

October 29, 2012

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**Re: September 2012 – Monthly Monitoring Report for Water Licence 2AM-DOH0713**

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This report is comprised of monitoring requirements as set out in Schedule J of water license 2AM-DOH0713 and additional requirements from AANDC. License items include:

- Part D (Conditions Applying to Construction) Items 7 and 19;
- Part E (Conditions applying to Water Use) Item 1;
- Part G (Conditions Applying to Waste Management and Waste Management Plans) Items 3(e) and 3(b), Item 21 (a) and 22 (e);
- Part J (Conditions Applying to General and Aquatic Effects Monitoring) Items 12 and 14.

Other monitoring requirements stipulated in the license refer to facilities that have not been constructed.

**Part D: Conditions Applying to Construction**

**Item 7. Construction Monitoring**

Construction activities did not take place in this month.

**Item 19. Surface Runoff Effluent Quality Limits**

There was no runoff from construction areas, therefore, turbidity and total suspended solids samples were not collected.

**Part E: Conditions Applying to Water Use**

**Item 1: Water Usage**

Fresh water used for domestic camp use, portable wash cars, and dust suppression is reported in Table 1.

Table 1: Water Usage for Doris North, September 2012

| Parameters  | Water Use                        |
|---|----------------------------------|
| Water Source                                      | Doris Lake                       |
| Geographical Coordinates                          | 68°8'17.04" N,<br>106°36'52.68"W |
| Monthly Cumulative                                | 895 m <sup>3</sup>               |
| Annual Cumulative                                 | 16,638 m <sup>3</sup>            |
| 2AM-DOH0713 Permitted Water Volume (Total Annual) | 480,000m <sup>3</sup>            |

## Schedule J: Water Quality Monitoring at Water Intake

Monthly compliance samples, in accordance with Schedule J requirements of the licence, were taken from monitoring station ST-7 (Table 2).

Table 2: Monthly Compliance Sample Results for SNP Monitoring Station ST-7, September 2012

| Parameter                        | Units | ST7-07SEP12         |
|----------------------------------|-------|---------------------|
| ALS ID                           |       | L1206063-1          |
| Sample Date/Time                 |       | 9/7/2012 7:45:00 AM |
| Conductivity (EC)                | uS/cm | 271                 |
| Hardness (as CaCO <sub>3</sub> ) | mg/L  | 42.6                |
| pH                               | pH    | 7.67                |
| Total Suspended Solids           | mg/L  | 12                  |
| Ammonia, Total (as N)            | mg/L  | <0.050              |
| Nitrate (as N)                   | mg/L  | <0.050              |
| Nitrite (as N)                   | mg/L  | <0.050              |
| Orthophosphate-Dissolved (as P)  | mg/L  | <0.0010             |
| Phosphorus (P)-Total             | mg/L  | 0.038               |
| Cyanide, Free                    | mg/L  | <0.0050             |
| Cyanide, Total                   | mg/L  | <0.0050             |
| Aluminum (Al)-Total              | mg/L  | 0.219               |
| Antimony (Sb)-Total              | mg/L  | <0.00040            |
| Arsenic (As)-Total               | mg/L  | <0.00040            |
| Barium (Ba)-Total                | mg/L  | 0.0056              |
| Beryllium (Be)-Total             | mg/L  | <0.0010             |
| Boron (B)-Total                  | mg/L  | <0.050              |
| Cadmium (Cd)-Total               | mg/L  | <0.000010           |
| Calcium (Ca)-Total               | mg/L  | 8.14                |
| Chromium (Cr)-Total              | mg/L  | <0.0010             |
| Cobalt (Co)-Total                | mg/L  | <0.0020             |
| Copper (Cu)-Total                | mg/L  | 0.024               |
| Iron (Fe)-Total                  | mg/L  | 1.12                |
| Lead (Pb)-Total                  | mg/L  | 0.00027             |
| Lithium (Li)-Total               | mg/L  | <0.010              |
| Magnesium (Mg)-Total             | mg/L  | 5.66                |
| Manganese (Mn)-Total             | mg/L  | 0.0973              |
| Mercury (Hg)-Total               | mg/L  | <0.000020           |
| Molybdenum (Mo)-Total            | mg/L  | <0.0050             |
| Nickel (Ni)-Total                | mg/L  | <0.0020             |
| Potassium (K)-Total              | mg/L  | 2.11                |
| Selenium (Se)-Total              | mg/L  | <0.00040            |
| Silver (Ag)-Total                | mg/L  | <0.000020           |
| Sodium (Na)-Total                | mg/L  | 27.6                |
| Thallium (Tl)-Total              | mg/L  | <0.00010            |
| Tin (Sn)-Total                   | mg/L  | <0.050              |
| Titanium (Ti)-Total              | mg/L  | 0.0087              |
| Uranium (U)-Total                | mg/L  | <0.00010            |
| Vanadium (V)-Total               | mg/L  | <0.0010             |
| Zinc (Zn)-Total                  | mg/L  | 0.0106              |
| Calcium (Ca)-Dissolved           | mg/L  | 7.8                 |

| Parameter                      | Units        | ST7-07SEP12          |
|--------------------------------|--------------|----------------------|
| ALS ID                         |              | L1206063-1           |
| Sample Date/Time               |              | 9/7/2012 7:45:00 AM  |
| Magnesium (Mg)-Dissolved       | mg/L         | 5.61                 |
| Biochemical Oxygen Demand      | mg/L         | <2.0                 |
| Oil and Grease                 | mg/L         | <1.0                 |
| Oil And Grease (Visible Sheen) |              | no visible sheen     |
| Fecal Coliforms                | CFU/100mL    | <1                   |
| Sample ID                      |              | ST7-17AUG12          |
| ALS ID                         |              | L1195962-1           |
| Sample Date/Time               |              | 8/17/2012 8:15:00 AM |
| Fecal Coliforms*               | CFU/100mL    | 8                    |
| Sample ID                      |              | PDC10-07SEP12        |
| ALS ID                         |              | L1206100-1           |
| Sample Date/Time               |              | 9/7/2012 7:00:00 AM  |
| Blue-green algae               | Cells/100 mL | 93,100               |

*\*Reporting of fecal coliforms for Monitoring Station ST-7 was inadvertently omitted from the August report*

## Part G: Conditions Applying to Waste Management and Waste Management Plans.

### Item 3(b): Conditions applying to sewage effluent quality

Sampling station ST-8 is located within the Doris Camp sewage treatment plant. Effluent samples were collected from ST-8B and were compliant for all parameters (Table 3). Sampling station ST-8A was phased out of service during June and July as sewage effluent treatment was directed through a single operating plant.

Table 3: Water Quality Data Summary for Monitoring Station ST-8B, September 2012

| Parameter                      | Units     | ST8B-07SEP12           | Doris: 2AM-DOH0713                  |  |
|--------------------------------|-----------|------------------------|-------------------------------------|--|
| ALS ID                         |           | L1206063-2             | (Part G: Item 3 (b))                |  |
| Sample Date/Time               |           | 9/7/2012<br>7:30:00 AM | Maximum<br>Average<br>Concentration | Maximum<br>Allowable Grab<br>Sample<br>Concentration |
| Conductivity (EC)              | uS/cm     | 788                    |                                     |  |
| pH                             | pH        | 7.62                   | 6.5 - 9.0                           | 9  |
| Total Suspended Solids         | mg/L      | <3.0                   | 100                                 | 100  |
| Biochemical Oxygen Demand      | mg/L      | <2.0                   | 80                                  | 80   |
| Oil and Grease                 | mg/L      | 2.3                    | 5                                   | 10   |
| Oil And Grease (Visible Sheen) |           | No Visible<br>Sheen    | No Visible<br>Sheen                 | No Visible<br>Sheen                                  |
| Fecal Coliform                 | CFU/100mL | <1                     | 10,000                              | 10,000   |

Station ST-9 was sampled in September (Table 4).

Table 4: Water Quality Data Summary for Monitoring Station ST-9, September 2012

| Parameter                      | Units     | ST9-06SEP12         |
|--------------------------------|-----------|---------------------|
| ALS ID                         |           | L1206063-3          |
| Sample Date/Time               |           | 9/6/2012 6:25:00 PM |
| Conductivity (EC)              | uS/cm     | 489                 |
| pH                             | pH        | 7.77                |
| Total Suspended Solids         | mg/L      | 6                   |
| Biochemical Oxygen Demand      | mg/L      | <2.0                |
| Oil and Grease                 | mg/L      | <1.0                |
| Oil And Grease (Visible Sheen) |           | No Visible Sheen    |
| Fecal Coliform                 | CFU/100mL | <1                  |

### Item 3(e): Treated Sewage Effluent Release in cubic meters

The volume of treated effluent released at ST-8 and the volume of sludge removed and incinerated during the reporting period are shown in Table 5.

Table 5: Treated Sewage Effluent released in cubic meters (m<sup>3</sup>) through ST-8 and total sludge volume removed

| Parameters         | Effluent Released ST-8 (m <sup>3</sup> ) | Sludge Volume (m <sup>3</sup> ) |
|--------------------|--|---------------------------------|
| Monthly Cumulative | 458                                      | 1.42                            |
| Annual Cumulative  | 4840                                     | 27.02                           |

### Item 21 (a) and Items 22 (c), (e): Sedimentation pond, land farm, and fuel containment sumps

As described in the 2012 Interim Water Management Plan, the Sedimentation Pond (ST-1) is being used as a collection pond for the water that accumulated in the Pollution Control Pond (ST-2) and the two Underflow Sumps (STS1 and STS2), and occasionally from various berms and containments in the project area. Water that had been stored in the temporary pollution control pond from the 2011 season was also transferred into ST-1. The water in ST-1 is then transferred to the Tailings Impoundment Area (TIA) when the accumulated volume permits. Water was transferred from ST-1 to the TIA beginning in June 2012 (Table 6). The water quality samples collected from ST-1 are summarized in Table 7, which is provided at the end of this report. Discharges of water from ST-1 to Tail Lake stopped on Sept 15 to allow for winterization of the pumping system. Residual volumes of water in the pipelines and ponds were managed and tracked in October just prior to complete system shut down. These volumes will be reported in the October monthly report.

Table 6: Water in cubic meters (m<sup>3</sup>) transferred from ST-1 to the TIA, September 2012

| Parameters         | Water volume transferred from ST-1 to TIA (m <sup>3</sup> ) |
|--------------------|---|
| Monthly Cumulative | 848   |
| Annual Cumulative  | 12,517  |

No water was accumulated at the Land Farm (ST-4), Doris Tank Farm (ST-5) or Roberts Bay Bulk Fuel Containment berms (ST-6a and ST-6b) during September.

### Item 26, 27, 28 and Part J Item 8: Water Discharged from Tailing Impoundment Area

Water Samples were collected from TL-2, TL-3, TL-4, and TL-10 as per the requirements of the licence. Note that TL-1 is taken from the intake end and TL-4 is taken from the discharge end of the same pipe; therefore, samples collected as TL-4 during the dewatering program also fulfill the sampling requirements for TL-1. Sample results for TL-4 are provided in Table 8, which is provided at the end of this report. As expected, discharged water was well below the discharge criteria in the water licence.

Water collected from TL-4 in September was shown to be non-acutely toxic to trout or daphnia (Table 9).

Table 9: Acute Lethality Test Results for TL-4, September 2012

| Parameter        | TL4-06SEP12         | Analyst Comments   |
|------------------|---------------------|--------------------|
| ALS ID           | L1206012-3          |                    |
| Sample Date/Time | 9/6/2012 2:00:00 PM |                    |
| Trout LC50       | >100%               | No effect occurred |
| Daphnia LC50     | >100%               | No effect occurred |

Note: LC50 = lethal concentration that results in mortality of 50% of the test organisms; a result of 100% indicates all organisms survived

Sample results for TL-2 (Doris Creek upstream) are presented in Table 10, which is provided at the end of this report. Sample results for TL-3 (Doris Creek downstream) and a comparison of these results to TL-2 sample results is provided in Table 11, which is also provided at the end of this report. As expected, the TL-3 (downstream of discharge) water quality was similar to the TL-2 (upstream Doris Creek background). Water quality samples at TL-3 exceeded criteria for several parameters (TSS, aluminium, chromium, copper, iron) on September 6, however none of the values exceeded background as measured as TL-2.

### Item 30: Tailings Impoundment Area Discharge Volume

Dewatering of the Tailings Impoundment Area commenced on June 11, 2012 and was completed for the season on September 13, 2012. The daily discharge and maximum permitted discharge volumes for September are presented in Table 12. Discharge was within daily allowable volumes during September.

Table 12. Daily Permitted and Actual Discharge Volumes for the TIA Dewatering Program, September 2012

| Date               | TL-2 Discharge Volume (m³) | Max. Discharge Volume Allowed - 10% of TL-2 (m³)† | Total Daily Vol. Discharged (m³) | Elevation of TIA (m) |
|--------------------|----------------------------|---|----------------------------------|----------------------|
| September 1, 2012  | 288,700                    | 2,887   | 0*                               | 29.06                |
| September 2, 2012  | 287,400                    | 2,874   | 0*                               | 29.06                |
| September 3, 2012  | 286,000                    | 2,860   | 0*                               | 29.06                |
| September 4, 2012  | 284,600                    | 2,846   | 1,941                            | 29.06                |
| September 5, 2012  | 284,600                    | 2,846   | 2,774                            | 29.06                |
| September 6, 2012  | 283,200                    | 2,832   | 2,676                            | 29.06                |
| September 7, 2012  | 271,500                    | 2,715   | 2,376                            | 29.05                |
| September 8, 2012  | 269,600                    | 2,696   | 2,440                            | 29.05                |
| September 9, 2012  | 267,700                    | 2,677   | 2,395                            | 29.05                |
| September 10, 2012 | 255,100                    | 2,551   | 2,217                            | 29.05                |
| September 11, 2012 | 251,700                    | 2,517   | 1,931                            | 29.04                |

| Date                 | TL-2 Discharge Volume (m <sup>3</sup> ) | Max. Discharge Volume Allowed - 10% of TL-2 (m <sup>3</sup> )† | Total Daily Vol. Discharged (m <sup>3</sup> ) | Elevation of TIA (m) |
|----------------------|---|--|---|----------------------|
| September 12, 2012   | 248,200                                 | 2,482  | 1,918   | 29.05                |
| September 13, 2012   | 238,800                                 | 2,388  | 1,626   | 29.04                |
| <i>Monthly Total</i> |   | <i>35,171</i>  | <i>22,293</i>                                 |                      |
| <i>Annual Total</i>  |   | <i>854,459</i>   | <i>465,665</i>                                |                      |

Notes: †Data provided by Rescan from the TL-2 continuously monitoring hydrostation. \*Pump turned off to clarify analytical results from lab re: acute toxicity samples.

### Schedule J: Tailings Impoundment Area Water Quality (TL-10)

Water quality at station TL-10 is provided in Table 13.

Table 13: Water Quality at Surface (A), Mid-Depth (B) and Near Bottom (C) in Tail Lake (TIA), September 2012

| Parameter                        | Units | TL10-16SEP12A         | TL10-16SEP12B         | TL10-16SEP12C         |
|----------------------------------|-------|-----------------------|-----------------------|-----------------------|
| ALS ID                           |       | L1210492-1            | L1210492-2            | L1210492-3            |
| Sample Date/Time                 |       | 9/16/2012 11:38:00 AM | 9/16/2012 11:38:00 AM | 9/16/2012 11:38:00 AM |
| Conductivity (EC)                | uS/cm | 193                   | 192                   | 193                   |
| Hardness (as CaCO <sub>3</sub> ) | mg/L  | 45.7                  | 41.6                  | 42.0                  |
| pH                               | pH    | 7.72                  | 7.79                  | 7.81                  |
| Redox Potential                  | mV    | 148                   | 143                   | 141                   |
| Dissolved Oxygen                 | mg/L  | 12.01                 | 11.98                 | 11.89                 |
| Total Suspended Solids           | mg/L  | 4                     | <3.0                  | <3.0                  |
| Total Dissolved Solids           | mg/L  | 110                   | 116                   | 112                   |
| Ammonia, Total (as N)            | mg/L  | <0.050                | <0.050                | <0.050                |
| Chloride (Cl)                    | mg/L  | 33.4                  | 33.4                  | 33.5                  |
| Nitrate (as N)                   | mg/L  | <0.050                | <0.050                | <0.050                |
| Nitrite (as N)                   | mg/L  | <0.050                | <0.050                | <0.050                |
| Orthophosphate-Dissolved (as P)  | mg/L  | <0.0010               | <0.0010               | <0.0010               |
| Phosphorus (P)-Total             | mg/L  | <0.020                | 0.069                 | <0.020                |
| Cyanide, Free                    | mg/L  | <0.0050               | <0.0050               | <0.0050               |
| Cyanide Total                    | mg/L  | <0.0050               | <0.0050               | <0.0050               |
| Aluminum (Al)-Total              | mg/L  | 0.0209                | 0.024                 | 0.024                 |
| Antimony (Sb)-Total              | mg/L  | <0.00040              | <0.00040              | <0.00040              |
| Arsenic (As)-Total               | mg/L  | <0.00040              | <0.00040              | <0.00040              |
| Barium (Ba)-Total                | mg/L  | <0.0030               | <0.0030               | <0.0030               |
| Beryllium (Be)-Total             | mg/L  | <0.0010               | <0.0010               | <0.0010               |
| Boron (B)-Total                  | mg/L  | <0.050                | <0.050                | <0.050                |
| Cadmium (Cd)-Total               | mg/L  | <0.000010             | <0.000010             | <0.000010             |
| Calcium (Ca)-Total               | mg/L  | 9.2                   | 9.02                  | 9.19                  |
| Chromium (Cr)-Total              | mg/L  | <0.0010               | <0.0010               | <0.0010               |
| Cobalt (Co)-Total                | mg/L  | <0.0020               | <0.0020               | <0.0020               |
| Copper (Cu)-Total                | mg/L  | 0.001                 | 0.0012                | <0.0010               |
| Iron (Fe)-Total                  | mg/L  | 0.082                 | 0.08                  | 0.085                 |
| Lead (Pb)-Total                  | mg/L  | 0.0002                | <0.00010              | <0.00010              |
| Lithium (Li)-Total               | mg/L  | <0.010                | <0.010                | <0.010                |

| Parameter                | Units | TL10-16SEP12A         | TL10-16SEP12B         | TL10-16SEP12C         |
|--------------------------|-------|-----------------------|-----------------------|-----------------------|
| ALS ID                   |       | L1210492-1            | L1210492-2            | L1210492-3            |
| Sample Date/Time         |       | 9/16/2012 11:38:00 AM | 9/16/2012 11:38:00 AM | 9/16/2012 11:38:00 AM |
| Magnesium (Mg)-Total     | mg/L  | 5.07                  | 4.83                  | 5.03                  |
| Manganese (Mn)-Total     | mg/L  | <0.0050               | 0.0052                | <0.0050               |
| Mercury (Hg)-Total       | mg/L  | <0.000020             | <0.000020             | <0.000020             |
| Molybdenum (Mo)-Total    | mg/L  | <0.0050               | <0.0050               | <0.0050               |
| Nickel (Ni)-Total        | mg/L  | <0.0020               | <0.0020               | <0.0020               |
| Potassium (K)-Total      | mg/L  | 1.32                  | 1.32                  | 1.34                  |
| Selenium (Se)-Total      | mg/L  | <0.00040              | <0.00040              | <0.00040              |
| Silver (Ag)-Total        | mg/L  | <0.000020             | <0.000020             | <0.000020             |
| Sodium (Na)-Total        | mg/L  | 14.7                  | 14.3                  | 14.2                  |
| Thallium (Tl)-Total      | mg/L  | <0.00010              | <0.00010              | <0.00010              |
| Tin (Sn)-Total           | mg/L  | <0.050                | <0.050                | <0.050                |
| Titanium (Ti)-Total      | mg/L  | <0.0010               | <0.0010               | <0.0010               |
| Uranium (U)-Total        | mg/L  | <0.00010              | <0.00010              | <0.00010              |
| Vanadium (V)-Total       | mg/L  | <0.0010               | <0.0010               | <0.0010               |
| Zinc (Zn)-Total          | mg/L  | <0.0040               | <0.0040               | <0.0040               |
| Calcium (Ca)-Dissolved   | mg/L  | 9.76                  | 8.87                  | 8.89                  |
| Magnesium (Mg)-Dissolved | mg/L  | 5.18                  | 4.73                  | 4.8                   |

## Part J: Conditions Applying to General and Aquatics Effects Monitoring

### Item 12d Tonnages of Waste Rock Stored on the Temporary Waste Rock Pad

Underground mining is no longer occurring. Waste rock has not been removed from the pile. The total volume of rock on the temporary waste rock pad is 182 716 tonnes, as per the December 2011 survey.

### Item 12g Tail Lake Ice Thickness

There was no ice cover on Tail Lake.

## Environmental Incident Reporting

There were five environmental incidents in this reporting period:

- A spill was detected by site Environmental personnel as a stained area in the crush laydown outside an auxiliary building to the Doris Camp Geology Coreshack. From a nearby container the product was identified as diesel and the amount of the spill estimated to be several liters. The date and time is unknown. The affected area material will be removed and contained for disposal as part of the seasonal site-wide reclamation activities.
- During staging of drill contractor sea-cans at the Roberts Bay laydown area for removal on the sea-lift, it was noted by equipment operators that fluid was leaking from a sealed sea-can. The can was opened to reveal hydraulic fluid leaking from an improperly drained hydraulic control panel. An estimated 10-15L leaked on the crush of the laydown. The fluid in the catchment tray inside the can was soaked up with sorbents and the reservoir tank drained. Contaminated gravel outside the can was scraped up and contained for offsite disposal. All remaining drill contractor sea-cans (70+) were opened to identify additional fuel product management, packaging and DG labelling insufficiencies. Any remaining fluid tanks located were drained to prevent further incidents and cans were re-packed in accordance with proper IMDG shipping requirements.

- Spill #12-376. During staging of product totes for removal on the sea-lift, the forklift operator pinched the bottom corner of a plastic tote containing approximately 900L of fluid cement additive. A quantity of fluid leaked on the ground at the Robert's Bay Laydown; the estimated loss to the environment was 150L. The operator reacted quickly to the incident and deposited the leaking tote in a nearby portable berm. The product volume recovered from the berm and contained in drums was 750L. All contaminated gravel from the area of the spill was collected and contained for proper disposal and there was no risk of the product entering any water body. The manufacturer's Safety Data Sheet indicates the product is non-toxic.
- Spill #12-377. Site services personnel detected evidence of a diesel leak inside the containment berm at the Roberts Bay Bulk Fuel Storage Facility (ST-6b). A stained area was observed in the gravel of the berm near the pump and hose system utilized for transferring fuel into/between the tanks. It is thought that during the overnight re-positioning of the pumping system apparatus two days prior some residual fuel in the system leaked on to the floor of the berm before the hoses and pump were reconnected. No further leaking was detected upon investigation of the spill. The actual volume leaked is not known, but is estimated to be 100L. The leak of diesel fuel was fully contained by the lined gravel berm structure and no fuel was released to the environment. The contaminated gravel was removed by machine and contained for disposal.
- A hydraulic line on a loader located at the Roberts Bay jetty turnaround area was decoupled spilling approximately 20L of hydraulic fluid onto the gravel. The loader had been carrying a bucket to be loaded on the barge. As it adjusted its forks, the bucket strapped to the front caught a hydraulic line and knocked it off its coupler allowing hydraulic fluid to flow out of the hose freely. No fluid was spilled into the water. The contaminated gravel was collected for offsite disposal.

Should there be any questions regarding this monthly report, please contact Angela Holzapfel, Manager of Environmental Compliance for Hope Bay Mining Limited at (604) 345-3122 or [Angela.Holzapfel@Newmont.com](mailto:Angela.Holzapfel@Newmont.com).

Yours sincerely,

**Angela Holzapfel**

Manager of Environmental Compliance

Hope Bay Mining Limited



Table 7: Water Quality Data Summary for Monitoring Station ST-1, September 2012

| Parameters                                | Units | Maximum Average Concentration (mg/L) | Maximum Concentration in any Grab Sample (mg/L) | ST1-06SEP12         | ST1-13SEP12          |
|---|-------|--------------------------------------|---|---------------------|----------------------|
|   |       |                                      |   | L1206071-1          | L1209817-1           |
|   |       |                                      |   | 9/6/2012 1:05:00 PM | 9/13/2012 3:00:00 PM |
| Hardness (as CaCO <sub>3</sub> )          | mg/L  |                                      |   | 2730                | 2460                 |
| Total Suspended Solids                    | mg/L  | 15                                   | 30  | <3.0                | 4                    |
| Alkalinity, Total (as CaCO <sub>3</sub> ) | mg/L  |                                      |   | 126                 | 137                  |
| Ammonia, Total (as N)                     | mg/L  | 2                                    | 4   | 43.9                | 40.3                 |
| Bicarbonate (HCO <sub>3</sub> )           | mg/L  |                                      |   | 153                 | 168                  |
| Carbonate (CO <sub>3</sub> )              | mg/L  |                                      |   | <5.0                | <5.0                 |
| Chloride (Cl)                             | mg/L  |                                      |   | 2570                | 2340                 |
| Conductivity (EC)                         | uS/cm |                                      |   | 9180                | 8550                 |
| Hardness (as CaCO <sub>3</sub> )          | mg/L  |                                      |   | 2640                | 2310                 |
| Hydroxide (OH)                            | mg/L  |                                      |   | <5.0                | <5.0                 |
| Ion Balance                               | %     |                                      |   | 97.4                | 98.9                 |
| Nitrate and Nitrite (as N)                | mg/L  |                                      |   | 132                 | 113                  |
| Nitrate (as N)                            | mg/L  |                                      |   | 132                 | 113                  |
| Nitrite (as N)                            | mg/L  |                                      |   | <0.50               | <0.50                |
| pH  | pH    | 6.0 - 9.0                            | 9   | 7.72                | 7.82                 |
| TDS (Calculated)                          | mg/L  |                                      |   | 5140                | 4700                 |
| Sulfate (SO <sub>4</sub> )                | mg/L  |                                      |   | 204                 | 190                  |
| Cyanide, Total                            | mg/L  | 1                                    | 2   | 0.0298              | 0.0099               |
| Aluminum (Al)-Total                       | mg/L  |                                      |   | 0.061               | 0.046                |
| Antimony (Sb)-Total                       | mg/L  |                                      |   | <0.0016             | <0.0016              |
| Arsenic (As)-Total                        | mg/L  | 0.05                                 | 0.1   | <0.0016             | <0.0016              |
| Barium (Ba)-Total                         | mg/L  |                                      |   | 0.229               | 0.176                |
| Beryllium (Be)-Total                      | mg/L  |                                      |   | <0.0040             | <0.0040              |
| Boron (B)-Total                           | mg/L  |                                      |   | 0.45                | 0.53                 |
| Cadmium (Cd)-Total                        | mg/L  |                                      |   | 0.000319            | 0.000167             |
| Calcium (Ca)-Total                        | mg/L  |                                      |   | 918                 | 808                  |
| Chromium (Cr)-Total                       | mg/L  |                                      |   | <0.0040             | <0.0040              |
| Cobalt (Co)-Total                         | mg/L  |                                      |   | <0.0080             | <0.0080              |
| Copper (Cu) - Total                       | mg/L  | 0.02                                 | 0.3   | 0.0140              | 0.0117               |
| Iron (Fe)-Total                           | mg/L  | 0.3                                  | 0.6   | 0.885               | 0.92                 |
| Lead (Pb)-Total                           | mg/L  | 0.01                                 | 0.02  | <0.00040            | <0.00040             |
| Lithium (Li)-Total                        | mg/L  |                                      |   | 0.122               | 0.088                |
| Magnesium (Mg)-Total                      | mg/L  |                                      |   | 106                 | 106                  |
| Manganese (Mn)-Total                      | mg/L  |                                      |   | 1.52                | 1.30                 |
| Mercury (Hg)-Total                        | mg/L  |                                      |   | <0.000020           | <0.000020            |
| Molybdenum (Mo)-Total                     | mg/L  |                                      |   | <0.020              | <0.020               |
| Nickel (Ni)-Total                         | mg/L  | 0.05                                 | 0.1   | 0.0086              | <0.0080              |
| Potassium (K)-Total                       | mg/L  |                                      |   | 48.6                | 43.6                 |

Table 7 (cont.): Water Quality Data Summary for Monitoring Station ST-1, September 2012

| Parameters                        | Units | Maximum<br>Average<br>Concentration<br>(mg/L) | Maximum<br>Concentration<br>in any Grab<br>Sample<br>(mg/L) | ST1-06SEP12                    | ST1-13SEP12                     |
|-----------------------------------|-------|---|---|--------------------------------|---------------------------------|
|                                   |       |   |   | <b>L1206071-1</b>              | <b>L1209817-1</b>               |
|                                   |       |   |   | <b>9/6/2012 1:05:00<br/>PM</b> | <b>9/13/2012 3:00:00<br/>PM</b> |
| Selenium (Se)-Total               | mg/L  |   |   | 0.0035                         | 0.0031                          |
| Silver (Ag)-Total                 | mg/L  |   |   | <0.000080                      | <0.000080                       |
| Sodium (Na)-Total                 | mg/L  |   |   | 744                            | 673                             |
| Thallium (Tl)-Total               | mg/L  |   |   | <0.00040                       | <0.00040                        |
| Tin (Sn)-Total                    | mg/L  |   |   | <0.20                          | <0.20                           |
| Titanium (Ti)-Total               | mg/L  |   |   | 0.0150                         | <0.0040                         |
| Uranium (U)-Total                 | mg/L  |   |   | 0.00241                        | 0.00224                         |
| Vanadium (V)-Total                | mg/L  |   |   | <0.0040                        | <0.0040                         |
| Zinc (Zn)-Total                   | mg/L  | 0.01  | 0.02  | <b>0.185</b>                   | <b>0.195</b>                    |
| Calcium (Ca)-Dissolved            | mg/L  |   |   | 878                            | 762                             |
| Magnesium (Mg)-<br>Dissolved      | mg/L  |   |   | 108                            | 100                             |
| Potassium (K)-Dissolved           | mg/L  |   |   | 46.2                           | 41.9                            |
| Sodium (Na)-Dissolved             | mg/L  |   |   | 674                            | 683                             |
| Oil and Grease                    | mg/L  | 5   | 10  | <1.0                           | <1.0                            |
| Oil And Grease (Visible<br>Sheen) |       | no visible<br>sheen                           | no visible<br>sheen   | no visible sheen               | no visible sheen                |

Note: Red text indicates that value is above the discharge criteria when discharging to tundra. All water from ST-1 was discharged to Tail Lake TIA

Table 8: TL-4 Sample Results, September 2012

| Parameters                      | Units | TL-4 Max Average (mg/L) | TL-4 Max Grab (mg/L) | TL4-26AUG12                 | TL4-06SEP12                | TL4-13SEP12                 | TL1/TL4 Sept. Monthly Average |
|---------------------------------|-------|-------------------------|----------------------|-----------------------------|----------------------------|-----------------------------|-------------------------------|
| <b>ALS ID</b>                   |       |                         |                      | <b>L1200382-3</b>           | <b>L1206012-3</b>          | <b>L1209794-3</b>           |                               |
| <b>Sample Date/Time</b>         |       |                         |                      | <b>8/26/2012 2:15:00 PM</b> | <b>9/6/2012 2:00:00 PM</b> | <b>9/13/2012 2:00:00 PM</b> |                               |
| Conductivity (EC)               | uS/cm |                         |                      | 208                         | 226                        | 229                         | 227.5                         |
| Hardness (as CaCO3)             | mg/L  |                         |                      | 60.3                        | 50.3                       | 48.8                        | 49.55                         |
| pH                              | pH    | 6.0 - 9.0               | 9                    | 7.76                        | 7.75                       | 7.71                        | 7.73                          |
| Total Suspended Solids          | mg/L  | 15                      | 30                   | <3.0                        | <3.0                       | <3.0                        | <3.0                          |
| Total Dissolved Solids          | mg/L  |                         |                      | 129                         | 132                        | 132                         | 132                           |
| Ammonia, Total (as N)           | mg/L  | 6                       | -                    | <0.050                      | 0.063                      | <0.050                      | 0.063                         |
| Chloride (Cl)                   | mg/L  |                         |                      | 33                          | 40.4                       | 39.3                        | 39.85                         |
| Nitrate (as N)                  | mg/L  |                         |                      | <0.050                      | <0.050                     | <0.050                      | <0.050                        |
| Nitrite (as N)                  | mg/L  |                         |                      | <0.050                      | <0.050                     | <0.050                      | <0.050                        |
| Orthophosphate-Dissolved (as P) | mg/L  |                         |                      | <0.0010                     | <0.0010                    | <0.0010                     | <0.0010                       |
| Phosphorus (P)-Total            | mg/L  |                         |                      | <0.020                      | <0.020                     | <0.020                      | <0.020                        |
| Cyanide, Total                  | mg/L  | 1                       | 2                    | <0.0050                     | <0.0050                    | <0.0050                     | <0.0050                       |
| Cyanide, Free                   | mg/L  |                         |                      | <0.0050                     | <0.0050                    | <0.0050                     | <0.0050                       |
| Aluminum (Al)-Total             | mg/L  |                         |                      | 0.0115                      | 0.0122                     | 0.011                       | 0.0116                        |
| Antimony (Sb)-Total             | mg/L  |                         |                      | <0.00040                    | <0.00040                   | <0.00040                    | <0.00040                      |
| Arsenic (As)-Total              | mg/L  | 0.5                     | 1                    | <0.00040                    | <0.00040                   | <0.00040                    | <0.00040                      |
| Barium (Ba)-Total               | mg/L  |                         |                      | <0.0030                     | 0.0117                     | 0.012                       | 0.01185                       |
| Beryllium (Be)-Total            | mg/L  |                         |                      | <0.0010                     | <0.0010                    | <0.0010                     | <0.0010                       |
| Boron (B)-Total                 | mg/L  |                         |                      | <0.050                      | <0.050                     | <0.050                      | <0.050                        |
| Cadmium (Cd)-Total              | mg/L  |                         |                      | <0.000010                   | 0.000016                   | <0.000010                   | 0.000016                      |
| Calcium (Ca)-Total              | mg/L  |                         |                      | 11                          | 13                         | 13                          | 13                            |
| Chromium (Cr)-Total             | mg/L  |                         |                      | <0.0010                     | <0.0010                    | <0.0010                     | <0.0010                       |
| Cobalt (Co)-Total               | mg/L  |                         |                      | <0.0020                     | <0.0020                    | <0.0020                     | <0.0020                       |
| Copper (Cu)-Total               | mg/L  | 0.3                     | 0.6                  | 0.001                       | 0.0022                     | 0.0024                      | 0.0023                        |
| Iron (Fe)-Total                 | mg/L  |                         |                      | 0.308                       | 0.296                      | 0.267                       | 0.2815                        |
| Lead (Pb)-Total                 | mg/L  | 0.2                     | 0.4                  | <0.00010                    | 0.00086                    | 0.00049                     | 0.000675                      |
| Lithium (Li)-Total              | mg/L  |                         |                      | <0.010                      | <0.010                     | <0.010                      | <0.010                        |
| Magnesium (Mg)-Total            | mg/L  |                         |                      | 5.17                        | 5.5                        | 5.74                        | 5.62                          |

Note: TL-1 and TL-4 are opposite ends of the same discharge pipeline, therefore, separate TL-1 samples were not collected

Table 8 (cont): TL-4 Sample Results, September 2012

| Parameters                     | Units         | TL-4 Max<br>Average<br>(mg/L) | TL-4 Max<br>Grab<br>(mg/L) | TL4-26AUG12                     | TL4-06SEP12                    | TL4-13SEP12                     | TL4 (TL1)<br>Sept.<br>Monthly<br>Average |
|--------------------------------|---------------|-------------------------------|----------------------------|---------------------------------|--------------------------------|---------------------------------|--|
| <b>ALS ID</b>                  |               |                               |                            | <b>L1200382-3</b>               | <b>L1206012-3</b>              | <b>L1209794-3</b>               |  |
| <b>Sample Date/Time</b>        |               |                               |                            | <b>8/26/2012 2:15:00<br/>PM</b> | <b>9/6/2012 2:00:00<br/>PM</b> | <b>9/13/2012 2:00:00<br/>PM</b> |  |
| Manganese (Mn)-Total           | mg/L          |                               |                            | 0.0256                          | 0.0153                         | 0.0215                          | 0.0184                                   |
| Mercury (Hg)-Total             | mg/L          |                               |                            | <0.000020                       | <0.000020                      | <0.000020                       | <0.000020                                |
| Molybdenum (Mo)-Total          | mg/L          |                               |                            | <0.0050                         | <0.0050                        | <0.0050                         | <0.0050                                  |
| Nickel (Ni)-Total              | mg/L          | 0.5                           | 1                          | <0.0020                         | <0.0020                        | <0.0020                         | <0.0020                                  |
| Potassium (K)-Total            | mg/L          |                               |                            | 1.74                            | 1.97                           | 1.93                            | 1.95                                     |
| Selenium (Se)-Total            | mg/L          |                               |                            | <0.00040                        | <0.00040                       | <0.00040                        | <0.00040                                 |
| Silver (Ag)-Total              | mg/L          |                               |                            | <0.000020                       | <0.000020                      | <0.000020                       | <0.000020                                |
| Sodium (Na)-Total              | mg/L          |                               |                            | 16.8                            | 17.2                           | 17.5                            | 17.35                                    |
| Thallium (Tl)-Total            | mg/L          |                               |                            | <0.00010                        | 0.00012                        | <0.00010                        | 0.00012                                  |
| Tin (Sn)-Total                 | mg/L          |                               |                            | <0.050                          | <0.050                         | <0.050                          | <0.050                                   |
| Titanium (Ti)-Total            | mg/L          |                               |                            | <0.0010                         | <0.0010                        | <0.0010                         | <0.0010                                  |
| Uranium (U)-Total              | mg/L          |                               |                            | <0.00010                        | <0.00010                       | <0.00010                        | <0.00010                                 |
| Vanadium (V)-Total             | mg/L          |                               |                            | <0.0010                         | <0.0010                        | <0.0010                         | <0.0010                                  |
| Zinc (Zn)-Total                | mg/L          | 0.5                           | 1                          | <0.0040                         | 0.0069                         | 0.0099                          | 0.0084                                   |
| Calcium (Ca)-Dissolved         | mg/L          |                               |                            | 13.4                            | 11.6                           | 11.2                            | 11.4                                     |
| Magnesium (Mg)-Dissolved       | mg/L          |                               |                            | 6.53                            | 5.17                           | 5.05                            | 5.11                                     |
| Radium-226                     | Bq/L          | 0.37                          | 1.11                       | Error*                          | Error*                         | Error*                          | -  |
| Biological Oxygen Demand (BOD) | mg/L          | 80                            | 160                        | <2                              | <2.0                           | -                               | <2.0                                     |
| Dissolved Oxygen (DO)**        | mg/L          |                               |                            | 9.18                            | -                              | -                               |  |
| Fecal Coliforms                | CFU/100m<br>L | 10,000                        | 10,000                     | <1                              | 4                              | -                               | 4  |

Note: TL-1 and TL-4 are opposite ends of the same discharge pipeline, therefore, separate TL-1 samples were not collected

\*During August and September sampling for Radium-226, a sample preservation error prevented analysis for this parameter. Results are not available. No prior sampling results for this parameter exceeded criteria during the 2012 sampling season.

\*\*Dissolved Oxygen was inadvertently omitted from the report for August. The complete lab analytical results for sampling August 26/12 are included above, with the field measurement for DO.

Table 10: TL-2 Sample Results, September 2012

| Parameter                        | Units | Maximum Concentration<br>of Any Grab Sample<br>(mg/L) - TL-3 | TL2-26AUG12*         | TL2-06SEP12         | TL2-13SEP12          |
|----------------------------------|-------|--|----------------------|---------------------|----------------------|
| ALS ID                           |       |  | L1200382-1           | L1206012-1          | L1209794-1           |
| Sample Date/Time                 |       |  | 8/26/2012 2:15:00 PM | 9/6/2012 1:50:00 PM | 9/13/2012 2:10:00 PM |
| Conductivity (EC)                | uS/cm |  | 279                  | 273                 | 281                  |
| Hardness (as CaCO <sub>3</sub> ) | mg/L  |  | 50.5                 | 43.9                | 44.8                 |
| pH                               | pH    | 6.0 - 9.0  | 7.59                 | 7.24                | 7.57                 |
| Total Suspended Solids           | mg/L  | 15   | <3.0                 | 58                  | 3                    |
| Total Dissolved Solids           | mg/L  |  | 25                   | 165                 | 164                  |
| Ammonia, Total (as N)            | mg/L  | 1.54*  | <0.050               | <0.050              | <0.050               |
| Chloride (Cl)                    | mg/L  | 150  | 62.3                 | 61.4                | 60.8                 |
| Nitrate (as N)                   | mg/L  | 2.9  | <0.050               | <0.050              | <0.050               |
| Nitrite (as N)                   | mg/L  | 0.06   | <0.050               | <0.050              | <0.050               |
| Orthophosphate-Dissolved (as P)  | mg/L  |  | <0.0010              | <0.0010             | <0.0010              |
| Phosphorus (P)-Total             | mg/L  |  | <0.020               | 0.067               | <0.020               |
| Cyanide, Total                   | mg/L  | 0.01   | <0.0050              | <0.0050             | <0.0050              |
| Cyanide, Free                    | mg/L  | 0.005  | <0.0050              | <0.0050             | <0.0050              |
| Aluminum (Al)-Total              | mg/L  | 0.1  | 0.0362               | 1.73                | 0.0548               |
| Antimony (Sb)-Total              | mg/L  |  | <0.00040             | <0.00040            | <0.00040             |
| Arsenic (As)-Total               | mg/L  | 0.005  | <0.00040             | 0.00056             | <0.00040             |
| Barium (Ba)-Total                | mg/L  |  | <0.0030              | 0.0181              | 0.0031               |
| Beryllium (Be)-Total             | mg/L  |  | <0.0010              | <0.0010             | <0.0010              |
| Boron (B)-Total                  | mg/L  |  | <0.050               | <0.050              | <0.050               |
| Cadmium (Cd)-Total               | mg/L  | 0.000017   | <0.000010            | <0.000010           | <0.000010            |
| Calcium (Ca)-Total               | mg/L  |  | 7.99                 | 9.12                | 7.82                 |
| Chromium (Cr)-Total              | mg/L  | 0.001  | <0.0010              | 0.0032              | <0.0010              |
| Cobalt (Co)-Total                | mg/L  |  | <0.0020              | <0.0020             | <0.0020              |
| Copper (Cu)-Total                | mg/L  | 0.002  | 0.0013               | 0.0089              | 0.0015               |
| Iron (Fe)-Total                  | mg/L  | 0.3  | 0.083                | 2.07                | 0.089                |
| Lead (Pb)-Total                  | mg/L  | 0.001  | <0.00010             | 0.00056             | <0.00010             |
| Lithium (Li)-Total               | mg/L  |  | <0.010               | <0.010              | <0.010               |
| Magnesium (Mg)-Total             | mg/L  |  | 5.46                 | 6.6                 | 5.52                 |
| Manganese (Mn)-Total             | mg/L  |  | 0.0152               | 0.0848              | 0.0165               |
| Mercury (Hg)-Total               | mg/L  | 0.000026   | <0.000020            | <0.000020           | <0.000020            |

Note: Ammonia maximum criteria based on pH 7 at 20°C. Red text indicates exceedence of TL-3 (downstream) criteria at TL-2 (upstream)

Table 10 (cont): TL-2 Sample Results, September 2012

| Parameter                | Units | Maximum Concentration<br>of Any Grab Sample<br>(mg/L) - TL-3 | TL2-26AUG12*                | TL2-06SEP12                | TL2-13SEP12                 |
|--------------------------|-------|--|-----------------------------|----------------------------|-----------------------------|
| <b>ALS ID</b>            |       |  | <b>L1200382-1</b>           | <b>L1206012-1</b>          | <b>L1209794-1</b>           |
| <b>Sample Date/Time</b>  |       |  | <b>8/26/2012 2:15:00 PM</b> | <b>9/6/2012 1:50:00 PM</b> | <b>9/13/2012 2:10:00 PM</b> |
| Molybdenum (Mo)-Total    | mg/L  | 0.0073   | <0.0050                     | <0.0050                    | <0.0050                     |
| Nickel (Ni)-Total        | mg/L  | 0.025  | <0.0020                     | 0.0027                     | <0.0020                     |
| Potassium (K)-Total      | mg/L  |  | 1.86                        | 2.63                       | 1.84                        |
| Selenium (Se)-Total      | mg/L  | 0.001  | <0.00040                    | <0.00040                   | <0.00040                    |
| Silver (Ag)-Total        | mg/L  | 0.00001  | <0.000020                   | <0.000020                  | <0.000020                   |
| Sodium (Na)-Total        | mg/L  |  | 28.6                        | 29.6                       | 28                          |
| Thallium (Tl)-Total      | mg/L  | 0.0008   | <0.00010                    | <0.00010                   | <0.00010                    |
| Tin (Sn)-Total           | mg/L  |  | <0.050                      | <0.050                     | <0.050                      |
| Titanium (Ti)-Total      | mg/L  |  | <0.0010                     | 0.0816                     | 0.0017                      |
| Uranium (U)-Total        | mg/L  |  | <0.00010                    | 0.0001                     | <0.00010                    |
| Vanadium (V)-Total       | mg/L  |  | <0.0010                     | 0.0036                     | <0.0010                     |
| Zinc (Zn)-Total          | mg/L  | 0.03   | <0.0040                     | 0.0057                     | <0.0040                     |
| Calcium (Ca)-Dissolved   | mg/L  |  | 9.16                        | 7.97                       | 8.36                        |
| Magnesium (Mg)-Dissolved | mg/L  |  | 6.71                        | 5.82                       | 5.82                        |

Note: Ammonia maximum criteria based on pH 7 at 20°C. Red text indicates exceedence of TL-3 (downstream) criteria at TL-2 (upstream)

\*Results for sampling August 26/12 were incomplete in the previous monthly report; the complete analysis is presented above.

Table 11: TL-3 Sample Results and Comparison to TL-2 Sample Results, September 2012

| Parameter                        | Units | Maximum<br>Concentration of<br>Any Grab<br>Sample (mg/L)<br>– TL-3 | TL3-26AUG12*         | TL3-06SEP12         | TL3-13SEP12          |
|----------------------------------|-------|--|----------------------|---------------------|----------------------|
| ALS ID                           |       |  | L1200382-2           | L1206012-2          | L1209794-2           |
| Sample Date/Time                 |       |  | 8/26/2012 2:15:00 PM | 9/6/2012 6:35:00 PM | 9/13/2012 5:45:00 PM |
| Conductivity (EC)                | uS/cm |  | 262                  | 282                 | 295                  |
| Hardness (as CaCO <sub>3</sub> ) | mg/L  |  | 50.1                 | 45.1                | 46.5                 |
| pH                               | pH    | 6.0 - 9.0  | 7.72                 | 7.57                | 7.6                  |
| Total Suspended Solids           | mg/L  | 15   | <3.0                 | 21*                 | <3.0                 |
| Total Dissolved Solids           | mg/L  |  | 146                  | 167                 | 167                  |
| Ammonia, Total (as N)            | mg/L  | 1.54   | <0.050               | <0.050              | <0.050               |
| Chloride (Cl)                    | mg/L  | 150  | 53.6                 | 64.5                | 65.1                 |
| Nitrate (as N)                   | mg/L  | 2.9  | <0.050               | 0.09                | 0.073                |
| Nitrite (as N)                   | mg/L  | 0.06   | <0.050               | <0.050              | <0.050               |
| Orthophosphate-Dissolved (as P)  | mg/L  |  | <0.0010              | <0.0010             | <0.0010              |
| Phosphorus (P)-Total             | mg/L  |  | 0.021                | 0.036               | <0.020               |
| Cyanide, Total                   | mg/L  | 0.01   | <0.0050              | <0.0050             | <0.0050              |
| Cyanide, Free                    | mg/L  | 0.005  | <0.0050              | <0.0050             | <0.0050              |
| Aluminum (Al)-Total              | mg/L  | 0.1  | 0.036                | 1.12*               | 0.0566               |
| Antimony (Sb)-Total              | mg/L  |  | <0.00040             | <0.00040            | <0.00040             |
| Arsenic (As)-Total               | mg/L  | 0.005  | <0.00040             | <0.00040            | <0.00040             |
| Barium (Ba)-Total                | mg/L  |  | 0.003                | 0.013               | 0.0031               |
| Beryllium (Be)-Total             | mg/L  |  | <0.0010              | <0.0010             | <0.0010              |
| Boron (B)-Total                  | mg/L  |  | <0.050               | <0.050              | <0.050               |
| Cadmium (Cd)-Total               | mg/L  | 0.000017   | <0.000010            | <0.000010           | <0.000010            |
| Calcium (Ca)-Total               | mg/L  |  | 9.62                 | 9.47                | 7.6                  |
| Chromium (Cr)-Total              | mg/L  | 0.001  | <0.0010              | 0.0021*             | <0.0010              |
| Cobalt (Co)-Total                | mg/L  |  | <0.0020              | <0.0020             | <0.0020              |
| Copper (Cu)-Total                | mg/L  | 0.002  | 0.0013               | 0.0028*             | 0.0014               |
| Iron (Fe)-Total                  | mg/L  | 0.3  | 0.159                | 1.2*                | 0.1                  |
| Lead (Pb)-Total                  | mg/L  | 0.001  | <0.00010             | 0.00037             | <0.00010             |
| Lithium (Li)-Total               | mg/L  |  | <0.010               | <0.010              | <0.010               |

Notes: Ammonia maximum criteria based on pH 7 at 20°C. Red text indicates over licence discharge criteria. Red text with a \* indicates TL-2 and TL-3 were above the licence discharge criteria on that date. Black text with a \* indicates that value is above licence criteria but below TL-2 on that date.

Table 11 (cont): TL-3 Sample Results and Comparison to TL-2 Sample Results, September 2012

| Parameter                      | Units | Maximum Concentration of Any Grab Sample (mg/L) – TL-3 | TL3-26AUG12*             | TL3-06SEP12              | TL3-13SEP12              |
|--------------------------------|-------|--|--------------------------|--------------------------|--------------------------|
| ALS ID                         |       |  | L1200382-2               | L1206012-2               | L1209794-2               |
| Sample Date/Time               |       |  | 8/26/2012 2:15:00 PM     | 9/6/2012 6:35:00 PM      | 9/13/2012 5:45:00 PM     |
| Magnesium (Mg)-Total           | mg/L  |  | 6.05                     | 6.59                     | 5.37                     |
| Manganese (Mn)-Total           | mg/L  |  | 0.0186                   | 0.0452                   | 0.0195                   |
| Mercury (Hg)-Total             | mg/L  | 0.000026   | <0.000020                | <0.000020                | <0.000020                |
| Molybdenum (Mo)-Total          | mg/L  | 0.0073   | <0.0050                  | <0.0050                  | <0.0050                  |
| Nickel (Ni)-Total              | mg/L  | 0.025  | <0.0020                  | <0.0020                  | <0.0020                  |
| Potassium (K)-Total            | mg/L  |  | 2.04                     | 2.44                     | 1.96                     |
| Selenium (Se)-Total            | mg/L  | 0.001  | <0.00040                 | <0.00040                 | <0.00040                 |
| Silver (Ag)-Total              | mg/L  | 0.00001  | <0.000020                | <0.000020                | <0.000020                |
| Sodium (Na)-Total              | mg/L  |  | 30                       | 29                       | 30.7                     |
| Thallium (Tl)-Total            | mg/L  | 0.0008   | <0.00010                 | <0.00010                 | <0.00010                 |
| Tin (Sn)-Total                 | mg/L  |  | <0.050                   | <0.050                   | <0.050                   |
| Titanium (Ti)-Total            | mg/L  |  | <0.0010                  | 0.0557                   | 0.0025                   |
| Uranium (U)-Total              | mg/L  |  | <0.00010                 | <0.00010                 | <0.00010                 |
| Vanadium (V)-Total             | mg/L  |  | <0.0010                  | 0.0023                   | <0.0010                  |
| Zinc (Zn)-Total                | mg/L  | 0.03   | <0.0040                  | 0.0046                   | 0.0081                   |
| Calcium (Ca)-Dissolved         | mg/L  |  | 9.64                     | 8.32                     | 8.95                     |
| Magnesium (Mg)-Dissolved       | mg/L  |  | 6.32                     | 5.91                     | 5.87                     |
| Hexavalent Chromium            | mg/L  | 0.0010   | <0.0010                  | <0.0010                  | <0.0010                  |
| Oil and Grease                 | mg/L  | 5  | <1.0                     | <1.0                     | <1.0                     |
| Oil And Grease (Visible Sheen) |       |  | No visible sheen present | No visible sheen present | No visible sheen present |

Notes: Ammonia maximum criteria based on pH 7 at 20°C. Red text indicates over licence discharge criteria. Red text with a \* indicates TL-2 and TL-3 were above the licence discharge criteria on that date. Black text with a \* indicates that value is above licence criteria but below TL-2 on that date.

\*Results for sampling August 26/12 were incomplete in the previous monthly report; the complete analytical results are presented above.