

## QA DAILY REPORT

**DATE** June 2nd 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 JUNE 1<sup>ST</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 0°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.
- A blast is planned at 12:45 at Phaser.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The QA Manager reiterated the need to receive the centerline for the portable GPS. SANA surveyor will send the GPX file to the QA Manager.
- An accumulation of boulders was noticed on the first ultramafic (UM) rockfill lift near Sta. 1+425 m at El. 152. The QA Manager required that those boulders be scattered to ensure that no boulder nest occurs in the lift.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 2 m thick (approx.) lift of UM rockfill from El. 150 m to El. 152 m (approx.) with a dozer from Sta. 1+450 m to 1+390 m (o.s. unavailable). The material is of good quality and is well graded.</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

## 6.0 PHOTOGRAPH



**Photograph NCIS-025: From Sta. 1+475 m (approx.), looking SE. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 150 m to El. 152 m (approx.) with a dozer from Sta. 1+450 m to 1+390 m (o.s. unavailable). The material is of good quality and is well graded.**

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## QA DAILY REPORT

**DATE** June 3rd 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 JUNE 2<sup>ND</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 0°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.
- Fog in the morning: reduce speed while driving and increase distance with other vehicles.
- Following a near miss during night shift between a truck and a grader, it was reminded to have a clear visual or radio communication with the operator of the grader before overtaking a grader.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The QA Manager reported a few loads with coarser heterogeneous ultramafic (UM) rockfill yesterday. The QA Manager asked the bulldozer operator to mix the coarser rockfill with finer rockfill to obtain a well graded material.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Removal of the snow bank in the footprint with an excavator from Sta. 1+120 m to 1+060 m (approx.).</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

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## QA DAILY REPORT

**DATE** June 4th 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 JUNE 3<sup>RD</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around -2°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.
- Fog in the morning: reduce speed while driving and increase distance with other vehicles.
- Small blocks have fallen from haul trucks on the road to NCIS near Sta. 2+700 m. A loader was sent to remove them in the course of the day.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The QA Manager noticed several oversize boulders on the UM rockfill lift at El. 152 m yesterday and reiterated that the maximum allowable size on the dikes is 1.3 m. AEM forwarded the information to the operators in the pit and on the dikes. As it is impracticable to sort the oversized boulders with the pit equipment, if the rockfill load presents more than 70% of oversized blocs, the load will be sent to the waste dump. Otherwise, if an oversize boulder is delivered on the dikes, it will be pushed aside in the downstream slope by the dozer during placement.
- Regarding the rockfill lift founded on unprepared natural soil (Sta. 1+800 m to 1+900 m, approx.), AEM decided that the rockfill will be removed and to excavate the natural soils in the footprint to reach a good quality bedrock. The frozen natural soil material will need to be exposed and excavated as it thaws.

## 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	■ No activity

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

## QA DAILY REPORT

**DATE** June 5th 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 JUNE 4<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 2°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.
- Fog in the morning: reduce speed while driving and increase distance with other vehicles.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- There was no activity on the NCIS today.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	■ No activity

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

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## QA DAILY REPORT

**DATE** June 6th 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 JUNE 5<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 2°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.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- There was no activity on the North Cell Internal Structure today.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	■ No activity

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

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## QA DAILY REPORT

**DATE** June 7th 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 JUNE 6<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around -4°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.
- A backhoe circulated on the North Cell tailings last week. AEM produced a Near Miss report.
- A blast is planned at 12h45 at km 10 on Amaruq road.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- Rockfill placement activity as resumed on North Cell Internal Structure today.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 2 m thick (approx.) lift of UM rockfill from El. 150 m to El. 152 m (approx.) with a dozer from Sta. 1+390 m to 1+365 m (+9 m to -29 m). The material is of good quality and is well graded.</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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



**Photograph NCIS-026: From Sta. 1+440/+2 m, looking S. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 150 m to El. 152 m (approx.) with a dozer from Sta. 1+390 m to 1+365 m (o.s. +10 m to -29 m).**

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## QA DAILY REPORT

**DATE** June 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 JUNE 7<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 3°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.
- A backhoe circulated on the North Cell tailings last week. AEM produced a Near Miss report.
- A blast is planned at 12h45 at km 10 on Amaruq road.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The QA Manager departure is planned for June 12<sup>th</sup> or 13<sup>th</sup>. After that day, they won't be QA supervision for the work on the North Cell Internal Structure.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 2 m thick (approx.) lift of UM rockfill from El. 150 m to El. 152 m (approx.) with a dozer from Sta. 1+365 m to 1+360 m (o.s. +9 m to -28 m).</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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



## 6.0 PHOTOGRAPH



**Photograph NCIS-027: From Sta. 1+360/+67 m, looking S. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 150 m to El. 152 m (approx.) with a dozer from Sta. 1+365 m to 1+360 m (o.s. +9 m to -28 m).**

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## QA DAILY REPORT

**DATE** June 9th 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 JUNE 8<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 3°C, sunny then cloudy.

#### 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.
- Equipment circulated on the North Cell tailings again yesterday. AEM reiterated to his operators that it is forbidden to circulate on tailings.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- AEM installed a pipe across the North Cell Internal Structure road. No rockfill was placed today.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	■ No activity

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

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## QA DAILY REPORT

**DATE** June 10th 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 JUNE 9<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 3°C, sunny then cloudy.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The QA Manager observed that the UM rockfill lift was about 3.2 m thick around Sta. 1+340 m.
- The QA Manager asked for the elevation of the tailings ahead of the UM rockfill lift advancement front. AEM consulted the LIDAR survey and reported a 148.8 m elevation (approx.) that is declining towards the direction of the rockfill lift advancement and reaches 148 m around Sta. 1+200 m. Given the 152 m elevation of the rockfill lift, the lift thickness is of 3.2 m around Sta. 1+340 m and would increase to 4 m around Sta. 1+200 m. Furthermore, as the tailings are thawing on the surface, the expected settling of soft tailings below the rockfill increases the lift thickness. Considering that the lift maximum thickness was 2 m per design, it is not recommended to continue placement of UM rockfill with a single lift thicker than 2 m, as the compaction quality will be compromised. AEM will have a meeting tomorrow regarding this situation.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	■ No activity

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

## 6.0 PHOTOGRAPH



**Photograph NCIS-028: From Sta. 1+340/+3 m, looking E. View of the UM rockfill lift approximately 3.2 m thick.**

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## QA DAILY REPORT

**DATE** June 11th 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 JUNE 10<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 4°C, cloudy then sunny.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- An operator wasn't answering to his radio. After an inquire, it was found out the operator has audition problem and was not wearing is hearing aid. AEM reiterated the importance of reporting if an employee appears to be unfit for duty.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The water line installed this week on the North Cell Internal Structure at elevation 152 m is in the footprint of the raise at elevation 154 m. It will need to be moved prior to the raise.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	■ No activity

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

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## QA DAILY REPORT

**DATE** June 12th 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 JUNE 11<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 4°C, sunny then cloudy.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Grizzlies were spotted near Vault yesterday. AEM informed his personnel by email and shared the information on the radio. As the QA and QC were in the lab wearing ear protection, they did not hear the radio communication. Next time wildlife is spotted on site, AEM will share the email with the QA and QC personnel.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- There was no activity on the North Cell Internal Structure today.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	■ No activity

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

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## QA DAILY REPORT

**DATE** June 20th 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 JUNE 19<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 12°C, sunny.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- There was no QC on site today. The QC personnel will arrive on site tomorrow (June 20<sup>th</sup>).
- The QA Manager went with the Dike supervisor and AEM's representatives to review work done without QA/QC supervision and to discuss the construction planning of the North Cell Internal Structure. Follow-up will be done on the system of peripheral ditches and sumps.
- The coarse and fine filters are placed on the upstream slope of the North Cell Internal Structure each in a single lift, ranging from the upstream toe to the crest, with a thickness of 0.5 m perpendicular to the slope. Given the gentle 3H:1V slope, compaction will be done on each lift with a smooth-drum compactor directly on the slope rather than raising horizontal lifts. Placement in horizontal lifts would be problematic due to the limited reach of the excavator, and the fact that the tailings at the bottom of the slope are now too soft to be trafficked safely.
- The foundation has been exposed in the section where the structure is built on natural ground (approx. Sta. 1+800 to 1+900 m). The foundation seems to be a shallow layer of till overlying bedrock. Clean-up of the bedrock with an excavator will be done tomorrow to ensure a sound foundation for the filters and reduce the risk of settlement.

## 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Upstream	<ul style="list-style-type: none"> <li>■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+280 m to 2+105 m.</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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

## 6.0 PHOTOGRAPHS



**Photograph NCIS-029: From Sta. 2+120/-27 m (approx.), looking SE. Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+280 m to 2+105 m.**

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## QA DAILY REPORT

**DATE** June 21st 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 JUNE 20<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 15°C, sunny.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The QA Manager asked to receive a weekly follow-up of the volumes of materials placed on the structure, in order to check that the QA/QC sampling rate is adequate.
- The filter materials placed at the bottom of the upstream slope (about 1 m) will be difficult to compact, as underlying tailings have thawed and are very soft. Water is ponding on the tailings against the UM rockfill slope, probably due to snowmelt. Compaction with a smooth-drum compactor will be done as much as possible without pushing the material into the tailings and as long as the stability of the compactor can be ensured. The remaining filter materials will be compacted with the bucket of the excavator.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Compaction of the 2 m lift (approx.) of ultramafic (UM) rockfill at El. 152 m with a 10-tonne smooth-drum compactor with vibration (6 passes) between the haul truck traffic lane and the upstream slope from Sta. 1+660 to 1+380 m (o.s. -45 to -24 m).</li> </ul>
Upstream	<ul style="list-style-type: none"> <li>■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+105 m to 1+930 m.</li> <li>■ Final clean-up of the dike footprint with an excavator to reach a good quality bedrock from Sta. 1+800 to 1+850 m (o.s. -42 to -33 m).</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

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

**Table 3: Samples taken by the QA**

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



## 6.0 PHOTOGRAPHS



**Photograph NCIS-030: From Sta. 2+140/-29 m (approx.), looking W. Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+105 m to 1+930 m. Notice the presence of water ponding at the bottom of the slope.**





**Photograph NCIS-031: From Sta. 1+880/-21 m (approx.), looking SW. Final clean-up of the dike footprint with an excavator to reach a good quality bedrock from Sta. 1+800 to 1+850 m (o.s. -42 to -33 m).**



**Photograph NCIS-032: From Sta. 1+400/-24 m (approx.), looking N. Compaction of the 2 m lift (approx.) of ultramafic (UM) rockfill at El. 152 m with a 10-tonne smooth-drum compactor with vibration (6 passes) between the haul truck traffic lane and the upstream slope from Sta. 1+660 to 1+380 m (o.s. -45 to -24 m).**

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## QA DAILY REPORT

**DATE** June 22nd 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 JUNE 21<sup>ST</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 10°C, sunny to cloudy.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The foundation on the bedrock for filter placement between Sta. 1+800 and 1+850 m was approved by the QA Manager. No foundation approval forms are required for the North Cell Internal Structure.
- Compaction of the filters is done with a smooth-drum compactor in the upstream slope, attached to an excavator. Due to the soft foundation, the compactor is unable to reach the bottom of the slope, and some material is pushed down the slope. This results in an irregular surface, it is however acceptable. The lower portion of the slope will be flattened with the bucket of the excavator once compaction 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 1.5 to 2 m thick (approx.) lift of UM rockfill from El. 148 m to El. 150 m (approx.) with a dozer from Sta. 1+350 m to 1+300 m (+9 m to -29 m). The material is of good quality and is well graded.</li> </ul>
Upstream	<ul style="list-style-type: none"> <li>■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 1+930 m to 1+715 m.</li> <li>■ Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with an excavator from Sta. 1+860 m to 1+750 m.</li> <li>■ Compaction of the 0.5 m lift (approx.) of coarse filter between El. 150 and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 2+524 m to 2+450 m. Vibration is used except for the first pass down the slope in order to stabilize the material and limit deformation of the lift.</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-380-2018	2018-06-21		Coarse filter	North Cell Internal Structure, Sta. 1+920/-23 m, El. 152 m		
CF-382-2018	2018-06-21		Coarse filter	SANA crusher stockpile		
CF-383-2018	2018-06-21		Coarse filter	SANA crusher stockpile		
CF-384-2018	2018-06-21		Coarse filter	SANA crusher stockpile		
FF-392-2018	2018-06-21		Fine filter	SANA crusher stockpile		

FF-393-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-394-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-395-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-396-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-397-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-398-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-399-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-400-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-401-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-402-2018	2018-06-21		Fine filter	SANA crusher stockpile		

**Table 3: 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>
CF-381-2018	2018-06-21		Coarse filter	North Cell Internal Structure, Sta. 1+920/-23 m, El. 152 m		
CF-385-2018	2018-06-21		Coarse filter	SANA crusher stockpile		



FF-403-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-404-2018	2018-06-21		Fine filter	SANA crusher stockpile		
FF-405-2018	2018-06-21		Fine filter	SANA crusher stockpile		

## 6.0 PHOTOGRAPHS



**Photograph NCIS-033: From Sta. 1+900/-21 m (approx.), looking E. Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 1+930 m to 1+715 m.**



**Photograph NCIS-034: From Sta. 1+900/-21 m (approx.), looking W. Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with an excavator from Sta. 1+860 m to 1+750 m.**





**Photograph NCIS-035: From Sta. 2+550/-25 m (approx.), looking N. Compaction of the 0.5 m lift (approx.) of coarse filter between El. 150 and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 2+524 m to 2+450 m.**

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## QA DAILY REPORT

**DATE** June 23rd 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 JUNE 22<sup>ND</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 10°C, sunny.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- It was reiterated not to pass behind heavy equipment without calling on the radio first.
- Personnel on foot must stay at a safe distance from the compactor attached to the excavator with a cable, in case the cable should break.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The alignment of the North Cell Internal Structure was slightly modified in the south-western section in order to avoid the cyanide burning area. This will avoid removal of material which would be difficult given that excavators cannot traffic on the soft tailings. There will be no new centerline issued, but only a field fitting done. The crest width will be checked during rockfill placement to ensure that the design is respected.
- Given that a large amount of UM rockfill is expected to arrive on the structure very soon, priority will be given to compaction of the crest (including underneath the safety berms) of the portion of lift at El. 150 m, in order to be ready to place the second lift at El. 152 m. Berms will be pushed downstream and replaced by boulders after compaction. If there is not enough time to complete the compaction, the placement activities might also be relocated to the portion of the structure which needs to be raised to El. 154 m.

## 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Upstream	<ul style="list-style-type: none"> <li>■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 1+715 m to 1+570 m and from Sta. 1+425 m to 1+480 m.</li> <li>■ Placement of a 0.5 m thick lift of fine filter over the coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+542 m to 2+475 m.</li> <li>■ Compaction of the 0.5 m lift (approx.) of coarse filter between El. 150 and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 2+450 to 1+805 m. Vibration is used except for the first pass down the slope in order to stabilize the material and limit deformation of the lift.</li> <li>■ Compaction of the 0.5 m lift (approx.) of fine filter between El. 150 and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 2+542 m to 2+475 m. Vibration is used except for the first pass down the slope in order to stabilize the material and limit deformation of the lift.</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-406-2018	2018-06-22		Fine Filter	North Cell Internal Structure, Sta. 1+920/-22 m, El. 152 m		

**Table 3: Samples taken by the QA**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-407-2018	2018-06-22		Fine Filter	North Cell Internal Structure, Sta. 1+920/-22 m, El. 152 m		

## 6.0 PHOTOGRAPHS



**Photograph NCIS-036: From Sta. 1+900/-21 m (approx.), looking SE. Placement of a 0.5 m thick lift of fine filter over the coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+542 m to 2+475 m.**



**Photograph NCIS-037: From Sta. 1+550/-25 m (approx.), looking NW. Compaction of the 0.5 m lift (approx.) of coarse filter between El. 150 and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 2+450 to 1+805 m.**





**Photograph NCIS-038: From Sta. 2+510/-28 m (approx.), looking SE. Compaction of the 0.5 m lift (approx.) of fine filter between El. 150 and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 2+542 m to 2+475 m.**

## QA DAILY REPORT

**DATE** June 24th 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 JUNE 23<sup>RD</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 10°C, sunny.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- A blast is planned at 12:45 at Pit E.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- UM rockfill availability is limited at the moment, until analyses results come back on the last blast to certify that it is Non-AG material.
- Stockpiles will be surveyed to evaluate remaining quantities of coarse and fine filters. Another stockpile of coarse filter may be used if needed.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 1.5 to 2 m thick (approx.) lift of UM rockfill from El. 148 m to El. 150 m (approx.) with a dozer from Sta. 1+300 m to 1+197 m (-7 m to -41 m). The material is of good quality and is well graded.</li> </ul>
Upstream	<ul style="list-style-type: none"> <li>■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 1+480 m to 1+570 m and from Sta. 1+420 m to 1+425 m.</li> <li>■ Placement of a 0.5 m thick lift of fine filter over the coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+460 m to 2+475 m and from Sta. 2+065 m to 1+980 m.</li> <li>■ Compaction of the 0.5 m lift (approx.) of coarse filter between El. 150 and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 1+480 to 1+805 m. Vibration is used except for the first pass down the slope in order to stabilize the material and limit deformation of the lift.</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-380-2018	2018-06-21	2018-06-22	Coarse Filter	North Cell Internal Structure, Sta. 1+920/-23 m, El. 152 m	Gradation	Compliant
					Water content	2.50%
CF-386-2018	2018-06-23		Coarse Filter	North Cell Internal Structure, Sta. 1+400/-24 m, El. 150 m		

**Table 3: 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>
CF-381-2018	2018-06-21	2018-06-23	Coarse Filter	North Cell Internal Structure, Sta. 1+920/-23 m, El. 152 m	Gradation	Compliant
					Water content	2.12%



## 6.0 PHOTOGRAPHS



**Photograph NCIS-039: From Sta. 2+200/-24 m (approx.), looking W. Placement of a 0.5 m thick lift of fine filter over the coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+460 m to 2+475 m and from Sta. 2+065 m to 1+980 m.**

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## QA DAILY REPORT

**DATE** June 25th 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 JUNE 24<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 10°C, sunny in the morning, cloudy to rainy in the afternoon.

#### 2.0 HEALTH AND SAFETY

- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- A blast is planned at 12:45 at Pit E.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The UM rockfill platform around Sta. 1+200 m is too narrow and will be widened to 48 m, as required for the crest width at El. 150 m. Elevation of the lift has been corrected at some places.
- Coarse and fine filters are currently placed on the section of the structure that will be raised at 154 m, and will be extended to the rest of the structure while the second lift of UM rockfill from El. 152 m to 154 m is placed.
- The limits of the North Cell Internal Structure will be confirmed with AEM based on the deposition plan.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	■ Placement of a 1.5 to 2 m thick (approx.) lift of UM rockfill from El. 148 m to El. 150 m (approx.) with a dozer from Sta. 1+197 m to 1+150 m (-7 m to -41 m). The material is of good quality and is well graded.
Upstream	■ Placement of a 0.5 m thick lift of fine filter over the coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+305 m to 2+460 m and from Sta. 1+980 m to 1+835 m.

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-408-2018	2018-06-24		Fine Filter	North Cell Internal Structure, Sta. 2+380/-21 m, El. 150 m		

**Table 3: Samples taken by the QA**

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

## 6.0 PHOTOGRAPHS



**Photograph NCIS-040: From Sta. 2+185/-25 m (approx.), looking W. Placement of a 0.5 m thick lift of fine filter over the coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+305 m to 2+460 m and from Sta. 1+980 m to 1+835 m.**





**Photograph NCIS-041: From Sta. 1+220/-7 m (approx.), looking S. Placement of a 1.5 to 2 m thick (approx.) lift of UM rockfill from El. 148 m to El. 150 m (approx.) with a dozer from Sta. 1+197 m to 1+150 m (-7 m to -41 m).**

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## QA DAILY REPORT

**DATE** June 26th 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 JUNE 25<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 10°C, cloudy.

#### 2.0 HEALTH AND SAFETY

- The rain is an issue, the muddy and very slippery ground causes a high risk of slips and falls. Extra caution must be applied when walking or driving on wet surfaces.

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The weekly meeting was held at the same time as the daily meeting today.
- The limits of the North Cell Internal Structure have been modified by AEM based on the most recent deposition plan. The section at El. 154 m has been shifted toward the east (see Figure 1 below).
- AEM indicated that the downstream slope of the structure would not be profiled with an excavator like the other dikes, but left at the angle of repose. With a 1.5H:1V slope, this is not expected to affect global stability, but minor rockfalls are possible.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 1.5 to 2 m thick (approx.) lift of UM rockfill from El. 148 m to El. 150 m (approx.) with a dozer from Sta. 1+150 m to 1+120 m (-92 m to +10 m). The material is of good quality and is well graded.</li> <li>■ Removal of the downstream berms from Sta. 1+330 to 1+220 m. They were replaced with boulders placed at the limit of the haul truck traffic lane.</li> <li>■ Compaction of the 1.5 to 2 m lift (approx.) of ultramafic (UM) rockfill at El. 150 m with a 10-tonne smooth-drum compactor with vibration (6 passes) between the haul truck traffic lane and the upstream slope from Sta. 1+330 to 1+200 m (o.s. -53 to -24 m), and between the haul truck traffic lane and the downstream slope from Sta. 1+330 to 1+225 m (o.s. -4 to +13 m).</li> </ul>
Upstream	<ul style="list-style-type: none"> <li>■ Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with an excavator from Sta. 2+715 m to 2+825 m.</li> <li>■ Placement of a 0.5 m thick lift of fine filter over the coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+305 m to 2+040 m.</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-382-2018	2018-06-21	2018-06-24	Coarse filter	SANA crusher stockpile	Gradation	Compliant
					Water content	-
FF-406-2018	2018-06-22	2018-06-24	Fine Filter	North Cell Internal Structure, Sta. 2+500/-22 m, El. 152 m	Gradation	Compliant
					Water content	2.80%

FF-409-2018	2018-06-25		Fine Filter	North Cell Internal Structure, Sta. 2+262/-21 m, El. 152 m		
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**Table 3: Samples taken by the QA**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-403-2018	2018-06-21	2018-06-25	Fine filter	SANA crusher stockpile	Gradation	Slightly too many large particles, but accepted provided the material is well-graded
					Water content	1.65%



## 6.0 PHOTOGRAPHS



**Photograph NCIS-042:** From Sta. 2+210/-27 m (approx.), looking SE. Placement of a 0.5 m thick lift of fine filter over the coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+305 m to 2+040 m.



**Photograph NCIS-043: From Sta. 1+250/-38 m (approx.), looking N. Compaction of the 1.5 to 2 m lift (approx.) of ultramafic (UM) rockfill at El. 150 m with a 10-tonne smooth-drum compactor with vibration (6 passes) between the haul truck traffic lane and the upstream slope from Sta. 1+330 to 1+200 m (o.s. -53 to -24 m).**



**Photograph NCIS-044: From Sta. 1+200/-19 m (approx.), looking S. Placement of a 1.5 to 2 m thick (approx.) lift of UM rockfill from El. 148 m to El. 150 m (approx.) with a dozer from Sta. 1+150 m to 1+120 m (-92 m to +10 m). The material is of good quality and is well graded.**





**Photograph NCIS-045: From Sta. 2+760/-40 m (approx.), looking S. Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with an excavator from Sta. 2+715 m to 2+825 m.**

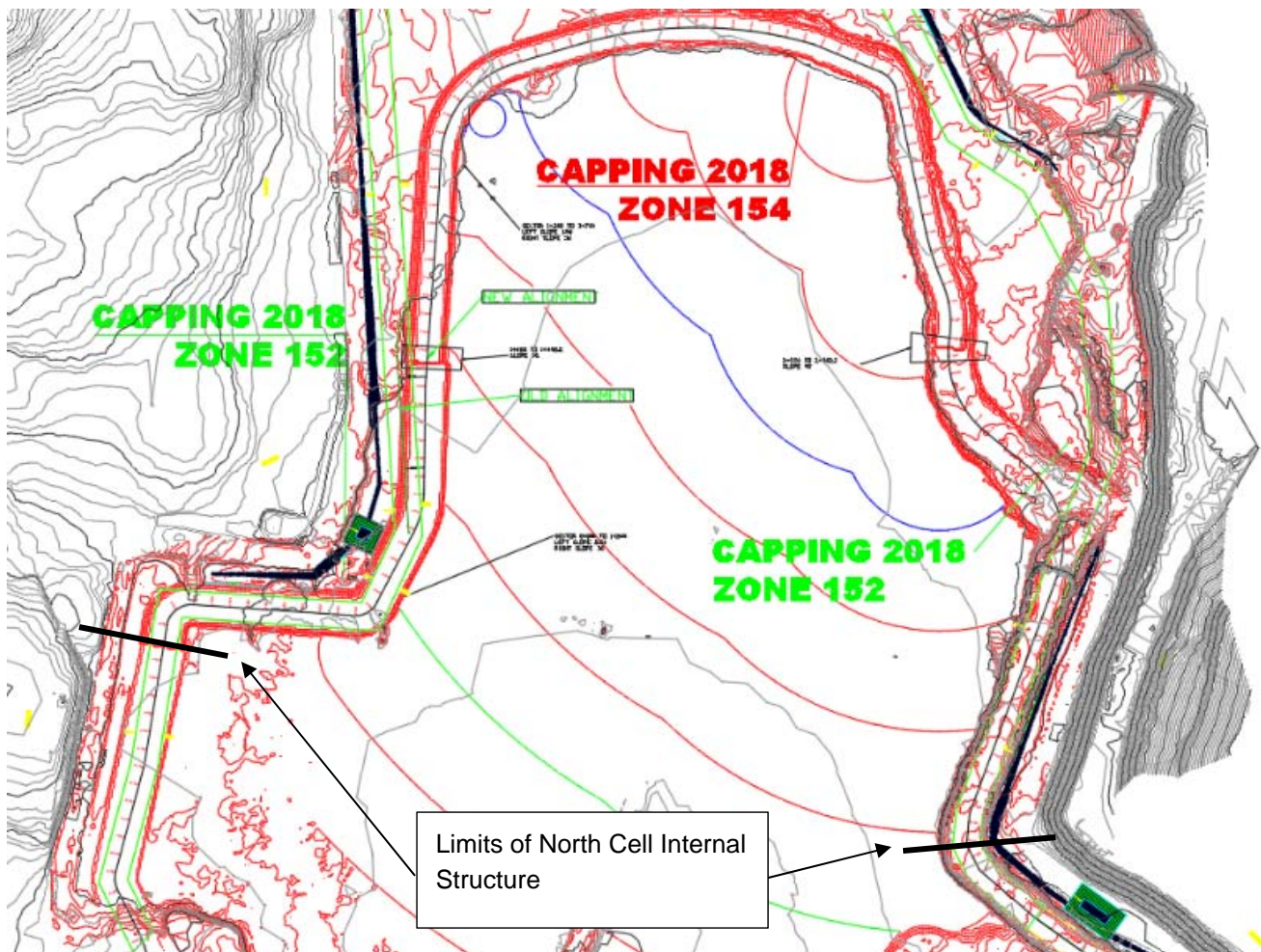


Figure 1: New proposed configuration for the North Cell Internal Structure and planned deposition

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## QA DAILY REPORT

**DATE** June 27th 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 JUNE 26<sup>TH</sup>, 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 10°C, cloudy to sunny.

#### 2.0 HEALTH AND SAFETY

- 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 dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.
- A haul truck nearly went off the road yesterday on the North Cell Internal Structure.
- Radio channels on the North Cell Internal Structure: Portage Operations must be used on the traffic lane, whereas MBDykes must be used when working behind the boulders (e.g. excavators working on the slope).

#### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- During down times in rockfill placement, the dozer will push the berms into the slope to prepare the crest for compaction.
- The updated materials quantities following the change of the structure limits will be sent shortly.

#### 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 North 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 the North Cell Internal Structure**

Activity or Area	Comments
Crest	<ul style="list-style-type: none"> <li>■ Placement of a 1.5 to 2 m thick (approx.) lift of UM rockfill from El. 148 m to El. 150 m (approx.) with a dozer from Sta. 1+125 m to 1+115 m (-92 m to -47 m). The material is of good quality and is well graded.</li> <li>■ Removal of the downstream berms from Sta. 1+220 to 1+130 m.</li> <li>■ Compaction of the 1.5 to 2 m lift (approx.) of ultramafic (UM) rockfill at El. 150 m with a 10-tonne smooth-drum compactor with vibration (6 passes) between the haul truck traffic lane and the upstream slope from Sta. 1+220 to 1+130 m (o.s. -91 to -44 m).</li> <li>■ Removing of UM rockfill material from the capping with a dozer to level the surface to El. 152 m from Sta. 2+760 m to 2+850 m (o.s. -29 to -17 m).</li> </ul>
Upstream	<ul style="list-style-type: none"> <li>■ Removal of till material mixed with the UM rockfill of the capping (about 1 to 2 m thick along the slope) with an excavator from Sta. 2+760 m to 2+850 m (o.s. -35 to -17 m).</li> <li>■ Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with a dozer from Sta. 2+840 to 2+890 m.</li> <li>■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+560 m to 2+640 m.</li> </ul>

## 5.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

**Table 2: Samples taken by the QC**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-386-2018	2018-06-23	2018-06-25	Coarse Filter	North Cell Internal Structure, Sta. 1+400/-24 m, El. 150 m	Gradation	Compliant
					Water content	4.40%

FF-392-2018	2018-06-21	2018-06-26	Fine filter	SANA crusher stockpile	Gradation	The material lack a little sand-sized particles but is still acceptable.
					Water content	1.40%

**Table 3: Samples taken by the QA**

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-404-2018	2018-06-21	2018-06-26	Fine filter	SANA crusher stockpile	Gradation	Compliant
					Water content	2.75%



## 6.0 PHOTOGRAPHS



**Photograph NCIS-046:** From Sta. 2+680/-18 m (approx.), looking SE. Removal of till material mixed with the UM rockfill of the capping (about 1 to 2 m thick along the slope) with an excavator from Sta. 2+760 m to 2+850 m (o.s. -35 to -17 m).



**Photograph NCIS-047: From Sta. 2+580/-35 m (approx.), looking N. Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 2+560 m to 2+640 m.**