

## DAILY REPORT #55 – DORIS NORTH INFRASTRUCTURE/ NORTH DAM

Prepared by:	Iozsef Miskolczi Lawrence Borowski	Date:	2012.02.29
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 Yes Yes No No Yes Yes 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	Yes Yes No No Yes 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	No No Yes No Yes Yes
	EBA Engineering Consultants Ltd.	Jeff Orr – Project Manager Jennifer Stirling – Geologist Thomas Bradshaw – Junior Engineer Ernest Palczewski – Geologist	Yes No Yes No
Earthworks Contractor	Nuna Logistics	Bradford Watkin – QC Manager 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 Kyle Kuntz – Project Engineer Margaret Caley – Surveyor Matt McKay – Civil Supervisor Mike MacMaster – Surveyor Mike Price – Field Engineer Nick Stoneberger – Superintendent Rick Peter – Foreman Ron MacMaster – Surveyor Simon Chipper – Civil Supervisor	No No No Yes No Yes Yes No No No No Yes Yes Yes Yes Yes No No No
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		
This Construction Daily Report is produced as an internal communication document between SRK site and head office staff. Any distribution of this report outside of SRK is done as a courtesv. and the information contained in this report are for information only to			

those external parties.

## WEATHER (ROBERTS BAY)

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

Temperature/Wind Chill (°C)	6AM: -35C/-52C	12PM: -33C/-53C	6 PM: -33C/-52C	12 AM: n/a
Precipitation (mm)	<b>Rain:</b> None		<b>Snow:</b> None	
Conditions	<b>Day Shift:</b> Clear, windy, wind chills to -53C		<b>Night Shift:</b> Very cold. Clear sky. Moderate wind.	
Daily norms (°C)	24 hour high: -33C		24 hour low: -35C	

## HEALTH, SAFETY AND ENVIRONMENT

- Iozsef Miskolczi and Thomas Bradshaw attended the daily tool box meeting.

## COMMENTS, CORRESPONDENCE AND ACTIVITIES

### DAILY MEETING WITH NUNA AND HBML TEAM:

- The daily meeting was attended by HBML [Katsky Venter], Newmont [Don Ethelston], JDS [Doug Fielding, Kevin Whieldon, Mark Valeriote, Lloyd Jackson]; Nuna [Nick Stoneberger] and SRK [Lowell Wade, Lawrence Borowski, Jeff Orr]

Topic	Status
Health and Safety and Environment	<ul style="list-style-type: none"> <li>• Safety: Minor incident with truck running off the road. Pulled out of a snowbank.</li> <li>• Worker who complained of lower back discomfort on previous shift complained again and reported to medical.</li> <li>• ESR: Issue with unauthorized use of the burn pan. To be followed up at a separate meeting.</li> </ul>
North Dam	<ul style="list-style-type: none"> <li>• Still no freezeback on the core material between Sta 0+85 and Sta 1+17.</li> <li>• Three loads of core material placed by the night shift at the north end to build up the slopes.</li> <li>• Overbuilt portion of the north diversion berm (East end ~ 100m) to be reshaped and modified to permit work to commence placing crush on the slopes.</li> <li>• Sump installation did not proceed as planned yesterday due to equipment breakdown. To proceed today.</li> <li>• Crusher will operate until Thursday.</li> <li>• Continue with liner installation today.</li> <li>• Start placing final ¾" crush at east end.</li> <li>• Station markers were all removed when banks at the north dam were reshaped. Markers are required.</li> </ul>
Water Management Structures	<ul style="list-style-type: none"> <li>• Sumps to be installed today.</li> <li>• Layfield will continue with liner placement.</li> <li>• Preparation of key trench will continue.</li> <li>• Start placing ¾" final cover over liners.</li> </ul>
General	<ul style="list-style-type: none"> <li>•</li> </ul>

### SURVEY:

Required

-

<b>Data Received</b>	<ul style="list-style-type: none"> <li>• Survey of frozen core materials (Rec'd Feb 28<sup>th</sup>)</li> <li>• Frozen core volumes (Rec'd Feb 29<sup>th</sup>)</li> <li>• QC cross sections at North dam (Rec'd Feb 29<sup>th</sup>.)</li> <li>• Sump 1 and sump 2 survey data (Rec'd Feb 29<sup>th</sup>)</li> <li>• Survey frozen core placed (Rec'd Mar 01)</li> <li>• Frozen core volumes (Mar 01)</li> <li>• Planning map of lifts (Mar 01)</li> </ul>
<b>Outstanding</b>	•
<b>Upcoming</b>	<ul style="list-style-type: none"> <li>• Survey of FCM after placement (ongoing).</li> <li>• Survey of Doris North Diversion berm (ongoing).</li> </ul>

#### **NORTH DAM/FROZEN CORE PLANT PAD:**

##### **Multi-Bead Thermistors**

- No activity

##### **Frozen Core Plant**

###### *Dayshift*

- Plant start up 12:00 noon
- Temperature of FCM +32C
- Temperature increased to +41C due to windy conditions.
- 23 loads were produced in the afternoon.

###### *Nightshift*

- The nightshift started with repairs to the south bay door.
- Core material production started around 11:30 PM. Temperature was about 37 degrees at start-up and slowly increasing to 40 degrees.
- Production stopped after only four loads.

##### **Dam Shell**

###### *Dayshift*

- No activity.

###### *Nightshift*

- Transition material was placed from Sta. 0+85 to Sta 0+10 on the downstream side of the core.

##### **Key Trench/ Central Core**

###### *Dayshift*

- Started placing frozen core material at 12:00 noon.
- FCM placed in a 250mm lift between Sta 0+70 and Sta 1+15
- Temperature raised to 41C due to extreme weather conditions (wind gusts to 30 kph)
- Density and saturation tests all met specifications.
- Rakes were used to finish the 2:5 : 1 slopes along the upstream edge.
- A single bead thermistor was installed.

###### *Nightshift*

- A 250 m lift of core material was placed between Sta. 1+10 and Sta. 1+30. Only four loads were placed.
- The same mix recipe was used as during the previous three nightshift placements, with moisture content increased from 53.3 to 53.7. Temperature off the chute was 37 degrees at startup and increased to 40 degrees.
- The first load seemed dryer than usual, based on visual inspection after placement. Analysis of the moisture content from a sample collected after placement indicated a degree of saturation of 76%. The

second sample collected from the placement area showed a saturation of approximately 85%. Degree of compaction was adequate in both cases. On most of the placed core, other than the first load, a sheen of water was noted developing on the surface after compaction.

- A decision was made by the SRK engineer to remove the first load of placed material. Because this load could not be accessed from the previously frozen core, the excavator was driven onto the recently placed core breaking up the frozen crust. Removal of the disturbed area was also necessary.
- One single-bead thermistor was placed, SB 16 at Sta. 1+25.
- The other single-bead thermistors were monitored for freeze-back. No freeze-back was noted by the end of the nightshift.

### **Field Geotechnical Testing, Laboratory and Sampling**

#### **SINGLE BEAD THERMISTOR STATUS**

Installed Today			Active			Destroyed / Abandoned		
ID	Station	U/S, D/S, CL	ID	Station	U/S, D/S, CL	ID	Station	U/S, D/S, CL
SB30	0+85	CL				SB28	1+74	U/S
SB16	1+25	D/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-CR-CORE-PSD60-QA-20120229	HB12-CR-CORE-PSD60-QA-20120229	HB12-FCP-CORE-PSD59-QA-20120229
HB12-CR-CORE-PSD61-QA-20120229	HB12-CR-CORE-PSD61-QA-20120229	

#### **MOISTURE CONTENT SUMMARY**

Collected	Testing In Progress	Completed
HB12-FCP-CORE-MC225-QA-20120229	None	HB12-FCP-CORE-MC225-QA-20120229
HB12-ND-CORE-MC226-QA-20120229		HB12-ND-CORE-MC226-QA-20120229
HB12-ND-CORE-MC227-QA-20120229		HB12-ND-CORE-MC227-QA-20120229
HB12-FCP-CORE-MC228-QA-20120229		HB12-FCP-CORE-MC228-QA-20120229
HB12-ND-CORE-MC229-QA-20120229		HB12-ND-CORE-MC229-QA-20120229
HB12-ND-CORE-MC230-QA-20120229		HB12-ND-CORE-MC230-QA-20120229
HB12-FCP-CORE-MC231-QA-20120229		HB12-FCP-CORE-MC231-QA-20120229
HB12-FCP-CORE-MC232-QA-20120229		HB12-FCP-CORE-MC232-QA-20120229
HB12-ND-CORE-MC230-QA-20120229		HB12-ND-CORE-MC230-QA-20120229

#### **DRILLED CORE**

Collected	Testing In Progress	Completed
HB12-ND-CORE-DC59-QA-20120229	None	HB12-ND-CORE-DC59-QA-20120229

#### **GENERAL:**

- Weather conditions were extreme today with windchills up to -53C
- Placing FCM under these conditions proceeded.
- Work at the north diversion berm was limited due to weather conditions.

#### **DORIS NORTH DIVERSION BERM:**

- Drill used to drill high spots that were identified yesterday.
- No geotextile or liner placed. With Layfield leaving tomorrow, the day was spent working on paperwork.
- SRK witnessed destructive testing.
- Additional crush placed in the key trench where width significantly exceeded 1 meter. Work soon stopped as snow was drifting into the key trench.
- No progress made on modifying berm to permit access for placing crush on slopes on east end

**DORIS SUMPS:**

- 5/8" clear material placed in Sumps 1 and 2.
- Sumps 1 and 2 moved from the laydown area to the site.
- Both Sumps 1 and 2 placed into their final positions.
- 5/8" clear material placed around sump 2
- Sumps were covered with tarps at the end of the day.

**QUARRY #2:**

- Crusher will continue crushing until Thursday.
- One drill working.

**GENERAL:**

- The field vehicle driven by SRK was taken to the mechanical shop with steering issues. The mechanic advised that the power steering pump needs to be changed.
- Part of the Nuna crew was assigned to snow clearing from the Upper Reagent Pad.

## PHOTOS:



**Photo 1:** Key trench from point 3 facing north east in early afternoon.



**Photo 2:** North dam facing south, late afternoon.





**Photo 3:** Sump 1 installed.



**Photo 4:** Base of sump 1.



**Photo 5:** Sump 2 installed.



**Photo 6:** 5/8" crush placed around sump 2.



**Photo 7:** Layfield undertaking destructive testing



**Photo 8:** Drilling high spots in berm trench



**Photo 9:** Key at north diversion berm filling with snow.



**Photo 10:** EBA testing FCM





**Photo 11:** Sloping to design grades



**Photo 12:** Placing FCM



**Photo 13:** Frozen core area after removal of the sub-standard material.

**FIGURES:**

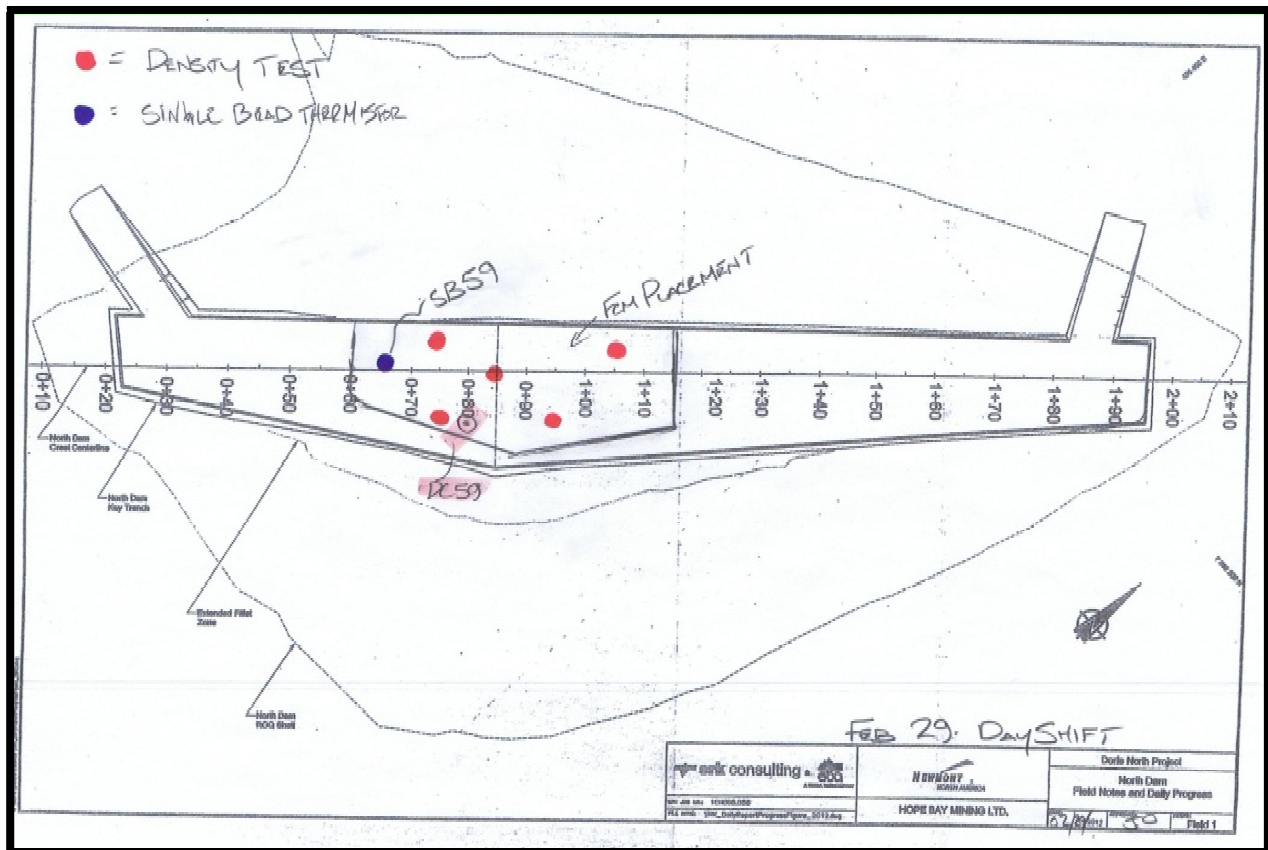


Figure 1 – North Dam Progress – Dayshift

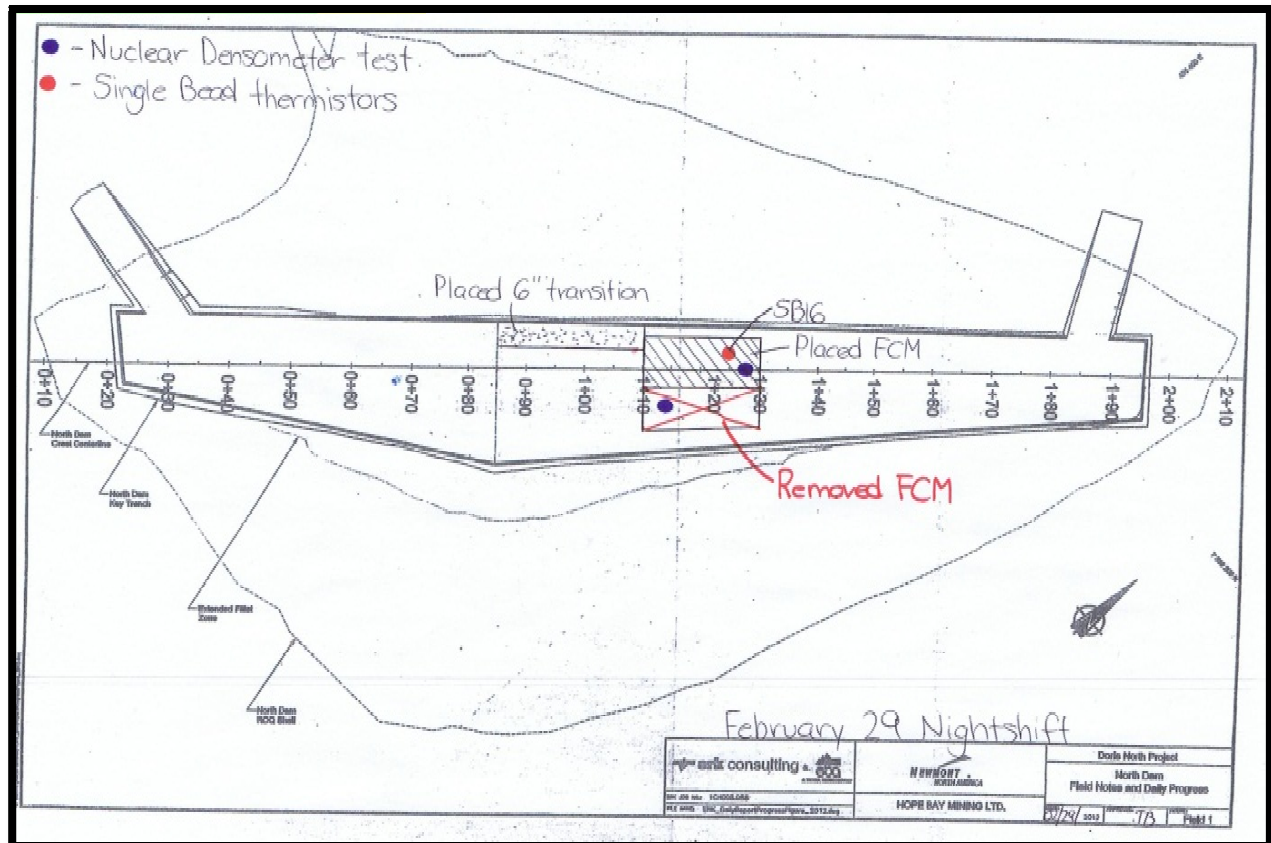


Figure 2 – North Dam Progress – Nightshift