



SNC • LAVALIN

SITE REPORT (Detailed)

20180909-DS-SR

Document number

09/09/2018 6AM/6PM 658309 A.Arbaiza

Visit date Time (Start/End) Project No. Prepared by

WTD Construction Agnico Eagle

Project Client

SNC-Lavalin KCG (SP by HED)

Consultant Contractor

Weather : ☒ Sunny ☒ Cloudy ☒ Rain ☐ Storm ☒ Snow ☐ Glaze

Wind : ☐ None gusts ☐ Light ☒ Moderate ☐ Strong, Temperature : °C

Comments :

Appendix : ☐ Yes ☒ No Pictures ☒ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ No activity on the dike. HED has been trying to make their batch plant work. At the end of the shift they started to mix some Bentonite in the Batch mixer #1 and some cement in batch mixer #2. These are just tests and AEM or the contractor required any controls from QA/QC.
→ QA (GHD and KCG) did the inventory of the CB Seams and it was clarified that Barakade is in fact Bentonite and that Cement-Bentonite seams only contained Bentonite, therefore the total of ~~the~~ seams are :

- Bentonite = 32
- Cement HE = 21
- Cement GU = 22

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No Subject Given to
QC from KCG marked all the seams again to avoid confusion.
→ No water levels were taken today.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

SAFE AND SAFETY REMARKS

Inspect pick-ups every shift to avoid accidents.

Issued by :

[Signature]

Signature

09/09/2018

Date

Verified by :

Signature

Date

SKETCH



SNC • LAVALIN

SITE REPORT
(Detailed)

20180910-NS-SR

Document number

10/09/2018

Visit date

6PM/6PM

Time (Start/End)

658309

Project No.

J. LEBLANC

Prepared by

Project

SNC-Lavalin

Consultant

Agnico Eagle

Client

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☒ Snow

☐ Glaze

Wind :

☐ None

gusts

☒ Light

☒ Moderate

☐ Strong,

Temperature : -2 °C

Comments :

Appendix :

☐ Yes

☒ No

Pictures

☐ Yes

☒ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ No activity on the dike. HD should be able to do some mix at the batch plant and some injection for the secant piles at the day shift.

→ QA asked the surveyor for water level measurements, even if AEM is monitoring:
• Downstream (North): 152.71m
• Upstream (South): 152.75m.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
WTL water elevation	u/s = 152.75m d/s = 152.71m	

SAFE AND SAFETY REMARKS

The office entrance is very slippery because of snow precipitation. Be aware when coming in and getting out of the office.

Issued by :

Jonathan Leblanc
Signature

2018-09-10.

Date

Verified by :

Signature

Date

SKETCH

20180910-DS-SR

Document number

10/09/2018	6AM/6PM	658309	A. Arboliza
Visit date	Time (Start/End)	Project No.	Prepared by
WTD construction		Agnico Eagle	
Project		Client	
SNC-Lavalin		KCG (SP by HD)	
Consultant		Contractor	

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature : 0 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☒ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- KCG worked on moving the finished permeadone and the construction of the second permeadone.
- HD had some problems with the screen in their batch plant during the morning and in the afternoon they were ready to make a batch. the mud balance was according to specs but mesh viscosity was 113 for the first batch. the contractor has a good pump therefore it was easy to place. the plan is to fill the trench for the night shift.
- Some depth of piles need to be checked (see excel file). to be done by NS.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

crabbing placement

west abutment trench.

Batch #01.

SAFE AND SAFETY REMARKS

Ground is very slippery due to snow and frost. Be aware of your surroundings.

Issued by :

[Signature]

Signature

10/09/2018

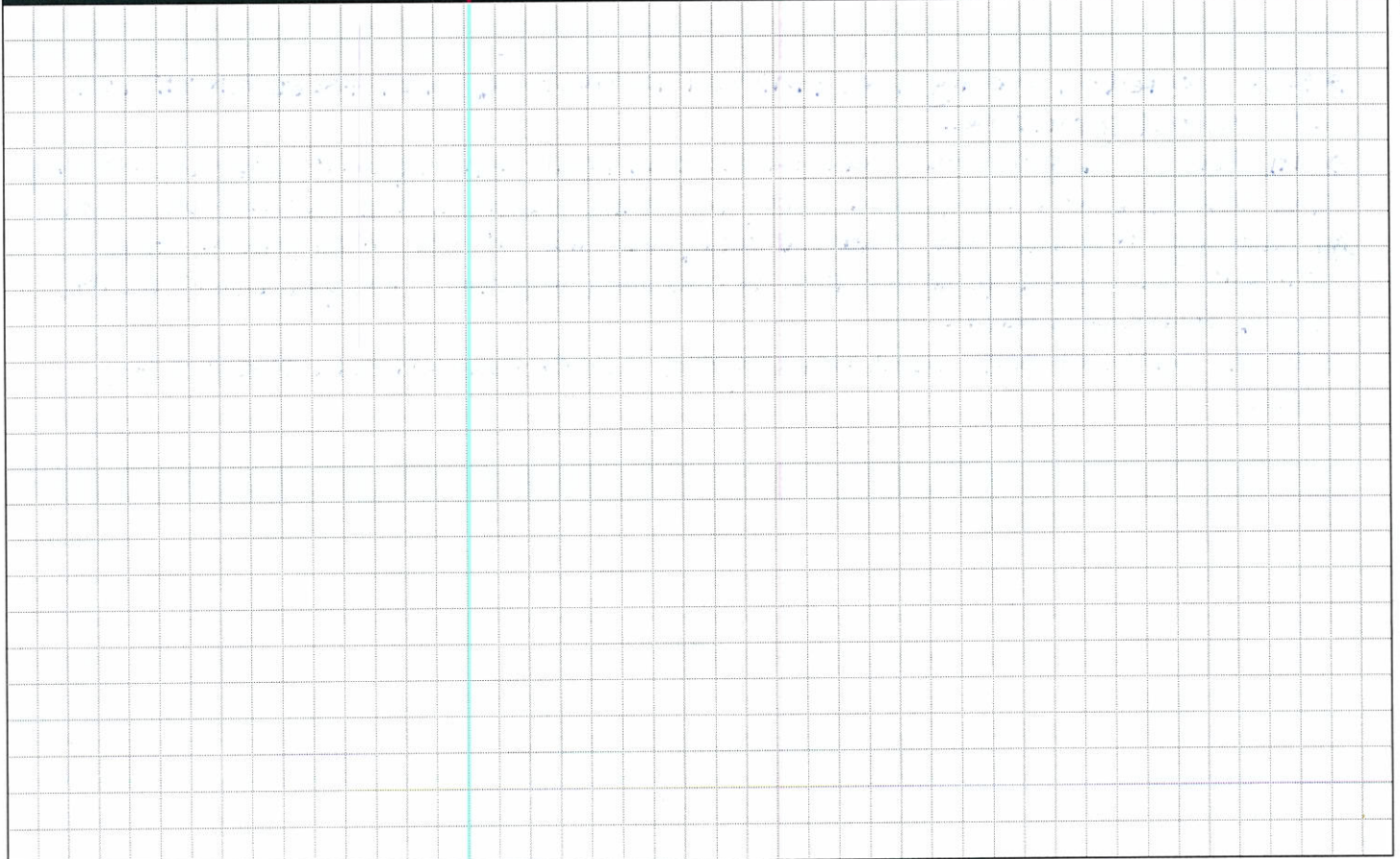
Date

Verified by :

Signature

Date

SKETCH





SNC-LAVALIN

SITE REPORT (Detailed)

201809#NS-SR

Document number

11/09/2018 6PM-6AM 658309 J. LEBLANC

Visit date

Time (Start/End)

Project No.

Prepared by

WRD Construction

Agnico Eagle

Project

Client

SNC-Lavalin

KCG

Consultant

Contractor

Weather :

☐ Sunny

☐ Cloudy

☒ Rain

☐ Storm

☒ Snow

☐ Glaze

Wind :

☐ None gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : 0 °C

Comments :

Appendix :

☐ Yes

☒ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Secant piles 0009 and 0013 were measured again by QC rep. The rock socket is not deep enough by 0.13m and 0.12m respectively. HD drilling^{team} was not on the dike during NS (only one member of HD's team for the pump on the dike).
- The second drill has been moved on the dike and is ready to go. The third one is not assembled yet.
- batches has been prepared at the plant (batch 3 to batch 7). QC representatives took samples on batch #2 and #6. From batch #6, the bentonite slurry was too liquid. There is some problem in the bentonite slurry tank as the dry bentonite goes straight to the bottom of the tank...

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to reject

- ... without being properly mixed with water. HD decided to ~~dump~~ batch #07, empty and clean the bentonite slurry tank and start over by mixing more gradually dry bentonite with water to avoid accumulation at the bottom of the tank
- Test results on CB mix batches have been compiled by QC representatives. Compilation files will be send to QA rep. (as asked by the QA rep.).
- Time lapse between 2 batches : about ~~2h30, 2h00~~ 1h30, 2h00

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

CB Slurry placement

West abutment trench.

batch # 03 to # 7

SAFE AND SAFETY REMARKS

Slippery surface with snow and frost. Beware especially close to the slurry trench.

Issued by :

Jonathan Leblanc
Signature

2018-09-11

Date

Verified by :

Signature

Date

SKETCH

* After batch 7, they stopped (HD) the production of CB mix because they cannot fix the problems with Bentonite slurry production. ~~And~~ One of the member of HD's crew think the issue might be related with the cold temperature.



SNC • LAVALIN

SITE REPORT
(Detailed)

20180911-DS-SR

Document number

11/09/2018 6AM/6PM 658309 A. Arcaiz

Visit date

Time (Start/End)

Project No.

Prepared by

WTD construction

Project

Agnico Eagle

Client

SNC-Lavalin

Consultant

KGG (OSP by HD)

Contractor

Weather :

☒ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☒ Snow

☐ Glaze

Wind :

☐ None
gusts

☒ Light

☐ Moderate

☐ Strong,

Temperature : 20 °C

Comments :

Appendix :

☐ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ Batch plant was not working since 1am (NS) and did not work during the entire day shift. therefore there was no activity in the dike. the placed CB slurry in the west abutment + trench stopped at el. 156.5 from st. 0+072 to 0+092.

→ Some corrections had to be done in the bedrock elevation. Refer to section pile approval procedure - Draft version. Due to this, casings 0009 and 0013 have to be drilled 160 mm and 240 mm deeper respectively.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements

water level

Location

DL = 152.67 ULS = 152.74

Scope and comments

Date taken = 11 of sept.

SAFE AND SAFETY REMARKS

Slippery surfaces due to snow and cold temperature. Be aware on where and how you step on.

Issued by :

[Signature]

Signature

11/09/2018

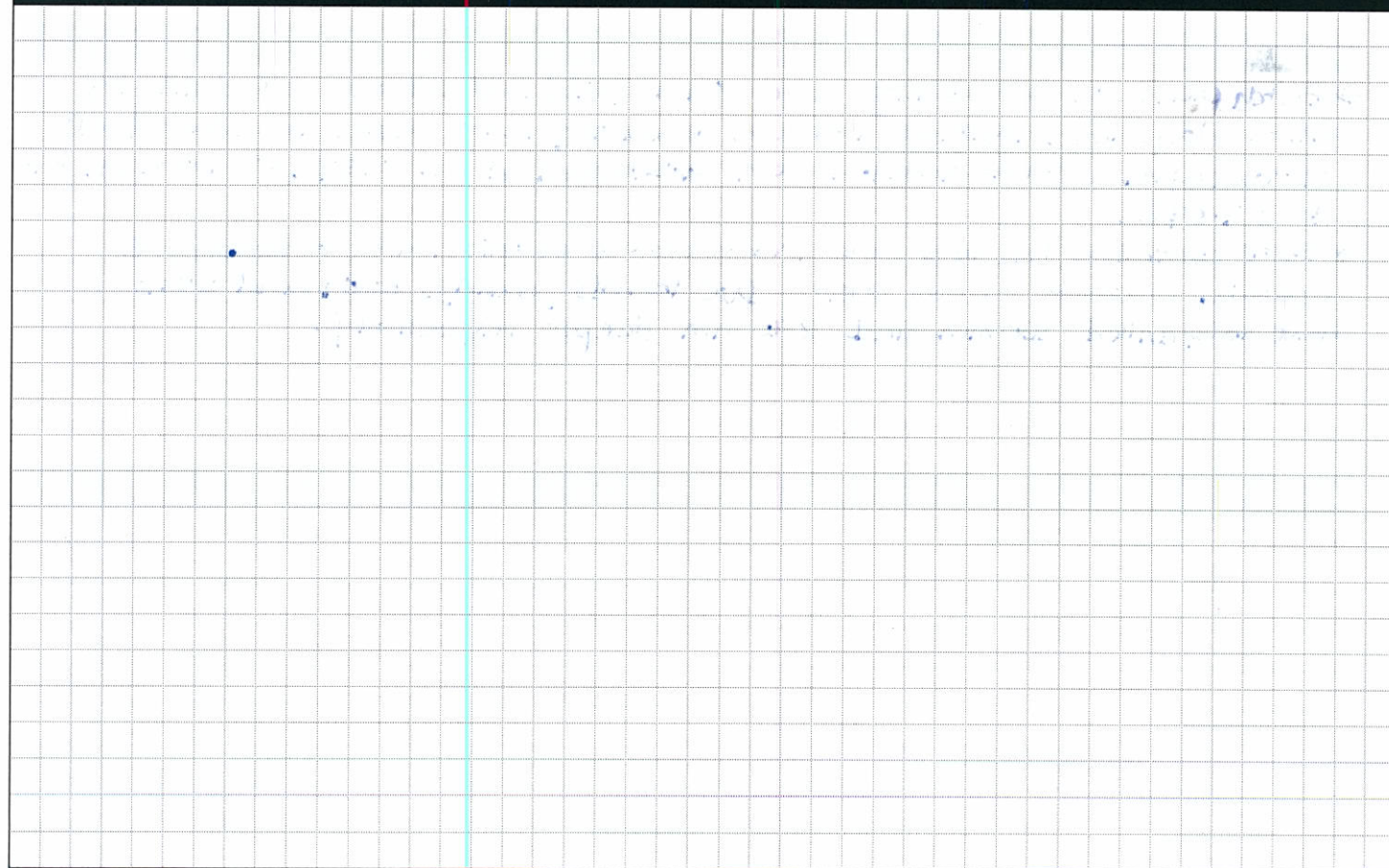
Date

Verified by :

Signature

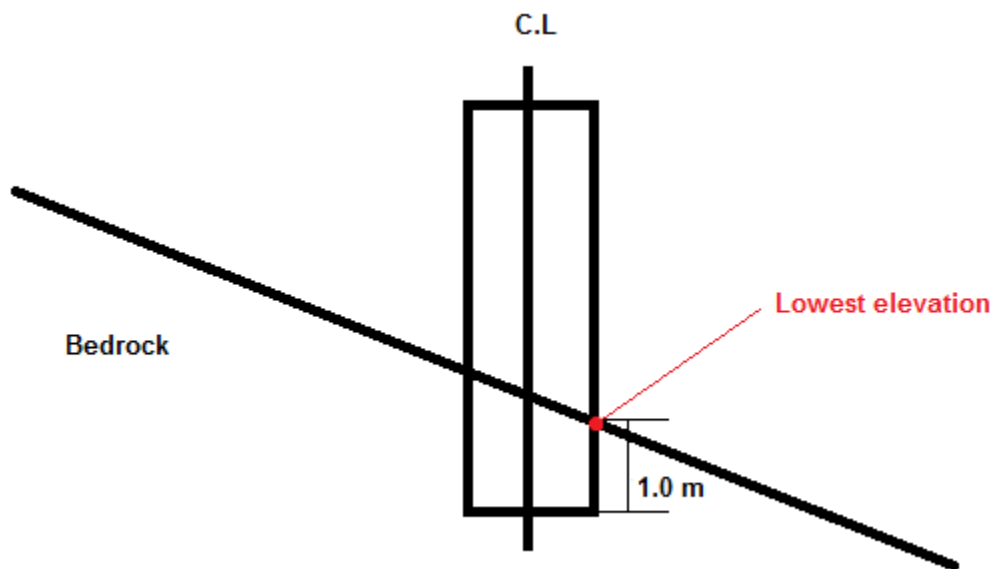
Date

SKETCH



Secant Pile Approval procedure - DRAFT

- 1- **Approved Foundation** | The bathymetry of the bedrock done by the surveyor was not treated (there are some noise with high and low peaks). KCG is aware of this and is cleaning their bedrock surface survey. *Result: KCG will send an excel file with clean approved bedrock profile.*
- 2- **Review of pile depth** | The lowest elevation of bedrock where a one meter pile will be located is being taking into consideration as implementation point for the piles instead of taking the center line point, which was giving higher elevations and the 1.0 m bedrock socket was not being respected. *Result: KCG should send an excel file with the new depth of bedrock to attain by pile (excel file: WT_SCEACANT PILES LISTING WITH QUANTITIES.xlsx).* The following sketch demonstrates the change.

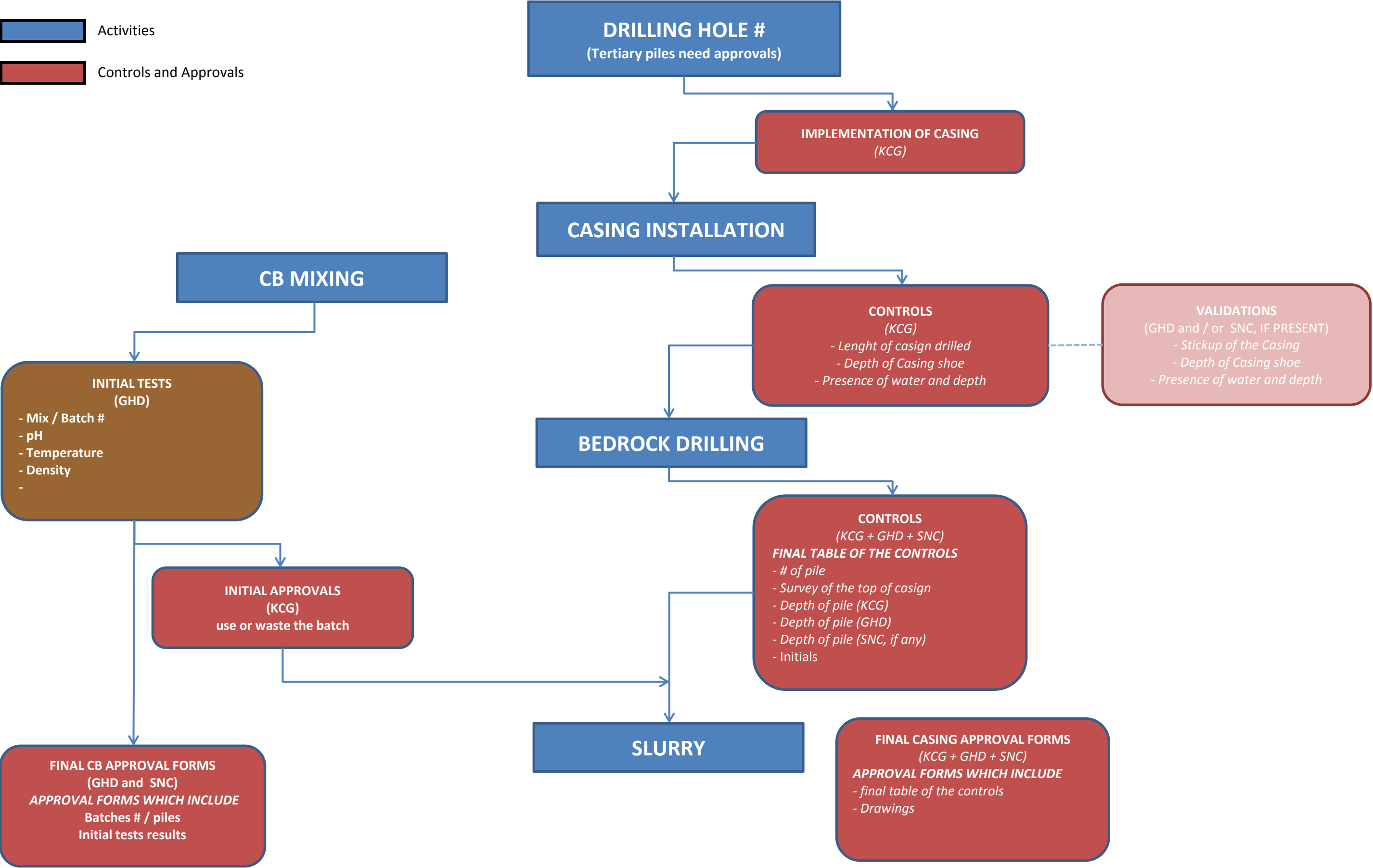
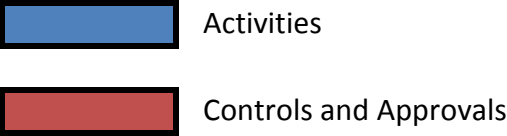


The surveyor (KCG) will then implement these depths on the dike by using a nail on the ground indicating the center of the casing and a flag indicating the depth to attain. Henry Drilling (HD) will then drill place the casing and drill down to bedrock. They usually penetrate the bedrock with their casing about 4 cm and then they use their rock hammer to go down 1.0 m down to bedrock. During this process HD records the length of the casing, the casing depth, the rock depth, if water is encountered, etc. This is all recorded in their drill logs. Ideally, QC should be present at all times during this process. **Sector with uncertainties (where bedrock may not have been reached after cleaning process) have to get stringent controls (QA and QC shall be present).**

- 3- Once HD has finished the drilling and rock hammer, the surveyor (KCG) has to survey the deviation of the pile by surveying the lip of the casing in 4 points (refer to document: CON-MET-010 - Survey procedure for drilling pipe installation.pdf) and survey the top of the casing with the total station. The QC (and / or QA) has to measure the depth of the bedrock socket from the top of the casing and should use the elevation of the top of the casing

(surveyed by KCG) and subtract the measured depth by tape. This elevation should be compared to the theoretical bedrock (as per elevation shown on the excel file discussed on point 2 - *WT_SEACANT PILES LISTING WITH QUANTITIES.xlsx*). It should be noted that KCG has another excel file to calculate the deviation per pile (refer to document: *SECANT PILES CALCUL TABLE.xlsx*). This document records the maximum elevation of the casing to therefore obtain the bottom of the rock socket. QA/QC should initial the drill log of HD per pile ONLY if the elevation to bedrock has been attained. The maximum tolerance is of 100 mm for the depth of the bedrock socket. After approval of this, HD can pour CB slurry in the secant pile/trench. QA can then collect all the drill logs that were approved and create an approval form for the total of piles that were drilled and where CB slurry was placed. Ideally, there will only be one approval form per shift to approve the drilling of the casings and the drill logs should be in appendix.

- 4- After, CB slurry backfilled in the secant pile/trench and after receiving the results of the testing (about 7 days), there will be an additional approval form that will approve a number of secant piles by approving the placement of CB slurry, the results of the tests (received by GHD), the deviation of the pile (refer to document: *SECANT PILES CALCUL TABLE.xlsx* and the as built drawings that will be sent by KCG). It should be noted that the as built is necessary once the tertiary piles have been put in place since this is where the gaps in the cutoff wall will be seen. If any gaps are encountered, then quarterly piles will have to be drilled to cover the gap. It will be required to have the as built once the primary and secondary piles have been drilled so that the tertiary pile can be adjusted based on deviation and location of the primary and secondary.





SNC • LAVALIN

SITE REPORT
(Detailed)

20180912-NS-SR

Document number

Visit date 2018-09-12 Time (Start/End) 6AM-6AM Project No. 658309 Prepared by J. Leblanc

Project WTD Construction Client Agnico Eagle

Consultant SNC-Lavalin Contractor KCG

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature : -1 °C

Comments :

Appendix : ☒ Yes ☐ No Pictures ☒ Yes ☐ No Inspection report or other :

Approval Form

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- No production at batch plant tonight.
- DTH Hammer in secant piles 0009 and 0013. Qc rep. measured the depth of the bottom of rock socket. Rock socket is now deep enough in both secant piles (see sketch and spreadsheet compilation file).
- Secant pile 0065 was measured again. Measurement is consistent with the one previously taken during the last DS.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements

Secant Piles Elevation
bottom of rock socket

Location

Primary piles
0009 to 0065

Scope and comments

Reach appropriate
Elevation- see
Approval Form. Ready
for CB mix injection.

SAFE AND SAFETY REMARKS

Watch out if using pick up truck 10-0016. The beacon
is working 1 time out of 2. Be sure that it is
functioning properly. If not, ask for a pick-up change.

Issued by :

Jonathan L. Blane
Signature

2018-09-12

Date

Verified by :

Signature

Date

SKETCH

Secant Pile
0009
0013

Bottom bedrock TOC(m)
5.15
5.08

El. bottom rock socket(m)
153.28
152.90

Elevation of the bottom of rock socket as per last excavation of
bedrock :

0009 = 153.32m
0013 = 152.86m



SNC-LAVALIN

SITE REPORT
(Detailed)

20180913-NS-SR

Document number

Visit date: 2018-09-13 Time (Start/End): 18:00/6:00 Project No.: 658309 Prepared by: M. JÉZÉQUEL

Project: WTD CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather: ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze
Wind: ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature: -2 °C

Comments:

Appendix: ☐ Yes ☒ No Pictures: ☒ Yes ☐ No Inspection report or other:

+ VIDEOS OF
TORVANE TESTS

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ No QA INSPECTOR WAS ON SITE DURING THE LAST DAY SHIFT (2018-09-12) DUE TO CREW CHANGE. HOWEVER, QC REPRESENTATIVES REPORTED THAT NO ACTIVITY OCCURED DURING THAT SHIFT.

→ THERE WAS NO ACTIVITY ON THE DIKE TONIGHT. NO CB MIX WAS PRODUCED AT THE BATCH PLANT.

→ QC REPRESENTATIVES CONDUCTED TORVANE TESTS ON CB SAMPLES IN ORDER TO ASSESS SHEAR STRENGTH AS A FUNCTION OF TIME IN WARM CURE CONDITIONS (21°C +/- 2°C). THOSE SAMPLES WERE TAKEN DURING NIGHT SHIFT OF SEPTEMBER 11, 2018.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

WEAR SAFETY GLASSES AT ALL TIME IN THE LABORATORY: PIECES OF CB MIX CAN BE PROJECTED IN THE AIR DURING TORVANE TESTS.

Issued by :

Signature

2018-09-13

Date

Verified by :

Signature

Date

SKETCH



20180913-DS-SR
Document number

2018-09-13 6:00 AM / 6:00 PM 658309 Tezere Faw Azmald
Visit date Time (Start/End) Project No. Prepared by

WTD Construction Agnico Eagle
Project Client

SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature : -2 °C

Comments :

Appendix : ☒ Yes ☐ No Pictures ☐ Yes ☐ No Inspection report or other :

Field vane shear test result.

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- No construction activity from today, except trial field vane shear tests carried out in the trench in the West abutment.
 - The field vane shear tests in the CB trench were carried out at the following stations
 - (1) 0 + 088.75 : c_u at a depth of 0.18m is 110 kPa
 - (2) 0 + 089.55 : c_u at a depth of 0.16m is 90 kPa
 - (3) 0 + 090.35 : c_u at a depth of 0.175m is 102.5 kPa
 - (4) 0 + 091.15 : c_u at a depth of 0.20m is 117.5 kPa
- Attached to this report is the field vane shear test result.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|--|----------|
| → | It was difficult to push the vane beyond the above depths | |
| → | The temperature recorded inside the trench was about 14°C | |
| → | The above mentioned strengths were for an average curing age of 3 days. | |
| → | There was no CB mixing done today since Henry Drilling is having some issues with their plant. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

wet and slippery conditions, cold weather.

Issued by :

[Signature]
Signature

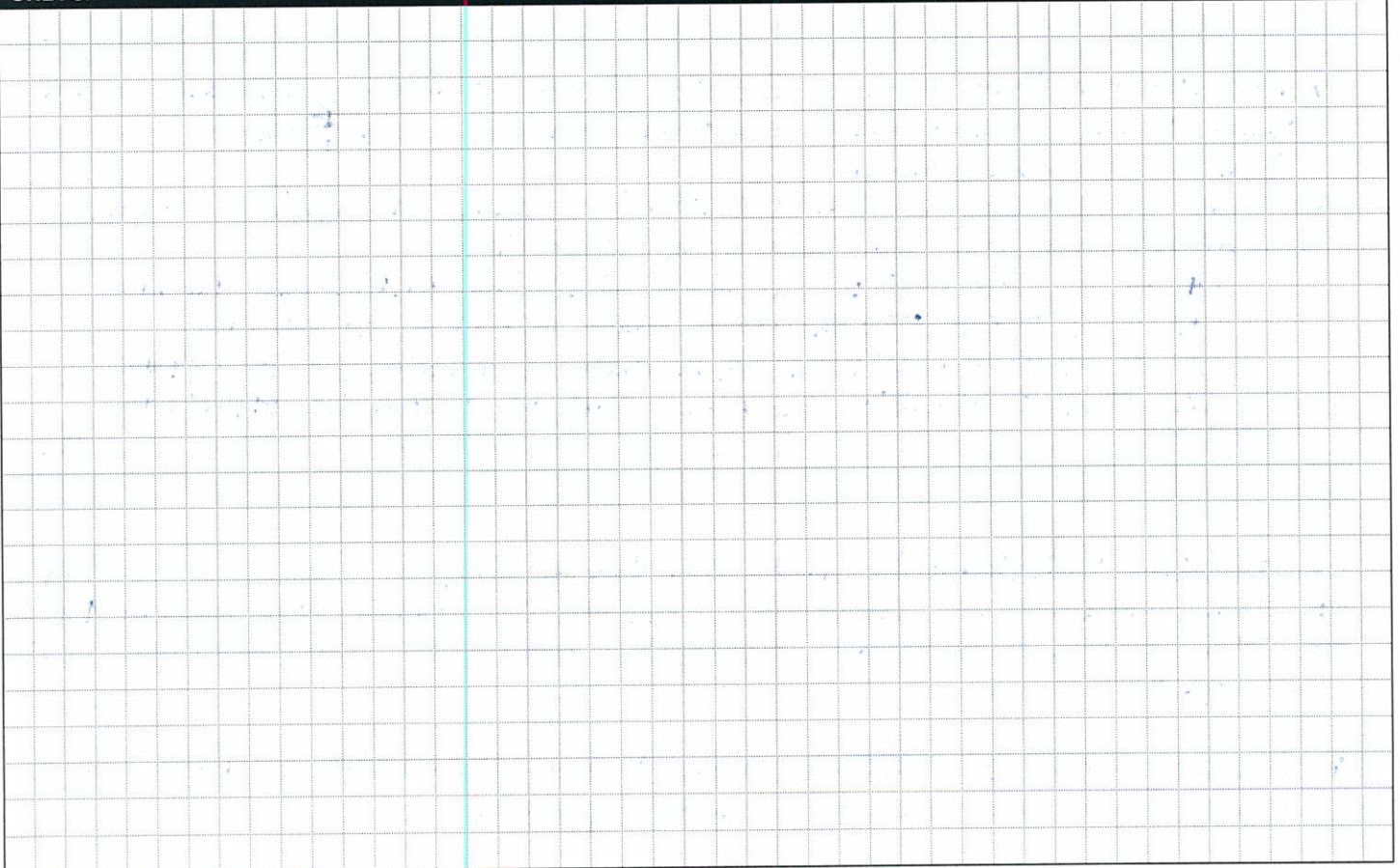
Sept. 13, 2018
Date

Verified by :

Signature

Date

SKETCH





SNC • LAVALIN

SITE REPORT
(Detailed)

20180914-NS-SR

Document number

Visit date 2018-09-14 Time (Start/End) 18:00/6:00 Project No. 658309 Prepared by M. JÉZÉQUEL

Project WTD CONSTRUCTION Client Agnico Eagle

Consultant SNC-Lavalin Contractor KCG

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze
Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature : -1 °C

Comments : _____

Appendix : ☐ Yes ☒ No Pictures ☒ Yes ☐ No Inspection report or other : _____

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

NO ACTIVITY ON THE WHALE TAIL DIKE
NO ACTIVITY AT THE BATCH PLANT
NOTHING TO REPORT

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

Issued by :

Markus J. J. J.

Signature

2018-09-14

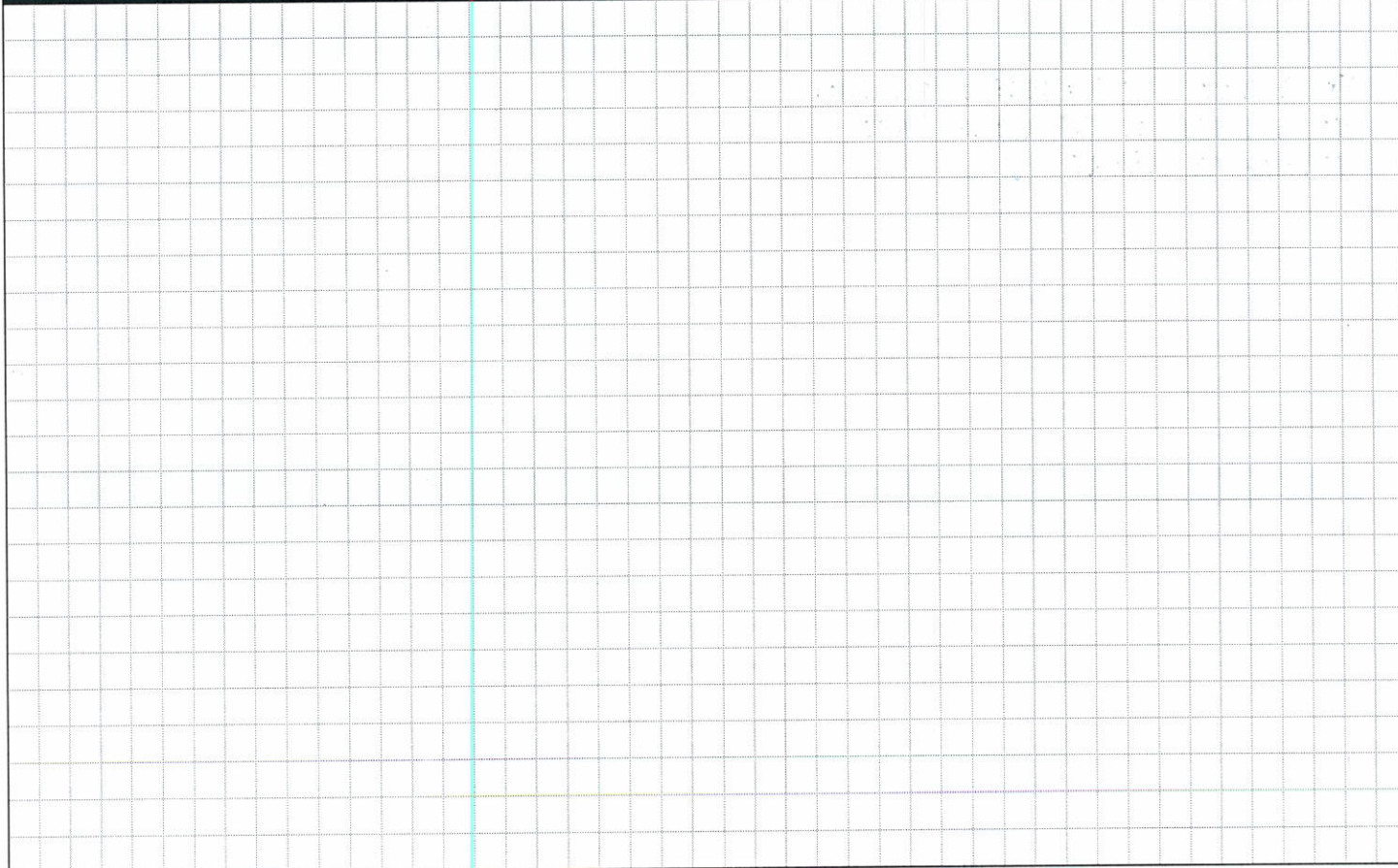
Date

Verified by :

Signature

Date

SKETCH



20180914-DS-SR
Document number

Sept 14, 2018 6:00 AM - 6:00 PM 658309 Tezera Firew Azmach
Visit date Time (Start/End) Project No. Prepared by

WTS construction Agnico Eagle
Project Client

SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze
Wind : ☐ None gusts ☐ Light ☐ Moderate ☐ Strong, Temperature : 2 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

1. There was no activity on CB mixing. No CB mix was prepared.
2. Henry driving is still trying to fix the CB mixing plant.

3. Trial field vane shear test in the CB trench in the west abutment area was ~~continued~~ carried out today.
At the same time, the results were briefed.
• The results are attached

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

SAFE AND SAFETY REMARKS

Issued by :


Signature

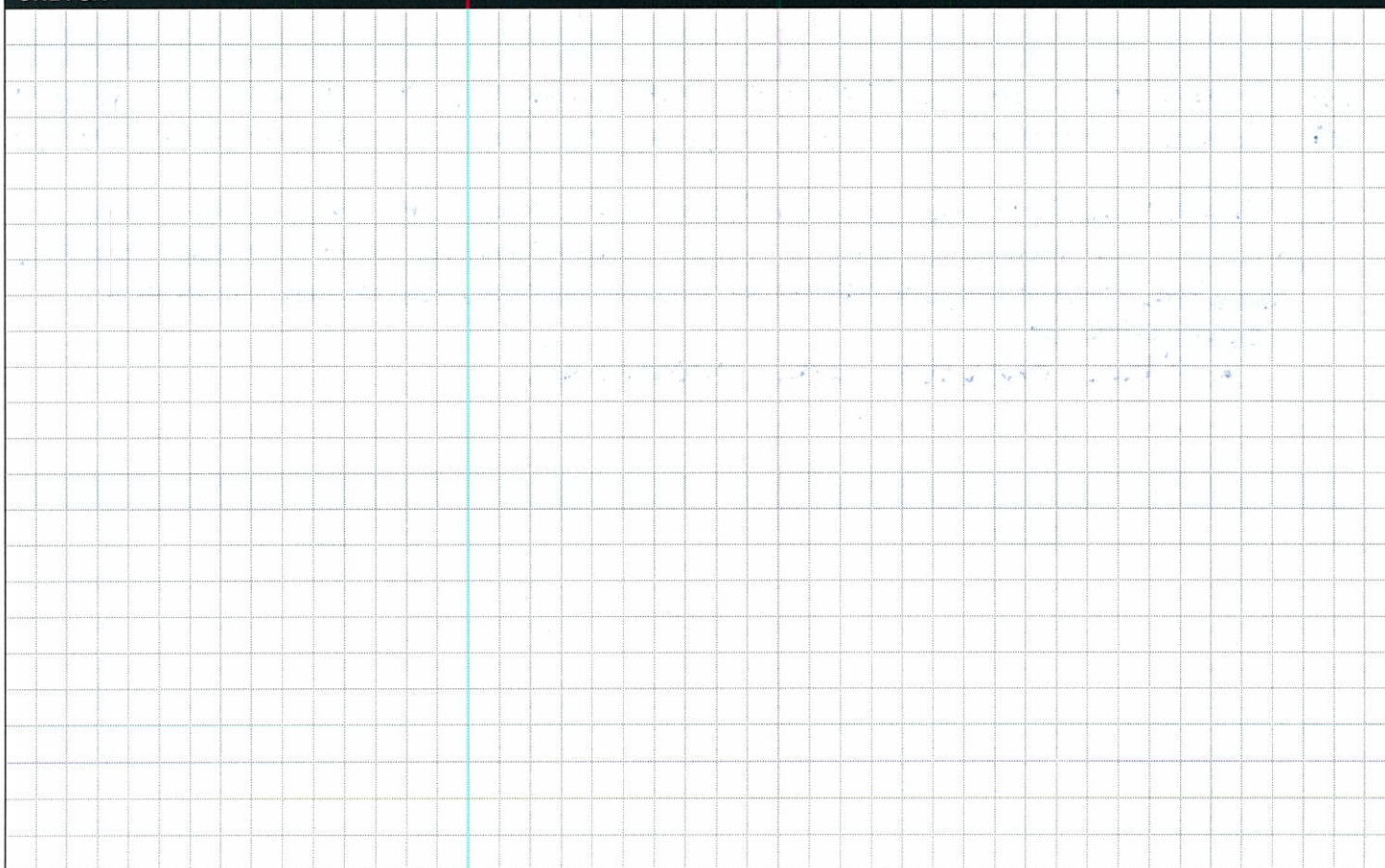
Sept. 14, 2018
Date

Verified by :

Signature

Date

SKETCH





PROJECT / SITE: Amaruq

SECANT PILE No.: Slurry Wall

Slurry surface elevation: 156.50 m

Notes : * : Rejected because the paddle was not deep enough due to refusal.
Each rod has been push down with two wrenches and the power of two men until refusal.
Temperature of the slurry has been take, 10.5°C (0+091.15), 17.7°C (0+084.35) and 14.7°C (0+082.20).

Verified by: Denis-Jacques Coulombe
Date: 2018-09-14

20180915-NS-SR

Document number

Visit date: 2018-09-15 Time (Start/End): 18:00/6:00 Project No.: 658309 Prepared by: M. JÉZÉQUEL

Project: WTO CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather: ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind: ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature: -2 °C

Comments:

Appendix: ☐ Yes ☒ No Pictures ☐ Yes ☒ No

Inspection report or other:

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ NO ACTIVITY ON THE WHALE TAIL DIKE, NO ACTIVITY AT THE BATCH PLANT

→ STRIPPING OF THE ACTIVE LAYER AT THE NORTHEAST DIKE BETWEEN ST. 0+367 TO 0+460.
DEPTH OF PERMAFROST TABLE ≈ 1.7 m AT THIS LOCATION.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
ACTIVE LAYER STRIPPING	NE DIKE, 0+367 to 0+460	ONGOING.

SAFE AND SAFETY REMARKS

STAY ATTENTIVE TO WHERE WE PUT OUR FEET: SOME SOFT SPOTS AT THE NORTHEAST DIKE.

Issued by :


Signature

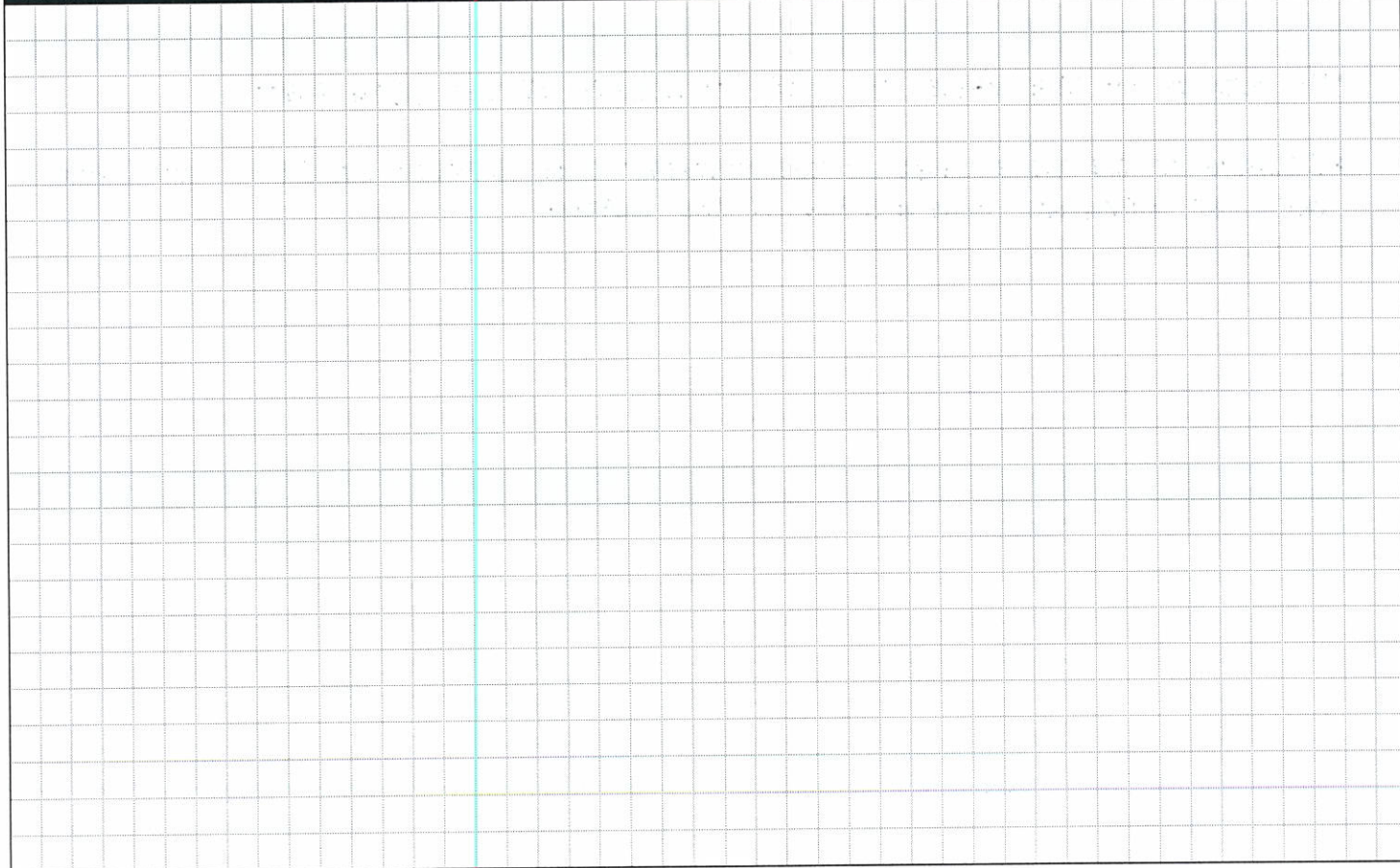
2018-09-15
Date

Verified by :

Signature

Date

SKETCH





SNC • LAVALIN

SITE REPORT
(Detailed)

20180915-DS-SR.

Document number

Sept 15, 2018 6:00am/6:00pm Tezera Finew Azmatch
Visit date Time (Start/End) Project No. Prepared by

WCD Construction Agnico Eagle
Project Client

SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☐ Light ☐ Moderate ☐ Strong,

Temperature : ~ 0 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ Observed trial per hole test being carried out by the QC in the laboratory.

• QC is still working on setting it up properly.

→ No ~~batching~~ batching/mixing of CB was carried out today. ~~they~~ Henry Drilling is still working to fix their CB mixing plant. They intend to get started sometime soon.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

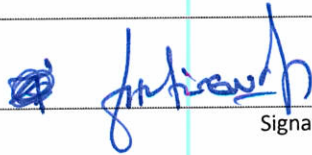
Elements

Location

Scope and comments

SAFE AND SAFETY REMARKS

Issued by :



Signature

Sept. 15, 2018

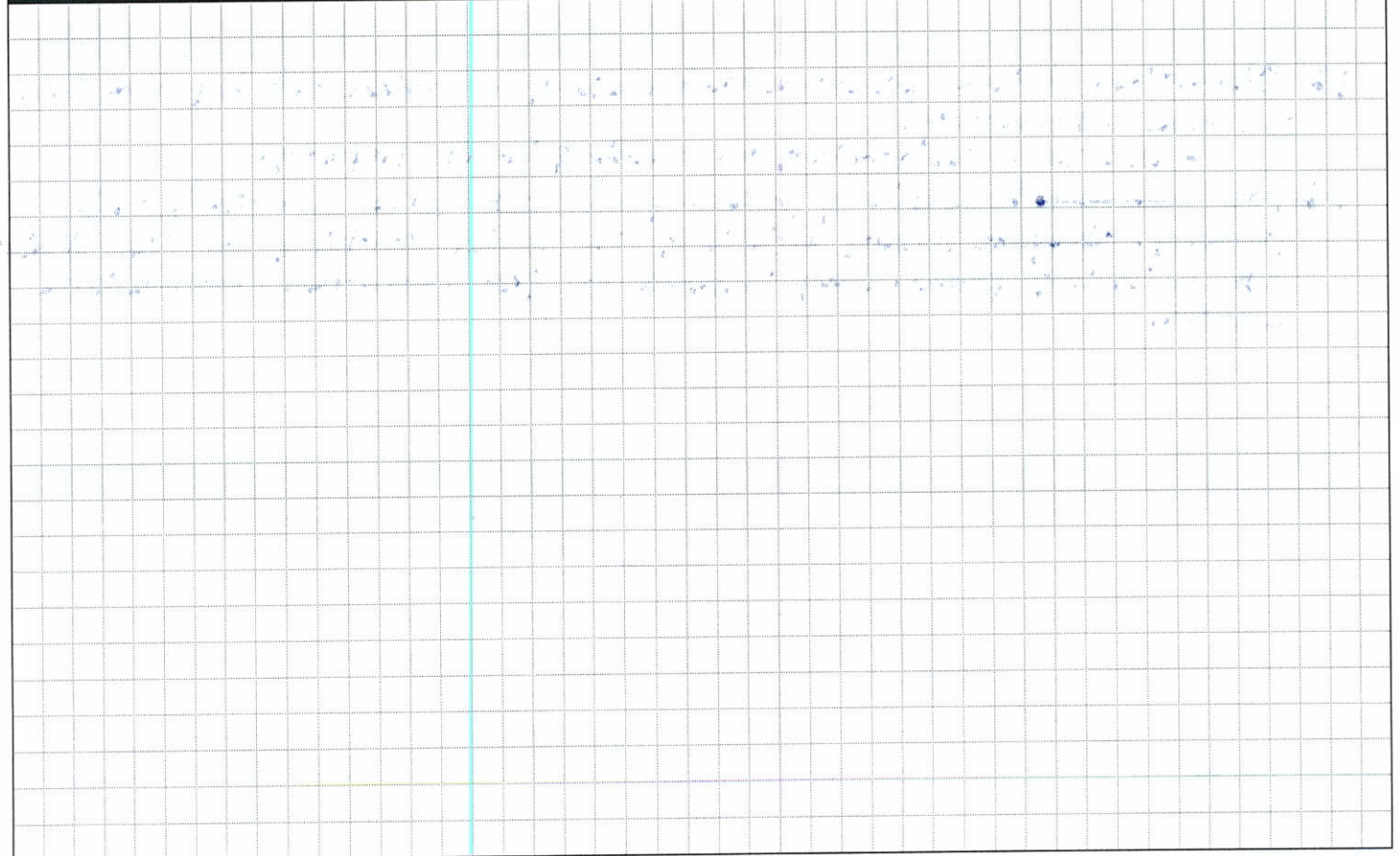
Date

Verified by :

Signature

Date

SKETCH



20180916-NS-SR
Document number

Visit date: 2018-09-16 Time (Start/End): 18:00 / 6:00 Project No.: 658309 Prepared by: M. JÉZÉQUEL

Project: WTO CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze
Wind : ☐ None gusts ☐ Light ☐ Moderate ☐ Strong, Temperature : -3 °C

Comments : _____

Appendix : ☐ Yes ☒ No Pictures ☒ Yes ☐ No Inspection report or other : _____

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ HENRY DRILLING TRIED TO MAKE A BATCH OF CEMENT-BENTONITE MIX BUT ENCOUNTERED PROBLEMS WITH THE PUMPS WHEN ADDING THE ADDITIVE INTO THE WATER-BENTONITE MIX. FOR THIS REASON, NO BATCH OF CB MIX HAS BEEN PRODUCED.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

THE ENGINE OF PICKUP TRUCK #10-0016 CHOKED WHILE I WAS DRIVING, AND ALL THE ACCESSORIES (LIGHTS, STEERING WHEEL, BRAKES) STOPPED WORKING WHILE I WAS ON MOVEMENT. THIS VEHICLE SHOULD NOT BE USED ANYMORE.

Issued by :



Signature

2018-09-16

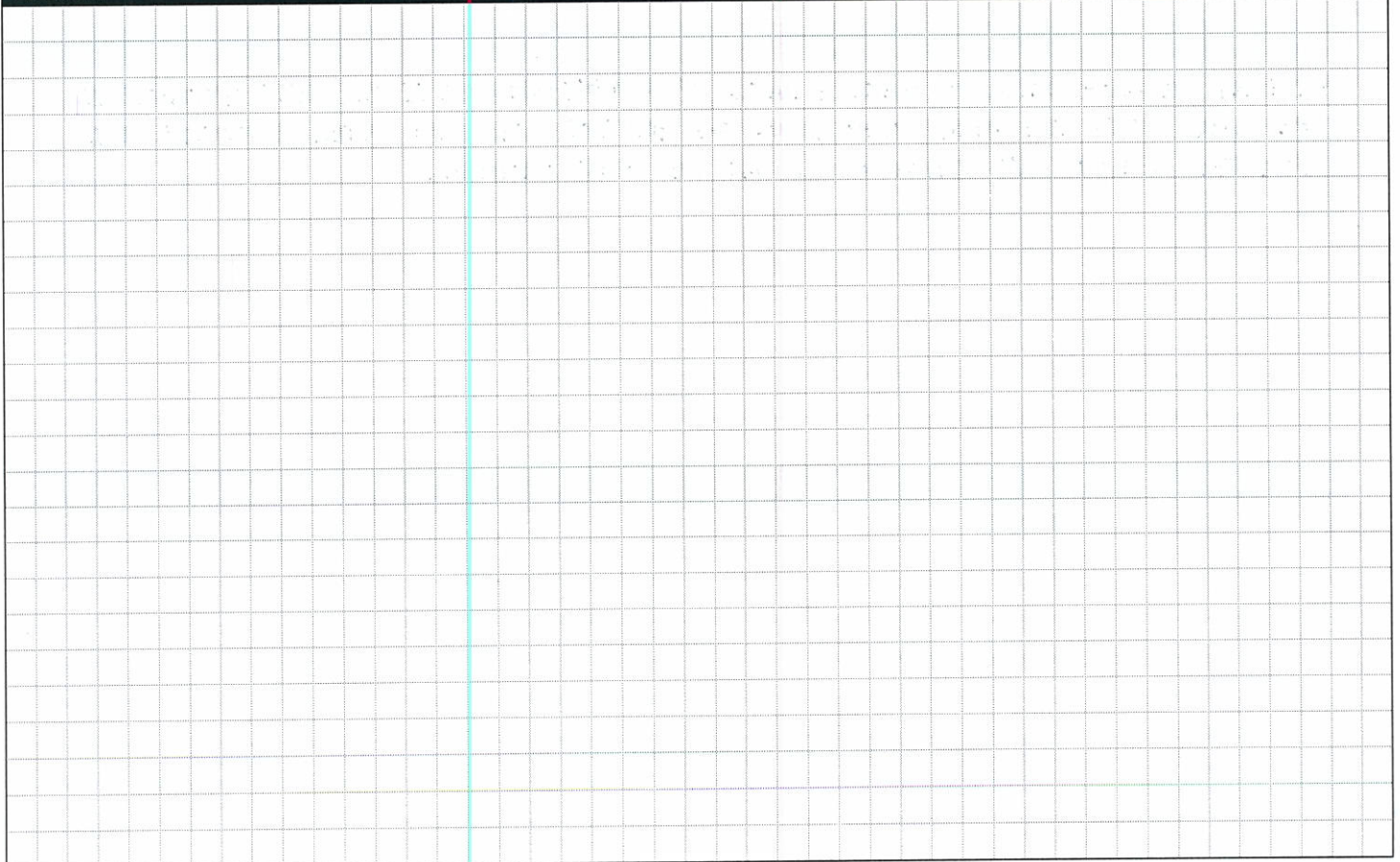
Date

Verified by :

Signature

Date

SKETCH





SNC-LAVALIN

SITE REPORT
(Detailed)

20180916-05-SR

Document number

Sept. 16, 2018 6:00 AM / 6:00 PM 658309 Tezera Finer Azmatch
Visit date Time (Start/End) Project No. Prepared by

WTD Construction Agnico Eagle
Project Client

SNC-Lavalin ECG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze
Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature : 10 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Henry drilling started producing CB mix, but without the additive, with approval from the Designer.
- the viscosity was not measurable since the CB mix was too thick.
- ~~observed~~ observed installation of the following primary piles: 065, 061, 057 and 053
- observed driving of the following primary piles: 081, 077 and 073.
- observed mud balance test being carried out on the CB mix.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No Subject Given to
→ The pile dropped in height after placement (as shown in Figure 1) but was later on filled to full design elevation. But the monitoring should continue as there could be further drop in height/elevation of top of pile fill. This situation is illustrated in the sketch at the back of the in the next page

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

Issued by :

[Signature]
Signature

Sept. 16, 2018
Date

Verified by :

Signature

Date

SKETCH

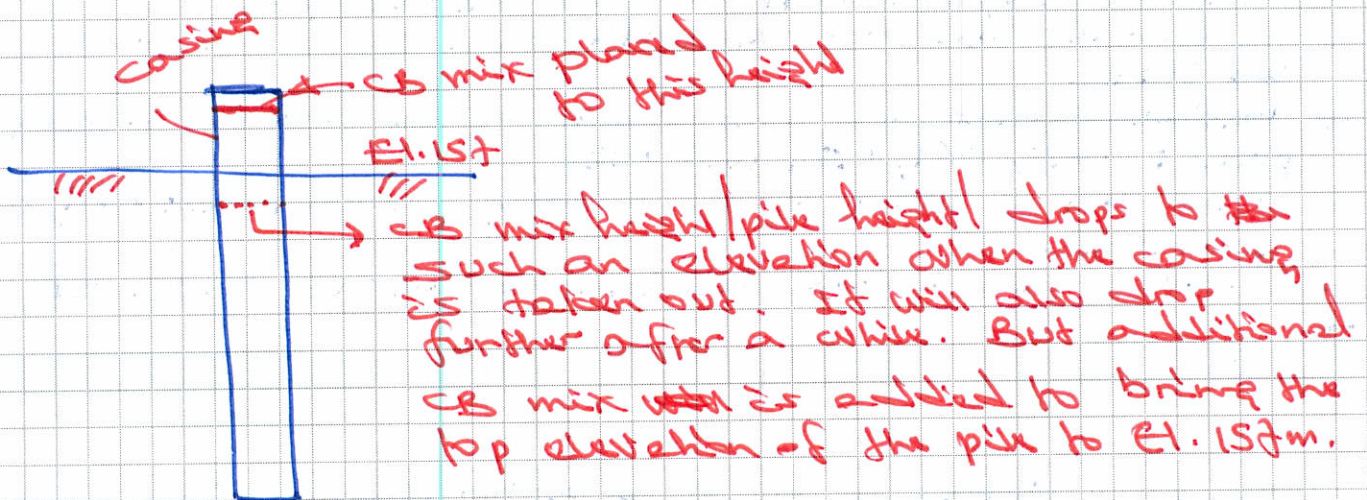


Figure 1 - Drop in Pile Height After Placement in Primary Pile 065: The pile was filled to the full elevation later on



Figure 2 – CB Mix being Pumped to Primary Pile 065



20180917-NS-SR
Document number

Visit date: 2018-09-17 Time (Start/End): 18:00/6:00 Project No.: 658309 Prepared by: M. JÉZÉQUEL

Project: WTD CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather: ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze
Wind: ☐ None gusts ☐ Light ☒ Moderate ☐ Strong, Temperature: -1 °C

Comments:

Appendix: ☐ Yes ☒ No Pictures ☒ Yes ☐ No Inspection report or other: + VIDEOS

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- HENRY DRILLING CONTINUED PRODUCTION OF CB MIX. THE WATER PUMP STOPPED WORKING FOR ≈ 2 HOURS DURING MIXING OF BATCH #7, SO THE CONTRACTOR DECIDED TO DISCARD BATCH #7 AND THROW AWAY THE CB MIX.
- THERE WAS A LOSS OF BENTONITE SLURRY DURING MIXING PROCESS OF BATCH #8, RESULTING IN A SLIGHTLY HIGHER DENSITY FOR THAT MIX (1.27 RATHER THAN 1.25). CB MIX SAMPLES HAVE BEEN TAKEN IN THIS BATCH.
- OBSERVATION OF CASINGS INSTALLATION FOR PILES #085, 089, 093, 097 AND #101. CASINGS WERE ANCHORED ~ 30 CM INTO BEDROCK, AND FINE FILTER MATERIAL WAS CLEANED WITH AN AUGER INSIDE THE CASINGS. NO DOWN-THE-HOLE DRILLING OCCURED IN NIGHT SHIFT.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|--|----------|
| → | OBSERVATION OF CASING FILLING WITH CB MIX FOR PILES #049, 045, 041, 037, 033, 029 AND #025. THE TIME REQUIRED TO EMPTY THE PAT (PORTABLE AGITATOR TANK) INTO PILE CASINGS IS USUALLY ~ 1 hour. | |
| → | CB MIX WAS ADDED ON TOP OF PILES AFTER REMOVAL OF CASINGS FOR PILES #037, 041, 045, 049, 053, 057, 061 AND 065. THE LAST FEW (065, 061, 057) ALREADY STARTED TO SET ON TOP BEFORE ADDITIONAL CB MIX WAS PUMPED ON TOP. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

AVOID DIRECT SKIN CONTACT WITH CB MIX.

Issued by :

[Signature]
Signature

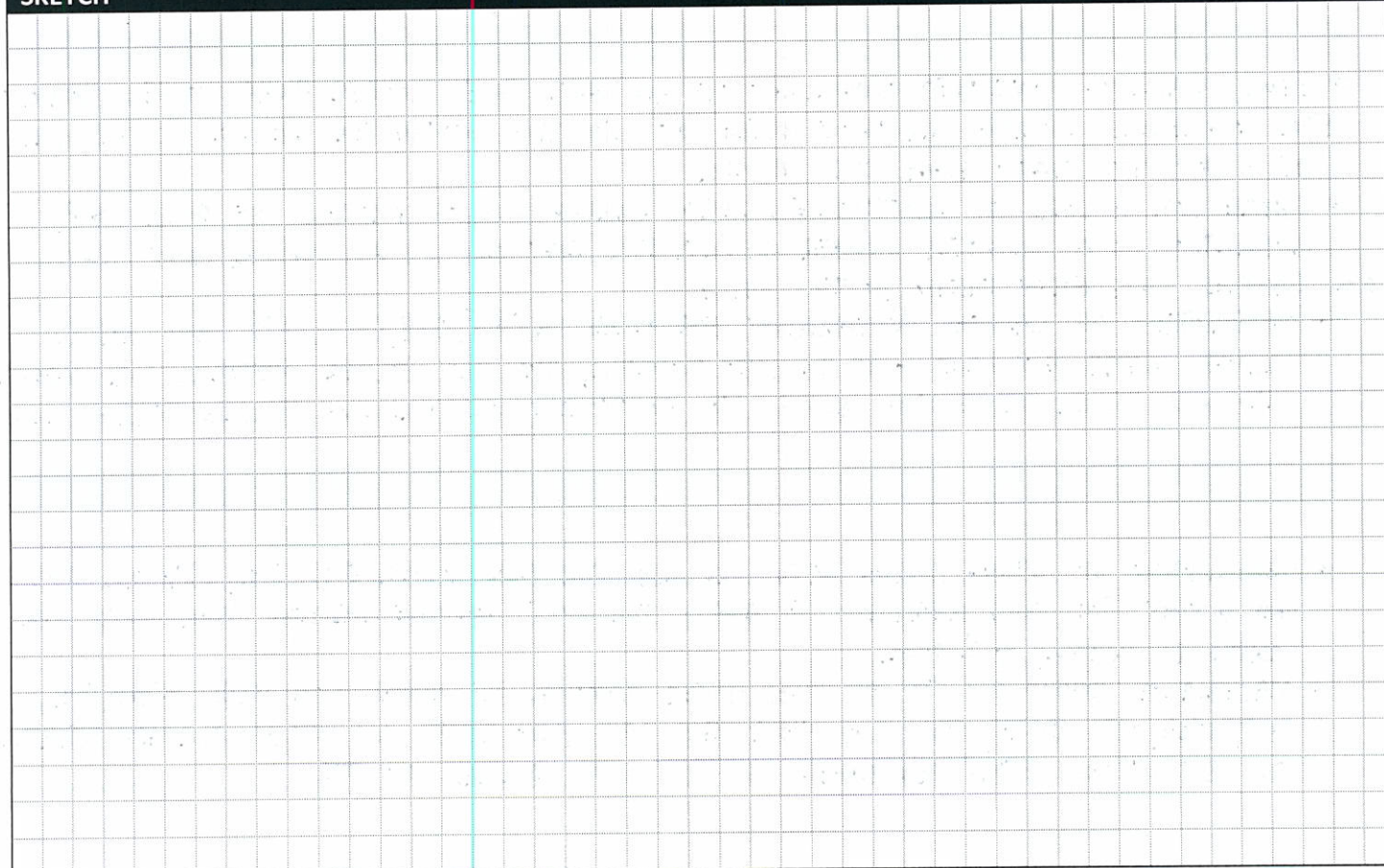
2018-09-17
Date

Verified by :

Signature

Date

SKETCH





SNC • LAVALIN

SITE REPORT
(Detailed)

20180917-05-SR

Document number

Sept. 17, 2018 8:00AM / 8:00PM 658309 Tezera Firew Azmatch
Visit date Time (Start/End) Project No. Prepared by

WTD construction. Agnico Eagle
Project Client

SNC-Lavalin ICCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze
Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature : 2 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Observed ~~pi~~sturry (CB) placement into the second pile casings.
- Observed placement of the casings for second pile walls.
- The piles which are ~~stirred~~ filled with CB slurry are covered with wooden boards. This may be a safety hazard, especially during night shift since they may not be visible.
- CB slurry placement time (from batching to placement) varied between two hours and three hours
 - Batch 0013 was placed into Primary Pile 013 after 2 hrs and 30 min ~~after~~ time of batching.
 - Batch 0014 placed into Pile 009 nearly after 3 hours ~~after~~ batching

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No Subject Given to

- There was only one QC for the day shift today, since it is rotation time for QC personnel.
- Drilling of bedrock sockets was done for the following piles : 069, 073, 077 and 089.

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

Issued by :

[Signature]

Signature

Sept 17, 2018

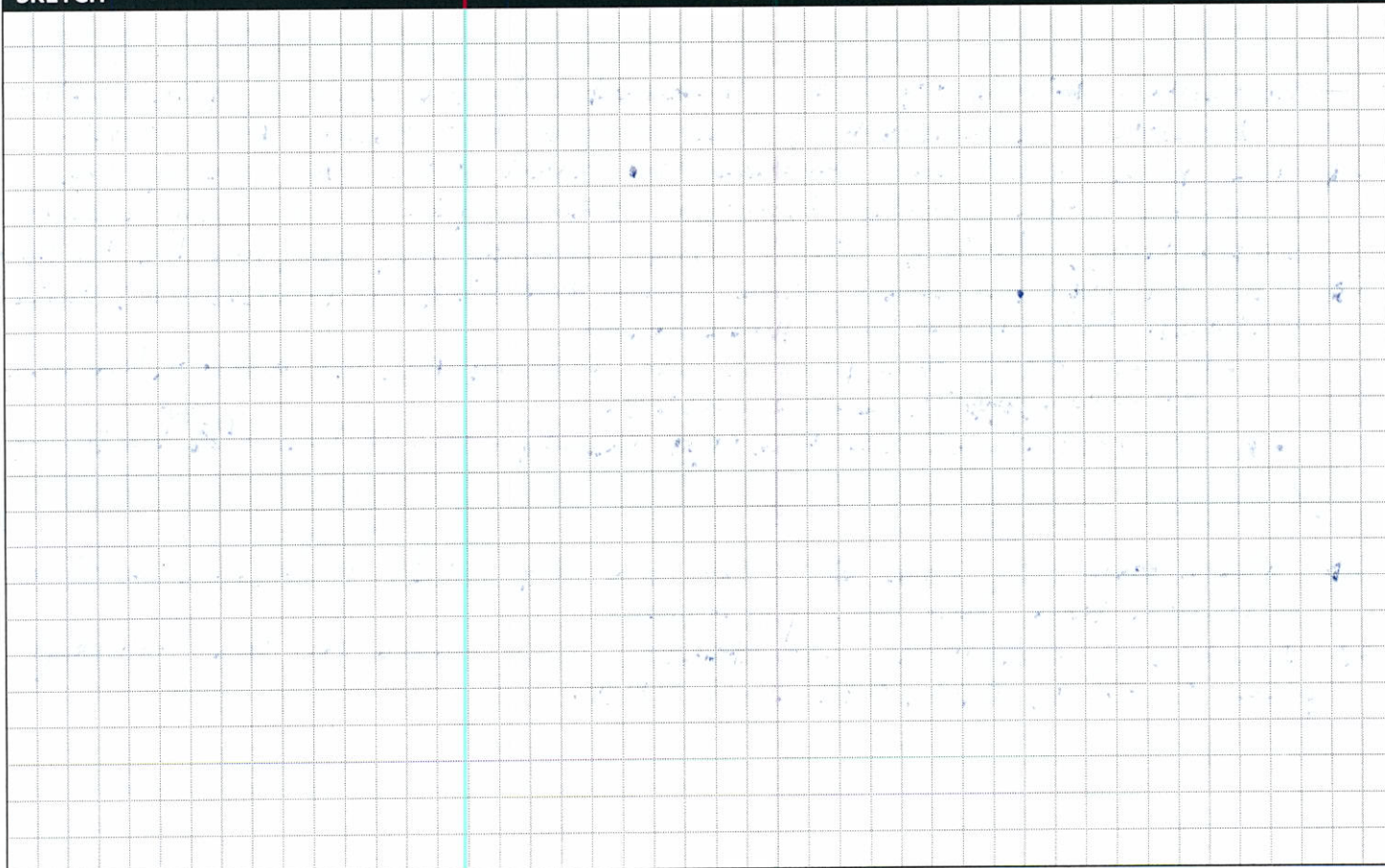
Date

Verified by :

Signature

Date

SKETCH





SNC-LAVALIN

SITE REPORT
(Detailed)

20180918-NS-SR

Document number

Visit date: 2018-09-18 Time (Start/End): 18:00/6:00 Project No.: 658309 Prepared by: M. JÉZÉQUEL

Project: WTD CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze
Wind : ☐ None gusts ☐ Light ☒ Moderate ☐ Strong, Temperature : -4 °C

Comments :

Appendix : ☒ Yes ☐ No Pictures ☒ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ THE FOLLOWING PRIMARY PILES HAVE BEEN FILLED WITH CB MIX: #069, 073, 077, 081, 085.

- THE AGITATOR FROM THE PAT STOPPED WORKING WHILE BATCH #21 WAS PUMPED IN PILE #073 AND THE MIX SEEMED VERY THICK. QA INSPECTOR REQUESTED THAT ADDITIONAL TESTS BE CARRIED OUT ON THAT MIX (TEMPERATURE, DENSITY) BECAUSE HE SUSPECTED THAT SOMETHING COULD BE WRONG. TESTS SHOWED THAT TEMPERATURE WAS 19°C AND DENSITY WAS 1.26, WHICH MEET THE SPECIFICATIONS. BY THE TIME THE CONTRACTOR FIXED THE PAT AND POUNDED BATCH #01, THE MIX WAS ~3h OLD AND SEEMED TO HAVE REACHED ITS INITIAL SET TIME. SINCE THIS BATCH WAS USED TO FILL PILE #077, QA ADVISED QC TO TAKE A SAMPLE OF THAT MIX ON TOP OF PILE #077 JUST AFTER THE MIX WAS PUMPED, WHICH HE DID.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

→ OBSERVATION OF WATER COMING OFF THE PILES AS GROUT WAS INJECTED BY TREMIE: CLEAR WATER WAS FLOWING UNTIL CB MIX REACHED THE TOP OF THE CASING.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

SAFE AND SAFETY REMARKS

Issued by :

[Signature]
signature

2018-09-18

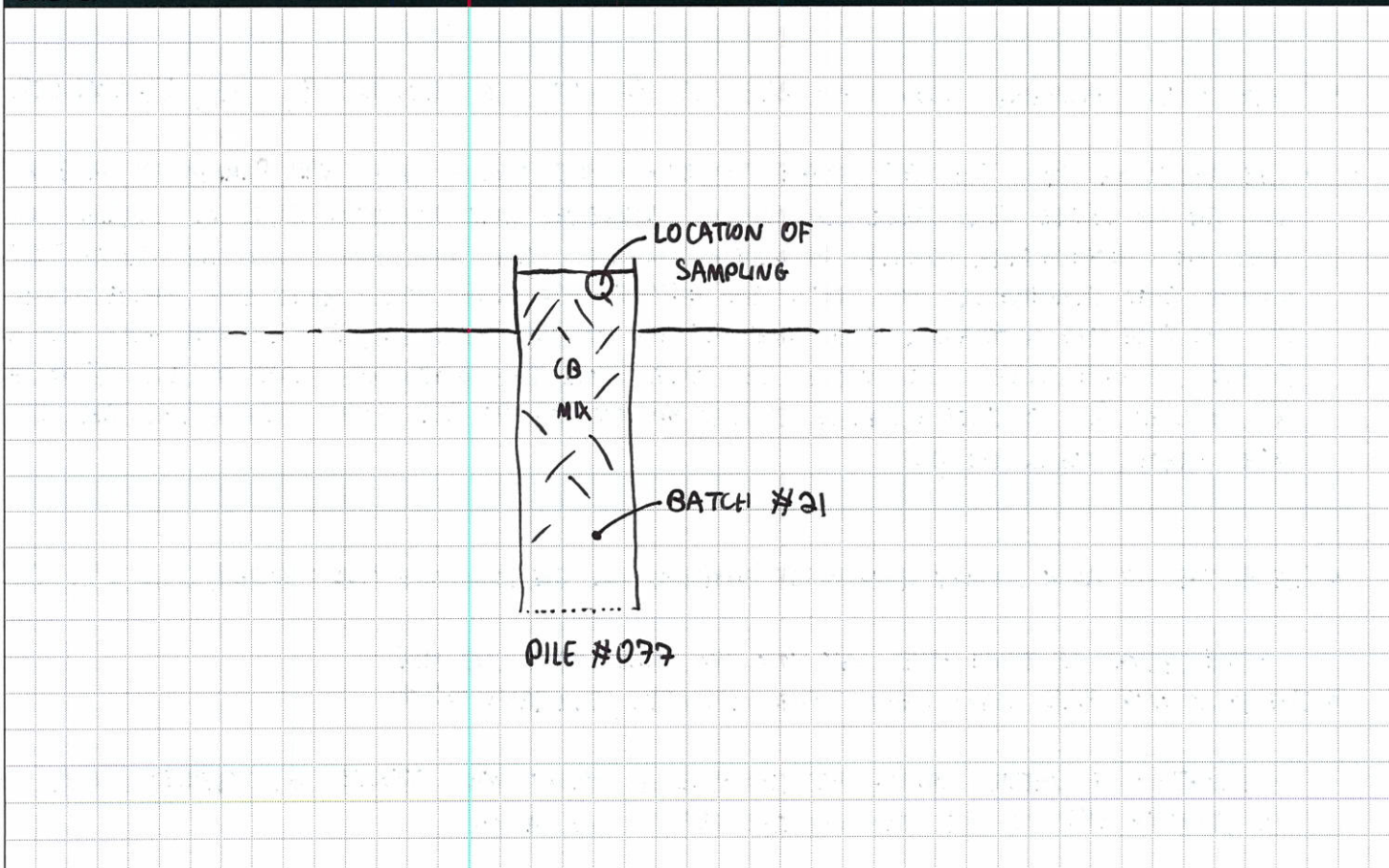
Date

Verified by :

Signature

Date

SKETCH



20180918-05-JR
Document number

Visit date Sept 18, 2018	Time (Start/End) 6:00am/6:00pm	Project No. 658309	Prepared by Tezera Fikru Azmach
Project WTO Construction		Client Agnico Eagle	
Consultant SNC-Lavalin		Contractor KCCG	
Weather : <input type="checkbox"/> Sunny <input checked="" type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Storm <input type="checkbox"/> Snow <input type="checkbox"/> Glaze Wind : <input type="checkbox"/> None gusts <input checked="" type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Strong, Temperature : -5 °C			
Comments :			
Appendix : <input type="checkbox"/> Yes <input type="checkbox"/> No Pictures <input type="checkbox"/> Yes <input type="checkbox"/> No Inspection report or other :			

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- ~~Henry~~ I asked Henry during if it was possible to measure the volume of slurry placed in each pile so that slurry loss can be estimated. Henry during indicated that volume measurement is not possible. Hence, QC/QA are measuring the change in fill elevation with time to monitor slurry loss. Pile 093 is currently being used to monitor the slurry loss.
- It was observed by QA that some of the piles filled with slurry were left open without cover. QA mentioned to the supervisor from HQ that these could be a safety issue. The piles were covered right away.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|---|----------|
| → | Observed slurry placement into piles. Pile 101 was re-drilled to reach rock socket elevation. But slurry was poured into it (only small volume without approval. This was pointed out to QC. Then the depth was re-measured (under the small height of slurry) and approval was provided. Batch 0027 was used to fill pile 101 partly at about 2:00 pm. The rest of the pile was supposed to be filled by batch 0028 (to reach full height). But batch 0028 was not discarded since the pump of the PAT froze and was not working. The time for placement of the next batch into this pile needs to be verified to the night and before placing the slurry into the pile. | |

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

- The following piles were filled with CB slurry:
089, 093, and 097. Pile 101 was filled partly.
- the following casing were installed: 125 and 129
- The Approvals for depth of piles were made for the following
piles: 101, 105, 109, 113

SAFE AND SAFETY REMARKS

Piles need to be covered right after being filled with
CB slurry.

Issued by :



Signature

Sept. 18, 2018

Date

Verified by :

Signature

Date

ADDITIONAL NOTES:

SKETCH

→ There is shortage of QC to do the tasks of the QC. It seems like client is expecting QA to be on site, replacing QC, to take measurements during the whole day. It is understood that QA will cooperate to do some QC tasks when QC can't make it to the site (due to other responsibilities in lab or batching plant). But QA has to also monitor activities in the lab and batching plant and has to also spend time in the office. Hence, this issue needs to be addressed.



SNC • LAVALIN

SITE REPORT
(Detailed)

20180919-NS-SR

Document number

2018-09-19 18:00 / 6:00 658309 M. JÉZÉQUEL
Visit date Time (Start/End) Project No. Prepared by
WTD CONSTRUCTION Agnico Eagle
Project Client
SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature : -6 °C

Comments :

Appendix : ☒ Yes ☐ No Pictures ☒ Yes ☐ No

Inspection report or other :

Approval Form

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- NO BATCHES OF CB MIX HAVE BEEN PRODUCED TONIGHT DUE TO PROBLEMS WITH THE PORTABLE AGITATOR TANKS. HENRY DRILLING / SANA ARE WORKING ON AN ALTERNATIVE SOLUTION BECAUSE THEY EXPECT TO HAVE PROBLEMS WITH THEIR CURRENT EQUIPMENT IN EXTREME COLD CONDITIONS.
- ON YESTERDAY'S NIGHT SHIFT, THE DEPTHS OF BEDROCK SOCKETS HAVE BEEN APPROVED FOR THE FOLLOWING PILES: 069, 073, 077, 081, 085, 089, 093, 097.
- ON THE CURRENT SHIFT, THE DEPTHS OF BEDROCK SOCKETS HAVE BEEN APPROVED FOR THE FOLLOWING PILES: 117, 121, 125, 129
- FOLLOW-UP ON PILE #101: APPROXIMATELY 1.8 m OF CB MIX WAS CASTED INTO THE PILE AT ~ 2:00 PM ON SEPTEMBER 18. IT IS EXPECTED THAT A COLD JOINT WILL FORM IF NEW CB MIX

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- 930 Subject Given to
- IS POURED ON TOP OF THE OLD ONE. AGNICO EAGLE COULD CONSIDER REMOVING THE SET MIX SITTING AT THE BOTTOM OF THE PILE BEFORE ADDING A FRESH BATCH TO PREVENT A COLD JOINT FORMING AT EL. ~ 152.9 m IN PILE #101.
- THE FOLLOWING PILES HAVE THEIR CASING INSTALLED DOWN TO BEDROCK BUT STILL HAVE TO BE DRILLED WITH THE HAMMER 1.0 m INTO BEDROCK: 133, 137, 141, 145

SPECIFIC ELEMENTS VERIFIED

Elements

Location PILE #

Scope and comments

DEPTHS OF ROCK SOCKETS

069, 073, 077, 081, 085, 089,

APPROVED YESTERDAY

093, 097

APPROVED TODAY

11

117, 121, 125, 129

SAFE AND SAFETY REMARKS

OPEN TOP OF CASINGS HAVE TO BE COVERED AT ALL TIME, ESPECIALLY THOSE WHICH ARE CLOSE TO GROUND LEVEL IN ORDER TO PREVENT FALLS. (QA REPRESENTATIVE ASKED THE CONTRACTOR TO COVER 3 CASINGS, WHICH HE DID RIGHT AWAY.

Issued by :

[Signature]
Signature

2018-09-19

Date

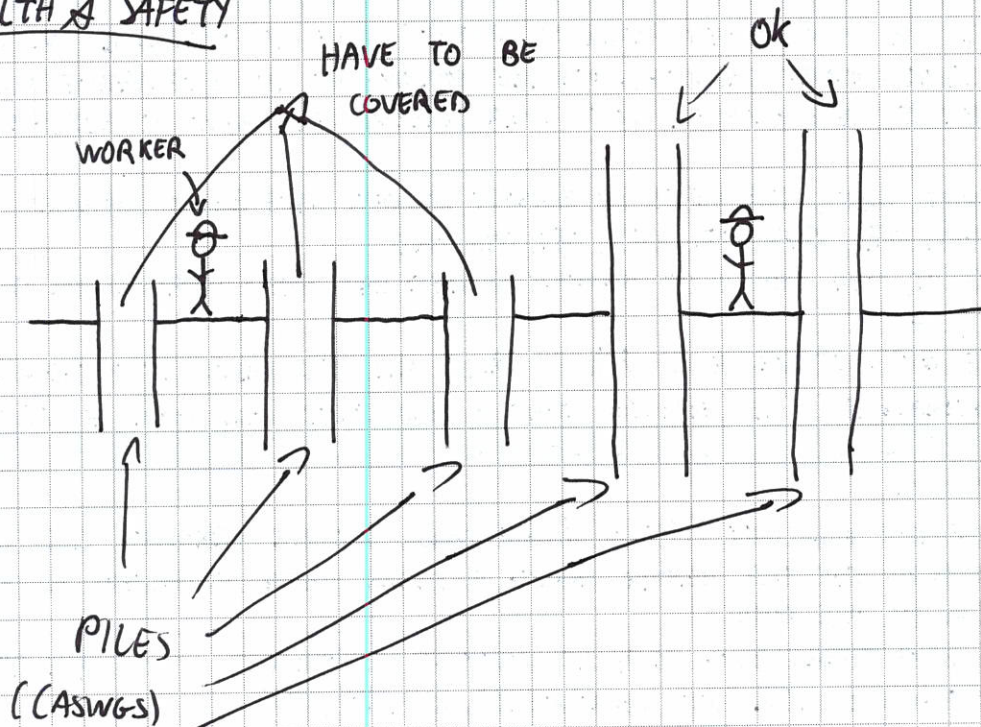
Verified by :

Signature

Date

SKETCH

HEALTH & SAFETY





SNC-LAVALIN

SITE REPORT (Detailed)

20180919-DS-SR

Document number

Visit date: 2018-09-19 Time (Start/End): 6:00/18:00 Project No.: 658309 Prepared by: M. JÉZÉQUEL

Project: WTO CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather: ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind: ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature: -3 °C

Comments:

Appendix: ☒ Yes ☐ No Pictures ☒ Yes ☐ No Inspection report or other:

VANE SHEAR
TEST RESULTS

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- NO ACTIVITY OCCURRED AT THE BATCH PLANT TODAY (NO PRODUCTION OF CB MIX)
- SECONDARY PILES #011, 015 AND 019 HAVE BEEN INSTALLED TODAY (CASINGS).
DOWN-THE-HOLE DRILLING IS STILL REQUIRED IN PILES #133, 137, 141, 145, 011, 015 AND 019.
- TEZERA AZMATCH WORKED FROM 6 AM TO 12 PM DURING THIS SHIFT AND WILL BE NIGHT SHIFT FOR THE REST OF THIS ROTATION (ENDING SEPTEMBER 26).
- WEEKLY REPORT FROM QA HAS BEEN SENT TODAY.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- Rq Subject GIVEA20
- QA INSPECTOR WAS ON SITE WHILE QC REPRESENTATIVES CONDUCTED VANE SHEAR TESTS INTO PILES FILLED WITH SET CB MIX. THE SHEAR RESISTANCE WAS OVER 160 KPa FOR ALL FIVE TESTS. DETAILED RESULTS ARE ATTACHED TO THIS REPORT.
 - QA INSPECTOR WAS IN THE LABORATORY FOR THE FIRST PINHOLE TEST ON THE CB MIX. IT WAS FOUND THAT THE COLD CURE SAMPLE IS NON ERODABLE AND NON DISPERSIVE.

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

MAKE SURE QA ARE WELL RESTED AS THEY ARE DOING A SHIFT CHANGE IN THE MIDDLE OF THEIR ROTATION.

Issued by :

[Signature]
Signature

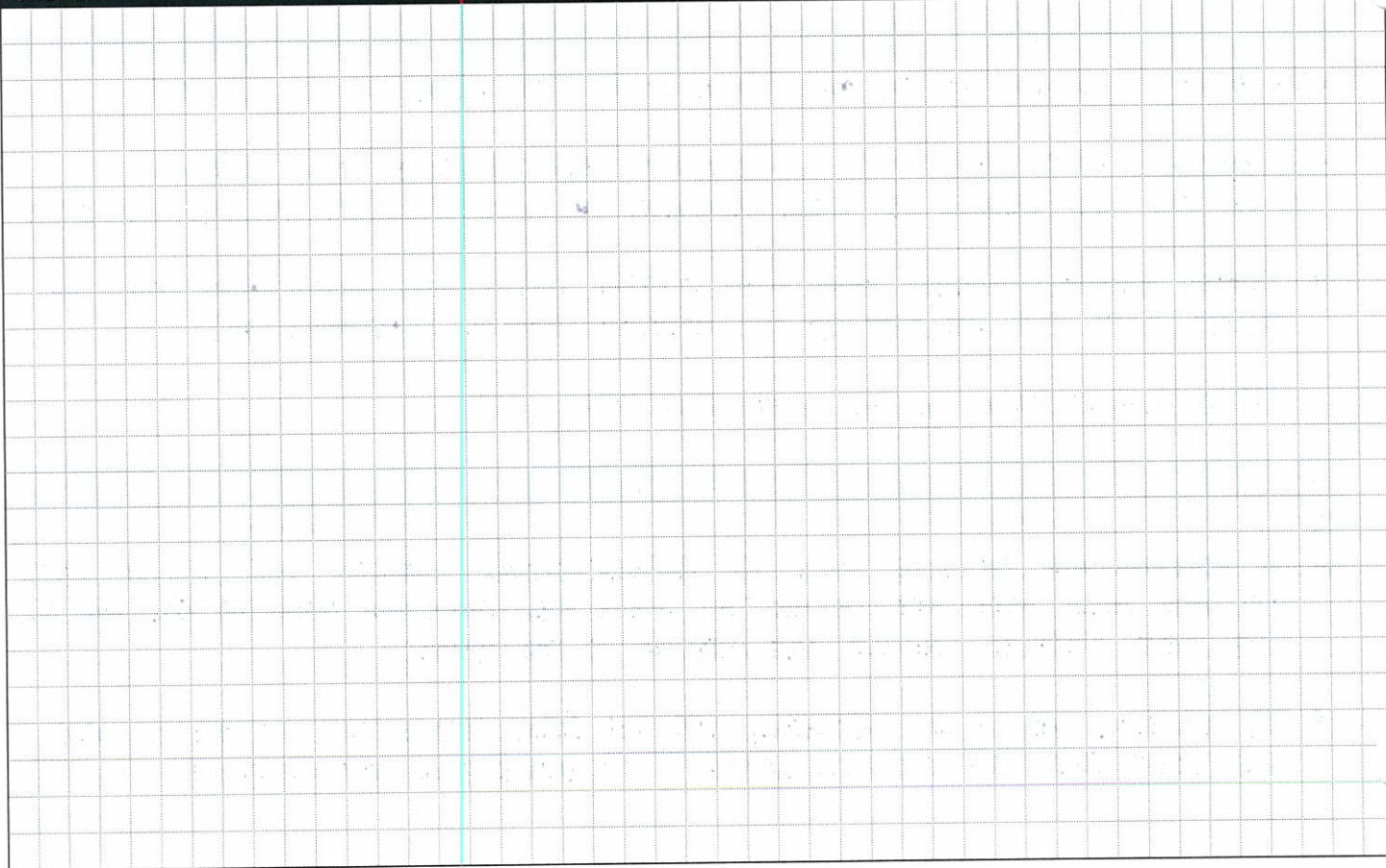
2018-09-19
Date

Verified by :

Signature

Date

SKETCH





VANE SHEAR TEST (FIELD)

Client: AEM
Project: Whale Tail Dike
Location: Amaruq

Date: 9/19/2018
Shift: Day
QC rep.: Max C

Apparatus # 0EP016730
Apparatus Model: BDS160-SPL
Paddle used: Small one

Grout identification: Cement bentonite
Ground surface elevation: 156.5

Vane shear test

Secant Pile		Test hour (mm/dd/yyyy hh:mm)	Temp. (Top) : (°C)	Depth (m)	Elevation (m)	Curing time (h)	Shear Resistance (kPa)
#SP/Stations	Last batch hour (mm/dd/yyyy hh:mm)						
21	9/17/2018 4:50	9/19/2018 15:00	18.7	0.500	156.5 to 156.00	58.2	>160
89	9/18/2018 5:53	9/19/2018 14:30	24.7	0.500	156.5 to 156.00	32.6	>160
89	9/18/2018 5:53	9/19/2018 15:30	-	1.000	156.5 to 155.50	33.6	>160
89	9/18/2018 5:53	9/19/2018 16:00		2.000	156.5 to 154.50	34.1	>160
97	9/18/2018 11:10	9/19/2018 16:30	25.4	0.500	156.5 to 156.00	29.3	>160

Remarks / Resisting to driving : _____

Performed by : Maxime Côté
Date : 9/19/2018

Verified by : Denis-Jacques Coulombe
Date : 9/19/2018

2018 0920 - NS - SR

Document number

Sept. 20, 2018 6:00 PM / 6:00 AM
Visit date Time (Start/End)

Tezere fire Azmatd
Prepared by

WTD Construction
Project

Project No.

Prepared by

Project

Agnico Eagle
Client

SNC-Lavalin
Consultant

KCG
Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature : -4 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Observed driving into bed rock for reach the depth of rock sockets for the following piles: primary piles 133, 137, 141 and 145, and secondary piles 011, 015 and 019.
- Depth of rock sockets and depth of rock piles were approved for the above piles listed above.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to

- There was no CB slurry produced tonight since Henry Driving has issues with the PAT. Henry Driving is working towards the option of pumping the slurry from the batch plant to the second piles. Client stated that the Arbo 501P additive will be added into the CB mix when preparing the slurry. Under this option (of pumping slurry)

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

Issued by :

[Signature]
Signature

Sept 20, 2018

Date

Verified by :

Signature

Date

SKETCH

A large grid area for sketching, consisting of approximately 20 columns and 30 rows of small squares.



SNC-LAVALIN

SITE REPORT
(Detailed)

20180920-DS-SR

Document number

2018-09-20	6:00/18:00	658309	M. JÉZÉQUEL
Visit date	Time (Start/End)	Project No.	Prepared by
WTD CONSTRUCTION		Agnico Eagle	
Project		Client	
SNC-Lavalin	KCG		
Consultant	Contractor		
Weather : <input type="checkbox"/> Sunny <input checked="" type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Storm <input type="checkbox"/> Snow <input type="checkbox"/> Glaze			
Wind : <input type="checkbox"/> None gusts <input checked="" type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Strong,			
			Temperature : -1 °C
Comments :			
Appendix : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pictures <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Inspection report or other :			

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- NO PRODUCTION OF CEMENT-BENTONITE MIX TODAY. HENRY DRILLING IS STILL WORKING ON AN ALTERNATIVE SOLUTION TO THE USE OF PORTABLE AGITATOR TANKS, THAT IS USING A 800-m PIPE FROM THE BATCH PLANT TO THE PILES. TRIAL TESTS OF BENTONITE SLURRY PUMPED THROUGH THEIR SYSTEM SHOULD BE CONDUCTED TONIGHT.
- QA FOUND SOME ROOM FOR IMPROVEMENT FOR THE QC REPORTS (BLEEDING TESTS, VANE SHEAR TESTS). QC WILL APPLY THE RECOMMENDATIONS FROM QA AND THEY WILL BE REFLECTED IN THEIR NEXT REPORTS.
- QC SPENT MOST OF THE SHIFT IN THE LAB TO PREPARE SAMPLING AND TESTS CARRIED OUT DURING PRODUCTION OF CB MIX. THE UCS EQUIPMENT IS STILL MISSING IN THE LABORATORY, NO COMPRESSION TEST CAN BE CONDUCTED.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- INSTALLATION OF A THERMISTOR STRING WITHIN WHALE TAIL DIKE LOCATED APPROXIMATELY AT STATION 0+300, 5m UPSTREAM FROM THE CENTER LINE.
- QC REPRESENTATIVE TOOK A SAMPLE OF BENTONITE TO CONDUCT A WATER CONTENT TEST.
- THE CONTRACTOR WANTS TO START STRIPPING AND EXCAVATION AT THE WRSF DIKE BUT NEEDS TO BUILD A ROAD TO REACH THE SITE. AN ACCESS ROAD SHOULD BE BUILT SOMETIME SOON.

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

IT HAS BEEN SNOWING MORE LATELY: BEWARE OF TRIPS AND FALLS AS THE GROUND IS BECOMING SLIPPERY.

Issued by :

[Signature]
Signature

2018-09-20

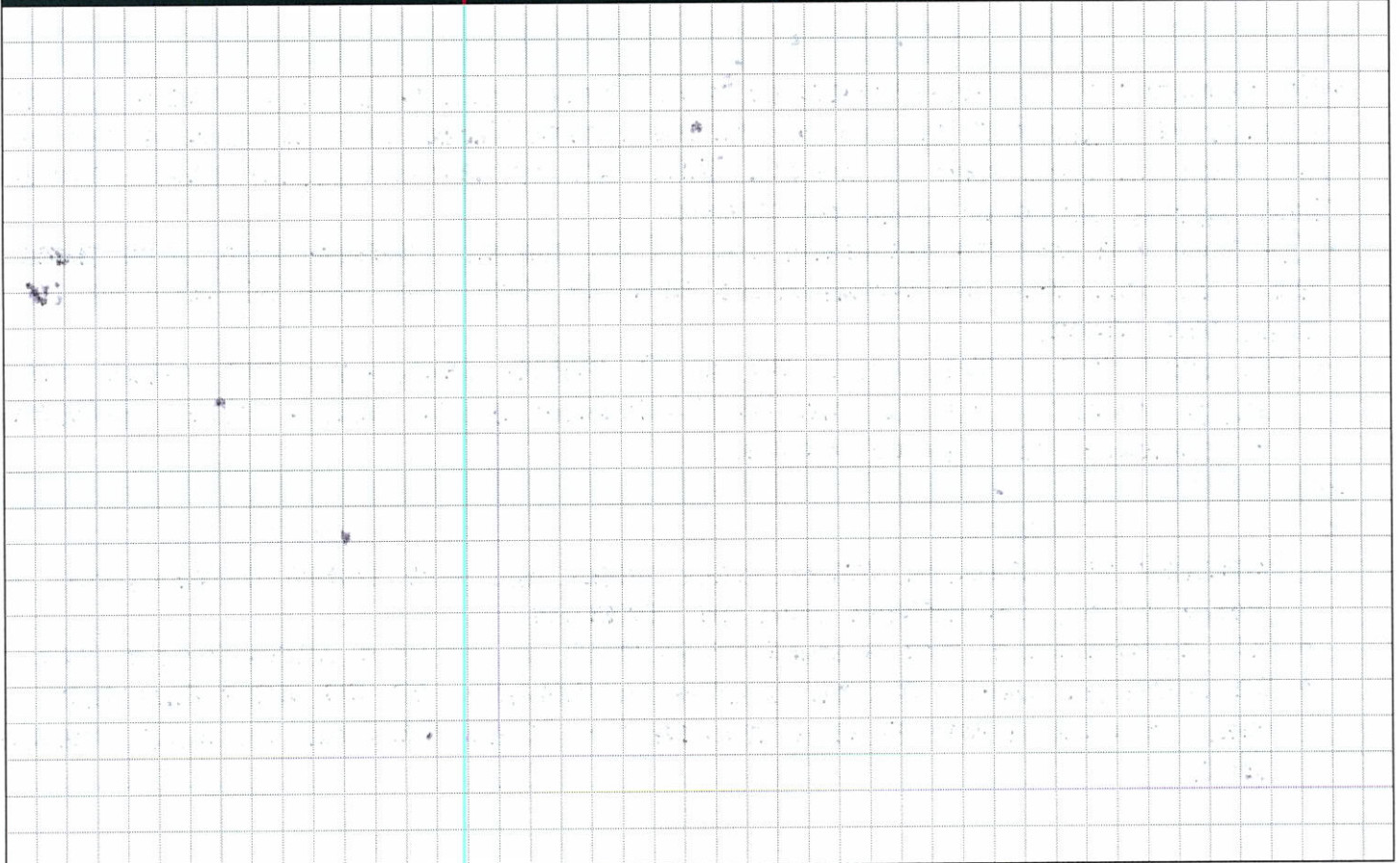
Date

Verified by :

Signature

Date

SKETCH



20180921-NS-SR
Document number

Sept. 21, 2018 6:00PM/6:00AM 658309 Tezera Fire Azmala
Visit date Time (Start/End) Project No. Prepared by

WTD Construction Agnico Eagle
Project Client

SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☐ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☐ Light ☐ Moderate ☐ Strong,

Temperature : -5 °C

Comments : _____

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No Inspection report or other : _____

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ No batch mixing of CB slurry, no recent pile placement activity
→ observed laboratory testing for viscosity
Upon the request of Henry Drilling. This is a testing program for Henry Drilling to investigate the option of pumping slurry through pipelines.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

Issued by :

[Signature]
Signature

Sept. 21, 2018

Date

Verified by :

Signature

Date

SKETCH



SNC • LAVALIN

SITE REPORT
(Detailed)

20180921-DS-SR

Document number

2018-09-21

Visit date

6:00/18:00

Time (Start/End)

658309

Project No.

M. JÉZÉQUEL

Prepared by

WTD CONSTRUCTION

Project

Agnico Eagle

Client

SNC-Lavalin

Consultant

KCG

Contractor

Weather :

☒ Sunny☐ Cloudy☐ Rain☐ Storm☐ Snow☐ Glaze

Wind :

☐ None
gusts☒ Light☐ Moderate☐ Strong,

Temperature : 1 °C

Comments :

Appendix :

☐ Yes☒ No

Pictures

☒ Yes☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ THE COMPRESSION DEVICE WAS INSTALLED TODAY, AND THE QC REPRESENTATIVES ARE NOW ABLE TO CARRY OUT COMPRESSION TESTS ON CB SAMPLES. TRIAL TESTS HAVE BEEN CONDUCTED ON THE FIRST BATCH OF CB MIX AND THE PRELIMINARY RESULTS SHOW THAT THE COMPRESSIVE STRENGTH IS AROUND 300 kPa ON A SAMPLE CURED IN WARM CONDITIONS DURING 11 DAYS. QA INSPECTED THE METHODOLOGY USED TO CONDUCT THE TESTS AND NOTED THAT IT WAS ACCEPTABLE OVERALL, BUT THERE IS ROOM FOR IMPROVEMENT WHEN CUTTING THE SAMPLE TO ENSURE THAT TOP AND BOTTOM FACES ARE PARALLEL.

→ QA RAISED THE POINT OF PILE #101 DURING THE DAILY MEETING IN WHICH HE REMINDS THAT THE CASING WAS PARTLY FILLED 3 DAYS AGO AND THE CB MIX IS SET ON 1.8m AT

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

To

Subject

Given to

THE BOTTOM OF THE CASING. HENRY DRILLING CONFIRMED THAT THEY ARE GOING TO DRILL THROUGH THE CASING AND REMOVE THE CB MATERIAL INSIDE.

→ NO PRODUCTION OF CB MIX TODAY: HENRY DRILLING IS STILL STRUGGLING WHEN ADDING THE ARBO ADDITIVE INTO THE BENTONITE SLURRY. THE CURRENT PLAN IS TO TEST THE EQUIPMENT (PUMP AND PIPES) WITH A BENTONITE SLURRY OF A SIMILAR VISCOSITY AS THE FINAL MIX WITH ARBO BUT WITHOUT THE CEMENT. THEY ARE STILL WORKING TO FIND A SOLUTION.

→ NO DRILLING ACTIVITY ON THE DIKE AS HENRY DRILLING IS STILL OUT OF CASINGS (ALL 15 CASING SHOES ARE INSTALLED).

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

SAFE AND SAFETY REMARKS

ICING OF FLOORS AND STEPS: PAY ATTENTION TO SLIPPERY CONDITIONS

Issued by :

[Signature]
Signature

2018-09-21

Date

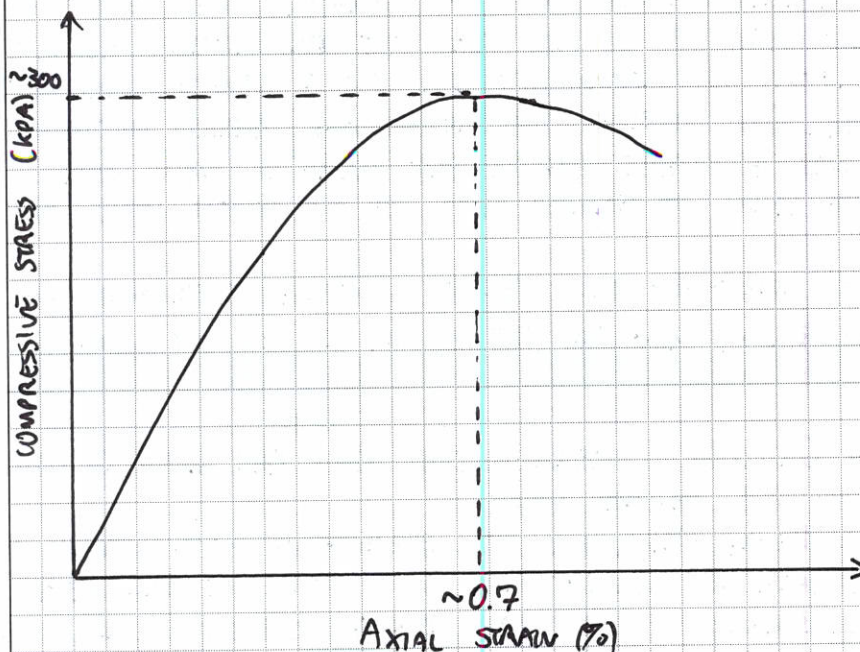
Verified by :

Signature

Date

SKETCH

TYPICAL COMPRESSIVE TEST (UNCONFINED)





SNC-LAVALIN

SITE REPORT
(Detailed)

20180922-MS-SR

Document number

September 21, 2018 6:00pm / 6:00am 658309 Tezera Fire Azmatch
Visit date Time (Start/End) Project No. Prepared by

WTD Construction Agnico Eagle
Project Client

SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature : -6 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- ⇒ Observed unconfined compression test on a sample cured for 11 days at warm condition. The test was carried out as per standard procedure. Sample preparation and testing were done in a very good way. UCS of about 28 MPa was measured.
- ⇒ Observed pinhole test on a sample cured for 4 days. The pinhole test set-up is not capable of applying a constant head test. The head is variable with time. The tests were carried out at heads that were slightly higher than (~10cm higher) than the required head for each test. It is recommended to have a constant head test set-up to do the test as per standard.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to

- ⇒ The results indicated that sample tested is non-dispersible and falls under category ND1.
- ⇒ There was no CB mix slurry preparation, no pile casting, installation.
- ⇒ Henry Drilling is still working on the option of pumping slurry from the batching plant all the way to the piles through pipes.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

SAFE AND SAFETY REMARKS

Issued by :


Signature

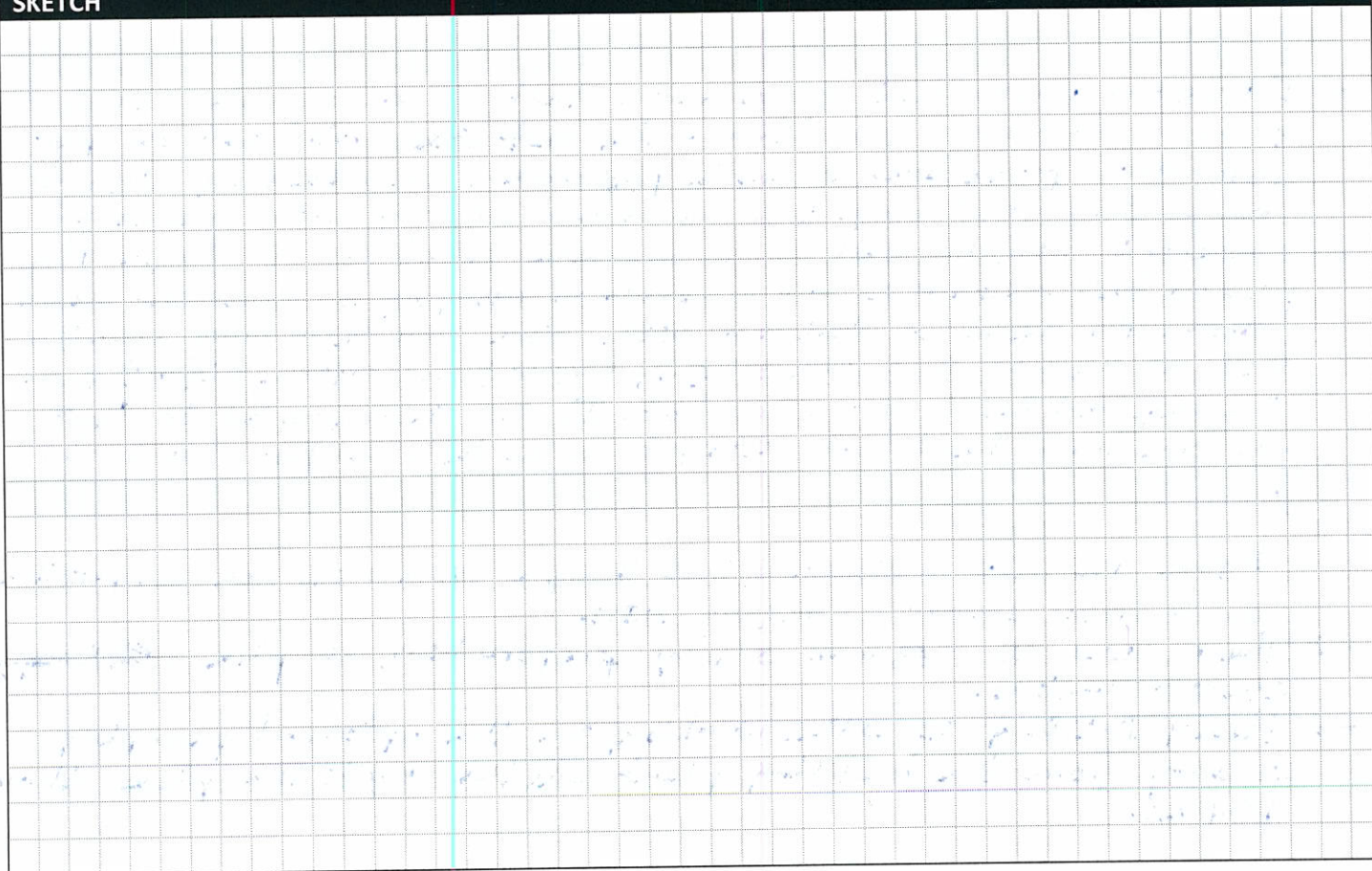
Sept. 22, 2018
Date

Verified by :

Signature

Date

SKETCH



20180922-DS-SR

Document number

Visit date: 2018-09-22 Time (Start/End): 6:00/18:00 Project No.: 658309 Prepared by: M. JÉZÉQUEL

Project: WTO CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather: ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind: ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature: -1 °C

Comments:

Appendix: ☒ Yes ☐ No Pictures ☒ Yes ☐ No

Inspection report or other:

PHOTOS

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- QA INSPECTOR SPENT MOST OF THE SHIFT IN THE LABORATORY OBSERVING UNCONFINED COMPRESSION TESTS ON 12-DAYS OLD CB SAMPLES. THE FOLLOWING OBSERVATIONS WERE MADE:
 - ALL SAMPLES MEET UCS REQUIREMENTS AFTER 28 DAYS OF CURING (200 KPa MINIMUM ACCORDING TO TECHNICAL SPECIFICATIONS).
 - TOP PLATEN IS 50 mm WIDE AND THE SAMPLES HAVE A 52 mm DIAMETER. AS A RESULT, QA OBSERVED THAT PUNCHING OCCURED IN CB SAMPLES CAUSED BY A SMALLER PLATEN (IT PENETRATED IN THE SAMPLE). SEE FIGURE ATTACHED.
 - SOME AIR VOIDS HAVE BEEN OBSERVED INSIDE BROKEN SAMPLES. SEE FIGURE ATTACHED.
 - "SHEAR CONES" HAVE BEEN OBSERVED WHEN BROKEN SAMPLES WERE TAKEN APART, WHICH IS A TYPICAL FAILURE MODE FOR REGULAR CONCRETE (SEE FIGURE ATTACHED).

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Comment |
|----|--|---------|
| | SAMPLES CB-WTO-003 WERE VERY DIFFICULT TO UNMOLD. QC REPRESENTATIVE HAD TO USE EXCESSIVE FORCE AND UNORTHODOX METHODS TO UNMOLD CB SAMPLES, SUCH AS A PROCTOR HAMMER HITTING THE SAMPLE FROM A DROP OF ~300mm. UCS RESULTS FROM THESE SAMPLES MAY NOT BE REPRESENTATIVE OF THE CB INSIDE THE SECANT PILES. | |
| | IT WAS DISCUSSED IN THE DAILY MEETING THAT QC REPRESENTATIVES COULD CONDUCT UCS TESTS ON SAMPLES BEFORE 7 DAYS TO EVALUATE IF THE REQUIRED UCS OF 50 KPa COULD BE REACHED AFTER 4-5 DAYS. THIS WOULD ALLOW HENRY DRILLING TO DRILL TERTIARY PILES SOONER. THERE WAS A GENERAL AGREEMENT THAT IT COULD BE DONE BUT QA/QC WILL MAKE A DECISION BASED ON THEIR OBSERVATIONS OF THE SET MIX TO ASSESS AFTER HOW MUCH TIME SAMPLES CAN BE UNMOLD. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

DO AN INSPECTION OF TOOL CONDITIONS BEFORE USING THEM IN THE LAB.

Issued by :

Martin J. J. J.
Signature

2018-09-22

Date

Verified by :

Signature

Date

SKETCH

ACTIVITIES PERFORMED BY SNC-LAVALIN - CONTINUED.

- QC REPRESENTATIVE WENT TO THE BATCH PLANT TO HELP HENRY DRILLING WITH MARSH CONE TESTS. THE CONTRACTOR IS STILL TRYING TO FIND A WAY TO INCORPORATE THE ARBO ADDITIVE IN AN EFFICIENT WAY IN THE BENTONITE SLURRY.
- NO CB MIX HAS BEEN PRODUCED TODAY.
- NO DRILLING ACTIVITIES OCCURRED TODAY.



Figure 1: Punching on top of the CB sample

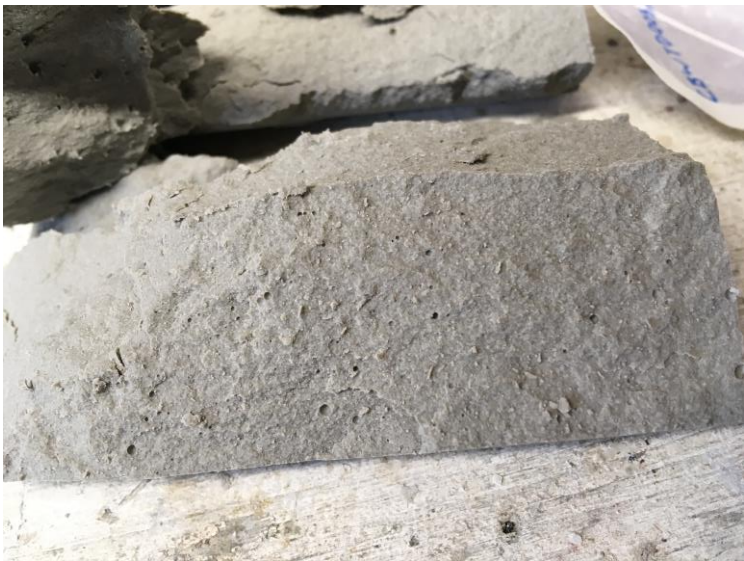


Figure 2: Air voids inside broken CB sample



Figure 3: "Shear cone" observed on broken CB sample after unconfined compression test

20180923-XJ-SR
Document number

Sept. 23, 2018 6:00PM/6:00AM 658309 Tezero Fire Azmat
Visit date Time (Start/End) Project No. Prepared by
WTD Construction Agnico Eagle
Project Client
SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature : -3 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- No production of CB mix tonight. Henry Drilling is still working on the option of pumping the slurry from the batching plant all the way to piles using long pipes.
- No pile case driving and no rock socket driving activity.
- Observed the ^{shooting and} excavation for Mammoth dike.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

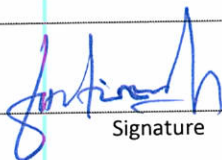
No	Subject	Given to

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

Issued by :


Signature

Sept. 23, 2018

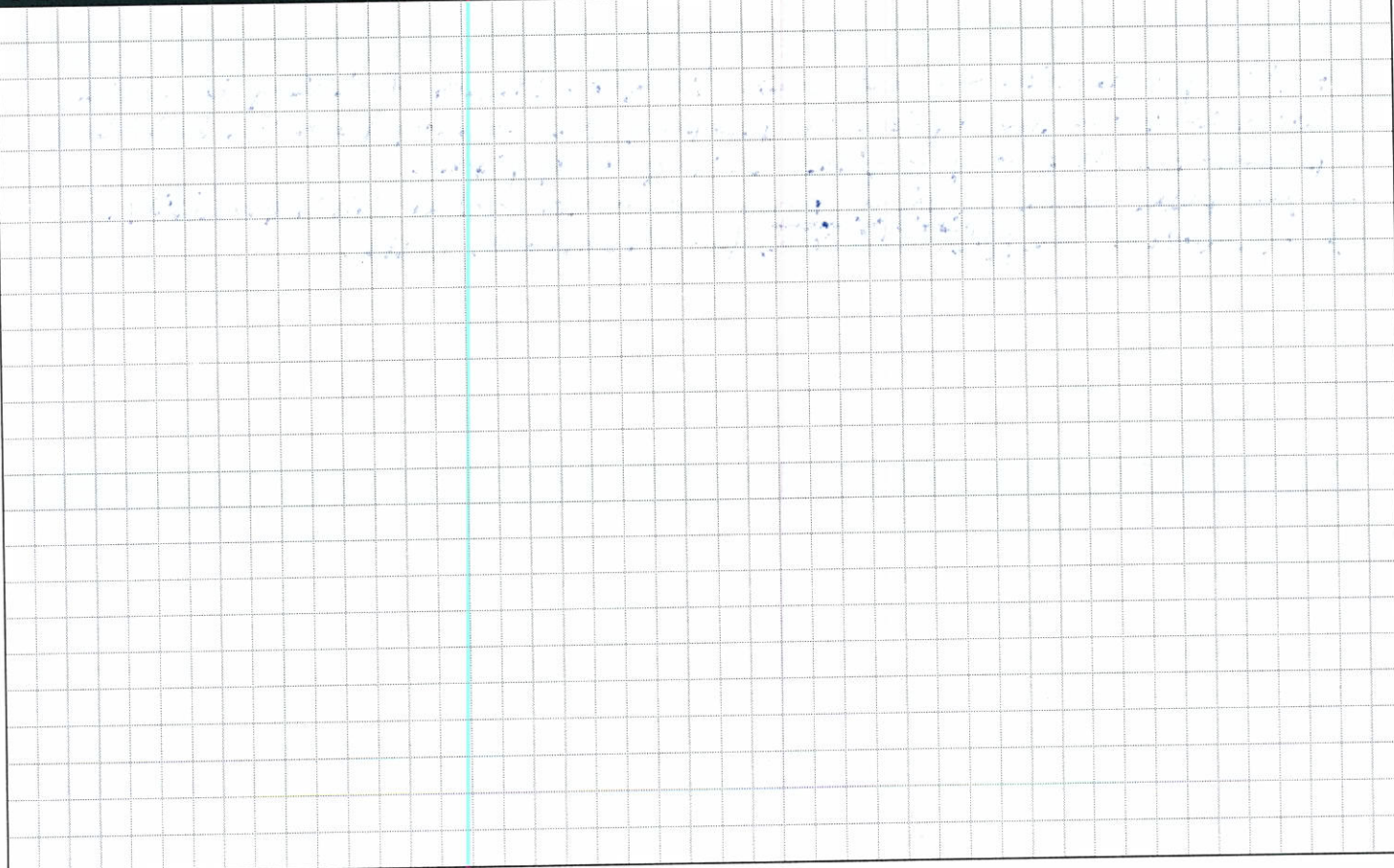
Date

Verified by :

Signature

Date

SKETCH



20180923-DS-SR
Document number

2018-09-23 6:00/18:00 658309 M. JÉZÉQUEL
Visit date Time (Start/End) Project No. Prepared by

WTD CONSTRUCTION Agnico Eagle
Project Client

SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze
Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature : 2 °C

Comments :

Appendix : ☐ Yes ☒ No Pictures ☒ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ BENTONITE SLURRY HAS BEEN PUMPED IN THE PIPE FROM THE BATCH PLANT ALL THE WAY TO STATION ~ 0+200 ON THE DIKE TO TEST THE NEW PUMPING SYSTEM INSTALLED BY THE CONTRACTOR. IT TURNED OUT TO BE SUCCESSFUL. QC REPRESENTATIVE CONDUCTED SOME TESTS BEFORE AND AFTER PUMPING: DENSITY USING MUD BALANCE AND MARSH FUNNEL TESTS GAVE VERY SIMILAR RESULTS BUT THE TEMPERATURE DROPPED BY 8 °C AFTER STAYING ~ 2 HOURS IN THE PIPE.

NOTE: THE BENTONITE SLURRY WAS DUMPED INTO TRUCKS AND WAS NOT CASSED IN PILE CASINGS.

→ COMPRESSION TESTS WERE CONDUCTED ON 7-DAY SAMPLES AND BOTH WARM CURED AND COLD CURE HAVE UCS > 150 kPa. COLD CURED SAMPLES HAVE A LOWER UCS.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

NO Subject Given to
→ TOWARDS THE END OF THE SHIFT, THE FIRST CB BATCH USING THE NEW METHOD DESCRIBED ABOVE WAS USED. ARGO ADDITIVE WAS ADDED DIRECTLY IN THE CEMENT. A QC WAS IN THE BATCH PLANT TO MONITOR THE CB MIX.
→ QA AND QC AGREED TO TAKE SAMPLES BOTH AT THE BATCH PLANT AND ON THE DIKE IN ORDER TO COMPARE THE MIX AT THOSE LOCATIONS. DENSITY, VISCOSITY AND TEMPERATURE WILL BE MONITORED AT BOTH LOCATIONS AS WELL IN ORDER TO MAKE SURE THAT PUMPING DOES NOT AFFECT THE MIX. IF QA/QC FIND OUT THAT PUMPING DOES NOT CHANGE MIX PROPERTIES, ONLY THE MIX AT THE BATCH PLANT WILL BE TESTED BEFORE PUMPING. HOWEVER, SAMPLES WILL BE TAKEN ON THE DIKE AFTER PUMPING.

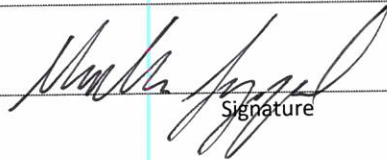
SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

THERE WAS SOME CEMENT POWDER IN THE AIR AT THE BATCH PLANT WHILE PREPARING THE CB MIX: WEAR A MASK OR LEAVE THE BATCH PLANT WHILE THEY MANIPULATE CEMENT.

Issued by :


Signature

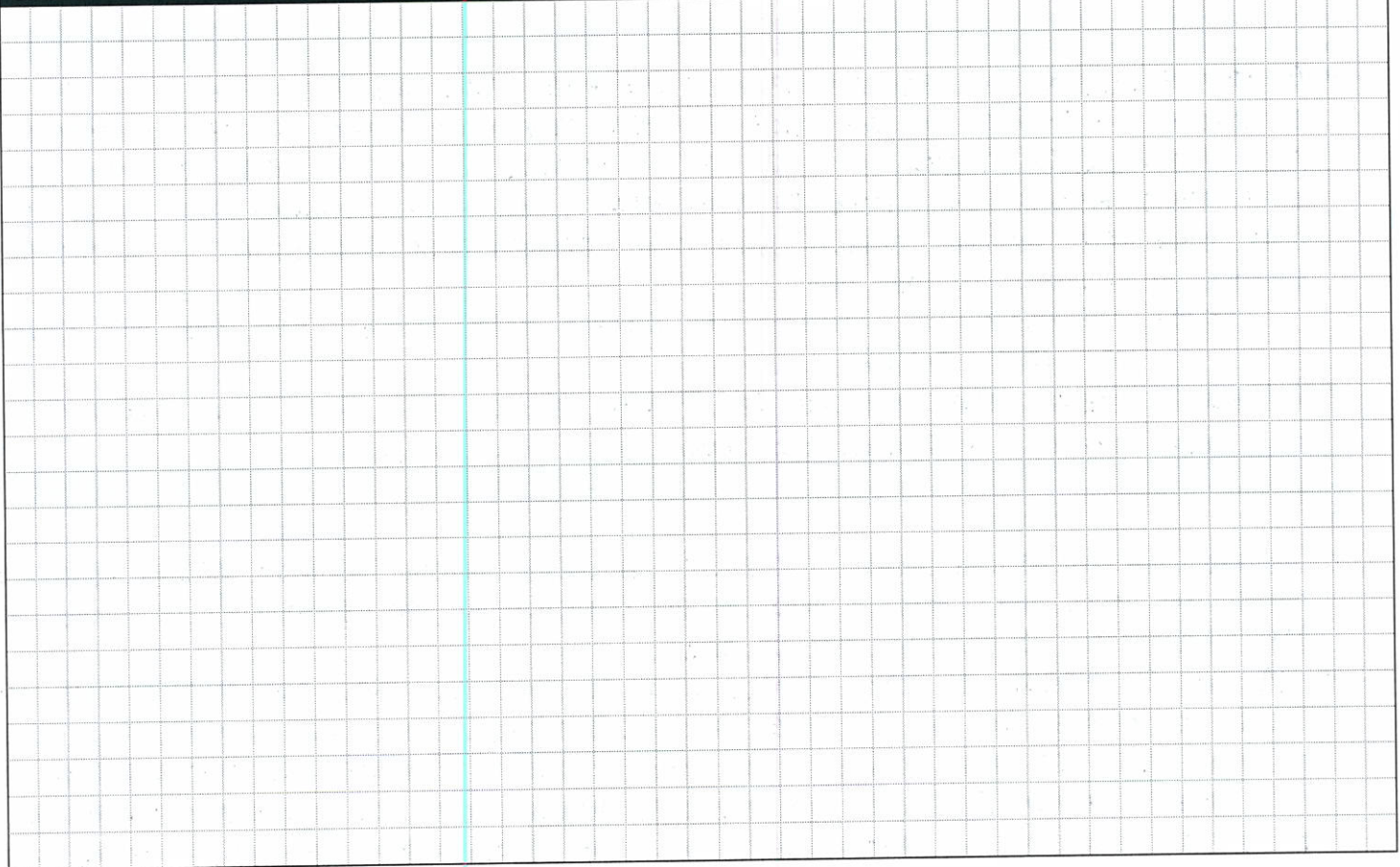
2018-09-23

Date

Verified by :

Signature

Date

SKETCH

20180924-NS-SR
Document number

Sept 24, 2018 6:00PM / 6:00AM 658309 Tezera Faw Azmatel
Visit date Time (Start/End) Project No. Prepared by

WSD construction Agnico Eagle
Project Client

SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☐ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☐ Light ☐ Moderate ☐ Strong,

Temperature : 0 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- ⇒ Followed up CB mix production at the batch plant. After a few trial of CB mixes, HD ~~didn't~~ succeeded in producing cement bentonite mixes (which include additive) with viscosity values of between 50^{sec} and 63^{sec}. The additive was added in the PAT in the already prepared CB mixes. It was added in liquid format. It took effect a few minutes after being added into the CB mix.
- ⇒ HD tried to pump three CB mixes (that had viscosity between 50 and 63) through pipes all the way to the piles. An effort was made to put the slurry into pile 101. However, HD didn't

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No Subject Given to
succeed in pumping the slurry to the pile due to pump failure.

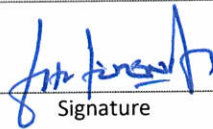
- ⇒ the CB slurry had density values between 1.25 and 1.265.
- ⇒ NCS test is being carried out.

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

Issued by :


Signature

Sept 24, 2018

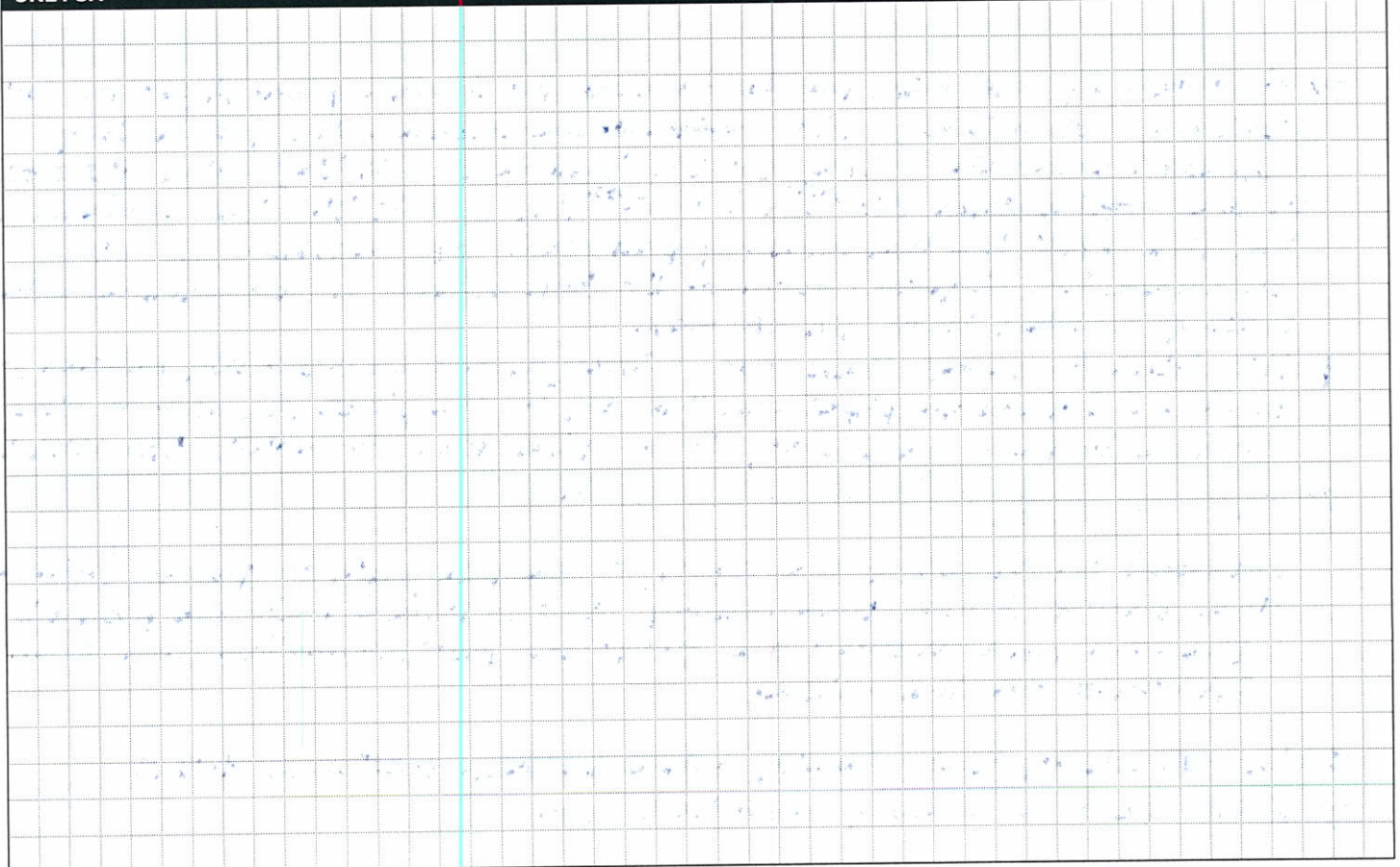
Date

Verified by :

Signature

Date

SKETCH





SNC • LAVALIN

SITE REPORT (Detailed)

20180924-NS-SR

Document number

Visit date: 2018-09-24 Time (Start/End): 6:00/18:00 Project No.: 658309 Prepared by: M. JÉZÉQUEL

Project: WTD CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather: ☒ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind: ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature: 0 °C

Comments:

Appendix: ☐ Yes ☒ No Pictures: ☒ Yes ☐ No Inspection report or other:

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- DUE TO CREW CHANGE, ONLY 1 QC REPRESENTATIVE WAS ON THE SITE DURING THE DAY.
- DURING THE DAILY MEETING, THERE WAS SOME CONFUSION FROM HENRY DRILLING REGARDING THE METHODOLOGY TO BE USED BY QA/QC FOR TESTING AND SAMPLING. QA INSPECTOR SENT A COMMUNICATION TO THE CLIENT ^(AEM) TO CLARIFY HOW QA/QC ARE GOING TO PROCEED FOR TESTING AND SAMPLING CB MIX.
- HENRY DRILLING DRILLED THROUGH CASING #101 TO REMOVE THE CB MIX THAT PARTLY FILLED THE PILE (CASTED ON SEPTEMBER 18). QA/QC REPRESENTATIVES MEASURED THE DEPTH OF THE PILE AND CONFIRMED THAT ALL THE MATERIAL HAD BEEN REMOVED AND THAT ROCK SOCKET WAS DEEP ENOUGH.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- To: Subject: Report
- HENRY DRILLING MANAGED TO HAVE A CB MIX WITH A VISCOSITY FROM MARSH FUNNEL TEST OF ~55 SECONDS (MUD BALANCE GAVE A MUD BALANCE OF ~1.255) WHICH MET THE SPECIFICATIONS AND SEEMED WORKABLE. HOWEVER, THERE WAS BARELY ANY MATERIAL COMING OUT OF THE PIPE AT THE END, SO IT WAS NOT POSSIBLE TO CAST CB MIX INTO PILES USING THE TREMIE PIPE. AFTER APPROXIMATELY 5 TO 5.5 HOURS, THE CONTRACTOR DECIDED TO PUT THE FEW CMAL METERS OF CB MIX HE PRODUCED AT THE WEST ABUTMENT SLURRY TRENCH AND TO TOP-UP SOME OLDER PILES.
 - THE METHOD USED TO ADD THE ARBO INTO THE MIX WAS TO POUR IT IN ITS LIQUID FORM DIRECTLY IN THE AGITATOR TANK AND LET IT AGITATE FOR ~10 MINUTES.

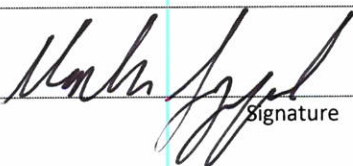
SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

MAKE SURE THAT ALL CASINGS ARE COVERED WITH A PIECE OF PLYWOOD (TO PREVENT FALLS)

Issued by :


Signature

2018-09-24

Date

Verified by :

Signature

Date

SKETCH





SNC • LAVALIN

SITE REPORT
(Detailed)

20180925-NS-SR

Document number

Visit date: Sept. 25, 2018 Time (Start/End): 6:00pm/6:00am Project No.: 658309 Prepared by: Tezera Fines Azmeh

Project: WTD Construction Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature : -2 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☒ Yes ☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Henry Drilling (HDD) was able to place CB slurry into the piles tonight. ~~Amended ref~~
- CB slurry was placed in primary piles 101, 105, 109, 113, 117, 121, 125
- Casings were also pushed drilled into secondary piles 23, 27, 31, and 35. Note that ~~depth~~ the fine filter material is not yet excavated and depth of casings is not yet verified.
- The cement bentonite (CB) mix had viscosity values ranging from 45 to 63, density ranging from 1.20 to 1.25 at temperature values ranging from 16.3 to 18.6 °C.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|---|--------------------------|
| ⇒ | Cement-bentonite-additive mixes were | formalized into the PAB. |
| | The slurry is then loaded to a truck and transported to the site. The slurry is then pumped from the truck to the piles in a tremie pipe. (Refer to attached picture) | |
| ⇒ | The time from batching them to placement ranged between 2 and 3 hours. | |
| ⇒ | 2 samples were collected during this shift. | |
| ⇒ | The CB had slurry hard | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

Issued by :

[Signature]
Signature

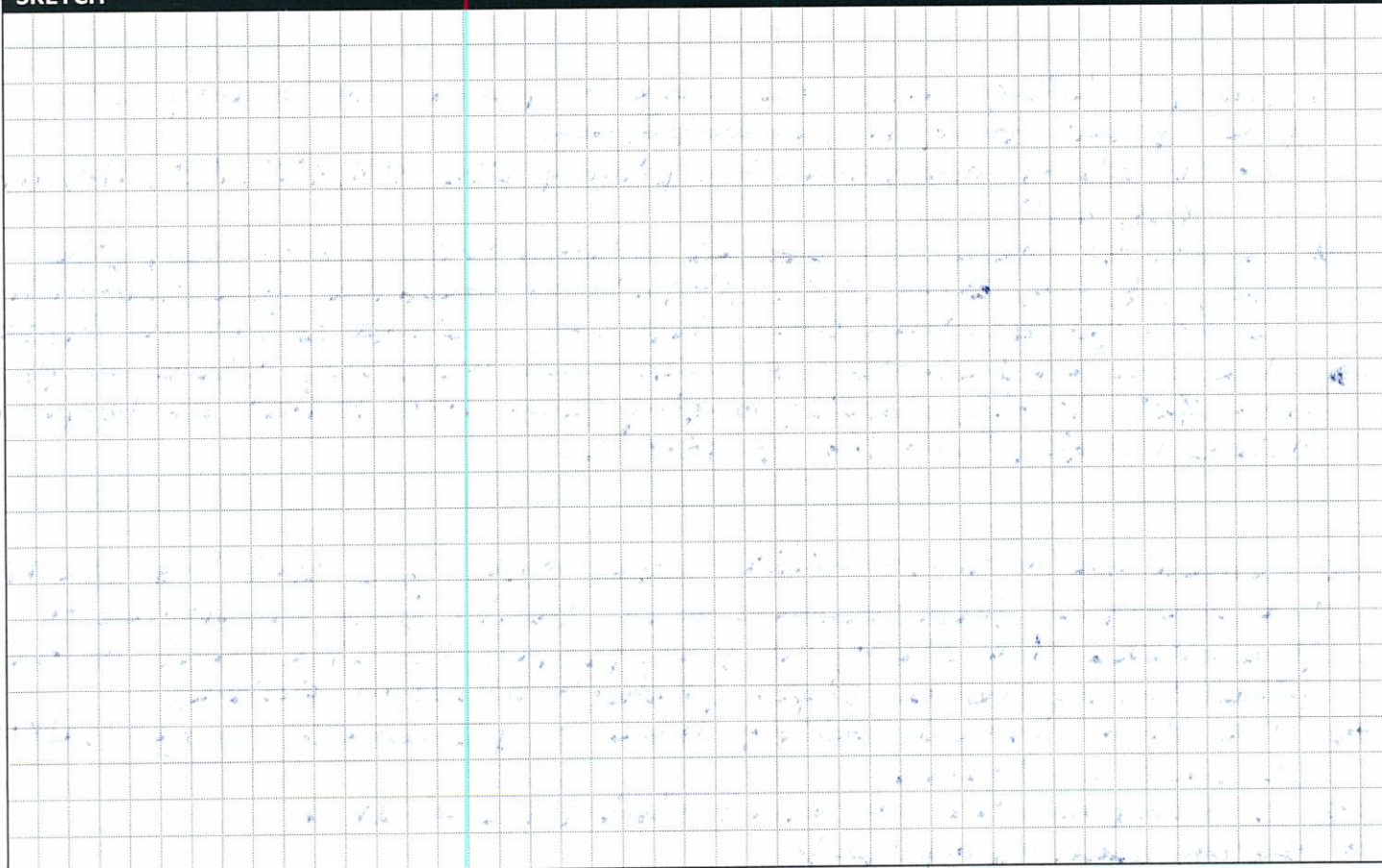
Sept. 25, 2018.
Date

Verified by :

Signature

Date

SKETCH



Picture showing slurry being pumped from truck to the piles



20180925-05-SR

Document number

Visit date 2018-09-25	Time (Start/End) 6:00/18:00	Project No. 658309	Prepared by M. JÉZÉQUEL
Project WTD CONSTRUCTION		Client Agnico Eagle	
Consultant SNC-Lavalin		Contractor KCG	
Weather :	<input checked="" type="checkbox"/> Sunny	<input checked="" type="checkbox"/> Cloudy	<input type="checkbox"/> Rain
		<input type="checkbox"/> Storm	<input type="checkbox"/> Snow
			<input type="checkbox"/> Glaze
Wind :	<input type="checkbox"/> None gusts	<input checked="" type="checkbox"/> Light	<input type="checkbox"/> Moderate
		<input type="checkbox"/> Strong,	
Comments :	Temperature : 0 °C		
Appendix :	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Pictures Yes <input type="checkbox"/> No
			Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- QA INSPECTOR NOTED A FEW MISTAKES MADE BY QC REPRESENTATIVES FROM LAST DAY SHIFT:
 - THE BLEEDING TEST WAS CONDUCTED WITHOUT PROPER COVER OF THE GRADUATED CYLINDER, WHICH COULD HAVE CONTRIBUTED TO EVAPORATION OF BLEED WATER. IT IS RECOMMENDED TO DISCARD THE RESULTS FROM THIS TEST AND TO START ANOTHER ONE WITH FRESH CB MIX.
 - 12 FRESHLY CASTED CYLINDERS HAVE BEEN SITTING FOR ~ 12 HOURS ON THE COUNTER OF THE LAB WITHOUT ANY COVER, OUTSIDE OF THE MOIST ROOM. THESE MOLDS SHOULD BE COVERED AND PLACED IN THE MOIST ROOM FOR CURING AS SOON AS POSSIBLE. SINCE THEY HAD NO IDENTIFICATION, THIS INFORMATION SHOULD BE COMMUNICATED TO QA BY QC REPRESENTATIVES.
- QC CONDUCTED UCS TESTS IN THE LABORATORY. RESULTS TO BE SENT TO QA.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|--|----------|
| → | HENRY DRILLING HAD TROUBLE WITH THEIR AUTOMATED SYSTEM AT THE BATCH PLANT IN THE MORNING. THEY STARTED PRODUCING MANUAL CB BATCHES DURING THE AFTERNOON. PILE #133 WAS FILLED AND OTHER PILES WERE TOPPED-UP WITH SLURRY (CASTED IN THE PREVIOUS SHIFT). | |
| → | PILES #03, 27, 31, 35, 39 AND 43 HAVE BEEN DRILLED WITH DOWN-THE-HOLE HAMMER DRILL AND CASINGS # 47 AND 51 WERE DRILLED INTO THE GROUND (FINE FILTER TO BE EXCAVATED). FINAL APPROVAL OF THOSE PILES BY QA/QC IS REQUIRED BEFORE CASTING GROUT IN THESE PILES. | |
| → | BLEEDING AND LOSS OF SLURRY WERE OBSERVED AND MONITORED FOR PILES #125, 129 AND 133. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments

SAFE AND SAFETY REMARKS

WEAR A MASK IF STAYING IN THE BATCH PLANT WHEN HENRY DRILLING IS DOING MANUAL BATCHING (LOTS OF BENTONITE IN THE AIR).

Issued by :

[Signature]
Signature

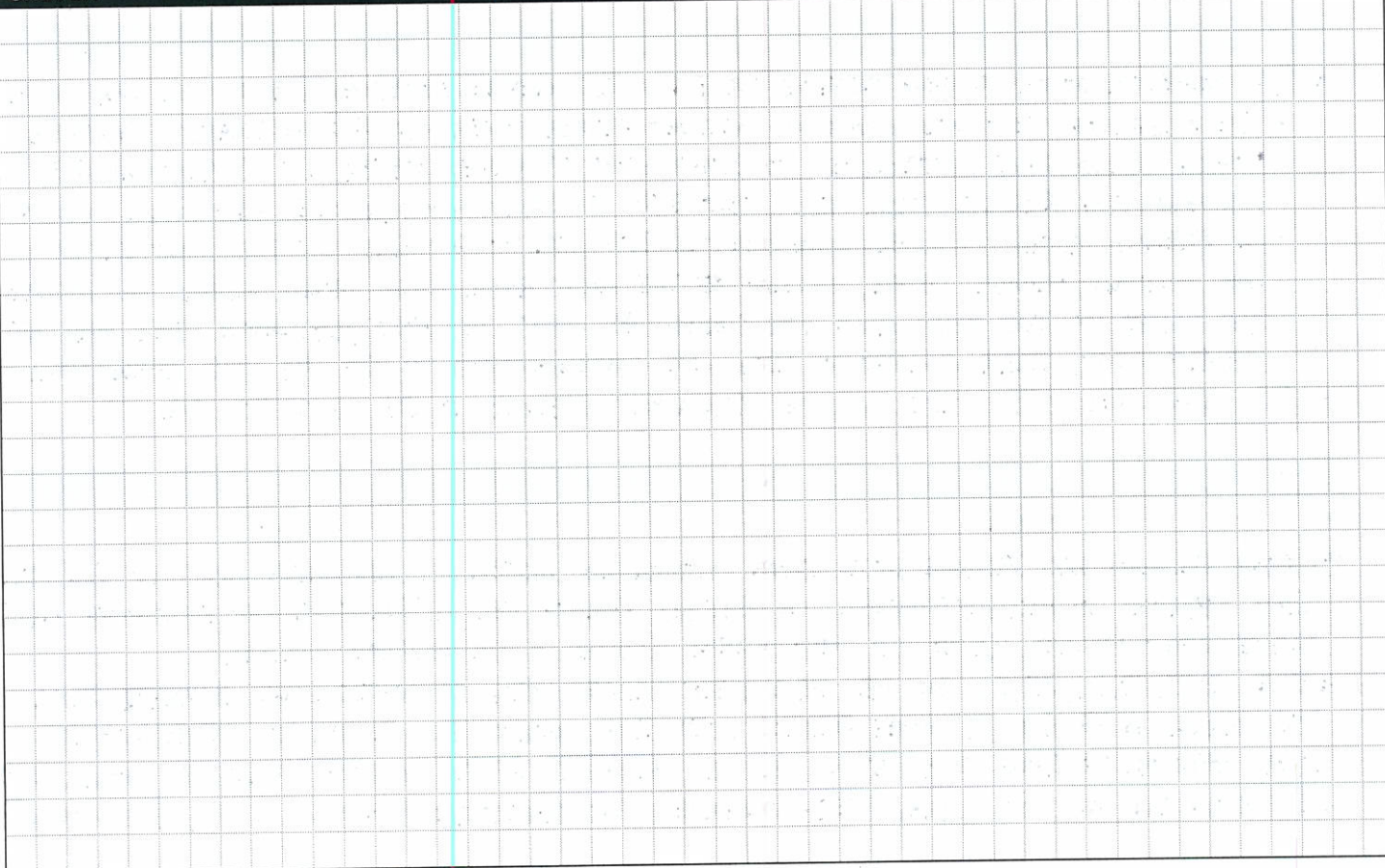
2018-09-25
Date

Verified by :

Signature

Date

SKETCH



20180926-NS-SR

Document number

September 26, 2018 6:00PM 6:00AM 658309 Tezera Firew Azmeh
Visit date Time (Start/End) Project No. Prepared by

WCD construction Agnico Eagle
Project Client

SNC-Lavalin KCG
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature : -2 °C

Comments :

Appendix : ☐ Yes ☐ No Pictures ☐ Yes ☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ QA observed that QC is not carrying out the bleeding test at the required frequency. QA notified QC that 4 bleeding tests have to be carried out per day (i.e., 2 per shift, which implies 1 per sample) as per the "Proposed Start-up QC Program Frequency" by the Contractor. It is also noted that QC does not have enough number of cylinders (as they only have 3 cylinders) for carrying out the bleeding test as per the proposed frequency.
→ casings were drilled into fine water material for the following secondary piles: 55, 59, 63

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No Subject Given to
→ observed QC conduct of was test. Results will be sent to QA. QA mentioned to QC that the size of the '... ' loading plates need to be adjusted to match the size of the sample, as the result may be affected. This was also mentioned by QA on Sept. 22.
→ completed approval form for piles 23, 27, and 31 for depth of rock socket of piles. ~~subject~~
→ ...
→ QA monitored rate of slurry was in secondary piles 011 and 015

SPECIFIC ELEMENTS VERIFIED

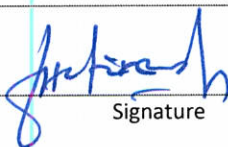
Elements

Location

Scope and comments

SAFE AND SAFETY REMARKS

Issued by :


Signature

Sept. 26, 2018
Date

Verified by :

Signature

Date

SKETCH

→ HD didn't place any slurry into the piles, except into the secondary pile 011 and 015, which were filled with a slurry produced at the end of day shift. These piles were filled at ~~the~~ the very beginning of the night shift. Pile 011 was actually partly filled during day shift.



SNC-LAVALIN

SITE REPORT (Detailed)

20180927-NS-SR

Document number

Visit date: 27-09-2018 Time (Start/End): 6PM-6AM Project No.: 658309 Prepared by: J. LEBLANC

Project: WTD CONSTRUCTION Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: HCG

Weather: ☐ Sunny ☐ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze
Wind: ☐ None gusts ☐ Light ☒ Moderate ☒ Strong, Temperature: -5 °C

Comments: No day shift site report due to QA crew change.

Appendix: ☐ Yes ☒ No Pictures: ☒ Yes ☐ No Inspection report or other:

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- HD was able to place CB slurry into the piles during the most part of the night. CB slurry was placed in secondary piles 71, 75, 79, 83 and 87.
- Rock sockets were also drilled (DTH hammer) and verbally approved by QC representative in secondary piles 83, 87, 91, 95, 99.
- The cement bentonite mix had viscosity values ranging from 52 to 64, density ranging from 1.24 to 1.26 at temperatures ranging from 16.2 to 21.6 °C.
- The cement bentonite mix was transported on the dike with the vacuum truck, containing the equivalent of two batches in volume (~11m³).

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|--|----------|
| → | Hydraulic cylinder of the vacuum truck broke. It was used to lift the tank in order to facilitate the clean up. This result in a small quantity of CB mix that is always left in the tank after each CB mix placement. QC representative proposed that the tank be cleaned more often than once per shift in order to avoid CB mix accumulation in the tank. | |
| → | QA/QC representatives noted that if the pump is not shut before the tank is completely empty, the pump will push air in the tremie, causing avoidable mixing with CB slurry and water. This observation has been highlighted to HD workers and QA/QC representatives will watch this phenomenon specifically from now on. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
→ CB slurry in piles	71-75-79-83-87	
→ Rock socket (DTN hammer)	83-87-91-95-99	Verbally approved by QC rep.

SAFE AND SAFETY REMARKS

Very low visibility on the site, especially during snow episode.
Be prudent since there is a lot of co-activity on the dike.

Issued by :

Jonathan Labarre
Signature

2018-09-27

Date

Verified by :

Signature

Date

SKETCH

→ Batch 150 was rejected since it was too thick and has most probably started to set in the tank, as showed by high temperature of 32°C for the CB mix. The mix was too thick and it was impossible to measure its viscosity (mix was not flowing through the Marsh cone).



SNC • LAVALIN

SITE REPORT (Detailed)

20180927-DS-SR

Document number

27/09/2018

Visit date

6AM / 6PM

Time (Start/End)

658309

Project No.

A. Arbaiza

Prepared by

WTD construction

Project

Agnico Eagle

Client

SNC-Lavalin

Consultant

KCGC SP by HD)

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☐ Snow

☐ Glaze

Wind :

☐ None
gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : -7 °C

Comments :

(-16 with windchill)

Appendix :

☐ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- casings 103, 107 and 111 were drilled down to bedrock in the morning and depth measurements were taken by QA/QC inspectors. 103 and 107 did not respected specs requirements, therefore the rock hammer was used to drill more. these three piles were then approved for CB slurry placement.
- HD was ready to drill casings in the west abutment trench. they asked QA/QC to approve the activity for the NS crew. ~~the QA/QC~~ QA/QC asked to survey the trench prior to drilling and the top of the trench was found to be always above 157.0m. Since the CB slurry was poured in two different dates (1st pour 2 weeks ago ; 2nd pour 4 days ago) QA asked QC to do a UCS test from the

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|---|--|----------|
| 4 days sampling: | Results → 343, 5 and 301, 2 KPa (2 samplings at 4 days). | |
| | the trench can now be drilled since UCS is in accordance with the specs. It was also agreed with the designer to place about 1m of fine filter on top of the trench to facilitate the drilling of the casings and access with the machinery. | |
| - QC is doing 1 bleeding per shift (2 per day) instead of 2 per shift due to lack of equipment (cylinders). this was mentioned to QC inspector. | | |
| - Piles 91, 95 and half of 99 were poured with CB mix from batch plant 144 and 146 which has less bentonite compared to the other mixes. this is due to the valve that stayed open without noticing in the PAT. | | |

→

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
• Approval of depth to bedrock of casings	Pile #103, 107, 111	See approval form
• CB slurry placement in casings	Pile #91, 95, 99, 103, 107, 111	

SAFE AND SAFETY REMARKS

Very windy and cold temperatures - wear proper equipment.

Issued by :

[Signature]
Signature

27/09/2018

Date

Verified by :

Signature

Date

SKETCH

... nevertheless, the mud density and marsh core were in accordance with specs.



SNC • LAVALIN

SITE REPORT
(Detailed)

20180928-NS-SR

Document number

Visit date: 28/09/2018 Time (Start/End): 6PM/6AM Project No.: 658 309 Prepared by: J. LeBlanc

Project: WTD Construction Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG (SP by HD)

Weather: ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze
Wind: ☒ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature: — °C

Comments:

Appendix: ☒ Yes ☐ No Pictures: ☒ Yes ☐ No Inspection report or other: Approval form

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Piles 0115 to 0127 and 0149 to 0157 (Secondary) were drilled down to bedrock (DTH hammer) and were measured by AC rep. (See approval).
- Piles 0115, 0157, 0189, 0193, 0197, 0201, 0205 and 0207 were anchored to the bedrock surface and partially cleaned with the Auger (Fine Filter removal).
- Piles 0115 to 0127 and 0137 to 0145 were filled with CB slurry. After removal of the casings, CB slurry was added in the piles to reach Fine filter surface elevation.
- Batches 170 to 190 were prepared for the secant piles: Marsh viscosity between 62 to 88, Temperature between 18.5 to 21.7°C, Mud balance density between 1.250 to 1.260.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|--|----------|
| → | Beginning the construction of the fine filter pad of 1.0m thickness at the west abutment slurry trench. Not finished yet due to not enough man power during night shift. | |
| → | Slurry loss measurements in piles 0137, 0141 and 0145 in the casings after CB slurry has been placed. (See results in sketch). | |
| → | Piles 0153 was half filled with CB slurry (only 1 batch left before the end of the shift) at around 6:00 am. The depth will be measured during next shift. A cold joint is expected and a decision will have to be taken regarding this joint. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
Approval depth of bedrock	Piles # 0115 to 0127 (secondary) 0149 to 0157 (primary)	See approval form
CB slurry placement in casings	Piles # 0115 to 0127 (secondary) 0137 to 0145 (primary)	
Casings Anchored	Piles # 0115 and 0157 0189 to 0207 (primary)	Ready For DTH Hammer

SAFE AND SAFETY REMARKS

Issued by :

Jonathan Leblanc
Signature

28-09-2018

Date

Verified by :

Signature

Date

SKETCH

Slurry loss measurements

0137

15 minutes 0,04m
45 minutes 0,09m
1 hour 0,105m
1.5 hours 0,12m
2.0 hours 0,13m
3.5 hours 0,16m
4.0 hours 0,16m

* Bleeding observed after 1.5 hours
and reached 3cm after 4 hours

0145

15 minutes 0,45m
30 minutes 0,79m
1 hour 0,80m
* casing was pulled out after 1 hour

0141

15 minutes 0,04m
45 minutes 0,08m
1 hour 0,10m
1.5 hours 0,14m
3.5 hours 0,165m

* bleeding observed after 1.5 hours
and reached 2.5cm after 4 hours.

20180928-DS-SR

Document number

Visit date 28/09/2018	Time (Start/End) 6am / 6pm	Project No. 658309	Prepared by A. Arbalaz
Project WTD Construction		Client Agnico Eagle	
Consultant SNC-Lavalin		Contractor KGLSP by HD	
Weather : <input checked="" type="checkbox"/> Sunny <input checked="" type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Storm <input type="checkbox"/> Snow <input type="checkbox"/> Glaze Wind : <input type="checkbox"/> None gusts <input type="checkbox"/> Light <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Strong,			
Comments :		Temperature : -5 °C windchill (-10)	
Appendix : <input type="checkbox"/> Yes <input type="checkbox"/> No		Pictures <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Inspection report or other :			

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Crew change for HD therefore there was no activity on the dike (NO CB slurry and no drilling). HD did maintenance to their equipment especially their bag unloader which needs to be fixed. Drilling should start in the NS.
- KGL is working on the WRSF road and the garage for the vacuum truck (to be heated while being filled).
- It was noticed that the lake downstream is completely frozen.
- As a follow up on the batch #144 and 146 (CB mix with less bentonite), QC informed QA that the QC on the batch plant did not take any sampling of these two batches because he did not have any buckets available at that moment. Overall the QC did not think of

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|---|----------|
| | any possible solution to sample these batches and informed the other QC too late. | |
| → | west abutment trench (unfilled part) is accumulating a lot of snow. It might be difficult to fill the missing trench with CB mix. | |
| → | A vane shear test was done at pile #145 after 12 hours. About 10 cm of water was found on top and the CB loss was about 50 cm. It should be noted that the casing was pulled during the night shift. The test gave a 65 kPa shear strength. | |
| → | Piles 189 and 193 were approved (rock socket > 1.0 m). Approval form was started but can be completed with more approved piles during the NS. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
Approval to bedrock	Pile 189 and 193	Approval form to be completed.

SAFE AND SAFETY REMARKS

Issued by :


Signature

28/09/2018

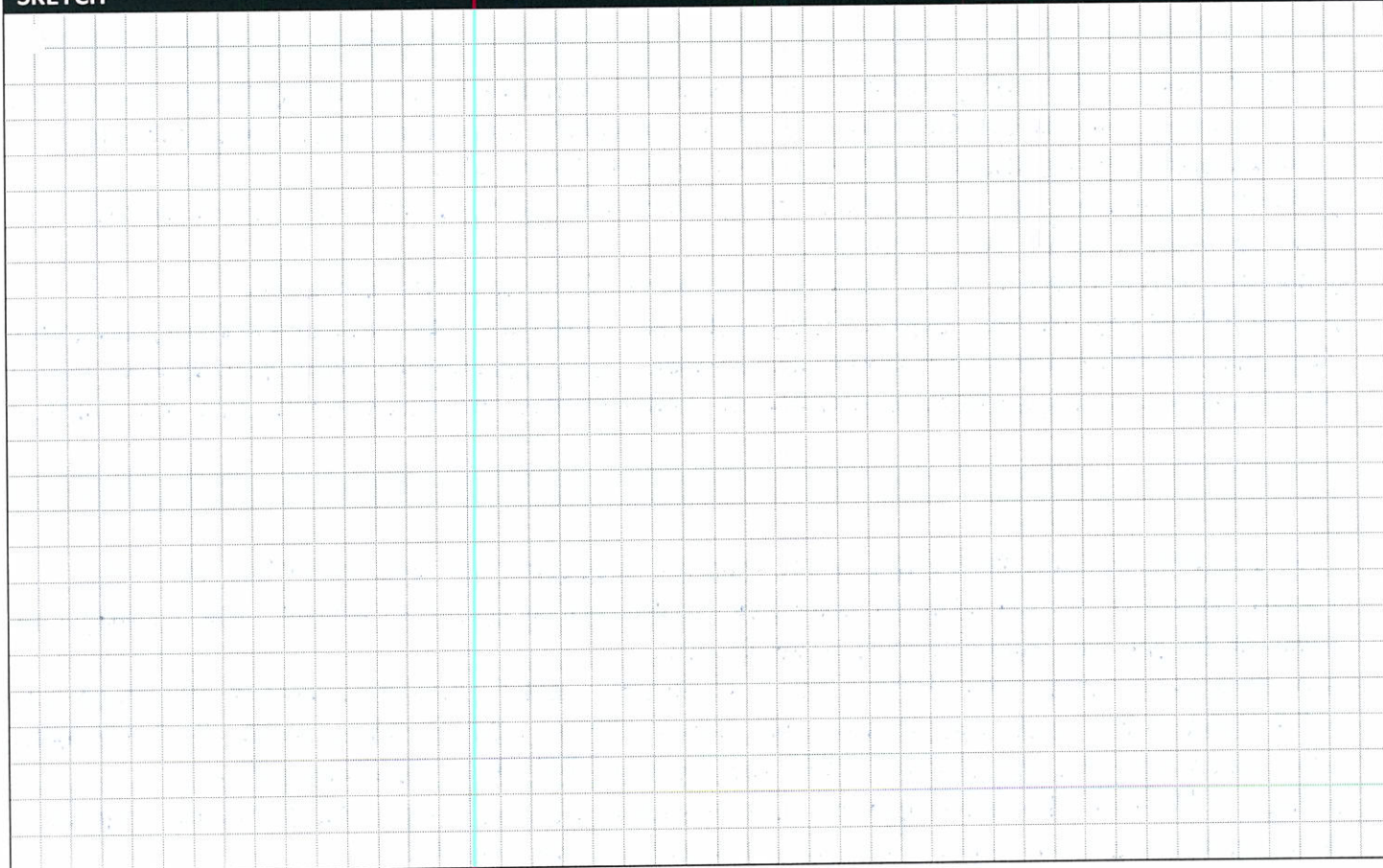
Date

Verified by :

Signature

Date

SKETCH





SNC-LAVALIN

SITE REPORT
(Detailed)

20180929-NS-SR
Document number

29-09-2018 6PM/6AM 658 309 J. Leblanc
Visit date Time (Start/End) Project No. Prepared by
WTD Construction Agnico Eagle
Project Client
SNC-Lavalin KCG (SP by HD)
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze
Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong, Temperature : _____ °C

Comments : _____

Appendix : ☒ Yes ☐ No Pictures ☒ Yes ☐ No Inspection report or other : _____
Approval Form

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- 2 CB mix samples taken by QC rep. at the batch plant.
- Observations on pine-hole testing. QC make sure the constant water head is maintained during the test.
- The vacuum truck is still being repaired. A vacuum tank on a trailer has been used (exactly the same than the truck but on a trailer). The tank is slightly inclined to ensure no accumulation in the tank.
- HD and Sana changed the hose of the vacuum tank at the beginning of the shift because the previous was frozen.
- One of HD drills is having mechanical problems and was shut down during the entire night shift.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|--|----------|
| → | Primary pile 0153 that was half filled during the previous night shift needed to be drilled again because it was impossible to remove the casings without affecting the grout. HD decided to drill the grout in and re-clean the casing. CB mix was poured again at 1h30AM after being cleaned. | |
| → | Piles 197, 201 and 131 drilled down to bedrock (DTH) and measured by QC. | |
| → | Piles 197, 201 and 131 were previously anchored to bedrock and cleaned with Auger. | |
| → | Piles 149, 153, 157, 189, 193 and 197 were filled with CB slurry. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
Approval depth of bedrock	Piles 197, 201 (primary)	See Approval Form
	Pile 131 (secondary)	
CB slurry placement in casings	Piles 149, 153, 157, 189, 193, 197. (primary)	
Casings Anchored	Pile 131 (Secondary)	Ready for DTH hammer.
	Piles 165, 169 (primary)	

SAFE AND SAFETY REMARKS

A lot of ice formation around the piles. Wear proper equipment and be aware of the ground surface conditions when walking on dike.

Issued by :

Jonathan Leblanc
Signature

29-09-2018

Date

Verified by :

Signature

Date

SKETCH

Slurry loss measurements taken before the removal of the casings:

0149 (Poured at 22h30)

23h00 6cm
23h30 9cm
00h30 14,5cm
01h15 18,5cm
02h00 21cm

* Bleeding observed after 7h00 (23h30) and reached 2cm at 2h00.

0189 (poured at 2h30)

3h45 5cm
4h40 8cm
5h15 11cm

* Bleeding observed and reached 0,5cm at 5h15.

0157 (Poured at 23h55)

00h30 21cm
01h15 35,5cm
02h00 38cm

* Bleeding observed after 35min (00h30) and reached 1cm at 2h00.

0193 (Poured at 3h55)

4h00 5,5cm
4h40 9,5cm
5h15 12cm

* Bleeding observed and reached 1cm at 5h15.

→ Batches 194 to 196 poured during the shift. It takes about 30 minutes to fill a secant pile and about one hour to empty a vacuum tank.



SNC-LAVALIN

SITE REPORT
(Detailed)

20180929-DS-SR

Document number

29/09/2018

Visit date

6AM/6PM

Time (Start/End)

658309

Project No.

A. Arbaiza

Prepared by

658309

Project

Agnico Eagle

Client

SNC-Lavalin

Consultant

ICG (HD by SP)

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☒ Snow

☒ Glaze

Wind :

☐ None
gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : -8 °C

Comments :

Appendix :

☐ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- A system to communicate the work being done on site has been implemented: 3 ribbons are being placed at each casing intersection of the activity to be performed. A red ribbon indicates that the casing is finished and the rock-hammer is pending. The surveyor may survey the elevation of the top of the casing. A blue ribbon represents a complete pile down to bedrock. QA/QC need to take measurements of depth to rock socket and approve (or not) the pile for CB slurry placement. If surveyor did not survey the casing yet, they need to do it at this stage. A green ribbon indicates that the pile is approved by QA/QC for CB slurry. only QA/QC can put the green flag on the casing.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

-No

-Subject

-Given to

- HD has a new batch plant operator - they are taking all the precautions to make a smooth transition. Nevertheless, the batch plant stopped working around 10am since the worker is having problems operating it. It started by not producing enough bentonite to tie PAT and when they wanted to adjust, only dry bentonite was being fed without water, the mix was very thick and had to be wasted (Batch #216). Pile #131 was being filled with batch 214 and may have to be redrilled if batch plant does not work by the end of the shift. Pile #201 was finished with CB slurry at the beginning of the shift (it started in NS).

→

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
- Approval depth of bedrock	Pile # 169, 173	Approval form to complete with NS approvals
- CB slurry placement in casings.	Pile # 201 and partially 131.	

SAFE AND SAFETY REMARKS

Some of the holes filled on NS are not covered since plywood is missing. Be careful when walking. Also, visibility reduce due to Glaze.

Issued by :

[Signature]

Signature

29/09/2018.

Date

Verified by :

Signature

Date

SKETCH

→ Pile 205 was measured by surveyor for deviation before rock hammer (once red ribbon was placed on the casing). After rock hammer, the surveyor noticed that the casing was inclined (11 mm difference in elevation). HO was trying to see if they can move the casing to place it properly. They are aware that they might have to drill a 4th pile if any gaps are encountered at the bottom of the recent piles. Because of this, the surveyor will now only survey the casing once a blue ribbon is placed in the casing (at the end of rock hammer).

→ Inspection of the excavation at WRSF dike with QCS.



SNC • LAVALIN

SITE REPORT
(Detailed)

20180930-NS-SR

Document number

Visit date: 30-09-2018 Time (Start/End): 6PM/6AM Project No.: 658309 Prepared by: J. Leblanc

Project: WTD Construction Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG (SP by HD)

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze

Wind : ☐ None gusts ☒ Light ☐ Moderate ☐ Strong,

Temperature : -8 °C

Comments :

Appendix : ☒ Yes ☐ No Pictures ☒ Yes ☐ No

Inspection report or other :

Approval Form

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Because of day shift problems at the batch plant, the first CB mix batches were ready at 20h15 to be poured on the dike.
- DTH hammer drill had some problems (mechanical or hydraulic) and stopped for about 45 minutes. Production continued after this brief shut down.
- Piles 209 to 233 were drilled down to bedrock (DTH hammer) and measured by QC representative. (See approval form).
- Piles 169, 173, 181, 229, 225 were filled with CB slurry.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- No Subject Given to
- When the casing was removed at pile 173, grout was 2.4m below ground surface. The pile was immediately topped with CB mix. After ~2h00, a slurry loss of 0.66m below ground surface. QA asked the operators to fill back the secant pile as soon as possible. They did not had the chance to do it since the drill was working near the pile. It will have to be filled at the beginning of day shift.
 - Batches 218 to 240 were poured at the dike (details compiled by QC representatives).

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Approval depth of bedrock

Primary: 209 to 233

See approval form

CB slurry placement in casings

Primary: 169, 173, 225, 229, 233

Secondary: 131

SAFE AND SAFETY REMARKS

Wear gloves at all time with CB mix (can cause chemical reaction).

Issued by :

Jonathan Leblanc

Signature

30-09-2018

Date

Verified by :

Signature

Date

SKETCH

Vane test in primary pile 0201, 12 hours after placement:

depth bottom of rock socket: 7.599 m

* Revision 1:
data needed
to be corrected
when using the
large vane.

depth below ground surface (m)

2.22 m

3.22 m

4.22 m

5.22 m

6.22 m

7.22 m

S_u (kPa)

~~80~~ 40

~~60~~ 30

~~95~~ 48

~~107~~ 54

~~142~~ 71

~~155~~ 78

* An official test results sheet will be send by QC rep.



SNC • LAVALIN

SITE REPORT
(Detailed)

20180930-DS-SR

Document number

30/09/2018

6AM/6PM

658309

A. Arbizu

Visit date

Time (Start/End)

Project No.

Prepared by

WTD Construction

Agnico Eagle

Project

Client

SNC-Lavalin

Consultant

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☒ Snow

☐ Glaze

Wind :

☐ None
gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : ~-10 °C

Comments :

Appendix :

☐ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- CB mix was being placed on piles 213 and 217 and the mix was coming out too liquid. After a while of pouring and wasting CB mix, QC told the operators that the slurry was fine. QA advised the QC to take some samples of the slurry and do a mud balance since it seemed to be still very liquid. QC said that it was not necessary and that it was time consuming. Then QA/QC inspected the placement of slurry for piles 203 and 205 and it was still watery. QA told QC to do a mud balance because it was not normal. Furthermore it was clear that the placement method was different than previous ones: the slurry was being pumped too fast or tremmie was not being well placed and it seemed that

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to

the water inside the pile was mixing with the CB mix. A sample was finally taken by QC at pile #205 and the mud balance test gave a density of 1.16 g/cm³. HO and KCG and AEM were informed of this and decided to pump more CB from the bottom until cleaning all the liquid slurry. This was done for piles: 205, 209, 213 and partially 217 (to continue on NS).

- It was also noticed that pile #221 (which was finished to be poured at 6am) dropped by 20cm after 2.5h but when casing was taken out it dropped by ~2m. Once filled again, it dropped of 1.4m after ~2 hours.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Approved castings to bedrock

161, 165, 181, 185, 205, 209, 245, #

CB slurry placement

213, 209, 205, 185

SAFE AND SAFETY REMARKS

Issued by :

[Signature]
Signature

20/09/2018

Date

Verified by :

Signature

Date

SKETCH

- An UCS was done by QC to check for 2 days curing. The result gave ~360 KPa. It was noticed that QC excel file to calculate the strength had a bad formula.
- West abutment was already filled with CB slurry completely on Sept. 24th. Nobody was aware.



SNC-LAVALIN

SITE REPORT
(Detailed)

2018/001-NS-SR

Document number

Visit date: 01-10-2018 Time (Start/End): 6PM-6AM Project No.: 658309 Prepared by: J. Leblanc

Project: WTD Construction Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: HCG (SP by HD)

Weather: ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze

Wind: ☐ None gusts ☒ Light ☒ Moderate ☐ Strong, Temperature: _____ °C

Comments: _____

Appendix: ☒ Yes ☐ No Pictures: ☒ Yes ☐ No Inspection report or other: _____

Approval form

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Secant pile 217 needed to be pumped with more CB mix to clean all the liquid slurry but it was impossible to install the tremmie back in the pile since the CB mix was already too thick/hard. If the final decision is to remove all of the CB mix already in place, HD will have to drill the CB mix before starting over. QC representative asked for this issue to be discussed during the next day shift meeting.
- QC representative rejected the first two batches of the night shift during pouring on the dike because the mix was being way too thick (the two batches waited for 3 hours at the batch plant before being sent out on the dike). The vacuum truck had to be cleaned because the mix blocked the hose (too thick).

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No _____ Subject _____ Given to _____

Pile 245 was partially filled with the rejected batch. QC representative decided to discuss the issue during next day meeting: Do we leave the CB there or do we drill it and start over? QC rep. asked HD the impact of leaving the casing in place and for HD there was none.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Approved casings
to bedrockPrimary: 01, 05, 237, 241,
Tertiary: 24 to 32, 96, 100

See approval form

CB slurry placement

221, 233, 245, 181, 221
177, 161, 165

SAFE AND SAFETY REMARKS

Always wear gloves with CB mix slurry.

Issued by :

Jonathan Leblanc
Signature

01-10-2018

Date

Verified by :

Signature

Date

SKETCH

→ A lot of secant piles were filled to the top during the night since many had lost significant amount of slurry: Piles 185, 181, 177, 173, 169, 205 and 221.

Secant pile 205Filled back at ~~20:30~~ 9:50pmAt ~~12:10 AM~~ 12:10 AM, slurry drop of 0.66m from ground surface.

At 1:50am, slurry drop of 0.86m from ground surface.

Pile Filled back again at 2:20 AM.

At 3:35am, drop of only 0.1m

Secant pile 177

Filled back at 1:57am

At 2:26am, slurry drop of 0.16m.

At 3:35am, slurry drop of 0.32m



SNC • LAVALIN

SITE REPORT (Detailed)

20181001-DS-SR

Document number

01/10/2018

6AM/6PM

658309

A. Albaiza

Visit date

Time (Start/End)

Project No.

Prepared by

WTD construction

Agnico Eagle

Project

Client

SNC-Lavalin

KCG (SP by H/D)

Consultant

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☒ Snow

☐ Glaze

Wind :

☐ None gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : -7 °C

Comments :

Appendix :

☐ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Crew change for QC, therefore one QC at batch plant at all times and QA had to be on the dike all day doing QC job.
- Pile 217: discussion was done with AEM and QC of SANA (KCB). It was agreed to fill #217 and remove casing. A vane shear test will be done on NS.
- Pile 245: discussion was done with AEM and QC of KCB and it was agreed to drill all the thick part and then pump new CB slurry. QA measured the CB slurry depth removal from ground surface before pumping new CB: -2.57m. A vane shear will be done on NS.
- Pile 165 was poured with CB during the NS and when operator took out casing (during DS) there was a drop of about 3m. Since this drop was abnormal compared to the

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to

- other piles, H/D decided to place back the casing at the top of the pile and pour new CB slurry to avoid any soil collapse. After CB slurry placement the casing was removed and the drop was of about 40cm.
- CB slurry placement was done at several piles (see next page). When CB was placed on piles 1, 5 and 20, no water was seen at the bottom of the pile. The contractor decided to not overflow the CB since there was no water outflow in order to not waste CB slurry. The piles were filled about 1m above ground (see sketch). It was clear that the CB had a good consistency at the top of the pile.

SPECIFIC ELEMENTS VERIFIED

Elements

Approved to be checked

CB slurry placed

Location

40, 44, 48, 92, 52, 56
but complete at the end of the shift
partially 245 complete:
237, 241, 5, 1, 20, 24, 28,
32, 40.
44 started but not finished.

Scope and comments

SAFE AND SAFETY REMARKS

Be aware of wild life around the site, especially when drilling.

Issued by :

[Signature]
Signature

01/10/2018

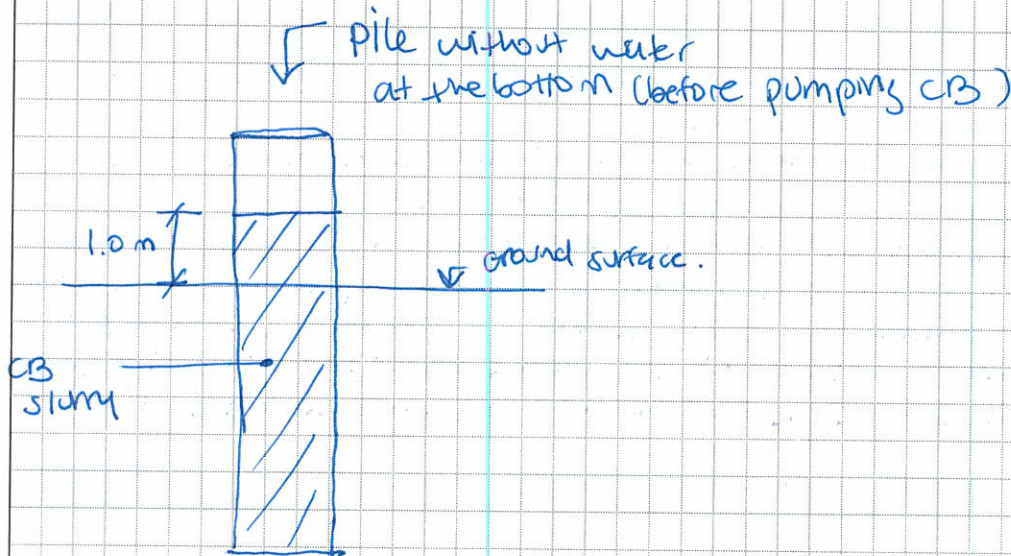
Date

Verified by :

Signature

Date

SKETCH



20181002-NS-SR

Document number

Visit date 02-10-2018	Time (Start/End) 6PM-6AM	Project No.	Prepared by J. Leblanc
Project WTD Construction	Client Agnico Eagle		
Consultant SNC-Lavalin	Contractor KCG		
Weather : <input type="checkbox"/> Sunny <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Storm <input checked="" type="checkbox"/> Snow <input type="checkbox"/> Glaze			
Wind : <input checked="" type="checkbox"/> None gusts <input checked="" type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Strong,			
			Temperature : -7 °C
Comments :			
Appendix : <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pictures <input type="checkbox"/> Yes <input type="checkbox"/> No			
Approval form.		Inspection report or other :	

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Follow up of slurry loss measurements at pile 165 From last day shift. At 8:15pm, slurry had dropped 1.26m below ground level. The level of slurry remained constant when measured during the course of the night shift (measured until 1:00am).
- DTH hammer started only at 11:30pm since they were no casings anchored to the rock and ready to be drilled for the rock socket.
- Two field vane shear tests were performed by QC representative on piles 217 and 161 (poured 24 and 12 hours ago approximately). Results will be send by QC rep. Su measured were above 135 kPa and ~~140 kPa~~ 60 kPa respectively. QC rep. needed the help of the excavator to lower the rods in the pile.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|---|-------------|
| → | DTH hammer were performed on piles 08, 36, 60, 68 and 88 and approved (See approval form for further details). | 88, 72, 76. |
| → | CB mix was poured in piles 44, 48, 92, 52, 56, 96, 100, 88, 68, 36, 08, 60 | 72, 76 |
| → | Batches 306 to 330 were poured on the dike during the shift (batches) : | |
| | Viscosity between 56 and 71 | |
| | Mud balance density between 1.255 and 1.265 | |
| | Temperature at batch plant between 20,5 and 22,3 | |

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Approved rock socket

Tertiary: 08, 36, 60, 68, 88
72, 76

See approval form

CB slurry poured in secant
piles

Tertiary: 44, 48, 42, 52, 56,
96, 100, 88, 68, 36, 08,
60, 72, 76

SAFE AND SAFETY REMARKS

Some casings are high above ground and necessitate the use of a ladder to be measured. Be sure to be on stable and leveled ground before climbing the ladder.

Issued by :

Jonathan Lablone
Signature

2018-10-02

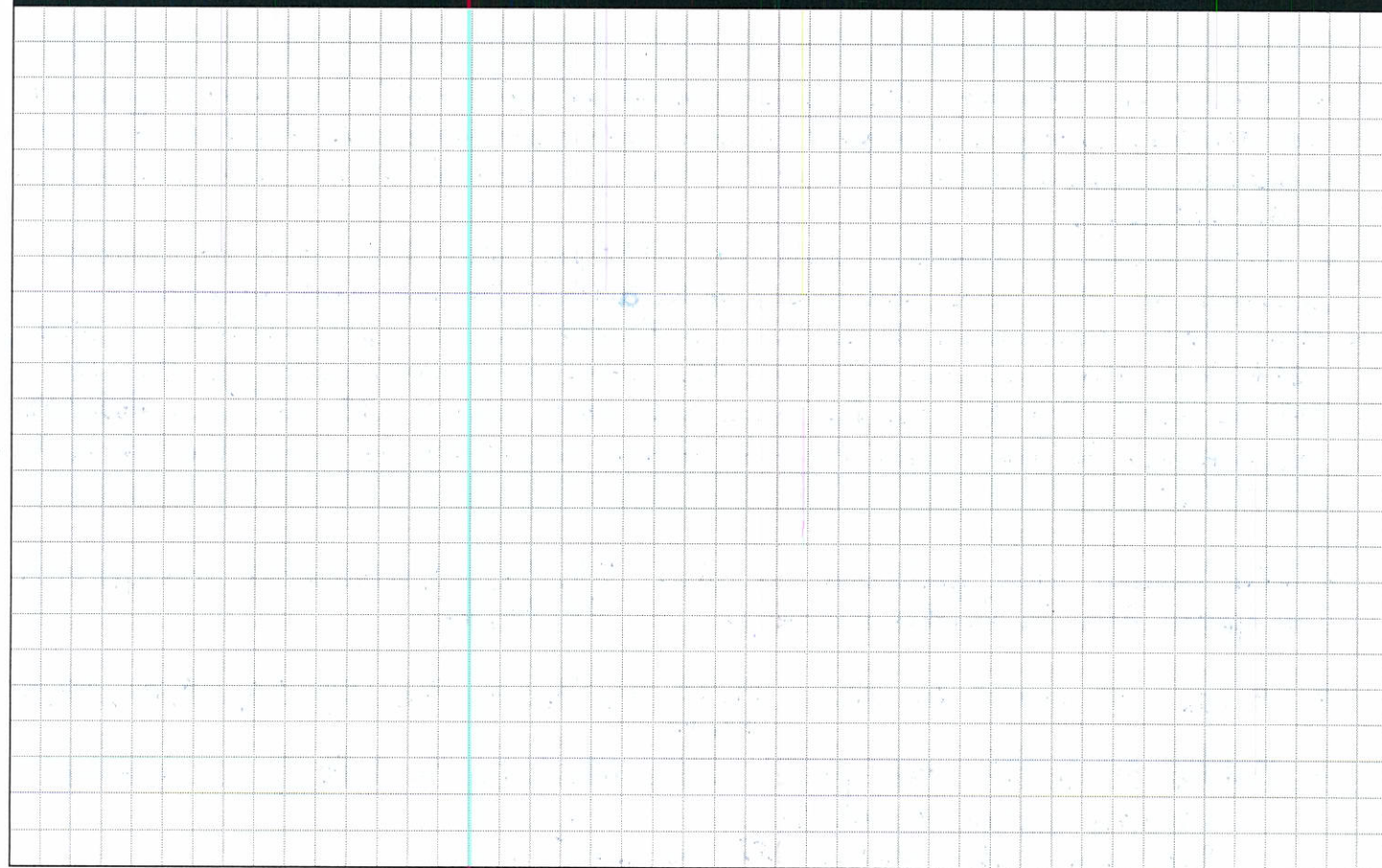
Date

Verified by :

Signature

Date

SKETCH





SNC-LAVALIN

SITE REPORT
(Detailed)

20181002-DS-SR

Document number

02/10/2018 6AM/6PM 658309 A. Arbizu
Visit date Time (Start/End) Project No. Prepared by
WTD Construction Agnico Eagle
Project Client
SNC-Lavalin KCB (SP by H&D)
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze
Wind : ☐ None gusts ☐ Light ☒ Moderate ☐ Strong, Temperature : ~-10 °C

Comments :

Appendix : ☐ Yes ☒ No Pictures ☒ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ Inspection of CB slurry placement in piles. Placement and CB slurry thickness was according to specs. A total of 5 piles were poured today. The batch plant was stopped at 3:30pm because KCB wanted to have more piles drilled down to rock socket before making an extra batch. Also they needed to clean the truck. It seems that H&D did not agree on stopping production for 3 hours (since cleaning the truck only takes 30'). Also it seems that KCB is not comfortable with all the drills and truck being all at the same place.
→ While inspecting the drilling of some piles it was noticed that pile #104 already reached the required depth to rock socket with the auger. The material that was coming out did not look like bedrock. On the opposite, it looked like

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to
	ester material, big round boulders and till. QA asked H&D to drill a bit more with the auger to clearly see the material. At the end of the drill some fractured bedrock was seen and a piece of the auger broke. The rock hammer was then used to go 1m for rock socket. Stations 0+55 to 0+181 (#pile 84 to #pile 116) will be looked closely to see if more material of this type comes out.	

SPECIFIC ELEMENTS VERIFIED

Elements

Approl of rock
socket

CB slurry placement

Location

12, 64, 84, 124, 120,
108, 104, 12, 16, 80

124, 120, 108, 64, 84

Scope and comments

SAFE AND SAFETY REMARKS

Cold, use warm clothes

Issued by :



Signature

02/10/ 2018.

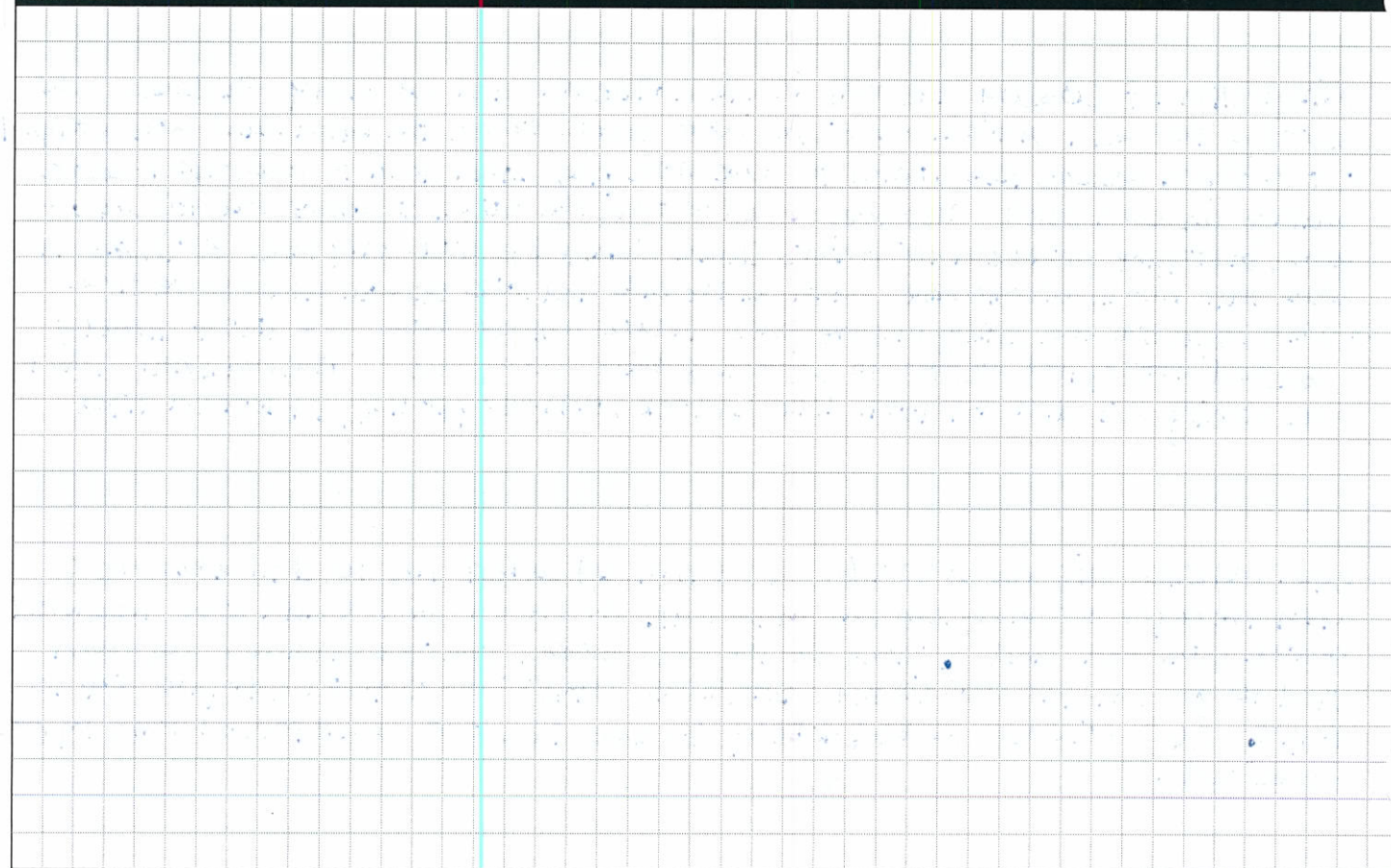
Date

Verified by :

Signature

Date

SKETCH





SNC • LAVALIN

SITE REPORT
(Detailed)

20181003-NS-SR

Document number

03-10-2018	6PM-6AM	658309	J. Leblanc
Visit date	Time (Start/End)	Project No.	Prepared by
WTD Construction		Agnico Eagle	
Project		Client	
SNC-Lavalin		KCG (SP by HD)	
Consultant		Contractor	
Weather :	<input type="checkbox"/> Sunny <input checked="" type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Storm <input type="checkbox"/> Snow <input type="checkbox"/> Glaze		
Wind :	<input checked="" type="checkbox"/> None gusts <input checked="" type="checkbox"/> Light <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Strong,		
Comments :	Temperature : -9 °C (-16 with wind factor)		
Appendix :	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pictures <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Inspection report or other :		
Approval form			

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ Following day shift recommendations, materials from drilling with Auger were observed closely between piles 084 and 116. Only one secant pile was drilled within this uncertain zone, secant pile 116. No fill like material came out of the pile with the Auger, only fine filter material, as usual. DTH hammer was then performed to drill the rock socket. The reached elevation was compared with the expected drilling elevation (from bathymetry/survey) and with the bedrock elevation of AMQ17-1173 (Bedrock at 151.5m). Both bedrock elevation (bathymetry vs. AMQ17-1173) are about the same, respectively 151.6 and 151.5m. After the comparison by QA, QC rep. approved the pile.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No	Subject	Given to
→	Secant piles 012 and 016 were poured between 7h30pm to 8h00pm. Casings were removed at 2:00am. After casings being removed, QA noticed the presence of chunks of thick CS slurry around the piles. QA representative asked if HD waited too long before removing the casings and they said they thought they had 10 hours before removing the casings. QA HD 111 suggested HD no too wait that much of a time before removing casings for the other piles and they agreed not to wait...	

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Approved rock socket

116, 135, 139, 143, 22, 26
257, 265, 167, 147

See approval form

Poured CB slurry in
secant piles

12, 16, 80, 104, 108, 112, 116
108, 135, 139, 143, 22, 26
265, 257

SAFE AND SAFETY REMARKS

It is starting to get really cold outside. Wear proper clothing, especially body extremities (head, feet, hands).

Issued by :

Jonathan Leblanc

Signature

2018-10-03

Date

Verified by :

Signature

Date

SKETCH

... It turns out that the CB slurry was already too stiff and since they remove the casings with the Auger on the drill (usually, the Auger goes in the CB slurry), they had to drill a bit of CB slurry located in the casing above ground to remove the casings. By looking at the pile from the surface, it is impossible to say if the CB slurry has been damaged below ground.

→ Secant pile 261 was ready to be approved but there was some problem with the verticality. HD decided to try to move the casing to be within the specs. This will be done during day shift.



SNC-LAVALIN

SITE REPORT
(Detailed)

20181003-DS-SR

Document number

03/10/2018

Visit date

6AM/6PM

Time (Start/End)

658309

Project No.

A. Arbaiter

Prepared by

WTD construction

Project

Agnico Eagle

Client

SNC-Lavalin

Consultant

KCG (SP by HIO)

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☐ Snow

☐ Glaze

Wind :

☐ None gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : -11 °C

Comments :

Appendix :

☒ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

↳ Approval form

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ Inspection of CB slurry placement into some piles. CB slurry had good consistency when flowing out of the casing.

→ Approval of casings with QC inspector. A total of 12 piles were approved.

→ Approval form was done for tertiary piles drilling. The tertiary piles drilling approval was given verbally 2 days ago since all lab tests were completed and reused. Due to lack of time the approval form (official) was sent today with all the lab and site testing, including results of the batch plant tests.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to

→ Good day with no problems on site nor in the batch plant. A total of 12 piles were poured in 1 shift.

→ Production program for lab testing officially started today and was communicated by AEM

→ Inspection of WRSF excavation with client. the excavation of the key trench has been done up to 0+200.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Piles approved for rock
socket

03, 30, 34, 54, 58, 261,
38, 46, 179, 199, 195, 191

Rock socket > 1.0m

CB sumy placement

* 257, 147, 167, 58, 265
03, 30, 34, 38, 46, 54,
261

According to specs

SAFE AND SAFETY REMARKS

Very cold temperatures; dress properly and cover extremities at all times.

Issued by :

[Signature]

Signature

03/10/2018

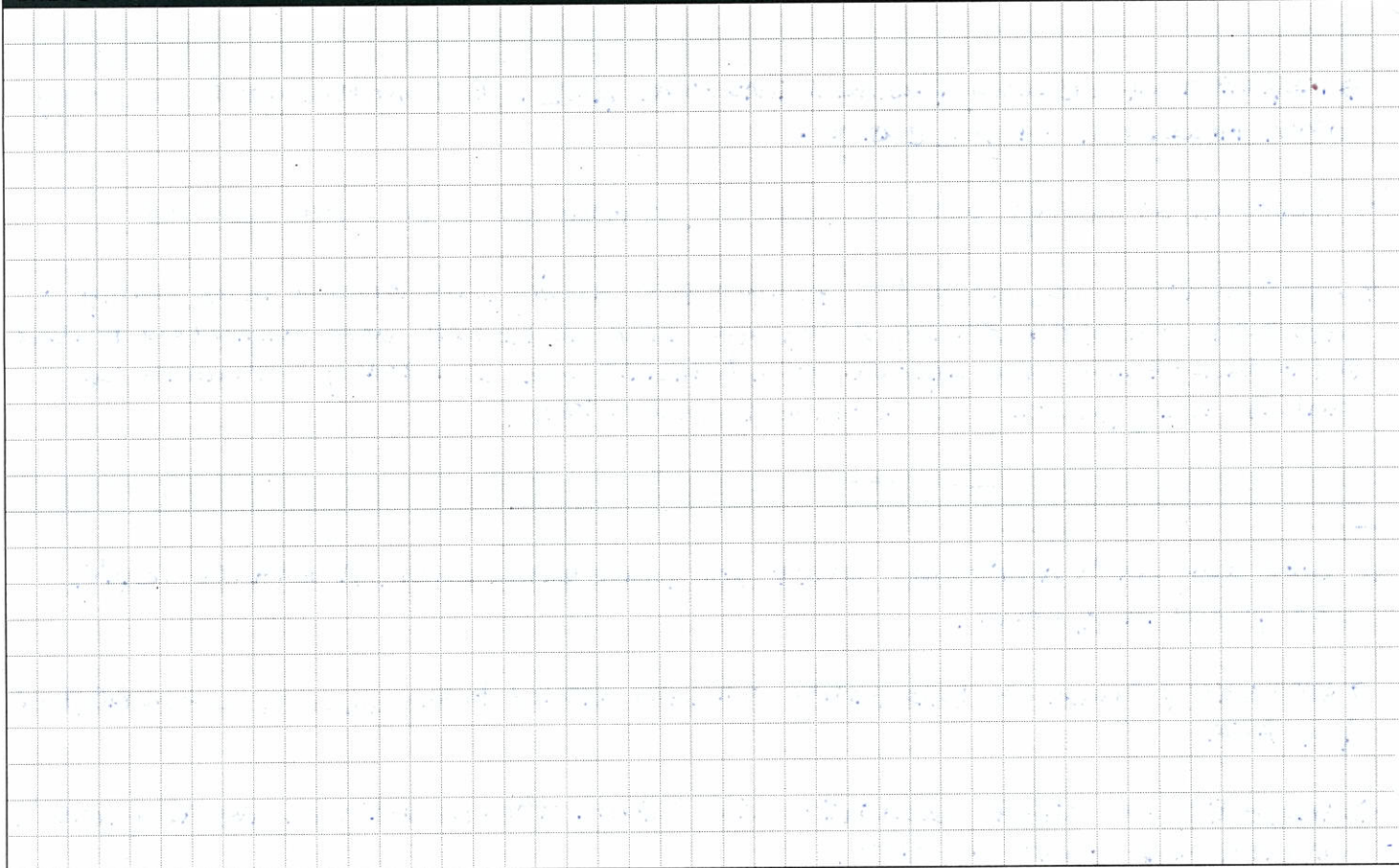
Date

Verified by :

Signature

Date

SKETCH





SNC • LAVALIN

SITE REPORT
(Detailed)

20181004-NS-SR

Document number

04/10/2018

Visit date

6PM-6AM

Time (Start/End)

658 309

Project No.

J. Leblanc

Prepared by

Project

WTD Construction

Agnico Eagle

Client

SNC-Lavalin

Consultant

KCG (SP by HD)

Contractor

Weather :

☐ Sunny

☐ Cloudy

☐ Rain

☐ Storm

☒ Snow

☐ Glaze

Wind :

☐ None
gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : _____ °C

Comments :

Appendix :

☒ Yes

☐ No

Pictures

☐ Yes

☐ No

Inspection report or other :

Approval Form.

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Troubles with air compressors on the dike: DTH hammer could not start drilling rock socket before 22 h00 (10:00 pm).
- There was a flat tire on the vacuum truck that needed to be repaired on the dike. It causes no pouring of CB slurry between 11:30pm and 1:30 am. There was no incidence on the CB slurry quality at the batch plant. The vacuum truck was cleaned after the incident.
- Casings were pulled out immediately after pouring of casings during the shift to avoid leaving the CB slurry in the casings for too long.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to :

- QC rep. did 3 UCS tests on 7 days curing samples. Results will be compiled and send to SM-Amaruz. They now have proper cutting tools for the sample in the lab.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Approved rock socket

151, 171, 175, 183, 74,
70, 66, 50, 42, 62

See approval form

CB slurry placement

179, 199, 195, 191, 151,
171, 175, 179, 183

SAFE AND SAFETY REMARKS

A lot of ice cover on the dike, not always visible with ice cover: be prudent and wear proper footwear.

Issued by :

Jonathan Loblone
Signature

2018-10-04

Date

Verified by :

Signature

Date

SKETCH

Slurry loss measurements (will also be compiled in the appropriate spreadsheet) :

0143 - (Batches 410-412) - Backfilled at 11:30pm at ground surface

- Temperature of CB slurry on site = 18.2°C
- Sample was taken in the second pile for bleeding test and mud balance (density of 1.255)

Time	Slurry loss from ground surface (mm)	Bleeding on site (mm)
23:30	0	0
23:45	0	0
00:00	20	0
00:15	40	0
01:15	110	30
02:00	160	40

0171 (Batches 414-416) - Poured at 2h00 - Top of casing.

Time	Slurry loss (mm)	Bleeding (mm)
2h00	0	0
2h10	300	0
2h20	400	0
4h00	550	20
4h40	600	40

20181004-DS-SR

Document number

04/10/2018

Visit date

6AM/6PM

Time (Start/End)

658309

Project No.

A. Albariza

Prepared by

WTD construction

Project

Agnico Eagle

Client

SNC-Lavalin

Consultant

KCG

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☐ Snow

☐ Glaze

Wind :

☐ None gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : -10 °C

Comments :

Appendix :

☐ Yes

☒ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- As an addition of previous site report (20181003-DS-SR), the QC at the batch plant did some bleeding tests but his sampling was uncovered, therefore there was evaporation of water. This QC is now advised that he needs to cover the tubes.
- As a follow-up of QA observations on site report 20181003-DS-SR (piles #12 and 16 being poured with thick CB slurry and casings being removed after 8 hours), on daily meeting with client and contractor this issue was discussed and H2O will write the time of CB placement in each casing. A maximum of 5 hours has been allowed to remove casings from piles. After this discussion the casings have been removed right away.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

subject

Given to

- Casing 86 was installed today down to bedrock. QC on site forgot that special care had to be taken from pile 86 to 116 (as mentioned in site report 20181001-DS-SR). QC did not notice any big boulders or round rocks nor till like material but forgot to ask the Auger to show her the material at the end of the drilling process. It should be noted that this QA went to inspect the material that came out of the auger and the rock drill and it seemed that it was just fine filter material.
- QC approved a pile that did not reach the minimum rock socket of 1.0m by mistake.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Appraisal of piles for rock
socket drillingPiles # 223, 235, 239, 243,
163, 187, 82, 86, 78,
18, 06, 203


CB slurry placement

Piles # 50, 42, 62, 66, 70,
74, 223, 235, 239,
243, 203

SAFE AND SAFETY REMARKS

Cured CB slurry on ground with snow is very slippery. Be careful when
walking on the dike.

Issued by :



Signature

04/Oct/2018

Date

Verified by :

Signature

Date

SKETCH

QA was on site at the moment and checked with tape to double verify.
The pile was never panned with CB slurry so more rock hammer will be done
during the night shift.



SNC-LAVALIN

SITE REPORT
(Detailed)

20181005-NS-SR

Document number

Visit date: 05-10-2018 Time (Start/End): 6PM-6AM Project No.: 658309 Prepared by: J. Leblanc

Project: WTD Construction Client: Agnico Eagle

Consultant: SNC-Lavalin Contractor: KCG (SP by HD)

Weather: ☐ Sunny ☐ Cloudy ☐ Rain ☐ Storm ☒ Snow ☐ Glaze

Wind: ☐ None gusts ☐ Light ☐ Moderate ☒ Strong, Temperature: -6 °C

Comments:

Appendix: ☒ Yes ☐ No Pictures: ☐ Yes ☐ No Inspection report or other: Approval Form.

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- There was no more dry cement at the batch plant. It seems that the dry cement left is at Baker Lake. CB slurry was poured until 2:00 am before having no more dry cement.
- Secant Pile 98, 102 and 102 were observed by QA rep. during casing and Auger drilling to make sure no esker material with rounded boulders was observed (See sketch for further details).

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|---|----------|
| → | Secant pile 219 was ready to be measured and approved by QC rep. but the rock socket is not deep enough. The pile still needs to be drilled by 0.3m. Before asking to HD to re-drill the pile during day shift, the surveyor should check the elevation of the casing. The night shift surveyor wasn't sure of the elevation of the pile when he gave it to QC rep. | |
| → | Piles 90 and 94 were already anchored and cleaned with Auger at our arrival on the dike (DTH was already occurring in one of the pile). The debris left around the pile seems to indicate no trace of esker material nor boulders. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
Approved piles for rock socket drilling	155, 90, 94, 253, 249, 231, 227	See approval form
CB slurry placement	163, 187, 82, 86, 78 18, 06, 155	

SAFE AND SAFETY REMARKS

Strong cold wind- Wear face protection against cold.

Issued by :

Jonathan LeBlanc
Signature

2018-10-04

Date

Verified by :

Signature

Date

SKETCH

Secant Pile 98

- almost no esker material/ boulders observed.
- Bedrock surface measured after cleaning with the Auger indicate that the bedrock surface is at 5.4m instead of 5.3m.
- Rock socket depth stayed the same.

Secant Pile 102

- Founded esker material/ boulders during Auger cleaning.
- Bedrock surface was reached at 5.7m depth instead of 5.3m.
- QA rep. suggested HD to drill the rock socket at 6.7m depth instead of 6.3m. HD followed the suggestion and drilled at 6.7m depth.

Secant Pile 106

- Founded esker material/ boulders during Auger cleaning.
- Bedrock surface reached at 6.0m instead of 5.5m.
- QA suggested HD to drill rock socket at 7.0m depth instead of 6.5m. HD followed the suggestion and drilled at 7.0m depth.



SNC • LAVALIN

SITE REPORT
(Detailed)

20181005-DS-SR

Document number

05/10/2018

6AM/6PM

658309

A. Arbuzov

Visit date

Time (Start/End)

Project No.

Prepared by

WTD Construction

Agnico Eagle

Project

Client

SNC-Lavalin

KCG (SP by HD)

Consultant

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☐ Snow

☐ Glaze

Wind :

☐ None gusts

☐ Light

☒ Moderate

☐ Strong,

Temperature : ~ -10 °C

Comments :

Appendix :

☐ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ AS mentioned in previous NS report, there was no more cement on site. It seemed that the inventory was not done on time. Today the cement arrived at 9:40 am and the first PAT at about 12 pm because the cement was heated for 1 hour. there was a programming problem with the batch plant and the it wasn't able to feed cement. It took some time until the second PAT was ready and the 1st truck with CB arrived at 1:40 pm on site to fill

→ All the piles that were poured during NS were top up with CB during NS as well (after removing the casings). QA measured the slurry loss at 9:00 am assuming that all piles were filled at 2:00 am, which is the time that production stopped due to lack of cement. the losses are compiled in an excel sheet and are presented in the sketch. It should

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to

be noted that it has been discussed with HD and the client during Daily meetings that the piles that have been filled after casing removal should be filled again for the ones that have had slurry loss as soon as possible to avoid a cold joint. When QA was on site piles 90, 94 and 98 were already poured and the piles poured on NS were not filled. It was mentioned to QA and HD that it is important to fill the post piles.

→ Since there has been a lot of loss of slurry, HD decided to do some tests with two primary piles : # 273 and # 277, trying two different techniques when drilling and anchoring the casing. Pile # 273 was done with a core barrel to anchor the casing properly on bedrock and avoiding the additional air that the rock hammer produces in the bedrock and maybe part of the fine filter material (HD maybe this is why there →

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
Approval of rock socket drilling	211, 207, 126, 106, 102, 98, 273, 277	
CB slurry placement	90, 94, 98	

SAFE AND SAFETY REMARKS

Very windy and cold. wear appropriate clothes and protection.

Issued by :



Signature

05/10/2018

Date

Verified by :

Signature

Date

SKETCH

Pile #	loss (cm)	Bleeding (cm)
06	42	6
18	49	8
78	88	5
82	35	5
86	34	6
155	45	9
163	91	9
187	103	10

... is a loss in slurry. Pile #277 was done with rock hammer, as ~~the~~ all the other piles. The measurements and results will be shown in the next day's report since this test started at 17:45.



SNC • LAVALIN

SITE REPORT
(Detailed)

20181006-NS-SR

Document number

06-10-2018 6PM- 6AM 658309 J. Leblanc
Visit date Time (Start/End) Project No. Prepared by

WTD Construction Agnico Eagle
Project Client

SNC-Lavalin KCG (SP by HD)
Consultant Contractor

Weather : ☐ Sunny ☒ Cloudy ☐ Rain ☐ Storm ☐ Snow ☐ Glaze

Wind : ☐ None gusts ☐ Light ☐ Moderate ☒ Strong, Temperature : -6 °C
(-14 with wind)

Comments :

Appendix : ☒ Yes ☐ No Pictures ☒ Yes ☐ No Inspection report or other :

Approval forms

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Casing of secant pile 110 was anchored and cleaned to bedrock surface with the Auger. QA rep. / QC rep. Almost no esker material / rounded boulders were observed and the bedrock surface was reached at the expected depth. QA/QC could clearly observe pieces of bedrock (angular, freshly cut and oxidized) that was pulled out by the Auger when bedrock was reached.
- Piles 273 and 277 were filled with CB slurry at the beginning of the shift (Measurements of slurry loss in sketch).

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|------------|---|----------|
| see sketch | Batch plant stopped working at 10:15 pm (Major issues with the pump that feed the CB mix to the vacuum truck). All the shoe casings are already drilled down so there was no operation on the dike. The batch was down for the rest of the shift. | |
| | Secant piles 187, 163, 155 and 153 were topped up during this night shift. | |
| | List of secant piles that needs to be topped rapidly: 277, 273, 253, 249, 102, 98, 94, 90, 86, 78. | |

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
Approval of rock socket drilling	219, 02, 10, 14, 130, 122 110	See approval form
CB slurry placement	253, 249, 273, 277, 102	

SAFE AND SAFETY REMARKS

Watch for the strong wind when next to open poured recast piles during ~~grout~~ slurry loss measurements.

Issued by :

Jonathan Leblanc
Signature

2018-10-06

Date

Verified by :

Signature

Date

SKETCH

Measurements and results of slurry loss in piles 273 and 277:

273. (Measures from ground surface)

- 0,4m after removal of casing.
Topped up at 8:00pm,

- 0,10m at ~~20:00~~ 8:30pm
- 0,23m at 9:00pm
- 0,29m at 9:30pm
- 0,37m at 10:00pm
- 0,48m at 10:30pm
- 0,55m at 11:00pm
- 0,65m at 01:00am
- 0,78m at 02:00am
- 0,78m at 03:00am
- 0,81m at 04:30am

277 (Measures from ground surface)

- 1,7m after removal of casing
Topped up at 6:10pm,

- 0,58m at 7:32pm
- 0,71m at 8:00pm
- 0,80m at 8:30pm
- 1,00m at 9:00pm
- 1,09m at 9:30pm
- 1,14m at 10:00pm
- 1,20m at 10:30pm
- 1,33m at 11:00pm
- 1,42m at 01:00am
- 1,49m at 02:00am
- 1,53m at 03:00am
- 1,58m at 04:30am

* * During the pump problem (it wouldn't start), the cement in the tank (only cement + water) stayed too long because the PAT couldn't be emptied. The cement set in the tank and all the conduits. All the hardened cement had to be broken in the tank ~~part~~ and in the conduits (that needed to be dismantled to pieces to be cleaned).



SNC • LAVALIN

SITE REPORT
(Detailed)

2018 1006-DS-SR

Document number

06/10/2018

6AM/6PM

658309

A. Arbaiter

Visit date

Time (Start/End)

Project No.

Prepared by

WTD construction

Agnico Eagle

Project

Client

SNC-Lavalin

Consultant

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☐ Snow

☐ Glaze

Wind :

☐ None
gusts

☐ Light

☒ Moderate

☒ Strong,

Temperature : ~ -10 °C

Comments :

Appendix :

☐ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ There was no production in the morning due to the problems they encountered during WS. The pump was not working either. The first vacuum truck arrived at 3pm and filled some piles near west abutment. There are some piles already filled that need to be filled again to the top but AC noticed some snow on top of the pile. AC asked H/D to clean the pile and/or drill the top part before pouring CB. H/D said that they will clean the snow and redrill a small part before pouring CB, especially for pile #18.

→ During the morning, AC that stays on watch plant did a lot of WS tests at various days, the minimum being of 2 days that gave 114 kPa.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to

- All piles will be topped up during WS. The top-ups were talked again during daily meeting and H/D agrees they should have a strategy to not forget them and agreed to drill the tops (on top) that were old or too low or with snow.
- Pile #231 that was poured last night (WS) was drilled completely since it was just filled half way. Today the pile was poured with CB completely.
- Inspection of WRSF excavation. See Excavation drawings.

SPECIFIC ELEMENTS VERIFIED

Elements	Location	Scope and comments
CB slurry placement	Pile #002, 010, 014, 231, 227	

SAFE AND SAFETY REMARKS

Very cold winds, protect face and extremities with proper equipment.

Issued by :

[Signature]
Signature

06/10/2018.

Date

Verified by :

Signature

Date

SKETCH

(05/10/2018 @ 5pm)

CB fill → $\frac{277}{5.54 \text{ m}}$
 Truck → 800 mm height of CB
 (to calculate volume)

$\frac{273}{7.47 \text{ m}}$
 850 mm

Removal of casing Drop of -1.7 m

-0.4 m

Filling drop → 620 mm height of CB (calculate volume)

800 mm.

Filled to gr. level @ 6.10 pm

8 pm.

Drop -0.58 m @ 7.32 pm
 (3cm bleeding)



SNC-LAVALIN

SITE REPORT
(Detailed)

20181007-NS-SR

Document number

07-10-2018

6PM-6AM

658 309

J. Leblanc

Visit date

Time (Start/End)

Project No.

Prepared by

Project

WTD CONSTRUCTION

Agnico Eagle

Client

SNC-Lavalin

Consultant

KCG (SP by HD)

Contractor

Weather :

☐ Sunny

☒ Cloudy

☐ Rain

☐ Storm

☒ Snow

☐ Glaze

Wind :

☐ None

gusts

☐ Light

☐ Moderate

☒ Strong,

Temperature : -9 °C

(-19 with wind)

Comments :

Appendix :

☒ Yes

☐ No

Pictures

☒ Yes

☐ No

Inspection report or other :

Approval Form

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

→ At 20:00, batches 506 and 508 was rejected by QC rep. at the batch plant. The mud balance density of the CB slurry in both PATs was the same of bentonite slurry: There was not enough or no cement at all in the mix. Both PATs and the vacuum truck (which was used to empty the PATs) were cleaned before starting new batches. New batches arrived at the dike at 22h00 (10:00pm). As soon as they arrived on the dike, the vacuum truck operator busted the vacuum truck pump (the slurry had time to freeze in the tremi). They needed to switch the pump with a functional spare one. The truck was finally ready at 23:00. QA rep. suggested to test the CB slurry left...

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

No

Subject

Given to

... that was still in the tank before sending the truck back to the dike. Mud balance density was of 1.250 and viscosity of 48 sec.

→ Piles 249, 253, 273, 277, 219, 14, 10, 18, 02, 98 were topped up during this shift.

→ QC rep sampled the CB slurry in batch 514 and prepared 6 molds.

SPECIFIC ELEMENTS VERIFIED

Elements

Location

Scope and comments

Approval of rock socket
drilling

04, 07

See approval form

CB slurry placement

211, 219, 207, 04, 07
106, 110

SAFE AND SAFETY REMARKS

Very low visibility with very strong wind and snow.
walk slowly on dike and be sure to be visible and
to communicate clearly on the radio

Issued by :

Jonathan Leblanc

Signature

2018-10-07

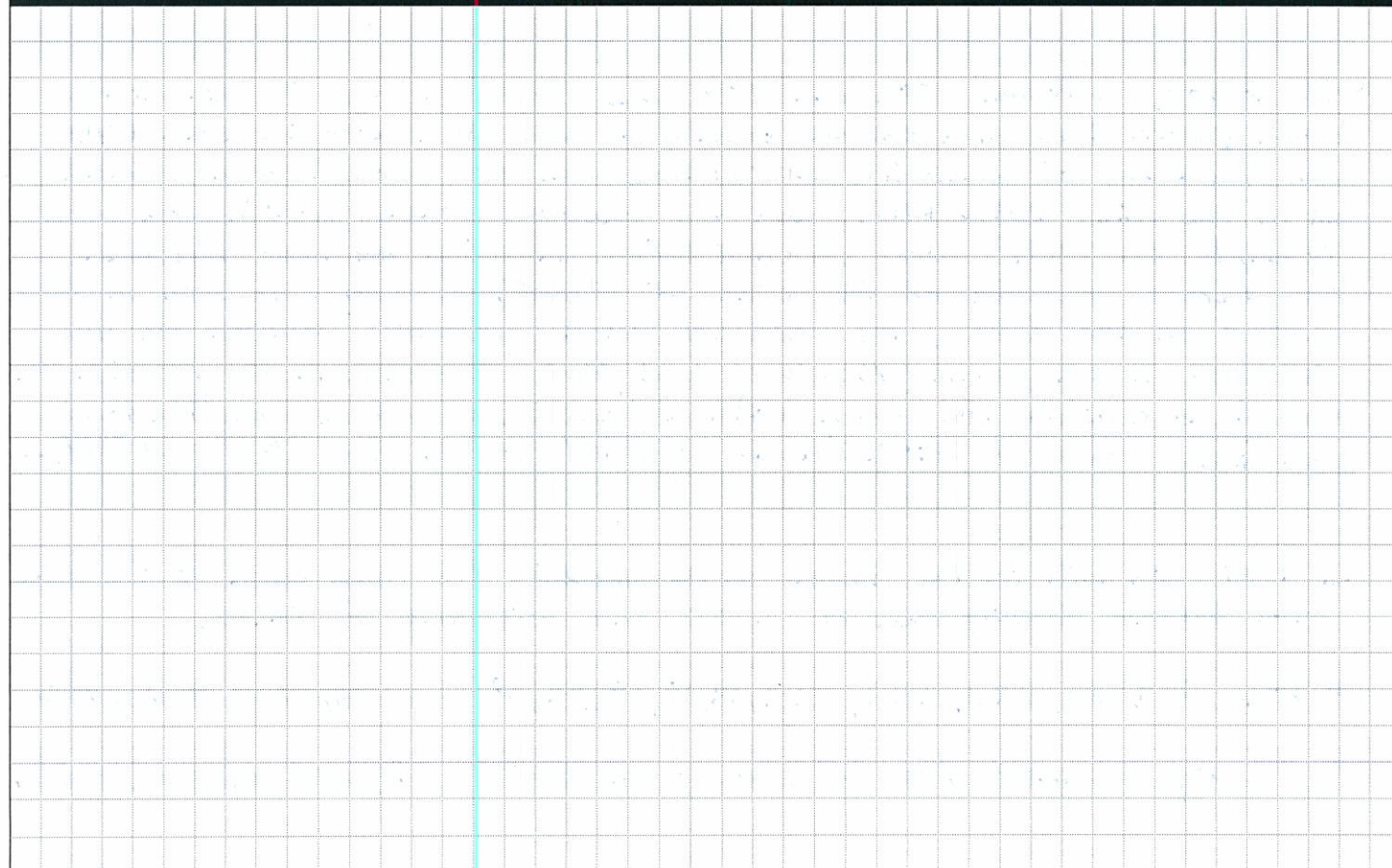
Date

Verified by :

Signature

Date

SKETCH



20181007-DS-SP

Document number

07/10/2018 6AM/6PM 658309 A.Arbaizca
Visit date Time (Start/End) Project No. Prepared by

WTD construction Agnico Eagle
Project Client

SNC-Lavalin KGC (SP by HD)
Consultant Contractor

Weather : ☐ Sunny ☐ Cloudy ☐ Rain ☒ Storm ☒ Snow ☐ Glaze
Wind : ☐ None ☐ Light ☐ Moderate ☒ Strong, gusts Temperature : ~-10 °C

Comments : very strong winds, road is closed.

Appendix : ☐ Yes ☐ No Pictures ☒ Yes ☐ No Inspection report or other :

ACTIVITIES PERFORMED BY SNC-LAVALIN (indicate if test forms were used)

- Post approval forms for rock socket were sent today since all post daily reports of HD were received today.
- Volume calculations of pile tests #277 and 273. Compared to theoretical volume, #277 (rock hammer only) used 57% more CB and #273 (core barrel and rock hammer) used 16% more CB. Test piles #144 and 148 (terranes) were started today for volume calculations but only #144 was done during DS. #148 will be done in NS. Volume calcs will be sent tomorrow. NS will have to measure slurry loss for these two piles.

SITE GUIDELINES (guidelines, memos, modification proposals, etc.)

- | No | Subject | Given to |
|----|---|------------------------------------|
| → | Approval of piles for rock socket (>1.0m). | A total of 11 piles were approved. |
| → | A total of 9 piles were filled with CB slurry. | |
| → | Attend 3 weekly meeting: Client waiting for - dug mammoth drawings and memo from designer for tests and sampling process. | |