APPENDIX E
Preliminary Phase IV
Tailings Management Plan

November 29, 2010 EBA File: W14101068.017

Minto Explorations Ltd.
Suite 900 – 999 West Hastings Street,
Vancouver, B.C. V6C 2W2

Attention: Mr. Jaime Delgado

Subject: Revision 1: Preliminary Phase IV Tailings Management Plan
Minto Mine, YT

1.0 INTRODUCTION

Minto Explorations Ltd. (Minto) is proposing to expand its current mining operations at the Minto Mine site, located north of Carmacks, YT. The expansion, referred to as Phase IV development, includes development of the Area 2 and Area 118 open pits and associated underground workings as well as associated waste management and other ancillary activities. In support of the Phase IV development, Minto requested EBA Engineering Consultants Ltd. (EBA) complete a Preliminary Tailings Management Plan (PTMP).

This report presents information from the PTMP, together with associated components that will be required for Phase IV development. Figure TMP-01 shows the Phase IV development and tailings deposition areas. This document does not address open pit development or mined waste management. Included with this report are Figures TMP-01 through -08 and Appendix A and B.

1.1 SUPPORTING DOCUMENTATION

This document should be reviewed in conjunction with the following documents:

- Phase IV Waste Management Plan;
- Phase IV Water Management Plan; and
- Phase IV Closure Plan

2.0 DESIGN BASIS FOR TAILINGS MANAGEMENT

For this PTMP, Minto provided EBA with the following:

- A milling rate of 3,600 tonnes (T)/day.
- A slurry solids content of 50 %.
- The storage volume of the Area 1 Open Pit is 5.54 x10^6 (M) m^3 with a spill elevation of 786 m.

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- The storage volume of the Area 2 Open Pit is 5.80 M m^3 with a spill elevation of 800 m.
- A requirement for 0.7 M m^3 of liquid storage capacity for surge protection during operations.
- No accommodation is provided for storm events at this time beyond the 0.7 M m^3 of surge protection.
- In place dry density of thickened tailings is estimated to be 1.12 T/m^3.
- The water treatment plant will be designed to treat and release a minimum of 4,000 m^3/day.
- Sub-catchments A1-1, A1-2, A1-3, A2, A3-1, A3-2, A4-1 and A4-4 flow into the Area 1 Pit. Sub-catchments can be seen on Figure TMP-02.
- Hydrology assumptions can be found in memo CCL-MC3 prepared by Clearwater Consultants Ltd. submitted to Access Consulting Group March 28, 2008. The memo is included as Appendix A of this document.
- Management of freshet runoff assumes 70 % of snowmelt occurs in April and 30 % of snowmelt occurs in May.
- Some waste rock containing 0.10 – 0.64 % copper, referred to as Grade Bin 0.10 – 0.64 (GB) material, will be disposed of along with the tailings in the Area 1 Open Pit.
- The Area 1 Open Pit Buttress construction schedule allows that the crest of the buttress stays above the elevation of the tailings. See the Waste Management Plan for details on the Area 1 Open Pit Buttress.

The following design parameters were adopted by EBA:

- Mill water will be sourced from the pond in the active tailings disposal pit.
- Run on water from the 2011 freshet will be allowed to pond in the Area 1 Open Pit at the start of thickened tailings placement in April of 2011.
- Run-on water from sub-catchments A1-1, A1-2, A1-3, A3-1, A3-2, A4-1 and A4-4 will be redirected into the Area 2 Open Pit during the summer of 2014. Only sub-catchment A2 will flow into the Area 1 Open Pit after 2014.
- Run-on water that collects in the Area 1 Open Pit after summer 2014 will continue to be treated and released.
- At the time of preparing this document, ground water inflow and outflow data for the Area 1 and Area 2 Open Pits was not available; therefore, water balance calculations are based on a net ground water flow of 0 m^3 into the pits (what flows in equals what flows out).
- Tailings and pond elevations are approximate as several geometry simplifications were made. These simplifications include:
    - The tailings elevations are based on stage-storage data for the Area 1 and Area 2 pits provided by SRK Consulting Engineers and Scientists (SRK);

  - 3-D modelling of tailings deposition was not completed for this analysis; and
  - A tailings slope angle of 4° for beached and sub-aqueous tailings.

- On the basis of EBA's northern mining experience, some ice entrainment is expected. For preliminary calculations, a conservative volume of 10 % has been taken from the available volume to accommodate ice that forms during winter and remains trapped in the tailings.
- Based on field density tests and laboratory moisture-density relationship tests conducted on placed tailings in the Dry Stack Tailings Storage Facility (DSTSF) since 2008, the maximum dry density of the dry stack tailings is 1,789 kg/m^3.
- Dry stack tailings placed in DSTSF have a moisture content of 18 % and are placed at 95 % of maximum dry density (1,700 kg/m^3).

3.0 TAILINGS PRODUCTION SCHEDULE

During Phase IV operations, tailings will be generated during milling of ore from the Area 1, Area 2 and Area 118 ore bodies.

3.1 ORE SOURCES

Ore will be sourced from three locations during Phase IV operations: stockpiles from previous open mining in Area 1, open pit mining in Area 2/118 and underground mining in Area 2/118. Ore source locations as shown on Figures TMP-01 and TMP -02. Table 1 below presents the expected tonnages of ore from each source.

TABLE 1: EXPECTED TONNAGES FOR PHASE IV ORE PRODUCTION

Source	Expected Mass (M T)
Area 1 Stockpiles	3.52
Area 2/118 Open Pit	3.27
Area 2/118 Underground	1.59
Total	**8.38**

3.2 TYPES OF TAILINGS

Minto is proposing to produce two types of tailings during Phase IV operations: dry stack tailings and thickened tailings. Dry stack tailings are currently being generated by Minto and are being stored in the DSTSF. Minto is proposing to switch to thickened tailings in April 2011 once mining activities are completed in the Area 1 Open Pit. Approximate volumes of the types of tailings can be seen in Table 3. A brief discussion of the two tailings types is included below.

3.2.1 Dry Stack Tailings

Dry stack tailings are produced by pressing process water from the processed tailings. Dry stack tailings typically require less storage space than thickened or traditional tailings as there is no supernatant water to store during operations.

Material testing carried out on placed tailings to date shows that Minto's dry stack tailings are typically approximately 50 % sand and 50 % silt, dewatered to a moisture content of approximately 15 %. After dewatering, the tailings are placed in the DSTSF and compacted, in accordance with Minto's current Tailings Management Plan. After compaction, the tailings typically consist of approximately 80 % solids.

3.2.2 Thickened Tailings

Thickened tailings differ from dry stack tailings in that they are not dewatered to the same degree. Dewatering is conducted; however, enough water is left in the processed tailings to allow the water and tailings (known as slurry) to be pumped to the disposal facility. This slurry is deposited into the tailings storage facility and the tailings are allowed to settle, which produces supernatant water. The supernatant water is "squeezed" from the pores of the tailings during settlement and typically forms a pond above the placed tailings. Minto's preliminary mill design will produce slurry with a solids content of approximately 50 % and the tailings are expected to settle to approximately 66 % solids.

The conceptual plan for thickened tailings deposition at Minto will be to create a tailings beach from the south side of the pit. Tailings discharge points will be determined during detailed tailings deposition planning.

3.3 MILESTONE DATES

Table 2 shows a list of milestone dates for Phase IV development provided to EBA by Minto. These dates have been used in the development of this PTMP.

TABLE 2: PHASE IV MILESTONE DATES

Date	Milestone
February 2011	Begin mining in Area 2/118 Open Pit
March 2011	Mining completed in Area 1 Open Pit
April 2011	Begin placing thickened tailings in Area 1 Open Pit
July 2011	Begin mining in Area 2/118 Underground
Quarter 3, 2013	Complete mining in Area 2/118 Open Pit
Quarter 1, 2014	Complete mining in Area 2/118 Underground
Quarter 2, 2016	End of milling of Phase IV ore

4.0 TAILINGS DEPOSTION PLAN

Tailings will be deposited in the DSTSF, the Area 1 Open Pit and the Area 2 Open Pit during Phase IV operations. Table 3 shows the proposed tailings deposition schedule. The tailings deposition locations are shown on Figures TMP-01 and -03.

TABLE 3: PROPOSED TAILINGS DEPOSITION SCHEDULE

Date Range	Type of Tailings	In Place Dry Density of Tailings (kg/m^3)	Disposal Facility	Disposal Facility Storage Volume (M m^3)	Volume of Tailings (M m^3)
May 2010 – April 2011	Dry Stack	1700	DSTSF	1.7 (as of February 2010)	0.7
April 2011 – April 2014	Thickened	1120	Area 1 Open Pit	5.54	3.40
April 2014 – June 2016	Thickened	1120	Area 2 Open Pit	5.80	2.48
Thickened Tailings Totals					5.88

Deposition of tailings in each disposal facility is discussed below.

4.1 DRY STACK TAILINGS STORAGE FACILITY

Dry stack tailings will be deposited in the DSTSF until April 1, 2011 in accordance with Minto's current Tailings Management Plan. These tailings will be generated from ore mined from the Area 1 Open Pit.

4.2 AREA 1 OPEN PIT

Between April 2011 and April 2014, 3.40 M m^3 of tailings and a minimum of 0.93 M m^3 of GB material will be deposited into the Area 1 Open Pit. Based on the stage storage data for the Area 1 Open Pit, this will leave a storage balance of 1.21 M m^3. This storage space will be used as surge protection for surface run-on water (0.7 M m^3) and potential storage of additional GB material. The preliminary plan is to deposit the tailings into the pit at suitable locations between the current pit water level and the pit crest. Deposition locations will be determined during detailed tailings deposition planning. Figure TMP-04 shows a typical section of the Area 1 pit after April 2014.

GB material will be disposed in the Area 1 Open Pit simultaneously with the tailings during operations. The GB material will be end dumped into the south side of the pit below elevation 786 m, in conjunction with tailings deposition. The preliminary plan is to deposit the GB material from the crest of the buttress. It is expected that the GB material will be deposited on the benches and the faces of the Area 1 South Wall Buttress, as shown in Figure TMP-04. This method and location of disposal of the GB material with the tailings will allow the GB material to be disposed of sub-aqueously. Based on predictive water quality modelling carried out by SRK, sub-aqueous

disposal of the GB material will reduce overall water metal loading (see the Closure Plan and the Water Management Plan for details).

4.3 AREA 2 OPEN PIT

Thickened tailings will be deposited in the Area 2 Open Pit from April 2014 to June 2016. During this period 2.48 M m^3 of tailings will be deposited. After June 2016, 3.20 M m^3 of storage will remain in the Area 2 Open Pit. This storage volume could be used for surge protection, the remaining GB material or other storage. Tailings will be deposited into the pit from suitable locations between the current pit water level and the pit crest. Tailings discharge locations will be determined during detailed tailings deposition planning.

Figure TMP-04 shows a typical section of the Area 2 pit after June 2016.

5.0 WATER BALANCE

Water management is an integral component of tailings management, therefore the above solids (tailings and GB material) have been incorporated into the water balance assessment for the PTMP for Phase IV development.

A predictive water balance assessment was carried out to assess the feasibility of thickened tailings deposition in the Area 1 and Area 2 Open Pit for Phase IV development. This predictive water balance assessment is preliminary; a detailed water balance assessment will be completed during detailed tailings deposition planning.

The water balance assessment for the Area 1 and Area 2 Open Pits is shown in Figures TMP-05 to 08. This shows that the assumed water treatment capacity of 4,000 m^3 per day will be adequate for operations during Phase IV development, based on the following limitations:

- Run-on water from all catchments except A2 are diverted into the Area 2 Open Pit after freshet of 2014 (details below);
- Run-on water that collects in the Area 1 Open Pit may have to be pumped into the Area 2 Open Pit during freshet of 2014 as there may not be enough storage volume for all of the freshet run-on water in the Area 1 Open Pit. A pumping system may be required to pump the run-on water from the Area 1 Open Pit to the Area 2 Open Pit during freshet of 2014. This will be addressed during detailed tailings deposition planning.
- Run-on water that enters the Area 1 Open Pit continues to be treated and released after 2014.

Run-on water from sub-catchments A1-1 and A1-2 drain to the W-15 water detention structure and most of the run-on water from these sub-catchments could be pumped to the Area 2 Open Pit. The South Diversion Ditch, which transports run-on water from sub-catchment A3-1 could be diverted into the Area 2 Open Pit. This would leave sub-catchment A2 draining into the Area 1 Open Pit. The envisioned water management system would consist of a pump to transfer excess water from the Area 1 open Pit to the Area 2 Open Pit.

The water balance was carried out until September 2017 as it is expected that closure activities will be underway starting in 2016. Based on the current closure plan, active water treatment may be required until 2020; however, the location of the water treatment plant may change. Surface water management beyond 2017 will be addressed during detailed closure design.

6.0 FACILITY CLOSURE

At closure, the DSTSF will be covered with an engineered cover to provide source reduction for neutral metal leaching to the receiving environment. Further closure details can be found in the Closure Plan.

The Area 1 and Area 2 Open Pits will be flooded at closure. SRK's predictive water quality modeling shows that flooding will reduce the oxidization of exposed materials in the pit walls. In pit water treatment will be conducted as required to reduce metal and sediment loadings. Further closure details can be found in the Closure Plan.

7.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Minto Explorations Ltd. and their agents. EBA does not accept any responsibility for the accuracy of any of the data, the analysis or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Minto Explorations Ltd., or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this report is subject to the terms and conditions stated in EBA's Services Agreement. EBA's General Conditions are provided in Appendix B of this report.

8.0 CLOSURE

We trust this report meets your present requirements. Should you have any questions or comments, please contact the undersigned at your convenience.

Respectfully submitted,
EBA Engineering Consultants Ltd.

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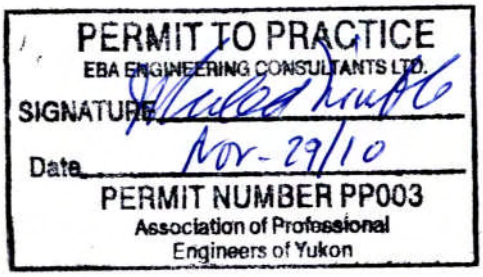
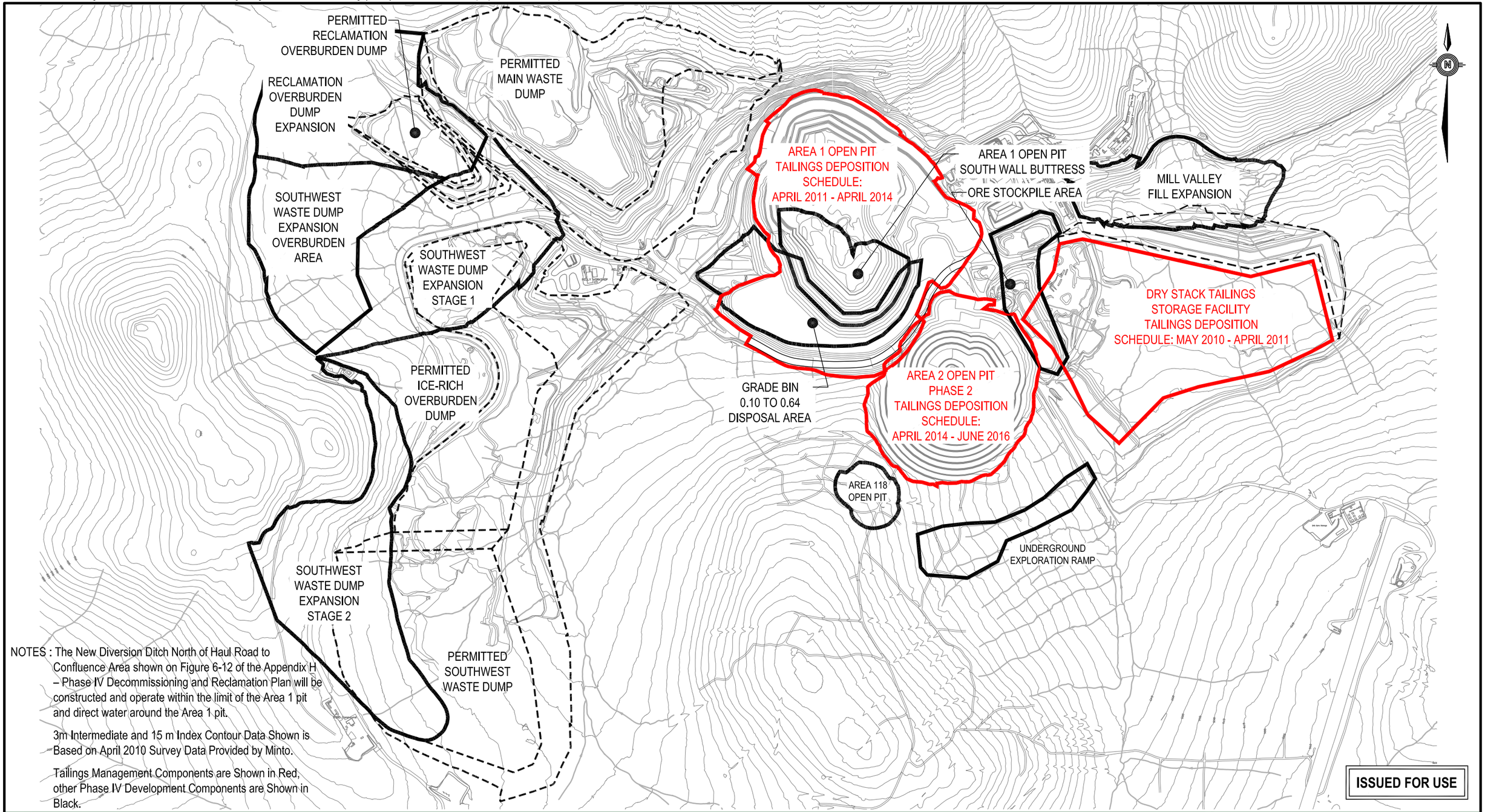
Attachments:
Figures TMP-01 to -08
Appendix A
Appendix B



FIGURES



NOTES : The New Diversion Ditch North of Haul Road to Confluence Area shown on Figure 6-12 of the Appendix H – Phase IV Decommissioning and Reclamation Plan will be constructed and operate within the limit of the Area 1 pit and direct water around the Area 1 pit.

3m Intermediate and 15 m Index Contour Data Shown is Based on April 2010 Survey Data Provided by Minto.

Tailings Management Components are Shown in Red, other Phase IV Development Components are Shown in Black.

ISSUED FOR USE

0 500
Scale: 1: 10 000 (metres)

NUM	DATE	DWN	CKD	APR	DESCRIPTION
1	10/11/29	CB	BJC	JRT	Updated notes.

REVISIONS

NUM	DATE	APR	DESCRIPTION

DRAWING STATUS

CLIENT
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WASTE MANAGEMENT PLAN
MINTO MINE, YT

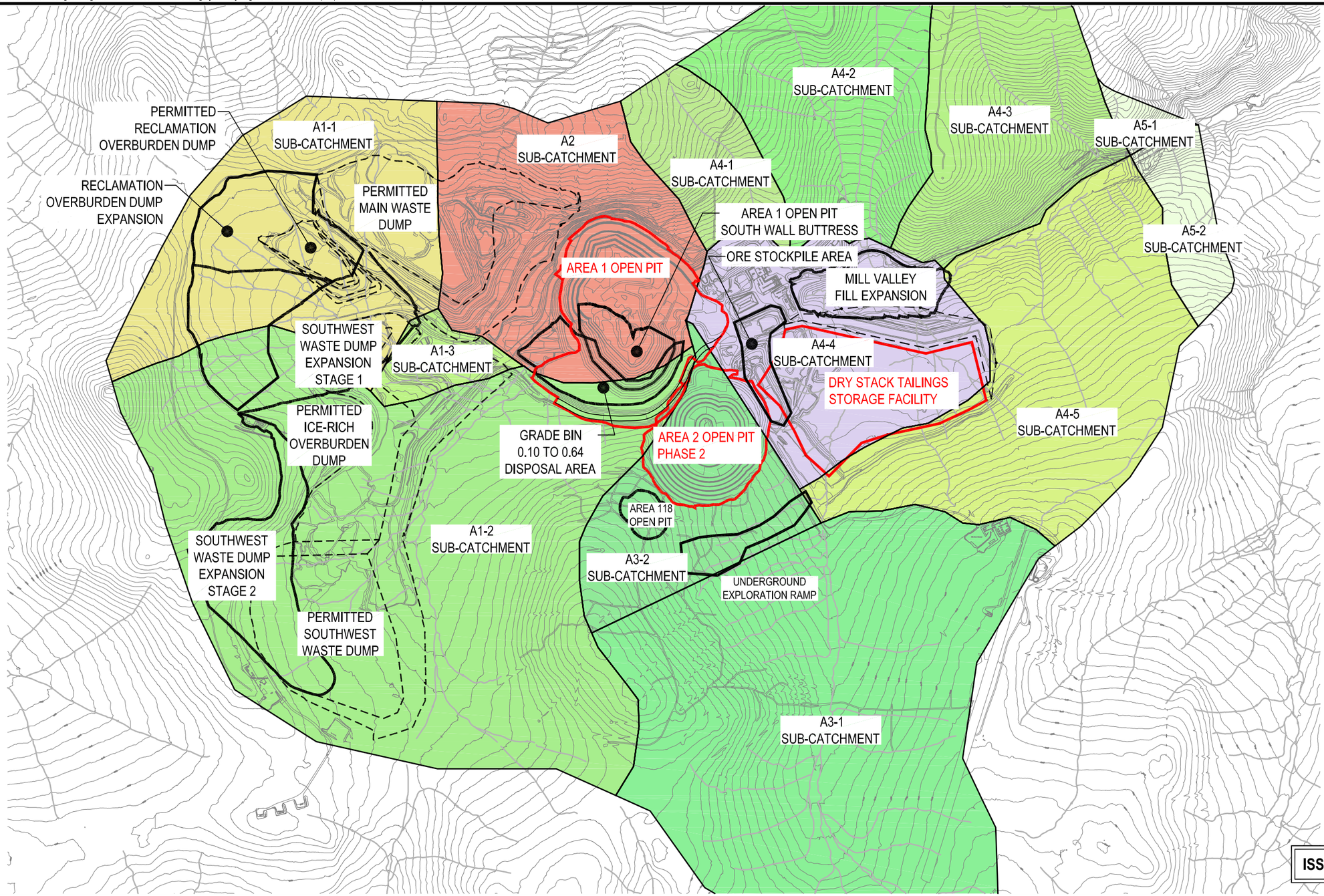
PRELIMINARY TAILINGS MANAGEMENT PLAN COMPONENTS
SITE PLAN

EBA Engineering Consultants Ltd.

PROJECT NO.	DWN	CKD	REV
W14101068.017	CB	JGD	1

OFFICE	DATE
EBA-WHSE	November 29, 2010

TMP-01



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NOTES:
1. 3 m INTERMEDIATE AND 15 m INDEX CONTOUR DATA SHOWN BASED ON APRIL 2010 SURVEY DATA PROVIDED BY MINTO.
2. SUB-CATCHMENTS SHOWN IN DIFFERENT COLOURS FOR CLARITY.
3. TAILINGS MANAGEMENT COMPONENTS SHOWN IN RED, OTHER PHASE IV DEVELOPMENT COMPONENTS SHOWN IN BLACK.

REVISIONS						DRAWING STATUS			
NUM	DATE	DWN	CKD	APR	DESCRIPTION	NUM	DATE	APR	DESCRIPTION

CLIENT
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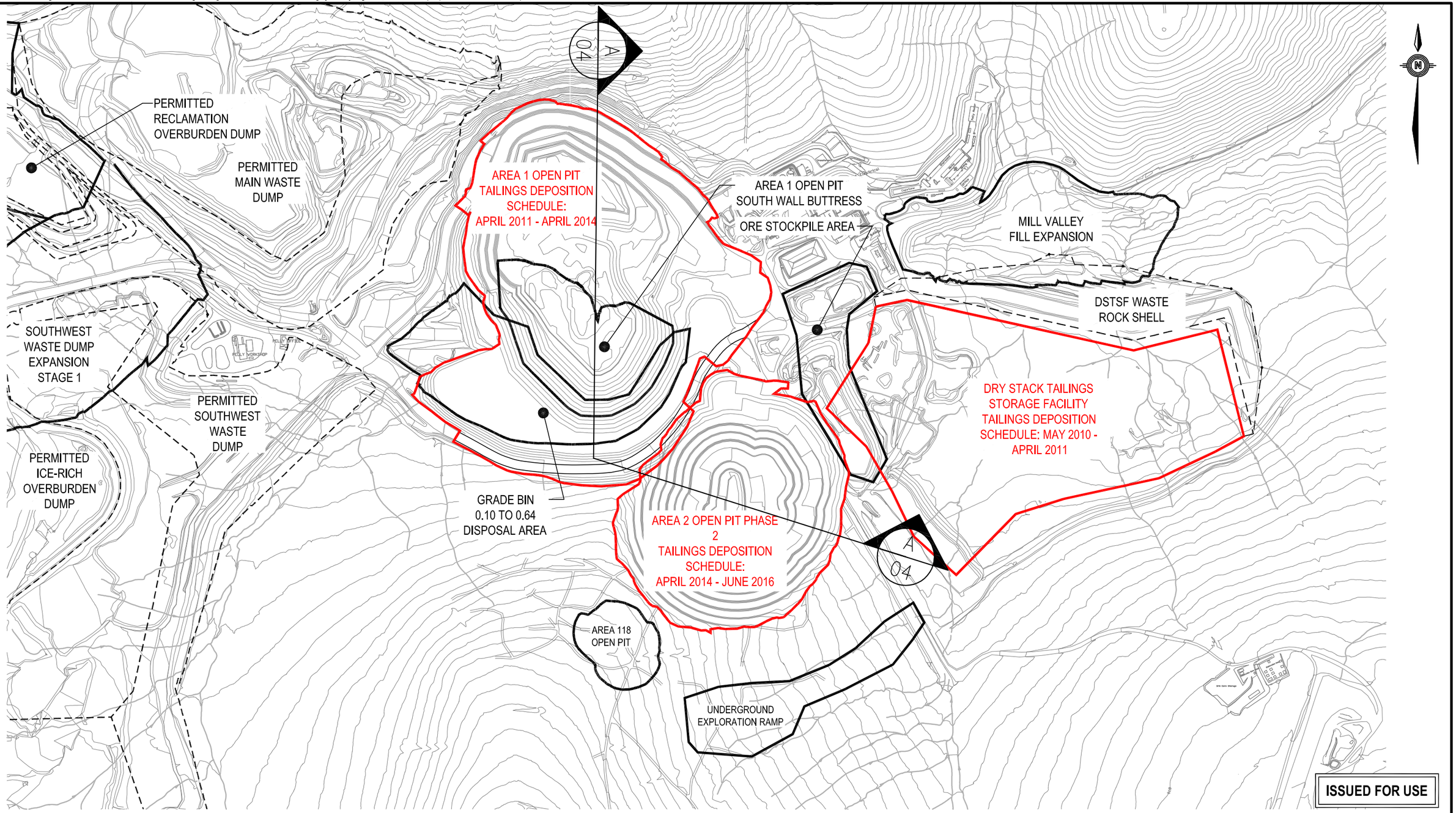
TAILINGS MANAGEMENT PLAN
MINTO MINE, YT

PRELIMINARY TAILINGS MANAGEMENT PLAN SUB-CATCHMENTS

EBA Engineering Consultants Ltd.

PROJECT NO.	DWN	CKD	REV
W14101068.017	CB	JGD	0
OFFICE: EBA-WHSE	DATE: August 12, 2010		

TMP-02



ISSUED FOR USE

NOTES :

1. 3 m INTERMEDIATE AND 15 m INDEX CONTOUR DATA SHOWN BASED ON APRIL 2010 SURVEY DATA PROVIDED BY MINTO.
2. TAILINGS MANAGEMENT COMPONENTS SHOWN IN RED, OTHER PHASE IV DEVELOPMENT COMPONENTS SHOWN IN BLACK

0 250

Scale: 1: 7 500 (metres)

NUM	DATE	DWN	CKD	APR	DESCRIPTION

REVISIONS

NUM	DATE	APR	DESCRIPTION

DRAWING STATUS

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MINTO EXPLORATIONS LTD.

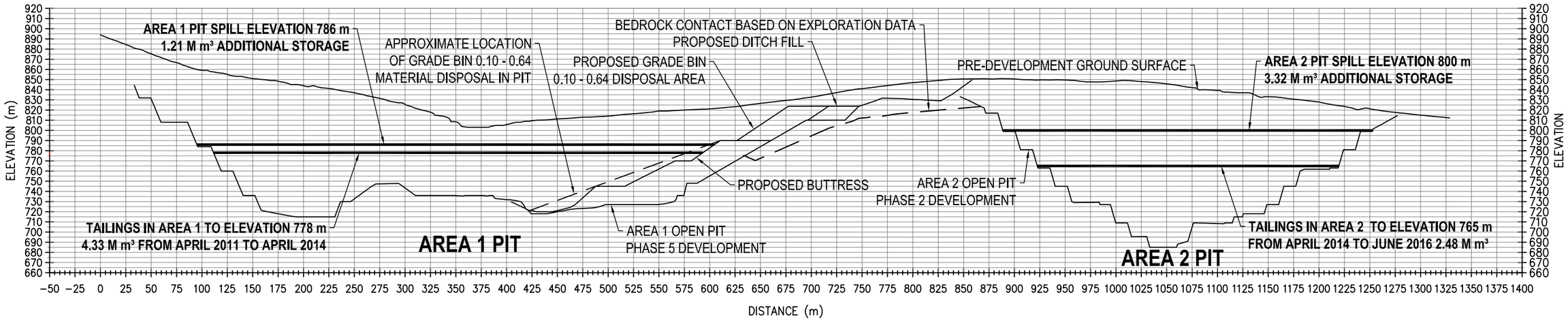
EBA Engineering Consultants Ltd.

TAILINGS MANAGEMENT PLAN MINTO MINE, YT

PRELIMINARY TAILINGS MANAGEMENT PLAN DEPOSTION AND ORE SOURCE LOCATIONS

PROJECT NO.	DWN	CKD	REV
W14101068.017	CB	JGD	0
OFFICE	DATE		
EBA-WHSE	August 12, 2010		

TMP-03



A
03

NOTE : Final surface of tailings to be determined during detailed design. Straight line shown represents the maximum below water level storage volume for tailings solids.

ISSUED FOR USE

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Scale: 1: 4 000 (metres)

NUM	DATE	DWN	CKD	APR	DESCRIPTION
1	10/11/29	CB	BJC	JRT	Updated notes.

REVISIONS

NUM	DATE	APR	DESCRIPTION

DRAWING STATUS

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TAILINGS MANAGEMENT PLAN
MINTO MINE, YT

AREA 1 AND 2 OPEN PIT
TYPICAL SECTION AT END OF PHASE IV

EBA Engineering Consultants Ltd.

PROJECT NO.	DWN	CKD	REV
W14101068.017	CB	JGD	1

OFFICE: EBA-WHSE
DATE: November 29, 2010

TMP-04

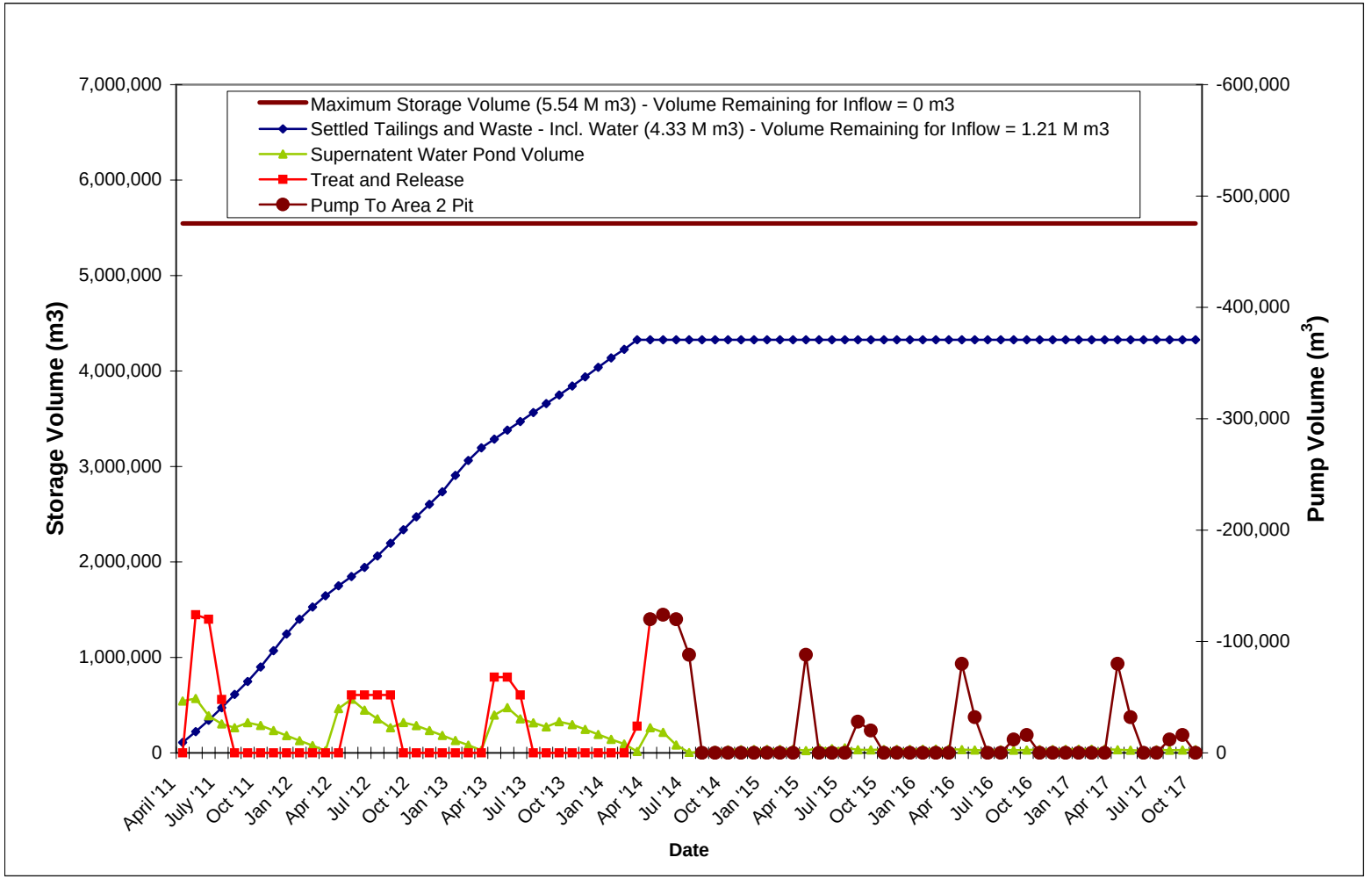


Figure TMP-05
Area 1 Open Pit Water Balance Preliminary Tailings and Water Volumes

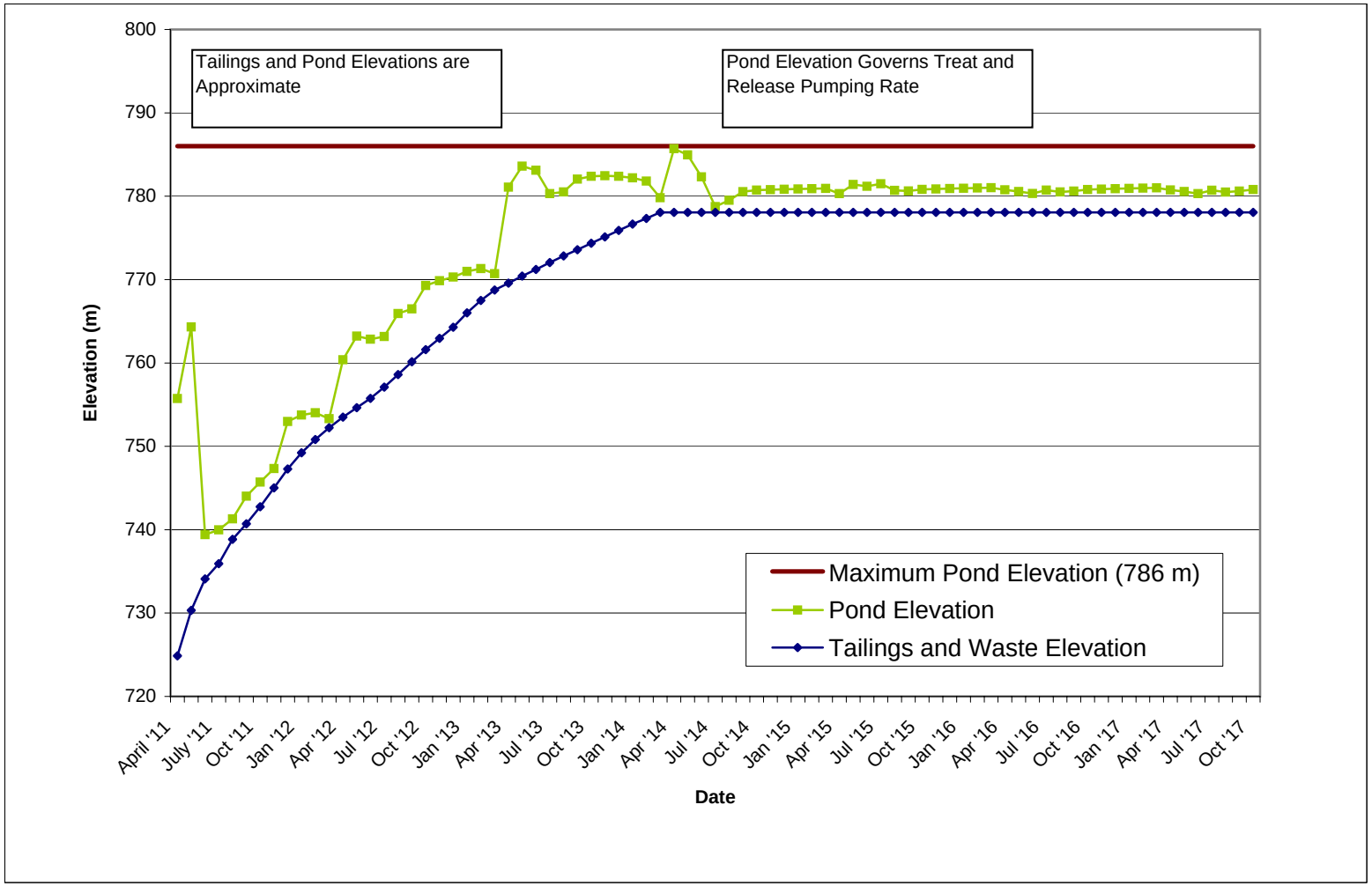


Figure TMP-06
Area 1 Open Pit Water Balance Preliminary Tailings and Water Elevations

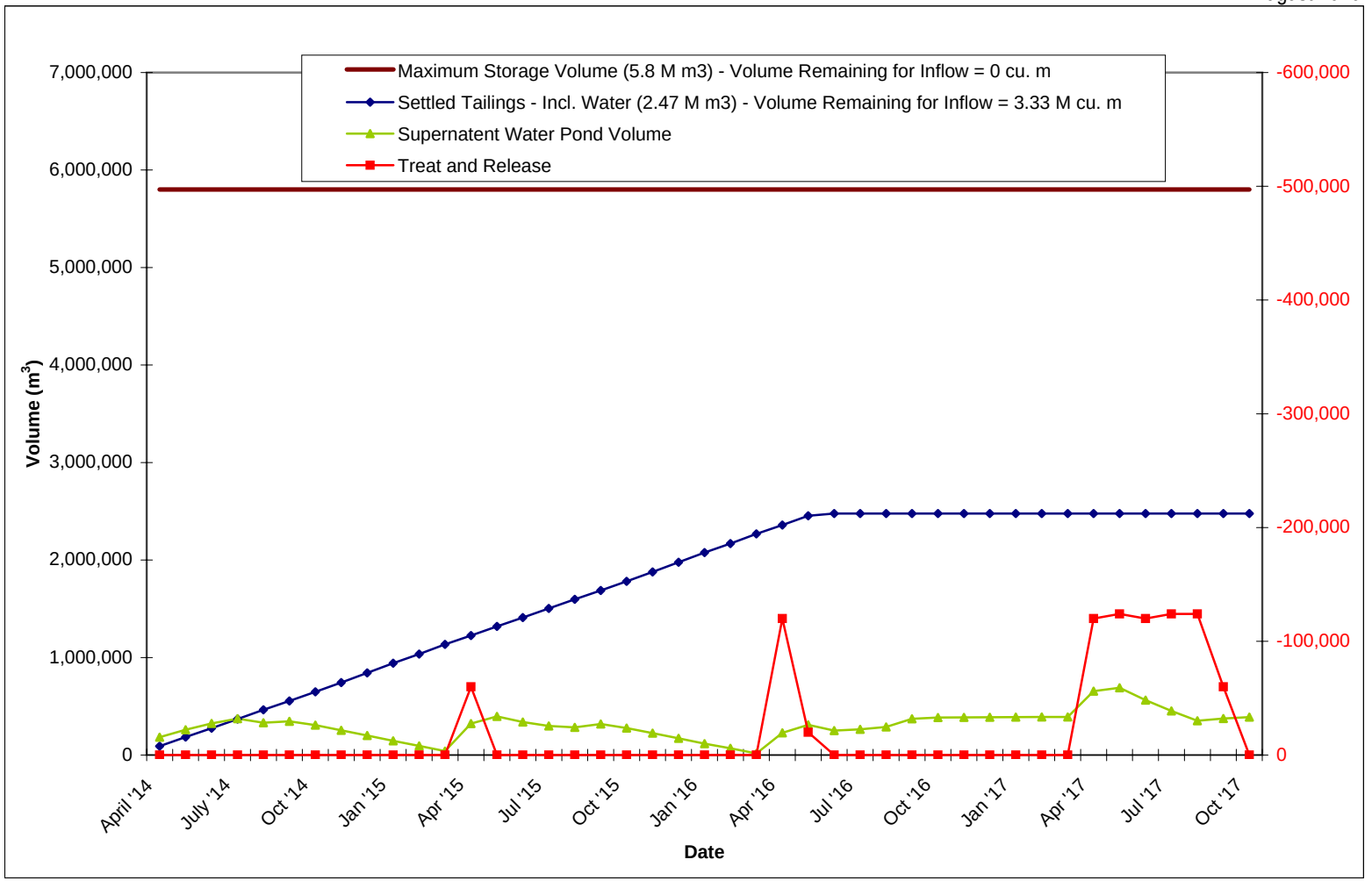


Figure TMP-07
Area 2 Open Pit Water Balance Preliminary Tailings and Water Volumes

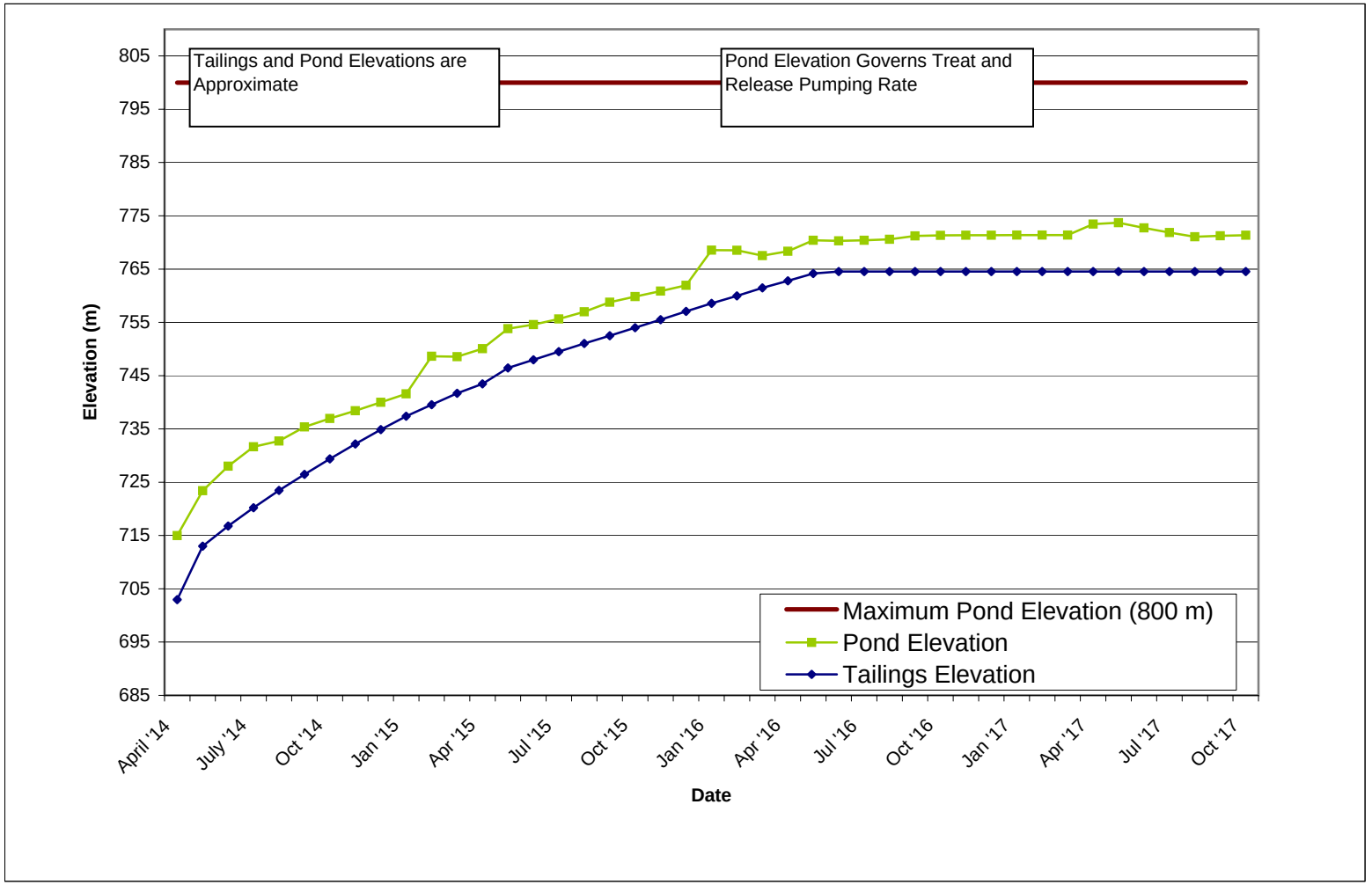


Figure TMP-08
Area 2 Open Pit Water Balance Preliminary Tailings and Water Elevations

APPENDIX

APPENDIX A CLEARWATER CONSULTANTS MEMO CCL-MC3

FINAL DRAFT Memorandum CCL-MC3

Date: March 28, 2008 **Our File:** 087.01

To: Access Consulting Group – Dan Cornett (dan@accessconsulting.ca)

From: Clearwater Consultants Ltd. - Peter S. McCreath (pmccreath@shaw.ca)

Subject: Minto Copper Project - Water Balance Model

1. Introduction

This Memorandum CCL-MC3 prepared by Clearwater Consultants Ltd. presents a description of the water balance model developed for the Minto Copper Project. Design Memorandum CCL-MC1, "Site Hydrology Update" dated October 6, 2006 presented details of the site baseline hydrology.

2. Water Balance Model

A continuous simulation spreadsheet water balance model of the Minto Copper site was developed with monthly time steps. Figure 1, prepared by Access Consulting Group, shows the general arrangement of facilities at the Minto Copper site and the contributory catchment areas up to the Main Water Pond on Minto Creek. Figure 2 shows a schematic of the various individual water flow items modeled within the project site. Output from the monthly model and summary tables are included in Appendix 1.

2.1. Data and Assumptions

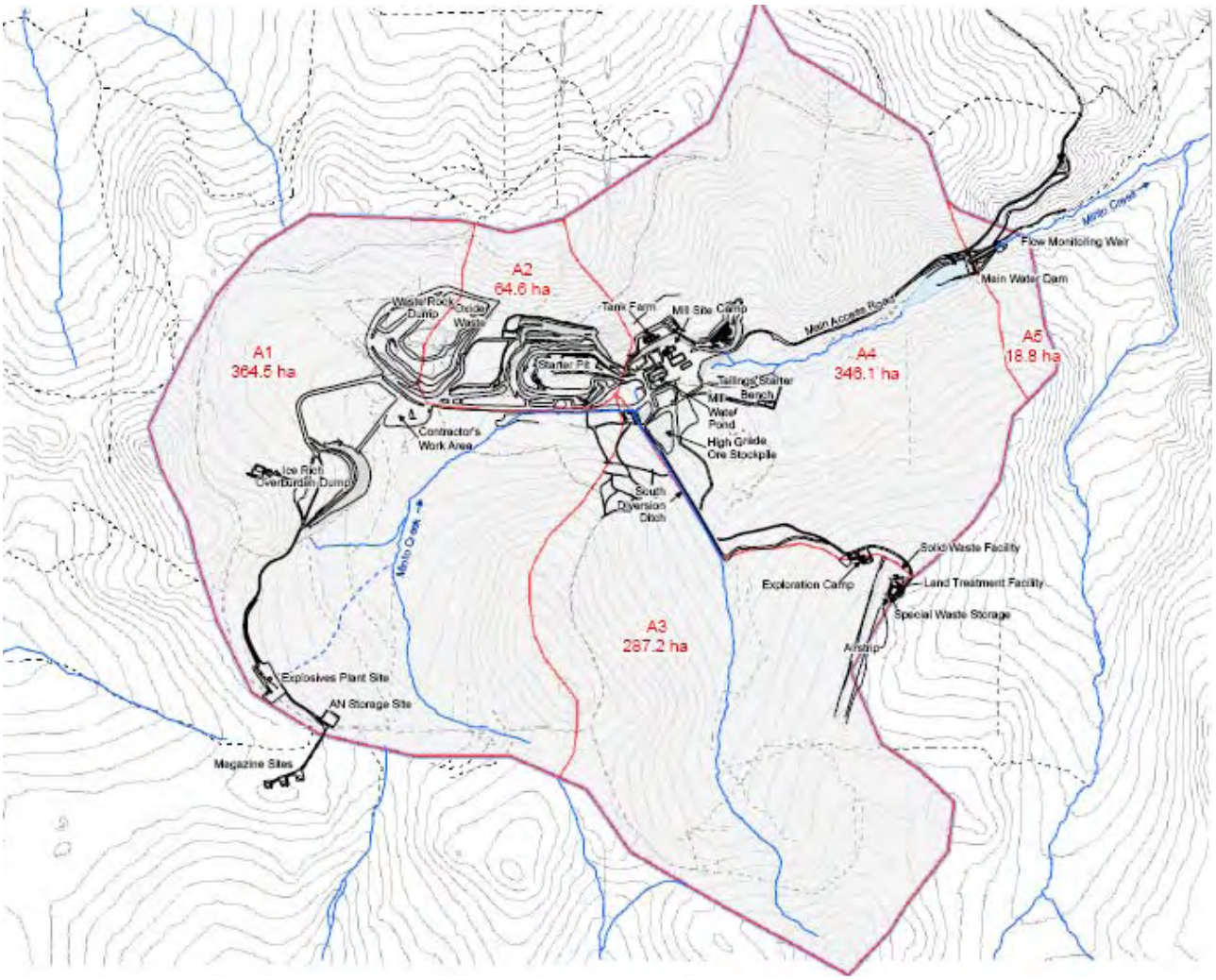
Process data and assumptions were provided by Access Consulting Group and Sherwood Copper. Table MC3-1-1 in Appendix 1 summarizes key input data and assumptions for the model including hydrological and process parameters. Average mill operational parameters assumed were:

- Total ore throughput of 2400 tonnes per day (tpd) with a total ore reserve of 6.13 million tonnes
- Tailings produced at a specific gravity of 2.7 and settled dry density of 1.90 t/m^3 after filtering and deposition in the dry stack. Moisture loss to the filtered dry stack tailings of 20% by weight. Moisture loss to unfiltered deposited tailings of 45% by weight. Actual tailings moisture losses varied from 16.75% in October 2007 to 15.67% in February 2008.
- Concentrate averages 8.55% by weight of the throughput with 7% moisture content by weight. Actual concentrate moistures have varied from 11.1% to 7.7% by weight.
- Assumed moisture reporting with ore and waste rock from the pit is 3% by weight

The following assumptions were made for Year 1 of operation:

- Mill operations commenced in May 2007
- For May, June and July 2007, 20% of the tailings were filtered for dry stack deposition and 80% were unfiltered and trucked to the ice rich overburden dump area for storage.
- For August and September 2007, 80% of tailings were filtered and 20% unfiltered. All tailings were assumed to be filtered starting in October 2007
- Mill throughputs were 750 tpd for May and June 2007, 1500 tpd July to September, and varied from 1085 to 1600 tpd until February 2008, assumed 2400 tpd starting in March 2008

Figure 1 – Minto Copper Site - General Arrangement and Catchment Areas

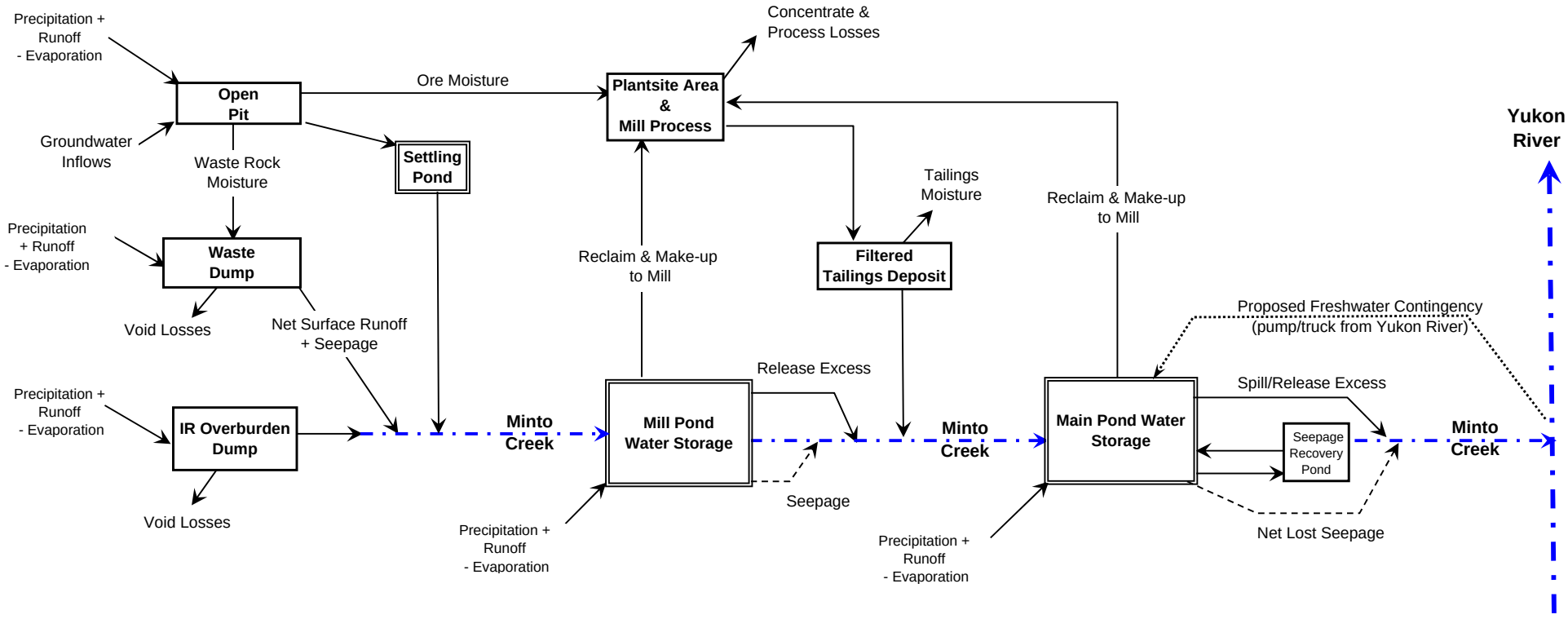


(Figure prepared, and catchment areas estimated, by Access Consulting Group, August 2007)

Catchment areas were estimated as follows:

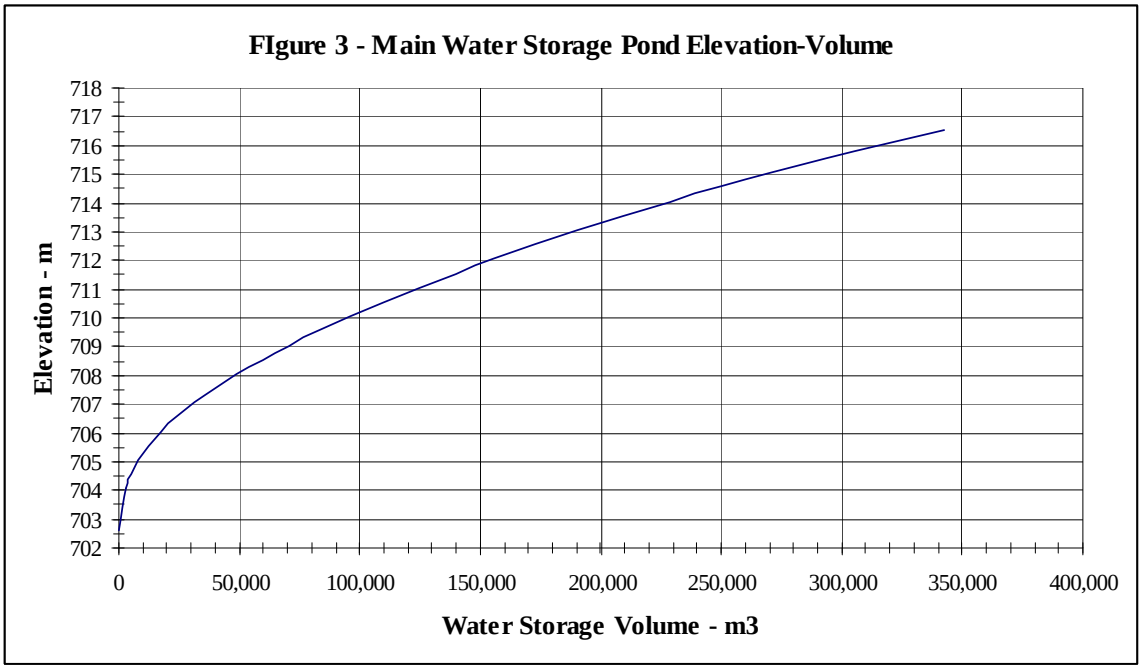
- Open pit total catchment area of 29 ha, 28 ha of which will be pit walls with a nominal allowance of a 1 ha area for water periodically ponded in the pit bottom
- Waste dump total area 23 ha, all of which is disturbed ground
- Ice Rich Overburden Dump (IROD) area 9 ha, again all disturbed ground
- The open pit, waste dump and IROD all drain towards the Mill Pond
- Mill Pond area 655.3 ha including about 5 ha disturbed ground, 649.3 ha natural ground, and a nominal 1 ha pond size. The pit, waste dump and IROD areas are additional to these areas.
- Main Water Pond total area 346 ha, 32 ha disturbed ground, 311.1 ha natural ground, and 3 ha pond area. The disturbed area draining to the Main Pond includes the plantsite area, local roads, and the dry stack tailings deposit.

Figure 2 - Minto Copper - Schematic Water Balance Flows - OPERATIONS



Due to low water levels in the Main Pond, from approximately August 25 to October 31, 2007, additional make-up water was trucked up from the Yukon River to the system at a rate of 952 m^3/day for use in the exploration program.

Estimated storage volumes for both ponds and measured water elevations in the Main Pond were provided by Access. Figure 3 shows the elevation-storage volume relation for the Main Pond. The maximum storage volume is about 342,000 m^3 corresponding to a pond elevation of 716.55 m. A nominal minimum volume of 10,000 m^3 was assumed. The Mill Pond was assumed to have a maximum water storage capacity of 5,800 m^3.



Initial seepage rates from the Main Pond of 7 L/s were used as reported by Minto personnel with no seepage recovery. Seepage recovery facilities were installed in September 2007 and a seepage recovery efficiency of 90% was assumed thereafter. Seepage recovery flows of 1 to 2 L/s have been calculated.

2.2. Runoff Calculations

Runoff is calculated in the model on a monthly basis for each sub-catchment area type. Runoff volumes are summed to calculate total inflows to the Mill Pond and reclaim from the Mill Pond is maximized. Excess water which cannot be stored in the Mill Pond is spilled to the Main Water Pond from which additional reclaim and make-up is taken as required. Excess water in the Main Pond over and above the maximum storage capacity is released to Minto Creek. If insufficient make-up water is available from the two ponds, the model calculates the additional amount of make-up water required, assumed to be taken from the Yukon River.

Snowmelt runoff is assumed to occur in April and/or May. The percent of snowmelt occurring in each month may be specified. The default values assume 70% snowmelt in April and 30% in May. Runoff due to snowmelt from each area in each month is calculated as:

[Area] *x* [total November to April snowfall *minus* Sublimation Losses] *x* [monthly snowmelt percent]

Runoff from the pit walls was assumed equal to 80% of rainfall during the summer months. Runoff from the open pit was assumed to be directed to a sediment pond prior to release into Minto Creek upstream of the Mill Pond. Net runoff from the waste dump was calculated with allowances for infiltration of runoff and subsequent losses due to wetting the waste rock.

Runoff from rainfall (April through mid-October) from other areas is calculated in the model on a monthly basis as:

[Area] *times* [Rainfall *minus* (Factor *times* Potential Evapotranspiration)]

Where, Potential Evapotranspiration = Lake Evaporation
Factors for: Water-covered areas = 1.0
Natural Ground = 0.50
Disturbed Ground = 0.25

3. Water Balance Results

Total precipitation measured at the site was input to the model for May through September 2007. Adjustments were made to evaporation rates during these months so that the calculated main pond volume corresponded with the measured volume. Base case calculations over the mine operating period assumed average monthly rates of precipitation and evaporation thereafter.

The water balance results are presented as a series of tables in Appendix 1 as follows:

- Table MC3-1 – Input Data and Assumptions
- Table MC3-2 - Monthly Water Balance – Years 1 to 9 (4 pages)
- Table MC3-3 - Annual Water Balance Summary – Average Conditions
- Table MC3-4 - Annual Water Balance Summary – Wet and Dry Conditions

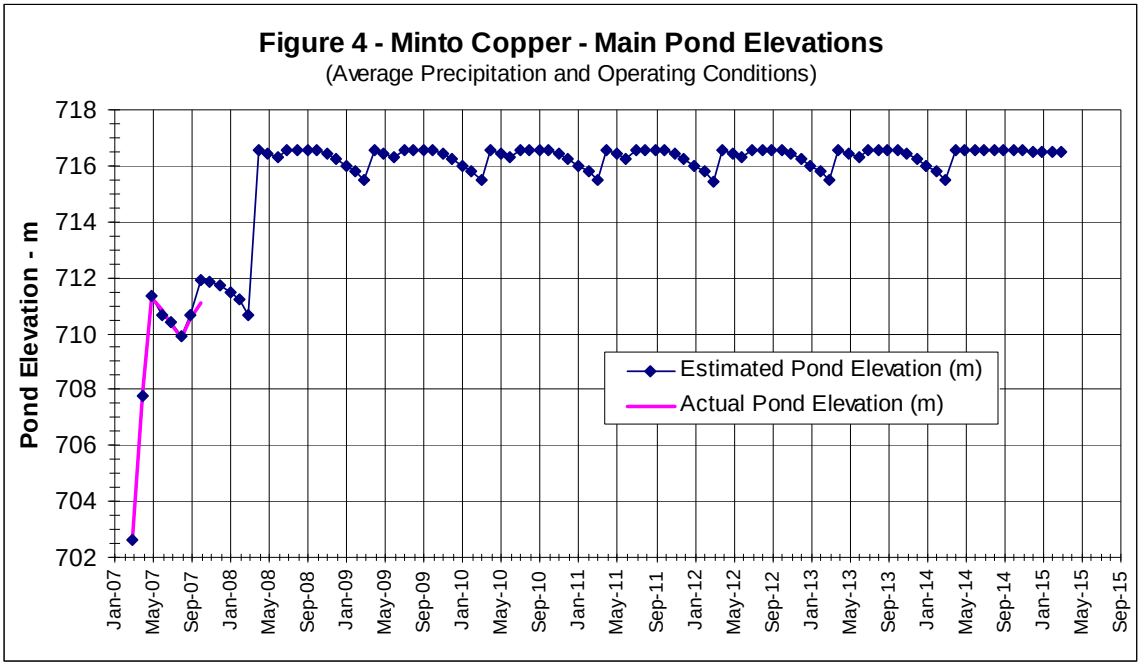
Figure 4 and Figure 5 show the variation in estimated and actual pond levels and water storage volumes for the Main Pond over the simulation period.

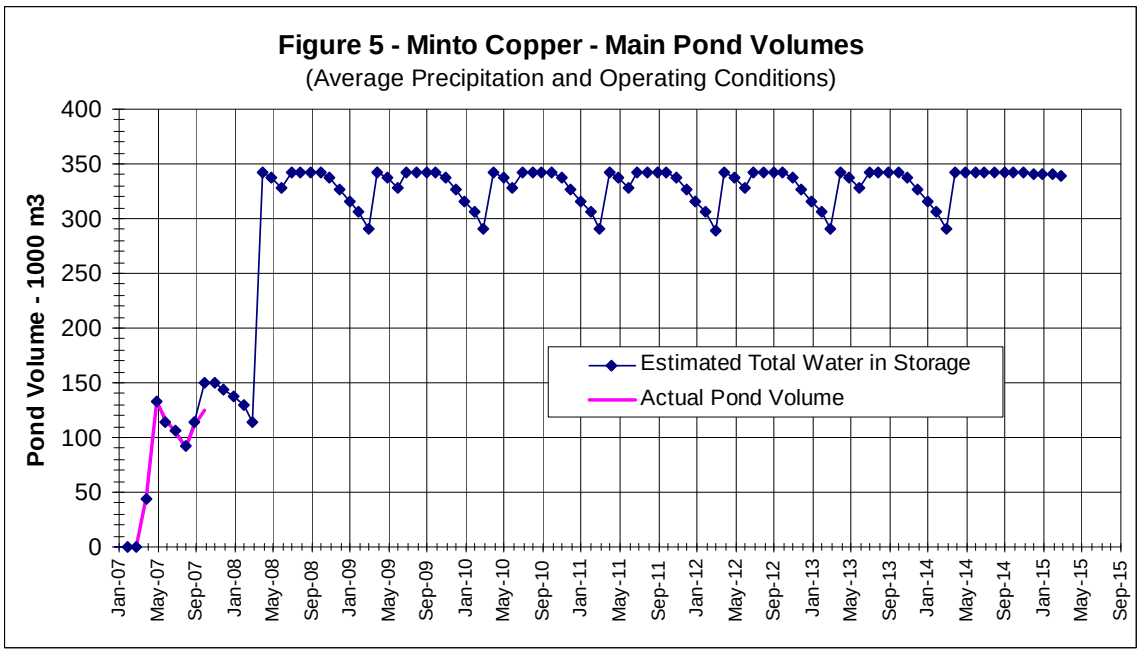
For base case operations and average precipitation conditions the model indicates that no additional make-up water should be required for the system: natural runoff to the Mill Pond and the Main Pond should provide sufficient quantities of operating water (Table MC3-3). In fact, there should be excess water in the system and approximately 600,000 m^3/year of excess water could be released on average to Minto Creek from the Main Pond. The potential need for treatment of water released from the system will be addressed by others.

Table MC3-4 indicates that there will still be about 0.3 Mm^3/year of excess water in the system during a 10 year return period dry year. For wetter than average conditions from 1.3 Mm^3/year (10 year return period) to 2.1 Mm^3/year (200 year) of excess water should be released from the Main Pond to Minto Creek. Actual monthly and year-to-year release volumes will vary depending on process parameters and the actual magnitude of monthly and annual precipitation and evaporation.

The model indicated that, based on the estimated precipitation conditions, the Main Pond should have filled up during the spring of 2007. However, the pond did not fill and, due to concerns about possible shortages of water during the winter of 2007-2008, additional water was added to the system by trucking from the Yukon River for use in the exploration program. Possible explanations for the low apparent inflows in spring 2007 include higher than expected sublimation losses from the snowpack, higher than expected evaporation and evapotranspiration losses in the spring, and possible excessive losses to

groundwater which subsequently bypassed the Main Pond. Monthly precipitation, snowpack conditions, consumptive water usage, and pond levels should be closely monitored during spring and summer 2008 to get a better understanding of actual site water balance conditions and the behaviour of the system. The water balance model will likely require some adjustments in future in order to better simulate actual conditions for the Minto Creek mining operations.





4. Conclusions

A continuous simulation monthly water balance for the Minto Copper Mine site in Minto Creek, Yukon has been developed to include all components of the mine development. The model included actual precipitation and operating conditions during 2007. Final output from the model includes monthly flow volumes from each component area of the development. Results from the water balance model are presented in a series of tables in Appendix 1. The following conclusions are drawn:

- The model closely simulates actual volumes of water estimated in the Main Pond over the period March through October 2007
- The Mill Pond and Main pond should be able to supply all required operating water to the mill based on the assumed operating parameters and site hydrological conditions
- For average precipitation and operating conditions about 0.6 Mm^3 per year of excess water will be released from the Main Pond to Minto Creek
- Annual releases may range from about 0.3 Mm^3/year for a 10 year return period dry year to 2.1 Mm^3/year for a 200 year return period wet year
- Critical components of the water balance should be monitored during spring and summer 2008 to allow modifications to be made as required to the model assumptions and parameters so as to better reflect actual site operating and hydrological conditions. On-going monitoring should include precipitation and snowpack conditions, pond levels, water usage in the mill, and any other consumptive uses of water.
- If the observed hydrologic and runoff conditions during spring of 2008 do not confirm predictions made using the water balance model, specifically if significantly less areal runoff occurs in spring than predicted based on snowpack measurements, a contingency source of process water should be identified.

CLEARWATER CONSULTANTS LTD.

Peter S. McCreath P.Eng.

APPENDIX 1

Minto Copper Project

Water Balance - Tables

Table MC3-1 - Minto Copper Project Water Balance - Input Data & Assumptions

VERSION 1.2

1) Hydrology

Annual Snowfall each year =	42.0%	of Total Precip	
Annual Pond Evaporation =	430	mm	
Annual Beach & Disturbed Ground Losses =	107.5	mm, or	25.0% of Pond Evap.
Annual Evapotranspiration =	215.0	mm, or	50.0% of Pond Evap.
Snowmelt Distribution	April/May split defined for each year		
Winter Snowpack Losses =	80	mm (sublimation)	
October Rainfall Runoff =	15%	of October Precipitation	

2) Process Parameters

	Total		
Nominal Ore Throughput (tpd) =	2,400	at	100% mill availability
Tailings Specific Gravity =	2.70		
Settled Tailings Density =	1.900	tonnes/m3 (assumed for Dry Stack)	
Void water Losses =	15.6%	of weight of tailings in Dry Stack	
	45.0%	loss if not filtered	
Total Ore Reserve (x 106 t) =	6.13	million tonnes	
No. Years Operations =	7		
Average Concentrate Percent Tonnage =	8.55%	of throughput (= loss from total tailings)	
or,	205.2	tpd Conc.	8.0% moisture by weight

Other Water Losses & Usage

Assume	2.0	L/s to Exploration Drills (March to October)
	0.0	L/s Other
Moisture Losses to Ore =	3.0%	by weight
Moisture Losses to Waste Rock =	3.0%	by weight
Main Pond completed on =	01-Oct-06	
Mill started -	01-May-07	(50% of 1500 tpd capacity until July 2007)

3) Seepage Conditions

Total Seepage from Main Pond =	7.0	L/s (measured near W3)		
Seepage Recovery percentage =	0%	Year 1, to	90%	Year 2 onwards
Pit Seepage Inflows =	0.2	L/s		
Maximum Mill Pond Seepage =	0.5	L/s to Main Pond		

4) Pond Volumes

	MAIN	MILL	
Minimum Water Volume =	10,000	100	m3
Maximum Water Volume =	342,000	5,800	m3

5) Annual Precipitation Probability (mm)

Return Period		Precip.
10 year	1	268
Average	2	341
Wet	10	420
Wet	50	478
Wet	100	500
Wet	200	521

6) Average Monthly Conditions (mm)

Month	Average Precip.	Average Snowfall	Lake Evaporation	Actual EvapoTrans	Disturbed Losses
April	16.4	13.0	12.0	6.0	3.0
May	24.2	0.0	83.0	41.5	20.8
June	40.0	0.0	119.0	59.5	29.8
July	57.7	0.0	112.0	56.0	28.0
Aug	41.7	0.0	80.0	40.0	20.0
Sept	30.1	0.0	24.0	12.0	6.0
Oct	29.0	29.0	0.0	0.0	0.0
Nov	27.0	27.0	0	0.0	0
Dec	23.6	23.6	0	0.0	0
Jan	21.9	21.8	0	0.0	0
Feb	16.4	16.4	0	0.0	0
Mar	13.7	13.6	0	0.0	0
YEAR	342	144	430.0	215.0	107.5

7) Waste Dump Runoff

	Operations	Closure	
Infiltration =	70%	30%	April/May Snowmelt
	70%	30%	June to October
	(Infiltration = P - E/T)		
Void Losses =	80%	30%	of Infiltration

8) Pit Runoff

Pit Walls Runoff Coefficient = 0.8 (summer only)

MINTO COPPER Project - CATCHMENT AREAS

YEAR	Return Period	Tailings Generated (tonnes)	Mining Rates (1000 t/y) Ore	Waste	MILL Pond Areas (km2) Total	Dist'd	Land	Pond	MAIN Pond Areas (km2) Total	Dist'd	Land	Pond	Pit Areas (km2) Total	Walls	Land	Pond	Waste Dump (km2) Total	Dist'd	Land	Pond	Ice Rich Overburden Dump (km2) Total	Dist'd	Land	Pond	Snowmelt Distribution April	May
-1	2	-	0	0	6.553	0.05	6.493	0.01	3.461	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
1	2	418,341	457	457	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	0%	100%
2	2	801,102	876	876	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
3	2	801,102	876	876	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
4	2	801,102	876	876	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
5	2	803,297	878	878	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
6	2	801,102	876	876	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
7	2	801,102	876	876	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
8	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
9	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
10	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
11	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
12	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
13	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
14	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
15	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
16	2	0	0	0	6.553	0.05	6.493	0.01	3.46	0.32	3.111	0.03	0.29	0.28	0.00	0.01	0.23	0.23	0.00	0.00	0.09	0.09	0.00	0.00	70%	30%
P/C	2	-	0	0	6.553	0.00	6.543	0.01	3.46	0.00	3.461	0.00	0.29	0.24	0.00	0.05	0.23	0.05	0.18	0.00	0.09	0	0.09	0.00	70%	30%
					Areas A1,A2,A3, excluding Pit, Waste Dump, IRO Dump				Area A4 including Plant, Tailngs Stack, Po				Areas within Pit rim only				Plan area of dumped waste rock				Plan area of Ice Rich Overburden dump					

NOTES

1) Total catchment area and areas of Disturbed, Undisturbed Land and Ponds estimated by CCL & Access
2) Net inflows to the open pits & waste dumps drains to Main Pond via Mill Pond
3) "Direct Rainfall" = (April to October total precipitation) times (Disturbed + Pond Areas)
"Evap Losses" = (April to October (Evap x Disturbed Area) + (Lake Evap x Pond Area)

NOTES (continued)

5) "Runoff" = Summer Runoff from Land Area + Spring Snowmelt from Total Area
= April to October (Total Precipitation minus Evapotranspiration) times (Land Area)
plus [(November to March Total Precipitation) minus (Winter Losses)] times (Total Area)
6) Mill Operations start in May of Year 1 (2007), "P/C" = Post-Closure period after all reclamation completed.

Table MC3-2 - Minto Copper Project - Monthly Water Balance

(volumes in 1000 m3/month)

VERSION 1.2

			Hydrologic Parameters						MILL Pond Inflows		Waste Dump Inflows			Overburden Dump Inflows			Open Pit Inflows & Losses				
Operating Year	Month & Year	Tailings (tonnes)	Return Period (years)	Total Precip mm	Pond Evap mm	Actual E'Trans mm	Dist'd Losses mm	Total Make-Up Required	Direct Rainfall	Snowmelt + Runoff	Surface Runoff	Seeps	Other Local Runoff	Surface Runoff	Seeps	Other Local Runoff	Direct Rainfall	Snowmelt + Runoff	Seepage Inflows	Evap Losses	To Ore & WR Moisture
-1	Sep-06																				
-1	Oct-06	0	2	29	-	0	-	0	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.0	0.0	0.0
-1	Nov-06	0	2	27	-	-	-	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-1	Dec-06	0	2	24	-	-	-	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-1	Jan-07	0	2	22	-	-	-	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-1	Feb-07	0	2	16	-	-	-	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-1	Mar-07	0	2	14	-	-	-	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	Apr-07	0	2	12	12	6	3	0	0.7	39	0.6	0.3	0.0	0.2	0.1	0.0	2.8	0.0	0.0	0.1	0.0
1	May-07	21,262	2	4.6	83	42	21	13.1	0.3	67	2.1	1.0	0.0	0.8	0.4	0.0	1.1	13.7	0.5	0.8	1.4
1	Jun-07	20,576	2	36.0	119	60	30	12.7	2.2	0	0.4	0.2	0.0	0.2	0.1	0.0	8.4	0.0	0.5	1.2	1.4
1	Jul-07	42,524	2	47.8	112	46	28	20.9	2.9	12	1.4	0.6	0.0	0.5	0.2	0.0	11.2	0.0	0.5	1.1	2.8
1	Aug-07	42,524	2	21.0	80	19.7	20	13.4	1.3	8	0.1	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.5	0.8	2.8
1	Sep-07	41,153	2	38.0	24	38	38	13.0	2.3	0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.5	0.2	2.7
1	Oct-07	31,287	2	29	-	0	0	9.8	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	1.6
1	Nov-07	29,170	2	27	-	-	0	3.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
1	Dec-07	33,268	2	24	-	-	0	4.2	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
1	Jan-08	46,388	2	22	-	-	0	5.7	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
1	Feb-08	42,150	2	16	-	-	0	5.5	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
1	Mar-08	68,039	2	14	-	-	0	14.2	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
2	Apr-08	65,844	2	16	12	6	3	13.8	1.0	284	3.2	1.5	0.0	1.3	0.6	0.0	3.8	9.6	0.5	0.1	4.3
2	May-08	68,039	2	24	83	42	21	14.2	1.5	0	1.2	0.6	0.0	0.5	0.2	0.0	5.7	4.1	0.5	0.8	4.5
2	Jun-08	65,844	2	40	119	60	30	13.8	2.4	0	0.7	0.3	0.0	0.3	0.1	0.0	9.3	0.0	0.5	1.2	4.3
2	Jul-08	68,039	2	58	112	56	28	14.2	3.5	11	2.1	1.0	0.0	0.8	0.4	0.0	13.5	0.0	0.5	1.1	4.5
2	Aug-08	68,039	2	42	80	40	20	14.2	2.5	11	1.5	0.7	0.0	0.6	0.3	0.0	9.7	0.0	0.5	0.8	4.5
2	Sep-08	65,844	2	30	24	12	6	13.8	1.8	117	1.7	0.8	0.0	0.6	0.3	0.0	7.0	0.0	0.5	0.2	4.3
2	Oct-08	68,039	2	29	-	0	0	14.2	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	1.6
2	Nov-08	65,844	2	27	-	-	0	8.6	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
2	Dec-08	68,039	2	24	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
2	Jan-09	68,039	2	22	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
2	Feb-09	61,454	2	16	-	-	0	8.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
2	Mar-09	68,039	2	14	-	-	0	14.2	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
3	Apr-09	65,844	2	16	12	6	3	13.8	1.0	284	3.2	1.5	0.0	1.3	0.6	0.0	3.8	9.6	0.5	0.1	4.3
3	May-09	68,039	2	24	83	42	21	14.2	1.5	0	1.2	0.6	0.0	0.5	0.2	0.0	5.7	4.1	0.5	0.8	4.5
3	Jun-09	65,844	2	40	119	60	30	13.8	2.4	0	0.7	0.3	0.0	0.3	0.1	0.0	9.3	0.0	0.5	1.2	4.3
3	Jul-09	68,039	2	58	112	56	28	14.2	3.5	11	2.1	1.0	0.0	0.8	0.4	0.0	13.5	0.0	0.5	1.1	4.5
3	Aug-09	68,039	2	42	80	40	20	14.2	2.5	11	1.5	0.7	0.0	0.6	0.3	0.0	9.7	0.0	0.5	0.8	4.5
3	Sep-09	65,844	2	30	24	12	6	13.8	1.8	117	1.7	0.8	0.0	0.6	0.3	0.0	7.0	0.0	0.5	0.2	4.3
3	Oct-09	68,039	2	29	-	0	0	14.2	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	1.6
3	Nov-09	65,844	2	27	-	-	0	8.6	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
3	Dec-09	68,039	2	24	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
3	Jan-10	68,039	2	22	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
3	Feb-10	61,454	2	16	-	-	0	8.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
3	Mar-10	68,039	2	14	-	-	0	14.2	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
4	Apr-10	65,844	2	16	12	6	3	13.8	1.0	284	3.2	1.5	0.0	1.3	0.6	0.0	3.8	9.6	0.5	0.1	4.3
4	May-10	68,039	2	24	83	42	21	14.2	1.5	0	1.2	0.6	0.0	0.5	0.2	0.0	5.7	4.1	0.5	0.8	4.5
4	Jun-10	65,844	2	40	119	60	30	13.8	2.4	0	0.7	0.3	0.0	0.3	0.1	0.0	9.3	0.0	0.5	1.2	4.3
4	Jul-10	68,039	2	58	112	56	28	14.2	3.5	11	2.1	1.0	0.0	0.8	0.4	0.0	13.5	0.0	0.5	1.1	4.5
4	Aug-10	68,039	2	42	80	40	20	14.2	2.5	11	1.5	0.7	0.0	0.6	0.3	0.0	9.7	0.0	0.5	0.8	4.5
4	Sep-10	65,844	2	30	24	12	6	13.8	1.8	117	1.7	0.8	0.0	0.6	0.3	0.0	7.0	0.0	0.5	0.2	4.3
4	Oct-10	68,039	2	29	-	0	0	14.2	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	1.6
4	Nov-10	65,844	2	27	-	-	0	8.6	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
4	Dec-10	68,039	2	24	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
4	Jan-11	68,039	2	22	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
4	Feb-11	61,454	2	16	-	-	0	8.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
4	Mar-11	68,039	2	14	-	-	0	14.2	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
5	Apr-11	66,024	2	16	12	6	3	13.8	1.0	284	3.2	1.5	0.0	1.3	0.6	0.0	3.8	9.6	0.5	0.1	4.3
5	May-11	68,225	2	24	83	42	21	14.3	1.5	0	1.2	0.6	0.0	0.5	0.2	0.0	5.7	4.1	0.5	0.8	4.5

Table MC3-2 - Minto Copper Project - Monthly Water Balance

(volumes in 1000 m3/month)

VERSION 1.2

			Hydrologic Parameters						MILL Pond Inflows		Waste Dump Inflows			Overburden Dump Inflows			Open Pit Inflows & Losses				
Operating Year	Month & Year	Tailings (tonnes)	Return Period (years)	Total Precip mm	Pond Evap mm	Actual E'Trans mm	Dist'd Losses mm	Total Make-Up Required	Direct Rainfall	Snowmelt + Runoff	Surface Runoff	Seeps	Other Local Runoff	Surface Runoff	Seeps	Other Local Runoff	Direct Rainfall	Snowmelt + Runoff	Seepage Inflows	Evap Losses	To Ore & WR Moisture
5	Jun-11	66,024	2	40	119	60	30	13.8	2.4	0	0.7	0.3	0.0	0.3	0.1	0.0	9.3	0.0	0.5	1.2	4.3
5	Jul-11	68,225	2	58	112	56	28	14.3	3.5	11	2.1	1.0	0.0	0.8	0.4	0.0	13.5	0.0	0.5	1.1	4.5
5	Aug-11	68,225	2	42	80	40	20	14.3	2.5	11	1.5	0.7	0.0	0.6	0.3	0.0	9.7	0.0	0.5	0.8	4.5
5	Sep-11	66,024	2	30	24	12	6	13.8	1.8	117	1.7	0.8	0.0	0.6	0.3	0.0	7.0	0.0	0.5	0.2	4.3
5	Oct-11	68,225	2	29	-	0	0	14.3	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	1.6
5	Nov-11	66,024	2	27	-	-	0	8.6	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
5	Dec-11	68,225	2	24	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
5	Jan-12	68,225	2	22	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
5	Feb-12	63,824	2	16	-	-	0	8.3	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
5	Mar-12	68,225	2	14	-	-	0	14.3	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
6	Apr-12	65,844	2	16	12	6	3	13.8	1.0	284	3.2	1.5	0.0	1.3	0.6	0.0	3.8	9.6	0.5	0.1	4.3
6	May-12	68,039	2	24	83	42	21	14.2	1.5	0	1.2	0.6	0.0	0.5	0.2	0.0	5.7	4.1	0.5	0.8	4.5
6	Jun-12	65,844	2	40	119	60	30	13.8	2.4	0	0.7	0.3	0.0	0.3	0.1	0.0	9.3	0.0	0.5	1.2	4.3
6	Jul-12	68,039	2	58	112	56	28	14.2	3.5	11	2.1	1.0	0.0	0.8	0.4	0.0	13.5	0.0	0.5	1.1	4.5
6	Aug-12	68,039	2	42	80	40	20	14.2	2.5	11	1.5	0.7	0.0	0.6	0.3	0.0	9.7	0.0	0.5	0.8	4.5
6	Sep-12	65,844	2	30	24	12	6	13.8	1.8	117	1.7	0.8	0.0	0.6	0.3	0.0	7.0	0.0	0.5	0.2	4.3
6	Oct-12	68,039	2	29	-	0	0	14.2	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	1.6
6	Nov-12	65,844	2	27	-	-	0	8.6	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
6	Dec-12	68,039	2	24	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
6	Jan-13	68,039	2	22	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
6	Feb-13	61,454	2	16	-	-	0	8.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
6	Mar-13	68,039	2	14	-	-	0	14.2	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
7	Apr-13	65,844	2	16	12	6	3	13.8	1.0	284	3.2	1.5	0.0	1.3	0.6	0.0	3.8	9.6	0.5	0.1	4.3
7	May-13	68,039	2	24	83	42	21	14.2	1.5	0	1.2	0.6	0.0	0.5	0.2	0.0	5.7	4.1	0.5	0.8	4.5
7	Jun-13	65,844	2	40	119	60	30	13.8	2.4	0	0.7	0.3	0.0	0.3	0.1	0.0	9.3	0.0	0.5	1.2	4.3
7	Jul-13	68,039	2	58	112	56	28	14.2	3.5	11	2.1	1.0	0.0	0.8	0.4	0.0	13.5	0.0	0.5	1.1	4.5
7	Aug-13	68,039	2	42	80	40	20	14.2	2.5	11	1.5	0.7	0.0	0.6	0.3	0.0	9.7	0.0	0.5	0.8	4.5
7	Sep-13	65,844	2	30	24	12	6	13.8	1.8	117	1.7	0.8	0.0	0.6	0.3	0.0	7.0	0.0	0.5	0.2	4.3
7	Oct-13	68,039	2	29	-	0	0	14.2	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	1.6
7	Nov-13	65,844	2	27	-	-	0	8.6	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
7	Dec-13	68,039	2	24	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
7	Jan-14	68,039	2	22	-	-	0	8.9	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
7	Feb-14	61,454	2	16	-	-	0	8.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
7	Mar-14	68,039	2	14	-	-	0	14.2	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
8	Apr-14	0	2	16	12	6	3	0.0	1.0	284	3.2	1.5	0.0	1.3	0.6	0.0	3.8	9.6	0.5	0.1	0.0
8	May-14	0	2	24	83	42	21	0.0	1.5	0	1.2	0.6	0.0	0.5	0.2	0.0	5.7	4.1	0.5	0.8	0.0
8	Jun-14	0	2	40	119	60	30	0.0	2.4	0	0.7	0.3	0.0	0.3	0.1	0.0	9.3	0.0	0.5	1.2	0.0
8	Jul-14	0	2	58	112	56	28	0.0	3.5	11	2.1	1.0	0.0	0.8	0.4	0.0	13.5	0.0	0.5	1.1	0.0
8	Aug-14	0	2	42	80	40	20	0.0	2.5	11	1.5	0.7	0.0	0.6	0.3	0.0	9.7	0.0	0.5	0.8	0.0
8	Sep-14	0	2	30	24	12	6	0.0	1.8	117	1.7	0.8	0.0	0.6	0.3	0.0	7.0	0.0	0.5	0.2	0.0
8	Oct-14	0	2	29	-	0	0	0.0	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	0.0
8	Nov-14	0	2	27	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
8	Dec-14	0	2	24	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
8	Jan-15	0	2	22	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
8	Feb-15	0	2	16	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
8	Mar-15	0	2	14	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
9	Apr-15	0	2	16	12	6	3	0.0	1.0	284	3.2	1.5	0.0	1.3	0.6	0.0	3.8	9.6	0.5	0.1	0.0
9	May-15	0	2	24	83	42	21	0.0	1.5	0	1.2	0.6	0.0	0.5	0.2	0.0	5.7	4.1	0.5	0.8	0.0
9	Jun-15	0	2	40	119	60	30	0.0	2.4	0	0.7	0.3	0.0	0.3	0.1	0.0	9.3	0.0	0.5	1.2	0.0
9	Jul-15	0	2	58	112	56	28	0.0	3.5	11	2.1	1.0	0.0	0.8	0.4	0.0	13.5	0.0	0.5	1.1	0.0
9	Aug-15	0	2	42	80	40	20	0.0	2.5	11	1.5	0.7	0.0	0.6	0.3	0.0	9.7	0.0	0.5	0.8	0.0
9	Sep-15	0	2	30	24	12	6	0.0	1.8	117	1.7	0.8	0.0	0.6	0.3	0.0	7.0	0.0	0.5	0.2	0.0
9	Oct-15	0	2	29	-	0	0	0.0	1.7	28	0.3	0.1	0.0	0.1	0.1	0.0	1.0	0.0	0.5	0.0	0.0
9	Nov-15	0	2	27	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
9	Dec-15	0	2	24	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
9	Jan-16	0	2	22	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
9	Feb-16	0	2	16	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
9	Mar-16	0	2	14	-	-	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0

Table MC3-2 - Minto Copper Project Monthly Water Balance (continued)

(volumes in 1000 m3/month)

VERSION 1.2

		MILL Pond Losses & Outflows							MAIN POND Inflows			MAIN Pond Losses & Outflows											
Operating Year	Month & Year	Evap Losses	Lost Seepage	Net Inflow to Mill Pond	Reclaim to Mill	Spill	TOTAL OUT	Mill Pond Volume	Direct Rainfall	Snowmelt + Runoff	Total in to MAIN Pond	Evap Losses	Net Lost Seepage	Reclaim to Mill	TOTAL OUT	Net INFLOW to MAIN Pond	Extra Make-up Required	Potential Water in Storage	Minimum Riparian Release	Spill	Estimated Total Water in Storage	Estimated Pond Elevation (m)	Actual Pond Elevation (m)	Actual Pond Volume
-1	Sep-06							**0**													**0**			
-1	Oct-06	0.0	1.3	30.3	0.0	24.5	24.5	5.8	10	14	50	0	18.7	0	19	31	0	31	0	0	31			
-1	Nov-06	0.0	1.3	-1.3	0.0	0.0	0.0	4.5	0	0	1	0	18.1	0	18	-17	0	14	0	0	14			
-1	Dec-06	0.0	1.3	-1.3	0.0	0.0	0.0	3.2	0	0	1	0	18.7	0	19	-17	0	0	0	0	0			
-1	Jan-07	0.0	1.3	-1.3	0.0	0.0	0.0	1.8	0	0	1	0	18.7	0	19	-17	0	0	0	0	0			
-1	Feb-07	0.0	1.2	-1.2	0.0	0.0	0.0	0.6	0	0	1	0	16.9	0	17	-16	0	0	0	0	0			
-1	Mar-07	0.0	0.5	-0.5	0.0	0.0	0.0	0.1	0	0	1	0	18.7	0	19	-18	0	0	0	0	0	702.60	**702.60**	0.0
1	Apr-07	0.3	1.3	42.4	0.0	36.7	36.7	5.8	4	21	63	1	18.1	0	19	44	0	44		0	44	707.75	**707.95**	47.2
1	May-07	1.9	1.3	81.5	13.1	68.3	81.5	5.8	2	35	107	9	18.7	0.0	28	79	0	122		0	**132.8**	711.32	**711.31**	132.4
1	Jun-07	2.7	1.3	5.5	11.2	0.0	11.2	0.1	13	0	14	13	18.1	1.5	33	-19	0	114		0	114	710.69	**710.82**	117.8
1	Jul-07	2.5	1.3	21.3	20.9	0.0	20.9	0.5	17	6	24	12	18.7	0.0	31	-7	0	107		0	107	710.43	**710.37**	104.9
1	Aug-07	1.8	1.3	8.6	8.9	0.0	8.9	0.1	7	4	13	9	18.7	4.5	32	-19	**5.7**	87		0	93	709.93	**709.84**	90.5
1	Sep-07	2.1	1.3	5.3	5.3	0.0	5.3	0.1	13	0	15	13	1.8	7.7	22	-8	**28.6**	85		0	114	710.68	**710.56**	110.2
1	Oct-07	0.0	1.3	29.3	9.8	13.7	23.6	5.8	10	14	39	0	1.9	0.0	2	37	0	151		0	151	711.89	**711.07**	125.1
1	Nov-07	0.0	1.3	-1.3	3.9	0.0	3.9	0.6	0	0	1	0	1.8	0.0	2	-1	0	150		0	150	711.87		#N/A
1	Dec-07	0.0	0.5	-0.5	0.0	0.0	0.0	0.1	0	0	0	0	1.9	4.2	6	-6	0	145		0	145	711.70		
1	Jan-08	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	5.7	8	-8	0	137		0	137	711.46		
1	Feb-08	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.8	5.5	7	-7	0	130		0	130	711.22		
1	Mar-08	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	14.2	16	-16	0	114		0	114	710.67		
2	Apr-08	0.3	1.3	299.7	13.8	280.2	294.0	5.8	6	150	437	1	1.8	0.0	3	434	0	548		206	342	716.54		
2	May-08	1.9	1.3	5.7	11.4	0.0	11.4	0.1	8	0	10	9	1.9	2.8	14	-4	0	338		0	338	716.46		
2	Jun-08	2.7	1.3	4.2	4.2	0.0	4.2	0.1	14	0	15	13	1.8	9.6	24	-9	0	329		0	329	716.28		
2	Jul-08	2.5	1.3	23.4	14.2	3.4	17.7	5.8	20	5	30	12	1.9	0.0	14	16	0	345		3	342	716.54		
2	Aug-08	1.8	1.3	18.2	14.2	4.0	18.2	5.8	15	5	25	9	1.9	0.0	11	14	0	356		14	342	716.54		
2	Sep-08	0.5	1.3	123.6	13.8	109.8	123.6	5.8	11	56	178	3	1.8	0.0	4	173	0	515		173	342	716.54		
2	Oct-08	0.0	1.3	29.3	14.2	15.0	29.3	5.8	10	14	40	0	1.9	0.0	2	38	0	380		38	342	716.54		
2	Nov-08	0.0	1.3	-1.3	4.4	0.0	4.4	0.1	0	0	1	0	1.8	4.2	6	-5	0	337		0	337	716.45		
2	Dec-08	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	327		0	327	716.23		
2	Jan-09	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	316		0	316	716.01		
2	Feb-09	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.7	8.0	10	-10	0	306		0	306	715.80		
2	Mar-09	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	14.2	16	-16	0	290		0	290	715.46		
3	Apr-09	0.3	1.3	299.7	13.8	280.2	294.0	5.8	6	150	437	1	1.8	0.0	3	434	0	724		382	342	716.54		
3	May-09	1.9	1.3	5.7	11.4	0.0	11.4	0.1	8	0	10	9	1.9	2.8	14	-4	0	338		0	338	716.46		
3	Jun-09	2.7	1.3	4.2	4.2	0.0	4.2	0.1	14	0	15	13	1.8	9.6	24	-9	0	329		0	329	716.28		
3	Jul-09	2.5	1.3	23.4	14.2	3.4	17.7	5.8	20	5	30	12	1.9	0.0	14	16	0	345		3	342	716.54		
3	Aug-09	1.8	1.3	18.2	14.2	4.0	18.2	5.8	15	5	25	9	1.9	0.0	11	14	0	356		14	342	716.54		
3	Sep-09	0.5	1.3	123.6	13.8	109.8	123.6	5.8	11	56	178	3	1.8	0.0	4	173	0	515		173	342	716.54		
3	Oct-09	0.0	1.3	29.3	14.2	15.0	29.3	5.8	10	14	40	0	1.9	0.0	2	38	0	380		38	342	716.54		
3	Nov-09	0.0	1.3	-1.3	4.4	0.0	4.4	0.1	0	0	1	0	1.8	4.2	6	-5	0	337		0	337	716.45		
3	Dec-09	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	327		0	327	716.23		
3	Jan-10	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	316		0	316	716.01		
3	Feb-10	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.7	8.0	10	-10	0	306		0	306	715.80		
3	Mar-10	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	14.2	16	-16	0	290		0	290	715.46		
4	Apr-10	0.3	1.3	299.7	13.8	280.2	294.0	5.8	6	150	437	1	1.8	0.0	3	434	0	724		382	342	716.54		
4	May-10	1.9	1.3	5.7	11.4	0.0	11.4	0.1	8	0	10	9	1.9	2.8	14	-4	0	338		0	338	716.46		
4	Jun-10	2.7	1.3	4.2	4.2	0.0	4.2	0.1	14	0	15	13	1.8	9.6	24	-9	0	329		0	329	716.28		
4	Jul-10	2.5	1.3	23.4	14.2	3.4	17.7	5.8	20	5	30	12	1.9	0.0	14	16	0	345		3	342	716.54		
4	Aug-10	1.8	1.3	18.2	14.2	4.0	18.2	5.8	15	5	25	9	1.9	0.0	11	14	0	356		14	342	716.54		
4	Sep-10	0.5	1.3	123.6	13.8	109.8	123.6	5.8	11	56	178	3	1.8	0.0	4	173	0	515		173	342	716.54		
4	Oct-10	0.0	1.3	29.3	14.2	15.0	29.3	5.8	10	14	40	0	1.9	0.0	2	38	0	380		38	342	716.54		
4	Nov-10	0.0	1.3	-1.3	4.4	0.0	4.4	0.1	0	0	1	0	1.8	4.2	6	-5	0	337		0	337	716.45		
4	Dec-10	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	327		0	327	716.23		
4	Jan-11	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	316		0	316	716.01		
4	Feb-11	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.7	8.0	10	-10	0	306		0	306	715.80		
4	Mar-11	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	14.2	16	-16	0	290		0	290	715.46		
5	Apr-11	0.3	1.3	299.7	13.8	280.2	294.0	5.8	6	150	437	1	1.8	0.0	3	434	0	724		382	342	716.54		
5	May-11	1.9	1.3	5.7	11.4	0.0	11.4	0.1	8	0	10	9	1.9	2.8	14	-4	0	338		0	338	716.46		

input **actual** pond elevations at month-end

Table MC3-2 - Minto Copper Project Monthly Water Balance (continued)

(volumes in 1000 m3/month)

VERSION 1.2

		MILL Pond Losses & Outflows							MAIN POND Inflows			MAIN Pond Losses & Outflows											
Operating Year	Month & Year	Evap Losses	Lost Seepage	Net Inflow to Mill Pond	Reclaim to Mill	Spill	TOTAL OUT	Mill Pond Volume	Direct Rainfall	Snowmelt + Runoff	Total in to MAIN Pond	Evap Losses	Net Lost Seepage	Reclaim to Mill	TOTAL OUT	Net INFLOW to MAIN Pond	Extra Make-up Required	Potential Water in Storage	Minimum Riparian Release	Spill	Estimated Total Water in Storage	Estimated Pond Elevation (m)	Actual Pond Elevation (m)	Actual Pond Volume
5	Jun-11	2.7	1.3	4.2	4.2	0.0	4.2	0.1	14	0	15	13	1.8	9.6	25	-9	0	329		0	329	716.27		
5	Jul-11	2.5	1.3	23.4	14.3	3.4	17.7	5.8	20	5	30	12	1.9	0.0	14	16	0	345		3	342	716.54		
5	Aug-11	1.8	1.3	18.2	14.3	3.9	18.2	5.8	15	5	25	9	1.9	0.0	11	14	0	356		14	342	716.54		
5	Sep-11	0.5	1.3	123.5	13.8	109.7	123.5	5.8	11	56	178	3	1.8	0.0	4	173	0	515		173	342	716.54		
5	Oct-11	0.0	1.3	29.3	14.3	15.0	29.3	5.8	10	14	40	0	1.9	0.0	2	38	0	380		38	342	716.54		
5	Nov-11	0.0	1.3	-1.3	4.4	0.0	4.4	0.1	0	0	1	0	1.8	4.2	6	-5	0	337		0	337	716.45		
5	Dec-11	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	326		0	326	716.23		
5	Jan-12	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	316		0	316	716.01		
5	Feb-12	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.8	8.3	10	-10	0	306		0	306	715.79		
5	Mar-12	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	14.3	16	-16	0	289		0	289	715.45		
6	Apr-12	0.3	1.3	299.7	13.8	280.2	294.0	5.8	6	150	437	1	1.8	0.0	3	434	0	724		382	342	716.54		
6	May-12	1.9	1.3	5.7	11.4	0.0	11.4	0.1	8	0	10	9	1.9	2.8	14	-4	0	338		0	338	716.46		
6	Jun-12	2.7	1.3	4.2	4.2	0.0	4.2	0.1	14	0	15	13	1.8	9.6	24	-9	0	329		0	329	716.28		
6	Jul-12	2.5	1.3	23.4	14.2	3.4	17.7	5.8	20	5	30	12	1.9	0.0	14	16	0	345		3	342	716.54		
6	Aug-12	1.8	1.3	18.2	14.2	4.0	18.2	5.8	15	5	25	9	1.9	0.0	11	14	0	356		14	342	716.54		
6	Sep-12	0.5	1.3	123.6	13.8	109.8	123.6	5.8	11	56	178	3	1.8	0.0	4	173	0	515		173	342	716.54		
6	Oct-12	0.0	1.3	29.3	14.2	15.0	29.3	5.8	10	14	40	0	1.9	0.0	2	38	0	380		38	342	716.54		
6	Nov-12	0.0	1.3	-1.3	4.4	0.0	4.4	0.1	0	0	1	0	1.8	4.2	6	-5	0	337		0	337	716.45		
6	Dec-12	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	327		0	327	716.23		
6	Jan-13	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	316		0	316	716.01		
6	Feb-13	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.7	8.0	10	-10	0	306		0	306	715.80		
6	Mar-13	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	14.2	16	-16	0	290		0	290	715.46		
7	Apr-13	0.3	1.3	299.7	13.8	280.2	294.0	5.8	6	150	437	1	1.8	0.0	3	434	0	724		382	342	716.54		
7	May-13	1.9	1.3	5.7	11.4	0.0	11.4	0.1	8	0	10	9	1.9	2.8	14	-4	0	338		0	338	716.46		
7	Jun-13	2.7	1.3	4.2	4.2	0.0	4.2	0.1	14	0	15	13	1.8	9.6	24	-9	0	329		0	329	716.28		
7	Jul-13	2.5	1.3	23.4	14.2	3.4	17.7	5.8	20	5	30	12	1.9	0.0	14	16	0	345		3	342	716.54		
7	Aug-13	1.8	1.3	18.2	14.2	4.0	18.2	5.8	15	5	25	9	1.9	0.0	11	14	0	356		14	342	716.54		
7	Sep-13	0.5	1.3	123.6	13.8	109.8	123.6	5.8	11	56	178	3	1.8	0.0	4	173	0	515		173	342	716.54		
7	Oct-13	0.0	1.3	29.3	14.2	15.0	29.3	5.8	10	14	40	0	1.9	0.0	2	38	0	380		38	342	716.54		
7	Nov-13	0.0	1.3	-1.3	4.4	0.0	4.4	0.1	0	0	1	0	1.8	4.2	6	-5	0	337		0	337	716.45		
7	Dec-13	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	327		0	327	716.23		
7	Jan-14	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	8.9	11	-11	0	316		0	316	716.01		
7	Feb-14	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.7	8.0	10	-10	0	306		0	306	715.80		
7	Mar-14	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0	0	0	0	1.9	14.2	16	-16	0	290		0	290	715.46		
8	Apr-14	0.3	1.3	304.0	0.0	298.3	298.3	5.8	6	150	455	1	1.8	0.0	3	452	0	742		400	342	716.54		
8	May-14	1.9	1.3	10.2	0.0	10.2	10.2	5.8	8	0	20	9	1.9	0.0	11	9	0	351		9	342	716.54		
8	Jun-14	2.7	1.3	8.5	0.0	8.5	8.5	5.8	14	0	24	13	1.8	0.0	15	9	0	351		9	342	716.54		
8	Jul-14	2.5	1.3	27.8	0.0	27.8	27.8	5.8	20	5	55	12	1.9	0.0	14	41	0	383		41	342	716.54		
8	Aug-14	1.8	1.3	22.7	0.0	22.7	22.7	5.8	15	5	44	9	1.9	0.0	11	33	0	375		33	342	716.54		
8	Sep-14	0.5	1.3	127.9	0.0	127.9	127.9	5.8	11	56	196	3	1.8	0.0	4	191	0	533		191	342	716.54		
8	Oct-14	0.0	1.3	30.8	0.0	30.8	30.8	5.8	10	14	56	0	1.9	0.0	2	54	0	396		54	342	716.54		
8	Nov-14	0.0	1.3	-0.8	0.0	0.0	0.0	5.0	0	0	1	0	1.8	0.0	2	-1	0	341		0	341	716.53		
8	Dec-14	0.0	1.3	-0.8	0.0	0.0	0.0	4.2	0	0	1	0	1.9	0.0	2	-1	0	341		0	341	716.52		
8	Jan-15	0.0	1.3	-0.8	0.0	0.0	0.0	3.4	0	0	1	0	1.9	0.0	2	-1	0	340		0	340	716.51		
8	Feb-15	0.0	1.2	-0.7	0.0	0.0	0.0	2.7	0	0	1	0	1.7	0.0	2	-0	0	340		0	340	716.50		
8	Mar-15	0.0	1.3	-0.8	0.0	0.0	0.0	1.9	0	0	1	0	1.9	0.0	2	-1	0	339		0	339	716.49		
9	Apr-15	0.3	1.3	304.0	0.0	300.1	300.1	5.8	6	150	457	1	1.8	0.0	3	454	0	794		452	342	716.54		
9	May-15	1.9	1.3	10.2	0.0	10.2	10.2	5.8	8	0	20	9	1.9	0.0	11	9	0	351		9	342	716.54		
9	Jun-15	2.7	1.3	8.5	0.0	8.5	8.5	5.8	14	0	24	13	1.8	0.0	15	9	0	351		9	342	716.54		
9	Jul-15	2.5	1.3	27.8	0.0	27.8	27.8	5.8	20	5	55	12	1.9	0.0	14	41	0	383		41	342	716.54		
9	Aug-15	1.8	1.3	22.7	0.0	22.7	22.7	5.8	15	5	44	9	1.9	0.0	11	33	0	375		33	342	716.54		
9	Sep-15	0.5	1.3	127.9	0.0	127.9	127.9	5.8	11	56	196	3	1.8	0.0	4	191	0	533		191	342	716.54		
9	Oct-15	0.0	1.3	30.8	0.0	30.8	30.8	5.8	10	14	56	0	1.9	0.0	2	54	0	396		54	342	716.54		
9	Nov-15	0.0	1.3	-0.8	0.0	0.0	0.0	5.0	0	0	1	0	1.8	0.0	2	-1	0	341		0	341	716.53		
9	Dec-15	0.0	1.3	-0.8	0.0	0.0	0.0	4.2	0	0	1	0	1.9	0.0	2	-1	0	341		0	341	716.52		
9	Jan-16	0.0	1.3	-0.8	0.0	0.0	0.0	3.4	0	0	1	0	1.9	0.0	2	-1	0	340		0	340	716.51		
9	Feb-16	0.0	1.3	-0.8	0.0	0.0	0.0	2.7	0	0	1	0	1.8	0.0	2	-1	0	340		0	340	716.50		
9	Mar-16	0.0	1.3	-0.8	0.0	0.0	0.0	1.9	0	0	1	0	1.9	0.0	2	-1	0	339		0	339	716.49		

Table MC3-3 - Minto Copper Project - ANNUAL WATER BALANCE SUMMARY - Average Conditions 2,400 tpd

(All Volumes in 1000 m3 per year)

YEAR	Return Period	Net Runoff Inflows				Mill Pond		Main Water Pond			Make-Up Water Requirements		
		Mill Pond	Waste Dump	IR O'den Dump	Open Pit	Total Inflow	Reclaim to Mill	Net Inflow	Reclaim to Mill	Release to Minto Ck	Total Required	From Mill & Main Ponds	From Yukon
2007	2	144	7.2	2.8	38.3	192.1	73.2	68.8	43.4	0.0	150.9	116.7	34.3
2008	2	446	15.6	6.1	35.3	502.8	90.4	611.0	56.6	434.6	147.0	147.0	0.0
2009	2	446	15.6	6.1	35.3	502.8	90.4	611.0	56.6	611.0	147.0	147.0	0.0
2010	2	446	15.6	6.1	35.3	502.8	90.4	611.0	56.6	611.0	147.0	147.0	0.0
2011	2	446	15.6	6.1	35.2	502.7	90.5	610.3	57.1	610.8	147.6	147.6	0.0
2012	2	446	15.6	6.1	35.3	502.8	90.4	611.0	56.6	610.5	147.0	147.0	0.0
2013	2	446	15.6	6.1	35.3	502.8	90.4	611.0	56.6	611.0	147.0	147.0	0.0
2014	2	441	15.6	6.1	65.8	528.1	0	786.7	0	737.2	0	0	0
2015	2	441	15.6	6.1	65.9	528.1	0	788.5	0	788.5	0	0	0
P/C	2	435	18.9	5.9	50.4	510.4	0	743.5	0	743.5	0	0	0

Notes

1) Operating Years extend from April through the following March
2) Make-up water trucked from the Yukon during 2007 for exploration program
3) Mining activities assumed to be complete by 2013
4) Year "P/C" corresponds to Post-Closure conditions when all site reclamation activities have been completed.

Table MC3-4 - Minto Copper Project - ANNUAL WATER BALANCE SUMMARY - Wet & Dry Year Conditions 2,400 tpd

(All Volumes in 1000 m3 per year)

Precipitation Return Period (Years)	Net Runoff Inflows				Mill Pond		Main Water Pond			Make-Up Water Requirements		
	Mill Pond	Waste Dump	IR O'den Dump	Open Pit	Total Inflow	Reclaim to Mill	Net Inflow	Reclaim to Mill	Release to Minto Ck	Total Required	From Mill & Main Ponds	From Yukon
10 year DRY	249	8.7	3.4	18.4	279.5	63.5	270.9	83.5	270.9	147.0	147.0	0.0
Average	446	15.6	6.1	35.3	502.8	90.4	611.0	56.6	611.0	147.0	147.0	0.0
10 year WET	846	23.0	9.0	53.5	931.5	102.7	1258.8	44.2	1258.8	147.0	147.0	0.0
50 year WET	1,152	28.4	11.1	66.8	1258.7	102.7	1753.5	44.2	1753.5	147.0	147.0	0.0
100 year WET	1,273	30.5	11.9	72.0	1387.1	102.7	1947.5	44.2	1947.5	147.0	147.0	0.0
200 year WET	1,390	32.4	12.7	76.7	1511.8	102.7	2135.8	44.2	2135.8	147.0	147.0	0.0

APPENDIX

APPENDIX B GENERAL CONDITIONS

GEOTECHNICAL REPORT – GENERAL CONDITIONS

This report incorporates and is subject to these "General Conditions".

1.0 USE OF REPORT AND OWNERSHIP

This geotechnical report pertains to a specific site, a specific development and a specific scope of work. It is not applicable to any other sites nor should it be relied upon for types of development other than that to which it refers. Any variation from the site or development would necessitate a supplementary geotechnical assessment.

This report and the recommendations contained in it are intended for the sole use of EBA's Client. EBA does not accept any responsibility for the accuracy of any of the data, the analyses or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than EBA's Client unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user.

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2.0 ALTERNATE REPORT FORMAT

Where EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed EBA's instruments of professional service), only the signed and/or sealed versions shall be considered final and legally binding. The original signed and/or sealed version archived by EBA shall be deemed to be the original for the Project.

Both electronic file and hard copy versions of EBA's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except EBA. EBA's instruments of professional service will be used only and exactly as submitted by EBA.

Electronic files submitted by EBA have been prepared and submitted using specific software and hardware systems. EBA makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

3.0 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, EBA has not been retained to investigate, address or consider and has not investigated, addressed or considered any environmental or regulatory issues associated with development on the subject site.

4.0 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems and methods employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. EBA does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

5.0 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

6.0 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historic environment. EBA does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional investigation and review may be necessary.

7.0 SURFACE WATER AND GROUNDWATER CONDITIONS

Surface and groundwater conditions mentioned in this report are those observed at the times recorded in the report. These conditions vary with geological detail between observation sites; annual, seasonal and special meteorologic conditions; and with development activity. Interpretation of water conditions from observations and records is judgemental and constitutes an evaluation of circumstances as influenced by geology, meteorology and development activity. Deviations from these observations may occur during the course of development activities.

8.0 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

9.0 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

10.0 INFLUENCE OF CONSTRUCTION ACTIVITY

There is a direct correlation between construction activity and structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques are known.

11.0 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, as well as the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

12.0 DRAINAGE SYSTEMS

Where temporary or permanent drainage systems are installed within or around a structure, the systems which will be installed must protect the structure from loss of ground due to internal erosion and must be designed so as to assure continued performance of the drains. Specific design detail of such systems should be developed or reviewed by the geotechnical engineer. Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function.

13.0 BEARING CAPACITY

Design bearing capacities, loads and allowable stresses quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition assumed. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions assumed in this report in fact exist at the site.

14.0 SAMPLES

EBA will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

15.0 INFORMATION PROVIDED TO EBA BY OTHERS

During the performance of the work and the preparation of the report, EBA may rely on information provided by persons other than the Client. While EBA endeavours to verify the accuracy of such information when instructed to do so by the Client, EBA accepts no responsibility for the accuracy or the reliability of such information which may affect the report.