116-150-PDI-CC10-0011_5 de 5	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 to Pumping Station
116-150-PDI-CC10-0012	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 to Pumping Station
116-150-PDI-CC10-0018_1 de 2	3	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to 65POD11601A
116-150-PDI-CC10-0018_2 de 2	2	116 - Fuel Tank Farm - Ranklin Inlet - Fabrication Isometric - Diesel from 65TNK11601 & 65TNK11602 to 65POD11601A





NEW TANK #2 - DIESEL	
DESCRIPTION	333.1m 1,300,000 LBS
REMARKS	
1. 4.00 ROOF MANHOLE	TO API 650 STANDARDS
2. 4.00 ROOF MANHOLE	TO API 650 STANDARDS
3. 1.00 PAINTED CLAYED CABLE SUPPORT	TO API 650 STANDARDS
4. 4.00 SHELL MANHOLE - 18" DIA	TO API 650 STANDARDS
5. 1.00 ROOF MANHOLE	TO API 650 STANDARDS
6. 4.00 WATER MANHOLE	TO API 650 STANDARDS
7. 2.00 ROOF PRESSURE VENT LINE CONNECTION	TO API 650 STANDARDS
8. 1.00 ROOF #150 GASE VENT	TO API 650 STANDARDS
9. 1.00 ROOF #150 GASE VENT	TO API 650 STANDARDS
10. 1.00 ROOF #150 GASE VENT	TO API 650 STANDARDS
11. 1.00 ROOF #150 GASE VENT	TO API 650 STANDARDS
12. 2.00 SHELL MANHOLE FOR PUMP & COOLER	TO API 650 STANDARDS
13. 1.00 ROOF INSPECTION FRAME	TO API 650 STANDARDS
14. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
15. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
16. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
17. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
18. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
19. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
20. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
21. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
22. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
23. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
24. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS
25. 1.00 ROOF GUARDRAIL	TO API 650 STANDARDS

NOTE:
1. DIMENSIONS OF TANKS / LOCATIONS / CONNECTIONS HAVE TO BE CONFIRMED WITH CLEARANCE OF
1000mm IN CLAVES IN BETWEEN TANKS AND ROOF MANHOLE CONNECTION



POUR CONSTRUCTION
DATE: 2017-05-31



10, 115, 120, 125, 130, 135, 140, 145, 150, 155, 160, 165, 170, 175, 180, 185, 190, 195, 200, 205, 210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 385, 390, 395, 400, 405, 410, 415, 420, 425, 430, 435, 440, 445, 450, 455, 460, 465, 470, 475, 480, 485, 490, 495, 500, 505, 510, 515, 520, 525, 530, 535, 540, 545, 550, 555, 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660, 665, 670, 675, 680, 685, 690, 695, 700, 705, 710, 715, 720, 725, 730, 735, 740, 745, 750, 755, 760, 765, 770, 775, 780, 785, 790, 795, 800, 805, 810, 815, 820, 825, 830, 835, 840, 845, 850, 855, 860, 865, 870, 875, 880, 885, 890, 895, 900, 905, 910, 915, 920, 925, 930, 935, 940, 945, 950, 955, 960, 965, 970, 975, 980, 985, 990, 995, 1000

NOTES: GENERAL / GENERAL NOTES
1. TANK DIMENSIONS AS SHOWN TO CENTERLINE UNLESS OTHERWISE NOTED
2. REPLACE DRAWING 65-116-250-201

DESIGNER: AGNICO EAGLE
CHECKED: AGNICO EAGLE
DATE: 2017-05-31

AGNICO EAGLE
118 - FUEL TANK FARM
250 - PLANTWORK
TANK #2 - 1,300,000 LBS
GENERAL ARRANGEMENT

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

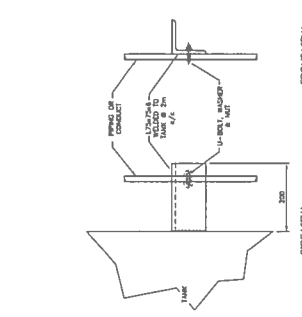
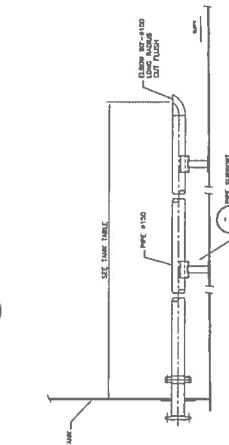
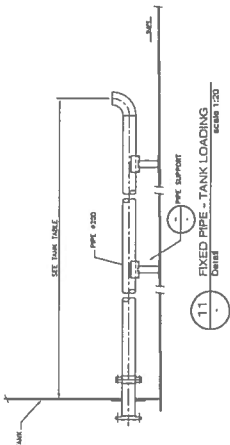
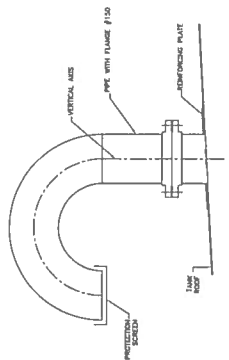
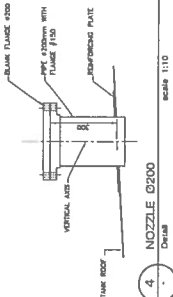
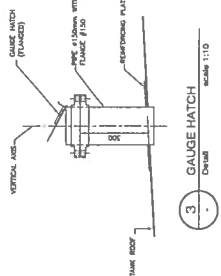
REVISIONS
1. 2017-05-31: REVISION FOR CONSTRUCTION
2. 2017-05-31: REVISION FOR CONSTRUCTION

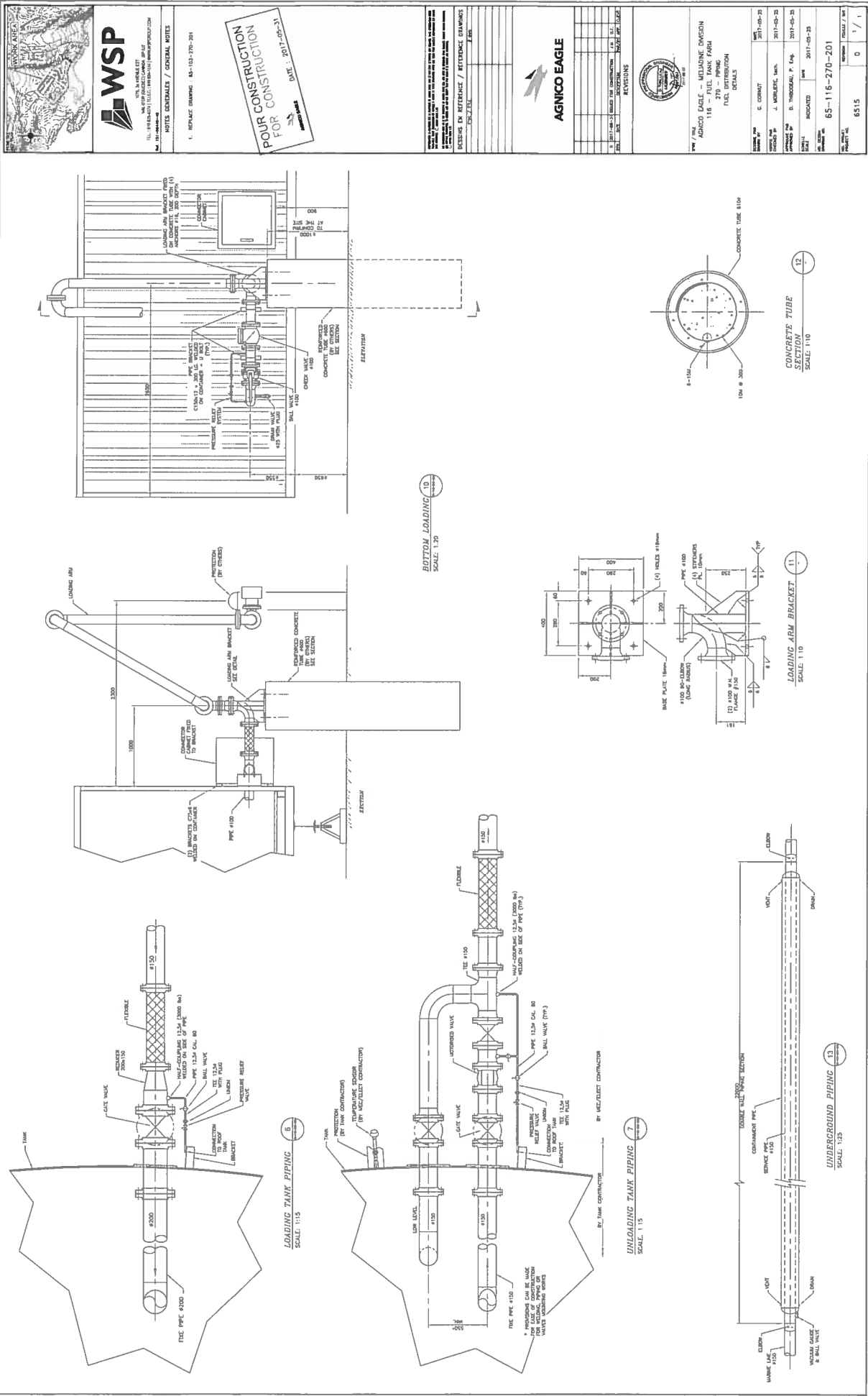


1. REPLACE DRAWING 65-116-260-202

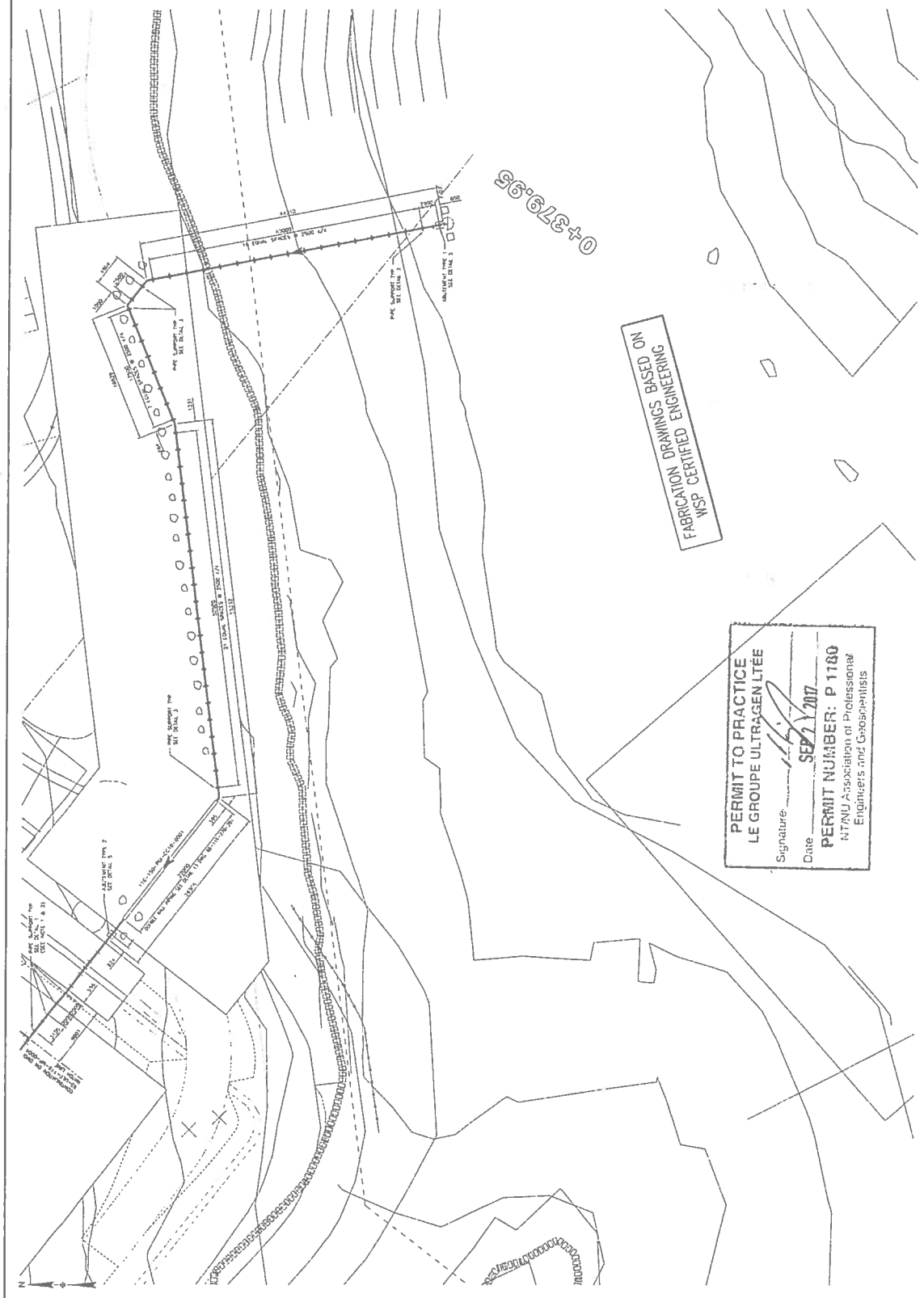
NOTES: GENERAL / GENERAL NOTES

DATE: 2017-05-31
POUR CONSTRUCTION FOR CONSTRUCTION





65-ULI-116-VF-001



FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LTÉE
Signature: *[Signature]*
Date: *SEP 27 2007*
PERMIT NUMBER: P 1180
NTNU Association of Professional
Engineers and Geoscientists



NOTES GENERAL / GENERAL NOTES

PROFESSIONAL ENGINEER
D. TRUONG
LICENSEE
2017/09/21

DESIGNS IN REFERENCE / REFERENCES

NO.	DESIGN	DATE
1	DESIGN OF ROAD WIDENING	2017/09/21
2	DESIGN OF ROAD CLOSURE	2017/09/21
3	DESIGN OF ROAD RECONSTRUCTION	2017/09/21



DESIGNER'S INFORMATION

NAME	AGNICO EAGLE
ADDRESS	1111 1111 1111
CITY	1111 1111
PROVINCE	1111 1111
COUNTRY	1111 1111



CLIENT'S INFORMATION

NAME	ULTRAGEN
ADDRESS	1111 1111 1111
CITY	1111 1111
PROVINCE	1111 1111
COUNTRY	1111 1111

PROJECT INFORMATION

PROJECT NAME	ROAD WIDENING
PROJECT NO.	1111 1111
PROJECT DATE	2017/09/21

REVISIONS

NO.	REVISION	DATE
1	1111 1111	2017/09/21

SCALE

SCALE	1:1111
-------	--------

65-ULI-116-VF-001



SEP 24 2014
P 1180
PROFESSIONAL
SUBMIT NUMBER: P 1180
DATE: 09/24/2014

FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

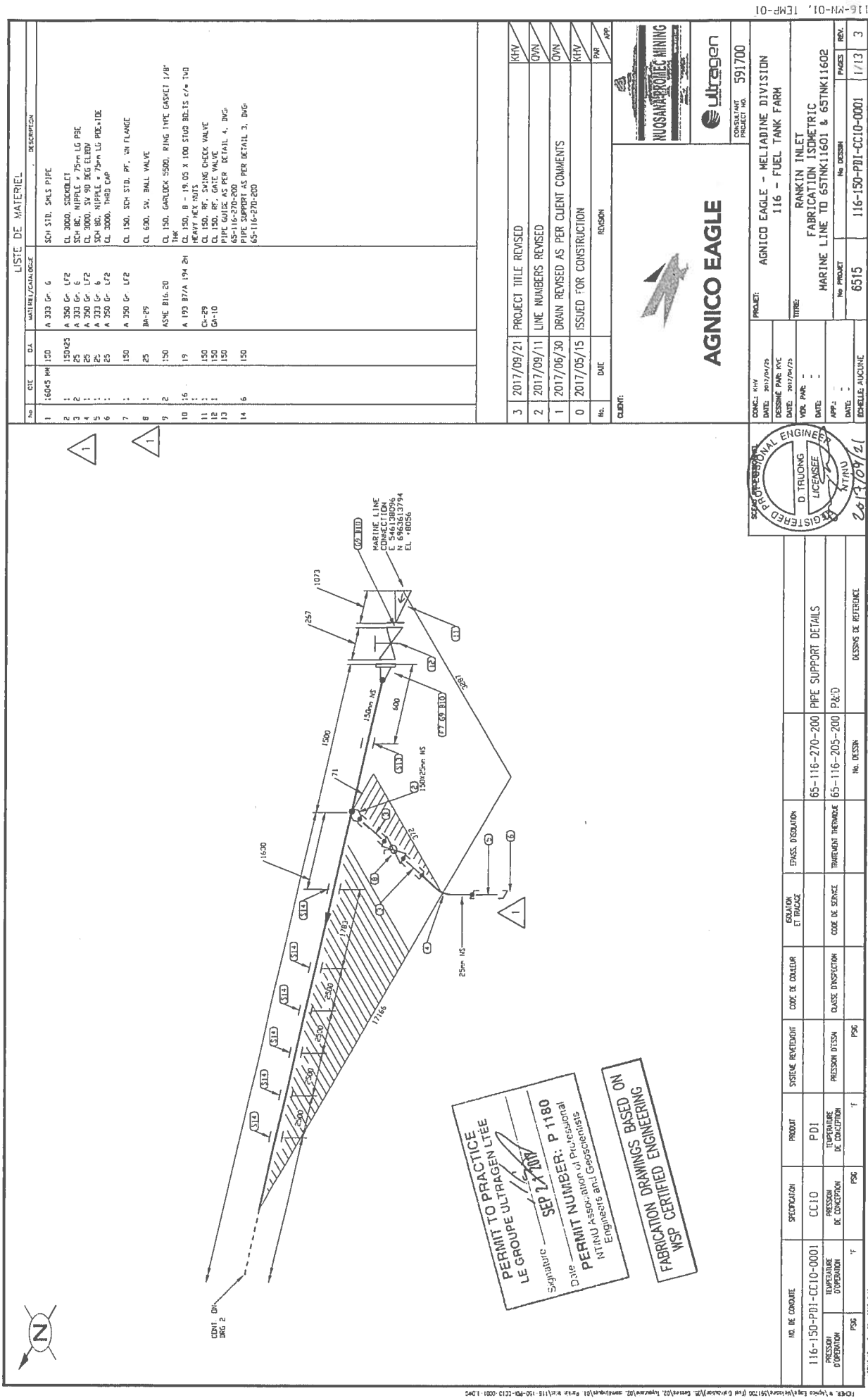
AGNICO EAGLE

DISCLOSURE IN REFERENCE / DISCLOSURE	DATE	NAME	ADDRESS	CITY	STATE	ZIP	PHONE
13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-							

NOTES GENERALES / GENERAL NOTES

THE U.S. GOVT. HAS COMPLETED THE FIRST PHASE OF A \$1.5-BILLION REPAIR PROGRAM FOR THE 100-MILE-TO-BE-BUILT NEW YORK STATE TOLLWAY. THE PROJECT IS BEING FINANCED BY THE U.S. GOVT. AND THE STATE OF NEW YORK. THE PROJECT IS BEING FINANCED BY THE U.S. GOVT. AND THE STATE OF NEW YORK.

© 2004 Blackwell Publishing Ltd *Journal of Internal Medicine* 255: 119–127



LISTE DE MATERIEL				
NO	QTE	DA	MATERIEL/CHASSISSE	DESCRIPTION
1	28178 MM	150	A 313 G- 6	SCM STD. SWMS PIPE
2	1	150	A 420 G- WPL6	SCM STD. BR LR 45 DEG ELBOW TRIM TO 41.16
3	13	150		PIPE SUPPORT AS PER DETAIL 3. DWG. 65-116-270-200

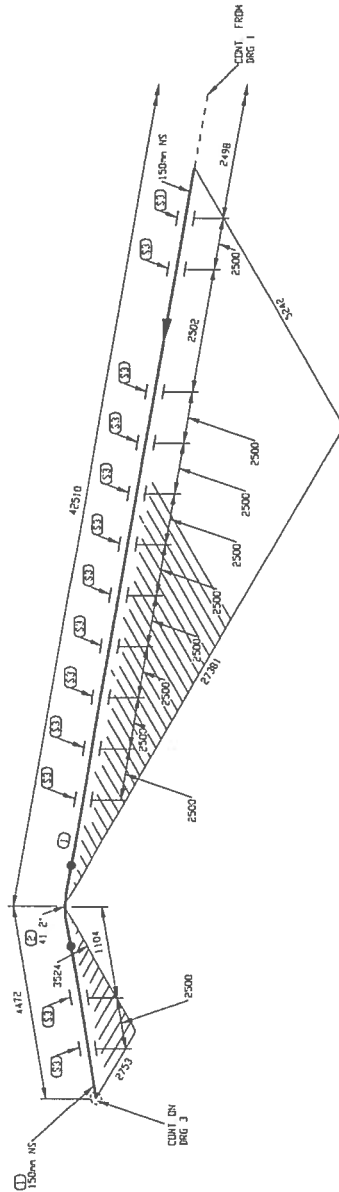
2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
NO.	DATE	REVISION	PAR COS



AGNICO EAGLE



COMC#	RHW	PROJECT:		CONSULTANT PROJECT NO.	591700
DATE:	26/09/23				
DESSING NAME	POL				
DATE:	28/09/23				
VOL	FAR	TITLE:			
DATE:	-				
APP:	-				
DATE:	-				
DESIGNEE	AUCHE				

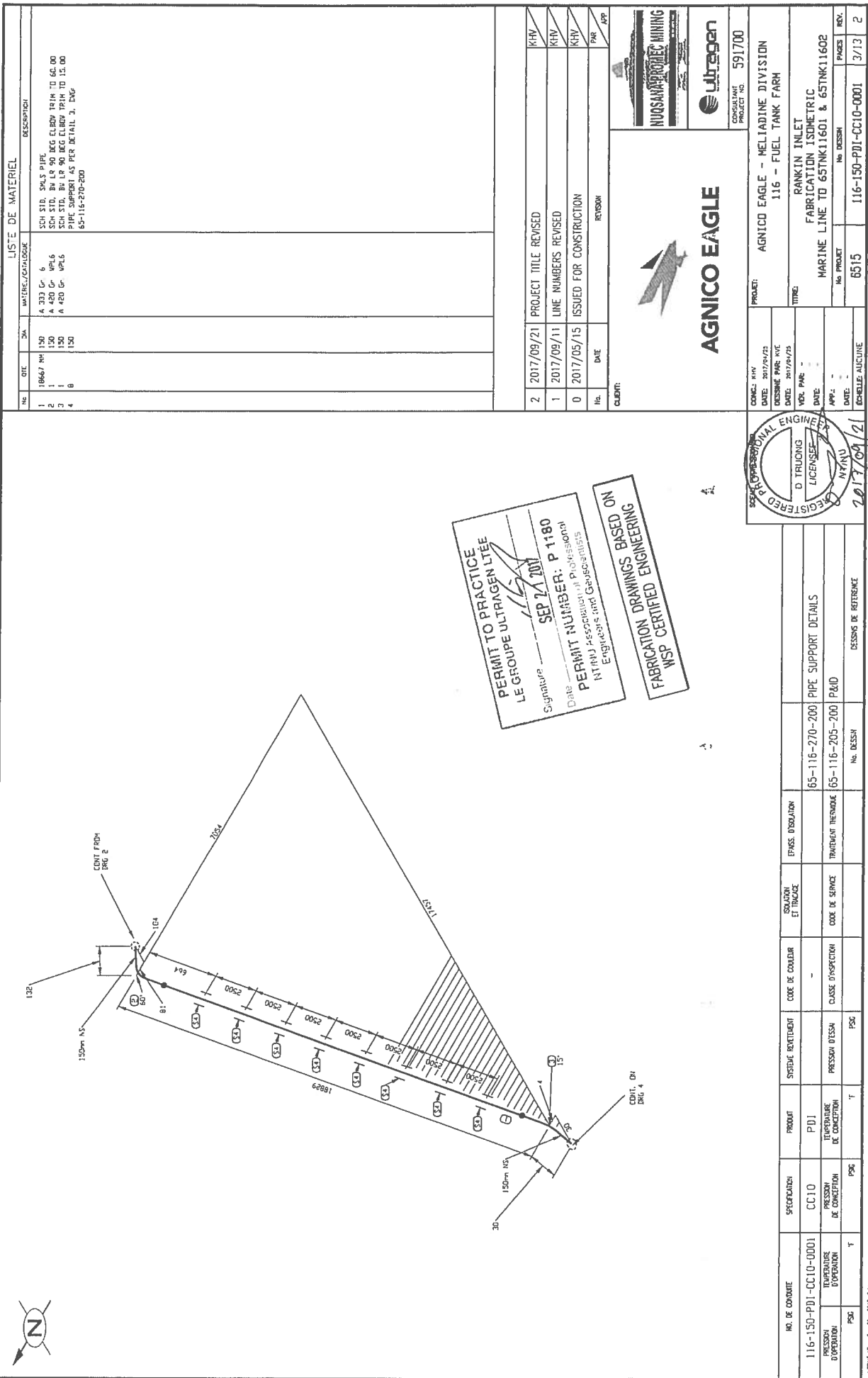


PERMIT TO PRACTICE
 LE GROUPE ULTRAGEN LITÉS
 SEP 1 1987
 Signature _____
 Date _____
 PERMIT NUMBER: P 1180
 INTRU Association of Professionals
 Engineers and Geoscientists

**FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING**



NO. DE CONDUITE	SPECIFICATION	PRODUIT	SYSTEME RETENTION	CODE DE CONDUITE	ISOLATION ET TRACÉ	ÉPAISS. D'ISOLATION
116-150-PJ1-CC10-0001	CC10	PJ1	-	-	-	65-116-270-200
RESSERVAISON D'OPERATION	TEMPERATURE D'OPERATION	PRESSION DE CONCEPTION	PRESSION TISSU	CLASSE D'INSPECTION	CODE DE SERVICE	PIPE SUPPORT DETAILS
PSC	T	PSC	PSC	PSC		65-116-205-200 P&ID
						DESIGNS DE REFERENCE
						NO. DESIGN



PERMIT TO PRACTICE
 LE GROUPE ULTRAGEN LEE
 Signature: *[Signature]*
 Date: SEP 21 2017
 PERMIT NUMBER: P 1180
 NTNU Association of Professional
 Engineers and Geoscientists
 FABRICATION DRAWINGS BASED ON
 WSP CERTIFIED ENGINEERING

LISTE DE MATERIEL			
NO	QTE	UN	MATERIE/CATALOGUE
1	18667	M	150
2	1		A 333 G- 6
3	1		A 420 G- WPL6
4	8		A 420 G- WPL6
			150
			65-116-270-200
			65-116-270-200

2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
NO	DATE	REVISION	PAR APP
CLIENT:			
AGNICO EAGLE			
PROJECT: AGNICO EAGLE - MELIADINE DIVISION			
116 - FUEL TANK FARM			
RANKIN INLET			
FABRICATION ISOMETRIC			
MARINE LINE TO 65TNK11601 & 65TNK11602			
No. PROJECT: 6515			
No. DESIGN: 116-150-PDI-CC10-0001			
No. DRAWING: 3/13			
No. SHEET: 2			

REGISTERED PROFESSIONAL ENGINEER
 D. TRUONG
 LICENSE # 116-150-PDI-CC10-0001
 2017/09/21

NO. DE COMMANDE	PROJET	SYSTEME DE RETENUE	CODE DE COMMANDE	ISOLATION ET TRACER	EPES D'ISOLATION	65-116-270-200	PIPE SUPPORT DETAILS
116-150-PDI-CC10-0001	PDI	TEMPERATURE DE CONCEPTION	CC10	CLASSE D'INSPECTION	CLASSE D'INSPECTION	65-116-205-200	P&ID
PRESSION D'OPERATION	PRESSION	PRESSION D'OPERATION	PRESSION	PRESSION D'OPERATION	PRESSION D'OPERATION	65-116-205-200	P&ID
PRESSION D'OPERATION	PRESSION	PRESSION D'OPERATION	PRESSION	PRESSION D'OPERATION	PRESSION D'OPERATION	65-116-205-200	P&ID
PRESSION D'OPERATION	PRESSION	PRESSION D'OPERATION	PRESSION	PRESSION D'OPERATION	PRESSION D'OPERATION	65-116-205-200	P&ID

CDT: DN
PAGE 3

CDT: DN
PAGE 3

PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LITEE

Signature: *[Signature]*
Date: **SEP 11 2017**
PERMIT NUMBER: P 1180
NTNU Association of Professional
Engineers and Geoscientists

FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

LISTE DE MATERIEL

No	QTE	DA	MATERIEL/CANALISSE	REMARKS
1	52507 PM 150	A 333 Gr. 6	SDH STD. SMLS PIPE	
2	273	150	PIPE SUPPORT AS PER DETAIL 3. Dwg. 65-116-270-200	

No	DATE	REVISION	APP.
2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV

AGNICO EAGLE

CLIENT: **NUSANTARACORP MINING**

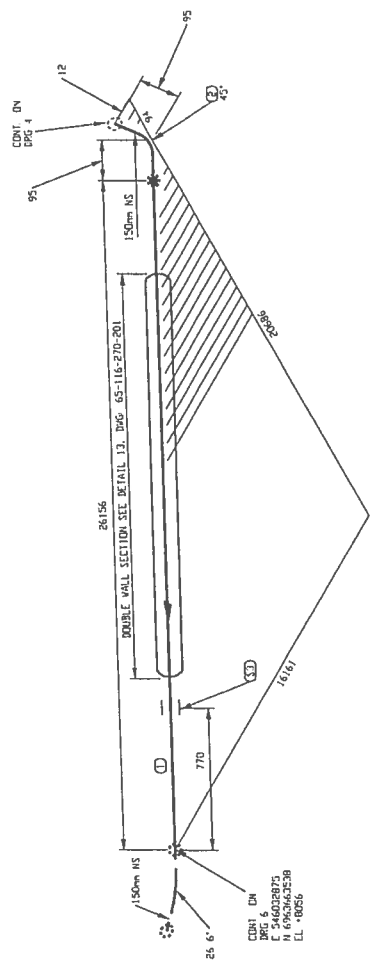
PROJECT NO: **591700**

CDT: DN
PAGE 3

CDT: DN
PAGE 3

LISTE DE MATERIEL

No	QTE	DA	MATERIEL/CATALOGUE	SECTION
1	25156	150	A 333 Gr. 6	SCM STD. SMLS PIPE
2	1	150	A 420 Gr. WPL6	SCM STD. 30 L9 45 DEG ELBOW
3	1	150		ADDITIONAL PIPE 2 AS PER DETAIL 5, DWG 65-116-270-200



PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LEE
Signature: *[Signature]*
Date: *SEP 11 2017*
PERMIT NUMBER: P 1180
NTNU Association of Professional
Engineers and Geoscientists
FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

No.	DATE	REVISION
2	2017/09/21	PROJECT TITLE REVISED
1	2017/09/11	LINE NUMBERS REVISED
0	2017/05/15	ISSUED FOR CONSTRUCTION

CLIENT:

AGNICO EAGLE

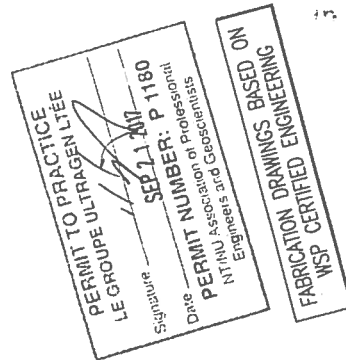
AGNICO EAGLE - MELIADINE DIVISION
116 - FUEL TANK FARM

RANKIN INLET
FABRICATION ISOMETRIC
MARINE LINE TO 65TNK11601 & 65TNK11602

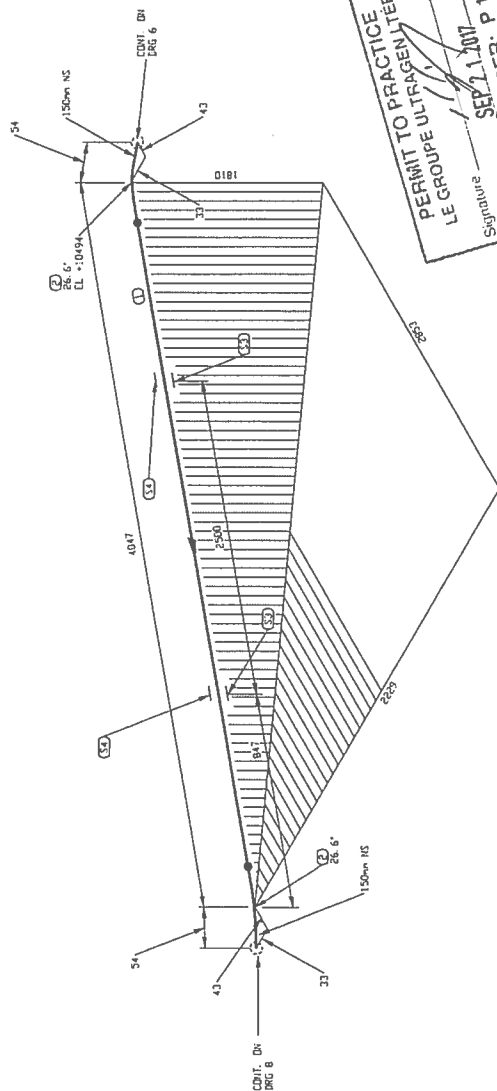
CONSULTANT
PROJECT NO. 591700

NO. DE COMMANDE	PROJET	SYSTEME PROTECTOR	CODE DE COULEUR	ESCALON ET TITRE	EMISS. D'ISOLATION	DESIGN DE REFERENCE
116-150-PDI-CC10-0001	PDI	PRESSION D'ISOLATION	-	CODE DE SERVICE	FRONTIERE THERMOQUE	65-116-270-200 PIPE SUPPORT DETAILS
PRESSION D'OPERATION	PRESSION D'OPERATION	PRESSION D'ISOLATION	CLASSE D'ISOLATION	CODE DE SERVICE	FRONTIERE THERMOQUE	65-116-205-200 P&ID
PRESSION D'OPERATION	PRESSION D'OPERATION	PRESSION D'ISOLATION	CLASSE D'ISOLATION	CODE DE SERVICE	FRONTIERE THERMOQUE	65-116-205-200 P&ID
PRESSION D'OPERATION	PRESSION D'OPERATION	PRESSION D'ISOLATION	CLASSE D'ISOLATION	CODE DE SERVICE	FRONTIERE THERMOQUE	65-116-205-200 P&ID

REGISTERED PROFESSIONAL ENGINEER
D. TRUONG
LICENSEE
2017/09/21



10-NW-911

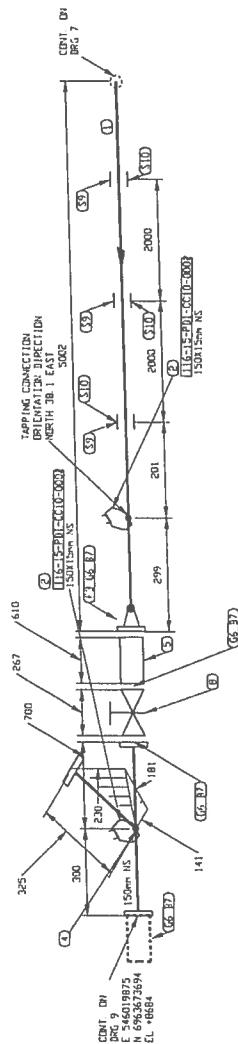


PERMIT TO PRACTICE
 LE GROUPE ULTRAGENTÉE
 Signature _____ SEP 11 2007
 Date _____
 PERMIT NUMBER: P 1180
 NTNU Association of Professional
 Engineers and Geoscientists
 DRAWINGS BASED ON
 OFFERING

**FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING**

[illegible]

Received 11: Sep 20, 2017, 2:44pm

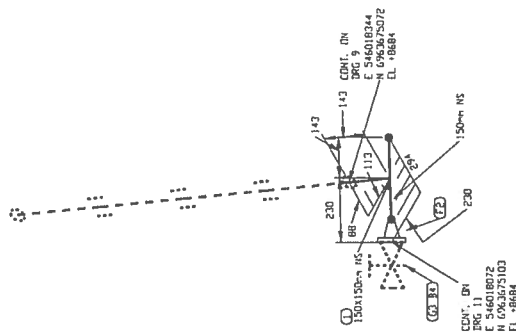


PERMIT TO PRACTICE
 LE GROUPE ULTRAGEN LTÉE
 Signature:  SEP 11 2011 P 1180
 Date: _____
 PERMIT NUMBER: _____
 INTRAKU Association of Professional
 Engineers and Geoscientists

NTNU Kongsberg
Engineers

FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

[illegible]



Signature _____ SEP 2 2007
 Date _____
 PERMIT NUMBER: P 1180
 NTNU Association of Professional
 Engineers and Geoscientists

Engineers
FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

[illegible]

LISTE DE MATERIEL				
No	Q.T.E	DA	MATERIEL / C.A. / LOGIQUE	DESCRIPTION
1	1	150X150	A 420 C.A. UPLS	SCN 310 BU STRAIGHT TEE
2	1	150	A 350 C.A. L72	CL 150, SCN 310, 8", 90° FLANGE
3	1	150	ASME B16.20	CL 150, GASKET, 5500, RING TYPE GASKET 1/8"
4	8	19	A 193 B7/A 194 2H	THK CL 150, 8 - 19.05 X 100 STUD BOLLTS C/A 150 HEAVY HEX NUTS

		 NUSANTAPROTEK MINING PT. (PUBLIK) Tbk. Jl. Raya Industri, Kawasan Industri Cikarang Barat, Kabupaten Cikarang, Jawa Barat 40132	
 Ultragen CONCRETE PROJECT NO.		CONCRETE PROJECT NO. 591700	
PROJECT:		AGNICO EAGLE - MELTADINE DIVISION 116 - FUEL TANK FARM	
TITLE:		RANKIN INLET FABRICATION ISOMETRIC MARINE LINE TO 65TNK11601 & 65TNK11602	
CONC. : CMV DATE: 2017/09/23 DESIGN: PNR, PVE DATE: 2017/09/23	NO. PROJECT 6515	NO. DESIGN 116-150-P01-C010-0001	PAGES 102/13
VPTR: PNR DATE: - APP: - DATE: -	PROJECT: ALPHATONE DATE: -		

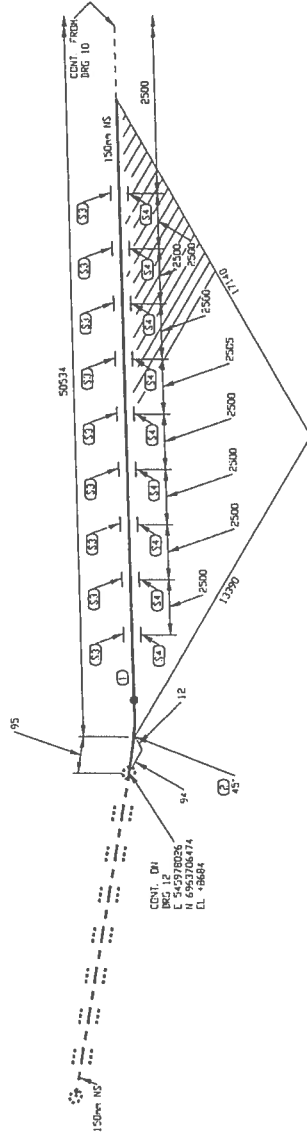
CLIENT: REVISION			
No.	DATE	REVISION	APP.
2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
			PAR

10. *Other* (if any):

APPROX 11 50 AM, 7/17 2:44 PM

LISTE DE MATERIEL

No	QTE	DA	MATERIEL/CHANGCODE	DESCRIPTION
1	21655	MM	A 333 Gr 6	SCH STD. SHLS PIPE
2	1	150	A 420 Gr DPL6	SCH STD. BU LR 45 DEG ELBOW
3	9	150		PIPE SUPPORT AS PER DETAIL 1, BNG
4	9	150		65-116-270-200
				PIPE SLEE. AS PER DETAIL 2, BNG
				65-116-270-200



PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LTYE
Signature *[Signature]*
Date *SEP 11 2017*
PERMIT NUMBER: P 1180
NTNU Association of Professional
Engineers and Geoscientists

FABRICATION DRAWINGS BASED ON
NSP CERTIFIED ENGINEERING

No.	DATE	REVISION
2	2017/09/21	PROJECT TITLE REVISED
1	2017/09/11	LINE NUMBERS REVISED
0	2017/05/15	ISSUED FOR CONSTRUCTION

CLIENT:

AGNICO EAGLE

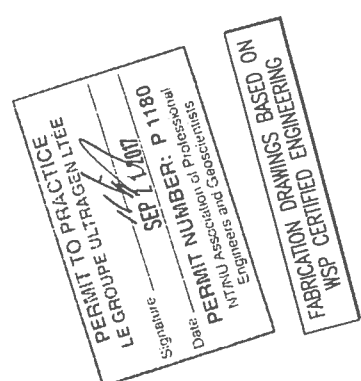
CONSULTANT
PROJECT NO. 591700

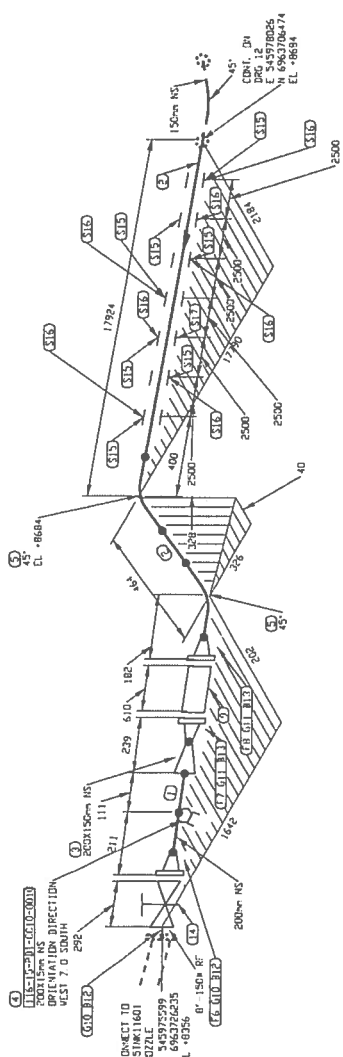
ULTRAGEN

SEAL PROFESSIONNEL
REGISTERED PROFESSIONAL ENGINEER
D. TRUONG
LICENSEE
2017/09/11

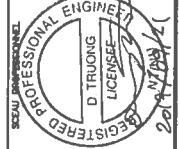
CONC.: 45V	DATE: 2017/09/11	PROJET: AGNICO EAGLE - MELTADINE DIVISION
DESSINE PAR: NVE	DATE: 2017/09/11	116 - FUEL TANK FARM
VOL. PAR: -	DATE: -	TITRE: RANKIN INLET
APP.: -	DATE: -	FABRICATION ISOMETRIC
DATE: -	DATE: -	MARINE LINE TO 65TNK11601 & 65TNK11602
No. PROJET: 6515	No. DESSIN: 116-150-PD1-CC10-0001	PAGES: 2

NO. DE CONDATE	SPÉCIFICATION	PROJET	SYSTÈME REVÊTEMENT	CODE DE COULEUR	ÉQUATION ET INTRUSION	ÉPAISSEUR D'ISOLATION	DESIGN DE RÉFÉRENCE
116-150-PD1-CC10-0001	CC10	PDI		-			
PRESSION D'OPERATION	PRESSION DE CONCEPTION	TEMPÉRATURE DE CONCEPTION	CLASSE D'ISOLATION	CODE DE SERVICE	TRAITEMENT THERMIQUE		
PSG	PSG	PSG	PSG				

[illegible]



PERMIT TO PRACTICE
LE GROUPE ULTRAGEN L'ÉE
Signature: *[Signature]*
Date: **SEP 21 2017** P 1180
NTRU Association of Professional
Engineers and Geoscientists
FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING



NO. DE COMMANDE		SPECIFICATION	PROJET	SISTÈME RECEVUEUR	CODE DE COULEUR	PROLATION ET TRACAGE	ÉPAISS. D'ISOLATION	DESSINS DE RÉFÉRENCE
116-150-PJ1-CC10-0001		CC10	PDI	TEMPERATURE DE CONCEPTION	-	CODE DE SERVICE	TRAITEMENT THERMIQUE	65-116-270-200 PIPE SUPPORT DETAILS
PRESSION D'OPERATION		PRESSION D'OPERATION	PRESSION D'OPERATION	PRESSION D'OPERATION	CLASSE D'INSPECTION	CODE DE SERVICE	TRAITEMENT THERMIQUE	65-116-205-200 P&ID
T		PSC	T	PSC				No. DESSIN

LISTE DE MATERIEL				DESCRIPTION
No	QTE	DA	MATRIEL/CATALOGUE	
1	222 M	200	A 333 Gr. 6	SCH STD. SMLS PIPE
2	18103 M	150	A 333 Gr. 6	SCH STD. SMLS PIPE
3	1	200	A 333 Gr. 6	SCH STD. SMLS PIPE
4	1	200	A 333 Gr. 6	SCH STD. SMLS PIPE
5	2	200	A 333 Gr. 6	SCH STD. SMLS PIPE
6	1	200	A 333 Gr. 6	SCH STD. SMLS PIPE
7	1	200	A 333 Gr. 6	SCH STD. SMLS PIPE
8	1	200	A 333 Gr. 6	SCH STD. SMLS PIPE
9	1	200	A 333 Gr. 6	SCH STD. SMLS PIPE
10	2	200	A 333 Gr. 6	SCH STD. SMLS PIPE
11	2	150	ASME B16.20	THK
12	16	19	A 193 B7/A 194 2H	CL 150, B - 19.05 x 110 STUD BOLT 2 c/a TWO
13	16	19	A 193 B7/A 194 2H	HEAVY HEX NUTS
14	1	200	GA-10	CL 150, B - 19.05 x 100 STUD BOLT 2 c/a TWO
15	7	150		HEAVY HEX NUTS
16	7	150		CL 150, B - 19.05 x 100 STUD BOLT 2 c/a TWO
17	1	150		PIPE SMOKE AS PER DETAIL 2, DNG

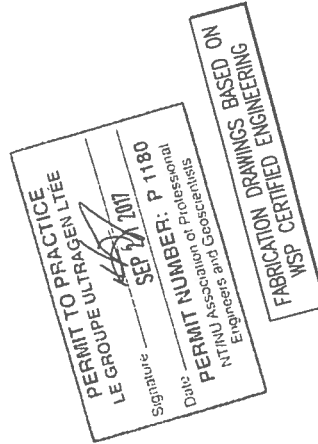
No	DATE	REVISION
2	2017/09/21	PROJECT TITLE REVISED
1	2017/09/11	LINC NUMBERS REVISED
0	2017/05/15	ISSUED FOR CONSTRUCTION

AGNICO EAGLE

CONSULTANT
PROJECT NO. 591700

COMPL. RVT		DATE: 2017/09/21
DESIGN. P&ID		DATE: 2017/09/21
VÉR. P&ID		DATE: -
APP. -		DATE: -
EXCELLES-AUCUNE		DATE: -

PROJET:		AGNICO EAGLE - MELLADINE DIVISION
TITRE:		116 - FUEL TANK FARM
MARQUE:		RANKIN INLET
FABRICATION ISOMETRIC		MARINE LINE TO 65TNC11601 & 65TNC11602
No. DESSIN		6515
No. PROJET		116-150-PJ1-CC10-0001
PAGES		13/13
REV.		2



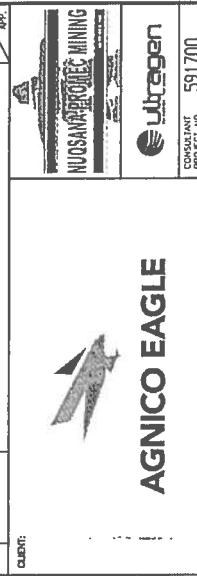
3	2017/09/21	PROJECT TITLE REVISED	ING
2	2017/09/11	LINE NUMBERS REVISED	KHV
1	2017/06/30	DRAIN REVISED AS PER CLIENT COMMENTS	QW
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
No.	DATE	REVISION	PAR
			100

PROJECT:	AGNICO EAGLE - MELIADINE DIVISION 116 - FUEL TANK FARM			
CONC. #	RANKIN INLET			
DATE:	FABRICATION ISOMETRIC			
DESIGNER NAME	DIESEL FROM 65PMD11601B TO BOTTLE LOADING ARM 65CMT1601			
DATE:				
VOL. PANE				
DATE:				
APP. 1	No. INQUIRY			
DATE:	No. DESIGN			
DATE:	6515			
DATE:	116-100-P01-CC10-0020			
DATE:	1/2			
DATE:	3			

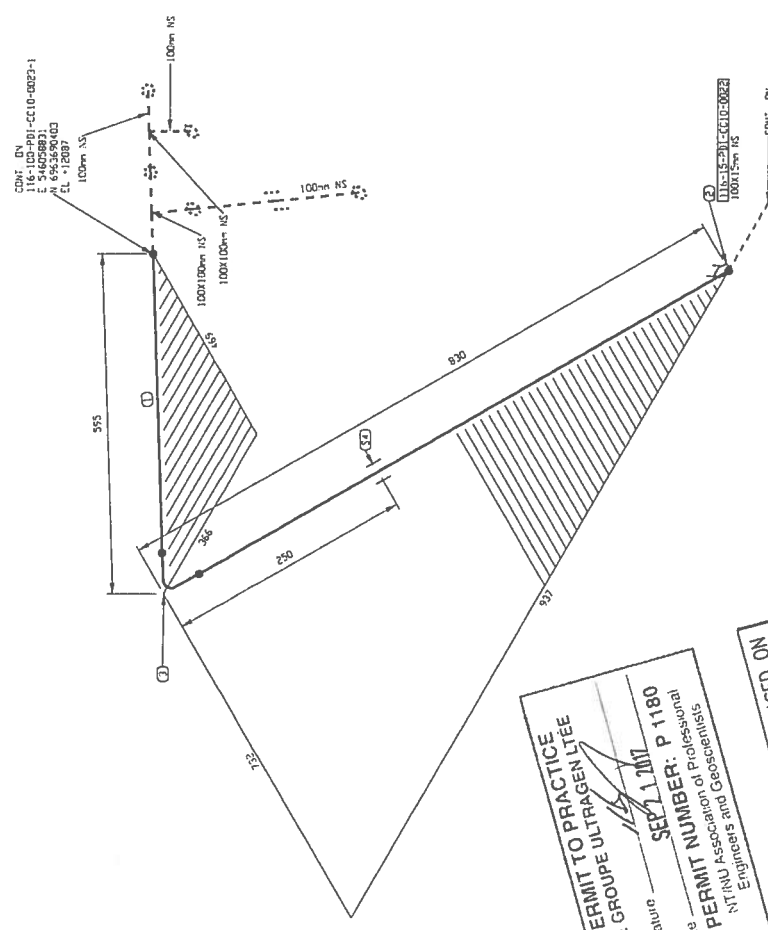
NO. DE COMPTRE		SPECIFICATION	PRODUIT	SYSTEME RENTREMENT	CODE DE COULEUR	ISOLATION ET TRAÇAGE	EMISS. D'ISOLATION	No. INCEIN	DESSINS DE RETOURNE
PPSO	T								
116-100-PPJ-CC10-0020		CC10	PJ1				55-116-270-200		PPE SUPPORT DETAILS
TEMPERATURE D'OPERATION		PRESSION DE CONCEPTION	TEMPERATURE DE CONCEPTION	PRESSION D'ESSAI	CLASSE D'INSPECTION	CODE DE SERVICE	TRAITEMENT THERMIQUE	65-116-205-200	P&ID
PPSO	T	PPSO	T	PPSO					

№	QTY	DA	UNIT/QUANTITE	DESCRIPTION
1	1480 PH	100	A 323 G- 6	SCH STD. SWKS PIPE
2	1	100x15	A 350 G- L72	CL 2000, 1"REDUCT
3	1	100	A 420 G- WPL6	SCH STD. B/L 90 DEG ELBOW
4	1	100		PIPE SUPPORT BY CONTRACTOR

2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
No.	DATE	REVISION	PREPARED BY



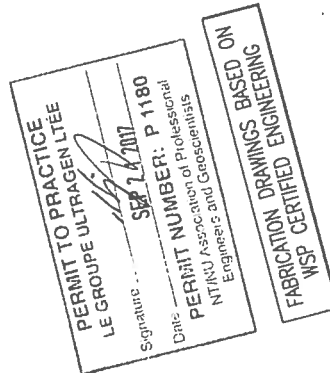
PROJECT:	AGNCTD EAGLE - HELIADINE DIVISION		PROJECT NO.	0272100
	116 - FUEL TANK FARM			
TITLE:	RANKIN INLET FABRICATION ISOMETRIC DIESEL FROM 6SPUD1601610 TO BOTTOM LOADING ARM 650M11601			
	NO. PROJECT	NO. DESIGN	PAGES	REV.
	6515	116-100-PD1-CC10-0020	2/2	2
DESIGNEE AUCINCHE				
CONC. DATE	APP. 2	DATES		
DATE	DATE	DATE		
DESIGNING FIRM DATE	DATE	DATE		
DATE	DATE	DATE		
DATE	DATE	DATE		



PERMIT TO PRACTICE
 LE GROUPE ULTRAGEN L'ÉE
 Signature _____ SEP 1 2017
 Date _____ PERMIT NUMBER: P 1180
 NTRU Association of Professional
 Engineers and Geoscientists

Engineers in
FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

NO. DE COMMANDE		SPECIFICATION	PRODUIT	SYSTEME RETENUE/NI	CODE DE COULEUR	SOLUTION ET TRAÇAGE	EPAISSE D'ISOLATION	PIPE SUPPORT DETAILS	Dessins de référence
PSOG	T								
116-100-PDI-CC-10-0020		CC 10	PDI				65-116-270-200	PIPE SUPPORT DETAILS	
PRESSION D'OPERATION		PRESSION DE CONCEPTION	TEMPERATURE DE CONCEPTION	PRESSION D'ESCOM	CLASSE D'INSPECTION		TRANSFERT THERMIQUE	PAID	
PSOG		PSOG	T	PSG			NO. D'ESSAI		



Support LE: Sep 20, 2017, 2:43pm

LISTE DE MATERIEL				DESCRIPTION
No	QTT	DL	MATERIEL/CATALOGUE	
1	1120 MH	100	A 323 Gr. 6	SCH STD, SMLS PIPE
2	1	100X100	A 420 Gr. UP6	SCH STD, BV STRAIGHT TEE
3	1	100X15	A 350 Gr. LF2	CL 3000, THRODLET
4	2	100	A 420 Gr. UP6	SCH STD, BV LR 90 DEG ELBOW
5	5	100	A 350 Gr. LF2	CL 150, SCH STD, RT, W/ FLANGE
6	1	100	ASME 11C-3	CL 150, SCH STD, RT, W/ FLANGE
7	5	100	ASME B16.20	CL 150, GASKET 5500, RING TYPE GASKET 1/8"
8	3	40	A 193 B7/A 194 2H	THK
9	2	100	BA-31	CL 150, 8 - 15.875 X 90 STUD BOLTS C/w 100
10	2	100		CL 150, RT. BALL VALVE
11	10	100		PIPE SUPPORT AS PER DETAIL 9, BNG
12	1	100		65-16-270-520

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE	REVISION	CLIENT
2	2017/09/21	PROJECT TITLE REVISED	 AGNICO EAGLE
1	2017/09/11	LINE NUMBERS REVISED	
0	2017/05/15	ISSUED FOR CONSTRUCTION	

No.	DATE
-----	------

[illegible]

100 *Journal of Management Inquiry* 16(1)

6

[illegible]

	Pipe	Pipe
	200	200

24

3

229

105

100mm

12

18

16

25

259

D'OSLAIN

MT INERWOOD

[illegible]

CLASS	CLASSNO	COO
1		

13

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

N

0
1

USED ON
ER

RE DEVELOPMENT

SANDY DITSON

PS

T. EN
1

SISTEM
PRESS

PRODUCT PD1
PURCHASE CONCEPTION

[illegible]

FABRIC
WS

e

PERMIT TO GROUP	ENGINEERING	DESIGNATION	CC10	PRESSURE CONDICTION	P
--------------------	-------------	-------------	------	------------------------	---

PERF
LEGG
Signature
Date
PB

C10-0000
SUPERGLUE
OPERATION

DE CONSULTA	10	10
	10	10

	NO. 1116-100	
	PRESSION OPERATION	

`f = f - A * g`

No	QTE	Qm	MATRIEL/CATALOGUE	DESCRIPTION
1	172 MM	100	A 323 Gr. 6	SCH STD. SMLS PIPE
2	1	1000/25	A 350 Gr. L72	CL 3000. STICKBOLT
3	1	1000/15	A 350 Gr. L72	CL 3000. STICKBOLT
4	3	100	A 423 Gr. WPL6	SCH STD. BW LR 90 DEG ELBOW
5	2	25	A 323 Gr. 6	SCH 80. NIPPLE x 75mm LG PEE
6	1	25	A 350 Gr. L72	CL 3000. 3/4 90 DEG ELBOW
7	1	25	A 323 Gr. 6	SCH 80. NIPPLE x 75mm LG PEE-ICE
8	1	25	A 350 Gr. L72	CL 3000. 1/2 90 DEG ELBOW
9	6	100	A 350 Gr. L72	CL 150. SCH STD. RT. UN FLANGE
10	1	25	3A-29	CL 600. 3/4. BALL VALVE
11	1	100	ASAC B16.20	CL 150. FLEXIBLE (FLECONICS)
12	6	100	193 B7/A 194 2H	CL 150. GARDLOCK 3500. RING TYPE GASKET : /8"
13	48	16	CL-29	CL 150. 8 - 15.875 X 90 STUD BOLTS C/A 1/40
14	1	100	CL-29	CL 150. RT. SWING CHECK VALVE
15	1	100	CL-29	PIPE BRACKET C150-12-300 WELDED TO CONTAINER C/A U-BOLT
16	1	100	CL-29	LOADING ARM BRACKET AS PER DETAIL 11. DWG 65-116-270-201

No.	DATE	REVISION
3	2017/09/21	PROJECT TITLE REVISED
2	2017/09/11	LINE NUMBERS REVISED
1	2017/06/30	DRAWN REVISED AS PER CLIENT COMMENTS
0	2017/05/15	ISSUED FOR CONSTRUCTION
No.	DATE	REVISION
1		
2		
3		



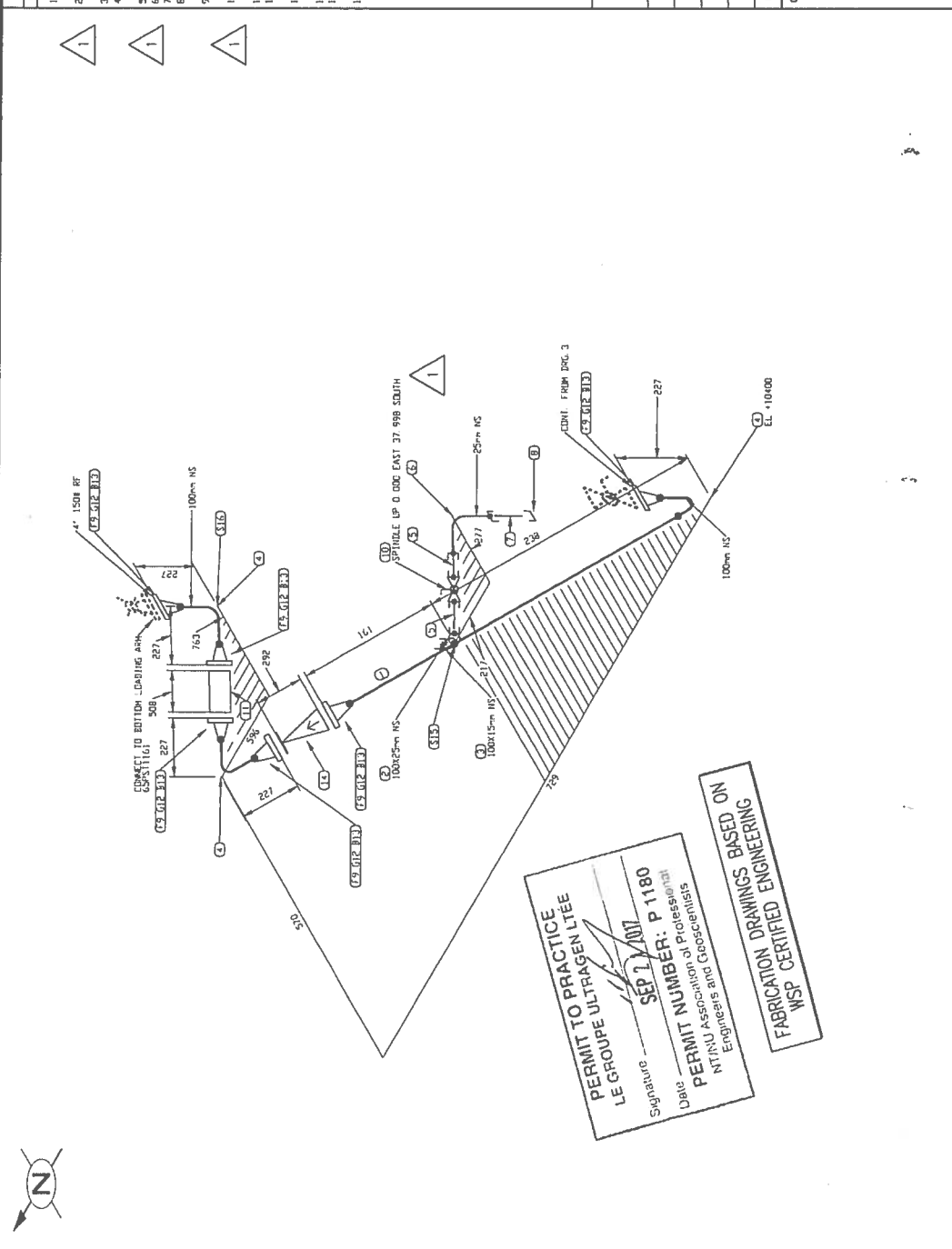
AGNICO EAGLE





CONSULTANT PROJECT NO. 591700

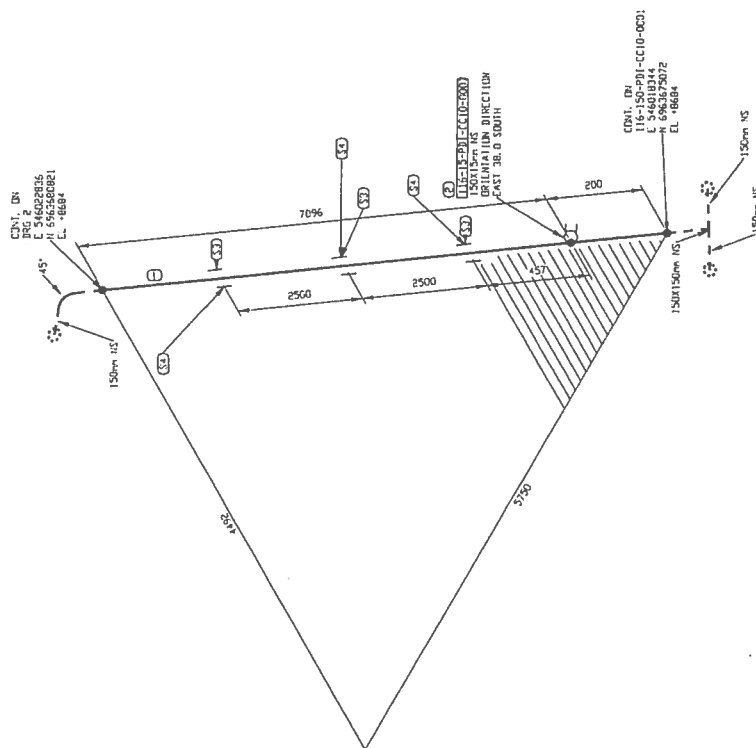
CONC. REV	DATE: 2017/09/23
DESIGNE PAR: PVE	DATE: 2017/04/23
VER. PAR: -	DATE: -
APP. -	DATE: -
DATE: -	DATE: -
CORRECTION AUCUNE	



SEALING PROFESSIONAL ENGINEER		REGISTERED PROFESSIONAL ENGINEER		D. TRUONG		LICENSEE		2017/08/21							
NO. DE CONDUITE		SPECIFICATION		PRODUIT		SYSTEME RETENTION		CODE DE COULEUR		SOLUTION ET TRACAGE		ETAPES, FORMATION		PIPE SUPPORT DETAILS	
116-100-P01-CC10-0023		CC10		P01								65-116-270-200		PIPE SUPPORT DETAILS	
PRESSION D'OPERATION		PRESSION DE CONCEPTION		TEMPERATURE DE CONCEPTION		PRESSION D'ESSAI		CLASSE D'INSPECTION		CODE DE SURVE		TRAITEMENT THERMIQUE		Pw/O	
PSG		PSG		PSG		PSG		PSG				No. DESSIN		No. DESSIN	
T		T		T		T		T						DESSINS DE REFERENCE	

Signature: *[Signature]*
 Date: SEP 21 2017
 PERMIT NUMBER: P 1180
 NTINU Association of Professionals
 Engineers and Geoscientists

FABRICATION DRAWINGS BASED ON
 WSP CERTIFIED ENGINEERING



PERMIT TO PRACTICE
 LE GROUPE ULTRAGEN LEE
 Signature:  SEP 11 2007
 Permit Number: P 1180
 NTAU Association of Professional
 Engineers and Geoscientists

FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

[illegible]

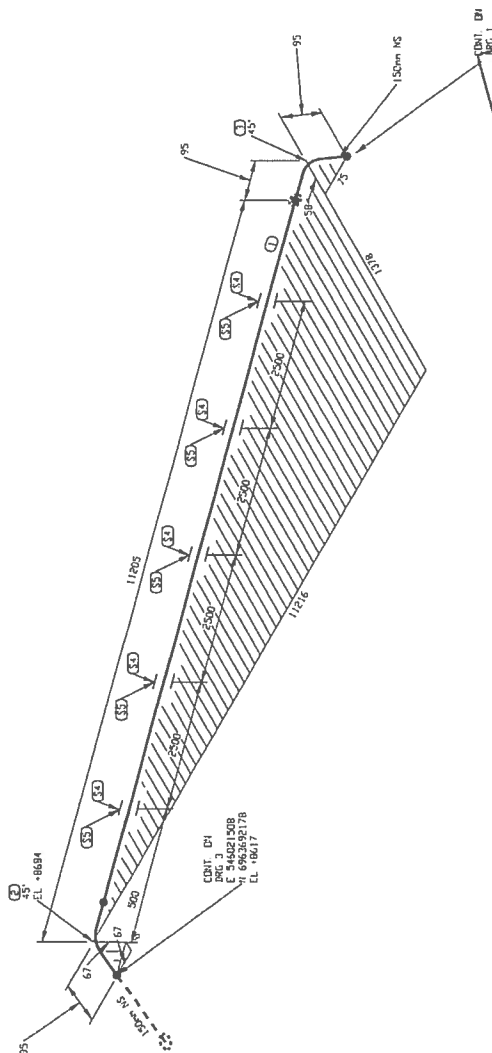
NO	QTY	SIZE	MATERIAL/CATALOG	DESCRIPTION
1	1110	MM	A 323 Gr. 6	SCH STD. 3/4" S PIPE
1	150		A 420 Gr. WPL6	SCH STD. 3/4" L 45 DEG CLEWD
1	150		A 420 Gr. WPL6	SCH STD. 3/4" L 45 DEG CLEWD
1	150		A 420 Gr. WPL6	PIPE SUPPLY AS PER DETAIL 1. DNG
5	5			65-116-270-200
5	5			PIPE SHADE AS PER DETAIL 2. DNG
5	5			65-116-270-200

2	2017/09/21	PROJECT TITLE REVISED	KRV
1	2017/09/11	LINE NUMBERS REVISED	KRV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KRV
No.	DATE	REVISION	PKG
			LOG



AGNICO EAGLE

PROJECT:	AGNICO EAGLE - MELTADINE DIVISION		PROJECT NO.	07-750
DATE:	2017/04/25			
ISSUING OFFICE	DATE:	2017/04/25		
FOR: P&W	DATE:	2017/04/25		
DATE:				
APP: -				
DATE:				
FOR: AUGINE				
DATE:				
NO. PROJECT	NO. DESIGN	PROJECT REV.		
6515	116-150-PJ1-CCIO-0004	2/3		2
AGNICO EAGLE - MELTADINE DIVISION 116 - FUEL TANK FARM RANKIN INLET FABRICATION ISOMETRIC MARINE LINE TO 65TNK11602 TITLE:				



TO PRACTICE

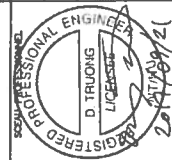
11/9/2017

SEP 27 1964
NUMBER: P 1180
Professional

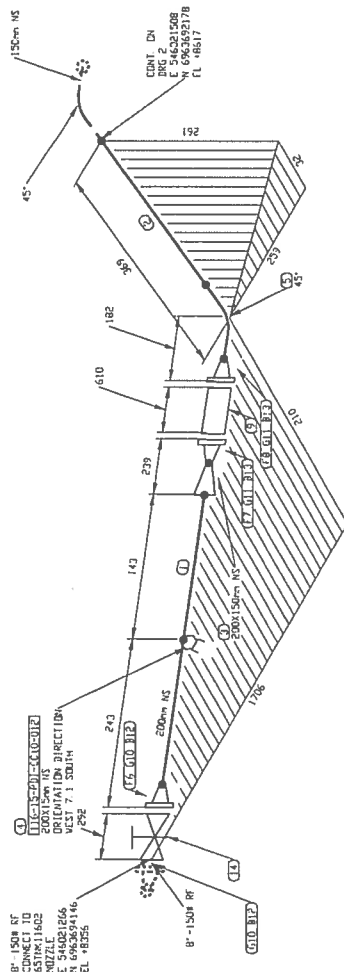
PERMIT NO. _____
NTNU Association of Geoscientists
Engineers and

ON DRAWINGS BASED ON ENGINEERING

FABRICATION CERTIFIED ENGINE



NO. DE CONDUITE	SPECIFICATION	PRODUIT	SYSTEME RENTREMENT	CODE DE COUDELUR	ESQUISON ET TAILLAGE	EPAISS. D'ISOLATION	PIPE SUPPORT DETAILS
116-150-PJ1-CC10-0004	CC10	P01				65-116-270-200	
PRESSION TEMPERATURE D'OPERATION	PRESSION DE CONCEPTION	TEMPERATURE DE CONCEPTION	PRESSION D'ESSAI	CLASSE D'INSPECTION	CODE DE SERVICE	TRAITEMENT THERMIQUE	P&ID
PSG	T	PSG	T	PSG		NO. DESIGN	DESSINS DE REFERENCE



PERMIT TO PRACTICE
 LE GROUPE ULTRAGEN LTYEE
 Signature:  SEP 12 2007
 Date: SEP 12 2007
 PERMIT NUMBER: P 1180
 NTNU Association of Professional
 Engineers and Geoscientists

**FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING**

LISTE DE MATERIEL

No	QTL	DA	MATERIEL/CATÉGORIE	DESCRIPTION
1	286 MM	200	A 333 Gr. 6	SCH STD. SMLS PIPE
2	274 MM	150	A 333 Gr. 6	SCH STD. SMLS PIPE
3	1	200x150	A 420 Gr. WPL6	SCH STD. BV CONIC RED
4	1	200x15	A 350 Gr. LF2	CL 3000, HARCULET
5	1	150	A 420 Gr. WPL6	SCH STD. B/LP 45 DEG ELBOW
6	1	200	A 350 Gr. LF2	CL 150, SCH STD. RT. WN FLANGE
7	1	200	A 350 Gr. LF2	CL 150, SCH STD. RT. WN FLANGE
8	1	150	A 350 Gr. LF2	CL 150, SCH STD. RT. WN FLANGE
9	1	150	A 350 Gr. LF2	CL 150, SINGLE BRAIDED HOSE ASSEMBLY
10	2	200	ASME B16.20	CL 150, GASKET 5500, RING TYPE GASKET 1/8"
11	2	150	ASME B16.20	CL 150, GASKET 5500, RING TYPE GASKET 1/8"
12	16	19	A 193 B7/A 194 2H	CL 150, B - 19.05 X 110 STUD BOLTS C/A 100
13	16	19	A 193 B7/A 194 2H	HEAVY HEX NUTS
14	1	200	GA-10	CL 150, RT. GATE VALVE

PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LEE
Signature: SEP 12 2017
Date: PERMIT NUMBER: P 1180
NIRXU Association of Professional Engineers and Geoscientists

FABRICATION DRAWINGS BASED ON WSP CERTIFIED ENGINEERING

NO. DE COMMANDE	PROJET	SISTÈME REVENDIR	CODE DE COULIER	SOLUTION ET PROCE	EPAISSE D'ISOLATION	PIPE SUPPORT DETAILS	DESSIN DE RÉFERENCE
116-150-PDI-CC10-0004	PDI		-			65-116-270-200	
PRESSION D'OPERATION	TEMPERATURE D'OPERATION	PRESSION D'SSA	CLASSE D'INSPECTION	CODE DE SERVICE	Traitement thermique	65-116-205-200	
PAGE	PAGE	PAGE	PAGE	PAGE	PAGE	PAGE	

AGNICO EAGLE

AGNICO EAGLE - MELIADINE DIVISION
116 - FUEL TANK FARM

RANKIN INLET FABRICATION ISOMETRIC MARINE LINE TO 65TNK11602

ULTRAGEN CONSULTANT PROJECT NO. 591700

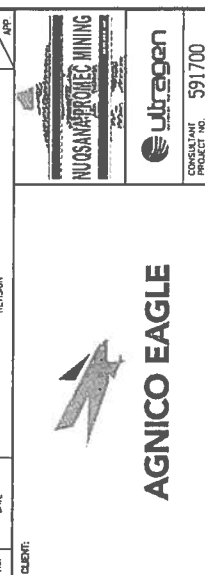
CONC: KHV DATE: 2017/09/21 DESIGNED FOR: DATE: 2017/09/23 VOL. PIRE: APP: 2 DATE: 2017/09/21

REGISTRE PROFESSIONNEL D'INGENIEUR
D. TRUONG
L'ASSOCIÉE
SEP 12 2017

NUSANTAPROJECT MINING

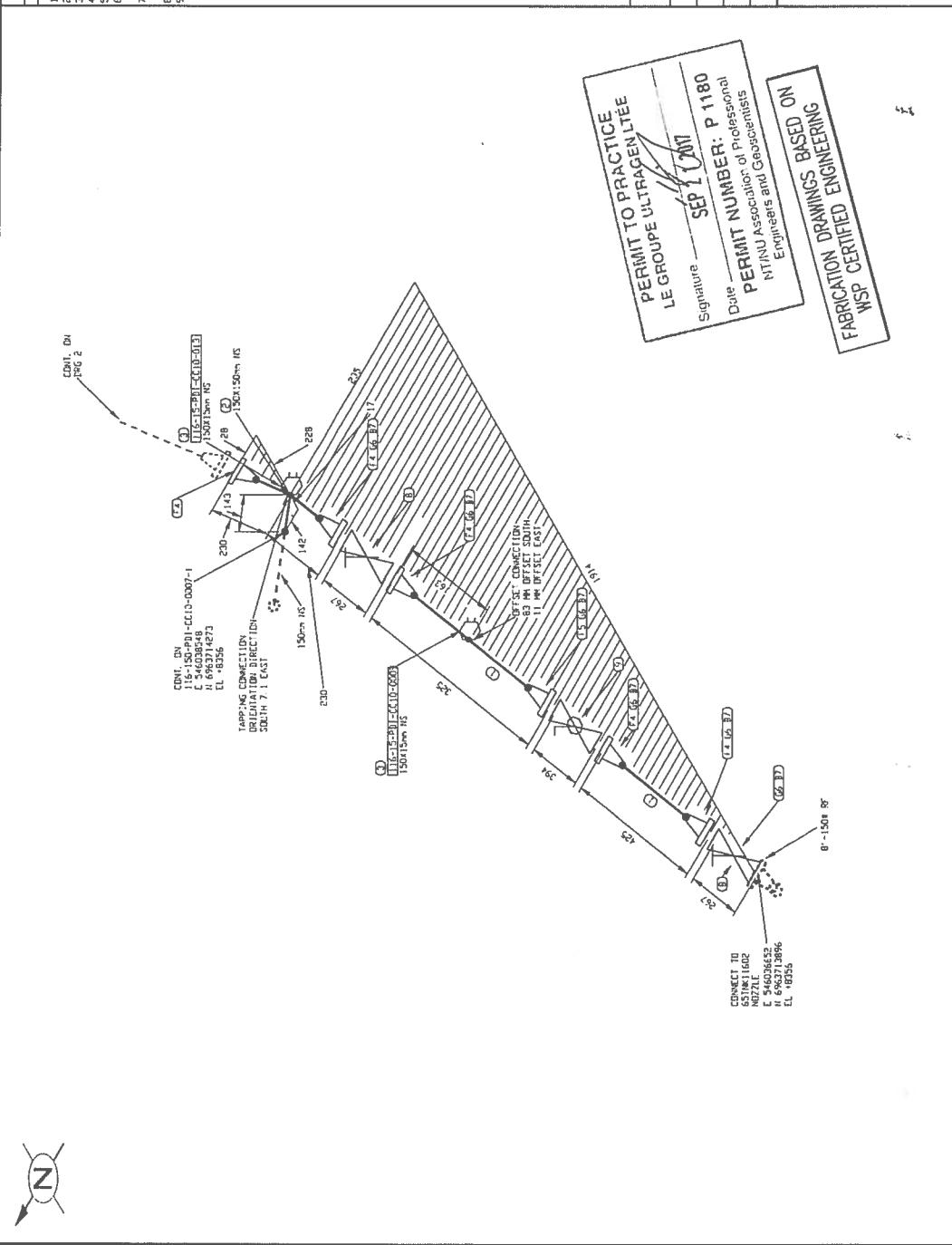
No.	G/T	QA	MATERIAL/CAN-NO.	DESCRIPTION
1	402 9H	150	A 373 Gr. 6	SCM STD. SWS PIPE
2		150X15	A 450 Gr. WPL6	SCM STD. BU STRAIGHT TEE
3		150X15	A 450 Gr. L F2	CL 3000, BU STRAIGHT TEE
4		150	A 350 Gr. L F2	CL 150, SCM STD. "R"
5		150	A 350 Gr. L F2	CL 150, SCM STD. "R"
6		150	ASME B16.20	CL 150, GASKET, 200, RING TYPE GASKET 1/8"
7	48	19	A 193 B7FA 194 2H	1HK
8		150	KAPEL NUT	CL 150, B - 19.05 x 100 STD BOLTS 1/2 x 100
9	2	150	GA-10	CL 150, NUT
10	1	150	BA-31	CL 150, W. PLATE
11	2	150	BA-31	CL 150, REF. BALL VALVE

2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
Iss	DATE	REVISION	PAR



PROJECT:	AGNICO EAGLE - MELTADINE DIVISION 116 - FUEL TANK FARM			
DATE:	2017/09/23			
ISSUING ENG. NO.				
DATE:	2017/09/23			
TITLE:	RANKIN INLET FABRICATION ISOMETRIC DIESEL FROM 65TNK11601 & 65TNK11602 TO PUMPING STATION			
VOL. NO.	NO.	NO. DESIGN	PAGES	REV.
DATE:				
APP.:				
DATE:				
POWER TO SUPPLY LINE	6515	116-150-PI-10010-0006	1/12	2

NO. DE CONSTAT		SPECIFICATION	PRODUIT	SYSTEME PREVENTIF	CODE DE CONTRÔLE	SOLUTION ET TRACAGE	EPASS. D'SOLUTION	DESIGNS DE REFERENCE	
PSG	T	TEMPERATURE D'OPERATION	PRESSION DE CONCEPTION	PRESSION D'ESSAI	CLASSE D'INSPECTION	CODE DE SERVICE	TRAIEMENT THERMIQUE	NO. DESSIN	DESIGNS DE REFERENCE
		1:16-150-PJ1-CC10-0006	CC10					65-116-270-200	PPE SUPPORT DETAILS
								65-116-205-200	PJ1/D



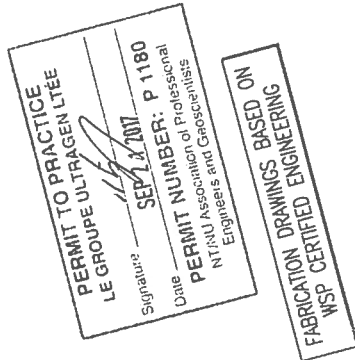
PERMIT TO PRACTICE
LE GROUPE ULTRACEN L'EE

SEP 1 2007

Signature _____
Date _____

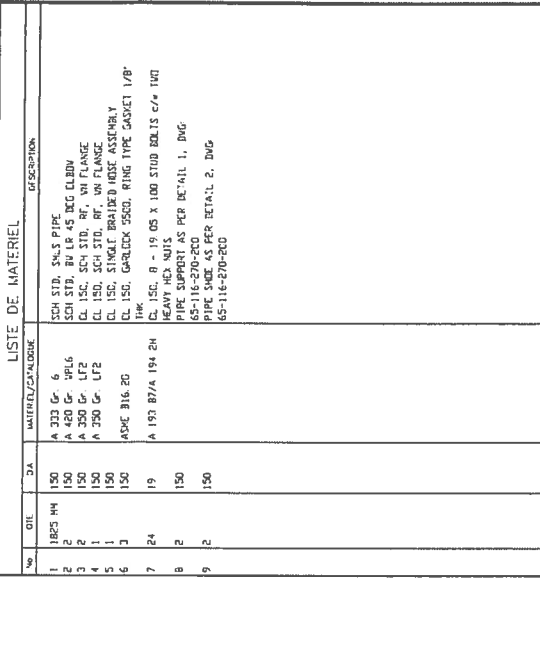
PERMIT NUMBER: P 1180
NTNU Association of Professional
Engineers and Geoscientists

FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

[illegible]

[illegible]

21 photos 28 mm 27.5



CONT. FROM
Dwg. 1

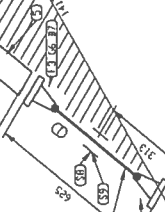
PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LTÉE

Signature: *[Signature]* **SEP 1 2017**

Date: **SEP 1 2017**

PERMIT NUMBER: P 1180
NTNU Association of Professionals
Engineers and Geoscientists

FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING



AGNICO EAGLE

LISTE DE MATERIEL

No	QTL	DA	MATIERE/CHANGEMENT	DESCRIPTION
1	1825 MM	150	A 333 G- 6	350 STD. 54.5 PIPE
2	2	150	A 450 G- 4PL6	350 STD. BU LR 45 TKG ELBOW
3	2	150	A 350 G- LF2	CL 150. 350 STD. RF, 90 FLANGE
4	1	150	A 350 G- LF2	CL 150. 350 STD. RF, 90 FLANGE
5	1	150	ASPC 316 20	CL 150. STAINLESS STEEL WEDGE ASSEMBLY
6	3	150	ASPC 316 20	CL 150. STAINLESS STEEL WEDGE ASSEMBLY
7	24	19	A 193 B7/A 194 24	CL 150. 8 - 19 OS X 100 STD BOLTS C/A 190
8	2	150	HEAVY HEX NUTS	PIPE SUPPORT AS PER DETAIL 1, DWG.
9	2	150	PIPE SHOE AS PER DETAIL 2, DWG	65-116-270-200
				65-116-270-200

No	DATE	REVISION
2	2017/09/21	PROJECT TITLE REVISED
1	2017/09/11	LINE NUMBERS REVISED
0	2017/05/15	ISSUED FOR CONSTRUCTION

CLIENT:

AGNICO EAGLE - HELIADINE DIVISION
116 - FUEL TANK FARM

CONSULTANT:

ULTRAGEN

PROJET: AGNICO EAGLE - HELIADINE DIVISION
116 - FUEL TANK FARM

CLIENT: AGNICO EAGLE - HELIADINE DIVISION
116 - FUEL TANK FARM

PROJET: AGNICO EAGLE - HELIADINE DIVISION
116 - FUEL TANK FARM

PROJET: AGNICO EAGLE - HELIADINE DIVISION
116 - FUEL TANK FARM

CLIENT: AGNICO EAGLE - HELIADINE DIVISION
116 - FUEL TANK FARM

PROJET: AGNICO EAGLE - HELIADINE DIVISION
116 - FUEL TANK FARM



**FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING**

UQSANA-PROTEC MINING

NO. DE CONSULT		SPÉCIFICATION	PRODUIT	SYSTÈME RÉTENTION	CODE DE COLLEUR	ISOLATION ET FINISAGE	UNITE D'ISOLATION	PIPE SUPPORT DETAILS	DESSINS DE REFERENCE	
PRESSION TEMPERATURE D'OPERATION	CC10	TEMPERATURE DE CONCEPTION	PDI		-		65-116-270-200	PIPE SUPPORT DETAILS		
PRESSION TEMPERATURE D'OPERATION	CC10	PRESSION DE CONCEPTION	TEMPERATURE DE CONCEPTION	PRESSION D'ESSAI	CLASSE D'INSPECTION	CODE DE SERVICE	65-116-205-200	P&ID		
PSG	T	PSG	T	PSG			No. DESIGN		DESSINS DE REFERENCE	



REGISTERED PROFESSIONAL ENGINEER
D. TRUONG
LICENSEE
116-150-PJI-CC10-0006
2017/04/23

PROJECT: AGNICO EAGLE - MELLIADINE DIVISION 116 - FUEL TANK FARM		DATE: 2017/04/23	DATE: 2017/04/23
TITLE: RANKIN INLET FABRICATION ISOMETRIC DIESEL FROM 65TNK11601 & 65TNK11602 TO PUMPING STATION		DATE: -	DATE: -
No. PROJECT: 6515		No. DESIGN: 116-150-PJI-CC10-0006	NO. PAGES: 2



FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

NO. DE COMARTE		SPECIFICATION	PRODUIT	SISTÈME REVÊTEMENT	CODE DE COMARTE	CONTOUR ET TRACÉ	ÉPAISS. D'ISOLATION	
116-150-P11-CC10-0006		CC10	PB1					
PRESSION D'OPERATION	TEMPERATURE D'OPERATION	PRESSION DE CONCEPTION	TEMPERATURE DE CONCEPTION	PRESSION D'ESCA	CLASSE D'INSPECTION	CODE DE SERVICE	INDICATEUR INTRINSÈQUE	
PSIG	°F	PSIG	°F	PSIG				
								NO. DESER
								DESSINS DE REFERENCE

LISTE DE MATERIEL

NO	QTE	DA	MATRIEL/CALCUL	DESCRIPTION
1	12983 MH	150	A 333 Gr. 6	SCM STD. SMLS PIPE
2	1	1500115	A 350 Gr. L72	CL 3000, THREDOLET
3	1	150	A 420 Gr. UPL6	SCM STD. BV LP 45 DEG ELBOW
4	1	1500	A 350 Gr. L72	CL 150, SCM STD. RT, WN FLANGE
5	2	150	ASIC 816.20	CL 150, GASKET 5500, RING TYPE GASKET 1/8"
6	16	19	A 193 B7/A 194 2H	CL 150, B - 19 OS X 100 STD BOLTS C/A 1/40
7	1	150	GA-10	HEAVY HEX NUTS
8	5	150		CL 150, RT, GATE VALVE
9	5	150		PIPE SUPPORT AS PER DETAIL 1, DWG. 65-116-270-200
				PIPE SIZE AS PER DETAIL 2, DWG. 65-116-270-200

NO.	DATE	REVISION	REVISED	PROJECT TITLE REVISED	KIV
1	2017/09/11			LINE NUMBERS REVISED	KGV
0	2017/05/15			ISSUED FOR CONSTRUCTION	KIV
No.	DATE				PAR APP.

CLIENT:

AGNICO EAGLE

NUCOR APPLACHIA MINING

ULTRAGON

CONSULTANT
PROJECT NO
591700

COMC - MAY
DATE: 2017/04/23
DESSINE PAR RYC
DATE: 2017/04/23
VOL PAR -
DATE: -
APP: -
DATE: -
ESCHELLE AUCUNE

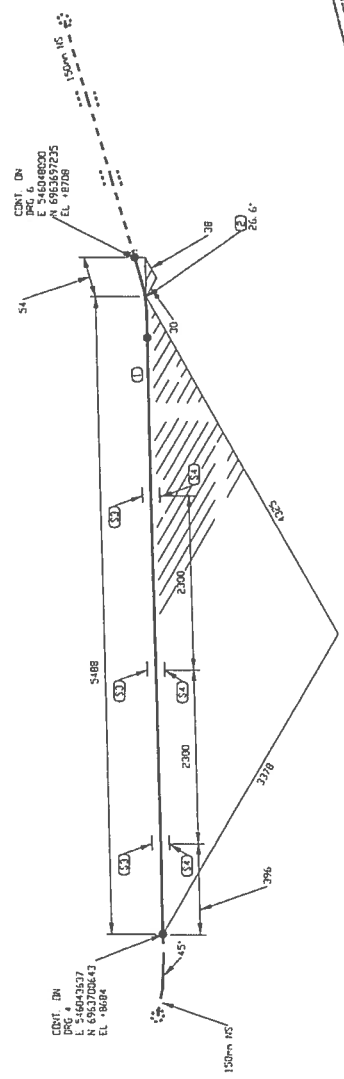
PROJECT: AGNICO EAGLE - MELLADINE DIVISION
116 - FUEL TANK FARM
RANKIN INLET
FABRICATION ISOMETRIC
DIESEL FROM 65THK11601 & 65THK11602 TO PUMPING STATION

No. PROJECT
6515

No. DESIGH
116-150-PJT-CC10-0006

PAGES
4/12

PAGE 2



PERMIT TO PRACTICE
LE GROUPE ULTRAGEN TEE
Signature: *[Signature]*
Date: SEP 14 2017
PERMIT NUMBER: P 1180
NTNU Association of Professional
Engineers and Geoscientists
FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

LISTE DE MATERIEL				DESCRIPTION	
No	QTE	DA	MATRIEL / CALIBRE		
1	5434	M	A 323 Gr. 6	SCH STD. SMLS PIPE	
2	1	150	A 420 Gr. 16L6	SCH STD. BV LR 90 DEG ELBOW TRIM TO 26.57	
3	3	150		PIPE SUPPORT AS PER DETAIL 1, DNG	
4	3	150		PIPE SUPPORT AS PER DETAIL 2, DNG	
				65-116-270-200	

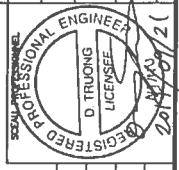
2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
No.	DATE	REASON	PRG
			APP

AGNICO EAGLE

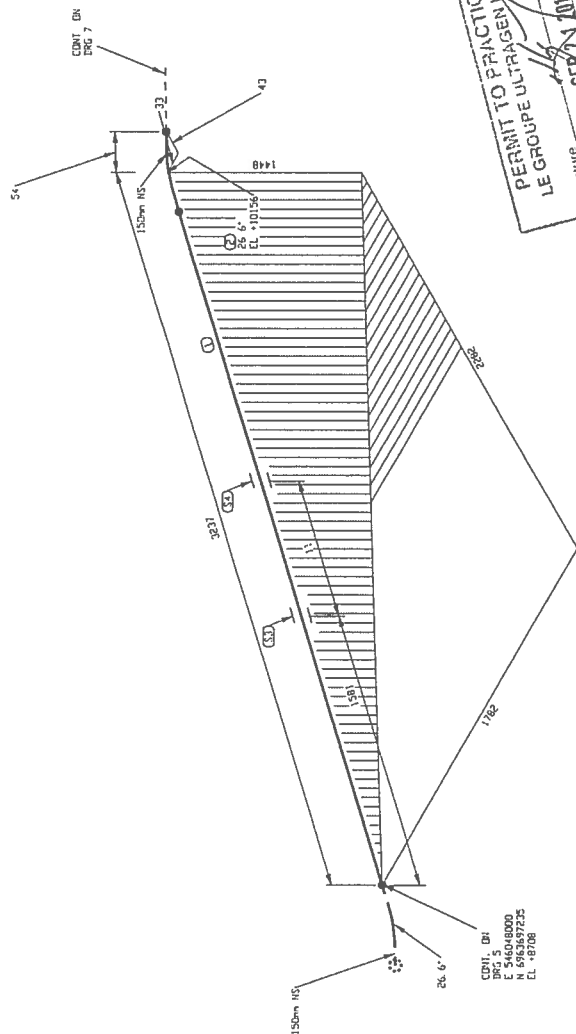
ULTRAGEN

CONTRACT NO.	591700
DATE: 2017/09/23	PROJECT NO.
DESIGNER: PIR KVE	PROJECT NO.
DATE: 2017/09/23	PROJECT NO.
WSP: PIR	PROJECT NO.
DATE: 2017/09/23	PROJECT NO.
WSP: PIR	PROJECT NO.
DATE: 2017/09/23	PROJECT NO.
WSP: PIR	PROJECT NO.

PROJECT: AGNICO EAGLE - MELIADINE DIVISION	591700
116 - FUEL TANK FARM	
RANKIN INLET	
FABRICATION ISOMETRIC	
DIESEL FROM 65TNC11601 & 65TNC11602 TO PUMPING STATION	
No. PROJECT	No. DESSIN
6515	116-150-PJ1-CC10-0006
6515	116-150-PJ1-CC10-0006
5/12	2



NO. DE CONSUITE		SPECIFICATION		PROJET		SYSTEME PROJETANT		CODE DE COULEUR		SOLUTION ET TRACÉ		EPAISS. D'ISOLATION		PIPE SUPPORT DETAILS	
116-150-PJ1-CC10-0006	CC10	TEMPERATURE DE CONCEPTION	CC10	PD1	PD1	PRESSION D'ESSAI	PRESSION D'ESSAI	CLASSE D'INSPECTION	CLASSE D'INSPECTION	CODE DE SERVICE	CODE DE SERVICE	TRAVAILLANT INTERMÉDIAIRE	TRAVAILLANT INTERMÉDIAIRE	65-116-270-200	65-116-270-200
PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION
PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION	PRESSION D'ISOLATION



PERMIT TO PRACTICE
 LE GROUPE ULTRAGENETEE
 Signature SEP 11 2007
 Date **PERMIT NUMBER: P 1180**
 NTRU Association of Professional
 Engineers and Geoscientists

WSP CERTIFIED ENGINEERING
FABRICATION DRAWINGS BASED ON

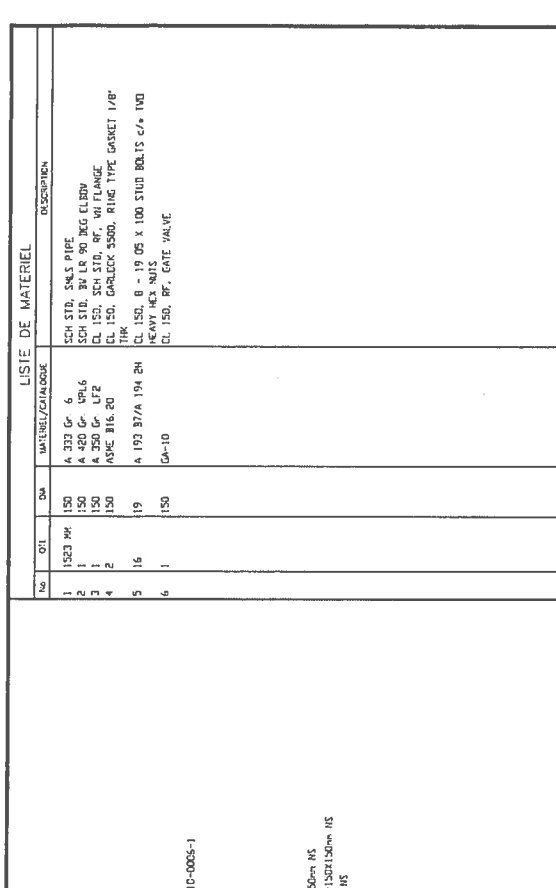
10-NW-91



ENGINEERS
FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

NO. DE COQUILLE		SPECIFICATION	PRODUIT	SYSTEME REVETEMENT	CODE DE COULEUR	ECLAIRAGE ET TACHAGE	EPAISS. D'ISOLATION	NO. DECSN	DESSINS DE RETENANCE
PRESSION D'OPERATION	TEMPERATURE D'OPERATION								
PSG	T	PSG	T	PSG					
: 16-150-PP1-CC10-0006		CC10	PP1					65-116-270-200	PIPE SUPPORT DETAILS
								65-116-205-200	P&ID

10-NW-91



CONTRACT NO. 116-150-PJ1-CC10-0007-1
PROJET 116-150-PJ1-CC10-0007-1
DATE 2017/09/15
PROJET 116-150-PJ1-CC10-0007-1
DATE 2017/09/15
PROJET 116-150-PJ1-CC10-0007-1
DATE 2017/09/15

PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LEE
 Signature: *[Signature]*
 Date: **SEP 14 2017**
PERMIT NUMBER: P 1180
 RTINU Association of Professional
 Engineers and Geoscientists

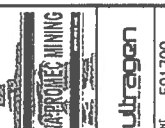
FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

AGNICO EAGLE

LISTE DE MATERIEL

No	QTY	QVA	MATERIEL/CATALOGUE	DESCRIPTION
1	1503 MM	150	A 332 G- 6	SCH STD, SMLS PIPE
2	1	150	A 420 G- UPL6	SCH STD, 2V LR 90 DEG ELBOW
3	1	150	A 420 G- UPL6	CL 150, SCH STD, RF, W/ FLANGE
4	2	150	ASPE 816 20	CL 150, ORLOCK 3500, RING TYPE GASKET 1/8"
5	16	19	A 193 B7/A 194 2H	CL 150, B - 19 05 X 100 STD BOLTS C/A 190
6	1	150	DA-10	HEAVY HEX NUTS
				CL 150, RF, GATE VALVE

No	DATE	REVISION	REMARKS
2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
			REV
			APP



AGNICO EAGLE

CONSULTANT
PROJECT NO. 591700

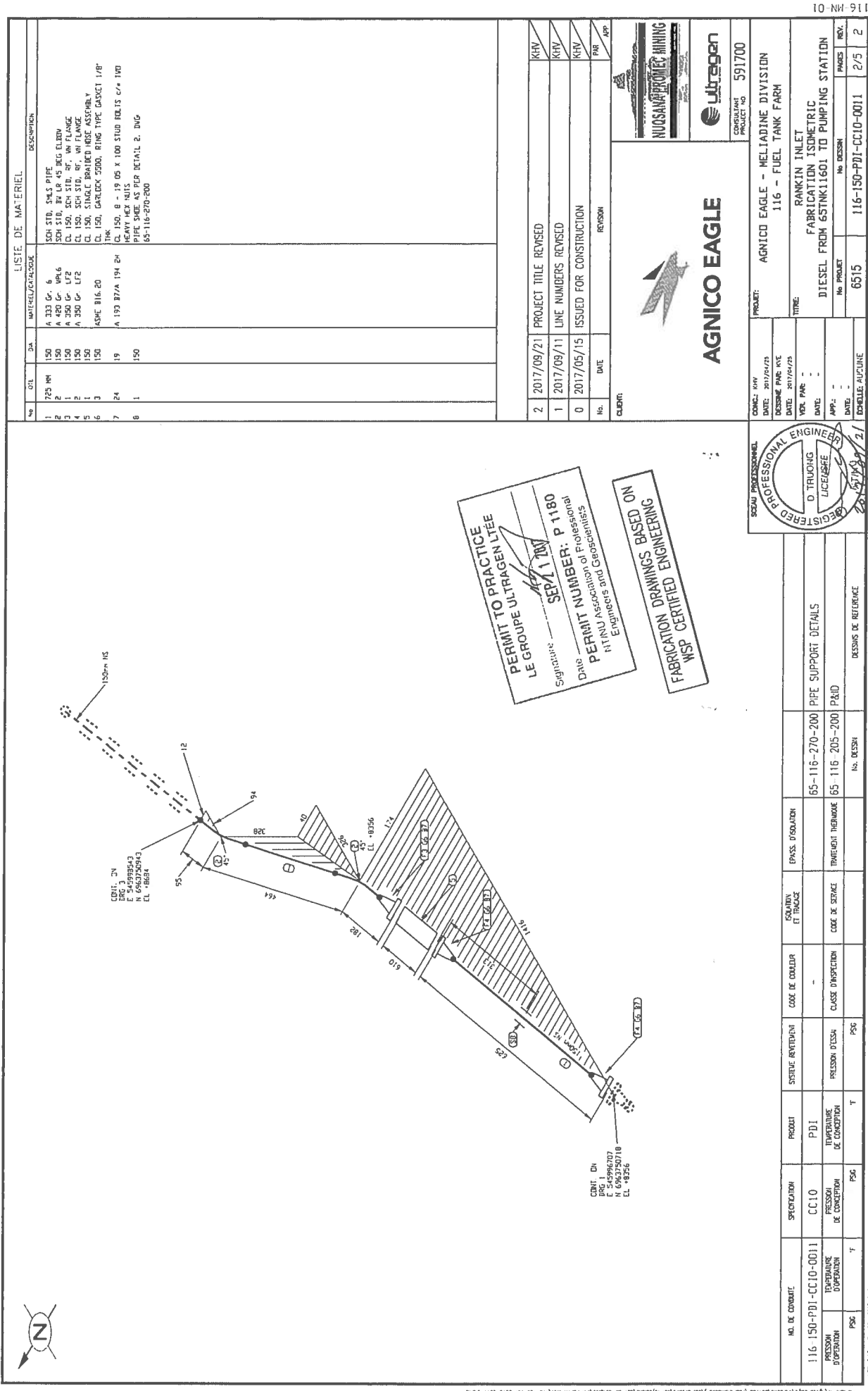
SEAL PROFESSIONNEL

REGISTERED PROFESSIONAL ENGINEER
D. TRUONG
ULTRAGEN
SEP 14 2017

NO. DE COMITE	SPÉCIFICATION	PROJET	SISTÈME REVÊTEMENT	CODE DE COULEUR	ÉVALUATION ET TRACÉ	ÉPAISS. D'ISOLATION	PIPE SUPPORT DETAILS
116-150-PJ1-CC10-0007	CC10	PJ1	PRESSION D'ESSAI	CAUSE D'INSPECTION	CODE DE SERVICE	TRAVAIL D'INDIQUE	65-116-270-200
PRESSION D'OPÉRATION	PRESSION D'OPÉRATION	TEMPÉRATURE D'OPÉRATION	PRESSION D'ESSAI	CAUSE D'INSPECTION	CODE DE SERVICE	TRAVAIL D'INDIQUE	65-116-205-200
PRESSION D'OPÉRATION	PRESSION D'OPÉRATION	TEMPÉRATURE D'OPÉRATION	PRESSION D'ESSAI	CAUSE D'INSPECTION	CODE DE SERVICE	TRAVAIL D'INDIQUE	65-116-205-200
PRESSION D'OPÉRATION	PRESSION D'OPÉRATION	TEMPÉRATURE D'OPÉRATION	PRESSION D'ESSAI	CAUSE D'INSPECTION	CODE DE SERVICE	TRAVAIL D'INDIQUE	65-116-205-200



1970 12 20 217, 245m



LISTE DE MATERIEL				DESCRIPTION	
No	QTE	SA	MATERIEL/CHANGEO		
1	725	150	A 332 Gr. 6	SCH STD, 5/8" S PIPE	
2	2	150	A 420 Gr. 6	SCH STD, 8" x 1/2" FLANGE	
3	1	150	A 350 Gr. 1/2	SCH STD, 8" x 1/2" FLANGE	
4	1	150	A 350 Gr. 1/2	SCH STD, 8" x 1/2" FLANGE	
5	1	150	ASPE 816.20	SCH STD, 8" x 1/2" FLANGE	
6	3	150	ASPE 816.20	SCH STD, 8" x 1/2" FLANGE	
7	24	19	A 192 87/A 194 24	THK, 150, 8" x 1/2" FLANGE	
8	1	150		THK, 150, 8" x 1/2" FLANGE	
				HEAVY HEX NUTS	
				PIPE SAE AS PER DETAIL 2. DNG	
				65-116-270-200	

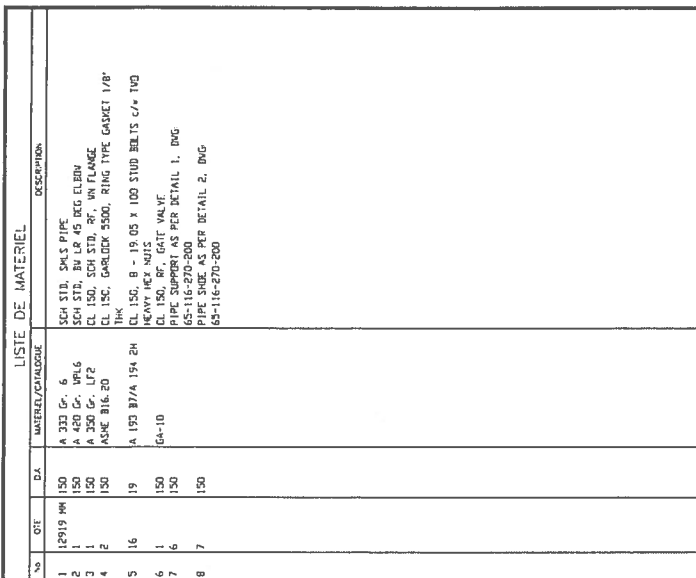
PROJECT TITLE		PROJECT NO	
2017/09/21		591700	
1		AGNICO EAGLE - MELIADINE DIVISION	
0		116 - FUEL TANK FARM	
2017/05/15		RANKIN INLET	
		FABRICATION ISOMETRIC	
		DIESEL FROM 65TNC11601 TO PUMPING STATION	
		No DESIGN	
		6515	
		116-150-P01-CC10-0011	
		2/5	
		2	

10-NH-1611



**FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING**

ISSN: 0022-0466



N°	QTE	DA	MATIERE/CATALOGUE	DESCRIPTION
1	12919 MM	150	A 333 Gr. 6	SCH STD. SHLS PIPE
2	1	150	A 480 Gr. WPL6	SCH STD. BU LR 45 DEG ELBOW
3	1	150	A 350 Gr. LP2	CL 150. SCH STD. RF. VAN FLANGE
4	2	150	ASPE 816.20	CL 150. GARLOCK 5500. RING TYPE GASKET 1/8"
5	16	19	A 193 B7/A 194 2H	CL 150. B - 19.05 x 100 STUD BOLT 5 C/4 190
6	1	150	GA-10	CL 150. RF. GATE VALVE
7	6	150		PIPE SUPPORT AS PER DETAIL 1. DNG
8	7	150		PIPE SHOE AS PER DETAIL 2. DNG
				65-116-270-200
				65-116-270-200

PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LTYE

Signature: *[Signature]* **SEP 11/2017**

Date: **SEP 11/2017**

PERMIT NUMBER: P 1180

INFINU Association of Professional Engineers and Geoscientists

FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING

N°	DATE	PROJET	REVISION
2	2017/09/21	PROJECT TITLE REVISED	KHV
1	2017/09/11	LINE NUMBERS REVISED	KHV
0	2017/05/15	ISSUED FOR CONSTRUCTION	KHV
			PRG
			APP



AGNICO EAGLE

CLIENT:

MUSANAPROTECT MINING

ULTRAGEN

CONSULTANT PROJECT NO. 591700

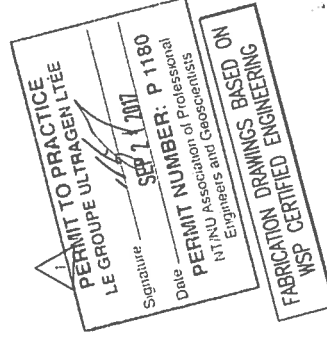
PROJET: AGNICO EAGLE - MELIADINE DIVISION
116 - FUEL TANK FARM

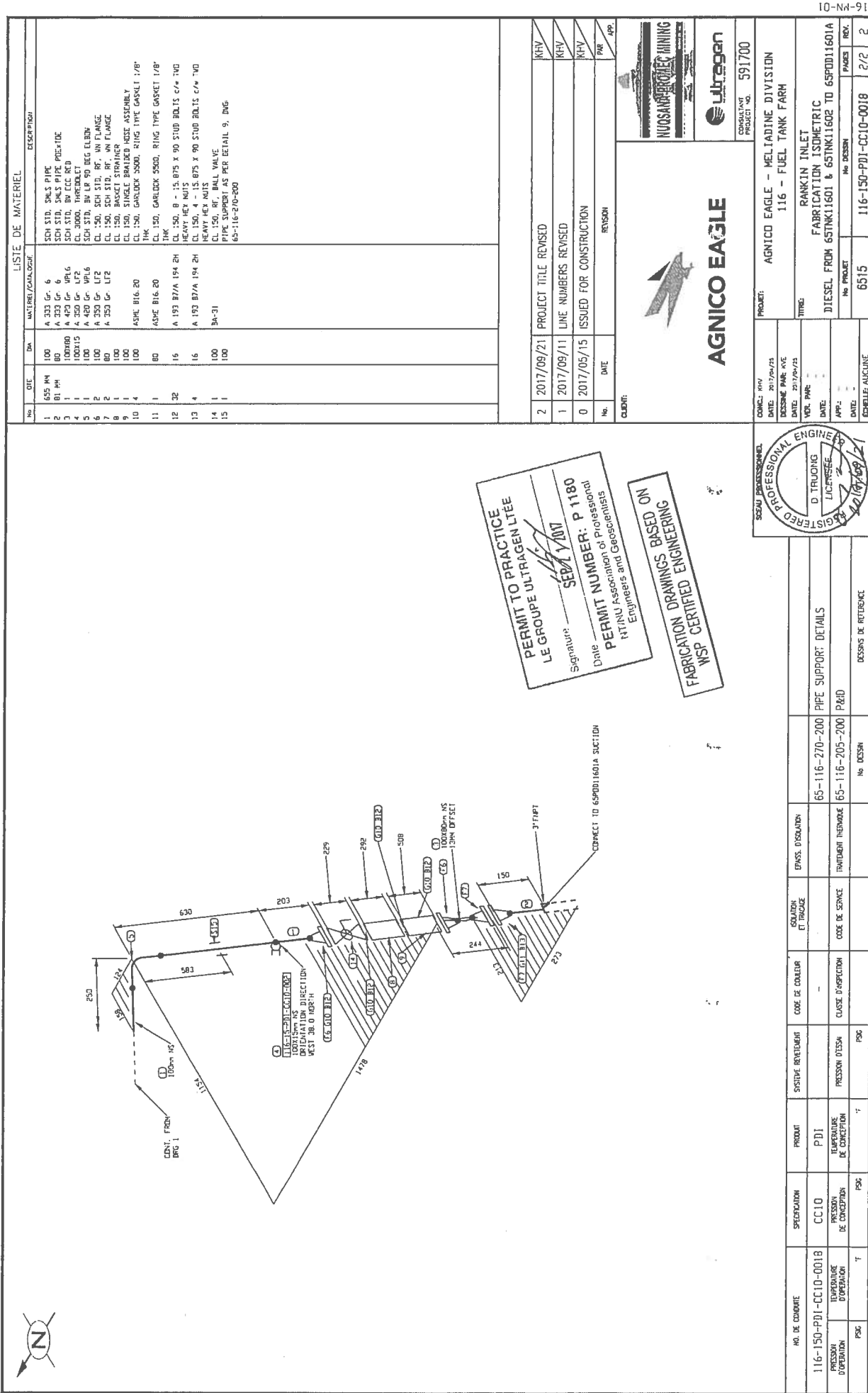
TITRE: RANKIN INLET
FABRICATION ISOMETRIC
DIESEL FROM 65TNK11601 TO PUMPING STATION

Mo PROJET: No DESIGN

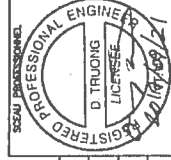
PAGES: 5/5

REV.: 2





PERMIT TO PRACTICE
LE GROUPE ULTRAGEN LEE
Signature: *[Signature]*
Date: *[Date]*
PERMIT NUMBER: P 1180
NTNU Association of Professional
Engineers and Geoscientists
FABRICATION DRAWINGS BASED ON
WSP CERTIFIED ENGINEERING



LISTE DE MATERIEL				DESCRIPTION	
No	QTE	DA	MATERIEL / CATALOGUE		
1	655 M	100	A 323 Gr. 6	SCH STD. SMLS PIPE	
2	81 M	80	A 323 Gr. 6	SCH STD. SMLS PIPE FLEXIBLE	
3	1	100000	A 323 Gr. 6	SCH STD. SMLS PIPE FLEXIBLE	
4	1	100015	A 323 Gr. 6	SCH STD. SMLS PIPE FLEXIBLE	
5	1	100	A 480 Gr. WPL6	SCH STD. BULL UP 90 DEG ELBOW	
6	2	100	A 320 Gr. L12	CL 150. SCH STD. RT. WN FLANGE	
7	2	80	A 320 Gr. L12	CL 150. SCH STD. RT. WN FLANGE	
8	1	100	A 320 Gr. L12	CL 150. BASKET STRAINER	
9	1	100	A 320 Gr. L12	CL 150. SINGLE BRAIDED HOSE ASSEMBLY	
10	4	100	ASPE B16.20	CL 150. GARDER 5500. RING TYPE CASSET 1/8"	
11	1	80	ASPE B16.20	CL 150. GARDER 5500. RING TYPE CASSET 1/8"	
12	32	16	A 192 B7/A 194 2H	CL 150. B - 15.875 X 90 STD BOLTS C/N TWO	
13	4	16	A 192 B7/A 194 2H	HEAVY HEX NUTS	
14	1	100	3A-31	CL 150. RT. BALL VALVE	
15	1	100	3A-31	CL 150. RT. BALL VALVE	

No	DATE	REVISION
2	2017/09/21	PROJECT TITLE REVISED
1	2017/09/11	LINE NUMBERS REVISED
0	2017/05/15	ISSUED FOR CONSTRUCTION

No	DATE	REVISION
2	2017/09/21	PROJECT TITLE REVISED
1	2017/09/11	LINE NUMBERS REVISED
0	2017/05/15	ISSUED FOR CONSTRUCTION

CLIENT: *[Signature]*

AGNICO EAGLE

CONSULTANT
PROJECT NO. 591700

PROJECT: AGNICO EAGLE - MELTADINE DIVISION
116 - FUEL TANK FARM

TITLE: RANKIN INLET
FABRICATION ISOMETRIC
DIESEL FROM 65TNK11601 & 65TNK11602 TO 65PDB11601A

NO PROJET	NO DESSIN	PAGES	REV.
6515	116-150-PJ1-CC10-0018	2/2	2



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By:

Jean-Francois Tremblay

Date:

2017-05-02

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No.

6515-C-270-007-141-TES-0014 R: Sub001

DOCUMENT FOR INFORMATION



**Agnico-Eagle Mines Ltd.
Non-Conformance Report**

ITR Number : AEM-GE-ITR-002
Contract no. : C22466T / C22498E



PART 1 – To be completed by Originator			
ITR no. :	Supplier/Vendor/Manufacturer/Contractor :	Originator :	Date:
Equipment Identification:		Equipment Tag No.:	
Disposition Requested: ☐ 48 Hours ☐ Other	NCR Classification: ☐ Supplier ☐ Fabrication ☐ Engineering ☐ Construction ☐		
Current Status: ☐ Work Already Done ☐ Partially Done ☐ Other _____	Potential Impact (Check appropriate box and give estimate): ☐ Cost ☐ Schedule ☐ Other		
Detailed Description of Non-Conformance (attach sketch, pictures, etc) :			
Describe Deviation to Drawings, Specifications, Standard, Code or other Reference:			
PART 2 - Disposition			
* CONTRACTOR Proposed Disposition / Resolution: ☐ Use As Is ☐ Repair ☐ Rework ☐ Reject/Scrap		Concession Request No. (if applicable):	Contractors NCR No. (if applicable):
Details of Contractor Corrective Actions Proposed / Concession Request:			
* Disposition: ☐ Use as Is ☐ Repair ☐ Rework ☐ Reject/Scrap		Dispositioning Party:	Signature:
Recommended Resolution / Actions:			
PART 3 - Confirmation			
Corrective Actions Completed By: Name: Date: Signature:		Corrective Actions Accepted by Dispositioning Party: Name: Date: Signature:	
Corrective Actions Accepted by Originator: Name: Date: Signature:		NCR Closed Out By (Area QA Coordinator) Name: Date: Signature:	
* Note: Dispositions are not to be construed as a change to any Contracts which may be affected. Prior to initiating any work which will impact the Contract terms, the Contractors must forward to AMEC written notice of all impacts, including but not limited to cost and schedule. Any work completed without a written instruction to proceed, if required, will be at the Contractor's risk.			



6515-C-270-007

Fuel Tanks Piping Supply and Installation

Non-Conformance Log

Document Number : AEM-GE-LOG-002
Contract Number : C22466T / C22498E



AGNICO EAGLE

Number	Company	Description	Initiator	Date Opened	Date Closed	Progress Status
NCR-001		AGNICO EAGLE Vendor Document Status 1 ☐ Proceed to next submission and status. 2 ☐ Proceed with exceptions as noted to next submission and status. 3 ☐ Do not proceed. Revise as noted and resubmit next submission and status. 4 ☒ Complete, no further submission required. By: <u>Jean-Francois Tremblay</u> Date: 2017-05-02 Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures. Agnico Eagle No. 6515-C-270-007-141-TES-0019 R: Sub001 DOCUMENT FOR INFORMATION				N/A
NCR-002						N/A
NCR-003						N/A
NCR-004						N/A
NCR-005						N/A
NCR-006						N/A
NCR-007						N/A
NCR-008						N/A
NCR-009						N/A
NCR-010						N/A
NCR-011						N/A
NCR-012						N/A
NCR-013						N/A
NCR-014						N/A
NCR-015						N/A
NCR-016						N/A
NCR-017						N/A
NCR-018						N/A
NCR-019						N/A
NCR-020						N/A
NCR-021						N/A
NCR-022						N/A
NCR-023						N/A
NCR-024						N/A
NCR-025						N/A
NCR-026						N/A
NCR-027						N/A
NCR-028						N/A
NCR-029						N/A
NCR-030						N/A
NCR-031						N/A
NCR-032						N/A
NCR-033						N/A
NCR-034						N/A
NCR-035						N/A
NCR-036						N/A
NCR-037						N/A
NCR-038						N/A
NCR-039						N/A
NCR-040						N/A



Vendor Document Status

AGNICO EAGLE

- 1 ☐ Proceed to next submission and status.
- 2 ☐ Proceed with exceptions as noted to next submission and status.
- 3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.
- 4 ☒ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY

Date: 2017-05-02

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle
No.

6515-C-270-007-141-TES-0038 R: Sub001

DOCUMENT FOR INFORMATION



Agnico-Eagle Mines Ltd.
Contract no. 6515-C-270-007

Welding Control Procedure
AEM-WE-PRO-001

Area No.: All

System No.: All

PROMEC Approvals

Prepared by: Stéphane Doré Signature: [Signature] Date: 2017-04-26

Verified by: Jérémy Duval Signature: [Signature] Date: 2017-04-26

Approved by: Éric Poulin Signature: [Signature] Date: 2017-04-26

CLIENT Approvals

Verified by: _____ Signature: _____ Date: _____

Approved by: _____ Signature: _____ Date: _____

TABLE OF CONTENTS

	<u>Page</u>
1. SCOPE	3
2. REFERENCES	3
3. WELDING PROCEDURES	3
4. WELDER PERFORMANCE QUALIFICATION	3
5. WELDING MATERIAL CONTROL	4
6. FIT-UP AND WELDING.....	4
7. RADIOGRAPHIC INSPECTION.....	5

APPENDIX A – ALL APPLICABLE ITRs & LOGs

1. Scope

- This procedure describes the system for maintaining control of all production welding to the requirements of the applicable engineering specifications, codes and standards.

2. References

- ASME, Section IX - Welding and Brazing Qualifications
- ANSI, B-31.3 - Petroleum Refinery Piping
- ANSI, B-31.1 - Power Piping
- AWS, American Welding Society

3. Welding Procedures

- All welding performed on site will comply with applicable qualified welding procedures as specified in the Standard S40 05 13.
- Prime contractor's welders will be qualified to weld procedures in accordance with contract specifications. Prime contractor is responsible for certifying their own welders.
- Copies of the qualified welding procedures approved for that project shall be maintained on site by the Welding Foreman and Site Q/C Representative for reference and permanent retention.

4. Welder Performance Qualification

- It is the responsibility of the Site Q/C Representative to conduct or supervise the Welder Performance Qualification tests. At the discretion of the Corporate Quality Control Manager, a Welding Foreman or other qualified site supervisor may conduct these tests.
- Records attesting to the Welder Performance Qualification tests shall be generated and maintained by the Site Q/C Representative and the Welding Foreman.
- The Site Q/C Representative and the Welding Foreman shall maintain a complete listing of welders and welding operators employed. The form, Welder Qualification Log, is to be updated and reissued on a monthly basis and is to be distributed as required.



**Agnico-Eagle Mines Ltd.
Welding Control Procedure**

**PRO Number : AEM-WE-PRO-001
Contract no. : C22466T**



5. Welding Material Control

- The Site Q/C Representative and Welding Foreman shall make certain that the welding material used conforms to that of the welding procedure. No substitutions for the specified material will be made without written approval from the client.

6. Fit-Up and Welding

- Visual surveillance shall be performed to establish compliance to welding procedures. The inspection parameters listed below are recommended as guidelines
 - ✓ Inspect end preparation and joint configuration as established by applicable weld procedures and engineering specifications.
 - ✓ Inspect internal alignment and root opening prior to welding.
 - ✓ Check tack welds that are to be incorporated into the final weld, and be assured of proper blend grinding and absence of visual defects.
 - ✓ Check for proper welding materials and other essential variables of applicable weld procedures.
 - ✓ Check visually root pass for cracks, porosity, slag, fusion lines and quality workmanship (if required use LP).
 - ✓ Inspect completed welds for proper reinforcement. All welds should blend smoothly into the base metal and be free of cold lap or fusion at the toe.
 - ✓ Inspect weld for surface discontinuities such as undercut. Surface porosity is to be considered as an injurious defect and shall be repaired.
 - ✓ All repairs are to be made in accordance with approved procedures.
 - ✓ Each welder shall be responsible for stamping his assigned symbol immediately after completion of the weld. A smooth, flat spot shall be ground or filed on the reinforcement cap. The welder shall stamp his/hers identifying mark upon this spot.
- For ferrous material less than 1/4" (1/2" for nonferrous), the welder's symbol shall be recorded on the base metal by use of a halogen-free paint marker, or recorded on isometric drawings by the welding supervisor which shall be available to the Quality Control Inspector.

7. Radiographic Inspection

- The Site Q/C Representative or Welding Foreman will schedule radiographic inspections.
- Radiographic requirements shall be determined by the client standard to assure compliance to contract Codes and specifications.
- Welds requiring radiography will be flagged by a suitable means which will be consistent through contract completion.
- The Site Q/C Representative will complete the Radiographic Inspection Status Record, to indicate status of radio graphically-inspected welds. This form will be forwarded to appropriate supervision for distribution.
- In addition to the records generated under this procedure, marked-up isometric and orthographic drawings will be used as weld maps to indicate completion of radiographic inspection. This will allow a progressive record and give system status.

**PREMIÈRE PASSE E-6011 , 3/32
SMAW**

**REEMPLISSAGE E-7018 , 1/8-5/32
SMAW**

ACIER AU CARBONE

Procédure : P-1 , PR-1

Les titres désignent également les hommes et les femmes.

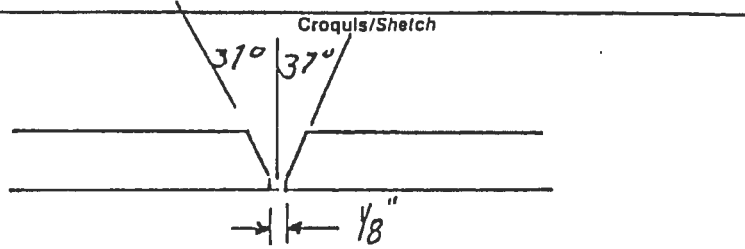
Entreprise/Company
 Construction Promec
 Adresse/Address
 369 rue Murdoch
 Rouyn-Noranda (Québec)
 (819) 797-3456

② Enregistrement provincial
 Provincial Registration
 MS WP 8814.6

③ Désignation de la méthode/Procedure Identification
 DMS N°
 WPS No. P1 Révision N°
 Revision No. 0
 RMS N°
 PQR No. PRI
 Section du code
 Code section

④ Procédé(s) de soudage
 Welding Process(es)
 1 SMAW Manuel/Manual ☒ Semi-auto. ☐ Auto. ☐
 2 Manuel/Manual ☐ Semi-auto. ☐ Auto. ☐
 3 Manuel/Manual ☐ Semi-auto. ☐ Auto. ☐

⑤ Joints/Joints (QW-402)
 Genre/Design VW Fillet Chan Frein Simple
 Chan Frein Double
 Soutien Oui ☒ Non ☒
 Backing Yes No
 Matériau de soutien P1 ou soudure
 Backing material
 Autre
 Other



⑥ Métaux de base/Base Metals (QW-403)
 P N°/No. P1 Gr N°/No. à/to P N°/No. P1 Gr N°/No. à/to
 ou Spécifications type et grade
 or Specifications type and grade
 Analyse chimique et prop. mec.
 Chemical Analysis and Mech. Prop.
 Gamme des épaisseurs qualifiées
 Thickness Range Qualified
 Total 3/16" à 1 1/2" 1 1/4" 2 1 1/4" 3
 Autre
 Other

⑦ Métaux d'apport/Filler Metals (QW-404)
 AWS N°/No. E6011 SFA 5.1 F-No. 3 A-No. 1 Dia. 3/32-1/8-5/32
 AWS N°/No. E7018 SFA 5.1 F-No. 4 A-No. 1 Dia. 3/32-1/8-5/32
 AWS N°/No. SFA F-No. A-No. Dia.
 Marque de commerce du flux
 Flux Tradename
 Electrode-insérée consommable
 Consumable Insert
 Classification du flux-électrode
 Electrode-Flux Classification
 Autre
 Other

⑧ Positions/Positions (QW-405)
 Position(s) du chanfrein
 Position(s) of Groove
 Toute position
 Progression du soudage
 Welding Progression
 Montant ☒ Descendant ☒
 Up Down
 Position(s) de l'angle
 Position(s) of Fillet
 Toute position
 Autre
 Other

⑩ Traitement thermique postsoudage/
 Postweld Heat Treatment (QW-407)
 Gamme de températures
 Temperature Range
 Aucun
 Gamme de durée
 Time Range
 Autre
 Other

⑨ Préchauffage/Preheat (QW-406)
 Température de préchauffage
 Preheat Temperature
 Min. 60°F
 Température de l'interpassage
 Interpass Temperature
 Maintien du préchauffage
 Preheat Maintenance
 Autre
 Other

⑪ Gaz/Gas (QW-408)
 Composition du gaz de protection
 Shielding Gas Composition
 Débit du gaz
 Gas Flow Rate
 Composition du gaz de soutien
 Shielding Gas Composition
 Débit du gaz
 Gas Flow Rate
 Composition du gaz de protection traînant
 Trailing Shielding Gas Composition

Caractéristiques électriques et techniques/Electrical Characteristics and Techniques (QW-409) + (QW-410)								
Méthode(s) de soudure Process(es)	Procédé Process	Métal d'apport Filler Metal		Courant Current				Gamme de vitesse Travel Speed Range
		Classification Classification	Diamètre Diameter	Type Type	Polarité Polarity	Gamme d'ampérage Amp Range	Gamme de voltage Volt Range	
à	SHAW	E6011	1/8" à 5/32"	DC	Inversé	75 - 85	26-30	--
à tres	SHAW	E7018	1/8" à 5/32"	DC	Inversé	105 - 110	26-30	--

Taille et type d'électrode de tungstène
 Electrode Size and Type: --

Mode de transfert du métal pour GMAW
 Mode of Metal Transfer for GMAW: --

Ion droit ou oscillant
 Ion or Weave Bead: Droit et oscillant

Mode de gougeage arrière
 Mode of Back Gouging: Arc Air

Nettoyage initial et entre les passes (brossage, meulage, etc.)
 Initial and Interpass Cleaning (Brushing, Grinding, etc.): Brossage ou meulage

Taille de la tuyère à gaz
 Gas Cup Size: --

Largeur
 Width: --

Fréquence
 Frequency: --

Distance entre tuyère & pièce
 Torch to Work Distance: --

Single Pass (per Side) ou multiple (par côté)
 Single Pass (per Side) or Multiple: --

Electrode unique ou multiple
 Single or Multiple Electrode: --

Gamme de vitesse d'alimentation de l'électrode
 Wire feed speed range: --

Pas de martelage

Autres commentaires/Supplementary Comments

Signature du représentant de l'entreprise
Company Representative's Signature: *Donald H. Catil*

Date: 15 janv. 88

Réservé au ministère/Department use only

Date: 1/20



Illes désignent également les hommes et les femmes.

(Référence: ASME Section IX)

1 Entreprise/Company			
Nom/Name: Construction Promec			
Adresse/Address: 369 rue Murdoch			
Rouyn-Noranda (Québec)			
819-797-3456		Code postal: J9X1G4	
4 Procédé(s) de soudage/Welding Process(es)			
SMAW		Type: Manuel	
		Type:	
		Type:	
3 Métaux de base/Base Metals (QW-403)			
No. 1	Gr No.	À/to	P No. 1 Gr No.
Spécification/Specification		Tension/Tensile	
SA - 516 - 70		70 000	
épaisseur thickness: 3/4"		Diamètre/Diameter	
Métaux d'apport/Filler Metals (QW-404)			
Classification (AWS)	SFA - No.	F - No.	A - No.
E-6011	5.1	3	1
E-7018	5.1	4	1
Positions/Positions (QW-405)			
Position(s) du joint Position(s) of Groove: 1 - G			
Progression du soudage Welding Progression		Montant Up ☐	Descendant Down ☐
Préchauffage/Preheat (QW-406)			
Température de préchauffage Preheat Temperature: 60°F			
Température de l'interpassage Interpass Temperature			

2 Enregistrement provincial Provincial Registration		MS WP: 8814.6
3 Désignation du résultat/Record Identification		
RMS N° PQR No.	PR-1	
DMS N° WPS No.	P -1	
5		
Croquis du joint utilisé/Groove Design used		
10 Traitement thermique postsoudage/ Postweld Heat Treatment (QW-407)		
Température Temperature: aucun		
Durée Time		
Autre Other		
11 Gaz/Gas (QW-408)		
Composition du gaz de protection Shielding Gas Composition: --		
Débit du gaz Gas Flow Rate		
Composition du gaz de soutien Backing Gas Composition		
Débit du gaz Gas Flow Rate		
Autre Other		
12 Technique/Technique (QW-410)		
Cordon droit ou oscillant String or Weave Bead: droit		
Oscillation Oscillation		
Passe unique ou multiple (par côté) Multipass or Single Pass (Per Side): multiple		
Électrode unique ou multiple Single or Multiple Electrode: unique		
Autre Other		

3 Caractéristiques électriques et techniques/Electrical Characteristics and Technique (QW-409) + (QW-410)								
Couche(s) de soudure Weld Layer(s)	Procédé Process	Métal d'apport Filler Metal		Courant Current				Vitesse Travel Speed
		Classification	Diamètre Diameter	Type Type	Polarité Polarity	Ampérage Amp	Voltage Volt	
Primaire	SMAW	E-6011	1/8	DC	Inverse	85	26-30	-
Autres	SMAW	E-7018	1/8	DC	Inverse	105	26-30	-

12
 QC MINISTÈRE DU TRAVAIL ET
 DE LA MAIN-D'ŒUVRE
 APPROUVÉ
 SELON LA LOI SUR LES ALIÉNÉS
 ÉOUS PRESSION D.I.E.T.
 VÉRIFIÉ PAR: [Signature]
 DATE: [Signature]
 100005

Caractéristiques électriques et techniques/Electrical Characteristics and Technical Data (QW-409) + (QW-410)								
Méthode(s) de soudure Welding Method(s)	Procédé Process	Métal d'apport Filler Metal		Courant Current				Gamme de vitesse Travel Speed Range
		Classification	Diamètre Diameter	Type	Polarité Polarity	Gamme d'ampérage Amp Range	Gamme de voltage Volt Range	
SHAW	SHAW	E6011	1/8" à 5/32"	DC	Inversé	75 - 85	26-30	--
SHAW	SHAW	E7018	1/8" à 5/32"	DC	Inversé	105 -110	26-30	--

tailleur et type d'électrode de tungstène
Tungsten Electrode Size and Type

--

mode de transfert du métal pour GMAW
Metal Transfer Mode for GMAW

--

forme droite ou oscillante
Straight or Weave Bead

Droit et oscillant

mode de gougeage arrière
Back Gouging Method

Arc Air

nettoyage initial et entre les passes (brossage, meulage, etc.)
Initial and Interpass Cleaning (Brushing, Grinding, etc.)

Brossage ou meulage

tailleur de la tuyère à gaz
Gas Cup Size

--

largeur
Width

--

fréquence
Frequency

distance entre tuyère et pièce
Torch to Work Distance

--

simple ou multiple (par côté)
Single or Multiple Pass (per Side)

--

électrode unique ou multiple
Single or Multiple Electrode

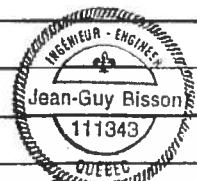
--

gamme de vitesse d'alimentation de l'électrode
Electrode Wire Feed Speed Range

--

ne pas marteler
Do Not Hammer

Autres commentaires/Supplementary Comments



Reviewed And Accepted by Construction Prover Inc. QC Manager
Date: MARCH 29, 2007 Signed: Jean-Guy Bisson, eng

Signature du représentant de l'entreprise
Company Representative's Signature

Date
Date

15 janv. 88

Réservé au ministère/Department use only

é par

Date:

re N°





**Agnico-Eagle Mines Ltd.
Welding Control Procedure**

**PRO Number : AEM-WE-PRO-001
Contract no. : C22466T**



Appendix A

ALL APPLICABLE ITRs & LOGs



**Agnico-Eagle Mines Ltd.
Welding Control Procedure**

**PRO Number : AEM-WE-PRO-001
Contract no. : C22466T**



Appendix A

ALL APPLICABLE ITRs & LOGs

Date de qualification	Qualification
2017-05-06	Soudage sur appareils sous pression Classe A Tuyaux 50 mm, catégorie 160-P1-6G, F3-F4

Emploi

Québec

Certificat de qualification

Nom de famille

MASSICOTTE-ROY

Prénom

ALEXANDRE

Numéro de dossier

0000000176159

Déjà délivré en vertu de la Loi sur la formation et la qualification professionnelles de la main-d'œuvre (L.R.Q., chapitre F-5).

Délivré le

2017-05-06

Expire le

2019-05-06

X

Signature

Ministère du Travail, de l'Emploi et de la Solidarité sociale

001386104

Date de qualification	Qualification
2015-11-18	Soudage sur appareils sous pression Classe A Tuyaux 50 mm, catégorie 160-P1-6G, F3-F4

334 (07-2009)

Plier
ici

Détacher sur le pointillé

Plier
ici

Emploi

Québec

Certificat de qualification

Nom de famille FAUBERT	
Prénom STEVEN	Numéro de dossier 0000000125746

Délivré en vertu de la Loi sur la formation et la qualification professionnelles de la main-d'oeuvre (L.R.Q., chapitre F-5).

Délivré le
2015-11-18
Expire le
2017-11-18

x 
Signature

Ministère du Travail, de l'Emploi et de la Solidarité sociale **001139657**

Objet : Délivrance de votre certificat de qualification

Date de qualification	Qualification
2015-05-28	Soudage sur appareils sous pression Classe A Tuyaux 50 mm, catégorie 160-P1-6G, F3-F4

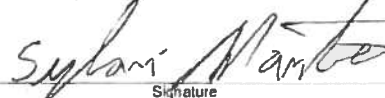
Emploi

Québec  Certificat de qualification

Nom de famille MARTEL	
Prénom SYLVAIN	Numéro de dossier 0000000046942

Délivré en vertu de la Loi sur la formation et la qualification professionnelles de la main-d'oeuvre (L.R.Q., chapitre F-5).

Délivré le 2015-05-28
Expire le 2017-05-28

X 
Signature

Ministère de l'Emploi et de la Solidarité sociale

001055843

Date de qualification

2017-05-06

Qualification

Soudage sur appareils sous pression Classe A

Tuyaux 50 mm, catégorie 160-P1-6G, F3-F4

Emploi

Québec



Certificat de qualification

Nom de famille

LEROUX

Prénom

STEPHANE

Numéro de dossier

0000000102229

Délivré en vertu de la Loi sur la formation et la qualification professionnelles de la main-d'œuvre (L.R.Q., chapitre F-5).

Délivré le

2017-05-06

Expire le

2019-05-06

X

Stephane Leroux
Signature

Ministère du Travail, de l'Emploi et de la Solidarité sociale

001386103

Alberta

Municipal Affairs
and Housing

21396

ABSA

the pressure equipment safety authority

Grade "B" Pressure Welder's

Certificate of Competency

This is to certify that **Marylene Paul**
having complied with provisions of the Safety Codes Act, is authorized to engage
in pressure welding in accordance with the prescribed Regulations.

Dated at Edmonton
October 04, 2007

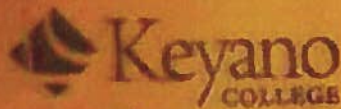


W-26448

File no.

A handwritten signature in black ink, appearing to read "L. Chan".

Chief Inspector and Administrator



Welder Performance Qualification Card

AOQP No.
7121

MARYLENE PAUL
Name

W-26448
File No.

This card is issued pursuant to the 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.

MARCH 17-2016
Date of Test

Marylene Paul
Welder's Signature

Louis Boutin
Welding Examiner (Print/type)

CARD No. **8816**