POLARIS MINE

POST-RECLAMATION MONITORING REPORT

2009 4th QUARTER and 2009 ANNUAL REPORT

FOR THE NUNAVUT WATER BOARD

&

INDIAN AND NORTHERN AFFAIRS CANADA

March 14, 2010

Teck

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March 14, 2010

Nunavut Water Board
Box 119
Gjoa Haven, NU
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Attention: Phyllis Beaulieu, Manager of Licensing

Indian and Northern Affairs Canada
969 Qimugjuk Building, 2nd Floor
Iqaluit, Nunavut
X0A 0H0
Attention: Spencer Dewar, Manager, Lands Administration

Dear Ms. Beaulieu and Mr. Dewar;

Re: Polaris Mine Water Licence NWB1POL0311 – 2009 4th Quarter and Annual Water Licence and Decommissioning and Reclamation Plan Reports

Please find attached the Polaris Mine 2009 4th Quarter and 2009 Annual Reports required under Polaris's Water Licence and Decommissioning and Reclamation Plan (DRP). I have attached paper copies of this report to this letter in addition to an electronic copy (pdf format on CD).

There were no activities or sampling done at the Polaris Mine site during the 4th Quarter of 2009 as the site was snow covered and there were no effluent discharges due to the freezing temperatures. Apart from the sampling of Garrow Lake in the 2nd Quarter of 2009, all monitoring was conducted during the 3rd Quarter of 2009 which was previously reported.

If you have any questions regarding this report, please do not hesitate to contact me.

Yours truly,

Bruce J. Donald
Reclamation Manager
Environment and Corporate Affairs
Teck Cominco Limited

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1. INTRODUCTION

The Polaris Mine ceased operation in September of 2002. Immediately upon mine closure, reclamation activities commenced in accordance with the Decommissioning and Reclamation Plan (DRP) approved by the Nunavut Water Board and Indian and Northern Affairs Canada. The DRP as well as the Water Licence requires reporting of work and monitoring activities on both a quarterly and an annual basis. This document includes both the 2009 4th Quarter and the 2009 Annual Report for the Polaris Mine site.

An executive summary of this report translated into Inuktitut is included as Appendix 1.

2. 2009 4th QUARTER REPORT

2.1. Reclamation Activities

During the entire 4th Quarter of 2009, the Polaris Mine remained unoccupied by personnel. No reclamation activities were undertaken.

2.2. Site Monitoring

During the entire 4th Quarter of 2009, the Polaris Mine remained unoccupied by personnel and no monitoring events occurred as all surface waters were frozen. As a result there is no effluent water quality data to report.

2.3. Financial Reporting

2.3.1. Updated Financial Report

An update of reclamation and monitoring costs is presented in Appendix 2. Costs for 2009 were $297,000. The water monitoring costs are continuing at a higher than forecast level as we had anticipated being able to reduce the intensity of monitoring by now through administrative review of the requirements rather than having to undertake regulatory amendments. Forecast costs include the final demobilization costs from the site prior to the Water Licence and Land Leases expiring in 2011.

2.3.2. Request for Security Adjustments

In 2009 after substantial effort and time, a major reduction in reclamation security was obtained. It is not simple nor timely to obtain security reductions so further reductions will not be pursued until a significant portion or all of the residual security is requested.

3. 2009 ANNUAL REPORT

Part B, Section 6 of the Water Licence requires that an Annual Report be filed that includes the following topics.

3.1. Unauthorized Discharges

The Polaris Mine had no unauthorized discharges to report.

3.2. Progress Report of Studies and Plans

Progress on reports and/or revision of any studies or plans requested by the Board is listed below:

- As part of the review process for Teck's request to reduce reclamation security at the site, a comprehensive review of compliance with the Water Licence was conducted. A number of reporting deficiencies identified and most were resolved. There was also dialogue as to the appropriate amount of security that should remain in place for remaining site maintenance, site monitoring, final demobilization from site, and for contingencies. Finally, the NWB grated a reduction of reclamation security to $3.539M. All of these discussions are contained in the correspondence listed below and these are all attached in Appendix 3 for future reference:
  - Mar 05, 2009 - Teck letter to the NWB and INAC responding to the BGC Consultants review of current reclamation liabilities for the site.
  - Apr 06, 2009 - NWB letter to Teck recognizing the June 24th, 2008 submission for security reduction.
  - May 15, 2009 - INAC letter to NWB with estimate of current reclamation liabilities.
  - Jun 01, 2009 - Teck Letter to the NWB – regarding the May 15, 2009 letter from INAC to the NWB.
  - Jun 09, 2009 - INAC to NWB – Response to June 5th letter requesting clarification and justification for post-closure monitoring.
  - Jul 18, 2009 - Teck email to NWB with missing Operational Landfill as-built-drawing.
  - Jul 30, 2009 - Teck letter to NWB – Response to INAC June 9, 2009 letter regarding estimated reclamation liabilities.
  - Aug 25, 2009 - INAC letter to NWB regarding review of Polaris 2008 annual report and associated water quality laboratory results.
  - Aug 27, 2009 - NWB letter to Minister of INAC stating the security is being reduced from $33.7 to $3.539M.
  - Sep 01, 2009 - NWB letter to Teck reviewing reconciliation of administrative requirements.
  - Oct 01, 2009 - INAC letter to Teck's insurance agent releasing $1M land lease bond.
  - Oct 08, 2009 - Teck letter to INAC requesting cancellation of $18M of security
  - Oct 18, 2009 - Teck letter to NWB responding to September 1, 2009 list of licence reporting deficiencies.
  - Nov 02, 2009 - Minister of INAC letter to NWB noting NWB letter of August 27, 2009 modifying licence.

- The report does not itemize or include routing correspondence regarding submission or receipt of 2008 or 2009 routine reporting.

3.3. Executive Summary of Report Translated into Inuktitut

Included in Appendix 1 is an executive summary of both the 2009 4th Quarter Report and the 2009 Annual Report translated into Inuktitut.

3.4. Summary of Closure and/or Reclamation Work Undertaken

A summary of any closure and reclamation work undertaken during the year and an outline of work anticipated for the next year is outlined below:

- On June 12th, Garrow Lake the Maximum Ice Thickness sampling was done from the two monitoring stations 262-3 and 262-3A. The ice was 3.5 metres thick which is substantially thicker than observed since post-closure monitoring began in 2002.
- Between July 19th and the 24th a small crew of 5-7 people were on site to:
  - conduct the annual geotechnical inspection,

  - conduct topographic surveys,
  - take soil and water samples,
  - continue picking up of litter at the site, and
  - conduct slope stabilization work at the Main Portal area.
- During the open water period on Garrow Lake, when no personnel were on site, the wind speeds were monitored at Resolute Bay. No significant wind events occurred during open water period of Garrow Lake.
- Minimum Ice thickness (i.e. open water) sampling of Garrow Lake was done on Aug. 16th from the two required monitoring stations.
- The waters discharging from Garrow Lake into Garrow Creek were monitored and fully compliant with the Water Licence during the year.
- Garrow Lake stratigraphy continues to be both physically and chemically stable based on both the June and August sampling events.
- The annual geotechnical inspection was completed by an independent professional geotechnical engineer. No unstable landforms or erosion requiring follow up were identified in the detailed inspect.
- The topographic survey of the Subsidence Area has yet to identify any significant movement since these were initiated in 2004 let alone from year to year.
- The small slope failure on the cover over the Main Portal entrance identified in August 2008 was repaired, and the bottom half of the slope flattened with additional material added to the toe area to improve stability. This area was inspected by INAC contracted geotechnical inspector after the work was completed.
- Had contractors on site to view the equipment and materials remaining on site in preparation for them to submit bids on beginning the final demobilization from the island in the summer of 2010. All materials must be removed from the island by mid 2011 prior to the land leases expiring.

3.5. Estimate of the Total Mine Closure Cost

An update of reclamation and monitoring costs is presented in Appendix 2. Costs for 2009 were $297,000. Costs will continue at a higher than budgeted as it was originally assumed that water quality monitoring requirements would have been relaxed by this time. It is now recognized that any monitoring program revisions require permit amendments rather than a simple administrative processes. The significant cost and time commitments to make permit amendments are more onerous that complying with current licence provisions for the two remaining years.

3.6. Public consultation / Participation

- No public consultations were conducted as the site is basically dormant other than for monitoring.
- During the annual inspection, an Inuit resident from Resolute assists with at the site. In addition to providing local employment, the local knowledge for the safety of workers on site is important. Having a local Inuit resident involved with monitoring of the site has the benefit of ensuring that the nearest community is aware of site activities and site conditions.

3.7. Work Conducted in Response to Inspection or Compliance Reports

A brief summary of work done to address concerns or deficiencies listed in inspection reports include the slope stabilization work at the Main Portal Area.

- During 2009 substantial correspondence was exchanged between the Water Board and the Licensee regarding deficiencies in reporting as a result of a major review by INAC and the

Water Board. The have been largely resolved and resulted in the reclamation security being reduced to $3,539,000 from $33.7M (as required by the water licence and from $18,000,000 that was currently in place). Listing of this correspondence was included in Section 3.2 above.

3.8. Effluent and Water Quality Studies Conducted

3.8.1. Quantities of Fresh Water Pumped From Frustration Lake

The water licence requires the monthly and annual quantities (in cubic metres) of water pumped from Frustration Lake to be reported.

- No water was pumped as the site's freshwater system was demolished and reclaimed in 2004.

3.8.2. Garrow Lake Water Column Monitoring

During 2009, the Water Licence required three monitoring events (at mid-winter, at maximum ice thickness, and at maximum ice melt) in two separate locations of the Garrow Lake water column stratigraphy. The mid-winter monitoring event was not conducted as charter aircraft will not fly to this isolated, abandoned site in the dark. The maximum ice thickness and maximum melt monitoring events took place as required and were reported in the 2nd and 3rd Quarter monitoring reports.

Zinc concentrations in the water column of Garrow Lake are primary metal of concern and so the trend of zinc concentrations over time at varying depths in the lake water column are monitored. Previous reports have monitored the trends from 2002 but due to the volume of data, this year the time range graphed starts in 2005 to minimize data clutter. Appendix 4 contains the zinc data and the graphs.

Figure 1A – Station 262-3 Zinc Trends - Maximum Ice Thickness

- There is a clear and consistent trend of reducing zinc concentrations with time below the 10 metre depth in the water column. Between the bottom of the Mixolimnium layer and the top of the Pycnocline layer there continues to be a distinct transition in density and associated higher zinc concentrations. As this transition layer is very thin, if water samples are collected from even slightly different depths, the resulting measured zinc concentrations change significantly. This explains the somewhat scattered nature of the zinc data around the 10 m depth. However in 2009, the zinc concentrations are lower than recent years, but similar to 2006 data. In the Mixolimnium layer the zinc concentrations remained similar to previous years data but at the upper end of the range of variations experienced previously.

Figure 1B – Station 262-3 Zinc Trends – Minimum Ice Thickness (i.e. No ice)

- There is a clear and consistent trend of reducing zinc concentrations with time below the 10 metre depth in the water column. Between the bottom of the Mixolimnium layer and the top of the Pycnocline layer there continues to be a distinct transition in both density due to salt concentration (as measured by conductivity) and associated higher zinc concentrations. As this transition layer is very thin, if water samples are collected from even slightly different depths, the resulting measured zinc concentrations change significantly. This explains the somewhat scattered nature of the zinc data around the 10 m depth. As with the Maximum Ice thickness sampling, the zinc concentrations in 2009 are lower that the other four years of data graphed. In the Mixolimnium layer the 2006 and 2009 zinc concentrations were slightly lower in

the top 3 metres compared to other years, and between the 4m to 8m depth, the 2006 and 2009 zinc concentrations are slightly higher compared to other three years shown in the graph.

Figures 2A and 2B – Station 262-3A

- As the data at Station 262-3A is very similar to the data at Station 262-3, no graphs of this data are included in the report.

Appendix 5 contains the hydrolab data collected at the same time as the water quality samples were taken from both Stations 262-3 and 262-3A as well as plots of the water density. The plots Figure 1 (Maximum ice thickness sampling event) and Figure 2 (Minimum ice thickness sampling event) clearly show the distinct density changes through the water column. The density changes demonstrate that the intense stratification of the lake remains intact.

3.8.3. Garrow Lake Effluent Monitoring

The Water Licence and the DRP requires sampling of the Final Discharge Point from Garrow Lake during periods of effluent discharge. All water quality results were compliant with the parameters specified in the Water Licence. In addition there was no acute toxicity in either the Rainbow Trout or the Daphnia magna. The details of the monitoring results can be found in the previously submitted 3rd Quarter Report.

3.9. Details of Water Use or Waste Disposal Requested By the Board

- There is no fresh water use at the site. No details of water use have been requested by the board.
- Waste disposal was restricted to collection of site litter that has been stockpiled for future disposal in LRD Quarry Landfill

APPENDIX 1

Executive Summary

Translated into Inuktitut

1. ᑭᓱᒨᖅᒪᖔᑦ

ᒪᕈᓕᕿᒥ ᐅᔭᖅᑭᖅᓯᐅᕐᕕᒃ ᒪᑐᓚᐅᓯᒪᔪᖅ ᓯᑎᐱᕆ 2002ᖑᑎᓪᓗᒍ. ᒪᑐᑐᐊᕐᒪᑦ, ᖃᓄᐃᑐᓂᖓᓄᑦ ᐅᑎᕐᑎᑕᐅᓇᓱᓂᖓ ᐱᒋᐊᓯᑲᐅᑎᒋᓚᐅᓯᒪᔪᖅ ᑕᐃᒪᓇ ᐸᕐᓇᒃᑕᐅᓯᒪᓚᐅᒪᑦ ᐊᖏᑕᐅᓯᒪᓗᓂᓗ ᓄᓇᕗᕐᒥ ᐃᒪᓕᕆᔨᖏᓄᑦ ᐊᖓᓂᒃ ᐊᒪᓗ 2009ᒥ ᐊᒪᓗ ᐃᓄᓕᕆᔨᑐᖅᑯᓄᑦ. ᐅᓇ ᑎᑎᕋᓯᒪᔪᖅ ᐃᓗᓕᖅᑲᖅᓯᐅᑎᖏᒥᔪᖅ ᑕᐃᒪᓂᒃ 2009ᒥ ᑎᓴᒪᖓᓂ ᑎᓴᒪᐃᓕᖅᑲᖓᔪᑦ 2009ᒥᓗ ᐊᕿᒍᑕᒫᑦ ᐅᓂᒃᑳᓕᐊᖓᓂ ᒪᕈᓕᕿᐅᑉ ᐅᔭᖅᑭᖅᓯᐅᕕᖓ ᐱᔪᑎᒋᓗᒍ.

2. 2009ᒥ ᑎᓴᒪᖓᑕ ᑎᓴᒪᐃᓕᖅᑲᖓᔭᐃ ᐅᓂᒃᑳᑦ

2.1. ᖃᓄᐃᑐᓂᖓᔫᑦ ᐅᑎᑎᑕᐅᓇᓱᓂᑰᑉ ᐱᓕᕆᐊᕕᓂᖓ

ᑕᐃᒪᖓᓕᒫᖅ ᑎᓴᒪᐃᓕᖅᑲᖓᔪᑦ ᑎᓴᒪᖓᓂ 2009ᒥ ᒪᕈᓕᕿ ᐃᓄᖅᑲᓚᐅᖏᑐᖅ ᐃᖅᑲᐃᔭᕐᑎᒥᒃ. ᖃᓄᐃᑐᓂᕕᓂᖓᓄᑦ ᐅᑎᑎᑕᐅᓇᓱᓂᕐᒥᒃ ᑲᔪᓯᔪᖅᑲᓚᐅᖏᑐᖅ.

2.2. ᒪᕈᓕᕿᒥ ᐅᐊᓯᓂᖅ

ᑕᐃᒪᖓᓕᒫᖅ ᑎᓴᒪᐃᓕᖅᑲᖓᔪᑦ ᑎᓴᒪᖓᓂ 2009ᒥ ᒪᕈᓕᕿ ᐃᓄᖅᑲᓚᐅᖏᑐᖅ ᐃᖅᑲᐃᔭᕐᑎᒥᒃ ᐊᒪᓗ ᐅᐊᓯᓂᕐᒥᒃ ᑲᔪᓯᔪᖅᑲᓚᐅᖏᒥᔪᖅ ᐱᔪᑎᒋᓗᒍ ᑕᓲᑦ ᖁᐊᖑᓚᐅᒪᑕ. ᑕᐃᒪᐃᓂᖓᓄᑦ ᐃᒪᐅᑉ ᐱᐅᓂᖓᑕ ᖃᐅᔨᓴᕐᑕᐅᓂᖓᓂᒃ ᑎᑎᕋᓯᒪᔪᕐᒥᒃ ᐅᓂᒃᑳᓴᕐᑕᖅᑲᖏᑐᖅ.

2.3. ᑭᓇᐃᔭᓕᕆᓂᒧᑦ ᐅᓂᒃᑳᑦ

2.3.1. ᓄᑕᐅᓕᕐᑕᐅᓯᒪᔪᑦ ᑭᓇᐅᔭᓕᕆᓂᒧᑦ ᐅᓂᒃᑳᑦ

ᓄᑕᐅᓕᕐᑕᐅᓯᒪᔪᑦ ᐅᐊᓯᓂᕐᒧᑦ ᑭᓇᐅᔭᐃᑦ ᐊᑐᕐᑕᐅᓂᖏᑦ ᐃᓚᒋᐊᕈᑦ 2ᒥᑐᑦ. ᑭᓇᐅᔭᕐᒥ ᐊᑐᓚᐅᑐᒍᑦ 2009ᖑᑎᓪᓗᒍ $297,000ᒥᒃ. ᐊᑐᕐᑕᐅᓂᐊᕋᓱᒋᔪᑦ ᐃᓗᓕᖅᒥᔪᑦ ᑭᖑᓕᕐᐸᕐᒥᒃ ᐃᒍᑎᕆᓂᒧᑦ ᑕᐃᑲᓂ ᒪᕈᓕᕿᒥ ᐃᒪᕐᒧᑦ ᐱᔪᓇᐅᑎᑎᓄᑦ ᓱᓕ ᐱᓚᐅᕐᑎᓇᑕ ᐊᒪᓗ ᓄᓇᒧᑦ ᐊᑐᑐᐊᕈᑎᒃ ᐃᓱᓕᓚᐅᖏᓂᖓᓂ 2011ᒥ.

2.3.2. ᑐᒃᓯᕋᓂᖅ ᑭᓇᐅᔭᕐᓂᒃ ᓴᓂᕙᐃᓂᕐᒧᑦ

2009ᖑᑎᓪᓗᒍ ᐊᒃᓱᕈᕐᓗᑕ ᐱᓕᕆᓇᓱᓚᐅᑐᒍᑦ, ᒥᒃᓕᒋᐊᑲᓂᓂᓴᓚᓗᕐᑯᓗᒍ ᑭᓇᐅᔭᖓ ᑕᐃᒪᐃᓚᐅᕈᑕᓗ. ᒪᓇᐅᔪᖅ ᑭᓇᐅᔭᐃᑦ ᐊᑐᕐᑕᐅᓂᖏᑦ ᕿᓄᔪᑕᐅᖏᑐᑦ ᒥᑭᓕᒋᐊᕐᑯᓗᑎᑦ.

3. 2009ᒥ ᐊᕿᒍᑕᒫᕐᒧᖓᔪᖅ ᐅᓂᒃᑳᖅ

ᐊᒍᕐᓯᒪᔪᑦ ᐱᒥᑐᖅ, ᓇᓴᐅᑎᓕᒃ 6ᒥᒃ ᐃᒪᒧᑦ ᐱᔪᓇᐅᑎᒃ ᕿᓄᓯᒪᒃᒪᑦ ᐊᕿᒍᑕᒫᑦ ᐅᓂᒃᑳᓕᐅᕐᑯᔨᓗᑎᒃ ᐅᒪᓗ ᐊᑕᓂᑐᓂᒃ ᐃᓗᓕᖅᑲᓇᓗᓂ.

3.1. ᐊᖏᕐᑕᐅᓯᒪᖏᑐᑦ ᑯᕕᑎᓯᓃᑦ

ᒪᕈᓕᕿᒥ ᐃᓄᖅᑲᓚᐅᖏᒪᑦ ᐊᖏᕐᑕᐅᓯᒪᖏᑐᕐᒥᒃ ᑯᕕᔪᖅᑐᕐᒥᒃ ᐅᓂᒃᑳᒃᓴᕐᑕᖅᑲᖏᑐᖅ.

3.2. ᐱᕙᓕᐊᔪᑦ ᐅᓂᒃᑳᖏᑦ ᖃᐅᔨᓴᕐᓂᕕᓃᑦ ᐸᕐᓇᒍᑕᐅᓯᒪᔪᓪᓗ

ᖃᓄᐃᓕᖓᓕᕐᓂᕆᔭᖓ ᐅᓂᒃᑳᖅ ᐊᒪᓗ/ᐅᕙᓗᓃᑦ ᖃᐅᔨᓴᓃᑦ ᐸᕐᓇᓂᓗᓃᑦ ᑐᑭᓯᕋᕆᔭᐅᓯᒪᔪᑦ ᑲᑎᒪᔩᓄᑦ ᐅᒪ ᐊᑖᓂ ᑎᑎᕋᓯᒪᔪᑦ

- ᓄᓇᕗᕐᒥ ᐃᒪᓕᕆᔨᒧᑦ ᑲᑎᒪᔨᖏᑦ ᐊᒪᓗ ᐃᓄᓕᕆᔨᑐᖅᑯᑦ ᓇᒪᔪᕐᒥᒃ ᖃᐅᔨᓴᓚᐅᑐᑦ ᒫᓕᑕᐅᒐᓗᐊᒪᖓᑕ ᐱᔪᓇᐅᑎᑎᓂᑐᑦ. ᑎᒃᑯᑦ ᑐᓂᓯᓚᐅᑐᑦ ᐃᓚᑯᔪᑎᕕᓂᕐᓂᒃ ᑐᓴᕈᑎᓂᒃ ᐊᒪᓗ ᐊᕿᒋᐊᕐᑕᐅᔭᕆᐊᓖᑦ ᑲᒪᒋᔭᐅᓗᑎᒃ. ᐊᒐᓯᐅᑎᓗᒍ ᐃᒪᓕᕆᔨᒧᑦ ᒥᑭᓕᒋᐊᕐᑎᓯᓚᐅᑐᑦ ᖃᓄᐃᑐᓂᖓᑕ ᓴᓇᔭᐅᓂᖓᓄᑦ ᓴᓂᕙᕐᑕᐅᓯᒪᔪᓂᒃ ᑭᓇᐅᔭᕐᓂᒃ 3.539ᒥᓕᐊᓄᑦ. ᑕᑯᐊᓕᒫᑦ ᐅᓂᒃᑲᐅᓯᐅᔪᑦ ᑕᕙᓂ ᑎᑎᕋᒪᖅᓯᐅᑎᔪᑦ ᐅᒪ ᐊᑖᓂ. ᐊᔨᖏᑦ ᐃᓚᐅᖅᑕᐅᑎᓗᑎᒃ ᐃᓚᒐᐊᕈᑦ 3ᒥ ᓯᕗᓂᑎᓂ ᖃᐅᔨᒋᐊᕈᑎᓴᑲᓃᑦ.
  - ᒪᔨ 5, 2009 - ᑎᒃ ᑎᑎᖅᖓ ᓄᓇᕗᕐᒥ ᐃᒪᓕᕆᔨᖏᓄᑦ ᐃᓄᓕᕆᔨᑐᖅᑯᓄᓗ ᑭᐅᔪᑎᓕᒃ ᐱᔨᓯ ᖃᐅᔨᓴᕐᑎᑯᑦ ᕿᒥᕈᓂᑯᖏᓂᒃ ᒪᓇᐅᔪᖅ ᐱᐅᔪᓂᕈᑎᒋᑐᐃᓇᓇᐊᖅᑕᖏᓄᑦ.
  - ᐊᐃᕆᓕ 6, 2009 - ᓄᓇᕗᕐᒥ ᐃᒪᓕᕆᔨᖏᑕ ᑎᑎᖅᑕᕕᓂᖓ ᑎᒃᑯᓄᑦ ᐃᓕᓴᕐᓯᕐᑯᔨᓗᑎᒃ ᔪᓂ 24, 2008ᒥ ᑐᓂᔭᐅᓚᐅᓯᒪᔪᖅ ᓴᓂᕐᕙᕐᑕᐅᓯᒪᔪᑦ ᒥᑭᓕᒋᐊᕐᑯᓗᑎᑦ ᑭᓇᐅᔭᐃᑦ.

- ᒪᐃ 15, 2009 - ᐃᓄᓕᓵᔨᐃᖅᑯᓄᑦ ᑎᑎᕋᑦ ᓄᓇᕗᖅᑎᑦ ᐃᒪᓕᓵᔨᓄᑦ ᑲᑎᒪᔨᖏᓄᑦ ᒪᓇᐅᔪᖅ ᖃᓄᐅᓕᒫᖅᑕ ᑭᓇᐅᔭᐃᑦ ᐊᑐᕐᑕᐅᓂᖅᓯᒪᔪᑦ ᓴᓕᑦᑕᕐᓯᒪᓂᖏᑦ.
- ᔪᓂ 01, 2009 - ᑎᒃᓄᑦ ᑎᑎᕋᖅᓱ ᓄᓇᕗᖅᑎᑦ ᐃᒪᓕᓵᔨᓄᖏᓄᑦ - ᐱᔪᑎᑕᒃ ᒪᐃ 15 , 2009ᒥ ᑎᑎᕋᕐᓴᕐᓯᒪᔪᑦ ᐃᓄᓕᓵᔨᐃᖃᓂᑦ ᓄᓇᕗᖅᑎᑦ ᐃᒪᓕᓵᔨᖏᓄᑦ.
- ᔪᓂ 09, 2009 - ᐃᓄᓕᓵᔨᐃᖃᓂᑦ ᐃᒪᓕᓵᔨᓄᑦ - ᑭᒧᓕᖅᓯ ᔪᓂ 5ᒥ ᑎᑎᕋᕐᔪᐊᓂᖅ ᐱᓗᒍ ᐅᑭᓯᕋᑦ ᐅᑭᓯᑎᑕᕐᔪᒪᓗᑎᒃ ᓇᓗᓇᐃᓯᑎᐊᖅᑐᓗᒃᑐᓗ ᒪᐅᓂᓕᓂᖅᕋᑦ ᓯᖏᓂᐊᓂ ᐅᐊᓯᐅᓕᓂᖅ ᐱᔪᑎᑕᓗᓂ.
- ᔪᓕᐃ 18, 2009 - ᑎᒃᓄᑦ ᖃᓇᑕᐅᔨᓄᑦ ᑎᑎᕋᑦ ᓄᓇᕗᖅᑎᑦ ᐃᒪᓕᕆᔨᓄᑦ ᐃᓕᓄᒪᔪᖅ ᐊᑐᕋᑦᑕᕐᓂᓕᕋᖅ ᐊᒃᑕᕋᔨᐅᑦ ᑎᑎᕋᐅᑕᕐᓯᒪᓕᕐᓂᖅᓱᒪᓕᖅᑐᑦ ᑭᓇᐅᔭᓕᕐᓂᖅ ᐱᔪᑎᑕᓗᓂ.
- ᔪᓕᐃ 30, 2009 - ᑎᒃᓄᑦ ᓄᓇᕗᖅᑎᑦ ᐃᒪᓕᓵᔨᓄᖏᓄᑦ - ᑭᒧᖅ ᐃᓄᓕᓵᔨᐃᖃᓂᑦ ᔪᓂ 9, 2009ᒥ ᑎᑎᕋᓂᓄᖓᓂᑦ ᓴᓂᒃᑯᕋᕐᓯᒪᔪᓴᖅᓴᖅ ᖃᓄᐅᓂᓄᓕᕋᕐᓯᑐᐃᓐᓇᖅᓯᓂᑦ.
- ᐊᖏᓂ 25, 2009 - ᐃᓄᓕᓵᔨᐃᖃᓂᑦ ᐃᒪᓕᓵᔨᓄᓕᓂᑦ ᐱᐊᑎᓂᒃ ᖃᒥᕐᔨᐅᓂᖓ ᒪᓕᕐᖃᐅᑦ 2008ᒥ ᐊᕋᔭᒪᓕᒃᑎᑎᖓ ᐅᓂᒃᖅ ᐊᒪᓗ ᐃᒪᐅᑦ ᐱᐅᓂᖓᓂ ᖃᐅᔨᓴᕋᕐᔪᐊᕐᓇᓂᖓᓂᑦ.
- ᐊᖏᓂ 27, 2009 - ᐃᒪᓕᓵᔨᓄᓂᑦ ᒥᓵᓂᖓᓄᑦ ᐃᓄᓕᓵᔨᐃᖃᓂᑦ ᑭᓇᐅᔭᖅ ᓴᓂᓕᕋᕐᓯᒪᔪᖅ ᒥᑭᓂᑎᕋᕋᕐᓂᓕᕋᕐᔪᐊᕐᓇᖅ 33.7ᒥᓂᒥᑦ 3.539ᒥᓂᐊᒧᑦ..
- ᓯᑎᐱᓗ 01, 2009 - ᐃᒪᓕᓵᔨᓄᑦ ᑎᑎᕋᖅᓱ ᑎᒃᓄᓄᑦ ᖃᒥᐅᑎᕋᕐᓂᖓᓂᒃ ᐊᖏᑎᕋᕐᔨᐅᓂᖓᓂ ᕿᐃᕕᓵᕋᓵᔨᐃᖅᑕᖏᑦ ᑭᖓᒪᓴᐅᔪᑦ ᐱᓚᒥᑦ.
- ᐅᑐᐱᓗ 01, 2009 - ᐃᓄᓕᓵᔨᐃᖃᓂᑦ ᑎᑎᕋᖅᓱ ᑎᒃᓄᓄᑦ ᓇᓕᐅᓄᒪᓕᓵᔨᖏᑦ ᑭᓇᐅᔭᖅᓂᒃ 1ᒥᓕᐊᓂᒃ ᐊᑐᐃᓇᑦᑎᓯᓂᐊᕋᖅᑐᑦ ᓄᓇᒪᑦ ᐊᑐᖅᑐᐊᕋᓂᖓᓂ ᓇᓕᐅᓄᒪᒻᒪᖓᓄᑦ.
- ᐅᑐᐱᓗ 08, 2009 - ᑎᒃᓄᑦ ᑎᑎᖏ ᐃᓄᓕᓵᔨᓄᓄ ᓄᖏᑎᕋᐅᖅᓄᑐᐃᔪᒍ 18ᒥᓕᐊᑦ ᓴᓂᓯᕋᕐᔪᒪᓂᖓ.
- ᐅᑐᐱᓗ 18, 2009 - ᑎᒃᓄᑦ ᑎᑎᕋᖅᓱ ᐃᒪᓕᓵᔨᓄᓕᓂᑦ ᑭᒧᓂᖓᓂᑦ ᓯᑎᐱᓗ 1, 2009ᒥ ᓇᓗᓇᐃᔪᒪᓕᕐᓂᑦ ᐱᔪᓇᐅᑎᖓ ᐱᓚᒍ ᐅᓂᒃᓕᐊᓂᖓᓄᑦ ᒪᓕᕐᓂᖓᓂᖓᓄᑦ.
- ᓄᓇᐱᓗ 02, 2009 - ᒥᓵᓂᖓᓂᑦ ᐃᓄᓕᓵᔨᐃᖃᓂᑦ ᑎᑎᕋᕐᓂᖓ ᐃᒪᓕᓵᔨᓄᓕᓂᑦ ᓇᓗᓇᐃᔭᓯᓂᑦ ᐃᒪᓕᓵᔨᓄᑦ ᑎᑎᕋᓂᓄᓕᐊ ᐊᖏᓂ 27, 2009ᒥ ᐱᔪᓇᐅᑦ ᓄᓕᐅᕐᑕᐅᓂᖓ.

- ᐅᓂᒃᓕᐊᖓᔪᓕᖅ ᓇᓗᓇᐃᕆᑯᓗᒍᓂᑦ ᑕᐃᒪᐃᖏᑐᑦ ᐅᕐᓗᓂᒃᑦ ᐃᓗᓕᖏᑐᑦ ᑎᑎᖏᐃ ᓇᓕᐊᑯᖏᑕᒪᐅᓕᖅᑎᓪᓚᕆᑦ ᑐᔪᑎᐃᓕᖅᑐᑦ ᐱᓕᕐᓂᐊᖅ 2008ᒥ 2009ᒥᓗ ᐅᓂᒃᓕᐊᓇᓂᑦ ᓇᐅᐅᓂᑯᐃᓕᖅᑎᓪᓚᕆᑦ.

3.3. ᓯᐅᓕᕆᓇᖏᓕᕋᑦ ᓇᓗᐃᓕᓕᐊᕆᓕᓗᑎᓄᑦ ᐅᓂᒃᑦ ᐃᓇᐢᑎᑐᓕᑎᒋᐊᓕᓂᖓᑦ

ᐃᓕᓕᐊᑭᑦ 1ᒥᖏᑕᐅᓕᖅᖏᓄᑦ ᓯᐅᓕᕆᓇᖏᓐᓇᐅᓕᕋᑦ ᓇᐃᓕᓕᐊᕆᓕᓗᑎᓕᕋᑦ ᑕᒪᕆᑦ 2009ᒥ ᑎᕋᒪᖏᖓ ᑎᕋᒪᐃᓕᓵᖏᖏᓕᕐᓂᖓᓄᑦ ᐅᓂᒃᑦᖓᓂᑦ ᐊᒪᓗ 2009ᒥ ᐊᖏᔪᓕᒪᖕᒧᖏᓐᓇᕋᑦ ᐅᓂᒃᑦ ᐃᓇᐢᑎᑐᓕᑎᒋᓗᑎᒃ.

3.4. ᓇᐃᐢᓕᕆᐊᖏᓕᕋᑦ ᒪᑐᐅᐅᓂᖓ ᐊᒪᓗ/ᐅᕐᓗᓂᒃᑦ ᖃᓇᐃᑐᓂᐃᓂᖓᓐᓇᓇ ᐅᑎᑎᕋᐅᓇᓂᖓᓂᑦ ᐱᓕᕐᓇᐃᐊᖓᑦ

ᓇᐃᐢᓕᕆᐊᖏᓕᕋᑦ ᒪᑐᓂ ᐱᓪᓗᔪᐊᒪᓗ ᖃᓇᐃᑐᓂᖓᓂᓇᓂᑦ ᐅᑎᑎᕋᐅᓇᓂᖓᓂ ᑲᔪᓂ ᕿᓂᑦ ᐊᖏᔪᒥ ᐊᒪᓗ ᐱᓕᕐᓇᖓᔪᓂᕆᑦᑕᕐᓂᖓᓂᑦ ᐊᖏᔪᓯᑐᓂᖅ ᐅᒪ ᐊᑕᓂ ᓇᓗᓇᐃᖏᓕᕋᑦ:

- ᔪᓂ 12ᓂᑦ, ᑭᐊᖅ ᑕᓂᖓᓂ ᐃᔪᓂᑦᖓᓕ ᖃᐅᔨᒪᔭᕋᕐᓂᖓᓂ ᑲᑎᒪᔨᖏᑐᑦ ᒪᓕᕐᖃᐅᑦ ᑐᖃᓕᖅᖃᖅ 262-3ᒥ ᐊᒪᓗ 262-3ᐃᒥ. ᓂᑯᑦ ᐃᔪᓂᓕᓇᕋᖓᓂ 3.5ᒥᑎᑦ ᐃᔪᓂᖏᒪᓕᓇᕐᓂᖅ ᐊᖏᔪᓇᐅᓂᓕᕋᕐᓂᖅ ᓯᐅᓂᐊᓂ ᒪᑐᐅᓇᐅᖃᖓᓇᒍ ᐅᐊᓂᓂᖅ ᑕᐃᒪᓐᓇᓂ ᐱᑎᐊᓇᐅᓂᒪᓐᓂᑦ 2002ᒥ.
- ᐊᑯᓂᖓᓂ ᔪᓕᐃ 19 ᐊᒪᓗ 24 ᐅᓄᖅᑐᐃ ᐃᖃᓄᐃᐃᖅᑎᑦ 5ᒥᑦ 7ᒧᑦ ᒪᓕᕐᓂᖅᒥᓕᓇᕐᓂᖅ ᐅᑯᓂᖓ ᐱᓕᕐᓇᐃᓐᓇᖅ:
  - ᐅᐸᕋᖅᓂᓄᑦ ᖃᐅᔨᒪᖃᕋᒥᑦ ᐊᖏᔪᑕᒪᑦ ᖃᐅᔨᒪᓕᐅᒥᔪᑦ,
  - ᓂᐲᖓᓕᓵᓂᖅᓂᓄ ᕿᖓᒥᑎᕋᓗᑎᒃ,
  - ᖃᐅᔨᒪᕋᕐᓂᖅᓴᓄᑦ ᑐᐊᔪᑕᕋᓗᑎᒃ ᐃᒪᕋᓄᓗ,
  - ᒪᕋᓗᑯᐊᓂᑦ ᓄᐊᑕᐅᓗᑎᒃ, ᐊᒪᓗ
  - ᑎᓯᓚᐊᓇᒍ ᑐᐊᔪᖓ ᑐᓂᑕᕋᐊᓂᕐᓂᖅᓱ ᐊᕿᓂᕋᒍ.
- ᓂᑯᖏᓂᓄᓱ ᑭᐊᖅ ᑕᓂᖓᓱ, ᑕᐃᑲᓱ ᐃᖃᓄᐃᐃᖅᑎᑕᖏᑎᓗᒍ, ᐊᓄᓵᑦ ᓂᑲᓄᖓ ᐅᐊᓂᐅᑦᑕᐅᓂᖓ ᑲᑎᒪᔨᖏᑐᑦ ᑲᔪᓗᐸᐃᑦ. ᐅᓴᕋᓄᓗᓇᓱ ᐊᓄᓵᔨᓂᐊᓕᕆᔨᓄᑦ ᑲᔪᓗᐸᐃᑦ ᐊᖏᔪᓯᑐᓂᖅᓱᒪᓕᖅᑐᑦ ᑲᔪᓗᐸᐃᑦ.
- ᑲᑎᒪᔨᖏᓂᓱ ᑭᐊᖅ ᑕᓂᖓᓂ, ᑕᐃᑲᓱ ᐃᖃᓄᐃᐃᖅᑎᑕᖏᑎᓗᒍ, ᐊᓄᓵᑦ ᓂᑲᓄᖓ ᐅᐊᓂᐅᑦᑕᐅᓂᖓ ᑲᑎᒪᔨᖏᑐᑦ ᑲᔪᓗᐸᐃᑦ ᑲᓇᓗᐸᐃᑦ. ᐅᓴᕋᓄᓗᓇᓱ ᐊᓄᓵᔨᓂᐊᓕᕆᔨᓄᑦ ᑲᔪᓗᐸᐃᑦ ᐊᖏᔪᓯᑐᓂᖅᓱᒪᓕᖅᑐᑦ ᑲᔪᓗᐸᐃᑦ.
- ᐃᓂᐅᔪᓄᑦ ᐃᓕᑦᑎᓐᓄᑦ ᑭᐊᖅ ᑕᓂᖓᓂ, ᑭᐊᖅ ᐃᓕᓄᑦ ᐅᐊᓂᐅᑦᑕᐅᓂᖓᓂ ᐊᖏᔪᓯᑐᓂᖅᓱᒪᓕᖅᑐᑦ ᓚᓂᐊᑦᑎᓯᓂᖓᓄᑦ ᐃᓚᒥᑦ ᐱᔪᓇᐅᑦ ᐊᒪᓗ ᐱᓕᕐᓇᖓᔪᓂᕆᑦᑕᕐᓂᖓᓂᑦ ᓚᓂᐊᑦᑎᓯᓂᖓᓄᑦ ᐊᖏᔪᓯᑐᓂᖅᓱᒪᓕᖅᑐᑦ.

- ᒥᐊᕈ ᑕᓯᖓᑕ ᑕᕆᐅᖑᓕᕆᓐᓂᖓ ᑲᔪᓯᑎᐊᕐᑐᖅ ᖃᓄᐃᑐᓂᖓ ᐊᒪᓗ ᑕᕆᐅᖑᓕᕆᓂᖓ ᑕᒪᐃᓂ ᖃᐅᔨᓴᕐᑕᐅᓂᐅᔪᓂ ᔪᓂᐅᑎᓗᒍ ᐊᒐᓯᐅᑎᓗᒍᓗ.
- ᐊᕐᒍᑕᒫᑦ ᖃᐅᔨᓴᕐᑕᐅᓂᕆᓱᖓ ᑐᐊᐸᖓᑕ ᐱᔭᕆᑕᐅᓚᐅᑐᖅ ᐃᒥᑰᕐᑐᒥᑦ ᐱᓕᕆᔨᒪᕆᒥᑦ ᖃᐅᔨᓴᕈᓇᑎᐊᕐᑐᒥᑦ ᐅᔭᕋᒃᓂᒃ ᖃᐅᔨᓴᕐᑎᐅᔪᕐᒧᑦ. ᓄᓇᖓ ᐱᓪᓗᒍᐅᕙᓗᓂᑦ ᐃᒪᕐᒧᑦ ᓄᖑᑕᐅᕙᓕᐊᔪᑦ ᓇᓗᓇᐃᕐᑕᐅᓚᐅᖅᑐᑦ ᓇᓗᓇᐃᕐᓯᒪᑎᐊᕐᑐᓂ ᖃᐅᔨᓴᕈᑎᕕᓂᖏᓂ.
- ᓯᕕᖓᓕᕆᓂᖏᑕ ᕿᒍᒥᒋᑦᑕᐅᓂᕕᓂᖓ ᓯᕕᖓᓂᐅᔪᕐᓂ ᓱᓕ ᓇᓗᓇᐃᕐᑕᐅᓯᒪᓕᕆᖏᑐᑦ ᑎᓱᕋᓕᐊᒪᖔᑦ ᓄᓇᖓ ᑕᐃᒪᖓ ᑕᒪᓇ ᑲᔪᓯᒋᐊᕐᑎᑕᐅᓚᐅᓯᒪᖓᒪᑦ 2004ᒥ.
- ᓯᕕᖓᓚᓛᕐᔪᒃ ᐊᕿᓯᒪᑎᐊᖑᓂᖓ ᖄᐸᓯᐊ ᐱᓪᓗᒍ ᐃᓯᑕᕐᕕᓗᐊᑕᐅᓚᐅᑑᑉ ᓇᓗᓇᐃᕐᑕᐅᓚᐅᖅᑐᖅ ᐊᒐᓯ 2008ᒥ ᐊᕿᒃᓱᑕᐅᓚᐅᑐᖅ, ᐊᒪᓗ ᐃᖃᐸᓯᐊᑕ ᓇᐸᖓ ᓯᕕᖓᓂᐅᔫᑉ ᓯᕕᖓᔪᓂᕐᑎᑕᐅᓚᐅᑐᖅ ᐃᓱᕐᐸᓯᐊᓂᓗ ᑐᐊᐸᓕᓯᕐᑕᐅᑎᐊᑲᓂᓚᐅᑐᖅ ᐲᓱᑐᐊᕐᑯᓇᒍ. ᑕᒪᓇ ᖃᐅᔨᓴᕐᑕᐅᓚᐅᑐᖅ ᐃᓄᓕᕆᔨᑐᖃᑯᑦ ᑲᑐᕐᑎᑕᓪᓗᓄᑦ ᐅᔭᕋᖅᓂᒃ ᖃᐅᔨᒪᔭᒪᓇᓂᑦ ᖃᐅᔨᓴᕐᑎᖕᖑ ᐱᔭᕆᑕᐅᑐᐊᕐᒪᑦ.
- ᑲᑐᕐᑎᓂᒃ ᑕᐃᑲᓂᑐᖃᓚᐅᑐᖅ ᖃᐅᔨᓴᕆᐊᕐᑐᒥᑦ ᐅᖁᒪᐃᑐᕐᓂᐅᑎᖃᑦ ᐊᒪᓗ ᐊᒥᐊᑯᕐᒥᑦ ᐱᓕᕆᐊᒃᓴᐃᑦ ᖃᓯᕐᕿᑎᓗᒍ ᐱᓕᕆᐊᒃᓴᐅᔪᖅ ᐱᓇᓱᓐᓂᐊᕐᒪᖔᕐᒥᒃ ᑭᖑᓕᕐᐸᓐᓂ ᐃᒍᑎᕆᓂᖅ ᐱᒋᐊᓕᐅᖏᓂᖏᓂ ᑕᐃᑲᓂ ᕿᑭᑕᖓᓂ ᐊᐅᔭᖓᓂ 2010. ᐱᖁᑎᕕᓂᓕᒫᑦ ᑕᐃᑲᖓ ᐲᔭᕐᑕᐅᔭᕆᐊᓖᑦ ᕿᑭᑕᕐᒥᑦ ᐊᐅᔭᖓᓂ 2011 ᓄᓇᒥᒃ ᐊᑐᕐᑐᐊᕈᑎᓄᑦ ᐃᓱᓕᓚᐅᖏᓂᖓᓂ.

3.5. ᖃᓯᕐᓂᐊᕐᓯᒥᔭᐅᒪᖔᑦ ᑲᑎᓗᒍ ᐅᔭᕐᓯᐅᕐᕕᐅ ᒪᑐᔭᐅᓂᖓᑕ ᐊᑭᖓ

ᖃᓄᐃᓕᖓᓕᒪᖔᑦ ᖃᓄᐃᑐᓂᕕᓂᖓᓄᑦ ᐅᑎᑎᑕᐅᓇᓱᓂᖓ ᐅᐊᓯᔭᐅᓂᒧᓗ ᐊᑭᖓ ᐃᓚᒥᐊᕈᑦ 2ᒥᑐᖅ. ᐊᑭᖏᑦ 2009ᖑᑎᓗᒍ $297,000ᖑᓚᐅᑐᖅ. ᐊᑭᖏᑦ ᓱᓕ ᖁᑎᓐᓂᓴᐅᓂᐊᕐᑐᖅ ᐊᕿᑕᐅᓯᒪᓚᐅᑐᕐᒥᒃ ᐱᔪᑎᒥᓗᒍ ᐃᒪᕐᒥᒃ ᐅᐊᓯᓂ ᑲᔪᓯᔭᕆᐊᖃᓂᖓ ᐃᓱᒪᒥᔭᐅᓚᐅᒪᑦ ᒪᓇᐅᔭᖅ ᐱᓕᕆᐊᖑᐃᓇᓗᒥᐊᖃᕐᓯᒥᔭᐅᓚᐅᖏᒪᑦ..

3.6. ᐃᓄᓕᒫᕐᓂᑦ ᑐᓴᕐᓱᓐᓂᖅ/ᐃᓚᐅᑎᓯᓂᖅ

- ᐃᓄᓕᒫᓂᑦ ᑐᑭᓯᓇᓱᓚᐅᖏᑐᒍᑦ ᐱᔪᑎᒥᓗᒍ ᒪᕈᓕᕿ ᐃᓄᖃᖏᑲᔪᒪᑦ ᑕᐃᒪ ᐅᐊᓯᓂᖅ ᑲᔪᓯᔭᕆᐊᖃᓕᒪᑦ ᑭᓯᐊᓂ ᐃᓄᖃᓕᑕᐃᓇᖃᑕᕐᒪᑦ.
- ᐊᕐᒍᑕᒫᑦ ᖃᐅᔨᓴᕐᑕᐅᓂᐅᖃᑕᕐᑐᖅ ᑲᔪᓯᑎᓗᒍ, ᓴᓗᒥᐅᑐᖅ ᐃᓄᒃ ᐃᑲᔪᓚᐅᑐᖅ ᒪᕈᓕᕿᒥ. ᐊᒪᓗᑲᓂᖅ ᑕᒪᓇ ᓴᕿᑎᓯᓚᐅᑐᖅ ᓄᓇᓕᒥᐅᒥᒃ ᐃᖃᓇᐃᔭᕐᑎᖃᓂᖅ, ᓄᓇᓕᒥ ᖃᐅᔨᒪᔭᖅ ᐊᑕᕐᓇᑐᕐᒥᕐᑯᓇᒥᑦ ᐃᖃᓇᐃᔭᕐᑏᑦ ᐱᒪᕆᐅᒪᑦ. ᓄᓇᓕᒥᐅᑕᐅᔪᕐᒥᒃ ᐃᓚᐅᑎᓯᓂᖅ ᐅᐊᓯᓂᒥᒃ ᒪᕈᓕᕿᒥ ᐃᑲᔪᖃᑕᕐᑐᖅ ᖃᓂᓖᖅ ᓄᓇᓕᐅᔪᖅ ᖃᐅᔨᒪᑎᐊᕐᓯᑐᐊᓗᐊᒪᖕᒋᑦ ᖃᓄᐃᓕᐅᓂᐅᔪᒃ ᐊᒪᓗ ᓄᓇᖅ ᖃᓄᐃᑐᓕᒪᖓᑦ ᖃᐅᔨᒪᔭᐅᑰᓗᒋᑦ.

3.7. ᐱᓕᕆᐊᖑᓚᐅᑐᑦ ᖃᐅᔨᓴᕐᓃᑦ ᐱᓪᓗᒥᑦ ᒪᓕᒋᐊᖃᓂᒧᓗᓃᑦ ᐅᓂᑳᑦ

- ᑕᒪᓇ ᐅᖃᐅᓯᐅᓯᒪᔪᖅ 3.2ᒥᑐᕐᒥ

3.8. ᑰᒃᓂᐅᔪᑦ ᐊᒪᓗ ᐃᒪᐅᑉ ᐱᐅᓂᖓᑕ ᖃᐅᔨᓴᕐᑕᐅᓂᖏᑦ

3.8.1. ᐱᐅᓂᖓ ᑕᓯᕐᒥᑦ ᒥᐊᓗᕐᑕᐅᓃᑦ ᓱᑲᑲᖓᔪᖅ ᑕᓯᕐᒥᑦ

ᑕᕆᐅᖑᖏᑐᕐᒥᒃ ᐃᒪᕐᒥᒃ ᒥᓗᐊᑕᐅᔪᖃᓚᐅᖏᑐᖅ ᐱᔪᑎᒥᓗᒍ ᐃᒪᓕᕆᔪᑎᖏᑦ ᓱᕐᑎᑕᓚᐅᓯᒪᒪᑕ ᐊᒪᓗ ᖃᓄᐃᑐᓂᖓᓄᑦ ᐅᑎᑎᑕᐅᑐᓂ 2004ᖑᑎᓗᒍ.

3.8.2. ᒥᐊᕈ ᑕᓯᖓᑕ ᑕᕆᐅᖑᓕᕆᓂᖓᑕ ᐅᐊᓯᔭᐅᓂᖓ

2009ᖑᑎᓗᒍ, ᐃᒪᕐᒧᑦ ᐱᔪᓇᐅᑎᒃᖓ ᑭᖑᓕᒃᓕᑐᖅ ᐱᖓᓱᐊᕐᑎᓗᒍ ᐅᐊᓯᔭᐅᓂᖓ ᑲᔪᓯᔭᕆᐊᓕᒃ (ᐅᑭᐅᑯᑦ, ᓯᑰ ᐃᔪᓂᖓ ᐃᔪᓂᕐᐹᖑᑎᓗᒍ, ᐊᒪᓗ ᓯᑯᖓ ᐊᐅᓕᒫᖏᓂᕐᐸᐅᑎᓗᒍ) ᒪᕈᐃᖑᔪᓂ ᒥᐊᕈ ᑕᓯᖓᑕ ᑕᕆᐅᖑᓕᕆᓂᖓᓂ. ᐅᑭᐅᓚᓇᑯᑦ ᐅᐊᓯᓂᖅ ᑲᔪᓯᓚᐅᖏᑐᖅ ᐱᔪᑎᒥᓗᒍ ᓴᑕᕐᔨᓇᓚᐅᖏᒪᑦ ᑕᐃᑯᖓᕈᒪᖏᒪᑕ ᐃᓄᖃᖏᓂᓗᓄᑦ, ᐅᔭᕐᓯᐅᕐᕕᕕᓂᐅᑐᓂ ᕿᒪᒃᑕᐅᓯᒪᒪᑦ ᑕᐃᒪᐃᕐᑯᔭᐅᓂᖓᑦ ᒪᓕᓗᒍ ᐊᒪᓗ ᐅᓂᑳᓕᐊᖑᓚᐅᑐᖅ ᐊᐃᐸᖓᓂ ᐊᒪᓗ ᐱᖓᔪᖓᑕ ᑎᓴᒪᐃᓕᖃᖓᔪᑦ ᐅᐊᓯᔭᐅᓂᖓᑕ ᐅᓂᑳᖏᓂ.

- ᓴᕕᕐᔭᒃᓴᑕᖃᓂᖓ ᐃᒪᖓᓂ ᑕᕆᐅᖑᓕᕆᓂᖓᓂ ᒥᐊᕈ ᑕᓯᖓᓂ ᓴᕕᕐᔭᒃᓴᓗᐊᑕᑐᐃᓇᖅ ᐊᒪᓗ ᑕᐃᒪᐃᓂᖓᓄᑦ ᓴᕕᕐᔭᒃᑕᖅ ᐊᕐᒍᔪᓂ ᐊᒥᕐᓂᐊᕐᑐᓂ ᐃᑎᓕᕆᕐᓂᖓᓂ ᑕᕐᓯᐅ ᐃᒪᖓᑕ ᑕᕆᐅᖑᓕᕆᓂᖓ ᐅᐊᓯᔭᐅᔪᖅ. ᐅᒪ ᓯᕗᓂᐊᓂ ᐅᓂᑳᓕᐊᑦ ᐅᐊᓯᔭᐅᓯᒪᒧᑦ ᐊᐳᒥᖏᓂᖏᓂᒃ 2002ᒥᓂ ᑭᓯᐊᓂ

ᐱᔪᑎᒥᓗᒍ ᐊᖏᔪᓂᖓ ᓄᐊᑕᐅᓯᒪᔪᑦ ᑎᑎᕐᑕᐅᓯᒪᔪᑦ, ᑕᒪᑐᒪᓂ ᐊᕐᒍᔪᕐᒥ ᐊᕐᒍᖏᓂ ᑎᑎᕐᓯᒪᓂᖏᑦ ᐱᒋᐊᕐᓯᒪᔪᑦ 2005ᒥ ᒥᑭᓂᕐᓴᐅᕐᑯᓗᒍ ᓄᐊᑕᐅᓯᒪᔪᑦ ᑲᑎᖓᕈᓘᔭᓗᓂᖏᑦ ᐃᓚᒥᐊᕈᑦ 4 ᐃᓗᓕᓕᒃ

ᓴᕕᕋᔭᒃᓴᖃᓂᖓᑕ ᑎᑎᕋᓯᒪᔪᖏᓂᒃ ᓇᓗᓇᐃᖁᑕᖏᓂᒃᓗ. ᑭᓯᐊᓗᒥ ᐅᐱᓇᑐᐊᓗᒥ ᓴᕕᕋᔭᒃᓴᖃᓂᖓ ᒥᐊᕈ ᑕᓯᖓᓂ ᓇᓗᓇᐃᑕᐅᓯᒪᔪᑕᖃᖏᑐᖅ.

ᐃᓚᒥᐊᕈᑦ 5 ᐃᓗᓕᓕᒃ ᐳᓚᓕᓄᑦ ᖃᐅᔨᓴᕈᕐᑯᑎᖏᓂᒃ ᑎᑎᕋᓯᒪᔪᓂᒃ ᓄᐊᑕᐅᓯᒪᔪᑦ ᐊᑕᐅᑎᖁᑦ ᖃᐅᔨᓴᕐᑕᐅᓂᖏᑕ ᐃᒪᐅ ᐱᐅᓂᖓᓄᑦ ᖃᐅᔨᓴᕈᑏᑦ ᐱᔭᐅᓚᐅᓯᒪᑎᓗᒋᑦ ᑐᖃᑕᕐᕕᒃ 262-3ᒥᑦ ᐊᒪᓗ 262%3ᐃᒥᑦ ᐊᒪᓗ ᐃᒪᐅ ᐅᑎᓂᖏᑦ ᖃᐅᔨᓴᕐᑕᐅᒋᓗᑎᒃ. ᑕᐃᖁᐊ ᖃᐅᔨᓴᕐᑕᐅᔪᑎᕕᓃᑦ ᐃᓚᖓ 1ᒥᑐᖅ (ᐃᑎᓂᕐᐸᖓᑕ ᓯᖂᑉ ᖃᐅᔨᓴᕐᑕᐅᑎᓗᒍ) ᐊᒪᓗ ᐃᓚᖓ 2ᓗ (ᓯᖁᖓᑕ ᓴᓂᕐᐸᖓᑕ ᖃᐅᔨᓴᑕᐅᑎᓗᒍ) ᑕᒪᓇ ᓴᕿᔮᕐᑎᓯᔪᖅ ᐊᔩᒥᖏᓂᓚᓗᖓᓂ ᐃᒪᐅᑉ ᑕᓇᐅᖑᓕᕆᖏᓂᖓᓂᒃ. ᑕᓇᐅᖑᓕᕆᓂᖓᑕ ᐊᓯᔾᕐᓂᖓ ᓴᕿᑎᓯᔪᖅ ᑕᒪᓇ ᐊᔩᒥᖏᓂᓚᓗᖓ ᓱᓕ ᑕᓯᐅᑉ ᑕᐃᒪᐃᑐᖏᓈᕐᑐᖅ.

3.8.3. ᒥᐊᕈ ᑕᓯᖓᑕ ᑰᓂᖓᑕ ᐅᐊᓯᔭᐅᓂᖓ

ᐃᒪᕐᒧᑦ ᐱᔪᓇᐅᑎᒃ ᐊᒪᓗ ᖃᓄᐃᑐᓂᕕᓂᖓᓄᓗ ᐅᑎᑎᑕᐅᓂᖓ ᐸᕐᓇᒃᑕᐅᓂᕕᓂᐊ ᐱᔭᕆᐊᖃᑎᓯᔪᖅ ᖃᐅᔨᓴᕐᑕᐅᔪᑎᓴᓂ ᐃᒪᕐᓂ ᐱᖃᑕᕆᐊᖃᑐᒧᑦ ᑰᖓᑕ ᐃᓱᐊᓂᑦ ᑰᓕᕐᑎᓗᒍ. ᐃᒪᐅᑉ ᐱᐅᓂᖓᑕ ᖃᐅᔨᔭᐅᓂᖓ ᒪᒪᓕᓯᒪᓚᐅᑐᑦ ᒪᓕᑕᐅᔭᕆᐊᓕᓂᒃ ᐃᒪᒧᑦ ᐱᔪᓇᐅᑎᑎᓂ. ᐊᒪᓗᑲᓂᖅ ᓱᕈᓇᕐᑐᐊᓗᒥ ᐱᑕᖃᓚᐅᖏᑐᖅ ᐄᓗᕐᓂ ᐊᕙᓗᓃᑦ ᑲᓇᔪᕐᓂ. ᓇᓗᓇᐃᕐᓯᒪᑎᐊᕐᑐᑦ ᐅᐊᓯᔭᐅᓂᒧᑦ ᖃᐅᔨᔭᐅᓂᖁᐃᑦ ᑕᖁᔭᐅᔪᓇᕐᑐᑦ ᐅᒪ ᓯᕗᓂᐊᓂ ᑐᓂᔭᐅᓚᐅᑐᑦ ᐱᖓᔪᖓᓂ ᑎᓴᒪᐃᓕᖃᖓᔪᑦ ᐅᓂᑳᕐᓂ.

3.9. ᓇᓗᓇᐃᕐᓯᒪᔪᑦ ᐃᒪᐅᑉ ᐊᑐᕐᑕᐅᓂᖓ ᑯᕕᕐᑕᕐᑕᐅᓂᑯᖏᓗᓃᑦ ᐊᑐᓂᑯᑉ ᑐᒃᓯᕌᑦ ᑲᑎᒪᔨᓂᑦ

- ᑕᓇᐅᖑᖏᑐᕐᒥᒃ ᐃᒪᕐᒥ ᐊᑐᓚᐅᖏᑐᒧᑦ ᒪᕈᓕᕿᒥ. ᓇᓗᓇᐃᓯᒪᑎᐊᕐᑐᓂᒃ ᖃᓄ ᐃᒪᐃ ᐊᑐᑕᐅᖃᑕᒪᖔᑕ ᕿᓄᐊᕆᔭᐅᓚᐅᖏᑐᑦ ᑲᑎᒪᔨᓂᑦ.
- ᒪᕐᓗᑰᓂᖅ ᐃᓱᓕᑕᕐᕕᖃᓚᐅᑐᖅ ᑕᐃᑲᓂ ᓴᓗᒪᕐᓴᐃᓂᖅ ᑲᔪᓯᑎᓗᒍ ᓄᐊᑕᐅᓯᒪᔪᑦ ᓯᕗᓂᑎᓂ ᐊᐅᐸᕐᑐᖅ ᕿᒥᖁᓗᒧᑦ ᓴᐅᔭᐅᔪᒪᕐᒪᑕ.

APPENDIX 2

2009 Update of

Reclamation and Monitoring Costs

TABLE 1

POLARIS MINE DECOMMISSIONING, RECLAMATION AND MONITORING - ACTUAL EXPENDITURES AND ESTIMATED REMAINING LIABILITY

	APPROVED CLOSURE PLAN BUDGET		ACTUAL EXPENDITURES TO DATE						FORECAST OF REMAINING OUTSTANDING LIABILITY					
			Expended To December 31, 2008		Expended in 2009		Project Total To Date		2010 Forecast		2011 Forecast		Total Forecast to 2011	
	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals
DEMOLITION & RECLAMATION (BARE COSTS)														
MINE EQUIPMENT REMOVAL														
Hazardous Materials Removal	35,845		853		-		853						-	
Mine Refrigeration Plant	145,525		25,639		-		25,639						-	
Mobile & Mine Equipment	2,919		12,981		-		12,981						-	
Remove Salvaged Mine Equipment	20,754		-		-		-						-	
Misc Sub Contract Costs	45,957		28,540		-		28,540						-	
		$ 251,000		$ 68,013		$ -		$ 68,013		$ -		$ -		$ -
MINE ACCESS SEALING														
Seal Mine Portals	60,000		20,992		-		20,992						-	
		$ 60,000		$ 20,992		$ -		$ 20,992		$ -		$ -		$ -
CONCENTRATOR BUILDING														
Miscellaneous Materials	22,092		-		-		-						-	
Mill Equipment Clean-Up - Fuels	16,398		-		-		-						-	
Mill Equipment Clean-Up	99,900		40,613		-		40,613						-	
Hazardous Materials Removal	151,117		94,553		-		94,553						-	
Barge Demolition	608,592		443,526		-		443,526						-	
Misc Process Equipment Demolition & Removal	197,432		183,317		-		183,317						-	
Misc Sub Contract Costs	88,469		84,794		-		84,794						-	
		$ 1,184,000		$ 846,803		$ -		$ 846,803		$ -		$ -		$ -
CONCENTRATE STORAGE STRUCTURE & EQUIPMENT														
Concentrate Storage Equipment Clean-Up	26,117		1,905		-		1,905						-	
Conveyors	67,600		8,421		-		8,421						-	
Concentrate Storage Structure & Equipment	555,283		93,654		-		93,654						-	
		$ 649,000		$ 103,980		$ -		$ 103,980		$ -		$ -		$ -
SHIP LOADER & CONVEYOR														
Conveyors	50,000		24,592		-		24,592						-	
		$ 50,000		$ 24,592		$ -		$ 24,592		$ -		$ -		$ -
DOCK & SHORELINE														
Dock & Shoreline Reclamation	869,000		837,739		-		837,739						-	
		$ 869,000		$ 837,739		$ -		$ 837,739		$ -		$ -		$ -
THICKENER & TAILINGS LINES														
Hazardous Materials Removal	22,577		16,452		-		16,452						-	
Tailings Thickener	377,423		106,677		-		106,677						-	
		$ 400,000		$ 123,129		$ -		$ 123,129		$ -		$ -		$ -
GARROW LAKE														
Garrow Lake Siphons & Lake Drawdown	120,391		195,965		-		195,965						-	
Dam/Spillway Modifications	95,467		269,662		-		269,662						-	
Escalation Allowance	3,142		-		-		-						-	
		$ 219,000		$ 465,627		$ -		$ 465,627		$ -		$ -		$ -
CRF PLANT STRUCTURE & EQUIPMENT														
CRF Plant Equipment Clean-Up	7,002		1,040		-		1,040						-	
CRF Plant Equipment Removal	17,533		9,406		-		9,406						-	
CRF Plant Buildings Demolition	130,455		23,497		-		23,497						-	
Misc Sub Contract Costs	11,010		46,766		-		46,766						-	
		$ 166,000		$ 80,709		$ -		$ 80,709		$ -		$ -		$ -
ACCOMMODATION COMPLEX STRUCTURE & EQUIPMENT														
Accommodation Complex Building Demolition	249,000		72,318		-		72,318						-	
		$ 249,000		$ 72,318		$ -		$ 72,318		$ -		$ -		$ -
FUEL STORAGE & HANDLING EQUIPMENT														
Miscellaneous Materials	3,681		4,904		-		4,904						-	
Purge & Decommission Fuel Tanks	53,404		341,959		-		341,959						-	
Hazardous Materials Removal	50,645		547,319		-		547,319						-	
Fuel Pumping & Distribution Systems	87,270		11,173				11,173						-	
		$ 195,000		$ 905,355		$ -		$ 905,355		$ -		$ -		$ -
BUILDINGS & CONTAINERS														
Miscellaneous Materials	1,323		-		-		-						-	
Misc Warehouse / Shipping Equipment	1,221		3,292		-		3,292						-	
Misc Buildings Demolition	250,456		100,053		-		100,053						-	
		$ 253,000		$ 103,345		$ -		$ 103,345		$ -		$ -		$ -
MISC CONTRACTOR LABOUR														
Unallocated Labour	133,000		2,310		-		2,310						-	
		$ 133,000		$ 2,310		$ -		$ 2,310		$ -		$ -		$ -
GENERAL SITE GRADING														
Hazardous Materials Removal	44,719		90,114		-		90,114						-	
General Site Grading & Reclamation	7,129		828,869		-		828,869				50,000		50,000	
Escalation Allowance	4,152		-		-		0						-	
		$ 56,000		$ 918,983		$ -		$ 918,983		$ -		$ 50,000		$ 50,000
LANDFILL RECLAMATION														
Landfill Reclamation	432,000		821,746		-		821,746						-	
		$ 432,000		$ 821,746		$ -		$ 821,746		$ -		$ -		$ -
CONTAMINATED SOILS - CLEANUP														
Metals & Hydrocarbon Contaminated Soils Cleanup & Disposal	366,623		2,627,104		-		2,627,104						-	
Hydrocarbon Contaminated Soils (By Polaris)	6,097		13,131		-		13,131						-	
Metals Contaminated Soils (By Polaris)	173,605		52,382		-		52,382						-	
U/G Handling & Disposal Of Contaminated Soils	48,675		1,012,154		-		1,012,154						-	
		$ 595,000		$ 3,704,771		$ -		$ 3,704,771		$ -		$ -		$ -
QUARRIES & MINE SURFACE RECLAMATION (EARTHWORK														
Backfill & Re-Contouring	263,000		273,711		-		273,711						-	
		$ 263,000		$ 273,711		$ -		$ 273,711		$ -		$ -		$ -
MISC. DEMOLITION & CLEAN-UP														
Misc Unallocated Clean-Up / Demo	380,000		-		-		0		115,500		185,000		300,500	
		$ 380,000		$ -		$ -		$ -		$ 115,500		$ 185,000		$ 300,500
EQUIPMENT PURCHASE/RENTAL														
Contractor Equipment Rental	5,274,900		5,216,572		-		5,216,572						-	
Contractor Misc Equipment Purchase	719,407		432,906		-		432,906						-	
Escalation Allowance	59,693		-		-		0						-	
		$ 6,054,000		$ 5,649,478		$ -		$ 5,649,478		$ -		$ -		$ -
MISC. SERVICES & SUPPLIES														
Misc Purchased Materials / Supplies	235,333		536,124		-		536,124						-	
Escalation Allowance	19,667		-		-		-						-	
		$ 255,000		$ 536,124		$ -		$ 536,124		$ -		$ -		$ -
FUEL														
Fuel Supply	3,294,536		4,216,186		-		4,216,186						-	
Fuel Taxes (Heating & Power Generation)	68,677		-		-		-						-	
Fuel Taxes (Equipment)	467,343		713,101		-		713,101						-	
Escalation Allowance	157,444		-		-		-						-	
		$ 3,988,000		$ 4,929,287		$ -		$ 4,929,287		$ -		$ -		$ -
MAINTENANCE OF EQUIPMENT & FACILITIES														
Mobile Equip Maintenance	1,296,759		7,682,560		-		7,682,560						-	
Building Maintenance	506,923		2,136,535		-		2,136,535						-	
Escalation Allowance	101,318		-		-		-						-	
		$ 1,905,000		$ 9,819,095		$ -		$ 9,819,095		$ -		$ -		$ -
PRE - PURCHASED EQUIPMENT (BY COMINCO)														
Construction Equipment - Purchase (By Owner)	541,000		893,766		-		893,766						-	
		$ 541,000		$ 893,766		$ -		$ 893,766		$ -		$ -		$ -
CONTRACTOR'S FIELD SUPPORT & SUPPLIES														
TRANSPORTATION (SHIPPING)														
Packing & Preparation	85,326		-		-		-						-	
Shipping Costs	948,661		3,411,970		-		3,411,970						-	
Escalation Allowance	78,013		-		-		-						-	
		$ 1,112,000		$ 3,411,970		$ -		$ 3,411,970		$ -		$ -		$ -
CONTRACTOR MOB, DEMOB & SUPERVISION														
Contractor Mob/Demob	61,883		208,747		-		208,747						-	
Contractor Supervisory/Admin Personnel	2,127,339		3,758,445		-		3,758,445						-	
Safety Services & Supplies	36,000		521,604		-		521,604						-	
Misc Temporary Services / Modifications	223,824		1,007,843		-		1,007,843						-	
Escalation Allowance	13,954		-		-		-						-	
		$ 2,463,000		$ 5,496,639		$ -		$ 5,496,639		$ -		$ -		$ -
MISC. SERVICES & SUPPLIES														
Communications & TV	374,000		256,412		-		256,412						-	
Escalation Allowance	31,000		-		-		-						-	
		$ 405,000		$ 256,412		$ -		$ 256,412		$ -		$ -		$ -
ACCOMODATIONS														
Catering	1,487,166		2,153,968		-		2,153,968						-	
Escalation Allowance	122,834		-		-		-						-	
		$ 1,610,000		$ 2,153,968		$ -		$ 2,153,968		$ -		$ -		$ -
TRAVEL & PERSONNEL														
Travel (Airfares & Expenses)	1,552,881		4,683,561		-		4,683,561						-	
Travel Premium - Revised Rotation Schedule	1,072,773		-		-		-						-	
Misc Personnel Transport	72,274		391,547		-		391,547						-	
Escalation Allowance	575,072		-		-		-						-	
		$ 3,273,000		$ 5,075,108		$ -		$ 5,075,108		$ -		$ -		$ -
CONTRACTOR INDIRECTS														
HO MOB & DEMOB SUPPORT														
Mob & Demob	1,912,000		1,912,376		-		1,912,376						-	
		$ 1,912,000		$ 1,912,376		$ -		$ 1,912,376		$ -		$ -		$ -
CONTRACTOR MANAGEMENT SUPPORT														
Personnel	3,928,932		3,928,932		-		3,928,932						-	
Safety & First Aid Personnel to Provide Overlap	184,068		183,644		-		183,644						-	
		$ 4,113,000		$ 4,112,576		$ -		$ 4,112,576		$ -		$ -		$ -
OTHER CONTRACTOR INDIRECTS														
Contractor's General Indirects	4,952,000		7,470,401		-		7,470,401						-	
		$ 4,952,000		$ 7,470,401		$ -		$ 7,470,401		$ -		$ -		$ -
ENGINEERING / PROJECT MANAGEMENT														
ENVIRONMENTAL SITE ASSESMENT														
Environmental Consultants - Site Assesment	275,787		354,711		-		354,711						-	
Site Assessment - Unallocated	207,874		105,263		-		105,263						-	
Escalation Allowance	2,339		-		-		-						-	
		$ 486,000		$ 459,974		$ -		$ 459,974		$ -		$ -		$ -
CLOSURE PLAN														
Environmental Consultants - Closure Plan	415,772		372,272		-		372,272						-	
Escalation Allowance	2,228		-		-		-						-	
		$ 418,000		$ 372,272		$ -		$ 372,272		$ -		$ -		$ -
ENGINEERING / SPECIAL CONSULTANTS														
Design Consultants - Dock / Loadout	1,316		1,320		-		1,320						-	
Design Consultants - Tailings / Garrow Lake	3,520		3,515		-		3,515						-	
Design Consultants - Dock / Loadout	79,684		65,354		-		65,354						-	
Design Consultants - Tailings / Garrow Lake	54,780		45,328		-		45,328						-	
Sitework & Demolition Procedures - Design Services	18,300		46,825		-		46,825						-	
Escalation Allowance	2,400		-		-		-						-	
		$ 160,000		$ 162,342		$ -		$ 162,342		$ -		$ -		$ -
PROJECT MANAGEMENT CONSULTANT (HO STAFF)														
Project Management - Salaries	411,069		1,289,847		10,159		1,300,006						-	
Project Management - Reimb Expenses	100,000		85,492		-		85,492						-	

POLARIS MINE DECOMMISSIONING, RECLAMATION AND MONITORING - ACTUAL EXPENDITURES AND ESTIMATED REMAINING LIABILITY

	APPROVED CLOSURE PLAN BUDGET		ACTUAL EXPENDITURES TO DATE						FORECAST OF REMAINING OUTSTANDING LIABILITY					
			Expended To December 31, 2008		Expended In 2009		Project Total To Date		2010 Forecast		2011 Forecast		Total Forecast to 2011	
	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals	By Code	Subtotals
Escalation Allowance	31,931		-		-		-						-	
		$ 543,000		$ 1,375,339		$ 10,159		$ 1,385,498		$ -		$ -		$ -
CONSTRUCTION MANAGEMENT (FIELD STAFF)														
Construction Management - Salaries	2,142,878		1,915,004		-		1,915,004						-	
Escalation Allowance	179,122		-		-		-						-	
		$ 2,322,000		$ 1,915,004		$ -		$ 1,915,004		$ -		$ -		$ -
ENVIRONMENTAL TESTING AND SAMPLING														
Environmental Reclamation Supervision - Staff	337,123		1,038,747		-		1,038,747						-	
Escalation Allowance	29,550		-		-		-						-	
Environmental Reclamation Supervision - Testing	330,000		171,498		-		171,498						-	
Additional Sampling and Consultant Services (MMER)	0		354,386		-		354,386						-	
Escalation Allowance	26,327		-		-		-						-	
		$ 723,000		$ 1,564,631		$ -		$ 1,564,631		$ -		$ -		$ -
OWNER'S COSTS														
SALARIES & EXPENSES														
Teck HO Proj Mgmnt (Staff Lab)	374,631		476,911		-		476,911						-	
Teck HO Proj Mgmnt (Misc Material & Exp)	199,149		221,031		-		221,031						-	
Escalation Allowance	34,220		-		-		-						-	
		$ 608,000		$ 697,942		$ -		$ 697,942		$ -		$ -		$ -
OVERHEAD / HO SUPPORT														
Land Leases, Licences	175,000		96,979		-		96,979						-	
Miscellaneous Permits	45,000		16,889		-		16,889						-	
Insurance	445,900		319,459		-		319,459						-	
Property Taxes	495,000		180,412		-		180,412						-	
Home Office General Admin (Labour & Exp)	722,384		16,700		-		16,700						-	
Public Relations	74,292		58,718		-		58,718						-	
Legal	57,540		48,421		-		48,421						-	
Escalation Allowance	168,560		-		-		-						-	
Misc Owner's Overhead	6,324		13,882		-		13,882						-	
		$ 2,190,000		$ 751,460		$ -		$ 751,460		$ -		$ -		$ -
GENERAL ADMIN														
Closure Management - Polaris Personnel	54,000		-		-								-	
Escalation Allowance	2,880		-		-								-	
Closure Wrap Up	5,120		-		-								-	
		$ 62,000		$ -		$ -		$ -		$ -		$ -		$ -
POST RECLAMATION COSTS (2005 - 2011)														
SITE MONITORING AND HOLDING COSTS														
Annual Post Closure Environmental Monitoring (2005 to 2011)	510,000		1,123,300		286,809		1,410,109		324,500		248,500		573,000	
Final Sampling Program, Data Evaluation and Reporting in 2011	160,000		-		-		-						-	
Land Lease/Licence costs from 2005 to 2011	126,000		-		-		-						-	
Property Taxes - 2005 to 2011	70,000		-		-		-						-	
Escalation Allowance	135,000		-		-		-		-				-	
		$ 1,001,000		$ 1,123,300		$ 286,809		$ 1,410,109		$ 324,500		$ 248,500		$ 573,000
TOTAL DECOMMISSIONING / RECLAMATION & MONITORING COSTS		**$ 47,500,000**		**$ 69,513,587**		**$ 296,968**		**$ 69,810,555**		**$ 440,000**		**$ 483,500**		**$ 923,500**

Note: For actual and forecast expenditures have not included Land Lease costs, Licence Costs or Property Taxes as these do not represent a potential cost or liability to the government

APPENDIX 3

2009 WATER LICENCE CORRESPONDANCE

Appendix 3 Document #1

Mar 05, 2009 - Teck letter to the NWB and INAC responding to the BGC Consultants review of current reclamation liabilities for the site.

Bruce J. Donald
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Environment, Health and Safety
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Teck

March 5, 2009

Submitted by email, paper submission to follow

Nunavut Water Board
Box 119
Gjoa Haven, NU X0B 0J0
Attention: Phyllis Beaulieu, Manager of Licensing

Indian and Northern Affairs Canada
P.O. Box 100
Iqaluit, Nunavut X0A 0H0
Attention: Spencer Dewar, Manager, Lands Administration

Dear Ms. Beaulieu and Mr. Dewar;

Re: Polaris Mine – Request for Reduction of Reclamation Security (Water Licence NWB1POL0311)

Thank you for forwarding the BGC Engineering Inc. report (dated November 24, 2008) titled "Polaris Mine – Draft Review of Outstanding Items and Assessment of Crown's Remaining Liability". This report reviews the various Nunavut Water Licence and Detailed Decommissioning and Reclamation Plan (DDRP) approvals and identifies information and/or documents that may not have been submitted. In reviewing this report, we recognize that some information that had not been previously submitted as required. Since the issuing of BGC's report, we have completed two reports that should resolve the outstanding documentation concerns.

These two reports are:

- A revision to the 2004 combined Quarterly and Annual report. When this report was initially issued in electronic format, it was missing a number of sections of data. Recently, an update to this report was issued (in both paper and electronic format) so that this submission is now complete.
- Enclosed with this letter is the 2003 Annual report (in both paper and electronic format). This report had not been previously submitted. The 2003 Annual report does not contain any new information that had not been previously reported in the quarterly reports from 2003.

Teck has filed the 2008 4th Quarter and Annual report as required. All quarterly and annual reporting for the Polaris Mine Water Licence and DDRP are now fully up to date.

The November 28th, 2008 BGC report included three tables that identified the status of the following types of submissions:

- Table 1 – Summary of Documentation Required by Water Licence
- Table 2 – Summary of Outstanding Documentation from Available Reports
- Table 3 – Summary of Outstanding Items Related to On-Site Reclamation Activities

Attached to this letter are three tables in the same order and format as the original tables in BGC's report. The attached tables (Tables 1 to 3) respond to each of BGC's comments in order. As can be seen from the responses, we have addressed all of the issues or concerns identified by BGC.

A fourth table in BGC's report (Table 4) presented a list of five items/issues that BGC believes are outstanding. This table also provides BGC's estimate of the associated potential remaining liability to the Crown. Our responses to this table are provided below:

1. **Item: Outstanding Documentation to be submitted in accordance to Water Licence requirements** (BGC's Estimated Potential Liability $1,000,000)

   Teck Response – With the current and recent submissions of reports, we are now up to date with all NWB Quarterly and Annual reporting requirements. There are two items (Subsidence Area report and As-Built Drawings) that BGC identified in their review as being deficient relative to the original requirements that we wish to respond to below.

   a. Subsidence Area Geotechnical Review – This issue is actually part of two separate items listed in Table 4 of the BGC report. The concern was that the "sink hole" area in the Subsidence Area would continue to be active, creating a deep, steeply sided hole that would present a risk to the public and wildlife using the site. Teck was requested to submit a geotechnical report discussing the stability of the ground surface in this area. A report was submitted as part of the routine 2003 3rd Quarter Water Licence report of the area by one of its experienced mining engineers (a P. Eng. who was registered to practice in Nunavut). This engineer was involved with both the planning of underground mining but also with the monitoring of subsidence. BGC reviewed this report in their March 30, 2004 report titled "Polaris Mine Decommissioning and Reclamation – Review of 3rd and 4th Quarter Reports". BGC recommended that an independent professional geotechnical engineer review this issue and present a report on it. We had approached an independent geotechnical engineering firm who had been familiar with the underground mining operations at Polaris based on a number of annual inspections he conducted at the site while it was in operation. The purpose of these inspections was to review conditions underground in the mine and advise the mine engineering group on ground stability conditions and mine planning practices. We were unsuccessful in obtaining a review from them. We are reluctant to attempt to have a geotechnical engineer not fully familiar with the site attempt to understand the complexities of this issue without first hand knowledge of the site and the ground conditions in the mine. It is difficult for someone not familiar with the mine, to fully evaluate the question of ground stability. They would require substantial detailed information regarding the sequence of mining, the extraction ratios utilized, detailed mine plans, quantities/sequences/timing of backfilling, and an understanding of the overlying stratigraphy and competency of such strata. Without direct experience with a mine, it is difficult to make reliable assessments even with the above information. This information would have been readily available while the mine was operating but much of this information is no longer available as only select records were retained during demolition of the site. At the time reclamation commenced, there was no requirement to maintain all of these types of records, and it was not anticipated that this would become a requirement in the future. We have retained the normal records typically and legally required such as the detailed underground mine plans.

      In the Polaris 2003 3rd Quarter report on the subsidence issue, Teck had proposed that monitoring of the sinkhole area be done in 2004 to give an updated picture of the trend in subsidence rates. BGC stated in their March 2004 review that at that time "There is no evidence that the movement within the sinkhole zone has stabilized over the last 10 years." In response to this comment and as we have not satisfied the request for an independent geotechnical review, Teck has been conducting topographic surveys of this area annually for the past 6 years (with the exception of one year where no survey was done due to an equipment malfunction). These topographic surveys are very detailed (for example in 2008, approximately 5000 points were surveyed) and the results are compared between years to look for changes and trends (and the data presented annually in the 3rd Quarter reports). Over this 6 year period, there has been **no** detectable movement of the ground surface in the Subsidence Area. We feel this should be sufficient to allay concerns.

While we are of the opinion that this subsidence in this area has already occurred, even if we were wrong; there is no practical way of preventing additional subsidence from occurring. If additional subsidence were substantial, the only practical course of action available to make the area safe would be to fence the area so that people and/or wildlife do not inadvertently enter the area. This matter is discussed further in Item # 5 below specifically related to the potential financial liability associated with it.

b. P. Eng. Certified as-built drawings – Teck has recently submitted as-built drawings of all of the engineered structures at the site (decommissioned dock and adjacent foreshore areas, mine portal seals, operational landfill cover, LRDQ landfill cover, and the decommissioned Garrow Lake dam) as required. These structures were all constructed by SNC Lavalin Contractors and the work was observed throughout the construction process by Teck's contracted on-site project management team (Cascade Management). Several of the project management team members were qualified engineers but none were registered in Nunavut and so were not able to certify the drawings as a Professional Engineer. No other Professional Engineers registered in Nunavut were present at the site at sufficient number of stages of the work to be in a position to stamp (certify) the drawings. While the drawings are not stamped, considerable effort was made to present accurate information as to the details of the construction of these. It should also be noted that based on annual inspections by Teck and regulators, and through monitoring data collected, there has been no indication that there are any significant concerns or deficiencies with any of these structures. They are all performing as intended so we feel that this item has been resolved.

2. **Item: Mobilization of new equipment to site from Resolute Bay (BGC's Estimated Potential Liability - $835,000)**

Teck Response – We have three pieces of heavy mobile equipment that were selected to remain at site when reclamation was completed in the fall of 2004. There is a D6 dozer, a Cat 235 Excavator and a Ford dump truck. Both the dozer and the excavator were selected as they were in the best condition of the equipment on site and thus the least likely to have major problems. The truck is in poorer but operating condition, but as repairs to it are relatively easy, this was not considered a concern. Since completion of reclamation, we have used the equipment for a total of about 1 month (operating time) for resloping several areas, improving water bars on the road to Frustration Lake, and repairing two erosion gullies on one of the slopes in the New Quarry area. There is at most, several days work planned for this summer. Assuming no other unexpected issues arise, the only work remaining work in 2010 will be to bury some garbage and to demobilize the camp. The only known significant repairs currently required are to replace 4 boogies on the tracks for the dozer. This job can easily be done on site and it is a normal operating type repair. There is absolutely no reason for bringing other equipment on site as the equipment currently on site is adequate for the work remaining. If unexpected breakdowns were to occur, the most economical solution would be to repair the existing equipment not to bring other equipment to site. If one were to allow $50,000 to cover known and unexpected repair costs, this would be a reasonable allowance. The suggested $835,000 allowance is excessive.

3. **Item: Demobilization of existing camp and removal of old and new equipment after completion of outstanding site reclamation (BGC's Estimated Potential Liability is $40,000)**

Teck Response – Our budget submitted with the 2008 4th Quarter and Annual report (Appendix 3) includes our estimated costs for final clean up and demobilization from site. The estimate of $40,000 from BGC is too low. The cost will vary significantly depending on the value we obtain for the sale of the camp and mobile equipment which has value in the north. To be conservative, we estimate the costs could be as high as $408,000.

4. **Item: Ongoing Post-Closure Monitoring for 2009 to end of 2011 (BGC's Estimated Potential Liability is $731,500)**

   Teck Response – BGC stated the estimated liability of $731,500 is from our 2007 Annual report. The 2008 4th Quarter and Annual report updates this cost estimate to be $815,500 which has increased slightly due to inflation and due to refinements in our estimates.

5. **Item: Assessment of long-term stability of subsidence zone (BGC's Estimated Potential Liability is $1,000,000)**

   Teck Response – The issue of the long term stability of the subsidence area was discussed above in Item #1. We disagree with the proposed potential liability for this item for two reasons:

   a. BGC states that this amount is a "suggested hold back until documents are received." The goal is not the receipt of documents but to protect the public from unfunded reclamation liabilities. Teck has addressed this concern by continuing the detailed monitoring to demonstrate that there has been no additional subsidence. Additionally, Item #1 and Item #5 are both attributing liability to lack of documentation so we are in effect being double billed for the same item. We do recognize that in Item #1, when the liability amount was originally proposed, there were a significant number of outstanding documents which have since been submitted.
   b. If subsidence were to occur to a degree that was a significant public/wildlife safety issue, the most practical solution would be to fence the area. At our underground mine site in Kimberley, B.C. we have underground workings that were designed to cave to surface and other areas where we need to control access. To prevent public or wildlife from accidently entering the subsidence area, we have constructed many kilometers of fencing. We use 8 foot high wildlife fencing similar to what is used by the National Parks Board in Banff National Park (would not need fencing that high at Polaris). Our costs for constructing these fences are $24 per metre. To be conservative, assume the cost to construct this type of fence at Polaris is triple the Kimberley cost. Based on site surveys at Polaris, to fence the entire perimeter of the general Subsidence Area would require a fence which is 1200 metres in length. This is very conservative as the area of specific concern (the "sink hole" area) is no more that 20% of the Subsidence Area. Based on these conservative assumptions, costs to fence the entire area would not exceed $87,000.

Originally in our letter dated June 24, 2008 we requested both a reduction in the reclamation security in addition to a reduction of the monitoring program. We have since been informed by the Water Board that a change to the monitoring program would require an amendment to the Water Licence so we are not proceeding with the request to alter the monitoring program at this time.

Consistent with Part B, Section 3 of the Polaris Water Licence which specifies that the quarterly reports should identify the "amount of credit adjustment requested", and our 4th Quarter 2008 NWB report contained a request to reduce the reclamation security to $1,600,000. This is less than the June 24, 2008 reclamation security reduction request as we now have an additional monitoring season completed and consequently another year of monitoring costs having been expended which reduces the remaining site liability.

The security reduction is a very important matter to Teck, given the state of the economy and the current credit market. Teck can not afford to have lines of credit tied up when there is no need for it. We have submitted the information required under the Water Licence and the DDRP. Teck has been proactive in reclaiming the site promptly after completion of mining and to a high standard. We continue to manage the Polaris Mine site with diligence and the monitoring results confirm the site is stable. We request that the Water Board and INAC recognize this and respond by expediting the release of excess reclamation security to Teck.

If there are any questions regarding the above information, please do not hesitate to contact the undersigned.

Yours truly,

Bruce Donald,
Reclamation Manager,
Environment, Health and Safety,
Teck Cominco Limited

Attachment: Tables 1 – 3 Response to BGC's tables contained in the November 24, 2008 report "Polaris Mine – Draft review of Outstanding Items and Assessment of Crown's Remaining Liability"

Enclosures:

a) 2003 Annual Reclamation Report
b) Cd containing translations of the Updated 2004 Annual Report and the 2008 4th Quarter and Annual Report.

TABLE 1 - SUMMARY OF DOCUMENTATION REQUIRED BY WATER LICENCE - TECK RESPONSE

BGC REPORT PAGE #	Water Licence Reference		DOCUMENTATION REQUIRED	TECK RESPONSE TO BGC's COMMENTS
5	Part B	Item 3	Quarterly Expenditure Reports of remediation completed to date	An updated expenditure report was filed with the 4th Quarter 2008 report which is current to December 31st 2009 and forecasts the costs through until expiry of the Water Licence.
5		Item 5	By November 1, 2003 an approximation of the amount of security to implement corrective measures should Garrow Lake be detrimentally affected by decommissioning and reclamation activities	This was submitted in Appendix 6 of the 2003 3rd Quarter report.
5		Item 6	An Annual Report by March 31st of the year following the calendar year reported.	While not all were submitted on time, all Annual reports have now been submitted
5	Part E	Item 1	Within 30 days of issuance of Licence, a revised Emergency Response Plan	One was submitted and BGC also noted that it should be reviewed annually. The 2008 Annual report includes an updated ERP in Appendix 2.
5		Item 4	As built plans and drawings of modifications within 90 days of modifications.	All missing as built drawings have now been submitted in Appendix 4 of the recently updated 2004 Annual report.
5	Part G	Item 3	Modifications to Decommissioning and Reclamation Plan to be submitted annually to Board as an addendum.	The DRP itself was never amended but any changes to the DRP were requested and formal approval granted by the NWB and INAC before the requested changes were undertaken.
5		Item 5	By March 31, 2005 a Comprehensive Assessment of Mine Site Remediation in terms of remediation objectives and need for ongoing monitoring and follow-up remediation requirements.	A submission dated June 14, 2005 was submitted addressing this item.
5	Part H	Item 6	Report of Annual Geotechnical Inspection, within 60 days of the inspection.	These are done annually and submitted with the 3rd Quarter reports each year. The most recent one is from July 2008. The only year where a geotechnical insptection report was not obtained was in 2004 although a formal independent geotechnical inspection was done.
5		Item 27	Effluent monitoring report for all tests and monitoring conducted during each calendar quarter, not later than 45 days after the end of the quarter.	Effluent monitoring data has been submitted with each quarterly report where effluent is flowing. The latest effluent monitoring submitted was with the 3rd Quarter 2008 report (no flow in the 4th Quarter to report).
5		Item 28	Annually, no later than March 31, a report summarizing the Effluent Monitoring results for the previous calendar year.	These are normally submitted with the 3rd Quarter reports as there is normally no effluent flow in other quarters. The last report was included in the 2008 3rd Quarter report
5		Item 39	Submit exact location of water sampling reference areas referred to in Part H, Item 37(i) within 30 days of identifying such areas.	This was submitted to Environment Canada in a letter dated August 14, 2003 as required by the MMER. The Final Discharge Point location was also included the 3rd Quarter 2003 report submitted to the NWB (in Appendix 20).
5		Item 41	By June 16, 2003 the Biological Monitoring Studies as required by Part 2 of Schedule 5 of the Metal Mining Effluent Regulations	On April 8, 2003 Teck met with the Environment Canada Technical Advisory Panel to discuss the EEM proposal. Dionne Filiatrault was a member of the Panel. This was followed up by submission of the study proposal to Environment Canada on June 11, 2003 and to the NWB on June 27th, 2003.
5		Item 42	By June 30, 2003 the Terms of Reference to study; metal concentrations in benthic sediments, representative species in Garrow Lake and Garrow Bay and erosion rates of the shorelines of Garrow Lake and Garrow Creek.	The proposal of these studies was submitted to the NWB on June 30, 2003.
5		Item 44	Submit for review the results of the monitoring requirements in Table 1 (of the Licence) in accordance with Part B, Item 6.	Table 1 monitoring requirements form a key basis of the quarterly reporting and the results are submitted in the quarterly reports (primarily in the 3rd Quarter reports as that is when the bulk of the monitoring is conducted).

TABLE 2 - SUMMARY OF OUTSTANDING DOCUMENTATION FROM AVAILABLE REPORTS - TECK RESPONSE

BGC REPORT PAGE #	REFERENCE DOCUMENT	OUTSTANDING ITEMS	TECK RESPONSE TO BGC'S COMMENTS
6	BGC (2003), July 2-3 Site Inspection Report	Information pertaining to construction of Operational Landfill: thermistor readings, material testing results (moisture, grain size, density), as-built drawings. Verify that actual properties of cover materials are equivalent to assumption in thermal analysis and verify final thickness of cover with respect to actual properties.	Refer to EBA site inspection report of the Operational Landfill submitted in Appendix 15 of the 2003 3rd Quarter report. Inadequate survey control by the prime contractor at the Operational Landfill resulted in test pitting being conducted to confirm that cover cap met minimum thickness requirements (which it did without exception). Thermistor monitoring results have verified that the cover cap is performing as designed. Initially thermistor results were not acceptable due to technical problems related to their installation. Considerable work was expended over two summers to improve the installations and ultimately data loggers were installed in 2006 to collect detailed temperature data on a daily basis all year round. These results are verify that the active layer remains within the cap thickness and the data is being reported in the 3rd Quarter reports. The 2008 3rd Quarter report presents the daily data for the thermisters going back to when they were installed in 2006.
		An updated estimate of the volume of hydrocarbon and metals contaminated soils placed underground.	Completed as noted by BGC's comment on status.
		The results of the metals and hydrocarbon analysis of the melt water stored underground and a drawing showing the location and extent of the underground melt water storage area.	Reported the analysis of the water in Appendix 2 of the 2003 3rd Quarter report and the location shown on the one of the mine plans in Appendix 11 of the same report.
6	BGC (2003), September 8 - 10 Site Inspection Report	Teck Cominco hired EBA to review the subsidence issue and will submit results of their evaluation and proposed plan to INAC/NWB for review. Requested to provide compilation of all instrumentation and survey records showing subsidence data.	A report on subsidence was submitted in Appendix 16 of the 2003 3rd Quarter report authored by T. Feduniak, P.Eng. Who was a mining engineer who worked at Polaris and is very familiar with subsidence at the mine. Mr. Feduniak directed the surveyors who monitored the subsidence and also was involved with developing the underground mining plans. This report has substantial background information on this area. Subsequent to this report, Teck attempted to obtain a detailed review by Golder Associates who were the geotechnical experts that advised the mine during operations. We were unsuccessful in obtaining a report. This is an extremely complex question that is not easily answered. As a result, Teck has been conducting annual detailed topographic surveys of the area to document that movement observed prior to mine ceasing operations has stabilized and that there are no signs of significant subsidence occurring. The latest survey information is provided in the 3rd Quarter 2008 report which continues to confirm that this area is stablie and show no signs of movement since starting these surveys in 2003.
		Metals contaminated soils in bedrock under concentrate storage shed.	As per BGC comment - "No outstanding concerns".
		As-built drawings of cover for Operational Landfill	These have been submitted in the recently updated 2004 Annual reclamation report.
		As-built engineer signed and stamped drawings showing final slopes and contours for the New Quarry and North Pit reclamation.	Teck is not aware of a Water Licence or Closure Plan requirement for this. These slopes were contoured by a dozer for aesthetic purposes only and was never an engineered slope done to meet any specific design. A visual inspection of these areas is all that is necessary and has been done annually. There is nothing to be gained by surveying and developing drawings of these areas any more than any of the other surrounding slopes.
6	BGC (2004), September 9 Site Visit	As-built drawings for portals	These have been submitted to BGC in 2008 as requested and have also been recently submitted in the recently updated 2004 Annual Reclamation report.
		As-built drawings for LRD Quarry Landfill and cover	This drawing was recently submitted in the updated 2004 Annual Reclamation report.
7		Report by Golder on the subsidence area.	Refer to Teck's comment in BGC(2003), September 8 - 10 Site Inspection Report 6 comments (on BGC report Page 6).
		Close out reports and remaining quarterly reports.	All contaminated soils close out reports have been submitted. Also, all Quarterly and Annual reports have now been submitted to both the NWB and INAC. In the case of 2004 reporting, due to the volume of reporting required, the Quarterly reports were combined with the Annual report and submitted in two three inch thick binders.
7	BGC (2006), 2006 Site Inspection Report	Thermistor data from data loggers in Operational Landfill and LRD Quarry Landfill	BGC stated that several years of thermal data should be collected to demonstrate the covers are performing as designed. We now have data from 2006, 2007, and 2008. Data continues to be retrieved each summer from the data loggers and the trends in temperatures continue to be as expected. The LRD Quarry Landfill is cooling further at depth each year as freeze-back continues. The Operational Landfill does not show the same deeper cooling trend as freeze-back has already occurred as it is an older landfill.
		Subsidence Zone assessment by Golder.	Refer to Teck's comment in BGC(2003), September 8 - 10 Site Inspection Report (BGC report Page 6)
		As-built drawings for marine dock and adjacent shoreline reclamation.	Drawings recently submitted with the updated 2004 Annual report.
		As-built drawings for Garrow Lake Dam decommissioning.	Drawings recently submitted with the updated 2004 Annual report.
		A-built drawings for portal closure seals.	Drawings recently submitted with the updated 2004 Annual report.
		As-built drawings showing locations where metals contaminated soils were placed in LRD Quarry Landfill	As noted by BGC, drawings have previously been submitted showing this information.
		Annual geotechnical inspection for 2004 by EBA and for 2005.	EBA conducted a geotechnical inspection in 2004 but no formal report was obtained. In 2005 the geotechnical inspection was done by Gartner Lee Ltd. and their report was submitted in Appendix E of the 2005 3rd Quarter report. The 2005 geotechnical report was comprehensive in documenting conditions at the site as it was the first inspection after essentially all reclamation work was completed and so is a good baseline to compare future inspections to.

TABLE 2 - SUMMARY OF OUTSTANDING DOCUMENTATION FROM AVAILABLE REPORTS - TECK RESPONSE

BGC REPORT PAGE #	REFERENCE DOCUMENT	OUTSTANDING ITEMS	TECK RESPONSE TO BGC'S COMMENTS
7	Nunavut Water Board Letter of Direction to	The Board requested Teck Cominco to complete the submissions of the following documents which had not yet been received by NWB or INAC at that time:	
		Annual report for 2003	Had not been previously submitted. It is now completed and is being submitted at the same time as this report. Note that while this report had been missing, it contains NO new information and is simply a summary of information previously submitted in the quarterly reports.
		All quarterly expenditure /remediation updates for 2004	Recently submitted the updated 2004 Annual report which includes the year end expenditure report and a complete review of all remediation work done during the year.
		Geotechnical inspection reports for 2003 and 2004.	2003 Geotechnical inspection by EBA of specific engineered structures were submitted in Appendices 14 and 15 of the 2003 3rd Quarter report. While EBA conducted an onsite geotechnical inspection in 2004, no formal report was obtained.
		All quarterly effluent monitoring reports for 2004	Refer to the updated 2004 Annual report which contains all the monitoring data from 2004.
		Report providing details on the decommissioning of non-PCB transformers at the mine.	There is no separate report that details this as none is necessary as the procedure followed to decommission them was the same as all other hydrocarbon containing equipment decommissioned on site. Upon removal of hydrocarbons from equipment, the maintenance person completes a form verifying he did this. The form is signed by his supervisor confirming that the work was done. In the 2004 Annual report, Appendix 10, one of these forms indicates that hydrocarbons were removed from these transformers on August 13 and 14 of 2004 and that the shells were disposed on Bench 5 of Little Red Dog Quarry Landfill. The oil from the transformers would have then been incinerated in the on-site approved hydrocarbon incinerator along with other hydrocarbons as standard practice.
		Engineer stamped as-built drawings of Little Red Dog Landfill Cover	The drawings have not been stamped by a Professional Engineer as none were present on site at enough stages of the work to be willing to certify that the construction was done as designed. There were engineers on site monitoring the work but were not geotechnical engineers registered in Nunavut and so were unable to stamp the drawings. The as-built drawings are included in Appendix 4 of the updated 2004 Annual report.
		Engineer stamped as-built drawings of Operational Landfill cover	The drawings have not been stamped by a Professional Engineer as none were present on site at enough stages of the work to certify that the construction was done as designed. There were engineers on site monitoring the work but were not geotechnical engineers registered in Nunavut and so were unable to stamp the drawings. The as-built drawings are included in Appendix 4 of the updated 2004 Annual report.
		Report considering closure and cover design and engineer stamped as-built drawings of Subsidence Zone/Reclamation Landfill cover	The letter of direction did not request this. The letter requested a report on the subsidence zone that includes predicted movement, risk-management and long-term monitoring concerns. In Appendix 16 of the 3rd Quarter 2003 report, T. Feduniak, P. Eng. identified that the majority of movement had likely already occurred and that annual survey monitoring of the topography of the area should be done to confirm that subsidence was slowing and did not present a public safety concern. Surveys have been done annually since the mine closed (except 2007 due to an equipment failure) through to the most recent summer (2008). The surveys verify that there is no significant or identifiable subsidence occuring over this time period.
			Teck attempted to obtain a report from a specific engineering firm as they were familiar with the site when it was operating (i.e. did annual rock mechanic reviews and gave advice on mining methods and plans employed) but we were unable have them agree to do the review. Teck intends to continue conducting the annual surveys as part of its annual geotechnical inspection program which we expect will continue to show that there are no on-going subsidence concerns.
8		Report on sampling results at Frustration Lake	BGC stated monitoring has not identified any concerns and BGC supports dropping this requirement.
		Report on sediment/turbidity levels observed at Dock and Foreshore Area.	The recently updated 2004 Annual report contains the previously missing photographs, TSS sampling results, and a report on subsurface survey of the area after work was completed (Appendices 15 & 16)
		Report describing the cover placed over the footprint of the former Concentrate Storage shed, as well an engineer stamped as-built drawings of the constructed cover	This was originally reported in Appendix 2 of the 4th Quarter 2003 report. This appendix includes drawings indicating the locations and thickness of the cap. This report was followed up by a technical memorandum included in Appendix 9 of the 2004 Annual report.
		Report on the subsidence zone that includes predicted movement, risk management and reclamation phase	Previously discussed.
		A report that re-evaluates the estimated cost of re-establishing Garrow Dam in the post-reclamation phase.	BGC states this requirement is now redundant.
		Terms of reference for post-closure site monitoring, including mine components to be monitored, type of monitoring to be undertaken, frequency of monitoring, protocols for remote site monitoring, contingency plans for additional or altered monitoring requirements.	As reported by BGC, this information was submitted on June 14th, 2005.
		INAC/NWB recommended that the above be submitted as one comprehensive document as requested Teck Cominco provide a date when this report could be expected.	BGC stated this request is obsolete as it was superseded by subsequent reports although many items were still outstanding. Teck believes that at this time the outstanding items have been addressed satisfactorily.

TABLE 2 - SUMMARY OF OUTSTANDING DOCUMENTATION FROM AVAILABLE REPORTS - TECK RESPONSE

BGC REPORT PAGE #	REFERENCE DOCUMENT	OUTSTANDING ITEMS	TECK RESPONSE TO BGC'S COMMENTS
8	BGC Memo to Carl McLean (INAC),	BGC asked INAC/NWB if bathymetry of tailings deposition area in Garrow Lake had been submitted.	This survey was submitted in Appendix 17 of the 2003 3rd Quarter report.
		Data and report supporting Teck Cominco's conclusions that the movements in the subsidence zone have slowed and do not present a safety issue. The outstanding geotechnical consultant's review of the subsidence issue was requested.	Annual surveys continue to verify that there is no measurable subsidence occurring (through to and including the 2008 survey submitted in the 2008 3rd Quarter report. Teck has not been able to obtain an independent geotechnical review of this as previously explained.
		As-built drawings of the mine portal plugs.	Submitted in Appendix 4 of the recently updated 2004 Annual report
		Analysis of wind data from Resolute Bay and ability to react to extreme events to mitigate effects on stability of Garrow Lake halocline.	BGC stated this request is obsolete. However Teck continues to monitor this annually as required and even with significant wind events, sampling of Garrow Lake confirms the lake continues to be stable and not adversely affected by these wind events.
8	Teck Cominco 2004 Annual Report,	Teck Cominco highlighted the items that were still outstanding at that time and reported on others as they were completed. The following items were noted:	
		2003 Annual Report was still outstanding as of September 19, 2005	This report was recently submitted (dated February 25, 2009). Note that this report is simply a summary of information previously submitted in the 2003 Quarterly reports.
		As-built drawings for the marine dock and adjacent shoreline.	These drawings were submitted in Appendix 4 of the February 10, 2009 update of the 2004 Annual report
		As-built drawings for removal of Garrow Lake Dam	These drawings were submitted in Appendix 4 of the February 10, 2009 update of the 2004 Annual report
9		Survey of Garrow Lake Wave-Break structure.	BGC's comment was that a survey should be done to document conditions for file purposes and then no need for any further follow up surveys. A survey was conducted in the summer of 2006 and the resulting drawing submitted in Appendix 6 of the 3rd Quarter 2006 report.
		As-built drawings of the Operational Landfill cover.	These drawings were submitted in Appendix 4 of the February 10, 2009 update of the 2004 Annual report
		As-built drawings of the LRD Quarry Landfill Cap.	These drawings were submitted in Appendix 4 of the February 10, 2009 update of the 2004 Annual report
		Confirmation of adequacy of remedial efforts to deal with residual metals contamination in the footprint of the concentrate storage area and as-built drawings.	BGCs comment was that an as-built drawing is required and further information on a risk assessment study being done for the basis the approach of using a thin cap on this area. Appendix 9 of the updated 2004 Annual report has a memorandum from Gartner Lee Ltd. further discussing this issue. Appendix 2 of the 4th Quarter 2003 report contains the Gartner Lee Ltd. close-out reports for remediation of contaminated soils. In Appendix A of their report, there is an as built drawing showing the area capped and the thickness of the cap. On-going annual sampling shows that the soils in the area continue to meet remedial targets for metals concentrations.
		Rationalize legal names between permits, licenses and leases.	The immediate concern expressed was related to the holding of reclamation security when lease holders appear different. Where there are different names on the leases, they are all owned at the end of the day by Teck Cominco Limited. While the legal names have not been harmonized, the reclamation security has been submitted and is being held based on the Water Licence so that the lease names are not a factor the holding of security.
		Report on Golder Associates on geotechnical review of subsidence zone.	Previously discussed in this document.
		Photographs taken by GLL in August 2004 of Garrow Lake erosion monitoring pins need to be added to Appendix 13.	In the February 11, 2009 update to the 2004 Annual report, the missing photographs have been added to Appendix 13.
		Garrow Creek Monitoring results.	In the February 11, 2009 update to the 2004 Annual report, the missing data and photographs have been submitted in Appendix 14.
		Marine Dock and Foreshore Erosion Monitoring	As noted by BGC, Appendix 15 of the 2004 Annual report contained 3 DVD's with SIMs imagery and a SCUBA survey. Data collected by Gartner Lee Ltd. was missing. In the February 11, 2009 update to the 2004 Annual report the DVD's are resubmitted in Appendix 16 and the GLL data and photographs are included in Appendix 15.
		2004 Annual Geotechnical Inspection Report by EBA Engineering	Previously discussed in this document.
10	BGC Memo to Spencer Dewar, December 20, 2005,	This memorandum reviewed the 2004 Annual Report submitted by Teck Cominco on September 19, 2005, the Annual MMER Report dated September 2005 and the 3 CD's of seabed imaging.	BGC's comment here was that the previous section of this report discussed the status of these items.

TABLE 2 - SUMMARY OF OUTSTANDING DOCUMENTATION FROM AVAILABLE REPORTS - TECK RESPONSE

BGC REPORT PAGE #	REFERENCE DOCUMENT	OUTSTANDING ITEMS	TECK RESPONSE TO BGC'S COMMENTS
10	BGC Memo to Spencer Dewar,	In the Q2 Report, TCL indicated it would be requesting a reduction in the number and frequency of samples required to monitor the stability of the Garrow lake water column.	BGC recommended that INAC have water quality specialists review TCL's request. TCL is not aware of this occurring as we can not locate a copy of BGC's memorandum or any apparent correspondence from INAC to us in regard to this.
		In the Q3 Report, TCL presented the results of the annual survey over the subsidence area. There was no mention that their consultants report would be forthcoming.	BGC is still recommending a consultant's report that reviews the history of the subsidence area and reviews the now 4 years of survey data. TCL as previously discussed has not been able to obtain a review of this area from the key consultant familiar with the mining practices.
		Assessment of wind speed measured at weather station in Resolute Bay and effects on stability of Garrow Lake water column.	BGC requested that TCL include reference for the wind speed criteria given in the DRP to allow comparison with the data collected from the weather station. In the 2005 3rd Quarter report, Section 5.1 discusses the wind speeds monitored at Resolute Bay. This section refers to a letter of response by Dr. Paul Ericson of AXYS Environmental Consultants (dated December 14, 2001) regarding the potential mixing of the mixolimnion with the halocline due to wind events and the resulting change in zinc concentrations in the mixolimnion. In the letter, Mr. Erickson states that using conservative assumptions, it would take an average wind speed of 52 km/hr a duration of 21.6 hours to cause mixing of the 7.5 to 8.5 metre depth of the lake. Based on this comment, BGC suggested that these events be viewed in terms of exceeding a threshold of energy, however the data available to us from the weather station at Resolute is not sufficent to do this. The Environment Canada wind data represents only the 2 minute mean wind speed at the top of each hour.
			Therefore it is not possible to provide a more definitive trigger that we currently use. TCL has selected to flag any wind events exceeding 50 km/hour for more as being noteworthy. If the event occurs in late July or early August, then monitoring of the lake in mid August verifies that the lake has not been affected. If the event occurs between mid August and mid September, the weekly sampling of Garrow Creek that is done until flow from the lake freezes for the winter would identify if there were any significant disturbances in the lake. Then during the winter while there is ice cover detailed sampling of the lake occurs. Consequently any disturbance to the lake stratigraphy would be identified prior to Garrow Creek flowing in the following summer.
		Thermistor data in landfill covers.	Data loggers have been used since July 2006 to collect daily temperature data and is reported annually in the 3rd Quarter reports.
10	BGC Review of 2006 4th Quarter and 2004 Annual Reports,	Limited data set concerning temperatures in the two landfill covers.	Data loggers have been used since July 2006 to collect daily temperature data and is reported annually in the 3rd Quarter reports so there is detailed data from the summer of 2006 through to this past summer. Recording of data conintues and next summer the data will be collected again.
		Visual monitoring of erosion areas around New Quarry that have been mitigated.	BGC states that observations to date show stabilization work has been effective but continued monitoring is recommended. TCL does this as part of the annual geotechnical inspections done.
		Simplified water quality monitoring program.	BGC recommended checking the status of TCL's request for simplified site water quality monitoring. This is an action item for INAC.
10	BGC Review of 2007 Third Quarter Report	Indications of toxicity in the reported Daphnia magna tests.	BGC states there is no obligation for TCL to do more than report toxicity results (Garrow Creek). The metals concentrations in the samples were all compliant with the Water Licence and MMER. The only parameter that was slightly higher than normal was the hardness. In 2008 there were no concerns. All 2008 samples passed the toxicity tests.
11	BGC Review of 2007 Fourth Quarter and	Completion of outstanding studies and as-built drawings listed in 2004 Annual Report (dated September 19, 2005).	In the February 11, 2009 update to the 2004 Annual report, the missing data and drawings have now been submitted.
		Rationalization of water quality monitoring program to reduce annual costs.	BGC stated that this is in the hands of the regulatory bodies to resolve. However, the Water Board has indicated it will take a formal Water Licence ammendment to change the monitoring program and that Teck will need to make a formal application to initiate this process (which Teck has not done).
11	BGC 2008 Site Visit and Inspection Report	Report on Subsidence Zone.	BGC recommended that TCL sumarize and submit all its supporting documentation and that BGC would be prepared to undertake this review on behalf of INAC to assess longerm risk and potential implications on the Reclamation Security. In Appendix X of the 2006 Annual report, TCL had one of it's mine engineers (P. Eng.) provide his assessment of the issue. As this engineer worked at the mine and was familiar with the mining history, his assessment should carry considerable weight in discussing the issue. Without a detailed understanding of the details of the local stratigraphy, mine dimensions, rate of mining, depth of mining, history of backfilling (which stopes, where and when), a geotechnical engineer without that knowledge can only provide a qualified opinion of a very general nature. This is the primary reason why TCL has not attempted to obtain other engineers with mine geotechnical expertise to comment on this issue. It has now been 5 years since the mine closed and the subsidence had detailed topographic surveys conducted each year since (except in 2007 due to an equipment failure) that has yet to identify ANY surface ground movements.
			Unless there were to be significant subsidence of the surface over a short distance, there would be no safety concern. Even in that case, the most practical solution would be to install fencing around this limited area. The costs of this contingent plan would be very modest, certainly only a small fraction of the $1,000,00 security that BGC suggested be held back for this issue.

TABLE 3: SUMMARY OF OUTSTANDING ITEMS RELATED TO ON-SITE RECLAMATION ACTIVITIES - TECK RESPONSE

BGC REPORT PAGE #	Water Licence Reference	Documentation Required	TECK RESPONSE TO BGC'S COMMENTS
12	BGC (2003) July 2-3, 2003 Site Inspection Report	Clean up insulation blowing around tailings thickener area and site in general. Conduct confirmatory soil sampling of soil when fill pad under tailings thickener removed.	BGC states "No outstanding concerns."
		Disposal of ice-rich material from the breaching of Garrow Lake Dam.	As indicated by BGC a change of location for disposal was requested by TCL and approved by regulators on March 5, 2004.
		Frustration lake access road erosion due to melt water runoff	BGC comment is to see BGC 2008 Site Inspectoin Report for recent inspection recommendations. The 3rd Quarter 2008 report contains the annual geotechnical inspection which did not identify any concerns regarding erosion
12	BGC (2004), September 9, 2004 Site Visit Report	Removal and re-contouring of piles of ice-rich soils along upstream side of Garrow lake Dam	BGC stated "No further action is recommended"
		Analysis of rusty coloured soil on exposed lake bed sediments along shoreline of Garrow Lake	BGC confirmed that soil sample analysis confirmed metals did not exceed site specific remediation requirements.
		Monitoring of Garrow Lake outlet channel at wave break structure.	BGC stated "No further action is required."
		Equip thermistors installed in Operational Landfill with data loggers.	This was done. BGC stated "No further concerns."
		Flatten slopes in vicinity of tank farm and incinerator.	BGC stated "This was done by Teck Cominco, no further concerns."
		Re-grade area of additional excavation where cover materials were removed in New Quarry.	BGC said that GLL geotechnical inspections did not comment on this area. The resloping was done in 2006 and the slopes recontoured can not be identifie as any different from surrounding areas and as such was not specifically commented on in GLL inspections. It should be noted that INAC has inspected this area twice since this work was done and have not commented on their observations in this area either. In TCL's view, the reason there have been no comments is that this is such a minor matter that when inspecting the area, there has been nothing of concern to note. This was strictly an aesthetic matter that has long since been dealt with.
		Monitor performance of restored marine shoreline area.	BGC states "No further outstanding issues or concerns."
		Exploration portal backfill looks too steep for the fine material used. At Main Portal, the upper crest of the slope should be bladed down. Some Steel bars sticking out of the ground were to be removed for aesthetic and safety purposes.	The only outstanding concern here by BGC was a slump of the slope at the Main Portal and it was noted that TCL stated they would repair this area in 2009 when back on site.
12	BGC (2006), 2006 Site Inspection Report	Erosion along Frustration Lake access road.	BGC stated that repairs were made and monitoring is required. Monitoring by TCL continues and is most recently reported in the 2008 3rd Quarter geotechnical monitoring report. Conditions remained stable in 2008.
13		Gully erosion in slopes around New Quarry	BGC states that the area remains stable but on-going monitoring is required. These areas are now a routine part of Teck's annual geotechnical inspection.
		Scrap metal stockpile in LRD Quarry	Pieces of scrap metal collected by TCL should be buried before the site is abandoned. TCL agrees and this will be done before the site is abandoned.
		Fleet of construction equipment left on site.	BGC states that a new fleet of construction equipment may be required if significant site works become necessary due to the age/condition of existing equipment on site. TCL disagrees. Some of the equipment is in need of repairs (i.e. dozer requires some boggies replaced) but this can easily be done on site and are normal routine repairs. We have been maintaining the equipment to a level necessary to do the work that we have at the site. If some more major work were required (and all the monitoring has not identified anything of concern that would suggest that there is), then we would simply undertake additional maintenance on the equipment. There is absolutely no need to consider bringing new equipment on site. Anyone with heavy equipment experience would disagree with the need to provide a $1,000,000 in security as a contingency for this item.
13	BGC review of 2007 Third Quarterly Report	Water sampling of Loon Lake Drainage	BGC says this is a requirement of the Water Licence but it never has been.
		Sampling of seepage (if any) from toe of Operational Landfill.	BGC recommends that surface seepage in the area of the landfill should be sampled. A sample will be taken in 2009.
13	BGC 2008 Inspection Report	Additional erosion caused by quad traffic along Frustration Lake Access Road	BGC is concerned about quad traffic going on the tundra to get around the water bars in the access road. They recommend deleting the water sampling requirement of Frustration Lake believing that it is the reason for the traffic. However, we do gather drinking water from the lake when on site during the summer. We will try to keep the quads on the road except where the water bars make it unsafe to go over top of them.
		Erosion gullies around New Quarry	BGC recommends continuing the monitoring of them to identity if and stabilization work is required. This is a routine part of the annual geotechnical inspection and TCL has no plans to do otherwise.
		Slump in backfill of Main Portal	Teck will do repairs to this area during the summer of 2009.
		Stockpile of metal debris in LRD Quarry	BGC states this should be buried in the pit in 2009 before removing equipment from the site. It is Teck's plan to bury this material but not until the final cleanup of the site is done prior to demobilizing.

Appendix 3 Document #2

Apr 06, 2009 - NWB letter to Teck recognizing the June 24th, 2008 submission for security reduction.

Indian and Northern Affairs Canada
Affaires indiennes et du Nord Canada

Water Resources Division
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU X0A 0H0

CIDMS #: 278971

April 6, 2009

Bruce Donald
Reclamation Manager
Environment and Corporate Affairs
Teck Cominco Limited
Bag 2000/Kimberley, BC V1A 3E1
Tel: 250-427-8405 – Fax: 250-427-8451
Email: bruce.donald@teckcominco.com

Re: Polaris Mine Site – Submission of June 24, 2008 Request: Reduction of Water Quality Monitoring Requirements and Reduction of Reclamation Security

Dear Mr. Donald,

Thank you for your June 24, 2008 submission, "Request for Reduction of Water Quality Monitoring Requirements and Reduction of Reclamation Security". As you are aware issues related to your request were subsequently discussed between us during various telephone conversations, (November 3, 2008, March 16, 2009, etc), and through several emails.

As a result of a review of your submission INAC has undertaken a number of actions. These can be summarized as follows:

- A site inspection was conducted at the Polaris site on August 24, 2008. Following this an inspection report was prepared and was provided to you and the Nunavut Water Board on November 7, 2008.

- A site security assessment was conducted by INAC and a draft security report "Review of Outstanding Items and An Assessment of the Crown's Remaining Liability" was prepared. (Copy provided to you Dec, 2008).

- This draft security report identified a number of documents that INAC should have on file with respect to reclamation of the Polaris site.

- Teck was advised that in order for INAC to complete any reclamation security assessment, the documents referred to in the draft should be provided to INAC.

On March 5, 2009 you submitted information and documents in response to the draft security report. INAC compared the documents and information submitted by Teck to the list provided in Tables 1-3 of the draft security report and have determined that it appears that all information noted has been provided. For your information INAC also obtained some of the documents (noted in the draft security report) from the Nunavut Water Board's ftp site.

It was also noted in your March 5, 2009 submission that Teck is no longer proposing to reduce or alter the current water monitoring program required by Water Licence #NWB1POL0311 (your June 24, 2008 submission had requested a reduction in water quality monitoring).

In March, 2009 you informed K. Buck, Manager of Water Resources that INAC also held a $1,000,000.00 performance bond related to land leases on Crown Land. It is my understanding that the INAC Lands Division has recently contacted you (email from S. Dewar dated April 1, 2009) in regard to the return of this bond.

At this time I would like to advise you that any requests regarding reclamation security reduction or alteration of any conditions in the current water licence must be approved by the NWB. The Board will likely request public comment as a result of any such requests. INAC Water Resources Division play an "intervener –type" role in the process and will provide appropriate comments to the NWB to assist in their approval process.

I would like to take the opportunity to thank you for your cooperation in these matters. Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by email at Andrea.Cull@ainc-ianc.gc.ca

Yours truly,

Original Signed By

Andrea Cull
Water Management Specialist

Cc: Kevin Buck – Water Resources Manager, INAC
Michael Nadler – Acting Director of Operations, INAC
Dionne Filiatrault – Executive Director, NWB

Appendix 3 Document #3

May 15, 2009 - INAC letter to NWB with estimate of current reclamation liabilities.

Appendix 3 Document #4

Jun 01, 2009 - Teck Letter to the NWB – regarding the May 15, 2009 letter from INAC to the NWB.

Bruce J. Donald
Reclamation Manager
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Kimberley, BC Canada V1A 3E1
Fax: 250-427-8451
Dir: 250-427-8405

Teck

June 1, 2009

Dave Hohnstein
A/Director Technical Services
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Re: Response to INAC's Water Resource Division Letter of May 15, 2009 regarding Teck Cominco's Security for the Polaris Mine Site (Water Licence 1AR-POL0311)

Thank you for forwarding a copy of the INAC submission to the Water Board on May 28th regarding our request to reduce the reclamation security for the Polaris Mine Site. Teck is committed to continue to work cooperatively and responsibly with the Water Board to fulfill its obligations at the former Polaris Mine site.

We would like to submit the following comments regarding INAC's submission of May 15th, 2009 for your consideration:

1. General – Water Licence Number 1AR-POL0311

   We are in general agreement with the information presented by INAC in this section of their submission to the Water Board including both the sequence of events and their understandings of those events.

2. Current Security Assessment Provided by INAC for NWB Consideration

   As identified in INAC's submission, Teck has slightly different opinions from INAC on the amount of outstanding liabilities and the reasons for them on individual item by item basis. However, the overall difference in the total estimated outstanding liability is not sufficient that we would oppose INAC's recommendation to the Water Board to retain $3,539,000 with one exception. INAC recommends that the Water Board retain $815,000 for potential post closure monitoring obligations beyond 2011. There are two reasons why we object to this:

   a. INAC states in their section on Post Closure Monitoring that "Any alteration to the current monitoring requirements must consider a comprehensive rationale to be provided by the proponent. Such a rationale must provide scientific justification for any proposed changes ….". There are approved monitoring requirements in the licence and according to INAC

there should be no changes to them unless there is “scientific justification”. INAC’s rational of “it is possible” as a basis for INAC to request additional security to cover non-existent monitoring requirements does not appear justified to the proponent. Should not regulatory requirements be based on scientific justification, the same standard expected from proponents?

b. The Water Board established both the terms in the Water Licence and the term of the Water Licence. The terms in the Water Licence require monitoring only until 2011 and coincide with the expiry of the term of the Water Licence. We are not aware of any requirements to monitor beyond the term of the licence.

3. Current Post Closure Monitoring Requirements – Part H of #1AR-POL0311

In INAC’s submission, they have requested that the Board advise Teck that any change to the monitoring plan at Polaris requires an amendment to the current licence. Teck is not currently requesting a change to the monitoring plan so that no response from the Board is required. We may chose to request a change to the monitoring plan in the future and in our view, that would be the appropriate time for the Board to contemplate any proposed request.

We do believe that a change to the monitoring plan does not require an amendment to the Water Licence although it would require Board approval as specified in Part H Sect 43 “Changes to the Monitoring Program”. There are other portions of the Water Licence that support our position but rather than providing detailed debate on this now, again in our view it is not necessary to deal with this issue at the current time.

If you have any questions regarding the above information, please don’t hesitate to contact me.

Regards,

Bruce Donald
Reclamation Manager,
Environment and Corporate Affairs
Teck Resources Limited

Attachments: Public Notice of Name Change
Cc: D. Filiatrault - NWB
G. Wahl - Teck

News Release

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Teck

For Immediate Release
09-11-TC

Date: April 23, 2009

Teck Shareholders Approve Name Change to Teck Resources Limited

Vancouver – Teck Resources Limited (TSX: TCK.A and TCK.B, NYSE: TCK) today announced that at its annual and special meeting yesterday in Vancouver, shareholders approved a resolution to change the name of the corporation from Teck Cominco Limited to Teck Resources Limited to more accurately reflect our diversified portfolio of commodities. The name change takes effect today. In accordance with our announcement on October 1st 2008, the company will continue to be known as "Teck".

Teck's shares will continue to trade on the Toronto Stock Exchange under the symbols TCK.A and TCK.B and on the New York Stock Exchange under the symbol TCK.

About Teck
Teck is a diversified resource company committed to responsible mining and mineral development with major business units focused on copper, metallurgical coal, zinc, gold and energy. Headquartered in Vancouver, Canada, its shares are listed on the Toronto Stock Exchange under the symbols TCK.A and TCK.B and the New York Stock Exchange under the symbol TCK. Further information about Teck can be found at www.teck.com.

For further information, please contact:

Catherine Hart
Manager, Communications
Teck Resources Limited
(604) 699 4503
email: catherine.hart@teck.com

Appendix 3 Document #5

Jun 09, 2009 - INAC to NWB – Response to June 5th letter requesting clarification and justification for post-closure monitoring.

Water Resources Division
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU X0A 0H0

CIDMS #: 339284

June 9, 2009

Dave Hohnstein
A/Director Technical Services
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Re: Response to the NWB's June 5, 2009 letter regarding Teck Resources Ltd's Application for Reduction in Security for the Polaris Mine Site (Water Licence 1AR-POL0311)

Dear Mr Hohnstein

Thank you for your correspondence of June 5, 2009 in which you requested that INAC provide additional clarification and justification on the amounts "proposed" for security with respect for ongoing monitoring of the site post license term. You specifically requested this clarification/justification to consider the inclusion of an additional $815,500.00 for post closure monitoring beyond the monitoring requirements established in the approved post closure monitoring plan of the current license (expires 2011) as well as confirmation that the amounts of security being recommended for individual components include a contingency.

Several documents were reviewed. These include,

- Nunavut Waters and Nunavut Surface Rights Tribunal Act
- Current Water license - #1AR-POL0311
- Quarterly Reports and Annual Reports for 2007 and 2008

- June 14, 2005 Teck Cominco submitted: Polaris Mine Decommissioning and Reclamation – Response to letter of Direction Dated Feb 28, 2005

- June 24, 2008 Teck Cominco submitted: Request for Reduction of Water Quality Monitoring Requirements and Reduction of Reclamation Security

- March 5, 2009 Teck Cominco submitted a letter to the NWB and INAC: "Re: Polaris Mine – Request for Reduction of Reclamation Security (Water Licence NWB1POL0311)"

- May 15, 2009 INAC submitted a letter to the NWB: Response to NWB's May 5, 2009 letter Teck Cominco's Security for the Polaris Mine Site

- June 1, 2009 Teck Cominco submitted a letter to the NWB: Response to INAC's Water Resources Division Letter of May 15, 2009 regarding Teck Cominco's Security for the Polaris Mine Site

- June 5, 2009 NWB submitted a letter to Teck Cominco: Application for Reduction in Security – Type "A" Water Licence 1AR-POL0311

General

INAC respectfully reminds the Board of its jurisdiction regarding security under Section 76 of the Nunavut Waters and Nunavut Surface Rights Tribunal Act (Act) and Section 12 of the Northwest Territories Water Regulations (continued in Nunavut under Section 173 of the Act). In setting quantum of security regarding an undertaking, the Board may set an amount not exceeding the aggregate costs of abandonment, site restoration, and *ongoing measures that may remain to be taken after the abandonment of the undertaking.* This security is not to be released until the Minister is satisfied that the undertaking is permanently closed or abandoned and that none of the security will be applied under the Act. Also, as you are aware, under section 46 of the Act, cancellation or expiry of the license does not relieve the holder from any obligations imposed by the license. Therefore, to the extent that there may be ongoing monitoring measures required upon expiry of the license, INAC recommends that the Board require appropriate security until such time as the Minister is satisfied that none of the security will be required under the Act.

Clarification/Justification/Contingency

INAC's security assessment as stated in correspondence to the Board dated May 15, 2009 included an additional $815,500.00 for post closure monitoring beyond the expiration of the license. Part of that consideration is stated above.

In determining this amount INAC also considered several other factors. First, contaminated sites and other waste disposal sites, in general have post closure monitoring requirements in one form or another for periods far longer that that which is contemplated in the site's approved A&R plan. In fact these periods extend for up to 25 years (see INAC's Abandoned Military Site Remediation Protocol Vol 1 and 2, Dec, 2008). The key is that the proponent has to definitively prove that there will be no adverse effects to the environment as a result of the former activity at the site.

Further to this, there is no comprehensive assessment information that provides details related to the trend analysis of zinc concentrations in Garrow Lake (see annual and quarterly reports).There should be a discussion and rationale provided that considers possible and/or potential impacts to water as a result of previous mining activity . For example one item of concern is Teck's postulation that the elevated levels of zinc noted consistently at mid depth sampling events in Garrow Lake are the result of a "thin accumulated layer of bacterial tissue". This has not been substantiated. These zinc levels are significantly higher than CCME Guidelines for the Protection of Aquatic Life. Will there be remedial action required in the future? Could it be the result of mining? Or is it background? Could the elevated levels of zinc discharge to the receiving environment in the future? (current data – 2007, 2008 indicate all discharges meet license criteria). Another concern related to current post closure monitoring results (2007, 2008) is that Teck has only conducted 2 sampling events at the Garrow lake Center stations (262-3, 3a) and the license requires 3. Teck advises that they cannot conduct mid winter sampling due to the fact that charter aircraft will not land at the site in the dark. This is a legitimate safety issue and Teck advised the Board appropriately, however data related to post closure monitoring is nonetheless not available for assessment. Teck should request changes to their monitoring program as per their license to rectify this situation. All data required in a post closure monitoring program is essential to identify trends, potential impacts, etc.

Second, while no specific contingency amount per se was stated in INAC's May 15, 2009 submission that was related to each reclamation component, the additional monitoring assessment amount (amount based on Teck's submission of Mar 5, 2009) considered contingency actions should current monitoring activities identify a problem. An example would be the findings during INAC's 2008 Site Visit. It was noted that there was subsidence, albeit, minor, at a former portal. Teck has committed to repairing this during the 2009 season. Will future monitoring reveal more remedial measures that must be undertaken? The possibility exists based on historical results of site visits and inspections.

When the license expires and monitoring data is assessed in a comprehensive manner a further determination of security requirements can be undertaken. INAC assumes that this would most likely be part of a public hearing process.

Other

INAC intends to visit the site again this current field season (July, 2009) and is going to assess, among other things, the status of reclamation structures, water quality and determine if Teck addressed items indentified in the 2008 Site Visit Report.

INAC also wishes to advise the Board and Teck that reclamation to date appears to have been thorough and generally in compliance with the approved plan. It also should be noted that there are components listed in INAC's assessment that, if completed by Teck during 2009, could warrant a further reduction in security should Teck request such. This would include remediation of the areas identified by INAC during the 2008 site visit – see May 15, INAC's submission to the Board and demobilization of the existing camp.

I trust that this clarifies our security assessment estimate for the Polaris site.

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by email at Andrea.Cull@inac.gc.ca.

Yours truly,

Original Signed By

Andrea Cull
Water Management Specialist

Cc: Kevin Buck – Water Resources Manager, INAC
Bernie MacIsaac – Director of Operations, INAC
Dionne Filiatrault – Executive Director, NWB

Appendix 3 Document #6

Jul 18, 2009 - Teck email to NWB with missing Operational Landfill as-built-drawing.

Donald Bruce KIMB

From: Donald Bruce KIMB
Sent: Saturday, July 18, 2009 8:07 PM
To: Richard Dwyer
Subject: RE: 1AR-POL0311 Operational Landfill drawing 23306-1 Revision #1
Attachments: 23306-1.pdf

Attached is the drawing requested.
Let me know if you need any further information.
I will be up at site all this week so will be out of contact until about July 26th.

Bruce Donald
Reclamation Manager
Environment and Corporate Affairs
Teck Resources Limited
Direct Phone: 250.427.8405
Fax: 250.427.8451
eMail: Bruce.Donald@teck.com
http://www.teck.com

From: Richard Dwyer [mailto:licensingadmin@nunavutwaterboard.org]
Sent: Thursday, July 16, 2009 11:40 AM
To: Donald Bruce KIMB
Subject: 1AR-POL0311 Operational Landfill drawing 23306-1 Revision #1

Good morning Bruce;

The earlier submission of drawing 23306-1 is must have been deleted unintentionally I've attached your earlier submission letter for your reference; I'd like to request electronic copy of the Operational Landfill drawing 23306-1 Revision #1.

Thanks,

Richard Dwyer
Licensing Administrator
Nunavut Water Board
PH: 867-360-6338 ext.29
FX: 867-360-6369

Appendix 3 Document #7

Jul 30, 2009 - Teck letter to NWB – Response to INAC June 9, 2009 letter regarding estimated reclamation liabilities.

Bruce J. Donald
Reclamation Manager
Environment and Corporate Affairs
Bruce.Donald@teck.com

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Kimberley, BC Canada V1A 3E1
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Dir: 250-427-8405

Teck

July 30, 2009

Dave Hohnstein
A/Director Technical Services
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Re: Response to INAC's Water Resource Division Letter of June 9, 2009 regarding Teck Cominco's Security for the Polaris Mine Site (Water Licence 1AR-POL0311)

Thank you for forwarding a copy of the INAC submission to the Water Board on July 21st regarding our request to reduce the reclamation security for the Polaris Mine Site. Teck is committed to continue to work cooperatively and responsibly with the Water Board to fulfill its obligations at the former Polaris Mine site.

We would like to submit the following comments regarding INAC's submission of June 9th, 2009 for your consideration:

1. General

   I did not have time to seek legal advice regarding the additional comments made by INAC regarding post licence security obligations and so have no further comments to make on this matter at this time.

2. Clarification/Justification/Contingency

   With regard to the length of time for site monitoring, the only comment I have relative to INAC's statement that other government agencies that have committed to 25 years of post closure monitoring; is that each site needs to be considered on it own merits. I suspect few if any of these sites already have 25 years of comprehensive and regular monitoring (such as is the case with Garrow Lake).

   INAC's comment regarding the thin layer of elevated zinc concentrations at mid depth (approximately at 10m depth) is in our view a matter of interest, not of concern, for two reasons:

   - The monitoring of the stability of the stratified lake is required by the Water Board to verify that if there were an upset to the lake where the physical stratification were to break down (i.e. major wind event causing mixing), that the resulting water quality would not result in effluent discharge exceeding Licence limits. Based on the water chemistry at the various depths, this

is already the situation. Mathematically, if the upper portions or even the entire water column were to mix, the resulting metals concentrations in the effluent would continue to comply with Water Licence permit limits. The issue is of academic interest and not one of environmental concern.

- INAC comments that this layer is above CCME concentrations for the protection of Aquatic Life and questions whether remedial action may be required in the future. This comment is of concern to us as it is misleading and raise false concerns in that the CCME criteria has no relevance for Garrow Lake. Garrow Lake is a designated lake under Schedule 2 of the MMER regulations and as a result may have "any concentration of a deleterious substance". The pertinent requirement is that the effluent discharged at the Final Discharge Point meets MMER criteria and that there are no environmental effects from the discharge on the receiving environment. Polaris's discharge has been compliant with this requirement and the EEM program that was required under the MMER. This includes the Final EEM study results that Environment Canada accepted as demonstrating that there are no adverse environmental effects from the effluent discharge on the receiving environment.

In reference to the amount of security that should continue to be held, INAC refers to their 2008 inspection of the site where they identified a slope over the former main portal area that required minor repairs. Referring to the potential of additional future repairs being required at the site, INAC stated; "The possibility exists based on historical results of site visits and inspections." While one can not say unequivocally that there will never be any erosion or slope instabilities identified at the site in the future, the historical example stated by INAC was of such a minor nature (cosmetic as it did not threaten public safety or water quality) that if Teck were no longer present at the site, there would have been compelling reason to undertake any repairs.

INAC states that when the license expires that a further assessment of security requirements can be undertaken and that INAC assumes that it would be most likely be part of a public hearing process. Teck is not aware of any requirements for a public hearing regarding this matter.

3. <u>Other</u>

In their submission, INAC stated that they intend to conduct a site visit again in July 2009. This inspection has now taken place (last week). In addition to INAC's inspection, as required in the Water Licence, a geotechnical inspection by a professional geotechnical engineer licensed to practice in Nunavut was also conducted in July. I was present at the site for both inspections and am not aware of any significant new concerns being identified (it should be noted that the INAC inspection just occurred last week and so no formal inspection report is available yet to my knowledge).

If you have any questions regarding the above information, please don't hesitate to contact me.

Regards,

Bruce Donald
Reclamation Manager,
Environment and Corporate Affairs
Teck Resources Limited

Cc: Phyllis Beaulieu - NWB
G. Wahl - Teck

Appendix 3 Document #8

Aug 25, 2009 - INAC letter to NWB regarding review of Polaris 2008 annual report and associated water quality laboratory results.

Indian and Northern Affairs Canada
Affaires indiennes et du Nord Canada

Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

NWB file: 1AR-POL0311
CIDMS#: 349588

August 25, 2009

Richard Dwyer
License Administrator
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Re: 1AR-POL0311 – Annual Report, 2008 –Teck Cominco – Polaris Mine Site

Please be advised that Indian and Northern Affairs Canada (INAC) has completed a review of 1AR-POL Type "A" Water License 2008 Annual Report for the Polaris Mine Site. The NWB circulated the report for review and comments on July 28, 2009. All associated documents related to this license posted on the NWB ftp site under 1AR-POL were included in my review (see attached Technical Review Memo).

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by email at Andrea.Cull@inac.gc.ca.

Yours truly,

Original Signed By

Andrea Cull
Water Management Specialist

Cc: Kevin Buck – Water Resources Manager, INAC

Technical Review Memorandum

To: Richard Dwyer – License Administrator, NWB
Peter Kusugak – Field Operations Manager, INAC
Bruce Donald – Teck Cominco

From: Andrea Cull – Water Management Specialist, INAC

Re: 1AR-POL0311 – Annual Report, 2008 –Teck Cominco – Polaris Mine Site

The 2008 Annual Report submitted by Teck Cominco (Bruce Donald) addressed many of the requirements of Part B, Item 6 of the current water license # 1AR-POL0311. However, it was noted that the following information was not provided in the 2008 Annual Report.

> Part H, Item 44 of the water license requires the licensee to submit for review the results of the monitoring requirements in Table 1 - Summary of Monitoring Requirements in accordance with Part B, Item 6.
>
> Table 1, Summary of Monitoring Requirements,
>
> It is noted in the Water License that Station number 262-3 requires three monitoring events (at mid-winter, at maximum ice thickness, and at maximum ice melt) at two separate locations in Garrow Lake. Teck has advised that they cannot conduct mid winter sampling due to the fact that a charter aircraft will not land at the site in the dark. Therefore it appears that monitoring was not completed as required by the License. INAC recommends that Teck contact the Board and seek clarity or a revision to this monitoring requirement especially if they are unable to comply due to safety reasons. All correspondence to the Board in this regard should be copied to INAC Water Resources Division.
>
> It was also noted that all sample monitoring results provided indicated compliance with Water License criteria.

For your information INAC Water Resources staff conducted a site visit on July 24, 2009. The purpose of the visit was to determine reclamation progress as well as determining compliance with the approved Reclamation Plan "Polaris Mine Decommissioning and Reclamation Plan, prepared by Gartner Lee Limited, March 2001." INAC contracted BCG Engineering for assistance in this regard. Teck Resources staff was also present during the site visit. A full engineering report will be submitted to the Board in September, 2009. This report will also include a summary of geotechnical status at the site. INAC Water Resources

staff has also prepared a site visit report which will follow shortly. Sampling results from July 24, 2009 of the Garrow Lake discharge station 262-7 was conducted and the results indicate compliance with all Water License (1AR-POL0311) criteria – See attached lab results.

This information has been forwarded to our Field Operations Unit

Cc: Kevin Buck – Water Resources Manager, INAC

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 290475

- FINAL REPORT -

Prepared For: Nunavut District Office

Address: Box 100
Building 918
Iqaluit, NU
X0A 0H0

Attn: Andrea Cull **Facsimile:** 8679794585

Final report has been reviewed and approved by:

Angelique Ruzindana
Quality Assurance Officer

NOTES:

- Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association of Environmental Analytical Laboratories (CAEAL) as a testing laboratory for specific tests registered with CAEAL.
- Routine methods are based on recognized procedures from sources such as
  - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
  - Environment Canada
  - USEPA
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

ReportDate: Monday, August 10, 2009
Print Date: Monday, August 10, 2009

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 290475

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Garrow Lake Discharge **Taiga Sample ID:** 001

Client Project:
Sample Type: Sea/Lake Water
Received Date: 25-Jul-09
Sampling Date: 24-Jul-09
Sampling Time:
Location: Polaris Mine Site
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	44.0	0.4	mg/L	27-Jul-09	SM2320:B	
Conductivity, Specific (@ 25°C)	3610	0.4	µS/cm	27-Jul-09	SM2510:B	
pH	8.04		pH units	27-Jul-09	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	29-Jul-09	SM2540:D	
Inorganics - Nutrients						
Ammonia as Nitrogen	< 0.01	0.01	mg/L	27-Jul-09	SM4500-NH3:	
Nitrate+Nitrite as Nitrogen	0.20	0.01	mg/L	27-Jul-09	SM4110:B	
Major Ions						
Calcium	47.6	0.1	mg/L	28-Jul-09	SM4110:B	
Hardness	419	0.7	mg/L	27-Jul-09	SM2340:B	
Magnesium	72.8	0.1	mg/L	28-Jul-09	SM4110:B	
Nitrate as Nitrogen	0.20	0.01	mg/L	28-Jul-09	SM4110:B	
Nitrite as Nitrogen	< 0.01	0.01	mg/L	28-Jul-09	SM4110:B	
Trace Metals, Total						

ReportDate: Monday, August 10, 2009
Print Date: Monday, August 10, 2009

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 290475

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Garrow Lake Discharge **Taiga Sample ID: 001**

Aluminum	< 5	5	µg/L	06-Aug-09	EPA200.8
Arsenic	5.6	0.2	µg/L	06-Aug-09	EPA200.8
Cadmium	< 0.1	0.1	µg/L	06-Aug-09	EPA200.8
Copper	8.4	0.2	µg/L	06-Aug-09	EPA200.8
Iron	14	5	µg/L	06-Aug-09	EPA200.8
Lead	0.2	0.1	µg/L	06-Aug-09	EPA200.8
Manganese	1.6	0.1	µg/L	06-Aug-09	EPA200.8
Mercury	< 0.01	0.01	µg/L	06-Aug-09	EPA200.8
Molybdenum	1.4	0.1	µg/L	06-Aug-09	EPA200.8
Nickel	2.3	0.1	µg/L	06-Aug-09	EPA200.8
Zinc	11	5	µg/L	06-Aug-09	EPA200.8
Subcontracted Organics					
Cyanide, Total	0.002	0.001	mg/L	29-Jul-09	EPA335.3

ReportDate: Monday, August 10, 2009
Print Date: Monday, August 10, 2009

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 290475

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Garrow Lake D2 **Taiga Sample ID: 002**

Client Project:
Sample Type: Sea/Lake Water
Received Date: 25-Jul-09
Sampling Date: 24-Jul-09
Sampling Time:
Location: Polaris Mine Site
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	44.1	0.4	mg/L	27-Jul-09	SM2320:B	
Conductivity, Specific (@ 25°C)	3630	0.4	µS/cm	27-Jul-09	SM2510:B	
pH	8.05		pH units	27-Jul-09	SM4500-H:B	
Solids, Total Suspended	< 3	3	mg/L	29-Jul-09	SM2540:D	
Inorganics - Nutrients						
Ammonia as Nitrogen	< 0.01	0.01	mg/L	27-Jul-09	SM4500-NH3:	
Nitrate+Nitrite as Nitrogen	0.19	0.01	mg/L	27-Jul-09	SM4110:B	
Major Ions						
Calcium	44.9	0.1	mg/L	28-Jul-09	SM4110:B	
Hardness	391	0.7	mg/L	27-Jul-09	SM2340:B	
Magnesium	67.8	0.1	mg/L	28-Jul-09	SM4110:B	
Nitrate as Nitrogen	0.19	0.01	mg/L	28-Jul-09	SM4110:B	
Nitrite as Nitrogen	< 0.01	0.01	mg/L	28-Jul-09	SM4110:B	
Trace Metals, Total						

ReportDate: Monday, August 10, 2009
Print Date: Monday, August 10, 2009

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 290475

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Garrow Lake D2 **Taiga Sample ID: 002**

Aluminum	< 5	5	µg/L	06-Aug-09	EPA200.8
Arsenic	5.6	0.2	µg/L	06-Aug-09	EPA200.8
Cadmium	< 0.1	0.1	µg/L	06-Aug-09	EPA200.8
Copper	8.4	0.2	µg/L	06-Aug-09	EPA200.8
Iron	14	5	µg/L	06-Aug-09	EPA200.8
Lead	0.2	0.1	µg/L	06-Aug-09	EPA200.8
Manganese	1.6	0.1	µg/L	06-Aug-09	EPA200.8
Mercury	0.01	0.01	µg/L	06-Aug-09	EPA200.8
Molybdenum	1.4	0.1	µg/L	06-Aug-09	EPA200.8
Nickel	2.1	0.1	µg/L	06-Aug-09	EPA200.8
Zinc	11	5	µg/L	06-Aug-09	EPA200.8
Subcontracted Organics					
Cyanide, Total	0.001	0.001	mg/L	29-Jul-09	EPA335.3

ReportDate: Monday, August 10, 2009
Print Date: Monday, August 10, 2009

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 290475

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Garrow Lake D3 **Taiga Sample ID:** 003

Client Project:
Sample Type: Sea/Lake Water
Received Date: 25-Jul-09
Sampling Date: 24-Jul-09
Sampling Time:
Location: Polaris Mine Site
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Physicals						
Alkalinity, Total (as CaCO3)	No Container		mg/L		SM2320:B	16
Conductivity, Specific (@ 25°C)	No Container		µS/cm		SM2510:B	16
pH	No Container		pH units		SM4500-H:B	16
Solids, Total Suspended	No Container		mg/L		SM2540:D	16
Inorganics - Nutrients						
Ammonia as Nitrogen	No Container		mg/L		SM4500-NH3:	16
Nitrate+Nitrite as Nitrogen	No Container		mg/L		SM4110:B	16
Major Ions						
Calcium	No Container		mg/L		SM4110:B	16
Hardness	No Container		mg/L		SM2340:B	16
Magnesium	No Container		mg/L		SM4110:B	16
Nitrate as Nitrogen	No Container		mg/L		SM4110:B	16
Nitrite as Nitrogen	No Container		mg/L		SM4110:B	16
Trace Metals, Total						

ReportDate: Monday, August 10, 2009
Print Date: Monday, August 10, 2009

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.: 290475

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Garrow Lake D3 **Taiga Sample ID: 003**

Aluminum	No Container		µg/L		EPA200.8	16
Arsenic	No Container		µg/L		EPA200.8	16
Cadmium	No Container		µg/L		EPA200.8	16
Copper	No Container		µg/L		EPA200.8	16
Iron	No Container		µg/L		EPA200.8	16
Lead	No Container		µg/L		EPA200.8	16
Manganese	No Container		µg/L		EPA200.8	16
Mercury	No Container		µg/L		EPA200.8	16
Molybdenum	No Container		µg/L		EPA200.8	16
Nickel	No Container		µg/L		EPA200.8	16
Zinc	No Container		µg/L		EPA200.8	16
Subcontracted Organics						
Cyanide, Total	0.001	0.001	mg/L	29-Jul-09	EPA335.3	

ReportDate: Monday, August 10, 2009
Print Date: Monday, August 10, 2009

Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.:
290475

- CERTIFICATE OF ANALYSIS -

Client Sample ID: Garrow Lake D3 **Taiga Sample ID: 003**

- DATA QUALIFERS -

Data Qualifier Descriptions:

16 *Test requested but no sample bottle received*

*** Taiga analytical methods are based on the following standard analytical methods**

SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

ReportDate: Monday, August 10, 2009
Print Date: Monday, August 10, 2009

Appendix 3 Document #9

Aug 27, 2009 - NWB letter to Minister of INAC stating the security is being reduced from $33.7 to $3.539M.

P.O. BOX 119
GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
Fax: (867) 360-6369

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NUNAVUT IMALIRIYIN KATIMAYINGI
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

August 27, 2009 File No: 1AR-POL0311

Honorable Chuck Strahl, P.C., M.P.
Minister of Indian Affairs & Northern Development
and Federal Interlocutor for Metis and Non-Status Indians
21st Floor, 10 Wellington
Gatineau, Quebec K1A 0H4
By Courier, Email and Regular Mail

Subject: Modification to License 1AR-POL0311 – Polaris Mine, Nunavut

Dear Minister Strahl:

I am writing to advise you, and by copy of this letter TeckCominco Limited (Teck), that pursuant to Part B, Item 4 of Type A Water License 1AR-POL0311 (Licence), the Nunavut Water Board (NWB or Board) has exercised its authority to approve a modification to the amount of security to be held pursuant to Part B, Item 2 of the Licence, with the amount of security to be held reduced from $33,700,000 to $3,539,000.[1] As the Minister previously approved this Licence condition, no further action on the Minister's part is required.

The Board made this decision to reduce the security on the basis that $3,539,000 fairly represents the estimated remaining aggregate costs of abandonment, site restoration, and ongoing measures that remain to be taken after the abandonment of the undertaking; and that there are no known outstanding issues of compensation pursuant to the *Nunavut Waters and Surface Rights Tribunal Act (*NWNSRTA). The Board notes that under Part B, Item 4 of the Licence, Teck may request a further reduction in security as post closure monitoring results become available.

[1] Relevant conditions in Part B of the Licence are:

Item 2: The Licensee shall post and maintain security in the amount of $33.7 million in the form required by the Minister of Indian and Northern Affairs Canada, to be paid in accordance with the following schedule:
- a. Within 90 days of issuance of the license a total amount of $3.7 million;
- b. Subject to Part B, Item 3 and 4, a total amount of $18 million due December 31, 2003; and
- c. Subject to Part B, Item 3 and 4, a total amount of $12 million due December 31, 2004.

Item 4: The Board reserves the right at any time to modify the amount and schedule of payments of security upon the submission of any party. The decision to advance or change security amounts or schedules remains within the discretion of the Board and must be based upon proof of evidence that the Licensee has failed for whatever reason to perform reclamation of the undertaking as stated in this License.

In addition, I would like to advise the Minister of the Board's concern that while $33.7 million of security was originally required pursuant to Part B, Item 2 of the Licence, during the review of this application it came to the Board's attention that, in contravention of the Licence, only $18 million of security was actually held by Indian and Northern Affairs Canada (INAC).

In this particular case, the Board has little choice but to accept INAC's May 15, 2009, submission that "…although Teck has technically contravened Part B, Item 2 of the Water License by not providing the full $33.7 million dollars it seems moot to consider that Teck should provide this amount at this point in time". However, in future the Board hopes that INAC will work more closely with licensees and provide ongoing assurance to the Board that the full security ordered through a water licence is in fact furnished to the Minister.

A further Licence compliance issue brought to the Board's attention while considering this application is that Teck is unable to fully comply with the conditions of the Licence which require the submission of as built drawings stamped and signed by a "professional engineer" as defined in the Licence.[2] The Board understands that Teck is unable to comply with this condition because an engineer registered in Nunavut did not either carry out or sufficiently supervise the engineering work to sign off on final drawings.

Thank you for your ongoing support of the NWB.

Sincerely,

Thomas Kabloona
Chair

Cc: TeckCominco Limited
Polaris Distribution List

2 See letter from TeckCominco Limited to the Nunavut Water Board and INAC Lands Administration, dated March 5, 2009, available at ftp://nunavutwaterboard.org/PRUC/1%20INDUSTRIAL/1A/1AR%20-%20Remediation/1AR-POL0311/3%20TECH/2%20SECURITY/2008/

Appendix 3 Document #10

Sep 01, 2009 - NWB letter to Teck reviewing reconciliation of administrative requirements.

P.O. BOX 119
GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File: 1AR-POL0311

September 1, 2009

Bruce Donald
Environment and Corporate Affairs
Teck Resources Limited
Bag 2000
Kimberley, BC
V1A 3E1

By Email: Bruce.Donald@teck.com

Subject: Reconciliation of Administrative Requirements of Type "A" Water Licence 1AR-POL0311

Dear Mr. Donald,

In follow-up to the recently issued security amount modification of August 27, 2009 for Teck Resources Ltd. (Teck) Water Licence No. 1AR-POL0311, the Nunavut Water Board (NWB) would like to address a number of administrative issues that have been identified during the review of the Licence, submissions and historical files. These may require the attention of Teck in the form of clarification, re-submission (not on file) or a new submission to satisfy requirements of the Licence.

The following summarizes the areas of deficiency with respect to submissions required of the Licence and their significance with respect to Licence compliance. Also provided, is a summary of items related to monitoring and potential impacts to consider during a request for reduction in monitoring.

Items requiring Teck provide additional information submission

1. B-3: The 2004 quarterly reports are not on file with the NWB. TCL has provided a summary of the 2004 quarterly reports in the 2004 annual report. This issue was raised in the February 28, 2005 letter of direction.
2. B-6(iii): A translated executive summary for the 2006 annual report is not on file.
3. F-1: Design drawings (for construction) stamped by an Engineer are not on file for the Reclamation Landfill Cover Design. These drawings were required for Board approval. This issue was raised in the June 2, 2004 letter of direction.

4. H-6: The 2004 geotechnical inspection report is not on file. TCL has indicated that although an inspection was conducted, the report is not available. This issue was raised in INAC's July 26, 2006 inspection as well as the February 28, 2005 letter of direction.
5. H-27(iv): Identification of whether composite or grab sample collection methods were used for each effluent sample as required by Part H items 7-9 are not on file for 2003 and 2004.
6. H-27(vi): Mass loading monitoring results for cadmium and mercury in accordance with Part H item 23 are not on file. This could be as a result of absent monitoring information for H-27(ii)
7. H-27(vii): In 2007, acute lethality was observed in Daphnia Magna. Clarification is required regarding subsequent effluent characterization monitoring requirements in accordance with Part H item 14(i).

Items recently distributed by the NWB for review

8. 2008 4th Quarter and the 2008 Annual Report have been distributed for public review and comments along with the review by NWB technical staff will be forwarded to Teck prior to November 1 for consideration in the 2009 Annual Report submission.

Items to be considered for an amendment request to monitoring requirements

9. B-6(viii)(c)(i): Water quality monitoring results at exposure and reference areas in Garrow Bay for 2004, 2006, 2007, and 2008 are not on file.
10. B-6(viii)(c)(i): Sub-lethal monitoring results for 2007 and 2008 are not on file.
11. B-6(viii)(c)(iii): Clarification regarding the data on which the selection of the Final Discharge Point was made in compliance with Part H Item 35 is not on file.
12. B-6(viii)(c)(iii): Sub-lethal monitoring results for 2007 and 2008 are not on file.
13. B-6(viii)(c)(v): Methodologies used to conduct Effluent characterization and water quality monitoring and the related method detection limits for 2003 and 2004 are not on file.
14. B-6(viii)(c)(vi): Description of quality assurance and quality control measures for 2007 and 2008 are not on file.
15. G-4: A Board approved Comprehensive Assessment of Mine Site Remediation is not on file. TCL's June 14, 2005 document submitted to address this Licence condition does not address all the sub-item requirements of this Licence condition. [Note: All G-4 items to be addressed during amendment for reduced water quality monitoring]

Indian and Northern Affairs Canada (INAC)

16. B-6(vii): INAC's inspection report for the inspection conducted on September 9, 2004 is not on file with the NWB.

As you are aware, the Polaris Mine reclamation file is quite substantial and has required a great deal of effort on the part of the NWB and other agencies to review and provide assistance, confirmation and direction on the file and to Teck Resources Ltd. Although the above has been provided to Teck, there may be other additional items that become apparent to the NWB through further review that will require Teck's involvement in either clarification or submissions. The

NWB requests that Teck provide the information, where available, by **October 16, 2009** for review and consideration of any additional requests the NWB may have prior to November 1st for inclusion in the 2009 Annual Report.

By copy of this letter, the NWB requests that INAC provide the NWB with information pertaining to bullet item number 16, with reference to the Inspection Report for 2004, which is absent from the NWB public record.

If you have any questions or require clarification on the above, please contact the undersigned at (780) 443-4406, dts@nunavutwaterboard.org, or Richard Dwyer, Licensing Administrator at (867) 360-6338, licensingadmin@nunavutwaterboard.org.

Yours truly,

Original signed by:

David Hohnstein, C.E.T.
Director Technical Services

Cc: Polaris Distribution List

Appendix 3 Document #11

Oct 01, 2009 - INAC letter to Teck's insurance agent releasing $1M land lease bond.

Indian and Northern Affairs Canada
www.inac.gc.ca

Affaires indiennes et du Nord Canada
www.ainc.gc.ca

October 1, 2009

Your file - Votre référence

Our file - Notre référence

Travelers Guarantee Company of Canada,
on behalf of Northern Indemnity Inc.
650 W. Georgia St., Suite 2500
P.O. Box 11542
Vancouver, BC
V6B 4N7

Attn: Laura Patten

Re: Release and Return the Reclamation Performance Surety Bond (Number KE7430) Issued by Northern Indemnity Inc., dated 28-May-2001, in the amount of Canadian $1,000,000 and amended by Bond Rider No.1, dated as of October 31, 2001.

Her Majesty the Queen as represented by the Department of Indian and Northern Affairs and Northern Development, Canada ("DIAND"), is the Beneficiary under a Reclamation Performance Surety Bond (Number KE7430) issued by Northern Indemnity Inc. dated 28-May-2001, in the amount of Canadian $1,000,000, and amended by Bond Rider No. 1, dated as of October 31, 2001 (the "Bond"). The Bond secures certain obligations of the Principal (as defined therein) under leases between DIAND and the Principal.

This will confirm that DIAND agrees to release and return the Bond effective as of October 1, 2009. Should you have any question or concerns please call do not hesitate to contact me.

Sincerely,

HER MAJESTY THE QUEEN IN RIGHT OF CANADA (as represented by the Minister of Indian and Northern Development)

Spencer Dewar
A/Director of Operations

I am an authorized delegate of the Minister of Indian Affairs and Northern Development

cc. Scott Wilson, Treasurer, Teck Resources Ltd.
Kevin Buck, Manager Water Resources
Jeff G. Mercer, Land Administration Specialist

Canada

Appendix 3 Document #12

Oct 08, 2009 - Teck letter to INAC requesting cancellation of $18M of security

Teck Resources Limited
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Teck

October 8, 2009

Ian Rumbolt, Acting Manager of Water Resources
Indian and Northern Affairs Canada
Building 918 Box 100
Iqualut, Nunavut
X0A 0H0

Subject: Polaris Mine, Nunavut - Return of Letter of Credit re: Modification to License 1AR-POL0311

Dear Mr. Rumbolt:

Teck recently received confirmation that the required financial security under License 1AR –POL0311 for the Polaris Mine has been modified (reduced) to $3,539,000 (see copy of attached letter of August 27, 2009).

Indian and Northern Affairs Canada (INAC) are currently holding financial security consisting of three letters of credit totaling $18,000,000 (copies attached):

$1, 000,000 (Bank of Montreal) Beneficiary Dept. of Indian Affairs and Northern Development,
$14,300,000 (Royal) Bank) Beneficiary Receiver General for Canada/ Nunavut Water Board
$2,700,000 (Bank of Montreal) Beneficiary Receiver General for Canada/ Nunavut Water Board

Teck requests the two letters of credit issued to the Receiver General for Canada/Nunavut Water Board be returned along with a letter from the Beneficiary requesting their cancellation. Please send the letters to:

Irene Bohjalian
Royal Bank of Canada
1025 W. Georgia
Level R2
International Trade Centre
Vancouver, B.C.
V6E 3N9
Ref: LC P311142V02286

Alice Garabedian
Bank of Montreal
Global Trade Services
234 Simcoe Street
Toronto, Ontario
M5T 1T4
Ref: LC 858584/169470

Teck

Teck will request an amendment to have the $1,000,000 letter of credit issued to the Dept. of Indian Affairs and Northern Development increased to $3,539,000.

I would appreciate your prompt attention to this matter and request a copy of the cancellation letter sent to my attention once complete.

Sincerely,

SRWL

Scott Wilson, Treasurer, Teck Resources Limited

CC: Andrea Cull, Water Management Specialist, INAC
Michael Nadler, Regional Director General, Nunavut
Security Division, Public Works and Government Services Canada
T. Kabloona, Chair, Nunavut Water Board
B. Donald, Teck Resources Limited
G. Wahl, Teck Resources Limited
A. Murdock, Teck Resources Limited
M. Edwards, Teck Resources Limited
M. Filion, Teck Resources Limited

P.O. Box 119
Gjoa Haven, NU X0B 1J0
Tel: (867) 360-6338
Fax: (867) 360-6369

ᓄᓇᕗᑦ ᐃᓚᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ
NUNAVUT IMALIRIYIN KATIMAYINGI
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

August 27, 2009

File No: 1AR-POL0311

Honorable Chuck Strahl, P.C., M.P.
Minister of Indian Affairs & Northern Development
and Federal Interlocutor for Metis and Non-Status Indians
21st Floor, 10 Wellington
Gatineau, Quebec K1A 0H4
By Courier, Email and Regular Mail

Subject: Modification to License 1AR-POL0311 – Polaris Mine, Nunavut

Dear Minister Strahl:

I am writing to advise you, and by copy of this letter TeckCominco Limited (Teck), that pursuant to Part B, Item 4 of Type A Water License 1AR-POL0311 (Licence), the Nunavut Water Board (NWB or Board) has exercised its authority to approve a modification to the amount of security to be held pursuant to Part B, Item 2 of the Licence, with the amount of security to be held reduced from $33,700,000 to $3,539,000.[1] As the Minister previously approved this Licence condition, no further action on the Minister's part is required.

The Board made this decision to reduce the security on the basis that $3,539,000 fairly represents the estimated remaining aggregate costs of abandonment, site restoration, and ongoing measures that remain to be taken after the abandonment of the undertaking; and that there are no known outstanding issues of compensation pursuant to the *Nunavut Waters and Surface Rights Tribunal Act* (NWNSRTA). The Board notes that under Part B, Item 4 of the Licence, Teck may request a further reduction in security as post closure monitoring results become available.

---

[1] Relevant conditions in Part B of the Licence are:

Item 2: The Licensee shall post and maintain security in the amount of $33.7 million in the form required by the Minister of Indian and Northern Affairs Canada, to be paid in accordance with the following schedule:
- a. Within 90 days of issuance of the license a total amount of $3.7 million;
- b. Subject to Part B, Item 3 and 4, a total amount of $18 million due December 31, 2003; and
- c. Subject to Part B, Item 3 and 4, a total amount of $12 million due December 31, 2004.

Item 4: The Board reserves the right at any time to modify the amount and schedule of payments of security upon the submission of any party. The decision to advance or change security amounts or schedules remains within the discretion of the Board and must be based upon proof of evidence that the Licensee has failed for whatever reason to perform reclamation of the undertaking as stated in this License.

In addition, I would like to advise the Minister of the Board's concern that while $33.7 million of security was originally required pursuant to Part B, Item 2 of the Licence, during the review of this application it came to the Board's attention that, in contravention of the Licence, only $18 million of security was actually held by Indian and Northern Affairs Canada (INAC).

In this particular case, the Board has little choice but to accept INAC's May 15, 2009, submission that "...although Teck has technically contravened Part B, Item 2 of the Water License by not providing the full $33.7 million dollars it seems moot to consider that Teck should provide this amount at this point in time". However, in future the Board hopes that INAC will work more closely with licensees and provide ongoing assurance to the Board that the full security ordered through a water licence is in fact furnished to the Minister.

A further Licence compliance issue brought to the Board's attention while considering this application is that Teck is unable to fully comply with the conditions of the Licence which require the submission of as built drawings stamped and signed by a "professional engineer" as defined in the Licence.[2] The Board understands that Teck is unable to comply with this condition because an engineer registered in Nunavut did not either carry out or sufficiently supervise the engineering work to sign off on final drawings.

Thank you for your ongoing support of the NWB.

Sincerely,

Thomas Kabloona
Chair

Cc: TeckCominco Limited
Polaris Distribution List

2 See letter from TeckCominco Limited to the Nunavut Water Board and INAC Lands Administration, dated March 5, 2009, available at ftp://nunavutwaterboard.org/PRUC/1%20INDUSTRIAL/1A/1AR%20-%20Remediation/1AR-POL0311/3%20TECH/2%20SECURITY/2008/

Appendix 3 Document #13

Oct 18, 2009 - Teck letter to NWB responding to September 1, 2009 list of licence reporting deficiencies.

Bruce Donald
Reclamation Manager
Environment and Corporate Affairs
Teck Resources Limited
Bruce.Donald@Teck.com

Teck Metals Ltd.
Dormant Properties Office
Bag 2000
Kimberley, BC V1A 3E1

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+1 250 427 8451 Fax
+1 250 426 9845 Mobile
www.teck.com

Teck

October 18, 2009

Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

By Email: dts@nunavutwaterboard.org and licensing@nunavutwaterboard.org

Attention: David Hohnstein, Director Technical Services

Subject: Response to Reconciliation of Administrative Requirements of Type "A" Water Licence 1AR-POL0311

Dear Mr. Hohnstein,

Thank you for the letter dated September 1, 2009 where a number of administrative issues were identified during the review of Polaris's Water Licence submissions. Our responses to each of the items identified are provided below in the order that they were presented in your letter.

Items requiring Teck provide additional information submission

1. B-3: The 2004 Quarterly reports are not on file.
   Teck Response – At the time that the February 28, 2005 letter of direction was issued, no 2004 reporting had been submitted. The February 28th 2005 letter of direction suggested that "TCL devote its resources towards the submission of one comprehensive final report rather than several smaller ones." Subsequent to the letter of direction, all of the 2004 quarterly data was submitted combined into a single comprehensive report (requiring two 2 ½ thick binders to contain all of the information submitted) along with the information required for the Annual report.

2. B-6(iii): A translated executive summary for the 2006 annual report is not on file.
   Teck Response – A translation of the executive summary was prepared and must have been overlooked when submitting the 2006 4th Quarter and Annual Report. Attached to this letter in Attachment 1 is a copy of the translation.

3. F-1: Design Drawings (for Construction) stamped by an Engineer are not on file for the Reclamation Landfill Cover Design
   Teck Response – The Reclamation Landfill was originally started in 1997 and was actively used through until 2002 while the mine was still in operation. The landfill was covered with fill prior to the current water licence coming into effect. There was never a requirement to provide certified construction drawings for this landfill. However, the Closure Plan for Polaris (which was approved in 2003) proposed that there should be a minimum of 1.5m cover of fill over this area. As the materials placed into this landfill were benign in nature, the purpose of the fill was to prevent frost jacking rather than to

eliminate potential leachate issues. The NWB and INAC issued a letter dated June 2, 2004 responding to reports that Teck submitted and requested that the Teck should provide a report detailing the depth of cover over the landfill and the plans for long term monitoring of the site.

Teck's 2004 combined Quarterly and Annual report for Polaris indicated in Section 5.2.7 that test pitting in the Reclamation Landfill area had been undertaken to verify that the cap in this area was at least 2m thick. The test pitting had identified some areas where the cover was less than 2m thick, and as a result in 2004 additional material was excavated from the New Quarry area and used to thicken the landfill cap to obtain a minimum 2m thick cover in this area. In terms of monitoring of this location, Teck had committed to annually surveying this area during the summer to monitor whether any further subsidence was occurring. Since the annual surveys started in 2004 (and the results submitted each year in the 3rd Quarter site monitoring reports), no movement of this area has occurred.

4. H-6: The 2004 geotechnical inspection report is not on file.
   Teck's Response – There was an inspection done by a registered professional geotechnical engineer in 2004 but the report was never finalized. We received a draft of the report from the engineer but did not receive the final signed copy. The draft report submitted to us was incomplete, and did not identify any significant items related to failures of engineered structures or areas of unacceptable erosion. As we did not receive the final signed copy we are not able to issue this report. It is not possible to correct this deficiency at this time.

   However, it should be noted that INAC conducted two geotechnical inspections in 2004, one of which was the final inspection done upon completion of the reclamation program at the site. The first inspection identified some deficiencies on the construction of the Operational Landfill cap which were corrected prior to the second INAC inspection. The second inspection only identified issues that were cosmetic in nature and these have been resolved subsequently.

5. H-27(iv): Identification of whether composite or grab sample collection methods were used for each effluent sample as required by Part H items 7-9 are not on file for 2003 and 2004.
   Teck Response – They were all grab samples.

6. H-27(vi): Mass loading monitoring results for cadmium and mercury in accordance with Part H item 23 are not on file. This could be as a result of absent monitoring information for H-27(ii)
   Teck Response – Sample were analyzed for both cadmium and mercury. As the monitoring program in the Water Licence mimicked the Metal Mining Effluent Program, the data was reported using the format developed for the MMER program. This format did not include the reporting of loading for cadmium and mercury and this information was overlooked. The missing loading calculations have been completed and are attached in Attachment 2 of this letter.

7. H-27(vii): In 2007, acute lethality was observed in Daphnia Magna. Clarification is required regarding subsequent effluent characterization monitoring requirements in accordance with Part H item 14(i)

   Teck Response – The September 6, 2007 monthly effluent characterization included both a Rainbow Trout Bioassay LC50 test and a Daphnia Magna Bioassay LC50 test. The test results for the Rainbow trout determined that the effluent was acutely non-lethal (96 hr LC50 v/v (%):

>100%). However, the test for the Daphnia Magna determined the effluent was lethal (48 hr LC50: 86.6%) for the Daphnia Magna.

The Water Licence in Part H 12 requires an "Acute Lethality Test" to be conducted monthly on the effluent. If the effluent is determined to be acutely lethal, then Part H 14 requires monitoring frequency to be altered to comply with Part H 14(i) of the Water Licence.

*Referring to Part 2 Definitions of the Water Licence; ""**Acutely lethal effluent"** means effluent as defined in the Metal Mining Effluent Regulations SOR/2002-222 dated June 6, 2002;". Referring to the MMER regulations:*

> *"Acute Lethality Test means the test to determine the acute lethality of effluent to rainbow trout as set out in Reference Method EPS1/RM/13."*
>
> *"Acute Lethal Effluent means an effluent at 100% concentration that kills more than 50% of rainbow trout subjected to it over a 96-hour period when testing in accordance with the acute lethality test."*

As the September 6th tests passed the rainbow trout LC50 test, the effluent by definition is not acutely lethal. Therefore there was no additional testing required under Part H 14(i) of the Water Licence regardless of the results of the Daphnia Magna test.

Teck notes in your letter, identification of the items that would need to be considered for an amendment to our site monitoring requirements.

If there are any further requests for information related to the above correspondence, I would be happy to respond to such requests.

Yours truly,

Bruce Donald
Reclamation Manager

Attachments: 2

Cc: A. Cull (INAC)

ATTACHMENT 1

INUKTITUT TRANSLATION

2006 3RD QUARTER AND ANNUAL REPORT

ᑭᓯᓂᒃ ᐃᓗᓕᖅᑕᖏᓐᓄᑦ ᑎᑎᕋᓱᒪᔪᑦ ᒪᓕᒐᖅᑎ ᐅᓪᓗᕋᐅᓕᖅᐸᒥ
2006ᒥ ᑎᕋᒪᑦᓕᑦᓄᑎᒃ ᑎᕋᒪᐃᓕᖅᑕᖏᓐᓇᓂᑦ ᐅᓂᒃᓕᐊᖅ ᐊᕐᔪᓕᒪᕐᓗᓐ

ᐃᓕᒋᐊᕐᑎᐅᖅ

1. ᑭᓱᒎᒪᖔᑦ

ᒪᕈᓕᕿᒥ ᐅᔭᕿᒃᓯᐅᕐᕕᒃ ᓄᖃᓚᐅᓯᒪᔪᖅ ᓯᑎᐱᕆᒥ 2002ᖑᑎᓗᒍ. ᒪᑐᕋᑖᓯᐊᕐᑎᓗᒍ ᐅᔭᕿᒃᓯᐅᕐᕕᒃ, ᖃᓄᐃᑐᓂᕕᓂᖓᓄᑦ ᐅᑎᑎᑕᐅᓇᓱᒃᓂᖓ ᑲᔪᓯᓕᓚᐅᓯᒪᔪᖅ ᒪᓕᓗᒋᑦ ᐊᕿᓱᑕᐅᓯᒪᔪ ᑕᐃᔭᐅᓗᓂ ᐃᒍᑎᕆᓂ ᖃᓄᐃᑐᓂᕕᓂᖓᓄᓗ ᐅᑎᑎᑕᐅᓂᒧᑦ ᐅᐸᓗᖓᐃᔭᕈᑎᒃ ᐊᖏᕐᑕᐅᓯᒪᓗᓂ ᓄᓇᕗᒥ ᐃᒪᓕᕆᔨᑯᑦ ᑲᑎᒪᔩᖏᓄᑦ ᐊᒪᓗ ᐃᓄᓕᕆᔨᑐᖃᑯᓂᑦ. ᐅᐸᓗᖓᐃᔭᐅᑦ ᐊᒪᓗ ᐃᒪᕐᒧᑦ ᐱᔪᓇᐅᑎᒃ ᐅᖃᓯᒪᒪᑕ ᐅᓂᑳᓕᐅᓇᐊᖃᕋᑕ ᐱᓕᕆᐊᑎᓂᒃ ᐊᒪᓗ ᐅᐊᓯᓂᒧᑦ ᐱᓕᕆᐊᑎᓂᒃ ᑕᒪᐃᓂ ᑎᓴᒪᐃᓕᖃᖓᔪᑎᒍᑦ ᐊᒪᓗ ᐊᕋᒍᑕᒫᕈᑎᑎᓂ. ᑕᓇ ᓱᓕᓗᓂ ᑎᑎᖃᓯᒪᔪᖅ ᐱᑕᖃᑐᖅ ᑕᒪᐃᓂ 2006ᒥ ᑎᓴᒪᖓᓂ ᑎᓴᒪᐃᓕᖃᖓᔪᓂ ᐅᓂᑳᖓ ᐊᒪᓗ 2006ᒥ ᐊᕋᒍᑕᒫᕈᑎᖓᑕ ᐅᓂᑳᖓ ᒪᕈᓕᕿᐅᑉ ᐅᔭᕋᓯᐅᕕᕕᓂᐊ ᐱᓪᓗᒍ.

2. 2006ᒥ ᑎᓴᒪᖓᑕ ᑎᓴᒪᐃᓕᖃᖓᔪᓂ ᐅᓂᑳᓕᐊᖅ

2.1. ᖃᓄᐃᑐᓂᑐᖃᕕᓂᖓᓄ ᐅᑎᑎᑕᐅᓂᖓᑕ ᐅᓂᑳᖓ

ᑕᕙᓂ ᑎᓴᒪᖓᓂ ᑎᓴᒪᐃᓕᖃᖓᔪᑦ 2006ᖑᑎᓗᒍ, ᒪᕈᓕᕿᒥ ᐅᔭᕿᒃᓯᐅᕐᕕᒃ ᓱᓕ ᐃᓄᖃᓚᐅᖏᑐᖅ ᐃᖃᓇᐃᔭᕐᑎᒥᒃ. ᖃᓄᐃᑐᓂᕕᓂᖓᓄᑦ ᐅᑎᑎᑕᐅᓇᓱᓂᖓ ᑲᔪᓯᓚᐅᖏᑐᖅ.

2.2. ᓄᓇᖓᓂ ᐅᐊᓯᓂᖅ

ᑕᕙᓂ ᑎᓴᒪᖓᓂ ᑎᓴᒪᐃᓕᖃᖓᔪᑦ 2006ᖑᑎᓗᒍ, ᒪᕈᓕᕿᒥ ᐅᔭᕿᒃᓯᐅᕐᕕᒃ ᓱᓕ ᐃᓄᖃᓚᐅᖏᑐᖅ ᐃᖃᓇᐃᔭᕐᑎᒥᒃ ᐊᒪᓗ ᑕᐃᒪᐃᓂᖓᓄᑦ ᐅᐊᓯᓂᖅ ᑲᔪᓯᓚᐅᖏᑐᖅ ᐃᒪᐃᓗ ᓴᕿᔮᕿᔭᕐᑐᑦ ᖁᐊᖑᓚᐅᒪᑕ. ᑕᐃᒪᐃᓂᖓᓄᑦ ᑰᑐᕐᒥᒃ ᐃᒪᕐᒥᒃ ᖃᓄᑎᒋ ᐱᐅᑎᒋᒪᖓᑦ ᐅᓂᑲᒃᓴᑕᖃᖏᑐᖅ.

2.3. ᐊᕙᑎᒧ ᓱᓂᐅᑎᐅᔪᑦ ᐅᐊᓯᔭᐅᓂᖏᑦ

ᐊᕙᑎᓕᕆᔨᑯᑦ ᑲᓇᑕᒥᑎᑎᕋᓚᐅᑐᑦ ᓖᕈᖕᓂᒃ ᑎᑎᖅᑳᒃᓂᒃ 2006ᖑᑎᓗᒍ ᓇᓗᓇᐃᓯᓗᓂ ᒪᕈᓕᕿᒥ ᐅᔭᕿᒃᓯᐅᕕᕕᓂᖅ ᒪᓕᒋᐊᓕᖏᓂᒃ ᐱᑕᖃᕈᓂᕐᑐᖅ ᒪᓕᓗᒋᑦ ᓴᕕᕋᔭᕐᒧᑦ ᐅᔭᕋᑕᕐᓂᒧᑦ ᑰᑦ ᒪᓕᒐᖓ ᐊᒪᓗ ᑕᓇ ᑭᖑᓕᕐᐹᖅ ᐊᕙᑎᐅᑉ ᓱᓂᑕᐅᓂᖓᑕ ᐅᐊᓯᔭᐅᓂᖓᑕ ᐅᓂᑳᖓ ᒪᓕᑕᐅᔭᕆᐊᖃᓂᖏᑦ ᒪᓕᑕᐅᒪᑕ. ᑎᑎᖃᐃ ᑕᕙᓂ ᐃᓚᒋᐊᕈᑦ 2ᒥᑐᑦ.

3. 2006ᒥ ᐊᕋᒍᑕᒫᕈᑎᖓᑕ ᐅᓂᑳᖓ

ᑐᒃᓕᐊ ᐃᓚᖓ, ᑎᑎᕋᓯᒪᔪᖅ 6ᒥ ᐃᒪᕐᒧᑦ ᐱᔪᓇᐊᑎᒃ ᑭᖑᒪᒃᓚᑐᖅ ᐊᕋᒍᑕᒫᑦ ᐅᓂᑲᓕᐅᖃᑕᕆᐊᓕᒃ ᐃᓚᐅᓗᑎᒃ ᐅᒪ ᐊᑕᕐᓂᑐᑦ ᑎᑎᕋᓯᒪᖃᓯᐅᑎᓗᑎᒃ.

3.1. ᐊᖏᕐᑕᐅᓯᒪᖏᑐᑦ ᑯᕕᑎᑎᓂᐅᔪᑦ

ᒪᕈᓕᕿᒥ ᐅᔭᕿᒃᓯᐅᕐᕕᒃ ᐊᖏᕐᑕᐅᓯᒪᖏᑐᓂᒃ ᑯᕕᑎᑎᓚᐅᖏᑐᑦ ᑕᐃᒪᐃᒪᑦ ᐅᓂᑳᒐᓴᑕᖃᖏᑐᖅ.

3.2. ᖃᓄᐃᓕᖓᓕᒫᖓᑕ ᐅᓂᑳᑦ ᖃᐅᔨᓴᕐᑕᐅᖃᑕᓯᒪᔪᑦ ᐸᕐᓇᖑᑕᐅᖃᑕᕐᑐᓗ

ᑕᐃᒪ ᑕᐃᓇᑐᐊᖅ ᐅᔭᕋᐃᑦ ᖃᐅᔨᓴᕐᑕᐅᓂᖓᑕ ᕿᒥᕈᔭᐅᓂᖓ ᐅᔭᕋᕐᔨᐅᕐᓂᐅᑉ ᕿᑲᕐᓂᖓ, ᑕᐃᑯᐊ ᐃᓚᑯᔪᑕᐅᔪᑦ ᐅᓂᑳᑦ ᐱᔮᕆᕐᑕᐅᔪᑦ ᐊᒪᓗ ᑐᓂᔭᐅᑖᕐᓗᑎᒃ ᐊᐃᐸᕆᓕᕐᑕᖓᓂᒃ ᑎᓴᒪᐃᓕᖃᖓᔪᓂᑦ ᐅᓂᑲᓕᐅᓕᕐᐸᑕ 2007ᒧᖓᔪᓂᒃ.

3.3. ᓯᕗᓕᕐᑎᓄᖓᔪᖅ ᓇᐃᓕᒋᐊᕐᓯᒪᔪᑦ ᐅᓂᑳᑦ ᐃᓄᒃᑎᑐᓕᑎᑕᐅᓯᒪᔪᑦ

ᐃᓚᐅᖃᑕᐅᔪᖅ ᐃᓚᒋᐊᕈᑦ 1ᒥ ᓯᕗᓕᕐᑎᓄᖓᔪᖅ ᓇᐃᓕᒋᐊᓯᒪᔪᖅ ᐅᓂᑳᖅ ᑕᒪᐃᓄᑦ 2006ᒧᑦ ᑎᓴᒪᖓ ᑎᓴᒪᐃᓕᖃᖓᔪᓂ ᐊᒪᓗ 2006ᒧᑦ ᐊᕋᒍᓕᒫᕈᑎᒃ ᐅᓂᑳᖅ ᐃᓄᒃᑎᑐᓕᕐᑎᑕᐅᔪᑦ.

3.4. ᓇᐃᓕᒋᐊᕐᓯᒪᔪᖅ ᒪᑐᓂᖓ ᐊᒪᓗ/ᐅᕙᓗᓃᑦ ᖃᓄᐃᑐᓂᕕᓂᖓᓄ ᐅᑎᑎᑕᐅᓇᓱᓂᖓ

ᓇᐃᓕᒋᐊᕐᓯᒪᔪᖅ ᒪᑐᓂᖓᓂᒃ ᐊᒪᓗ ᖃᓄᐃᑐᓂᕕᓂᖓᑕ ᐅᑎᑎᑕᐅᓂᖓᓄ ᐱᓕᕆᐊᖑᔪᑦ ᑕᕙᓂ ᐊᕋᒍᔪᕐᒥ ᐊᒪᓗ ᑭᓱᓕᕆᓖᕐᒪᖓᑦ ᓇᓗᓇᐃᓯᒪᔪᖅ ᐊᕋᒎᕐᑐᖅ ᐅᓂᑲᐅᓯᐅᓗᑎᒃ ᑎᑎᕋᓯᒪᔪᑦ ᐅᒪ ᐊᑖᓂ:

- ᔪᓚᐃᖑᑎᓗᒍ ᐅᓄᖏᑐᑯᓗᐃᑦ ᐃᓄᐃᑦ ᑕᓕᒪᐅᓗᑎᒃ ᑕᐃᑲᓂ ᓄᓇᖓᓂᓚᐅᑐᑦ ᐱᔭᕆᓯᔭᕐᑐᓗᑎᒃ ᐊᕿᓱᐃᓗᑎᒃᓗ ᓄᓇᖓᓂᒃ ᓯᕕᖓᓕᕐᑎᑲᓂᕋᓱᒃᓗᖑ ᐊᖐᔪᖏᑐᖅ ᓄᓇ ᑕᐃᑲᓂ ᓄᑖᕐᒥ ᑐᐊᐸᒃᑕᕐᕕᒥ, ᐅᕐᓱᐊᓗᖃᐅᑎᕕᓂᕐᓂ, ᐊᒪᓗ ᐃᑯᐊᓚᑎᕕᐅᖃᑕᓚᐅᑐᕐᒥ ᑕᐃᑲᓂ ᓇᓗᓇᐃᑕᐅᓯᒪᔪᖅ ᓯᑎᐱᕆ 2004ᖑᑎᓗᒍ ᖃᐅᔨᓴᕐᑕᓚᐅᑎᓗᒍ ᐅᓂᑲᓕᐊᖑᓚᐅᑐᕐᒥ. ᑕᓇ ᐱᔭᓇᒪᑦ ᖃᐅᔨᓴᑕᐅᑲᓂᓕᓚᐅᑐᑦ ᔪᓚᐃ 2006ᒥ ᐃᓄᓕᕆᔨᑐᖃᑯᓄᑦ ᐊᕋᒍᑕᒫᕈᑎᒥᓂᒃ ᓄᓇᖓᓂ ᖃᐅᔨᓴᕐᓗᑎᒃ.

- ᓴᓗᒪᕐᓴᐃᓚᐅᑐᒍᑦ ᑕᐃᕙᒃᓱᒥᖓ ᒪᕐᓗᑯᓂᒃ ᑕᕿᓕᒫᖓᓂ ᔪᓚᐃ. ᓱᓕ ᑲᔪᓯᑎᓯᓂᐊᕐᑐᒍᑦ ᑕᒪᑐᒥᖓ ᓴᓗᒪᓴᐃᒋᐊᓚᑲᓂᓛᕐᑐᒍᑦ ᐊᕐᒍᑕᒫᑦ ᐃᖃᓇᐃᔭᕐᑎᕗᑦ ᑕᐃᑲᓂᓕᕐᒐᑕ.
- ᑕᐃᑯᐊ ᓇᓗᓇᐃᑕᐅᓚᐅᓯᒪᔪᑦ ᓯᑑᕐᐸᓕᐊᓂᖏᓂᒃ 2005ᒥ ᐊᕐᒍᑕᒫᑦ ᐅᔭᕋᓕᕆᓂᒧᑦ ᖃᐅᔨᓴᕐᑎᐅᖃᑕᕐᑐᑦ ᐊᕿᑕᐅᕐᑯᔭᖏᑦ ᐊᕿᑕᐅᓚᐅᑐᑦ ᑕᐃᒪᐃᓂᐊᓂᕋᓚᐅᓯᒪᒪᒐᑕ. ᐊᒪᓗᑲᓂ ᐊᓯᖏᑦ ᓄᑖᑦ ᓯᑑᕐᑐᑦ ᓇᓗᓇᐃᑕᐅᓚᐅᒥᔪᑦ ᔪᓚᐃ 2006ᖑᑎᓗᒍ ᐊᒪᓗ ᐊᕿᒋᐊᕐᑕᐅᓗᑎᒃ ᐱᔭᕆᑕᐅᓚᐅᑐᑦ.
- ᔪᓚᐃᖑᑎᓗᒍ ᑕᐃᑯᐊ ᓱᓕ ᐊᕿᑕᐅᓯᒪᓚᐅᖏᑑᒃ ᐅᓇᕐᓂᖓᓄ ᓂᓕᓇᓂᖓᓄᓗᓃᑦ ᖃᐅᔨᓴᐅᑏᒃ ᐊᕿᑕᐅᓚᐅᑐᑦ ᐊᑐᕐᑕᐅᔪᕐᒥ ᒪᕐᓗᑰᕐᕕᒥ ᐃᓕᔭᐅᓗᑎᒃ. ᑕᒪᕐᒥᓕᒫᖅ ᖃᐅᔨᓴᕈᑏᑦ ᓂᓪᓕᓇᕐᓂᖓᓄᑦ ᐊᕿᒋᐊᕐᑕᐅᓚᐅᕐᑐᑦ ᓱᓕᑎᐊᕐᓂᕐᓴᖕᓂᒃ ᑎᑎᖃᓯᒪᔪᕐᑯᑎᖃᕐᑯᓗᑕ ᐊᒪᓗ ᐊᕿᑕᐅᔪᑦ ᓇᓄᕐᓂᑦ ᐲᕐᑕᐅᔭᖏᓂᕐᓴᐅᕐᑯᓗᒋᑦ. ᑎᑎᕐᕈᑏᑦ ᐃᓕᔭᐅᓚᐅᑐᑦ ᓂᓪᓕᓇᕐᓂᖓᓄᑦ ᑎᓕᓇᓂᖓᑕ ᑎᑎᕐᓂᖏᑦ ᐱᔭᐅᔪᓇᓂᐊᕐᒪᑕ ᑕᒪᐃᓄᑦ ᒪᕐᓗᑰᕐᕕᓄᑦ ᑎᑎᕐᑕᐅᕙᓕᐊᔪᓇᓂᐊᕐᒪᑕ ᐊᕐᒍᓕᒫᖅ.
- 2007ᒥ, ᑲᔪᓯᑎᓯᔪᒪᔪᒍᑦ ᐸᕐᓇᖑᑎᒋᓯᒪᓗᒍ ᐊᕿᓱᐃᔪᒪᓗᑕ ᐊᖏᔪᖏᑐᕐᒥᒃ ᓯᑑᕐᑕᐅᓕᔪᑎᓴᓂᒃ ᐊᕿᓯᔪᒪᓗᑕ ᑕᐃᓇ ᓇᓗᓇᐃᑕᐅᓚᐅᑐᖅ ᑐᐊᐸᖓ ᕿᒥᕈᔭᐅᓂᖃᑎᓗᒍ.

3.5. ᖃᓄᐃᑐᓕᒫᖓᑦ ᖃᓄᐃᑐᓂᖓᓄ ᐅᑎᑎᑕᐅᓇᓱᓂᖓ ᐊᒪᓗ ᐅᐊᓯᔭᐅᓂᐅᑉ ᐊᑭᖏᑦ

ᖃᓄᐃᓕᖓᓕᒫᖓᑦ ᖃᓄᐃᑐᓂᕕᓂᖓ ᐊᒪᓗ ᐅᐊᓯᓂᐅᔪᑦ ᐊᑭᖓ ᐅᓂᑳᓕᐊᖑᓗᓂ ᑕᕙᓂ ᐃᓕᒋᐊᑭᑦ 3ᒥᑐᖅ. ᐊᑭᖏᑦ 2006ᖑᑎᓗᒍ $332,000ᖑᓚᐅᑐᑦ ᑕᒪᓇ ᐊᖏᒧᐊᓗᒃ ᐃᓱᒪᒥᓗᒍ ᖃᓄᐃᑐᓂᕕᓂᖓ ᓴᓇᓂᑐᐃᓇᐅᒪᑦ (ᓯᕕᖓᓕᑎᑕᐅᑲᓂᕐᓗᓂ ᐊᒪᓗ ᓯᑑᕐᓂᖓ ᐊᕿᒋᐊᕐᑕᐅᓗᓂ) ᖃᑲᓂᐊᒍᑦ ᐅᐊᓯᓂᑐᐃᓴᒧᑦ ᐊᑐᓯᒪᔭᑎᓂᒃ ᐱᑕᖃᓇᓗᓂ.

3.6. ᐃᓄᓕᒫᑦ ᐊᐱᕐᓱᕐᑕᐅᓂᖏᑦ/ᐃᓚᐅᑎᑕᐅᓂᖏᑦ

- ᐃᓄᓕᒫᕐᑎᓯᓚᐅᖏᑐᒍᑦ ᑐᑭᓯᓇᓱᒃᓗᑕ ᑕᐃᓇ ᓄᓇ ᖃᓄᐃᓕᐅᕕᐅᓚᐅᖏᑎᐊᕐᓂᖓᓄᑦ ᐅᐊᓯᓂᐅᕝᔪᑉ ᐊᓯᐊᓂᒃ.
- ᐅᓄᖏᒫᖅ ᐃᓄ ᓄᓇᓕᖃᕐᑐᖅ ᕿᓴᓗᒥ ᐃᑲᔪᖃᑕᕐᑐᖅ ᑲᔪᓯᐲᓇᕐᑕᑎᓂᒃ ᖃᐅᔨᓴᕐᑎᑉᓴᓂ ᐱᓕᕆᖃᑕᕐᑎᓗᑕ ᑕᐃᑲᓂ ᓄᓇᖓᓂ ᐅᕙᓗᓃᑦ ᐃᓚᒋᔭᐅᖃᑕᕐᑐᖅ ᐱᓇᓱᐊᕐᑲᑎᒋᑐᓂ ᐱᑕᖃᓕᕐᒐᑦ ᑕᐃᑲᓂ. ᐃᖃᓇᐃᔮᕐᒥᒃ ᓴᕿᔮᕐᑎᓯᓗᑕᓗ, ᑕᐅᕙᓂᒥᐅᕐᒥᒃ ᖃᐅᔨᒪᔪᕐᒥᒃ ᐊᑕᕐᓇᖏᑐᕐᑯᓯᕐᒥᒃ ᐃᖃᓇᐃᔭᕐᑎᐅᕐᑐᒍᑦ ᐱᒪᕆᐅᓇᓱᒋᓚᑎᒍᑦ ᐃᖃᓇᐃᔭᕐᑎᓯᕐᖃᕐᑐᒍᑦ. ᑕᐅᕙᓂᕐᒥᐅᑕᕐᒥᒃ ᐃᖃᓇᐃᔭᑎᖃᓂᖅ ᐅᐊᓯᓂᒥᒃ ᑕᐃᕙᒃᓱᒪ ᓄᓇᖓᓂ ᐃᑲᔪᑎᖃᒥᔪᖅ ᑕᐅᕙᓂ ᓄᓇᓕᒋᔭᖓ ᖃᓂᓛᖑᔪᖅ ᖃᐅᔨᒪᖃᕐᓂᐊᕐᒪᑕ ᑕᐅᕙᓂ ᖃᓄᐃᑐᐅᓂᕐᒪᖔᑦ ᐊᒪᓗ ᓄᓇᖓ ᑕᐅᕙᓂ ᖃᓄᐃᑐᓕᒪᖔᑦ.

3.7. ᐱᓕᕆᐊᖑᓯᒪᓕᕐᑐᑦ ᐱᔪᑎᓖᑦ ᖃᐅᔨᓴᕐᑕᐅᓂᒧᑦ ᐊᑐᕐᑯᔭᐅᔪᑦ ᐅᕙᓗᓃᑦ ᐅᓂᑳᓕᐊᒥᑦ

ᓇᐃᓈᕐᓯᒪᓗᒍ ᖃᓄᐃᓕᐅᓚᐅᒪᖔᑕ ᐃᓱᓖᓗᑕᐅᔪᑦ ᐱᓪᓗᒋᑦ ᐅᕙᓗᓃᑦ ᐊᕿᓱᕆᐊᓛᑦ ᓇᓗᓇᐃᕐᑕᐅᓯᒪᔪᑦ ᖃᐅᔨᓴᕈᑎᕕᓂᕐᓂ/ᐅᕙᓗᓃᑦ ᒪᓕᒋᐊᓕᓂᒃ ᐅᓂᑳᓕᐊᖑᔪᑦ ᐅᒪ ᐊᑕᓂ ᑎᑎᕐᓯᒪᔪᑦ:

- 2006ᖑᑎᓗᒍ ᓄᓇᓕᓂᑦ ᑕᐅᕙᓂ ᐱᓕᕆᓂᐅᓚᐅᑐᑦ ᐃᒪᐃᑐᑕᖃᓚᐅᒥᔪᑦ ᓴᓗᒪᕐᓴᐃᓗᑎᒃ ᒪᕐᓗᑯᕕᓂᕐᓂᒃ ᑕᒪᓇᓗ ᑲᔪᓯᓂᐊᕐᓗᓂ ᐊᕐᒍᓂ ᐊᒥᕐᑐᓂ ᐊᐅᔭᐅᓂᖓᓂ ᐅᐊᓯᓂᖅ ᑲᔪᓯᕐᒐᑦ.
- 2006ᖑᑎᓗᒍ ᓯᕕᖓᓂᖓ ᐊᕿᓱᑕᐅᑎᓗᒍ ᑕᐃᓱᒪ ᐊᕙᑎᓕᒫᖓ ᑕᐅᕙᓂ ᓄᑕᕐᒥ ᑐᐊᐸᒃᑕᕐᕕᒥ, ᖃᑕᐅᔭᑯᕕᖃᐅᑎᐅᑉ ᐃᓂᕕᓂᖓ ᐱᔭᕆᑕᐅᓚᐅᑐᖅ. ᓯᕕᖓᓂᓗᐊᕿᑐᖏᑦ ᓇᓗᓇᐃᑕᐅᒪᐅᑐᑦ ᖃᓄᐃᕆᐊᕐᑯᔭᐅᓗᓂ ᐊᕿᓱᕆᐊᓕᓂᒃ ᓱᑲᑲᖓᔫᑉ ᑕᓯᖓᓂ ᐊᕿᓱᓯᒪᔪᑦ ᐊᕿᓱᑕᐅᑲᓂᕆᐊᖃᓗᑎᒃ ᐊᒪᓗ ᐊᓯᑲᓂᖏᓂᒃ ᐃᓚᓗᕐᒥᑦ ᓯᑑᑐᖃᑲᓂᕐᑯᐊᓂᕐᓗᒍ. ᐊᕿᓱᑕᐅᔭᕆᒪᑕ, ᑕᐃᑯᐊ ᐊᕿᓱᑕᐅᒪᐅᑐᑦ ᖃᐅᔨᓴᑕᐅᓚᐅᑐᑦ ᐊᕐᒍᑕᒫᕈᑎᒥᓂ ᖃᐅᔨᓴᕐᓂᒥᒃ ᐃᓄᓕᕆᐳᑐᖃᑯᑦ ᑕᐃᑲᓂ ᖃᐅᔨᓴᓕᓚᐅᑐᑦ.

3.8. ᑰᒃᑐᖅ ᐊᒪᓗ ᐃᒪᐅᑉ ᐱᐅᓂᖓᑕ ᖃᐅᔨᓴᕐᑕᐅᓂᕆᓚᐅᕐᑕᖏᑦ

3.8.1. ᖃᓄ ᐊᖏᑎᒋᔪᕐᒥ ᑕᕆᐅᖑᖏᑐᕐᒥ ᐃᒪᕐᒥᒃ ᒥᓗᐊᕐᓯᒪᒪᖓᑕ ᓱᑲᑲᖓᔫᑉ ᑕᓯᖓᓂᑦ

ᐃᒪᒧᑦ ᐱᔪᓇᐅᑎᒃ ᐅᖃᓯᒪᔪᖅ ᑕᕿᑕᒫᑦ ᐊᒪᓗ ᐊᕐᒍᑕᒫᑦ ᖃᓄᑎᒋ ᐊᖏᑎᒋᔪᕐᒥᑉ (ᑭᒃᐸᕆᓯᓯᒪᓗᒋᑦ ᒦᑕᐃ) ᒥᓪᓗᐊᑕᐅᔪᖅ ᓱᑲᑲᖓᔪᖅ ᑕᓯᕐᒥᑦ ᐅᓂᑲᐅᓯᐅᔭᕆᐊᖃᒪᒍᖅ.

  - ᐃᒪᕐᒥᒃ ᒥᓪᓗᐊᑕᐅᔭᖃᓚᐅᖏᑐᖅ ᐱᔪᑎᒋᓗᒍ ᑕᐃᑲᓂ ᑕᓯᐅᑉ ᐃᒪᖓᑕ ᒥᓪᓗᐊᕈᑖ ᓱᕐᓯᒪᓚᐅᒪᑦ ᐊᒪᓗ ᖃᓄᐃᑐᓂᕕᓂᖓ ᐅᑎᑎᑕᐅᓗᓂ 2004ᖑᑎᓗᒍ.

3.8.2. ᒋᐊᖀ ᑕᓯᖓᑕ ᐃᒪᖓᑕ ᐃᒪᖃᓂᖓᑕ ᐅᐊᓯᔭᐅᓂᖓ

2006ᖑᑎᓗᒍ, ᐃᒪᒧᑦ ᐱᔪᓇᐅᑎᒃ ᐅᖃᓯᒪᔪᖅ ᐱᖓᓱᐊᕐᑎᓗᒍ ᐅᐊᓯᔭᐅᕐᑯᓗᒍ (ᐅᑭᐅᓚᕆᑯᑦ, ᓯᑯ ᖁᐊᖑᓚᕆᓕᕐᑎᓗᒍ, ᐊᒪᓗ ᐊᐅᔭᖏᑎᐊᓕᕐᑎᓗᒍ ᓯᑯ) ᒪᕉᓂ ᐃᓃᖕᓂ ᑕᕙᓂ ᒋᐊᕿ ᑕᓯᖓᑕ ᐃᒪᖓᑕ ᐃᑎᓂᖓᓂᑦ ᐃᑲᓂᖓᓄᑦ. ᐅᑭᐅᓚᕆᑯᑦ ᐅᐊᓯᓂᖅ ᑲᔪᓯᑎᑕᐅᓚᐅᖏᑐᖅ ᓴᑕᓂᒃ ᖃᓪᑕᓯᐊᓂ ᖃᓪᑕᑎᓯᐊᒪᖏᒪᑕ ᖃᓪᑕᓯᖃᑎᐅᔪᑦ ᐃᓄᖃᐅᕐᑐᕐᒍᑦ, ᕿᒪᑕᐅᓯᒪᓕᕐᒍᑭᒪᕐᑭᒪᑕ ᑖᕐᕿᓇᓕᕐᑎᓗᒍ. ᐃᑎᓂᕐᐹᖓ ᓯᑰᑉ ᐊᒪᓗ ᐊᐅᔭᖏᓂᕐᐸᓇᔪᖓ ᓯᑰᑉ ᐅᐊᓯᓂᐅᑐᑦ ᑲᔪᓯᓚᐅᑐᑦ ᑕᐃᒪᐃᑕᕆᐊᕐᑯᔭᐅᒪᑦ ᐊᒪᓗ ᐅᓂᑲᐅᓯᐅᓚᐅᑐᑦ ᒪᕈᒋᔭᖕᓂ ᐊᒪᓗ ᐱᖕᐊᒋᔭᖕᓂ ᑎᓴᒪᐃᓕᖃᖕᓗᐊᓂ ᐅᓂᑳᐊᕐᒍᑕᕐᑐᓂ

ᐅᐊᓯᓂᕐᒥᒃ ᐅᓂᑳᓕᐅᕐᑎᓗᒋᑦ. ᐃᓚᒋᐊᕈᑎᒃ 4 ᐃᓗᓕᖅᑐᖅ ᑕᕐᓯᕐᓱᓯᒪᔪᓂᒃ ᓇᓗᓇᐃᑯᑕᕐᓂᒃ 2002ᒥᑦᓂᑦ ᐊᒐᓯ 2006 ᑎᑭᓗᒍ ᖃᓄᐃᐸᓕᐊᓂᕕᓂᖏᓂᒃ. ᑐᓴᕈᑎᓗᐊᑕᐃᑦ ᑕᕐᓯᓱᕐᓯᒪᔪᑦ ᐃᒪᐃᑐᔪᑦ:

- ᖃᓄᑎᒋ ᓴᕕᕋᔭᒃᓴᕐᑕᖃᒪᖔᑦ ᒋᐊᕈ ᑕᓯᖓᑕ ᐃᒪᖓ ᑕᕙ ᓴᕕᕋᔭᖃᓂᖓ ᖃᐅᔨᔭᐅᔪᒪᓗᐊᑕᕐᑐᖅ. ᓴᕕᕋᔭᒃᓴᖅ ᓱᑲᐃᑐᒐᓗᐊᕐᒥᒃ ᒥᑭᓕᕙᓕᐊᖏᓇᓕᒫᕐᑐᖅ
- ᓇᓗᓇᐃᑯᑕᖓ ᖃᓄᑎᒋ ᑕᕆᐅᖃᑎᒋᒪᖔᑦ ᐃᒪᖅ (ᑕᓇ ᓇᓗᓇᐃᓯᔪᖅ ᖃᓄᑎᒋ ᐃᑎᑎᒋᒪᖔᑦ) ᓇᓗᓇᐃᓯᔪᖅ ᑕᓯᖅᑦ ᓱᓂᐊᔪᐊᓗᖏᑐᖅ (ᐅᖅᑲᐅᓯᐅᓚᐅᓯᒪᒪᑦ ᖃᖓ ᐃᒪᐅᓂᐅᓗᓂ ᐃᖅᑲᖓ ᑕᕆᐅᖑᓂᐅᓗᓂ ᑕᐃᒪᐃᓚᓂᐊᓂᕋᑕᐅᓚᐅᓯᒪᒪᑦ)
- ᐊᔨᒋᖏᑐᓂᒃ ᐱᑕᖃᖏᑐᖅ ᑕᑯᐊ ᖃᐅᔨᔭᐅᔪᑦ ᑕᕙᓂ ᐅᐊᓯᕕᖕᓂ ᑐᖃᑕᕐᕕᐅᔪᓂ ᕿᑎᖓᓂ ᑕᓯᐅᑉ ᐊᔨᖓᓂᒃ ᖃᐅᔨᓴᓂᐅᖃᑕᕐᑐᑦ ᑐᖃᑕᕐᕕᐅᔪᓂᑦ ᖃᐅᔨᓴᕐᕕᓂᑦ ᖃᓂᒋᔮᓂ ᑕᓯᐅᑉ ᑰᒋᐊᕐᕕᖓᓂ.

3.9. ᑐᑭᓯᓇᓯᑎᓯᒪᔪᑦ ᐃᒪᐅᑉ ᐱᐅᓂᖓᑕ ᐅᐊᓯᔭᐅᓂᖓ

ᐱᔪᑎᒋᓗᒍ ᑕᒪᑯᐊ ᖃᐅᔨᓴᑕᐅᖃᑕᕐᑐᑦ ᐱᐅᔫᖏᓇᕐᒪᑕ ᐃᒪᐅ ᐱᐅᔪᓂᖓ ᖃᐅᔨᓴᕐᑕᐅᔭᕐᖓ ᑕᐃᒪᖓᓂ ᐅᔭᖅᓯᐅᕐᕕᒃ ᒪᑐᓚᐅᓯᒪᒪᑦ, ᑎᒃ ᑲᒥᑯᑯᑦ ᒥᑭᓕᒋᐊᕐᓯᔪᒪᔪᑦ ᖃᐅᔨᓴᕐᓂᕆᖃᑕᑕᕐᒥᓂᒃ ᐱᔪᑎᒋᓗᒍ ᐊᑭᖓ ᐃᓱᒪᒋᓗᒍ ᐊᒪᓗ ᐱᔪᑎᒋᓗᒍ ᐃᓱᒪᒐᑕ ᖃᐅᔨᓴᕐᑐᐊᓗᖃᑕᕋᓗᐊᕈᑕ ᐊᑐᑎᖃᖏᒪᑦ. ᑎᒃ ᑲᒥᑯᑯᑦ ᑐᓂᓯᒪᐅᑐᑦ ᑎᑎᕋᓯᒪᔪᖁᑎᒥᓂ ᖃᐅᔨᓴᕈᑎᕕᓂᖏᓂᒃ ᐊᕙᑎᓕᕆᔨᑯᓄᑦ ᑲᓇᑕᒥ ᐊᐱᕐᓱᕐᓗᑎᒃ ᐃᑲᔪᑐᐃᒐᔭᕐᒪᖔᑕ ᐱᔭᕆᐊᑭᓕᕙᓕᑎᑕᐅᔪᓇᒪᖔᑦ ᖃᐅᔨᓴᓂᕆᔭᖔᑦ ᐊᒪᓗ ᒥᑭᓕᒋᐊᕐᓗᒍ ᐊᖏᓂᖓ ᐃᒪᐅᑉ ᖃᐅᔨᓴᑕᐅᓂᕆᖃᑕᑕᖓᑕ ᒪᓇᐅᔪᖅ ᐊᑐᑕᐅᖃᑕᕐᑑᑉ.

ᑎᓯᐱᕆ 12, 2006ᖑᑎᓗᒍ ᐋᓐ ᕗᐃᐅᓪᓴᓐ ᐊᕙᑎᓕᕆᔨᑯᑦ ᑲᓇᑕᒥᖔᑐᖅ ᑭᐅᓚᐅᓯᒪᔪᖅ ᐊᖏᖃᑎᖃᕐᓗᓂ ᒥᑭᓕᒋᐊᑕᐅᓂᖓ ᖃᐅᔨᓴᑕᐅᖃᑕᓂᐅᔪᑦ ᑕᐃᒪᐃᐸᑦ ᓱᓕᔪᖅ. ᑎᑎᕋᓚᐅᓯᒪᔭᖓ ᐃᓚᒋᐊᕈᑦ 7ᒥᑐᖅ.

2007ᐅᑎᓗᒍ ᑎᒃ ᒪᑭᑯᑯᑦ ᐅᐸᒍᑎᓚᐅᓯᒪᔪᑦ ᐃᒪᓕᕆᔨᑯᑦ ᑲᑎᒪᔨᖏᓄᑦ ᐊᒪᓗ ᐃᓄᓕᕆᔨᑐᖅᑯᓄᑦ ᑐᒃᓯᕋᓗᑎᒃ ᐊᓯᔨᕐᑕᐅᖁᓗᒥᑦ ᒪᕈᓕᕿᐅ ᐅᔭᖅᓯᐅᕐᕕᖓᑕ ᐅᐊᓯᔭᐅᓂᖓ.

ATTACHMENT 2

MASS LOADING MONITORING RESULTS

FOR

CADMIUM AND MERCURY

2004 3rd QUARTER GARROW CREEK EFFLUENT MONITORING
SEPTEMBER, 2009 UPDATE
FOR PARAMETERS PREVIOUSLY NOT REPORTED

LOCATION - FINAL DISCHARGE POINT FROM GARROW LAKE

CONCENTRATIONS OF EFFLUENT SAMPLED WEEKLY

Sample Taken During The Week of	Date Sample Taken	Concentration (mg/L) Cadmium	Mecury	Collection Method
5-Jul-04	07-Jul-04	0.000588	0.00001	Grab
12-Jul-04	13-Jul-04	0.000332	pna[2]	Grab
19-Jul-04	20-Jul-04	*0.000109*	pna[2]	Grab
26-Jul-04	27-Jul-04	*0.000140*	0.000010	Grab
2-Aug-04	3-Aug-04	*0.000146*	0.000010	Grab
9-Aug-04	10-Aug-04	*0.000330*	0.000010	Grab
16-Aug-04	17-Aug-04	*0.000230*	0.000010	Grab
23-Aug-04	24-Aug-04	*0.000335*	0.000010	Grab
30-Aug-04	31-Aug-04	*0.000553*	pna[2]	Grab
6-Sep-04	ned[1]	ned[1]	ned[1]	ned[1]
13-Sep-04	ned[1]	ned[1]	ned[1]	ned[1]
20-Sep-04	ned[1]	ned[1]	ned[1]	ned[1]
27-Sep-04	ned[1]	ned[1]	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

Concentrations in red italics were set to the detection limit

MONTHLY MEAN CONCENTRATIONS OF SUBSTANCE IN EFFLUENT

MONTH OF	Concentration (mg/L) Cadmium	Mercury
July/04	0.000292	0.000010
August/04	0.000319	0.000010
September/04	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Concentrations in red italics were set to the detection limit

MASS LOADING FOR EACH DAY SAMPLED

Sample Taken During The Week of	Date Sample Taken	Kg/day Cadmium	Kg/day Mercury	Average Daily Flow Rate (m^3/day)
5-Jul-04	07-Jul-04	0.010656	0.000181	18,122
12-Jul-04	13-Jul-04	0.124813	pna[2]	375,944
19-Jul-04	20-Jul-04	0.011170	pna[2]	102,479
26-Jul-04	27-Jul-04	0.003951	0.000282	28,218
2-Aug-04	3-Aug-04	0.003862	0.000265	26,450
9-Aug-04	10-Aug-04	0.008545	0.000259	25,894
16-Aug-04	17-Aug-04	0	0	0
23-Aug-04	24-Aug-04	0	0	0
30-Aug-04	31-Aug-04	0	0	0
6-Sep-04	ned[1]	ned[1]	ned[1]	ned[1]
13-Sep-04	ned[1]	ned[1]	ned[1]	ned[1]
20-Sep-04	ned[1]	ned[1]	ned[1]	ned[1]
27-Sep-04	ned[1]	ned[1]	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

MASS LOADING PER CALENDAR MONTH FOR EACH PART D-4 PARAMETER

CALENDAR MONTH OF	Kg/month[1] Cadmium	Kg/month[1] Mercury	Average Weekly Flow Rate[2] (m^3/week)	Total Monthly Flow Rate[3] (m^3/month)
July/04	1.1671	0.0072	131,191	4,066,913
August/04	0.0962	0.0041	10,469	324,533
September/04	0	0	0	0

Note[1] - Total Mass Loading for Calendar month calculated by multiplying the Average Daily Mass Loading for the Month x # days in the month

Note[2] - Average Weekly Flow Rate calculated by multiplying Average Daily Flow Rate x 7 days per week

Note[3] - Total Monthly Volume calculated by multiplying Average Daily Flow Rate for the month x days in month

2005 3rd QUARTER GARROW CREEK EFFLUENT MONITORING
SEPTEMBER, 2009 UPDATE
FOR PARAMETERS PREVIOUSLY NOT REPORTED

LOCATION - FINAL DISCHARGE POINT FROM GARROW LAKE

CONCENTRATIONS OF EFFLUENT SAMPLED WEEKLY

Sample Taken During The Week of	Date Sample Taken	Concentration (mg/L) Cadmium	Concentration (mg/L) Mecury	Collection Method
3-Jul-05	06-Jul-05	0.000200	0.00001	Grab
10-Jul-05	13-Jul-05	0.000064	0.000010	Grab
17-Jul-05	16-Jul-05	0.000200	0.000010	Grab
24-Jul-05	23-Jul-05	*0.000079*	0.000010	Grab
31-Jul-05	30-Jul-05	*0.000064*	0.000050	Grab
7-Aug-05	6-Aug-05	0.000200	0.000010	Grab
14-Aug-05	13-Aug-05	*0.000321*	0.000010	Grab
21-Aug-05	24-Aug-05	*0.000267*	0.000010	Grab
28-Aug-05	27-Aug-05	*0.000228*	0.000010	Grab
4-Sep-05	ned[1]	ned[1]	ned[1]	ned[1]
11-Sep-05	ned[1]	ned[1]	ned[1]	ned[1]
18-Sep-05	ned[1]	ned[1]	ned[1]	ned[1]
25-Sep-05	ned[1]	ned[1]	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

Concentrations in red italics were set to the detection limit

MONTHLY MEAN CONCENTRATIONS OF SUBSTANCE IN EFFLUENT

MONTH OF	Concentration (mg/L) Cadmium	Concentration (mg/L) Mercury
July/05	0.000121	0.000018
August/05	0.000254	0.000010
September/05	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Concentrations in red italics were set to the detection limit

MASS LOADING FOR EACH DAY SAMPLED

Sample Taken During The Week of	Date Sample Taken	Kg/day Cadmium	Kg/day Mercury	Average Daily Flow Rate (m^3/day)
3-Jul-05	06-Jul-05	0.001694	0.000085	8,471
10-Jul-05	13-Jul-05	0.000233	0.000036	3,636
17-Jul-05	16-Jul-05	0.000669	0.000033	3,343
24-Jul-05	23-Jul-05	0.000430	0.000054	5,443
31-Jul-05	30-Jul-05	0.000145	0.000113	2,260
7-Aug-05	6-Aug-05	0.001349	0.000067	6,747
14-Aug-05	13-Aug-05	0.003606	0.000112	11,234
21-Aug-05	24-Aug-05	0.004732	0.000177	17,722
28-Aug-05	27-Aug-05	0.002869	0.000126	12,583
4-Sep-05	ned[1]	ned[1]	ned[1]	ned[1]
11-Sep-05	ned[1]	ned[1]	ned[1]	ned[1]
18-Sep-05	ned[1]	ned[1]	ned[1]	ned[1]
25-Sep-05	ned[1]	ned[1]	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

MASS LOADING PER CALENDAR MONTH FOR EACH PART D-4 PARAMETER

CALENDAR MONTH OF	Kg/month[1] Cadmium	Kg/month[1] Mercury	Average Weekly Flow Rate[2] (m^3/week)	Total Monthly Flow Rate[3] (m^3/month)
July/05	0.0197	0.0020	32,412	143,540
August/05	0.0973	0.0037	84,501	374,218
September/05	0	0	0	0

Note[1] - Total Mass Loading for Calendar month calculated by multiplying the Average Daily Mass Loading for the Month x # days in the month

Note[2] - Average Weekly Flow Rate calculated by multiplying Average Daily Flow Rate x 7 days per week

Note[3] - Total Monthly Volume calculated by multiplying Average Daily Flow Rate for the month x days in month

2006 3rd QUARTER GARROW CREEK EFFLUENT MONITORING
SEPTEMBER, 2009 UPDATE
FOR PARAMETERS PREVIOUSLY NOT REPORTED

LOCATION - FINAL DISCHARGE POINT FROM GARROW LAKE

CONCENTRATIONS OF EFFLUENT SAMPLED WEEKLY

Sample Taken During The Week of	Date Sample Taken	Concentration (mg/L) Cadmium	Concentration (mg/L) Mecury	Collection Method
2-Jul-06	06-Jul-06	0.000055	pna	Grab
9-Jul-06	15-Jul-06	0.000083	0.000010	Grab
16-Jul-06	21-Jul-06	0.000157	0.000010	Grab
23-Jul-06	26-Jul-06	*0.000099*	0.000010	Grab
30-Jul-06	No Sample			
6-Aug-06	11-Aug-06	0.000192	0.000010	Grab
13-Aug-06	17-Aug-06	*0.000236*	0.000010	Grab
20-Aug-06	23-Aug-06	*0.000333*	0.000010	Grab
27-Aug-06	1-Sep-06	*0.000374*	0.000010	Grab
3-Sep-06	9-Sep-06	*0.000374*	0.000010	Grab
10-Sep-06	14-Sep-06	*0.000404*	0.000010	Grab
17-Sep-06	ned[1]	ned[1]	ned[1]	ned[1]
24-Sep-06	ned[1]	ned[1]	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

Concentrations in red italics were set to the detection limit

MONTHLY MEAN CONCENTRATIONS OF SUBSTANCE IN EFFLUENT

MONTH OF	Concentration (mg/L) Cadmium	Concentration (mg/L) Mercury
July/06	0.000099	0.000010
August/06	0.000254	0.000010
September/06	0.000389	0.000010

Note [1] - "ned" refers to no effluent discharge to sample

Concentrations in red italics were set to the detection limit

MASS LOADING FOR EACH DAY SAMPLED

Sample Taken During The Week of	Date Sample Taken	Kg/day		Average Daily Flow Rate (m^3/day)
		Cadmium	Mercury	
2-Jul-06	06-Jul-06	0.000361	npa	6,566
9-Jul-06	15-Jul-06	0.000997	0.000120	12,010
16-Jul-06	21-Jul-06	0.001433	0.000091	9,129
23-Jul-06	26-Jul-06	0.001091	0.000110	11,016
30-Jul-06	No Sample			
6-Aug-06	11-Aug-06	0.002280	0.000119	11,875
13-Aug-06	17-Aug-06	0.002719	0.000115	11,521
20-Aug-06	23-Aug-06	0.002097	0.000063	6,298
27-Aug-06	1-Sep-06	0.002263	0.000061	6,052
3-Sep-06	9-Sep-06	0.001453	0.000039	3,884
10-Sep-06	14-Sep-06	0.000392	0.000010	971
17-Sep-06	ned[1]	ned[1]	ned[1]	ned[1]
24-Sep-06	ned[1]	ned[1]	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

MASS LOADING PER CALENDAR MONTH FOR EACH PART D-4 PARAMETER

CALENDAR MONTH OF	Kg/month[1]		Average Weekly Flow Rate[2] (m^3/week)	Total Monthly Flow Rate[3] (m^3/month)
	Cadmium	Mercury		
July/06	0.0301	0.0033	67,763	300,092
August/06	0.0725	0.0028	62,555	277,030
September/06	0.0286	0.0008	16,994	72,832

Note[1] - Total Mass Loading for Calendar month calculated by multiplying the Average Daily Mass Loading for the Month x # days in the month

Note[2] - Average Weekly Flow Rate calculated by multiplying Average Daily Flow Rate x 7 days per week

Note[3] - Total Monthly Volume calculated by multiplying Average Daily Flow Rate for the month x days in month

2007 3rd QUARTER GARROW CREEK EFFLUENT MONITORING
SEPTEMBER, 2009 UPDATE
FOR PARAMETERS PREVIOUSLY NOT REPORTED

LOCATION - FINAL DISCHARGE POINT FROM GARROW LAKE

CONCENTRATIONS OF EFFLUENT SAMPLED WEEKLY

Sample Taken During The Week of	Date Sample Taken	Concentration (mg/L) Cadmium	Concentration (mg/L) Mecury	Collection Method
8-Jul-07	08-Jul-07	0.000073	0.000010	Grab
12-Jul-07	12-Jul-07	0.000059	0.000010	Grab
19-Jul-07	19-Jul-07	0.000800	0.000011	Grab
26-Jul-07	26-Jul-07	*0.000168*	0.000010	Grab
1-Aug-07	1-Aug-07	*0.000253*	0.000010	Grab
9-Aug-07	9-Aug-07	0.000249	0.000010	Grab
16-Aug-07	16-Aug-07	*0.000238*	0.000010	Grab
23-Aug-07	23-Aug-07	*0.000292*	0.000010	Grab
30-Aug-07	30-Aug-07	*0.000285*	0.000011	Grab
6-Sep-07	6-Sep-07	*0.000308*	0.000010	Grab
13-Sep-07	13-Sep-07	*0.000299*	0.000034	Grab
20-Sep-07	ned[1]	ned[1]	ned[1]	ned[1]
27-Sep-07	ned[1]	ned[1]	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

Concentrations in red italics were set to the detection limit

MONTHLY MEAN CONCENTRATIONS OF SUBSTANCE IN EFFLUENT

MONTH OF	Concentration (mg/L) Cadmium	Concentration (mg/L) Mercury
July/07	0.000275	0.000010
August/07	0.000263	0.000010
September/07	0.000304	0.000022

Note [1] - "ned" refers to no effluent discharge to sample

Concentrations in red italics were set to the detection limit

MASS LOADING FOR EACH DAY SAMPLED

Sample Taken During The Week of	Date Sample Taken	Kg/day		Average Daily Flow Rate (m^3/day)
		Cadmium	Mercury	
8-Jul-07	08-Jul-07	0.000124	0.000017	1,702
12-Jul-07	12-Jul-07	0.000261	0.000044	4,424
19-Jul-07	19-Jul-07	0.005674	0.000078	7,093
26-Jul-07	26-Jul-07	0.001354	0.000081	8,061
1-Aug-07	1-Aug-07	0.001991	0.000079	7,871
9-Aug-07	9-Aug-07	0.002883	0.000116	11,578
16-Aug-07	16-Aug-07	0.003290	0.000138	13,824
23-Aug-07	23-Aug-07	0.002800	0.000096	9,590
30-Aug-07	30-Aug-07	0.001849	0.000071	6,489
6-Sep-07	6-Sep-07	0.004918	0.000160	15,967
13-Sep-07	13-Sep-07	0.007427	0.000845	24,840
20-Sep-07	ned[1]	ned[1]	ned[1]	ned[1]
27-Sep-07	ned[1]	ned[1]	ned[1]	ned[1]

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

MASS LOADING PER CALENDAR MONTH FOR EACH PART D-4 PARAMETER

CALENDAR MONTH OF	Kg/month[1]		Average Weekly Flow Rate[2] (m^3/week)	Total Monthly Flow Rate[3] (m^3/month)
	Cadmium	Mercury		
July/07	0.0575	0.0017	37,240	162,921
August/07	0.0794	0.0031	69,092	305,977
September/07	0.1913	0.0156	142,823	632,504

Note[1] - Total Mass Loading for Calendar month calculated by multiplying the Average Daily Mass Loading for the Month x # days in the month

Note[2] - Average Weekly Flow Rate calculated by multiplying Average Daily Flow Rate x 7 days per week

Note[3] - Total Monthly Volume calculated by multiplying Average Daily Flow Rate for the month x days in month

2008 3rd QUARTER GARROW CREEK EFFLUENT MONITORING
SEPTEMBER, 2009 UPDATE
FOR PARAMETERS PREVIOUSLY NOT REPORTED

LOCATION - FINAL DISCHARGE POINT FROM GARROW LAKE

CONCENTRATIONS OF EFFLUENT SAMPLED WEEKLY

Sample Taken During The Week of	Date Sample Taken	Concentration (mg/L) Cadmium	Concentration (mg/L) Mecury	Collection Method
30-Jun-08	03-Jul-08	0.000163	0.000010	Grab
7-Jul-08	10-Jul-08	0.000068	0.000010	Grab
14-Jul-08	19-Jul-08	0.000094	0.000010	Grab
21-Jul-08	24-Jul-08	*0.000141*	0.000010	Grab
28-Jul-08	31-Jul-08	*0.000199*	0.000010	Grab
4-Aug-08	7-Aug-08	0.000261	0.000010	Grab
11-Aug-08	15-Aug-08	*0.000279*	0.000010	Grab
18-Aug-08	22-Aug-08	*0.000359*	0.000010	Grab
25-Aug-08	29-Aug-08	*0.000332*	0.000010	Grab
1-Sep-08	6-Sep-08	*0.000312*	0.000010	Grab
8-Sep-08	ned[1]	ned1	ned1	ned[1]
15-Sep-08	ned[1]	ned1	ned1	ned[1]
22-Sep-08	ned[1]	ned1	ned1	ned[1]
29-Sep-08	ned1	ned1	ned1	ned1

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "pna" refers to parameter not analyzed

Concentrations in red italics were set to the detection limit

MONTHLY MEAN CONCENTRATIONS OF SUBSTANCE IN EFFLUENT

MONTH OF	Concentration (mg/L) Cadmium	Concentration (mg/L) Mercury
July/08	0.000133	0.000010
August/08	0.000308	0.000010
September/08	0.000312	0.000010

Concentrations in red italics were set to the detection limit

MASS LOADING FOR EACH DAY SAMPLED

Sample Taken During The Week of	Date Sample Taken	Kg/day		Average Daily Flow Rate (m^3/day)
		Cadmium	Mercury	
30-Jun-08	03-Jul-08	0.000141	0.000009	868
7-Jul-08	10-Jul-08			nfd[2]
14-Jul-08	19-Jul-08	0.000378	0.000040	4,017
21-Jul-08	24-Jul-08	0.000146	0.000010	1,037
28-Jul-08	31-Jul-08			nfd[2]
4-Aug-08	7-Aug-08	0.008245	0.000316	31,590
11-Aug-08	15-Aug-08	0.001635	0.000059	5,862
18-Aug-08	22-Aug-08	0.002458	0.000068	6,847
25-Aug-08	29-Aug-08	0.003289	0.000099	9,906
1-Sep-08	6-Sep-08	0.004755	0.000152	15,240
8-Sep-08	ned[1]	ned[1]	ned[1]	ned[1]
15-Sep-08	ned[1]	ned[1]	ned[1]	ned[1]
22-Sep-08	ned[1]	ned[1]	ned[1]	ned[1]
29-Sep-08	ned1	ned1	ned1	ned1

Note [1] - "ned" refers to no effluent discharge to sample

Note [2] - "nfd" refers to no flow data

MASS LOADING PER CALENDAR MONTH FOR EACH PART D-4 PARAMETER

CALENDAR MONTH OF	Kg/month[1]		Average Weekly Flow Rate[2] (m^3/week)	Total Monthly Flow Rate[3] (m^3/month)
	Cadmium	Mercury		
July/08	0.0069	0.0006	13,818	61,194
August/08	0.1211	0.0042	84,094	372,415
September/08	0.1474	0.0047	106,680	182,880

Note[1] - Total Mass Loading for Calendar month calculated by multiplying the Average Daily Mass Loading for the Month x # days in the month

Note[2] - Average Weekly Flow Rate calculated by multiplying Average Daily Flow Rate x 7 days per week

Note[3] - Total Monthly Volume calculated by multiplying Average Daily Flow Rate for the month x days in month

Appendix 3 Document #14

Nov 02, 2009 - Minister of INAC letter to NWB noting NWB letter of August 27, 2009 modifying licence.

Ministre des Affaires indiennes et
du Nord canadien et interlocuteur fédéral
auprès des Métis et des Indiens non inscrits

Minister of Indian Affairs and
Northern Development and Federal Interlocutor
for Métis and Non-Status Indians

Ottawa, Canada K1A 0H4

NOV 2 2009

Mr. Thomas Kabloona
Chair
Nunavut Water Board
PO Box 119
GJOA HAVEN NU X0B 1J0

Dear Mr. Kabloona:

Thank you for your letter of August 27, 2009, advising me of the modification to reclamation security held for the Polaris Mine under Nunavut water licence 1AR-POL0311.

I would like to thank the Nunavut Water Board for its efforts in determining a revised amount of reclamation security meant to fairly represent the costs of abandonment, site restoration and ongoing measures given the progress that the proponent, Teck-Cominco has made in progressive reclamation at the Polaris Mine site. Officials of Indian and Northern Affairs Canada are presently working with the proponent to reduce the security amount currently held for the project.

Thank you again for your letter and for your ongoing dedication in the review and approval of water use in Nunavut.

Sincerely,

Chuck Strahl

APPENDIX 4

Garrow Lake Water Column

Monitoring Data

TABLE 1
GARROW LAKE WATER COLUMN MONITORING
STATION 262-3: Garrow Lake at Centre

Depth (m)	18-Jan-02	13-Mar-02	4-Feb-03	29-Mar-03	1-Jan-04	3-May-04	13-May-05	25-Aug-05	22-May-06	21-Aug-06	3-Jun-07	25-Aug-07	27-May-08	29-Aug-08	12-Jun-09	16-Aug-09
1.5								0.131	0.231	0.19	0.235	0.168		0.177		0.1150
2							0.244	0.136	0.235	0.199	0.23	0.180		0.183	0.266	0.1180
3	0.26	0.30	0.25	0.28	0.236	0.234	0.247	0.134	0.241	0.193	0.244	0.180	0.257	0.180	0.264	0.1180
4				0.28	0.197	0.227	0.244	0.243	0.237	0.192	0.241	0.176	0.250	0.179	0.272	0.2390
5		0.32		0.29	0.209	0.247	0.228	0.267	0.25	0.187	0.234	0.185	0.251	0.179	0.260	0.2410
6				0.29	0.207	0.229	0.239	0.265	0.211	0.186	0.228	0.181	0.270	0.175	0.254	0.2460
7		0.32		0.29	0.197	0.227	0.241	0.284	0.218	0.183	0.245	0.180	0.246	0.228	0.257	0.2520
8				0.29	0.189	0.231	0.248	0.271	0.233	0.186	0.231	0.177	0.250	0.249	0.261	0.2480
9				0.30	0.702	0.816	1.120	0.552	0.359	0.287	0.246	0.218	0.249	0.241	0.255	0.2540
10	0.34	0.37	0.60	0.87	0.932	0.764	0.535	1.250	0.491	0.987	0.917	0.916	0.792	0.252	0.452	0.3690
11	1.40	1.6	1.40	0.96	0.279	0.315	0.134	0.151	0.0721	0.0903	0.0319	0.024	0.046	0.038	0.381	0.3630
12	0.68	0.60	0.585	0.52	0.27	0.262	0.120	0.104	0.0383	0.0578	0.0288	0.020	0.024	0.033	0.0201	0.0236
13	0.46	0.48	0.70	0.44	0.251	0.234	0.0812	0.105	0.0226	0.0241	0.0279	0.024	0.019	0.016	0.0146	0.0180
14	0.45	0.460	0.52	0.41	0.229	0.211	0.0482	0.0457	0.024	0.0304	0.0204		0.020		0.0153	0.0156
15	0.42	0.47	0.44	0.52	0.256	0.211	0.0378	0.0565	0.021	0.0297	0.0208	0.022	0.020	0.025	0.0153	0.0139
16	0.44	0.48	0.44	0.42	0.265	0.201	0.0429	0.0556	0.03	0.0287	0.0589		0.021	0.019	0.0149	0.0124
17	0.44	0.48	0.44	0.42	0.267	0.193	0.0435	0.0409	0.0294	0.032	0.0252	0.022	0.020	0.020	0.0152	0.0122
18	0.44	0.48	0.44	0.41	0.275	0.204	0.0440	0.0435	0.0314	0.0336	0.0238		0.020	0.017	0.0151	0.0117
19	0.44	0.48	0.45	0.42	0.266	0.202	0.0448	0.0425	0.0351	0.034	0.0208	0.021	0.021	0.018	0.0153	0.0130
20	0.43	0.50	0.46	0.40	0.260	0.197	0.0425	0.0413	0.0293	0.0346	0.0228	0.025	0.021	0.018	0.0154	0.0137
22	0.43	0.49	0.46	0.42	0.260	0.199	0.0407	0.0468	0.0301	0.0351	0.0218	0.024	0.052	0.019	0.0154	0.0124
30	0.43	0.50		0.38	0.0514	0.117	0.0310	0.0404		0.092	0.0453	0.035	0.020	0.021	0.0261	0.0184
40	0.44	0.53	0.07	0.06	0.234	0.0301	0.0214	0.0235	0.0558	0.0139					0.0119	

Note: - did not graph the data from 30m depth for May 22/06 as there is clearly a data error. The Zn = 0.561 and the TSS was 111 mg/L. The sample must have been contaminated.
- Jun-07 didn't show the 35 m depth as the sample result was disturbed and incorrect data collected.
- 27-May-08 Didn't show the 36M depth sample as zinc was 2.01. Believe that the sample was contaminated by hitting the lake bottom and creating turbidity
- 16-Aug-09 data for 39 Metres depth was discarded due to the sample being contaminated (TSS = 698) indicating the bottom sediments were disturbed.

FIGURE 1A
Last 5 YEARS - MAXIMUM ICE THICKNESS
GARROW LAKE - Station 262-3
Trend In Zinc Concentrations In The Water Column 2005 to 2009

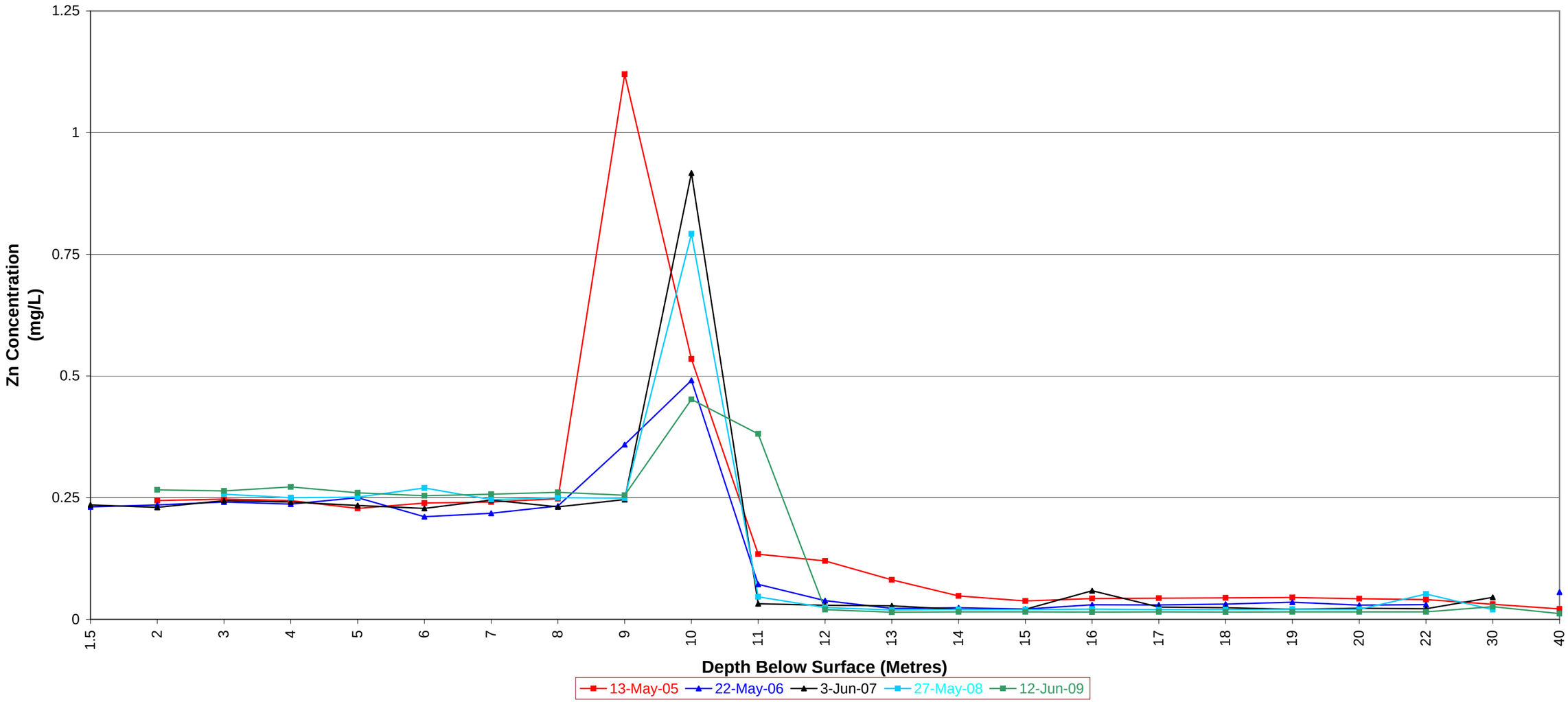


FIGURE 1B
Last 5 YEARS - MINIMUM ICE THICKNESS (i.e. Ice Free)
GARROW LAKE - Station 262-3
Trend In Zinc Concentrations In The Water Column 2005 to 2009

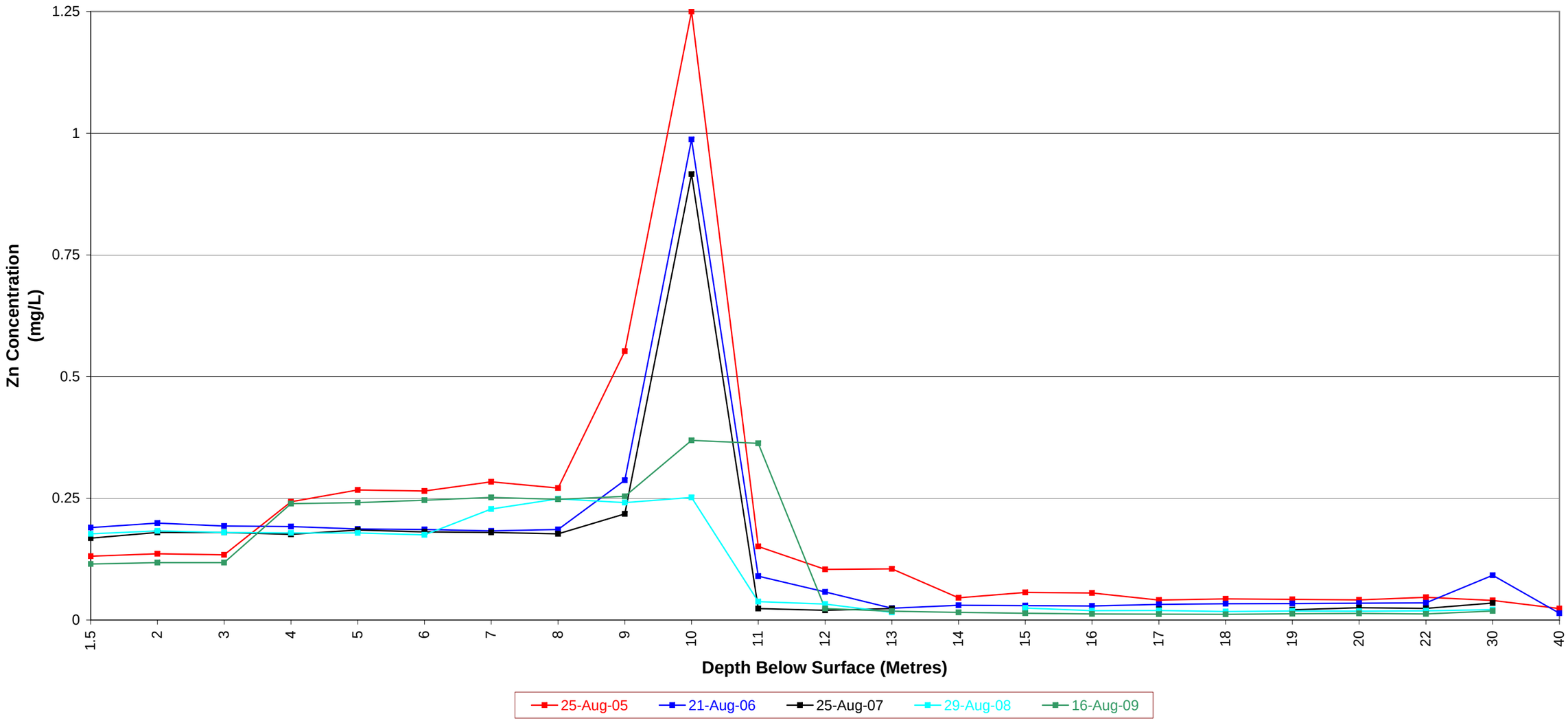


TABLE 2
GARROW LAKE
WATER COLUMN MONITORING

STATION 262-3A: Garrow Lake Near Discharge

	Zinc Concentrations mg/L											
Depth (m)	**27-Jan-04**	**3-May-04**	**13-May-05**	**25-Aug-05**	**22-May-06**	**21-Aug-06**	**3-Jun-07**	**25-Aug-07**	**27-May-08**	**29-Aug-08**	**12-Jun-09**	**16-Aug-09**
0				0.113	0.246	0.233						
1				0.112	0.244	0.218						
1.5				0.104	0.255	0.222	0.212	0.178		0.151		0.109
2			0.224	0.109	0.235	0.235	0.207	0.182		0.145	0.2820	0.111
3	0.223	0.232	0.221	0.115	0.267	0.213	0.210	0.186	0.257	0.150	0.271	0.104
4	0.211	0.230	0.231	0.176	0.205	0.215	0.207	0.186	0.250	0.155	0.272	0.205
5	0.223	0.250	0.206	0.219	0.216	0.222	0.212	0.191	0.251	0.149	0.275	0.223
6	0.202	0.240	0.219	0.230	0.243	0.217	0.191	0.180	0.270	0.152	0.276	0.234
7	0.208	0.252	0.228	0.240	0.246	0.220	0.186	0.177	0.246	0.222	0.281	0.233
8	0.223	0.228	0.264	0.253	0.237	0.221	0.167	0.201	0.250	0.216	0.253	0.233
9	1.000	0.916	0.854	0.574	0.374	0.369	0.196	0.251	0.249	0.232	0.256	0.234
10	0.423	0.496	0.501	1.090	0.983	1.190	0.720	1.030	0.792	0.495	0.704	0.250
11	0.308	0.300	0.136	0.146	0.098	0.108	0.038	0.030	0.046	0.325	0.038	0.207
12	0.297	0.283	0.106	0.094	0.059	0.080	0.025	0.023	0.024	0.018	0.020	0.029
13	0.238	0.250	0.042	0.089	0.032	0.056	0.023	0.028	0.019	0.013	0.015	0.018
14	0.241	0.203	0.041	0.030	0.031	0.037	0.017	0.021	0.020	0.022	0.015	0.014
15	0.261	0.211	0.045	0.037	0.030	0.035	0.018	0.023	0.020	0.019	0.014	0.013
16	0.270	0.193	0.041	0.040	0.032	0.034	0.018	0.020	0.021	0.018	0.014	0.013
17	0.272	0.198	0.046	0.038	0.030	0.038	0.018	0.019	0.021	0.018	0.015	0.012
18	0.265	0.198	0.039	0.037	0.026	0.032	0.019	0.021	0.021	0.018	0.014	0.013
19	0.263	0.201	0.047	0.042	0.032	0.031	0.018	0.022	0.019		0.014	0.0131
20	0.266	0.206	0.042	0.035	0.029	0.031	0.021	0.020	0.021		0.014	0.0131
22	0.267				0.029			0.023				0.0135
30	0.076											
40	0.075											

Note - The Water Licence did not require sampling of this station prior to 2004

FIGURE 2A
LAST 5 YEARS - MAXIMUM ICE THICKNESS
GARROW LAKE - Station 262-3A
Zinc Concentrations In The Water Column 2005 to 2009

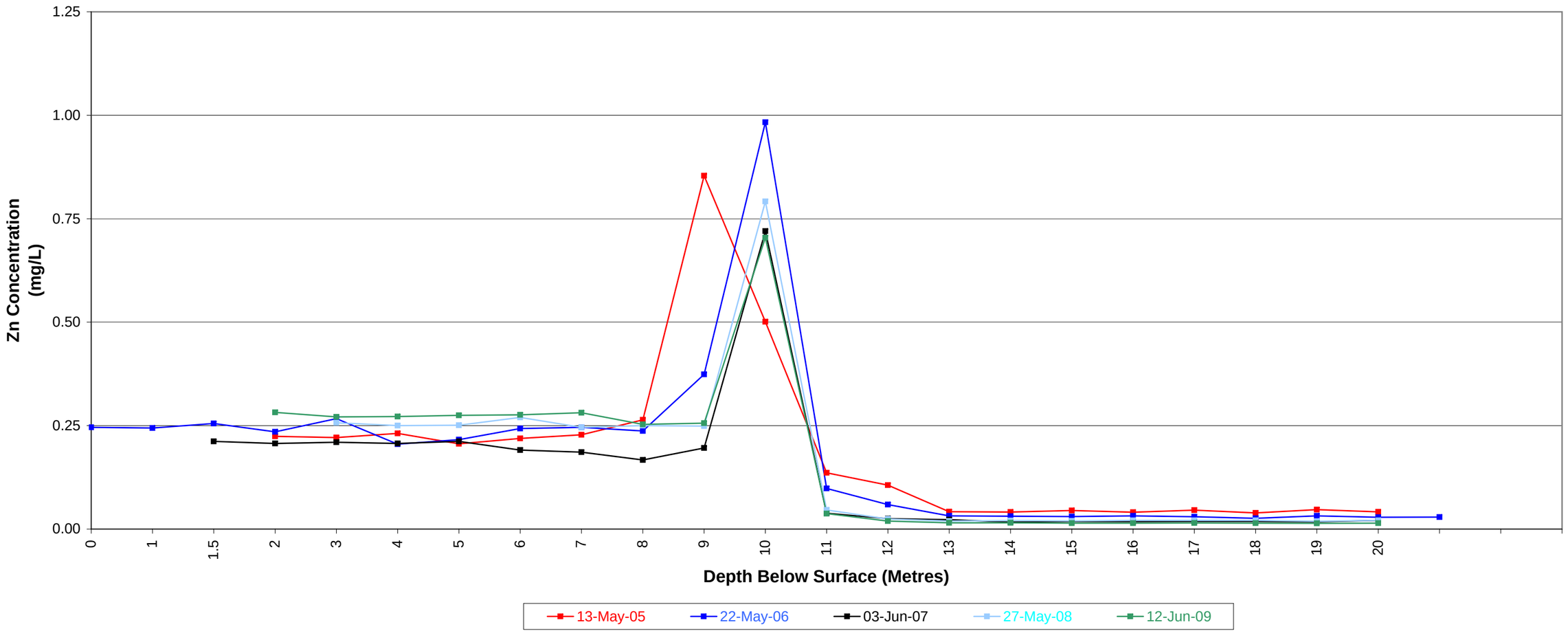
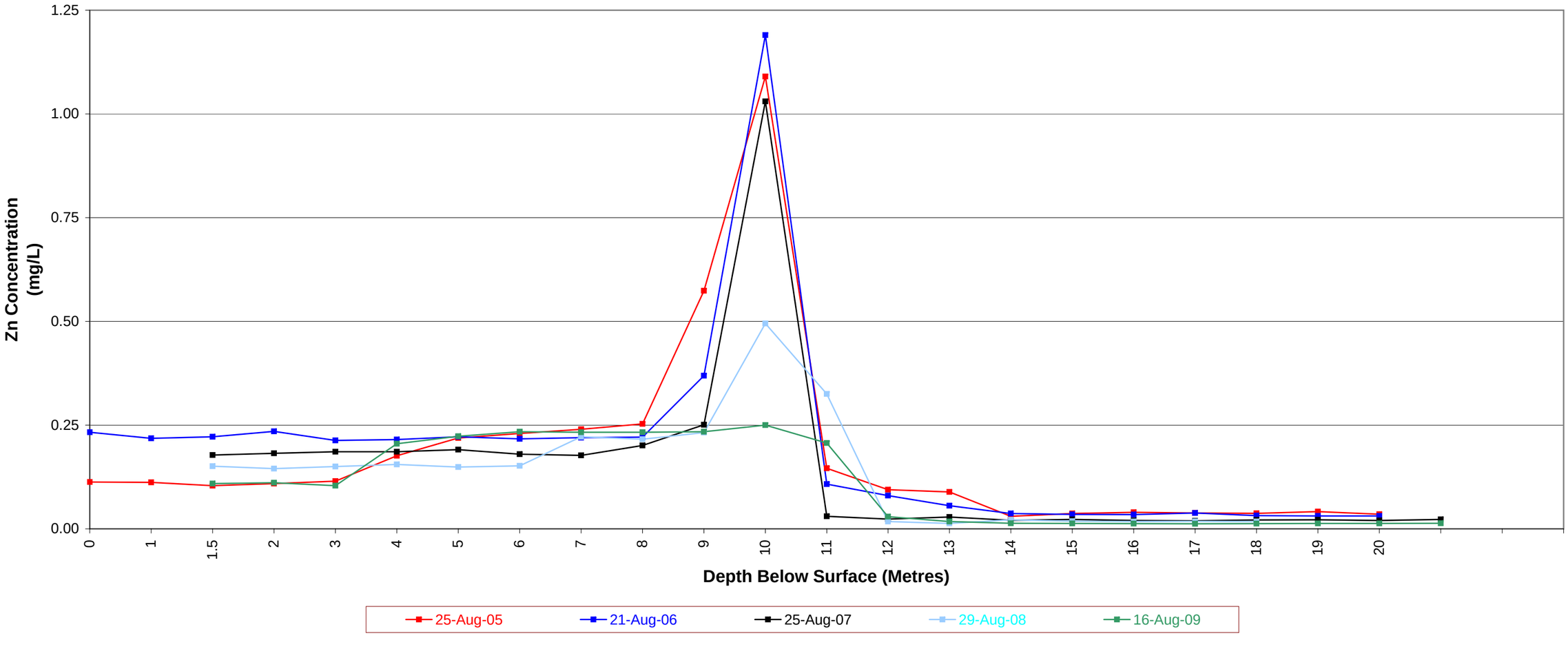


FIGURE 2B
LAST 5 YEARS - MINIMUM ICE THICKNESS (i.e. Ice Free)
GARROW LAKE - Station 262-3A
Zinc Concentrations In The Water Column 2005 to 2009



APPENDIX 5

Garrow Lake Hydrolab Data and Graphs

Figure 1
2009 Garrow Lake Conductivity - Station 262-3 (Centre of Lake)
Maximum Ice Thickness (June 12) Versus Minimum Ice Thickness (August 16)

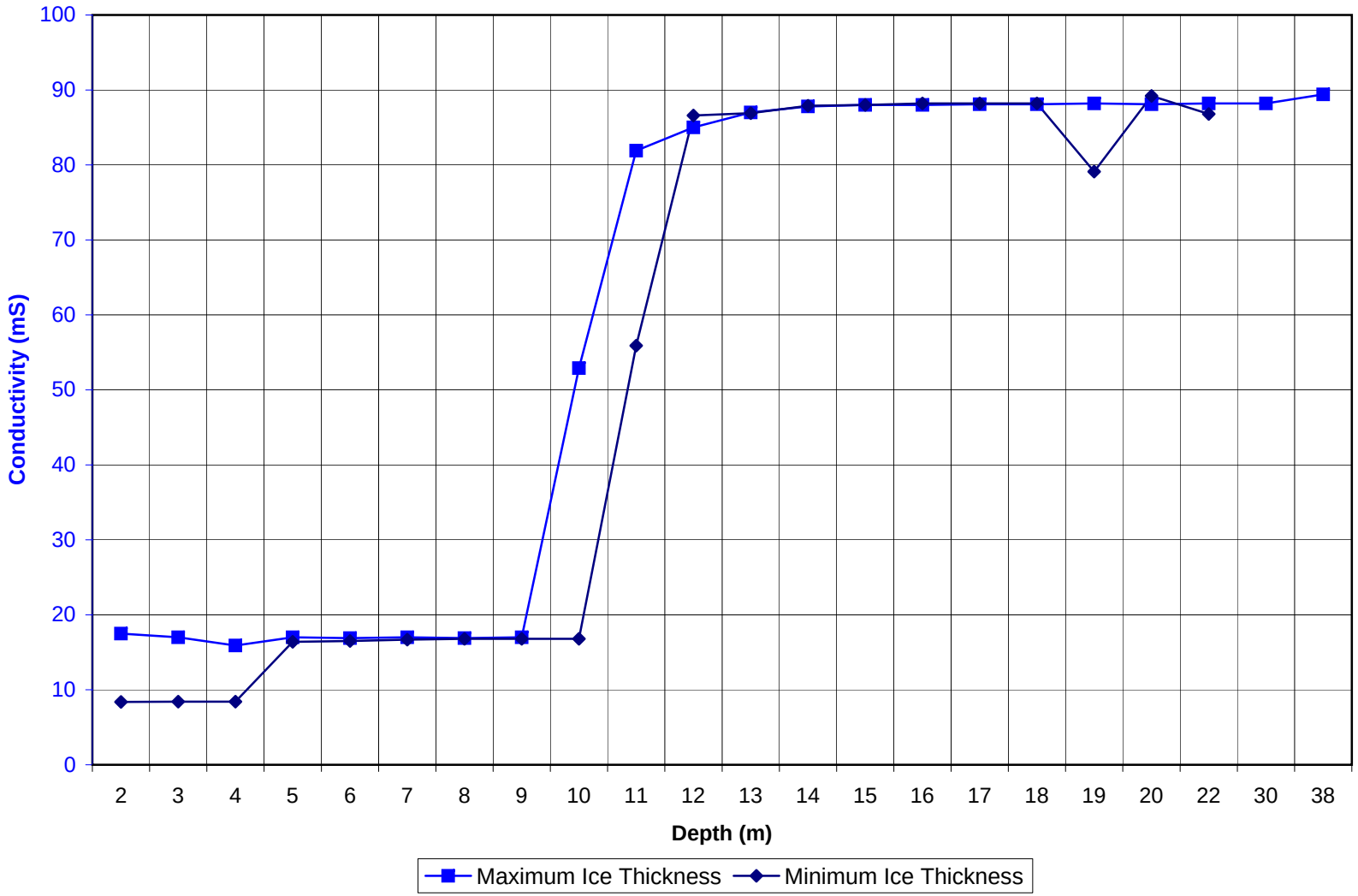


Figure 2
2009 Garrow Lake Conductivity - Station 262-3A (South of Lake)
Maximum Ice Thickness (June 12) Versus Minimum Ice Thickness (August 16)

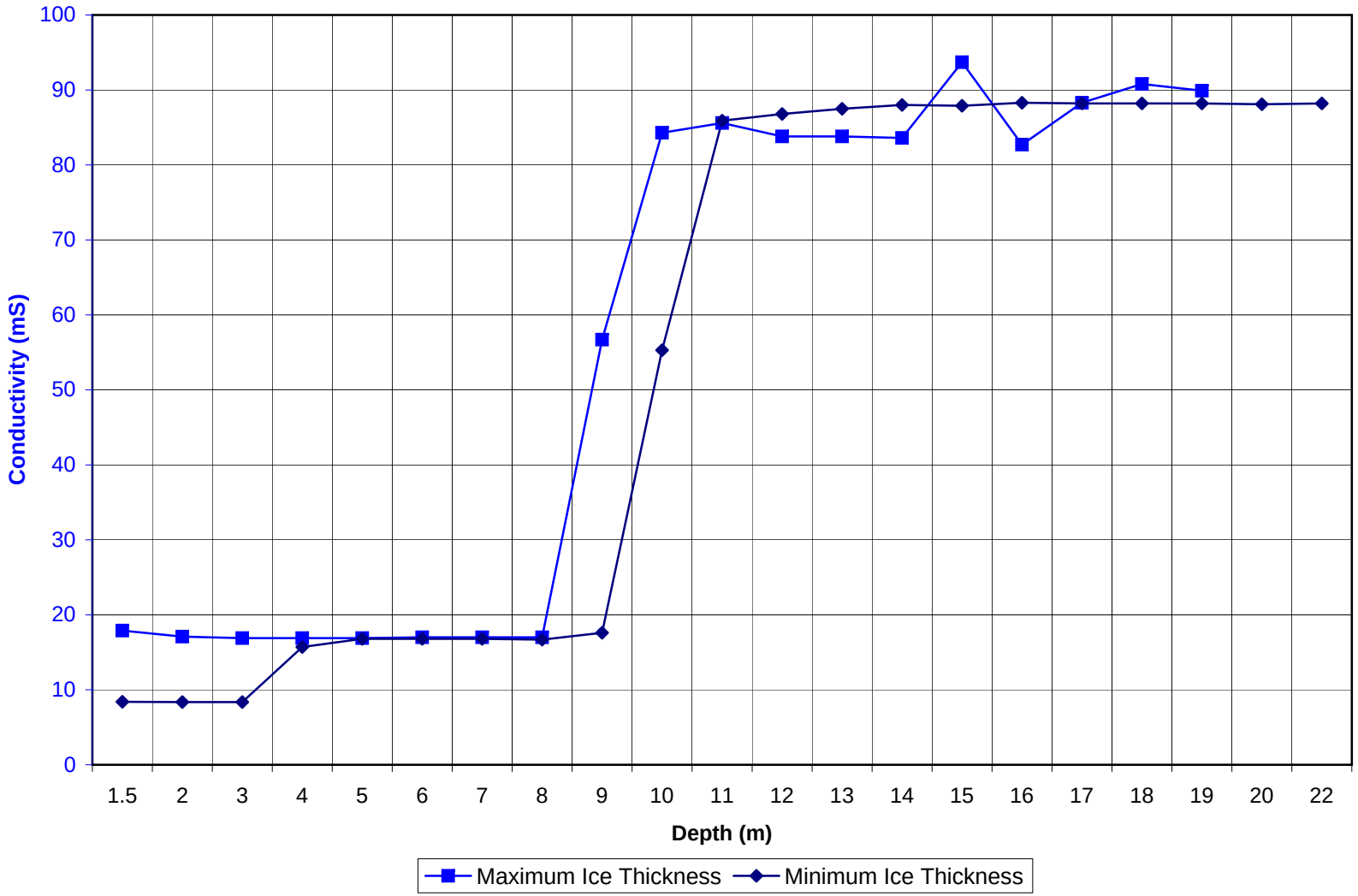


TABLE 1

2009 HYDROLAB RESULTS - GARROW LAKE - June 12th 2009

STATION 262-3 (Centre Station)

Depth	Temp (^{0}C)	DO (mg/L)	Cond (mS/cm)	pH	Redox (mV)
2	-0.65	15.56	17.5	7.67	328
3	-0.62	15.93	17	8.3	315
4	-0.64	15.73	15.9	8.58	307
5	-0.64	16.56	17	8.82	295
6	-0.64	15.73	16.9	8.91	291
7	-0.64	15.09	17	8.97	287
8	-0.62	20.53	16.9	9.04	283
9	-0.57	16.82	17	9.05	281
10	3.05	6.27	52.9	8.29	289
11	5.86	0.8	81.9	8.3	230
12	6	0.48	85	8.33	189
13	6.3	0.37	87	8.32	117
14	6.38	0.31	87.8	8.33	49
15	6.37	0.28	88	8.33	36
16	6.38	0.27	88	8.34	3
17	6.38	0.26	88.1	8.35	-12
18	6.38	0.25	88.1	8.35	-24
19	6.38	0.25	88.2	8.36	-32
20	6.38	0.22	88.1	8.37	-40
22	6.38	0.22	88.2	8.37	-48
30	6.55	0.11	88.2	8.34	-87
38	7.35	0.18	89.4	8.17	-124
Note - Data below was not graphed to maintain consistent depth data points.					
9.5	0.26	11.16	20.5	8.82	282

Ice Thickness - 11.5 ft (3.5m)

TABLE 2

2009 HYDROLAB RESULTS - GARROW LAKE - June 12th 2009

STATION 262-3A (Near Outlet)

Depth	Temp (^{0}C)	DO (mg/L)	Cond (mS/cm)	pH	Redox (mV)
2	-0.62	15.6	17.9	8.91	310
3	-0.62	15.67	17.1	9.1	303
4	-0.62	15.66	16.9	9.19	296
5	-0.62	15.66	16.9	9.29	296
6	-0.62	15.62	16.9	9.27	292
7	-0.62	16.86	17	9.24	287
8	-0.62	16.76	17	9.24	285
9	-0.48	15.33	17	9.23	282
10	3.23	4.2	56.7	8.36	296
11	5.82	0.65	84.3	8.33	192
12	6	0.4	85.6	8.35	156
13	6.35	0.38	83.8	8.33	118
14	6.37	0.3	83.8	8.34	87
15	6.37	0.25	83.6	8.35	66
16	6.37	0.21	93.7	8.36	44
17	6.38	0.27	82.7	8.38	22
18	6.37	0.24	88.3	8.38	3
19	6.38	0.2	90.8	8.39	-14
20	6.38	0.19	89.9	8.39	-22
Note - Data below was not graphed to maintain consistent depth data points.					
10.5	4.76	1.28	71.7	8.33	282

Ice Thickness - 10 ft (3m)

TABLE 3

2009 HYDROLAB RESULTS - GARROW LAKE - August 16th 2009

STATION 262-3 (Centre Station)

Depth (m)	Temperature	DO mg/L	Scond ms/cm	pH	Redox
1.5	3.41	13.48	8.39	8.75	313
2	3.42	13.37	8.42	8.79	311
3	3.43	13.38	8.41	8.81	309
4	3.75	16.57	16.4	8.88	309
5	3.81	17.1	16.5	8.92	306
6	3.8	17.23	16.7	8.95	304
7	3.53	17.05	16.8	8.95	303
8	3.08	16.93	16.8	8.98	301
9	2.96	16.84	16.8	8.99	299
10	5.06	1.41	55.9	8.14	311
11	6.9	3.16	86.6	8.27	293
12	7.12	1.44	86.9	8.25	292
13	7.38	0.69	87.9	8.21	290
14	7.01	0.26	88	8.23	207
15	6.58	0.22	88.2	8.24	178
16	6.42	0.18	88.2	8.25	167
17	6.42	0.18	88.2	8.26	159
18	6.42	0.15	79.1	8.26	152
19	6.42	0.15	89.2	8.26	148
20	6.42	0.16	86.8	8.27	140
22	Hydrolab Malfunction at 21m				
30					
38					
Note - Data below was not graphed to maintain consistent depth data points.					
9.5	3.4	13.77	18.5	8.88	300

TABLE 4

2009 HYDROLAB RESULTS - GARROW LAKE - August 16th 2009

Station 262-3A (Near Outlet)

Depth (m)	Temperature	DO mg/L	Scond ms/cm	pH	Redox
1.5	3.62	14.06	8.4	9.22	383
2	3.62	13.65	8.36	9.17	377
3	3.6	13.53	8.36	9.13	373
4	3.6	15.95	15.7	9.09	366
5	3.72	16.86	16.8	9.06	363
6	3.21	15.19	16.8	9.06	361
7	2.9	15.45	16.8	9.07	359
8	2.86	15.42	16.7	9.08	357
9	3.2	14.94	17.6	9.05	367
10	4.93	3.65	55.3	8.21	367
11	6.88	1.62	85.9	8.29	361
12	7.11	1.63	86.8	8.29	358
13	7.33	1.04	87.5	8.29	356
14	7.06	0.4	88	8.26	239
15	6.86	0.25	87.9	8.28	196
16	6.53	0.22	88.3	8.29	177
17	6.46	0.18	88.2	8.29	163
18	6.43	0.18	88.2	8.29	156
19	6.43	0.15	88.2	8.3	151
20	6.43	0.14	88.1	8.3	143
22	6.42	0.15	88.2	8.31	130
Note - Data below was not graphed to maintain consistent depth data points.					
9.5	3.9	11.57	25.5	8.71	361

APPENDIX 6

Electronic Copy of Report on CD