■ With the new alignment, the water pipe around Sta. 2+730 m (approx.) is crossing the North Cell Internal Structure footprint at El. 152 m. The water pipe is included in the access for the elevation 154 m. The water pipe will need to be displaced before raising this area 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
Crest	■ Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+605 m to 2+455 m (+3 m to -23 m). The material is of good quality and is well graded.
	Compaction of the 0.5 m lift (approx.) of fine filter between El. 150 m and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 2+028 m to 1+650 m. Vibration is used except for the first pass down the slope in order to stabilize the material and limit deformation of the lift.

### 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.

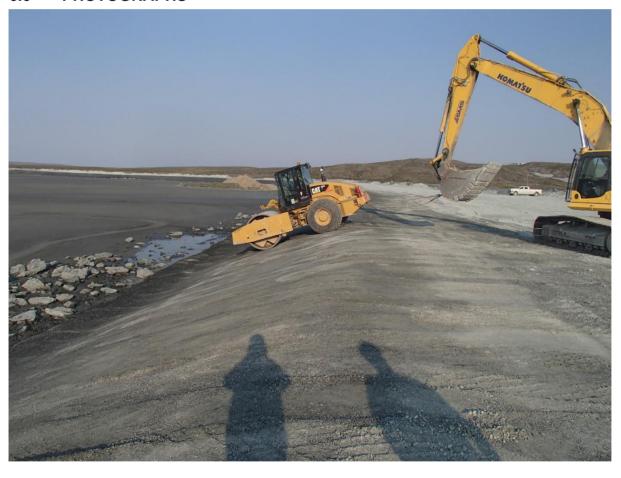
Table 2: Samples taken by the QC

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-088: From Sta 2+000/-35 m (approx.), looking W. Compaction of the 0.5 m lift (approx.) of fine filter between El. 150 m and 152 m with a 10-tonne smooth-drum compactor (4 passes) in the upstream slope from Sta. 2+028 m to 1+650 m.



Photograph NCIS-089: From Sta 2+525/+4 m (approx.), looking S. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+605 m to 2+455 m (+3 m to -23 m).

d:\qa database 2018\6) qa deliverables\qa daily report\north cell\1897439-1576-tm-rev0 qa daily report north cell 2018-07-12.docx





**DATE** July 14th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau@golder.com

## QA DAILY REPORT FOR JULY $13^{TH}$ , 2018 - TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

#### 1.0 WEATHER

Temperature around 12°C, cloudy and windy.

### 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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- Boulders acting as a berm on the North Cell Internal Structure were move by mistake on the top of the upstream slope at El 152 m. They will need to be move downstream during the upstream sloping operations from El. 152 m to 154 m.
- Following discussion with AEM, the water management works planned for this construction season consist of:
  - Clearing a channel through the area near the cyanide burning pad to allow water to flow gravitationally inside the North Cell Internal Structure:
  - Digging a ditch west of the NCIS, flowing southbound towards the interior of the NCIS, without installing a liner;
  - Improving the water management capacities by deepening the low points in the tailings east of the NCIS, install rockfill to prevent erosion of the tailings and create an access for the pumping crew. The QA/QC

Golder Associés Ltée

7250, rue du Mile End, 3e étage Montréal (Québec) H2R 3A4 Canada

T: +1 514 383 0990 +1 514 383 5332

personnel will be required to closely follow-up the excavation in the tailings as the underlying RF2 till plug must not be excavated.

# 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 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+455 m to 2+370 m (+4 m to -24 m). The material is of good quality and is well graded.

### 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-090: From Sta 2+440/-1 m (approx.), looking SE. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+455 m to 2+370 m (+4 m to -24 m).

d:\qa database 2018\6) qa deliverables\qa daily report\north cell\1897439-1576-tm-rev0 qa daily report north cell 2018-07-13.docx





**DATE** July 15th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau EMAIL sbarbeau@golder.com

## QA DAILY REPORT FOR JULY $14^{TH}$ , 2018 - TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

### 1.0 WEATHER

Temperature around 15°C, sunny and windy.

### 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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The UM rockfill lift installed yesterday was thicker than required by 300 mm to 700 mm even if the surveyor installed guide pickets. SANA Surveyor will increase the frequency of the follow-ups with the bulldozer operator from the Mine, as the Non-AG rockfill quantities are low and limited. The elevation will be corrected to 154 m by an excavator to have a smooth surface for the compactor as well as to limit the extent of the filters.
- Boulders acting as a berm on the North Cell Internal Structure were move by mistake on the top of the upstream slope at El 152 m. They were scattered with an excavator to prevent honeycombing.

# 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 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+370 m to 2+290 m (+9 m to -22 m). The material is of good quality and is well graded.					
Upstream	■ Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with an excavator from Sta. 1+185 m to 1+135 m.					

### 5.0 SAMPLING, LABORATORY AND FIELD TESTING

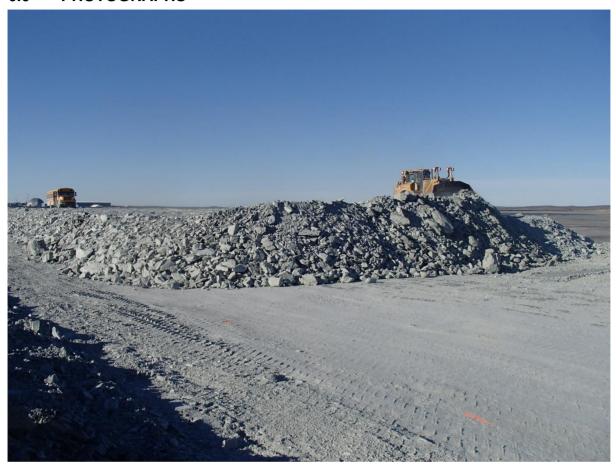
Table 2 and Table 3 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 2: Samples taken by the QC

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

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-091: From Sta 2+330/+13 m (approx.), looking S. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+370 m to 2+290 m (+9 m to -22 m). The material is of good quality and is well graded.



Photograph NCIS-092: From Sta 1+160/-77 m (approx.), looking S. Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with an excavator from Sta. 1+185 m to 1+135 m.

d:\qa database 2018\6) qa deliverables\qa daily report\north cell\1897439-1576-tm-rev0 qa daily report north cell 2018-07-14.docx





**DATE** July 16th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau EMAIL sbarbeau@golder.com

## QA DAILY REPORT FOR JULY $15^{TH}$ , 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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The UM rockfill lift elevation at the North Cell Internal Structure is henceforth closely followed by SANA Surveyor. The lift being placed at El. 154 m has the correct thickness.
- The QA Manager observed oversized boulders at the North Cell Internal Structure in the lift close to the upstream slope. AEM mine supervisor was informed of the situation. The loader operator in the pit will hence informed the haul truck if a boulder is present in is load and transfer this information to the bulldozer operator. The haul truck will drop is load on the downstream side of the pad and the bulldozer operator shall push the oversized boulders downstream.

### July 16th 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 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 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+290 m to 2+280 m (+9 m to -22 m). The material is of good quality and is well graded.
Upstream	■ Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with an excavator from Sta. 1+135 m to 1+100 m.
	■ Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+720 m to 2+545 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



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-093: From Sta 2+260/+12 m (approx.), looking S. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+290 m to 2+280 m (+9 m to -22 m).



Photograph NCIS-094: From Sta 1+125/-109 m (approx.), looking SW. Profiling of the upstream slope (3H:1V) from El. 150 to 152 m with an excavator from Sta. 1+135 m to 1+100 m.

d:\qa database 2018\6) qa deliverables\qa daily report\north cell\1897439-1576-tm-rev0 qa daily report north cell 2018-07-15.docx





**DATE** July 17th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau EMAIL sbarbeau@golder.com

## QA DAILY REPORT FOR JULY 16<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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The water pipe crossing the North Cell Internal Structure around Sta. 2+730 m will need to be moved. AEM will inform SANA on who will move the pipe and where will it be moved to.
- The material resulting from the profiling of the upstream slope is pushed on the downstream slope by the bulldozer.

# 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	■ Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+545 m to 2+410 m.

### SAMPLING, LABORATORY AND FIELD TESTING

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-095: From Sta 2+375/-18 m (approx.), looking S. Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+545 m to 2+410 m.

d:\qa database 2018\6) qa deliverables\qa daily report\north cell\1897439-1576-tm-rev0 qa daily report north cell 2018-07-16.docx





**DATE** July 19th 2018 1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

## QA DAILY REPORT FOR JULY 18<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

- 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.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.
- A blast is planned at 12:45 at Vault Pit.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

■ The works on the portion of the North Cell Internal Structure at El. 152 m will be prioritized. The ditches and sumps excavation should then be done to ensure that the structure at El. 152 m is operation for August 1st.

# 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 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+190 m to 2+103 m (+7 m to -22 m). The material is of good quality and is well graded.

## 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-096: From Sta 2+355/+9 m (approx.), looking N. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+190 m to 2+103 m (+7 m to -22 m). The material is of good quality and is well graded.

d:\qa database 2018\6) qa deliverables\qa daily report\north cell\1897439-1576-tm-rev0 qa daily report north cell 2018-07-18.docx





**DATE** July 20th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Marion Habersetzer EMAIL mhabersetzer@golder.com

## QA DAILY REPORT FOR JULY $19^{TH}$ , 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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.
- A blast is planned at 12:45 at Pit E5.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

Compaction procedures in the upstream slope were reviewed with the new workers.

# 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 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+103 m to 1+984 m (+7 m to -22 m). The material is of good quality and is well graded.
Upstream	<ul> <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+200 m to 1+113 m.</li> <li>Compaction of the 0.5 m lift (approx.) of coarse filter between El. 150 m and 152 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 1+200 m to 1+170 m.</li> <li>Placement of a 0.5 m thick lift of fine filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 1+205 m to 1+215 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.

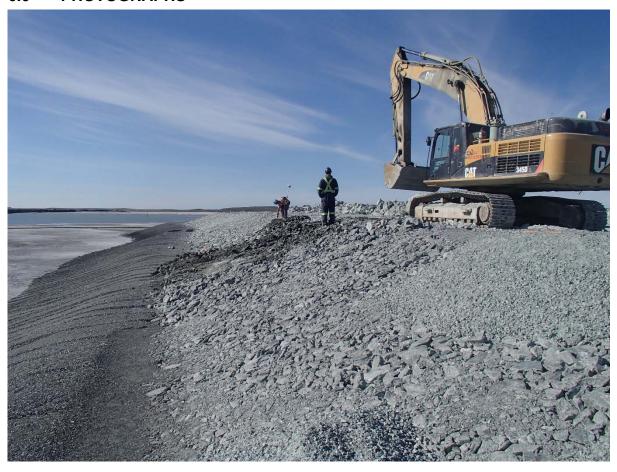
Table 2: Samples taken by the QC

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





Photograph NCIS-097: From Sta. 1+180/-75 m (approx.), looking SW. 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+200 m to 1+113 m.





Photograph NCIS-098: From Sta. 2+040/-9 m (approx.), looking E. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 2+103 m to 1+984 m (+7 m to -22 m). The material is of good quality and is well graded.





Photograph NCIS-099: From Sta. 1+180/-76 m (approx.), looking SE. Compaction of the 0.5 m lift (approx.) of coarse filter between El. 150 m and 152 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 1+200 m to 1+170 m.

 $d:\qa\ database\ 2018\ (a)\ qa\ deliverables\ (a)\ daily\ report\ (n)\ report\ (n)\ 1897439-1576-tm-rev0\ qa\ daily\ report\ (n)\ rep$ 





**DATE** July 21st 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Marion Habersetzer @golder.com

## QA DAILY REPORT FOR JULY 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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.
- A haul truck passed by 2 larger haul trucks yesterday on the North Cell Internal Structure without obtaining the radio clearance beforehand. It was reiterated to wait for confirmation before taking over heavy equipment and to make sure to always use the correct radio channel.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

■ Ditches and sumps as well as deposition points should be completed by August 1<sup>st</sup> to allow for deposition from that date on.

# 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.

Golder Associés Ltée

7250, rue du Mile End, 3e étage Montréal (Québec) H2R 3A4 Canada

T: +1 514 383 0990 +1 514 383 5332

Table 1: QA observations for the North Cell Internal Structure

Activity or Area	Comments
Crest	Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 1+984 m to 1+947 m (+14 m to -26 m). The material is of good quality and is well graded.
Upstream	■ Compaction of the 0.5 m lift (approx.) of coarse filter between El. 150 m and 152 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 1+143 m to 1+113 m.
	■ Placement of a 0.5 m thick lift of fine filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 1+113 m to 1+205 m.
	■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+575 m to 2+710 m and from Sta. 2+411 m to 2+460 m.
	■ Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+400 m to 2+410 m. Oversize boulders were removed.

## 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-389- 2018	2018-07-20		Coarse Filter	North cell Internal Structure (in place) 2+720/-22 m, El. 154 m		



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-100: From Sta. 1+960/+10 m (approx.), looking E. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 1+984 m to 1+947 m (+14 m to -26 m). The material is of good quality and is well graded.



Photograph NCIS-101: From Sta. 1+120/-89 m (approx.), looking N. Placement of a 0.5 m thick lift of fine filter in the upstream slope from El. 150 m to 152 m with an excavator from Sta. 1+113 m to 1+205 m.





Photograph NCIS-102: From Sta. 2+680/-21 m (approx.), looking W. Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+575 m to 2+710 m and from Sta. 2+411 m to 2+460 m.



Photograph NCIS-103: From Sta. 2+420/-27 m (approx.), looking NE. Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+400 m to 2+410 m. Oversize boulders were removed.

d:\qa database 2018\6) qa deliverables\qa daily report\north cell\1897439-1576-tm-rev0 qa daily report north cell 2018-07-20.docx





**DATE** July 22nd 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Marion Habersetzer EMAIL mhabersetzer@golder.com

## QA DAILY REPORT FOR JULY $21^{ST}$ , 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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.
- A near-miss incident happened in Amaruq where a suspended load (boulder) dropped near workers.
- A caribou was spotted on the North Cell. Activities were slowed down as a precaution.
- A blast is planned at 12:45 at Vault Pit.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

Nothing to report.

# 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.

Golder Associés Ltée

7250, rue du Mile End, 3e étage Montréal (Québec) H2R 3A4 Canada

T: +1 514 383 0990 +1 514 383 5332

Table 1: QA observations for the North Cell Internal Structure

Activity or Area	Comments					
Crest	■ Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 1+947 m to 1+863 m (+14 m to -26 m). The material is of good quality and is well graded.					
Upstream	■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+575 m to 2+460 m.					
	■ Compaction of the 0.5 m lift (approx.) of coarse filter between El. 152 m and 154 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 2+710 m to 2+411 m.					
	■ Placement of a 0.5 m thick lift of fine filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+710 m to 2+445 m.					
	■ Compaction of the 0.5 m lift (approx.) of fine filter between EI. 150 m and 152 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 1+251 m to 1+660 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-419- 2018	2018-07-21		Fine Filter	North cell Internal Structure (in place) 2+690/-13 m, El. 154 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-420- 2018	2018-07-21		Fine Filter	North cell Internal Structure (in place) 2+690/-13 m, El. 154 m		



Photograph NCIS-104: From Sta. 2+650/-23 m (approx.), looking SE. Placement of a 0.5 m thick lift of fine filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+710 m to 2+445 m.



Photograph NCIS-105: From Sta. 2+630/-34 m (approx.), looking NW. Compaction of the 0.5 m lift (approx.) of coarse filter between El. 152 m and 154 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 2+710 m to 2+411 m.





Photograph NCIS-106: From Sta. 2+620/-35 m (approx.), looking NW. Placement of a 2 m thick (approx.) lift of UM rockfill from El. 152 m to El. 154 m (approx.) with a dozer from Sta. 1+947 m to 1+863 m (+14 m to -26 m). The material is of good quality and is well graded.





Photograph NCIS-107: From Sta. 1+380/-38 m (approx.), looking S. Compaction of the 0.5 m lift (approx.) of fine filter between El. 150 m and 152 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 1+251 m to 1+660 m.





## **QA DAILY REPORT**

**DATE** July 23rd 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Marion Habersetzer EMAIL mhabersetzer@golder.com

# QA DAILY REPORT FOR JULY $22^{ND}$ , 2018 – TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

## 1.0 WEATHER

Temperature around 15°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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.
- It is required to slow down when passing near workers on foot, as vehicles lift a large quantity of dust.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- AEM asked to know the volume of rockfill needed to complete the North Cell Internal Structure. An estimated 15 000 m3 is required to finish the crest, and additional UM rockfill will be used to prepare deposition points.
- The QA Manager and the foreman reviewed the works to be done for the ditch (west of the NCIS and through the Cyanide Burning Pad) and the sumps (east of the NCIS, near the rock storage facility) planned for this year.

# 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

Golder Associés Ltée

7250, rue du Mile End, 3e étage Montréal (Québec) H2R 3A4 Canada

T: +1 514 383 0990 +1 514 383 5332

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	■ Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+159 m to 2+409 m.
	Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+293 m to 2+411 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
CF-389- 2018	2018-07-20	Structure (in	North cell Internal Structure (in place)	Gradation	Compliant	
			2+720/-22 m, El. 154 m	Water content	0.5%	

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-108: From Sta. 2+490/-32 m (approx.), looking N. Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+159 m to 2+409 m.





Photograph NCIS-109: From Sta. 2+450/-21 m (approx.), looking N. Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+293 m to 2+411 m.

d:\qa database 2018\6) qa deliverables\qa daily report\north cell\1897439-1576-tm-rev0 qa daily report north cell 2018-07-22.docx





## **QA DAILY REPORT**

**DATE** July 24th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

**FROM** Marion Habersetzer

EMAIL mhabersetzer@golder.com

QA DAILY REPORT FOR JULY 23<sup>RD</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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.
- A blast is planned at 12:45 in Pit E.

### 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

■ The deposition points design by AEM was forwarded to the construction team.

# 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	■ Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+159 m to 2+000 m.
	■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+293 m to 2+080 m.
	■ Compaction of the 0.5 m lift (approx.) of coarse filter between El. 152 m and 154 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 2+293 m to 2+080 m.
	■ Placement of a 0.5 m thick lift of fine filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+460 m to 2+300 m.
	■ Compaction of the 0.5 m lift (approx.) of fine filter between EI. 152 m and 154 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 2+700 m to 2+650 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-419- 2018	2018-07-21	Structure (in	Gradation	Compliant		
				place) 2+690/-13 m, El. 154 m	Water content	2.9%

Table 3: Samples taken by the QA

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-420- 2018	2018-07-21	2018-07-23	Fine Filter	North cell Internal Structure (in	Gradation	Slightly too many large



	place) 2+690/-13 m, El. 154 m		particles, but accepted provided the material is well-graded.
		Water content	3.35%

## 6.0 PHOTOGRAPHS



Photograph NCIS-110: From Sta. 2+320/-22 m (approx.), looking N. Compaction of the 0.5 m lift (approx.) of coarse filter between El. 152 m and 154 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 2+293 m to 2+080 m.





Photograph NCIS-111: From Sta. 2+320/-22 m (approx.), looking NW. Profiling of the upstream slope (3H:1V) from EI. 152 to 154 m with an excavator from Sta. 2+159 m to 2+000 m and placement of a 0.5 m thick lift of coarse filter in the upstream slope from EI. 152 m to 154 m with an excavator from Sta. 2+293 m to 2+080 m.

 $d:\qa\ database\ 2018\ (a)\ qa\ deliverables\ (a)\ daily\ report\ (north\ cell\ (1897439-1576-tm-rev0\ qa\ daily\ report\ north\ cell\ (2018-07-23.docx)$ 





## **QA DAILY REPORT**

**DATE** July 25th 2018 1897439-1576-TM-Rev0

**TO** Patrice Gagnon, Pier-Éric McDonald

Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Marion Habersetzer EMAIL mhabersetzer@golder.com

# QA DAILY REPORT FOR JULY $24^{TH}$ , 2018 - TSF NORTH CELL CONSTRUCTION - MEADOWBANK (1897439)

## 1.0 WEATHER

Temperature around 20°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. Wear a mask in the lab.
- Coactivity on the dike: be aware of blind spots and safe spots, keep good communication and visual contact with the operators.

## 3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

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

- The QA Manager and the foreman defined the expected footprint of the ditch and the sumps.
- The QA and QC personnel were present during the excavation of the first sump. The QA Manager required that the width of the sump (perpendicular to the North Cell Internal Structure and RF1/RF2) and its depth be limited in order to avoid risking damaging the till and erosion protection layers placed on the upstream slope of RF1/RF2, below the tailings. Instead, the sump was lengthened (parallel to the dikes) to provide the same volume.
- The bottom of the excavation of the sump was frozen. It will be deepened tomorrow once the frozen tailings have thawed.
- The granular material to be placed as erosion protection in the sump and ditch excavated in the tailings will be coarse filter. A 0.3 m thick layer will be placed in the ditch, and a 0.5 m thick layer will be placed in the sump. This is an adaptation for the operation stage from the original design requiring 0.5 m of coarse filter in the sumps, and 0.3 m of fine filter in the ditches.

Golder Associés Ltée

7250, rue du Mile End, 3e étage Montréal (Québec) H2R 3A4 Canada

# 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	■ Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+000 m to 1+185 m.
	■ Placement of a 0.5 m thick lift of coarse filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+080 m to 1+910 m.
	■ Compaction of the 0.5 m lift (approx.) of coarse filter between El. 152 m and 154 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 2+080 m to 2+000 m.
	■ Placement of a 0.5 m thick lift of fine filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+300 m to 2+090 m.
	■ Compaction of the 0.5 m lift (approx.) of fine filter between El. 152 m and 154 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 2+650 m to 2+520 m.
Downstream	■ Placement of UM rockfill to build an access ramp on the tailings downstream of the North Cell Internal Structure. The rockfill was taken in the downstream slope of the dike and from the material removed from the upstream slope.
	■ Excavation of a 1 m (approx.) sump in the tailings with an excavator from Sta. 3+010 m to 3+030 m (o.s. +27 to +30 m). The bottom of the excavation was frozen.
	■ Excavation of a 0.8 m (approx.) deep, 1 m wide shallow ditch in the rockfill capping with an excavator from Sta. 1+500 m to 1+650 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-421- 2018	2018-07-24		Fine Filter	North Cell Internal Structure (in place) Sta. 2+160/-25 m, El. 154 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-112: From Sta. 2+610/-29 m (approx.), looking N. Compaction of the 0.5 m lift (approx.) of coarse filter between El. 152 m and 154 m with a 10-tonne smooth-drum compactor with vibration (4 passes) in the upstream slope from Sta. 2+080 m to 2+000 m.



Photograph NCIS-113: From Sta. 2+220/-26 m (approx.), looking SW. Profiling of the upstream slope (3H:1V) from El. 152 to 154 m with an excavator from Sta. 2+000 m to 1+185 m and placement of a 0.5 m thick lift of fine filter in the upstream slope from El. 152 m to 154 m with an excavator from Sta. 2+300 m to 2+090 m.





Photograph NCIS-114: From Sta. 1+700/-34 m (approx.), looking N. Excavation of a 0.8 m (approx.) deep, 1 m wide shallow ditch in the rockfill capping with an excavator from Sta. 1+500 m to 1+650 m.

