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April 14, 2022

Ali Shaikh  
Technical Advisor Nunavut Water Board  
P.O. Box 119  
Goja Haven, NU, X0B 1J0

Sent via Email: [ali.shaikh@nwb-oen.ca](mailto:ali.shaikh@nwb-oen.ca), [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**Re: 2021 Annual Geotechnical Inspection Report for the Doris and Madrid Sites, Hope Bay Project, Nunavut**

Dear Mr. Shaikh,

Please see Attachment #1 to this correspondence for the results of the Hope Bay Project 2021 Annual Geotechnical Inspection (AGI) of Doris-Madrid surface infrastructure and earthworks, conducted by SRK Consulting (Canada) Inc. Based on the recommendations identified during the AGI and in accordance with Part I, Item 9 of the Type 'A' Water Licence 2AM-DOH1335, Agnico Eagle is pleased to present responses to recommendations made during the AGI for both Doris and Madrid sites in Attachment #2.

Should you have any questions please feel free to contact me at [nancy.harvey@agnicoeagle.com](mailto:nancy.harvey@agnicoeagle.com).

Sincerely,

Nancy Duquet Harvey  
Environmental Superintendent  
Agnico Eagle Mines Limited – Hope Bay

Cc:  
Licencing, NWB  
John Roesch, KIA  
Kelli Gillard, NIRB

**Attachments:**

Attachment 1 - 2021 Annual Geotechnical Inspection Letter for Doris-Madrid (SRK, 2022)  
Attachment 2 - Recommendations and Agnico Responses (Agnico, 2022)

Attachment 1 - 2021 Annual Geotechnical Inspection Letter for Doris-Madrid (SRK, 2022)

March 31, 2022

Environmental Superintendent  
Agnico Eagle Mines Limited – Hope Bay Mine  
c/o BBE Global Logistics  
#18 Yellowknife Airport  
Yellowknife, NT, Canada  
X1A 3T2

**Attention**      **Nancy Duquet Harvey**  
**Subject**        **Doris and Madrid - 2021 Annual Geotechnical Inspections**  
**Project**        1CT022.077

Dear Nancy,

Agnico Eagle Mines contracted SRK Consulting (Canada) Inc. to conduct a geotechnical site inspection on their Doris and Madrid operations at the Hope Bay site in Nunavut. Construction started at Doris in 2007 but has been suspended periodically as the project went through three ownership transitions.

### **Background**

Annual geotechnical inspections (AGI) at Hope Bay have been carried out since 2009. This inspection and all previous Doris and Madrid annual geotechnical inspections have been conducted by SRK. The associated AGI reports are filed annually on the NWB public registry. This letter presents the findings of the 2021 AGI, which includes the Doris site, Windy AWR, Madrid AWR, the former Patch Lake drill shop area (only inspected aerially), the Doris North and Roberts Bay areas, the Doris airstrip, and the Madrid North area. This inspection report excludes the Doris TIA, which is reported on in a separate, stand alone, AGI report.

This geotechnical inspection is an annual requirement in response to Part I, Item 9 of the projects Water Licence 2AM DOH1335 – Amendment #2, issued by the Nunavut Water Board (NWB) on December 7, 2018. The objective of the geotechnical inspection is to ensure that the project's surface infrastructure is performing as intended from a geotechnical perspective and in the context of the project site use. The emphasis is to a large extent, based on the project's location in a cold climate continuous permafrost area, is ensuring permafrost integrity is upheld.

The comprehensive third-party AGI of Doris and Madrid is the subject of this letter.

## 2021 Annual Geotechnical Inspection

The 2020 geotechnical site inspection was carried out by SRK's Principal Geotechnical Engineering Consultant John Kurylo, MSc, PEng between August 3 to 6, 2021. Weather conditions during the inspection were overcast with sunny periods. The inspection included a comprehensive drive, walkover over, and helicopter aerial reconnaissance of the entire Doris and Madrid North areas. The inspection of the 10 km Windy AWR (to the former Windy camp), the Secondary Road from the Doris camp to the Tailings Impoundment Area, and the portion of the Madrid AWR that has been constructed to date, was conducted via truck with frequent stops for physical inspections at key areas. Agnico Eagle's Environmental Superintendent (Nancy Duquet Harvey) and onsite, at the time, Environmental staff (Patrick Jolliffe), accompanied John during much of the walkover and drive, as well as during the aerial reconnaissance.

In addition to the physical inspections, on-site discussions were held with Agnico Eagle staff to gather supplementary information pertaining to the infrastructure. These additional site comments have been considered as part of this 2021 AGI (primarily used for increased observational background information). On the last day of SRK's site visit (August 6, 2021) a short joint teleconference and in person meeting was held on site to overview the main observations. This help to expedite recommendations, many of which Agnico Eagle has already addressed or improved since the summer 2021 site visit.

Overall, the 2021 geotechnical inspection suggests that conditions, as it pertains to geotechnical performance of surface infrastructure, are relatively unchanged from what was observed in 2020 (for Doris and the Windy AWR) or are in development but generally in reasonable condition (as it pertains to the Madrid North site). Specific items of note, and the general observations from this site visit are summarized in the tables in Attachment 1 for Doris and the Windy AWR, and in Attachment 2 for Madrid. Supplemental survey data plots are included in Attachment 3 and the recent review of the most relevant ground temperature data (for this inspection) are provided in Attachment 4. Any areas that fall outside of routine maintenance activities and require action by Agnico Eagle are highlighted in the summary tables (Attachment 1 and Attachment 2). Figure 1 and 2 shows the general as-built overview of the Doris and Madrid areas respectively and provides a plan overview of the various areas listed in this inspection report.

The top priority items that were noted as part of this 2021 annual geotechnical inspection were:

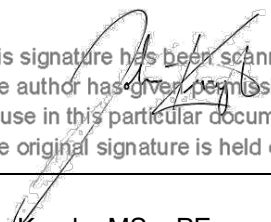
- From a safety and operations point of view, areas of the Pad T waste rock and low-grade ore stockpile (specifically the SSE corner) still appear to be over steepened. Some improvement on the Past T slopes have resulted since the 2020 inspection and a small catch berm was construed on site closer to the portal entrance. Future development plans should be done in a manner that decreases the overall slope angle (and height, where appropriate) of the waste rock.
  - Consideration should be given to complete updated site surveys of the existing piles, which would document progress and allow additional guidance or interim stability analysis to be carried out.
  - SRK understands that as part of the 2022 site works additional underground backfill is planned on site. This provides a good opportunity to decrease the overall slope angle by strategically

excavating waste rock material from the east and south face of the existing Pad T stockpile. Where appropriate, reduction of the pile height will also reduce overall loading above the portal.

- The stability of the Pad T stockpile slope (specifically in the areas above the portal) remain an area that site should closely monitor.
- From a performance point of view, the monitoring and diligent management of the Madrid CWP remains a top priority.
- Issued for Construction (IFC) designs have been generated in 2022 (post the AGI inspection) and plans are in place to install a sump downstream of the existing Madrid CWP. This sump would be installed to assist with additional seepage control at the Madrid area.

Notwithstanding the observations and recommendations provided in this AGI (see Attachment 1 and Attachment 2), the Hope Bay site is overall in good condition. Notable improvements have been seen in tracking and maintenance since Agnico Eagle became owner of the site. Based on the inspection and data review completed for this AGI, the site was observed to be performing in accordance with predicted geotechnical expectations.

Regards,  
SRK Consulting (Canada) Inc.

  
This signature has been scanned.  
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John Kurylo, MSc, PEng  
Principal Consultant (Geotechnical)

SRK Consulting (Canada) Inc Engineers and Geoscientist BC Permit to Practice No: 1003655

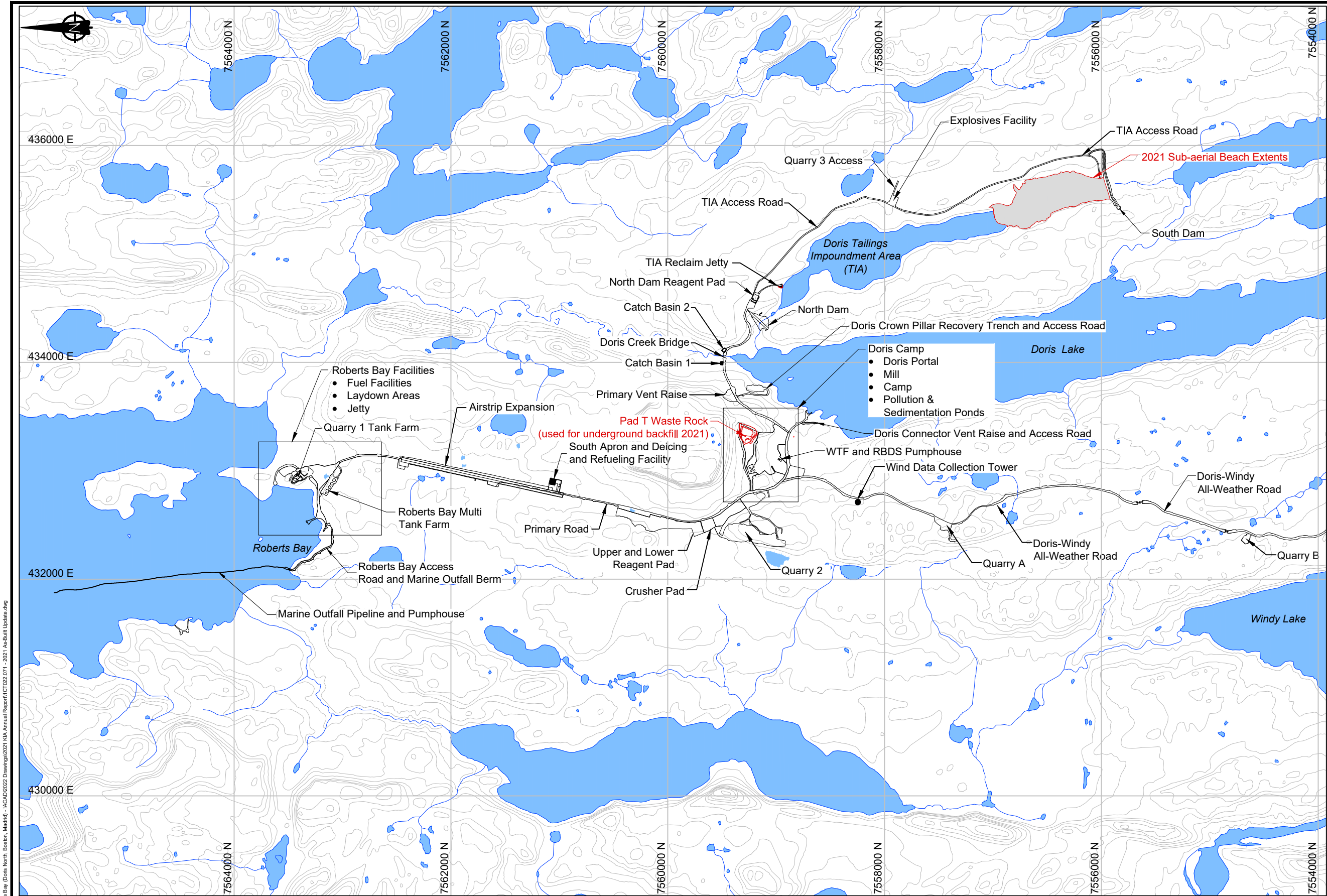
### Attachments:

Figures	Doris and Madrid Overviews
Attachment 1	Summary of Observations and Recommendations – Doris
Attachment 2	Summary of Observations and Recommendations – Madrid
Attachment 3	Survey Monitoring Data & Dashboards
Attachment 4	Ground Temperature Data

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**Figures**

**Doris and Madrid Overviews**



## LEGEND

- Existing As-Built Infrastructure
- 2021 As-Built Infrastructure

## NOTES

- Coordinate system is UTM Zone 13, NAD83.
- 2021 As-built linework delineated from drone LiDAR collected in August 2021, data provided by client.



SRK JOB NO.: 1CT022.071  
FILE NAME: 1CT022.071 - 2021 As-Built Update.dwg



AGNICO EAGLE

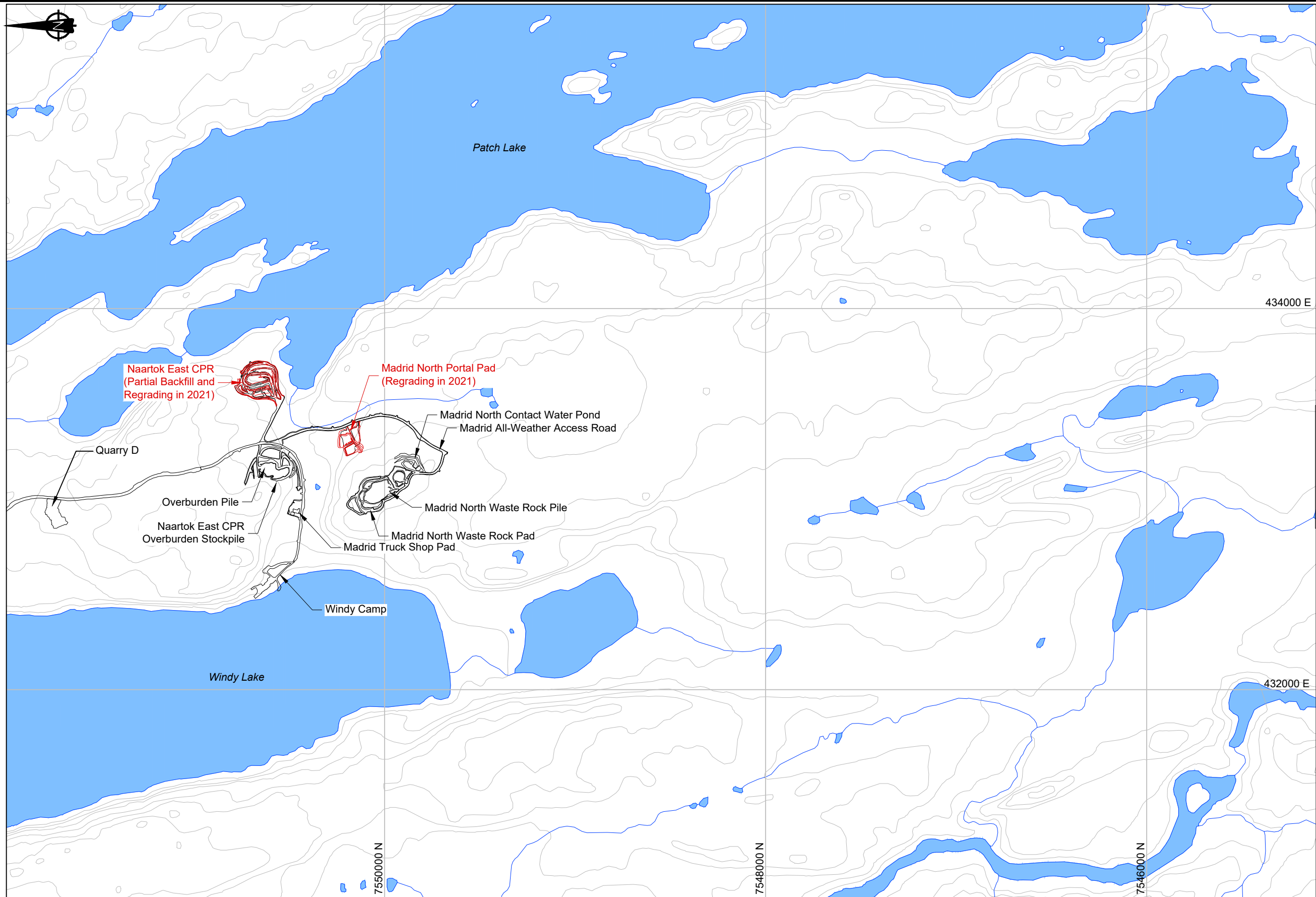
HOPE BAY

2021 KIA Annual Report

Doris Area 2021  
As-Built Summary

DATE: March 2022 APPROVED: PDL FIGURE: 1

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**LEGEND**

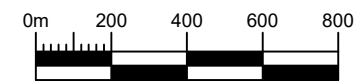
Existing As-Built Infrastructure

2021 As-Built Infrastructure

**NOTES**

1. Coordinate system is UTM Zone 13, NAD83.

2. 2021 As-built linework delineated from drone LiDAR collected in August 2021, data provided by client.



 SRK JOB NO.: 1CT022.071 FILE NAME: 1CT022.071 - 2021 As-Built Update.dwg	 <b>AGNICO EAGLE</b> <b>HOPE BAY</b>	2021 KIA Annual Report		
		Madrid North Area 2021 As-Built Summary		
		DATE: March 2022	APPROVED: PDL	FIGURE: 2

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**Attachment 1****Summary of Observations and  
Recommendations – Doris**

## Summary of Primary Observations and Recommendations - Table 1: Doris Project - 2021 Annual Geotechnical Inspection

Observation	Comments and Recommendation
<p><b>PAD B</b></p> <p>Agnico Eagle has conducted surveys of the monuments on Pad B 2021. There was an improvement in the data collection in 2021.</p> <p>Horizontal displacement has been indicated by the last two surveys at Pad B (October and November 2021 - note this is after the AGI site visit, but data up until the end of 2021 was included in the data review when producing this memorandum).</p>	<p>The Pad B area should be continued to be monitored. The monuments should be resurveyed in May including a survey of the control point (CP1), and once the ground is snow free, the Pad B should be inspected for signs of tension cracking and the points PH1 and PH2 should be inspected for signs of accidental movement of the monitoring point itself.</p> <p>Attachment 3 presents a summary of the recent Pad B survey data.</p>
<p><b>DORIS CREEK BRIDGE ABUTMENTS</b></p> <p>The original rock gabion construction, done at each of the Doris Creek Bridge abutments, was done in a manner that deformed the welded mesh gabion cages (moved into place rather than built in place). The deformed state of the rock gabion cages makes it difficult to visually assess if ongoing deformations are occurring at these gabions.</p> <p>Review of the ground temperature cable (GTC) data at the Doris Creek Bridge location shows that there are no anomalous data suggesting any undue warming trend.</p>	<p>The abutment of the bridges should continue to be monitored. Specifically monitoring checks should look for any new or reoccurring depressions that might develop in the area.</p> <p>Permanent survey monitoring points should be placed near the corners of each rock gabion abutment. These points would allow monitoring of the abutments for movement and potential identification of the mechanism (tilting, vertical or lateral displacement). Surveys of these new monitoring markers are suggested to be completed at least in May and August 2022 to set up a monitoring baseline.</p> <p>At the time of the 2021 inspection no notable changes in the conditions around this abutment were observed since the last site visit.</p> <p>Attachment 4 includes an overview of the ground temperature data at the Doris Creek Bridge location.</p>
<p><b>DORIS CAMP SUMPS</b></p> <p>Permanent ponding should be prevented around Sump #1 and #2. At the time of the site inspection water management and mitigation of ponding water around Sump #1 and #2 was being well executed on site (ponding water was being minimized). Site staff appear to have procedures in place to keep on top the water management and visual inspections around the sump locations. This is a good operational improvement over past years inspection.</p> <p>Sump #3 was originally installed incorrectly but was repaired in 2020. However, permafrost degradation may be continuing.</p>	<p>The Doris sumps (Sump #1, #2 and #3) should continue to be visually monitored.</p> <p>Agnico Eagle should carefully monitor Sump #3 to determine if further fill around Sump #3 should be considered. The current Sump #3 is a notable improvement over the original sump installation. This noted, there is ongoing permafrost degradation around this area and additional maintenance activities (likely in the form of additional fill placement) should be expected to be carried out over the next approximately two years.</p> <p>Ponding around the sumps was noted in the 2019 and 2020 inspection to be less than what is shown in photos from previous years (2018 and earlier). At the time of the 2020 inspections the pumps were down but SRK was informed that this pump had been repaired shortly after the AGI site visit.</p> <p>It is recommended that all sumps continue to be visually monitored, and that photos of each sump location be taken in May, June, July, August, and September 2021 to help document and track permafrost performance around these sumps. In 2020 some photos were taken around this area but not monthly during the summer months.</p>

Observation	Comments and Recommendation
<p><b>POLLUTION CONTROL POND</b></p> <p>As first noted during the 2017 AGI, the Pollution Control Pond (PCP) base is very undulated because of surficial permafrost melt, and as a result there are small, ponded areas that prevent complete drainage of the pond. Site staff have now backfilled the largest depressions (with unfrozen fine-grained overburden) at the areas closest to the liner to permafrost tie-in. Coconut matting appears to also have been placed over some of the placed overburden in 2021.</p>	<p>The pollution control pond is suggested to be visually inspected by site staff on an at least bimonthly (every two months) basis over the late spring to summer months (May to August).</p> <p>Additional backfill is expected to require in the pond as part of ongoing maintenance. Additional backfill material is not immediately required but area of ponding against the liner tie-in should be avoided to reduce the risk of larger sinkholes developing and to allow for a prolonged life of the facility. At this time the main recommendation for this area is continued visual monitoring to assist in determining if or when additional unfrozen overburden backfilling may be required.</p>
<p><b>SEDIMENTATION POND</b></p> <p>Various construction activities around the top liner tie-in of the Sedimentation Pond continued in 2021.</p>	<p>Visual inspection of the exposed liner is suggested to continue to be completed on site. Site is currently doing this. Specifically, visual inspection should look for any rock or gravel in contact with the liner, and should look for any damaged liner, or top liner tie-ins or anchoring that may become loose and more prone to being caught or torn by strong winds. Site is current completing routine inspections of these ponds. This should be continued.</p> <p>No additional recommendations for this pond.</p>
<p><b>DORIS 7.5ML TANK FARM - Highwall</b></p> <p>Rock spalling on the vent raise and 7.5 ML tank farm high walls has previously been raised as a concern for personnel safety. This rock spalling was noted again in the 2021 inspections, as well as some smaller wedges of rock appearing to protrude from the slope face. This poses a safety hazard to personnel working in these areas and larger rolling rock could have the potential to damage the liner or tanks.</p> <p>Additional signage was apparent around the tank locations which is a safety improvement.</p>	<p>Since limited access prohibits construction of a simple catch-berm to retain falling rocks, consideration should be given to a permanent solution such as covering these high walls with rockfall mesh or imposing a preventative scaling campaign. Until any long-term solutions are implemented on these rock faces it is suggested that these rock walls be inspected at least quarterly and any time before the tanks are refueled. The inspections should be done by a qualified rock mechanics engineer (this could be done by site staff or a site mine engineer with training in rock mechanics inspections).</p>

Observation	Comments and Recommendation
<p><b>DORIS 7.5ML TANK FARM – Berms / Bund</b></p> <p>Damage and erosion to the gravel layer (over-liner) protecting the liner in the 7.5 ML tank farm secondary containment.</p>	<p>On the eastern side of the tank farm some overliner material sloughing was noted, resulting in a few cracks in the crush material (expected to be above the liner) at the top and bottom portions of the slope.</p> <p>Maintenance activities in the tank farm are suggested to be completed including filling in and carefully compacting (likely with a hand compactor / tamper) crushed rock along the eastern side of the tank farm to prevent progressive failures from occurring and possibly exposing the liner.</p> <p>Continue to limit vehicle travel in the tank farm secondary containment area, and when vehicle travel is required, operators should be instructed to take special precautions to prevent over-liner damage. When damage is observed it needs to be repaired. No unplanned ramps are to be constructed to access the tank farm.</p> <p>A ground (GPS) survey, or LiDAR, over the base of the 7.5ML tank farm is suggested to be completed in 2022 so that a better assessment of the existing / current overliner crush thickness can be completed. This then can be better linked to maintenance and operational recommendations.</p>
<p><b>WINDY ALL-WEATHER ROAD BRIDGES</b></p> <p>Some ponding was noted at the south abutment of the double bridge along the Windy All-Weather Road.</p> <p>Remediation activities have been completed in this area (in the terms of some unfrozen overburden material and coconut material placement). However, some continued ponding near the bridge abutments, in part due to flow paths in area, now are resulting in areas of ponding and flow towards the bridge abutments.</p>	<p>This location should continue to be carefully monitored, specifically around spring melt over summer, and into fall when freeze-up begins.</p> <p>A ground (GPS) survey around the toes of the bridge abutments is suggested to be completed in the summer of 2022 to better constrain if additional thermal mitigation is suggested, and to better assess flow paths around the area (to determine if minor modification could be done to promote flow way from the toes of the rockfill bridge abutments).</p> <p>A review of the GTC at this location (see Attachment 4) does not suggest any anomalous thermal erosion at this point; however, this temperature cable is slightly offset from this specific location.</p>
<p><b>ROBERTS BAY 20ML TANK FARM</b></p> <p>Fluctuating water levels in the tank farm along with snow removal equipment activity has resulted in undercutting and over-steepening of various internal slope of the Roberts Bay 20 ML tank farm secondary containment. This was noted in the 2018 inspection but has continued since that time. The north and western slopes of the bunded area appear to be most impacted and require maintenance.</p>	<p>These slopes need to be repaired by reinstating appropriate fill to the original design slope. Specifically, additional overliner crush material (a ¾" minus type material) should be placed at the toe of the slopes to help buttress the slopes and avoid any liner slippage or damage.</p> <p>A survey was completed of the existing bunded area in 2021 and overliner checks were completed. Additional fill material should also be placed over the main access route within the tank farm (from the ramp down to the sump) to ensure adequate protective overliner material is apparent. Until this material is placed, vehicle access into this tank farm should be limited.</p>

Observation	Comments and Recommendation
<p><b>CORE STORAGE PAD - QUARRY D</b></p> <p>Various small to medium sized sinkholes exist on this historic pad, as well as smaller instability along the pad shoulder - at the core storage area near Quarry D.</p> <p>Additional signage has been placed at this location.</p> <p>Future remediation of this area may occur but at this time this area is blocked off and access restricted. The core boxes are also offset from the edges of the pad in areas adjacent to the road.</p>	<p>Inspections should be done periodically throughout the year to make sure that signage is still visible.</p> <p>Currently there are no known plans to complete any work in or around this area. However, if any new plans develop, then people working in the area should be made aware of the risks (specifically in terms of sink holes 30+cm in diameter that have become apparent in the overburden and oversize rockfill material that was placed to form this historic 'pad'). There is no large geotechnical concern for this area if it continues to only be use for historic core storage. Appropriate reconnaissance should be carried out ahead of any future work in this area, to develop a safe work plan.</p> <p>No additional recommendations at this time beyond signage maintenance.</p>
<p><b>PAD T</b> <b>Doris Waste Rock and Low-Grade Ore Storage</b></p> <p>The waste rock pile on Pad T is over-steepened.</p> <p>Some improvements on the slopes of Pad T have been made in the last year and a small catch berm was constructed on site closer to the portal entrance.</p> <p>Additional stability checks were completed on this pad in 2020. Future development plans should be done in a manner that decreases the overall slope angle (to the 2.5H:1V range).</p>	<p>A bench was cut in on the southern slope, but the southeastern corner remains over steepened.</p> <p>The slopes on Pad T appear to have been generally reduced since past AGI inspections however some areas still appear steeper than the original design Slopes steeper than 2.5H:1V should be revisited and reduced in grade.</p> <p>As part of the mine backfill plans, material should be preferentially taken off the south to south-eastern sides of the pile to reduce the overall slope angle in the areas with highest risk (i.e., the waste rock slopes directly above the portal location).</p> <p>No additional material should be placed on top of the most eastern waste rock stockpile lobe (i.e., the area above and immediately N of the Doris underground portal access).</p> <p><i>UPDATE: It is suggested that an updated survey of Pad T be collected to reassess the current stability of the stockpiles on this Pad and to capture any grading improvement (if completed since the 2021 site inspection).</i></p> <p><i>Since the summer 2021 site visit, milling activities were suspended on site. SRK is unaware of the latest mine plans however, specifically if underground backfilling activities have been or will be reduced. It is suggested that the Pad T stability be revisited and the overall slopes (specifically in the SSE corner) be excavated or regraded to the target overall slope.</i></p>
<p><b>ROBERTS BAY SINGLE TANK FARM – Quarry #1</b></p> <p>Quarry #1 (single tank) Tank Farm does not grade to one sump location and has variable overliner fill thickness.</p> <p>Some additional overliner material may have been placed in the Quarry #1 tank farm since the last annual inspections (unconfirmed by survey but based on visual inspection).</p>	<p>The crush fill over the base of this facility is noted to still be thin in a few areas.</p> <p>Vehicle traffic into this bunded area is still suggested to be restricted (except if required for emergency management measures and in this case ideally with lighter tracked equipment or pick-up trucks only) to avoid damage to the underlying HDPE liner.</p> <p><i>UPDATE: Since the 2021 summer inspection, some additional crush material has been placed by site to create a one-way access pathway into the facility to the front (SW) face of the fuel tank. Vehicle traffic, including fuel trucks, should be constrained to this pathway within the bunded area to limit the chance for any additional liner damage.</i></p>

Observation	Comments and Recommendation
<p><b>ROBERTS BAY JETTY</b></p> <p>Some of the riprap at the Roberts Bay Jetty head appears to have slumped or have been moved from general site activities at the jetty.</p>	<p>The front face / slope of the jetty should be visually inspected by site staff to determine if additional maintenance is required. This inspection should be done when there is no ice apparent around the jetty, and in advance of the annual sealifts (expect a visual inspection to be done by site staff around July 2022).</p> <p>As part of the next round of maintenance activities at the Roberts Bay Jetty consider adding addition riprap at the jetty head; specifically in the NNE corner (closer to the smaller boat docking area), near the edges where the blast matt / bumper mats are normally places.</p> <p>Attachment 4 includes an overview of the ground temperature data at the Roberts Bay Jetty.</p>
<p><b>DORIS LANDFARM</b></p> <p>A potential flow path or washed out fill material, was noted in the most northwest corner of the landfarm cell (most northern cell closest to the batch plant area) in the 2020 inspection. This area was further examined in 2021 and the pond was seen to be holding water. It has been constrained that this previous observation was most likely not due to liner damage and in fact due to some other disturbance (from equipment or water outside of the bunded area).</p>	<p>No recommendations.</p> <p>All landfarm cells available to be used /operated as licensed.</p>
<p><b>DORIS AIRSTRIP and DE-ICING APRON</b></p> <p>An increased amount of tension cracking was previously noted on the west shoulder of the airstrip. This area was generally at or outside of the main running surface (located generally at or outside of the airstrip lighting).</p> <p>Past tension cracking was original noted in 2019 and was noted to have further developed in 2020.</p> <p>In 2021 Agnico Eagle completed additional repairs on the west shoulder of the airstrip. This included pulling back material that was previously cast off the side of the airstrip. The material was pulled back to the toe, to minimize rate of permafrost degradation and most of the uncompacted crush that was previously placed over the airstrip lighting was reshaped and tamped.</p> <p>The maintenance completed in 2021 was a notable improvement and helped to address the immediate concerns highlight in earlier annual geotechnical inspections. At this point, the airstrip has been returned to a state where the main consideration is routine maintenance.</p>	<p>Aerial drone imagery is suggested to be taken during the snow free months to capture the current state and to set up a new visual baseline to track ongoing permafrost changes at the airstrip toes. The imagery should be captured in a series of vertical (downward looking) shots of the airstrip footprint, and ideally generated as an orthomosaic.</p> <p>Site may consider strategic placement of additional fill material at the western toe of the airstrip in areas, as a sacrificial fill to limit permafrost degradation at the current toe and help promote more surface water flow paths away from the airstrip (reduce ponding against the current airstrip toes) to help reduce the magnitude of ongoing maintenance.</p> <p>Site should continue to limit traffic access near the top crest and shoulders of the airstrip, specifically in the summer months when the active layer is at its deepest, and monitor for and document, any notable movements in the airstrip side lighting.</p>

Observation	Comments and Recommendation
<p><b>DORIS CROWN PILLARY RECOVERY</b></p> <p>Sinkholes have been historically noted at the Doris Crown Pillar Recovery (CPR) backfill area.</p> <p>Additional backfill material was placed within the largest sinkholes and signage has been placed to highlight the risks and to attempt to restrict access to this area. Notable improvements were noted in this area compared to prior year inspections.</p> <p>No new notable (larger than ~0.5m) sinkholes were noted at the time of the 2021 site inspection.</p>	<p>Access this area should continue to be restricted at this time.</p> <p>Site should continue to monitor settlement at the Doris Crown Pillar backfill area to ensure that larger sinkholes do not redevelop (ideally with a check from helicopter or drone done at least annually).</p> <p>The thermal erosion that appears to be starting in the NNE corner of the Doris CPR backfill should be monitored. If conditions change (such as additional erosion) then consideration to additional backfill material over the NNE corner of the existing backfilled pad area should be considered.</p>

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**Attachment 2      Summary of Observations and  
Recommendations – Madrid**

**Summary of Recommendations - Table 2: Madrid Project 2021 Annual Geotechnical Inspection**

Observation	Recommendation
<p><b>MADRID NORTH – CONTACT WATER POND Survey</b></p> <p>Survey settlement monitoring plates and surface settlement points were installed in 2019 and should continue to be monitored at the Madrid North CWP.</p>	<p>Survey monitoring should continue at the Madrid North CWP from around May to December each year.</p> <p>Overall, the largest movements at the Madrid CWP correspond with the two areas where the foundation is on overburden permafrost. The current deformations are within design limits but should be continued to be monitored.</p> <p>An overview of the survey monitoring results from 2021 are presented in Attachment 3.</p>
<p><b>MADRID NORTH – CONTACT WATER POND Seepage</b></p> <p>Interim remediation measures (placement of fine overburden near the liner bedrock interface) were completed in late 2020 to help stretch out the seepage pathways below and at the liner to bedrock contact the CWP. This was suggested to help stretch out seepage pathways below the CWP. This has had some minor positive improvement but not eliminated the seepage noted from the CWP.</p> <p>The latest monitoring and visual inspections indicated that the main seepage pathway is most likely through the natural fractured bedrock at the liner tie in and further within the facility. Somewhat as expected, the seepage at this contact water pond is noted to increase with increased water levels (increased head).</p>	<p>The monitoring and diligent management of the Madrid CWP remains a top priority. The CWP should be operated as a 'dry pond' with any water being removed from the pond over the course of a few days or less. Ideally ponded water would be left in the pond for less than 48 hours.</p> <p>Seepage should be monitored below the pond (North), specifically around freshet. If any seepage is noted the flow rates should be estimated, the location should be marked (to look for potential deepening of the active layer in these areas) and periodic water samples should be collected and tested in accordance with site water sampling procedures (if possible).</p> <p><i>UPDATE: Issued for Construction (IFC) designs have been generated in 2022 (post the AGI inspection) and plans are in place to install a sump downstream of the existing Madrid CWP. This sump would be installed to assist with additional seepage control at the Madrid area.</i></p>
<p><b>MADRID NORTH WASTE ROCK STORAGE FACILITY (WRSF)</b></p> <p>Drone LiDAR surveys were completed of the area in 2021.</p> <p>Site actively manages water at the three sump locations around the Madrid WRSF. At the time of the site inspection the sump water management was being performed well. Typically, very small volumes of runoff are noted at these surrounding sump locations – sumps located around the W, NW, and NE sides of the facility.</p>	<p>This area should continue to be visually monitored. Specially the collection sumps around the perimeter of the facility, the overall slopes (for any signs of instability such as cracking or slope relaxation) or any area adjacent to the access road (along the western side of the facility) to ensure that no rock falls or sloughs against or onto the access road.</p> <p>No additional actions beyond routine monitoring at this time.</p>

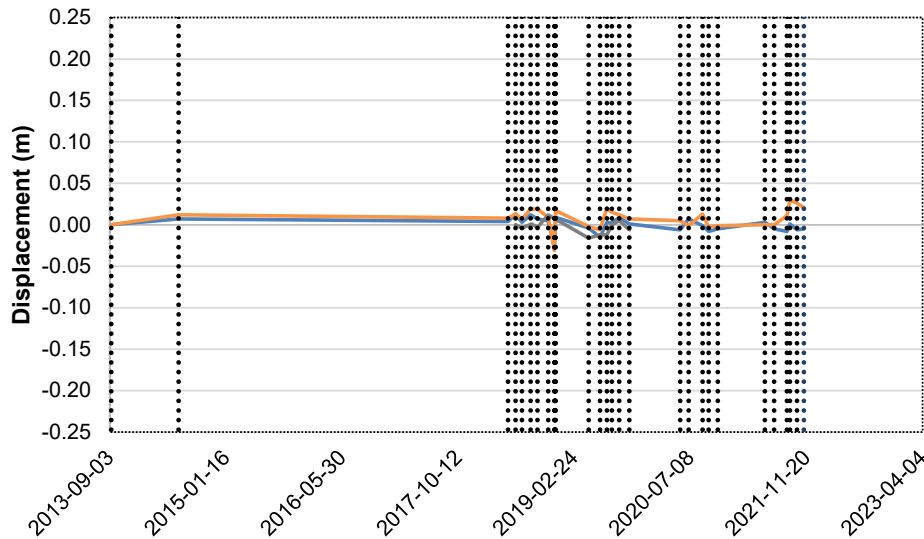
Observation	Recommendation
<p><b>MADRID NORTH OVERBURDEN DUMP</b></p> <p>The Madrid North Overburden dump was resloped by TMAC in 2020.</p> <p>Drone LiDAR surveys were completed of the area in 2021 and reviewed as part of the 2021 AGI checks.</p>	<p>This area should continue to be visually monitored. Specially any areas of minor slumping on the outside dump surface or any area of erosion (from surface water) should be noted to determine if maintenance or additional measure will be required in the coming years.</p> <p>No additional actions beyond routine monitoring at this time.</p> <p><i>Additional Background / Context:</i>  <i>Some additional relaxing of these overburden slopes may be expected as some of the outside portions of the slopes equilibrate with surface climatic boundary conditions to create a new 'active layer'.</i></p> <p><i>Overall, these slopes are stable and typically now at 3H:1V or shallower angles. This area will continue to be visually monitored.</i></p>
<p><b>NAARTOK EAST CPR</b></p> <p>No activities were occurring on site at the Madrid / Naartok East CPR at the time of the 2021 AGI Inspection.</p> <p><i>Additional Background / Context:</i>  <i>The Madrid / Naartok East CPR will eventually be backfilled to reach a closed state. Due to the backfill volumes this closure backfilling is expected to be done over the course of multiple years.</i></p> <p>Since the 2020 AGI site staff have placed some additional backfill material within the Naartok East CPR. SRK was consulted as part of this process, and this backfill material was preferentially placed (within the currently disturbed / mined out CPR footprint) over the exposed overburden surface on the top western side of the CPR. This backfill material has assisted to help reduce the rate of permafrost melt / degradation above the top western slope (the main pit slopes in the area are in bedrock). The outside of this backfill was also shaped to help promote a larger portion of the natural surface water flow around the western side of the CPR excavation.</p> <p>The CPR continues to have water accumulating in the base of the excavation.</p>	<p>Until the Naartok East CPR backfill activity is completed, ongoing monitoring (done through installed fix survey monitoring points over the thermally clad overburden slopes) should continue to be carried out.</p> <p>Water levels within the Naartok East CPR should also be maintained below the elevation of the overburden in the pit until backfilling activities are complete.</p> <p>Attachment 3 presents an overview of the 2020 monitoring set-up at this CPR. There are some areas with some settlement on the eastern overburden slopes, but generally the settlements are within allowance design ranges. The eastern overburden slope will continue to be monitored to see if any additional thermal protection will be required in future years (not currently required).</p> <p><i>UPDATE: Agnico Eagle is now reviewing the plans around the Madrid area and are working to advance a water management plan (to prefeasibility level) for the Naartok East CPR area. Part of this plan is expected to include removal of the water (or at least part of the water volume) currently within the CPR excavation. As per the current site water management plans water would be relocated from the Naartok East CPR to the Doris Tailings Impoundment Area system.</i></p>

Observation	Recommendation
<p><b>MADRID NORTH PORTAL PAD (Former Location)</b></p> <p>Agnico Eagle have completed active remediation of the most eastern portion of the historic Madrid North Portal Pad. This formal exploration portal location is not in active use. As part of the remediation activities, site has removed the former HDPE liner and high-salinity underground rock that was below this location – waste rock from the previous use of this location as a waste and ore transfer location on this pad (transfer from the underground to surface fleets). Portions of the waste rock on the eastern edge of the pad have been excavated down to an elevation just above the original tundra surface. A series of erosion and coconut matting baffles have also been placed over this area.</p>	<p>Visual monitoring of this location should occur on an at least biweekly between approximately May and the end of August. Visual monitoring should look for signs of thermal degradation (in the disturbed areas below the former pad) and any signs of erosion (or increased sediment in the runoff water). Currently with the existing natural topography layout, there was no notable ponding apparent in this area, at the time of the summer 2021 inspection. This noted, if any area of notable ponding (greater than approximately 0.3 to 0.5m in depth or areas greater than approximately 1m in diameter) do become apparent over time then these should be noted and tracked.</p> <p>A ground survey (or LiDAR) survey is suggested to be completed over this area in 2022, following any further remediation, to document any changes to the as-built of the remediation activities completed at site, and to support ongoing monitoring.</p>

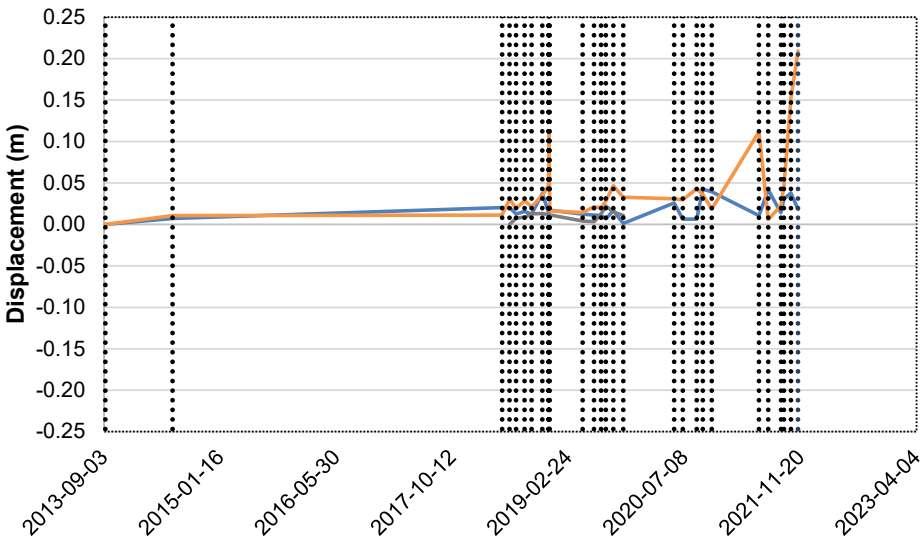
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## **Attachment 3      Survey Monitoring Data & Dashboards**

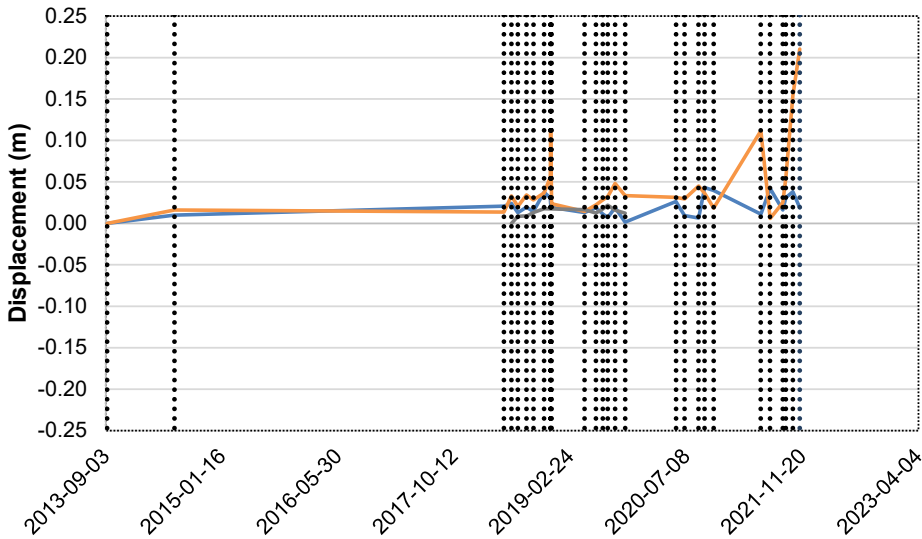
Vertical Displacement



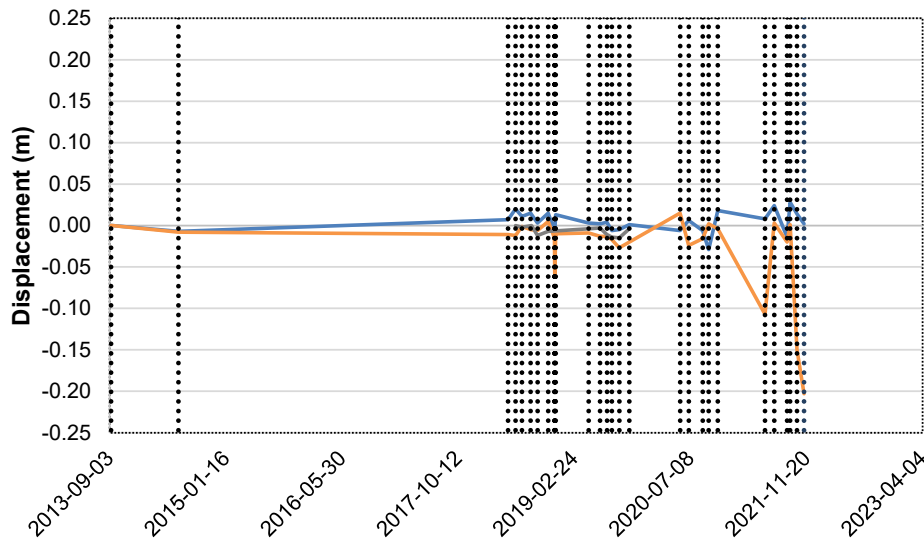
Horizontal Displacement



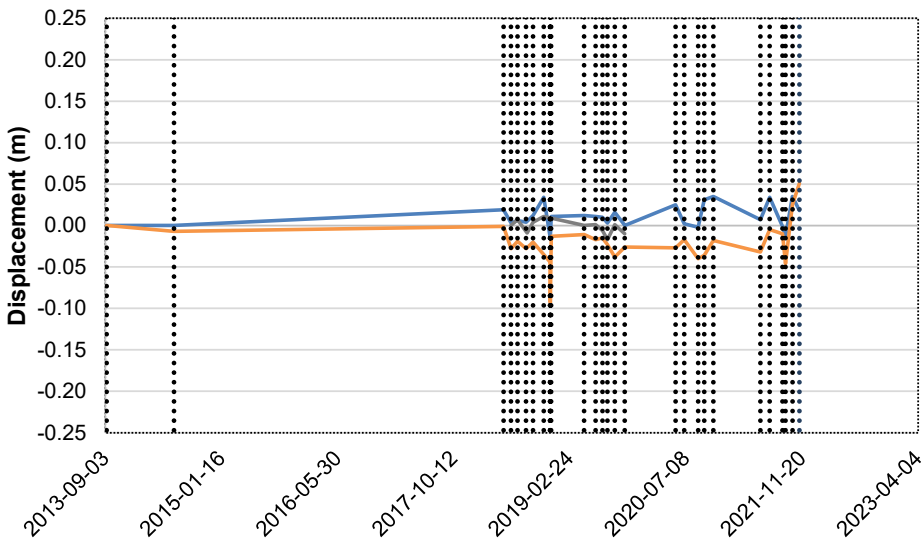
Total Displacement



Change in Easting



Change in Northing



LEGEND:

- PH1
- PH2
- CP1
- Survey Date

NOTES:

- CP1 corresponds to a control point (rock bolt in bed rock) that used as a check/secondary base point
- CP1 has not been surveyed since October 2019



Job No: 1CT022.071  
Filename: HopeBay\_PadB\_PowerhouseSurveyMonitoringPts\_20210715\_PL



Hope Bay

Pad B

Survey Monitoring Points Displacement Timeseries

Date: November, 2021  
Approved: PL  
Figure: 1

## Madrid North Contact Water Pond

AGNICO EAGLE

### Surficial Settlement Monitoring Points

The most recent survey date **2021-11-12**

The fourth last survey date **2021-07-18**

Vertical displacement\* (cm) from last four surveys:

Horizontal displacement (cm) from last four surveys:

Total Displacement (cm) from last four surveys:

CWP-SSP-01	0.4	CWP-SSP-11	1.1
CWP-SSP-02	0.6	CWP-SSP-12	0.5
CWP-SSP-03	-0.9	CWP-SSP-13	0.2
CWP-SSP-04	0.7	CWP-SSP-14	-0.1
CWP-SSP-05	0.0	CWP-SSP-15	-0.6
CWP-SSP-06	-0.2	CWP-SSP-16	0.8
CWP-SSP-07	-0.8	CWP-SMP-01	0.1
CWP-SSP-08	0.4	CWP-SMP-02	1.5
CWP-SSP-09	0.8	CWP-SMP-03	1.2
CWP-SSP-10	1.7	CWP-SMP-04	-0.2

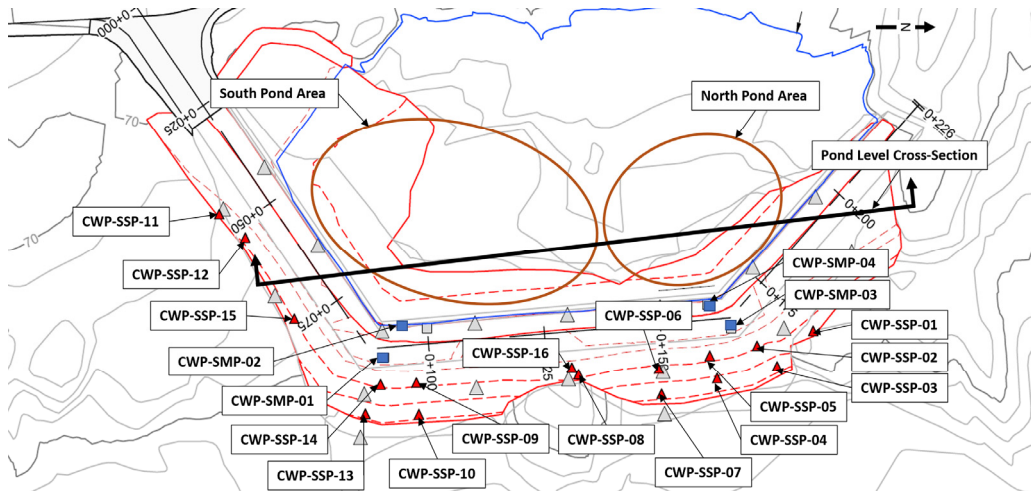
CWP-SSP-01	1.1	CWP-SSP-11	3.4
CWP-SSP-02	0.8	CWP-SSP-12	1.9
CWP-SSP-03	1.3	CWP-SSP-13	1.3
CWP-SSP-04	3.1	CWP-SSP-14	2.2
CWP-SSP-05	3.3	CWP-SSP-15	2.8
CWP-SSP-06	2.9	CWP-SSP-16	1.8
CWP-SSP-07	2.7	CWP-SMP-01	1.6
CWP-SSP-08	1.6	CWP-SMP-02	2.2
CWP-SSP-09	4.4	CWP-SMP-03	1.2
CWP-SSP-10	1.2	CWP-SMP-04	1.3

CWP-SSP-01	1.2	CWP-SSP-11	3.6
CWP-SSP-02	1.0	CWP-SSP-12	2.0
CWP-SSP-03	1.6	CWP-SSP-13	1.3
CWP-SSP-04	3.1	CWP-SSP-14	2.2
CWP-SSP-05	3.3	CWP-SSP-15	2.9
CWP-SSP-06	2.9	CWP-SSP-16	2.0
CWP-SSP-07	2.8	CWP-SMP-01	1.6
CWP-SSP-08	1.6	CWP-SMP-02	2.7
CWP-SSP-09	4.5	CWP-SMP-03	1.7
CWP-SSP-10	2.1	CWP-SMP-04	1.3

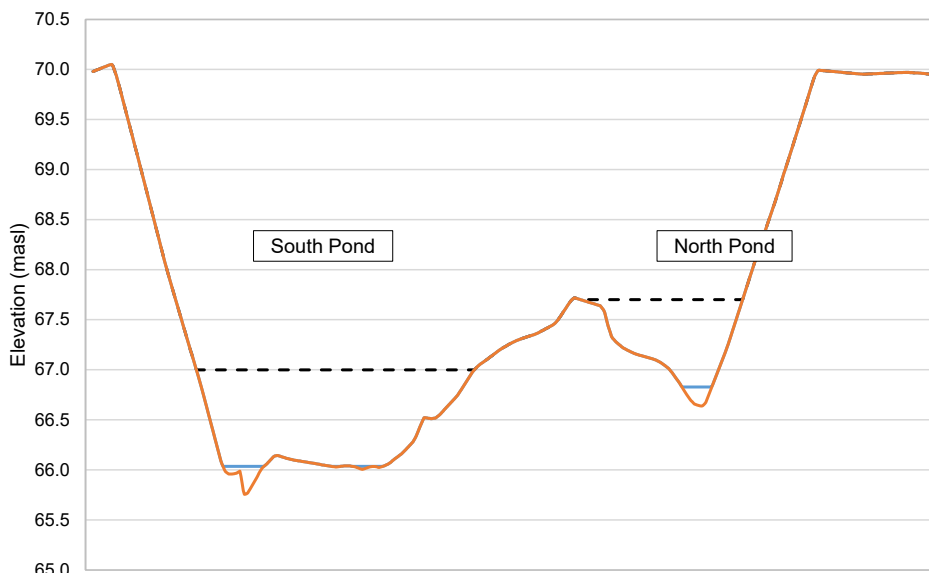
Note:

\* Negative vertical displacement indicates settlement

Within normal performance (<2.5 cm)
Check is required (>2.5 cm)
Concerning level of displacement (>5 cm)
Immediate action is required (>10 cm)



### North and South Pond Water Levels



Pond Elevation Date **2021-10-06**

North Pond Elevation	66.83	masl
Estimated North Pond Water Volume	2	m <sup>3</sup>
North Pond Max. Elevation**	67.7	masl

South Pond Elevation	66.04	masl
Estimated South Pond Water Volume	2	m <sup>3</sup>
South Pond Max. Elevation ***	67.0	masl

CWP Full Supply Level **69.7** masl

Note:

\*\* Max. elevation before North Pond spills to South Pond

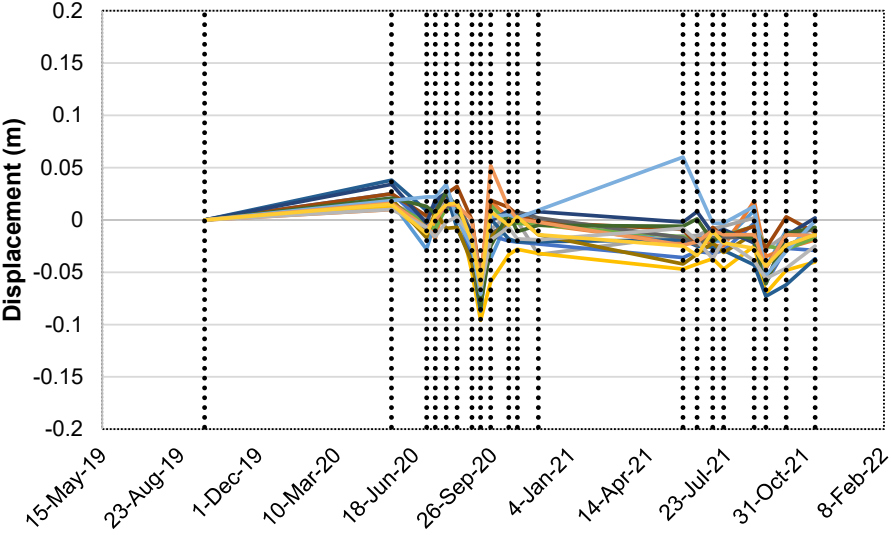
\*\*\* Max. elevation recommended to prevent seepage

—	Contact Water Pond Surface
—	Surveyed Water Level
- - -	Maximum Allowable Level

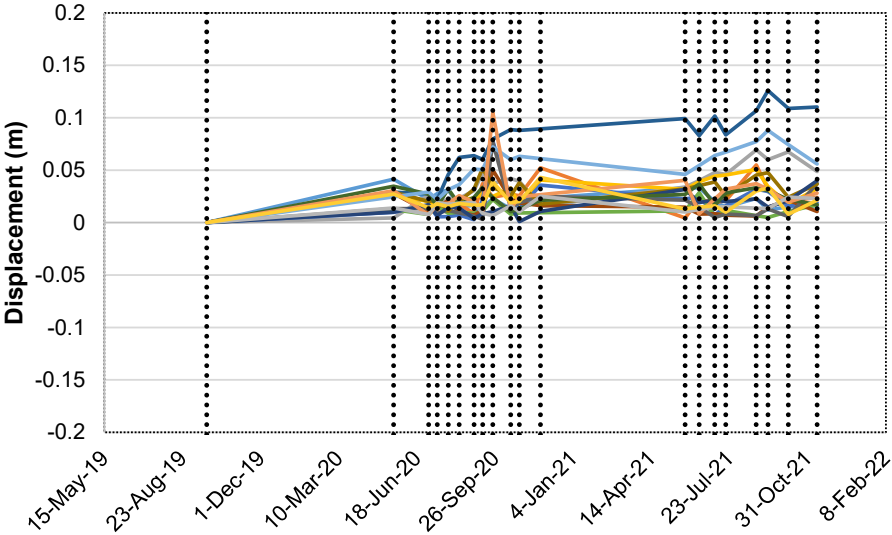
### Attachments:

- Madrid North CWP surficial settlement monitoring plan and settlement monitoring results

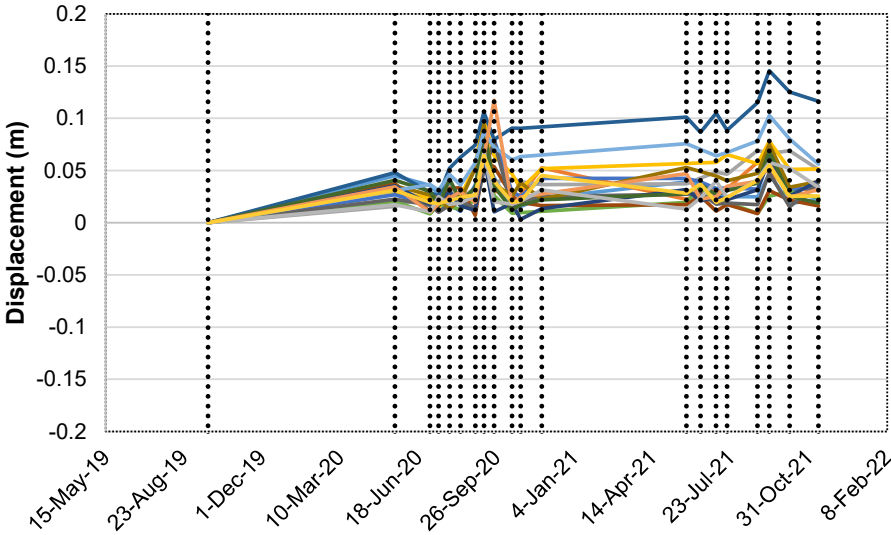
Vertical Displacement



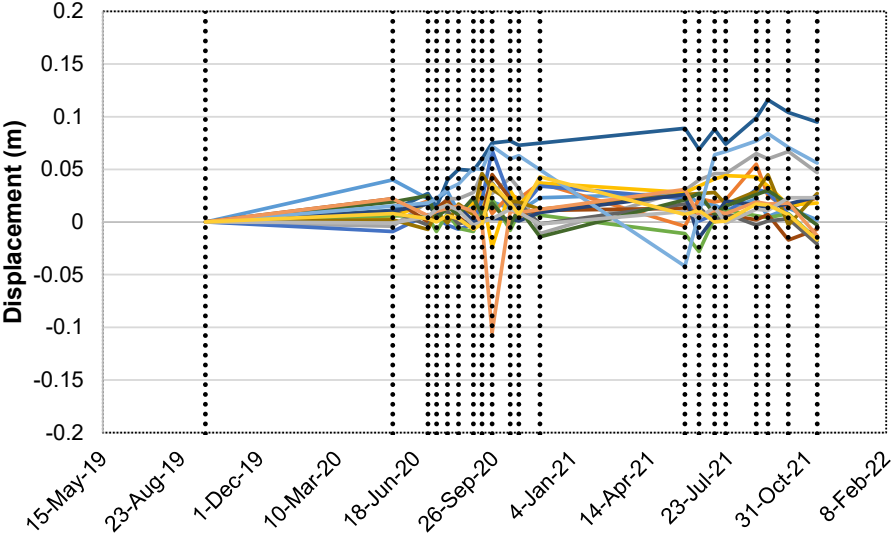
Horizontal Displacement



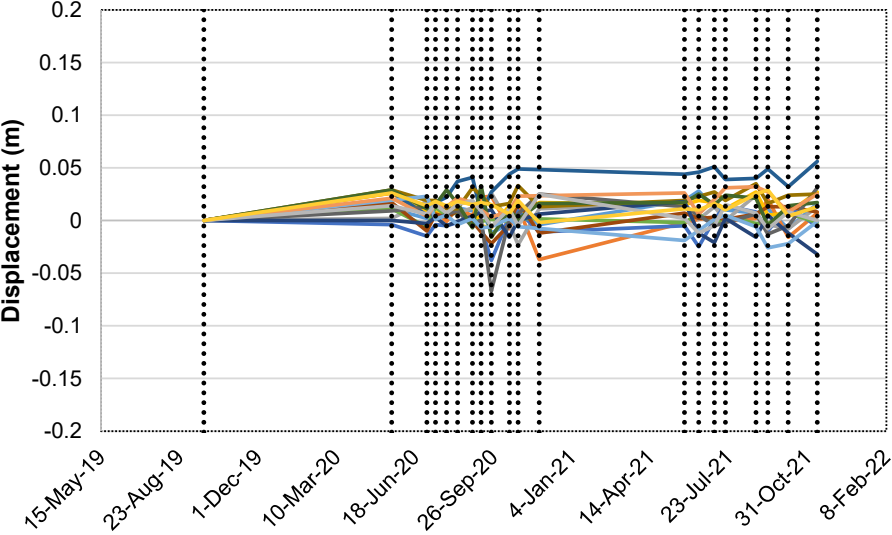
Total Displacement



Change in Easting



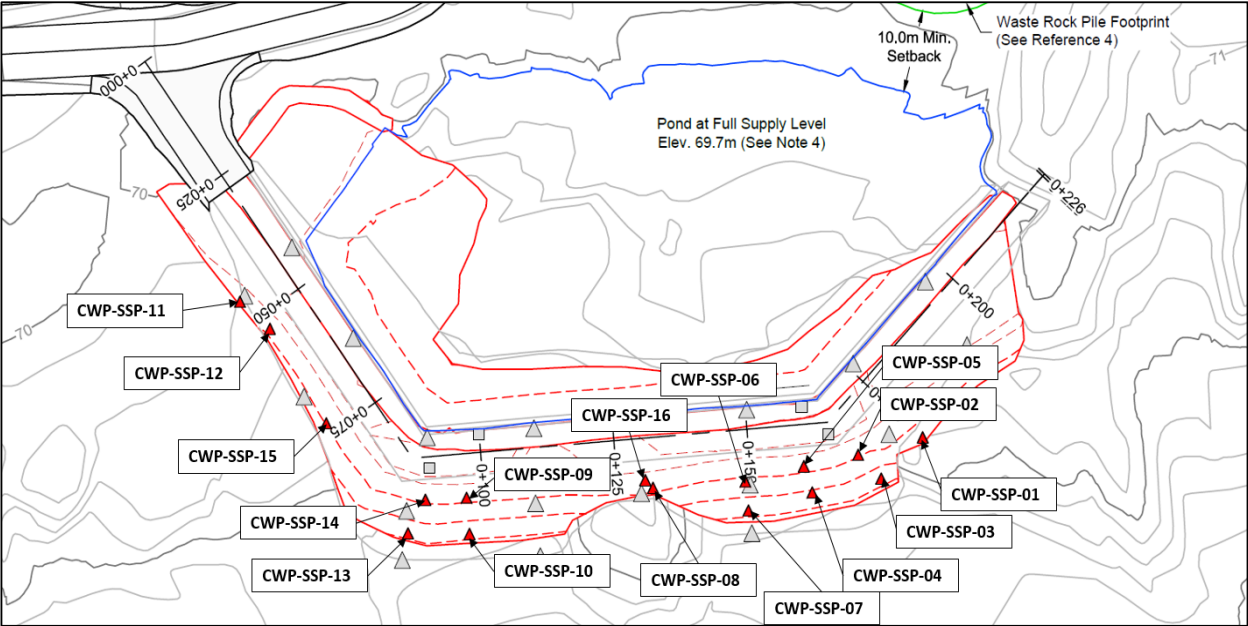
Change in Northing



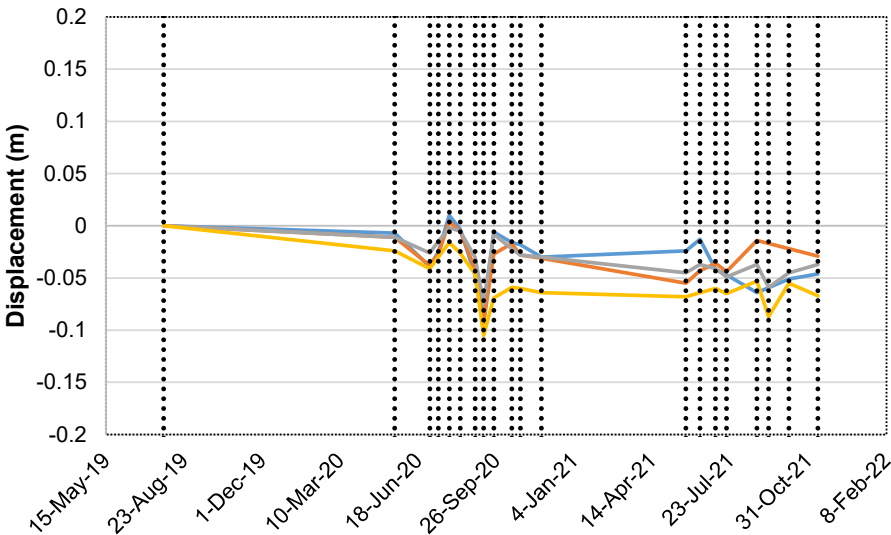
LEGEND:

CWP-SSP-01	CWP-SSP-02
CWP-SSP-03	CWP-SSP-04
CWP-SSP-05	CWP-SSP-06
CWP-SSP-07	CWP-SSP-08
CWP-SSP-09	CWP-SSP-10
CWP-SSP-11	CWP-SSP-12
CWP-SSP-13	CWP-SSP-14
CWP-SSP-15	CWP-SSP-16

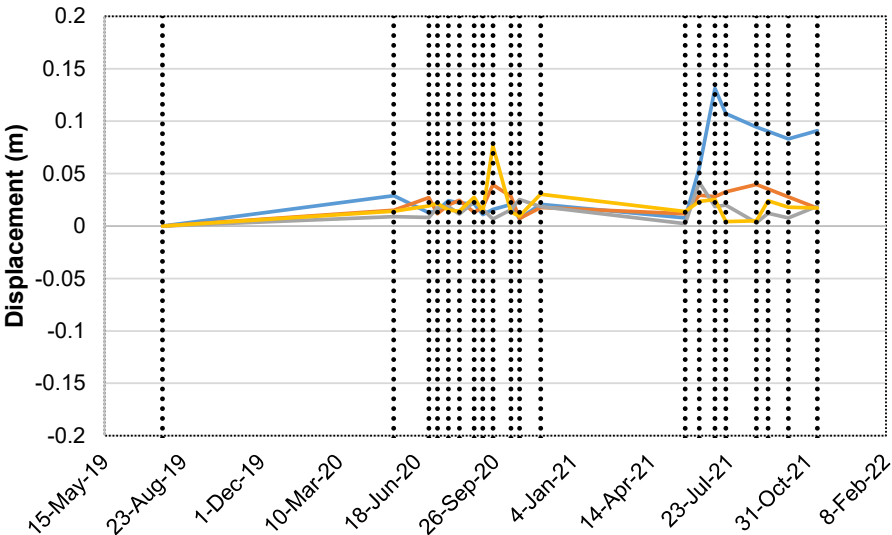
NOTES:



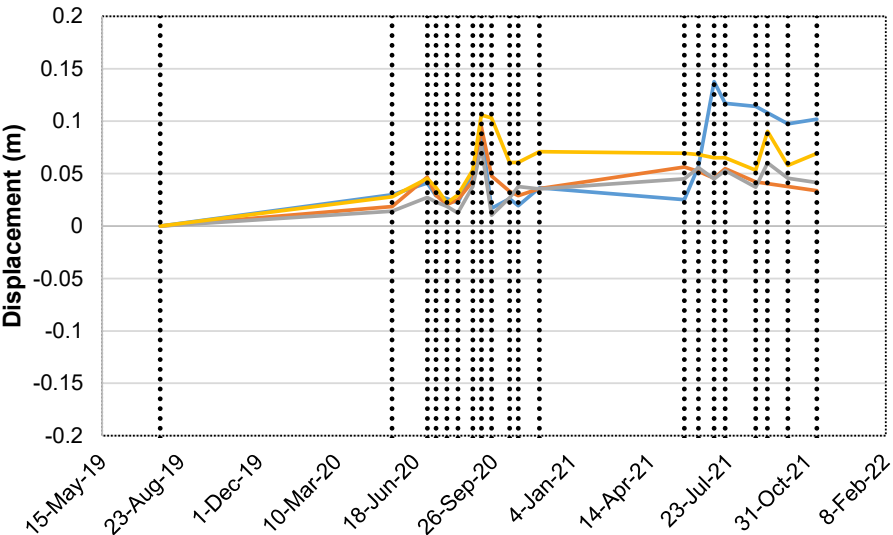
Vertical Displacement



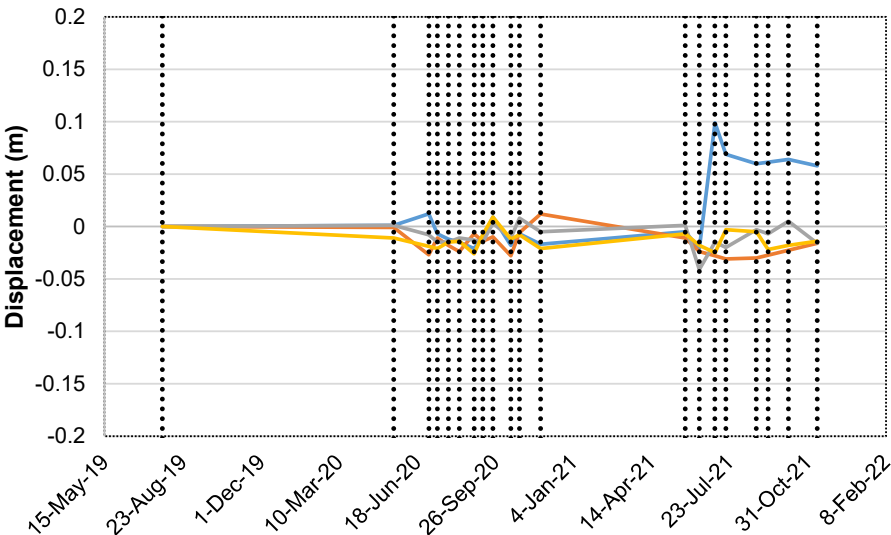
Horizontal Displacement



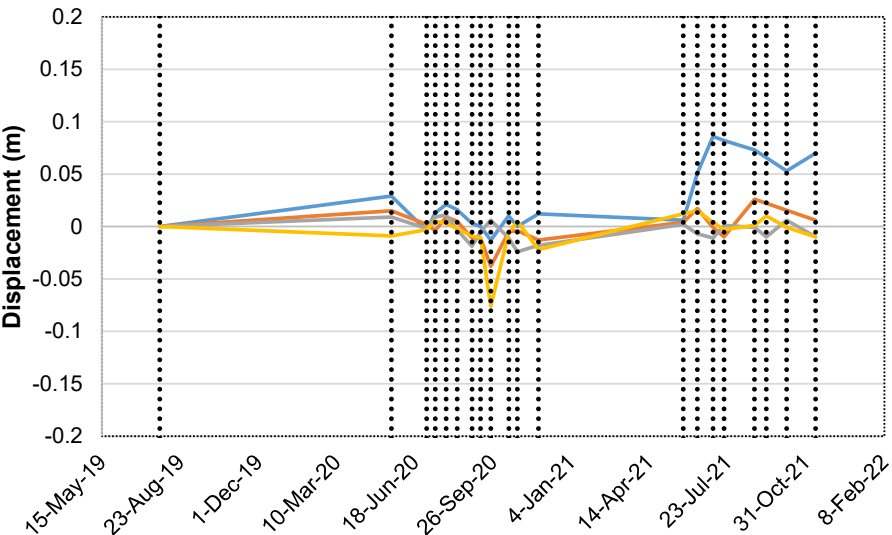
Total Displacement



Change in Easting



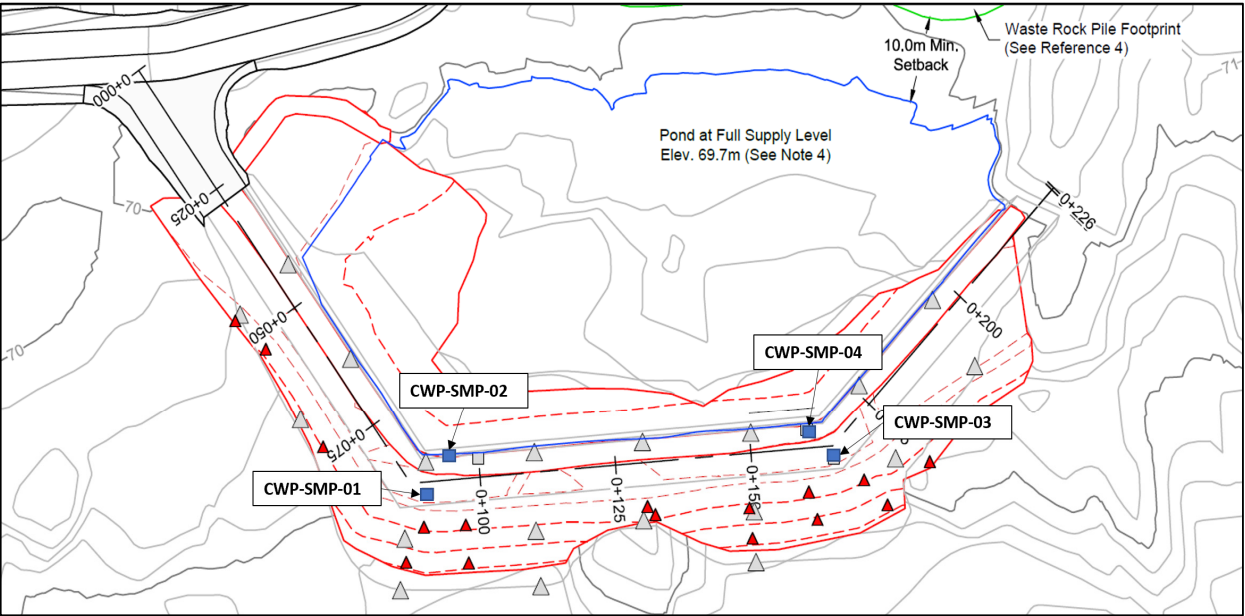
Change in Northing



LEGEND:

- CWP-SMP-01
- CWP-SMP-02
- CWP-SMP-03
- CWP-SMP-04

NOTES:



Job No: 1CT022.071  
Filename: MadridCWP\_SurveyMonitoringData\_rev03\_PL\_JU.xlsx



Hope Bay

Madrid CWP

Settlement Monitoring Plate  
Displacement Timeseries

Date: November, 2021  
Approved: PL  
Figure: 2

#### Surficial Settlement Monitoring Points

The most recent survey date **2021-11-10**

Vertical displacement\* (cm) from last four surveys:

CPR-SSM-01	-2.0
CPR-SSM-02	-18.7
CPR-SSM-02-New	-2.5
CPR-SSM-03	-2.6
CPR-SSM-04	-2.6
CPR-SSM-05	-1.7
CPR-SSM-06	-2.7
CPR-SSM-07	n/a
CPR-SSM-08	-1.8
CPR-SSM-09	-5.3
CPR-SSM-10	-3.0
CPR-SSM-11	-12.0
CPR-SSM-12	-5.3
CPR-SSM-13	-5.4
CPR-SSM-14	-1.8

Horizontal displacement (cm) from last four surveys:

CPR-SSM-01	1.4
CPR-SSM-02	12.0
CPR-SSM-02-New	2.0
CPR-SSM-03	1.7
CPR-SSM-04	5.2
CPR-SSM-05	5.4
CPR-SSM-06	3.9
CPR-SSM-07	n/a
CPR-SSM-08	3.8
CPR-SSM-09	5.5
CPR-SSM-10	3.7
CPR-SSM-11	10.2
CPR-SSM-12	4.2
CPR-SSM-13	3.0
CPR-SSM-14	2.9

Total displacement (cm) from last four surveys:

CPR-SSM-01	2.4
CPR-SSM-02	22.2 **
CPR-SSM-02-New	3.2 ***
CPR-SSM-03	3.1
CPR-SSM-04	5.8
CPR-SSM-05	5.7
CPR-SSM-06	4.7
CPR-SSM-07	n/a
CPR-SSM-08	4.2
CPR-SSM-09	7.6
CPR-SSM-10	4.8
CPR-SSM-11	15.7
CPR-SSM-12	6.8 ****
CPR-SSM-13	6.2 ****
CPR-SSM-14	3.4 ****

Within normal performance (<10 cm)
Check is required (>10 cm)
Concerning level of displacement (>25 cm)
Immediate action is required (>50 cm)

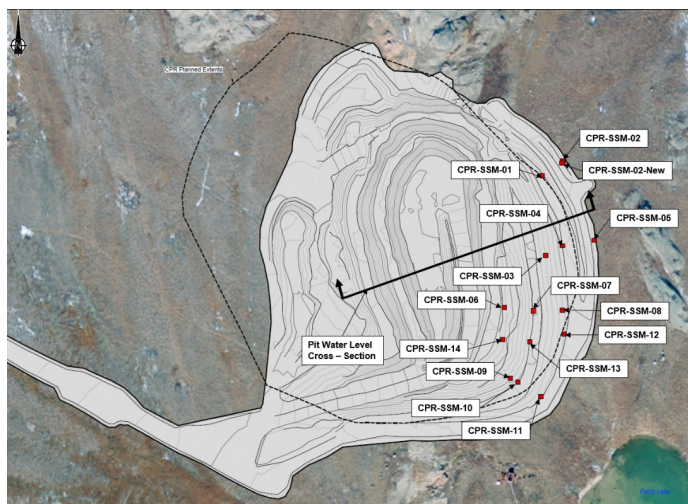
Note:

\* Negative vertical displacement indicates settlement.

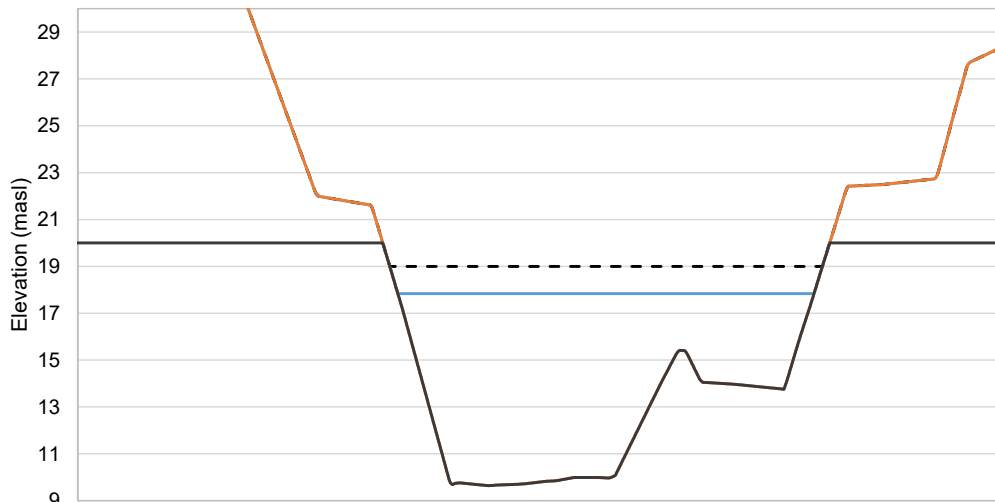
\*\* The boulder which CPR-SSM-02 was installed in was dislodged after the first reading. The first reading should be read with caution. This point has not been surveyed since Aug 2020.

\*\*\* CPR-SSM-02-New survey monument was installed on July 28, 2020.

\*\*\*\* Survey monuments were installed on August 30, 2020.



#### Pit Water Level



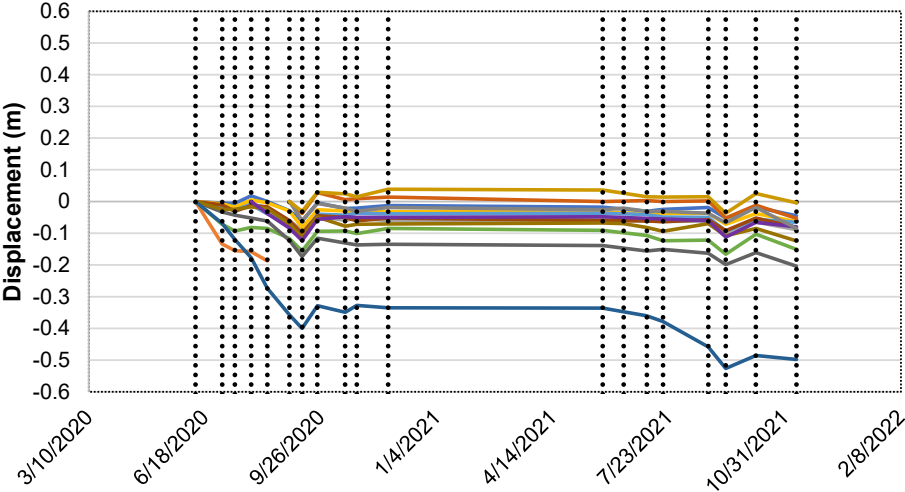
Pit Water Elevation Date	2021-11-10
Pit Water Elevation	17.84 masl
Estimated Water Volume	24,088 m <sup>3</sup>
Min. Frozen Ovb. Elevation	20.0 masl
Available Freeboard	2.2 m

Within normal conditions (>5 m)
Start to implement dewatering plans (1 m to 5 m)
Immediate action is required (< 1 m)
Frozen Overburden Surface
Pit/Bedrock Surface
Surveyed Water Level
Maximum Allowable Level

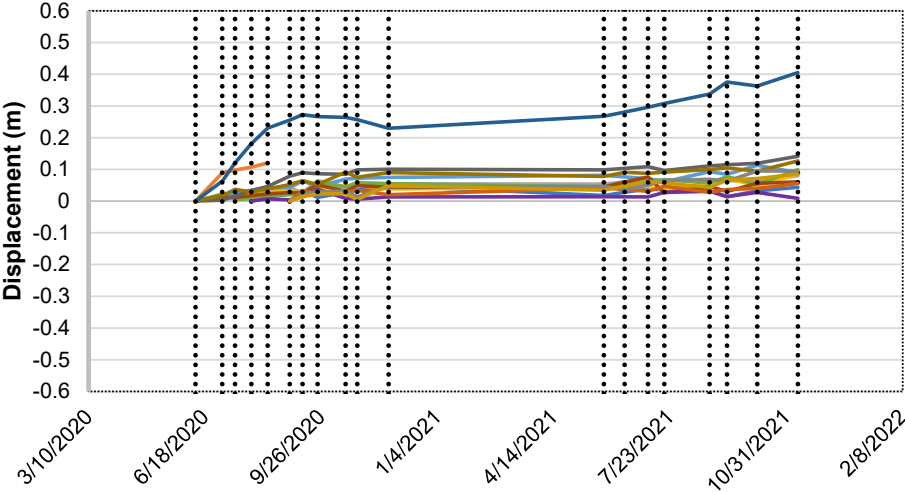
#### Attachments:

- Naatok East CPR surficial settlement monitoring plan and settlement monitoring results

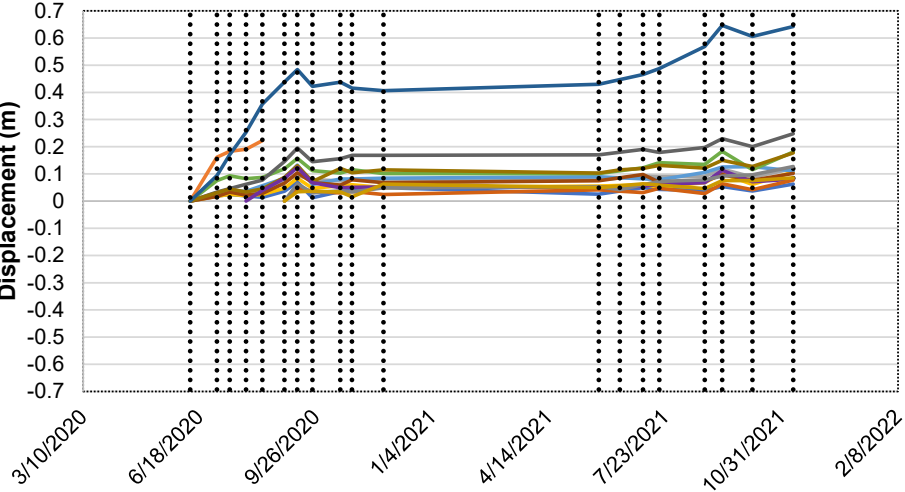
Vertical Displacement



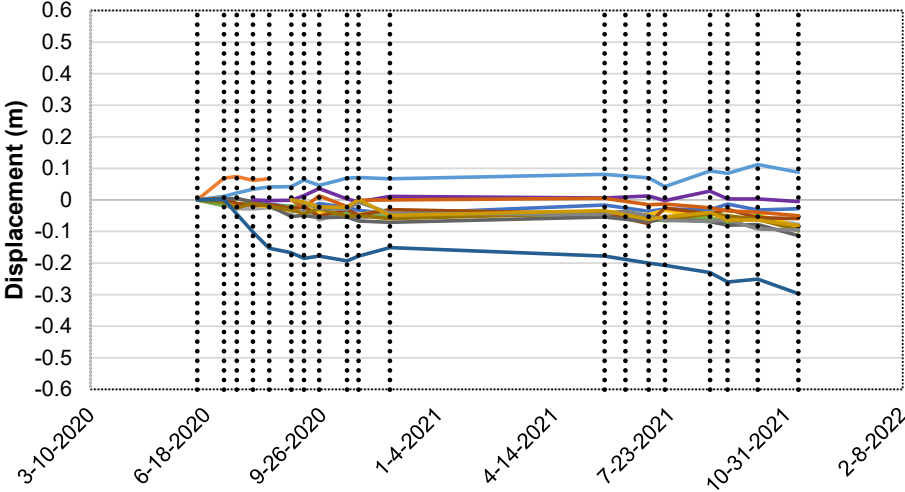
Horizontal Displacement



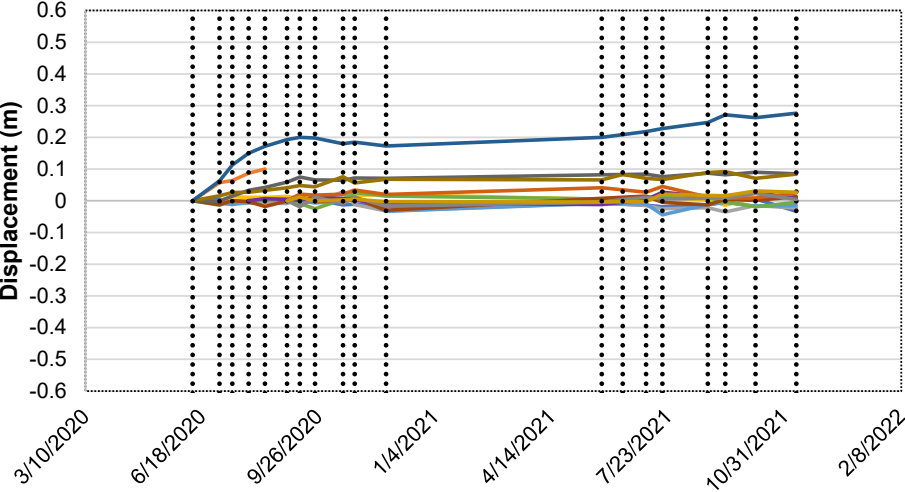
Total Displacement



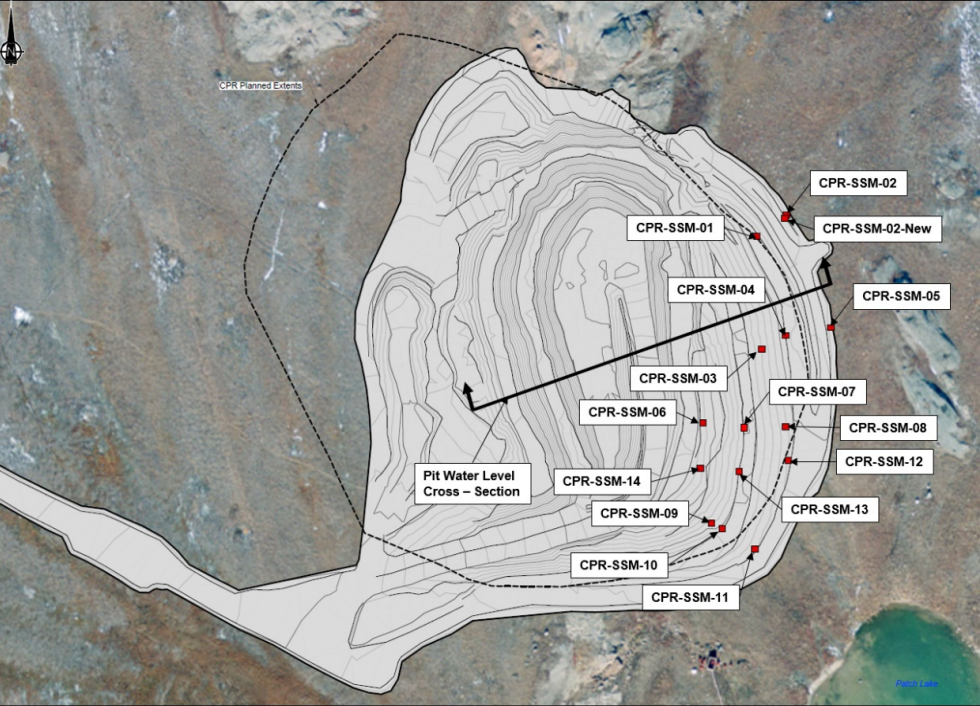
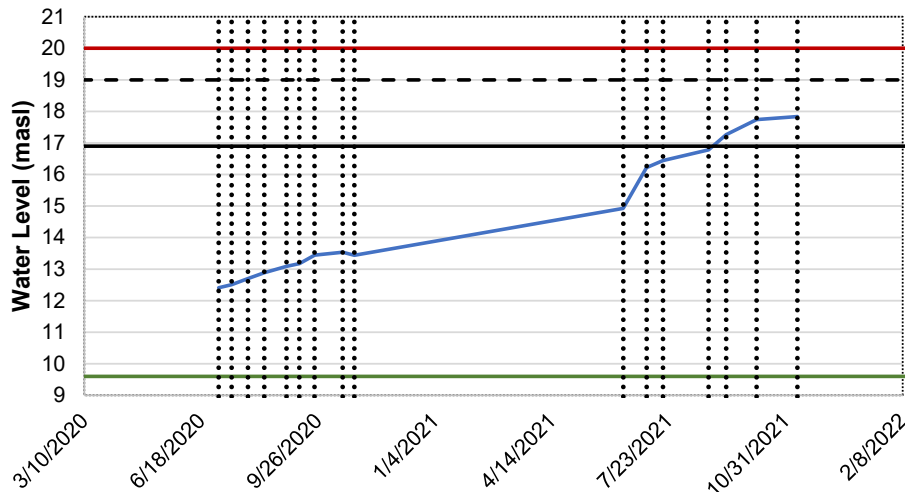
Change in Easting



Change in Northing



Pit Water Level



LEGEND:

- CPR-SSM-01
- CPR-SSM-02-New
- CPR-SSM-04
- CPR-SSM-06
- CPR-SSM-08
- CPR-SSM-10
- CPR-SSM-12
- CPR-SSM-14
- CPR-SSM-02
- CPR-SSM-03
- CPR-SSM-05
- CPR-SSM-07
- CPR-SSM-09
- CPR-SSM-11
- CPR-SSM-13
- ..... Survey Date

NOTES:

- Water Level
- Minimum Overburden Elevation (Phase 2)
- Maximum Allowable Water Level (Phase 1)
- Minimum Overburden Elevation (Phase 1)
- Pit Lowest Elevation (Phase 1)

---

**Attachment 4      Ground Temperature Data**



Roberts Bay Jetty Plan View



Doris Creek Bridge Plan View



Doris Pollution Control Pond Plan View

Note: Imagery sourced from ESRI World Imagery, except for the Doris Pollution Control Pond, which was provided by Agnico Eagle, and captured in 2021.



Job No: 1CT022.077  
Filename: DM\_AGI\_SiteWideGTC\_20220330.pptx



**AGNICO EAGLE**

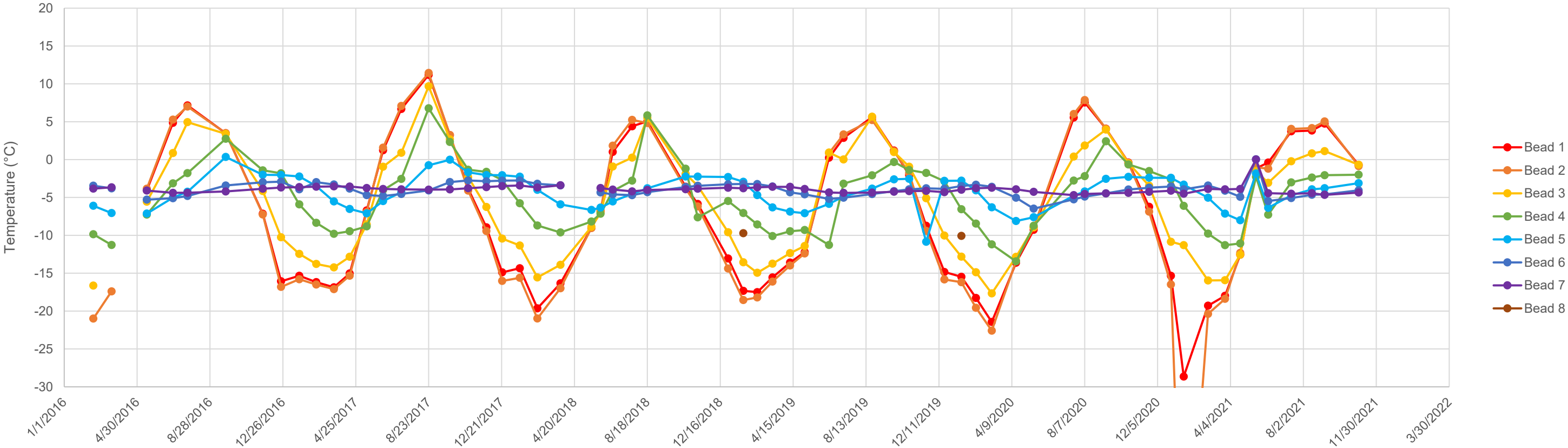
**Hope Bay**

2021 Annual Geotechnical Inspection  
Doris and Madrid

**Roberts Bay and Doris  
Infrastructure Thermistor Locations**

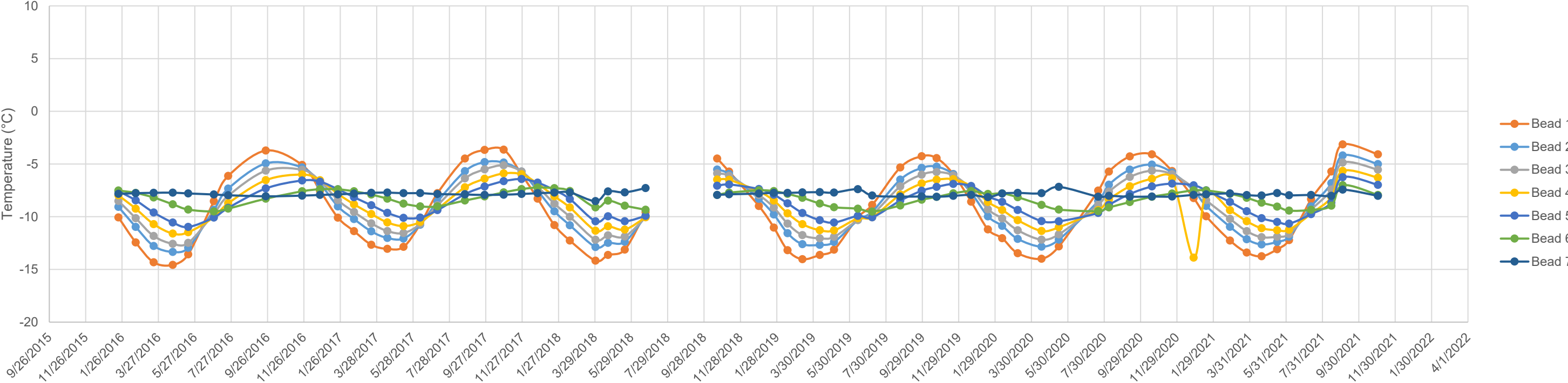
Date: Mar. 2022	Approved: PDL	Figure: <b>1</b>
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SRK-JT1-09

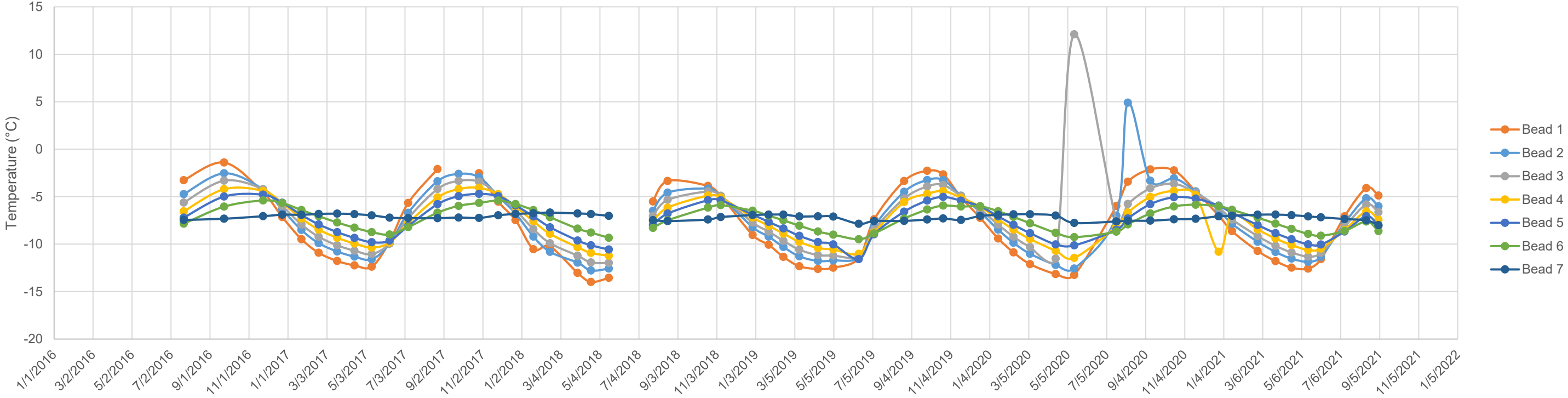


Note: Data is presented for the past five years, between Jan 2016 and Dec 2021, data records began in 2009.

SRK10-DCB2 (Doris Bridge East)

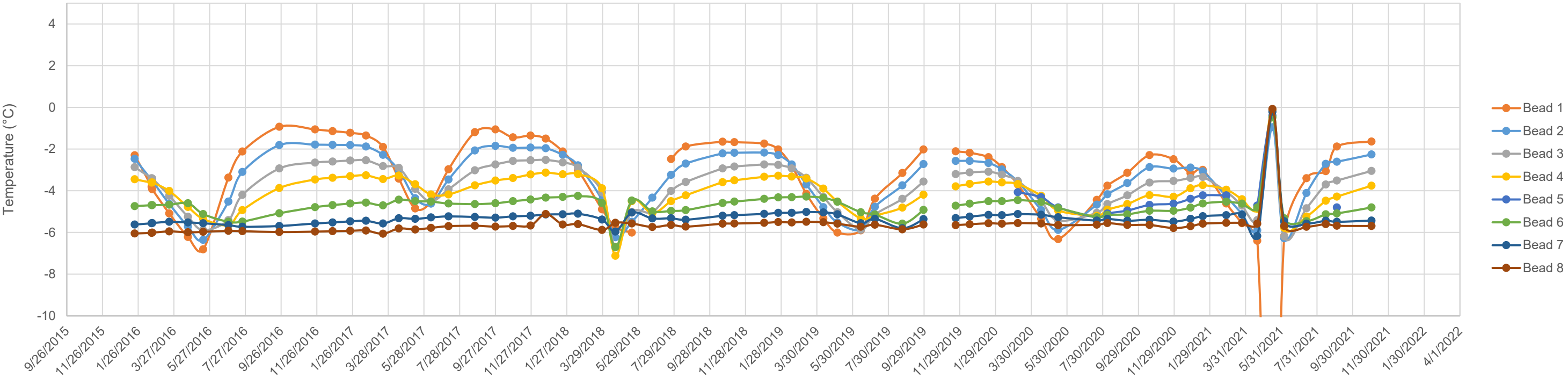


SRK10-DCB2 (Doris Bridge West)

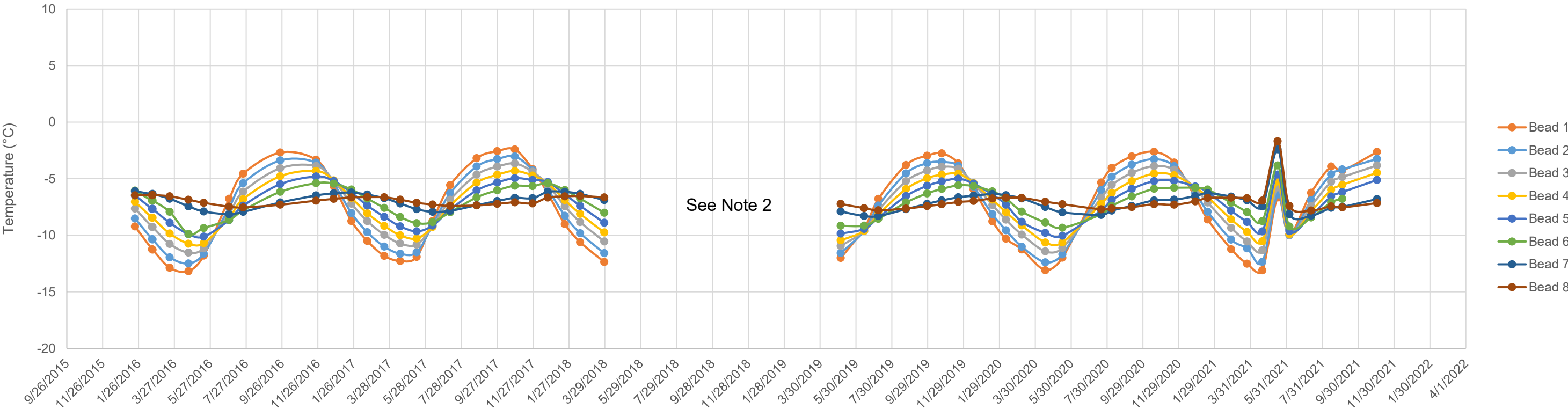


Note: Data is presented for the past five years, between Jan 2016 and Dec 2021, data records began in 2011.

SRK-12-GTC-DH01



SRK-12-GTC-DH02



Notes:

- 1) Data is presented for the past five years, between Jan 2016 and Dec 2021, data records began in 2012.
- 2) Data gap resulted from damage to the thermistor cable in 2018, repaired in 2019.



Job No: 1CT022.077  
Filename: DM\_AGI\_SiteWideGTC\_20220330.pptx



AGNICO EAGLE

Hope Bay

2021 Annual Geotechnical Inspection  
Doris and Madrid

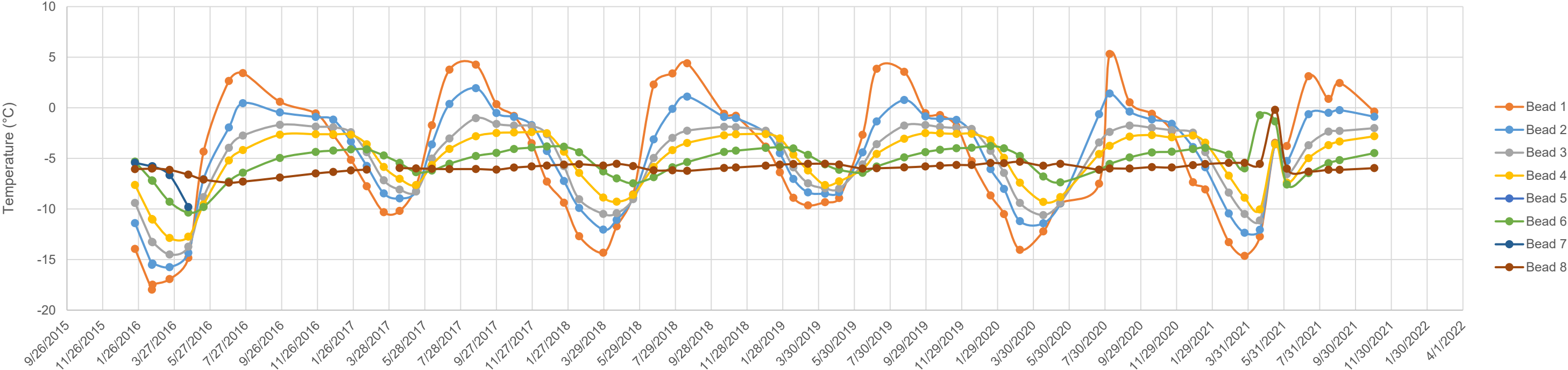
Doris Pollution Control Pond

Date:  
Mar. 2022

Approved:  
PDL

Figure: 4

SRK-12-GTC-DH03



Note: Data is presented for the past five years, between Jan 2016 and Dec 2021, data records began in 2012.



Job No: 1CT022.077  
Filename: DM\_AGI\_SiteWideGTC\_20220330.pptx



AGNICO EAGLE

Hope Bay

2021 Annual Geotechnical Inspection  
Doris and Madrid

Doris Pollution Control Pond

Date: Mar. 2022	Approved: PDL	Figure: <b>5</b>
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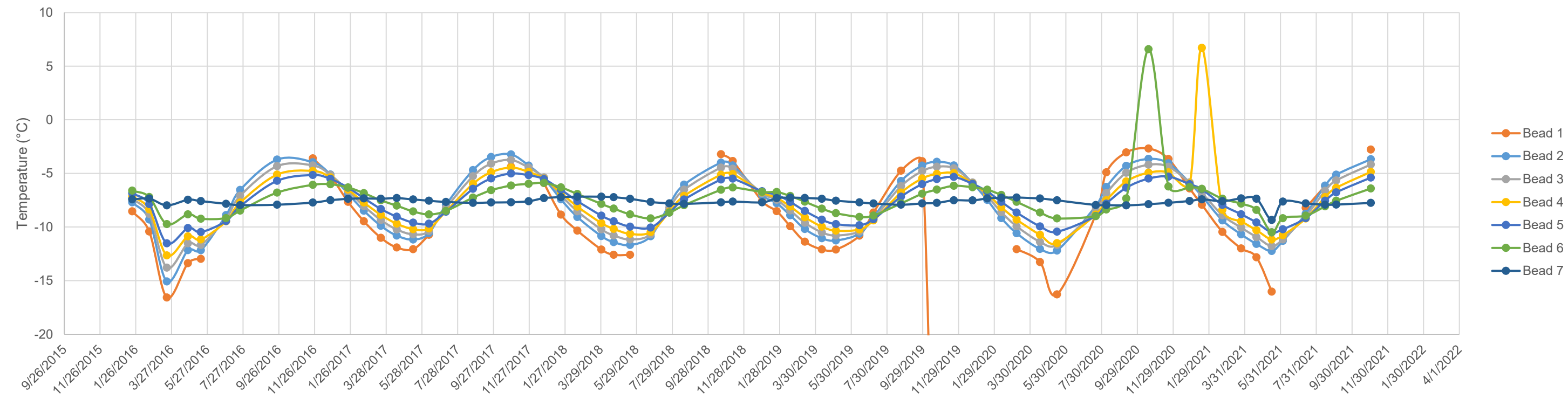
Madrid AWR Bridge 2 and 3 Plan View



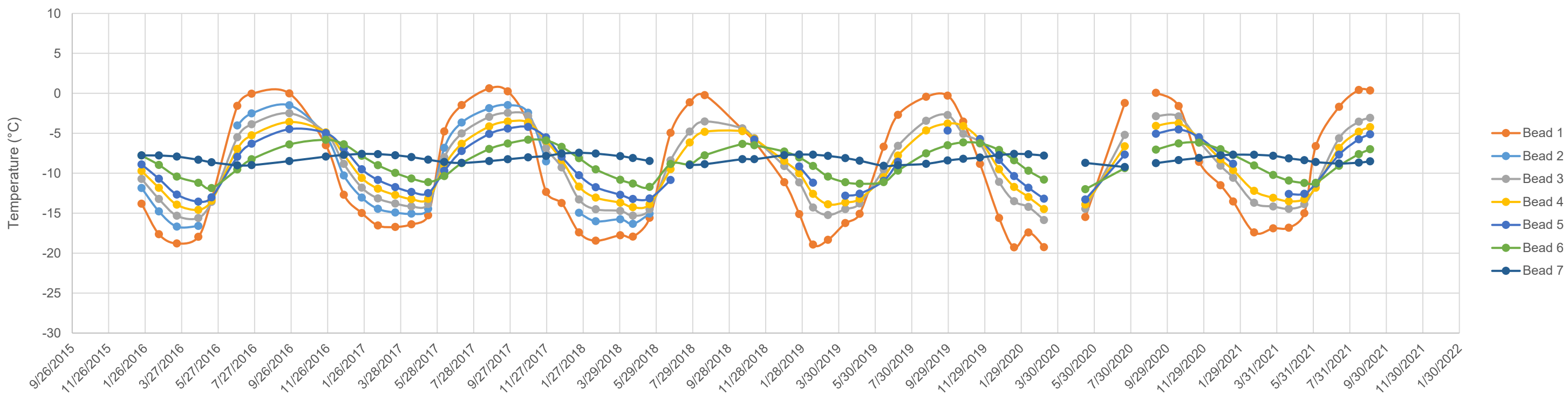
Madrid AWR Bridge 4 Plan View

Note: Imagery sourced from ESRI World Imagery.

SRK10-DBW1

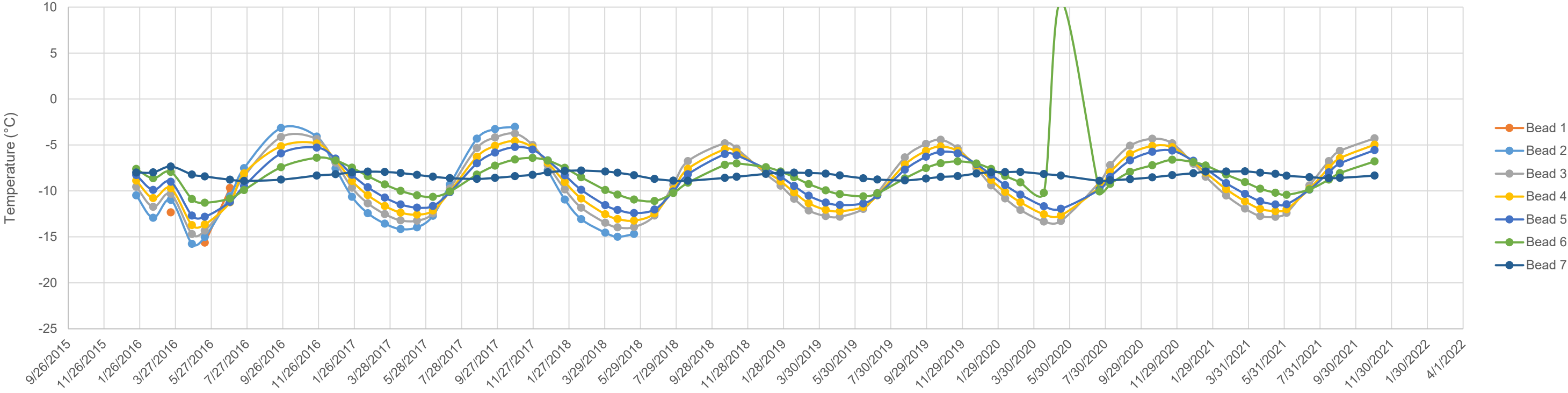


SRK10-DBW2



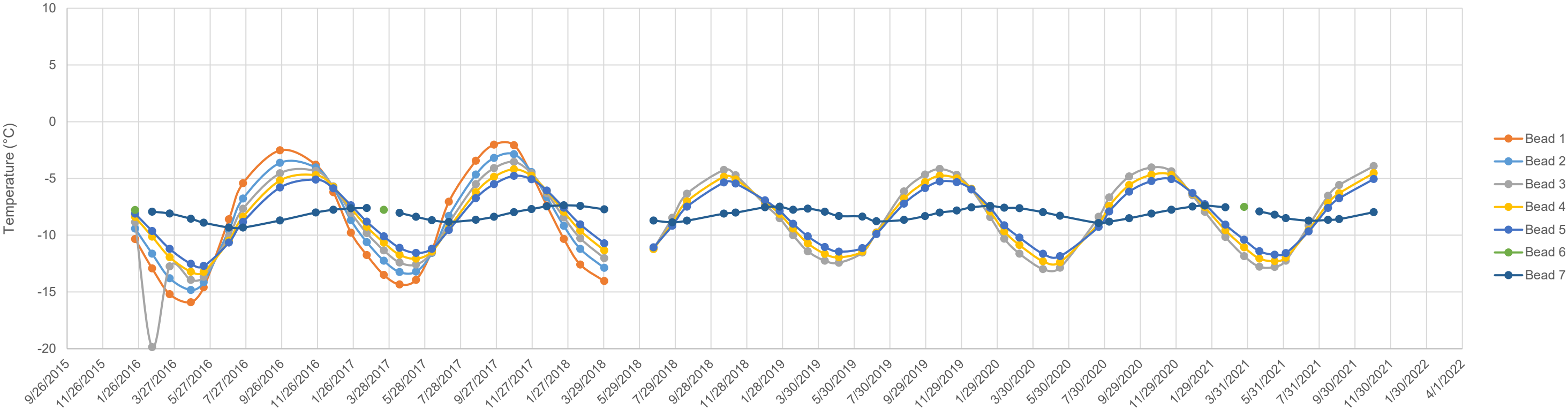
Note: Data is presented for the past five years, between Jan 2016 and Dec 2021, data records began in 2012.

SRK10-DBW3

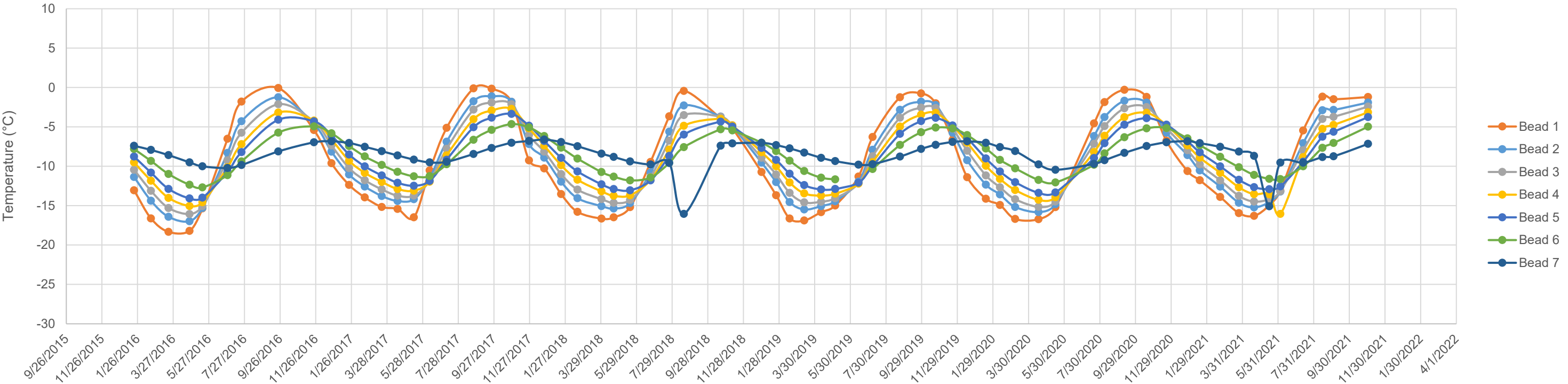


Note: Data is presented for the past five years, between Jan 2016 and Dec 2021, data records began in 2012.

SRK10-DBW4



SRK10-DBW5



Note: Data is presented for the past five years, between Jan 2016 and Dec 2021, data records began in 2012.

Attachment 2 - Recommendations and Agnico Responses (Agnico, 2022)

**Table 1 Agnico Response to 2021 Doris AGI Recommendations**

Please note: Formal recommendations are provided in black text, and where appropriate, an EOR update status of certain recommendations or important context is provided in **red** text.

Inspection Item	Recommendation	Agnico Response
Pad B	The Pad B area should be continued to be monitored. The monuments should be resurveyed in May including a survey of the control point (CP1), and once the ground is snow free, the Pad B should be inspected for signs of tension cracking and the points PH1 and PH2 should be inspected for signs of accidental movement of the monitoring point itself.	Agnico will conduct additional surveys of Pad B at the outlined frequency in 2022.
Doris Creek Bridge Abutments	<p>The abutment of the bridges should continue to be monitored. Specifically monitoring checks should look for any new or reoccurring depressions that might develop in the area.</p> <p>Permanent survey monitoring points should be placed near the corners of each rock gabion abutment. These points would allow monitoring of the abutments for movement and potential identification of the mechanism (tilting, vertical or lateral displacement).</p> <p>Surveys of these new monitoring markers are suggested to be completed at least in May and August 2022 to set up a monitoring baseline.</p> <p>At the time of the 2021 inspection no notable changes in the conditions around this abutment were observed since the last site visit.</p>	<p>Agnico will continue to monitor the abutment of the Doris Creek bridge.</p> <p>Agnico has established survey monitoring points in 2021 and will continue to survey the monuments on the rock gabions of this bridge during the snow free period of 2022.</p>
Doris Camp Sumps	<p>The Doris sumps (Sump #1, #2 and #3) should continue to be visually monitored.</p> <p>Agnico Eagle should carefully monitor Sump #3 to determine if further fill around Sump #3 should be considered. The current Sump #3 is a notable improvement over the original sump installation. This noted, there is ongoing permafrost degradation around this area and additional maintenance activities (likely in the form of additional fill placement) should be expected to be carried out over the next approximately two years.</p> <p>Ponding around the sumps was noted in the 2019 and 2020 inspection to be less than what is shown in photos from previous years (2018 and earlier). At the time of the 2020 inspections the pumps were down but SRK was informed that this pump had been repaired shortly after the AGI site visit.</p> <p>It is recommended that all sumps continue to be visually monitored, and that photos of each sump location be taken in May, June, July, August, and September 2021 to help document and track permafrost performance around these sumps. In 2020 some photos were taken around this area but not monthly during the summer months.</p>	<p>Agnico will continue to monitor the Doris sumps and add additional fill as needed.</p> <p>Pumps for the Doris sumps have been repaired and will continue to be operated in 2022.</p> <p>Photos of the sumps will be taken monthly and drone photos of the area will be taken in 2022 as recommended.</p>

Inspection Item	Recommendation	Agnico Response
Pollution Control Pond	<p>The pollution control pond is suggested to be visually inspected by site staff on an at least bimonthly (every two months) basis over the late spring to summer months (May to August).</p> <p>Additional backfill is expected to require in the pond as part of ongoing maintenance. Additional backfill material is not immediately required but area of ponding against the liner tie-in should be avoided to reduce the risk of larger sinkholes developing and to allow for a prolonged life of the facility. At this time the main recommendation for this area is continued visual monitoring to assist in determining if or when additional unfrozen overburden backfilling may be required.</p>	<p>Visual monitoring of the PCP will continue to determine if additional overburden should be placed along portions of the pond in 2022.</p> <p>Coconut matting will be placed over the overburden to reduce erosion of this material.</p>
Doris 7.5ML Tank Farm - Highwall	<p>Since limited access prohibits construction of a simple catch-berm to retain falling rocks, consideration should be given to a permanent solution such as covering these high walls with rockfall mesh or imposing a preventative scaling campaign. Until any long-term solutions are implemented on these rock faces it is suggested that these rock walls be inspected at least quarterly and any time before the tanks are refueled. The inspections should be done by a qualified rock mechanics engineer (this could be done by site staff or a site mine engineer with training in rock mechanics inspections).</p>	<p>Agnico will continue with the recommended inspections of this area until a permanent solution can be implemented.</p>
Doris 7.5ML Tank Farm – Berms / Bund	<p>On the eastern side of the tank farm some overliner material sloughing was noted, resulting in a few cracks in the crush material (expected to be above the liner) at the top and bottom portions of the slope.</p> <p>Maintenance activities in the tank farm are suggested to be completed including filling in and carefully compacting (likely with a hand compactor / tamper) crushed rock along the eastern side of the tank farm to prevent progressive failures from occurring and possibly exposing the liner.</p> <p>Continue to limit vehicle travel in the tank farm secondary containment area, and when vehicle travel is required, operators should be instructed to take special precautions to prevent over-liner damage. When damage is observed it needs to be repaired. No unplanned ramps are to be constructed to access the tank farm.</p> <p>A ground (GPS) survey, or LiDAR, over the base of the 7.5ML tank farm is suggested to be completed in 2022 so that a better assessment of the existing / current overliner crush thickness can be completed. This then can be better linked to maintenance and operational recommendations.</p>	<p>Agnico will work with the designer to develop a maintenance plan to address any potential issues with the crush layer protecting the liner and ensure this plan is implemented.</p> <p>Agnico limits vehicle access within the containment area to equipment required for maintaining the fuel tanks (e.g. tank painting and NDT thickness testing/inspections).</p> <p>Equipment access to complete this work and access to the tank farm with a ramp is necessary to ensure these maintenance/inspection activities can be conducted thoroughly.</p>

Inspection Item	Recommendation	Agnico Response
Windy All-Weather Road Bridges	<p>This location should continue to be carefully monitored, specifically around spring melt over summer, and into fall when freeze-up begins.</p> <p>A ground (GPS) survey around the toes of the bridge abutments is suggested to be completed in the summer of 2022 to better constrain if additional thermal mitigation is suggested, and to better assess flow paths around the area (to determine if minor modification could be done to promote flow way from the toes of the rockfill bridge abutments).</p> <p>A review of the GTC at this location (see Attachment 4) does not suggest any anomalous thermal erosion at this point; however, this temperature cable is slightly offset from this specific location.</p>	Ongoing monitoring of this area will continue in 2022.
Roberts Bay 20ML Tank Farm	<p>These slopes need to be repaired by reinstating appropriate fill to the original design slope. Specifically, additional overliner crush material (a ¾" minus type material) should be placed at the toe of the slopes to help buttress the slopes and avoid any liner slippage or damage.</p> <p>A survey was completed of the existing bunded area in 2021 and overliner checks were completed. Additional fill material should also be placed over the main access route within the tank farm (from the ramp down to the sump) to ensure adequate protective overliner material is apparent. Until this material is placed, vehicle access into this tank farm should be limited.</p>	Agnico ensure to conduct repairs to the slopes of the tank farm berm and add additional fill material as recommended.
Core Storage Pad – Quarry D	<p>Inspections should be done periodically throughout the year to make sure that signage is still visible.</p> <p>Currently there are no known plans to complete any work in or around this area. However, if any new plans develop, then people working in the area should be made aware of the risks (specifically in terms of sink holes 30+cm in diameter that have become apparent in the overburden and oversize rockfill material that was placed to form this historic 'pad'). There is no large geotechnical concern for this area if it continues to only be use for historic core storage. Appropriate reconnaissance should be carried out ahead of any future work in this area, to develop a safe work plan.</p> <p>No additional recommendations at this time beyond signage maintenance.</p>	Agnico will ensure that signage remains visible.

Inspection Item	Recommendation	Agnico Response
Pad T Doris Waste Rock and Low-Grade Ore Storage	<p>A bench was cut in on the southern slope, but the southeastern corner remains over steepened.</p> <p>The slopes on Pad T appear to have been generally reduced since past AGI inspections however some areas still appear steeper than the original design Slopes steeper than 2.5H:1V should be revisited and reduced in grade.</p> <p>As part of the mine backfill plans, material should be preferentially taken off the south to south-eastern sides of the pile to reduce the overall slope angle in the areas with highest risk (i.e., the waste rock slopes directly above the portal location).</p> <p>No additional material should be placed on top of the most eastern waste rock stockpile lobe (i.e., the area above and immediately N of the Doris underground portal access).</p> <p><i>UPDATE: It is suggested that an updated survey of Pad T be collected to reassess the current stability of the stockpiles on this Pad and to capture any grading improvement (if completed since the 2021 site inspection).</i></p> <p><i>Since the summer 2021 site visit, milling activities were suspended on site. SRK is unaware of the latest mine plans however, specifically if underground backfilling activities have been or will be reduced. It is suggested that the Pad T stability be revisited and the overall slopes (specifically in the SSE corner) be excavated or regraded to the target overall slope.</i></p>	<p>Agnico will conduct a survey at Pad T to assess the current stability of the stockpiles.</p> <p>Agnico will continue to work to reshape the waste rock pile to ensure the designed slopes are achieved.</p>
Roberts Bay Single Tank Farm	<p>The crush fill over the base of this facility is noted to still be thin in a few areas.</p> <p>Vehicle traffic into this bunded area is still suggested to be restricted (except if required for emergency management measures and in this case ideally with lighter tracked equipment or pick-up trucks only) to avoid damage to the underlying HDPE liner.</p> <p><i>UPDATE: Since the 2021 summer inspection, some additional crush material has been placed by site to create a one-way access pathway into the facility to the front (SW) face of the fuel tank. Vehicle traffic, including fuel trucks, should be constrained to this pathway within the bunded area to limit the chance for any additional liner damage.</i></p>	<p>Vehicle traffic is restricted within this area and Agnico will continue this practice to limit potential damage to the liner.</p>
Roberts Bay Jetty	<p>The front face / slope of the jetty should be visually inspected by site staff to determine if additional maintenance is required. This inspection should be done when there is no ice apparent around the jetty, and in advance of the annual sealifts (expect a visual inspection to be done by site staff around July 2022).</p> <p>As part of the next round of maintenance activities at the Roberts Bay Jetty consider adding addition riprap at the jetty head; specifically in the NNE corner (closer to the smaller boat docking area), near the edges where the blast matt / bumper mats are normally places.</p>	<p>Agnico will continue to monitor the Jetty as per the recommendations and will evaluate the option of placing additional riprap during maintenance.</p>

Inspection Item	Recommendation	Agnico Response
Doris Airstrip and De-icing Apron	<p>Aerial drone imagery is suggested to be taken during the snow free months to capture the current state and to set up a new visual baseline to track ongoing permafrost changes at the airstrip toes. The imagery should be captured in a series of vertical (downward looking) shots of the airstrip footprint, and ideally generated as an orthomosaic.</p> <p>Site may consider strategic placement of additional fill material at the western toe of the airstrip in areas, as a sacrificial fill to limit permafrost degradation at the current toe and help promote more surface water flow paths away from the airstrip (reduce ponding against the current airstrip toes) to help reduce the magnitude of ongoing maintenance.</p> <p>Site should continue to limit traffic access near the top crest and shoulders of the airstrip, specifically in the summer months when the active layer is at its deepest, and monitor for and document, any notable movements in the airstrip side lighting.</p>	<p>Agnico will capture drone imagery during the snow free months and work with the designer to determine a path forward for evaluating and mitigating risk related to tension cracking from settlement and ponded water at the airstrip.</p> <p>Traffic is restricted on the airstrip and airstrip side lighting is maintained in consultation with aircraft companies to ensure aircraft are able to safely land.</p>
Doris Crown Pillar Recovery	<p>Access this area should continue to be restricted at this time.</p> <p>Site should continue to monitor settlement at the Doris Crown Pillar backfill area to ensure that larger sinkholes do not redevelop (ideally with a check from helicopter or drone done at least annually).</p> <p>The thermal erosion that appears to be starting in the NNE corner of the Doris CPR backfill should be monitored. If conditions change (such as additional erosion) then consideration to additional backfill material over the NNE corner of the existing backfilled pad area should be considered.</p>	<p>Agnico continues to monitor the Doris Crown Pillar and collects drone photos of this area annually at minimum. The area continues to be restricted to personnel.</p>

**Table 2: Madrid Project 2021 Annual Geotechnical Inspection Summary of Recommendations**

Inspection Item	Recommendation	Agnico Response
Madrid North – Contact Water Pond	<p>Survey monitoring should continue at the Madrid North CWP from around May to December each year.</p> <p>Overall, the largest movements at the Madrid CWP correspond with the two areas where the foundation is on overburden permafrost. The current deformations are within design limits but should be continued to be monitored.</p>	Agnico will conduct survey monitoring at the recommended frequency.
Madrid North – Contact Water Pond	<p>The monitoring and diligent management of the Madrid CWP remains a top priority. The CWP should be operated as a 'dry pond' with any water being removed from the pond over the course of a few days or less. Ideally ponded water would be left in the pond for less than 48 hours.</p> <p>Seepage should be monitored below the pond (North), specifically around freshet. If any seepage is noted the flow rates should be estimated, the location should be marked (to look for potential deepening of the active layer in these areas) and periodic water samples should be collected and tested in accordance with site water sampling procedures (if possible).</p> <p><i>UPDATE: Issued for Construction (IFC) designs have been generated in 2022 (post the AGI inspection) and plans are in place to install a sump downstream of the existing Madrid CWP. This sump would be installed to assist with additional seepage control at the Madrid area.</i></p>	Agnico has submitted Issued for Construction (IFC) for the construction of a sump downstream of the Madrid North Contact Water Pond. The installation is currently scheduled to occur prior to freshet 2022. This sump would be installed to assist with additional seepage control at the Madrid area.
Madrid North Waste Rock Storage Facility (WRSF)	<p>This area should continue to be visually monitored. Specially the collection sumps around the perimeter of the facility, the overall slopes (for any signs of instability such as cracking or slope relaxation) or any area adjacent to the access road (along the western side of the facility) to ensure that no rock falls or sloughs against or onto the access road.</p> <p>No additional actions beyond routine monitoring at this time.</p>	Agnico will continue with routine monitoring.

Inspection Item	Recommendation	Agnico Response
Madrid North Overburden Dump	<p>This area should continue to be visually monitored. Specially any areas of minor slumping on the outside dump surface or any area of erosion (from surface water) should be noted to determine if maintenance or additional measure will be required in the coming years.</p> <p>No additional actions beyond routine monitoring at this time.</p>	Agnico will continue with routine monitoring.
Naartok East CPR	<p>Until the Naartok East CPR backfill activity is completed, ongoing monitoring (done through installed fix survey monitoring points over the thermally cladded overburden slopes) should continue to be carried out.</p> <p>Water levels within the Naartok East CPR should also be maintained below the elevation of the overburden in the pit until backfilling activities are complete.</p> <p>Attachment 3 presents an overview of the 2020 monitoring set-up at this CPR. There are some areas with some settlement on the eastern overburden slopes, but generally the settlements are within allowance design ranges. The eastern overburden slope will continue to be monitored to see if any additional thermal protection will be required in future years (not currently required).</p> <p><i>UPDATE: Agnico Eagle is now reviewing the plans around the Madrid area and are working to advance a water management plan (to prefeasibility level) for the Naartok East CPR area. Part of this plan is expected to include removal of the water (or at least part of the water volume) currently within the CPR excavation. As per the current site water management plans water would be relocated from the Naartok East CPR to the Doris Tailings Impoundment Area system.</i></p>	Agnico is currently examining options to dewater and divert runoff from the Naartok East Crown Pillar Recovery. As per the site water management plans, contact water will be moved to the TIA.

Inspection Item	Recommendation	Agnico Response
Madrid North Portal Pad (Former Location)	<p>Visual monitoring of this location should occur on an at least biweekly between approximately May and the end of August. Visual monitoring should look for signs of thermal degradation (in the disturbed areas below the former pad) and any signs of erosion (or increased sediment in the runoff water). Currently with the existing natural topography layout, there was no notable ponding apparent in this area, at the time of the summer 2021 inspection. This noted, if any area of notable ponding (greater than approximately 0.3 to 0.5m in depth or areas greater than approximately 1m in diameter) do become apparent over time then these should be noted and tracked.</p> <p>A ground survey (or LiDAR) survey is suggested to be completed over this area in 2022, following any further remediation, to document any changes to the as-built of the remediation actives completed at site, and to support ongoing monitoring.</p>	<p>Agnico will continue to monitor the former Madrid North Portal Pad at the recommended frequency and track any notable ponding.</p> <p>Agnico will evaluate the possibility of conducting a LiDAR survey over the area.</p>