

DAILY REPORT #80 – DORIS NORTH INFRASTRUCTURE/ NORTH DAM

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| Prepared by: | John Kurylo Megan Miller | Date: | 2012.03.25 |
| 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 Yes No Yes Yes 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 Calvin Goldschmidt – Construction Coordinator | No Yes No 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 | Yes Yes No No No No |
| | 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 | Doug Haverland – Area Superintendent Gary Sodhi – Field Engineer Georges Cornelissen – Survey Manager Jeff Roberts - Surveyor Jim Cardinal – Foreman Jordan Gunter – Foreman (Dayshift) 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 Ron MacMaster – Surveyor Simon Chipper – Civil Supervisor | No No Yes No Yes Yes Yes No No Yes No Yes Yes Yes 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:-21.2/-24 | 12PM: -19.2/-23 | 6 PM: -20.8/-24 | 12 AM: -25.1/-28 |
| Precipitation (mm) | Rain: None | | Snow: Trace | |
| Conditions | Day Shift: Overcast with trace snow in AM; bright and sunny in PM. | | Night Shift: Cold, light to moderate wind. | |
| Daily norms (°C) | 24 hour high: -25.3 | | 24 hour low: -16.4 | |

HEALTH, SAFETY AND ENVIRONMENT

- Megan Miller and Ernest Palczewski attended the dayshift Nuna toolbox meeting.
- John Kurylo and Thomas Bradshaw attended the nightly toolbox meeting.

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

- The daily meeting was attended by Nuna [Nick Stoneberger, Kevin Oakes, Trevor Sorken, Lucas Evans], Newmont Safety [Don Ethelston], ESR [Katsky Venter], JDS [Mark Valeriotte, Doug Fielding, Calvin Goldschmidt], SRK [John Kurylo, Megan Miller]

| Topic | Status |
|-----------------------------------|---|
| Health and Safety and Environment | <ul style="list-style-type: none"> • No safety issues. • ESR had no issues |
| North Dam | <ul style="list-style-type: none"> • Yesterday 9 panels of GCL were placed at the Dam. • Nuna plans on placing one additional panel today. • Transition material was placed yesterday and the section north of 1+60 was to grade. • Cover material was placed on nightshift. A total of 32 loads were placed. |
| Water Management Structures | <ul style="list-style-type: none"> • The work on the berm is progressing well, yesterday the focus was getting everything done in the area of the power cable. • Nuna plans on closing the Primary Road tonight to start the excavation of culvert installation. |
| General | <ul style="list-style-type: none"> • Nuna plans on moving the ESR lab today. • The drillers think they will be completed drilling in Quarry 2 by Monday. • Decommissioning of the explosives plant was discussed. |

SURVEY:

| | |
|----------------------|--|
| Required | <ul style="list-style-type: none"> • To date as-builts of Doris Diversion Berm (ROQ, underliner crush, liner, overliner crush) • Recent multi-bead cable string pickups and crush cover over cables at 0+85, 1+30 and 1+75. Also need bedding and cover for cables at 0+60 and start of cable at 0+60. |
| Data Received | <ul style="list-style-type: none"> • Frozen Core place on March 23rd • Overliner (GCL cover) placed on March 25th • QC Cross-Section of the North Dam progress • Transition material placement from March 23rd and 24th |
| Outstanding | <ul style="list-style-type: none"> • None |
| Upcoming | <ul style="list-style-type: none"> • Diversion Berm material as placed • Dam material (ongoing) |

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

- Readings were taken of all multi-bead thermistors during the dayshift.
 - Thermistor String ND-HTS-085-33.5 remains non-functional.

Frozen Core Plant*Dayshift*

- No activity.
- No operator available.

Nightshift

- The FCP started producing Overliner (GCL cover) material around 21:00.
 - Material temperatures were around +27 to +28°C.
 - The water pump dial at the FCP was set to 40.9.
 - Around 22:30 the water was upped to 41.6 on the pump dial.
 - Temperatures were noted to be around +26°C.
 - The plant was stopped around 23:30.
- Today the plant ran for ~ 2.5 hours and sent / produced 10 loads of Overliner to the dam.

Dam Shell*Dayshift*

- Transition material was placed over the GCL overliner material working south west from the end of placement yesterday.
 - A second lift was placed over the material from 1+60 to 1+30 and the transition material was placed to 1+10.
 - The packer had some difficulty packing the material on the slope; however everything got packed.

Nightshift

- Transition material was placed on top of the GCL Cover Material from Station 1+10 to 1+30.
- In the field the Transition material from ~ 1+60 to 1+40 was checked. Overall the Transition was found to be at / close to grade in most areas excluding the downstream crest.
 - An area around 1+50 to 1+40 on the crest was noted to be slightly under grade. Due to the current gradations of the ROQ being similar to the Transition material (i.e. ROQ of good quality) small underbuilds in the Transition (<0.1m) were allowed in areas, if discontinuous or only in select areas.
 - Nuna survey was requested by the foreman to stake out the downstream Transition limits / toe.
 - Upon a quick review of the Transition survey data around 1+60 to 1+40 it was requested that additional coverage and a better point resolution be gained in certain areas of the slope and near the crest. Additional points were picked up by survey over this area.
- The 10 ton vibratory compactor compacted all exposed transition material at the dam.
- Later in the shift ROQ was placed by a D8 around 1+95 and 1+75. ROQ was noted to be of good quality. The lift of ROQ was noted to be near the maximum allowable lift thickness of 1.85m. No compaction on this material was observed on nightshift.

Key Trench/ Central Core*Dayshift*

- A single panel of GCL was placed at ~station 1+80 to 1+75.
- Labourers and the CAT 330 excavator cleaned snow and ice from along the lower GCL south of station 0+75.0+75. The air compressor was used to
 - There is a lot of damage to the lower liner in this area. At least a few areas will require heating and FCM excavation to allow for patching, as the damage is right at the toe of the

FCM.

- Heating and hoarding were placed on one area of liner covered in ice which required patching around 1+75.
- The FCM placed in the small wedge was not frozen back by the end of dayshift.

Nightshift

- The lift of FCM at the southwest upstream corner, placed on nightshift March 23, has still not frozen back. Slow freezeback is attributed to the slope being subject to direct sunlight, moderate temperatures, low windchill, and large lift thickness.
- Trace amounts of snow (1 mm or less) were noted over the GCL liner. Due to the small volume this material was left.
- GCL was covered with a ¾" minus and 5 mm minus blend between Stations 0+75 and 0+92 during nightshift. A total of 10 truckloads were delivered from the FCP while ¼ load was sent to rejects.
- Minor work was done hording and heating some ripped GCL on the south end around station 0+65. Loose material was shoveled out by hand in area then hording and heating was reapplied.
- At the start of shift 2 trucks were used to haul Overliner material from the plant while 2 truck hauled Overliner mix from Quarry #2. Later in the shift 4 truck were used to haul ROQ to the dam. On the back haul some of the reject liner, snow and oversized rocks were hauled from the North Dam area.
- SRK completed a field trial to evaluate the performance of the passive thermosyphons installed in the North Dam.
 - The thermosyphon performance was determined by measuring the difference between the ambient air temperature, close to each group of thermosyphons, at the abutments, and the surface temperature of the evaporator pipes as they emerge from the engineered fill of the dam.
 - Single bead strings were used to measure temperatures.
 - The single beads were covered with reflective bubble insulation and secured in-place with bungee cords, see Photo 14.
 - Temperatures / measurement for all south and north thermosyphons (6 S and 6 N) were completed.
 - Overall the thermosyphons were noted to be functional.

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 |
| | | | SB11 | 0+54 | 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-FCP-COVER-PSD77-QA-20120324 |

MOISTURE CONTENT SUMMARY

| Collected | Testing In Progress | Completed |
|-------------------------------|-------------------------------|-----------|
| HB12-FCP-COVER-MC397-20120325 | HB12-FCP-COVER-MC397-20120325 | |
| HB12-ND-COVER-MC398-20120325 | HB12-ND-COVER-MC398-20120325 | |
| HB12-FCP-COVER-MC399-20120325 | HB12-FCP-COVER-MC399-20120325 | |
| HB12-ND-COVER-MC400-20120325 | HB12-ND-COVER-MC400-20120325 | |

DRILLED CORE

| Collected | Testing In Progress | Completed |
|-----------|---------------------|------------|
| | | Up to date |

COMPACTION TESTING SUMMARY

| Number of Tests | Material | Tested By | Shift | Notes |
|-----------------|-----------|-----------|-------|------------------|
| 0 | N/A | EP | Day | No FCM Placed |
| 2 | GCL Cover | TB | Night | Tests Acceptable |

- Compaction values over 90% were achieved.

DORIS NORTH DIVERSION BERM:

- The work at the berm looked good
- The trench excavation from station 100 to 055 was examined, and underliner crush was placed in this area.
- The underliner geotextile and HDPE liner were placed from 160 to 100.
- ROQ was placed up to station 160. The ROQ was of good quality and very fine (for ROQ).
- The CAT 325 excavator was used to remove some snow from around the sewage effluent pipes at the Primary road crossing. Heating and hoarding were then placed over this area.

QUARRY #2:

- One drill continues to drill on both day and night shifts.
- ROQ for use in the diversion berm was loaded from the floor level of the quarry.

GENERAL:

- SRK obtained the necessary supplies to perform the thermosyphon performance testing. Silver bubble wrap style pipe insulation was obtained; batts of insulation were also obtained but found to break when bent.

PHOTOS:



Photo 1: Progress photo of North Dam from photo point 1. Looking south west.



Photo 2: Progress photo of North Dam from photo point 2. Looking north west.



Photo 3: Progress photo of North Dam from photo point 3. Looking north east along the dam.



Photo 4: Progress photo of North Dam. Looking south west along the dam.



Photo 5: Holes in lower GCL near station 0+50. The hole in the foreground is right where the FCM slope meets the GCL.

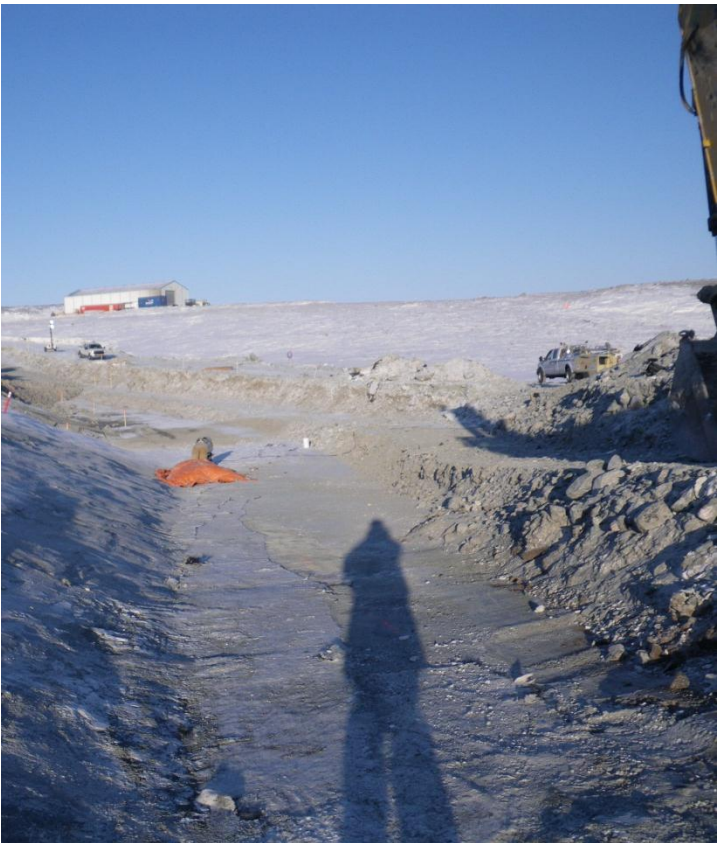


Photo 6: Looking east along the lower GCL. The frost fighter and tarp are located at approximately station 0+70.



Photo 7: Survey picking up crush at base of diversion berm trench.



Photo 8: First lift of ROQ placed in diversion berm. The ROQ is of good quality and very fine.



Photo 9: Transition material being placed on the slope above the liner. Photo looking south west.



Photo 10 (right): ~SWW view towards center of dam. Note excavator spreading Transition material in this picture.



Photo 11: ~NNW view of excavator spreading Transition material placed by dayshift in a ~ 0.4m thick lift.



Photo 12: ~NNE view of excavator spreading Overliner (GCL cover) material. Note the density test in progress in the foreground.

Photo 13: NEE view of the Fuel Transfer station at the DN Tank Farm (Pad R).

Photo 14 (bottom): Insulation wrapped around a single bead secured to the base of an exposed thermosyphon.

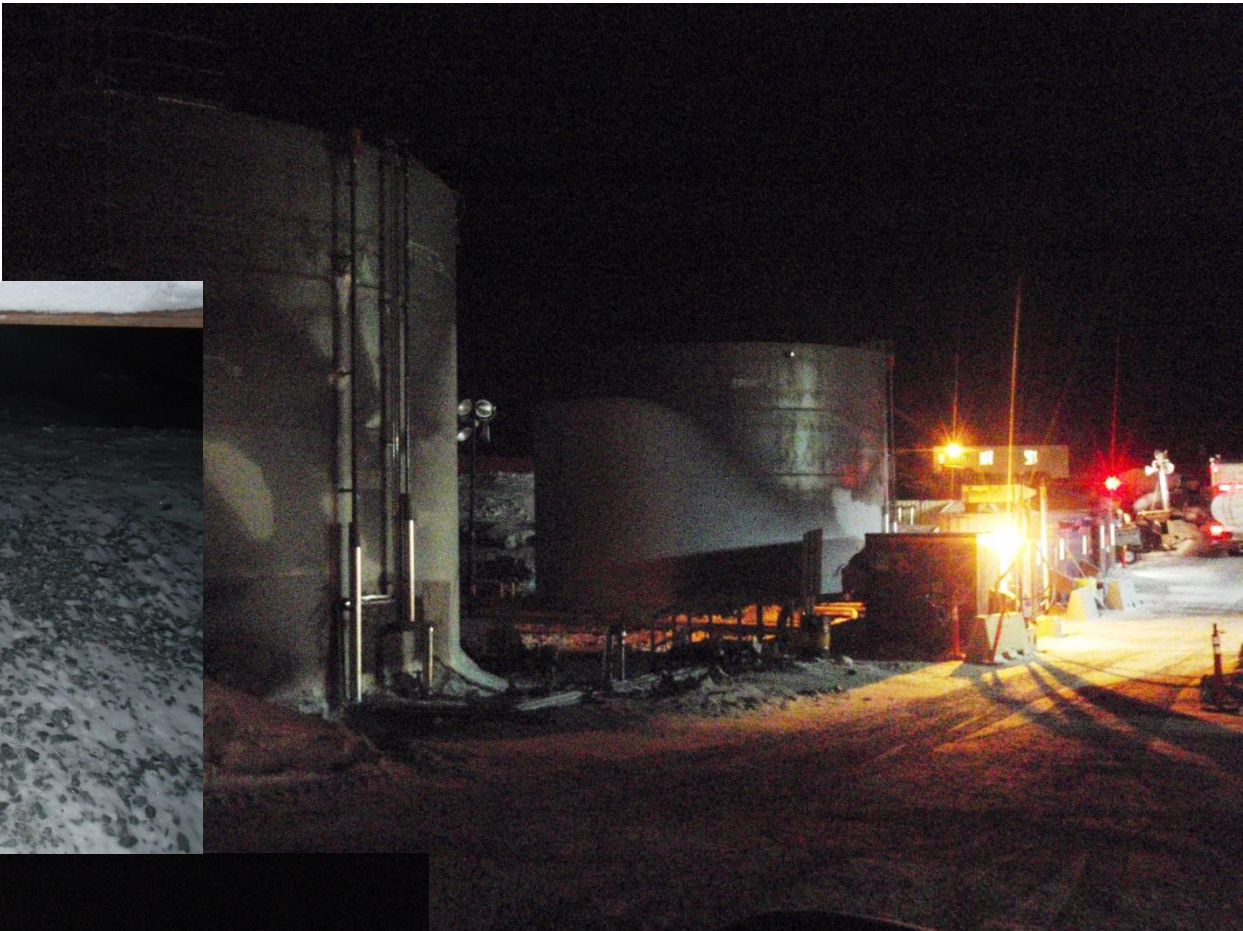


Photo 15 (left): Packer and excavator working on placing and packing Overliner material around 0+75 to 0+80.

Photo 16 (right): D8 spreading ROQ at the North end of the dam (around 1+90).



Photo 17: ~ SW view down the center of the dam. Note that the ROQ is on the left, Transition material is over the central area, the packer is working by the area where Overliner material was placed and beyond the packer to the S is the end of the GCL (around station 0+70).

FIGURES:

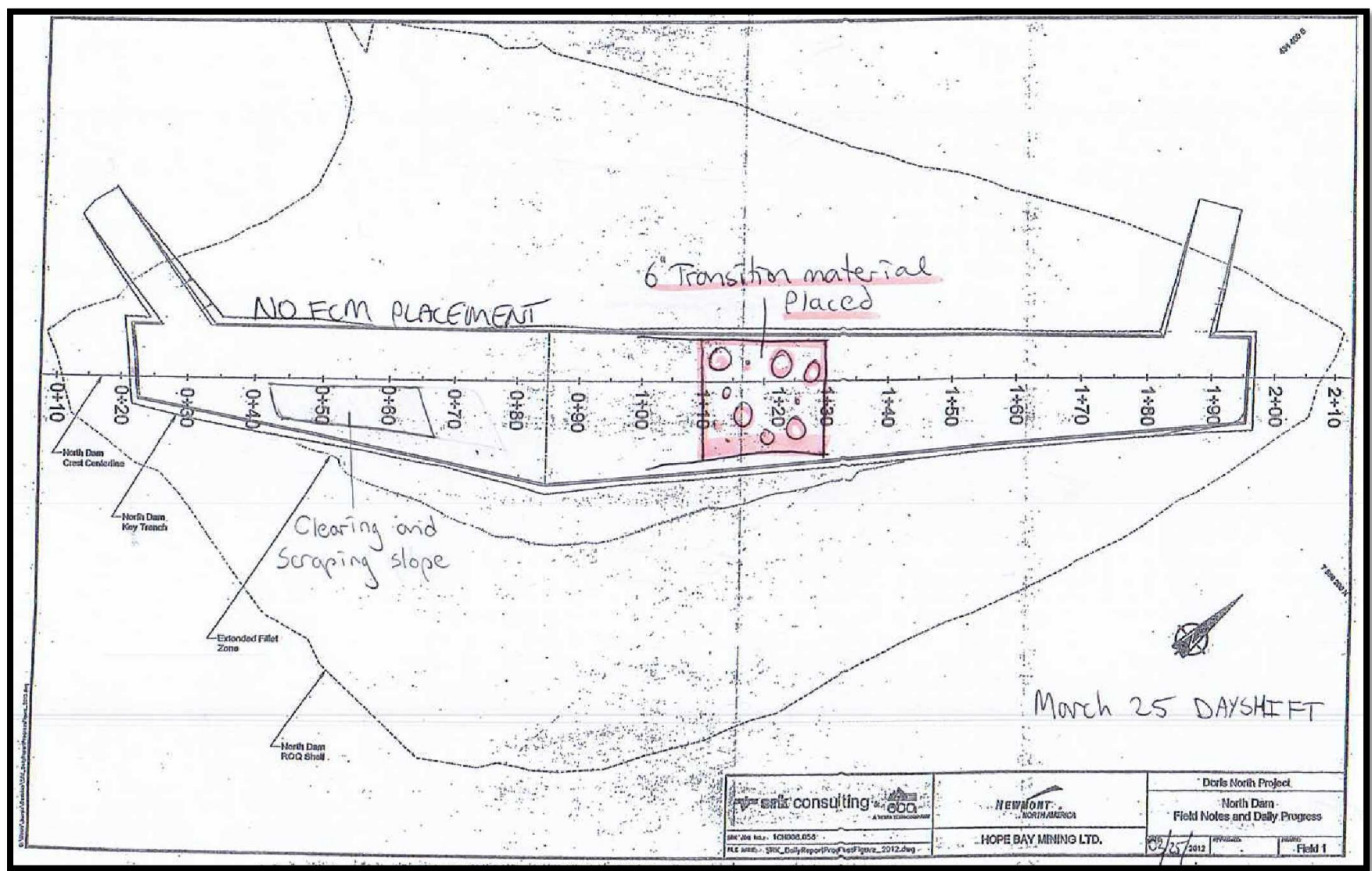


Figure 1: Dayshift North Dam Progress Figure

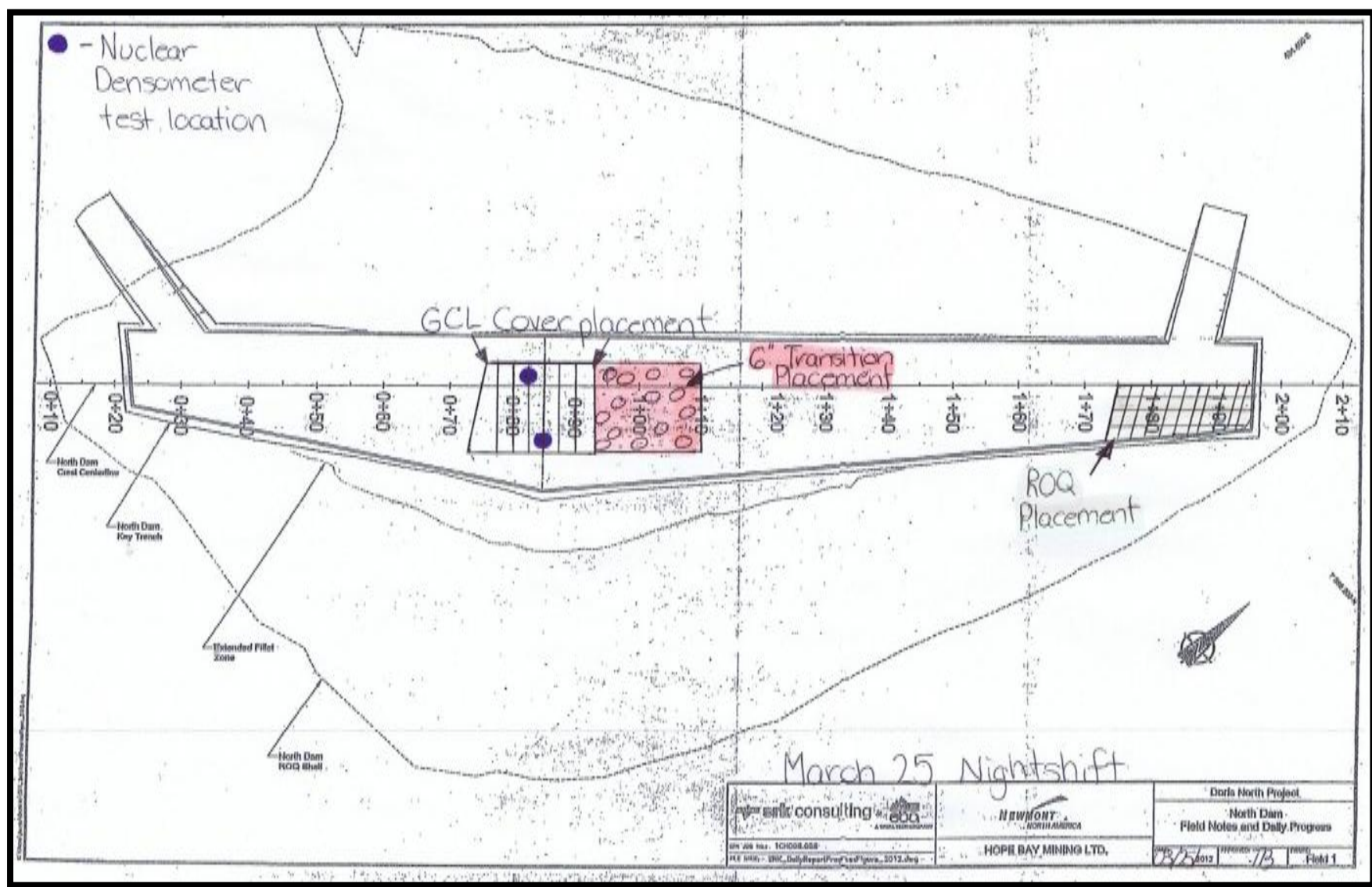


Figure 2: Nightshift North Dam Progress Figure