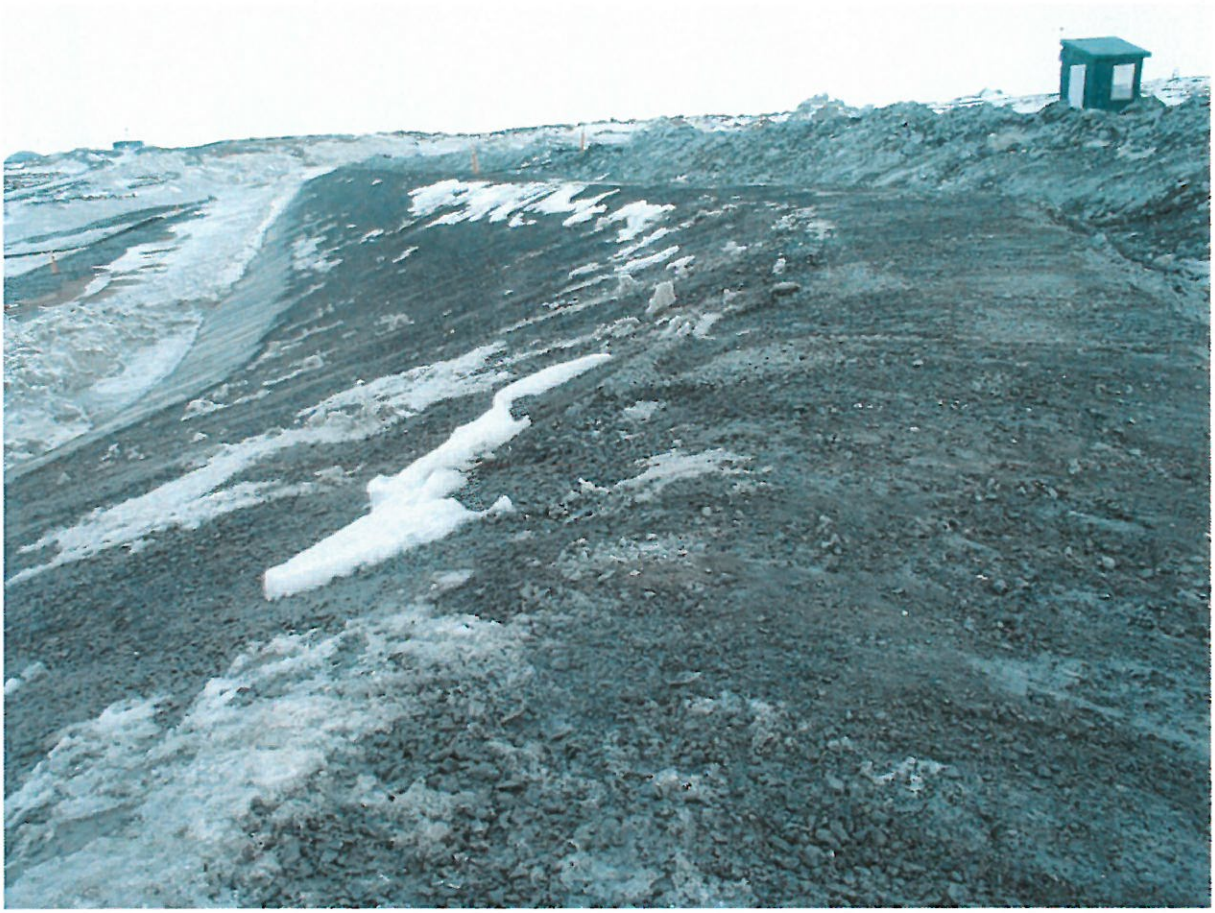
Photograph CD-1867: From Sta. 40+680/-37 m, looking E. View of repair patches on the extrusion weld at the bottom of the panels.

Photograph CD-1868: From Sta. 0+915/-24 m, looking S. Removal of the wet geotextile in place from Sta. 0+935 m to 0+900 m.

Photograph CD-1869: From Sta. 0+915/-30 m, looking W. Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+935 m to 0+900 m.

Photograph CD-1870: From Sta. 0+900/-26 m, looking S. Installation of the LLDPE liner on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+935 m to 0+900 m (panel numbers 820 to 823).

Photograph SD3-303: From Sta. 20+780/-15 m, looking N. View of an LLDPE liner roll stored on geotextile.



Photograph SD3-304: From Sta. 20+620/-36 m, looking SE. Smoothing of the surface of the fine filter with an excavator on top of the upstream slope from Sta. 20+600 m to 20+780 m.

REGISTERED PROFESSIONAL ENGINEER
Y. BOULIANNE
LICENSEE
2018-05-28
NT/NU

Marion Habersetzer, M.Sc.
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https://golderassociates.sharepoint.com/sites/1897439/preparation of deliverables/weekly reports/2018-05-21 to 2018-05-27/south cell/1897439-1577-tm-rev0 qa weekly report south cell 2018-05-21 to 2018-05-27.docx

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QA WEEKLY REPORT

DATE June 4th 2018 1897439-1577-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 WEEKLY REPORT FROM MAY 28TH TO JUNE 3RD – TSF SOUTH CELL CONSTRUCTION MEADOWBANK (1897439)

This document summarizes QA activities performed by Golder from May 28th to June 3rd, 2018 inclusively, related to the construction activities of Saddle Dam 3 (SD3) and Central Dike (CD) at the Meadowbank mine site.

Unless otherwise specified, the construction activities use the centreline of the structures for a dike crest elevation of 150 m for reference (refer to the Drawings). The description of activities refers to the stations and offsets from the centreline (e.g., Sta. 0+500/-50 m). The "+" and "-" symbols indicate the location of the work downstream and upstream of the centreline, respectively.

1.0 GOLDER PERSONNEL ON SITE

Golder personnel on site during this reporting period is summarized in Table 1.

Table 1: Golder Personnel on Site

Name	Comments
Marion Habersetzer	QA Manager (departure on May 29th)
Samuel Barbeau	QA Manager (arrival on May 28th)

2.0 HEALTH AND SAFETY

H&S meetings were held with AEM and FGL/SANA during the daily construction meetings. Minutes from these meetings are recorded and stored in Golder's on-site office. The key H&S elements for the reporting period were as follows:

- 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.
- Material handling risks and procedures was added into the JHA for geosynthetics installation. The JHA was communicated to the Liner Installers.
- It was reiterated that it is unsafe to go into the downstream slope of Central Dike (1.5H:1V) and that surveying in this area can be done with a GPS-equipped excavator.
- There is important heavy equipment coactivity on Central Dike because of geosynthetics installation operations: personnel on foot must make sure to be visible at all time.
- Frozen LLDPE liner is slippery in the morning: be careful when walking on the liner in the upstream slope and do not step on seams. A worker suffered a sprained ankle after slipping on the frozen liner.
- Following a near miss during a night shift between a truck and the grader, it was reiterated to have a clear visual or radio communication with the operator before overtaking a grader.

3.0 SUMMARY OF MAIN DISCUSSIONS IN CONSTRUCTION MEETINGS

Construction meetings were held daily during the reporting period and were attended by the QA Manager. The following items were discussed:

General

- It was pointed out by AEM that the tensiometer used for calibrations of the welding equipment still does not have a calibration certificate on site. AEM repeated the request of this certificate to ZTG.
- When the weather was good (no wind), priority was given to installing LLDPE liner panels. The extrusion and vacuum box testing were postponed and done when the installation was slowed down.
- The QA Manager verified the mechanical properties of the TenCate Mirafi S1600 geotextile planned for the design change regarding the liner erosion protection cover on SD3. The design change required geotextile type Texel 934 or equivalent. As the mechanical properties of the TenCate Mirafi S1600 are inferior to those of the Texel 934, the TenCate Mirafi S1600 is not considered equivalent.

Central Dike

- Due to the adverse weather (strong winds), no geosynthetics could be installed from May 29th PM to May 31st. Geosynthetics installation resumed on June 1st.
- The QA Manager observed a few holes on LLDPE panel 850 after its installation and the fusion weld with panel 849. Panel 850 was the beginning of a new roll. The holes were repaired with extrusion welding. The QA Manager reminded to discard the first few metres of the rolls to ensure that only intact, good quality material is used.

- The QA Manager observed a geotextile panel with a horizontal weld in the slope at Sta. 0+520 m following its installation. The panel was removed and replaced by a new geotextile panel before installing the LLDPE liner panels.

Follow up

- Preparation works for liner installation at SD3 to be completed.
- Calibration certificate of the tensiometer to be provided by ZTG.
- An alternative needs to be found for the TenCate Mirafi S1600 geotextile that is not equivalent to Texel 934.

4.0 SUMMARY OF CONSTRUCTION ACTIVITIES AND TEST RESULTS

Periodic QA inspections to monitor the construction activities and progress were performed by the QA Manager; these are summarized in the tables below.

Table 2: QA Observations for Saddle Dam 3

Activity or Area	Comments
Water management	■ Water is ponding on the first compacted sieved till layer of the upstream toe liner tie-in at approx. Sta. 20+595 m and is partially frozen.

Table 3: QA Observations for Central Dike

Activity or Area	Comments
Geotextile and LLDPE liner installation	■ AM and PM calibration results met Technical Specifications. Loads at failure in peel and shear were greater than minimum values presented in Table 6-2 from Technical Specifications. ■ Removal of the wet geotextile in place from Sta. 0+900 m to 0+870 m. ■ Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+900 m to 0+320 m. The geotextile surface was inspected before being covered with LLDPE. ■ Installation of the LLDPE liner on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+900 m to 0+320 m (panel numbers 824 to 910). The LLDPE was free of folds and holes, except for panel number 850, where a few holes were observed following installation. All holes identified have been

Activity or Area	Comments
	marked and repaired. Seam tests (air channel tests) were carried out under the supervision of the QA Engineer and results met Technical Specifications. ■ The total fusion seam length is about 870 m. The total extrusion fillet seam length is about 540 m. ■ Vacuum box tests were performed from Sta. 0+900 m to 0+740 m. Leaks have been identified on the extrusion fillet seam at the bottom of panel 838 and have been marked and repaired. All repairs were tested with the vacuum box again. ■ Backfilling of the geosynthetics tie-in from Sta. 0+900 m to 0+320 m. ■ Compaction of the geosynthetics tie-in material at El. 145 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta. 40+680 m to 0+480 m. ■ Destructive testing was carried out on samples D-2, D-3, D-4, D-5, D-6 and D-7 collected on the LLDPE geomembrane at Sta. 0+850, 0+760 m, 0+655 m, 0+555 m, 0+450 m and 0+350m (see Table 4). Loads at failure in peel and shear were greater than minimum values presented in Table 6-2 from Technical Specifications. Samples were kept for the Owner's Representative.

Table 4: Details of the Destructive Testing and Repairs

Name	Date Sampled and Tested	Structure	Station	Seam	Comment
D-2	Sampled on May 28th and tested on May 29th	Central Dike	0+855 m	Between panels 830 and 831	Compliant
D-3	Sampled and tested on June 1st	Central Dike	0+760 m	Between panels 845 and 846	Compliant
D-4	Sampled and tested on June 1st	Central Dike	0+655 m	Between panels 860 and 861	Compliant
D-5	Sampled and tested on June 2nd	Central Dike	0+555 m	Between panels 875 and 876	Compliant

Name	Date Sampled and Tested	Structure	Station	Seam	Comment
D-6	Sampled and tested on June 3rd	Central Dike	0+450 m	Between panels 890 and 891	Compliant
D-7	Sampled and tested on June 3rd	Central Dike	0+350 m	Between panels 905 and 906	Compliant

5.0 FOUNDATION APPROVALS

No foundation approval was carried out during the reporting period.

Table 5: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 6 and Table 7 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 6: Samples Taken by the QC

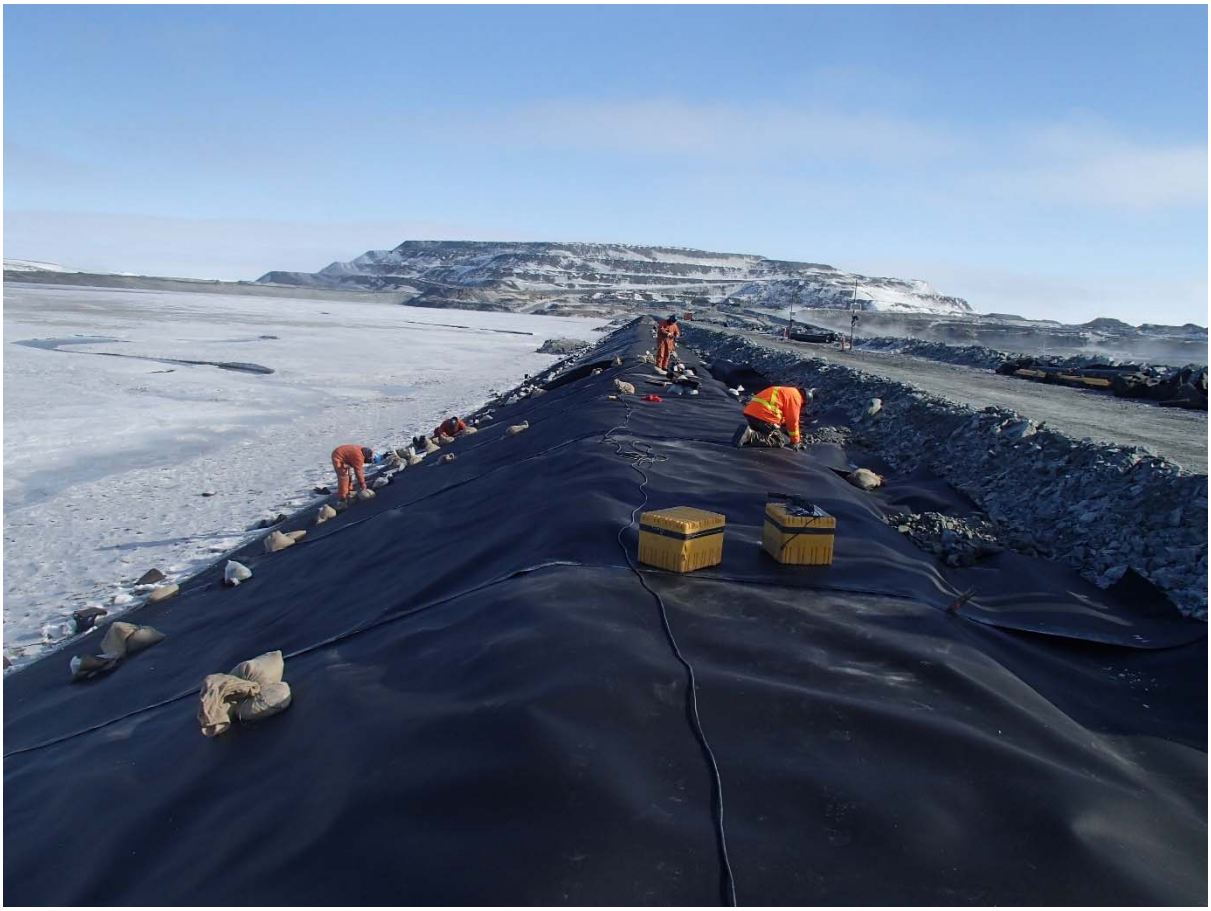
Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

Table 7: Samples Taken by the QA

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

7.0 PHOTOGRAPHS

Photograph CD-1871: From Sta. 0+910/-25 m, looking N. Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+900 m to 0+870 m.

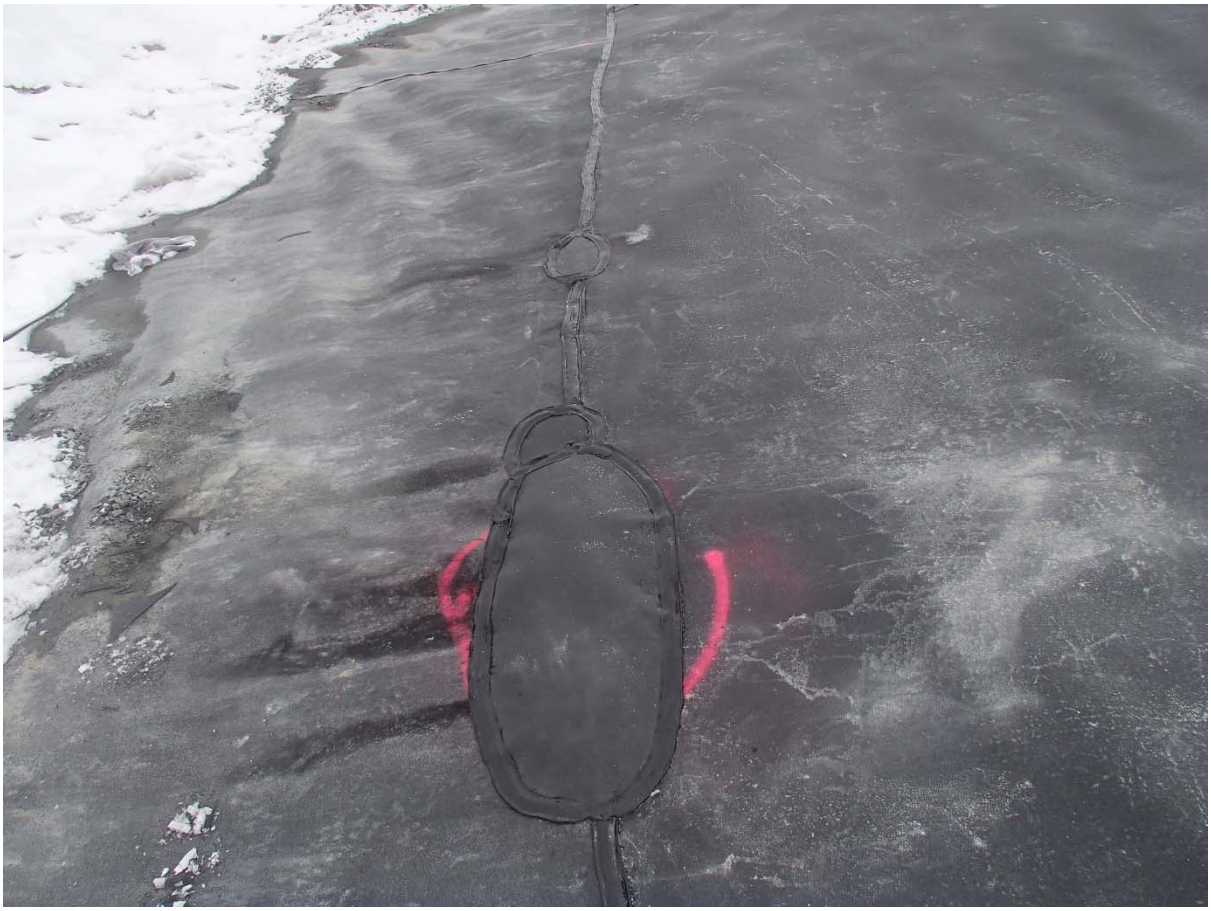


Photograph CD-1872: From Sta. 0+900/-24 m, looking N. Installation of the LLDPE liner on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+900 m to 0+760 m (panel numbers 824 to 844).

Photograph CD-1873: From Sta. 0+760/-26 m, looking N. Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+760 m to 0+740 m.

Photograph CD-1874: From Sta. 0+760/-26 m, looking N. Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+760 m to 0+740 m.

Photograph CD-1875: From Sta. 0+835/-26 m, looking N. View of a vacuum box testing.



Photograph CD-1876: From Sta. 0+820/-26 m, looking N. View of repair patches on the extrusion weld at the bottom of panel 838.

Photograph CD-1877: From Sta. 0+745/-26 m, looking N. Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+740 m to 0+610 m.

Photograph CD-1878: From Sta. 0+720/-24 m, looking N. Installation of the LLDPE liner on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+740 m to 0+610 m (panel numbers 849 to 867).

Photograph CD-1879: From Sta. 0+735/-28 m, looking N. View of the repaired holes on panel 850.

Photograph CD-1880: From Sta. 0+600/-25 m, looking N. Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+610 m to 0+480 m.

Photograph CD-1881: From Sta. 0+530/-27 m, looking N. View of a geotextile panel with a horizontal weld in the slope at Sta. 0+520 m before its removal.

Photograph CD-1882: From Sta. 0+510/-25 m, looking S. View of the emplacement of the geotextile panel with a horizontal weld in the slope at Sta. 0+520 following its removal.

Photograph CD-1883: From Sta. 0+525/-26 m, looking N. Installation of the LLDPE liner on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+610 m to 0+480 m (panel numbers 868 to 886).

Photograph CD-1884: From Sta. 0+530/-25 m, looking S. Backfilling of the geosynthetics tie-in from Sta. 0+610 m to 0+480 m and compaction of the tie-in material with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta. 0+610 to 0+480 m.

Photograph CD-1885: From Sta. 0+460/-26 m, looking N. Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+480 m to 0+320 m.

Photograph CD-1886: From Sta. 0+525/-26 m, looking N. Installation of the LLDPE liner on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+480 m to 0+320 m (panel numbers 887 to 910).

Marion Habersetzer
for: Samuel Barbeau
Mine Waste Group

REGISTERED PROFESSIONAL ENGINEER
Y. BOULIANNE
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NT/NU
2018-06-04

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GOLDER ASSOCIATES LTD.
Signature
Date 2018-06-04
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QA WEEKLY REPORT

DATE June 11th 2018 1897439-1577-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 WEEKLY REPORT FROM JUNE 4TH TO JUNE 11TH – TSF SOUTH CELL CONSTRUCTION MEADOWBANK (1897439)

This document summarizes QA activities performed by Golder from June 4th to June 11th, 2018 inclusively, related to the construction activities of Saddle Dam 3 (SD3) and Central Dike (CD) at the Meadowbank mine site.

Unless otherwise specified, the construction activities use the centreline of the structures for a dike crest elevation of 150 m for reference (refer to the Drawings). The description of activities refers to the stations and offsets from the centreline (e.g., Sta. 0+500/-50 m). The "+" and "-" symbols indicate the location of the work downstream and upstream of the centreline, respectively.

1.0 GOLDER PERSONNEL ON SITE

Golder personnel on site during this reporting period is summarized in Table 1.

Table 1: Golder Personnel on Site

Name	Comments
Samuel Barbeau	QA Manager (departure on June 12th)

2.0 HEALTH AND SAFETY

H&S meetings were held with AEM and FGL/SANA during the daily construction meetings. Minutes from these meetings are recorded and stored in Golder's on-site office. The key H&S elements for the reporting period were as follows:

- 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.
- There is important heavy equipment coactivity on Central Dike because of geosynthetics installation operations: personnel on foot must make sure to be visible at all time.
- Frozen LLDPE liner is slippery in the morning: be careful when walking on the liner in the upstream slope and do not step on seams.
- AEM reiterated to keep a 75 m safety distance when following a haul truck.
- Fog in the morning: reduce speed while driving and increase distance with other vehicles.
- A backhoe circulated on the North Cell tailings last week. AEM produced a Near Miss report.
- An operator wasn't answering his radio. After an inquiry, it was found out the operator has an audition problem and was not wearing his hearing aid. AEM reiterated the importance of reporting if an employee appears to be unfit for duty.
- Grizzlies were spotted near Vault on June 11th. AEM informed their 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 SUMMARY OF MAIN DISCUSSIONS IN CONSTRUCTION MEETINGS

Construction meetings were held daily during the reporting period and were attended by the QA Manager. The following items were discussed:

General

- When the weather was good (no wind), priority was given to installing LLDPE liner panels. The extrusion and vacuum box testing were postponed and done when the installation was slowed down.
- The QA Manager and QC personnel left the site on June 12th.

Central Dike

- An underlying liner has been cut at around Sta. 0+160 to drain the water (see photograph below) and is overlapped by the new panel 933.
- The QA Manager observed holes on the LLDPE liner panels 832, 833, 834, 879, 883 and 922. All holes were marked in paint, repaired and vacuum tested.
- Water leaking from extrusion fillet seams were noticed by the QA Manager at the bottom of panels 803, 807, 808, 810, 814, 815, 816 and 818. All leaks were marked with paint, repaired and vacuum tested.
- The installation of geosynthetics at Central Dike was completed on June 9th.

- The QA Manager observed a few rocks in direct contact with the liner following the construction of the deposition fingers on Central Dike and asked SANA's foreman to remove them.
- The QC Personnel observed that the compaction of the backfilling of the geosynthetics tie-in on Central Dike from approx. Sta 0+950 m to 1+050 m was inadequate and informed SANA's foreman. It will be compacted tomorrow.

Saddle Dam 3

- The water runoff from a melting snow berm north of SD3 was flowing into the small pond on the first compacted sieved till layer of the upstream toe liner tie-in at approx. Sta. 20+595 m. A temporary trench was dug to deviate the water flow to allow for the dewatering of the pond before the installation of the LLDPE.The water ponding was then pumped out. A Genset Frost-fighter heated the sieved till layer and a pump evacuated the water.
- The SD3 upstream slope liner bedding was surveyed by SANA's surveyor.
- The installation of geosynthetics at Saddle Dam 3 began on June 6th and was completed on June 9th.
- Due to the overlap of the panels caused by the geometry of the mound where SD3 is curved toward the inside of the cell because of the fault in the bedrock foundation, the geotextile panels were spot-welded together with at least 450 mm overlap from 20+620 m to 20+625 m (approx.). Welding with the dual hot wedge instrument would have required a lot of cutting of geotextile resulting in loss of time and increased risk of perforating the LLDPE liner underneath.
- The QA Manager observed a depression on the compacted sieved till layer of the upstream toe liner tie-in at approx. Sta. 20+595 m where the pump evacuated the water for three days. The depression is approximately 3 m wide by 5 m long and 0.15 m deep. It was filled with compacted sieved till. As no portable nuclear gauge was present on site, a sample was taken for water content analysis and gradation, and no compaction test could be done. Compaction tests will be required on the compacted sieved till before the next phase of construction for the installation of the LLDPE liner protection cover on SD3.
- The QA Manager observed holes on panel 943. They were marked with paint and repaired, and were vacuum tested.
- Sample D-12 was collected on a seam of questionable quality at the bottom of panel 949 at Sta. 20+700 m (approx.) at the QA Manager's request. As the section of the seam of questionable quality was about 0.1 m, long, only two coupons were collected and no intact samples could be kept for the Owner's Representative. Destructive testing failed. Seams of similar questionable quality at the bottom of panels 934, 948, 949 and 952 were repaired and vacuum tested.
- The QA Manager observed bubbles in the extrusion seam between panel 965 and the existing LLDPE panel at Sta. 20+595 m (approx.). The seam was repaired and successfully vacuum tested.
- The work for the installation of the LLDPE liner protection cover on SD3 and the completion of the upstream toe liner tie-ins are scheduled for July 16th to August 6th. The QA Manager reiterated that the first class

sieved till stockpile's surface should be scraped with an excavator as it thaws to ensure that the till will be fully thawed on time for the completion of the upstream toe-liner tie-ins on SD3 planned for July 16th.

- The TenCate Mirafi S1600 is not considered suitable for the design change of the liner erosion protection cover. According to AEM, it is not possible to deliver another type of geotextile to the site on time for the construction at the end of July, as the barges are already full. An alternative solution will need to be found with the agreement of the Designer.

Follow up

- Calibration certificate of the tensiometer to be provided by ZTG.
- An alternative solution needs to be found for the TenCate Mirafi S1600 geotextile that is not equivalent to Texel 34.
- Portable nuclear gauge compaction tests will be required on the compacted sieved till around Sta. 20+595 m, El. 143.3 m, identified on the blue hatched area in Figure 1, before the next phase of construction for the installation of the LLDPE liner protection cover on SD3.

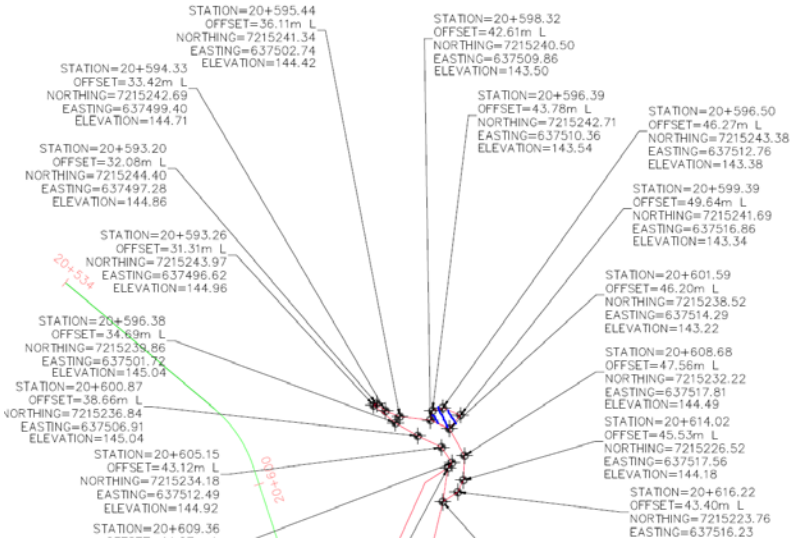


Figure 1: Sketch of the area to test with the portable nuclear gauge

4.0 SUMMARY OF CONSTRUCTION ACTIVITIES AND TEST RESULTS

Periodic QA inspections to monitor the construction activities and progress were performed by the QA Manager; these are summarized in the tables below.

Table 2: QA Observations for Saddle Dam 3

Activity or Area	Comments
Water management	■ The water ponding on the first compacted sieved till layer of the upstream toe liner tie-in at approx. Sta. 20+595 m was pumped out.
Upstream toe liner tie-in	■ Placement of a 0.15 m thick lift of compacted sieved till from Sta. 20+596.4 m to 20+601.6 m (offset -42.6 to -46.3 m) to fill the depression in the compacted sieved till layer. ■ Compaction of the 0.15 m-thick lift of compacted sieved till with a 10-tonne smooth-drum compactor without vibration (4 passes) from Sta. 20+596 m to 20+601 m. PNG tests were not conducted and will need to be conducted with the PNG before the next step of construction.
Upstream	■ Correction of the surface of the fine filter with a hand rake on the upstream slope from Sta. 20+590 m to 20+600 m. ■ Correction of the surface of the fine filter in the upstream slope and the top of the first class compacted sieved till layer with an excavator from Sta. 20+803 m to 20+793 m.
Geotextile and LLDPE liner installation	■ AM and PM calibration results met Technical Specifications. Loads at failure in peel and shear were greater than minimum values presented in Table 6-2 from Technical Specifications. ■ Installation of the geotextile on the upstream slope 3H:1V between El. 143 m and 145 m from Sta. 20+592 m to 20+807 m. The geotextile surface was inspected before being covered with LLDPE. ■ Installation of the LLDPE liner on the upstream slope 3H:1V between El. 143 m and 145 m from Sta. 20+592 m to 20+807 m (panel numbers 934 to 967). The LLDPE was free of folds and holes. Seam tests (air channel tests) were carried out under the supervision of the QA Manager and results met Technical Specifications. ■ The total fusion seam length was about 400 m. The total extrusion fillet seam length was about 190 m. ■ Repairs on the extrusion fillet seam between LLDPE panel 965 and the existing LLDPE panel at Sta. 20+600 m (approx.).

Activity or Area	Comments
	■ Vacuum box tests have not been performed yet. ■ Backfilling of the geosynthetics tie-in from Sta. 20+592 m to 20+807 m. ■ Compaction of the geosynthetics tie-in material at El. 145 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta. 20+592 m to 20+807 m. ■ Destructive testing was carried out on samples D-9, D-10 and D-11 collected on the LLDPE geomembrane at Sta. 20+615 m, Sta. 20+695 m and Sta. 20+795 m (see Table 4). Loads at failure in peel and shear were greater than minimum values presented in Table 6-2 from Technical Specifications. The samples were kept for the Owner's Representative. ■ Supplementary destructive testing was carried out on sample D-12, collected on a seam of questionable quality at the bottom of the LLDPE geomembrane panel 949 at Sta. 20+700 m at the request of the QA Manager (see Table 4). Loads at failure in shear were inferior to minimum values presented in Table 6-2 from Technical Specifications. ■ Seams of similar questionable quality at the bottom of panels 934, 948, 949 and 952 were repaired and vacuum tested.

Table 3: QA Observations for Central Dike

Activity or Area	Comments
Geotextile and LLDPE liner installation	■ AM and PM calibration results met Technical Specifications. Loads at failure in peel and shear were greater than minimum values presented in Table 6-2 from Technical Specifications. ■ Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+320 m to 0+160 m. The geotextile surface was inspected before being covered with LLDPE. ■ Installation of the LLDPE liner on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+320 m to 0+160 m (panel numbers 911 to 933). The LLDPE was free of folds and holes. Seam tests (air channel tests)

Activity or Area	Comments
	were carried out under the supervision of the QA Engineer and results met Technical Specifications. ■ Repairs on the extrusion fillet seam at the bottom of the LLDPE liner panels 803, 807, 808, 810, 814, 815, 816 and 818. ■ Repair of holes on the LLDPE liner panels 832, 833, 834, 879, 883 and 922. ■ The total fusion seam length was about 230 m. The total extrusion fillet seam length was about 240 m. ■ Vacuum box tests were performed from Sta. 0+740 m to 0+160 m. All leaks identified have been marked and repaired. All repairs were successfully tested with the vacuum box again. ■ Backfilling of the geosynthetics tie-in from Sta. 0+320 m to 0+160 m. ■ Compaction of the geosynthetics tie-in material at El. 145 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta. 40+670 to 0+160 m. ■ Destructive testing was carried out on sample D-8 collected on the LLDPE geomembrane at Sta. 0+240 m (see Table 4). Loads at failure in peel and shear were greater than minimum values presented in Table 6-2 from Technical Specifications. Sample was kept for the Owner's Representative.

Table 4: Details of the Destructive Testing and Repairs

Name	Date sampled and tested	Structure	Station	Seam	Comment
D-8	Sampled on June 4th and tested on June 5th	Central Dike	0+240 m	Between panels 920 and 921	Compliant
D-9	Sampled on June 7th and tested on June 8th	Saddle Dam 3	20+615 m	Between panels 935 and 936	Compliant
D-10	Sampled and tested on June 8th	Saddle Dam 3	20+695 m	Between panels 948 and 949	Compliant

D-11	Sampled and tested on June 8th	Saddle Dam 3	20+795 m	Between panels 959 and 960	Compliant
D-12	Sampled and tested on June 8th	Saddle Dam 3	20+700 m	Bottom extrusion seam of panel 949	Non-compliant. The seam was repaired and vacuum tested.

5.0 FOUNDATION APPROVALS

Four foundation approvals were carried out during the reporting period.

Table 5: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment
FND-SD3-37	Saddle Dam 3	Sta. 20+610.15 m to 20+803.45 m (offset -43.01 m to -25.29 m)	2018-06-06	Upstream slope approved for geosynthetics installation
FND-SD3-38	Saddle Dam 3	Sta. 20+593.20 m to 20+617.31 m (offset -49.64 m to -32.08 m)	2018-06-08	Upstream slope approved for geosynthetics installation under conditions
LLDPE-SD3-003	Saddle Dam 3	Sta. 20+592 to 20+807 m /offset -31 to -50 m	2018-06-10	Compliant
LLDPE-CD-31	Central Dike	Sta. 0+157 to 1+077 m /offset -21 to -44 m	2018-06-10	Compliant

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 6 and Table 7 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 6: Samples Taken by the QC

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
	2018-06-08	2018-06-11			Gradation	Compliant

ST-443-2018			Compacted sieved till	Sta. 20+601.59m /-46.2 m El. 143.22 m	Water content	9.2%
ST-445-2018	2018-06-09	2018-06-11	Compacted sieved till	Stockpile (SANA Crusher)	Gradation	Compliant
					Water content	10.3%

Table 7: Samples Taken by the QA

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
ST-444-2018	2018-06-08	2018-06-11	Compacted sieved till	Sta. 20+601.59m /-46.2 m El. 143.22 m	Gradation	Compliant
					Water content	10.8%
ST-446-2018	2018-06-09	2018-06-11	Compacted sieved till	Stockpile (SANA Crusher)	Gradation	Compliant
					Water content	13.0%

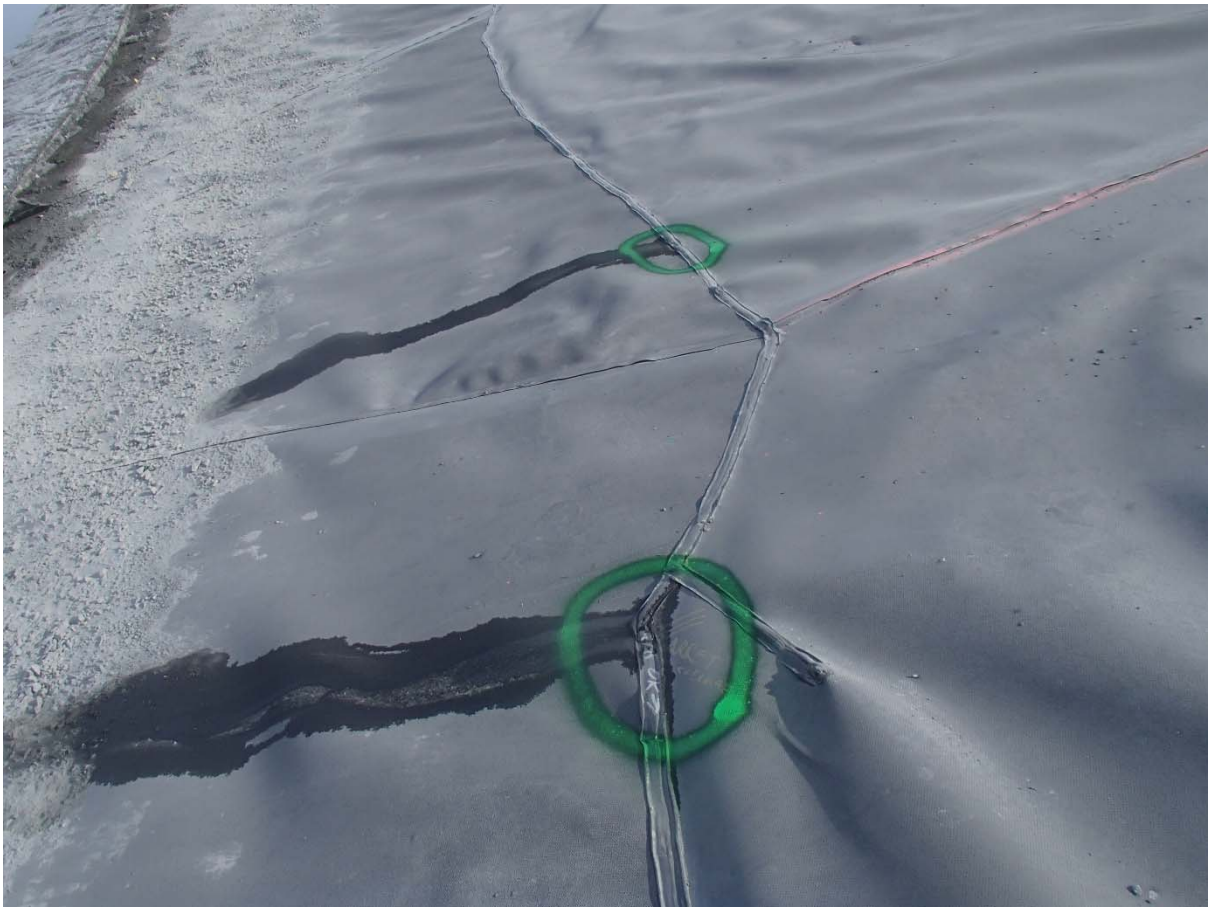
7.0 PHOTOGRAPHS

Photograph CD-1887: From Sta. 0+310/-26 m, looking N. Installation of the geotextile on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+320 m to 0+150 m.

Photograph CD-1888: From Sta. 0+525/-26 m, looking N. Installation of the LLDPE liner on the upstream slope 2H:1V between El. 143 m and 145 m from Sta. 0+320 m to 0+150 m (panel numbers 911 to 933).

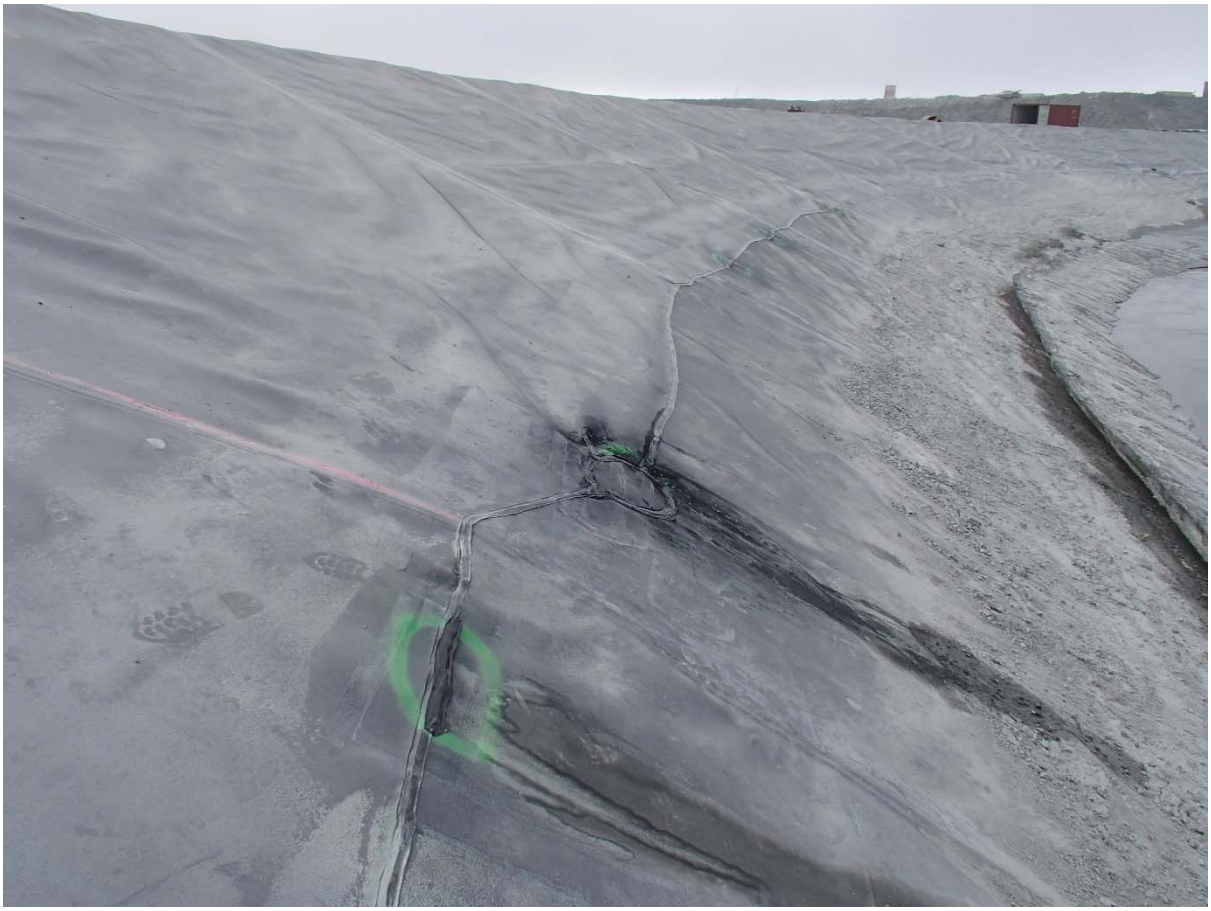
Photograph CD-1889: From Sta. 0+150/-28 m, looking N. View of the underlying liner that has been cut at around Sta. 0+160 m to drain the water.

Photograph CD-1890: From Sta. 0+310/-26 m, looking N. View of the extrusion welding.



Photograph CD-1891: From Sta. 0+960/-28 m, looking N. View of leaking extrusion fillet seam before their repair on panels 816 and 818.

Photograph CD-1892: From Sta. 0+155/-32 m, looking S. View of the liner panel 933 overlapping the underlying liner that has been cut at around Sta. 0+160 m to drain the water.



Photograph CD-1893: From Sta. 0+950/-27 m, looking SW. View of repair patches on the extrusion weld at the bottom of panels 803, 807, 808, 810, 814, 815, 816 and 818.

Photograph CD-1894: From Sta. 0+800/-28 m, looking E. View of a rock in direct contact with the LLDPE liner following the construction of the deposition fingers on Central Dike.

Photograph CD-1895: From Sta. 40+670/-15 m, looking E. Compaction of the geosynthetics tie-in material at El. 145 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta. 40+670 m to 0+950 m (approx.).

Photograph SD3-305: From Sta. 20+610/-48 m, looking NW. Dewatering of the water ponding on the first compacted sieved till layer of upstream toe liner tie-in. A Genset Frost-fighter is heating the sieved till layer and a pump is evacuating the water.

Photograph SD3-306: From Sta. 20+780/-25 m, looking S. Correction of the surface of the fine filter in the upstream slope and the top of the first class compacted sieved till layer with an excavator from Sta. 20+803 m to 20+793 m.

Photograph SD3-307: From Sta. 20+800/-25 m, looking N. View of the liner bedding ready for geosynthetics installation.