

DAILY REPORT #23 – DORIS NORTH INFRASTRUCTURE/ NORTH DAM

Prepared by:	John Kurylo/ Jeff Orr / Megan Miller	Date:	2012.01.28
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 No No
	JDS	Lloyd Jackson – Mechanical Superintendent Sven Archimowtiz – Electrical 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 Yes
Engineering Design Consultants	SRK Consulting (Canada) Inc.	John Kurylo – Site Engineer Megan Miller – Site Engineer Lawrence Borowski – Site Engineer Murry McGregor – Site Engineer Iozsef Miskolczi – Site Engineer	Yes Yes No No No
	EBA Engineering Consultants Ltd.	Jeff Orr – Project Manager Jennifer Stirling – Geologist Thomas Bradshaw – Junior Engineer Ernest Palczewki – Geologist	Yes Yes No No
Earthworks Contractor	Nuna Logistics	Ben Vostermans - Foreman Bradford Watkin – QC Manager Doug Haverland – Area Superintendent Gary Sodhi – Field Engineer Georges Cornelissen – Survey Manager Jeff Roberts - Surveyor Jim Cardinal – 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 Peters – Foreman Ron MacMaster – Surveyor Simon Chipper – Civil Supervisor	Yes No Yes Yes Yes No No No No Yes Yes Yes Yes No No No No No 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: -32.7/-54	12 PM:-32.2/-49	6 PM: -34.3/-34.3	12 AM:-37.1/-37.1
Precipitation (mm)	Rain: None		Snow: None	
Conditions	Day Shift: Cold, light to moderate wind.		Night Shift: Light wind, clear sky.	
Daily norms (°C)	24 hour high: -32.2		24 hour low: -37.2	

HEALTH, SAFETY AND ENVIRONMENT

- Megan Miller attended the nightly Nuna construction meeting.

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

- The daily meeting was attended by ADCO, Nuna [Doug Haverland, Kyle Kuntz], Newmont Safety [Don Ethelston], ESR [Katsky Venter], JDS [Doug Fielding, Mark Valeriote, Kevin Whieldon, Sven Archimowtiz, Calvin Goldschmidt], SRK [John Kurylo].

Topic	Status
Health and Safety and Environment	<ul style="list-style-type: none"> Safety had no issues to report. ESR informed JDS and Nuna about fishery closure dates. In water work needs to be completed before July 15th. The origin of the small antifreeze/ glycol spill noted in front of camp is expected to be from the mining telehandler. This piece of equipment will be inspected and any leaks fixed before its next use. ESR reminded everyone that antifreeze spills 1L or greater must be reported.
North Dam	<ul style="list-style-type: none"> SRK provided a summary/ overview of construction activities at the North Dam for 2012/ 01/ 27. <ul style="list-style-type: none"> Saturated FCM was placed yesterday from ~ 0+70 to 1+60. Nightshift ran out of broken up/ unfrozen material, at the FCP Pad, around 5am. Nuna outlined that the loader was down around 4am last night. Further a few stops were made at the FCP on nightshift to address various small issues (belts etc..) Additional cleaning at the key trench was planned to result today. The Nuna electricians visited the North Dam to fix the broken thermistor cable around 0+60 in the key trench however, due to the cold conditions the cable was found to be too brittle. The thermistor cable was noted to be breaking when the electricians attempted to cut the cable. Nuna electricians to warm cables/ area and splice together this cable in the coming days.
Water Management Structures	<ul style="list-style-type: none"> Drilling at the DN Diversion berm is scheduled to continue. WestArc has been reaching/ approaching the side of the current bedrock outcrop they are drilling. It appears like there is a sharp transition from bedrock to the overburden permafrost. Westarc will be drilling/ probing test holes along edge of bedrock to determine if the extent of the bedrock outcrop has been reached. <ul style="list-style-type: none"> JDS requested a figure showing the chainages on the DN Diversion berm alignment where drilling has/ will take place. No bedrock blasting along the DN Diversion Berm is expected until February 2nd (at the earliest).
General	<ul style="list-style-type: none"> Maritz Rykaart (SRK) and Ernest Palczewski (EBA) are scheduled to come to site on Monday.

	<ul style="list-style-type: none"> Nuna is down ~ 12 personnel due to delayed flights and recent resignations. The northern flight is scheduled to come into site this morning. ADCO is working on the Doris North Tank Farm (piping etc...). JDS requested that documentation be created for the current piping procedures being worked on. Nuna electricians to work with ADCO at the DN Tank Farm. Site is making out well with fuel conservation for the main generators. JDS is tracking this.
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SURVEY:

Required	<ul style="list-style-type: none"> Pick-up of 5/8" material removal from 2012/01/25
Data Received	<ul style="list-style-type: none"> Table of cumulative FCM volume placed Jan 22 to 27th Survey data for placed frozen core 2012/01/27
Outstanding	<ul style="list-style-type: none">
Upcoming	<ul style="list-style-type: none"> Survey of frozen core surface after cleaning/ scraping activities at N. Dam (on going). Survey of FCM after placement (on going).

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

- SRK held a discussion with JDS about increasing the belt speeds at the FCP.
 - SRK will work with Nuna operators to try and optimize belt speeds, while still obtaining required FCM temperatures (at this time the FCM is expected to be required to be around 30+°C).
 - Excess water from the camp and other heated water sources (such as from a water truck with a submersible heater) was used on Jan 27th. The heated water had a notable effect (on the temperature of the FCM exiting the FCP. This was based on the observation that temperatures were higher on Jan 27th than on Jan 26th. All the plant FCP settings/ factors were run at the same values on both of the aforementioned days.
 - JDS would like belt speeds adjusted when the ambient air temperatures are higher, or when the temperature in the plant starts to increase (to values greater than 30°C) further into production.
- Minor maintenance and cleaning resulted around the FCP in the morning. In the afternoon the FCP operators were moved over to the Quarry #2 crusher.
 - The FCP operators worked on recommissioning/ starting up the Quarry #2 crusher for the rest of dayshift.
- SRK held a discussion with JDS and later with Nuna about the planned crushing schedule. At this time it is expected that, once the crusher is up and running, that FCM placement will typically result on dayshift and crushing will result on nightshift.
- The 325 excavator, a D8 dozer and a loader were used at the FCM stockpile to sort and break down unsaturated frozen lumps from the FCM stockpile (on the FCP Pad).
 - Suitable feed material was stockpiled in preparation for placement on nightshift.
 - Large lumps of FCM were hauled to the crusher. These large lumps are planned to be re-crushed.

Nightshift

- The plant started up at ~9 pm with no problems.
- At ~11 pm the plant had to shut down as the belt under the hopper had broken.
 - The hopper was full when the belt broke; therefore the CAT 308 excavator and hand shovels were required to empty the hopper before the belt could be repaired.
 - The belt was still being repaired at the end of the shift.
- Large lumps of frozen FCM were hauled to the crusher where they will be re-crushed.

Dam Shell

- Multi-bead thermistor readings were taken for all thermistors located on the upstream and downstream. All thermistor strings (excluding cable ND-VTS-130-DS, as it is buried deep in drifted snow) were found to be functional.

Key Trench**Dayshift**

- Minor cleaning resulted in the key trench 0+60, 0+40 to 0+30 and 1+60 to 1+90.
 - Additional cleaning was required before night shift placement. Some frozen slabs of material (from vehicle wheels and the packer) were required to be removed from section ~ 1+60 to 1+90 at the end of dayshift.
- No FCM placement resulted on dayshift.
- No freezback of the material placed on Jan 27th day or nightshift was achieved on today's dayshift.
- The table below present the cumulative as-built volume (as provided by Nuna Survey) for FCM placed from January 22nd to January 27th.

SUMMARY OF CORE MATERIAL PLACED (AS-BUILT)

Date	FCM Placed/ Incremental Volume (m ³)	Cumulative FCM Volume Placed (m ³)
January 27 th	395.8	1473.7
January 25 th	261.4	1078.0
January 24 th	236.8	816.6
January 23 rd	203.0	579.8
January 22 nd		376.8

Nightshift

- The skid steer with the brush attachment was utilized to clean the floor of the key trench from 1+60 north east and 0+75 to 0+40.
 - The section north east of 1+60 was cleaned first and once placement was started the skid steer moved to the other side.
 - A large portion of snow had drifted in near 1+40; not all of this snow could be removed with the skid steer. Cleaning of this area stopped at ~12 am due to a problem with the hose on the broom attachment, and the operator was needed to assist at the plant.
- FCM was placed starting at ~1+60 working north east.
 - Material placement was going well; however it had to be halted at ~11:30 due to the broken belt. Material was placed until approximately sta. 1+70.
 - It was predicted that repair of the belt could take several hours or more, therefore a single bead thermistor (SB# 41) was installed in this lift. The plant did not start up again by the end of nightshift.
- Freezeback of the material placed 2012/01/27 nightshift was achieved at ~9 pm. The material placed 2012/01/27 dayshift did not achieve freezeback by the end of nightshift.
- Today's FCM placement progress is outlined in Figure 1.

Field Geotechnical Testing, Laboratory and Sampling

- In SRK held office discussions with JDS about recent laboratory testing (results submitted by EBA on Jan 27th). JDS will be informed immediately if any notable areas or items of concern are observed during material sampling and testing.
- Single bead #57 and #58 were monitored today. Single bead #41 was installed.

SINGLE BEAD THERMISTOR STATUS

Installed Today			Active			Destroyed / Abandoned		
ID	Station	US/DS/Center	ID	Station	US/DS/Center	ID	Station	US/DS/Center
SB41	1+65	DS	SB57	1+10	Center			
			SB58	1+40	Center			

- A summary of the material testing progress for 2012/01/28 is presented in the tables below.

PARTICLE SIZE DISTRIBUTION SUMMARY

Collected	Processed	Completed
		HB12-ND-CORE-PSD10-QA-20120127

MOISTURE CONTENT SUMMARY

Collected	Processed	Completed
HB12-FCP-CORE-MC27-QA-20120128		HB12-FCP-CORE-MC22-QA-20120127 HB12-FCP-CORE-MC23-QA-20120127 HB12-FCP-CORE-MC24-QA-20120127 HB12-FCP-CORE-MC25-QA-20120127 HB12-FCP-CORE-MC26-QA-20120127

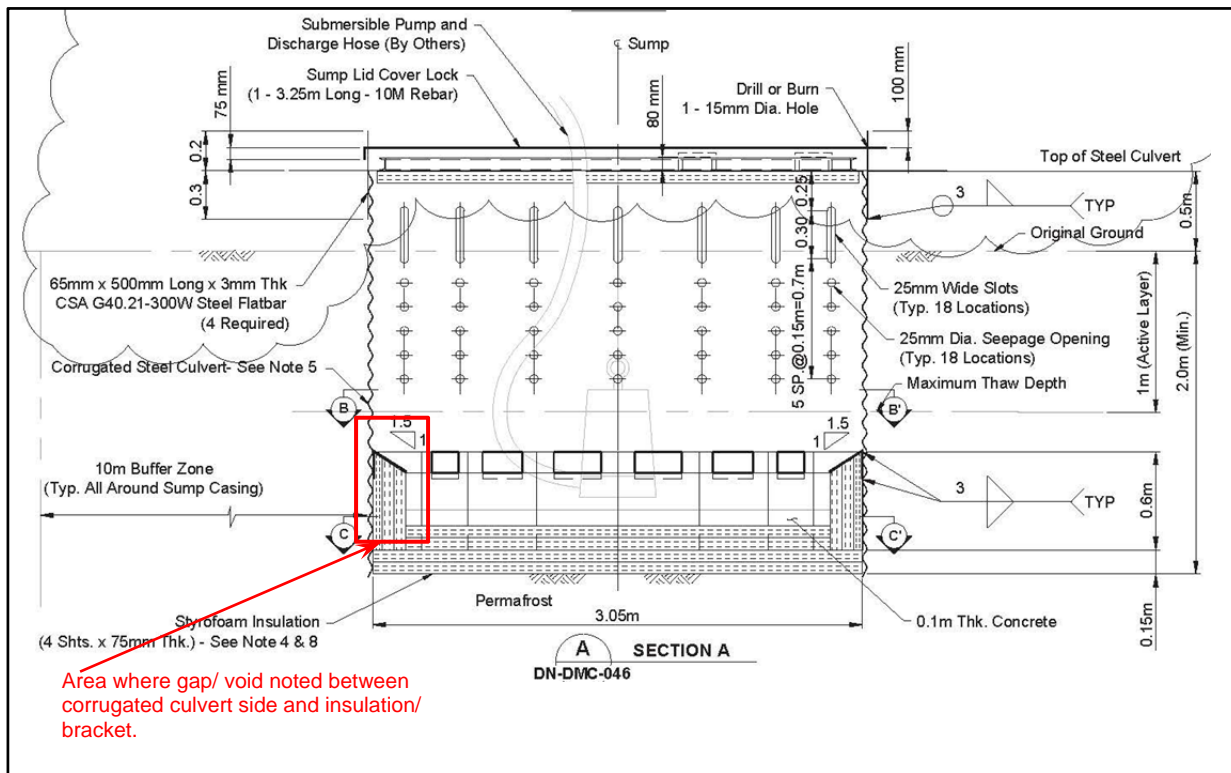
COMPACTION TESTING SUMMARY

Number of Tests	Material	Tested By	Shift	Notes
5	Core	JS	Night	All Passed

- Compaction and saturation results from the nuclear densometer were acceptable.
- EBA/ SRK acquired a concrete air/ density meter from the batch plant.
- An additional 30 single beads were picked up from the BBE warehouse today.
- A larger generator for coring was sourced out today. A superior generator was located in the SRK seacan (located behind the warehouse).

DORIS NORTH CAMP:

- Westarc continues drilling at the main bedrock outcrop noted towards the east central area of the DN Diversion Berm.
- The 330 excavator, spotted by Nuna survey, started to remove snow around the location of sump 1, over the location of the buried cables.
- Til Cho is currently installing/ fabricating the insulation for the bottom of the Doris North camp sumps (for Sump 1 and 2) in the batch plant. SRK and Nuna held discussions about the insulation installation in the bottom of the sumps.
 - Nuna pointed out to SRK that, as observed by Til Cho, there is an area between the side of the culvert and the vertical insulation and insulation brackets where a gap is apparent.
 - This gap is being created as the circular corrugated steel contact and the flat bracket steel and insulation do not perfectly meet.
 - Seepage into the sump then into this void and under the insulation was discussed. To limit the potential for seepage travelling around the sides of the culvert and under the insulation it was decided that Til Cho would put some additional pieces of insulation around the top of the insulation brackets to seal off/ close-up this void.
 - See figure/ notes below for area in question.
 - See photos 4 and 5.



GENERAL:

- The northern crew change flight which was scheduled for Thursday but delayed due to weather was able to get to site today.

PHOTOS:



Photo 1: ~NE view down keytrench. Note the area to the East (towards the FCP) of the closest set of delineations is the area where FCM was placed on Jan 27th.



Photo 2: ~NEE close up view of area/ transition from day and night shift FCM placement yesterday (Jan 27th).



Photo 3: ~ WSW view down key trench from ~ station 1+40. Looking over FCM placed on Jan 27th.

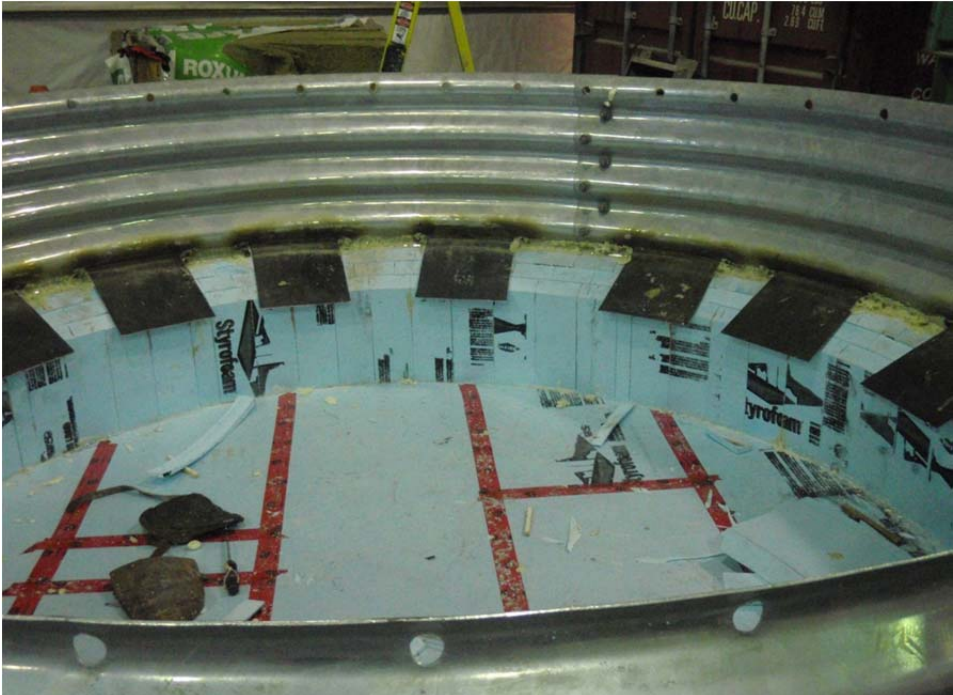
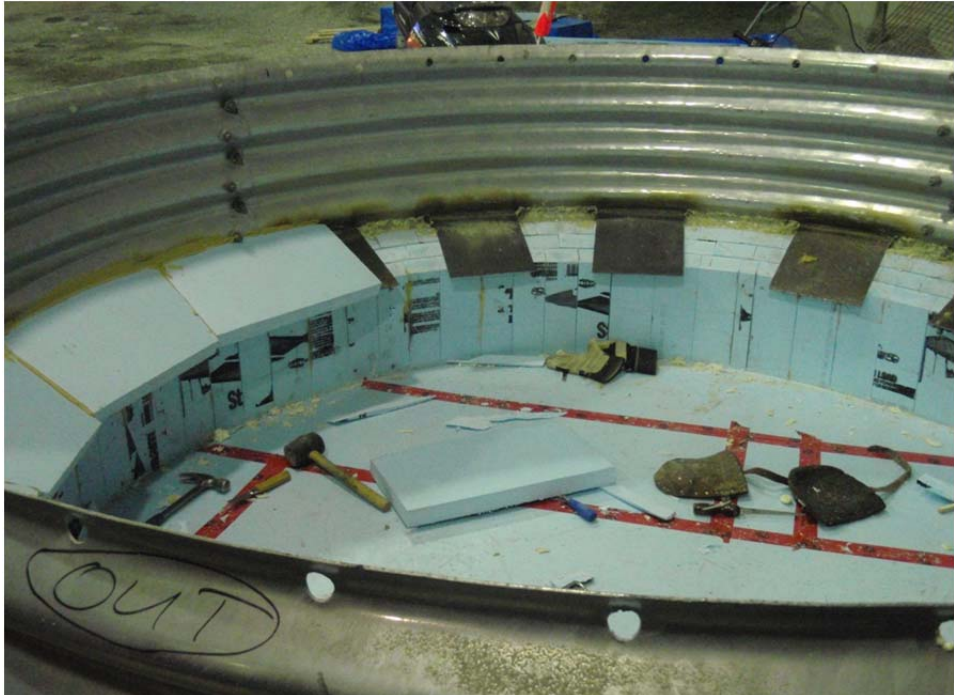


Photo 4 & 5: Close up view of styrofoam insulation and vertical retailing brackets being installed/ fabricated on the base of the sumps (for Sumps 1 and 2). Note that the left photo shows additional insulation that is being installed to ensure that water does not as readily seep behind the insulation and the corrugated steel culvert side.



Photo 6: ~ESE view of the loader, D8 dozer and 345 excavator working on breaking up the unsaturated FCM stockpile at the FCP Pad.



Photo 7: Progress photo of North Dam from photo point 1. ~SSE view.



Photo 8: Progress photo of North Dam from photo point 2. ~WNW view.



Photo 9: Progress photo of North Dam from photo point 3. ~ENE view.



Photo 10: ~ NNE view of the FCM stockpile at the FCP Pad.



Photo 11: The belt underneath the hopper on the Frozen Core Plant broke during the nightshift.

Photo 12 (Right): Crew cutting a belt to size to repair the belt under the hopper in the frozen core plant.



Photo 13: Lots of steam was produced during material placement.



Photo 14: Compaction testing of the material placed on nightshift.



Photo 15: Material placed on nightshift, looking south west along trench.

FIGURES:

Figure 1 – North Dam Progress – Jan 28th NIGHTSHIFT

