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April 26, 2016
Project No: 1CT022.002.511

Vice President Environmental Affairs
TMAC Resources Inc.
Suite 1010 – 95 Wellington Street West
Toronto, Ontario, M5J 2N7

Attention: John Roberts, PEng, Vice President Environmental Affairs

Dear John:

RE: Doris North Project 2015 Annual Geotechnical Inspection

TMAC Resources Inc. contracted SRK Consulting (Canada) Inc. to conduct a geotechnical site inspection on their Doris North Project (the Project) in Nunavut. This geotechnical inspection is an annual requirement in response to Part J, Items 18 and 19 D of TMAC's Water Licence 2AM-DOH1323 issued by the Nunavut Water Board (NWB) on August 16, 2013.

The Project was placed in Care and Maintenance while it was still under construction in February 2012. In March 9, 2015, the Project was taken out of Care and Maintenance and construction resumed with an anticipated production start in late 2016.

The geotechnical site inspection was carried out by Senior Consultant Lowell Wade, PEng, PGeo between August 14 and 16, 2015. Lowell was accompanied by Mr. Paul Christman, MEng, PGeo, PEng, TMAC's Manager of Mining during the inspection, which consisted of a walkover survey of the site followed by a helicopter aerial reconnaissance.

Formal annual geotechnical inspections of the Project have been carried out six times between 2009 and 2014 and those reports are filed on the Nunavut Water Board (NWB) public registry. All of these inspections have been conducted by SRK. This letter presents the findings of the 2015 geotechnical inspection, which includes the 10 km all-weather road linking Doris Camp with the former Windy Exploration Camp and the former Patch Lake Drill Shop Area. This inspection report however excludes the North Dam and Tailings Impoundment Area (TIA), which is covered under separate cover.

The geotechnical inspection suggests that conditions, as it pertains to geotechnical performance of surface infrastructure, are essentially unchanged from what was observed 2014. Two items of note were identified and are discussed below:

- Pad B, which houses the primary Project power generating station, is constructed on thick rock fill overlying ice rich permafrost. This facility is founded on raised concrete footings placed directly onto the rock fill pad, allowing for air to move freely underneath the building. This was done to mitigate against building heat degrading the permafrost. Thermal analysis suggests that the design is sufficient to ensure that the underlying permafrost remain frozen; however, should for any reason this not be the case there is a risk of creep deformation and ultimately foundation bearing capacity failure. Such failure modes could result in disruption of site power supply, rupture of fuel feed lines and at worst collapse of the structure onto the adjacent Administration building with subsequent possibility of injury or possible loss of life.

  Although the likelihood of these failure modes happening is extremely low, SRK has recommended that survey monuments be installed on Pad B and monitored at frequent intervals to provide early warning signs of any deformation or movement. Two survey hubs were installed on September 9, 2013, but to date no survey monitoring data has been collected. SRK recommend TMAC complete four surveys of these monuments annually. These should be done in May, June, August and September, which corresponds to the periods when thaw starts, and when the active layer thickness is at its thickest.

- In October 2014 a large sinkhole developed on Pad G while exploration drilling was being carried out from the surface of the pad. Following an investigation carried out at the time, it was concluded that the sinkhole was caused due to melting of massive ice underneath the pad. The melt occurred due to the introduction of brine onto the permafrost surface as a result of drilling fluid circulation losses. TMAC subsequently backfilled the sinkhole and has adjusted their exploration drilling procedures from existing surface infrastructure pads, and to track circulation volumes more closely.

  The sink hole was associated with a significant release of high salinity water which flowed along the contact between the base of the rock fill pad and the original ground surface emerging as surface water immediately southeast of Pad G in the vicinity of Sump #1. As a contingency against any of this water possibly flowing into Doris Lake, an ice dam was constructed. Surface water quality sampling however confirmed that the saline water did not reach Doris Lake.

  SRK carefully inspected the area impacted by this event looking for signs of continued or ongoing permafrost degradation. No signs of immediately additional concern could be observed; however, it is possible that further signs of permafrost degradation could be delayed for a period of time. SRK recommends that for the next three years TMAC operational staff closely investigate the root cause of any deformation that occurs on the Pad.

SRK also carefully reviewed results from Ground Temperature Cables (GTC) installed at the Pollution Control Pond (PCP) and in each of the bridge abutments. The thermal data confirm that all of these structures are performing as designed and that the structures have not resulted in degradation of the permafrost in any way. The PCP GTC data also confirms that the improved water management practices adopted by TMAC in terms of ensuring that the pond is operated normally empty has resulted in a cooling trend within the foundation of the pond.

Considering the condition of the site, as well as the nature of the surface infrastructure, SRK recommends that TMAC adopts the Surface Infrastructure Geotechnical Monitoring Program (SIGMP) documented in the attached Standard Operating Procedure (SOP) (Attachment 1) and accompanying Checklist

(Attachment 2). This SIGMP has been specifically designed to capture all elements of the site that is typically inspected on an annual basis by a Geotechnical Engineer. By having qualified site staff conduct these inspections on a more frequent nature, routine maintenance activities will be better addressed and early warning signs of impending problems will be more readily observed. During the 2016 annual geotechnical site inspection, the Engineer doing the inspection should audit the completed checklists and focus his inspection efforts on those areas where changes have been observed, or where unique extraordinary observations are noted.

SRK believes that this will improve the usefulness or the annual geotechnical inspections, allowing routine maintenance activities to be prioritized by site operational staff as part of normal operations while ensuring important geotechnical problems are highlighted, inspected and addressed throughout the year as opposed to only annually.

Sincerely,

SRK Consulting (Canada) Inc.

Lowell Wade, PEng, PGeo
Associate Consultant

Megan Miller, PEng for Consultant

and reviewed by

Maritz Rykaart, PEng, PhD
Practice Leader

Attachment 1: SIGMP Standard Operating Procedure

Doris North Project

Surface Infrastructure Geotechnical Monitoring Program

Including the Doris-Windy All-Weather Road, Quarries A, B and D, and the Patch Lake Drill Shop Area

Division:	**HB**		
Section:	*Geotechnical*		
Subject:	Doris North Project Surface Infrastructure Monitoring Program (SIGMP)		
Owner:	*OPS*	**Effective Date:**	April 21, 2016
Revision:	Draft	**Replaces:**	n/a

1 INTRODUCTION

The Doris North Project (Project) Surface Infrastructure Geotechnical Monitoring Program (SIGMP) has been developed to facilitate seasonal geotechnical monitoring of the earthworks components of site surface infrastructure. These inspections are to be carried out by qualified and trained site staff or contractors. Monitoring of the Tailings Management System (TMS), which includes the North Dam, is conducted under a separate protocol.

This SIGMP will be used in part to support the requirement of Part J, Item 18 and 19 of the Doris North Water Licence 2AM-DOH1323 dated August 16, 2013. This requirement states that *"The Licensee shall ensure that a geotechnical inspection is carried out annually between July and September by a Geotechnical Engineer."* By conducting the SIGMP, as opposed to only a single formal Annual Geotechnical Inspection (AGI), early warning of areas requiring corrective action or preventative maintenance are attained, allowing for a more focused approach during the AGI.

2 OBJECTIVE

Conduct seasonal physical inspections by qualified and trained site staff or contractors during snow-free periods of earthworks components of site surface infrastructure. The inspection will be carried out using a standardized inspection checklist to be completed by the inspector. These dated and signed checklists will be kept on site by the Site Environmental Manager, and will be subject to review and audit during the AGI.

The objective of the SIGMP is to ensure continued functionality of all earthworks components of site infrastructure that would allow for early proactive corrective cation or preventative maintenance if required. In addition, the AGI can be executed with greater focus and efficiency.

3 INSPECTION PROCESS

3.1 Frequency

A SIGMP inspection will be conducted twice seasonally during the snow-free period. The first inspection will occur early spring, and the second during fall before freeze up. The AGI will be conducted midway between these two inspections. The spring inspection will allow for the identification of any issues as a result of the preceding winter and/or freshet conditions, and allow for scheduling and planning of corrective and/or preventative work for the summer. The fall inspection will identify any issues as a result of the preceding summer season, and allow for planning and scheduling of corrective action or preventative maintenance work.

3.2 Inspector Qualification and Training

The SIGMP inspections are to be carried out by qualified and trained persons. The inspector does however not have to be a qualified geotechnical engineer. Qualified implies that the person is fully familiar with the task, understands the requirements and objectives of the inspection, understands the context of the checklist items, and has overall familiarity with the project.

The minimum training requirement will be ensuring that the person doing the inspection has conducted at least one site infrastructure element of the checklist together with a person that has received the necessary training. Initial training can be provided by the AGI inspector.

3.3 Inspection Checklist

Refer to *HB-DN-SI-GT-OPS-F Revision 20160421 Doris North Surface Infrastructure Geotechnical Monitoring Program – Inspection Checklist*. Revision 20160421, of the Inspection Checklist, was prepared using the 2014 AGI (SRK 2015) as well as observations during the 2015 AGI. The program has been designed to proceed from north to south between Roberts Bay and the terminus of the Doris-Windy All Weather Road. The SIGMP Inspection Checklist is considered to be a live document and will be reviewed and updated annually in response to the following:

- when new surface infrastructure are added or existing facilities are modified;
- when issues of concern are identified;
- when corrective action or preventive maintenance has resulted in significant change;
- when additional monitoring is warranted;
- following recommendations from the AGI; and
- following incidents or upsets affecting surface infrastructure.

3.4 Photographs

A complete photographic record is not required as part of the SIGMP. When issues deemed to be out of the ordinary are observed by the inspector, photographs should be taken and properly referenced and catalogued.

3.5 Management Response: Corrective Actions

The SIGMP Inspection Checklist includes a section to record if/when corrective action or preventative maintenance has been undertaken, or are planned. As part of the inspection, the inspector is required to consult with Operations/Facilities Management to ensure that this information is accurately recorded.

4 RECORDS

The completed signed and dated SIGMP Inspection Checklist, and any properly catalogued photographs are to be stored on site with the Site Environmental Manager and an electronic copy is to be sent to the site Engineer-of-Record, SRK Consulting (Canada) Inc. The email contacts are pluedke@srk.com and hopebaymonitoring@srk.com.

5 PROGRAM APPROVAL RECORD

NAME	POSITION	DATE	REV #	NOTES

6 REFERENCES

SRK Consulting (Canada) Inc., 2015. 2014 Annual Geotechnical Inspection, Doris North Project, Hope Bay, Nunavut. Report prepared for TMAC Resources Inc., Project Number: 1CT022.001. January 2015.

Attachment 2: SIGMP Inspection Checklist

Doris North Project

Surface Infrastructure Geotechnical Monitoring Program
Inspection Checklist

Date:	
Inspected By:	
Conditions:	*(ie. snow on ground, clear, heavy rain, or wind)*

This Surface Infrastructure Geotechnical Monitoring Program (SIGMP) Inspection Checklist is to be conducted in accordance with the procedures outlined in HB-DN-SI-GT-OPS-SOP Rev. 20160421. In addition, the following attachments are required during the inspection:

- Attachment 1 – General site arrangement drawing showing each of the inspection areas listed in the Inspection Checklist.
- Attachment 2 – Ground temperature cable monitoring list.

Specific Project Inspection Items **Date:**_____

1. Site Wide Ground Temperature Cables (GTC's)			
a) Are GTC's (Attachment 2) read on the prescribed frequency, and the data reviewed by a qualified person?	No	Yes	*Comments and photo reference if applicable*
b) Are any of the GTC's damaged or non-functional since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
2. Roberts Bay Jetty			
a) Were there significant storms since the last inspection, and was the Jetty inspected for damage after each of those events?	No	Yes	*Comments and photo reference if applicable*
b) Have there been modifications to the jetty since the last inspection (repairs or maintenance)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is the jetty armouring (i.e. riprap) intact? If not provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there tension cracks on or near the crest of the jetty? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there signs of deformation and settlement, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

f) Is operational staff aware of the jetty loading limitations (PND 2013, Section 4.0)?	No	Yes	*Comments and photo reference if applicable*
3. Roberts Bay 5 M L Tank Farm and Containment Berm / Fuel Module			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Has the liner been exposed? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement within the secondary containment or fuel transfer station, i.e. an undulating surface? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of vehicle traffic damage within the secondary containment? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Is there evidence of standing water within the secondary containment? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Has the high wall been inspected by a qualified rock mechanics expert since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
h) Was settlement monitoring conducted within the fuel transfer station and secondary containment facility section not constructed on bedrock since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
4. Roberts Bay 20 M L Tank Farm and Containment Berm			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Has the liner been exposed? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement within the secondary containment, i.e. an undulating surface? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there tension cracks on or near the crests of the secondary containment berms? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Is there evidence vehicle traffic damage within the secondary containment? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

f) Is there evidence of standing water within the secondary containment? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
h) Are the catch berms sufficiently free of rock fall or other debris to continue to function as catch berms? If not provide details.	No	Yes	*Comments and photo reference if applicable*
i) Are all the rock stabilization measures in good repair? If not provide details.	No	Yes	*Comments and photo reference if applicable*
j) Has the high wall been inspected by a qualified rock mechanics expert since the last inspection? If so provide details?	No	Yes	*Comments and photo reference if applicable*
5. Roberts Bay Laydown Area			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there tension cracks on or near the crests of the laydown area pads? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement of the laydown area pads, i.e. undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of ponded water along the edges of the laydown area pads? If so provide details.	No	Yes	*Comments and photo reference if applicable*
6. Roberts Bay Overburden Stockpile (Quarry #1) / Roberts Bay Fuel Transfer Access Road			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and differential settlement on the top of the Overburden Stockpile, i.e. sinkholes, rutting, undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crests of the Overburden Stockpile? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there signs of deformation and settlement along the Roberts Bay Fuel Transfer Access Road, including the turn-a-round, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

e) Are there tension cracks on or near the crests of the Roberts Bay Fuel Transfer Access Road, including the turn-a-round? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Is there evidence of ponded water along the outside edge of the Roberts Bay Fuel Transfer Access Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
7. Primary Road			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement along the Primary Road, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crests of the Primary Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there evidence of ponded water along the edges of the Primary Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
8. Airstrip Including North and South Aprons			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement on the North or South Apron, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are tension cracks or differential settlement undermining the stability of the fuel tank, generator or flight tower? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there signs of ponded water along the edges of the North or South Apron? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there signs of deformation and settlement along the Airstrip, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Are there tension cracks on or near the crests of the Airstrip? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Are there evidence of ponded water along the edges of the Airstrip, Airstrip Expansion and Aprons? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

9. Wash Bay Pad			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement within the Wash Bay / Explosives Mixing Plant Pad, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crest of the Wash Bay / Explosives Mixing Plant Pad? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of ponded water along the edges of the Wash Bay / Explosives Mixing Plant Pad? If so provide details.	No	Yes	*Comments and photo reference if applicable*
10. Upper and Lower Reagent Pads / Batch Plant Pad			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there tension cracks on or near the crests of the laydown area pads? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement of the laydown area pads, i.e. undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are tension cracks or differential settlement undermining the stability of the materials, equipment and supplies stored on the Upper and Lower Laydown and Batch Plant Pads? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there evidence of ponded water along the edges of the laydown area pads? If so provide details.	No	Yes	*Comments and photo reference if applicable*
11. Quarry 2 and Crusher Area			
a) Has this quarry been used since the last inspection?	No	Yes	*Comments and photo reference if applicable*
b) Is access to the quarry and crusher area restricted to authorized personnel through adequate barricades or signage?	No	Yes	*Comments and photo reference if applicable*
c) If in use, are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of standing water within the quarry? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

12. Doris Camp Treated Sewage Discharge Line/Outfall and Diffuser			
a) Is the old outfall in operation and/or is there ponded water in the area? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Is the diffuser in operation and functioning properly? If not provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is there ponding of water near the diffuser? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are discharge lines damaged or leaking? If so provide details.	No	Yes	*Comments and photo reference if applicable*
13. Doris North Landfarm			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement of the landfarm, i.e. undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crests of the landfarm containment berms? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there areas of exposed liner? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there any areas showing signs of erosion to the overliner material? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Have any of these facilities been used since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
14. Doris (Quarry #2) Overburden Stockpile			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there tension cracks on or near the crests of the Overburden Stockpile? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and differential settlement of the Overburden Stockpile, i.e. an undulating surface, sink holes, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there signs of deformation and settlement along the Sedimentation Control Berm, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

e) Are there tension cracks on or near the crests of the Sedimentation Control Berm? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Is there evidence of ponded water along the outside edges of the Sedimentation Control Berm? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Are there considerable volumes of sediment behind the Sediment Control Bern which may compromise its functionality? If so provide details.	No	Yes	*Comments and photo reference if applicable*
15. Doris North Camp Area Diversion Berm			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement along the Berm, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crests of the Berm? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of ponded water along the upstream edge of the Berm? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there areas of exposed liner? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Are there areas showing signs of erosion to the overliner material? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Are the culverts underneath the road at the outlet free of blockage? If not provide details.	No	Yes	*Comments and photo reference if applicable*
16. 7.5 ML Doris North Camp Tank Farm and Containment Berm			
a) Have there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Has the liner been exposed? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement within the secondary containment, i.e. an undulating surface? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of vehicle traffic damage within the secondary containment? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

e) Is there evidence of standing water within the secondary containment? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Has the high wall been inspected, by a qualified rock mechanics expert since the last inspection? If so provide details?	No	Yes	*Comments and photo reference if applicable*
h) Does the fuel tank and associated systems appear to be in good condition i.e. signs of structural damage, exposed grounding cables, evidence of fuel spills? If so provide details.	No	Yes	*Comments and photo reference if applicable*
17. Doris Main Generating Station / Permanent Powerhouse			
a) Have there been any modifications to the pad since the last inspection (repairs or maintenance)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there tension cracks on or near the crest of the pad? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement of the pad, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there signs of deformation and settlement of the Permanent Powerhouse and associated infrastructure? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Was settlement monitoring conducted since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
18. Doris North Camp Pads Including Helicopter Pad			
a) Has there been any modifications to the pads since the last inspection (repairs or maintenance)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there tension cracks on or near the crest of the pads? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement of the pads, i.e. an undulating surface, sinkholes, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there signs of deformation and settlement of heated buildings (geotechnical core cutting building and warehouse building on Pad Y and underground maintenance shop on Pad E/P)? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

e) Are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall on Pads D and X? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Has the high wall been inspected, by a qualified rock mechanics expert since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
19. Doris North Portal			
a) Are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Has the high wall been inspected, by a qualified rock mechanics expert since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are all the rock stabilization measures in good repair? If not provide details.	No	Yes	*Comments and photo reference if applicable*
20. Doris North Waste Rock Pile – Pad I			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement of the Ore Stockpile, i.e. an undulating surface, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement along Pad I, i.e. an undulating surface, or ravelling of side slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there tension cracks on or near the crests of Pad I? If so provide details.	No	Yes	*Comments and photo reference if applicable*
21. Pollution Control Pond			
a) Has there been modifications to the Pollution Control Pond since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there tension cracks on or near the crest of the Pollution Control Pond including the Divider Berm? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is there standing water within the Pollution Control Pond? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Specific Project Inspection Items **Date:**_____

d) Are there signs of deformation and settlement along the interior berm, i.e. an undulating surface, or ravelling of side slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there tension cracks on or near the crests of the interior berm? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Are there areas of exposed liner on the sides or top of the Pollution Control Pond? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Are there areas showing signs of erosion to the overliner material? If so provide details.	No	Yes	*Comments and photo reference if applicable*
22. Sedimentation Control Pond			
a) Has there been modifications to the Sedimentation Control Pond since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there tension cracks on or near the crest of the Sedimentation Control Pond including the Divider Berm? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is there standing water within the Sedimentation Control Pond? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there debris, large rocks, or overliner material within the Sedimentation Control Pond? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Is the exposed liner securely anchored along the crest of the Sedimentation Control Pond? If not provide details.	No	Yes	*Comments and photo reference if applicable*
f) Has the Sedimentation Control Pond's exposed liner been torn or punctured? If so provide details.	No	Yes	*Comments and photo reference if applicable*
23. Sumps #1 and #2			
a) Has there been modifications to Sump #1 or Sump #2 since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are Sumps #1 and #2 free of standing water? If not provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are the perimeters of the sumps inspected during freshet and immediately following significant or prolonged rainfall events?	No	Yes	*Comments and photo reference if applicable*
d) Has ponded water been pumped from the sumps since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*

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24. Float Plane Dock Access Road and Doris Freshwater Intake			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement along the Float Plane Dock Access Road and Pipe Bench, i.e. an undulating surface, or ravelling of side slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crests of the Float Plane Dock Access Road and Pipe Bench? If provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there evidence of ponded water along the downstream edge of the Float Plane Dock Access Road Pipe Bench? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there signs of erosion along the fresh water intake pipeline up to the pump house? If so provide details.	No	Yes	*Comments and photo reference if applicable*
25. Secondary Road			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement along the Secondary Road, i.e. an undulating surface, or ravelling of side slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crests of the Secondary Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there signs of ponded water along the downstream edge of the Secondary Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there any indication of new slope movement in the area where historic movement was identified? If so provide details.	No	Yes	*Comments and photo reference if applicable*
26. Doris Primary Vent Raise			
a) Has there been modifications to the pad since the last inspection (repairs or maintenance)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there tension cracks on or near the crest of the pad? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there signs of deformation and settlement of the pad, i.e. an undulating surface, sinkholes, or ravelling of slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*

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d) Are there evidence of ponded water along the downstream edge of the Primary Vent Raise Pad? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Has a catch berm and appropriate signage been installed along the high wall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Has the liner, within the Fuel Transfer Station, been exposed? If so provide details.	No	Yes	*Comments and photo reference if applicable*
h) Is there evidence of vehicle traffic damage within the Fuel Transfer Station secondary containment? If so provide details.	No	Yes	*Comments and photo reference if applicable*
i) Is there standing water within the Fuel Transfer Station secondary containment? If so provide details.	No	Yes	*Comments and photo reference if applicable*
27. Doris Creek Bridge			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Is there damage to the super or sub structure of the Bridge? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is there damage to the abutments? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is Doris Creek impacting and under cutting the toes of the abutments? If so provide details.	No	Yes	*Comments and photo reference if applicable*
28. Tail Lake Access Road			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement along Tail Lake Access Road including the turn-a-round, i.e. an undulating surface, or ravelling of side slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crests of Tail Lake Access Road, including the turn-a-round? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there evidence of ponded water along the edges of the Tail Lake Access Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
29. Doris-Windy All-Weather Road			

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a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Are there signs of deformation and settlement along the Doris-Windy All-Weather Road, i.e. an undulating surface, or ravelling of side slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Are there tension cracks on or near the crests of the Doris-Windy All-Weather Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Are there evidence of ponded water along the edges of the Doris-Windy All-Weather Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Has there been change in the depression at the junction of the Primary Road, Float Plane Dock Access Road, and the Doris-Windy All-Weather Access Road? If so provide details.	No	Yes	*Comments and photo reference if applicable*
30. Doris-Windy All-Weather Road Stream Crossing #1			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Has the shape of the Arched Culvert changed since the last inspection (i.e. the direction and magnitude of the deflection)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is there damage to the Arched Culvert? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Has buckling of the I-Beam along the south side of the Arched Culvert Pile Foundation changed since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Has the condition of the piles changed since the last inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Is the stream impacting and under cutting the Arched Culvert pile foundation? If so provide details.	No	Yes	*Comments and photo reference if applicable*
31. Doris-Windy All-Weather Road Stream Crossing #2			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Is there damage to the super or sub structure of the Bridge over Stream Crossing #2? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is there damage to the bridge abutments for Stream Crossing #2? If so provide details.	No	Yes	*Comments and photo reference if applicable*

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d) Is there evidence of ponded water along the toes of the bridge abutments over Stream Crossing #2? If so provide details.	No	Yes	*Comments and photo reference if applicable*
32. Doris-Windy All-Weather Road Stream Crossing #3			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Is there damage to the super or sub structure of the Bridge over Stream Crossing #3? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is there damage to the bridge abutments for Stream Crossing #3? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of ponded water along the toes of the bridge abutments over Stream Crossing #3? If so provide details.	No	Yes	*Comments and photo reference if applicable*
33. Doris-Windy All-Weather Road Stream Crossing #4			
a) Has there been modifications to the facility since the last inspection (maintenance or repairs)? If so provide details.	No	Yes	*Comments and photo reference if applicable*
b) Is there damage to the super or sub structure of the Bridge over Stream Crossing #4? If so provide details.	No	Yes	*Comments and photo reference if applicable*
c) Is there damage to the bridge abutments for Stream Crossing #4? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of ponded water along the toes of the bridge abutments over Stream Crossing #4? If so provide details.	No	Yes	*Comments and photo reference if applicable*
34. Quarry A			
a) Has this quarry been used since the last inspection?	No	Yes	*Comments and photo reference if applicable*
b) Is access to the quarry restricted to authorized personnel through adequate barricades or signage?	No	Yes	*Comments and photo reference if applicable*
c) If in use, are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of standing water within the quarry? If so provide details.	No	Yes	*Comments and photo reference if applicable*
35. Quarry B			
a) Has this quarry been used since the last inspection?	No	Yes	*Comments and photo reference if applicable*

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b) Is access to the quarry restricted to authorized personnel through adequate barricades or signage?	No	Yes	*Comments and photo reference if applicable*
c) If in use, are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of standing water within the quarry? If so provide details.	No	Yes	*Comments and photo reference if applicable*
36. Quarry D (including Core Laydown Area)			
a) Has this quarry been used since the last inspection?	No	Yes	*Comments and photo reference if applicable*
b) Is access to the quarry restricted to authorized personnel through adequate barricades or signage?	No	Yes	*Comments and photo reference if applicable*
c) If in use, are there areas of the rock high wall showing signs of deterioration i.e. significant rock fall? If so provide details.	No	Yes	*Comments and photo reference if applicable*
d) Is there evidence of standing water within the quarry? If so provide details.	No	Yes	*Comments and photo reference if applicable*
e) Are there signs of deformation and differential settlement on the top of the Quarry D Drill Core Laydown Area, i.e. sinkholes, rutting, undulating surface, or ravelling of side slopes? If so provide details.	No	Yes	*Comments and photo reference if applicable*
f) Are there tension cracks on or near the crests of the Quarry D Drill Core Laydown Area? If so provide details.	No	Yes	*Comments and photo reference if applicable*
g) Are there signs of ponded water along the outside edge of the Quarry D Drill Core Laydown Area? If so provide details.	No	Yes	*Comments and photo reference if applicable*
h) Are there signs of deformation and differential settlement on the top of the Quarry D Overburden Stockpile, i.e. sinkholes, rutting, undulating surface, or ravelling of side slopes? If so provide details	No	Yes	*Comments and photo reference if applicable*
i) Are there tension cracks on or near the crests of the Quarry D Overburden Stockpile? If so provide details.	No	Yes	*Comments and photo reference if applicable*
37. Patch Lake Drill Shop Area			
a) Has the condition of ponded water along the edges of the covered original Patch Lake Fuel Tank Farm / Patch Lake Drill Cuttings Sump changed since the previous inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*

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b) Has there been any vegetation die back or the development of erosion gullies formed by the surface water runoff from the original Patch Lake Fuel Tank Farm / Patch Lake Drill Cuttings Sump since the previous inspection? If so provide details.	No	Yes	*Comments and photo reference if applicable*

Other Areas or Issues Identified (Add Sheets As Required):

Comments and photo reference if applicable
Comments and photo reference if applicable
Comments and photo reference if applicable
Comments and photo reference if applicable
Comments and photo reference if applicable
Comments and photo reference if applicable
Comments and photo reference if applicable

References:

PND Engineers, Inc. 2013. Construction Report – Rock Jetty Repairs Roberts Bay. Report prepared for: Newmont. September 2013.

SRK Consulting (Canada) Inc. 2013. Hope Bay Project – Drill Site Remediation. Technical Memorandum prepared for Hope Bay Mining Limited, Report No. 1CH008.069.410.February.

Management Response: Proposed Corrective Actions and Dates (Add Sheets As Required)

Component ID (ie: 1a)	**Description of Repair** (describe what was done, who did it, who oversaw it and any other relevant information)	**Date** (completed or proposed completion)

Photos (Add Sheets As Required):

Component ID: Photo Reference: Description:	Component ID: Photo Reference Description:
Component ID: Photo Reference: Description:	Component ID: Photo Reference Description: