

**DATE** January 24, 2014**REFERENCE No.** 1314260010-064-TM-Rev0-0000**TO** Mr. Brad Thompson  
Public Works and Government Services Canada (PWGSC)**FROM** David Caughill**EMAIL** Dave\_Caughill@golder.com**SUMMARY OF FIELD INVESTIGATION PROGRAMS ON THE NORTH/SOUTH/CENTRAL PONDS AT GIANT MINE, YELLOWKNIFE, NORTHWEST TERRITORIES**

Public Works and Government Services Canada (PWGSC) requested Golder Associates Ltd. (Golder) to provide a summary of the field investigation programs carried out by Golder Associates on the North, Central and South Ponds at the Giant Mine Site, NWT. This technical memorandum was prepared to provide a factual field investigation record of the activities undertaken and observations recorded during the field programs and is intended to provide information to support production of paste from the tailings from these ponds.

The reader is referred to the Study Limitations section which follows the text and forms an integral part of this technical memorandum.

## 1.0 INTRODUCTION

Golder has completed four field investigation programs on the North, Central and South ponds between 2010 and 2013, consisting of three test pit site investigation programs and one auger borehole program. The test pit programs provide information on the upper 3 to 4 m of the tailings within the ponds. The borehole program provides more information on the tailings at deeper depths, at selected locations. Observations on consistency and composition of the tailings were recorded and samples were collected, to be used for laboratory testing to characterize and to evaluate the potential suitability of the tailings to produce paste for underground mine backfill. The information summarised in this memorandum is intended to provide information to support the planning of paste production programs in 2014 and 2015.

The paste produced with tailings from upper portions of the South Pond, the Central Pond and possibly the North Pond will be used to supply tailings for paste production in 2014 and 2015. For the purpose of this memorandum, the North Pond is considered as a backup location to source tailings, if insufficient tailings are available from the South and Central Ponds. Hence, the investigations completed to date for the North Pond are less extensive than that for the other two areas.

A brief summary of the typical tailings encountered in the upper portion of the ponds is provided in Section 4, with the ponds divided into sections according to typical soils description.



## 2.0 FIELD PROGRAMS

A total of 54 test pits have been excavated on the South Pond, 32 on the Central Pond and 2 on the North Pond. Two boreholes have been advanced on the South Pond, 2 on the Central Pond and 4 on the North Pond. Details on each program are provided in the individual reports, listed below:

- “Field Investigation for Tailings Excavation Planning at Giant Mine, Yellowknife, Northwest Territories – July 2013”, (Golder 2013A).
- “Field Investigation for Paste Production Planning at Giant Mine, Yellowknife, Northwest Territories – October 2013”, (Golder 2013B).
- “Phase 1 – Tailings Investigation Giant Mine Remediation Project” (Golder 2011).
- “Tailings Investigation, Giant Mine, Yellowknife, NWT” (Golder 2012).

Additional information on the tailings can also be found in an investigation report prepared by SRK in 2007. The information in this report is not included in this summary memorandum. The reference for the report is:

- “Tailings and Settling Pond Field Investigations, Giant Mine, Yellowknife, NWT, Canada” (SRK 2007b).

The descriptions of the tailings in the tables below were based on particle size distribution test where available and field assessments at locations where the tailings was not sampled. Field assessment techniques were limited to visual inspection and handling with gloved hands.

In general the tailings encountered during the investigation in the south and central tailings ponds can be classified as silty sand, sandy silt or clayey silt, as described below:

- Silty sand, fine grained, grey to brown, no cementation, non-cohesive, dry to moist, very loose to loose. This unit often contains lenses of blocky/friable sandy silt up to about 0.5 m thick.
- Sandy silt, various shades of brown and grey 1 to 10 mm thick interlaminations, very weakly cemented, blocky/friable, dry to moist, soft. This unit often contained lenses of silty sand up to about 0.5 m thick.
- Clayey silt, low plasticity, some sand to sandy, light grey to brown, cohesive, wet of plastic limit, very soft. This unit retained its water (no seepage/free water observed at time of excavation).

With few variations the material encountered during the investigation programs can be classified in one of these three categories. For the purposes of this report, the classification took into consideration the behavior of the material from the standpoint of paste production. The material described as silty sand is generally loose material that crumbles easily with light finger pressure. The material described as sandy silt is generally blocky or friable and requires moderate to strong finger pressure to crumble. The material described as clayey silt is plastic in nature and can be moulded or squeezed rather than crumbled with light to moderate finger pressure.

Observations during the 2013 paste production activities were that each type of material required different processing in order to be used for paste production (using Reimer trucks in this case). Silty sand was generally suitable to be used as excavated, except to possibly screen for debris within the tailings. Sandy silt required screening or mechanical conditioning, to break up the lumps in the tailings. Without conditioning, the tailings tended to cause blockages in the paste production (mixing process) operation. Clayey silt material, due to the plasticity, would need to be blended with coarser material, in order to not cause blockages in the paste piping system.

Based on field observations made during tailings excavation at the north end of the South Pond for the 2013 paste production trial, it should be noted that water conditions in the tailings can change due to the excavation activity itself. For example repeated passes by heavy equipment made over the same spot can have a “pumping” effect, apparently bringing water closer to the surface than it was during the initial investigation.

### **3.0 SUMMARY OF INVESTIGATION PROGRAMS**

The location of the test pits and boreholes at the South and Central Pond are shown on Figure 1 and those for the North Pond are shown on Figure 2. Some key observations from the investigation for each pond are noted below and tailings descriptions and observations are noted in Tables 1 to 4, for each program. Borehole and test pit records from the 2010, 2011 and 2013 investigation programs are provided in the individual reports referenced in Section 2.0.

#### **3.1 South Pond**

A key note related to the South Pond investigation programs is that all of the boreholes and test pits were completed prior to tailings being excavated in the north and north-west portions of the pond. The tailings were excavated in the fall of 2013 for paste production, to depths up to approximately 2 m. The reviewer will need to compare pre- and post-excavation contours in order to remove the upper portions of the test pit records in this area (the plans with these contours provided under separate cover).

In general, the grain size of the tailings varies both laterally and vertically in the South Pond, presumably as a result of multiple discharge locations. Boreholes and test pits could not be advanced near or on the pond in the north east corner of the pond, as the bearing capacity was too soft for the equipment in this area.

#### **3.2 Central Pond**

Features to note for the Central Pond is a channel along the western side of pond and a storage pad on the north east corner of the pond. Tailings cannot be excavated at the location of the pad. There are also anecdotal records of debris that may be buried in the pond.

Frozen tailings (suspected permafrost) were encountered within the tailings in test pits and boreholes on the Central Pond. The excavators were unable to dig through the frozen layers.

### 3.3 North Pond

There is a significant pond in the southern section of the pond; the potential tailings for paste production are located north of this pond.

### 3.4 Summary Tables of Investigation Programs

Summary tables for each investigation program are listed below.

**Table 1: North, Central and South Pond Test Pit Summary 2010**

| Test Pit                  | Depth (m) | Sample ID | Visual Description | Sand Content (%) | Fines Content (%) |
|---------------------------|-----------|-----------|--------------------|------------------|-------------------|
| GA10-06<br>(North Pond)   | 0-0.8     | SA1       | Sandy Silt         | 27               | 73                |
|                           | 0.8-1.9   | SA2       | Silt               | 1                | 99                |
|                           | 1.9-3.0   | SA3       | Clayey Silt        | 0                | 100               |
| GA10-07<br>(North Pond)   | 0-3.1     | SA2       | Silty Sand         | 85               | 15                |
| GA10-08<br>(Central Pond) | 0-2.9     | SA1       | Silty Sand         | 56               | 44                |
|                           | 2.9-3.6   | SA4       | Silt               | 0                | 100               |
| GA10-09<br>(South Pond)   | 0-3.0     | SA2       | Silty Sand         | 77               | 23                |
| GA10-10<br>(South Pond)   | 0-0.8     | SA1       | Sandy Silt         | 44               | 64                |
|                           | 0.8-1.1   |           | Clayey Silt        |                  |                   |
|                           | 1.1-1.3   |           | Silty Sand         |                  |                   |
|                           | 1.3-1.9   | SA2       | Silt               | 0                | 100               |
| GA10-11<br>(South Pond)   | 0-1.8     | SA1       | Silt, some sand    | 6                | 94                |
|                           |           | Sa2       | Silt, some sand    | 15               | 85                |
|                           | 1.8-2.2   |           | Silt               |                  |                   |
|                           | 2.2-3.1   |           | Silty Sand         |                  |                   |

**Table 2: North, Central and South Pond Borehole Summary 2011**

| Borehole                  | Depth (m) | Sample ID  | Visual Description | Moisture Content (%) | Sand Content (%) | Silt Content (%) | Clay Content (%) | Liquid Limit | Plastic Limit |
|---------------------------|-----------|------------|--------------------|----------------------|------------------|------------------|------------------|--------------|---------------|
| GA11-T-08<br>(North Pond) | 0.3-0.6   | SA1        | Silt               | 21.0                 |                  |                  |                  |              |               |
|                           | 4.5-5.5   | SA2        | Silt               | 23.7                 |                  |                  |                  |              |               |
|                           | 7.5-9.0   | SA3        | Silt               | 27.1                 |                  |                  |                  |              |               |
|                           | 3.0-3.4   | SA4        | Silt               | 20.6                 |                  |                  |                  |              |               |
|                           | 3.8-4.3   | SA5        | Silt               | 22.4                 |                  |                  |                  |              | NP            |
|                           | 4.6-4.9   | SA6        | Silt               | 20.1                 |                  |                  |                  |              |               |
|                           | 5.3-5.8   | SA7        | Silt               | 21.5                 |                  |                  |                  |              | NP            |
|                           | 6.1-6.4   | SA8        | Silt               | 20.2                 |                  |                  |                  |              |               |
|                           | 6.9-7.2   | SA9A       | Silt               | 29.1                 |                  |                  |                  | 23           | 18            |
|                           | 7.2-7.3   | SA9B       | Sand and Gravel    | 14.6                 |                  |                  |                  |              |               |
| 7.6-7.9                   | SA10      | Silty Clay | 17.6               |                      |                  |                  |                  | NP           |               |
| GA11-T-09<br>(North Pond) | 0.3-0.6   | SA1        | Silt               | 27.9                 |                  |                  |                  |              |               |
|                           | 1.2-1.5   | SA2        | Sand               |                      | 74.0             | 20.5             | 5.5              |              | NP            |
|                           | 1.8-2.1   | SA3        | Silt               | 21.2                 |                  |                  |                  |              | NP            |
|                           | 3.0-3.4   | SA5        | Silt               | 26.8                 |                  |                  |                  | 24           | 23            |
|                           | 4.6-4.9   | SA7        | Silt               | 32.0                 |                  |                  |                  |              |               |
|                           | 5.2-5.5   | SA8        | Sand and Gravel    | 11.2                 |                  |                  |                  |              |               |
|                           | 6.2-6.6   | SA9        | Clayey Silt        | 20.9                 |                  |                  |                  | 25           | 24            |
|                           | 7.3-7.6   | SA10       | Clayey Silt        | 23.0                 |                  |                  |                  |              |               |
|                           | 8.4-8.8   | SA11       | Clayey Silt        | 33.0                 |                  |                  |                  |              |               |
|                           | 9.0-9.3   | SA12       | Peat               | 26.7                 |                  |                  |                  |              |               |
| 9.6-9.9                   | SA13      | Silty Clay | 40.9               |                      |                  |                  |                  |              |               |
| GA11-T-10<br>(North Pond) | 0.3-0.6   | SA1        | Silt and Sand      | 24.0                 |                  |                  |                  |              |               |
|                           | 1.5-1.8   | SA2        | Silt and Sand      | 22.2                 |                  |                  |                  |              | NP            |
|                           | 2.3-2.7   | SA3        | Silt and Sand      | 31.6                 |                  |                  |                  |              |               |
|                           | 3.0-3.4   | SA4        | Clayey Silt        | 29.4                 |                  |                  |                  |              | NP            |
|                           | 4.6-4.9   | SA6        | Clayey Silt        | 26.4                 |                  |                  |                  |              | NP            |
|                           | 5.3-5.8   | SA7        | Clayey Silt        | 30.6                 |                  |                  |                  |              |               |
|                           | 6.1-6.4   | SA8        | Clayey Silt        | 25.6                 |                  |                  |                  |              |               |
|                           | 6.9-7.3   | SA9        | Clayey Silt        | 29.6                 |                  |                  |                  |              |               |
|                           | 7.6-7.9   | SA10       | Clayey Silt        | 38.9                 |                  |                  |                  | 32           | 27            |
|                           | 8.4-8.8   | SA11       | Silty Clay         | 11.3                 |                  |                  |                  |              |               |

| Borehole                    | Depth (m) | Sample ID | Visual Description    | Moisture Content (%) | Sand Content (%) | Silt Content (%) | Clay Content (%) | Liquid Limit | Plastic Limit |
|-----------------------------|-----------|-----------|-----------------------|----------------------|------------------|------------------|------------------|--------------|---------------|
| GA11-T-11<br>(North Pond)   | 0.3-0.6   | SA1       | Clayey Silt           | 42.3                 |                  |                  |                  |              |               |
|                             | 1.2-1.5   | SA2       | Clayey Silt           | 32.3                 |                  |                  |                  |              |               |
|                             | 1.5-2.3   | SA3       | Sandy - Silt          |                      | 19.8             | 68.9             | 11.3             |              | NP            |
|                             | 3.2-3.5   | SA4       | Sandy Silt            | 8.4                  |                  |                  |                  |              |               |
|                             | 3.8-4.3   | SA5       | Clayey Silt           | 34.5                 | 1.2              | 81.5             | 17.3             |              |               |
|                             | 4.6-4.9   | SA6       | Clayey Silt           | 39.2                 |                  |                  |                  |              |               |
|                             | 5.3-5.8   | SA7       | Clayey Silt           | 40.3                 | 0.5              | 85.2             | 14.2             |              | NP            |
|                             | 6.1-6.4   | SA8       | Clayey Silt           | 36.5                 |                  |                  |                  |              |               |
|                             | 6.9-7.3   | SA9       | Clayey Silt           | 34.5                 | 0.6              | 86.4             | 13.0             | 26           | 24            |
|                             | 7.6-7.9   | SA10      | Clayey Silt           | 39.2                 |                  |                  |                  |              |               |
|                             | 8.4-8.8   | SA11      | Clayey Silt           | 41.0                 | 0.6              | 85.6             | 13.9             |              | NP            |
|                             | 10.4-10.7 | SA12      | Clayey Silt           | 34.6                 |                  |                  |                  |              |               |
|                             | 11.4-11.9 | SA13      | Clayey Silt           | 35.8                 | 0.3              | 82.6             | 17.1             |              | NP            |
|                             | 12.5-12.8 | SA14      | Peat                  | 63.9                 |                  |                  |                  |              |               |
|                             | 13.4-13.7 | SA15      | Silty Clay            | 33.8                 |                  |                  |                  |              |               |
|                             | 14.0-14.3 | SA16      | Silty Sand            | 31.5                 |                  |                  |                  |              |               |
| GA11-T-04<br>(Central Pond) | 0.3-0.6   | SA1       | Silt and Sand         | 28.2                 |                  |                  |                  |              |               |
|                             | 0.8-1.2   | SA2       | Silt and Sand         | 20.0                 |                  |                  |                  |              |               |
|                             | 1.5-1.8   | SA3       | Silt and Sand         | 15.2                 |                  |                  |                  |              |               |
|                             | 2.3-2.7   | SA4       | Silt and Sand         | 9.7                  |                  |                  |                  |              |               |
|                             | 3.0-3.4   | SA5       | Sandy, Clayey - Silt  | 27.5                 | 18.9             | 66.0             | 15.0             |              | NP            |
|                             | 4.0-4.3   | SA6       | Sandy, Clayey - Silt  |                      | 15.4             | 71.6             | 13.0             |              | NP            |
|                             | 4.6-5.2   | SA7       | Silt                  | 19.7                 |                  |                  |                  | 26           | 23            |
|                             | 5.3-5.8   | SA8       | Clayey, Sand and Silt | 24.8                 | 51.8             | 35.9             | 12.2             |              | NP            |
|                             | 6.1-6.4   | SA9       | Silt                  | 20.0                 |                  |                  |                  |              |               |
|                             | 6.9-7.3   | SA10      | Sandy Silt            | 19.1                 | 32.1             | 60.6             | 7.3              |              | NP            |
|                             | 7.6-7.9   | SA11      | Silt                  | 27.6                 |                  |                  |                  |              |               |
|                             | 8.4-8.5   | SA12      | Sandy Silt            | 23.7                 | 28.7             | 63.6             | 7.7              |              | NP            |
|                             | 10.7-11.0 | SA13      | Silt                  | 28.5                 |                  |                  |                  |              |               |
|                             | 11.4-11.9 | SA14      | Silt                  | 30.9                 |                  |                  |                  |              |               |
|                             | 13.7-14.0 | SA15      | Sandy Silt            | 22.8                 | 28.1             | 60.0             | 11.9             |              | NP            |
|                             | 14.5-14.9 | SA16      | Silt                  | 30.5                 |                  |                  |                  |              |               |
|                             | 16.5-16.8 | SA17      | Silt                  | 23.6                 |                  |                  |                  |              |               |
|                             | 18.6-19.2 | SA18      | Silt                  | 32.5                 |                  |                  |                  |              | NP            |
| 20.0-20.4                   | SA19      | Peat      | 116.2                 |                      |                  |                  |                  |              |               |

| Borehole                    | Depth (m) | Sample ID  | Visual Description | Moisture Content (%) | Sand Content (%) | Silt Content (%) | Clay Content (%) | Liquid Limit | Plastic Limit |
|-----------------------------|-----------|------------|--------------------|----------------------|------------------|------------------|------------------|--------------|---------------|
| GA11-T-06<br>(Central Pond) | 4.6-4.9   | SA6        | Clayey Silt        | 38.2                 |                  |                  |                  |              |               |
|                             | 5.3-5.8   | SA7        | Sandy Silt         | 24.0                 | 38.1             | 55.0             | 6.9              |              |               |
|                             | 6.1-6.4   | SA8        | Clayey Silt        | 29.9                 |                  |                  |                  |              |               |
|                             | 7.6-7.9   | SA9        | Silt               | 25.1                 | 11.1             | 85.7             | 3.2              |              | NP            |
|                             | 8.4-8.8   | SA10       | Clayey Silt        | 34.7                 |                  |                  |                  |              |               |
|                             | 10.4-10.7 | SA11       | Sandy Silt         | 23.6                 | 27.2             | 71.5             | 1.3              |              | NP            |
|                             | 13.4-13.7 | SA12       | Sandy Silt         | 29.3                 | 14.2             | 74.9             | 10.9             |              | NP            |
|                             | 14.5-14.9 | SA14       | Clayey Silt        | 16.8                 |                  |                  |                  |              |               |
|                             | 16.6-16.9 | SA15       | Silty Sand         | 24.3                 | 67.3             | 26.9             | 5.8              |              | NP            |
|                             | 19.5-19.8 | SA16       | Clayey Silt        | 22.8                 |                  |                  |                  |              |               |
|                             | 19.5-19.8 | SA17       | Peat               | 25.1                 |                  |                  |                  |              |               |
| 20.0-20.3                   | SA18      | Sand       | 18.4               |                      |                  |                  |                  |              |               |
| GA11-T-01<br>(South Pond)   | 0.3-0.6   | SA1        | Silty Sand         | 9.9                  | 61.1             | 32.3             | 6.6              |              | NP            |
|                             | 0.8-1.2   | SA2        | Clayey Silt        | 24.2                 |                  |                  |                  |              |               |
|                             | 1.5-1.8   | SA3        | Clayey Silt        | 27.4                 | 2.1              | 82.8             | 15.2             | 25           | 22            |
|                             | 2.3-2.7   | SA4        | Clayey Silt        | 27.6                 | 0.2              | 83.9             | 15.9             |              | NP            |
|                             | 3.2-3.5   | SA5        | Sandy-Silt         | 31.2                 | 29.7             | 58.4             | 11.9             |              | NP            |
|                             | 3.8-4.3   | SA6        | Clayey Silt        | 25.8                 |                  |                  |                  |              |               |
|                             | 4.6-4.7   | SA7        | Clayey Silt        | 41.7                 | 0.5              | 79.6             | 19.9             | 32           | 25            |
|                             | 5.3-5.8   | SA8        | Clayey Silt        | 33.7                 |                  |                  |                  |              |               |
|                             | 6.1-6.4   | SA9        | Sandy Silt         | 23.4                 | 15.5             | 73.8             | 10.7             |              | NP            |
|                             | 6.9-7.3   | SA10       | Clayey Silt        | 29.2                 |                  |                  |                  |              |               |
|                             | 7.6-7.9   | SA11       | Sandy Silt         | 23.7                 | 13.8             | 75.5             | 10.7             |              | NP            |
|                             | 8.5-9.4   | SA12       | Clayey Silt        | 24.2                 |                  |                  |                  |              |               |
|                             | 10.7-11.0 | SA13       | Clayey Silt        | 29.0                 | 2.4              | 79.2             | 18.4             | 27           | 23            |
|                             | 11.4-11.9 | SA15       | Clayey Silt        | 29.9                 |                  |                  |                  | 23           | 17            |
|                             | 12.5-12.8 | SA16       | Clayey Silt        | 27.9                 |                  |                  |                  |              |               |
|                             | 14.5-14.9 | SA17       | Clayey Silt        | 27.5                 |                  |                  |                  |              |               |
|                             | 15.1-15.2 | SA18       | Peat               | 45.7                 |                  |                  |                  |              |               |
| 16.0-16.5                   | SA19      | Silty Clay | 24.9               |                      |                  |                  |                  |              |               |
| 16.6-17.1                   | SA20      | Silty Clay | 27.5               |                      |                  |                  |                  |              |               |

| Borehole                  | Depth (m) | Sample ID | Visual Description | Moisture Content (%) | Sand Content (%) | Silt Content (%) | Clay Content (%) | Liquid Limit | Plastic Limit |
|---------------------------|-----------|-----------|--------------------|----------------------|------------------|------------------|------------------|--------------|---------------|
| GA11-T-02<br>(South Pond) | 0.3-0.6   | SA1       | Silt               | 44.3                 |                  |                  |                  |              |               |
|                           | 0.9-1.5   | SA2       | Sand and Silt      |                      | 55.5             | 39.1             | 5.4              |              | NP            |
|                           | 3.0-3.4   | SA5       | Clayey Silt        | 22.5                 | 11.5             | 75.0             | 13.5             |              | NP            |
|                           | 4.6-4.9   | SA7       | Clayey - Silt      | 34.6                 | 3.8              | 79.0             | 17.2             | 24           | 20            |
|                           | 5.3-5.8   | SA8       | Silt               | 35.4                 |                  |                  |                  |              |               |
|                           | 6.1-6.4   | SA9       | Sandy, Clayey Silt | 26.6                 | 16.7             | 69.5             | 13.8             |              | NP            |
|                           | 6.9-7.3   | SA10      | Silt               | 24.8                 |                  |                  |                  |              |               |
|                           | 7.6-7.9   | SA11      | Sand and Silt      | 23.2                 | 46.9             | 42.1             | 11.0             |              | NP            |
|                           | 8.8-9.1   | SA13      | Silt               | 30.8                 |                  |                  |                  |              |               |
|                           | 9.1-9.4   | SA14      | Bedrock            | 17.9                 |                  |                  |                  |              |               |

Note: NP = Non Plastic



**Table 3: Central and South Pond Test Pit Summary July 2013**

| Area         | Test Pit ID | Depth (m)   | Visual Description / Relative Moisture Content   | Sand Content (%) | Silt Content (%) | Clay Content (%) |
|--------------|-------------|-------------|--|------------------|------------------|------------------|
| Central Pond | CP-TP-01    | 0-3.7       | Sandy Silt to Silt with trace sand and trace clay. Material varied from dry (shallow depths) to moist (deeper) | 42               | 53               | 5                |
|              | CP-TP-02    | 0-3.4       | Sandy Silt to Silt with trace sand and trace clay. Material varied from dry (shallow depths) to moist (deeper) | 40               | 55               | 5                |
|              | CP-TP-03    | 0-3.6       | Sandy Silt with trace clay. Material varied from dry (shallow depths) to moist (deeper)                        |                  |                  |                  |
|              | CP-TP-04    | 0-3.5       | Sandy Silt with trace clay. Material varied from dry (shallow depths) to moist (deeper)                        |                  |                  |                  |
|              | CP-TP-05    | 0-3.5       | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)  |                  |                  |                  |
|              | CP-TP-06    | 0-2.0       | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)  |                  |                  |                  |
|              |             | 2.0-3.6     | Clayey Silt  |                  |                  |                  |
|              | CP-TP-07    | 0-2.5       | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)  |                  |                  |                  |
|              |             | 2.5-3.7     | Clayey Silt  |                  |                  |                  |
|              | CP-TP-08    | 0-2.5       | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)  |                  |                  |                  |
| 2.5-3.7      |             | Clayey Silt |  |                  |                  |                  |
| South Pond   | SP-TP-01    | 0-3.0       | Sandy Silt with trace clay. Material varied from dry to moist (shallow depths) to moderately wet (deeper)      | 39               | 57               | 4                |
|              |             | 3.0-4.0     | Clayey Silt with sand. TP collapsed at 4.0m depth  |                  |                  |                  |
|              | SP-TP-02    | 0-2.9       | Sandy Silt with trace clay. Material varied from dry (shallow depths) to moist (deeper)                        | 43               | 54               | 3                |
|              | SP-TP-03    | 0-3.4       | Sandy Silt with trace clay. Material varied from dry (shallow depths) to moist (deeper)                        | 42               | 54               | 4                |
|              | SP-TP-04    | 0-2.4       | Sandy Silt with trace clay. Material varied from dry (shallow depths) to moist (deeper)                        | 15               | 79               | 6                |
|              | SP-TP-05    | 0-3.4       | Sandy Silt with trace clay. Material varied from dry (shallow depths) to moist (deeper)                        | 45               | 51               | 4                |

| Area     | Test Pit ID | Depth (m)   | Visual Description / Relative Moisture Content  | Sand Content (%) | Silt Content (%) | Clay Content (%) |
|----------|-------------|---|---|------------------|------------------|------------------|
|          | SP-TP-06    | 0-3.0   | Sandy Silt intermixed with clayey silt. Material varied from dry (shallow depths) to moist (deeper) | 37               | 58               | 5                |
|          |             | 3.0-4.0   | Clayey Silt with trace sand   |                  |                  |                  |
|          | SP-TP-07    | 0-3.5   | Sandy Silt with clay. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|          |             | 3.5-4.0   | Clayey Silt with trace sand   |                  |                  |                  |
|          | SP-TP-08    | 0-2.0   | Silty Sand. Material varied from dry to moist (shallow depths) to moderately wet (deeper)           |                  |                  |                  |
|          |             | 2.0-3.0   | Clayey Silt. Collapse at 3.3 m. Water at 3 m, accumulated overnight                                 |                  |                  |                  |
|          | SP-TP-09    | 0-2.0   | Sandy Silt. Material varied from dry to moist (shallow depths) to moderately wet (deeper)           |                  |                  |                  |
|          |             | 2.0-4.0   | Clayey sandy Silt. Collapse at 3.0 m. Water at 2.4 m, accumulated overnight                         |                  |                  |                  |
|          | SP-TP-10    | 0-2.5   | Sandy Silt with clay. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|          |             | 2.5-3.5   | Clayey Sandy Silt   |                  |                  |                  |
|          | SP-TP-11    | 0-1.9   | Sandy Silt with clay. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|          |             | 1.9-3.7   | Clayey Sandy Silt   |                  |                  |                  |
|          | SP-TP-12    | 0-1.0   | Sandy Silt with clay. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|          |             | 1.0-3.7   | Clayey Silt with sand   |                  |                  |                  |
|          | SP-TP-13    | 0-2.4   | Sandy Clayey Silt. Material varied from dry (shallow depths) to moist (deeper)                      |                  |                  |                  |
|          |             | 2.4-3.4   | Clayey Silt   |                  |                  |                  |
| SP-TP-14 | 0-4.0       | Clayey Silt (small sinkhole observed nearby test pit afterwards, probably existing sinkhole, ~45 cm diameter, 20-30 cm deep). Material varied from dry (shallow depths) to moist (deeper) |   |                  |                  |                  |
| SP-TP-15 | 0-3.5       | Clayey Silt. Material varied from dry (shallow depths) to moist (deeper)  |   |                  |                  |                  |
| SP-TP-16 | 0-3.7       | Clayey Silt with sand. Material varied from dry (shallow depths) to moist (deeper)  |   |                  |                  |                  |

| Area | Test Pit ID | Depth (m) | Visual Description / Relative Moisture Content  | Sand Content (%) | Silt Content (%) | Clay Content (%) |
|------|-------------|-----------|---|------------------|------------------|------------------|
|      | SP-TP-17    | 0-3.4     | Clayey Silt with sand. Material varied from dry (shallow depths) to moist (deeper)        |                  |                  |                  |
|      | SP-TP-18    | 0-1       | Sandy Clayey Silt. Material varied from dry (shallow depths) to moist (deeper)            |                  |                  |                  |
|      |             | 1.0-3.5   | Clayey Silt   |                  |                  |                  |
|      | SP-TP-19    | 0-1.0     | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|      |             | 1.0-3.8   | Clayey Silt   |                  |                  |                  |
|      | SP-TP-20    | 0-1.2     | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|      |             | 1.2-3.5   | Clayey Silt   |                  |                  |                  |
|      | SP-TP-21    | 0-1.3     | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|      |             | 1.3-3.8   | Clayey Silt   |                  |                  |                  |
|      | SP-TP-22    | 0-2.3     | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|      |             | 2.3-3.7   | Clayey Silt   |                  |                  |                  |
|      | SP-TP-23    | 0-2.0     | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|      |             | 2.0-3.7   | Clayey Silt   |                  |                  |                  |
|      | SP-TP-24    | 0-1.0     | Sandy Silt. Material varied from dry (shallow depths) to moist (deeper)                   |                  |                  |                  |
|      |             | 1.0-3.7   | Sandy Silt  |                  |                  |                  |
|      | SP-TP-25    | 0-1.5     | Sandy Silt. Material varied from dry to moist (shallow depths) to moderately wet (deeper) |                  |                  |                  |
|      |             | 1.5-3.6   | Clayey Silt. Collapse at 3.6 m  |                  |                  |                  |

**Table 4: Central and South Pond Test Pit Summary October 2013**

| Location     | Test Pit ID | Depth (m)  | Visual Description/Comments   | Sand Content (%) | Silt Content (%) | Clay Content (%) |
|--------------|-------------|--|---|------------------|------------------|------------------|
| Central Pond | CP-TP-09    | 0-1.25   | Silty Sand  |                  |                  |                  |
|              |             | 1.25-2.5   | Sandy Silt  | 23               | 70               | 7                |
|              |             | 2.5-4.5  | Clayey Silt. Sloughing in Clayey Silt   |                  |                  |                  |
|              | CP-TP-10    | 0-1.25   | Silty Sand  |                  |                  |                  |
|              |             | 1.25-1.75  | Sandy Silt  |                  |                  |                  |
|              |             | 1.75-4.5   | Clayey Silt. Sloughing in Clayey Silt   | 4                | 87               | 9                |
|              | CP-TP-11    | 0-1.0  | Silty Sand  |                  |                  |                  |
|              |             | 1.0-4.0  | Sandy Silt (moist to wet). Sloughing in sandy Silt layer, rock (suspected bedrock) at 4.0 m | 28               | 66               | 6                |
|              | CP-TP-12    | 0-3.5  | Sandy Silt (dry to moist. Clayey Silt lens from 2.0 to 2.5 m)                               |                  |                  |                  |
|              | CP-TP-13    | 0-2.0  | Sandy Silt  |                  |                  |                  |
|              |             | 2.0-5.0  | Silty Sand. Clayey Silt lens from 4.0 to 4.5 m  |                  |                  |                  |
|              | CP-TP-14    | 0-2.5  | Sandy Silt  | 42               | 54               | 4                |
|              |             | 2.5-4.5  | Clayey Silt   | 2                | 89               | 9                |
|              | CP-TP-15    | 0-4.0  | Silty Sand, containing lenses/laminations of blocky and clayey material                     | 64               | 33               | 3                |
|              |             | 4.0-5.5  | Sandy Silt  |                  |                  |                  |
|              | CP-TP-16    | 0-4.5  | Silty Sand  | 48               | 48               | 4                |
|              | CP-TP-17    | 0-1.0  | Sandy Silt  |                  |                  |                  |
|              |             | 1.0-4.5  | Silty Sand. Dry to moist, containing wet clayey lenses at 3.0 m                             |                  |                  |                  |
|              | CP-TP-18    | 0-3.75   | Sandy Silt  | 32               | 63               | 5                |
|              |             | 3.75-5.0   | Clayey Silt   |                  |                  |                  |
| CP-TP-19     | 0-4.0       | Sand and Silt, laminated   |   |                  |                  |                  |
|              | 4.0-4.5     | Sandy Silt   | 35  | 61               | 4                |                  |
| CP-TP-20     | 0-4.0       | Sandy Silt with sand lenses  |   |                  |                  |                  |
|              | 4.0-4.5     | Clayey Silt. Clayey lenses at 2.5 m. Sloughing off side walls observed | 12  | 81               | 7                |                  |

| Location   | Test Pit ID | Depth (m)                                    | Visual Description/Comments   | Sand Content (%) | Silt Content (%) | Clay Content (%) |
|------------|-------------|--|---|------------------|------------------|------------------|
|            | CP-TP-21    | 0-3.75                                       | Silty Sand to Sandy Silt. Frozen from 3.5 to 3.75 m. Unable to excavate through the frozen tailings   |                  |                  |                  |
|            | CP-TP-22    | 0-4.0  | Sandy Silt. Frozen, containing ice with 1 to 2 mm ice lenses from 3.0 to 4.0 m. Unable to dig further |                  |                  |                  |
|            | CP-TP-23    | 0-4.0  | Sandy Silt  |                  |                  |                  |
|            |             | 4.0-5.0                                      | Clayey Silt. Sloughing off side walls observed  |                  |                  |                  |
|            | CP-TP-24    | 0-2.5  | Sandy Silt. Rock below 2.5 m. Topsoil and tree roots encountered from 2.25 to 2.5 m                   |                  |                  |                  |
|            | CP-TP-25    | 0-3.5  | Silty Sand with Silt lenses. Rock below 3.5 m. Soft clayey lenses at 2.25 m                           |                  |                  |                  |
|            | CP-TP-26    | 0-2.25                                       | Sandy Silt  |                  |                  |                  |
|            |             | 2.25-3.0                                     | Clayey Silt. Rock (suspected bedrock) below 3.0 m. Roots encountered from 2.5 to 3.0 m                | 12               | 80               | 8                |
|            | CP-TP-27    | 0-4.25                                       | Silty Sand. Containing sandy Silt lenses up to 0.5 m thick. Clayey Silt lenses below 3.5 m            |                  |                  |                  |
|            | CP-TP-28    | 0-5.0  | Silty Sand. Containing sandy Silt lenses up to 0.5 m thick. Clayey Silt lens from 3.0 to 3.5 m        |                  |                  |                  |
|            | CP-TP-29    | 0-2.0  | Silty Sand containing Sandy Silt lenses   |                  |                  |                  |
|            |             | 2.0-5.0                                      | Sandy Silt. Clayey Silt lenses from 2.5 to 5.0 m  |                  |                  |                  |
|            | CP-TP-30    | 0-1.0  | Sandy Silt  |                  |                  |                  |
|            |             | 1.0-4.0                                      | Silt and Sand   |                  |                  |                  |
|            |             | 4.0-5.5                                      | Sandy Silt. Clayey Silt lenses from 4.0 to 5.5 m  |                  |                  |                  |
| CP-TP-31   | 0-5.0       | Silty Sand                                   |   |                  |                  |                  |
|            | 5.0-6.5     | Sandy Silt. Wet Clayey Silt lenses at 4.75 m |   |                  |                  |                  |
| South Pond | SP-TP-26    | 0-0.75                                       | Sandy Silt to Silty Sand  |                  |                  |                  |
|            |             | 0.75-2.75                                    | Silty Sand  |                  |                  |                  |
|            |             | 2.75-3.75                                    | Clayey Silt   |                  |                  |                  |
|            |             | 3.75-4.25                                    | Silty Sand  |                  |                  |                  |
|            |             | 0-1.5  | Sandy Silt  | 24               | 70               | 6                |
|            | SP-TP-27    | 1.5-4.0                                      | Silty Sand  |                  |                  |                  |

| Location | Test Pit ID | Depth (m)  | Visual Description/Comments  | Sand Content (%) | Silt Content (%) | Clay Content (%) |    |
|----------|-------------|--|--|------------------|------------------|------------------|----|
|          | SP-TP-28    | 0-1.0  | Sandy Silt   |                  |                  |                  |    |
|          |             | 1.0-4.0  | Silty Sand containing sandy Silt lenses  |                  |                  |                  |    |
|          | SP-TP-29    | 0-0.5  | Sandy Silt   |                  |                  |                  |    |
|          |             | 0.5-3.75   | Silty Sand. Clayey Silt lens from 1.75 to 2.5 m  |                  |                  |                  |    |
|          |             | 3.75-4.0   | Clayey Silt  |                  |                  |                  |    |
|          | SP-TP-30    | 0-4.0  | Silty Sand. Sandy Silt lenses from 2.5 to 4.0 m  |                  |                  |                  |    |
|          | SP-TP-31    | 0-2.0  | Sandy Silt to Silty Sand. Rock (suspected bedrock) below 2.0 m                                       |                  |                  |                  |    |
|          | SP-TP-32    | 0-4.0  | Silty Sand. Moist to wet silt lenses from 3.5 to 4.0 m   |                  |                  |                  |    |
|          | SP-TP-33    | 0-1.25   | Sandy Silt   |                  |                  |                  |    |
|          |             | 1.25-2.25  | Clayey Silt  |                  |                  |                  |    |
|          |             | 2.25-4.0   | Silty Sand   |                  |                  |                  |    |
|          | SP-TP-34    | 0-3.0  | Sandy Silt. Wet Clayey Silt lens at 1.75 m   |                  |                  |                  |    |
|          |             | 3.0-4.0  | Clayey Silt.   |                  |                  |                  |    |
|          | SP-TP-35    | 0-1.25   | Sandy Silt   |                  | 38               | 57               | 5  |
|          |             | 1.25-2.0   | Silty Sand   |                  |                  |                  |    |
|          |             | 2.0-4.0  | Clayey Silt  |                  |                  |                  |    |
|          | SP-TP-36    | 0-3.0  | Silty Sand   |                  |                  |                  |    |
|          |             | 3.0-4.0  | Clayey Silt  |                  | 0                | 90               | 10 |
|          | SP-TP-37    | 0-0.75   | Silty Sand   |                  |                  |                  |    |
|          |             | 0.75-4.0   | Clayey Silt  |                  |                  |                  |    |
|          | SP-TP-38    | 0-2.5  | Sandy Silt to Silty Sand containing Clayey Silt lenses   |                  |                  |                  |    |
|          |             | 2.5-4.0  | Clayey Silt. Sloughing off side walls noted  |                  | 0                | 88               | 12 |
|          | SP-TP-39    | 0-2.25   | Sandy Silt to silty Sand   |                  |                  |                  |    |
|          |             | 2.25-3.75  | Clayey Silt. Rock (suspected bedrock) below 3.75 m. Roots and topsoil encountered from 3.5 to 3.75 m |                  |                  |                  |    |
| SP-TP-40 | 0-0.5       | Sandy Silt   |  |                  |                  |                  |    |
|          | 0.5-3.0     | Clayey Silt. Rock (suspected bedrock) below 3.0 m                        |  |                  |                  |                  |    |
| SP-TP-41 | 0-3.0       | Clayey Silt. Possible Silty Clay from 2.0 to 3.0 m. Side walls collapsed |  | 0                | 89               | 11               |    |

| Location | Test Pit ID | Depth (m) | Visual Description/Comments   | Sand Content (%) | Silt Content (%) | Clay Content (%) |
|----------|-------------|-----------|---|------------------|------------------|------------------|
|          | SP-TP-44    | 0-2.75    | Silty Sand. Rock (suspected bedrock) below 2.75 m. Tree roots and boulders encountered from 2.5 to 2.75 m |                  |                  |                  |
|          | SP-TP-45    | 0-1.0     | Sandy Silt  |                  |                  |                  |
|          |             | 1.0-3.0   | Silty Sand. Rock below 3.0 m (suspected bedrock). A PVC pipe was encountered in this test pit             |                  |                  |                  |
|          | SP-TP-46    | 0-1.75    | Silty Sand containing sandy Silt lenses   |                  |                  |                  |
|          |             | 1.75-2.75 | Clayey Silt. Sloughing noted in Clayey Silt layer   |                  |                  |                  |
|          |             | 2.75-4.0  | Silty Sand  |                  |                  |                  |
|          | SP-TP-47    | 0-1.0     | Clayey Silt   |                  |                  |                  |
|          |             | 1.0-2.0   | Sandy Silt  |                  |                  |                  |
|          |             | 2.0-4.0   | Silty Sand  |                  |                  |                  |
|          | SP-TP-48    | 0-0.5     | Clayey Silt   |                  |                  |                  |
|          |             | 0.5-3.0   | Silty Sand containing Sandy Silt lenses. Rock below 3.0 m (suspected bedrock)                             |                  |                  |                  |
|          | SP-TP-49    | 0-3.5     | Silty Sand containing Sandy Silt lenses   |                  |                  |                  |
|          |             | 3.5-4.25  | Sandy Silt  |                  |                  |                  |
|          | SP-TP-50    | 0-2.0     | Sandy Silt containing Silty Sand  |                  |                  |                  |
|          |             | 2.0-4.0   | Silty Sand containing Sandy Silt lenses. Moist to wet from 0 to 4.0 m                                     |                  |                  |                  |
|          | SP-TP-51    | 0-1.0     | Sandy Silt  |                  |                  |                  |
|          |             | 1.0-3.25  | Silty Sand containing Sandy Silt  |                  |                  |                  |
|          |             | 3.25-4.0  | Sandy Silt containing some clay. Moist to wet from 1.5 to 4.0 m   |                  |                  |                  |
|          | SP-TP-52    | 0-3.5     | Sandy Silt. Clayey lenses from 1.5 to 3.5 m. Moist to wet   | 10               | 83               | 7                |
|          |             | 3.5-4.0   | Silty Sand. Moist   |                  |                  |                  |
|          | SP-TP-53    | 0-1.25    | Sandy Silt  |                  |                  |                  |
|          |             | 1.25-2.5  | Silty Sand  |                  |                  |                  |
|          |             | 2.5-4.0   | Clayey Silt   |                  |                  |                  |

## 4.0 POTENTIAL EXCAVATION AREAS

This section provides a summary of potential excavation areas in the South, Central and North Ponds. The ponds have been divided into areas based on soil classification, as described in Section 2, to help provide guidance as to the amount of processing that is likely to be required to use the tailings from each area. The areas are outlined on Figure 3. This section applies to the upper 4 m of tailings, as most of the investigation effort to date has been from test pits, which are limited to depths of 3 to 4 m. Insufficient information is available to divide the ponds by material type at greater depths. Some guidance on material characteristics below 4 m can be found on the record of borehole sheets for the boreholes drilled in the ponds in 2007 and 2011 (Golder 2012, SRK 2007b).

In general, the tailings in the upper portion of the Central Pond are slightly coarser than in the South Pond (higher sand, lower clay content), and thus may require somewhat less processing than for the South Pond tailings. It is anticipated that some processing will be required for all the tailings, at least to screen for potential small debris in the tailings. Frozen tailings at depth (suspected permafrost) were also encountered at some locations in the Central Pond, which is noted on the relevant test pit and borehole records in the referenced reports.

This section is intended for planning and guidance purposes only and is not intended to replace detailed review of the information provided in this report and the other tailings investigation reports referenced in Section 2.

### 4.1 South Pond

- **Area 1** – Typically silty sand to sandy silt material. The tailings in this area are generally suitable for paste production with minimal processing, except to screen for potential debris.
- **Area 2** – Typically sandy silt at surface, with thicknesses of 0 to 3 m thick, underlain by clayey silt. The upper tailings will likely require conditioning to break up lumps and the clayey silt tailings will require blending with coarser material.
- **Area 3** – Typically silty sand to sandy silt underlain by clayey silt. Silty sand to sandy silt varies from 0.5 to 3 m thick. The upper tailings will likely require conditioning to break up lumps and the clayey silt tailings will require blending with coarser material.
- **Area 4** – Not suitable for paste production at this time – generally consists of clayey silt and a significant portion of the area covered by ponded water.
- **Area 5** – Typically sandy silt from surface to depths of 2.0 to 3.5 m, clayey silt below this level. The upper tailings will likely require conditioning to break up lumps and the clayey silt tailings will require blending with coarser material. **Note** – some of the surface material from this area was excavated in 2013, the depths referred to here and in the test pit records are relative to the tailings surface prior to excavation.
- **Area 6** – Typically silty sand to depths up to 4 m, with shallow bedrock in some areas. The tailings in this area are generally suitable for paste production with minimal processing, except to screen for potential debris.



## 4.2 Central Pond

- **Area 7** – Typically silty sand to sandy silt material. Some mechanical conditioning may be required as well as screening for potential debris. Note there is a buried water pipe in this area that drains water from the pond in the South Pond to the channel on the west side of the Central pond. This approximate location of this pipe is shown on Figure 4.
- **Area 8** – Typically silty sand to sandy silt from surface to 2 to 2.5 m depth, underlying clayey silt. The upper tailings will likely require conditioning to break up lumps and the clayey silt tailings will require blending with coarser material.
- **Area 9** – Typically silty sand to sandy silt material, with shallow bedrock in some areas. Some mechanical conditioning may be required as well as screening for potential debris. Note that anecdotal evidence from the mine site indicates that there is likely waste debris buried in the tailings in this area (anecdotal evidence that this area was a boneyard – no records are available).

## 4.3 North Pond

- **Area 10** – The limited investigation in this area indicates that the material grades from silty sand along the dams to the north east edge of the pond to sandy silt and then to clayey silt with distance towards the water pond in the centre of the North Pond. (The material becomes less suitable, or will require more processing, at greater distances from the dams).

## 5.0 CLOSURE

We trust that the information provided in this technical memorandum meets your present needs. Should you have any questions or require additional information, please feel free to contact the undersigned.

**GOLDER ASSOCIATES LTD.**

**ORIGINAL SIGNED AND SEALED**

Dave Caughill, P.Eng.  
Associate, Senior Geotechnical Engineer

DC/JAH/jjj

Attachments: Figures 1, 2 and 3

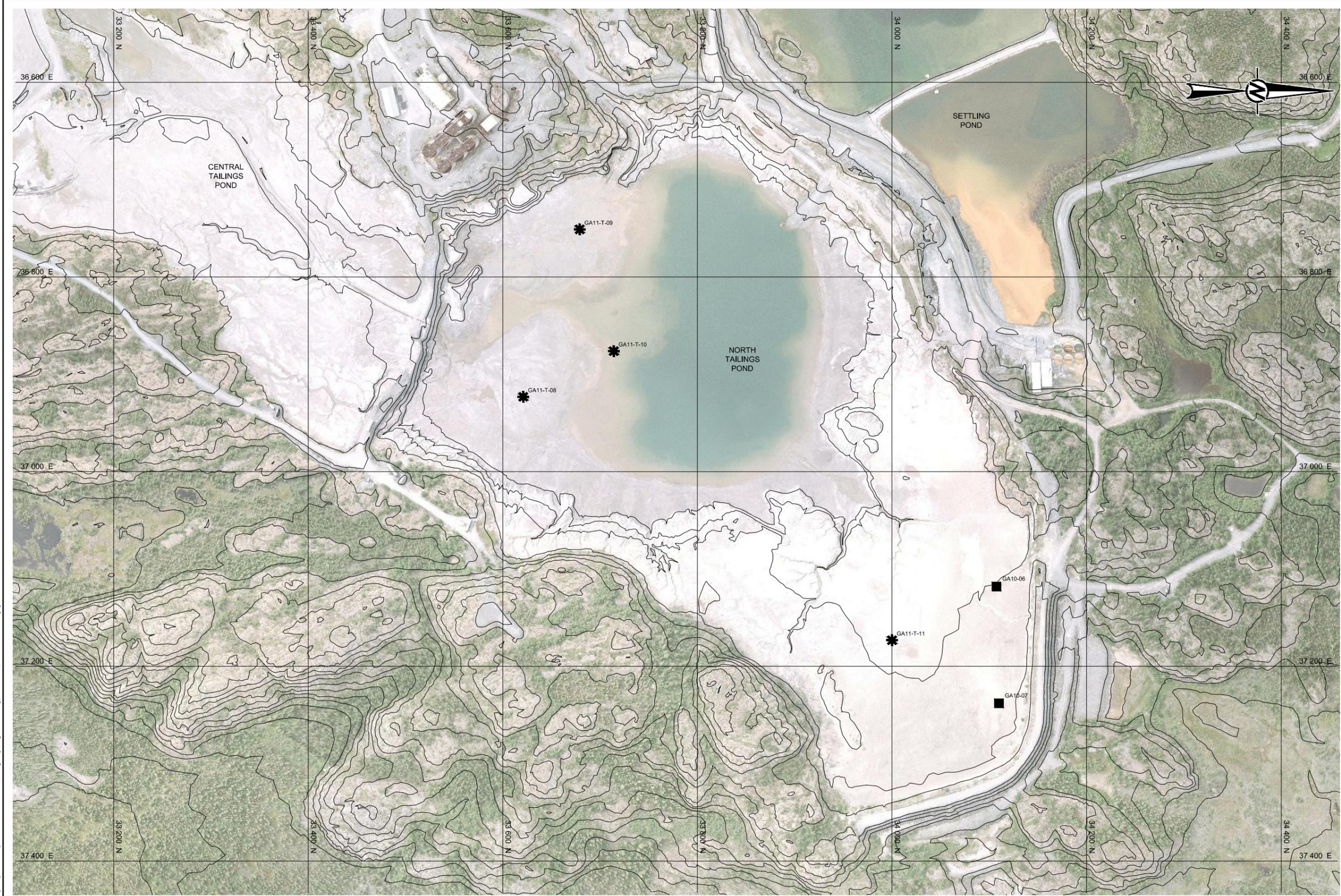
**ORIGINAL SIGNED**

John Hull, P.Eng.  
Principal, Mining Division

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**PRELIMINARY**  
NOT FOR CONSTRUCTION



PLAN VIEW  
SCALE A

- LEGEND**
- AUGER HOLE LOCATION (GOLDER 2011)
  - TEST PIT LOCATION (GOLDER 2010)

**NOTES**  
ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED. COORDINATE SYSTEM IS THE GMRP COORDINATE SYSTEM.

- REFERENCES**
1. AERIAL PHOTO DATED 2009, PROVIDED BY PUBLIC WORKS GOVERNMENT SERVICES CANADA
  2. TOPOGRAPHIC CONTOURS PROVIDED BY PUBLIC WORKS GOVERNMENT SERVICES CANADA, RECEIVED: JANUARY 10, 2011

**NOT FOR CONSTRUCTION**



| Revision/ | Description/Description    | Date/Date  |
|-----------|----------------------------|------------|
| 1         | ISSUED WITH DOC #064 REV B | 2014-01-24 |
| 0         | ISSUED WITH DOC #064 REV A | 2013-12-03 |

Client/client  
**PUBLIC WORKS  
GOVERNMENT SERVICES  
CANADA**

Project title/Titre du projet  
**GIANT MINE  
REMEDIATION PROJECT  
YELLOWKNIFE, N.W.T.**

Approved by/Approuvé par  
**CD**  
Designed by/Concept par  
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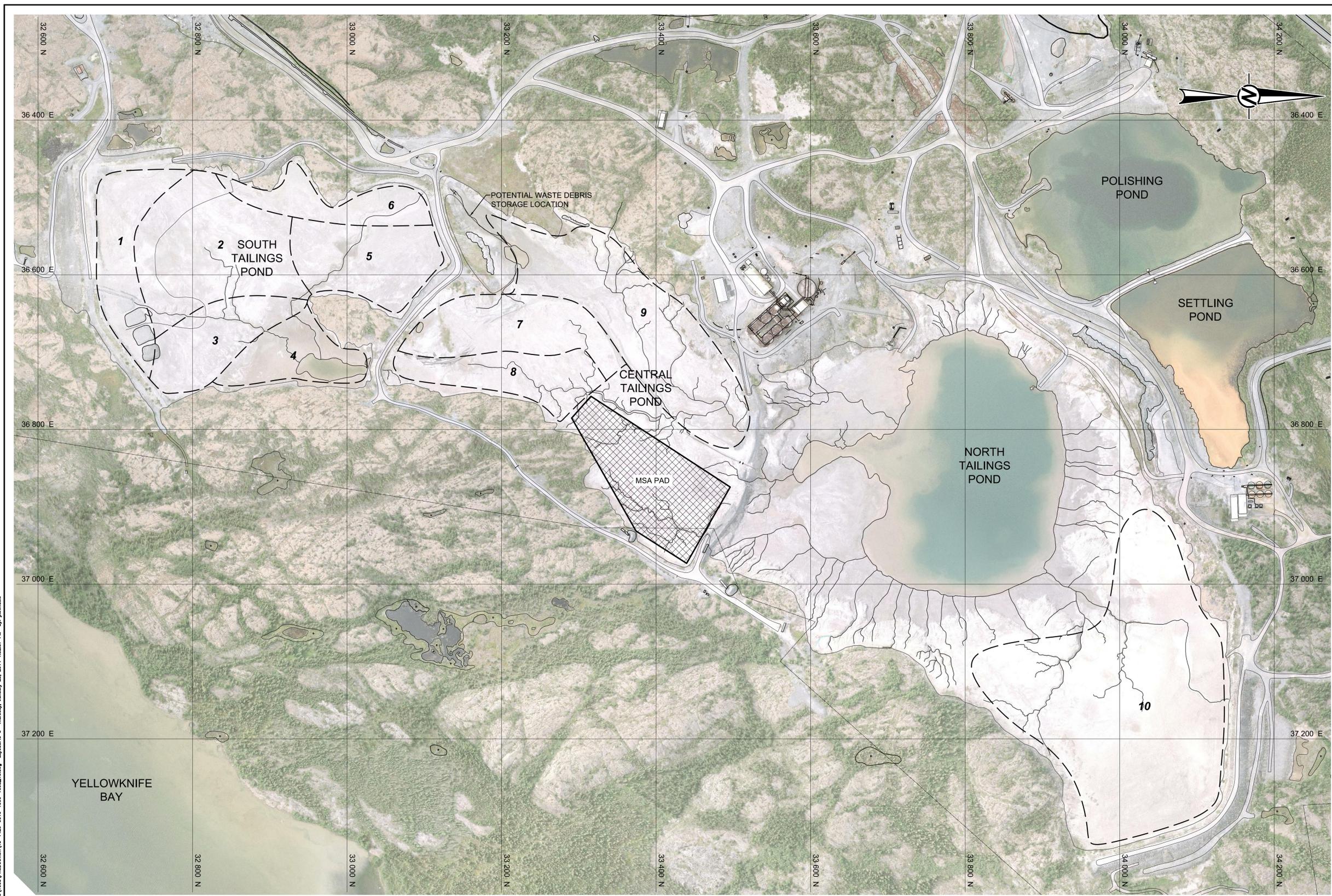
Client/client  
**PWSC**  
Drawing title/Titre du dessin

**INVESTIGATION LOCATIONS  
ON THE NORTH POND  
GOLDER 2010 AND 2011**

|  |  |  |
|--|--|--|
| Project No./No. du projet<br><b>13-1426-0010<br/>DOC. #064</b> | Sheet/ Feuille<br><b>FIGURE 2<br/>OF 3</b> | Revision no./<br>La Révision no.<br><b>1</b> |
|--|--|--|

CADD FILE LOC:\N:\B\Projects\Projects\2013\1426-0010\1000\1000\PRODUCTION\13-1426-0010-1000-1000-07.dwg Layer:Figure 2 Tuesday, December 03, 2013 3:59:44 PM By: jdownes

**PRELIMINARY**  
NOT FOR CONSTRUCTION



PLAN VIEW  
SCALE A

- LEGEND**
-  MSA PAD  
NO TAILINGS EXCAVATION HERE
  -  TAILINGS EXCAVATION AREAS

**NOTES**  
ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED. COORDINATE SYSTEM IS THE GMRP COORDINATE SYSTEM.

**REFERENCES**  
AERIAL PHOTO DATED 2009, PROVIDED BY PUBLIC WORKS GOVERNMENT SERVICES CANADA

**NOT FOR CONSTRUCTION**



| Revision/ | Description/Description     | Date/Date  |
|-----------|-----------------------------|------------|
| A         | ISSUED WITH DOC. #064 REV B | 2014-01-24 |

Client/client  
**PUBLIC WORKS  
GOVERNMENT SERVICES  
CANADA**

Project title/Titre du projet  
**GIANT MINE  
REMEDATION PROJECT  
YELLOWKNIFE, N.W.T.**

Approved by/Approve par  
**DC**

Designed by/Concept par  
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**PWGSC**

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Drawing title/Titre du dessin  
**TAILINGS EXCAVATION AREAS,  
SOUTH, CENTRAL  
AND NORTH PONDS**

|  |   |   |
|--|---|---|
| Project No./No. du projet<br><b>13-1426-0010<br/>DOC. #064</b> | Sheet/Feuille<br><b>FIGURE 3<br/>OF 3</b> | Revision no./<br>La Révision<br>no.<br><b>A</b> |
|--|---|---|

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