

DAILY REPORT #72 – DORIS NORTH INFRASTRUCTURE/ NORTH DAM

Prepared by:	John Kurylo Lawrence Borowski	Date:	2012.03.17
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	Yes Yes Yes No Yes No 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	No Yes yes No No 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	Yes No Yes No No No
	EBA Engineering Consultants Ltd.	Jeff Orr – Project Manager Jennifer Stirling – Geologist Thomas Bradshaw – Junior Engineer Ernest Palczewski – Geologist	No Yes No Yes
Earthworks Contractor	Nuna Logistics	Doug Haverland – Area Superintendent Gary Sodhi – Field Engineer Georges Cornelissen – Survey Manager Jeff Roberts - Surveyor Jim Cardinal – Foreman Jordan Gunter – Foreman Kevin Oakes – Project Engineer Kevin Kozdrowski – Foreman (Night shift) Kyle Kuntz – Project Engineer Margaret Caley – Surveyor Matt McKay – Civil Supervisor Mike MacMaster – Surveyor Mike Price – Field Engineer Nick Stoneberger – Superintendent Rick Peter – Foreman (Day shift) Ron MacMaster – Surveyor Simon Chipper – Civil Supervisor	Yes No Yes Yes Yes Yes No Yes Yes Yes No No Yes No No Yes Yes
External Distribution List:	SRK: Maritz Rykaart, Lowell Wade, Seema Kang, Silkie Wong EBA: Robert Zschuppe Nuna: Chris Petrovic JDS: Bob Prince-Wright, Calvin Goldschmidt HBML: Dave Power, Gerry Benson		
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WEATHER (ROBERTS BAY)

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

Temperature/Wind Chill (°C)	6AM: -33/-50	12PM : -31/-50	6PM: -32/-48	12AM:-30/-47
Precipitation (mm)	Rain: None		Snow: None	
Conditions	Day Shift: Clear, winds 20-25kph until noon, increasing to > 30Kph by noon. Gust as high as 55 kph		Night Shift: Cold, high winds, blowing snow. Miserable.	
Daily norms (°C)	24 hour high: -31C		24 hour low: -33C	

HEALTH, SAFETY AND ENVIRONMENT

- John Kurylo and Jennifer Stirling attended the nightly Nuna toolbox meeting.
- Earnest Palczewski attended the tool box meeting

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

- The daily meeting was attended by HBML [Jill Turk] Newmont [Gary, Don Ethelston], JDS [Doug Fielding, Ishan Fechter, Mark Valeriot]; Nuna [Doug Haverland,] and SRK [Lawrence Borowski, John Kurylo].

Topic	Status
Health and Safety and Environment	<ul style="list-style-type: none"> • Workers are continuing to fasten seat belts behind their backs. They are being warned at safety meetings. Management has indicated that anyone caught without seat belts will be asked to leave the project. • Worker left a vehicle in reverse when he jumped out and didn't place chocks. Vehicle rolled into a building. Some further clarification on the incident. Vehicle is being checked by a mechanic. • Mine inspector will be visiting the site March 26th to 28th. There will be an increased emphasis on house keeping the weekend before the visit. • ESR: noted that there has been an increase in "dump and run" incidents at the waste management facility. Not everything is being sorted properly. Request that contractors bring helpers when they are dumping at the facility and that waste management assist in sorting. • ESR noted that hauling waste off site has become a lower priority. Currently there are 72 megabags awaiting removal. • ESR enquired about the "list" of items relating to issues at the Tail Lake Dam. Nuna responded that most of the issues have been auctioned. • One minor spill reported. • Vehicles are still idling close to sleeping quarters.
North Dam	<ul style="list-style-type: none"> • Freezeback had been achieved from ~ Sta 1+50 to Sta 0+64 • Area cleaned and prepared for night shift. • Placed FCM from Sta 0+50 to St 1+10 • Plant shut down due to mechanical breakdown. • Concentrated on snow removal, excavating and placing ROQ and hauling separation material for much of the day shift and part of the night shift.
Water Management Structures	<ul style="list-style-type: none"> • Concentrated on removing snow from trenches and preparing area for Layfield to work in.

	<ul style="list-style-type: none"> Area between Sta 2+95 to 3+35 cleared of snow, bentonite placed. Area between Sta 3+30 and 3+90 cleared of snow. Plan to place HDPE liner today
General	<ul style="list-style-type: none"> One drill working at Quarry 2, day shift and night shift Blast now planned for Thursday

SURVEY:

Required	
Data Received	<ul style="list-style-type: none"> QC Cross sections of work in progress (Rec'd Mar 17th) Frozen Core Volumes (Rec'd Mar 17th)
Outstanding	<ul style="list-style-type: none">
Upcoming	<ul style="list-style-type: none"> Survey of FCM after placement (ongoing). Survey of Doris North Diversion berm (ongoing).

NORTH DAM/FROZEN CORE PLANT PAD:**Frozen Core Plant***Dayshift*

- Preparing plant for start-up on night shift.
- Stockpiling GCL overliner mix material
- Hauling and stockpiling separation material. D6 dozer working on stockpile.
- No plant operator was available for day shift.

Nightshift

- At the start of nightshift the electricians finished some electrical repairs to the plant.
- The plant was started up around 01:00 and ran until ~ 5:30.
 - The water pump dial was initially set at 54 when the plant started up and then increased to 55.7 before the first ½ load was rejected.
 - Temperatures at the plant started around 28C and were raised throughout the shift to around +30-32C to provide additional time to place material in the cold conditions.
 - Around 02:00 the water level was increased to 56.6.
 - 15 loads for FCM were sent to the dam from the plant.
- Transition material was hauled from outside Quarry #2 to the FCP Pad until the plant started up.

Dam Shell*Dayshift*

- Continued excavating ROQ and 5/8 in material over separation material on the east bank ~ Sta 0+60. Material hauled to the west bank and end dumped ~ Sta 0+70. By end of shift the excavation of ROQ over separation material was nearing completion.
- Multi bead thermistor cables at Sta 0+60 were strung across the west dam shell. ¾ in crush was hauled and dumped near Sta 0+65. A pad was prepared and packed with the excavator. Labourers strung out the cables. Surveyor surveyed the bedding material and location of the cables. Cables were covered with 300 mm and packed with the excavator

Nightshift

- ROQ material was briefly packed on the downstream from ~1+10 to 0+30.
- ROQ material was removed in areas over the Transition from the upstream dam shell. A small bench of Transition material can be observed on the upstream. Access down onto this material has been

created at the N end and around station 0+70.

Key Trench/ Central Core

Dayshift

- Thermistors were read ~ 1:30 pm. The section from 0+55 to the south end was noted as being -2.12C. The section between Sta 1+50 and Sta 1+10 was noted as being -1.79C.
- By 17:30 section from 0+55 to the south was -4.77C, and the section between Sta 1+50 and 1+10 was -3.54C
- Four labourers cleared snow by hand off the FC bank in areas that were out of reach by the excavator.

Nightshift

- Two drilled cores were taken on nightshift:
 - HB12-ND-CORE-DC81-20120317 was taken from ~ 0+55 upstream. This was in the SSE corner from the material placed on March 13th nightshift.
 - HB12-ND-CORE-DC82-20120317 was taken from ~1+20 centerline. This was taken from the material placed on March 16th nightshift.
 - Some difficulties were had finding a suitable power source for the drill. Eventually, after multiple attempts with multiple light plants, a power source was found. The breaker for this light plant consistently was tripped and somewhat limited the depth of core drilling that could be completed. The issues with the drill power source will be further examined in the coming days.
- FCM was placed from station ~1+10 to 0+25.
 - Two excavators (330 and 345) were used for placement for a portion of the shift.
 - The 330 placed on the top from the N to the S
 - The 345 placed in the underbuilt SSE corner around station 0+70 to 0+40
 - Typically lift thickness on the order of ~ 0.2m were observed. In the SSE area the lift was noted to be slightly thicker.
 - A small area on the downstream from ~ 0+90 to 0+70 was slightly underbuilt (in small areas and by less than 0.3m). Transition material is expected to be slightly offset to allow for this area to be built to design grades on the next lift.
 - The labour crew on night shift was limited. Typically the upstream sloping was completed with an excavator and then raked to smooth.
 - In the SSE corner snow was noted to be blowing in against the intermediate slope around the centerline at ~ 0+65 to 0+55. Some hand shovelling was required / completed in this area as the FCM placement proceeded.
 - In the SSE corner, snow was removed on the most upstream area and on the top centerline to downstream area in preparation for placement. However, there is a intermediate slope in this area where snow was not fully removed from. As the excavator placed core on the top downstream area, around 0+60 to 0+45, some FCM was noted to travel over / onto this intermediate snow covered slope.
 - This intermediate slope will be required to be scraped down to hard ground (i.e. snow removed) before subsequent lifts in this area tie into the slope. The excavator attempted to do some of this scraping in the field as placement progressed however, its success was somewhat limited and will have to be revisited after freezeback.
- Approximately 151 m³ of FCM was placed on nightshift. To date 10,190 m³ of FCM has been placed in 2012 at the North Dam.

Field Geotechnical Testing, Laboratory and Sampling

SINGLE BEAD THERMISTOR STATUS

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

SB22	0+75	CL	SB29	1+15	U/S	SB27	0+38	U/S
SB24	0+50	U/S						

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

PARTICLE SIZE DISTRIBUTION SUMMARY

Collected	Testing In Progress	Completed
HB12-ND-CORE-PSD72-QA-20120317		HB12-ND-CORE-PSD71-QA-20120316

MOISTURE CONTENT SUMMARY

Collected	Testing In Progress	Completed
HB12-FCP-CORE-MC349-20120317 HB12-FCP-CORE-MC350-20120317 HB12-FCP-CORE-MC351-20120317 HB12-ND-CORE-MC352-20120317 HB12-ND-CORE-MC353-20120317 HB12-FCP-CORE-MC354-20120317 HB12-ND-CORE-MC355-20120317 HB12-ND-CORE-MC356-20120317		HB12-FCP-CORE-MC349-20120317 HB12-FCP-CORE-MC350-20120317 HB12-FCP-CORE-MC351-20120317 HB12-ND-CORE-MC352-20120317 HB12-ND-CORE-MC353-20120317 HB12-FCP-CORE-MC354-20120317 HB12-ND-CORE-MC355-20120317 HB12-ND-CORE-MC356-20120317

DRILLED CORE

Collected	Testing In Progress	Completed
HB12-ND-CORE-DC81-20120317 HB12-ND-CORE-DC82-20120317	HB12-ND-CORE-DC81-20120317 HB12-ND-CORE-DC82-20120317	HB12-ND-CORE-DC80-20120316

DORIS NORTH DIVERSION BERM:

- Berm between Sta 2+95 and 3+35 approved for liner placement.
- Geotextile placed between Sta 2+95 and Sta 3+35
- High winds at noon precluded playing HDPE
- Bentonite placed between Sta 3+35 and Sta 3+90, inspected and surveyed.
- Two excavators worked on placing $\frac{3}{4}$ in crush over liners and bank, completing by mid afternoon.
- First of two lifts of ROQ placement completed between Sta 3+35 and Sta 3+90
- Strong winds were starting to blow snow into trenches.

DORIS SUMPS:

- Second lid has been fabricated.

QUARRY 2:

- One drill working during dayshift and one drill working on nightshift (i.e. one drill working 24 hours).

GENERAL:

- Weather was very cold this morning with moderate winds (20 kph). At 6:00 am readings were -33C/-45C. Just before lunch winds suddenly increased to 30 kph with a brief period at 55 kph. Wind chill dropped to -50C. Drifting was observed in the key trench at the berm and on the dam. Proposed work placing HDPE was suspended and efforts made to cover completed work as quickly as possible.
- SRK's truck remains down. SRK is currently sharing a truck with Nuna supervisor and field engineering crew on dayshift. Additional vehicles are available on nightshift due to the smaller crew size.
- The D6 spread the snow stockpile further ESE onto Tails Lake for part of the morning and for all of nightshift.

PHOTOS:



Photo 1: Photo point 3, facing NNE. Photo taken at 10:20 am



Photo 2: Facing SSW. Photo taken ~ 1:30 pm



Photo 3: Removal of snow by hand beyond reach of excavator,



Photo 4: Excavating upstream side to top of separation material.



Photo 5: Multi bead cluster laid out at Sta 0+60



Photo 6: Thermister cables back filled



Photo 7: Trench cleaned Sta 2+95 to Sta 3+30



Photo 8: Geotextile placed Sta 2+95 to Sta 3+30



Photo 9: Bentonite placed over liner Sta 3+30 to Sta 3+90



Photo 10: ¾ in crush placed over liner Sta. 3+30 to 3+90



Photo 11: ~NE view down US dam slope, taken from ~ 0+70

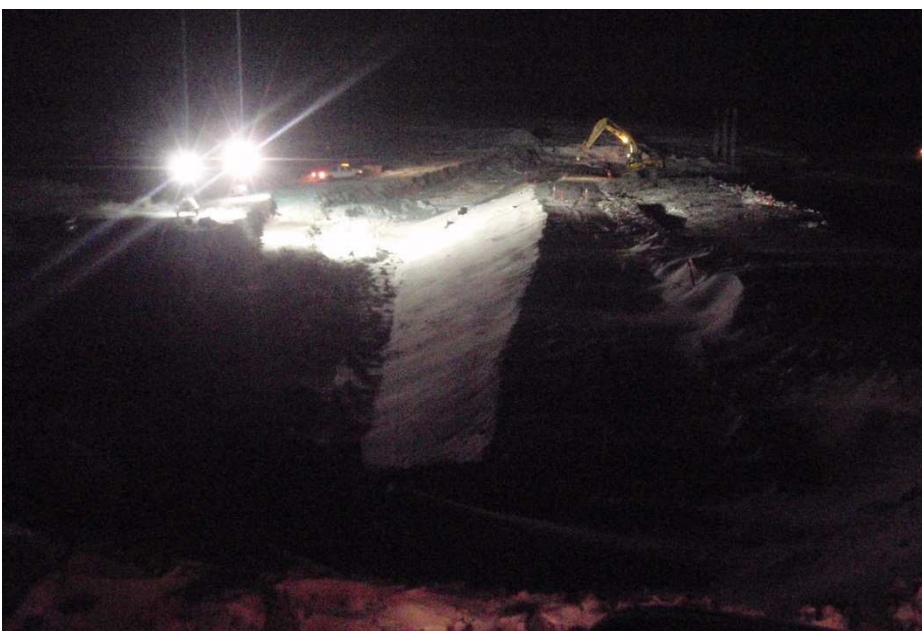


Photo 12: ~SW view of progress, looking down centerline of core.



Photo 13: Excavator and packer working on underbuilt SSE corner



Photo 14: Excavator and labours working on sloping US around 0+90



Photo 15: ~WNW view of construction progress around S end of Dam



Photo 16: Underbuilt SSE US area after tonight's lift (~0+50 to 0+70)



Photo 17: Drilled Core 81. Taken from ~ 0+55 US.



Photo 18: Drilled Core 82. Taken from ~ 1+20 CL

FIGURES:

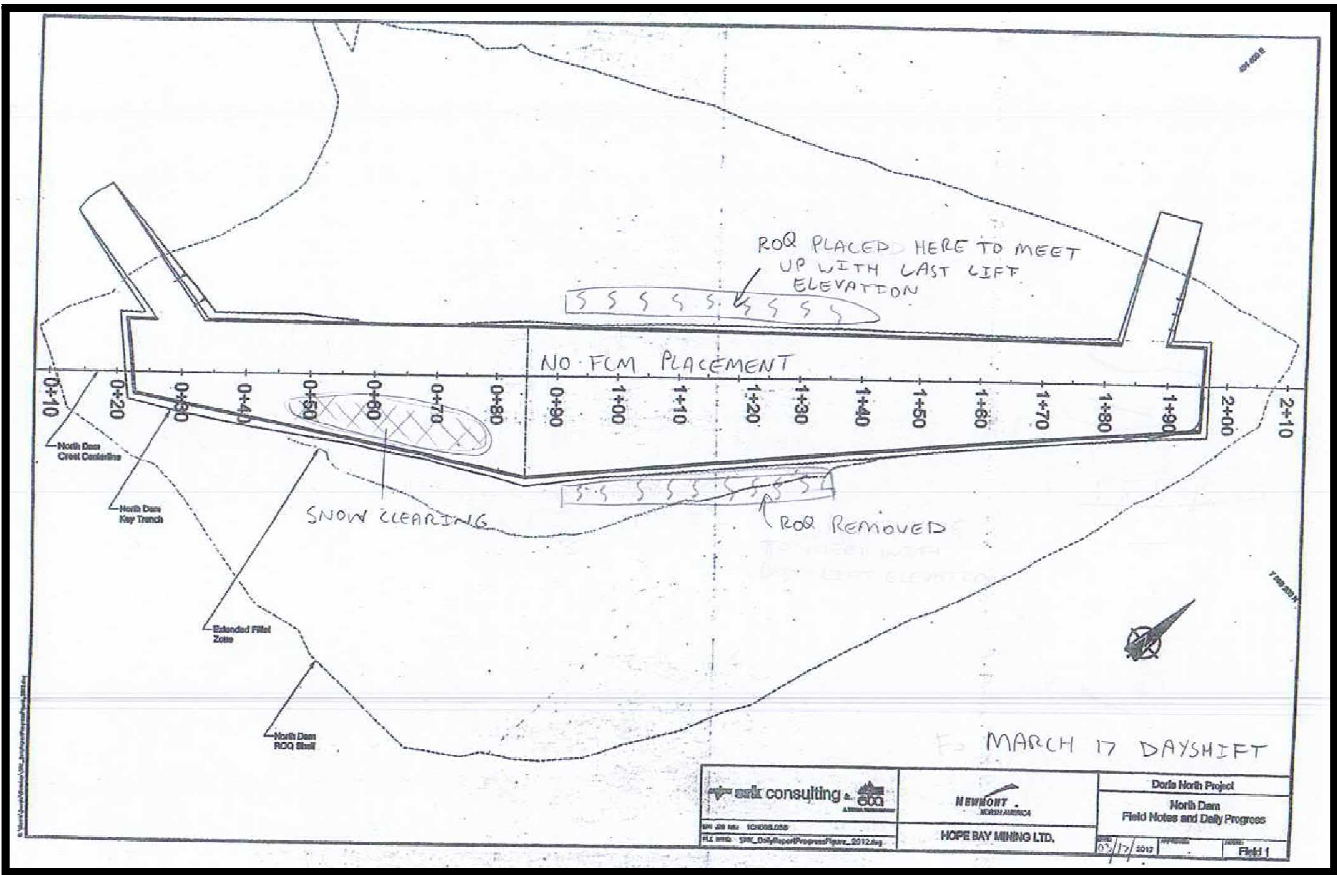


Figure 1 – North Dam Progress – Dayshift

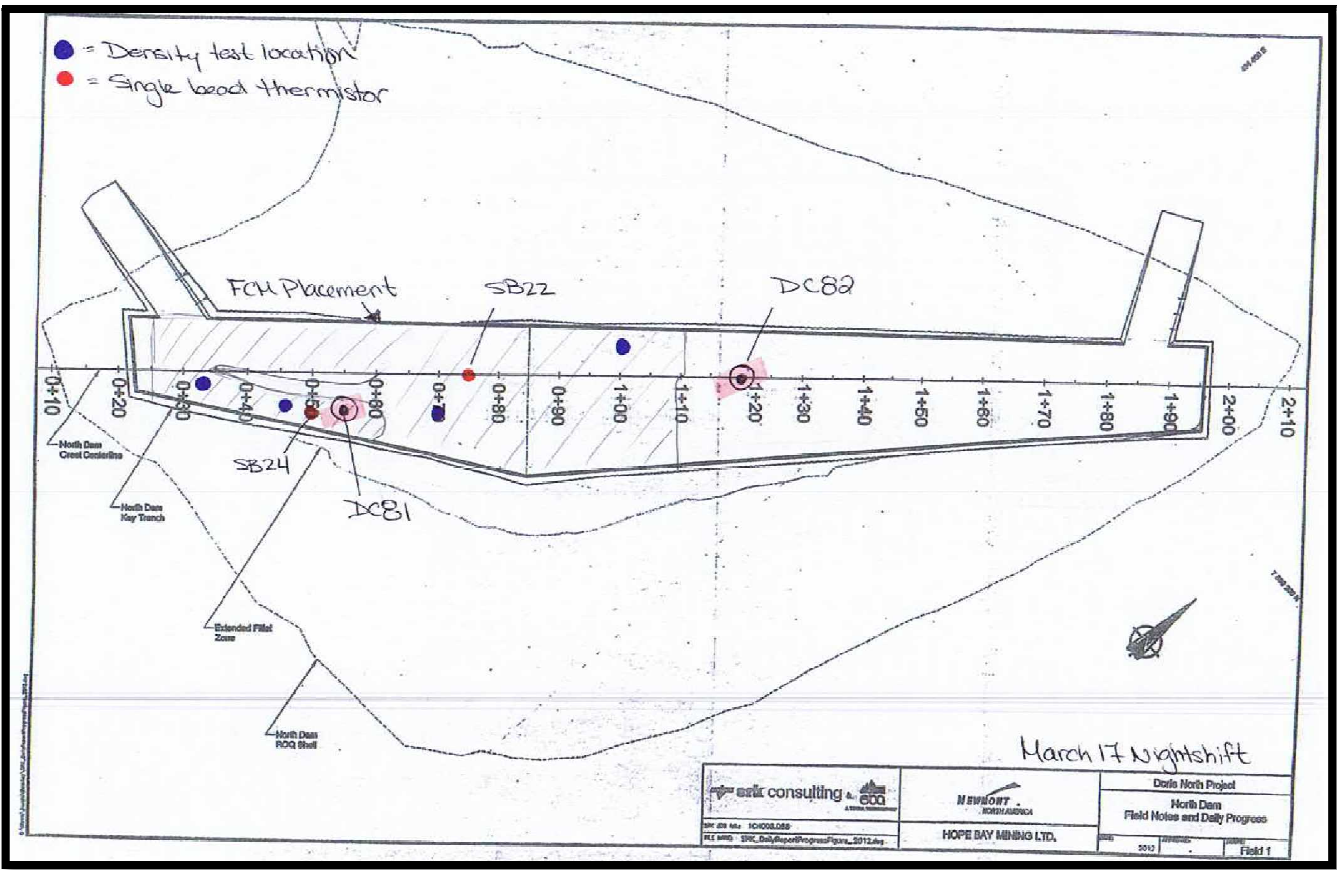


Figure 2 – North Dam Progress – Nightshift

