

DAILY REPORT #82 – DORIS NORTH INFRASTRUCTURE/ NORTH DAM

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Reviewed by:		Project #:	1CH008.058.0320
Role	Company	Personnel – Position	On Site
Client	Hope Bay Mining Limited (HBML)	Angela Holzapfel – ESR Compliance Manager David Vokey – ESR Coordinator Don Ethelston – HSLP Advisor Dean Wold - Safety Jill Turk – ESR Coordinator Katsky Venter – ESR Manger Michelle Tanquay – ESR Site Manager Stirling Kelly – HSLP Advisor	No No Yes No Yes Yes No No
	JDS	Lloyd Jackson – Mechanical Superintendent Doug Fielding – Construction Manager Ishan Fechter – Construction Coordinator Jerry Graham – Construction Manager Kevin Whieldon – Project Coordinator Mark Valeriote – Construction Manager Calvin Goldschmidt – Construction Coordinator	No Yes No No No Out Yes
Engineering Design Consultants	SRK Consulting (Canada) Inc.	John Kurylo – Site Engineer Megan Miller – Site Engineer Lawrence Borowski – Site Engineer Murray McGregor – Site Engineer Iozsef Miskolczi – Site Engineer Lowell Wade – Senior Engineer	Out Yes No No In No
	EBA Engineering Consultants Ltd.	Jeff Orr – Project Manager Jennifer Stirling – Geologist Thomas Bradshaw – Junior Engineer Ernest Palczewski – Geologist	No No Yes Yes
Earthworks Contractor	Nuna Logistics	Benny Vostermaans – Foreman (Night shift) Doug Haverland – Area Superintendent Gary Sodhi – Field Engineer Georges Cornelissen – Survey Manager Jeff Roberts - Surveyor Jim Cardinal – Foreman Jordan Gunter – Foreman (Dayshift) Kevin Kozdrowski – Foreman Kyle Kuntz – Project Engineer Margaret Caley – Surveyor Matt McKay – Civil Supervisor Mike MacMaster – Surveyor Mike Price – Field Engineer Rick Peter – Foreman Ron MacMaster – Surveyor Simon Chipper – Civil Supervisor	Yes No No Yes No Yes Yes No No Yes No Yes Yes No No Yes
External Distribution List:	SRK: Maritz Rykaart (On Site), Lowell Wade, Seema Kang, Silkie Wong EBA: Robert Zschuppe Nuna: Chris Petrovic HBML: Dave Power		
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WEATHER (ROBERTS BAY)

<http://www.wunderground.com/weatherstation/WXDailyHistory.asp?ID=INUNAVUT3>

Temperature/Wind Chill (°C)	6AM:-29/-29	12PM: -23/-23	6 PM: -24/-24	12 AM: -28/-28
Precipitation (mm)	Rain: None		Snow: Trace	
Conditions	Day Shift: Sunny light wind, bright.		Night Shift: Clear sky, light to moderate wind.	
Daily norms (°C)	24 hour high: -26.7		24 hour low: -32.2	

HEALTH, SAFETY AND ENVIRONMENT

- Megan Miller and Ernest Palczewski attended the dayshift Nuna toolbox meeting.
- Thomas Bradshaw attended the nightly toolbox meeting.

COMMENTS, CORRESPONDENCE AND ACTIVITIES**DAILY MEETING WITH NUNA AND HBML TEAM:**

- The daily meeting was attended by Nuna [Trevor Sorken, Lucas Evans, Simon Chipper], Newmont Safety [Don Ethelston], ESR [Katsky Venter], JDS [Doug Fielding, Calvin Goldschmidt], SRK [Iozsef Miskolczi, Maritz Rykaart, Megan Miller]

Topic	Status
Health and Safety and Environment	<ul style="list-style-type: none"> • No safety incidents. • Safety asked about the core box move plan. This started lots of discussions which were going to be carried on after the meeting. • ESR reported a small spill of salt from Boston. • ESR said that they have sent the closure inspection form to JDS and asked that JDS give it to any of their contractors who are leaving site.
North Dam	<ul style="list-style-type: none"> • Last night the LAST LIFT OF CORE was placed! • Transition and ROQ material were placed yesterday. • SRK asked if a frozen core plant operator would be coming for dayshift as we are considering sending one of the EBA personnel offsite. Nuna has a plant operator coming in on Friday however he is coming to site to decommission the crusher. Overliner cover material placement will continue on nightshift. The second EBA personnel can go home. • It was requested that the Nuna electricians replace the broken connectors on the thermistor strings when they have some spare time. Three connectors are known to be broken. • Nuna plans on placing ~3 panels of GCL today. • The crest settlement beacons have been manufactured. • The status of the North Dam settlement instrumentation was briefly discussed.
Water Management Structures	<ul style="list-style-type: none"> • Work at the berm looked good yesterday. • Nuna thinks that approximately one week is needed to complete the ROQ placement at the diversion berm. • The sumps still require the overburden backfill and the lids need insulation. • Nuna plans on starting the excavation for the culvert installation on dayshift.

General	<ul style="list-style-type: none"> After the diversion berm is complete Nuna plans on working on the Jetty. Nuna plans on starting the thermistor installation after the next blast in Quarry 2. Nuna wants to start with the Doris Windy Road bridge thermistors.
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SURVEY:

Required	<ul style="list-style-type: none"> Overliner Transition Material to station 0+85
Data Received	<ul style="list-style-type: none"> None.
Outstanding	<ul style="list-style-type: none"> To date as-builts of Doris Diversion Berm (ROQ, underliner crush, liner, overliner crush)
Upcoming	<ul style="list-style-type: none"> Diversion Berm material as placed Dam material (ongoing)

NORTH DAM/FROZEN CORE PLANT PAD:**Multi-bead Thermistors**

- Readings were taken of all multi-bead thermistors.
 - ND-HTS-085-33.5 remains non-functional. No additional headway was made in determining why this thermistor is not working.
- The thermistor cables with the broken connectors were marked with orange flagging tape, with the exception of the one at station 0+40, this one will be marked tomorrow.

Frozen Core Plant*Dayshift*

- No activity.
- No operator available.
- Transition material from the stockpile was loaded for placement at the dam.

Nightshift

- The FCP was started up around 8:15 PM, and was operating for about 2 ½ hours.
 - Water content was set at 40.9 as per previous settings for overliner material.
 - FCM temperature off the chute was 25°C
 - No material was rejected at start-up and one load was rejected at the shut-down.
 - About 55 loader bucket loads of overliner material were used to produce 8 truckloads plus reject of FCM

Dam Shell*Dayshift*

- Transition material was placed in a second lift over the GCL cover material to station 0+85.
 - The compactor had difficulties compacting this material on the slope. At the beginning of shift the compactor operator was compacting the slopes going down, and this was working okay. The compactor used in the morning broke down due to a problem with the roller vibrator, and the other compactor was used. The second compactor used was pulling material down as it backed down the slope as the drum was not rolling as fast as the wheels.
 - This material was walked with survey and was found to be at or above grade.
- ROQ material was placed with the CAT D6 dozer. The bottom lift, which is to the elevation of the previously placed ROQ on the upstream side was placed to 1+15. A second lift of ROQ material was coming up behind the first lift.
 - The 10T vibratory compactor was observed to run on both lifts of ROQ.
- Survey marked the slope of the ROQ on both the upstream and downstream side. In both areas the 'toe' lines for the slope are on the access road.
- The CAT 330 excavator loaded oversized rock and snow from the downstream side of the dam just north of station 1+75. This material was hauled to the overburden dump on the back haul.

Nightshift

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- The first lift of ROQ continued to be placed on the upstream side, advancing south to about Sta. 0+90. This material was compacted for about 30 minutes toward the end of the shift.
- The second lift of transition material placed on dayshift received further compaction. The packer operator was instructed to turn off the vibrator on his trip back (downwards) to eliminate the downslope transport of the transition material
- Elevations were checked in the area of transition used as vehicle access along the downstream edge of the core. The results were that no additional transition material was required.
- ROQ was placed on the downstream side to match the elevation of the previously placed transition material, starting at around Sta. 1+80 and progressing south.
- Cleanup and regrading by the toe of upstream ROQ shell was started at Sta. 1+30 progressing north. The snow mixed with ROQ was hauled to the overburden dump.

Key Trench/ Central Core*Dayshift*

- The remaining holes along the lower GCL were patched with large strips of excess GCL.
- Six panels of GCL were placed along the core material from approximately station 0+30 to 0+50.
 - Prior to GCL placement sacrificial patches of GCL were placed on any sharp looking spot along the core material.
 - After GCL placement the GCL area was walked and any areas where it appeared there was something sharp under the liner and the one hole noted were patched.
 - The CAT 330 excavator was used to place the GCL material.
- The single beads placed in the FCM placed on nightshift March 26th were monitored. Freeze back was not achieved by the end of dayshift.

Nightshift

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- One lift of overliner material was placed from Station 0+20 to Sta. 0+40.
- During placement of the material the excavator grabbed the GCL liner in one spot. A patch was placed over the damaged area and a bentonite seal was applied.
- Compaction of the placed overliner proved to be difficult due to the limited space for maneuvering. Following several attempts, it was decided to tie the compactor to the bucket of the excavator, which would help on the upward trip.
- The flat portion of the toe and the top were compacted in a pattern parallel to the dam centerline.
- Good compaction was achieved both on the flat portions (above 97% Proctor) and on the slope (96% Proctor). One small corner could not be reached by the compactor in the extreme south end. Compaction here was measured at just over 90% Proctor. Moisture contents were dry of optimum for this material (confirmation to follow in the lab reports).
- Freeze-back of the lift placed yesterday was monitored throughout the nightshift. Temperatures at 5 AM were ranging between +3 and +6 °C in the thickest part of the fill.

Field Geotechnical Testing, Laboratory and Sampling

- Cleanup of the geotechnical laboratory continued. The dead vacuums, waste glycol and various other items were brought to waste management for disposal.
- The power in the laboratory was out for a short period while the mechanics serviced the generator.

SINGLE BEAD THERMISTOR STATUS

Installed Today			Active			Destroyed / Abandoned		
ID	Station	US/DS/Center	ID	Station	US/DS/Center	ID	Station	US/DS/Center

			SB9	0+60	CL			
			SB20	0+65	CL			
			SB6	0+70	CL			

- A summary of today's material testing progress is presented in the tables below.

PARTICLE SIZE DISTRIBUTION SUMMARY

Collected	Testing In Progress	Completed
None	None	None

MOISTURE CONTENT SUMMARY

Collected	Testing In Progress	Completed
HB12-FCP-COVER-MC405-QA-20120327 HB12-FCP-COVER-MC406-QA-20120327 HB12-ND-COVER-MC407-QA-20120327 HB12-ND-COVER-MC408-QA-20120327	None	HB12-FCP-CORE-MC401-20120326 HB12-FCP-CORE-MC402-20120326 HB12-ND-CORE-MC403-20120326 HB12-ND-CORE-MC404-20120326 HB12-FCP-COVER-MC405-QA-20120327 HB12-FCP-COVER-MC406-QA-20120327 HB12-ND-COVER-MC407-QA-20120327 HB12-ND-COVER-MC408-QA-20120327

DRILLED CORE

Collected	Testing In Progress	Completed
None	None	None

COMPACTION TESTING SUMMARY

Number of Tests	Material	Tested By	Shift	Notes
0	N/A	EP	Day	No FCM Placed
2	GCL cover	TB	Night	Tests Acceptable

- Compaction values over 90% were achieved.

DORIS NORTH DIVERSION BERM:

- The primary road crossing for culvert installation was ripped with the dozer and excavated with the CAT 325 excavator. At the end of dayshift this excavation was to grade.
- No work was done on the section from 000 to 027 as this was the area where the culvert excavation was occurring.
- Underliner crush and lower bentonite were inspected to station 025. Underliner geotextile as placed in this area to station 027.
- HDPE liner and overliner geotextile were placed from station 100 to 050.
- The second lift of ROQ was staked from station 395 to 200.
 - A small section of this area (station 260 to 230) had more than 4" of snow within the footprint of the ROQ. This was mentioned to the foreman and he instructed the placing operator to remove the snow prior to ROQ placement.

QUARRY #2:

- One drill continues to drill on both day and night shifts.
ROQ material for placement at the North Dam was hauled from the middle bench of the Quarry

GENERAL:

- The two Doris Creek bridge thermistor were read.
- Due to the culvert installation through the primary road traffic was diverted through the overburden dump area.

PHOTOS:



Photo 1: Progress photo of North Dam from photo point 1. Looking south west.



Photo 2: Progress photo of North Dam from photo point 2. Looking north west.



Photo 3: Progress photo of North Dam from photo point 3. Looking north east along the dam.



Photo 4: large patches placed over the GCL liner south west of station 0+50.



Photo 5: Placement of upper GC south of station 0+50.



Photo 6: Diversion Berm - Excavation through primary road for culvert installation.



Photo 7: View of diversion berm progress from culvert excavation. Photo looking east.



Photo 8: View of the diversion berm where snow was allowed to accumulate on the exposed geotextile and HDPE liner.



Photo 9: North Dam - Compactor compacting slope of transition material. Photo looking north east along dam alignment.



Photo 10: Patch in the GCL liner.



Photo 11: Compactor on the first lift of ROQ on the upstream side.



Photo 12: Compactor compacting the toe of the overliner material. Photo looking south.



Photo 15: Compactor backing up the slope with the help of the excavator.

FIGURES:

Figure 1: Dayshift North Dam Progress Figure

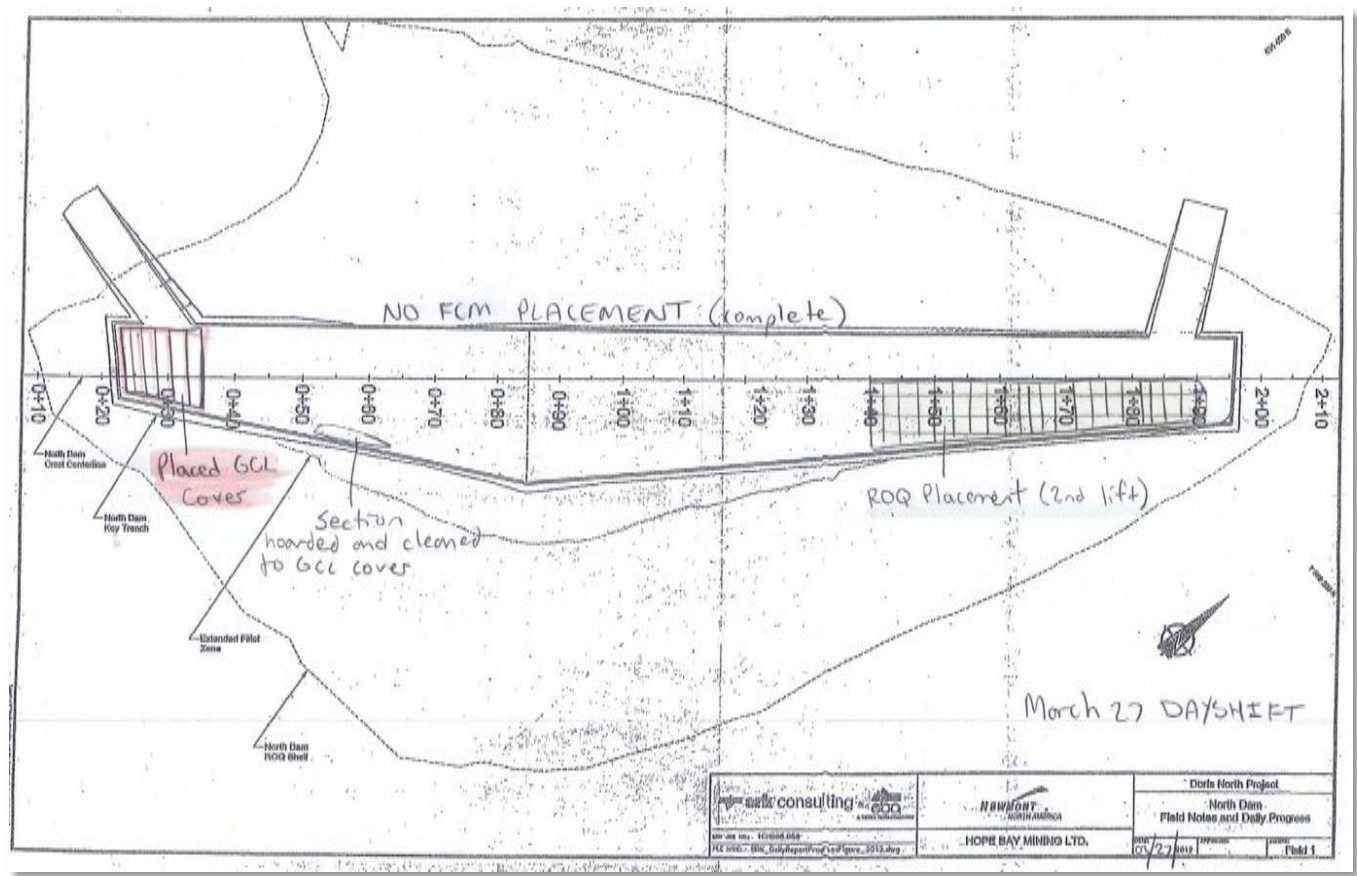


Figure 2: Nightshift North Dam Progress Figure

