

Item 15 - Manways - Leak Test Report

**Inukshuk Construction Limited**

Industrial Contracting



Project Management

PO Box 654

Rankin Inlet, NU X0C 0G0

T 867.645.4030 F 867.645.4064

**PRESSURE TEST CERTIFICATE**

SITE: Meliasline

WORK ORDER # \_\_\_\_\_

TITLE: Tank Farm Task #5

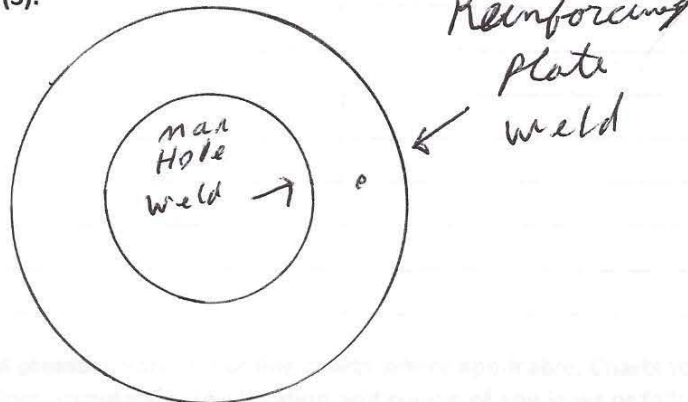
DATE: 9/9/17

**1. DESCRIPTION OF PIPE AND LOCATION:**

Man hole and reinforcing plate  
at 130° — 310°

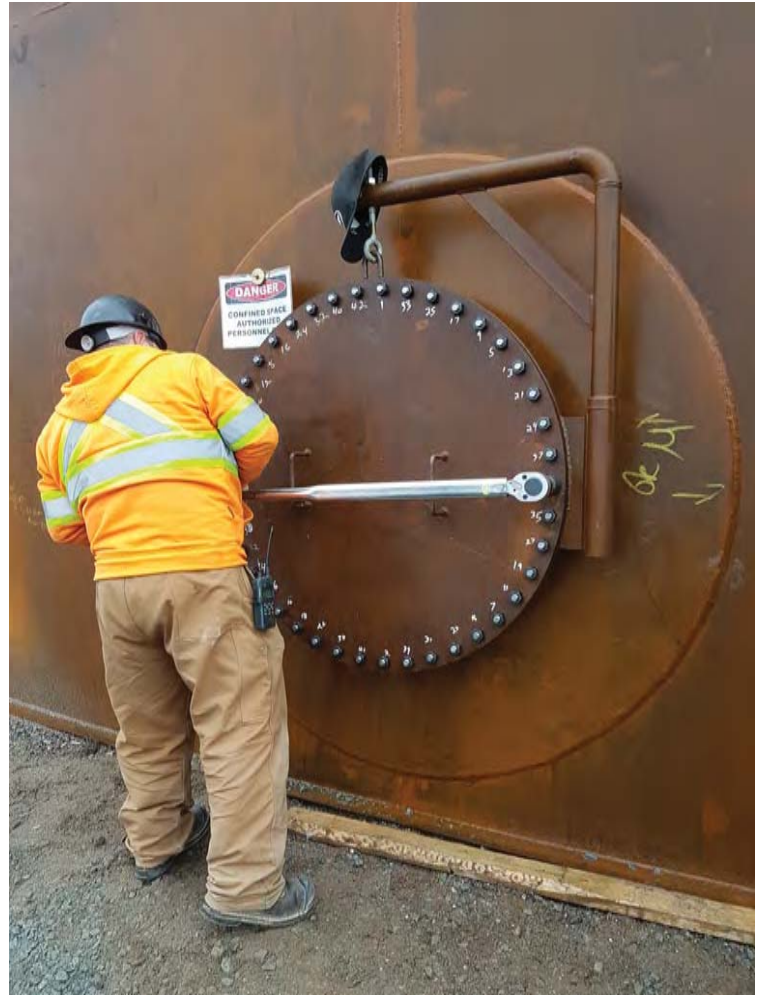
**2. SKETCH INDICATING TEST POINT (S):**

2 manhole  
on tank #5



**3. PIPE STANDARD / SPECIFICATION OF TEST SECTION:**

Item 15 - Manways Bolting Pattern and Torque Wrench Photos



## Item 15 - Manways - Torque Wrench Specs

### Certification of Calibration For Torque Wrench Used to Seal Shell Manholes

| Certification of calibration |       |       |                       |       |       |
|------------------------------|-------|-------|-----------------------|-------|-------|
| Model : 8229239              |       |       | Serial No : E2040301  |       |       |
| 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 | 713.1                 | 713.3 | 713.5 |



|                      |                                             |                       |               |
|----------------------|---------------------------------------------|-----------------------|---------------|
| Client :             | Inukshuk Construction Ltd,                  | Date d'intervention : | 2017-08-29    |
| Adresse/Address :    | PO Box 654 Rankin Inlet,<br>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 |
| Endroit du travail : | Rankin Inlet , Nunavut                      | File no :             |               |
| Job location :       |                                             | Commande :            | 295-1046      |
|                      |                                             | Order :               |               |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>INSP. VISUELLE</b> <input type="checkbox"/> <b>MAGNÉTOSCOPIE</b> <input checked="" type="checkbox"/> <b>RESSUAGE</b> <input type="checkbox"/> <b>ULTRASONS</b> <input checked="" type="checkbox"/><br><b>VISUAL INSP.</b> <input type="checkbox"/> <b>MAGNETIC PARTICLES</b> <input checked="" type="checkbox"/> <b>LIQUID PENETRANT</b> <input type="checkbox"/> <b>ULTRASONIC</b> <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                            |
| <b>DESCRIPTION :</b><br><b>Magnetic inspection and Ultrasonic inspection on tank 5</b><br><p>The client is opting to use an ultrasonic testing, instead of radiographic testing</p> <p>Remark : Visual testing was performed by client.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                            |
| <b>INSP. VISUELLE / VISUAL INSP.</b><br><b>NORME :</b><br><b>SPECIFICATION :</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>N° équip. :</b> N/A<br><b>Equip. no :</b>                                                                                                                                                                               |
| <b>MAGNÉTOSCOPIE</b><br><b>MAGNETIC PARTICLES</b><br>Ampérage : Culasse/Yoke <input checked="" type="checkbox"/> Continue <input checked="" type="checkbox"/> Résiduelle <input type="checkbox"/><br>Amperage : <input type="checkbox"/> Continuous <input type="checkbox"/> Residual <input type="checkbox"/><br>Longitudinale <input type="checkbox"/> Circulaire <input type="checkbox"/> C.A. <input checked="" type="checkbox"/><br>Longitudinal <input type="checkbox"/> Circular <input type="checkbox"/> A.C. <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>N° équip. :</b> MP-Q-27<br><b>Equip. no :</b><br>Sèche <input checked="" type="checkbox"/><br>Dry <input checked="" type="checkbox"/><br>Démagnétisée <input type="checkbox"/><br>Demagnetized <input type="checkbox"/> |
| <b>RESSUAGE</b><br><b>LIQUID PENETRANT</b><br>Pénétrant/Penetrant :<br>Temps/Time :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>NORME :</b><br><b>SPECIFICATION :</b><br>Émulsifiant/Emulsifier :<br>Temps/Time :                                                                                                                                       |
| <b>ULTRASONS / ULTRASONIC</b><br><b>ÉTALONNAGE/CALIBRATION :</b><br>Bloc/Block : IIW Type 2<br><b>APPAREIL/EQUIPMENT :</b><br>Instrument : USM GO+<br>N° équip./Equip. no : UT-Q-34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>NORME :</b><br><b>SPECIFICATION :</b> API 650<br>Trou/Hole : N/A<br>C.A.D. /D.A.C. : <input type="checkbox"/><br>Couplant : Echogel<br>Palpeur/Transducer : 0 degree and 70 degree<br>Échelle/Sweep length : 0" to 2"   |
| <b>RÉSULTATS/RESULTS :</b><br>Ultrasonic inspection was performed: <ul style="list-style-type: none"> <li>On every T (where vertical weld and horizontal touch each other) between first/second, second/third &amp; third/forth course: <b>Accepted</b></li> <li>On every vertical first course from 1" to 7 and 53" to 59": <b>Accepted</b></li> <li>On horizontal UT on two locations, placed at center over each manhole 6" long: <b>Accepted</b></li> </ul> Magnetic particles inspection was performed on angle joint between the shell and nozzle & bottom weld to shell inside and outside the tank: <ul style="list-style-type: none"> <li>-Inside tank, weld shell/nozzle and shell to the bottom weld at 100%: <b>Accepted</b></li> <li>-Outside tank, weld between shell/pad, and weld pad/nozzle, and on weld shell to bottom weld at 100%: <b>Accepted</b></li> </ul> <p><b>Remark: 12 nozzles including 2 manholes; one nozzle outside does not have pad. Please refer to drawing 295-M13; part section J-J item #35. 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.</b></p> |                                                                                                                                                                                                                            |
| <b>Techniciens :</b> Sylvain Germain<br><b>Technicians :</b> CSA W178.2 level 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Assistants:</b><br><b>Approuvé par :</b> Pierre Dostie<br><b>Approved by :</b> Technical Supervisor<br>CSA W178.2 Level 3                                                                                               |

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|                             |                                             |                              |               |
|-----------------------------|---------------------------------------------|------------------------------|---------------|
| <b>Client :</b>             | <b>Inukshuk Construction Ltd,</b>           | <b>Date d'intervention :</b> | 2017-08-29    |
| <b>Adresse/Address :</b>    | PO Box 654 Rankin Inlet,<br>Nunavut X0C 0G0 | <b>Intervention date :</b>   |               |
| <b>Contact :</b>            | Marc Losier                                 | <b>Date du rapport :</b>     | 2017-09-08    |
| <b>Entrepreneur :</b>       | N/A                                         | <b>Report date :</b>         |               |
| <b>Contractor :</b>         |                                             | <b>N° dossier :</b>          | INS-117107-01 |
| <b>File no :</b>            |                                             | <b>Commande :</b>            | 295-1046      |
| <b>Endroit du travail :</b> | Rankin Inlet , Nunavut                      | <b>Order :</b>               |               |
| <b>Job location :</b>       |                                             |                              |               |

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Picture : 1



View of tank # 5

|                      |                    |                    |  |                       |                      |
|----------------------|--------------------|--------------------|--|-----------------------|----------------------|
| <b>Techniciens :</b> | Sylvain Germain    | <b>Assistants:</b> |  | <b>Approuvé par :</b> | Pierre Dostie        |
| <b>Technicians :</b> |                    |                    |  | <b>Approved by :</b>  | Technical Supervisor |
|                      | CSA W178.2 level 2 |                    |  |                       | CSA W178.2 Level 3   |

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## **Item 16 – Internals**

### **Contents**

1. Visual Report
2. Internal Dimension Report (AmSpec)

Project 295 - AEM Meliadine Fuel Storage Tank 6515-C-260-002

Tank 3 and 5 manhole necks - Diesel Test

| Tank # | Manhole # | TEST        |            | Witnesses |             | Comments       |                                                    |
|--------|-----------|-------------|------------|-----------|-------------|----------------|----------------------------------------------------|
|        |           | Date        | Start Time | End Time  | Inukshuk    |                | Agnico Eagle                                       |
| 3      | 1         | Nov 01/2017 | 1:50       | 1:56      | John Curick | Piero Gauthier | Diesel Applied to all manholes, now we wait 48 hrs |
| 3      | 2         | Nov 01/2017 | 1:50       | 1:56      | John Curick | Piero Gauthier | Diesel Applied to all manholes, now we wait 48 hrs |
| 3      | 3         | Nov 01/2017 | 1:50       | 1:56      | John Curick | Piero Gauthier | Diesel Applied now we wait 48 hrs                  |
| 3      | 4         | Nov 01/2017 | 1:50       | 1:56      | John Curick | Piero Gauthier | Diesel Applied now we wait 48 hrs                  |
| 5      | 1         | Nov 01/2017 | 2:00       | 2:05      | John Curick | Piero Gauthier | Diesel Applied now we wait 48 hrs                  |
| 5      | 2         | Nov 01/2017 | 2:00       | 2:05      | John Curick | Piero Gauthier | Diesel Applied now we wait 48 hrs.                 |
|        |           | Nov 04/2017 | 2:30       |           | John Curick | Piero Gauthier | Check Nov 04, 2:30 pm No leak to report.           |

# Inukshuk Construction Limited

Industrial Contracting  Project Management

PO Box 654  
Rankin Inlet, NU X0C 0G0  
T 867.645.4030 F 867.645.4064

## Item 16 - Internals - Visual Report

### Fuel Tank Welding Visual Report

ICL Project #: 295 Supervisor Name: Sheldon Burry Location: Meliadine (Portal #1)

Client: Agnico Eagle Tank No: 5 Component Inspected: INTERNALS

Was all work on this component found to be acceptable? ☒ **Yes** ☐ **No** (if no, provide details below)

Details: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Corrective Action Required? ☐ **Yes** (if yes, provide details below) ☐ **No** (if no, explain why not)

Details of Corrective Action: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Supervisor Signature: *Sheldon Burry*

Date: 2.10.17

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

**ALL MEASUREMENTS TO BE SHOWN AS INCHES**

**Use Proper Codes and Enter all data**

[illegible]

## **Item 17 - Externals**

### **Contents**

1. Visual Report

# Inukshuk Construction Limited

Industrial Contracting



Project Management

PO Box 654  
Rankin Inlet, NU X0C 0G0  
T 867.645.4030 F 867.645.4064

## Item 17 - Externals - Visual Report

### Fuel Tank Welding Visual Report

ICL Project #: 295 Supervisor Name: Sheldon Burry Location: Meliadine (Portal #1)

Client: Agnico Eagle Tank No: 5 Component Inspected: EXTERNALS

Was all work on this component found to be acceptable? ☒ **Yes** ☐ **No** (if no, provide details below)

Details: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Corrective Action Required? ☐ **Yes** (if yes, provide details below) ☐ **No** (if no, explain why not)

Details of Corrective Action: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Supervisor Signature: Sheldon Burry

Date: 2017

## **Item 18 – Stairs and Platforms**

### **Contents**

1. Visual Report

# Inukshuk Construction Limited

Industrial Contracting



Project Management

PO Box 654  
Rankin Inlet, NU X0C 0G0  
T 867.645.4030 F 867.645.4064

## Item 18 - Stairs and Platforms - Visual Report

### Fuel Tank Welding Visual Report

ICL Project #: 295 Supervisor Name: Sheldon Burry Location: Meliadine (Portal #1)

Client: Agnico Eagle Tank No: 5 Component Inspected: STAIRS AND PLATFORMS

Was all work on this component found to be acceptable? ☐ Yes ☒ No (if no, provide details below)

Details: 3 steps to close to the ground

Corrective Action Required? ☒ Yes (if yes, provide details below) ☐ No (if no, explain why not)

Details of Corrective Action: cut the bottom steps off

Supervisor Signature: Sheldon Burry

Date: 2 10 17

## **Item 19 – Bolts and Nuts**

### **Contents**

1. Fastener List
2. Torque Wrench Specs

## Fastener List

| Tank # | qty    | Qty of Component | Connection                      | Description                                         | Lght (in) |
|--------|--------|------------------|---------------------------------|-----------------------------------------------------|-----------|
| 5      | 26.00  | 13               | Shell to Rafter Connection      | Bolt, Structural A325, 5/8"                         | 1.75      |
| 5      | 26.00  | 13               | Rafter to Center Column         | Bolt, Structural A325, 5/8"                         | 3         |
| 5      | 52.00  |                  |                                 | Nut, Structural heavy hex 5/8"                      |           |
| 5      | 104.00 |                  |                                 | Washer, type A, 5/8"                                |           |
| 5      | 84.00  | 2                | 32"Shell Manhole                | Stud, L7, 3/4"                                      | 2 3/4     |
| 5      | 48.00  | 6                | 6" in/out Nozzle                | Stud, L7, 3/4"                                      | 4         |
| 5      |        | 4                | 3" Water Drawoff                | Stud, L7, 5/8"                                      | 3 1/2     |
| 5      | 20.00  | 1                | 24" Roof manhole                | Stud, L7, 5/8"                                      | 2 1/4     |
| 5      | 20.00  | 1                | 24" Roof manhole emergency vent | Stud, L7, 5/8"                                      | 9.5       |
| 5      | 16.00  | 1                | 16" Vent                        | Stud, L7, 1"                                        | 5 1/4     |
| 5      | 8.00   | 1                | 8" Roof Nozzle                  | Stud, L7, 3/4"                                      | 4 1/4     |
| 5      | 8.00   | 1                | 6" Gauge Hatch                  | Stud, L7, 3/4"                                      | 4         |
| 5      | 8.00   | 1                | 4" Roof Nozzle                  | Stud, L7, 5/8"                                      | 3.5       |
| 5      | 2.00   | 2                | 32"Shell Manhole                | Gasket, Ring, Durlon 8500, 1/8", 899 o.d.x 762 i.d. |           |
| 5      | 6.00   | 6                | 6" in/out Nozzle                | Gasket, Ring, Durlon 8500, 1/8" x 6" x 150#         |           |
| 5      |        | 4                | 3" Water Drawoff                | Gasket, Ring, Durlon 8500, 1/8" x 3" x 150#         |           |
| 5      | 2.00   | 2                | 24" Roof manhole                | Gasket, Ring, Durlon 8500, 1/16" x 762 x 610        |           |
| 5      | 1.00   | 1                | 8" High Level                   | Gasket, Ring, Durlon 8500, 1/16" x 150#, 8"         |           |
| 5      | 1.00   | 1                | 6" Gauge Hatch                  | Gasket, Full Face, Durlon 8500, 1/16" x 150#, 6"    |           |
| 5      | 1.00   | 1                | 4" Roof Nozzle                  | Gasket, Full Face, Durlon 8500, 1/16" x 150#, 4"    |           |
| 5      | 32.00  |                  |                                 | Nut, A194, Gr. 4, 1"                                |           |
| 5      | 296.00 |                  |                                 | Nut, A194, Gr. 4, 3/4"                              |           |
| 5      | 96.00  |                  |                                 | Nut, A194, Gr. 4, 5/8"                              |           |

## 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 | 713.1                 | 713.3 | 713.5 |

## **Item 20 - Final**

### **Contents**

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

| API STANDARD 650         |                                                                                                                                    |                         |            |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------|
| APPENDIX                 | B, K, T                                                                                                                            | YEAR COMPLETED          | 2017       |
| EDITION                  | TWELFTH                                                                                                                            | ADDENDUM NO.            | 2          |
| NOMINAL DIAMETER         | 8.2M                                                                                                                               | NOMINAL HEIGHT          | 4.75M      |
| MAXIMUM CAPACITY         | 250CUM                                                                                                                             | DESIGN LIQUID LEVEL     | 4.75M      |
| DESIGN SPECIFIC GRAVITY  | 0.85                                                                                                                               | DESIGN METAL TEMP.      | -40 DEG C  |
| DESIGN PRESSURE          | ATM                                                                                                                                | MAXIMUM OPERATING TEMP. | 90 DEG C   |
| MANUFACTURE'S SERIAL NO. | 295-5                                                                                                                              | PARTIAL STRESS RELIEF   | -          |
|                          |                                                                                                                                    | PURCHASER'S TANK NO.    | 65TNK41608 |
| FABRICATED BY            | INUKSHUK CONSTRUCTION LIMITED                                                                                                      |                         |            |
| ERECTED BY               | INUKSHUK CONSTRUCTION LIMITED                                                                                                      |                         |            |
| SHELL COURSE<br>1 TO 2   | MATERIAL<br>CSA G40.21M-260WT NORMALIZED<br>TCVN 13FT/LBS@-45DEG F TRANSVERSE CHARPY<br>TCVN 15FT/LBS@-45DEG F LONGITUDINAL CHARPY |                         |            |

Industrial Contracting  Project Management

## Item 20 – Final – Punch List

## Punch List

[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. 5, 8.2 M DIA X 4.75 M HIGH, 250 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.



**INUKSHUK CONSTRUCTION LIMITED**

Manufacturer

**Kyle Brown**

Design Engineer

**14-Nov-17**

Date

**Permit Number: P471**



|       | 1 M    | mm    | 1 M    | mm    | 1 M    | mm    | 1 M    | mm    | 1 M    | mm    | 1 M    | mm    | 1 M    | mm    | 1 M    | mm    | 1 M    | mm    | 1 M     |
|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|---------|
| 0.000 | 53.170 | 0.100 | 58.481 | 0.200 | 63.792 | 0.300 | 69.098 | 0.400 | 74.391 | 0.500 | 79.685 | 0.600 | 84.978 | 0.700 | 90.272 | 0.800 | 95.565 | 0.900 | 100.859 |
| 0.001 | 53.223 | 0.101 | 58.534 | 0.201 | 63.845 | 0.301 | 69.151 | 0.401 | 74.444 | 0.501 | 79.738 | 0.601 | 85.031 | 0.701 | 90.325 | 0.801 | 95.618 | 0.901 | 100.912 |
| 0.002 | 53.276 | 0.102 | 58.587 | 0.202 | 63.898 | 0.302 | 69.204 | 0.402 | 74.497 | 0.502 | 79.791 | 0.602 | 85.084 | 0.702 | 90.378 | 0.802 | 95.671 | 0.902 | 100.965 |
| 0.003 | 53.329 | 0.103 | 58.640 | 0.203 | 63.951 | 0.303 | 69.257 | 0.403 | 74.550 | 0.503 | 79.844 | 0.603 | 85.137 | 0.703 | 90.431 | 0.803 | 95.724 | 0.903 | 101.018 |
| 0.004 | 53.382 | 0.104 | 58.693 | 0.204 | 64.005 | 0.304 | 69.310 | 0.404 | 74.603 | 0.504 | 79.897 | 0.604 | 85.190 | 0.704 | 90.484 | 0.804 | 95.777 | 0.904 | 101.070 |
| 0.005 | 53.436 | 0.105 | 58.747 | 0.205 | 64.058 | 0.305 | 69.363 | 0.405 | 74.656 | 0.505 | 79.950 | 0.605 | 85.243 | 0.705 | 90.536 | 0.805 | 95.830 | 0.905 | 101.123 |
| 0.006 | 53.489 | 0.106 | 58.800 | 0.206 | 64.111 | 0.306 | 69.416 | 0.406 | 74.709 | 0.506 | 80.003 | 0.606 | 85.296 | 0.706 | 90.589 | 0.806 | 95.883 | 0.906 | 101.176 |
| 0.007 | 53.542 | 0.107 | 58.853 | 0.207 | 64.164 | 0.307 | 69.469 | 0.407 | 74.762 | 0.507 | 80.055 | 0.607 | 85.349 | 0.707 | 90.642 | 0.807 | 95.936 | 0.907 | 101.229 |
| 0.008 | 53.595 | 0.108 | 58.906 | 0.208 | 64.217 | 0.308 | 69.521 | 0.408 | 74.815 | 0.508 | 80.108 | 0.608 | 85.402 | 0.708 | 90.695 | 0.808 | 95.989 | 0.908 | 101.282 |
| 0.009 | 53.648 | 0.109 | 58.959 | 0.209 | 64.270 | 0.309 | 69.574 | 0.409 | 74.868 | 0.509 | 80.161 | 0.609 | 85.455 | 0.709 | 90.748 | 0.809 | 96.042 | 0.909 | 101.335 |
| 0.010 | 53.701 | 0.110 | 59.012 | 0.210 | 64.323 | 0.310 | 69.627 | 0.410 | 74.921 | 0.510 | 80.214 | 0.610 | 85.508 | 0.710 | 90.801 | 0.810 | 96.095 | 0.910 | 101.388 |
| 0.011 | 53.754 | 0.111 | 59.065 | 0.211 | 64.376 | 0.311 | 69.680 | 0.411 | 74.974 | 0.511 | 80.267 | 0.611 | 85.561 | 0.711 | 90.854 | 0.811 | 96.148 | 0.911 | 101.441 |
| 0.012 | 53.807 | 0.112 | 59.118 | 0.212 | 64.429 | 0.312 | 69.733 | 0.412 | 75.027 | 0.512 | 80.320 | 0.612 | 85.614 | 0.712 | 90.907 | 0.812 | 96.200 | 0.912 | 101.494 |
| 0.013 | 53.860 | 0.113 | 59.171 | 0.213 | 64.483 | 0.313 | 69.786 | 0.413 | 75.080 | 0.513 | 80.373 | 0.613 | 85.667 | 0.713 | 90.960 | 0.813 | 96.253 | 0.913 | 101.547 |
| 0.014 | 53.914 | 0.114 | 59.225 | 0.214 | 64.536 | 0.314 | 69.839 | 0.414 | 75.133 | 0.514 | 80.426 | 0.614 | 85.719 | 0.714 | 91.013 | 0.814 | 96.306 | 0.914 | 101.600 |
| 0.015 | 53.967 | 0.115 | 59.278 | 0.215 | 64.589 | 0.315 | 69.892 | 0.415 | 75.185 | 0.515 | 80.479 | 0.615 | 85.772 | 0.715 | 91.066 | 0.815 | 96.359 | 0.915 | 101.653 |
| 0.016 | 54.020 | 0.116 | 59.331 | 0.216 | 64.642 | 0.316 | 69.945 | 0.416 | 75.238 | 0.516 | 80.532 | 0.616 | 85.825 | 0.716 | 91.119 | 0.816 | 96.412 | 0.916 | 101.706 |
| 0.017 | 54.073 | 0.117 | 59.384 | 0.217 | 64.695 | 0.317 | 69.998 | 0.417 | 75.291 | 0.517 | 80.585 | 0.617 | 85.878 | 0.717 | 91.172 | 0.817 | 96.465 | 0.917 | 101.759 |
| 0.018 | 54.126 | 0.118 | 59.437 | 0.218 | 64.748 | 0.318 | 70.051 | 0.418 | 75.344 | 0.518 | 80.638 | 0.618 | 85.931 | 0.718 | 91.225 | 0.818 | 96.518 | 0.918 | 101.812 |
| 0.019 | 54.179 | 0.119 | 59.490 | 0.219 | 64.801 | 0.319 | 70.104 | 0.419 | 75.397 | 0.519 | 80.691 | 0.619 | 85.984 | 0.719 | 91.278 | 0.819 | 96.571 | 0.919 | 101.864 |
| 0.020 | 54.232 | 0.120 | 59.543 | 0.220 | 64.854 | 0.320 | 70.157 | 0.420 | 75.450 | 0.520 | 80.744 | 0.620 | 86.037 | 0.720 | 91.331 | 0.820 | 96.624 | 0.920 | 101.917 |
| 0.021 | 54.285 | 0.121 | 59.596 | 0.221 | 64.907 | 0.321 | 70.210 | 0.421 | 75.503 | 0.521 | 80.797 | 0.621 | 86.090 | 0.721 | 91.383 | 0.821 | 96.677 | 0.921 | 101.970 |
| 0.022 | 54.338 | 0.122 | 59.649 | 0.222 | 64.961 | 0.322 | 70.263 | 0.422 | 75.556 | 0.522 | 80.849 | 0.622 | 86.143 | 0.722 | 91.436 | 0.822 | 96.730 | 0.922 | 102.023 |
| 0.023 | 54.392 | 0.123 | 59.703 | 0.223 | 65.014 | 0.323 | 70.315 | 0.423 | 75.609 | 0.523 | 80.902 | 0.623 | 86.196 | 0.723 | 91.489 | 0.823 | 96.783 | 0.923 | 102.076 |
| 0.024 | 54.445 | 0.124 | 59.756 | 0.224 | 65.067 | 0.324 | 70.368 | 0.424 | 75.662 | 0.524 | 80.955 | 0.624 | 86.249 | 0.724 | 91.542 | 0.824 | 96.836 | 0.924 | 102.129 |
| 0.025 | 54.498 | 0.125 | 59.809 | 0.225 | 65.120 | 0.325 | 70.421 | 0.425 | 75.715 | 0.525 | 81.008 | 0.625 | 86.302 | 0.725 | 91.595 | 0.825 | 96.889 | 0.925 | 102.182 |
| 0.026 | 54.551 | 0.126 | 59.862 | 0.226 | 65.173 | 0.326 | 70.474 | 0.426 | 75.768 | 0.526 | 81.061 | 0.626 | 86.355 | 0.726 | 91.648 | 0.826 | 96.942 | 0.926 | 102.235 |
| 0.027 | 54.604 | 0.127 | 59.915 | 0.227 | 65.226 | 0.327 | 70.527 | 0.427 | 75.821 | 0.527 | 81.114 | 0.627 | 86.408 | 0.727 | 91.701 | 0.827 | 96.995 | 0.927 | 102.288 |
| 0.028 | 54.657 | 0.128 | 59.968 | 0.228 | 65.279 | 0.328 | 70.580 | 0.428 | 75.874 | 0.528 | 81.167 | 0.628 | 86.461 | 0.728 | 91.754 | 0.828 | 97.047 | 0.928 | 102.341 |
| 0.029 | 54.710 | 0.129 | 60.021 | 0.229 | 65.332 | 0.329 | 70.633 | 0.429 | 75.927 | 0.529 | 81.220 | 0.629 | 86.513 | 0.729 | 91.807 | 0.829 | 97.100 | 0.929 | 102.394 |
| 0.030 | 54.763 | 0.130 | 60.074 | 0.230 | 65.385 | 0.330 | 70.686 | 0.430 | 75.979 | 0.530 | 81.273 | 0.630 | 86.566 | 0.730 | 91.860 | 0.830 | 97.153 | 0.930 | 102.447 |
| 0.031 | 54.816 | 0.131 | 60.127 | 0.231 | 65.439 | 0.331 | 70.739 | 0.431 | 76.032 | 0.531 | 81.326 | 0.631 | 86.619 | 0.731 | 91.913 | 0.831 | 97.206 | 0.931 | 102.500 |
| 0.032 | 54.870 | 0.132 | 60.181 | 0.232 | 65.492 | 0.332 | 70.792 | 0.432 | 76.085 | 0.532 | 81.379 | 0.632 | 86.672 | 0.732 | 91.966 | 0.832 | 97.259 | 0.932 | 102.553 |
| 0.033 | 54.923 | 0.133 | 60.234 | 0.233 | 65.545 | 0.333 | 70.845 | 0.433 | 76.138 | 0.533 | 81.432 | 0.633 | 86.725 | 0.733 | 92.019 | 0.833 | 97.312 | 0.933 | 102.606 |
| 0.034 | 54.976 | 0.134 | 60.287 | 0.234 | 65.598 | 0.334 | 70.898 | 0.434 | 76.191 | 0.534 | 81.485 | 0.634 | 86.778 | 0.734 | 92.072 | 0.834 | 97.365 | 0.934 | 102.659 |
| 0.035 | 55.029 | 0.135 | 60.340 | 0.235 | 65.651 | 0.335 | 70.951 | 0.435 | 76.244 | 0.535 | 81.538 | 0.635 | 86.831 | 0.735 | 92.125 | 0.835 | 97.418 | 0.935 | 102.711 |
| 0.036 | 55.082 | 0.136 | 60.393 | 0.236 | 65.704 | 0.336 | 71.004 | 0.436 | 76.297 | 0.536 | 81.591 | 0.636 | 86.884 | 0.736 | 92.177 | 0.836 | 97.471 | 0.936 | 102.764 |
| 0.037 | 55.135 | 0.137 | 60.446 | 0.237 | 65.757 | 0.337 | 71.057 | 0.437 | 76.350 | 0.537 | 81.643 | 0.637 | 86.937 | 0.737 | 92.230 | 0.837 | 97.524 | 0.937 | 102.817 |
| 0.038 | 55.188 | 0.138 | 60.499 | 0.238 | 65.810 | 0.338 | 71.109 | 0.438 | 76.403 | 0.538 | 81.696 | 0.638 | 86.990 | 0.738 | 92.283 | 0.838 | 97.577 | 0.938 | 102.870 |
| 0.039 | 55.241 | 0.139 | 60.552 | 0.239 | 65.863 | 0.339 | 71.162 | 0.439 | 76.456 | 0.539 | 81.749 | 0.639 | 87.043 | 0.739 | 92.336 | 0.839 | 97.630 | 0.939 | 102.923 |
| 0.040 | 55.294 | 0.140 | 60.605 | 0.240 | 65.917 | 0.340 | 71.215 | 0.440 | 76.509 | 0.540 | 81.802 | 0.640 | 87.096 | 0.740 | 92.389 | 0.840 | 97.683 | 0.940 | 102.976 |
| 0.041 | 55.347 | 0.141 | 60.659 | 0.241 | 65.970 | 0.341 | 71.268 | 0.441 | 76.562 | 0.541 | 81.855 | 0.641 | 87.149 | 0.741 | 92.442 | 0.841 | 97.736 | 0.941 | 103.029 |
| 0.042 | 55.401 | 0.142 | 60.712 | 0.242 | 66.023 | 0.342 | 71.321 | 0.442 | 76.615 | 0.542 | 81.908 | 0.642 | 87.202 | 0.742 | 92.495 | 0.842 | 97.789 | 0.942 | 103.082 |
| 0.043 | 55.454 | 0.143 | 60.765 | 0.243 | 66.076 | 0.343 | 71.374 | 0.443 | 76.668 | 0.543 | 81.961 | 0.643 | 87.255 | 0.743 | 92.548 | 0.843 | 97.841 | 0.943 | 103.135 |
| 0.044 | 55.507 | 0.144 | 60.818 | 0.244 | 66.129 | 0.344 | 71.427 | 0.444 | 76.721 | 0.544 | 82.014 | 0.644 | 87.307 | 0.744 |        |       |        |       |         |



## INNAGE TABLE

**GAUGE HEIGHT: 4.959 M**

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

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**CAPACITIES GIVEN IN CUBIC METERS**

GAUGE HEIGHT: 4.959 M

|       | 4 M     | mm    | 4 M     | mm    | 4 M     | mm    | 4 M     | mm    | 4 M     | mm    | 4 M     | mm    | 4 M     | mm    | 4 M     | mm    | 4 M     | mm    | 4 M |
|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-----|
| 0.000 | 211.921 | 0.100 | 217.208 | 0.200 | 222.496 | 0.300 | 227.783 | 0.400 | 233.071 | 0.500 | 238.358 | 0.600 | 243.646 | 0.700 | 248.933 | 0.800 | 254.221 | 0.900 |     |
| 0.001 | 211.974 | 0.101 | 217.261 | 0.201 | 222.549 | 0.301 | 227.836 | 0.401 | 233.124 | 0.501 | 238.411 | 0.601 | 243.699 | 0.701 | 248.986 | 0.801 | 254.274 | 0.901 |     |
| 0.002 | 212.027 | 0.102 | 217.314 | 0.202 | 222.602 | 0.302 | 227.889 | 0.402 | 233.177 | 0.502 | 238.464 | 0.602 | 243.751 | 0.702 | 249.039 | 0.802 | 254.327 | 0.902 |     |
| 0.003 | 212.080 | 0.103 | 217.367 | 0.203 | 222.655 | 0.303 | 227.942 | 0.403 | 233.229 | 0.503 | 238.517 | 0.603 | 243.804 | 0.703 | 249.092 | 0.803 | 254.380 | 0.903 |     |
| 0.004 | 212.133 | 0.104 | 217.420 | 0.204 | 222.707 | 0.304 | 227.995 | 0.404 | 233.282 | 0.504 | 238.570 | 0.604 | 243.857 | 0.704 | 249.145 | 0.804 | 254.433 | 0.904 |     |
| 0.005 | 212.185 | 0.105 | 217.473 | 0.205 | 222.760 | 0.305 | 228.048 | 0.405 | 233.335 | 0.505 | 238.623 | 0.605 | 243.910 | 0.705 | 249.198 | 0.805 | 254.486 | 0.905 |     |
| 0.006 | 212.238 | 0.106 | 217.526 | 0.206 | 222.813 | 0.306 | 228.101 | 0.406 | 233.388 | 0.506 | 238.676 | 0.606 | 243.963 | 0.706 | 249.250 | 0.806 | 254.539 | 0.906 |     |
| 0.007 | 212.291 | 0.107 | 217.579 | 0.207 | 222.866 | 0.307 | 228.154 | 0.407 | 233.441 | 0.507 | 238.728 | 0.607 | 244.016 | 0.707 | 249.303 | 0.807 | 254.592 | 0.907 |     |
| 0.008 | 212.344 | 0.108 | 217.631 | 0.208 | 222.919 | 0.308 | 228.206 | 0.408 | 233.494 | 0.508 | 238.781 | 0.608 | 244.069 | 0.708 | 249.356 | 0.808 | 254.645 | 0.908 |     |
| 0.009 | 212.397 | 0.109 | 217.684 | 0.209 | 222.972 | 0.309 | 228.259 | 0.409 | 233.547 | 0.509 | 238.834 | 0.609 | 244.122 | 0.709 | 249.409 | 0.809 | 254.698 | 0.909 |     |
| 0.010 | 212.450 | 0.110 | 217.737 | 0.210 | 223.025 | 0.310 | 228.312 | 0.410 | 233.600 | 0.510 | 238.887 | 0.610 | 244.174 | 0.710 | 249.462 | 0.810 | 254.751 | 0.910 |     |
| 0.011 | 212.503 | 0.111 | 217.790 | 0.211 | 223.078 | 0.311 | 228.365 | 0.411 | 233.652 | 0.511 | 238.940 | 0.611 | 244.227 | 0.711 | 249.515 | 0.811 | 254.804 | 0.911 |     |
| 0.012 | 212.556 | 0.112 | 217.843 | 0.212 | 223.130 | 0.312 | 228.418 | 0.412 | 233.705 | 0.512 | 238.993 | 0.612 | 244.280 | 0.712 | 249.568 | 0.812 | 254.857 | 0.912 |     |
| 0.013 | 212.608 | 0.113 | 217.896 | 0.213 | 223.183 | 0.313 | 228.471 | 0.413 | 233.758 | 0.513 | 239.046 | 0.613 | 244.333 | 0.713 | 249.621 | 0.813 | 254.910 | 0.913 |     |
| 0.014 | 212.661 | 0.114 | 217.949 | 0.214 | 223.236 | 0.314 | 228.524 | 0.414 | 233.811 | 0.514 | 239.099 | 0.614 | 244.386 | 0.714 | 249.674 | 0.814 | 254.963 | 0.914 |     |
| 0.015 | 212.714 | 0.115 | 218.002 | 0.215 | 223.289 | 0.315 | 228.577 | 0.415 | 233.864 | 0.515 | 239.151 | 0.615 | 244.439 | 0.715 | 249.727 | 0.815 | 255.016 | 0.915 |     |
| 0.016 | 212.767 | 0.116 | 218.054 | 0.216 | 223.342 | 0.316 | 228.629 | 0.416 | 233.917 | 0.516 | 239.204 | 0.616 | 244.492 | 0.716 | 249.780 | 0.816 | 255.069 | 0.916 |     |
| 0.017 | 212.820 | 0.117 | 218.107 | 0.217 | 223.395 | 0.317 | 228.682 | 0.417 | 233.970 | 0.517 | 239.257 | 0.617 | 244.545 | 0.717 | 249.833 | 0.817 | 255.122 | 0.917 |     |
| 0.018 | 212.873 | 0.118 | 218.160 | 0.218 | 223.448 | 0.318 | 228.735 | 0.418 | 234.023 | 0.518 | 239.310 | 0.618 | 244.597 | 0.718 | 249.886 | 0.818 | 255.175 | 0.918 |     |
| 0.019 | 212.926 | 0.119 | 218.213 | 0.219 | 223.501 | 0.319 | 228.788 | 0.419 | 234.075 | 0.519 | 239.363 | 0.619 | 244.650 | 0.719 | 249.939 | 0.819 | 255.228 | 0.919 |     |
| 0.020 | 212.979 | 0.120 | 218.266 | 0.220 | 223.553 | 0.320 | 228.841 | 0.420 | 234.128 | 0.520 | 239.416 | 0.620 | 244.703 | 0.720 | 250.000 | 0.820 | 255.280 | 0.920 |     |
| 0.021 | 213.031 | 0.121 | 218.319 | 0.221 | 223.606 | 0.321 | 228.894 | 0.421 | 234.181 | 0.521 | 239.469 | 0.621 | 244.756 | 0.721 | 250.053 | 0.821 | 255.333 | 0.921 |     |
| 0.022 | 213.084 | 0.122 | 218.372 | 0.222 | 223.659 | 0.322 | 228.947 | 0.422 | 234.234 | 0.522 | 239.522 | 0.622 | 244.809 | 0.722 | 250.106 | 0.822 | 255.386 | 0.922 |     |
| 0.023 | 213.137 | 0.123 | 218.425 | 0.223 | 223.712 | 0.323 | 228.999 | 0.423 | 234.287 | 0.523 | 239.574 | 0.623 | 244.862 | 0.723 | 250.159 | 0.823 | 255.439 | 0.923 |     |
| 0.024 | 213.190 | 0.124 | 218.477 | 0.224 | 223.765 | 0.324 | 229.052 | 0.424 | 234.340 | 0.524 | 239.627 | 0.624 | 244.915 | 0.724 | 250.212 | 0.824 | 255.492 | 0.924 |     |
| 0.025 | 213.243 | 0.125 | 218.530 | 0.225 | 223.818 | 0.325 | 229.105 | 0.425 | 234.393 | 0.525 | 239.680 | 0.625 | 244.968 | 0.725 | 250.265 | 0.825 | 255.545 | 0.925 |     |
| 0.026 | 213.296 | 0.126 | 218.583 | 0.226 | 223.871 | 0.326 | 229.158 | 0.426 | 234.446 | 0.526 | 239.733 | 0.626 | 245.020 | 0.726 | 250.318 | 0.826 | 255.598 | 0.926 |     |
| 0.027 | 213.349 | 0.127 | 218.636 | 0.227 | 223.924 | 0.327 | 229.211 | 0.427 | 234.498 | 0.527 | 239.786 | 0.627 | 245.073 | 0.727 | 250.371 | 0.827 | 255.651 | 0.927 |     |
| 0.028 | 213.402 | 0.128 | 218.689 | 0.228 | 223.976 | 0.328 | 229.264 | 0.428 | 234.551 | 0.528 | 239.839 | 0.628 | 245.126 | 0.728 | 250.424 | 0.828 | 255.704 | 0.928 |     |
| 0.029 | 213.454 | 0.129 | 218.742 | 0.229 | 224.029 | 0.329 | 229.317 | 0.429 | 234.604 | 0.529 | 239.892 | 0.629 | 245.179 | 0.729 | 250.477 | 0.829 | 255.757 | 0.929 |     |
| 0.030 | 213.507 | 0.130 | 218.795 | 0.230 | 224.082 | 0.330 | 229.370 | 0.430 | 234.657 | 0.530 | 239.945 | 0.630 | 245.232 | 0.730 | 250.530 | 0.830 | 255.810 | 0.930 |     |
| 0.031 | 213.560 | 0.131 | 218.848 | 0.231 | 224.135 | 0.331 | 229.422 | 0.431 | 234.710 | 0.531 | 239.997 | 0.631 | 245.285 | 0.731 | 250.583 | 0.831 | 255.863 | 0.931 |     |
| 0.032 | 213.613 | 0.132 | 218.900 | 0.232 | 224.188 | 0.332 | 229.475 | 0.432 | 234.763 | 0.532 | 240.050 | 0.632 | 245.338 | 0.732 | 250.636 | 0.832 | 255.916 | 0.932 |     |
| 0.033 | 213.666 | 0.133 | 218.953 | 0.233 | 224.241 | 0.333 | 229.528 | 0.433 | 234.816 | 0.533 | 240.103 | 0.633 | 245.391 | 0.733 | 250.689 | 0.833 | 255.969 | 0.933 |     |
| 0.034 | 213.719 | 0.134 | 219.006 | 0.234 | 224.294 | 0.334 | 229.581 | 0.434 | 234.869 | 0.534 | 240.156 | 0.634 | 245.443 | 0.734 | 250.742 | 0.834 | 256.022 | 0.934 |     |
| 0.035 | 213.772 | 0.135 | 219.059 | 0.235 | 224.347 | 0.335 | 229.634 | 0.435 | 234.921 | 0.535 | 240.209 | 0.635 | 245.496 | 0.735 | 250.795 | 0.835 | 256.075 | 0.935 |     |
| 0.036 | 213.825 | 0.136 | 219.112 | 0.236 | 224.399 | 0.336 | 229.687 | 0.436 | 234.974 | 0.536 | 240.262 | 0.636 | 245.549 | 0.736 | 250.848 | 0.836 | 256.128 | 0.936 |     |
| 0.037 | 213.877 | 0.137 | 219.165 | 0.237 | 224.452 | 0.337 | 229.740 | 0.437 | 235.027 | 0.537 | 240.315 | 0.637 | 245.602 | 0.737 | 250.901 | 0.837 | 256.181 | 0.937 |     |
| 0.038 | 213.930 | 0.138 | 219.218 | 0.238 | 224.505 | 0.338 | 229.793 | 0.438 | 235.080 | 0.538 | 240.368 | 0.638 | 245.655 | 0.738 | 250.954 | 0.838 | 256.234 | 0.938 |     |
| 0.039 | 213.983 | 0.139 | 219.271 | 0.239 | 224.558 | 0.339 | 229.845 | 0.439 | 235.133 | 0.539 | 240.420 | 0.639 | 245.708 | 0.739 | 251.007 | 0.839 | 256.287 | 0.939 |     |
| 0.040 | 214.036 | 0.140 | 219.323 | 0.240 | 224.611 | 0.340 | 229.898 | 0.440 | 235.186 | 0.540 | 240.473 | 0.640 | 245.761 | 0.740 | 251.060 | 0.840 | 256.340 | 0.940 |     |
| 0.041 | 214.089 | 0.141 | 219.376 | 0.241 | 224.664 | 0.341 | 229.951 | 0.441 | 235.239 | 0.541 | 240.526 | 0.641 | 245.814 | 0.741 | 251.113 | 0.841 | 256.393 | 0.941 |     |
| 0.042 | 214.142 | 0.142 | 219.429 | 0.242 | 224.717 | 0.342 | 230.004 | 0.442 | 235.292 | 0.542 | 240.579 | 0.642 | 245.866 | 0.742 | 251.166 | 0.842 | 256.446 | 0.942 |     |
| 0.043 | 214.195 | 0.143 | 219.482 | 0.243 | 224.770 | 0.343 | 230.057 | 0.443 | 235.344 | 0.543 | 240.632 | 0.643 | 245.919 | 0.743 | 251.219 | 0.843 | 256.499 | 0.943 |     |
| 0.044 | 214.248 | 0.144 | 219.535 | 0.244 | 224.822 | 0.344 | 230.110 | 0.444 | 235.397 | 0.544 | 240.685 | 0.644 | 245.972 | 0.744 | 251.272 | 0.844 | 256.552 | 0.944 |     |
| 0.045 | 214.300 | 0.145 | 219.588 | 0.245 | 224.875 | 0.345 | 230.163 | 0.445 | 235.450 | 0.545 | 240.738 | 0.645 | 246.025 | 0.745 | 251.325 | 0.845 | 256.605 | 0.945 |     |
| 0.046 | 214.353 | 0.146 | 219.641 | 0.246 | 224.928 | 0.346 | 230.216 | 0.446 | 235.503 | 0.546 | 240.791 | 0.646 | 246.078 | 0.746 | 251.378 | 0.846 | 256.658 | 0.946 |     |
| 0.047 | 214.406 | 0.147 | 219.694 | 0.247 | 224.981 | 0.347 | 230.268 | 0.447 | 235.556 | 0.547 | 240.843 | 0.647 | 246.131 | 0.747 | 251.431 | 0.847 | 256.711 | 0.947 |     |
| 0.048 | 214.459 | 0.148 | 219.746 | 0.248 | 225.034 | 0.348 | 230.321 | 0.448 | 235.609 | 0.548 | 240.896 | 0.648 | 246.184 | 0.748 | 251.484 | 0.848 | 256.764 | 0.948 |     |
| 0.049 | 214.512 | 0.149 | 219.799 | 0.249 | 225.087 | 0.349 | 230.374 | 0.449 | 235.662 | 0.549 | 240.949 | 0.649 | 246.237 | 0.749 | 251.537 | 0.849 | 256.817 | 0.949 |     |
| 0.050 | 214.565 | 0.150 | 219.852 | 0.250 | 225.140 | 0.350 | 230.427 | 0.450 | 235.715 | 0.550 | 241.002 | 0.650 | 246.289 | 0.750 | 251.590 | 0.850 | 256.870 | 0.950 |     |
| 0.051 | 214.618 | 0.151 | 219.905 | 0.251 | 225.193 | 0.351 | 230.480 | 0.451 | 235.767 | 0.551 | 241.055 | 0.651 | 246.342 | 0.751 | 251.643 | 0.851 | 256.923 | 0.951 |     |
| 0.052 | 214.671 | 0.152 | 219.958 | 0.252 | 225.245 | 0.352 | 230.533 | 0.452 | 235.820 | 0.552 | 241.108 | 0.652 | 246.395 | 0.752 | 251.696 | 0.852 | 256.976 | 0.952 |     |
| 0.053 | 214.723 | 0.153 | 220.011 | 0.253 | 225.298 | 0.353 | 230.586 | 0.453 | 235.873 | 0.553 | 241.161 | 0.653 | 246.448 | 0.753 | 251.749 | 0.853 | 257.029 | 0.953 |     |
| 0.054 | 214.776 | 0.154 | 220.064 | 0.254 | 225.351 | 0.354 | 230.639 | 0.454 | 235.926 | 0.554 | 241.214 | 0.654 | 246.501 | 0.754 | 251.802 | 0.854 | 257.082 | 0.954 |     |
| 0.055 | 214.829 | 0.155 | 220.117 | 0.255 | 225.404 | 0.355 | 230.691 | 0.455 | 235.979 | 0.555 | 241.266 | 0.655 | 246.554 | 0.755 | 251.855 | 0.855 | 257.135 | 0.955 |     |
| 0.056 | 214.882 | 0.156 | 220.169 | 0.256 | 225.457 | 0.356 | 230.744 | 0.456 | 236.032 | 0.556 | 241.319 | 0.656 | 246.607 | 0.756 | 251.908 | 0.856 | 257.188 | 0.956 |     |
| 0.057 | 214.935 | 0.157 | 220.222 | 0.257 | 225.510 | 0.357 | 230.797 | 0.457 | 236.085 | 0.557 | 241.372 | 0.657 | 246.660 | 0.757 |         |       |         |       |     |

## **APPENDIX J**

# Construction Summary of Mine Site Fuel Storage and Containment Facilities

### **Civil Earthworks Construction Summary – Mine Site Tank Farm**

- Construction management and quality assurance performed by Agnico Eagle Construction
- Primary civil construction contractor was MTKSL
- Subcontractors: Texel Geosol for liner installation and liner QC
- All survey conducted by Hamel Arpentage

#### **1. Site Preparation (June)**

- OG surveyed of tank farm footprint

#### **2. Under Liner Material Placement (June 5 to July 17)**

- Due to the location of the Tank Farm being outside the CP1 containment area, rockfill for all under liner and the service area was sourced from “clean” sources:
  - o 600 mm minus (tank containment area) was obtained from the remnants of the Temporary Water Treatment Pad and access road (previously placed in 2016 and therefore subject to multiple flushings) and Portal 2 drill/blast operations for the initial surface open cut
  - o 600 mm minus (service area) was obtained from Meliadine Esker
  - o 200 mm minus sourced from material crushed winter 2016 (and therefore subject to multiple flushings)
  - o 30 mm minus under liner was sourced from processed esker material (Mel. Esker)

#### **3. Liner System Installation (July 18 to October 12)**

- Textured 60 mil HDPE installed throughout and 540 g/m2 geotextile
- Liner was first placed under the tank pedestal footprints (July 18), the two tanks were erected, then liner installation proceeded throughout the remainder of the containment area (October 1, October 9 to 12)
- Liner under the tank pedestals was initially placed with no allowance for the ditch between the two tanks – this necessitated cutting of the liner between the tanks, excavation of the ditch area, and re-welding of the liner in this location after tank construction
- Liner on the tank pedestals was protected with plywood after installation and before the remaining liner was installed
- Liner installation QA was carried out by AEM and quality control testing by Texel

#### **4. Tank Erection (July 31 to September 13)**

- Civil earthworks within the Tank Farm area were suspended during erection of the tanks

#### **5. Over Liner Material Placement (July 19 to October 18)**

- Over liner material placement on the tank pedestals (July 19 to July 30) and in the tank containment area (October 2 to October 18) followed the design specification of placement of 30 mm minus placed on geotextile placed on HDPE

#### **Equipment Used for Construction:**

- |                      |                                            |
|----------------------|--------------------------------------------|
| - CAT D8 Bulldozer   | - CAT IT62                                 |
| - CAT D6 Bulldozer   | - CAT skid steers                          |
| - CAT 330L Excavator | - CAT 773 haul trucks                      |
| - CAT 345B Excavator | - CAT 740 articulated haul trucks          |
| - CAT 320 Excavator  | - CAT CS56 10-ton vibratory drum compactor |
| - CAT 980 Loader     |                                            |

- HAMM 5-ton vibratory drum compactor
- Various small hand-pushed compactors

#### **QA/QC Summary**

1. 600 mm minus, 200 mm minus, 50 mm minus (service area) and 30 mm minus (under liner) was placed according to the Technical Specifications for Civil Earthworks Revision 3 (6515-GNS-014, June 6, 2017). Compaction efforts consisted of a minimum number of passes with either a 10-tonne vibratory compactor (4 passes) or a 5-tonne vibratory compactor (6 passes). Suitability for placement and compaction efforts were assessed visually and approved by AEM.
2. Particle size analysis was conducted on the 30 mm minus produced from both the ROM and esker sources (results attached). The 30 mm minus material produced from the esker was within the specifications on average, while the 30 mm minus produced from ROM was generally slightly lower than specified for particles of 5 mm (37% tested versus 45% minimum specified)
3. Texel Geosol was responsible for all quality control of the liner installation process.

## **APPENDIX K**

### **Particle Size Summary – 30 mm minus Run of Mine**

## 30 mm Minus- ROM Meliadine

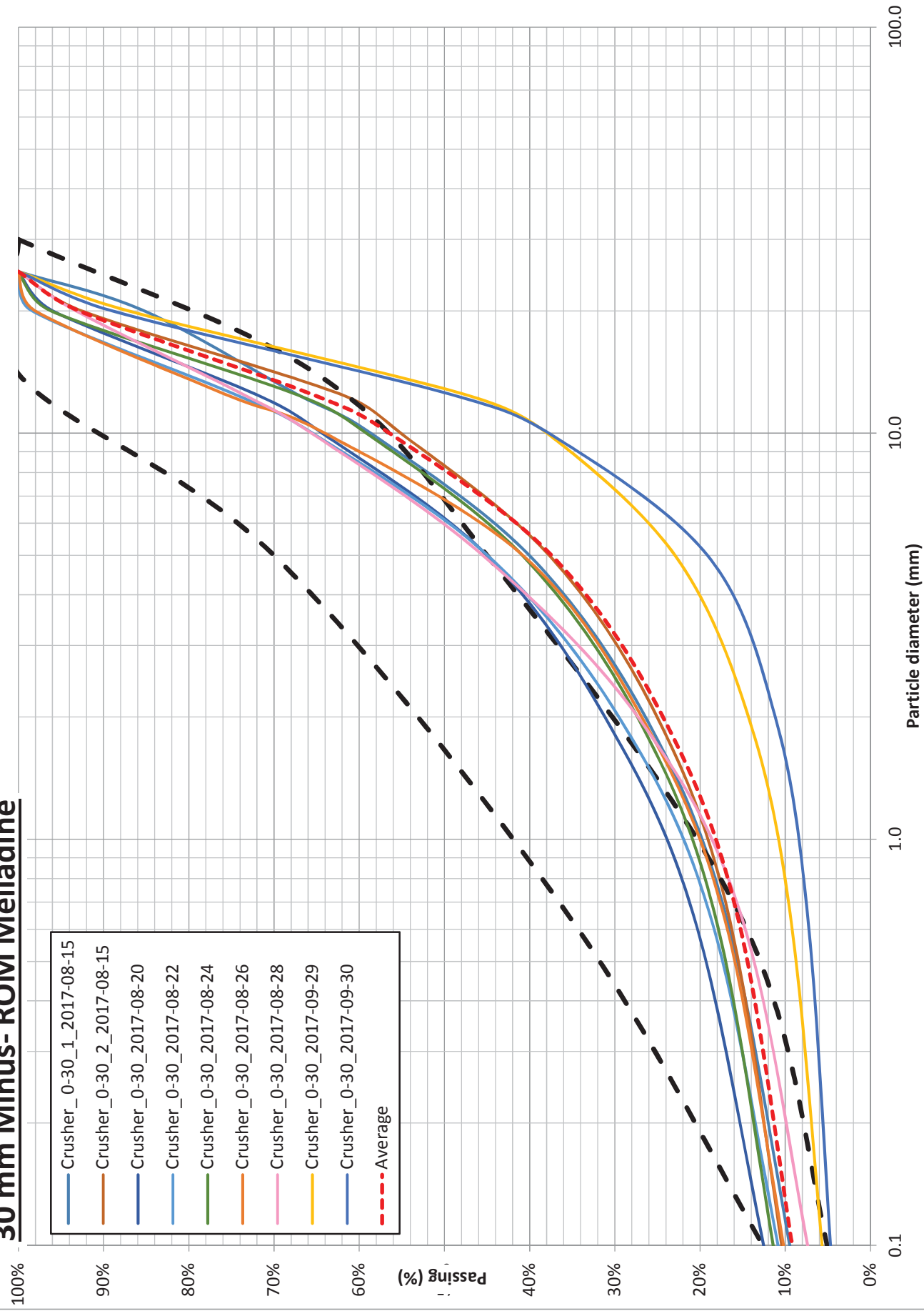


Table 1: Summary of Particle Size Analysis Results - 30 mm minus ROM Meliadine

| No.     | Sample ID                 | Sieve Size (mm) |       |       |       |       |       |       |       | Moisture Content |
|---------|---------------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|------------------|
|         |                           | 25.00           | 20.00 | 12.50 | 10.00 | 5.00  | 2.00  | 0.63  | 0.08  |                  |
| 1       | Crusher_0-30_1_2017-08-15 | 100.0%          | 85.2% | 67.4% | 58.6% | 40.0% | 26.4% | 16.8% | 8.6%  | 4.2%             |
| 2       | Crusher_0-30_2_2017-08-15 | 100.0%          | 92.6% | 62.3% | 55.1% | 37.7% | 25.0% | 16.5% | 9.7%  | 2.9%             |
| 3       | Crusher_0-30_2017-08-20   | 100.0%          | 95.9% | 72.3% | 64.4% | 45.0% | 31.2% | 20.6% | 11.6% | 3.2%             |
| 4       | Crusher_0-30_2017-08-24   | 100.0%          | 96.2% | 67.6% | 59.2% | 40.9% | 27.4% | 18.1% | 10.7% | 2.2%             |
| 5       | Crusher_0-30_2017-08-22   | 100.0%          | 98.4% | 74.7% | 65.5% | 44.9% | 29.5% | 18.6% | 10.0% | 3.7%             |
| 6       | Crusher_0-30_2017-08-26   | 100.0%          | 98.0% | 75.9% | 64.0% | 40.8% | 26.8% | 17.0% | 9.4%  | 2.2%             |
| 7       | Crusher_0-30_2017-08-28   | 100.0%          | 93.2% | 73.8% | 65.6% | 45.5% | 27.3% | 15.0% | 6.5%  | 4.4%             |
| 8       | Crusher_0-30_2017-09-29   | 100.0%          | 87.1% | 47.9% | 38.0% | 22.9% | 14.3% | 9.3%  | 5.3%  | 1.7%             |
| 9       | Crusher_0-30_2017-09-30   | 100.0%          | 89.0% | 49.5% | 37.8% | 19.1% | 11.2% | 7.3%  | 4.4%  | 1.3%             |
| Average |                           | 100.0%          | 92.8% | 65.7% | 56.5% | 37.4% | 24.4% | 15.5% | 8.5%  | 2.9%             |

## **APPENDIX L**

### **Particle Size Summary – 30 mm minus Esker**

### 30 mm Minus- Meliadine Esker

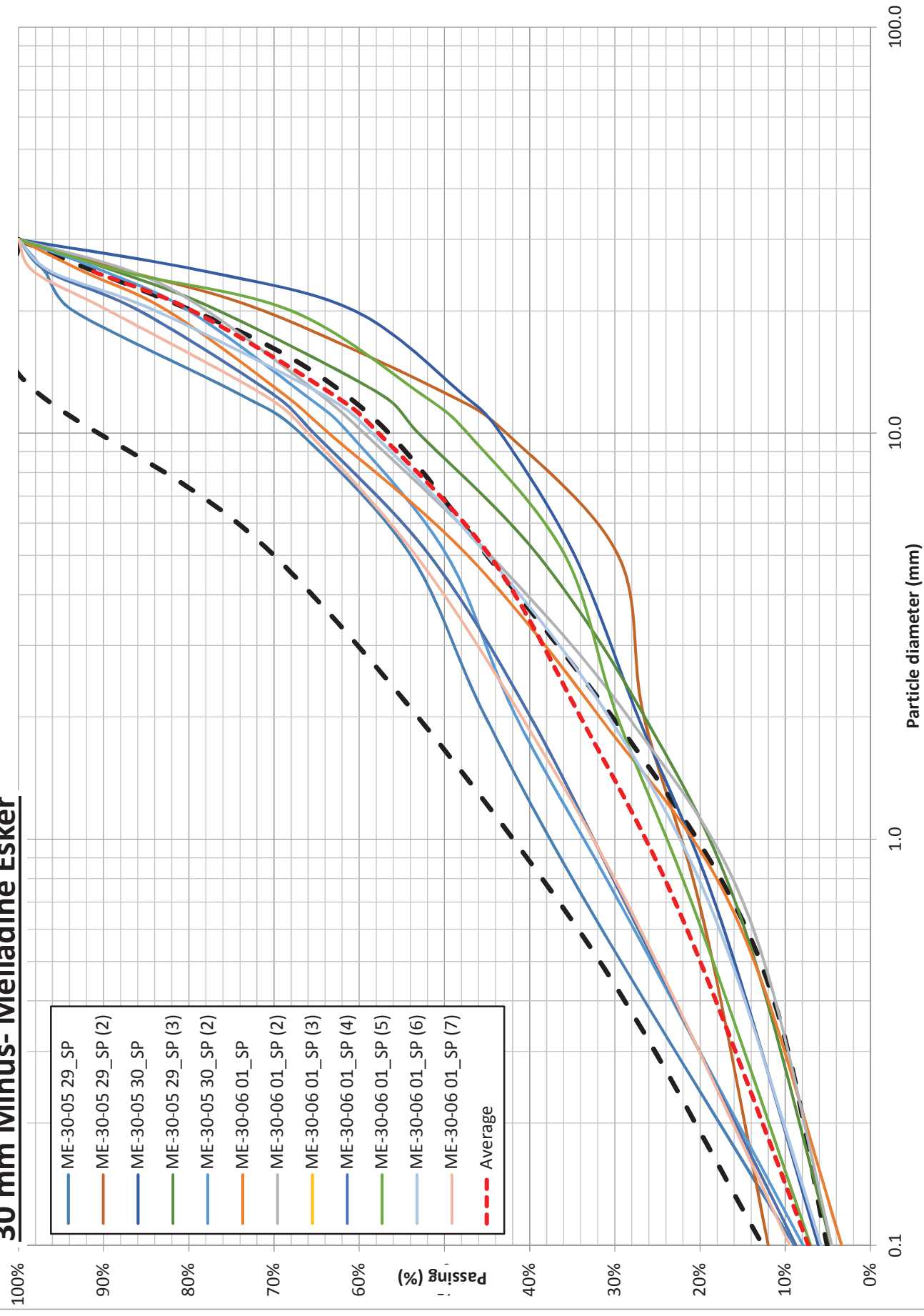


Table 1: Summary of Particle Size Analysis Results - 30 mm minus Meliadine Esker

| No.     | Sample ID          | Sieve Size (mm) |       |       |       |       |       |       |       |       | Moisture Content |
|---------|--------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|
|         |                    | 30.00           | 25.00 | 20.00 | 12.50 | 10.00 | 5.00  | 2.00  | 0.63  | 0.08  |                  |
| 1       | ME-30-05 29 SP     | 100%            | 96.9% | 93.5% | 74.1% | 66.9% | 53.9% | 45.2% | 32.1% | 6.1%  | 3.4%             |
| 2       | ME-30-05 29 SP (2) | 100%            | 87.0% | 71.2% | 49.7% | 42.7% | 29.6% | 26.6% | 19.6% | 11.1% | 3.0%             |
| 3       | ME-30-05 30 SP     | 100%            | 77.9% | 60.5% | 47.9% | 43.4% | 34.7% | 27.3% | 17.5% | 4.8%  | 2.8%             |
| 4       | ME-30-05 29 SP (3) | 100%            | 88.4% | 76.4% | 57.6% | 53.0% | 39.0% | 26.5% | 15.1% | 3.4%  | 2.2%             |
| 5       | ME-30-05 30 SP (2) | 100%            | 89.9% | 79.9% | 66.6% | 61.2% | 49.7% | 41.6% | 28.3% | 5.5%  | 3.5%             |
| 6       | ME-30-06 01 SP     | 100%            | 92.4% | 82.5% | 68.9% | 63.6% | 47.3% | 31.8% | 15.6% | 2.0%  | 3.6%             |
| 7       | ME-30-06 01 SP (2) | 100%            | 86.7% | 77.9% | 64.7% | 59.4% | 44.6% | 28.4% | 14.1% | 3.4%  | 3.4%             |
| 8       | ME-30-06 01 SP (3) | 100%            | 96.6% | 85.8% | 70.2% | 65.3% | 51.7% | 39.9% | 27.7% | 6.5%  | 5.1%             |
| 9       | ME-30-06 01 SP (4) | 100%            | 96.6% | 85.8% | 70.2% | 65.3% | 51.7% | 39.9% | 27.7% | 6.5%  | 5.1%             |
| 10      | ME-30-06 01 SP (5) | 100%            | 87.7% | 67.9% | 52.8% | 47.3% | 35.8% | 29.7% | 20.2% | 5.4%  | 3.7%             |
| 11      | ME-30-06 01 SP (6) | 100%            | 96.2% | 83.9% | 64.5% | 58.5% | 45.0% | 30.7% | 18.1% | 4.3%  | 4.1%             |
| 12      | ME-30-06 01 SP (7) | 100%            | 98.2% | 89.3% | 71.4% | 66.0% | 53.4% | 40.9% | 27.5% | 7.3%  | 5.0%             |
| Average |                    | 100%            | 91.2% | 79.5% | 63.2% | 57.7% | 44.7% | 34.0% | 22.0% | 5.5%  | 3.8%             |

## **APPENDIX M**

### **Inspection Report – Quality Control Final Report for Geomembrane Installation**

**MELIADINE MINE SITE FUEL FARM PHASE 2  
AGNICO EAGLE MINES LIMITED  
Meliadine, Nunavut  
Texel Geosol Project No. C-17060**

**QUALITY CONTROL FINAL REPORT  
BY TEXEL GEOSOL INC.**

**Prepared for:**

**NUNA KIVALLIQ EARTHWORKS INC**

**By:**



**December, 2017**

**MELIADINE MINE SITE FUEL FARM PHASE 2  
AGNICO EAGLE MINES LIMITED  
Meliadine, Nunavut  
Texel Geosol Project No. C-17060**

**QUALITY CONTROL FINAL REPORT  
BY TEXEL GEOSOL INC.**

**Prepared for:**

**NUNA KIVALLIQ EARTHWORKS INC  
NUNA SERVICES LTD  
9839-31 Avenue  
Edmonton, Alberta  
T6N 1C5**

**By:**

**TEXEL GEOSOL INC.  
1300, 2<sup>e</sup> Rue, Parc industriel  
Sainte-Marie, Québec, Canada  
G6E 1G8**

**December, 2017**

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## 1. INTRODUCTION

The following report was prepared by Texel Geosol, for Nuna Kivalliq Earthworks Inc.

This report contains a description as well as a certification of all work conducted by Texel Geosol, installer of the geosynthetics. It also contains the record drawing of the geomembrane installation for the Meliadine Industrial Pad Fuel Farm. All installation work conducted on the geosynthetics took place between July and October, 2017.

## 2. HUMAN RESOURCES

The following list identifies the key personnel involved with the physical realization of this project

### **TEXEL GEOSOL INC. (Geosynthetic Installer)**

- Mr. François Thivierge, Construction and project Manager
- Mr. Jacques St-Gelais, Operation Manager
- Mr. Eric Black, Simon Jodoin, Site Foreman
- Mr. Michael Gilbert, Field QC Inspector and technician
- Mr. Kléber Nault, David Beaulieu, Simon-Carl Marcoux, Olivier Belval and Phillipe Allie, Technicians

### **NUNA KIVALLIQ EARTHWORKS INC (General Contractor - Client)**

- Mr. Matt Gallant, Project Manager

### **AGNICO EAGLE CONSTRUCTION (Quality Assurance)**

## 3. GEOMEMBRANE INSTALLATION

This section includes a description of the work and the installation procedures used during the deployment of the geomembrane. Also, the construction quality control procedures are detailed in this section

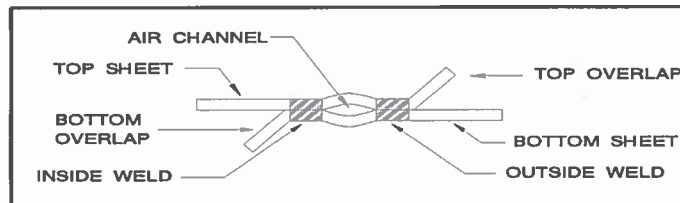
### ***3.1. Description of the work***

The scope of the installation was to completely cover the Meliadine industrial pad fuel farm with a geosynthetic lining system. Texel Geosol installed approximately 3682 sm of 60 mil HDPE textured geomembrane. All the installation, seaming and repair procedures were conducted according to the project plans and specifications, and manufacturer's recommendations.

### 3.2. Installation Procedures

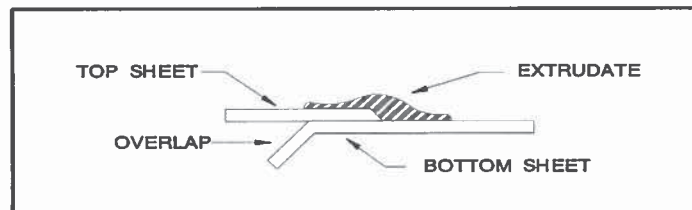
The geomembrane rolls were later deployed and installed by Texel Geosol as prescribed in the specifications. Panels were placed to minimize seams across the side slope and the tie-in seams. The panels were overlapped about 125 to 150 mm, allowing adequate double fusion welding and leaving enough material to perform peel and shear tests on seam samples (see section 3.3.2.1 for a description of these tests).

All seams between panels were made using an automated polymer fusion process, the fusion being obtained through a double hot wedge. These parallel welds create an air channel which allow air-pressure testing of the continuity of the seam (see Fig. 1).



**Figure 1 - Double -Track Geomembrane Weld**

In restrictive areas where this process could not be adequately applied, such as corners, repair work and pipe penetrations, a manual extrusion fillet welding was employed (see Fig. 2).



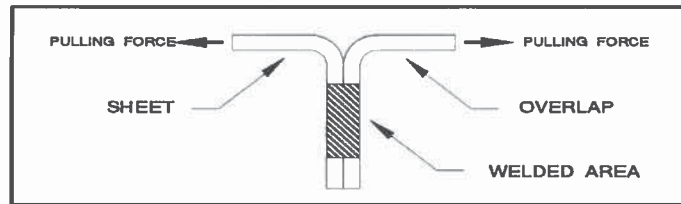
**Figure 2 - Fillet-Extruded Geomembrane Weld**

### 3.3. Geomembrane quality control

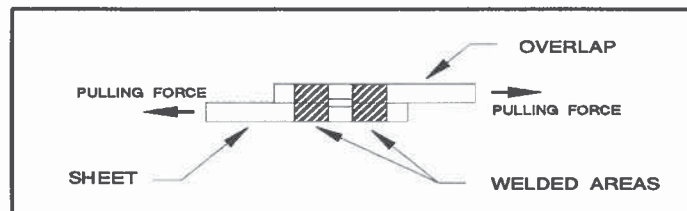
#### 3.3.1. On-site geomembrane installation

##### 3.3.1.1 Welding trial tests

Trial tests were performed prior to any on-site seaming in order to quantify the calibration of the welding equipment. On each sample, four peel tests and one shear tests were performed. A peel adhesion test is conducted by submitting a one inch-wide seam specimen to a tensile effort on a calibrated, portable tensiometer and trying to "peel", or open the seam (see Fig. 3). A shear strength test is similar, but the tension is applied in the plane of the seam (see Fig. 4). The peel test gives an indication of the quality of the seam while the shear test demonstrates the actual behavior of the seam in service.



**Figure 3 - Peel Adhesion Test**



**Figure 4 - Shear Strength Test**

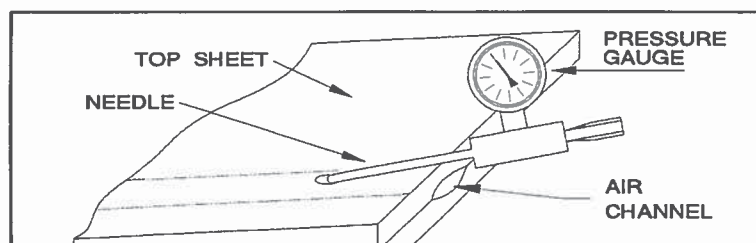
For each trial test, the QC Inspector recorded the date, time, ambient and operating temperatures, equipment number, speed setting, operator's initials, peel and shear values and corresponding type of break. The only type of break acceptable is designated as "FTB", as per the US-EPA classification for types of breaks, available in appendix III. The seams were made only after a satisfactory trial test had been obtained. All the results of these tests are also included in appendix I.

### 3.3.1.2 On-site non-destructive testing

The continuity of all seams (100%) was verified by non-destructive methods. These methods include the air-pressure test and the vacuum-box test. Any seam that failed one of these tests was rebuilt or repaired until a satisfactory result was obtained. All the results of these tests are included in Appendix I of this report.

#### a) Air-Pressure Testing

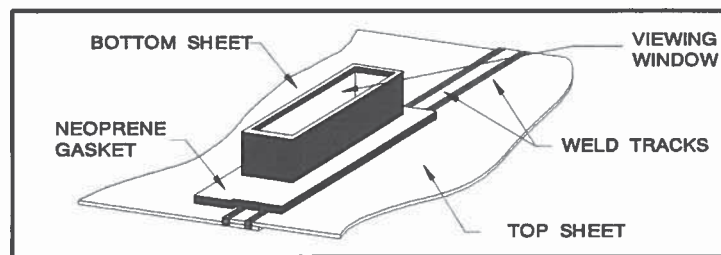
Air-pressure testing was employed as the primary test method. This non-destructive test method consists of injecting air at a predetermined pressure in the center air channel of fusion-welded seams (see Fig. 5). If the seam is continuous there will be very little or no drop of pressure. If a leak is present within the area under pressure, it is located and repaired. This type of non-destructive test is faster than the vacuum-box test, less observer-dependent and represents a supplementary mechanical resistance test since the geomembrane sheets are pulled away from each other by the air pressure in the channel.



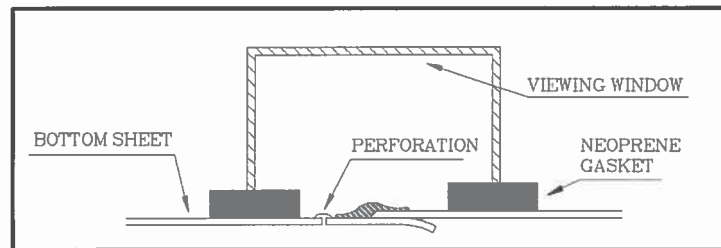
**Figure 5 - Air-Pressure Test**

### b) Vacuum-box test

Wherever the air-pressure test could not be used, the vacuum-box test was employed. In this test, a film of soapy water is sprinkled over the area to be tested. A box fitted with a transparent upper cover and a neoprene lower rim is placed over that same area and connected to a vacuum pump; a negative pressure of 5 psi is then applied (see Fig. 6). If there is a puncture or discontinuous seam within this area, bubbles will appear and be detected by the observer.



**Figure 6 - Vacuum-Box Test**



**Figure 7 - Vacuum-Box Test**

### 3.3.1.3 On-site destructive tests

Finally, a destructive testing program was applied, where seam samples taken from the installed geomembrane were tested for peel adhesion and shear strength on a calibrated, portable tensiometer. On each sample, four peel tests and one shear tests were performed. All the results from these tests are included in Appendix I of this report.

### **3.4. Repair Procedures**

All materials were visually inspected for blemishes, punctures and other defects or damages that may have occurred during transport or panel placement. Any defect or damage was repaired as per the procedures described in this section.

Demobilization was not authorized until Texel Geosol, Nuna Kivalliq Earthworks Inc and Agnico Eagle Construction completed a last visual inspection of the installation work. Any defect revealed by any step of the Quality Control Program was repaired and verified according to the prescribed procedures:

- All pockmarks, pinholes, T-seams, etc., smaller than the tip of the extruder were covered with an extrusion bead;
- All punctures, holes, tears, etc., wider than the tip of the extruder were repaired with extrusion-welded patches;
- Any seam revealed as defective by the CQC or CQA Programs was entirely rebuilt through a fusion and/or extrusion seaming process.

Prior to any fillet extrusion welding, the geomembrane was buffed to insure better adhesion of the extruded material. All repairs were visually inspected and verified by a non-destructive testing method, as described in section 3.3.2.2.

### **3.5. Record Drawing**

The record drawing of the geomembrane installation, showing all panels, panel identification, pipe penetrations, repairs and destructive test locations, is included in Appendix IV of this report.

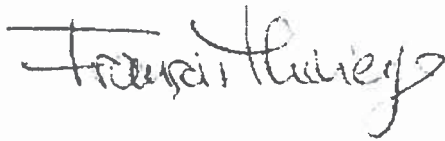
## **4. GEOTEXTILE QUALITY CONTROL**

Approximately 7364 sm of non-woven geotextile was installed by Texel Geosol according to the project plans and specifications. The geotextile panels were overlapped approximately 100 to 150 mm and thermally bonding (hot air or wedge) or sewing in order to ensure the continuity of the cushion layer.

Any holes or tears in the geotextile were repaired according to the project specifications. All geotextile materials were installed by Texel Geosol.

## 5. CERTIFICATION

Texel Geosol certifies having installed all geosynthetic materials according to the project plans and specifications provided by the consultant Tetra Tech, for Nuna Kivalliq Earthworks Inc. All installation work conducted by Texel Geosol meets or exceeds the standards of the geosynthetic industry.



---

François Thivierge, P. Eng, MBA  
Construction Director  
TEXEL GEOSOL INC.

12-07-17

---

Date

(mm-dd-yy)

## ***APPENDIX I***

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**QUALITY CONTROL PROCEDURES CONDUCTED ON SITE BY  
TEXEL GEOSOL INC.**

**Fusion Trial Tests**  
**Calibration par Fusion**

Project Name / Nom de Projet: **Meliadine mine site fuel farm**

Project No. / No. de Projet: **C-17060**

QC Inspector / Inspecteur CQ: **Anthony Duquette-Michon**

| Trial Test No.<br>No. de Calibration | Date<br>(mm/dd/yy) | Time<br>Heure | Ambient Temp.<br>Temp. Ambiante | Equipment No.<br>No. Équipement | Equipment Temp.<br>Temp. Équipement | Equipment Speed<br>Vitesse Équipement | Peel Resistance<br>Résistance Pelage<br>"A" (ppf) | Peel Type of Break<br>Type de Brisure | Peel Resistance<br>Résistance Pelage<br>"B" (ppf) | Peel Type of Break<br>Type de Brisure | Shear Resistance<br>Résist. Cisaillement<br>(ppf) | Shear Type of Break<br>Type de Brisure | Tech.-Welder<br>Soudeur | Tensiometer No.<br>No. Tensiomètre |
|--------------------------------------|--------------------|---------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------------|---------------------------------------------------|---------------------------------------|---------------------------------------------------|---------------------------------------|---------------------------------------------------|----------------------------------------|-------------------------|------------------------------------|
| F-1                                  | 07-18-17           | 10:15         | 8 °C                            | MD 007                          | 860 °F                              | 500                                   | 130                                               | SE1                                   | 121                                               | SE1                                   | 177                                               | BRK                                    | D.B                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 125                                               | SE1                                   | 131                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 123                                               | SE1                                   | 132                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 142                                               | SE1                                   | 128                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-2                                  | 09-30-17           | 16:00         | 3 °C                            | MD 007                          | 860 °F                              | 300                                   | 177                                               | SE1                                   | 180                                               | SE1                                   | 216                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 174                                               | SE1                                   | 182                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 176                                               | SE1                                   | 177                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 174                                               | SE1                                   | 177                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-3                                  | 10-01-17           | 07:15         | -2 °C                           | MD 007                          | 860 °F                              | 500                                   | 156                                               | SE1                                   | 171                                               | SE1                                   | 238                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 167                                               | SE1                                   | 172                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 183                                               | SE1                                   | 164                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 154                                               | SE1                                   | 178                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-4                                  | 10-01-17           | 07:15         | -2 °C                           | MD 007                          | 860 °F                              | 300                                   | 171                                               | SE1                                   | 174                                               | SE1                                   | 217                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 184                                               | SE1                                   | 174                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 163                                               | SE1                                   | 167                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 178                                               | SE1                                   | 164                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-5                                  | 10-09-17           | 09:45         | -3 °C                           | MD 007                          | 860 °F                              | 500                                   | 153                                               | SE1                                   | 142                                               | SE1                                   | 182                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 150                                               | SE1                                   | 150                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 142                                               | SE1                                   | 153                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 152                                               | SE1                                   | 145                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-6                                  | 10-09-17           | 10:00         | -3 °C                           | MD 007                          | 860 °F                              | 300                                   | 150                                               | SE1                                   | 139                                               | SE1                                   | 184                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 147                                               | SE1                                   | 151                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 149                                               | SE1                                   | 155                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 158                                               | SE1                                   | 154                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |

**Fusion Trial Tests  
Calibration par Fusion**

Project Name / Nom de Projet: Meliadine mine site fuel farm

Project No. / No. de Projet: C-17060

QC Inspector / Inspecteur CQ: Anthony Duquette-Michon

| Trial Test No.<br>No. de Calibration | Date<br>(mm/dd/yy) | Time<br>Heure | Ambient Temp.<br>Temp. Ambiante | Equipment No.<br>No. Équipement | Equipment Temp.<br>Temp. Équipement | Equipment Speed<br>Vitesse Équipement | Peel Resistance<br>Résistance Pelage<br>"A" (psi) | Peel Type of Break<br>Type de Brisure | Peel Resistance<br>Résistance Pelage<br>"B" (psi) | Peel Type of Break<br>Type de Brisure | Shear Resistance<br>Résist. Cisaillement<br>(psi) | Shear Type of Break<br>Type de Brisure | Tech.-Welder<br>Soudeur | Tensiometer No.<br>No. Tensiomètre |
|--------------------------------------|--------------------|---------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------------|---------------------------------------------------|---------------------------------------|---------------------------------------------------|---------------------------------------|---------------------------------------------------|----------------------------------------|-------------------------|------------------------------------|
| F-7                                  | 10-10-17           | 12:20         | -8 °C                           | MD 007                          | 860 °F                              | 500                                   | 147                                               | SE1                                   | 139                                               | SE1                                   | 196                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 160                                               | SE1                                   | 141                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 149                                               | SE1                                   | 141                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 150                                               | SE1                                   | 140                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-8                                  | 10-10-17           | 12:30         | -8 °C                           | MD 007                          | 860 °F                              | 300                                   | 148                                               | SE1                                   | 150                                               | SE1                                   | 194                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 139                                               | SE1                                   | 153                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 149                                               | SE1                                   | 152                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 154                                               | SE1                                   | 157                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-9                                  | 10-11-17           | 08:25         | -8 °C                           | MD 007                          | 860 °F                              | 500                                   | 134                                               | SE1                                   | 143                                               | SE1                                   | 216                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 147                                               | SE1                                   | 153                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 135                                               | SE1                                   | 142                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 143                                               | SE1                                   | 148                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-10                                 | 10-11-17           | 08:25         | -8 °C                           | MD 007                          | 860 °F                              | 300                                   | 148                                               | SE1                                   | 164                                               | SE1                                   | 210                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 153                                               | SE1                                   | 159                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 141                                               | SE1                                   | 157                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 146                                               | SE1                                   | 143                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-11                                 | 10-12-17           | 08:00         | -2 °C                           | MD 007                          | 860 °F                              | 500                                   | 146                                               | SE1                                   | 151                                               | SE1                                   | 209                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 143                                               | SE1                                   | 142                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 151                                               | SE1                                   | 142                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 147                                               | SE1                                   | 147                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| F-12                                 | 10-12-17           | 08:00         | -2 °C                           | MD 007                          | 860 °F                              | 300                                   | 153                                               | SE1                                   | 148                                               | SE1                                   | 203                                               | BRK                                    | K.N                     | T-9709                             |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 162                                               | SE1                                   | 146                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 148                                               | SE1                                   | 145                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                     | 151                                               | SE1                                   | 152                                               | SE1                                   | N/A                                               | N/A                                    | "                       | "                                  |

# Extrusion Trial Tests Calibration par Extrusion

Project Name / Nom de Projet: Meliadine mine site fuel farm

Project No. / No. de Projet: C-17060

QC Inspector / Inspecteur CQ: Anthony Duquette-Michon

| Trial Test No.<br>No. de Calibration | Date<br>(mm/dd/yy) | Time<br>Heure | Ambient Temp.<br>Temp. Ambiante | Equipment No.<br>No. Équipement | Equipment Temp.<br>Temp. Équipement | Pre-Heat Temp.<br>Temp. Pré-Chauf. | Peel Resistance<br>Résistance Pelage<br>(ppi) | Peel Type of Break<br>Type de Brisure | Shear Resistance<br>Résist. Cisaillement<br>(ppi) | Shear Type of Break<br>Type de Brisure | Tech.-Welder<br>Soudeur | Tensionmeter No.<br>No. Tensiomètre |
|--------------------------------------|--------------------|---------------|---------------------------------|---------------------------------|-------------------------------------|------------------------------------|-----------------------------------------------|---------------------------------------|---------------------------------------------------|----------------------------------------|-------------------------|-------------------------------------|
| E-1                                  | 07-18-17           | 14:00         | 8 °C                            | EX-E                            | 250 °C                              | 250 °C                             | 131                                           | SE3                                   | 180                                               | BRK                                    | E.B                     | T-9709                              |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 140                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 128                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 140                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| E-2                                  | 10-01-17           | 14:00         | 2 °C                            | EX-E                            | 260 °C                              | 260 °C                             | 129                                           | SE3                                   | N/A                                               | N/A                                    | S.M                     | T-9709                              |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 111                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 69                                            | AD                                    | N/A                                               | N/A                                    | "                       | "                                   |
| E-3                                  | 10-01-17           | 14:30         | 2 °C                            | EX-E                            | 260 °C                              | 260 °C                             | 120                                           | SE3                                   | 205                                               | BRK                                    | S.M                     | T-9709                              |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 138                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 145                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 167                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| E-4                                  | 10-09-17           | 13:30         | -3 °C                           | EX-E                            | 260 °C                              | 265 °C                             | 132                                           | SE3                                   | 191                                               | BRK                                    | P.A                     | T-9709                              |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 125                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 141                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 152                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |

### Extrusion Trial Tests Calibration par Extrusion

**Project Name / Nom de Projet:** Meliadine mine site fuel farm

**Project No. / No. de Projet:** C-17060

**QC Inspector / Inspecteur CQ:** Anthony Duquette-Michon

| Trial Test No.<br>No. de Calibration | Date<br>(mm/dd/yy) | Time<br>Heure | Ambient Temp.<br>Temp. Ambiante | Equipment No.<br>No. Équipement | Equipment Temp.<br>Temp. Équipement | Pre-Heat Temp.<br>Temp. Pré-Chauf. | Peel Resistance<br>Résistance Pelage<br>(ppi) | Peel Type of Break<br>Type de Brisure | Shear Resistance<br>Résist. Cisaillement<br>(ppi) | Shear Type of Break<br>Type de Brisure | Tech.-Welder<br>Soudeur | Tensionmeter No.<br>No. Tensiomètre |
|--------------------------------------|--------------------|---------------|---------------------------------|---------------------------------|-------------------------------------|------------------------------------|-----------------------------------------------|---------------------------------------|---------------------------------------------------|----------------------------------------|-------------------------|-------------------------------------|
| E-5                                  | 10-10-17           | 14:00         | -8 °C                           | EX-E                            | 260 °C                              | 265 °C                             | 142                                           | SE3                                   | 201                                               | BRK                                    | P.A                     | T-9709                              |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 139                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 124                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 154                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| E-6                                  | 10-11-17           | 10:00         | -3 °C                           | EX-E                            | 260 °C                              | 265 °C                             | 131                                           | SE3                                   | 197                                               | BRK                                    | P.A                     | T-9709                              |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 153                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 137                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 145                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| E-7                                  | 10-12-17           | 08:00         | -2 °C                           | EX-E                            | 260 °C                              | 265 °C                             | 134                                           | SE3                                   | 202                                               | BRK                                    | P.A                     | T-9709                              |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 127                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 147                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |
| "                                    | "                  | "             | "                               | "                               | "                                   | "                                  | 135                                           | SE3                                   | N/A                                               | N/A                                    | "                       | "                                   |

Project Name / Nom de Projet:

Meliadine mine site fuel farm

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

Project No. / No. de Projet:

C-17060

| Seaming Procedures / Procédures de Soudures |                               |                 |                    |                |                   | Non-Destructive Testing / Essai Non-Destructif |               |                                |                            |                                               |                                          |                                                  |            |                                         |
|---------------------------------------------|-------------------------------|-----------------|--------------------|----------------|-------------------|------------------------------------------------|---------------|--------------------------------|----------------------------|-----------------------------------------------|------------------------------------------|--------------------------------------------------|------------|-----------------------------------------|
| Seam No.                                    | Date of Seaming<br>(mm/dd/yy) | Time of Seaming | Seam Length<br>(m) | Trial Test No. | Technician-Welder | Test Date<br>(mm/dd/yy)                        | Time<br>Heure | Air-Pressure<br>Pressurisation | Vacuum Box<br>Boîte à Vide | Starting Pressure<br>(psi)<br>Pression Départ | Ending Pressure<br>(psi)<br>Pression Fin | Testing Details/Location<br>l'essai/Localisation | Détails de | Approved (Yes/No)<br>Approuvé (Oui/Non) |
| 1-2                                         | 07-18-17                      | 10:55           | 47.3               | F-1            | D.B               | 07-18-17                                       | 11:47         | X                              | -                          | 30                                            | 30                                       | From South<br>0m to 11.2m                        |            | O                                       |
| "                                           | "                             | "               | "                  | "              | D.B               | 07-18-17                                       | 12:26         | X                              | -                          | 31                                            | 31                                       | 11.2m to 27.3m                                   |            | O                                       |
| "                                           | "                             | "               | "                  | "              | D.B               | 07-18-17                                       | 12:23         | X                              | -                          | 27                                            | 25                                       | 27.3m to 44.8m                                   |            | O                                       |
| "                                           | "                             | "               | "                  | "              | D.B               | 07-18-17                                       | -             | -                              | X                          | -                                             | -                                        | 44.8m to 47.3m                                   |            | O                                       |
| 2-3                                         | 07-18-17                      | 12:06           | 47.5               | F-1            | D.B               | 07-18-17                                       | 12:41         | X                              | -                          | 31                                            | 31                                       | Soudure complète                                 |            | O                                       |
| 3-4                                         | 07-18-17                      | 12:36           | 47.5               | F-1            | D.B               | 07-18-17                                       | 13:01         | X                              | -                          | 31                                            | 31                                       | Soudure complète                                 |            | O                                       |
| 5-6                                         | 07-18-17                      | 13:05           | 1.7                | F-1            | D.B               | 07-18-17                                       | 13:22         | X                              | -                          | 28                                            | 27                                       | Soudure complète                                 |            | O                                       |
| 6-7                                         | 07-18-17                      | 13:03           | 1.5                | F-1            | D.B               | 07-18-17                                       | 13:09         | X                              | -                          | 31                                            | 31                                       | Soudure complète                                 |            | O                                       |
| 7-8                                         | 07-18-17                      | 13:00           | 1.3                | F-1            | D.B               | 07-18-17                                       | 13:05         | X                              | -                          | 32                                            | 31                                       | Soudure complète                                 |            | O                                       |
| 4-5                                         | 07-18-17                      | 13:15           | 11.9               | F-1            | D.B               | 07-18-17                                       | 13:45         | X                              | -                          | 29.5                                          | 27.5                                     | Soudure complète                                 |            | O                                       |
| 4-6                                         | 07-18-17                      | 13:15           | 11.9               | F-1            | D.B               | 07-18-17                                       | 13:45         | X                              | -                          | 29.5                                          | 27.5                                     | Soudure complète                                 |            | O                                       |
| 4-7                                         | 07-18-17                      | 13:15           | 10.9               | F-1            | D.B               | 07-18-17                                       | 13:45         | X                              | -                          | 29.5                                          | 27.5                                     | Soudure complète                                 |            | O                                       |
| 4-8                                         | 07-18-17                      | 13:15           | 12.0               | F-1            | D.B               | 07-18-17                                       | 13:45         | X                              | -                          | 29.5                                          | 27.5                                     | Soudure complète                                 |            | O                                       |
| Patch1-Patch2                               | 09-30-17                      | 16:35           | 0.7                | F-2            | K.N               | 09-30-17                                       | -             | -                              | X                          | -                                             | -                                        | Soudure complète                                 |            | O                                       |
| Patch2-Patch3                               | 09-30-17                      | 16:39           | 0.4                | F-2            | K.N               | 09-30-17                                       | -             | -                              | X                          | -                                             | -                                        | Soudure complète                                 |            | O                                       |

## Seaming Procedures Procédures de Soudures

Project Name / Nom de Projet:

Meliadine mine site fuel farm

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

Project No. / No. de Projet:

C-17060

| Seaming Procedures / Procédures de Soudures |                               |                 |                    |                |                   | Non-Destructive Testing / Essai Non-Destructif |               |                                |                            |                            |                          |                                                  | Approved (Yes/No)<br>Approuvé (Oui/Non) |            |
|---------------------------------------------|-------------------------------|-----------------|--------------------|----------------|-------------------|------------------------------------------------|---------------|--------------------------------|----------------------------|----------------------------|--------------------------|--------------------------------------------------|-----------------------------------------|------------|
| Seam No.                                    | Date of Seaming<br>(mm/dd/yy) | Time of Seaming | Seam Length<br>(m) | Trial Test No. | Technician-Welder | Test Date<br>(mm/dd/yy)                        | Time<br>Heure | Air-Pressure<br>Pressurisation | Vacuum Box<br>Boîte à Vide | Starting Pressure<br>(psi) | Ending Pressure<br>(psi) | Testing Details/Location<br>l'essai/Localisation |                                         | Détails de |
| Patch3-Patch4                               | 09-30-17                      | 16:42           | 0.8                | F-2            | K.N               | 09-30-17                                       | -             | -                              | X                          | -                          | -                        | Soudure complète                                 |                                         | O          |
| Patch1-1-North                              | 09-30-17                      | 17:00           | 4.3                | F-2            | K.N               | 09-30-17                                       | 17:18         | X                              | -                          | 30.5                       | 29                       | Soudure complète                                 |                                         | O          |
| Patch1-2-North                              | 09-30-17                      | 17:00           | 2.2                | F-2            | K.N               | 09-30-17                                       | 17:18         | X                              | -                          | 30.5                       | 29                       | Soudure complète                                 |                                         | O          |
| Patch2-2-North                              | 09-30-17                      | 17:00           | 4.5                | F-2            | K.N               | 09-30-17                                       | 17:18         | X                              | -                          | 30.5                       | 29                       | Soudure complète                                 |                                         | O          |
| Patch2-3-North                              | 09-30-17                      | 17:00           | 1.6                | F-2            | K.N               | 09-30-17                                       | 17:18         | X                              | -                          | 30.5                       | 29                       | Soudure complète                                 |                                         | O          |
| Patch3-3-North                              | 09-30-17                      | 17:00           | 5.1                | F-2            | K.N               | 09-30-17                                       | 17:18         | X                              | -                          | 30.5                       | 29                       | Soudure complète                                 |                                         | O          |
| Patch3-4-North                              | 09-30-17                      | 17:00           | 1.3                | F-2            | K.N               | 09-30-17                                       | 17:18         | X                              | -                          | 30.5                       | 29                       | Soudure complète                                 |                                         | O          |
| Patch4-4-North                              | 09-30-17                      | 17:00           | 5.4                | F-2            | K.N               | 09-30-17                                       | 17:18         | X                              | -                          | 30.5                       | 29                       | Soudure complète                                 |                                         | O          |
| Patch4-6-North                              | 09-30-17                      | 17:00           | 1.7                | F-2            | K.N               | 09-30-17                                       | 17:18         | X                              | -                          | 30.5                       | 29                       | Soudure complète                                 |                                         | O          |
| Patch1-1-South                              | 09-30-17                      | 17:35           | 4.3                | F-2            | K.N               | 09-30-17                                       | 17:55         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |
| Patch1-2-South                              | 09-30-17                      | 17:35           | 2.2                | F-2            | K.N               | 09-30-17                                       | 17:55         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |
| Patch2-2-South                              | 09-30-17                      | 17:35           | 4.5                | F-2            | K.N               | 09-30-17                                       | 17:55         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |
| Patch2-3-South                              | 09-30-17                      | 17:35           | 1.6                | F-2            | K.N               | 09-30-17                                       | 17:55         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |
| Patch3-3-South                              | 09-30-17                      | 17:35           | 5.1                | F-2            | K.N               | 09-30-17                                       | 17:55         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |
| Patch3-4-South                              | 09-30-17                      | 17:35           | 1.3                | F-2            | K.N               | 09-30-17                                       | 17:55         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |

Project Name / Nom de Projet:

Meliadine mine site fuel farm

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

Project No. / No. de Projet:

C-17060

| Seaming Procedures / Procédures de Soudures |                               |                                     |                                     |                |                              | Non-Destructive Testing / Essai Non-Destructif |               |                                |                            |                            |                          |                                                  | Approved (Yes/No)<br>Approuvé (Oui/Non) |            |
|---------------------------------------------|-------------------------------|-------------------------------------|-------------------------------------|----------------|------------------------------|------------------------------------------------|---------------|--------------------------------|----------------------------|----------------------------|--------------------------|--------------------------------------------------|-----------------------------------------|------------|
| Seam No.                                    | Date of Seaming<br>(mm/dd/yy) | Time of Seaming<br>Heure de Soudure | Seam Length<br>Longueur Soudure (m) | Trial Test No. | Technician-Welder<br>Soudeur | Test Date<br>(mm/dd/yy)                        | Time<br>Heure | Air-Pressure<br>Pressurisation | Vacuum Box<br>Boîte à Vide | Starting Pressure<br>(psi) | Ending Pressure<br>(psi) | Testing Details/Location<br>l'essai/Localisation |                                         | Détails de |
| Patch4-4-South                              | 09-30-17                      | 17:35                               | 5.4                                 | F-2            | K.N                          | 09-30-17                                       | 17:55         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |
| Patch4-6-South                              | 09-30-17                      | 17:35                               | 1.7                                 | F-2            | K.N                          | 09-30-17                                       | 17:55         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |
| 9-10                                        | 10-01-17                      | 09:33                               | 12.7                                | F-3            | K.N                          | 10-01-17                                       | 9:40          | X                              | -                          | 31                         | 30                       | Soudure complète                                 |                                         | O          |
| 10-11                                       | 10-01-17                      | 09:45                               | 12.2                                | F-3            | K.N                          | 10-01-17                                       | 9:54          | X                              | -                          | 30.5                       | 30                       | Soudure complète                                 |                                         | O          |
| 11-12                                       | 10-01-17                      | 10:02                               | 11.7                                | F-3            | K.N                          | 10-01-17                                       | 10:07         | X                              | -                          | 31                         | 29                       | Soudure complète                                 |                                         | O          |
| 12-13                                       | 10-01-17                      | 10:16                               | 11.7                                | F-3            | K.N                          | 10-01-17                                       | 10:24         | X                              | -                          | 30                         | 29                       | Soudure complète                                 |                                         | O          |
| 13-14                                       | 10-01-17                      | 10:45                               | 12.8                                | F-3            | K.N                          | 10-01-17                                       | 10:51         | X                              | -                          | 29                         | 29                       | Soudure complète                                 |                                         | O          |
| 9-5                                         | 10-01-17                      | 12:23                               | 0.2                                 | F-4            | K.N                          | 10-01-17                                       | 13:01         | X                              | -                          | 31.5                       | 31.5                     | Soudure complète                                 |                                         | O          |
| 9-6                                         | 10-01-17                      | 12:23                               | 6.5                                 | F-4            | K.N                          | 10-01-17                                       | 13:01         | X                              | -                          | 31.5                       | 31.5                     | Soudure complète                                 |                                         | O          |
| Patch4-10                                   | 10-01-17                      | 12:23                               | 0.4                                 | F-4            | K.N                          | 10-01-17                                       | 13:01         | X                              | -                          | 31.5                       | 31.5                     | Soudure complète                                 |                                         | O          |
| 10-6                                        | 10-01-17                      | 12:23                               | 5.1                                 | F-4            | K.N                          | 10-01-17                                       | 13:01         | X                              | -                          | 31.5                       | 31.5                     | Soudure complète                                 |                                         | O          |
| 10-7                                        | 10-01-17                      | 12:23                               | 1.2                                 | F-4            | K.N                          | 10-01-17                                       | 13:01         | X                              | -                          | 31.5                       | 31.5                     | Soudure complète                                 |                                         | O          |
| 11-7                                        | 10-01-17                      | 12:23                               | 6.7                                 | F-4            | K.N                          | 10-01-17                                       | 13:01         | X                              | -                          | 31.5                       | 31.5                     | Soudure complète                                 |                                         | O          |
| 12-7                                        | 10-01-17                      | 12:23                               | 3.7                                 | F-4            | K.N                          | 10-01-17                                       | 13:01         | X                              | -                          | 31.5                       | 31.5                     | Soudure complète                                 |                                         | O          |
| 12-8                                        | 10-01-17                      | 12:23                               | 3.0                                 | F-4            | K.N                          | 10-01-17                                       | 13:01         | X                              | -                          | 31.5                       | 31.5                     | Soudure complète                                 |                                         | O          |

## Seaming Procedures Procédures de Soudures

Project Name / Nom de Projet:

Meliadine mine site fuel farm

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

Project No. / No. de Projet:

C-17060

| Seaming Procedures / Procédures de Soudures |                               |                 |                    |                |                   | Non-Destructive Testing / Essai Non-Destructif |               |                                |                            |                                               |                                          |                                                  | Approved (Yes/No)<br>Approuvé (Oui/Non) |            |
|---------------------------------------------|-------------------------------|-----------------|--------------------|----------------|-------------------|------------------------------------------------|---------------|--------------------------------|----------------------------|-----------------------------------------------|------------------------------------------|--------------------------------------------------|-----------------------------------------|------------|
| Seam No.                                    | Date of Seaming<br>(mm/dd/yy) | Time of Seaming | Seam Length<br>(m) | Trial Test No. | Technician-Welder | Test Date<br>(mm/dd/yy)                        | Time<br>Heure | Air-Pressure<br>Pressurisation | Vacuum Box<br>Boîte à Vide | Starting Pressure<br>(psi)<br>Pression Départ | Ending Pressure<br>(psi)<br>Pression Fin | Testing Details/Location<br>l'essai/Localisation |                                         | Détails de |
| 13-8                                        | 10-01-17                      | 12:23           | 6.7                | F-4            | K.N               | 10-01-17                                       | 13:01         | -                              | X                          | 31.5                                          | 31.5                                     | Soudure complète                                 |                                         | O          |
| 14-8                                        | 10-01-17                      | 12:23           | 2.6                | F-4            | K.N               | 10-01-17                                       | 12:57         | -                              | X                          | 34                                            | 34                                       | Soudure complète                                 |                                         | O          |
| 15-16                                       | 10-09-17                      | 10:28           | 12.7               | F-5            | K.N               | 10-09-17                                       | 11:10         | -                              | X                          | 33                                            | 33                                       | Soudure complète                                 |                                         | O          |
| 16-17                                       | 10-09-17                      | 10:40           | 13.2               | F-5            | K.N               | 10-09-17                                       | 11:15         | X                              | -                          | 32                                            | 31                                       | Soudure complète                                 |                                         | O          |
| 17-18                                       | 10-09-17                      | 10:47           | 13.6               | F-5            | K.N               | 10-09-17                                       | 11:22         | X                              | -                          | 31                                            | 31                                       | Soudure complète                                 |                                         | O          |
| 18-19                                       | 10-09-17                      | 11:03           | 13.5               | F-5            | K.N               | 10-09-17                                       | 11:27         | X                              | -                          | 33                                            | 31                                       | Soudure complète                                 |                                         | O          |
| 20-14                                       | 10-09-17                      | 13:14           | 7.9                | F-5            | K.N               | 10-09-17                                       | 13:23         | X                              | -                          | 33                                            | 31                                       | Soudure complète                                 |                                         | O          |
| 19-21                                       | 10-09-17                      | 13:30           | 11.3               | F-5            | K.N               | 10-09-17                                       | 13:45         | X                              | -                          | 31                                            | 30                                       | Soudure complète                                 |                                         | O          |
| 21-22                                       | 10-09-17                      | 13:45           | 3.4                | F-5            | K.N               | 10-09-17                                       | 13:55         | X                              | -                          | 30                                            | 30                                       | Soudure complète                                 |                                         | O          |
| 1-15                                        | 10-09-17                      | 14:30           | 2.6                | F-6            | K.N               | 10-09-17                                       | 14:54         | X                              | -                          | 30                                            | 30                                       | Soudure complète                                 |                                         | O          |
| 1-16                                        | 10-09-17                      | 14:30           | 4.3                | F-6            | K.N               | 10-09-17                                       | 14:54         | X                              | -                          | 30                                            | 30                                       | Soudure complète                                 |                                         | O          |
| 2-16                                        | 10-09-17                      | 14:30           | 2.5                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                                            | 31                                       | Soudure complète                                 |                                         | O          |
| 2-17                                        | 10-09-17                      | 14:30           | 4.2                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                                            | 31                                       | Soudure complète                                 |                                         | O          |
| 3-17                                        | 10-09-17                      | 14:30           | 2.6                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                                            | 31                                       | Soudure complète                                 |                                         | O          |
| 3-18                                        | 10-09-17                      | 14:30           | 4.2                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                                            | 31                                       | Soudure complète                                 |                                         | O          |

## Seaming Procedures Procédures de Soudures

Project Name / Nom de Projet:

Meliadine mine site fuel farm

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

Project No. / No. de Projet:

C-17060

| Seaming Procedures / Procédures de Soudures |                               |                 |                    |                |                   | Non-Destructive Testing / Essai Non-Destructif |               |                                |                            |                            |                          |                                                  | Approuvé (Yes/No)<br>Approuvé (Oui/Non) |            |
|---------------------------------------------|-------------------------------|-----------------|--------------------|----------------|-------------------|------------------------------------------------|---------------|--------------------------------|----------------------------|----------------------------|--------------------------|--------------------------------------------------|-----------------------------------------|------------|
| Seam No.<br>No. de Soudure                  | Date of Seaming<br>(mm/dd/yy) | Time of Seaming | Seam Length<br>(m) | Trial Test No. | Technician-Welder | Test Date<br>(mm/dd/yy)                        | Time<br>Heure | Air-Pressure<br>Pressurisation | Vacuum Box<br>Boîte à Vide | Starting Pressure<br>(psi) | Ending Pressure<br>(psi) | Testing Details/Location<br>l'essai/Localisation |                                         | Détails de |
| 4-18                                        | 10-09-17                      | 14:30           | 2.5                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                         | 31                       | Soudure complète                                 |                                         | O          |
| 4-19                                        | 10-09-17                      | 14:30           | 4.2                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                         | 31                       | Soudure complète                                 |                                         | O          |
| 8-19                                        | 10-09-17                      | 14:30           | 1.2                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                         | 31                       | Soudure complète                                 |                                         | O          |
| 14-19                                       | 10-09-17                      | 14:30           | 2.1                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                         | 31                       | Soudure complète                                 |                                         | O          |
| 14-21                                       | 10-09-17                      | 14:30           | 3.9                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                         | 31                       | Soudure complète                                 |                                         | O          |
| 20-21                                       | 10-09-17                      | 14:30           | 6.1                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                         | 31                       | Soudure complète                                 |                                         | O          |
| 20-22                                       | 10-09-17                      | 14:30           | 3.3                | F-6            | K.N               | 10-09-17                                       | 15:10         | X                              | -                          | 31                         | 31                       | Soudure complète                                 |                                         | O          |
| 15-23                                       | 10-10-17                      | 12:30           | 7.5                | F-7            | K.N               | 10-10-17                                       | 12:45         | X                              | -                          | 32                         | 31                       | Soudure complète                                 |                                         | O          |
| 23-24                                       | 10-10-17                      | 12:40           | 8.7                | F-8            | K.N               | 10-10-17                                       | 12:51         | X                              | -                          | 30                         | 30                       | Soudure complète                                 |                                         | O          |
| 15-24                                       | 10-10-17                      | 13:01           | 2.4                | F-8            | K.N               | 10-10-17                                       | 13:15         | X                              | -                          | 32                         | 30                       | Soudure complète                                 |                                         | O          |
| 15-25                                       | 10-10-17                      | 13:01           | 4.7                | F-8            | K.N               | 10-10-17                                       | 13:15         | X                              | -                          | 32                         | 30                       | Soudure complète                                 |                                         | O          |
| 24-25                                       | 10-10-17                      | 12:52           | 8.8                | F-7            | K.N               | 10-10-17                                       | 13:02         | X                              | -                          | 31                         | 31                       | Soudure complète                                 |                                         | O          |
| 25-26                                       | 10-10-17                      | 14:00           | 12.3               | F-7            | K.N               | 10-10-17                                       | 14:15         | X                              | -                          | 30                         | 28                       | Soudure complète                                 |                                         | O          |
| 26-27                                       | 10-10-17                      | 14:18           | 12.0               | F-7            | K.N               | 10-10-17                                       | 14:27         | X                              | -                          | 30                         | 30                       | Soudure complète                                 |                                         | O          |
| 27-28                                       | 10-10-17                      | 14:38           | 12.5               | F-7            | K.N               | 10-10-17                                       | 14:54         | X                              | -                          | 32                         | 31                       | Soudure complète                                 |                                         | O          |

Project Name / Nom de Projet:

Meliadine mine site fuel farm

QC Inspector / Inspecteur CQ: Anthony Duquette-Michon

Project No. / No. de Projet:

C-17060

| Seaming Procedures / Procédures de Soudures |                               |                                     |                    |                                   |                              |                         | Non-Destructive Testing / Essai Non-Destructif |                                |                            |                            |                          |                                                  |            | Approved (Yes/No)<br>Approuvé (Oui/Non) |
|---------------------------------------------|-------------------------------|-------------------------------------|--------------------|-----------------------------------|------------------------------|-------------------------|------------------------------------------------|--------------------------------|----------------------------|----------------------------|--------------------------|--------------------------------------------------|------------|-----------------------------------------|
| Seam No.<br>No. de Soudure                  | Date of Seaming<br>(mm/dd/yy) | Time of Seaming<br>Heure de Soudure | Seam Length<br>(m) | Trial Test No.<br>No. Calibration | Technician-Welder<br>Soudeur | Test Date<br>(mm/dd/yy) | Time<br>Heure                                  | Air-Pressure<br>Pressurisation | Vacuum Box<br>Boîte à Vide | Starting Pressure<br>(psi) | Ending Pressure<br>(psi) | Testing Details/Location<br>l'essai/Localisation | Détails de |                                         |
| 1-28                                        | 10-10-17                      | 16:00                               | 6.7                | F-8                               | K.N                          | 10-10-17                | 16:27                                          | X                              | -                          | 34                         | 32                       | Soudure complète                                 |            | O                                       |
| 1-27                                        | 10-10-17                      | 16:00                               | 6.7                | F-8                               | K.N                          | 10-10-17                | 16:27                                          | X                              | -                          | 34                         | 32                       | Soudure complète                                 |            | O                                       |
| 1-26                                        | 10-10-17                      | 16:00                               | 6.7                | F-8                               | K.N                          | 10-10-17                | 16:27                                          | X                              | -                          | 34                         | 32                       | Soudure complète                                 |            | O                                       |
| 1-25                                        | 10-10-17                      | 16:00                               | 2.5                | F-8                               | K.N                          | 10-10-17                | 16:27                                          | X                              | -                          | 34                         | 32                       | Soudure complète                                 |            | O                                       |
| 28-29                                       | 10-11-17                      | 09:03                               | 12.1               | F-9                               | K.N                          | 10-11-17                | 9:17                                           | X                              | -                          | 33                         | 32                       | Soudure complète                                 |            | O                                       |
| 29-30                                       | 10-11-17                      | 09:10                               | 12.4               | F-9                               | K.N                          | 10-11-17                | 9:25                                           | X                              | -                          | 34                         | 32                       | Soudure complète                                 |            | O                                       |
| 30-31                                       | 10-11-17                      | 09:30                               | 12.0               | F-9                               | K.N                          | 10-11-17                | 9:40                                           | X                              | -                          | 30                         | 28                       | Soudure complète                                 |            | O                                       |
| 31-32                                       | 10-11-17                      | 09:37                               | 11.2               | F-9                               | K.N                          | 10-11-17                | 9:47                                           | X                              | -                          | 30                         | 28                       | Soudure complète                                 |            | O                                       |
| 32-33                                       | 10-11-17                      | 09:54                               | 8.4                | F-9                               | K.N                          | 10-11-17                | 10:00                                          | X                              | -                          | 31                         | 30                       | Soudure complète                                 |            | O                                       |
| 33-34                                       | 10-11-17                      | 10:00                               | 8.6                | F-10                              | K.N                          | 10-11-17                | 10:10                                          | X                              | -                          | 31                         | 30                       | Soudure complète                                 |            | O                                       |
| 34-35                                       | 10-11-17                      | 10:16                               | 8.3                | F-9                               | K.N                          | 10-11-17                | 10:27                                          | X                              | -                          | 33                         | 33                       | Soudure complète                                 |            | O                                       |
| 32-35                                       | 10-11-17                      | 10:23                               | 5.3                | F-10                              | K.N                          | 10-11-17                | 10:32                                          | X                              | -                          | 32                         | 31                       | Soudure complète                                 |            | O                                       |
| 1-32                                        | 10-11-17                      | AM                                  | 3.4                | E-6                               | P.A                          | 10-11-17                | -                                              | -                              | X                          | -                          | -                        | Soudure complète                                 |            | O                                       |
| 1-31                                        | 10-11-17                      | AM                                  | 6.7                | E-6                               | P.A                          | 10-11-17                | -                                              | -                              | X                          | -                          | -                        | Soudure complète                                 |            | O                                       |
| 1-30                                        | 10-11-17                      | AM                                  | 2.8                | E-6                               | P.A                          | 10-11-17                | -                                              | -                              | X                          | -                          | -                        | From int. 1-30-31<br>0m to 2.8m                  |            | O                                       |

## Seaming Procedures Procédures de Soudures

Project Name / Nom de Projet:

Meliadine mine site fuel farm

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

Project No. / No. de Projet: C-17060

| Seaming Procedures / Procédures de Soudures |                               |                 |                    |                |                   |                         | Non-Destructive Testing / Essai Non-Destructif |                                |                            |                            |                          |                                                  |            | Approved (Yes/No)<br>Approuvé (Oui/Non) |
|---------------------------------------------|-------------------------------|-----------------|--------------------|----------------|-------------------|-------------------------|------------------------------------------------|--------------------------------|----------------------------|----------------------------|--------------------------|--------------------------------------------------|------------|-----------------------------------------|
| Seam No.<br>No. de Soudure                  | Date of Seaming<br>(mm/dd/yy) | Time of Seaming | Seam Length<br>(m) | Trial Test No. | Technician-Welder | Test Date<br>(mm/dd/yy) | Time<br>Heure                                  | Air-Pressure<br>Pressurisation | Vacuum Box<br>Boîte à Vide | Starting Pressure<br>(psi) | Ending Pressure<br>(psi) | Testing Details/Location<br>l'essai/Localisation | Détails de |                                         |
| 1-30                                        | 10-11-17                      | 12:12           | 3.9                | F-10           | K.N               | 10-11-17                | 12:35                                          | X                              | -                          | 31                         | 30                       | 2.8m to 6.7m                                     |            | O                                       |
| 1-29                                        | 10-11-17                      | 12:12           | 6.6                | F-10           | K.N               | 10-11-17                | 12:35                                          | X                              | -                          | 31                         | 30                       | From int. 1-29-30<br>0m to 1.4m                  |            | O                                       |
| "                                           | "                             | "               | "                  | "              | "                 | 10-11-17                | 12:44                                          | X                              | -                          | 34                         | 34                       | 1.4m to 6.6m                                     |            | O                                       |
| 35-36                                       | 10-11-17                      | 12:40           | 10.9               | F-9            | K.N               | 10-11-17                | 13:08                                          | X                              | -                          | 31                         | 29                       | Soudure complète                                 |            | O                                       |
| 36-37                                       | 10-11-17                      | 12:50           | 10.9               | F-9            | K.N               | 10-11-17                | 13:14                                          | X                              | -                          | 32                         | 32                       | Soudure complète                                 |            | O                                       |
| 37-38                                       | 10-11-17                      | 13:00           | 11.0               | F-9            | K.N               | 10-11-17                | 13:20                                          | X                              | -                          | 31                         | 30                       | Soudure complète                                 |            | O                                       |
| 38-39                                       | 10-11-17                      | 13:20           | 10.7               | F-9            | K.N               | 10-11-17                | 13:27                                          | X                              | -                          | 33                         | 32                       | Soudure complète                                 |            | O                                       |
| 1-35                                        | 10-11-17                      | 13:40           | 2.5                | F-10           | K.N               | 10-11-17                | 14:55                                          | X                              | -                          | 32                         | 31                       | Soudure complète                                 |            | O                                       |
| 1-36                                        | 10-11-17                      | 13:40           | 4.2                | F-10           | K.N               | 10-11-17                | 14:55                                          | X                              | -                          | 32                         | 31                       | Soudure complète                                 |            | O                                       |
| 2-36                                        | 10-11-17                      | 13:40           | 2.7                | F-10           | K.N               | 10-11-17                | 15:50                                          | X                              | -                          | 30                         | 30                       | Soudure complète                                 |            | O                                       |
| 2-37                                        | 10-11-17                      | 13:40           | 4.0                | F-10           | K.N               | 10-11-17                | 15:50                                          | X                              | -                          | 30                         | 30                       | Soudure complète                                 |            | O                                       |
| 3-37                                        | 10-11-17                      | 13:40           | 2.7                | F-10           | K.N               | 10-11-17                | 15:50                                          | X                              | -                          | 30                         | 30                       | Soudure complète                                 |            | O                                       |
| 3-38                                        | 10-11-17                      | 13:40           | 4.1                | F-10           | K.N               | 10-11-17                | 15:50                                          | X                              | -                          | 30                         | 30                       | Soudure complète                                 |            | O                                       |
| 4-38                                        | 10-11-17                      | 13:40           | 2.6                | F-10           | K.N               | 10-11-17                | 15:50                                          | X                              | -                          | 30                         | 30                       | Soudure complète                                 |            | O                                       |
| 4-39                                        | 10-11-17                      | 13:40           | 4.1                | F-10           | K.N               | 10-11-17                | 15:50                                          | X                              | -                          | 30                         | 30                       | Soudure complète                                 |            | O                                       |

## Seaming Procedures Procédures de Soudures

Project Name / Nom de Projet:

Meliadine mine site fuel farm

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

Project No. / No. de Projet: C-17060

| Seaming Procedures / Procédures de Soudures |                               |                 |                    |                |                   |                         | Non-Destructive Testing / Essai Non-Destructif |                                |                            |                            |                          |                                                  |            |                                         |
|---------------------------------------------|-------------------------------|-----------------|--------------------|----------------|-------------------|-------------------------|------------------------------------------------|--------------------------------|----------------------------|----------------------------|--------------------------|--------------------------------------------------|------------|-----------------------------------------|
| Seam No.                                    | Date of Seaming<br>(mm/dd/yy) | Time of Seaming | Seam Length<br>(m) | Trial Test No. | Technician-Welder | Test Date<br>(mm/dd/yy) | Time<br>Heure                                  | Air-Pressure<br>Pressurisation | Vacuum Box<br>Boîte à Vide | Starting Pressure<br>(psi) | Ending Pressure<br>(psi) | Testing Details/Location<br>l'essai/Localisation | Détails de | Approved (Yes/No)<br>Approuvé (Oui/Non) |
| 5-39                                        | 10-11-17                      | 13:40           | 1.7                | F-10           | K.N               | 10-11-17                | 15:50                                          | X                              | -                          | 30                         | 30                       | Soudure complète                                 |            | O                                       |
| 9-40                                        | 10-12-17                      | 08:10           | 11.7               | F-11           | K.N               | 10-12-17                | 8:45                                           | X                              | -                          | 31                         | 31                       | Soudure complète                                 |            | O                                       |
| 40-41                                       | 10-12-17                      | 08:26           | 11.9               | F-11           | K.N               | 10-12-17                | 9:00                                           | X                              | -                          | 31                         | 30                       | Soudure complète                                 |            | O                                       |
| 39-44                                       | 10-12-17                      | 08:34           | 9.1                | F-11           | K.N               | 10-12-17                | 9:30                                           | X                              | -                          | 32                         | 30                       | Soudure complète                                 |            | O                                       |
| 41-42                                       | 10-12-17                      | 09:01           | 10.0               | F-11           | K.N               | 10-12-17                | 9:34                                           | X                              | -                          | 32                         | 31                       | Soudure complète                                 |            | O                                       |
| 43-44                                       | 10-12-17                      | 08:41           | 3.6                | F-11           | K.N               | 10-12-17                | 9:40                                           | X                              | -                          | 31                         | 30                       | Soudure complète                                 |            | O                                       |
| 5-40                                        | 10-12-17                      | 09:47           | 6.7                | F-12           | K.N               | 10-12-17                | 10:10                                          | X                              | -                          | 32                         | 31                       | Soudure complète                                 |            | O                                       |
| 5-41                                        | 10-12-17                      | 09:47           | 4.8                | F-12           | K.N               | 10-12-17                | 10:10                                          | X                              | -                          | 32                         | 31                       | Soudure complète                                 |            | O                                       |
| 39-41                                       | 10-12-17                      | 09:47           | 2.5                | F-12           | K.N               | 10-12-17                | 10:10                                          | X                              | -                          | 32                         | 31                       | Soudure complète                                 |            | O                                       |
| 42-44                                       | 10-12-17                      | 09:47           | 9.0                | F-12           | K.N               | 10-12-17                | 10:20                                          | X                              | -                          | 33                         | 31                       | Soudure complète                                 |            | O                                       |
| 42-43                                       | 10-12-17                      | 09:47           | 3.1                | F-12           | K.N               | 10-12-17                | 10:20                                          | X                              | -                          | 33                         | 31                       | Soudure complète                                 |            | O                                       |

**Destructive Testing  
Essai Destructif**

Project Name / Nom de Projet:

Meliadine mine site fuel farm

Project No. / No. de Projet:

C-17060

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

| Destructive Test No.<br>No. Essai Destructif | Seam No.<br>No. de Soudure | Date<br>(mm/dd/yy) | Sample Location<br>Localisation de<br>l'échantillon | Peel Resistance<br>Résistance Pelage<br>(psi) | Peel Type of Break<br>Type de Brisure | Peel Resistance<br>Résistance Pelage<br>(psi) | Peel Type of Break<br>Type de Brisure | Shear Resistance<br>Résist. Cisaillement<br>(psi) | Shear Type of Break<br>Type de Brisure | Date Repaired<br>Date Réparée<br>(mm/dd/yy) | Date Repair Verified<br>Date Réparée Vérifiée<br>(mm/dd/yy) | Lab. Testing (P/F)<br>Lab. Indép. (A/R) | Tensimeter No.<br>No. Tensiomètre |
|----------------------------------------------|----------------------------|--------------------|-----------------------------------------------------|-----------------------------------------------|---------------------------------------|-----------------------------------------------|---------------------------------------|---------------------------------------------------|----------------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------------------|-----------------------------------|
| DT-1                                         | 2-3                        | 07-18-17           | At 5m from SEOS                                     | 130                                           | SE1                                   | 115                                           | SE1                                   | 173                                               | BRK                                    | 07-18-17                                    | 07-18-17                                                    | P                                       | T-9709                            |
| "                                            | "                          | "                  | "                                                   | 118                                           | SE1                                   | 115                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| "                                            | "                          | "                  | "                                                   | 125                                           | SE1                                   | 117                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| "                                            | "                          | "                  | "                                                   | 123                                           | SE1                                   | 113                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| DT-2                                         | 18-19                      | 10-09-17           | North trench                                        | 144                                           | SE1                                   | 124                                           | SE1                                   | 185                                               | BRK                                    | 10-09-17                                    | 10-09-17                                                    | P                                       | T-9709                            |
| "                                            | "                          | "                  | "                                                   | 148                                           | SE1                                   | 134                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| "                                            | "                          | "                  | "                                                   | 136                                           | SE1                                   | 142                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| "                                            | "                          | "                  | "                                                   | 124                                           | SE1                                   | 136                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| DT-3                                         | 29-30                      | 10-11-17           | East trench                                         | 122                                           | SE1                                   | 135                                           | SE1                                   | 182                                               | BRK                                    | 10-11-17                                    | 10-11-17                                                    | P                                       | T-9709                            |
| "                                            | "                          | "                  | "                                                   | 147                                           | SE1                                   | 142                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| "                                            | "                          | "                  | "                                                   | 134                                           | SE1                                   | 121                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| "                                            | "                          | "                  | "                                                   | 132                                           | SE1                                   | 132                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| DT-4                                         | 40-41                      | 10-12-17           | West trench                                         | 129                                           | SE1                                   | 140                                           | SE1                                   | 191                                               | BRK                                    | 10-12-17                                    | 10-12-17                                                    | P                                       | T-9709                            |
| "                                            | "                          | "                  | "                                                   | 140                                           | SE1                                   | 139                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| "                                            | "                          | "                  | "                                                   | 140                                           | SE1                                   | 138                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |
| "                                            | "                          | "                  | "                                                   | 151                                           | SE1                                   | 134                                           | SE1                                   | N/A                                               | N/A                                    | "                                           | "                                                           | "                                       | "                                 |

## Repair Report Rapport de Réparation

Project Name / Nom de Projet:

Meliadine mine site fuel farm

Project No. / No. de Projet:

C-17060

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

| Repair No.<br>No. Réparation | Type & Dimensions<br>Type et Dimensions |                                             |                                   | Location of Repair<br>Localisation de la Réparation |                                |                                                     |                                                  | Date Repaired<br>Date Réparée<br>(mm/dd/yy) | Date Repair Verified<br>Date Réparée Vérifiée<br>(mm/dd/yy) | Approved (Yes/No)<br>Approuvé (Oui/Non) |
|------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------------|-----------------------------------------------------|--------------------------------|-----------------------------------------------------|--------------------------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------------------|
|                              | Patch<br>Empiècement                    | Extrusion Weld or Bead<br>Soudure Extrusion | Pipe Boot<br>Manchon d'étanchéité | On Panel No.<br>Sur Panneau No.                     | On Seam No.<br>Sur Soudure No. | Intersection of Panels<br>Intersection des Panneaux | Sample Location<br>Localisation de l'échantillon |                                             |                                                             |                                         |
| R-1                          | P3                                      |                                             |                                   |                                                     | 1-2                            |                                                     | At 0.8m from SEOS                                | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-2                          | P2                                      |                                             |                                   | 2                                                   |                                |                                                     | At 1m from SEOP<br>and 2m from EEOP              | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-3                          | P2                                      |                                             |                                   | 2                                                   |                                |                                                     | At 3.3m from SEOP<br>and 2m from EEOP            | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-4                          | P2                                      |                                             |                                   | 2                                                   |                                |                                                     | At 5.5m from SEOP<br>and 2m from EEOP            | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-5                          | P2                                      |                                             |                                   | 2                                                   |                                |                                                     | At 7.8m from SEOP<br>and 2m from EEOP            | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-6                          | P2                                      |                                             |                                   | 2                                                   |                                |                                                     | At 10m from SEOP<br>and 2m from EEOP             | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-7                          | P2                                      |                                             |                                   | 2                                                   |                                |                                                     | At 1m from SEOP<br>and 2m from WEOP              | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-8                          | P1                                      |                                             |                                   |                                                     | 1-2                            |                                                     | At 11.2m from SEOS                               | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-9                          | P1                                      |                                             |                                   |                                                     | 1-2                            |                                                     | At 27.3m from SEOS                               | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-10                         | P1                                      |                                             |                                   |                                                     | 1-2                            |                                                     | At 44.8m from SEOS                               | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-11                         | P1                                      |                                             |                                   |                                                     | 1-2                            |                                                     | At 0.4m from NEOS                                | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-12                         |                                         | E                                           |                                   |                                                     |                                | 4-5-6                                               |                                                  | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-13                         |                                         | E                                           |                                   |                                                     |                                | 4-6-7                                               |                                                  | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-14                         |                                         | E                                           |                                   |                                                     |                                | 4-7-8                                               |                                                  | 07-18-17                                    | 07-18-17                                                    | O                                       |
| R-15A                        |                                         | E                                           |                                   |                                                     |                                | Patch1 / 1-2<br>North                               |                                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-16A                        |                                         | E                                           |                                   |                                                     |                                | Patch1-Patch2-<br>2 North                           |                                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-17A                        |                                         | E                                           |                                   |                                                     |                                | Patch2 / 2-3<br>North                               |                                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-18A                        |                                         | E                                           |                                   |                                                     |                                | Patch2-Patch3-<br>3 North                           |                                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-19A                        |                                         | E                                           |                                   |                                                     |                                | Patch3 / 3-4<br>North                               |                                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-20A                        |                                         | E                                           |                                   |                                                     |                                | Patch3-Patch4-<br>4 North                           |                                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-21A                        |                                         | E                                           |                                   |                                                     |                                | Patch4 / 4-6<br>North                               |                                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-22A                        |                                         | E                                           |                                   |                                                     |                                | Patch1 / 1-2<br>South                               |                                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |

## Repair Report Rapport de Réparation

Project Name / Nom de Projet: **Meliadine mine site fuel farm**

Project No. / No. de Projet: **C-17060**

QC Inspector / Inspecteur CQ: **Anthony Duquette-Michon**

| Repair No.<br>No. Réparation | Type & Dimensions<br>Type et Dimensions |                                             |                                   | Location of Repair<br>Localisation de la Réparation |                                |                                                     | Date Repaired<br>Date Réparée<br>(mm/dd/yy) | Date Repair Verified<br>Date Réparée Vérifiée<br>(mm/dd/yy) | Approved (Yes/No)<br>Approuvé (Oui/Non) |
|------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------------|-----------------------------------------------------|--------------------------------|-----------------------------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------------------|
|                              | Patch<br>Empiècement                    | Extrusion Weld or Bead<br>Soudure Extrusion | Pipe Boot<br>Manchon d'étanchéité | On Panel No.<br>Sur Panneau No.                     | On Seam No.<br>Sur Soudure No. | Intersection of Panels<br>Intersection des Panneaux |                                             |                                                             |                                         |
| R-23A                        |                                         | E                                           |                                   |                                                     |                                | Patch1-Patch2-2 South                               | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-24A                        |                                         | E                                           |                                   |                                                     |                                | Patch2 / 2-3 South                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-25A                        |                                         | E                                           |                                   |                                                     |                                | Patch2-Patch3-3 South                               | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-26A                        |                                         | E                                           |                                   |                                                     |                                | Patch3 / 3-4 South                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-27A                        |                                         | E                                           |                                   |                                                     |                                | Patch3-Patch4-4 South                               | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-28A                        |                                         | E                                           |                                   |                                                     |                                | Patch4 / 4-6 South                                  | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-29A                        |                                         | E<br>DB                                     |                                   |                                                     | Patch1 - Patch2                | Full seam                                           | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-30A                        |                                         | E<br>DB                                     |                                   |                                                     | Patch2 - Patch3                | Full seam                                           | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-31A                        |                                         | E<br>DB                                     |                                   |                                                     | Patch3 - Patch4                | Full seam                                           | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-32A                        |                                         | E                                           |                                   |                                                     |                                | Patch4-6-9-10                                       | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-33A                        |                                         | E                                           |                                   |                                                     |                                | 6-7-10                                              | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-34A                        |                                         | E                                           |                                   |                                                     |                                | 7-10-11                                             | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-35A                        |                                         | E                                           |                                   |                                                     |                                | 7-11-12                                             | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-36A                        |                                         | E                                           |                                   |                                                     |                                | 7-8-12                                              | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-37A                        |                                         | E                                           |                                   |                                                     |                                | 8-12-13                                             | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-38A                        | P1                                      |                                             |                                   |                                                     |                                | 8-13-14                                             | 10-01-17                                    | 10-01-17                                                    | O                                       |
| R-15                         | P1                                      |                                             |                                   | 14                                                  |                                | At 0.2m of 14-20 and 0.5m of West trench            | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-16                         |                                         | E                                           |                                   |                                                     |                                | 20-21-22                                            | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-17                         |                                         | E                                           |                                   |                                                     |                                | 14-20-21                                            | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-18                         |                                         | E                                           |                                   |                                                     |                                | 14-19-21                                            | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-19                         |                                         | E                                           |                                   |                                                     |                                | 8-14-19                                             | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-20                         |                                         | E                                           |                                   |                                                     |                                | 4-8-19                                              | 10-09-17                                    | 10-09-17                                                    | O                                       |

## Repair Report Rapport de Réparation

Project Name / Nom de Projet:

Meliadine mine site fuel farm

Project No. / No. de Projet:

C-17060

QC Inspector / Inspecteur CQ:

Anthony Duquette-Michon

| Repair No.<br>No. Réparation | Type & Dimensions<br>Type et Dimensions |                                             |                                   | Location of Repair<br>Localisation de la Réparation |                                |                                                     |                                                  | Date Repaired<br>Date Réparée<br>(mm/dd/yy) | Date Repair Verified<br>Date Réparée Vérifiée<br>(mm/dd/yy) | Approved (Yes/No)<br>Approuvé (Oui/Non) |
|------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------------|-----------------------------------------------------|--------------------------------|-----------------------------------------------------|--------------------------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------------------|
|                              | Patch<br>Empiècement                    | Extrusion Weld or Bead<br>Soudure Extrusion | Pipe Boot<br>Manchon d'étanchéité | On Panel No.<br>Sur Panneau No.                     | On Seam No.<br>Sur Soudure No. | Intersection of Panels<br>Intersection des Panneaux | Sample Location<br>Localisation de l'échantillon |                                             |                                                             |                                         |
| R-21                         |                                         | E                                           |                                   |                                                     |                                | 4-18-19                                             | "T" Seam                                         | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-22                         |                                         | E                                           |                                   |                                                     |                                | 3-4-18                                              | "T" Seam                                         | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-23                         |                                         | E                                           |                                   |                                                     |                                | 3-17-18                                             | "T" Seam                                         | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-24                         |                                         | E                                           |                                   |                                                     |                                | 2-3-17                                              | "T" Seam                                         | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-25                         |                                         | E                                           |                                   |                                                     |                                | 2-16-17                                             | "T" Seam                                         | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-26                         |                                         | E                                           |                                   |                                                     |                                | 1-2-16                                              | "T" Seam                                         | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-27                         |                                         | E                                           |                                   |                                                     |                                | 1-15-16                                             | "T" Seam                                         | 10-09-17                                    | 10-09-17                                                    | O                                       |
| R-28                         |                                         | E                                           |                                   |                                                     |                                | 1-15-25                                             | "T" Seam                                         | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-29                         |                                         | E                                           |                                   |                                                     |                                | 15-24-25                                            | "T" Seam                                         | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-30                         | P3                                      |                                             |                                   |                                                     |                                | 15-23-24                                            |                                                  | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-31                         | P3                                      |                                             |                                   |                                                     | 1-25                           |                                                     | At 1.5m of int. 1-15-25                          | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-32                         |                                         | E                                           |                                   |                                                     |                                | 1-25-26                                             | "T" Seam                                         | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-33                         |                                         | E                                           |                                   |                                                     |                                | 1-26-27                                             | "T" Seam                                         | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-34                         |                                         | E                                           |                                   |                                                     |                                | 1-27-28                                             | "T" Seam                                         | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-35                         | P3                                      |                                             |                                   | 1                                                   |                                |                                                     | At 5m South of int. 1-28-29                      | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-36                         | P2                                      |                                             |                                   |                                                     |                                | 1-28-29                                             |                                                  | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-37                         | P3                                      |                                             |                                   |                                                     |                                | 32-33-34-35                                         |                                                  | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-38                         |                                         | E                                           |                                   |                                                     |                                | 1-29-30                                             | "T" Seam                                         | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-39                         | P3                                      |                                             |                                   |                                                     | 1-30                           |                                                     | At 3m of int. 1-30-31                            | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-40                         |                                         | E                                           |                                   |                                                     |                                | 1-30-31                                             | "T" Seam                                         | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-41                         |                                         | E                                           |                                   |                                                     |                                | 1-31-32                                             | "T" Seam                                         | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-42                         | P3                                      |                                             |                                   |                                                     |                                | 1-32-35                                             |                                                  | 10-10-17                                    | 10-10-17                                                    | O                                       |

## Repair Report Rapport de Réparation

**Project Name / Nom de Projet:** Meliadine mine site fuel farm

**Project No. / No. de Projet:** C-17060

**QC Inspector / Inspecteur CQ:** Anthony Duquette-Michon

| Repair No.<br>No. Réparation | Type & Dimensions<br>Type et Dimensions |                                             |                                   | Location of Repair<br>Localisation de la Réparation |                                |                                                     |                                                  | Date Repaired<br>Date Réparée<br>(mm/dd/yy) | Date Repair Verified<br>Date Réparée Vérifiée<br>(mm/dd/yy) | Approved (Yes/No)<br>Approuvé (Oui/Non) |
|------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------------|-----------------------------------------------------|--------------------------------|-----------------------------------------------------|--------------------------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------------------|
|                              | Patch<br>Empiècement                    | Extrusion Weld or Bead<br>Soudure Extrusion | Pipe Boot<br>Manchon d'étanchéité | On Panel No.<br>Sur Panneau No.                     | On Seam No.<br>Sur Soudure No. | Intersection of Panels<br>Intersection des Panneaux | Sample Location<br>Localisation de l'échantillon |                                             |                                                             |                                         |
| R-43                         |                                         | DB                                          |                                   |                                                     | 1-32                           |                                                     | Full seam                                        | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-44                         |                                         | DB                                          |                                   |                                                     | 1-31                           |                                                     | Full seam                                        | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-45                         |                                         | DB                                          |                                   |                                                     | 1-30                           |                                                     | From int. 1-30-31 to 3m                          | 10-10-17                                    | 10-10-17                                                    | O                                       |
| R-46                         | P3                                      |                                             |                                   |                                                     | 33-34                          |                                                     | South-East corner trench                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-47                         |                                         | E                                           |                                   |                                                     |                                | 1-35-36                                             | "T" Seam                                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-48                         |                                         | E                                           |                                   |                                                     |                                | 1-2-36                                              | "T" Seam                                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-49                         |                                         | E                                           |                                   |                                                     |                                | 2-36-37                                             | "T" Seam                                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-50                         |                                         | E                                           |                                   |                                                     |                                | 2-3-37                                              | "T" Seam                                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-51                         |                                         | E                                           |                                   |                                                     |                                | 3-37-38                                             | "T" Seam                                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-52                         |                                         | E                                           |                                   |                                                     |                                | 3-4-38                                              | "T" Seam                                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-53                         |                                         | E                                           |                                   |                                                     |                                | 4-38-39                                             | "T" Seam                                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-54                         |                                         | E                                           |                                   |                                                     |                                | 4-5-39                                              | "T" Seam                                         | 10-11-17                                    | 10-11-17                                                    | O                                       |
| R-55                         | P3                                      |                                             |                                   |                                                     | 9-40                           |                                                     | West trench                                      | 10-12-17                                    | 10-12-17                                                    | O                                       |
| R-56                         | P1                                      |                                             |                                   |                                                     | 9-40                           |                                                     | At 2m of int. 5-6-9-40                           | 10-12-17                                    | 10-12-17                                                    | O                                       |
| R-57                         | P3                                      |                                             |                                   |                                                     |                                | 5-6-9-40                                            |                                                  | 10-12-17                                    | 10-12-17                                                    | O                                       |
| R-58                         | P3                                      |                                             |                                   | 40                                                  |                                |                                                     | At 3.5m of 40-41 and 3m of 5-40                  | 10-12-17                                    | 10-12-17                                                    | O                                       |
| R-59                         |                                         | E                                           |                                   |                                                     |                                | 5-40-41                                             | "T" Seam                                         | 10-12-17                                    | 10-12-17                                                    | O                                       |
| R-60                         |                                         | E                                           |                                   |                                                     |                                | 5-39-41                                             | "T" Seam                                         | 10-12-17                                    | 10-12-17                                                    | O                                       |
| R-61                         | P3                                      |                                             |                                   |                                                     |                                | 39-41-42-44                                         |                                                  | 10-12-17                                    | 10-12-17                                                    | O                                       |
| R-62                         |                                         | E                                           |                                   |                                                     |                                | 42-43-44                                            | "T" Seam                                         | 10-12-17                                    | 10-12-17                                                    | O                                       |

**CHARTRE/CHART :** Empiècement/Patch (P1 0.3m à/to 0.6m; P2 0.6m à/to 1m; P3 over 1m et plus), Extrusion (E), Embout/Pipe Boot (B), Cap strip (CS), Doublure/Reinforcement (DB) et/and Reconstruction

## Repair Report Rapport de Réparation

*Project Name / Nom de Projet:*

**Meliadine mine site fuel farm**

*Project No. / No. de Projet:*

**C-17060**

*QC Inspector / Inspecteur CQ:*

**Anthony Duquette-Michon**

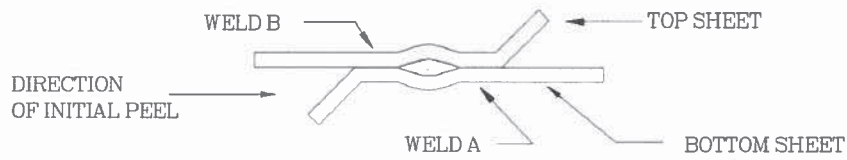
| Repair No.<br>No. Réparation | Type & Dimensions<br>Type et Dimensions |                                             |                                   | Location of Repair<br>Localisation de la Réparation |                                |                                                     | Date Repaired<br>Date Réparée<br>(mm/dd/yy) | Date Repair Verified<br>Date Réparée Vérifiée<br>(mm/dd/yy) | Approved (Yes/No)<br>Approuvé (Oui/Non) |
|------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------------|-----------------------------------------------------|--------------------------------|-----------------------------------------------------|---------------------------------------------|-------------------------------------------------------------|-----------------------------------------|
|                              | Patch<br>Empiècement                    | Extrusion Weld or Bead<br>Soudure Extrusion | Pipe Boot<br>Manchon d'étanchéité | On Panel No.<br>Sur Panneau No.                     | On Seam No.<br>Sur Soudure No. | Intersection of Panels<br>Intersection des Panneaux |                                             |                                                             |                                         |
|                              |                                         |                                             |                                   |                                                     |                                |                                                     |                                             |                                                             |                                         |

## ***APPENDIX III***

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### **-US-EPA CLASSIFICATION FOR TYPES OF BREAK**

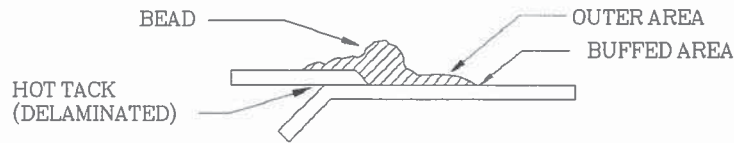
# DOUBLE-TRACK GEOMEMBRANE WELD

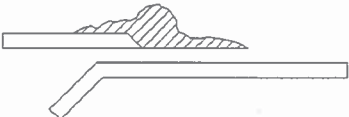
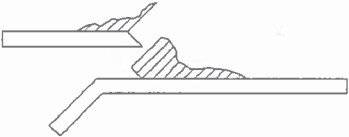
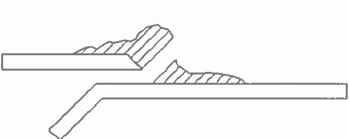
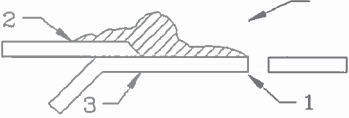
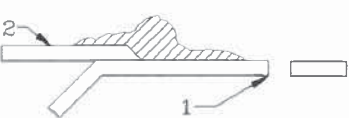
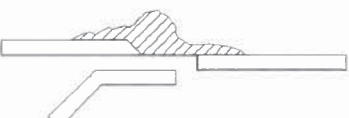


| <u>TYPES OF BREAK</u> | <u>CODE</u> | <u>BREAK DESCRIPTION</u>                                                                                     | <u>CLASSIFICATION <sup>a</sup></u> |
|-----------------------|-------------|--------------------------------------------------------------------------------------------------------------|------------------------------------|
|                       | AD          | ADHESION FAILURE                                                                                             | NON-FTB                            |
|                       | BRK         | BREAK IN SHEETING.<br>BREAK CAN BE IN EITHER<br>TOP OR BOTTOM SHEET.                                         | FTB                                |
|                       | SE1         | BREAK AT OUTER EDGE<br>OF SEAM. BREAK CAN BE<br>IN EITHER TOP OR<br>BOTTOM SHEET.                            | FTB                                |
|                       | SE2         | BREAK AT INNER EDGE OF<br>SEAM THROUGH BOTH<br>SHEETS                                                        | FTB                                |
|                       | AD-BRK      | BREAK IN FIRST SEAM<br>AFTER SOME ADHESION<br>FAILURE. BREAK CAN BE<br>IN EITHER THE TOP OR<br>BOTTOM SHEET. | FTB                                |

<sup>a</sup> FTB="FILM-TEAR BOND."

# FILLET-EXTRUDED GEOMEMBRANE WELD



| <u>TYPES OF BREAKS</u>                                                                                                                                                 | <u>CODE</u> | <u>BREAK DESCRIPTION</u>                                                                                                                                                                                      | <u>CLASSIFICATION</u> <sup>a</sup> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
|                                                                                       | AD1         | FAILURE IN ADHESION. SPECIMENS MAY ALSO DELAMINATE UNDER THE BEAD AND BREAK THROUGH THE THIN EXTRUDED MATERIAL IN THE OUTER AREA.                                                                             | NON-FTB                            |
|                                                                                       | AD2         | FAILURE IN ADHESION.                                                                                                                                                                                          | NON-FTB                            |
|   | AD-WLD      | BREAK THROUGH THE FILLET. BREAKS THROUGH THE FILLET RANGE FROM BREAKS STARTING AT THE EDGE OF THE TOP SHEET TO BREAKS THROUGH THE FILLET AFTER SOME ADHESION FAILURE BETWEEN THE FILLET AND THE BOTTOM SHEET. | NON-FTB <sup>b</sup>               |
|                                                                                     | SE          | BREAK AT SEAM EDGE. INDICATE LOCATION BY 1, 2 OR 3                                                                                                                                                            | FTB                                |
|                                                                                     | BRK         | BREAK IN THE SHEET. USE 1 TO INDICATE BOTTOM SHEET AND 2 TO INDICATE TOP SHEET. IF BREAK IS IN BUFFED AREA, INDICATE WITH "(B)".                                                                              | FTB                                |
|                                                                                     | AD-BRK      | BREAK IN THE BOTTOM SHEETING AFTER SOME ADHESION FAILURE BETWEEN THE FILLET AND THE BOTTOM SHEET. (APPLICABLE TO PEEL ONLY).                                                                                  | FTB                                |
|                                                                                     | HT          | BREAK AT THE EDGE OF THE HOT TACK FOR SPECIMENS WHICH COULD NOT BE DELAMINATED IN THE HOT TACK.                                                                                                               | NO TEST                            |

<sup>a</sup> FTB="FILM-TEAR BOND."

<sup>b</sup> ACCEPTANCE OF AD-WLD BREAKS MAY DEPEND ON WHETHER TEST VALUES MEET A MINIMUM SPECIFICATION VALUE AND NOT ON CLASSIFICATION AS A FTB OR NON-FTB BREAK.

## ***APPENDIX IV***

---

**-RECORD DRAWING**



INGÉNIEUR / ENGINEER

AGNICO EAGLE  
CONSTRUCTION

LEGÈRE / LEGEND:  
● IMPLÉMENT / PATCH  
⊙ IMPLÉMENT TUNN / PIPE BOOT  
⊖ DESTRUCTIF / DESTRUCTIVE  
SOLUDES / DISRUPTION /  
PANEL NO. / PANEL NO.  
1-30474 SOLUDES / PANEL NO.  
ANCRAGE MÉCANIQUE /  
MECHANICAL ANCHORAGE  
SOLUDES ÉLÉMENTAIRE /  
ELEMENTARY SOLUDES  
DURING SPAN

CLIENT / CUSTOMER:  
NUNA KIVALLIQ  
EARTHWORKS INC

TYPE DE PRODUIT / PRODUCT TYPE  
INSTALLÉ  
GÉOTEXTILE / GDE / TAPPE GÉOM. TEXTURE /  
GEOTEXTILE (GDE)

TYPE DE PRODUIT / PRODUCT TYPE  
MÉCANIQUE / MECH. SITE / FUEL / FARM LIVING  
AS BUILT

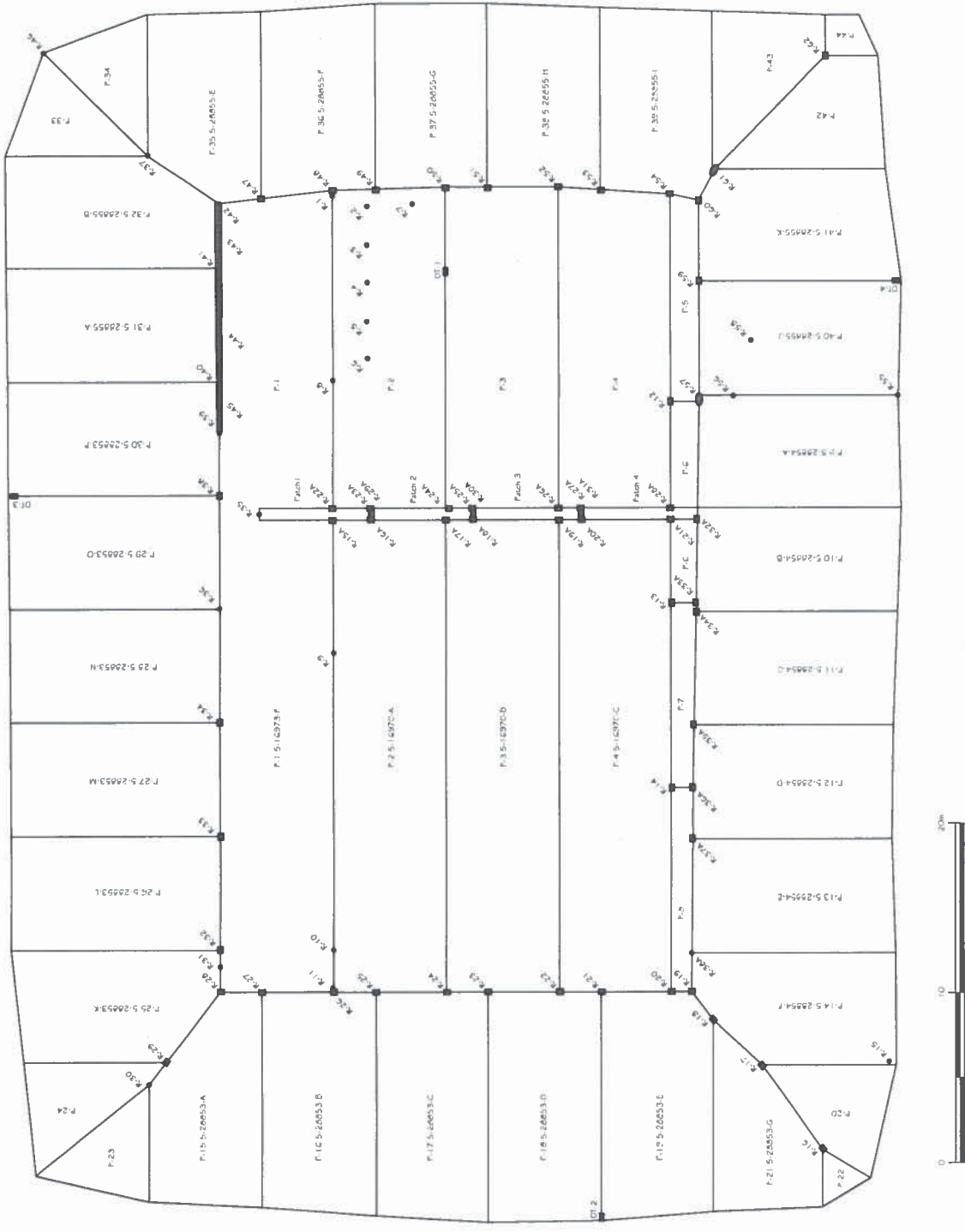
NOM DU PROJET / PROJECT NAME  
AGNICO EAGLE / NEUVILLE / ALANCO  
NEUVILLE / NEUVILLE / FUEL / FARM

**Texel**  
GEOLOGICAL

1300, 2e Rue, P.O. Box 1000  
Sorel-Tracy, QC, Canada  
G9V 4T2

NO. PROJET / PROJECT NO.: G-17000  
FICHE AUTOMATIQUE /  
AUTOMATIC FILE  
DATE (dd-mm-aa) /  
DATE (dd-mm-aa)

DESIGNER / DRAWN BY: E.B.  
VERIFIER / CHECKED BY: E.B.  
APPROVED / APPROVED BY: E.B.  
DESIGN NO. / DRAWING NO.: 17000



| NO. PANEL /<br>PANEL NO. | NO. ROLL /<br>ROLL NO. |
|--------------------------|------------------------|
| P-1                      | 5-2055-A               |
| P-2                      | 5-2055-B               |
| P-3                      | 5-2055-C               |
| P-4                      | 5-2055-D               |
| P-5                      | 5-2055-E               |
| P-6                      | 5-2055-F               |
| P-7                      | 5-2055-G               |
| P-8                      | 5-2055-H               |
| P-9                      | 5-2055-I               |
| P-10                     | 5-2055-J               |
| P-11                     | 5-2055-K               |
| P-12                     | 5-2055-L               |
| P-13                     | 5-2055-M               |
| P-14                     | 5-2055-N               |
| P-15                     | 5-2055-O               |
| P-16                     | 5-2055-P               |
| P-17                     | 5-2055-Q               |
| P-18                     | 5-2055-R               |
| P-19                     | 5-2055-S               |
| P-20                     | 5-2055-T               |
| P-21                     | 5-2055-U               |
| P-22                     | 5-2055-V               |
| P-23                     | 5-2055-W               |
| P-24                     | 5-2055-X               |
| P-25                     | 5-2055-Y               |
| P-26                     | 5-2055-Z               |
| P-27                     | 5-2055-AA              |
| P-28                     | 5-2055-AB              |
| P-29                     | 5-2055-AC              |
| P-30                     | 5-2055-AD              |
| P-31                     | 5-2055-AE              |
| P-32                     | 5-2055-AF              |
| P-33                     | 5-2055-AG              |
| P-34                     | 5-2055-AH              |
| P-35                     | 5-2055-AI              |
| P-36                     | 5-2055-AJ              |
| P-37                     | 5-2055-AK              |
| P-38                     | 5-2055-AL              |
| P-39                     | 5-2055-AM              |
| P-40                     | 5-2055-AN              |
| P-41                     | 5-2055-AO              |
| P-42                     | 5-2055-AP              |
| P-43                     | 5-2055-AQ              |
| P-44                     | 5-2055-AR              |

## **Appendix B**

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### **Construction Summary (As-Built) Report for Industrial Site Fuel Storage and Containment Facilities Meliadine Project, Nunavut**

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# CONSTRUCTION SUMMARY (AS-BUILT) REPORT FOR INDUSTRIAL SITE FUEL STORAGE AND CONTAINMENT FACILITIES MELIADINE PROJECT, NUNAVUT



PRESENTED TO  
**Agnico Eagle Mines Ltd.**

FEBRUARY 2019  
ISSUED FOR USE  
MELIADINE PROJECT, NU | TETRA TECH PROJECT NUMBER: 28920  
AGNICO EAGLE DOCUMENT NUMBER: 6515-E-132-005-132-REP-019

## EXECUTIVE SUMMARY

Tetra Tech was retained by Agnico Eagle Mines Limited (Agnico Eagle) to prepare a construction summary (as-built) report for the Industrial Site Fuel Storage and Containment Facilities at the Meliadine Gold Project, Nunavut. Tetra Tech and WSP Canada Inc. previously prepared the construction drawings and specifications as well as the design report for the Fuel Storage and Containment Facilities for the Project (AEM No 6515-E-132-004-132-REP-003). The facilities include two (2) main fuel storage tanks located at Rankin Inlet Itivia site and four (4) fuel storage tanks located at the Meliadine site.

This report presents the work executed at Meliadine site where the construction of the Industrial Site fuel storage secondary containment and the commissioning of the field erected fuel storage Tank #4 (6ML) and Tank #6 (250kL) was completed in January 2019.

Tetra Tech was not involved in the construction of the Fuel Farm Facilities. The information presented in this report was provided by Agnico Eagle.

The construction monitoring and quality assurance was managed by Agnico Eagle.

|            |                                                                                                                                        |           |
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## APPENDICES

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| Appendix C | Photographs of Industrial Site Fuel Storage and Containment Facilities          |
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| Appendix F | Inspection Report – Handover Package for Tank #4                                |
| Appendix G | Inspection Report – Handover Package for Tank #6                                |
| Appendix H | Construction Summary of Industrial Site Fuel Storage and Containment Facilities |
| Appendix I | Particle Size Summary – 30 mm minus Run of Mine                                 |
| Appendix J | Inspection Report – Inspection Test Plan                                        |
| Appendix K | Inspection Report – Quality Control Final Report for Geomembrane Installation   |
| Appendix L | Request for Information                                                         |

## ACRONYMS & ABBREVIATIONS

| ACRONYMS |                                                  |
|----------|--------------------------------------------------|
| API      | American Petroleum Institute                     |
| CCME     | Canadian Council of Ministers of the Environment |
| CEC      | Canadian Electrical Code                         |
| CL       | Centerline                                       |
| CSA      | Canadian Standards Association                   |
| HDPE     | High-Density Polyethylene                        |
| ITP      | Inspection Test Plan                             |
| NAD83    | North American Datum of 1983                     |
| NBCC     | National Building Code of Canada                 |
| NFCC     | National Fire Code of Canada                     |
| NFPA     | National Fire Protection Association             |
| NWT      | Northwest Territories                            |
| PLC      | Programmable Logic Controller                    |
| RRNWT    | Revised Regulations of the Northwest Territories |
| RTD      | Resistance Temperature Detector                  |
| UTM      | Universal Transverse Mercator                    |
| V:H      | Vertical : Horizontal                            |
| VSD      | Variable Speed Drive                             |

| UNITS |            |
|-------|------------|
| km    | Kilometer  |
| m     | Meter      |
| cm    | Centimeter |
| mm    | Millimeter |
| ft    | Feet       |
| in    | Inches     |
| ML    | Megaliter  |
| kL    | Kiloliter  |
| s     | Second     |
| V     | Volt       |
| mA    | Milliamp   |

## 1.0 INTRODUCTION

Agnico Eagle Mines Limited (Agnico Eagle) retained the services of Tetra Tech and WSP Canada Inc. to carry out the design works associated with the surface infrastructures for the Meliadine project, a gold mine located approximately 25 km north from Rankin Inlet, and 80 km southwest from Chesterfield Inlet in the Kivalliq Region of Nunavut. These works include the fuel storage and containment facilities for both Rankin Inlet and Meliadine.

Tetra Tech and WSP Canada Inc. previously prepared the design report and drawings for construction related to the fuel storage and containment facilities for the Project including one fuel storage facility at the Rankin Inlet Itivia site and two facilities at the Meliadine site (Industrial Site and Mine Site).

It should be noted that the 250 kL tank number was changed from Tank #5 to Tank #6 after the submittal of the design report for the Industrial Site fuel storage and containment facility, and will be referred to as Tank #6 hereafter.

As required by the Water Licence A (No. 2AM-MEL1631), this report summarizes the construction work of the Industrial Site fuel storage and containment facility, including the secondary containment for the fuel farm, pumping station and ancillaries, field erection, and commissioning of Tank #4 (6 ML) and Tank #6 (250 kL). Included in this report is:

- A summary of the characteristics of the Industrial Site fuel storage and containment facility;
- Documentation on field decisions that deviate from original plans;
- As-built drawings;
- Survey drawings conducted during and after the construction;
- Photographs;
- Inspection reports and quality control documents for the offsite and onsite fabrication and fuel modules;
- Inspection reports for the inspection test plan (ITP), and handover packages of Tank #4 and Tank #6;
- Inspection reports for the quality control for geomembrane installation; and
- Particle size summary of 30 mm minus material.

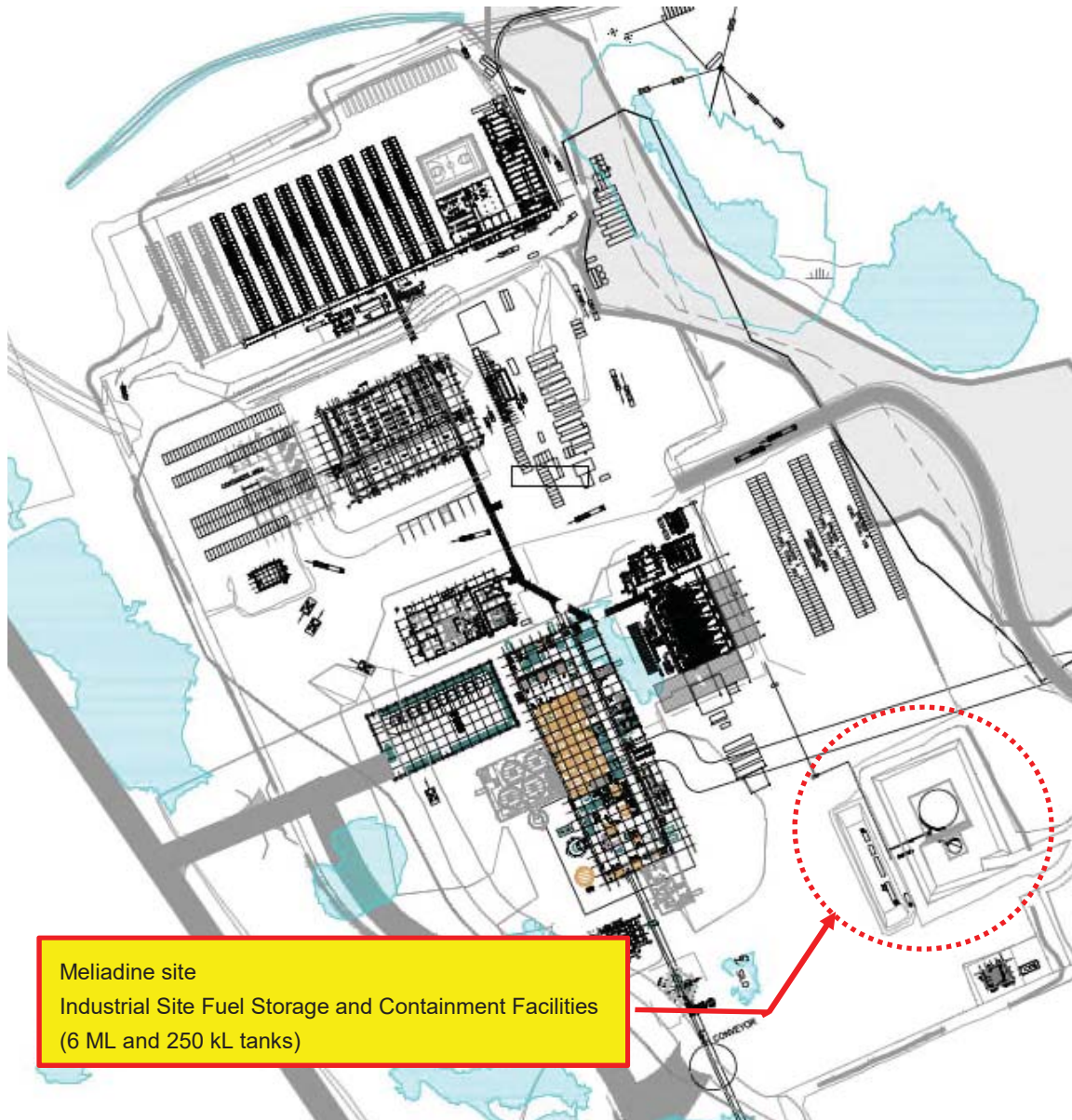
Tetra Tech was retained by Agnico Eagle to prepare a construction summary (as-built) report. Construction summary reports detailing the other fuel storage and containment facilities will be provided under separate covers.

## 2.0 SUMMARY OF THE CONSTRUCTION

### 2.1 Site Location Plan

The figure below presents the site location plan for the Industrial Site fuel storage and containment facility and pumping station located on the southeast side of the Industrial Site Pad around a UTM (NAD83, Zone 15) coordinate of 539,364E and 6,989,918N.

**Figure 2.1: Site Location Plan**



## 2.2 Construction Schedule

Construction activities at the Industrial Site fuel storage and containment facilities for the commissioning of Tank #4 and Tank #6 were conducted between June 2017 and January 2019. Construction was completed according to the milestone dates shown in Table 2.1.

**Table 2.1: Industrial Site Construction Milestone Dates**

| Item                                       | Date                                                                                                          |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Site Preparation                           | June 2017                                                                                                     |
| Under Liner Material Placement             | June 9 <sup>th</sup> to September 15 <sup>th</sup> , 2017                                                     |
| Liner System Installation                  | September 16 <sup>th</sup> to 17 <sup>th</sup> , 2017 and<br>July 14 <sup>th</sup> to 19 <sup>th</sup> , 2018 |
| Tank #4 Erection                           | May 2018                                                                                                      |
| Tank #6 Erection                           | May 2018                                                                                                      |
| Overliner Material Placement               | September 2017 and July 21 <sup>st</sup> to 29 <sup>th</sup> , 2018                                           |
| Commissioning of Tank #4 and Tank #6       | July 2018                                                                                                     |
| Pumping Station Installation               | July 29 <sup>th</sup> 2018                                                                                    |
| Piping Interrelated to Pumping Station     | August 2018                                                                                                   |
| Electrical Construction                    | October 2018                                                                                                  |
| Industrial Site Facility Testing           | August 9 <sup>th</sup> to October 11 <sup>th</sup> , 2018                                                     |
| System Operational for Tank #4 and Tank #6 | January 2019                                                                                                  |

## 2.3 As-Built Drawings and Photographs

Sealed as-built drawings completed by Tetra Tech are presented in Appendix A.

Survey drawings conducted by Hamel Arpentage during and after the construction of the Industrial Site fuel storage and containment facility can be found in Appendix B.

Photographs of the facilities during and after construction are provided in Appendix C.

## 3.0 CODES AND STANDARDS

### 3.1 Compliance for Field Erected Fuel Tanks

The systems comply with all codes and standards related to the project (Federal, Territorial, Municipal, NBCC, NFCC, CEC, CSA, NFPA, and API) as well as the directives of the authorities having jurisdiction over the project, including specific codes such as R-125-95 NWT, Mine Health and Safety Act and RRNWT 1990, C F-12 Fire Prevention Regulations. A summary of the compliance requirements are shown in Table 3.1 below.

**Table 3.1: Industrial Site Field Erected Fuel Tanks As-Built Compliance**

| Fuel Farm Description                                                | Industrial Site Fuel Storage Containment Facilities Compliance |               |
|----------------------------------------------------------------------|----------------------------------------------------------------|---------------|
|                                                                      | Tank #4                                                        | Tank #6       |
| Comply with CCME                                                     | Yes                                                            | Yes           |
| Equipped with Overfill Protection                                    | Yes                                                            | Yes           |
| Underground Piping Double Wall                                       | Yes                                                            | Yes           |
| Underground Piping Installed to Collect Leak into an Accessible Sump | Yes                                                            | Yes           |
| Connections for Filling/Emptying Storage Tanks Kept Close            | Yes                                                            | Yes           |
| Material                                                             | G40.21M-260WT                                                  | G40.21M-260WT |
| Product                                                              | Diesel                                                         | Diesel        |
| Volume                                                               | 6 ML                                                           | 250 kL        |
| Diameter                                                             | 23.4 m                                                         | 8.2 m         |
| Height                                                               | 14.0 m                                                         | 4.7 m         |

### 3.2 Compliance for Secondary Containment

The secondary containment for aboverground storage tanks complies to NFCC standards. The base and walls of the containment basin were constructed to withstand a full hydrostatic head and has a permeability of  $1\text{E}^{-13}$  cm/s while the required permeability is  $1\text{E}^{-6}$  cm/s. The tanks are located entirely within the diked area, with an impermeable membrane covered with a non-combustible material.

**Table 3.2: Industrial Site Secondary Containment As-Built Compliance**

| Parameters                                                                                 | Description                                 |         | Compliance |
|--------------------------------------------------------------------------------------------|---------------------------------------------|---------|------------|
| Enclosed Tanks                                                                             | Tank #4                                     | Tank #6 | -          |
| Volume                                                                                     | 6 ML                                        | 250 kL  | -          |
| Fuel Farm Secondary Containment Requirement / Actual Containment Capacity (for both tanks) | 6 600 m <sup>3</sup> / 6 631 m <sup>3</sup> |         | Yes        |
| Base and Wall Membrane to Withstand Hydrostatic Head                                       | HDPE                                        |         | Yes        |
| Permeability ( $1\text{E}^{-6}$ cm/s min.)                                                 | $1\text{E}^{-13}$ cm/s                      |         | Yes        |
| Tanks Located Entirely Within the Diked Area                                               | -                                           |         | Yes        |

As shown in Table 3.2 above, the actual volume capacity of 6 631 m<sup>3</sup> complies with the legal requirement which states that the minimum required capacity is 110% of the volume of the larger tank for the operation of the fuel farm. The actual versus designed capacity was reduced by 169 m<sup>3</sup> but the actual volume capacity is still greater than the required capacity of 6 600 m<sup>3</sup>.

### 3.3 Distance Restrictions As-Built

The minimum clearances that were required or recommended by the *Design Rationale for Fuel Storage and Distribution Facility* by Public Works and Services of the Government of the Northwest Territories and NFPA-30 were met and are listed on Table 3.3 below:

**Table 3.3: Distance Restrictions**

| Item                                                              | Required                                                                                               | Tank #4 | Tank #6 |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------|---------|
| Distance Between Tanks                                            | $\frac{1}{4} (D4 + D6) = 7.9 \text{ m Min.}$<br>Where D4=23.4 m, D6=8.2 m                              | 9.29 m  |         |
| Distance Between Tank and Toe of the Dike                         | 1.50 m Min.                                                                                            | 12.72 m | 15.01 m |
| Distance Between Tank and CL of the Dike                          | $\frac{1}{2} (\text{Height of Tank}) = 7 \text{ m} / 2.35 \text{ m Min.}$<br>Where H4=14.0 m, H6=4.7 m | 17.46 m | 20.98 m |
| Distance Between Property Limit (that can be built upon) and Tank | Tanks with less than 3 000 000 gallons:<br>165 ft. = 50.29 m Min.                                      | > 698 m | > 712 m |
| Distance Between Property Limit and Exterior Toe of the Dike      | 3.0 m Min.                                                                                             | > 550 m |         |
| Distance Between Tank and Public Roads                            | 55 ft. = 16.76 m Min.                                                                                  | ≈ 30 km | ≈ 30 km |

## 4.0 FIELD DECISIONS FOR THE FIELD ERECTED FUEL TANK #4 AND TANK #6 AND SURROUNDING FACILITIES (MECHANICAL AND ELECTRICAL)

### 4.1 Documentation on Field Decisions that Deviate from Original Plans

This section documents variations from original design which were approved by the designer and/or the field engineer on site for the field erected fuel tanks and piping systems.

The construction work led to slight variations from the original design in the mechanical and electrical aspects of Tank #4 and Tank #6 of the Industrial Site Fuel Farm. The designed intent of the structure was not compromised with the changes to the original design.

#### 4.1.1 Mechanical

- The loading arm manufacturer was changed from Emco to OPW due to time constraints of the delivery.
- The pumping station container was changed from a 20 feet to a 40 feet container to allow for more room in the pumping station.

#### 4.1.2 Electrical

- One switch per variable speed drive (VSD) was installed per pump. The 600 V power junction boxes were removed, approved by the designer and control cables were installed between cabinets and the VSD.
- Additional exterior lighting and fixtures were installed upon approval by the field engineer. One emergency lighting fixture and one 120 V receptacle in each operator room.
- Installation of fire protection strobe light on both Tank #4 and Tank #6, as well as at the gas boy.
- To avoid adding a resistance temperature detector (RTD) card to the programmable logic controller (PLC), a 4-20 mA signal from all RTD temperature sensor were added.
- A temperature sensor was installed on both Tank #4 and Tank#6.
- An Ethernet cable network connecting the Microload to the PLC will replace the BMXEAE0300 and MBXFTB2000.

## 4.2 Maintenance, Inspection, Construction Monitoring, and Inspection Reports

The construction monitoring was managed by Agnico Eagle. Several activities were conducted during construction to ensure the quality of the work. Here is a description of the reports prepared to summarize the quality control, monitoring, or inspection performed during the construction of key activities.

- *Offsite and Onsite Fabrication Quality Control Documents* dated January 2019 prepared by Nuqsana Promec Mining, see the handover document in Appendix D. Quality control was done throughout the construction and fabrication of the project, including but not limited to, the catwalk, piping, and mechanical fixtures.
- *Industrial Site Fuel Module Quality Control Documents* dated January 2019 prepared by Nuqsana Promec Mining, see handover document in Appendix E. Documentation for inspection and test plan for mechanical, piping, and also red line are included in this document.
- *As-Built Drawing Binder for Tank #4* dated July 25<sup>th</sup>, 2018 prepared by Inukshuk Construction Limited, see the handover document in Appendix F. Testing and Inspection Test Plans (ITP) were done throughout the erection of Tank #4 and the installation of the mechanical and electrical systems are included in this document (6515-C-260-002-141-QCR-0010).
- *As-Built Drawing Binder for Tank #6* dated July 25<sup>th</sup>, 2018 prepared by Inukshuk Construction Limited, see the handover document in Appendix G. Testing and Inspection Test Plans (ITP) were done throughout the erection of Tank #6 and the installation of the mechanical and electrical systems are included in this document (6515-C-260-002-141-QCR-0012).

All of the inspections done during and after the construction of Tank #4 and Tank #6 at the Industrial Site fuel storage containment facility were shown to comply with API standard 650. No leaks were found using diesel and liquid penetration tests, and all welds were deemed acceptable under multiple tests. Table 4.1 below shows the inspections that were done during the fabrication and erection of the tanks as provided in the Handover Packages.

**Table 4.1: Industrial Site Tank As-Built Inspections**

| Description                   | Test Method | Tank #4 Result | Tank #6 Result |
|-------------------------------|-------------|----------------|----------------|
| Tank Pedestal Foundation      | Measurement | Acceptable     | Acceptable     |
| Floor Weld                    | Visual      | Acceptable     | Acceptable     |
| Floor Weld                    | Vacuum Test | Acceptable     | Acceptable     |
| Shell to Floor Weld           | Visual      | Acceptable     | Acceptable     |
| Shell to Floor Weld           | Diesel Test | Acceptable     | Acceptable     |
| Horizontal Welds              | Visual      | Acceptable     | Acceptable     |
| Vertical Welds                | Visual      | Acceptable     | Acceptable     |
| Vertical Plumbness            | Measurement | Acceptable     | Acceptable     |
| Shell Plate                   | Diesel Test | Acceptable     | Acceptable     |
| Horizontal and Vertical Welds | Diesel Test | Acceptable     | Acceptable     |
| Compression Ring Weld         | Visual      | Acceptable     | Acceptable     |
| Roof Weld                     | Visual      | Acceptable     | Acceptable     |
| Roof Weld                     | Vacuum Test | Acceptable     | Acceptable     |
| Column Plumbness              | Measurement | Acceptable     | Acceptable     |
| Shell Nozzle Weld             | Visual      | Acceptable     | Acceptable     |
| Tank Leak                     | Air Test    | Acceptable     | Acceptable     |
| Shell Manway Welds            | Visual      | Acceptable     | Acceptable     |
| Roof Manway Welds             | Visual      | Acceptable     | Acceptable     |
| Shell Neck Welds              | Diesel Test | Acceptable     | Acceptable     |
| Stairs and Platforms          | Visual      | Acceptable     | Acceptable     |

## 5.0 FIELD DECISIONS FOR THE SECONDARY CONTAINMENT FACILITY

### 5.1 Documentation on Field Decisions that Deviate from Original Plans

This section documents variations from original design which were approved by the designer and/or the field engineer on site.

A construction summary of the earthworks for the secondary containment facility was prepared by Agnico Eagle and is located in Appendix H.

The Industrial Site fuel storage containment facilities geometry and characteristics were adjusted to site conditions. The designed intent of the structure was not compromised with the changes to the original design. Table 5.1 and the following sections summarize the changes between the proposed and final works.

#### 5.1.1 Dike and Secondary Containment for Fuel Tank Farm

- The dimensions of the dike centerline (CL) to centerline (CL) are lesser by 1.4 m length and 0.1 m width.
- The average dike height and containment height was increased by 0.2 m and 0.08 m to a height of 2.0 m and 1.73 m respectively.
- The average top width of the dike crest is 1.0 m which is an increase of 0.4 m from the original 0.6 m design.
- The foundation pads were increased to an average of 26.8 m x 26.3 m for Tank #4 and 13.5 m x 13.3 m for Tank #6 which is an average increase of 0.6 m and 2.4 m respectively.
- The minimum foundation shoulder was increased by 0.2 m to 1.4 m for Tank #4 and by 0.8 m to 2.0 m for Tank #6.
- The average tank foundation pad slope were made steeper for both Tank #4 and Tank #6. Drainage around the tanks foundations was found to be adequate.
- The average tank foundation thickness for Tank #4 was decreased by 0.05 m to 0.35 m and for Tank #6 remains at 0.4 m as designed.
- The slope of the floor of the secondary containment was increased to improve the flow directions towards the sump which was found to be suitable.
- The riprap was removed from the ditch, approved by the designer. The geometry of the ditch was changed due to constructability issues and approved by Agnico Eagle. The overall water management of the containment facility was unaffected, sloping toward the sump area where the clean water will be pumped out of the fuel farm.

#### 5.1.2 Dike and Secondary Containment for Refueling Service Area

- A secondary containment was added to the original design of the refueling service area as an additional measure to improve the potential spill management as shown in the as-built drawings, see Appendix A. The capacity of this additional secondary containment area is 691 m<sup>3</sup>.

**Table 5.1: Industrial Site Fuel Storage and Containment Facilities Geometry and Characteristics**

| Item                                                           | Proposed              |             | Actual                 |                | Difference                |
|----------------------------------------------------------------|-----------------------|-------------|------------------------|----------------|---------------------------|
|                                                                | Tank #4               | Tank #6     | Tank #4                | Tank #6        |                           |
| Secondary Containment Permeability (max.)                      | 1E <sup>-6</sup> cm/s |             | 1E <sup>-13</sup> cm/s |                | - 9.9E <sup>-7</sup> cm/s |
| Dike: length, width (CL to CL) (avg.)                          | 82.7 m x 57.7 m       |             | 81.3 m x 57.6 m        |                | - 1.4 m / - 0.1 m         |
| Dike height (avg.)                                             | 1.8 m                 |             | 2.0 m                  |                | + 0.2 m                   |
| Containment Height (avg.)                                      | 1.65 m                |             | 1.73 m                 |                | + 0.08 m                  |
| Dike flat top width (avg.)                                     | 0.6 m                 |             | 1.0 m                  |                | + 0.4 m                   |
| Dike embankment slope (avg.)                                   | 1V:2H                 |             | 1V:2H                  |                | -                         |
| Impervious area                                                | 4 870 m <sup>2</sup>  |             | 5 071 m <sup>2</sup>   |                | + 201 m <sup>2</sup>      |
| Tank Foundation Pad (avg.)                                     | 26 m x 26 m           | 11 m x 11 m | 26.8 m x 26.3 m        | 13.5m x 13.3 m | + 0.6 m / + 2.4 m avg.    |
| Tank Foundation Thickness (min.)                               | 900 mm                | 900 mm      | 900 mm                 | 900 mm         | -                         |
| Tank Foundation Shoulder (min.)                                | 1.2 m                 | 1.2 m       | 1.4 m                  | 2.0 m          | + 0.2 m / + 0.8 m         |
| Tank Foundation Pad Embankment Slope (avg.)                    | 1V:2H                 | 1V:2H       | 1V:2H                  | 1V:2H          | -                         |
| Tank Foundation Pad Slope (avg.)                               | 1V:120H               | 1V:120H     | 1V:60H                 | 1V:60H         | Steeper / Steeper         |
| Tank foundation pad thickness, above surrounding ground (avg.) | 0.4 m                 | 0.4 m       | 0.35 m                 | 0.4 m          | - 0.05 m / -              |
| Depth of Liner Under Fill (avg.)                               | 0.3 m                 |             | 0.37 m                 |                | + 0.07 m                  |
| Fuel Farm Area Containment Capacity                            | 6 800 m <sup>3</sup>  |             | 6 631 m <sup>3</sup>   |                | - 169 m <sup>3</sup>      |
| Refuelling Service Area Containment Capacity                   | -                     |             | 691 m <sup>3</sup>     |                | + 691 m <sup>3</sup>      |

## 5.2 Inspection, Construction Monitoring, and Inspection Reports

The construction monitoring was managed by Agnico Eagle. Several activities were conducted during construction to ensure the quality of the work. Here is a description of the reports prepared to summarize the quality control, monitoring, and/or inspections performed during the construction of key activities.

- Several particle size analyses were conducted for the 30 mm minus produced from Run of Mine material to be used for the liner system. It was approved by the field engineer and the results and summaries can be found in Appendix I.
- Civil Earthworks Inspection Test Plan (ITP) dated September 2018 prepared by MTKSL in conjunction with Agnico Eagle, see Appendix J.
- *Quality Control Final Report* prepared by Texel Geosol for Nuna Kivalliq Earthworks Inc, see Appendix K. Testing, both non-destructive and destructive, was performed to ensure the quality of the installation of the geosynthetic materials, including welding. Texel Geosol certified that all materials were installed according to the project plans and specifications.

## 6.0 EARTHWORKS

A shortage of on-site granular material led to slight changes in the materials. These changes were approved by the design engineer as per multiple requests for information (6515-C-230-005-RFI-001 and 6515-C-230-009-RFI-015), see Appendix L:

- The layer of 200 mm minus granular material outside the tank pedestals was eliminated while the layer that was specified under the tank pedestals was replaced with Run of Mine granular fill where the larger particles were removed.
- The fill thickness of the 30 mm minus granular fill over and under the liner system was changed to 300 mm and 200 mm respectively, approved by the designer. This change was to allow the heavy equipment required for construction to access the site. This change did not affect the total material quantities.
- The 600 mm minus Run of Mine material outside of the tank pedestal footprints (including the perimeter berms) was replaced with 600 mm minus Esker material.

The as-built material quantities for the main Industrial Site fuel storage containment facility area are presented in Table 6.1 below.

**Table 6.1: Earthworks As-Built Material Quantities**

| Item*                                                        | Proposed*                   |                             | Actual**                    |                                       | Difference                   |                              |
|--------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------------------|------------------------------|------------------------------|
|                                                              | Tank Farm                   | Refuelling Service Pad Area | Tank Farm                   | Refuelling Secondary Containment Area | Tank Farm                    | Refuelling Area              |
| Sand                                                         | 50 m <sup>3</sup>           | -                           | 50 m <sup>3</sup>           | -                                     | -                            | -                            |
| Riprap (50-300 mm)                                           | 35 m <sup>3</sup>           | -                           | -                           | -                                     | - 35 m <sup>3</sup>          | -                            |
| 30 mm minus                                                  | 2 500 m <sup>3</sup>        | -                           | 6 476 m <sup>3</sup>        | 1 557 m <sup>3</sup>                  | + 3 976 m <sup>3</sup>       | + 1 557 m <sup>3</sup>       |
| 50 mm minus                                                  | 105 m <sup>3</sup>          | 1 260 m <sup>3</sup>        | -                           | -                                     | - 105 m <sup>3</sup>         | - 1 260 m <sup>3</sup>       |
| 200 mm minus                                                 | 2 950 m <sup>3</sup>        | 2 500 m <sup>3</sup>        | -                           | -                                     | - 2 950 m <sup>3</sup>       | - 2 500 m <sup>3</sup>       |
| Borrow Pit CL-A / Run of Mine (600 mm minus)                 | 22 588 m <sup>3</sup>       | 6 012 m <sup>3</sup>        | 20 233 m <sup>3</sup>       | 1 620 m <sup>3</sup>                  | - 2 355 m <sup>3</sup>       | - 4 392 m <sup>3</sup>       |
| <b>Total of fill</b>                                         | <b>28 228 m<sup>3</sup></b> | <b>9 772 m<sup>3</sup></b>  | <b>26 759 m<sup>3</sup></b> | <b>3 177 m<sup>3</sup></b>            | <b>- 1 469 m<sup>3</sup></b> | <b>- 6 595 m<sup>3</sup></b> |
| 540 g/m <sup>2</sup> Non-woven geotextile for tank farm area | 4 870 m <sup>2</sup>        | -                           | 5 243 m <sup>2</sup>        | -                                     | + 373 m <sup>2</sup>         | -                            |
| HDPE Geomembrane for tank farm area                          | 9 740 m <sup>2</sup>        | -                           | 10 486 m <sup>2</sup>       | -                                     | + 746 m <sup>2</sup>         | -                            |

\* The proposed item names and values in the table have been taken from the latest drawing that was issued for construction, 65-000-230-223 revision 1.

\*\* The actual item names and values in the table have been taken from the latest survey drawing, see Appendix B.

- The granular material changes as presented in this section along with the dimension changes mentioned in section 5.0 resulted in the material quantity changes of the tank farm presented in the table above.
- The granular material quantities shown in the refuelling secondary containment area are reflected in the table above while the remainder of the quantities of the refuelling service pad area was allocated to the industrial site general pad resulting in the difference between the proposed and actual quantities.
- The geotextile and geomembrane quantities associated to the refuelling secondary containment area added are not provided.

## 7.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Agnico Eagle Mines Ltd. and their agents. Tetra Tech does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Agnico Eagle Mines Ltd., or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Tetra Tech accepts no responsibility for losses, claims, expenses or damages, if any, suffered by a third party as a result of any decisions made or actions based on this report. Use of this report is subject to the terms and conditions stated in Tetra Tech's Services Agreement.

While it is believed that the information contained herein is reliable under the conditions and subject to the limitations set forth in the report, this report is based on information not within the control of Tetra Tech, nor has said information been verified by Tetra Tech, and Tetra Tech therefore cannot and does not guarantee its sufficiency and accuracy. The comments in the report reflect Tetra Tech's best judgment in light of the information available to it at the time of preparation.

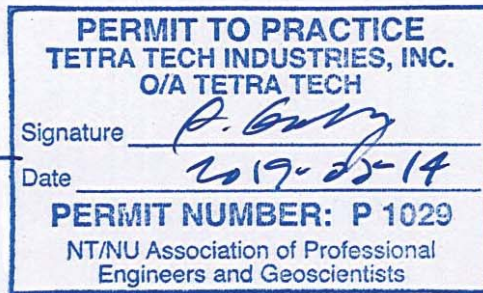
Use of this Document acknowledges acceptance of the foregoing conditions.

## 8.0 CLOSURE

We trust this report meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,  
Tetra Tech

 2019-02-14



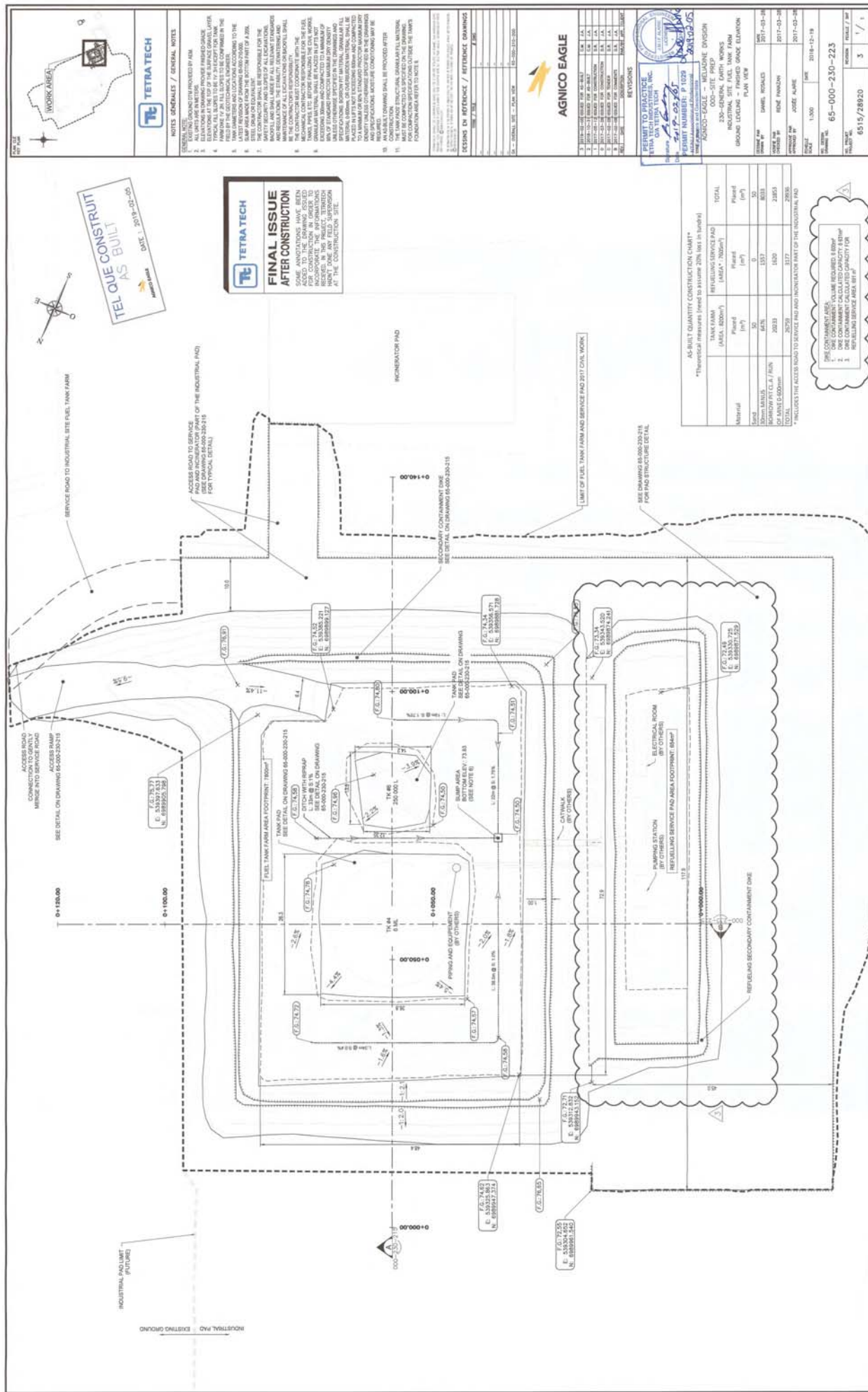
Prepared by:  
Christopher Morin, Jr. Eng.  
Direct Line: 514.257.2427 x3240  
Christopher.Morin@tetratech.com

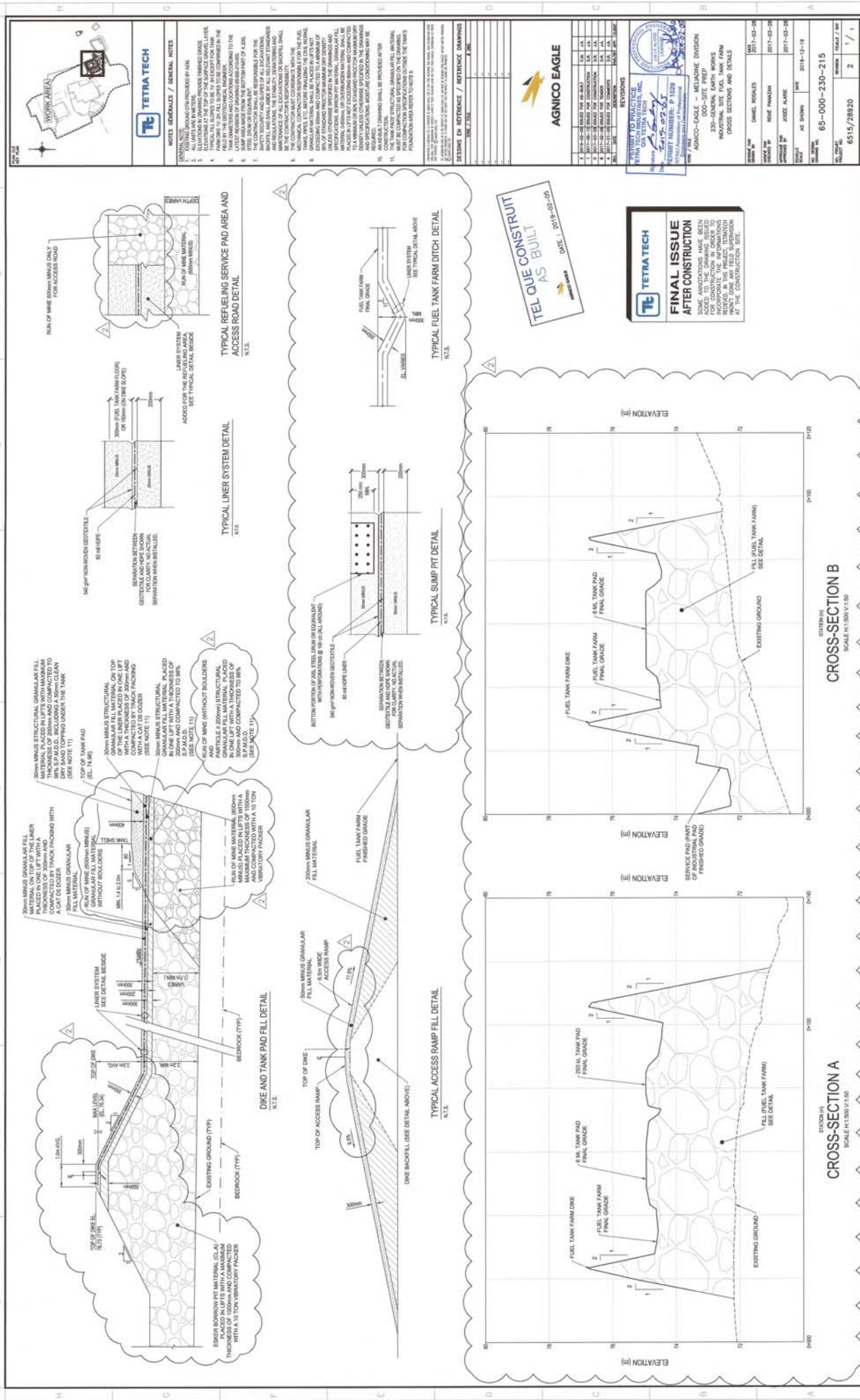


Reviewed by:  2019-02-14  
Josée Alarie, P.Eng.  
Direct Line: 514.257.2427 x3323  
Josee.Alarie@tetratech.com

## **APPENDIX A**

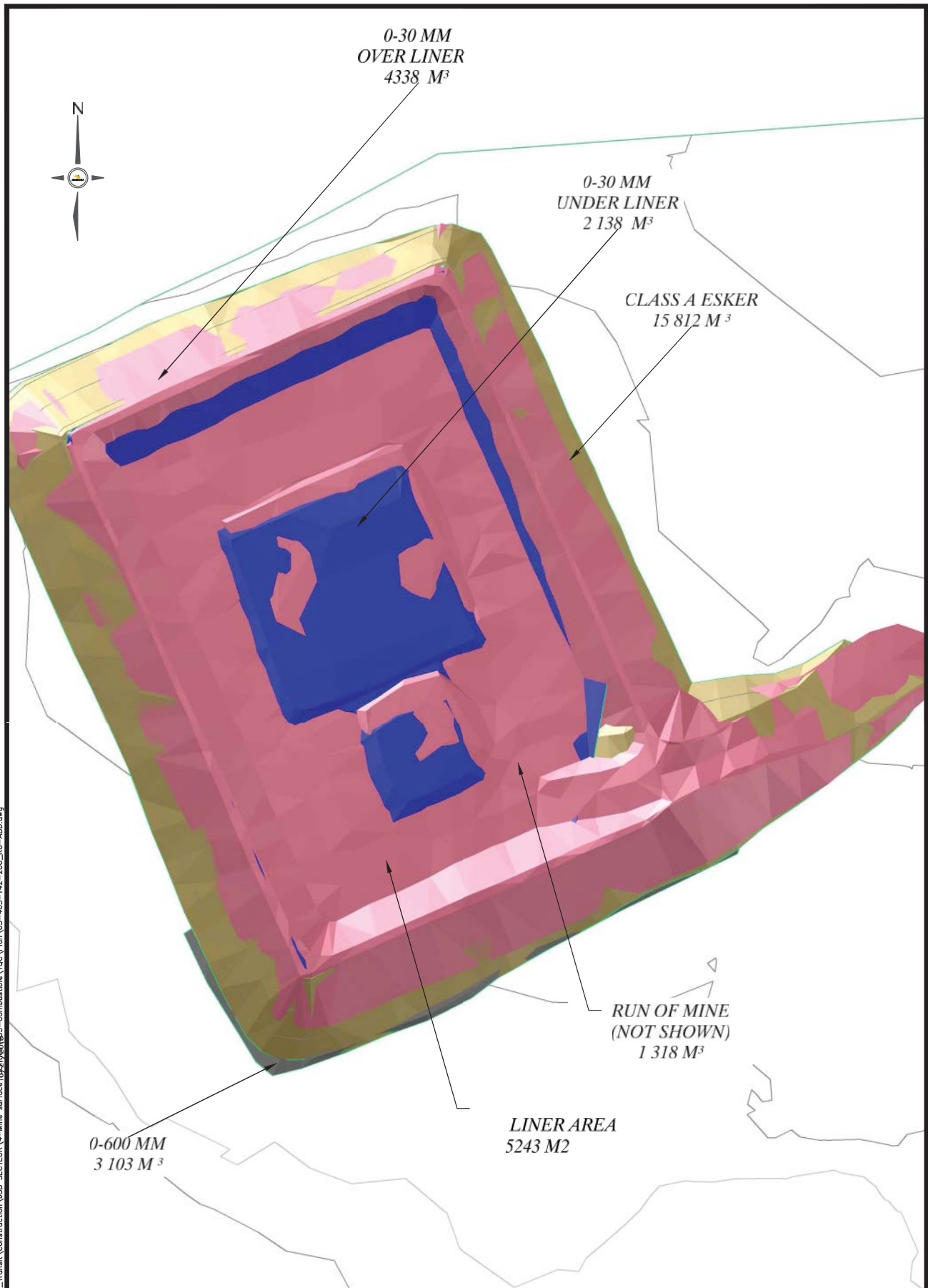
### **As-Built Drawings of Industrial Site Fuel Storage and Containment Facilities**





## **APPENDIX B**

# Survey Drawings of Industrial Site Fuel Storage and Containment Facilities



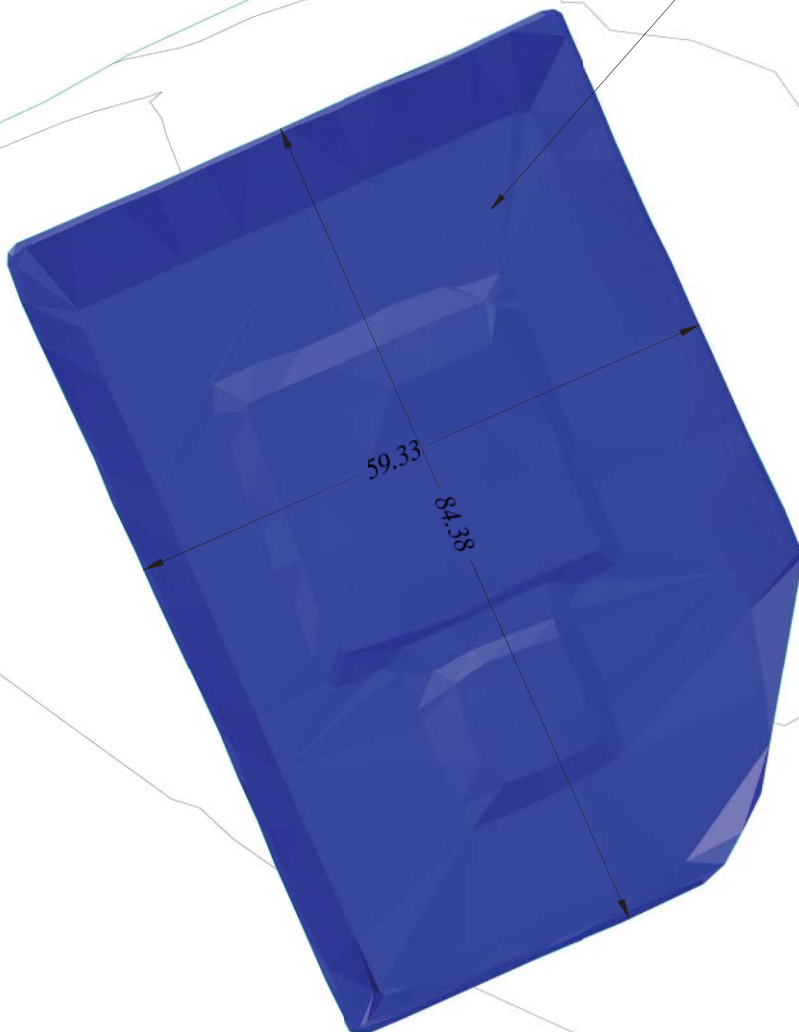
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|                               |                                    |                                 |
|-------------------------------|------------------------------------|---------------------------------|
| AGNICO EAGLE                  | WORK EXECUTION DATE 2017-2018      | EMISSION DATE 2018-10-21        |
| COORD. SYSTEM:<br>UTM15 NAD83 | AS BUILT ISFF                      | DRAWN BY:<br>Y HAMEL            |
| SCALE:<br>1:500               | PLAN NO.:<br>65-403-142-200-R0-ABD | APPROVED BY:<br>Hamel arpentage |



0-30 MM  
UNDER LINER  
2 138 M<sup>3</sup>



v:\Construction\Melodre\Z-Surveys-Trent\Construction\JOB-SECTION\4-Wire surface 2018\46-361-Combustible\TOP\Plan\65-403-142-200-R0-ABD\_v2.dwg



AGNICO EAGLE

WORK EXECUTION DATE 2017

EMISSION DATE 2018-10-21

COORD. SYSTEME:  
UTM15 NAD83

**AS BUILT 0-30 MM  
IND SITE FUEL FARM**

DRAWN BY:  
Y. HAMEL

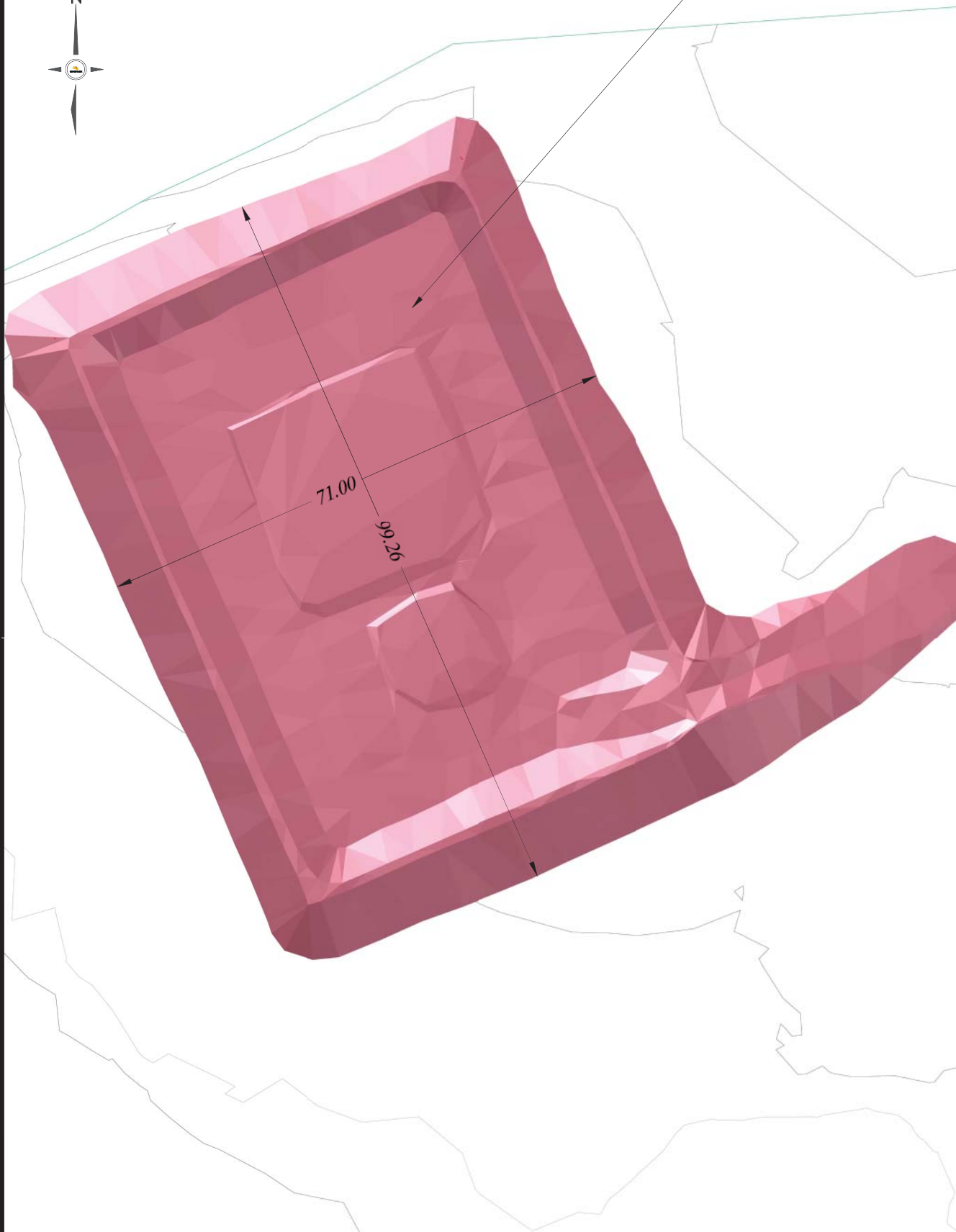
SCALE:  
1:500

PLAN NO.:  
65-403-142-200-R0-ABD

APPROVED BY:  
Hamel arpentage



0-30 MM  
OVER LINER  
4338 M<sup>3</sup>



AGNICO EAGLE

WORK EXECUTION DATE 2018-09

EMISSION DATE 2018-10-21

COORD. SYSTEME:  
UTM15 NAD83

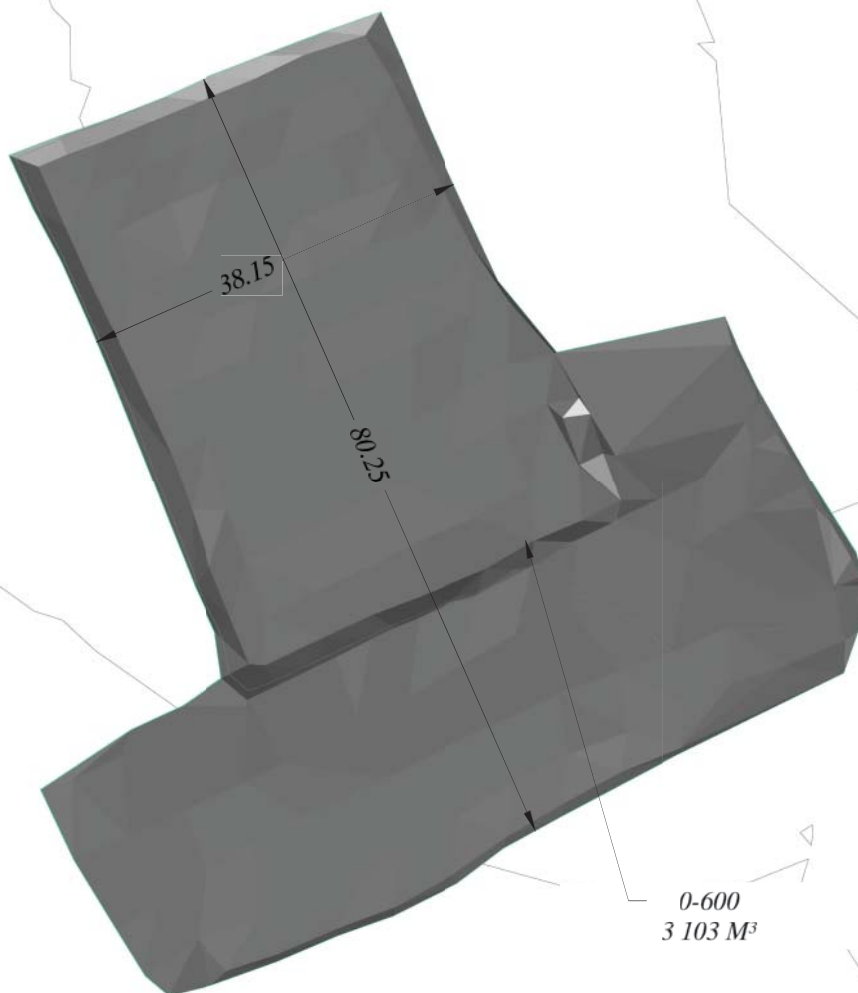
AB 0-30 MM OVER LINER  
IND SITE FUEL FARM

DRAWN BY:  
Y. HAMEL

SCALE:  
1:500

PLAN NO.:  
65-403-142-200-R0-ABD

APPROVED BY:  
Hamel arpentage



0-600  
3 103 M<sup>3</sup>



AGNICO EAGLE

WORK EXECUTION DATE 2017

EMISSION DATE 2018-10-21

COORD. SYSTEME:  
UTM15 NAD83

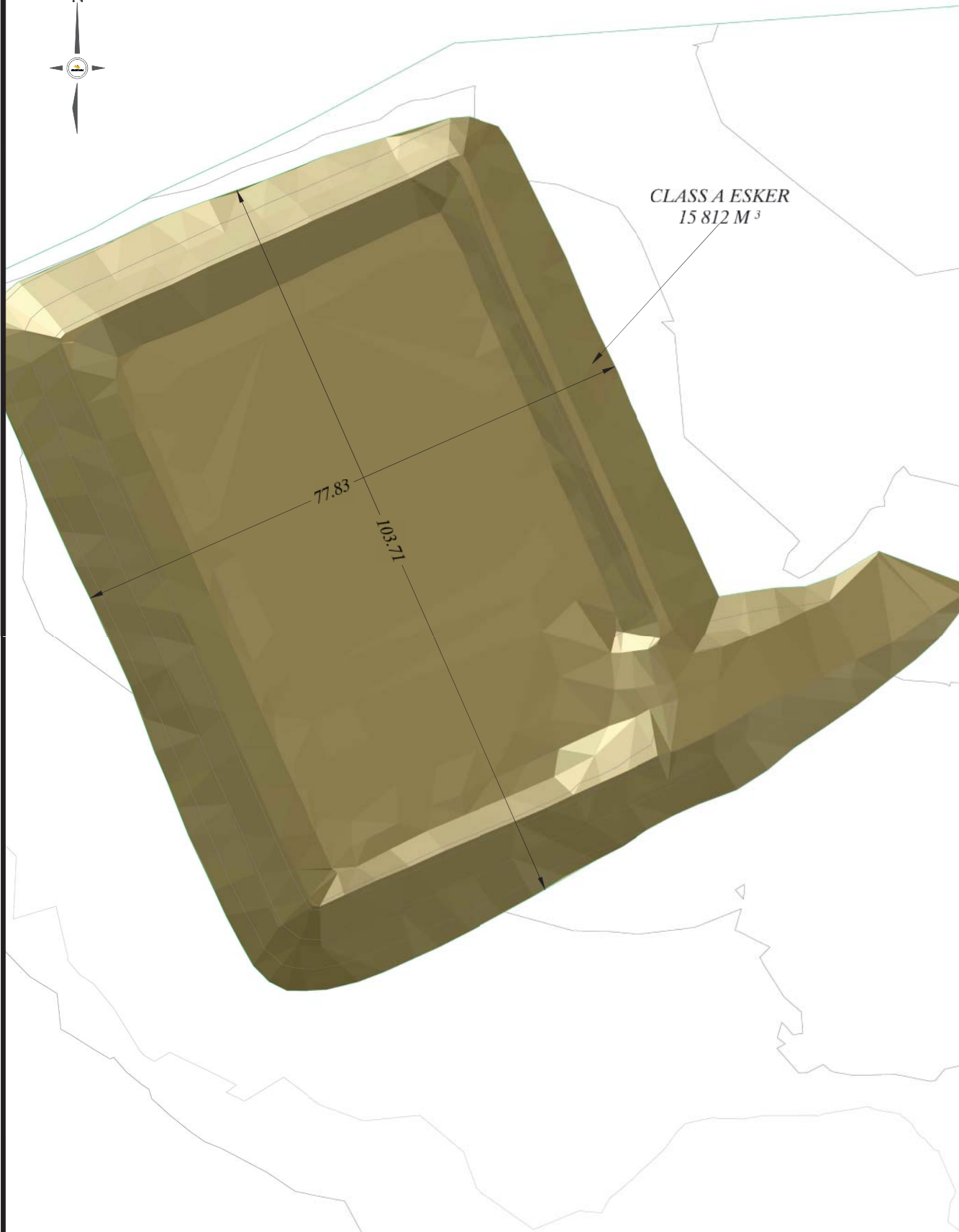
AS BUILT 0-600  
IND SITE FUEL FARM

DRAWN BY:  
Y. HAMEL

SCALE:  
1:500

PLAN NO.:  
65-403-142-200-R0-ABD

APPROVED BY:  
Hamel arpentage



AGNICO EAGLE

WORK EXECUTION DATE 2017

EMISSION DATE 2018-10-21

COORD. SYSTEME:  
UTM15 NAD83

**AS BUILT CLASS A ESKER  
IND SITE FUEL FARM**

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Y. HAMEL

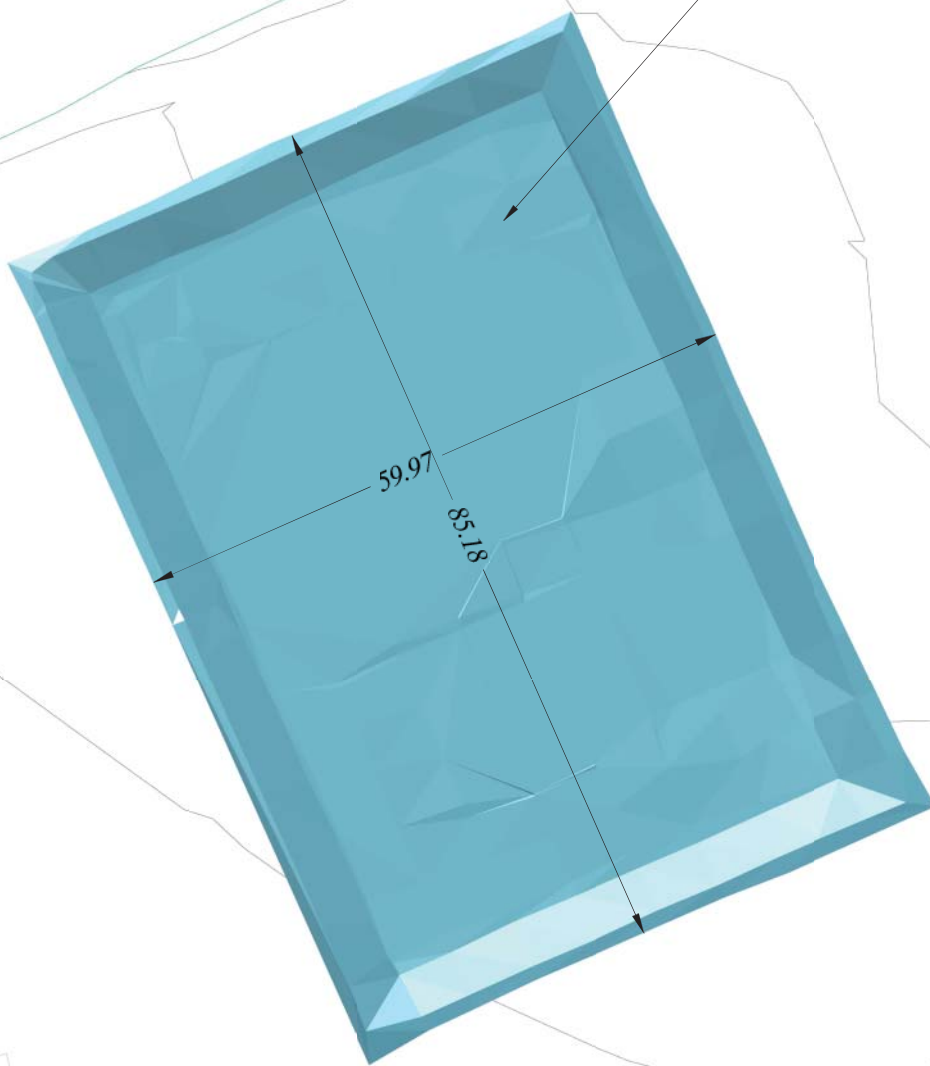
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PLAN NO.:  
65-403-142-200-R0-ABD

APPROVED BY:  
Hamel arpentage



LINER AREA  
5243 M2



AGNICO EAGLE

WORK EXECUTION DATE 2018-09

EMISSION DATE 2018-10-21

COORD. SYSTEME:  
UTM15 NAD83

AB LINER AREA  
IND SITE FUEL FARM

DRAWN BY:  
Y. HAMEL

SCALE:  
1:500

PLAN NO.:  
65-403-142-200-R0-ABD

APPROVED BY:  
Hamel arpentage



RUN OF MINE  
1 318 M<sup>3</sup>



AGNICO EAGLE

WORK EXECUTION DATE 2017

EMISSION DATE 2018-10-21

COORD. SYSTEME:  
UTM15 NAD83

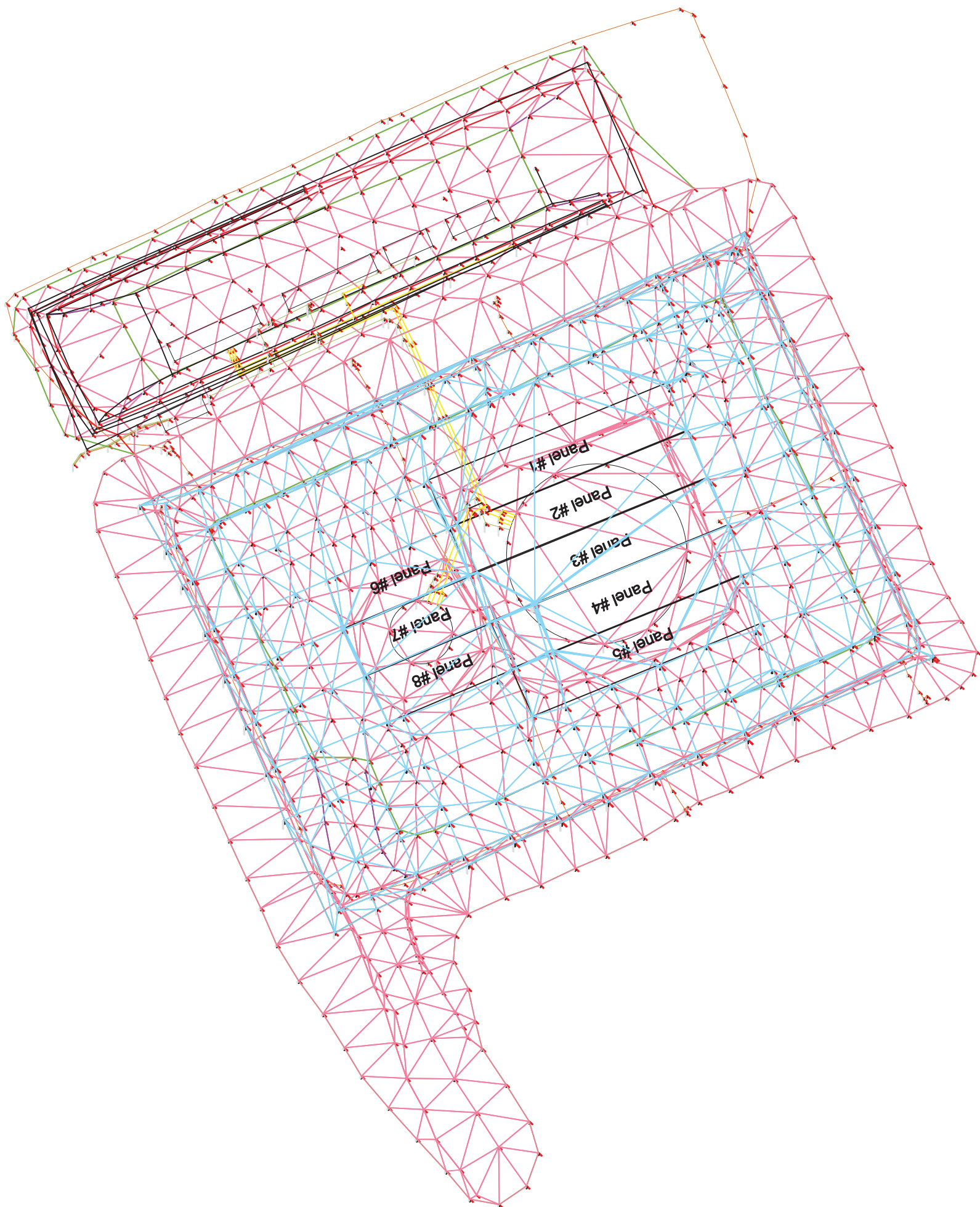
AS BUILT ROM  
IND SITE FUEL FARM

DRAWN BY:  
Y. HAMEL

SCALE:  
1:500

PLAN NO.:  
65-403-142-200-R0-ABD

APPROVED BY:  
Hamel arpentage



## **APPENDIX C**

### **Photographs of Industrial Site Fuel Storage and Containment Facilities**

2017-08-25  
Sub Base Placement





2017-09-07  
Sloping Berms



2017-09-12  
Placement of 30 mm minus  
Underliner



2017-09-14  
30mm minus Compaction

2017-09-17  
Liner Air Pressure Test



2017-09-17  
DT-1 Sample Area



2017-09-17  
Pedestal Liner Placement





2017-09-17  
Pedestal Liner Placement



2017-09-18  
30mm minus Overliner Placement



2017-09-23  
Pedestal Sand Placement



2017-09-24  
Tank Base Placement



2018-07-12  
Exposed Liner Edges

2018-07-17  
Liner Welding



2018-07-17  
Remaining Liner Placement



2018-07-17  
Remaining Liner Placement



2018-07-22  
30mm minus Overliner Placement



## APPENDIX C

### Photographs of Industrial Site Fuel Storage and Containment Facilities



**Photo 1 View of Industrial Site Fuel Farm Tank#4 (right) and Tank#5 (left) under construction**



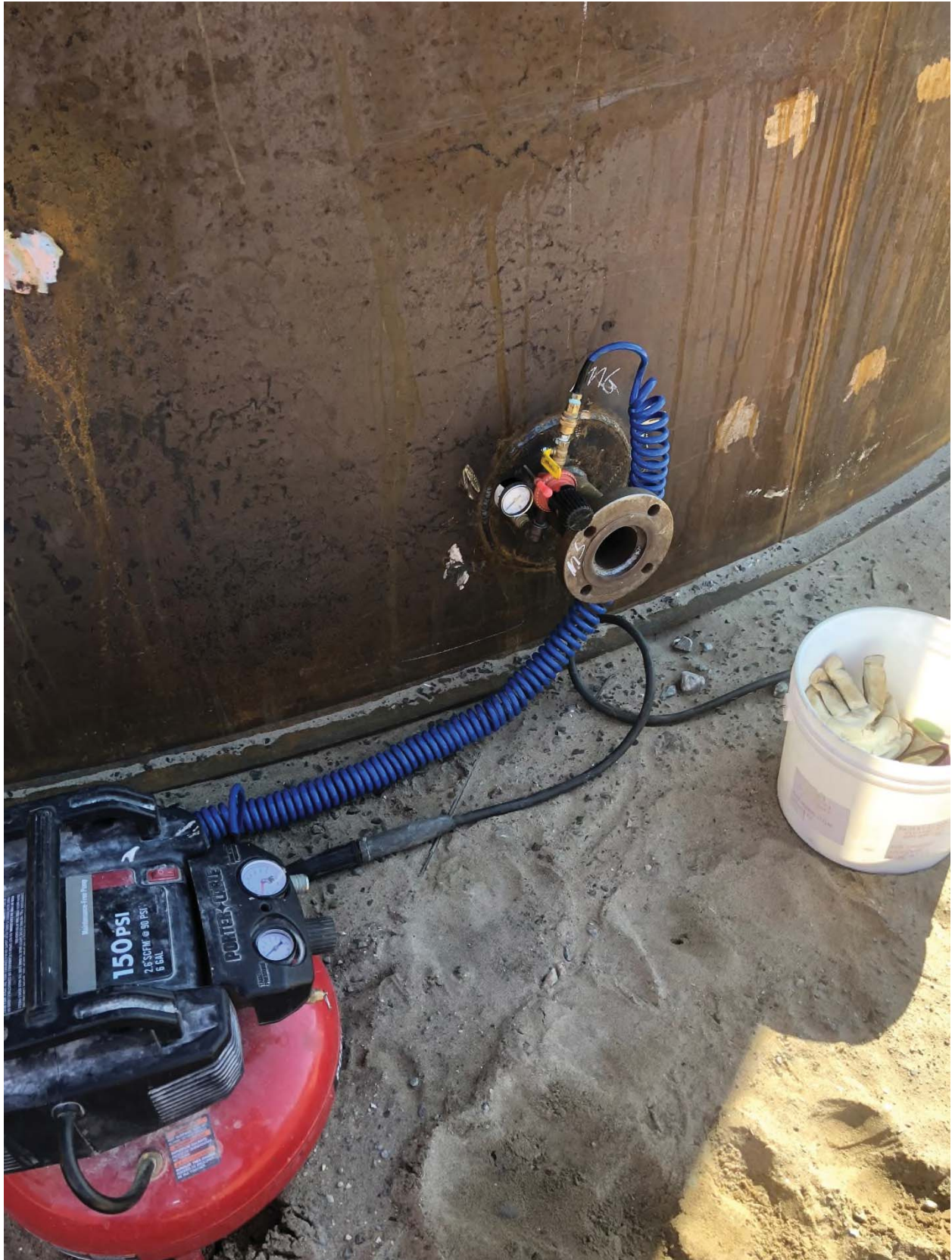
**Photo 2 Industrial Site Fuel Farm (view from south-east corner) of secondary containment berm**



**Photo 3 Industrial Site Fuel Farm (view from south-west corner) of secondary containment berm with sump (under construction) in the forefront**



**Photo 4 Vacuum tests on floor of Tank#4 (6ML)**



**Photo 5 Pressure tests on fuel tanks outlets to ensure air tightness between reinforcing plate and tank shell (test performed on all tanks)**



**Photo 6** Tank #4 (6ML) looking south



Photo 7 Pipeline between pumping station and Power Plant day tank



Photo 8 Pipe connexion at Industrial Site Fuel Farm pumping station



Photos 9 and 10 Welding of pipeline at loading and unloading stations at Industrial Site Fuel Farm



**Photo 11 and 12 Pipe support installation**



Photo 13 Pipe support installation at Industrial Site Fuel Farm



Photo 14 Piping within Industrial Site Fuel Farm



Photo 15 Welding of pipe at Industrial Site Fuel Farm



Photo 16 Cable tray installation at Industrial Site Fuel Farm



Photo 17 Cable tray installation at Industrial Site Fuel Farm



Photo 18 Pipe installation at Industrial Site Fuel Farm



**Photos 19 and 20 Piping arrangement between Industrial Site Fuel Farm tanks, pumping station and Power Plant**



**Photos 21 and 22 Piping arrangement between Industrial Site Fuel Farm tanks, pumping station and Power Plant**



**Photo 23 Industrial Site Fuel Farm piping completed**

## **APPENDIX D**

### **Inspection Report –Offsite and Onsite Fabrication Quality Control Documents**



## 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-0005 R: Sub001

**DOCUMENT FOR INFORMATION**

# **AGNICO EAGLE MINE**

**Contract No. 6515-C-270-007**



**C-22466T**

**Industrial Site**

**OffSite and OnSite Fabrication**

**Quality Control Documents**

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