teckcominco

July 22, 2008

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 – 2008 1st and 2nd Decommissioning and Reclamation Monitoring Report (Water Licence #NWB1POL0311)

Please find attached the Polaris Mine 2008 1st and 2nd Quarter Decommissioning and Reclamation Monitoring Reports.

The attached reports are in paper format complete with a CD containing electronic copies of the reports in pdf format.

If there are any questions with regard to these reports, please contact the undersigned.

Yours truly,

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

Enclosures:

- 1st and 2nd Quarter 2008 Decommissioning and Reclamation Report – Paper and Electronic versions.

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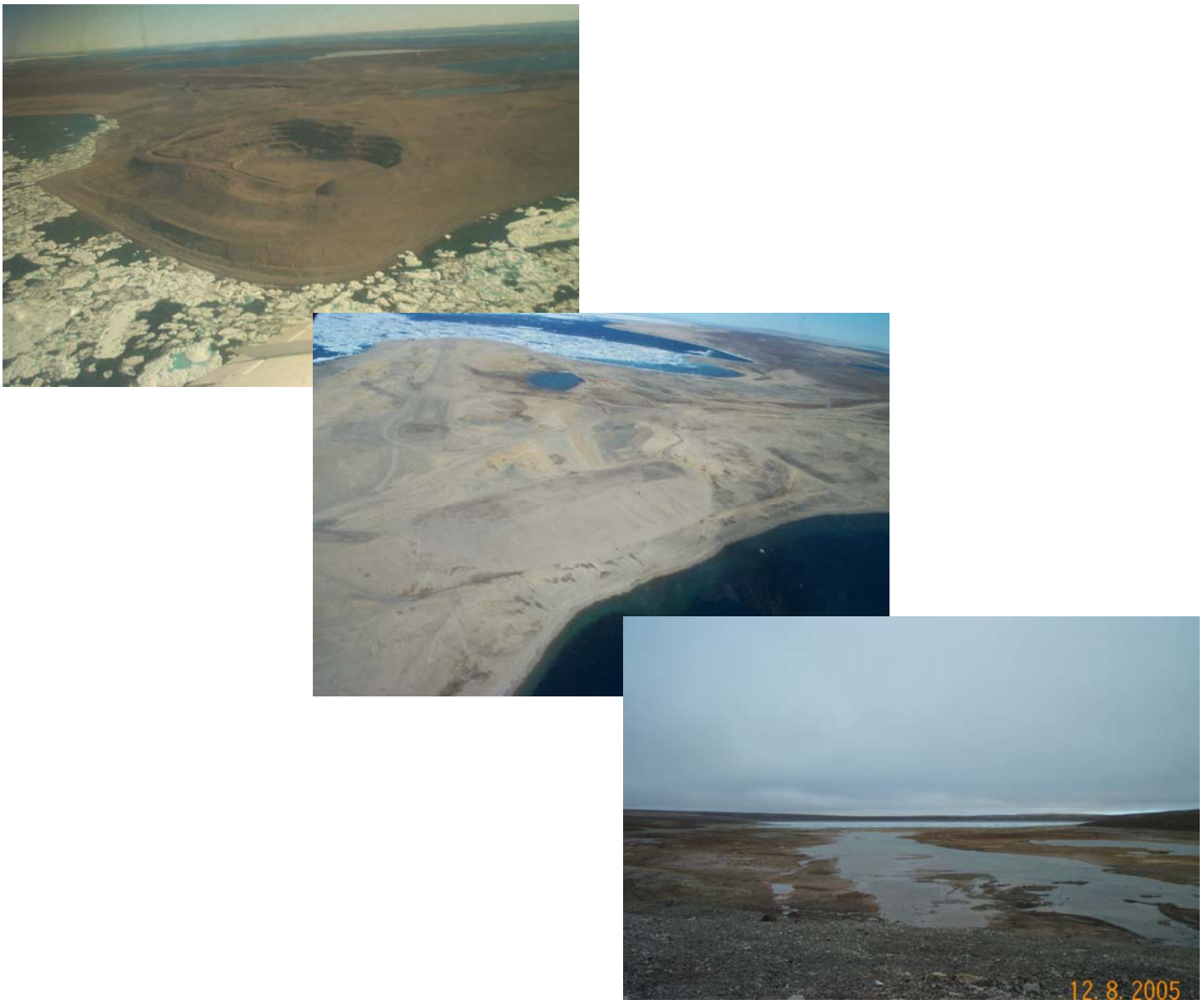
POLARIS MINE
2008 1ST AND 2ND QUARTER DECOMMISSIONING AND RECLAMATION REPORT

FOR THE
NUNAVUT WATER BOARD
AND
INDIAN AND NORTHERN AFFAIRS CANADA



POLARIS MINE

2008 1ST AND 2ND QUARTER

DECOMMISSIONING AND RECLAMATION REPORT

DISTRIBUTION

Nunavut Water Board
- Manager of Licensing - 2 copies

Indian and Northern Affairs Canada
- Manager, Lands Administration – 1 copy

Teck Cominco Metals Ltd.
- Reclamation Manager (Kimberley) – 2 copies

POLARIS MINE

2008 1ST AND 2ND QUARTER

DECOMMISSIONING AND RECLAMATION REPORT

LIST OF APPENDICES

APPENDIX 1 – Executive Summary in Inuktitut

APPENDIX 2 - May 27, 2008 Garrow Lake Water Quality and Stratigraphy Monitoring Results

APPENDIX 3 - May 27, 2008 Garrow Lake Graphs of Water Quality Monitoring Results

APPENDIX 4 – cd with electronic version (pdf) of this Report

2008 POLARIS MINE 1ST AND 2ND QUARTER POST-RECLAMATION MONITORING REPORT

INTRODUCTION

During the 1st and 2nd Quarters of 2008 the Polaris Mine site remained unoccupied due to winter weather conditions. As there was no effluent discharge from Garrow Lake, the only monitoring undertaken was the spring sampling of Garrow Lake. An executive summary of information for the 1st and 2nd Quarter in Inuktitut is provided in Appendix 1.

1st Quarter, 2008

During the 1st Quarter of 2008, the Polaris Mine remained un-occupied by personnel. No monitoring events occurred during the quarter.

The Water Licence requires a mid-winter sampling of Garrow Lake stratigraphy for water quality parameters. At mid-winter the site was not safely accessible. Charter aircraft will not fly to the site due to the dark conditions without the site having runway lighting and visual confirmation from the ground of landing conditions.

There was no data collected of temperature conditions in the Little Red Dog Landfill or the Operational Landfill as there was no one at the site during the quarter. However, data loggers are installed on the thermistors at both landfills so the data is being collected daily over the winter and the data will be retrieved in July and reported in the 2008 3rd quarter monitoring report.

Due to winter conditions at the site throughout the 1st Quarter reporting period, there was no discharge from Garrow Lake and thus there was no effluent discharge to monitor.

2nd Quarter, 2008

During the majority of the 2nd Quarter the Polaris Mine site remained un-occupied by personnel. However, monitoring of the water column of Garrow Lake was completed in late May to capture the Maximum Ice Thickness conditions as required by the Water Licence (the ice was approximately 2m thick).

There was no effluent flow to monitor from the site during the quarter there is no effluent data to report.

The Decommissioning and Reclamation Plan approvals have a number of parameters that must be monitored in addition to the monitoring requirements identified in the Water Licence. The majority of the monitoring required each year at the site will be undertaken during the 3rd Quarter.

1. **Garrow Lake Water Quality and Stratigraphy Monitoring**
   Please find attached to this report the sample analysis from ALS Laboratories for the May 27, 2008 sampling event of Garrow Lake (Appendix 2). This represents the Maximum Ice Thickness monitoring event required by the Water Licence.

   The commercial laboratory continues to have difficulty analyzing TSS parameters for the waters of Garrow Lake due to the high salt content. As in the past, the lab is not having success in eliminating salt in the water from leaving residues on the filter paper during the TSS analysis resulting in TSS concentrations that are incorrect.

The data continues to confirm that the stratigraphy of the lake is intact and stable and that zinc concentrations in the water column are low.

Appendix 3 contains the following information:

1. Table 1 – Is a summary of zinc concentrations from 2002 to May 2008 for monitoring Station 262-3
   - Figure 1A – Is a graph of the data contained in Table 1. It shows substantial reductions in zinc concentrations below the halocline since 2002. Zinc concentrations above the halocline have shown a modest decrease since 2004 but have significant variability from year to year.
   - Figure 1B – Is a graph of the last 4 years of data from Table 1 selected to reduce the clutter of the previous graph and more clearly demonstrate the recent trends.

2. Table 2 – Is a summary of zinc concentrations from 2004 to May 2008 at Station 262-3A.
   - Figure 2A – Is a graph of all data contained in Table 2. The data shows the same trends as for monitoring Station 262-3.
   - Figure 2B – Is a graph of the last 4 years of data in Table 2 to reduce clutter seen on the previous graph. The recent trend of stable zinc concentrations above the halocline and reducing concentrations below the halocline are apparent.

3. Table 3 – Is a summary of 2008 May zinc concentrations for Stations 262-3 and 262-3A for comparison purposes.
   - Figure 3A – Is a graph of the 2008 zinc concentrations from Table 3 for Stations 262-3 and 262-3A. It is important to note the data from both 262-3 and 262-3A are virtually identical which reinforces our long standing contention that sampling at both of the two locations is not necessary. Sampling since 2004 verifies that the data being collected at the two sample locations are virtually identical and does not warrant the expense of collecting data at Station 262-3A.

2. Notification of Intent to Initiate Planned Discharge of Effluent from the Tailings Impoundment Area (Part D, Section 1)

The date of initiation of effluent discharge is no longer under the control of Teck Cominco as siphoning is no longer required. As part of the approved site decommissioning plan, Garrow Dam was removed in 2004 and discharge from the lake occurs naturally.

3. Water Quality and Environmental Effects Monitoring Program

There was no effluent discharge from Garrow Lake in the 2nd Quarter.

4. Landfill Temperature Monitoring

Landfill temperature data was not collected during the Quarter as there was only one day where anyone was on site (and were fully occupied collecting Garrow Lake data). As there are data loggers on the landfill thermistors, the data will be collected during the 3rd Quarter and reported at along with the other 3rd Quarter data collected.

Electronic File of Report

Refer to Appendix 4 for an electronic copy of this report in pdf format.

APPENDIX 1

EXECUTIVE SUMMARY OF 1ST AND 2ND QUARTER 2008

POLARIS MINE POST RECLAMATION MONITORING

REPORT

TRANSLATED INTO INUKTITUT

ᑭᓯᒧᒪᓐᓕᒃ

ᓯᔭᕐᓴᐅᓐᓂᖅ ᐊᐃᕐᓴᐅᓐᓂᕐᓗ ᑎᓴᒪᐃᑕᖅᖃᖅᓴᓄᑦ ᐊᔪᕐᓇᒪᓴᓄᑦ ᐅᓂᒃᓄᑦ 2008ᖃᐅᑎᓗᒍ ᒪᓕᕐᓂᐸᐅᑦ ᐅᓴᖅᓯᐅᕐᖓᓕᖅᑐᑦ ᐃᓄᐃᖅᑕᐅᖅᖃᓕᖅᑐᑦ ᐃᓚᖃᖅᑐᑦ ᐅᐸᐃᖅᓴᑦ ᓯᕗᓕᖅ. ᐊᓐᔭᖅᑕᐃᖅᓯᒪᑦ ᑎᐊᖅ ᑕᓯᖅᓂᖅ, ᑕᐃᒪ ᐅᐊᓯᐅᕐᓴᐅᓇᖅᑐᑐᐃᓕᐅᑦ ᐅᐱᖅᓱᐊᑦ ᖃᐅᔨᓴᕕᐅᑎᓱᖅ ᐃᒪᖅ ᑎᐊᖅ ᑕᓯᖅᓂᖅᓱᖅ.

ᓯᔭᕐᓴᖅ ᑎᓴᒪᐃᑕᖅᖃᖅᓴᓄᑦ, 2008ᒥ

ᑕᓪᓕ ᓯᔭᕐᓴᖅᓂᖅ ᑎᓴᒪᐃᑕᖅᖃᖅᓴᑦ 2008ᒥ, ᒪᓕᕐᓂᐸᐅ ᐅᓴᖅᓯᐅᕐᖓᓕᖅᑐᑦ ᐃᓄᖅᖃᓗᐅᓕᕐᐅᑐᑦ ᐃᖅᓇᐃᓴᒥᖅᓯᓂᖅ. ᐅᐊᓯᐅᕐᓴᐅᓂᖅ ᑲᔪᓯᓂᖅᓴᓄᑦ ᓯᔭᕐᓴᖅᓂᖅ ᑎᓴᒪᐃᑕᖅᖃᖅᓴᓄᑦ.

ᐃᒪᖏᓪᓗ ᐱᔪᓇᐅᑎᖅ ᐱᓵᓕᐊᖅᑎᓯᒪᓕᒃ ᐅᐸᐅᖅᓯᔪᓄᑦ ᖃᐅᔨᓴᕕᐅᑎᓱᖏᓐᓂᖅ ᐃᒪᖏᑦ ᒥᐊᑦ ᑕᓯᖅᓂᒃ ᕿᓇᐅᒃᑐᖅᓯᒪᓂᖅ ᐃᓕᖅᑐᑦ ᐱᔪᓇᐅᑎᖅ ᐃᓕᓴᐅᓂᖅ ᐅᖃᓕᓴᐅᑎᖅᓯᒪᓂᖅ. ᐅᐸᐅᔨᑦ ᐊᑕᖏᓇᖅᑐᓂ ᐅᖃᓕᓴᐅᓂᖅᓱᖅ. ᓴᓐᑕᔨᑦ ᖃᖅᓯᑕᔨᑦ ᑕᐃᔨᖅᓯᖅᑎᑦᓯᓇᖅᓱᓇᖅᑎᓕᒃ ᐃᓕᐅᑦ ᐱᔪᓇᐅᑎᖅ ᑕᓪᓕᖅᑐᓂᖅ ᑕᐅᔨᒪᓂᖅ ᒪᒃᑯᓂᖅ ᐃᓕᓴᐅᓂᖅᓱᖅ. ᑭᓯᐊᓂᓕ, ᑎᑎᕋᓕᖅᓴᓕᒃ ᑎᑎᕋᖅᑕᐊᖅᓱᓇᖅᓯᒪᓂᖅ ᐃᓕᓴᐅᓂᖅᓱᖅ ᐃᓕᓴᐅᓂᖅᓱᖅ ᑕᐃᓕᖅᑐᑦ

- ᖃᐅᔨᓴᕕᒃ 1ΔΓᑦ - ᐊᒻᒪᓗᓯᒪᓂᖅ ᐊᑎᓕᓴᐃᓯᒪᓂᖅ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅ Δ͵ᓕᓐᓄᓂᑐᖅ ᑭᐳ 1Γ. ᓴᖅᑭᑦᑎᑭᔪᖅ ᒥᑭᓕᕆᕋᔾᔪᑕᒪᔭᓯᒪᔪᓐᓇᓂᓄᒃ ᓴᐃᔾᔨᒃᓴᐅᓕ᙮ ᑐᓂᖅᑐᑦ ᐅᑐᑐᕋᐅᔾᔪᑕᒪᔭᓯᒪᓂᖅ ᑕᐃᒪᓄᓂ 2002Γᓂᑦ. ᓴᐃᔾᔨᒃᓴᖅ ᐅᓄᒌᓂᕐᑦ ᖃᐅᔨᓴᕕᒃᑐᔪᑦ ᓇ͵ᓇᐃᑭᔪᖅ ᒥᒃᓕᓕᒫᑦᑐᓗᓂᓄᒃ ᑕᐃᒪᓄᓂᑦ 2004Γᓂᑦ ᑭᓯᐊᓂ ᐅᐸᖏᓗᑎᒍᑦᒥᒃ ᐊᐅᑎᕐᓂᖃᖅᖃᑦᒪᑦ ᐊᖏᔪᒪᓂᒃᑐᑦᒥᑦ ᐊᖏᔪᐅᓂᒪᑦ.

2. ᑭᐳ 2 - ᓇᐃᓕᑎᐊᖏᓪᓗᒪᔪᖅ ᐅᓂᒃᑲᓕᐊᖅ ᓴᐃᔾᔨᒃᓴᖃᓂᖓ 2004Γᑦ ᒪᐃ 2008ᒧᑦ ᑐᖃᑦᕕᒃ 262-3ΔΓ.
   - ᖃᐅᔨᓴᕕᒃ 2ΔΓ - ᑕᓇ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅ Δ͵ᓕᓐᓄᓂᑐᖅ ᑭᐳ 2Γ. ᑕᓇ ᑎᑎᖏᓪᓗᒪᔪᖅ ᓇ͵ᓇᐃᑭᔪᖅ ᓭᓕ ᑕᐃᒪᐃᑐᓂᓐᓄᓂᕐᕆᐅ ᐅᐊᓱᐅᐅᓂᐊᑐᑦ 262-3Γᑐᑦ.
   - ᖃᐅᔨᓴᕕᒃ 2ΑΓ - ᑕᓇ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅ ᓴᖅᑎᑭᔪᖅ ᑭᖓᔪᓕᓴᐅᓂᒃ ᑎᓴᒪᓂ ᐊᖏᔪᓂᒃ ᑎᑎᖏᓪᓗᒪᔪᓐᓇ ᑭᐳ 2Γ ᒥᑭᓕᕆᓂᑐᖅ ᑭᓱᑭᓇᖃᖅᓂᓐᓇ ᓭᐅᓂᐊᓂ ᑕᐻᓴᐅᖃᐅᔾᔨᑦ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅᑎᑦ. ᒪᓇᕋᒋᑦ ᖃᓄᐃᓕᓐᓄᓂᓐᓇ ᖃᓄᐃᓕᖃᓕᓂᕆᓇᓂ ᓴᐃᔾᔨᒃᓴᖅᓂᓐᓇ ᐅᔾᔨᖓᓕᒫᑦ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅᑎᑦ ᐊᒪᓗ ᒥᑭᓕᕆᓂᑐᖅ ᓴᐃᔾᔨᒃᓴᖅᓂᓐᓇ ᑐᓂᓯᔪᓐᓇ ᐅᔾᔨᖓᓕᒫᑦ ᐊᖏᔪᓂᒃ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅᑎᑦ ᐊᒪᓗ ᑕᐻᓴᐅᖃᐅᔾᔨᑦ ᑐᓂᓯᔪᓐᓇ ᓴᐃᔾᔨᒃᓴᖅᓂᓐᓇ ᐅᔾᔨᖓᓕᒫᑦ ᐊᖏᔪᓂᒃ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅᑎᑦ.

3. ᑭᐳ 3 - ᓇᐃᓕᑎᐊᖏᓪᓗᒪᔪᖅ 2008Γ ᒪᐃᖅᑎᓗᒍ ᓴᐃᔾᔨᒃᓴᖃᓂᖓ ᑐᖃᑦᕕᒃ 262-3Γ ᐊᒪᓗ 262-3ΔΓ ᖃᓄᑎᑎ ᐊᐅᑎᖅᑎᑎᒪᓕᒃᑐᑦ ᖃᐅᔨᓴᕕᖅᑦ.
   - ᖃᐅᔨᓴᕕᒃ 3ΔΓ - ᑕᓇ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅ 2008ᖅᑎᓗᒍ ᖃᓄᑎᑎ ᓴᐃᔾᔨᒃᓴᖃᖅᑎᑎᒪᓕᒃᑐᑦ ᑭᐳ 3Γᑦ ᑐᖃᑦᕕᒃ 262-3Γᑦ ᐊᒪᓗ 262-3ΔΓᑦ. ᐱᒪᓂᐅᔾᔭᖅ ᐅᔾᔨᓴᓂᐊᓕᓂᒃ ᑕᕐᕕᐊ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅᑎᑦ ᐊᒥᐅᑎᐊᖅᑐᒃ ᑕᒪᓕᐅᓂᒃ 262-3Γᑦ ᐊᒪᓗ 262-3ΔΓᑦ ᐊᐅᑎᑎᐊᖅᑐᒃ ᑕᒪᓕᓗᓂ ᓇᓗᓇᐃᓕᓴᐅᓂᖅ ᐊᐅᓚᐅᔾᔪᑎᒃ ᖃᓄᖅᑲᓇᐃᔾᔪᑎᒃᑐᑦ ᐊᒥᐅᑎᐊᖅᑐᒃ ᐊᒪᓗ ᐱᓕᓂᐊᖅᑐᖓᓄᑦ ᑭᓇᐅᔨᓴᖅᑐᒥᒃ ᖃᐅᔨᓴᕕᖅᑦ ᑐᓂᓯᔪᓐᓇ ᑎᑎᕋᐅᔾᔪᑕᒪᔭᖅᑎᑦ ᑐᖃᑦᕕᒃ 262-3ΔΓᑦ.

2. ᓇᓗᓇᐃᔾᔨᓂᖅ ᖃᓄᐃᓕᖃᐅᔨᓕᓂᒥᒃ ᑲᔪᓯᑎᑕᐅᔾᔨᑯᓗᒍ ᕿᔾᓇᑕᐅᔨᓯᒪᓂᖓ ᑯᒥᑦ ᑯᐃᑎᓂᓂᖅ ᐊᒥᐊᑯᔾᔨᓗᑯᓂᓂᑦ ᑯᐃᓱᑦᓴᐃᐅᓇᐅᔾᔨᑎᒥᑦ (ᐃᓇᖓ ᑎ, ᐊᔪᑐᒥᒪᔪᑦ 1Γ)
ᐅᓗᖓ ᑲᔪᓯᐊᔾᓂᐅᓇᐅᑐᑦ ᑯᐃᑎᑕᐅᓂᖓ ᑯᒥᑦ ᒪᓇᐅᔪᖅ ᐊᐅᓇᑕᐅᔪᓇᓄᑐᑎᓐᓄᖅ ᑎᑲ ᑲᒥᑯᑯᓇᑦ ᐱᔪᐊᑎᓗᒍ ᒥᓗᐊᔾᔨᑕᐅᔾᔨᓴᓂᖅᑐᑦ. ᐃᓇᒥᖅᑲᐅᔪᑎᑲᖓ ᐊᖏᑕᐅᔾᔪᑕᒪᔭᓕᑦ ᓄᓇᐅᔪᖅ ᐅᒪᑎᑦᑕᐅᓂᖓᓄᑦ ᕿᔾᓇᐅᑎᖅᑐᓂ, ᑎᐊᖅ ᔪᒥᖓ ᐱᔾᑕᐅᓇᐅᑐᓂᖅ 2004ᖅᑎᓗᒍ ᐊᒪᓗ ᐃᓄᓂᑦ ᐊᐅᓇᑕᐅᓇᓂ ᑯᓱᐅᑦᑐᖅ ᑕᓪᓕᒥᑦ.

3. ᐃᒪᐅᑦ ᐱᐅᓂᖓᓕ ᐊᕐᑎᑎᐅᓗ ᓪᓂᑦᑕᐅᓂᖓᓕ ᐅᐊᓪᔨᐅᓂᖓᓕ ᑲᒪᒋᔨᐅᓂᖓ
ᐅᐃᑎᑎᑕᐅᓇᐅᖏᑐᖅ ᑯᖏᒥᑦ ᑎᐊᖅ ᑕᓪᓕᖅᑐᑦ ᐊᐃᕐᓇᓕᑕᖓᓂᑦ ᑎᑎᒪᐃᓕᑕᖓᓂᑦ.

4. ᐊᑲᑕᖏᐅᑦ ᓂᑲᓕᓐᓂᖓᓕ ᐅᐊᓪᔨᐅᓂᖓ
ᐊᑲᑕᖏᐅᑦ ᓂᑲᓕᓐᓂᖓᓕ ᑎᑎᕋᓪᓕᒪᔭᖏᑦ ᐱᔨᑕᓕᐅᔾᔨᖏᑐᑦ ᑕᕐᓂ ᑎᒪᒪᐃᕕᖓᖓᓄᖓ ᐱᔭᑎᑎᓗᒍ ᐅᓗᑎᒃ ᐊᑕᐅᓪᓕᒥ ᐃᓇᑲᑕᓄᐅᓕᑦ ᑕᐃᑲᓂ (ᐊᒪᓗ ᐱᕕᓇᐅᓕᑕ ᓇᐊᑎᓗᑎᒃ ᑭᐳᑦ ᑕᓪᓕᖅᑐᑦ ᓇᐊᑎᓗᒍᖏᑦᑐᓂ). ᑎᑎᕋᐸᕕᐊᔭᓂᒃ ᐱᑕᖓᒪᑦ ᐊᑲᑕᖏᐅᑦ ᓂᕕᓪᓕᓂᖓᓕ ᖃᐅᔨᓴᕕᖅᑐᖏᓂᒃ, ᑕᕐᕕᐊ ᑎᑎᕋᓪᓕᒪᔭᖅ ᓇᐊᑎᓗᒍᖏᑦᑐᑦ ᐱᖓᓱᖓᓂ ᑎᒪᒪᐃᕕᖓᖓᓄᑦ ᑎᑎᕋᓪᓕᒪᔭᖅᑐᑦ ᐊᒪᓗ ᐅᓂᒃᑳᐅᔾᔨᓪᓗᒍ ᐃᓕᐅᔾᔭᓂᒃ ᐱᖓᓱᖓᓂ ᑎᒪᒪᐃᕕᖓᖓᓄᑦ ᑎᑎᕋᓪᓕᒪᔭᖅᑐᑦ ᓇᐊᑎᓗᒍᖏᑦᑐᑦ ᓇᐊᑎᓗᒍᖏᑦᑐᓂ.

<u>ᐅᐊᓱᓂᑦ ᑎᑎᕋᓪᓕᒪᔭᑦ ᐅᓂᒃᑳᑦ</u>

ᖃᐅᔨᓴᕐᔪᐊᓘᓐᓃᑦ ᐃᓕᓴᐊᔾᑦ 4Γ ᐅᐊᓱᓂᑦ ᐊᔨᖓᓂ ᐅᒪ ᐅᓂᒃᑳᑦ ᖃᓇᑕᐅᔾᓂᑦ ᐅᖃᓕᒫᓂᐅᔾᔨᑎᒃ ᐊᑐᑦᓗᑎᒃ.

APPENDIX 2

May 27, 2008 GARROW LAKE

WATER QUALITY AND STRATIGRAPHY

MONITORING RESULTS

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

ANALYTICAL REPORT

TECK COMINCO METALS LTD.

ATTN: BRUCE DONALD

BAG 2000

KIMBERLEY BC V1A 3E1

Reported On: 08-JUL-08 03:58 PM

Lab Work Order #: L636944 **Date Received:** 02-JUN-08

Project P.O. #: 7397
Job Reference: 80325
Legal Site Desc:
CofC Numbers: C048506, C048507

Other Information:

Comments: Some of the metals detection limits were increased due to high levels of metals in these samples.

Andre Langlais
Account Manager

ALS Canada Ltd.
Part of the **ALS Laboratory Group**
1988 Triumph Street, Vancouver, BC V5L 1K5
Phone: +1 604 253 4188 Fax: +1 604 253 6700 www.alsglobal.com
A Campbell Brothers Limited Company

ALS LABORATORY GROUP ANALYTICAL REPORT

	Sample ID	L636944-1	L636944-2	L636944-3	L636944-4	L636944-5
	Description					
	Sampled Date	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08
	Sampled Time	14:10	14:12	14:14	14:16	14:16
	Client ID	GLC 17m	GLC 18m	GLC 19m	GLC 20m	GLC 20Am
Grouping	**Analyte**					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	87600	87600	87600	87600	87700
	Hardness (as CaCO3) (mg/L)	12300	12500	12400	12100	12000
	pH (pH)	7.63	7.65	7.68	7.63	7.65
	Salinity (EC) (g/L)	63.1	63.1	63.1	63.1	63.2
	Total Suspended Solids (mg/L)	13.2	<3.0	15.2	17.9	15.2
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	438	435	432	439	433
	Sulphide as S (mg/L)		0.094		0.089	0.084
Total Metals	Aluminum (Al)-Total (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Arsenic (As)-Total (mg/L)	0.00022	0.00028	0.00035	<0.00020	<0.00020
	Cadmium (Cd)-Total (mg/L)	<0.000020	<0.000020	<0.000020	<0.000020	0.000023
	Calcium (Ca)-Total (mg/L)	786	799	798	772	770
	Copper (Cu)-Total (mg/L)	0.000340	0.000355	0.000366	0.000382	0.000384
	Iron (Fe)-Total (mg/L)	0.312	0.323	0.346	0.334	0.335
	Lead (Pb)-Total (mg/L)	0.000724	0.000755	0.000792	0.000781	0.000844
	Magnesium (Mg)-Total (mg/L)	2520	2550	2530	2480	2460
	Manganese (Mn)-Total (mg/L)	0.0895	0.0900	0.0919	0.0922	0.0944
	Mercury (Hg)-Total (mg/L)	0.000031	0.000023	0.000021	0.000021	0.000024
	Molybdenum (Mo)-Total (mg/L)	<0.025	<0.025	<0.025	<0.025	<0.025
	Nickel (Ni)-Total (mg/L)	0.00551	0.00564	0.00586	0.00586	0.00589
	Zinc (Zn)-Total (mg/L)	0.0200	0.0201	0.0207	0.0206	0.0210

ALS LABORATORY GROUP ANALYTICAL REPORT

Grouping	Analyte	Sample ID: L636944-6 Description: Sampled Date: 27-MAY-08 Sampled Time: 14:30 Client ID: GLC 22m	L636944-7 27-MAY-08 14:55 GLC 30m	L636944-8 27-MAY-08 15:08 GLC 36m	L636944-9 27-MAY-08 16:55 GLS 17m	L636944-10 27-MAY-08 16:57 GLS 18m
SEAWATER						
Physical Tests	Conductivity (uS/cm)	86600	88200	88600	87700	87600
	Hardness (as CaCO3) (mg/L)	11500	12100	12900	12500	12000
	pH (pH)	7.64	7.64	7.62	7.64	7.69
	Salinity (EC) (g/L)	62.3	63.7	64.0	63.2	63.1
	Total Suspended Solids (mg/L)	18.5	14.5	138	3.9	23.2
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	432	436	427	438	434
	Sulphide as S (mg/L)	0.058	0.81	0.81		0.097
Total Metals	Aluminum (Al)-Total (mg/L)	<0.50	<0.50	1.66	<0.50	<0.50
	Arsenic (As)-Total (mg/L)	<0.00020	0.00021	0.00043	<0.00020	0.00032
	Cadmium (Cd)-Total (mg/L)	0.000082	<0.000020	0.00815	<0.000020	0.000021
	Calcium (Ca)-Total (mg/L)	751	782	870	806	769
	Copper (Cu)-Total (mg/L)	0.000656	0.000248	0.0320	0.000432	0.000342
	Iron (Fe)-Total (mg/L)	0.319	0.327	10.4	0.332	0.334
	Lead (Pb)-Total (mg/L)	0.00898	0.00113	0.832	0.000775	0.000748
	Magnesium (Mg)-Total (mg/L)	2340	2470	2600	2540	2460
	Manganese (Mn)-Total (mg/L)	0.0891	0.0828	0.218	0.0903	0.0888
	Mercury (Hg)-Total (mg/L)	0.000024	0.000027	0.000024	0.000027	0.000025
	Molybdenum (Mo)-Total (mg/L)	<0.025	<0.025	<0.025	<0.025	<0.025
	Nickel (Ni)-Total (mg/L)	0.00565	0.00351	0.00743	0.00572	0.00543
	Zinc (Zn)-Total (mg/L)	0.0519	0.0198	2.01	0.0211	0.0209

ALS LABORATORY GROUP ANALYTICAL REPORT

	Sample ID	L636944-11	L636944-12	L636944-13	L636944-14	L636944-15
	Description					
	Sampled Date	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08	
	Sampled Time	16:59	17:02	17:02	17:05	
	Client ID	GLS 19m	GLS 20m	GLS 20Am	GL BLANK	TRAVEL BLANK
Grouping	**Analyte**					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	87600	87600	87700	3.7	<2.0
	Hardness (as CaCO3) (mg/L)	12200	12100	12300	<0.50	<0.50
	pH (pH)	7.65	7.67	7.66	5.72	5.61
	Salinity (EC) (g/L)	63.1	63.1	63.2	<1.0	<1.0
	Total Suspended Solids (mg/L)	16.5	7.8	17.2	<3.0	<3.0
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	438	438	433	<2.0	<2.0
	Sulphide as S (mg/L)		0.077	0.095	<0.020	<0.020
Total Metals	Aluminum (Al)-Total (mg/L)	<0.50	<0.50	<0.50	<0.0010	<0.0010
	Arsenic (As)-Total (mg/L)	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
	Cadmium (Cd)-Total (mg/L)	<0.000020	0.000022	<0.000020	<0.000020	<0.000020
	Calcium (Ca)-Total (mg/L)	784	777	797	<0.050	<0.050
	Copper (Cu)-Total (mg/L)	0.000326	0.000361	0.000339	0.000324	0.000059
	Iron (Fe)-Total (mg/L)	0.295	0.326	0.311	<0.010	<0.010
	Lead (Pb)-Total (mg/L)	0.000809	0.000800	0.000727	<0.000050	<0.000050
	Magnesium (Mg)-Total (mg/L)	2480	2470	2510	<0.10	<0.10
	Manganese (Mn)-Total (mg/L)	0.0857	0.0910	0.0859	<0.000050	<0.000050
	Mercury (Hg)-Total (mg/L)	0.000019	0.000018	0.000020	<0.000010	<0.000010
	Molybdenum (Mo)-Total (mg/L)	<0.025	<0.025	<0.025	<0.000050	<0.000050
	Nickel (Ni)-Total (mg/L)	0.00517	0.00567	0.00548	0.000175	0.000124
	Zinc (Zn)-Total (mg/L)	0.0190	0.0210	0.0198	<0.00050	<0.00050

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Analytical Method Reference(Based On)
ALK-C-COL-VA	Seawater	Alkalinity by Colourimetric (seawater)	APHA 310.2

This analysis is carried out using procedures adapted from EPA Method 310.2 "Alkalinity". Total Alkalinity is determined using the methyl orange colourimetric method.

AS-TOT-C-HVAAS-VA	Seawater	Total Arsenic in Seawater by HVAAS	PUGET SOUND PROTOCOLS, EPA 7000 SERIES

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis of the seawater is by atomic absorption/emission spectrophotometry (EPA Method 7000 series).

EC-C-PCT-VA	Seawater	Conductivity (Automated) (seawater)	APHA 2510 Auto. Conduc.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

HARDNESS-CALC-VA	Seawater	Hardness	APHA 2340B

Hardness is calculated from Calcium and Magnesium concentrations, and is expressed as calcium carbonate equivalents.

HG-TOT-C-CVAFS-VA	Seawater	Total Mercury in Seawater by CVAFS	PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedure involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry (EPA Method 245.7).

MET-TOT-C-ICP-VA	Seawater	Total Metals in Seawater by ICPOES	PUGET SOUND PROTOCOLS, EPA 6010B

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis is by inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).

MET-TOT-C-LOW-MS-VA	Seawater	Total Metals in Seawater by ICPMS	PUGET SOUND PROTOCOLS, EPA 6020A

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis is by atomic inductively coupled plasma - mass spectrometry (EPA Method 6020A).

MET-TOT-SPE-MS-VA	Seawater	Total Metals in Seawater by SPE ICPMS	PUGET SOUND PROTOCOLS, EPA 6020A

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995, and with procedures adapted from Cetac Technologies Incorporated. A suspended particulate resin (SPR), consisting of immobilized iminodiacetate (IDA) on a divinylbenzene polymer, is used to chelate and preconcentrate metals in seawater. Instrumental analysis is by inductively coupled plasma mass spectrometry (ICPMS).

PH-C-MAN-VA	Seawater	pH by Manual Meter (seawater)	APHA 4500-H "pH Value"

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.

PH-C-PCT-VA	Seawater	pH by Meter (Automated) (seawater)	APHA 4500-H "pH Value"

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

S2-C-T-COL-VA	Seawater	Tot. Sulphide by Colorimetric (seawater)	APHA 4500-S2 "Sulphide"

This analysis is carried out using procedures adapted from APHA Method 4500-S2 "Sulphide". Sulphide is determined using the methlyene blue colourimetric method.

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Analytical Method Reference(Based On)
SALINITY-C-EC-VA	Seawater	Salinity by calc. using EC (seawater)	APHA 2520 B

This analysis is carried out using procedures adapted from APHA Method 2520 "Salinity". Salinity is determined using a samples conductivity and the Practical Salinity Scale.

TSS-C-VA	Seawater	Solids by Gravimetric (seawater)	APHA 2540 Gravimetric

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids (TSS) are determined by filtering a sample through a glass fibre filter, TSS is determined by drying the filter at 104 degrees celsius.

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.
The last two letters of the above ALS Test Code column indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA		

GLOSSARY OF REPORT TERMS
Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in enviromental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.
The reported surrogate recovery value provides a measure of method efficiency.
mg/kg (units) - unit of concentration based on mass, parts per million
mg/L (units) - unit of concentration based on volume, parts per million
N/A - Result not available. Refer to qualifier code and definition for explanation

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

CHAIN OF CUSTODY / ANALYTICAL REQUEST FORM

CANADA TOLL FREE 1-800-668-9878

www.alsenviro.com

COC # C048506

REPORT TO:	**REPORT FORMAT / DISTRIBUTION**
COMPANY: Teck Cominco Metals Ltd	STANDARD ✓ OTHER ____
CONTACT: Bruce Donald	PDF ✓ EXCEL ✓ CUSTOM ____ FAX ____
ADDRESS: Bag 2000 Kimberley, BC V1A 3E1	EMAIL 1: bruce.donald@teckcominco.com
PHONE: 250-427-8405 FAX: 250-427-8451	EMAIL 2: alaudrum@gartnerlee.com
INVOICE TO: SAME AS REPORT ? (YES) / NO	INDICATE BOTTLES: FILTERED / PRESERVED (F/P) → → →
COMPANY:	**CLIENT / PROJECT INFORMATION:**
CONTACT:	JOB #: 80325
ADDRESS:	PO / AFE:
	Legal Site Description:
PHONE: FAX:	QUOTE #:
Lab Work Order # (lab use only): L636944	SAMPLER (Initials): CK

SERVICE REQUESTED

- X REGULAR SERVICE (DEFAULT)
- RUSH SERVICE (2-3 DAYS)
- PRIORITY SERVICE (1 DAY or ASAP)
- EMERGENCY SERVICE (<1 DAY / WEEKEND) - CONTACT ALS

ANALYSIS REQUEST

Sample #	SAMPLE IDENTIFICATION (This description will appear on the report)	DATE	TIME	SAMPLE TYPE	General Chemistry	Total Metals	Sulphide	HAZARDOUS ?	HIGHLY CONTAMINATED ?	NUMBER OF CONTAINERS
	GLC 17m	May 27/08	2:10	Seawater	X	X				
	GLC 18m	"	2:12	"	X	X	X			
	GLC 19m	"	2:14	"	X	X				
	GLC 20m	"	2:16	"	X	X	X			
	GLC 20Am	"	2:16	"	X	X	X			
	GLC 22m	"	2:30	"	X	X	X			
	GLC 30m	"	2:55	"	X	X	X			
	GLC 36m	"	3:08	"	X	X	X			
	GLS 17m	"	4:55	"	X	X				
	GLS 18m	"	4:57	"	X	X	X			

GUIDELINES / REGULATIONS

SPECIAL INSTRUCTIONS / HAZARDOUS DETAILS

Water is hypersaline, for TSS run 1-2L distilled through filters,
Total Metals preserved with HNO_3; Sulphide preserved with NaOH and zinc acetate

Failure to complete all portions of this form may delay analysis. Please fill in this form *LEGIBLY*.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse page of the white report copy.

RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
Curtis Kidd	May 28/2pm		53/612
RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:

SAMPLE CONDITION (lab use only)

TEMPERATURE	SAMPLES RECEIVED IN GOOD CONDITION ? YES / NO (If no provide details)
14°C	

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

CHAIN OF CUSTODY / ANALYTICAL REQUEST FORM

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COC # C048507

REPORT TO: Same as Page 1	REPORT FORMAT / DISTRIBUTION
COMPANY:	STANDARD ____ OTHER ____
CONTACT:	PDF ____ EXCEL ____ CUSTOM ____ FAX ____
ADDRESS:	EMAIL 1:
	EMAIL 2:
PHONE: FAX:	
INVOICE TO: SAME AS REPORT ? (YES) / NO	INDICATE BOTTLES: FILTERED / PRESERVED (F/P) → → →
COMPANY:	CLIENT / PROJECT INFORMATION:
CONTACT:	JOB #: 80325
ADDRESS:	PO /AFE:
	Legal Site Description:
PHONE: FAX:	QUOTE #:
Lab Work Order # (lab use only)	SAMPLER (Initials): CK

SERVICE REQUESTED	
X	REGULAR SERVICE (DEFAULT)
	RUSH SERVICE (2-3 DAYS)
	PRIORITY SERVICE (1 DAY or ASAP)
	EMERGENCY SERVICE (<1 DAY / WEEKEND) - CONTACT ALS

ANALYSIS REQUEST

Sample #	SAMPLE IDENTIFICATION (This description will appear on the report)	DATE	TIME	SAMPLE TYPE	General Chemistry	Total Metals	Sulphide	HAZARDOUS ?	HIGHLY CONTAMINATED ?	NUMBER OF CONTAINERS
	GLS 19m	May 27/08	4:59	Seawater	X	X				
	GLS 20m	"	5:02	"	X	X	X			
	GLS 20Am	"	5:02	"	X	X	X			
	GL Blank	"	5:05	water	X	X	X			

GUIDELINES / REGULATIONS

SPECIAL INSTRUCTIONS / HAZARDOUS DETAILS

Refer to page 1 - General Chemistry had no preservatives added.

Failure to complete all portions of this form may delay analysis. Please fill in this form *LEGIBLY*.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse page of the white report copy.

RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
Curtis Kidd	May 28/2pm		8/6/2
RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
			10

SAMPLE CONDITION (lab use only)

TEMPERATURE	SAMPLES RECEIVED IN GOOD CONDITION ? YES / NO (If no provide details)
11.4°C	

ANALYTICAL REPORT

TECK COMINCO METALS LTD.

ATTN: BRUCE DONALD

BAG 2000

KIMBERLEY BC V1A 3E1

Reported On: 08-JUL-08 04:02 PM
Revision: 1

Lab Work Order #: **L636951** **Date Received:** **02-JUN-08**

Project P.O. #: 7397
Job Reference: 80325
Legal Site Desc:
CofC Numbers: C048504, C048505

Other Information:

Comments: Some of the metals detection limits were increased due to high levels of metals in these samples.

Andre Langlais
Account Manager

ALS LABORATORY GROUP ANALYTICAL REPORT

	Sample ID	L636951-1	L636951-2	L636951-3	L636951-4	L636951-5
	Description					
	Sampled Date	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08
	Sampled Time	13:35	13:37	13:40	13:42	13:44
	Client ID	GLC 3m	GLC 4m	GLC 5m	GLC 6m	GLC 7m
Grouping	**Analyte**					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	16600	16600	16600	16600	16600
	Hardness (as CaCO3) (mg/L)	2040	2080	2050	1970	2030
	pH (pH)	7.92	8.01	8.01	8.00	8.01
	Salinity (EC) (g/L)	9.9	9.9	9.9	9.9	9.9
	Total Suspended Solids (mg/L)	<3.0	<3.0	4.5	3.1	3.8
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	155	155	153	157	158
	Sulphide as S (mg/L)				<0.020	
Total Metals	Aluminum (Al)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Arsenic (As)-Total (mg/L)	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
	Cadmium (Cd)-Total (mg/L)	0.000670	0.000669	0.000628	0.000685	0.000623
	Calcium (Ca)-Total (mg/L)	172	177	173	164	171
	Copper (Cu)-Total (mg/L)	0.00134	0.00108	0.00110	0.00118	0.00105
	Iron (Fe)-Total (mg/L)	0.013	<0.020	<0.020	<0.010	<0.020
	Lead (Pb)-Total (mg/L)	0.000469	0.000189	0.000141	0.000143	0.000118
	Magnesium (Mg)-Total (mg/L)	391	397	392	378	389
	Manganese (Mn)-Total (mg/L)	0.00676	0.00679	0.00675	0.00735	0.00670
	Mercury (Hg)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Molybdenum (Mo)-Total (mg/L)	0.0029	0.0033	0.0031	0.0035	0.0034
	Nickel (Ni)-Total (mg/L)	0.00497	0.00483	0.00488	0.00524	0.00471
	Zinc (Zn)-Total (mg/L)	0.257	0.250	0.251	0.270	0.246

ALS LABORATORY GROUP ANALYTICAL REPORT

	Sample ID	L636951-6	L636951-7	L636951-8	L636951-9	L636951-10
	Description					
	Sampled Date	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08
	Sampled Time	13:46	13:48	13:48	13:51	13:54
	Client ID	GLC 8m	GLC 9m	GLC 9Am	GLC 10m	GLC 11m
Grouping	**Analyte**					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	16600	16600	16600	50000	86500
	Hardness (as CaCO3) (mg/L)	2020	2050	2000	6260	12200
	pH (pH)	7.82	8.00	8.02	7.69	7.68
	Salinity (EC) (g/L)	9.9	9.9	9.9	33.3	62.2
	Total Suspended Solids (mg/L)	5.1	3.8	5.8	15.1	37.1
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	159	156	151	219	431
	Sulphide as S (mg/L)				<0.020	
Total Metals	Aluminum (Al)-Total (mg/L)	<0.050	<0.050	<0.050	<0.10	<0.50
	Arsenic (As)-Total (mg/L)	<0.00020	<0.00020	0.00032	0.00022	<0.00020
	Cadmium (Cd)-Total (mg/L)	0.000648	0.000639	0.000638	0.00179	0.000049
	Calcium (Ca)-Total (mg/L)	171	176	168	458	807
	Copper (Cu)-Total (mg/L)	0.00109	0.00110	0.00106	0.00226	0.000743
	Iron (Fe)-Total (mg/L)	<0.020	<0.020	<0.020	0.012	0.094
	Lead (Pb)-Total (mg/L)	0.000125	0.000118	0.000112	0.000529	0.00237
	Magnesium (Mg)-Total (mg/L)	387	391	383	1240	2470
	Manganese (Mn)-Total (mg/L)	0.00693	0.00671	0.00687	0.0658	0.117
	Mercury (Hg)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	0.000012
	Molybdenum (Mo)-Total (mg/L)	0.0029	0.0030	0.0032	0.0051	<0.025
	Nickel (Ni)-Total (mg/L)	0.00493	0.00484	0.00497	0.00836	0.00841
	Zinc (Zn)-Total (mg/L)	0.250	0.249	0.251	0.792	0.0462

ALS LABORATORY GROUP ANALYTICAL REPORT

Grouping	Analyte	Sample ID: L636951-11 Description: Sampled Date: 27-MAY-08 Sampled Time: 13:57 Client ID: GLC 12m	L636951-12 27-MAY-08 13:59 GLC 13m	L636951-13 27-MAY-08 14:01 GLC 14m	L636951-14 27-MAY-08 14:03 FLC 15m	L636951-15 27-MAY-08 14:08 GLC 16m
SEAWATER						
Physical Tests	Conductivity (uS/cm)	86800	87800	87700	87900	87900
	Hardness (as CaCO3) (mg/L)	12100	12300	12500	12000	12100
	pH (pH)	7.70	7.76	7.71	7.67	7.70
	Salinity (EC) (g/L)	62.5	63.3	63.2	63.4	63.4
	Total Suspended Solids (mg/L)	25.8	41.8	31.1	33.8	41.1
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	434	433	434	437	436
	Sulphide as S (mg/L)	<0.020		0.121		0.107
Total Metals	Aluminum (Al)-Total (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Arsenic (As)-Total (mg/L)	0.00028	0.00038	<0.00020	0.00030	<0.00020
	Cadmium (Cd)-Total (mg/L)	0.000023	<0.000020	<0.000020	<0.000020	<0.000020
	Calcium (Ca)-Total (mg/L)	797	812	835	783	789
	Copper (Cu)-Total (mg/L)	0.000556	0.000348	0.000380	0.000410	0.000387
	Iron (Fe)-Total (mg/L)	0.158	0.320	0.360	0.352	0.373
	Lead (Pb)-Total (mg/L)	0.000545	0.000754	0.000810	0.000797	0.000819
	Magnesium (Mg)-Total (mg/L)	2460	2500	2530	2430	2460
	Manganese (Mn)-Total (mg/L)	0.117	0.0892	0.0938	0.0924	0.0922
	Mercury (Hg)-Total (mg/L)	0.000012	0.000018	0.000016	0.000018	0.000016
	Molybdenum (Mo)-Total (mg/L)	<0.025	<0.025	<0.025	<0.025	<0.025
	Nickel (Ni)-Total (mg/L)	0.00821	0.00531	0.00581	0.00552	0.00575
	Zinc (Zn)-Total (mg/L)	0.0243	0.0194	0.0204	0.0199	0.0209

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Analytical Method Reference(Based On)
ALK-C-COL-VA	Seawater	Alkalinity by Colourimetric (seawater)	APHA 310.2

This analysis is carried out using procedures adapted from EPA Method 310.2 "Alkalinity". Total Alkalinity is determined using the methyl orange colourimetric method.

AS-TOT-C-HVAAS-VA	Seawater	Total Arsenic in Seawater by HVAAS	PUGET SOUND PROTOCOLS, EPA 7000 SERIES

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis of the seawater is by atomic absorption/emission spectrophotometry (EPA Method 7000 series).

EC-C-PCT-VA	Seawater	Conductivity (Automated) (seawater)	APHA 2510 Auto. Conduc.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

HARDNESS-CALC-VA	Seawater	Hardness	APHA 2340B

Hardness is calculated from Calcium and Magnesium concentrations, and is expressed as calcium carbonate equivalents.

HG-TOT-C-CVAFS-VA	Seawater	Total Mercury in Seawater by CVAFS	PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedure involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry (EPA Method 245.7).

MET-TOT-C-ICP-VA	Seawater	Total Metals in Seawater by ICPOES	PUGET SOUND PROTOCOLS, EPA 6010B

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis is by inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).

MET-TOT-C-LOW-MS-VA	Seawater	Total Metals in Seawater by ICPMS	PUGET SOUND PROTOCOLS, EPA 6020A

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis is by atomic inductively coupled plasma - mass spectrometry (EPA Method 6020A).

MET-TOT-SPE-MS-VA	Seawater	Total Metals in Seawater by SPE ICPMS	PUGET SOUND PROTOCOLS, EPA 6020A

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995, and with procedures adapted from Cetac Technologies Incorporated. A suspended particulate resin (SPR), consisting of immobilized iminodiacetate (IDA) on a divinylbenzene polymer, is used to chelate and preconcentrate metals in seawater. Instrumental analysis is by inductively coupled plasma mass spectrometry (ICPMS).

PH-C-PCT-VA	Seawater	pH by Meter (Automated) (seawater)	APHA 4500-H "pH Value"

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

S2-C-T-COL-VA	Seawater	Tot. Sulphide by Colorimetric (seawater)	APHA 4500-S2 "Sulphide"

This analysis is carried out using procedures adapted from APHA Method 4500-S2 "Sulphide". Sulphide is determined using the methlyene blue colourimetric method.

SALINITY-C-EC-VA	Seawater	Salinity by calc. using EC (seawater)	APHA 2520 B

This analysis is carried out using procedures adapted from APHA Method 2520 "Salinity". Salinity is determined using a samples conductivity and the Practical Salinity Scale.

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Analytical Method Reference(Based On)
TSS-C-VA	Seawater	Solids by Gravimetric (seawater)	APHA 2540 Gravimetric

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids (TSS) are determined by filtering a sample through a glass fibre filter, TSS is determined by drying the filter at 104 degrees celsius.

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.
The last two letters of the above ALS Test Code column indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA		

GLOSSARY OF REPORT TERMS
Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in enviromental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.
The reported surrogate recovery value provides a measure of method efficiency.
mg/kg (units) - unit of concentration based on mass, parts per million
mg/L (units) - unit of concentration based on volume, parts per million
N/A - Result not available. Refer to qualifier code and definition for explanation

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

CHAIN OF CUSTODY / ANALYTICAL REQUEST FORM

CANADA TOLL FREE 1-800-668-9878

www.alsenviro.com

COC # C048504

REPORT TO:	REPORT FORMAT / DISTRIBUTION	SERVICE REQUESTED
COMPANY: Teck Cominco Metals Ltd	STANDARD ✓ OTHER ____	X REGULAR SERVICE (DEFAULT)
CONTACT: Bruce Donald	PDF ✓ EXCEL ✓ CUSTOM ____ FAX ____	RUSH SERVICE (2-3 DAYS)
ADDRESS: Bag 2000 Kimberley, BC V1A 3E1	EMAIL 1: bruce.donald@teckcominco.com	PRIORITY SERVICE (1 DAY or ASAP)
PHONE: 250-427-8405 FAX: 250-427-8451	EMAIL 2: glaudrum@gartnerlee.com	EMERGENCY SERVICE (<1 DAY / WEEKEND) - CONTACT ALS
INVOICE TO: SAME AS REPORT ? (YES) NO	INDICATE BOTTLES: FILTERED / PRESERVED (F/P) → → →	ANALYSIS REQUEST
COMPANY:	CLIENT / PROJECT INFORMATION:	
CONTACT:	JOB #: 80325	
ADDRESS:	PO /AFE:	
	Legal Site Description:	
PHONE: FAX:	QUOTE #:	
Lab Work Order # (lab use only): L636951	SAMPLER (Initials): CK	

Sample #	SAMPLE IDENTIFICATION (This description will appear on the report)	DATE	TIME	SAMPLE TYPE	General Chemistry	Total Metals	Sulphide								HAZARDOUS ?	HIGHLY CONTAMINATED ?	NUMBER OF CONTAINERS
	GLC 3m	May 27/08	1:35	Seawater	X	X											
	GLC 4m	"	1:37	"	X	X											
	GLC 5m	"	1:40	"	X	X											
	GLC 6m	"	1:42	"	X	X	X										
	GLC 7m	"	1:44	"	X	X											
	GLC 8m	"	1:46	"	X	X											
	GLC 9m	"	1:48	"	X	X											
	GLC 9Am	"	1:48	"	X	X											
	GLC 10m	"	1:51	"	X	X	X										
	GLC 11m	"	1:54	"	X	X											

GUIDELINES / REGULATIONS

SPECIAL INSTRUCTIONS / HAZARDOUS DETAILS

Water is hypersaline, for TSS measurement run 1-2 L distilled through filters
Total metals have been preserved with HNO_3 Sulphide preserved with NaOH + Zinc Acetate

Failure to complete all portions of this form may delay analysis. Please fill in this form *LEGIBLY*.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse page of the white report copy.

RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
Curtis Kidd			
RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:

SAMPLE CONDITION (lab use only)

TEMPERATURE	SAMPLES RECEIVED IN GOOD CONDITION ? YES / NO (If no provide details)
11.0°C	

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

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COC # C048505

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COMPANY:	STANDARD ____ OTHER ____
CONTACT:	PDF ____ EXCEL ____ CUSTOM ____ FAX ____
ADDRESS:	EMAIL 1:
	EMAIL 2:
PHONE: FAX:	
INVOICE TO: SAME AS REPORT ? (YES) NO	INDICATE BOTTLES: FILTERED / PRESERVED (F/P) → → →
COMPANY:	CLIENT / PROJECT INFORMATION:
CONTACT:	JOB #: 80325
ADDRESS:	PO /AFE:
	Legal Site Description:
PHONE: FAX:	QUOTE #:
Lab Work Order # (lab use only)	SAMPLER (Initials): CK

SERVICE REQUESTED

- X REGULAR SERVICE (DEFAULT)
- RUSH SERVICE (2-3 DAYS)
- PRIORITY SERVICE (1 DAY or ASAP)
- EMERGENCY SERVICE (<1 DAY / WEEKEND) - CONTACT ALS

ANALYSIS REQUEST

Sample #	SAMPLE IDENTIFICATION (This description will appear on the report)	DATE	TIME	SAMPLE TYPE	General Chemistry	Total Metals	Sulphide								HAZARDOUS ?	HIGHLY CONTAMINATED ?	NUMBER OF CONTAINERS
	GLC 12m	May 27/08	1:57	Seawater	X	X	X										
	GLC 13m	"	1:59	"	X	X											
	GLC 14 m	"	2:01	"	X	X	X										
	GLC 15 m	"	2:03	"	X	X											
	GLC 16m	"	2:08	"	X	X	X										

GUIDELINES / REGULATIONS

SPECIAL INSTRUCTIONS / HAZARDOUS DETAILS

* Refer to page 1 - General Chemistry pre had no preservative added

Failure to complete all portions of this form may delay analysis. Please fill in this form *LEGIBLY*.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse page of the white report copy.

RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:

SAMPLE CONDITION (lab use only)

TEMPERATURE	SAMPLES RECEIVED IN GOOD CONDITION ? YES / NO (If no provide details)
12.9	

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

ANALYTICAL REPORT

TECK COMINCO METALS LTD.

ATTN: BRUCE DONALD

BAG 2000

KIMBERLEY BC V1A 3E1

Reported On: 08-JUL-08 05:33 PM
Revision: 2

Lab Work Order #: **L636965** **Date Received:** **02-JUN-08**

Project P.O. #: 7397
Job Reference: 80325
Legal Site Desc:
CofC Numbers: C048502, C048503

Other Information:

Comments: Some of the metals detection limits were increased due to high levels of metals in these samples.

Andre Langlais
Account Manager

ALS Canada Ltd.
Part of the **ALS Laboratory Group**
1988 Triumph Street, Vancouver, BC V5L 1K5
Phone: +1 604 253 4188 Fax: +1 604 253 6700 www.alsglobal.com
A Campbell Brothers Limited Company

ALS LABORATORY GROUP ANALYTICAL REPORT

	Sample ID	L636965-1	L636965-2	L636965-3	L636965-4	L636965-5
	Description					
	Sampled Date	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08
	Sampled Time	16:22	16:24	16:26	16:30	16:30
	Client ID	GLS 3m	GLS 4M	GLS 5m	GLS 6m	GLS 6Am
Grouping	**Analyte**					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	16600	16600	16700	16600	16600
	Hardness (as CaCO3) (mg/L)	2030	2040	2000	1980	2000
	pH (pH)	8.05	8.03	8.04	8.02	8.01
	Salinity (EC) (g/L)	9.9	9.9	9.9	9.9	9.9
	Total Suspended Solids (mg/L)	3.1	4.5	<3.0	5.1	3.8
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	155	151	155	156	157
	Sulphide as S (mg/L)				<0.020	
Total Metals	Aluminum (Al)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	0.117
	Arsenic (As)-Total (mg/L)	<0.00020	<0.00020	<0.00020	<0.00020	0.00049
	Cadmium (Cd)-Total (mg/L)	0.000619	0.000610	0.000603	0.000639	0.000613
	Calcium (Ca)-Total (mg/L)	174	176	168	166	169
	Copper (Cu)-Total (mg/L)	0.00113	0.00112	0.00109	0.00116	0.00119
	Iron (Fe)-Total (mg/L)	0.016	<0.010	<0.010	0.010	0.035
	Lead (Pb)-Total (mg/L)	0.000286	0.000168	0.000180	0.000147	0.000147
	Magnesium (Mg)-Total (mg/L)	389	389	383	380	383
	Manganese (Mn)-Total (mg/L)	0.00664	0.00653	0.00622	0.00674	0.00650
	Mercury (Hg)-Total (mg/L)	<0.000010	<0.000010	<0.000010	0.000015	<0.000010
	Molybdenum (Mo)-Total (mg/L)	0.0025	0.0028	0.0027	<0.0025	0.0026
	Nickel (Ni)-Total (mg/L)	0.00503	0.00500	0.00485	0.00520	0.00503
	Zinc (Zn)-Total (mg/L)	0.271	0.270	0.258	0.280	0.273

ALS LABORATORY GROUP ANALYTICAL REPORT

Grouping	Analyte	L636965-6	L636965-7	L636965-8	L636965-9	L636965-10
	Sample ID	L636965-6	L636965-7	L636965-8	L636965-9	L636965-10
	Description					
	Sampled Date	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08
	Sampled Time	16:34	16:36	16:38	16:40	16:42
	Client ID	GLS 7m	GLS 8m	GLS 9m	GLS 10m	GLS 11m
SEAWATER						
Physical Tests	Conductivity (uS/cm)	16600	16600	16600	44200	86700
	Hardness (as CaCO3) (mg/L)	2010	1980	1970	6300	11900
	pH (pH)	8.02	8.03	8.03	7.67	7.68
	Salinity (EC) (g/L)	9.9	9.9	9.9	29.0	62.4
	Total Suspended Solids (mg/L)	<3.0	3.8	<3.0	7.8	25.1
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	155	156	156	204	427
	Sulphide as S (mg/L)				<0.020	
Total Metals	Aluminum (Al)-Total (mg/L)	<0.050	<0.050	<0.050	<0.10	<0.50
	Arsenic (As)-Total (mg/L)	<0.00020	<0.00020	0.00037	<0.00020	0.00026
	Cadmium (Cd)-Total (mg/L)	0.000621	0.000607	0.000650	0.00153	0.000056
	Calcium (Ca)-Total (mg/L)	170	168	165	460	771
	Copper (Cu)-Total (mg/L)	0.00111	0.00114	0.00112	0.00220	0.000752
	Iron (Fe)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	0.096
	Lead (Pb)-Total (mg/L)	0.000132	0.000107	0.000109	0.000394	0.000613
	Magnesium (Mg)-Total (mg/L)	386	379	378	1250	2420
	Manganese (Mn)-Total (mg/L)	0.00643	0.00665	0.00668	0.0516	0.118
	Mercury (Hg)-Total (mg/L)	<0.000010	0.000010	0.000012	<0.000010	<0.000010
	Molybdenum (Mo)-Total (mg/L)	<0.0025	<0.0025	0.0026	<0.0050	<0.025
	Nickel (Ni)-Total (mg/L)	0.00490	0.00520	0.00518	0.00759	0.00893
	Zinc (Zn)-Total (mg/L)	0.271	0.278	0.276	0.743	0.0463

ALS LABORATORY GROUP ANALYTICAL REPORT

	Sample ID	L636965-11	L636965-12	L636965-13	L636965-14	L636965-15
	Description					
	Sampled Date	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08	27-MAY-08
	Sampled Time	16:44	16:46	16:48	16:51	16:53
	Client ID	GLS 12m	GLS 13m	GLS 14m	GLS 15m	GLS 16m
Grouping	**Analyte**					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	87000	87900	88000	88000	88000
	Hardness (as CaCO3) (mg/L)	12300	12300	12000	12200	11900
	pH (pH)	7.70	7.71	7.69	7.69	7.69
	Salinity (EC) (g/L)	62.6	63.4	63.5	63.5	63.5
	Total Suspended Solids (mg/L)	42.5	102	63.8	4.4	6.4
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	430	436	439	443	443
	Sulphide as S (mg/L)	0.039		0.128		0.117
Total Metals	Aluminum (Al)-Total (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Arsenic (As)-Total (mg/L)	0.00026	<0.00020	<0.00020	0.00030	<0.00020
	Cadmium (Cd)-Total (mg/L)	0.000023	<0.000020	<0.000020	<0.000020	<0.000020
	Calcium (Ca)-Total (mg/L)	803	804	787	792	772
	Copper (Cu)-Total (mg/L)	0.000498	0.000332	0.000356	0.000355	0.000337
	Iron (Fe)-Total (mg/L)	0.153	0.357	0.363	0.356	0.348
	Lead (Pb)-Total (mg/L)	0.000565	0.000759	0.000798	0.000764	0.000748
	Magnesium (Mg)-Total (mg/L)	2500	2490	2440	2470	2430
	Manganese (Mn)-Total (mg/L)	0.120	0.0992	0.0983	0.0983	0.0978
	Mercury (Hg)-Total (mg/L)	0.000010	0.000011	0.000013	0.000013	0.000013
	Molybdenum (Mo)-Total (mg/L)	<0.025	<0.025	<0.025	<0.025	<0.025
	Nickel (Ni)-Total (mg/L)	0.00765	0.00543	0.00548	0.00541	0.00547
	Zinc (Zn)-Total (mg/L)	0.0226	0.0198	0.0208	0.0204	0.0199

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Analytical Method Reference(Based On)
ALK-C-COL-VA	Seawater	Alkalinity by Colourimetric (seawater)	APHA 310.2

This analysis is carried out using procedures adapted from EPA Method 310.2 "Alkalinity". Total Alkalinity is determined using the methyl orange colourimetric method.

AS-TOT-C-HVAAS-VA	Seawater	Total Arsenic in Seawater by HVAAS	PUGET SOUND PROTOCOLS, EPA 7000 SERIES

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis of the seawater is by atomic absorption/emission spectrophotometry (EPA Method 7000 series).

EC-C-PCT-VA	Seawater	Conductivity (Automated) (seawater)	APHA 2510 Auto. Conduc.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

HARDNESS-CALC-VA	Seawater	Hardness	APHA 2340B

Hardness is calculated from Calcium and Magnesium concentrations, and is expressed as calcium carbonate equivalents.

HG-TOT-C-CVAFS-VA	Seawater	Total Mercury in Seawater by CVAFS	PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedure involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry (EPA Method 245.7).

MET-TOT-C-ICP-VA	Seawater	Total Metals in Seawater by ICPOES	PUGET SOUND PROTOCOLS, EPA 6010B

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis is by inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).

MET-TOT-C-LOW-MS-VA	Seawater	Total Metals in Seawater by ICPMS	PUGET SOUND PROTOCOLS, EPA 6020A

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by acid digestion or filtration (EPA Method 3005A). Instrumental analysis is by atomic inductively coupled plasma - mass spectrometry (EPA Method 6020A).

MET-TOT-SPE-MS-VA	Seawater	Total Metals in Seawater by SPE ICPMS	PUGET SOUND PROTOCOLS, EPA 6020A

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995, and with procedures adapted from Cetac Technologies Incorporated. A suspended particulate resin (SPR), consisting of immobilized iminodiacetate (IDA) on a divinylbenzene polymer, is used to chelate and preconcentrate metals in seawater. Instrumental analysis is by inductively coupled plasma mass spectrometry (ICPMS).

PH-C-PCT-VA	Seawater	pH by Meter (Automated) (seawater)	APHA 4500-H "pH Value"

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

S2-C-T-COL-VA	Seawater	Tot. Sulphide by Colorimetric (seawater)	APHA 4500-S2 "Sulphide"

This analysis is carried out using procedures adapted from APHA Method 4500-S2 "Sulphide". Sulphide is determined using the methlyene blue colourimetric method.

SALINITY-C-EC-VA	Seawater	Salinity by calc. using EC (seawater)	APHA 2520 B

This analysis is carried out using procedures adapted from APHA Method 2520 "Salinity". Salinity is determined using a samples conductivity and the Practical Salinity Scale.

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Analytical Method Reference(Based On)
TSS-C-VA	Seawater	Solids by Gravimetric (seawater)	APHA 2540 Gravimetric

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids (TSS) are determined by filtering a sample through a glass fibre filter, TSS is determined by drying the filter at 104 degrees celsius.

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.
The last two letters of the above ALS Test Code column indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA		

GLOSSARY OF REPORT TERMS
Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in enviromental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.
The reported surrogate recovery value provides a measure of method efficiency.
mg/kg (units) - unit of concentration based on mass, parts per million
mg/L (units) - unit of concentration based on volume, parts per million
N/A - Result not available. Refer to qualifier code and definition for explanation

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

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www.alsenviro.com

COC # C048502

REPORT TO:	REPORT FORMAT / DISTRIBUTION	SERVICE REQUESTED
COMPANY: Teck Cominco Metals Ltd.	STANDARD ✓ OTHER ___	X REGULAR SERVICE (DEFAULT)
CONTACT: Bruce Donald	PDF ✓ EXCEL ✓ CUSTOM ___ FAX ___	RUSH SERVICE (2-3 DAYS)
ADDRESS: Bag 2000 Kimberley, BC V1A 3E1	EMAIL 1: bruce.donald@teckcominco.com	PRIORITY SERVICE (1 DAY or ASAP)
	EMAIL 2: alaudrum@gartnerlee.com	EMERGENCY SERVICE (<1 DAY / WEEKEND) - CONTACT ALS
PHONE: 250-427-8405 FAX: 250-427-8451		ANALYSIS REQUEST
INVOICE TO: SAME AS REPORT ? (YES) / NO	INDICATE BOTTLES: FILTERED / PRESERVED (F/P) → → →	
COMPANY:	CLIENT / PROJECT INFORMATION:	
CONTACT:	JOB #: 80325	
ADDRESS:	PO /AFE:	
	Legal Site Description:	
PHONE: FAX:	QUOTE #:	
Lab Work Order # (lab use only): lb36965	SAMPLER (Initials): CK	

Sample #	SAMPLE IDENTIFICATION (This description will appear on the report)	DATE	TIME	SAMPLE TYPE	General Chemistry	Total Metals	Sulphide									HAZARDOUS ?	HIGHLY CONTAMINATED ?	NUMBER OF CONTAINERS
	GLS 3m	May 27/08	4:22	Seawater	X	X												
	GLS 4m	"	4:24	"	X	X												
	GLS 5m	"	4:26	"	X	X												
	GLS 6m	"	4:30	"	X	X	X											
	GLS 6Am	"	4:30	"	X	X												
	GLS 7m	"	4:34	"	X	X												
	GLS 8m	"	4:36	"	X	X												
	GLS 9m	"	4:38	"	X	X												
	GLS 10m	"	4:40	"	X	X	X											
	GLS 11m	"	4:42	"	X	X												

GUIDELINES / REGULATIONS

SPECIAL INSTRUCTIONS / HAZARDOUS DETAILS

Water is hypersaline, for TSS measurement run 1-2 L distilled through filters
Total Metals preserved with HNO_3, Sulphide preserved with NaOH and zinc Acetate

Failure to complete all portions of this form may delay analysis. Please fill in this form *LEGIBLY*.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse page of the white report copy.

RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
Curtis Kidd	May 28/ 2pm		
RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:

SAMPLE CONDITION (lab use only)

TEMPERATURE	SAMPLES RECEIVED IN GOOD CONDITION ? YES / NO (If no provide details)
14.0C	

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COC # C048503

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ADDRESS:	EMAIL 1:
	EMAIL 2:
PHONE: FAX:	
INVOICE TO: SAME AS REPORT ? YES / NO	INDICATE BOTTLES: FILTERED / PRESERVED (F/P) → → →
COMPANY:	CLIENT / PROJECT INFORMATION:
CONTACT:	JOB #:
ADDRESS:	PO /AFE:
	Legal Site Description:
PHONE: FAX:	QUOTE #:
Lab Work Order # (lab use only)	SAMPLER (Initials): CK

SERVICE REQUESTED

X	REGULAR SERVICE (DEFAULT)
	RUSH SERVICE (2-3 DAYS)
	PRIORITY SERVICE (1 DAY or ASAP)
	EMERGENCY SERVICE (<1 DAY / WEEKEND) - CONTACT ALS

ANALYSIS REQUEST

Sample #	SAMPLE IDENTIFICATION (This description will appear on the report)	DATE	TIME	SAMPLE TYPE	General Chemistry	Total Metals	Sulphide	HAZARDOUS ?	HIGHLY CONTAMINATED ?	NUMBER OF CONTAINERS
	GLS 12m	May 27/08	4:44	Seawater	X	X	X			
	GLS 13m	"	4:46	"	X	X				
	GLS 14m	"	4:48	"	X	X	X			
	GLS 15m	"	4:51	"	X	X				
	GLS 16m	"	4:53	"	X	X	X			

GUIDELINES / REGULATIONS

SPECIAL INSTRUCTIONS / HAZARDOUS DETAILS

* Refer to page 1 - also General Chemistry had no preservatives added

Failure to complete all portions of this form may delay analysis. Please fill in this form *LEGIBLY*.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse page of the white report copy.

RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:
Curtis Kidd	May 28 / 2pm		8/6
RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:

SAMPLE CONDITION (lab use only)

TEMPERATURE	SAMPLES RECEIVED IN GOOD CONDITION ? YES / NO (If no provide details)
14.2	

APPENDIX 3

May 27, 2008 GARROW LAKE

GRAPHS OF WATER QUALITY

MONITORING RESULTS

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

Depth	Zinc Concentrations (mg/L)												
	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
0								0.130	0.227	0.193			
1									0.246	0.186			
1.5								0.131	0.231	0.19	0.235	0.168	
2							0.244	0.136	0.235	0.199	0.23	0.18	
3	0.26	0.30	0.25	0.28	0.236	0.234	0.247	0.134	0.241	0.193	0.244	0.18	0.257
4				0.28	0.197	0.227	0.244	0.243	0.237	0.192	0.241	0.176	0.25
5		0.32		0.29	0.209	0.247	0.228	0.267	0.25	0.187	0.234	0.185	0.251
6				0.29	0.207	0.229	0.239	0.265	0.211	0.186	0.228	0.181	0.27
7		0.32		0.29	0.197	0.227	0.241	0.284	0.218	0.183	0.245	0.18	0.246
8				0.29	0.189	0.231	0.248	0.271	0.233	0.186	0.231	0.177	0.250
9				0.30	0.702	0.816	1.120	0.552	0.359	0.287	0.246	0.218	0.249
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
11	1.40	1.6	1.40	0.96	0.279	0.315	0.134	0.151	0.0721	0.0903	0.0319	0.0235	0.0462
12	0.68	0.60	0.585	0.52	0.27	0.262	0.120	0.104	0.0383	0.0578	0.0288	0.02	0.0243
13	0.46	0.48	0.70	0.44	0.251	0.234	0.0812	0.105	0.0226	0.0241	0.0279	0.0235	0.0194
14	0.45	0.460	0.52	0.41	0.229	0.211	0.0482	0.0457	0.024	0.0304	0.0204		0.0204
15	0.42	0.47	0.44	0.52	0.256	0.211	0.0378	0.0565	0.021	0.0297	0.0208	0.0219	0.0199
16	0.44	0.48	0.44	0.42	0.265	0.201	0.0429	0.0556	0.03	0.0287	0.0589		0.0209
17	0.44	0.48	0.44	0.42	0.267	0.193	0.0435	0.0409	0.0294	0.032	0.0252	0.0218	0.02
18	0.44	0.48	0.44	0.41	0.275	0.204	0.0440	0.0435	0.0314	0.0336	0.0238		0.0201
19	0.44	0.48	0.45	0.42	0.266	0.202	0.0448	0.0425	0.0351	0.034	0.0208	0.0209	0.0207
20	0.43	0.50	0.46	0.40	0.260	0.197	0.0425	0.0413	0.0293	0.0346	0.0228	0.0253	0.0206
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	0.0519
30	0.43	0.50		0.38	0.0514	0.117	0.0310	0.0404		0.092	0.0453	0.0348	0.0198
35	0.43	0.54		0.08							0.529		
40	0.44	0.53	0.07	0.06	0.234	0.0301	0.0214	0.0235	0.0558	0.0139			

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.

3-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. Clearly the sample was contaminated by hitting bottom

FIGURE 1A
GARROW LAKE - Station 262-3
Trend In Zinc Concentrations In The Water Column 2002 to 2008

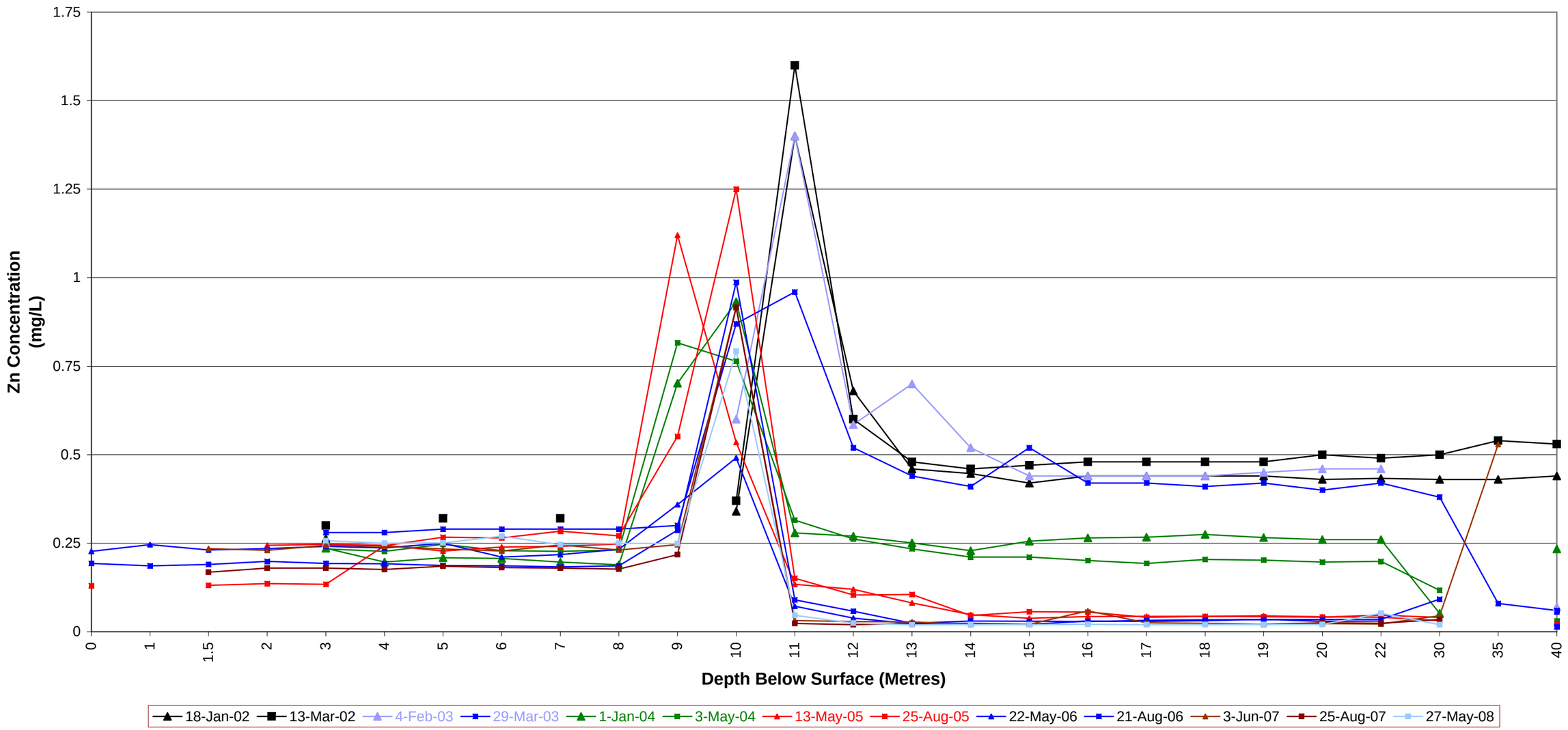


FIGURE 1B
Last 4 YEARS - SPRING
GARROW LAKE - Station 262-3
Trend In Zinc Concentrations In The Water Column 2005 to 2008

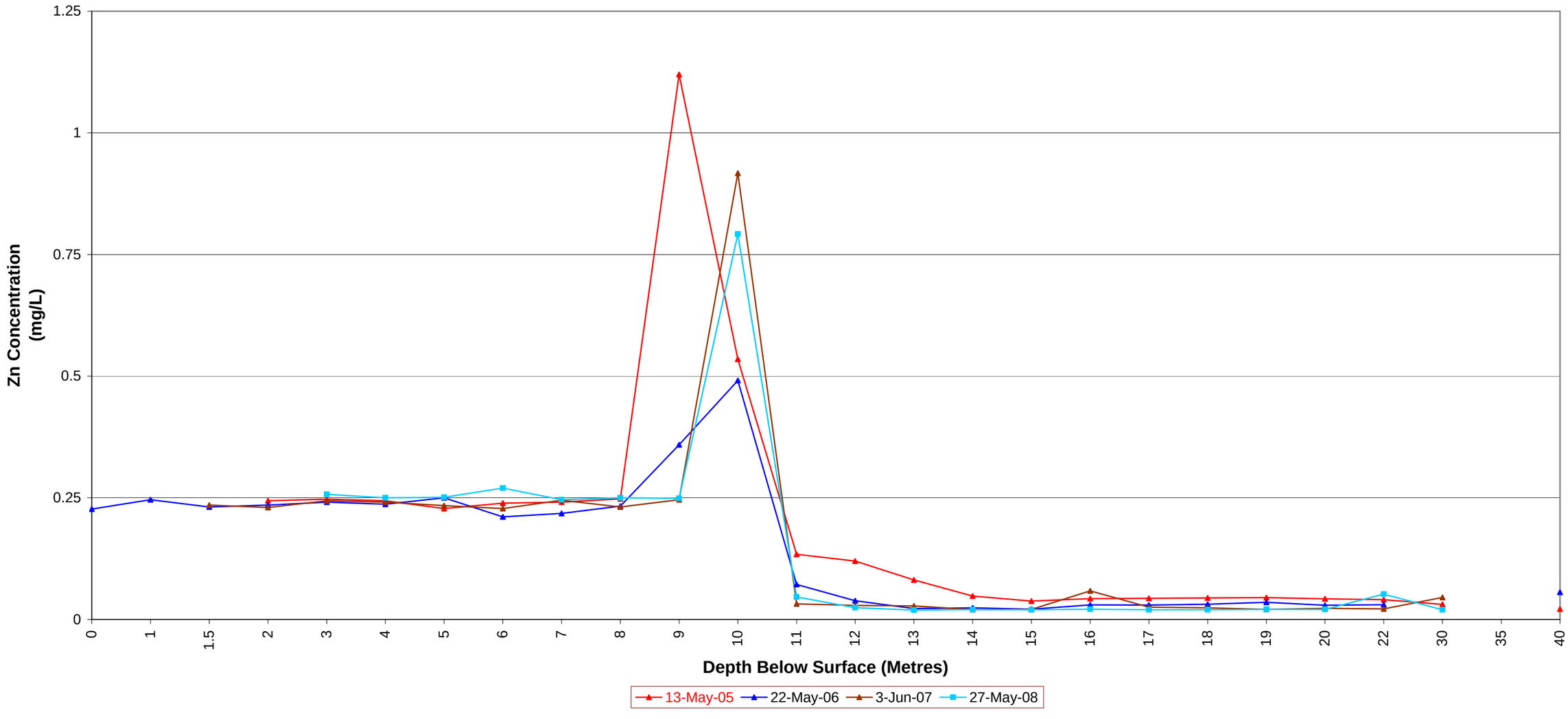


TABLE 2
GARROW LAKE
WATER COLUMN MONITORING
TABLE 2

STATION 262-3A: Garrow Lake Near Discharge

Depth	Zinc Concentrations mg/L								
	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
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	
2			0.224	0.109	0.235	0.235	0.207	0.182	
3	0.223	0.232	0.221	0.115	0.267	0.213	0.21	0.186	0.257
4	0.211	0.230	0.231	0.176	0.205	0.215	0.207	0.186	0.25
5	0.223	0.250	0.206	0.219	0.216	0.222	0.212	0.191	0.251
6	0.202	0.240	0.219	0.23	0.243	0.217	0.191	0.18	0.27
7	0.208	0.252	0.228	0.24	0.246	0.22	0.186	0.177	0.246
8	0.223	0.228	0.264	0.253	0.237	0.221	0.167	0.201	0.25
9	1.000	0.916	0.854	0.574	0.374	0.369	0.196	0.251	0.249
10	0.423	0.496	0.501	1.09	0.983	1.19	0.72	1.03	0.792
11	0.308	0.300	0.136	0.146	0.0981	0.108	0.038	0.0303	0.0462
12	0.297	0.283	0.106	0.094	0.059	0.0801	0.025	0.023	0.0243
13	0.238	0.250	0.0418	0.0888	0.032	0.0558	0.0228	0.0284	0.0194
14	0.241	0.203	0.0412	0.03	0.0309	0.0371	0.0168	0.0205	0.0204
15	0.261	0.211	0.045	0.037	0.0301	0.0349	0.0183	0.0226	0.0199
16	0.27	0.193	0.0408	0.0398	0.032	0.0344	0.0181	0.0202	0.0209
17	0.272	0.198	0.0458	0.0383	0.0299	0.0383	0.0183	0.0193	0.0211
18	0.265	0.198	0.0391	0.0372	0.0262	0.032	0.0186	0.0212	0.0209
19	0.263	0.201	0.047	0.0417	0.0318	0.0311	0.0175	0.0217	0.019
20	0.266	0.206	0.0415	0.0354	0.0285	0.031	0.0209	0.0202	0.021
22	0.267				0.0291			0.0226	
30	0.076								
40	0.0747								

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

FIGURE 2A
GARROW LAKE - Station 262-3A
Zinc Concentrations In The Water Column

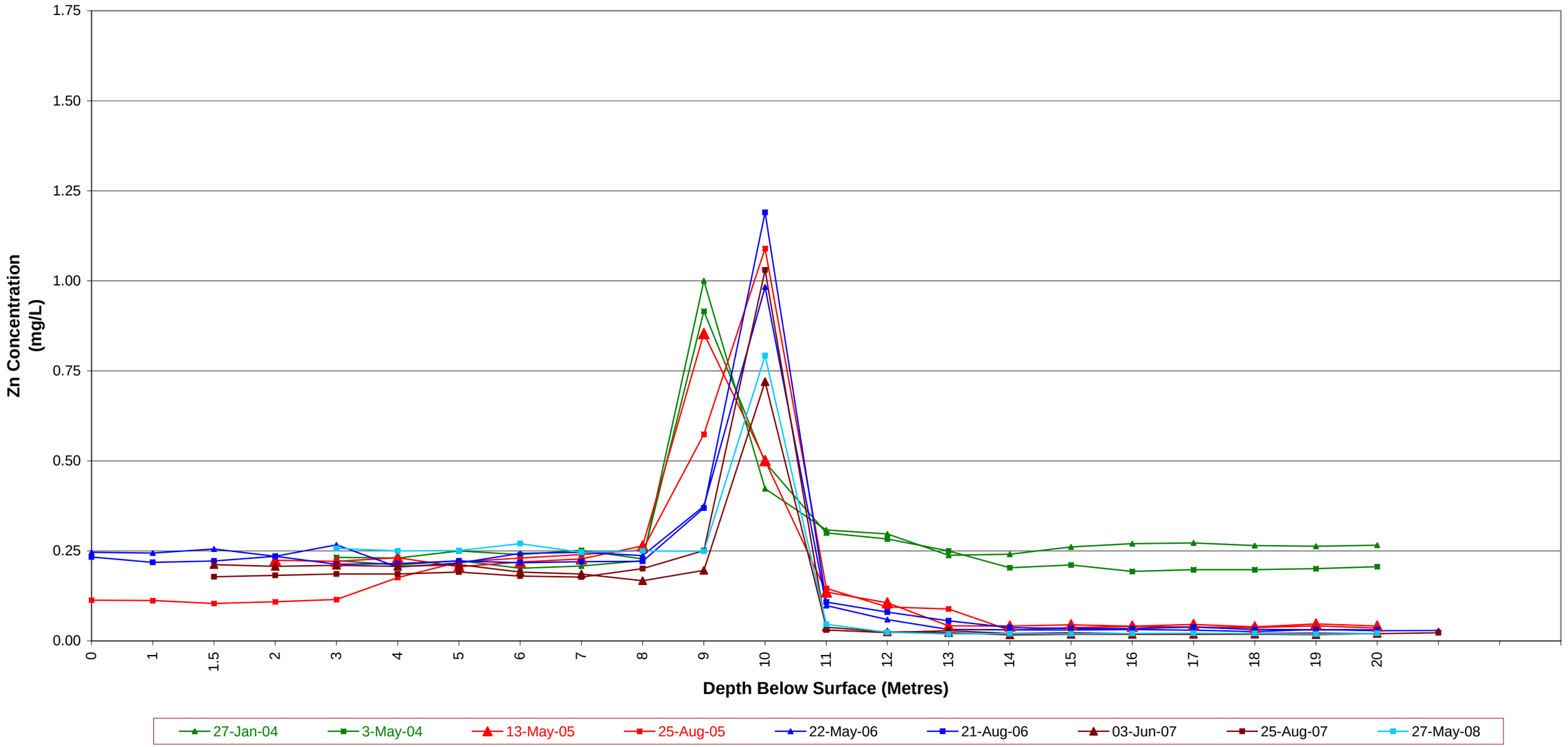


FIGURE 2B
LAST 4 YEARS - SPRING
GARROW LAKE - Station 262-3A
Zinc Concentrations In The Water Column 2005 to 2008

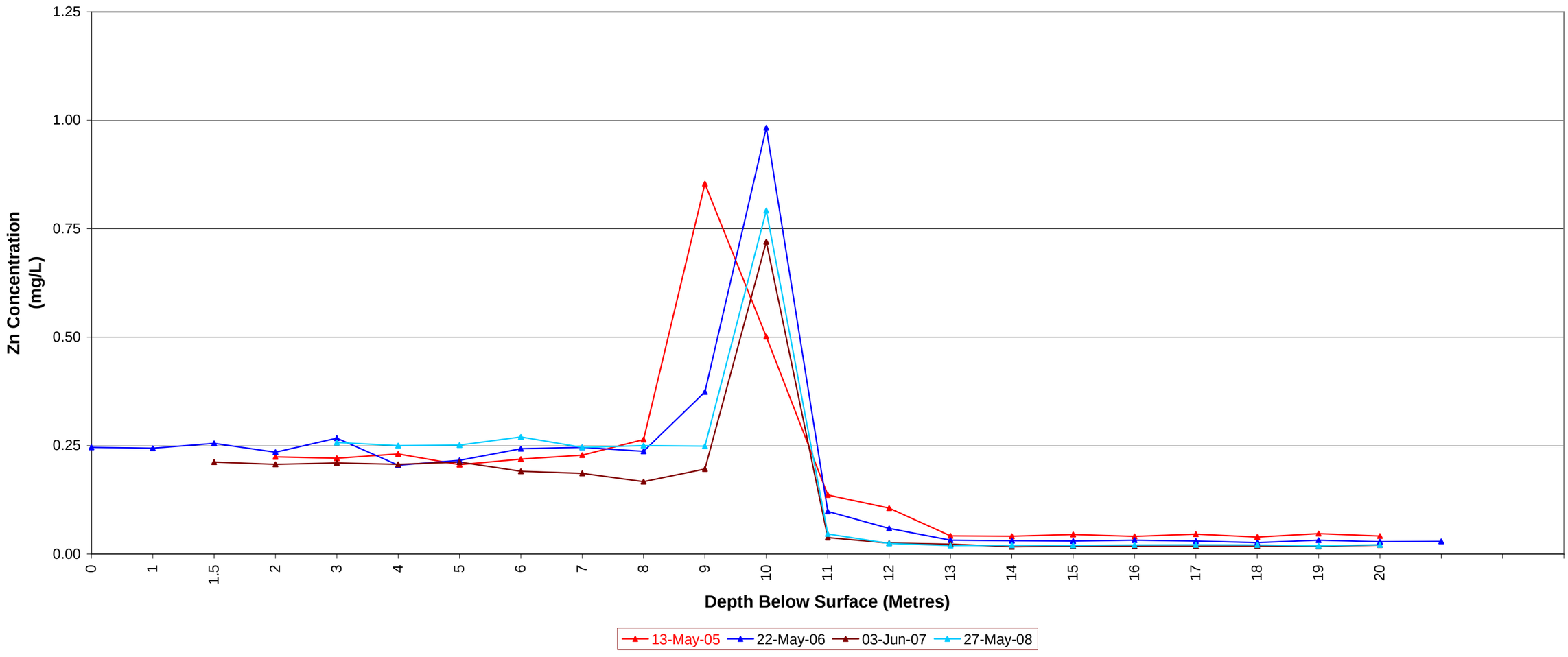
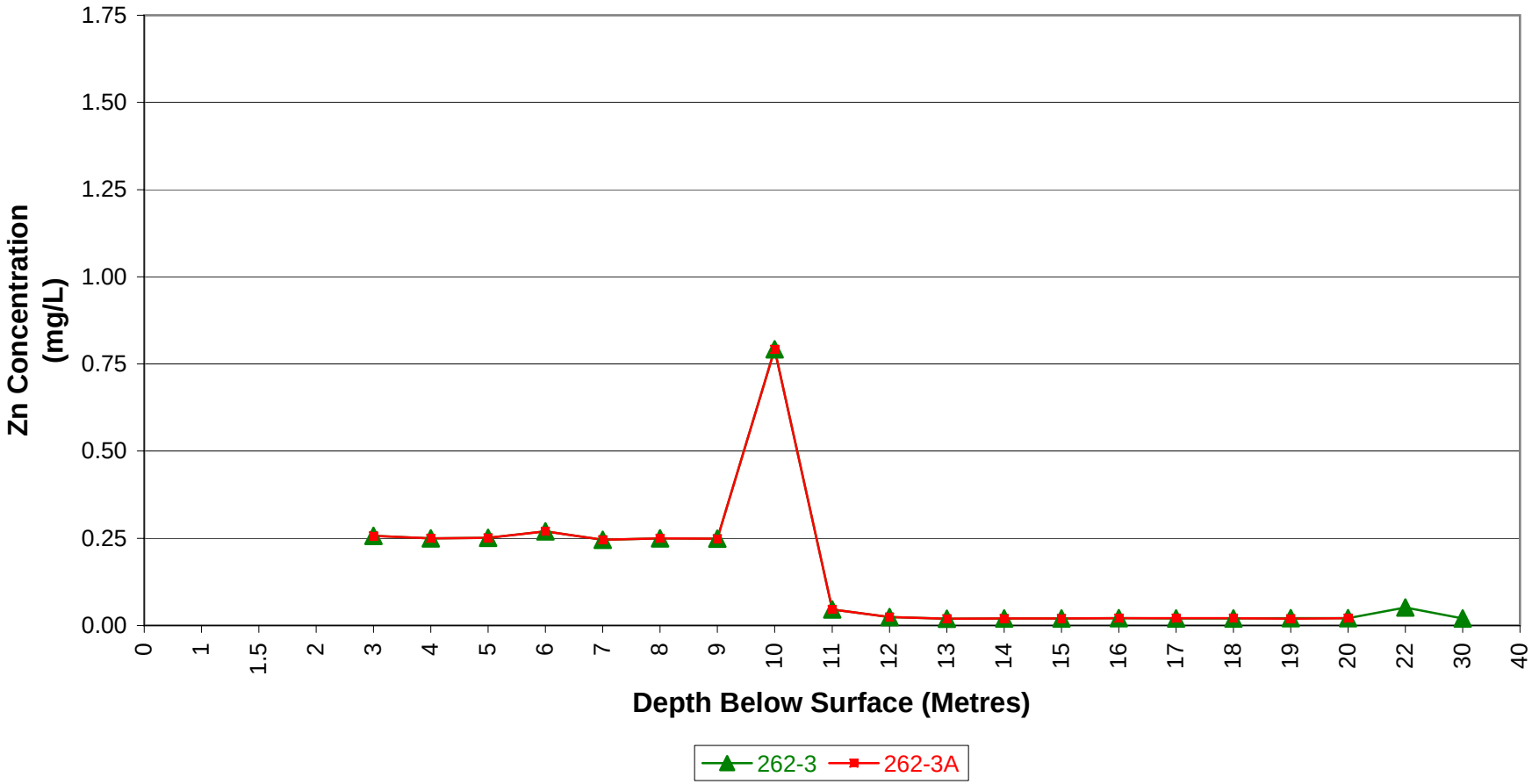


TABLE 3
GARROW LAKE
2008 WATER COLUMN MONITORING
COMPARE MID AND SOUTH
MONITORING STATION DATA

	May Sampling		August Sampling	
Depth	**262-3**	**262-3A**	**262-3**	**262-3A**
0				
1				
1.5				
2				
3	0.257	0.257		
4	0.25	0.25		
5	0.251	0.251		
6	0.27	0.27		
7	0.246	0.246		
8	0.25	0.25		
9	0.249	0.249		
10	0.792	0.792		
11	0.0462	0.0462		
12	0.0243	0.0243		
13	0.0194	0.0194		
14	0.0204	0.0204		
15	0.0199	0.0199		
16	0.0209	0.0209		
17	0.02	0.0211		
18	0.0201	0.0209		
19	0.0207	0.019		
20	0.0206	0.021		
22	0.0519			
30	0.0198			
40				

FIGURE 3A
GARROW LAKE - May 2008
Comparision of Zinc Concentrations In The Water Column Between Monitoring Stations 262-3 and 262-3A



APPENDIX 4

Electronic File (pdf) of Report

On Cd