

## DAILY REPORT #46 – DORIS NORTH INFRASTRUCTURE/ NORTH DAM

Prepared by:	Murray McGregor Iozsef Miskolczi	Date:	2012.02.20
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 No No Yes No Yes Yes
	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 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	No No No Yes Yes
	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	Bradford Watkin – QC Manager Doug Haverland – Area Superintendent Gary Sodhi – Field Engineer Georges Cornelissen – Survey Manager Jeff Roberts - Surveyor Jim Cardinal – Foreman (Day Shift) Jordan Gunter – Foreman (Night Shift) Kevin Oakes – Project Engineer Kevin Kozdrowski – Foreman Kyle Kuntz – Project Engineer Margaret Caley – Surveyor (Night Shift) 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 Yes No Yes No Yes Yes No No Yes Yes Yes Yes Yes No 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		
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**WEATHER (ROBERTS BAY)**

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

Temperature/Wind Chill (°C)	6AM: -30/--	12PM: -27/-34	6 PM: -24/-35	12 AM: n/a
Precipitation (mm)	<b>Rain:</b> None		<b>Snow:</b> None	
Conditions	<b>Day Shift:</b> Sunny and breezy throughout the day.		<b>Night Shift:</b> Cold. Clear sky. Calm to no wind.	
Daily norms (°C)	24 hour high: -22.7		24 hour low: -32.2	

**HEALTH, SAFETY AND ENVIRONMENT**

- Iozsef Miskolczi and Thomas Bradshaw attended the daily toolbox meeting.
- Ernest Palczewski attended the daily toolbox meeting.

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

- The daily meeting was attended by Newmont [Michelle Tanquay], JDS [Doug Fielding, Mark Valeriotte, Ishan Fechter], Nuna [Doug Haverland, Kyle Kuntz] and SRK [Iozsef Miskolczi].

Topic	Status
Health and Safety and Environment	<ul style="list-style-type: none"> <li>• No HSLP representative.</li> <li>• No new ESR incidents to report</li> <li>• JDS requested that all H&amp;S and ESR incidents be also forwarded to the JDS Construction Manager, besides Newmont.</li> </ul>
North Dam	<ul style="list-style-type: none"> <li>• SRK reported that cleanup of the upstream edge of the 2011 core is progressing but it is not yet complete.</li> <li>• SRK reported freeze-back of the core material placed on Saturday (Feb. 18).</li> <li>• Nuna presented the plans for hauling the snow from the stockpile at the Doris Lake ice strip off the lake and start building the short-haul road to North Dam. Schedule was discussed.</li> </ul>
Water Management Structures	<ul style="list-style-type: none"> <li>• SRK reported that geotextile placement was started at the Doris Diversion Berm.</li> <li>• Concerns were expressed by Nuna regarding the objection of Layfield to warranting the HDPE liner without the underlying geotextile. Brief discussion ensued as to the scope and intent of the design and cost of installation, as well as the responsibility of the decision lying with JDS.</li> <li>• Nuna expressed their intent to start drilling at Sump #1 today. One Westarc drill was moved to the sump location the previous day.</li> </ul>
General	<ul style="list-style-type: none"> <li>• SRK mentioned that it had retrieved the generator from the Nuna shop during the night shift.</li> <li>• JDS presented a preliminary schedule for the HDPE pipe layout and welding along the Doris Airstrip. The 6" and 10" HDPE pipe hauled to Tail Lake by mistake will have to be hauled back to the airstrip.</li> <li>• JDS reiterated concerns with cement powder being used up or removed from the mixing bins at the Batch Plant before decommissioning. Nuna responded that two more pours by Tli-Cho are expected at the Vent Raise and then cleanup will follow.</li> <li>• Nuna and JDS discussed the manpower re-distribution of the Tli-Cho personnel on site to increment the crew of Atco and Nuna respectively.</li> </ul>

**SURVEY:**

<b>Required</b>	<ul style="list-style-type: none"> <li>Survey of Core placed on Feb. 19</li> </ul>
<b>Data Received</b>	<ul style="list-style-type: none"> <li>Survey of Core placed on Feb. 18</li> <li>Survey of ROQ placed on Feb. 16</li> <li>Survey of core placed on Feb. 17</li> </ul>
<b>Outstanding</b>	<ul style="list-style-type: none"> <li></li> </ul>
<b>Upcoming</b>	<ul style="list-style-type: none"> <li>Survey of FCM after placement (ongoing).</li> <li>Survey of Doris North Diversion berm excavation.</li> </ul>

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

- All thermistor strings were downloaded and were found to be working as intended, except for the one permanently broken bead.

**Frozen Core Plant***Dayshift*

- The plant had a smooth start-up around 11:00AM; material was ready for placement within the first 10 minutes.
- Temperatures at the chute averaged 37°C.
- Hardly any reject at start-up and shutdown; less than half a truck combined.
- A variety of fine tune settings were utilized today; material had less moisture than yesterday.

*Nightshift*

- No activity, no FCM was produced.
- Core material was hauled to the FCP stockpile.

**Dam Shell***Dayshift*

- No activity.

*Nightshift*

- Transition material was hauled from the stockpile at the FCP and placed along the downstream of the core from Sta. 1+05 to Sta. 1+75.
- The thermistor cables at Sta 1+30 and Sta.1+75 were imbedded in dry core material and placed against the frozen core. Vibratory compaction was applied.
- Transition material was placed over the frozen core extension at the thermosyphon radiators near the north end of the keytrench and compacted.

**Key Trench/ Central Core***Dayshift*

- An area from 1+25 to 0+60 was cleaned for placement; the area had an odd shape dictated by last day's placement.
- Some additional spot cleaning was required near ledges before approval for placement was given.
- Material placed was drier than yesterday, but still had a noticeable sheen in most areas.
- Diligent compaction was observed resulting in smoother finished surfaces.
- All Troxler measurements indicated acceptable saturation and compaction.

*Nightshift*

- No FCM placement.
- Temperature of the core placed on Feb. 19 was monitored throughout the night for freeze-back. The material placed on Feb. 19 was measured at -1.7 °C at 5:30 AM.

**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
SB25	0+75	Center	SB13	0+73	Center	SB12	0+60	Center
			SB24	1+28	D/S	SB27	1+35	Center
						SB1	0+90	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-PSD42-20120220		HB12-CR-CORE-PSD42-20120220

**MOISTURE CONTENT SUMMARY**

Collected	Testing In Progress	Completed
HB12-FCP-CORE-MC162-QA-20120220		HB12-FCP-CORE-MC162-QA-20120220
HB12-ND-CORE-MC163-QA-20120220		HB12-ND-CORE-MC163-QA-20120220
HB12-ND-CORE-MC164-QA-20120220		HB12-ND-CORE-MC164-QA-20120220
HB12-FCP-CORE-MC165-QA-20120220		HB12-FCP-CORE-MC165-QA-20120220
HB12-FCP-CORE-MC166-QA-20120220		HB12-FCP-CORE-MC166-QA-20120220
HB12-FCP-CORE-MC167-QA-20120220		HB12-FCP-CORE-MC167-QA-20120220
HB12-ND-CORE-MC168-QA-20120220		HB12-ND-CORE-MC168-QA-20120220
HB12-ND-CORE-MC169-QA-20120220		HB12-ND-CORE-MC169-QA-20120220
HB12-ND-CORE-MC170-QA-20120220		HB12-ND-CORE-MC170-QA-20120220

**DRILLED CORE**

Collected	Testing In Progress	Completed
		HB12-ND-CORE-DC41-20120219
		HB12-TEST-CORE-DC42-20120219
		HB12-ND-CORE-DC43-20120219

**DORIS NORTH DIVERSION BERM:**

- Cat 330 excavator hoisted bentonite chip bags into the key-trench.
- Labourers cleaned the upstream wall for bentonite tie-in; then bentonite was spread in a 100mm lift across the bottom of the key-trench from the east end to chainage 5+35.
- Two 730 haul trucks continued snow clearing and muck-out in the morning, then ROQ placement on the central berm area in the afternoon.
- Cat 345 Excavator completed some mucking and snow clearing; then placed ROQ during the afternoon.
- Survey was present throughout Diversion Berm activities

**SECONDARY ROAD:**

- No activity.

**QUARRY #2:**

- Crusher continued re-crushing  $\frac{3}{4}$  inch into new FCM; one sample was taken by the crusher operator.
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**GENERAL:**

- Minor repairs and maintenance was performed on the glycol pump.
- Part of the Nuna crew was tasked with clearing the snow from the toe of the highwall in Quarry #2.

PHOTOS:



**Photo 1:** Progress photo of North Dam from photo point 1. ~SSE view.



**Photo 2:** Progress photo of North Dam from photo point 2. ~NW view.



**Photo 3:** Progress photo of North Dam from photo point 3. ~NE view.



**Photo 4:** Cat 330 excavator spreading the first load of today's FCM.



**Photo 5:** Photo during core placement today (foreground) was similar to placement yesterday (background, under delineators). This photo illustrates, to some degree, the appearance of the new FCM during placement and after freeze back.





**Photo 6:** Snow cleared area approved for ROQ placement at the Doris North Diversion Berm



**Photo 7:** Excavator lowering bentonite chip mega-bags into the base of the key-trench





**Photo 8:** Thermistor cables at Sta. 1+75 were encased in dry core material. Surveyor picking up the extent of the transition material placement on the right side of the photo.



**Photo 9:** Workers hand cleaning the ice from the upstream edge of the keytrench.





**Photo 10:** A Shop-Vac was set up to remove the meltwater before re-freezing.



**Photo 11:** Transition material was placed and compacted along the downstream side of the frozen core.  
Photo looking south from Sta. 1+75



## FIGURES:

Figure 1 – North Dam Progress – Dayshift

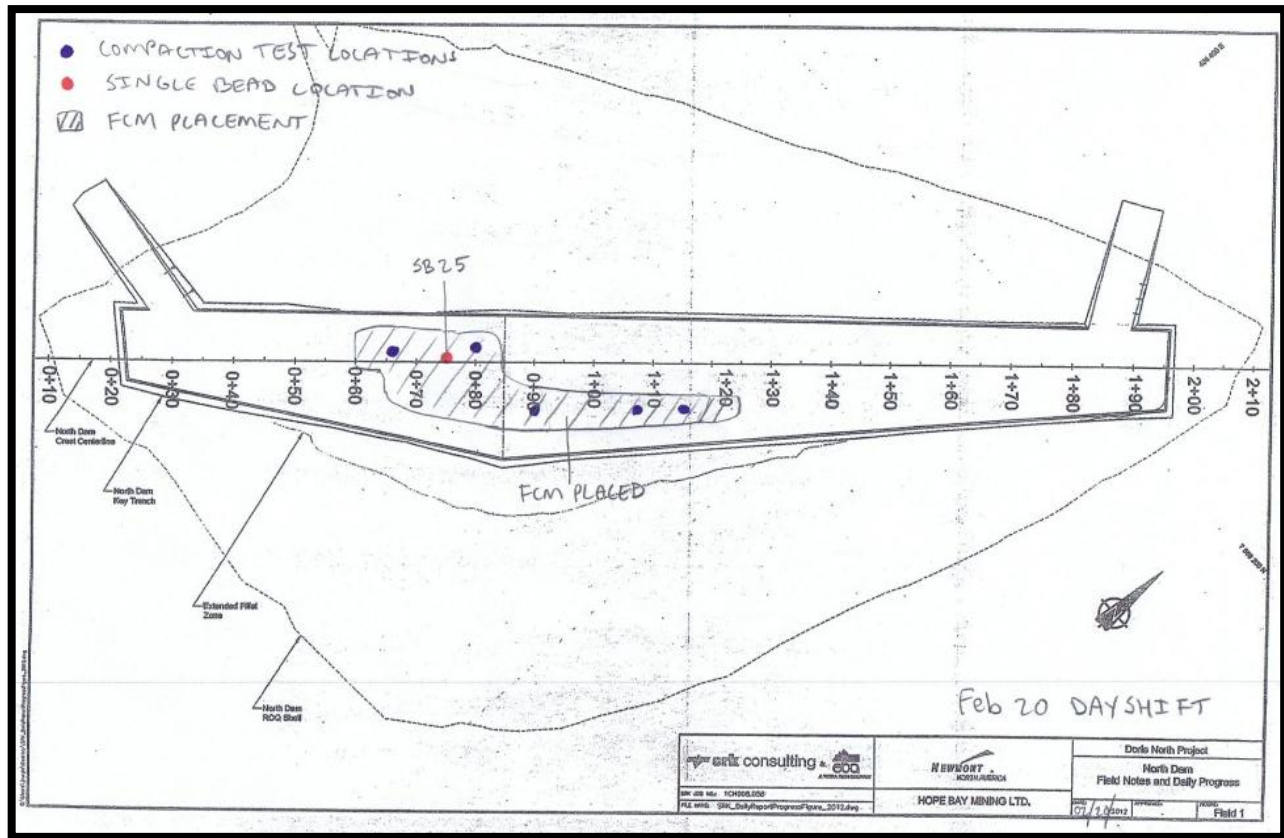


Figure 2 – North Dam Progress – Nightshift

