

DAILY REPORT #65 – DORIS NORTH INFRASTRUCTURE/ NORTH DAM

Prepared by:	John Kurylo Lawrence Borowski	Date:	2012.03.10		
Reviewed by:		Project #:	1CH008.058.0320		
Role	Company	Personnel – Position	On Site		
Client	Hope Bay Mining Limited (HBML)	Angela Holzapfel – ESR Compliance Manager	No		
		David Vokey – ESR Coordinator	Yes		
		Don Ethelston – HSLP Advisor	No		
		Dean Wold - Safety	Yes		
		Jill Turk – ESR Coordinator	No		
		Katsky Venter – ESR Manger	No		
		Michelle Tanquay – ESR Site Manager	Yes		
		Stirling Kelly – HSLP Advisor	Yes		
	JDS	Lloyd Jackson – Mechanical Superintendent	No		
		Doug Fielding – Construction Manager	No		
		Ishan Fechter – Construction Coordinator	Yes		
		Jerry Graham – Construction Manager	Yes		
		Kevin Whieldon – Project Coordinator	No		
		Mark Valeriote – Construction Manager	Yes		
Engineering Design Consultants	SRK Consulting (Canada) Inc.	John Kurylo – Site Engineer	Yes		
		Megan Miller – Site Engineer	No		
		Lawrence Borowski – Site Engineer	Yes		
		Murray McGregor – Site Engineer	No		
		Iozsef Miskolczi – Site Engineer	No		
		Lowell Wade – Senior Engineer	No		
	EBA Engineering Consultants Ltd.	Jeff Orr – Project Manager	Yes		
		Jennifer Stirling – Geologist	Yes		
		Thomas Bradshaw – Junior Engineer	No		
		Ernest Palczewski – Geologist	No		
		Earthworks Contractor	Nuna Logistics	Bradford Watkin – QC Manager	No
				Doug Haverland – Area Superintendent	Yes
Gary Sodhi – Field Engineer	Yes				
Georges Cornelissen – Survey Manager	No				
Jeff Roberts - Surveyor	Yes				
Jim Cardinal – Foreman	Yes				
Jordan Gunter – Foreman	No				
Kevin Oakes – Project Engineer	No				
Kevin Kozdrowski – Foreman (Night shift)	Yes				
Kyle Kuntz – Project Engineer	No				
Margaret Caley – Surveyor	No				
Matt McKay – Civil Supervisor	No				
Mike MacMaster – Surveyor	No				
Mike Price – Field Engineer	No				
Nick Stoneberger – Superintendent	No				
Rick Peter – Foreman (Day shift)	Yes				
Ron MacMaster – Surveyor	Yes				
Simon Chipper – Civil Supervisor	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: -34/-45	12PM: -33/-46	6PM:-34/-43	12AM:-37/-37
Precipitation (mm)	Rain: None		Snow: ~1mm	
Conditions	Day Shift: Clear, light wind, very cold		Night Shift: clear, light wind, cold	
Daily norms (°C)	24 hour high: - 32		24 hour low: - -34	

HEALTH, SAFETY AND ENVIRONMENT

- John Kurylo and Jennifer Stirling attended the nightly Nuna toolbox meeting.
- The SRK truck was experience issues with the power-steering and was taken to the Nuna shop for repair today. JDS's truck was borrowed for nightshift duties.

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

- The daily meeting was attended by HBML [Michelle Tanguay], Newmont [Sterling Kelly], JDS [Gerry Graham, Ishan Fechter, Mark Valeriote]; Nuna [Doug Haverland, Kyle Kuntz] and SRK [Lawrence Borowski, Jeff Orr, John Kurylo].

Topic	Status
Health and Safety and Environment	<ul style="list-style-type: none"> • Safety: Watch for wires that have been strung out by crew testing ground rods. • ESR: Discussion on snow dump at Tail Lake. Snow will need to be spread out as its' current location is in the vicinity of the water intake when the lake is being pumped.
North Dam	<ul style="list-style-type: none"> • Good day yesterday. Lift started ~ Sta 1+00 and stopped at Sta 0+70. Night shift continued from 0+70 to 0+47. • In addition FCM was placed at the inflection point during the day and night shift from Sta 0+70 to Sta 0+20 and across the top end. • ROQ and transition material were hauled.
Water Management Structures	<ul style="list-style-type: none"> • Layfield placed HDPE liner between sta 3+80 and 4+45 and repaired cut in HPDE • Will start placing ROQ in North Diversion Berm during night shift.
General	<ul style="list-style-type: none"> • Culverts are spotted at the Doris Creek Bridge and at the intersection near Sumps 1 & 2.

- JDS and SRK had additional discussion on the North Dam after the daily meeting.
 - SRK inquired if they could obtain a copy of the 2011 Transition material test (performed by Nuna and EBA Yellowknife). JDS sent this information before the end of the day.
 - JDS informed SRK that the current plan for the over GCL material was to mix $\frac{3}{4}$ " crush with the new 'manufactured fines' / 5mm minus crush material. This would be done to save money while bringin up the top end of the core, to assist with the placement on the 2.5H:1V dam slopes.

SURVEY:

Required	<ul style="list-style-type: none"> • FCM and Transition material placed on March 9 and 10th
Data Received	<ul style="list-style-type: none"> • Frozen Core Volumes (for up to and including March 10th). • QC Cross sections of work in progress (for up to March 10th)
Outstanding	<ul style="list-style-type: none"> •

Upcoming

- Survey of FCM after placement (ongoing).
- Survey of Doris North Diversion berm (ongoing).

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

- The following multi-bead strings were read:
 - ND-HTS-060-31.0, ND-HTS-060-28.8, ND-VTS-060-KT
 - ND-HTS-085-29.4, ND-HTS-085-25.3, ND-VTS-085-KT
 - ND-VTS-130-33.5, ND-HTS-130-28.8, ND-HTS-130-31.0, ND-VTS-130-KT
 - ND-HTS-175-33.5, ND-HTS-175-32.5, ND-VTS-175-KT

Frozen Core Plant*Dayshift*

- Plant started at 2:00 pm
- The water dial was set at 55 and wasn't changed all day
- Temperature was +32C

Nightshift

- Plant was started up around 23:00.
 - Initially the water dial was set to 56.6 and the belt speed was set to 21.1
 - Initial temperatures were around +33C but quickly increased to +37C
 - Around 3:30 all available areas where freezedback had occurred had been placed on.
 - Around 4:30, after freezedback was obtained around station 1+30 to 0+70, the plant was re-started. Temperatures were around +35 to +37C for the FCM.
- The plant was run for ~ 4.5hours on nightshift. .

Dam Shell*Dayshift*

- Vibratory packer was used to pack the slopes on the downstream end in the morning.
- Slopes were packed between Sta 0+40 and Sta 1+15
- ROQ was hauled in the morning and spread. Area covered to the elevation of the transition material from Sta 0+40 to Sta 1+30.

Nightshift

- Transition material was placed from ~1+45 to 1+75, on the downstream of the core placed on dayshift today.
 - Some compaction of the Transition material resulted in areas.
 - Some Transition material was not carefully placed and a skiff of loose Transition material was left on the downstream side slopes of the dam. In areas the loose transition that is currently on top of unfrozen core is expected to be slightly pulled back to ensure that minimum upstream design lines are met (minor task).
 - ROQ was placed on the downstream side of the dam shell. Some work on sloping the downstream 4H:1V slope was performed. Some vibrator compaction was observed however very little was observed today on the 2.5H:1V final downstream slope

Key Trench/ Central Core*Dayshift*

- By morning only the section from Sta 1+75 to 1+35 had freezeback. In itself, this was not sufficient to start up the plant.
- By noon, the south east corner had achieved freezeback.
- FCM placement started at 2:00 pm at Sta 0+60 at the inflexion point and proceeded up to the top at Sta 0+20.
- Simultaneously, FCM was placed from Sta 0+45 to Sta 0+20.
- FCM was graded to elevation 33.5 at Sta 0+40.
- Water was set at 55; temperature at 32C
- Following completion of work at the south end, the process started at Sta 1+75 and proceeded south. It stopped at 5:00 pm as it was approaching a multi bead location at Sta 1+30.
- Two drilled cores were taken on dayshift, HB12-ND-CORE-DC70-20120310 and HB12-ND-CORE-DC70-20120310

Nightshift

- FCM was placed from ~1+45 to 0+0+90
 - Material looked of good quality for compaction and saturation.
 - Approximately 15 loads were placed on nightshift
 - The above area was cleared of snow through the use the skid steer, excavators and labours (hand brooming, raking and shovelling).
 - The upstream slope continues to be sloped to 2.5H:1V grade as construction progresses byu overbuilding the slope, compacting the slope then cutting the slope back the outside surface is then raked and smoothed under the guidance of Nuna survey.
- The horizontal multibead thermistor string at station 1+30. The elevations of the dam core at the three remaining multibead locations are outlined below.

Station	Current Top Elevation (m)	Install Elevation (m)	Comment
1+30	33.50	33.50	Multibead cable INSTALLED today at this location
0+85	32.95	33.30	No change. Next lift to be graded to final thermistor
0+60	33.50	33.50	Graded to multibead elevation. No change in elevation today. Top beads of the thermistor string to be installed when next lift placed over area.
0+40	33.50	33.50	Graded to multibead elevation. No change in elevation today

- Single bead thermistors were monitored. Progressing form north to south the following freezeback was noted. Around 20:30 the area placed on nightshift on March 8th was noted to have frozen back (area along the far north end) and around 03:00 freezeback was noted for the area placed on March 9th dayshift. At the end of shift the area placed on March 9th night shift was around -1C.
- One drilled core was taken around station 0+95 on the downstream (HB12-ND-CORE-DC72-20120310). Issues with the shop vac were experienced. Snow and spill pads were utilized to clean up around the drilled core location. The shop vac will be attempted to be fixed in the coming days.

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
SB16	1+60	CL	SB12	0+65	U/S	SB1	1+50	CL
SB11	1+00	U/S	SB15	0+55	CL	SB13	1+10	CL

- 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-PSD68-20120310	HB12-ND-CORE-PSD68-20120310	

MOISTURE CONTENT SUMMARY

Collected	Testing In Progress	Completed
HB12-FCP-CORE-MC302-20120310		HB12-FCP-CORE-MC302-20120310
HB12-ND-CORE-MC303-20120310		HB12-ND-CORE-MC303-20120310
HB12-ND-CORE-MC304-20120310		HB12-ND-CORE-MC304-20120310
HB12-FCP-CORE-MC305-20120310		HB12-FCP-CORE-MC305-20120310
HB12-ND-CORE-MC306-20120310		HB12-ND-CORE-MC306-20120310
HB12-ND-CORE-MC307-20120310		HB12-ND-CORE-MC307-20120310
HB12-ND-CORE-MC308-20120310		HB12-ND-CORE-MC308-20120310
HB12-FCP-CORE-MC309-20120310		HB12-FCP-CORE-MC309-20120310
- HB12ND-CORE-MC310-20120310		HB12-ND-CORE-MC310-20120310
HB12-ND-CORE-MC311-20120310		HB12-ND-CORE-MC311-20120310
HB12-FCP-CORE-MC312-20120310		HB12-FCP-CORE-MC312-20120310
HB12-FCP-CORE-MC313-20120310		HB12-FCP-CORE-MC313-20120310
HB12-ND-CORE-MC314-20120310		HB12-ND-CORE-MC314-20120310
HB12-ND-CORE-MC315-20120310		HB12-ND-CORE-MC315-20120310

DRILLED CORE

Collected	Testing In Progress	Completed
HB12-ND-CORE-DC70-20120310	HB12-ND-CORE-DC70-20120310	
HB12-ND-CORE-DC71-20120310	HB12-ND-CORE-DC71-20120310	
HB12-ND-CORE-DC72-20120310	HB12-ND-CORE-DC72-20120310	

DORIS NORTH DIVERSION BERM:

- Nuna and SRK took survey of current status at the berm.
- Layfield welding HDPE between sta 3+80 and 4+45.
- Snow clearing progressed to Sta 2+50
- Current Status:
 - Trench excavation Sta 0+015 to 0+150; St.0+245 to 0+400
 - ROQ placement Sta 0+015 to 0+150; Sta 0+245 to 0+400
 - Key trench crush placement to underside of bentonite Sta 0+370 to 0+445
 - Bentonite placement (100 mm along base Sta 0+380 to 0+445
 - Geotextile placement Sta 0+335 to 0+445
 - 100mm Underliner crush placement Sta 0+335 to 0+445
 - Underliner Geotextile Sta 0+380 to 0+580
 - Overliner geotextile Sta 0+445 to 0+580
 - HDPE liner 0+380 to 0+580
 - Bentonite placement (100mm overliner) Sta 0+580 to 0+675
 - 300 mm overliner crush placement Sta 0+580 to 0+675

- Current status includes items that were not signed off Feb 27/12

DORIS SUMPS:

- Nuna enquired whether they could start fabricating the second lid.
- SRK saw no reason why fabrication could not proceed.
- The overburden saved being saved for backfill around the sump is in bags, thawing in the batch plant.

QUARRY 2:

- Two drills working.
- On nightshift on of the excavators continues to sort ROQ and clean off blast material from around the ¾" stockpile.

GENERAL:

- Overall a productive day.
- Pipes / culverts have been moved to the Doris Bridge and near sumps 1 and 2. Installation at the Doris Bridge tonight.
- The snow pile on Tails Lake continues to be pushed further out into the lake with a Dozer (day and nightshift). This is being done to get the snow pile to a deeper area of the lake and away from the expected lake intake. During the day shift a dozer was pushing snow out.
- A dozer started to rip out fill on the SSE side of the Doris Creek Bridge. This is being compelled by Nuna and JDS and is being completed as w
- Windchills were in the -46C range due to moderate winds. Today was considered a very cold day.
- Daylight savings resulted around 2am on nightshift.

PHOTOS:



Photo 1: Progress photo from photo point 2, facing NNW



Photo 2: Progress photo from point 3 , facing NNE



Photo 3: Snow dump at Tail Lake. Nuna has started spreading the snow.



Photo 4: Coring previously placed FCM



Photo 5: Preparing surfaces with compressed air.



Photo 6: Survey control; workers raking slope. Steam on a very cold day



Photo 7: Placing FCM in the SE corner.



Photo 8: Preparing for density tests



Photo 9: Congested work space.



Photo 10: Placing ROQ on downstream side.



Photo 11: 10 ton packer working on sideslopes



Photo 12: HDPE . Layfield in the background welding seams.



Photo 13: Snow clearing ~ Sta 350



Photo 14: Surveying. Setting grades for bentonite



Photo 15: ~SSW view of start of nightshift FCM placement.



Photo 16: Multi bead thermistor strings installed at station 1+30 at elevation 33.5m today.



Photo 17: 330 Excavator placing ROA and shaping 4H:1V downstream slope.



Photo 18: HB12-ND-CORE-DC70-20120310 drilled on dayshift.



Photo 19: HB12-ND-CORE-DC71-20120310 drilled on dayshift around the time of freeze back in area.



Photo 20: HB12-ND-CORE-DC72-20120310 drilled on Nightshift around 0+90 CL, immediately after freeze back in this area.

FIGURES:

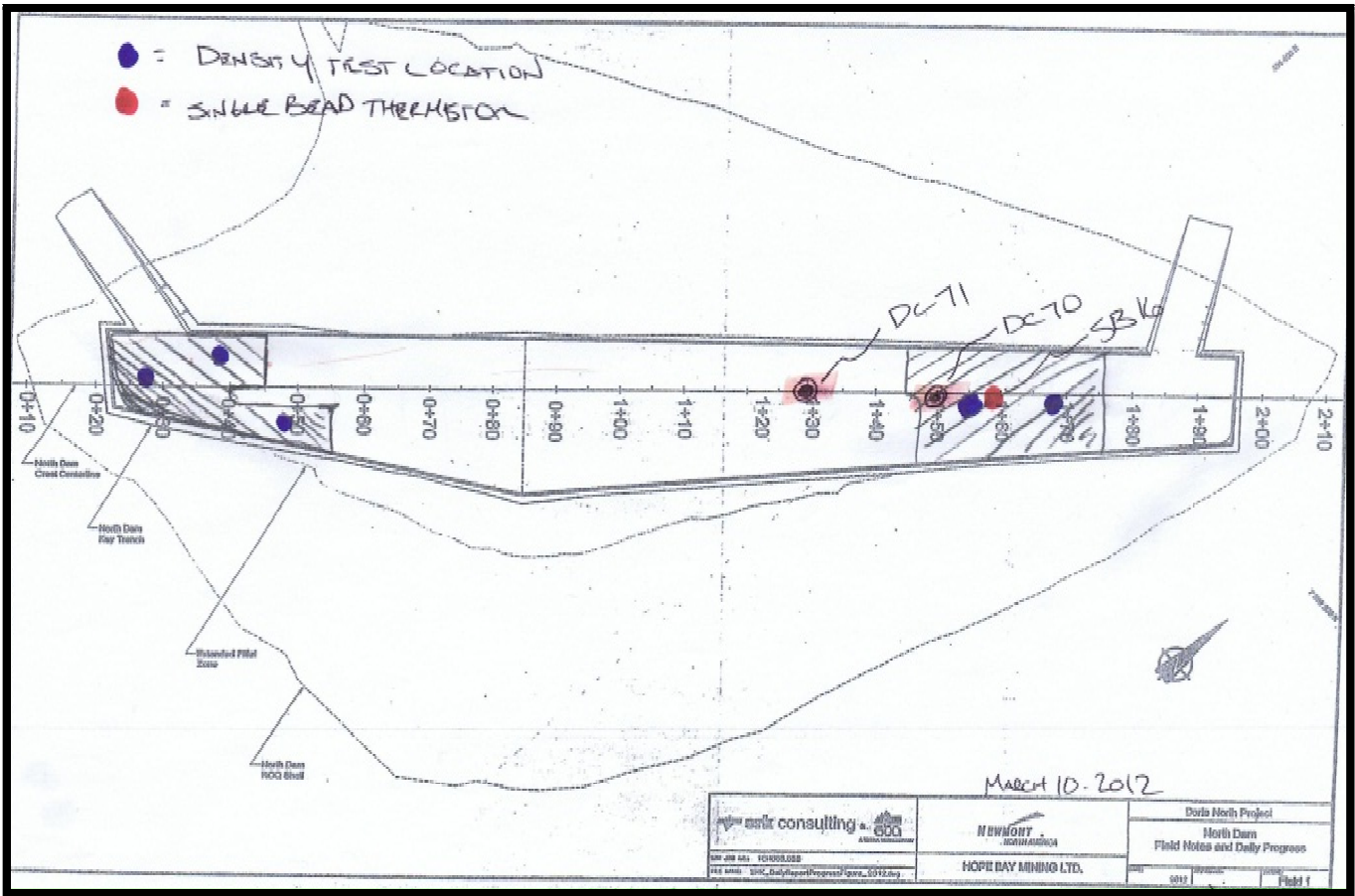


Figure 1 – North Dam Progress – Dayshift

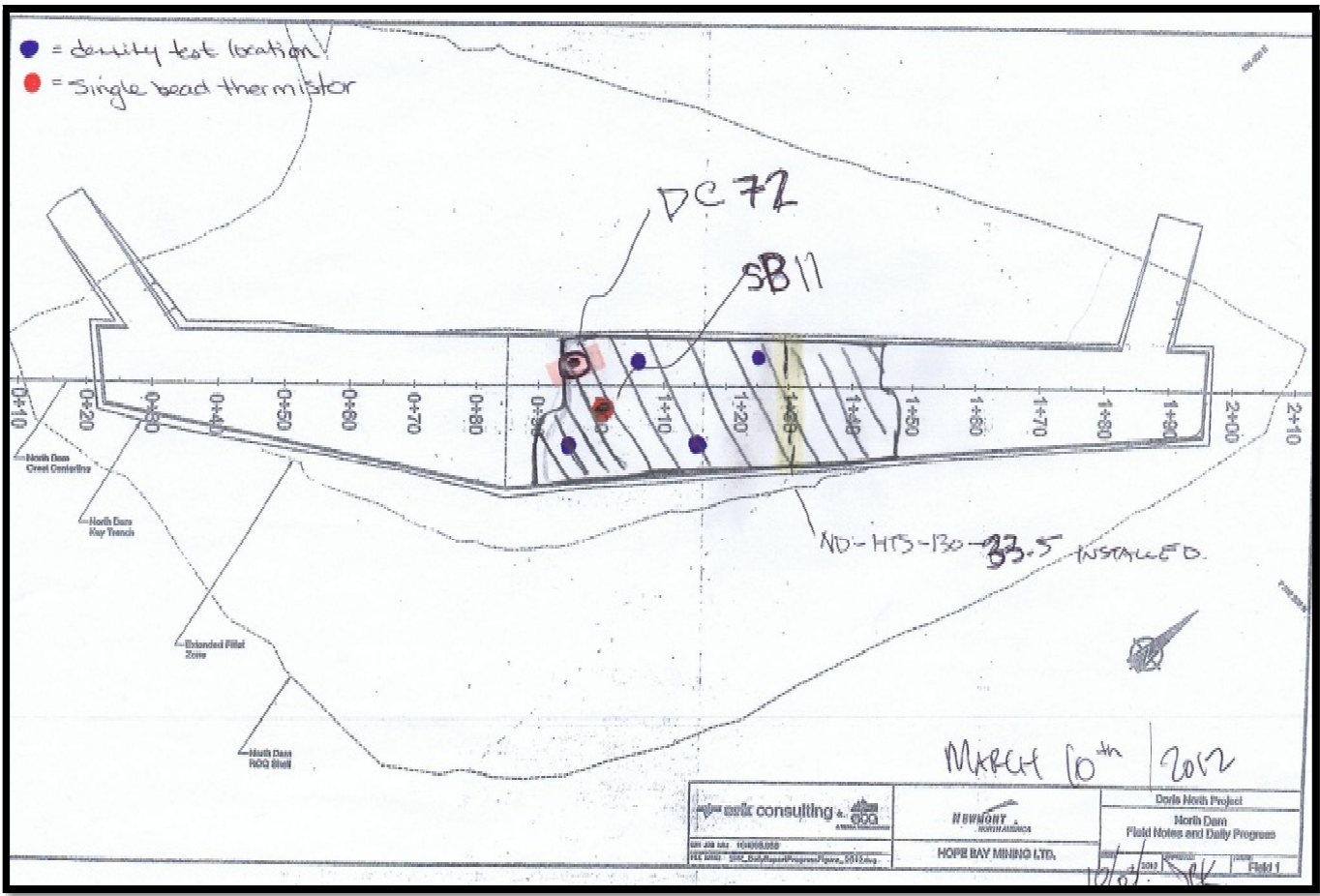


Figure 2 – North Dam Progress – Nightshift