

## 7.0 PHOTOGRAPH



*Photograph CD-1804: From Sta. 40+790/-2 m looking S. Presence of oversize boulders on the existing slope at the junction between SD5 and Central Dike.*



*Photograph CD-1805: From Sta. 40+780/2 m looking NE. Final clean-up of footprint with an excavator to reach a good quality bedrock from Sta. 40+780 to 40+805 m (o.s. -6 to 9 m).*



*Photograph CD-1806: From Sta. 0+800/-27 m looking N. Placement a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 0+710 to 0+760 m (o.s. -28 to 3 m).*



*Photograph CD-1807: From Sta. 0+200/-15 m looking S. Compaction of the 2 m lift (approx.) of IV rockfill at El. 145 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta. 0+150 to 0+280 m (o.s. -21 to 11 m).*





*Photograph CD-1808: From Sta. 40+790/-14 m looking E. Placement a 1.5 m thick (approx.) lift of intermediate volcanic (IV) rockfill from approx. Sta. 40+780 to 40+805 m (o.s. -6 to 9 m).*

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## QA DAILY REPORT

**DATE** April 30th 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

**EMAIL** mhabersetzer@golder.com

### QA DAILY REPORT FOR APRIL 29<sup>TH</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -15°C, sunny.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipments are working in the area.
- There is still important wildlife activity on and around the site. Reduce driving speed and avoid encounters.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- It was decided with AEM that given the safety concerns regarding compaction under the berms on the downstream edge of the crest of Central Dike, no compaction under the berms would be done this year. This point will be highlighted in the as-built report and, should Central Dike be raised to El. 150 m, this surface would be compacted once the dike is built at the El. 145 m to its final footprint.
- The QA Engineer reminded that the stations used on foundation approval drawings should be those for the centerline at El. 150 m, consistently with what was done during construction of the north abutment of Central Dike and the Saddle Dams.

## 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Placement of materials on the crest	<ul style="list-style-type: none"> <li>■ Placement a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 0+760 to 0+835 m (o.s. -28 to 3 m). The material is of good quality and is well graded. Around the instruments, the material was placed with the excavator.</li> </ul>

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment

## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

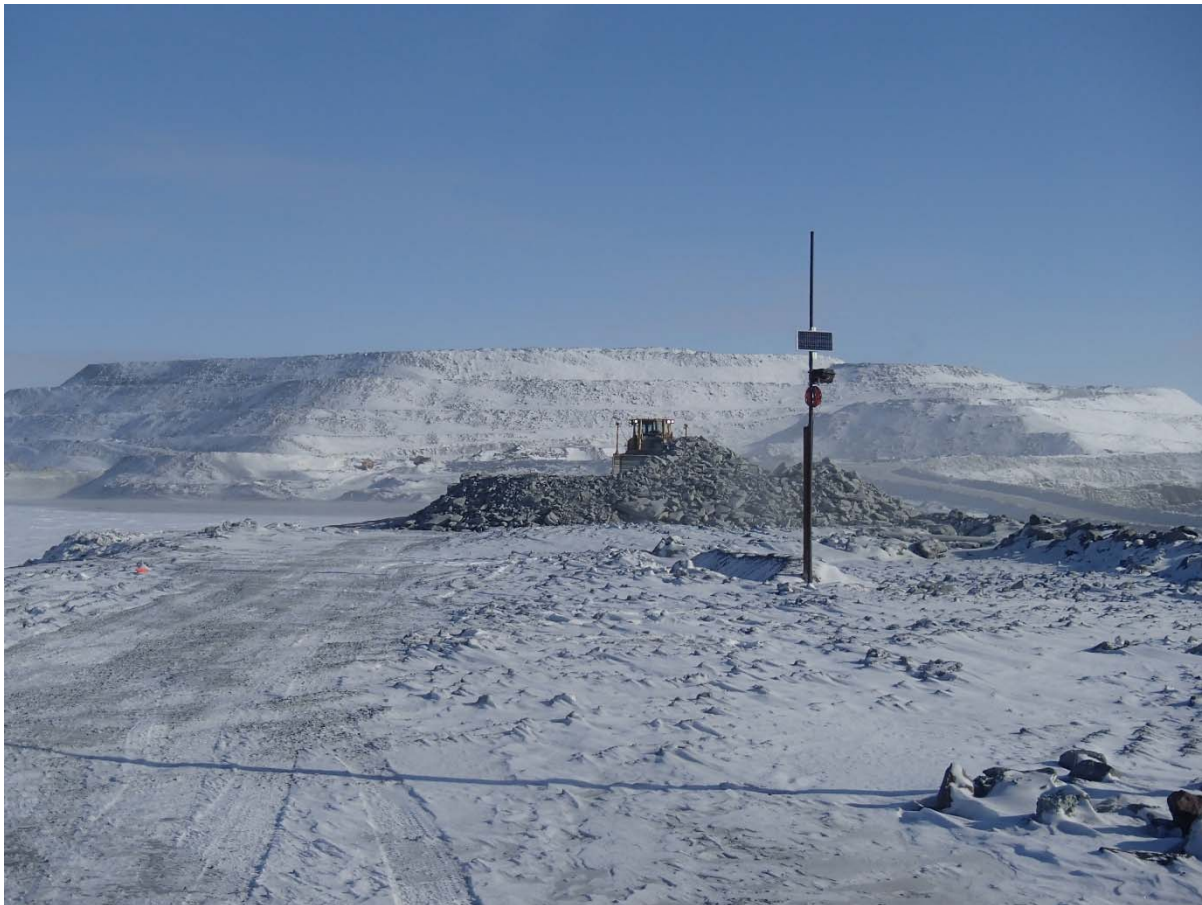
**Table 4: Samples taken by the QC**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

**Table 5: Samples taken by the QA**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

## 7.0 PHOTOGRAPH



*Photograph CD-1809: From Sta. 0+870/-16 m looking N. Placement a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 0+760 to 0+835 m (o.s. -28 to 3 m).*



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## QA DAILY REPORT

**DATE** May 1st 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

**EMAIL** mhabersetzer@golder.com

### QA DAILY REPORT FOR APRIL 30<sup>TH</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -15°C, foggy then sunny, with strong winds.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipments are working in the area.
- The fog causes a visibility issue on the roads and on the dikes. Reduce driving speed and keep safety distances between vehicles, call on the radio when entering Central Dike.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- The procedures for bringing a portable nuclear gauge (PNG) in site for the QC program were discussed.
- The QA and QC personnel went with SANA's foreman and the AEM dike supervisor to inspect the compacted sieved till material stockpile at the SANA crusher site. The available quantities are less than what is required for this year's construction. In addition, the stockpile may have been mixed with other materials, as large rocks are visible.

- Due to the shortage in 0-50 mm compacted sieved till material, it was discussed that the available quantities should be used in priority in the upstream toe liner tie-ins on SD3, and that the erosion protection cover may need an adjustment to replace the compacted sieved till. Several options are discussed:
  - Sieving low quality till with an excavator to obtain 0-50 mm till (this would likely be difficult);
  - Using a rougher till (0-150 mm) and one or two layers of thick geotextile (minimum type 934 or equivalent) on the LLDPE liner to protect it;
  - Replacing compacted sieved till by fine filter material (0-20 mm) mixed with 6% bentonite in mass and one layer of geotextile on the LLDPE liner.

#### 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Compaction of the 2 m lift (approx.) of IV rockfill at El. 145 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta. 0+350 to 0+540 m (o.s. -19 to -7 m).</li> </ul>
Downstream	<ul style="list-style-type: none"> <li>■ Placement the second, third, fourth and fifth 1 m thick (approx.) lifts of intermediate volcanic (IV) rockfill from approx. Sta. 0+985 to 40+780 m (o.s. -8 to 8 m) with the excavator. The material is of good quality and is well graded. The lifts were compacted with the excavator only.</li> <li>■ Placement of intermediate volcanic (IV) rockfill on the existing downstream slope up to approx. El. 140 m, from approx. Sta. 0+985 to 40+780 m. The existing slope (frozen) was scarified as much as possible with the excavator beforehand.</li> </ul>

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment

## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 4: Samples taken by the QC**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

**Table 5: Samples taken by the QA**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result



## 7.0 PHOTOGRAPH



*Photograph CD-1810: From Sta. 0+335/-15 m looking S. Compaction of the 2 m lift (approx.) of IV rockfill at El. 145 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta. 0+350 to 0+540 m (o.s. -19 to -7 m).*



*Photograph CD-1811: From Sta. 0+985/-11 m looking SE. Placement the second, third, fourth and fifth 1 m thick (approx.) lifts of intermediate volcanic (IV) rockfill from approx. Sta. 0+985 to 40+780 m (o.s. -8 to 8 m) with the excavator.*



*Photograph CD-1812: From Sta. 0+985/-11 m looking SE. Placement of intermediate volcanic (IV) rockfill on the existing downstream slope up to approx. El. 140 m, from approx. Sta. 0+985 to 40+780 m.*

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## QA DAILY REPORT

**DATE** May 1st 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

**EMAIL** mhabersetzer@golder.com

### QA DAILY REPORT FOR MAY 1<sup>ST</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -12°C, foggy then sunny.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipments are working in the area.
- The fog causes a visibility issue on the roads and on the dikes. Reduce driving speed and keep safety distances between vehicles, call on the radio when entering Central Dike.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- There was no daily meeting today due to the unavailability of several participants.
- The QA Engineer pointed out that snow has accumulated (approx. 0.5 m thick) on some parts of the crest of Central Dike at El. 143 m and should be removed before rockfill placement is continued.



## 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Compaction of the 2 m lift (approx.) of intermediate volcanic (IV) rockfill at El. 145 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta. 0+540 to 0+830 m (o.s. -19 to -7 m).</li> <li>■ Placement of intermediate volcanic (IV) rockfill around the instruments at approx. Sta. 0+830 m with the excavator.</li> </ul>
Downstream	<ul style="list-style-type: none"> <li>■ Placement of intermediate volcanic (IV) rockfill on the existing downstream slope up to approx. El. 143 m, from approx. Sta. 0+980 to 40+780 m. The existing slope (frozen) was scarified as much as possible with the excavator beforehand. The footprint correction is now complete.</li> <li>■ Placement of a 1.5 m thick (approx.) of intermediate volcanic (IV) rockfill on the access ramp at the south of Central Dike to correct the slope for rockfill placement up to El. 143 m on the crest.</li> </ul>

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment

## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 4: Samples taken by the QC**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

**Table 5: Samples taken by the QA**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

## 7.0 PHOTOGRAPH



*Photograph CD-1813: From Sta. 0+980/-2, looking S. Placement of intermediate volcanic (IV) rockfill on the existing downstream slope up to approx. El. 143 m, from approx. Sta. 0+980 to 40+780 m.*



*Photograph CD-1814: From Sta. 0+970/-10, looking NE. Placement of intermediate volcanic (IV) rockfill around the instruments at approx. Sta. 0+830 m with the excavator.*

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## QA DAILY REPORT

**DATE** May 3rd 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

**EMAIL** mhabersetzer@golder.com

### QA DAILY REPORT FOR MAY 2<sup>ND</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -11°C, cloudy then sunny.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipments are working in the area.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- Following discussions with AEM regarding the shortage in 0-50 mm compacted sieved till material, the selected option is to replace the compacted sieved till by fine filter material (0-20 mm) mixed with 6% bentonite in mass and one layer of geotextile on the LLDPE liner. It is expected that this alternative will achieve both purposes of the compacted sieved till layer, namely liner protection and impermeability.
- It was observed that when using the D9 bulldozer, which does not have a GPS to monitor elevation, the intermediate volcanic (IV) rockfill lift thickness was slightly in excess of 2 m (approx. 2.5 m) on Central Dike, at the junction with Saddle Dam 5. The bulldozer was replaced with the GPS-equipped D8 bulldozer used in the previous days, which ensured that the elevation of the lift was at 145m.

## 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 40+740 (SD5) to 0+980 m (o.s. -28 to -11 m). The material is of good quality and is well graded.</li> </ul>
Upstream	<ul style="list-style-type: none"> <li>■ Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+175 and 0+560 m.</li> </ul>

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment

## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 4: Samples taken by the QC**

<b>Sample ID</b>	<b>Date sampled</b>	<b>Date tested</b>	<b>Fill Material Type</b>	<b>Location (Station/Offset Elevation)</b>	<b>Test</b>	<b>Testing Result</b>

**Table 5: Samples taken by the QA**

<b>Sample ID</b>	<b>Date sampled</b>	<b>Date tested</b>	<b>Fill Material Type</b>	<b>Location (Station/Offset Elevation)</b>	<b>Test</b>	<b>Testing Result</b>

## 7.0 PHOTOGRAPH



Photograph CD-1815: From Sta. 0+920/-25, looking S. Placement of a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 40+740 to 0+980 m (o.s. -28 to -11 m).





**Photograph CD-1816: From Sta. 0+175/-27, looking S. Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+175 and 0+560 m.**



**Photograph CD-1817: From Sta. 40+700/-10, looking NE. View of the rockfill lift thickness at the junction of Saddle Dam 5 and Central Dike, approx. 2.5 m thick.**

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## QA DAILY REPORT

**DATE** May 4th 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

**EMAIL** mhabersetzer@golder.com

### QA DAILY REPORT FOR MAY 3<sup>RD</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -7°C, cloudy then sunny.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- Following discussions with AEM, as the SD5 footprint is for elevation 150 m while the CD footprint is for elevation 145 m, the downstream curve toe will need to be adjusted on the field to achieve a smooth transition.

#### 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 0+980 m to 0+880 m (o.s. -28 to -11 m). The material is of good quality and is well graded.</li> </ul>
Upstream	<ul style="list-style-type: none"> <li>■ Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+560 m and 0+830 m.</li> </ul>
Downstream	<ul style="list-style-type: none"> <li>■ Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+170 m and 0+250 m.</li> </ul>

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment

## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 4: Samples taken by the QC**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

**Table 5: Samples taken by the QA**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-01-2018	2018-04-25	2018-05-03	Fine Filter	Stockpile (SANA Crusher)	Gradation	Compliant
					Water content	4.3%

## 7.0 PHOTOGRAPH



**Photograph CD-1818: From Sta. 40+770/-25, looking NE. Placement of a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 0+980 m to 0+880 m (o.s. -28 to -11 m).**





**Photograph CD-1819: From Sta. 0+560/-21, looking S. Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+560 m and 0+830 m.**

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## QA DAILY REPORT

**DATE** May 5th 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

**EMAIL** mhabersetzer@golder.com

### QA DAILY REPORT FOR MAY 4<sup>TH</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -15°C, cloudy then sunny.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- It was reiterated to verify the back up alarm, beacon light and buggy whip on pick-up before use.
- Tires can burst on haul trucks: keep a safe distance of 40 m away from haul trucks at all time.
- A blast is scheduled for 12h45 at BB Phaser.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- An accumulation of boulders was noticed on the first intermediate volcanic (IV) rockfill lift of the junction of Central Dike and Saddle Dam 5 at El. 143m. The QA Engineer required that those boulders be scattered to ensure that no boulder nest occurs in the lift.
- The intermediate volcanic (IV) rockfill placement on Central Dike is complete.

## 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 0+880 m to 0+830 m (o.s. -28 to -11 m). The material is of good quality and is well graded.</li> </ul>
Downstream	<ul style="list-style-type: none"> <li>■ Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+250 m and 0+330 m.</li> </ul>
Upstream	<ul style="list-style-type: none"> <li>■ Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+830 m and 0+980 m.</li> </ul>
Junction of Central Dike and Saddle Dam 5	<ul style="list-style-type: none"> <li>■ Placement of two 2 m thick (approx.) lifts of intermediate volcanic (IV) rockfill from El. 141 m to El. 145 m from approx. Sta. 40+720 m to 40+750 m (o.s. -10 to +10 m).</li> <li>■ Compaction of the two 2 m lifts (approx.) of intermediate volcanic (IV) rockfill at El. 143 and at El. 145 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta. 40+720 m to 40+750 m (o.s. -10 to +10 m).</li> </ul>

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment

## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 4: Samples taken by the QC**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

**Table 5: Samples taken by the QA**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

## 7.0 PHOTOGRAPH



**Photograph CD-1820: From Sta. 0+790/-7, looking S. Placement of a 2 m thick (approx.) lift of intermediate volcanic (IV) rockfill from El. 143 m to El. 145 m from approx. Sta. 0+880 m to 0+830 m (o.s. -28 to -11 m).**





**Photograph CD-1821: From Sta. 0+175/+3, looking S. Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+250 m and 0+330 m.**



**Photograph CD-1822: From Sta. 40+725/+7, looking N. Placement of two 2 m thick (approx.) lifts of intermediate volcanic (IV) rockfill from El. 141 m to El. 145 m from approx. Sta. 40+720 m to 40+750 m (o.s. -10 to +10 m) and profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+830 m and 0+980 m.**



**Photograph CD-1823: From Sta. 0+175/+8, looking NE. Compaction of the two 2 m lifts (approx.) of intermediate volcanic (IV) rockfill at El. 143 and at El. 145 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta. 40+720 m to 40+750 m (o.s. -10 to +10 m).**

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## QA DAILY REPORT

**DATE** May 6th 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

**EMAIL** mhabersetzer@golder.com

### QA DAILY REPORT FOR MAY 5<sup>TH</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -14°C, cloudy then sunny.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- A blast is scheduled for 12h45 at Pit E.
- The QA Engineers and QC personnel followed the SOP training.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- The QA Engineers and QC personnel were absent from the Daily Construction Meeting to follow the SOP training.
- In the Daily Report 2018-05-03 the sample tested by the QA was mislabeled FF-01-2018. The correct number is FF-02-2018.



## 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Downstream	■ Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+330 m and 0+440 m and between Sta. 0+530 m and 0+745 m.
Upstream	■ Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+980 m and 40+730 m.

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment



## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 4: Samples taken by the QC**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

**Table 5: Samples taken by the QA**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-02-2018	2018-04-25	2018-05-04	Coarse filter	Stockpile (SANA Crusher)	Gradation	Compliant
					Water content	2.0 %

## 7.0 PHOTOGRAPH



**Photograph CD-1824: From Sta 40+760/-25 m, looking NE. Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+830 m and 40+730 m.**



**Photograph CD-1825: From Sta 0+430/+9 m, looking S. Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+330 m and 0+440 m and between Sta. 0+530 m and 0+745 m.**

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## QA DAILY REPORT

**DATE** May 7th 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

**EMAIL** mhabersetzer@golder.com

### QA DAILY REPORT FOR MAY 6<sup>TH</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -4°C, cloudy and snowy.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- A blast is scheduled for 12h45 at Pit E.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- A transition zone is required for the filters thickness at the junction of Saddle Dam 5 and Central Dike, as both filters are 0.5 m thick on Saddle Dam 5 and 1.0 m thick on Central Dike. The transition was made to ensure a smooth upstream slope surface for the geosynthetics.
- The QA Manager reiterated that the frost fighters used to defrost the deposition fingers materials on the LLDPE liner must not be applied directly on the LLDPE as intense heat may damage it.

## 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Upstream	<ul style="list-style-type: none"> <li>■ Placement of the first 0.5 m thick lift of coarse filter from El. 143 m to 143.5 m with an excavator from Sta. 40+730 m to 0+775 m and Sta. 0+170 m to 0+460 m.</li> <li>■ Placement of the first 0.5 m thick lift of fine filter from El. 143 m to 143.5 m upstream of the coarse filter with an excavator from Sta. 40+730 m to 0+835 m and Sta. 0+170 m to 0+380 m.</li> <li>■ Defrosting of the deposition finger materials with two Frost Fighters at Sta. 0+390 m.</li> </ul>

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment



## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 4: Samples taken by the QC**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-03-2018	2018-05-06		Coarse Filter	Central Dike, Sta. 0+270m, El. 143.5m		

**Table 5: Samples taken by the QA**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-04-2018	2018-05-06		Coarse filter	Central Dike, Sta. 0+980m, El. 143.5m		

## 7.0 PHOTOGRAPH



**Photograph CD-1826: From Sta 40+770/-27 m, looking NE. Placement of a 0.5 m thick lift of coarse filter from El. 143 m to 143.5 m with an excavator from Sta. 40+730 m to 0+ 775 m.**



**Photograph CD-1827: From Sta 0+940/-16 m, looking SW. Placement of a 0.5 m thick lift of fine filter from El. 143 m to 143.5 m with an excavator from Sta. 40+730 m to 0+ 835 m.**



**Photograph CD-1828: From Sta 0+410/-22 m, looking N. Defrosting of the deposition finger materials with two Frost Fighters at Sta. 0+390 m.**





**Photograph CD-1829: From Sta 0+410/-22 m, looking N. Placement of a 0.5 m thick lift of coarse filter from El. 143 m to 143.5 m with an excavator from Sta. 0+170 m to 0+460 m and placement of a 0.5 m thick lift of fine filter from Sta. 0+170 m to 0+380 m.**

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## QA DAILY REPORT

**DATE** May 8th 2018

1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald  
Agnico Eagle Mines Ltd, Meadowbank Division

**CC** Frédéric Bolduc, Alexandre Lavallée

**FROM** Samuel Barbeau

**EMAIL** sbarbeau@golder.com

### QA DAILY REPORT FOR MAY 7<sup>TH</sup>, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

- Temperature around -14°C, cloudy and windy.

#### 2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- When a pick-up crosses an articulated truck on Central Dike road, it is preferable to let the pick-up pass first while the articulated truck waits, as rock may fall from the articulated truck while it is moving.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- 6 passes of compactor were needed for the compaction of the first lift of coarse and fine filters at El. 143.5 m on Central Dike to achieve the maximum compaction (assessed visually). No watering of the filter materials was possible as water would have frozen inside the lift. The compaction was followed closely by the QC and QA personnel. Compaction of the filters is not optimal. However, the placed filter materials are not expected to settle significantly and will provide a good foundation for the geosynthetics.
- The removal of the material on the four deposition fingers to expose 1 m of liner is complete. Only the first deposition finger materials at approx. Sta. 0+390 m were heated before their removal. It was noticed that the

materials could be easily removed without heating, since a protection layer (Teranap) had been put in place prior to the construction of the deposition finger.

- Punctures were noticed on the top of the LLDPE liner around the four deposition fingers which were removed with the excavator. The holes all seem to be located above El. 142 m, where the horizontal extrusion weld for the raise of the liner is planned to be done. An inspection to assess the damages to the LLDPE liner on the upstream slope of Central Dike will be performed by the QA Manager.

## 4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

**Table 1: QA observations for Saddle Dam 3**

Activity or Area	Comments
None	

**Table 2: QA Observations for Central Dike**

Activity or Area	Comments
Upstream	<ul style="list-style-type: none"> <li>■ Placement of a first 0.5 m thick lift of coarse filter from El. 143 m to 143.5 m with an excavator from Sta. 0+460 m to 0+775 m, except on a length of approx. 5 m at the location of the finger deposition point at Sta. 0+520 m and 0+660 m.</li> <li>■ Placement of a first 0.5 m thick lift of fine filter from El. 143 m to 143.5 m upstream of the coarse filter with an excavator from Sta. 0+380 m to 0+490 m.</li> <li>■ Compaction of the first 0.5 m lift (approx.) of fine and coarse filters material at El. 143.5 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta. 40+730 m to 0+830 m and from Sta. 0+175 m to 0+490 m.</li> <li>■ Placement of a second 0.5 m thick lift of coarse filter from El. 143.5 m to 144 m with an excavator from Sta. 0+170 m to 0+290 m.</li> <li>■ Removal of the materials covering the 4 deposition fingers with an excavator and hand shovels at Sta. 0+390 m, 0+520 m, 0+660 m and 0+800 m.</li> </ul>

## 5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

**Table 3: Details of the Foundation Approvals**

Name	Structure	Sta. and Offset	Date of Approval	Comment

## 6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 4: Samples taken by the QC**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

**Table 5: Samples taken by the QA**

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

## 7.0 PHOTOGRAPH



**Photograph CD-1830: From Sta 0+420/-26 m, looking N. Removal of the deposition point finger materials with an excavator at Sta. 0+390 m.**