



MINTO EXPLORATIONS LTD.
A Subsidiary of Capstone Mining Corp.

APPENDIX I

Minto Creek Annual Fish Monitoring Program



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Minto Creek Annual Fish Monitoring Program

Prepared by:
Minto Explorations Ltd.

Minto Creek Annual Fisheries Monitoring Program

1. Objective

To monitor, assess and characterize fish usage in Minto Creek and to provide data to allow interpretation of the potential influence of the Minto Mine on the fish community. Focus on the most predominant species that uses the system, Chinook salmon, as well as other species that have previously been encountered (or any new species) will allow an interpretation of both extent and timings of use within this system.

With respect to extent of use, it is known that only lower Minto Creek (below the canyon) is used by fish during the open water season. Further, a natural barrier to fish passage was confirmed during a 2010 study at (approximately) 1.2 km up from the Yukon River. Traps will be placed above this barrier on an annual basis to confirm the extent of use by fish in the system.

Past observations have indicated that the area at the confluence of Minto Creek and the Yukon River is not used by spawning salmon or other species. The annual fisheries program will however, continue to observe for and report on the use of the confluence zone by spawning salmon and other species.

2. Target Habitat, Frequency and Timing

The Fisheries Monitoring Program will conduct monthly sampling throughout the open-water season from late June/ early July through November. Known juvenile habitat will be targeted including eddies, deep pools, and calmer waters with shady areas and/ or woody debris.

Additional fisheries data will be collected every 2-3 years in support of the requirements of the Environmental Effects Monitoring (EEM) Program under the Metal Mining Effluent Regulations (MMER). Years when EEM program is undertaken will be referenced.

3. Sampling Locations and Replication

The locations have been identified and recorded by GPS waypoints from prior efforts. 12-16 Gee Traps will be placed at approximately the same location during each sampling event and allowed a 24 hour soak period.

4. Sampling Methodology

Trapping efforts will include using Gee-type Minnow traps with ¼" wire mesh that will be baited using Yukon River origin Chinook salmon roe. All fish captured during the monthly sampling in the open water period will be identified and enumerated, measured for fork length (mm) or total length (sculpins, burbot), observed for abnormalities, and released at the location where it had been trapped.

Additional supporting information that will be collected includes: GPS coordinates of trapping locations, physical description and photo documentation of sampling locations, in situ water quality (temperature, dissolved oxygen, conductivity, flow) as well as weather conditions at time of sampling.

5. Data Analysis, Interpretation and Reporting

An annual report will be prepared detailing the results of the sampling program. Data analysis will be performed to quantify relative use of Minto Creek and will be reported through determination of Catch Per Unit Effort (CPUE). A description of water chemistry in the receiving environment and mine discharge actions during the open water period will also be reported.



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APPENDIX J

Periphyton Monitoring Program



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Periphyton Monitoring Program

Prepared by: Minto Explorations Ltd.

Periphyton Monitoring Program

1. Objective

To monitor the condition of the periphyton community of Minto Creek and to provide data to allow interpretation of the potential influence of the Minto Mine on the periphyton community using temporal and spatial comparisons. (control-impact design).

2. Target Habitat, Frequency and Timing

- Sampling will be conducted in a variety of habitat (i.e. pools, riffles) on suitable substrate (i.e. cobble, boulders).
- Sampling will take place once annual in late August/early fall

3. Sampling Locations and Replication

- Periphyton samples to be collected from lower Minto Creek (in the vicinity of water quality station W2), and at a reference area with similar habitat characteristics (substrate texture, water velocity, water depth).
- Three replicate samples will be taken within each habitat type (i.e. pool, riffle)

4. Sampling Methodology

- Samples will be collected from suitable substrate from a variety of habitat (i.e. pools, riffles) through scraping or brushing.
- Samples from each respective station will be combined to form one representative composite sample.
- Samples will be placed in jars, labeled and stored in a dark cool location prior to shipping to a plant (algae) taxonomist for identification.
- Supporting habitat measures to include substrate characterization (100 pebble count; CABIN 2010), water velocity, sampling depth and creek width (wetted and bankfull) and cover description.
- Supporting water quality measures to include field meter measurement of temperature, dissolved oxygen, specific conductance and pH, and a supporting water quality sample to be assessed for all analytes specified in the Minto Mine's receiving water quality monitoring program.

5. Laboratory Analysis

- Samples to be submitted to a qualified plant/algae taxonomy laboratory for taxonomy to “Lowest Practical Level” (LPL)..

6. Data Analysis, Interpretation and Reporting

- Data interpretation to include an evaluation of temporal changes in periphyton community condition and control-impact (effluent exposed versus reference) comparisons. Data interpretation will also consider relationships between periphyton community condition and chemical condition as well as periphyton community condition and habitat characteristics.
- An annual report is to be prepared detailing the results, analysis and interpretation of the periphyton community monitoring program.