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October 31, 2017

Ms. Stephanie Autut
Executive Director,
Nunavut Water Board
P. O. Box 119
Gjoa Haven, Nunavut
X0B 1J0

Dear Ms. Autut:

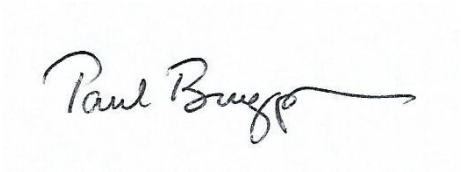
Pursuant to Part D, Article 8(d) and (e) of Water Licence 1BR-CUL1118, please find appended 2 paper copies of a report by **exp** Services Inc. entitled "2017 Tailings Facility Examination, Cullaton Lake Gold Mine". A third electronic copy has been e-mailed to you concurrent with this release.

Summarized, the consultant recommends:

- Continued visual surveillance of the Tailings Pond No. 1 spillway for erosion and Station 940-20 for artesian conditions.
- Surficial cracking noted in 2017 is monitored during subsequent visits.
- As per past recommendations, the frequency of geotechnical inspections be reduced to once every 3 years.

Should you have any questions regarding this report or any other Cullaton Lake matter, please don't hesitate to contact the undersigned.

Sincerely,



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Cc Ian Parsons, Water Resources Coordinator, Indigenous and Northern Affairs Canada
Holton Burns, Head of Innovation & Performance, Asset Development Group, Barrick Gold Corp.
Michael McCarthy, Senior Counsel, Barrick Gold of North America Inc.

Attachments: As stated

September 28, 2017

Mr. Paul Brugger, P.Eng.
Barrick Gold Corporation
1084 County Rd 8
Campbellford, ON K0L 1L0

Re: **Project No. THB-00090132-GG**

2017 Tailings Facility Examination
Cullaton Lake Gold Mine, Nunavut
Licence 1BR-CUL1118

Dear Mr. Brugger:

Further to your authorization we have carried out a visual geotechnical examination of the tailings impoundment facility at the Cullaton Lake Gold Mine (the Site) in Nunavut, owned by Barrick Gold Corporation (Barrick). The facility includes Tailings Ponds 1 and 2 (TP1 and TP2) and associated dams. The field examination was performed on September 6, 2017. The attached Drawing No. 1 in Appendix A, (January 30, 1995) illustrates the general layout of the facility.

This report includes a brief history and summary of previous annual inspection findings and concerns as requested by the Nunavut Water Board in a letter to Barrick dated June 9, 2004, commenting on the 2003 Tailings Dam Examination report. Annual reports since then have been similarly presented.

Additionally, and in accordance with Licence Amendment No. 1 (Part C, Item 1(e)), dated June 6, 2005), this report comments on the following; *"Monitoring of the encapsulated Shear Lake Waste Rock "cap" for erosion shall be carried out until such point that vegetation is sufficiently established so as to stabilize the cap and preclude significant erosion thereof."*

Historical Summary

The site of the Cullaton Lake Gold Mine is located in Nunavut at approximately 61^{O}16' north latitude and 98^{O}30' west longitude. The site is geographically located relative to the following communities (approximately):

- 670 km north of Thompson, MB
- 250 km west of Arviat, NU.
- 416 km south of Baker Lake, NU
- 416 km northwest of Churchill, MB

The Site is at the tree line near the border between continuous and discontinuous permafrost zones. Daily air temperatures measured at the Arviat weather station (located 250 km east of the Site) indicate that Arviat, NU is in the continuous permafrost zone with the average air temperature of -9.3°C (Canadian Climate Normals 1981-2010). Air temperatures measured at the Ennadai Lake weather station (located 150 km west-southwest of the Site) suggest air temperatures somewhat warmer than in Arviat, NU; however, long term temperature means could not be calculated due to limited weather data. There is no weather station at the Site.

Access to the Site is normally gained by charter air flights from Thompson, MB or Churchill, MB to the 1460 m gravel airstrip located about 8 km north of TP1.

The Site area features undulating terrain with shallow surficial soils overlying bedrock. The surficial deposits consist mainly of a bouldery glacial till with localized surface organic deposits. The soil matrix of the glacial till is a well-graded, silty sand with no clay to traces of clay (i.e., exhibit little or no plasticity).

The Cullaton Lake Gold Mine's construction and mill startup of a 300 tonnes per day complex was completed in early fall of 1981 with its first gold pour in December 1981. Total gold produced from the B-Zone and the Shear Lake zones to August 1985, was over 100,000 ounces when, for economic reasons, it was decided to put the property on temporary closure on a care-and-maintenance basis. The property has remained closed since September 1985.

Based on the mill records, a total of 373,000 tonnes of ore was processed, of which approximately 150,000 tonnes came from the B-Zone with the balance of 223,000 tonnes coming from the Shear Lake Zone. Laboratory analyses previously showed that the tailings from the B-Zone have a relatively high acid generation potential; however, there was no evidence, either physical or chemical, that acid drainage had been taking place within the tailings impoundment area. This lack of effect is attributed to three main factors:

- The majority of the tailings are either submerged below water and/or saturated, such that there is a lack of oxygen required for oxidation;
- The tailings are frozen for about eight months of the year and only the top layer of the tailings thaws. This, and the fact they remain saturated, limits water movement through the tailings, with resulting limited oxidation;
- The acid kinetic reaction from the tailings impoundment becomes substantially diluted and is not detectable in the surrounding environment.

The principal concern of the Water Board, with respect to abandonment of the tailings impoundment facility, was the potential generation of acidic drainage. As part of the Closure Plan[1], the objectives were to minimize acid generation by:

- Maintaining water cover over the tailings within the pond to prevent access by oxygen;
- Placement of cover material over the exposed tailings to reduce access by oxygen;
- Maintaining the remaining tailings in a frozen state (permafrost), by thickening the cover material.

The homogeneous tailings dams were constructed in the late 1970s or early 1980s (presumably) with local silty sand and gravel till (there are no design or construction records). Maximum dam height was about 5.5 m above original ground. The dams included filter fabric and synthetic impermeable liners on the upstream faces.

The following inspections of the tailings dams and ponds have been performed and reported on by **exp** and **Trow Associates Inc.** (a former identity of **exp** Services Inc.) since the preparation of the Closure Report. Note that ownership of the property has changed over the years. These reports should be on file with the Water Board and with Barrick.

August 1992 Inspection – Reported to Homestake Canada Ltd. (March 15, 1993)

The attached Drawings, No. 1 to 4 (Appendix B), are reproduced from the 1992 inspection report and serve to illustrate the conditions at the time. Observations with respect to the tailings impoundment included:

- the Pond No. 1 spillway exceeds the design requirements (wider channel and flatter slopes) given in the Closure Plan and was constructed with non-woven filter fabric on the cohesionless subgrade soil and covered with a rubber liner and about a 300 mm thick layer of graded waste rock;
- a few minor seeps were observed on the downstream side of Dam No. 1;
- no recommendations were made other than to conduct a detailed site survey.

June 1994 Inspection – Reported to Homestake Canada Ltd. (February 1, 1995)

A detailed survey of the tailings impoundment area and structures was completed. Observations with respect to the tailings impoundment included:

- the pond elevations of Pond No. 1 and No. 2 were 94.0 m and 89.4 m, respectively;
- no seepage evidenced on the downstream side of either dam;
- spillways in good condition;
- dams appear stable;

[1] Abandonment and Restoration Plan, Cullaton Lake Gold Mines Ltd. Reference No. F-90132-A/E. May 7, 1991. Prepared for Corona Corporation by Trow Consulting Engineers Ltd.

- no evidence of exposed tailings in Tailings Area No. 1;
- no recommendations were made.

September 1996 Inspection – Reported to Homestake Canada Ltd. (November 27, 1996)

Observations with respect to the tailings impoundment included:

- the tailings dams are presently stable, and in good condition with no signs of distress or erosion;
- although there were a few wet areas near the downstream toe of Dam No. 1, no seeps were visible; wetness may have been due to recent rainfall accumulations;
- the water level in Pond No. 1 was the same as it was in 1994;
- there were no exposed tailings in the area;
- it was recommended that some minor repair work be undertaken to address the exposed liner at the Dam No. 1 spillway, and that damaged and exposed sections of liner be removed from Dam No. 2.

July 1999 Inspection – Reported to Homestake Canada Ltd. (October 13, 1999)

Observations with respect to the tailings impoundment included:

- some small erosion scars were observed on both upstream and downstream sides of Tailings Dam No. 1, likely due to erosion of the previously flattened slopes;
- upstream and downstream slopes of about 3H:1V and 6H:1V, respectively, and crest width varies up to 15 m;
- Pond No. 1 level about 93.7 m, slightly lower than the 94.0 m of previous inspections;
- no unsubmerged tailings observed;
- no seepages observed at either dam;
- both dams considered stable;
- no recommendations were made.

July 2001 Inspection – Reported to Homestake Canada Ltd. (February 6, 2002)

Observations with respect to the tailings impoundment included:

- similar observations as in 1999, except Pond No. 1 water level was about 0.3 m higher at elevation 94.0, similar to previous years;
- no recommendations were made.

July 2003 Inspection – Reported to Barrick Gold Inc. (October 15, 2003)

- similar observations as in 2001;

- the erosion scars previously identified in 1999 appear to be naturally revegetating and self-armouring with larger rock particles from the dam fill;
- the weir in the Dam No. 1 spillway had been removed subsequent to the 2001 inspection;
- no recommendations were made.

July 2004 Inspection – Reported to Barrick Gold Inc. (February 9, 2005)

- similar observations as in 2003;
- the erosion scars previously identified appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill;
- a recommendation to repair the rubber liner and restore the design configuration of the base of the Dam No. 1 spillway channel was made.

August 2005 Inspection – Reported to Barrick Gold Inc. (October 3, 2005)

- similar observations as in prior recent years;
- the erosion scars previously identified appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill;
- local fine rockfill (25 mm to 75 mm size) was sourced and placed in the Dam No. 1 spillway channel to cover much of the exposed rubber liner that was previously evident in a few locations. Up to about 100 mm thickness was placed and it was recommended that this be monitored during future inspections.

August 2006 Inspection – Reported to Barrick Gold Inc. (October 11, 2006)

- similar observations as in prior recent years;
- the previously identified erosion scars on Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was about 100 mm to 150 mm lower than in 2005, due to a relatively dry period. There was no flow over the Dam No. 1 spillway;
- no erosion of the fine rockfill placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- no exposed tailings were observed within the pond;
- vegetation on the till cap on the Shear Lake Waste Rock continues to improve.

July 2007 Inspection – Reported to Barrick Gold Inc. (February 11, 2008)

- similar observations as in prior recent years;

- the previously identified erosion scars on Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill;
- no new erosion was apparent;
- the pond level in Pond No. 1 was about 100 mm higher than in 2006 and only a minor trickle was observed at the Dam No. 1 spillway;
- no erosion of the fine rockfill placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- no exposed tailings were observed within the pond;
- vegetation on the till cap on the Shear Lake Waste Rock continues to improve.

September 2008 Inspection – Reported to Barrick Gold Inc. (December 16, 2008)

- similar observations as in prior recent years;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was a few centimetres lower than in 2007 and only a minor trickle was observed at the Dam No. 1 spillway;
- no erosion of the fine rockfill placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- no exposed tailings were observed within the pond;
- vegetation on the till cap on the Shear Lake Waste Rock continues to improve.

August 2009 Inspection – Reported to Barrick Gold Inc. (October 27, 2009)

- similar observations as in prior recent years;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was a few centimetres higher than in 2008 and only a minor trickle was observed at the Dam No. 1 spillway;
- no erosion of the fine rockfill, that was placed on the spillway in 2005, was observed;
- no seepages through the dam were observed;
- no exposed tailings were observed within the pond;
- flow in the Dam No. 2 spillway channel was slightly less than in 2008;
- vegetation on the till cap on the Shear Lake Waste Rock continues to improve;
- recommendation to reduce monitoring frequency to every three years was made.

August 2010 Inspection – Reported to Barrick Gold Inc. (February 28, 2011)

- similar observations as in prior recent years;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was a few centimetres lower than in 2009 and only a minor trickle was observed at the Dam No. 1 spillway;
- no erosion of the fine rockfill that was placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- a wet spot was identified on the downstream slope, south of the spillway. No seepage was observed. The elevation of this spot was about 150 mm to 300 mm below the pond water level. It was recommended to mark this location in the field for future monitoring;
- no exposed tailings were observed within the pond;
- flow in the Dam No. 2 spillway channel was a trickle and slightly less than in 2009;
- vegetation on the till cap on the Shear Lake Waste Rock continues to improve;
- as in 2009, a recommendation to reduce monitoring frequency to every three years was made.

August 2011 Inspection – Reported to Barrick Gold Inc. (December 15, 2011)

- similar observations as in prior recent years;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was a few centimetres lower than in 2010 and only a minor trickle was observed at the Dam No. 1 spillway;
- no erosion of the fine rockfill that was placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- at the wet spot, which was previously identified during the 2010 inspection, on the downstream slope south of the spillway, there was no seepage observed, although there was collected water, which may have been from recent precipitation. The elevation of this spot was about 150 mm to 300 mm below the pond water level. The location was marked with a length of rebar, as previously recommended in the 2010 inspection report;
- no exposed tailings were observed within the pond;
- there was no flow observed in the Dam No. 2 spillway channel;
- vegetation on the till cap on the Shear Lake Waste Rock continues to improve;
- as in previous years, a recommendation to reduce the examination (by a geotechnical engineer) frequency to every three years was made.

August 2012 Inspection – Reported to Barrick Gold Inc. (January 23, 2013)

- similar observations as in prior recent years;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was two to three centimetres lower than in 2011 and only a minor trickle was observed through the rockfill at the Dam No. 1 spillway;
- no erosion of the fine rockfill that was placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- at the wet spot, which was previously identified (in 2010) on the downstream slope south of the spillway, there was no seepage observed, although there was a minor amount of collected water, which may have been from recent precipitation. The elevation of this spot was about 150 mm to 300 mm below the pond water level and the location was previously marked with a length of rebar.
- no exposed tailings were observed within the pond;
- there was minor flow observed through the rockfill of the Dam No. 2 spillway channel;
- vegetation on the till cap on the Shear Lake Waste Rock continues to improve;
- as in previous years, a recommendation to reduce the examination (by a geotechnical engineer) frequency to every three years was made.

August 2013 Inspection – Reported to Barrick Gold Inc. (February 28, 2014)

- similar observations as in prior recent years;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was two to three centimetres lower than in 2012 and only a minor trickle was observed through the rockfill at the Dam No. 1 spillway;
- no erosion of the fine rockfill that was placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- at the wet spot, which was previously identified on the downstream slope south of the spillway, there was no seepage observed, although there was a minor amount of accumulated water, which may have been from recent precipitation. The elevation of this spot was about 150 mm to 300 mm below the pond water level. The location is marked with a length of rebar.
- no exposed tailings were observed within the pond;
- there was no flow observed through the rockfill of the Dam No. 2 spillway channel;
- vegetation on the till cap on the Shear Lake waste rock storage area continues to improve;

- as in previous years, a recommendation to reduce the examination (by a geotechnical engineer) frequency to every three years was made.

August 2014 Inspection – Reported to Barrick Gold Inc. (September 18, 2014)

- similar observations as in prior recent years;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was similar to that in 2013 and only a minor trickle was observed through the rockfill at the Dam No. 1 spillway;
- no erosion of the fine rockfill that was placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- at the wet spot, which was previously identified on the downstream slope south of the spillway, there was no seepage observed, although there was a minor amount of accumulated water, which may have been from recent precipitation. The elevation of this spot was about 150 mm to 300 mm below the pond water level and the location is marked with a length of rebar.
- no exposed tailings were observed within the pond;
- there was no flow observed through the rockfill of the Dam No. 2 spillway channel;
- vegetation on the till cap on the Shear Lake waste rock storage area continues to improve;
- as in previous years, a recommendation to reduce the examination (by a geotechnical engineer) frequency to every three years was made.

September 2015 Inspection – Reported to Barrick Gold Inc. (December 4, 2015)

- similar observations as in prior recent years and as per the 2014 inspection, except as noted below;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was up to a few centimetres higher than in 2014 and only a minor trickle was observed through the rockfill at the Dam No. 1 spillway;
- no erosion of the fine rockfill that was placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- at the wet spot, which was previously identified on the downstream slope south of the spillway, there was no seepage observed, although there was a minor amount of accumulated water, which may have been from recent precipitation. The elevation of this spot was about 150 mm to 300 mm below the pond water level and the location is marked with a length of rebar.
- no exposed tailings were observed within the pond;

- vegetation on the till cap on the Shear Lake waste rock storage area continues to improve;
- as in previous years, a recommendation to reduce the examination (by a geotechnical engineer) frequency to every three years was made.

August 2016 Inspection – Reported to Barrick Gold Inc. (November 22, 2016)

- similar observations as in prior recent years;
- the previously identified small erosion scars on the upstream of Dam No. 1 appeared to be continuing to revegetate naturally and to self-armour with larger rock particles from the dam fill. No new erosion was apparent;
- the pond level in Pond No. 1 was up to a few centimetres higher than in 2015 and only a minor trickle was observed through the rockfill at the Dam No. 1 spillway;
- no erosion of the fine rockfill that was placed on the spillway in 2005 was observed;
- no seepages through the dam were observed;
- at the wet spot, which was previously identified on the downstream slope south of the spillway, there was no seepage observed, although there was a minor wetness, which may have been from recent precipitation. The elevation of this spot was about 150 mm to 300 mm below the pond water level and the location is marked with a length of rebar.
- no exposed tailings were observed within the pond;
- vegetation on the till cap on the Shear Lake Waste Rock Pile continues to improve;
- as in previous years, a recommendation to reduce the examination (by a geotechnical engineer) frequency to every three years was made.

Current Inspection – September 6, 2017

The field examination of TP1 and the associated Dam 1 was carried out by Ms. Renata Klassen, P.Eng. of **exp,** on September 6, 2017. The Dam 2 spillway on TP2 was also visited and comments on the spillway are included in this report.

The access to the Site was gained by a charter air flight from Thompson, MB. Access from the gravel airstrip to the former mine site and tailings impoundment facility was gained by an all terrain vehicle.

Exp understands that no construction activities took place at the Site since the 2016 inspection.

Dam 1 was visually examined for signs of distress such as seepage, ponding, settlement and cracking. Photographs were taken on the day of the inspection and select photographs are included in the Photographs section of this report. The current inspection was completed within one day of the last year's inspection (September 7, 2016).

The sections below summarise the findings of the 2017 inspection.

Tailings Facility TP1 and Dam 1

Photo 1 shows an aerial view of TP1 and its location relative to TP2. Photo 2 shows TP1, the revegetated tailings beach and Dam 1 with the spillway, the low point south of the spillway, and the access road. The tailings beach adjacent to the northwest edge of the pond had been previously covered with local till as reported in Trow's/**exp**'s previous inspection reports.

Water Levels

The water level in TP1 was significantly lower compared to previous years. Comparison of photographs from present and past inspections suggests that the water level this year was about 0.4 m lower than last year at the same time. The spillway appeared dry. No water was observed in the rockfill comprising the spillway channel bottom (Photos 3 and 4). A piece of rock visible in Photo 3 exposed at the water's edge and marked with a measuring tape (on the left in the photo) was almost submerged in 2016.

A review of Environment Canada records for Arviat, NU (the closest station to the site for which historic data are available), shows that precipitation in July and August 2017 was 16 mm and 0.5 mm, respectively. The 1981 – 2010 Climate Normals indicate average precipitation of 36.7 mm and 56.0 mm, for July and August, respectively. The very low precipitation in the months preceding the September 6 site visit as well as the relatively small size of the TP1, would account for the lower water level.

Seepage and Ponding

No seepages were observed on the day of the inspection. There was no evidence of any dam internal soil erosion or piping. This should continue to be monitored during subsequent inspections.

Minor ponding was observed west of the TP1 pond (Photo 5) consistent with observations from previous years.

The “wet spot” exhibited no wetness in 2017 (Photo 6). The “wet spot” was first noted during 2010 inspection because it contained some visible moisture. The spot is located south of the spillway halfway down the downstream face of Dam 1 (Drawing No. 1 in Appendix A). This spot is visible from the dam crest and is currently marked with a piece of rebar and red flagging.

Ground Freezing

Depth to frost at the time of the inspection was found to be 1.3 m as measured in a hole manually excavated in the covered tailings area. Depth to frost is affected by air temperatures and factors such as snow cover, vegetation cover, wind and exposure. Ground temperatures are presently not measured at the Site.

Stability

Photos 7 and 8 show views of the upstream face and crest of Dam 1. Typically, the embankment, which is constructed principally with local cohesionless till, is irregular in section and surface grade. Average side slopes of the upstream and downstream sides are typically about 3H:1V and 6H:1V, respectively. The downstream side is estimated to be as steep as about 3H:1V in a few areas. The dam height ranges up to about 4 m. The dam crest width varies but is generally in the order of 15 m.

Some small erosion scars were observed on both the upstream and downstream sides; however, as described below, they appear to continue to stabilize with vegetation and self-armouring with larger rock particles from the till and previously placed mine waste rock. These scars do not appear to be increasing in size, based on visual comparisons of previous years.

Localized longitudinal cracking was observed (Drawing No. 1 in Appendix A) where the access road adjoins the crest south of the spillway (Photos 9 and 10) and some localized surface cracking was noted on the crest north of the spillway (Photo 11). This cracking does not have an impact on Dam 1 performance. The cracking should be monitored during subsequent inspections. Photo 9 shows red flagging marking the location of the crack.

The TP1 spillway was visually inspected. The inspection indicated that the rockfill covering the liner in the spillway serves its purpose thus confirming that addition of fine rockfill in 2005 was a sufficient treatment. Small erosion of the rockfill was noted on the south bank of the spillway (Photos 3 and 12). Small areas of the liner became exposed in this area most likely due to a steeper grade. The rockfill in the spillway should be monitored for erosion and rockfill replaced if the exposed areas become larger.

Based on the current, as well as previous, inspections and involvement with the project, Dam 1 is not in distress and is considered to be stable.

Tailings

No unsubmerged or exposed tailings were observed within the pond.

Vegetation on the till covered tailings is small and sparse. However, it is noted that the density of the vegetation is increasing gradually, based on the comparative visual observations of previous years (Photo 2).

Tailings Pond TP2 and Dam 2

The TP2 spillway was observed. Dam 2 was observed from the TP2 spillway location (Photo 13). As with Dam 1, the principal construction material is local cohesionless till. Dam 2 section and surface grade is irregular, although less so than Dam 1. The crest width varies but is in the order of 15 m.

The TP2 spillway exhibited flow estimated to be 0.5 L/sec. Photo 14 shows the TP2 spillway looking towards the TP2 pond, and Barrick's water sampling activities. The drainage area for TP2 is significantly larger than for TP1.

Our visit to the TP2 spillway and previous inspections suggest that Dam 2 is not in any distress and is considered to be stable.

Review of Shear Lake Waste Rock Cap

Photo 15 shows an aerial view of the Shear Lake Waste Rock Pile. The Shear Lake Waste Rock Pile, located on the east side of Shear Lake, some 4.5 km north of the former mill site (at the TP1), was reportedly capped with local, compacted glacial till to promote runoff and reduce infiltration. The re-seeding (with grasses) was implemented to promote some vegetation growth which would reduce the erosion of the cover due to runoff, particularly along the side slopes. In 2005, Barrick personnel oversaw the re-seeding of the cap. Some erosion control on the till cap was performed in 2005. A berm approximately 0.5 m high is surrounding the pile near the bottom (Photo 16) reaching to the pile top on the south and west sides.

A comparison of photos from the present and previous years shows that the vegetation is improving, especially on the majority of the side slopes. Photos 16, 17 and 18 show the vegetation growth on the north, east and south slopes, respectively. The aerial view in Photo 15 shows that the vegetation growth is still sparse on the top of the pile.

Our observations were similar to previous years and suggest that the vegetation is helping to reduce erosion. Consistent with previous inspection findings, very few small erosion gulleys/channels (20 to 30 mm deep/wide) were noted on the side slopes. These generally are short and do not extend the full length of the slope. Most of these had been filled to some extent with small granular material in 2005, to minimize further erosion.

Subsequent inspections should be made to verify the efficacy of the vegetation/till cover system. Any erosion gullies that form should be repaired with fine rock/gravel. It is expected that it will take several more years for the vegetation to establish itself fully.

Recommendations

Based on the numerous visual inspections that **exp** has performed between 1992 and 2017, it is considered that no erosional or other detrimental forces have diminished the integrity of Dam 1 at the Cullaton Lake Gold Mine. Dam 1 is stable and serves its intended function of providing storage and water cover for the tailings in TP1 pond.

It is recommended that:

- the condition of the TP1 spillway continues to be monitored for erosion and if any is apparent, remedial measures, such as the addition of additional rockfill, be implemented;
- the "wet spot" exhibiting no water in 2017 located south of the TP1 spillway is monitored during each subsequent visit;
- the cracking noted in 2017 is monitored during each subsequent visit; and,
- the frequency of the formal geotechnical inspections be reduced to once every three years. While the inspections have been largely qualitative, there has been no visible evidence of deterioration of the dam or spillway structures over the last several years. Routine inspections should be provided by Barrick personnel during their annual site visits to collect water samples.

Closure

We trust that this letter is sufficient for your current requirements. Should you require clarification of some point, please contact the undersigned.

Sincerely,
exp Services Inc.

Prepared by:

Renata Klassen, M.Sc., P.Eng.
Arctic Engineer

Reviewed by:

Demetri N. Georgiou, MASc., P.Eng.
Branch Manager/Principal Engineer

Attach: Photographs
Appendix A
Appendix B

PHOTOGRAPHS

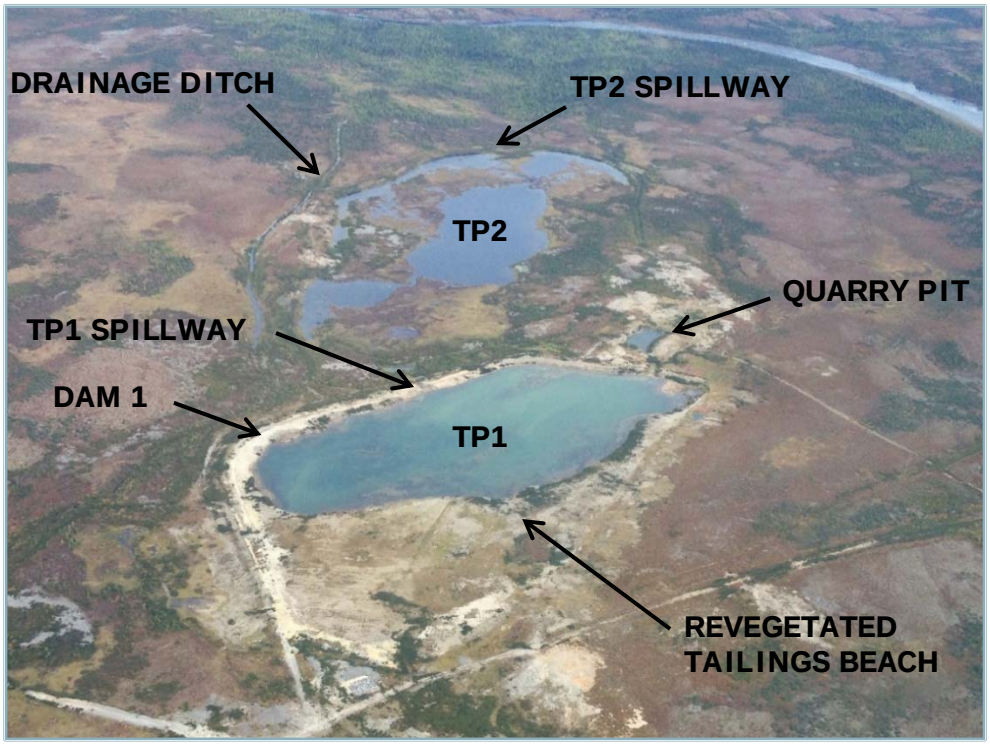


Photo 1: Aerial view of TP1 and TP2 (looking east).

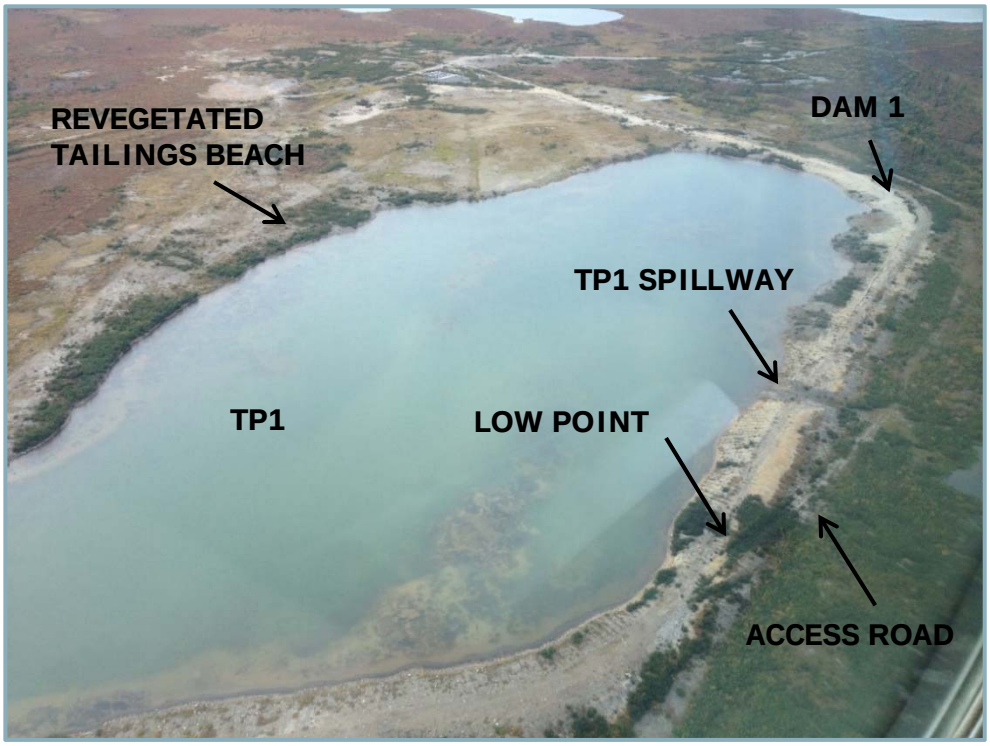


Photo 2: Aerial view of TP1 (looking northwest).

Photo 3: No water visible in the TP1 spillway (looking north across the spillway).

Photo 4: No water visible in TP1 spillway (looking up-spillway towards the pond).

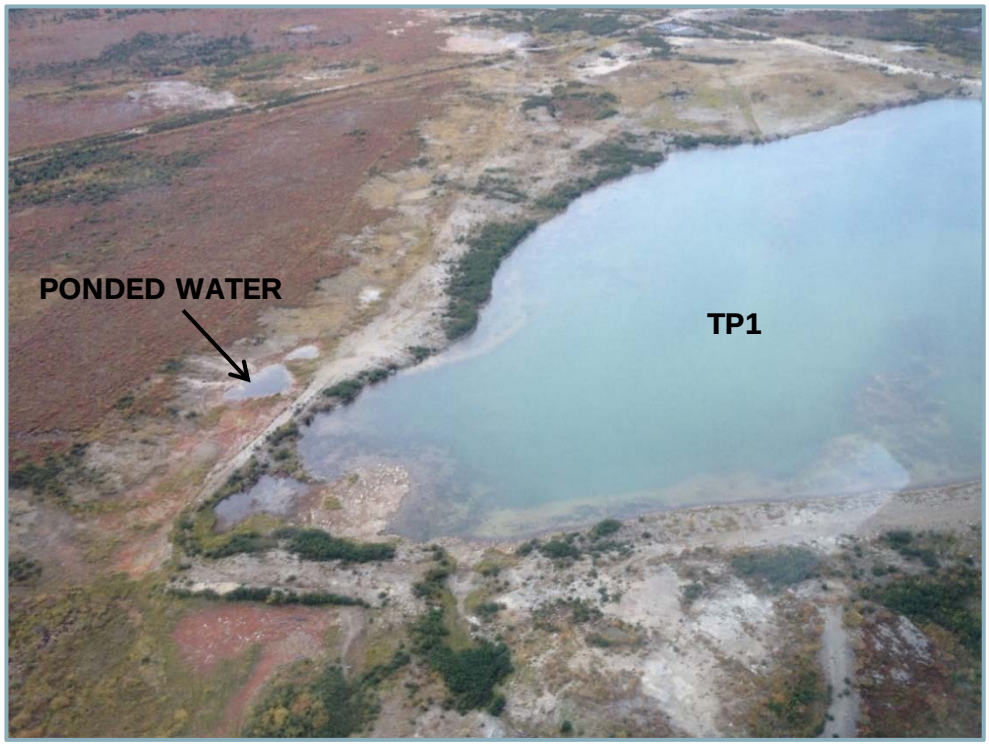


Photo 5: Minor ponding and small areas of exposed tailings in TP1 (looking west).

Photo 6: Dam 1 "wet spot" exhibiting no water in 2017.

Photo 7: Dam 1 upstream face and crest north of TP1 spillway (looking southeast).

Photo 8: Dam 1 upstream face south of TP1 spillway (looking north).

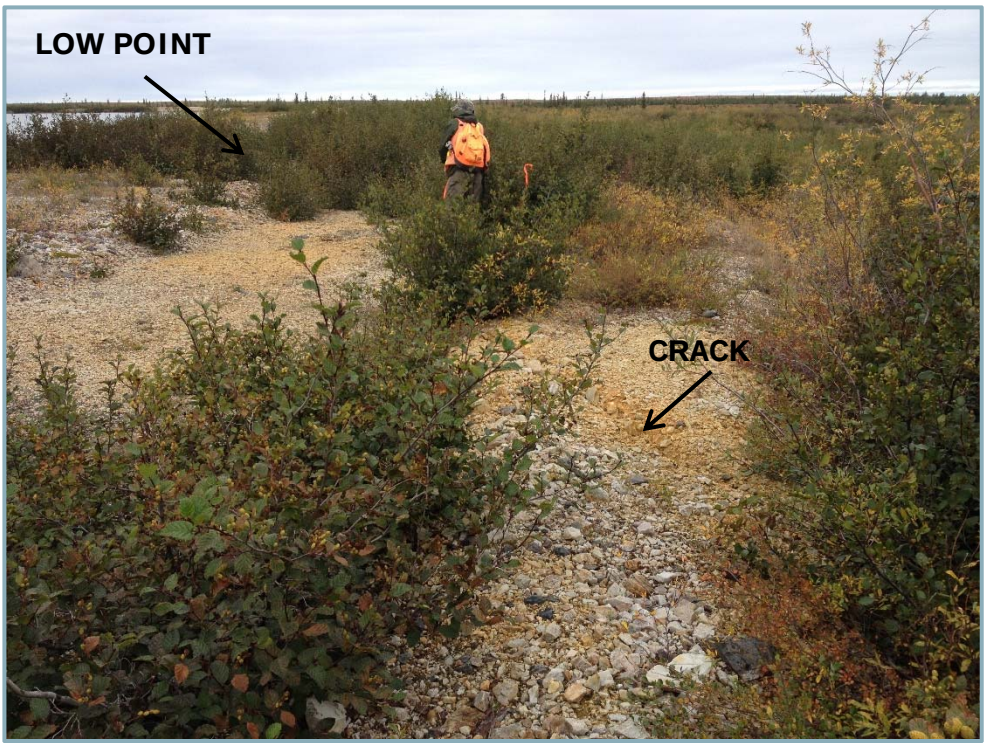


Photo 9: Cracking where access road adjoins Dam 1 crest (looking north).

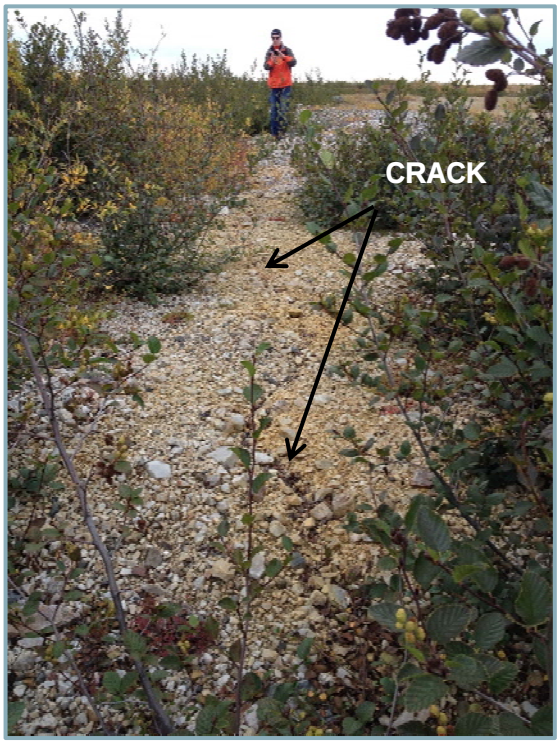


Photo 10: Cracking where access road adjoins Dam 1 crest (looking south).

Photo 11: Localized surface cracking north of TP1 spillway (looking north).

Photo 12: Liner exposed at the south edge of TP1 spillway (looking south).

Photo 13: Dam 2 (on the right) seen from TP2 spillway (looking northwest).

Photo 14: TP2 spillway with flow looking upstream to TP2 pond.

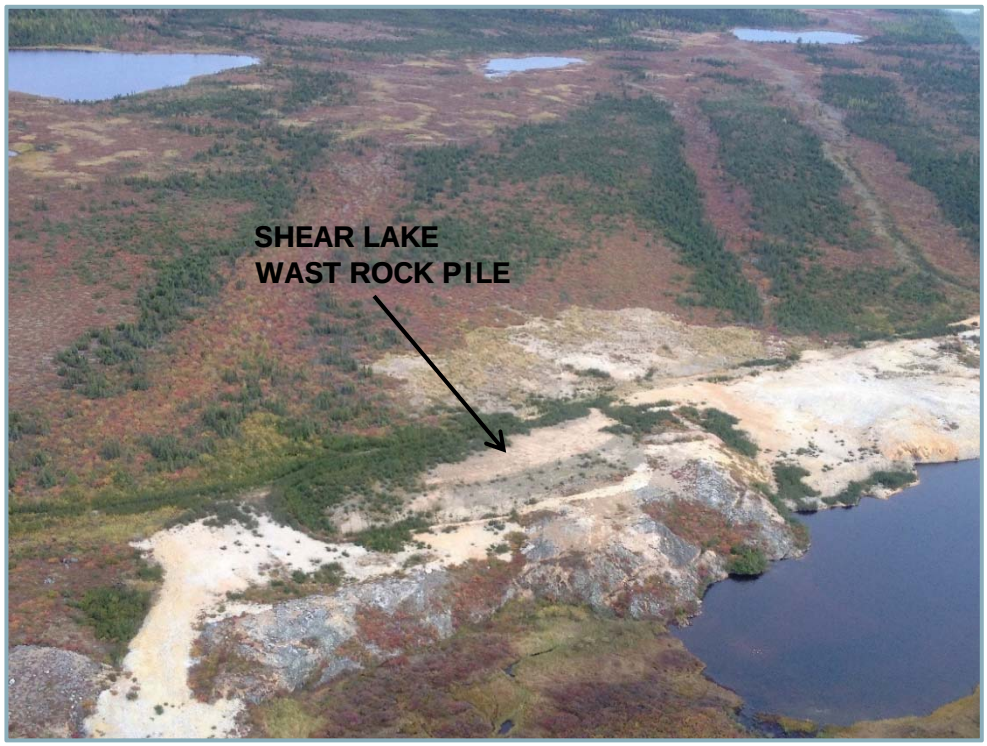


Photo 15: Aerial view of Shear Lake Waste Rock Pile (looking southeast).

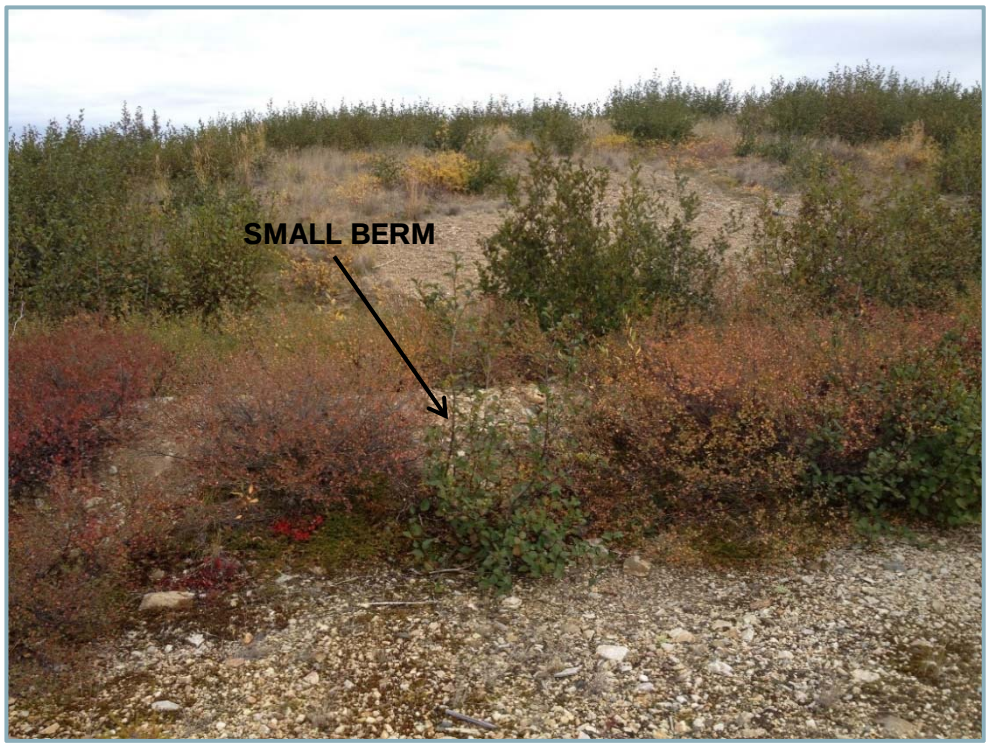
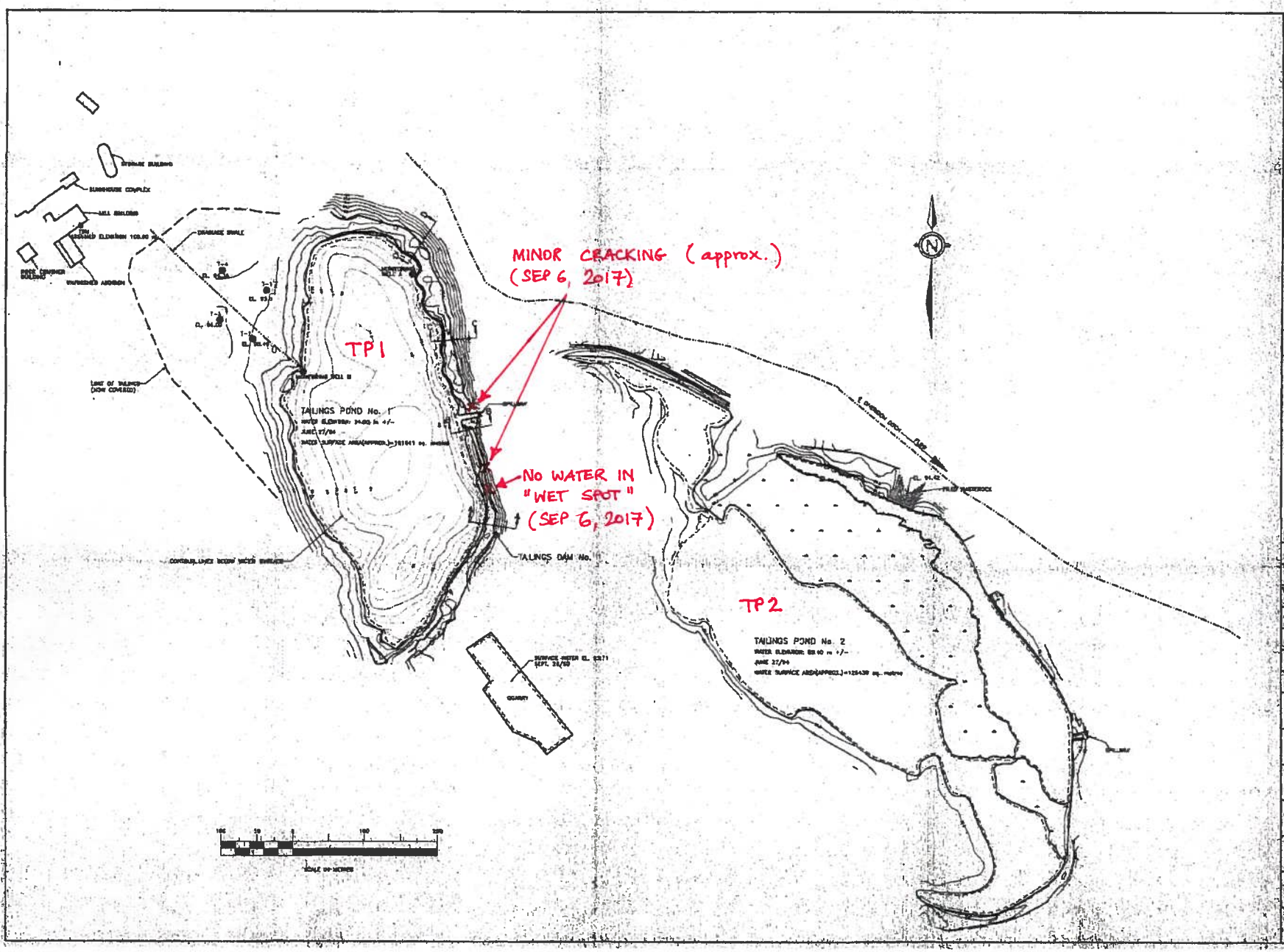


Photo 16: North side of Shear Lake Waste Rock Pile with berm and grasses (looking south).

Photo 17: Stable gravel/till covered east slope of Shear Lake Waste Rock Pile (looking west).

Photo 18: South side of Shear Lake Waste Rock Pile showing grasses (looking north).

APPENDIX A



TROW CONSULTING ENGINEERS LTD.
Thunder Bay, Ontario, Canada

LEGEND

- MONITORING WELL
- BENCHMARK
- THERMISTERS

NOTES:

1. DATA INTERPRETED FROM TROW ENGINEERING SURVEY(JUNE 27/94) AND SURVEY BY H.L.W. SURVEYS LTD.(NOV. 10/90).
2. BENCH MARK IS LOCATED ON CONCRETE SLAB AT NORTH EAST CORNER OF MILL BUILDING. ASSUMED ELEVATION: 100.00m
3. ALL ELEVATIONS ARE SHOWN IN METRES.

REVISIONS

No.	Date:	Revision:

Client: HOMESTAKE CANADA

Project: CULLATON LAKE MINE CLOSURE

Title: TAILINGS POND SURVEY CULLATON LAKE N.W.T

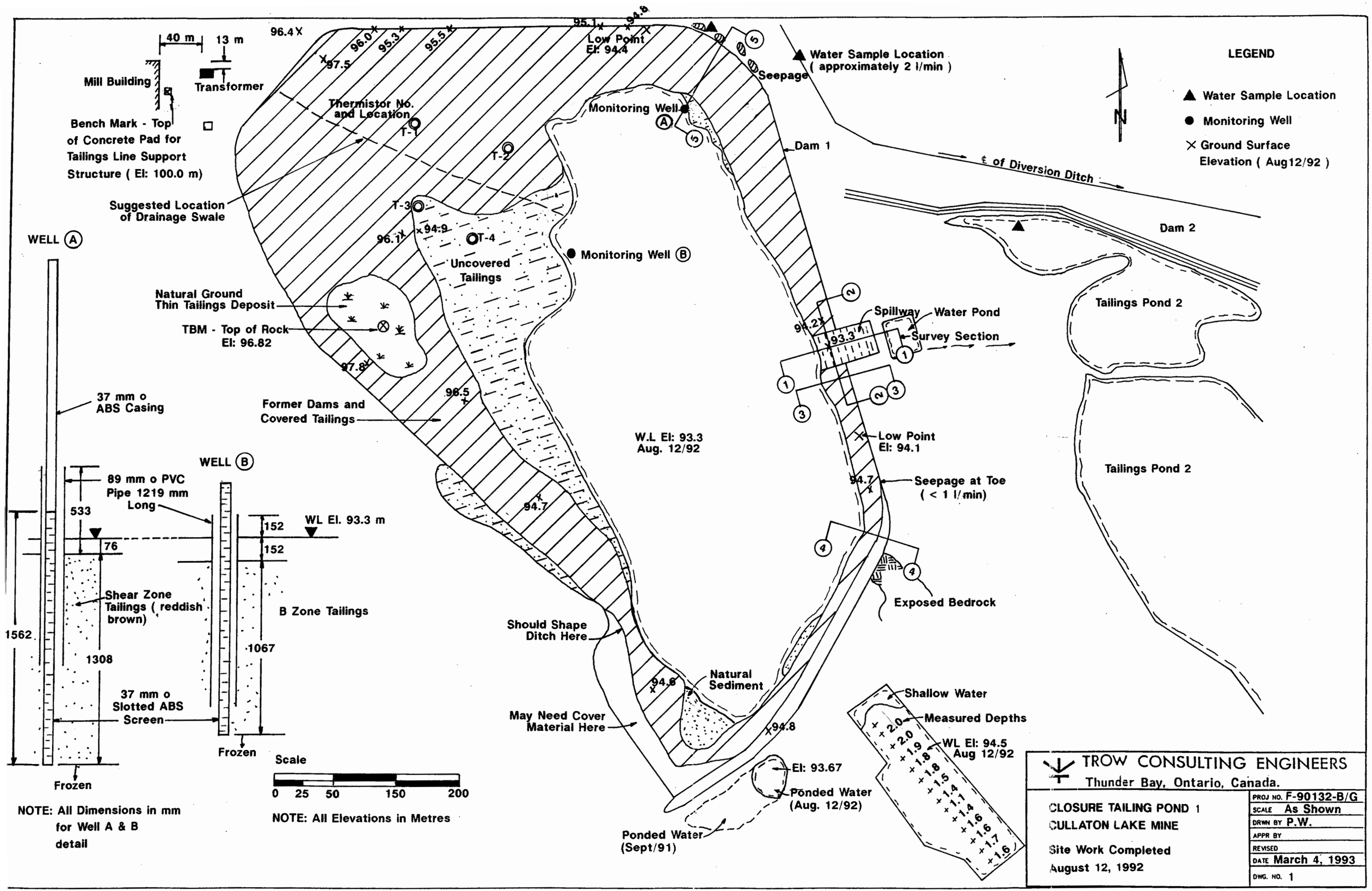
Projekt No.	Dwg. No.
F-190432-A/G	1

Drawn By:	Reviewed By:
PW/DT	DK

Date: JANUARY 30, 1995

Scale: 1 :500

APPENDIX B



NOTE: All Dimensions in mm for Well A & B detail

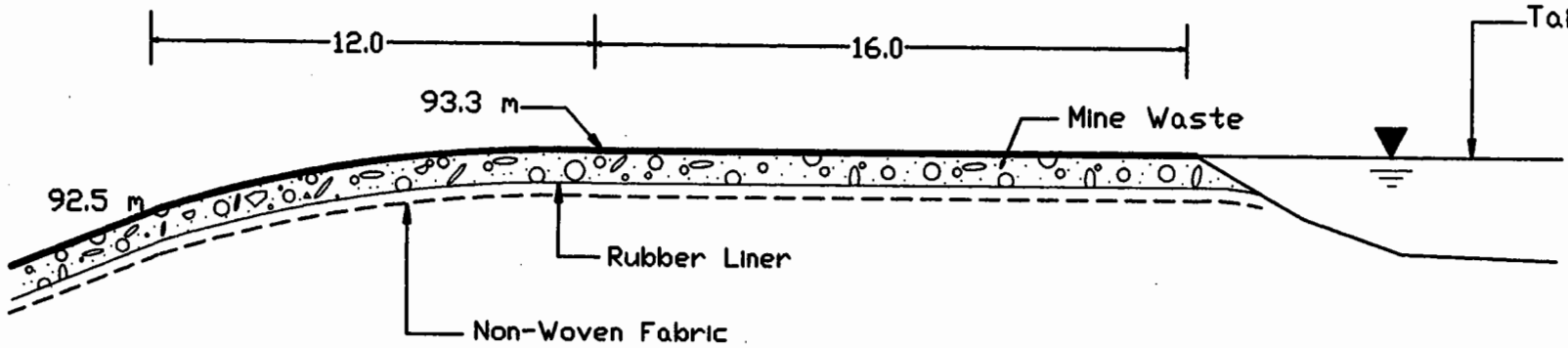
NOTE: All Elevations in Metres

TROW CONSULTING ENGINEERS
Thunder Bay, Ontario, Canada.

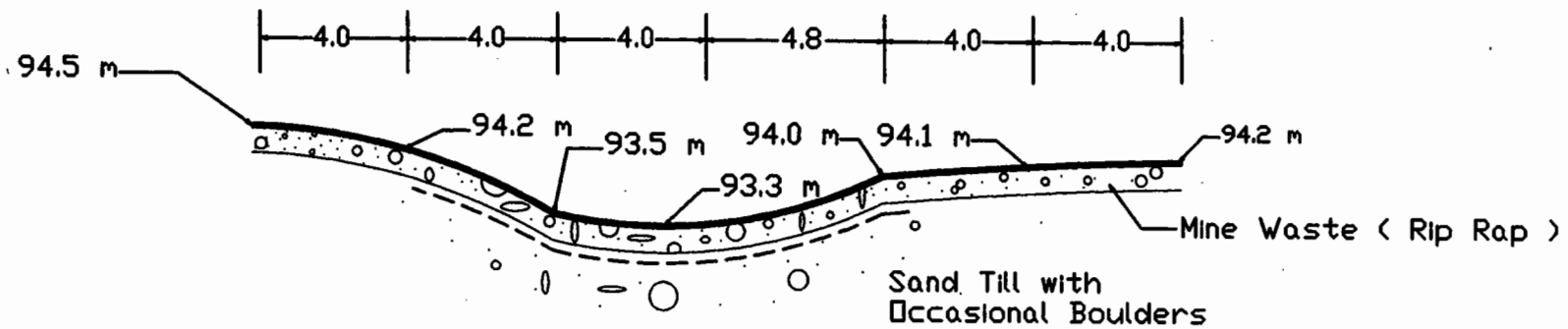
CLOSURE TAILING POND 1
CULLATON LAKE MINE

Site Work Completed
August 12, 1992

PROJ NO.	F-90132-B/G
SCALE	As Shown
DRWN BY	P.W.
APPR BY	
REVISED	
DATE	March 4, 1993
DWG. NO.	1

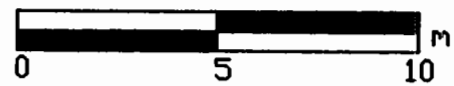


SECTION 1 - Longitudinal (Looking South)



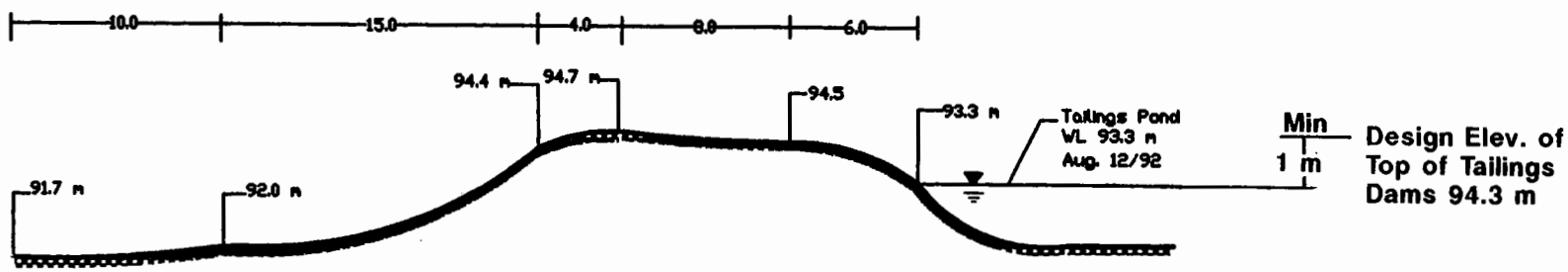
SECTION 2 _ Transverse (Looking East)

Vertical N.T.S.
Horizontal Scale

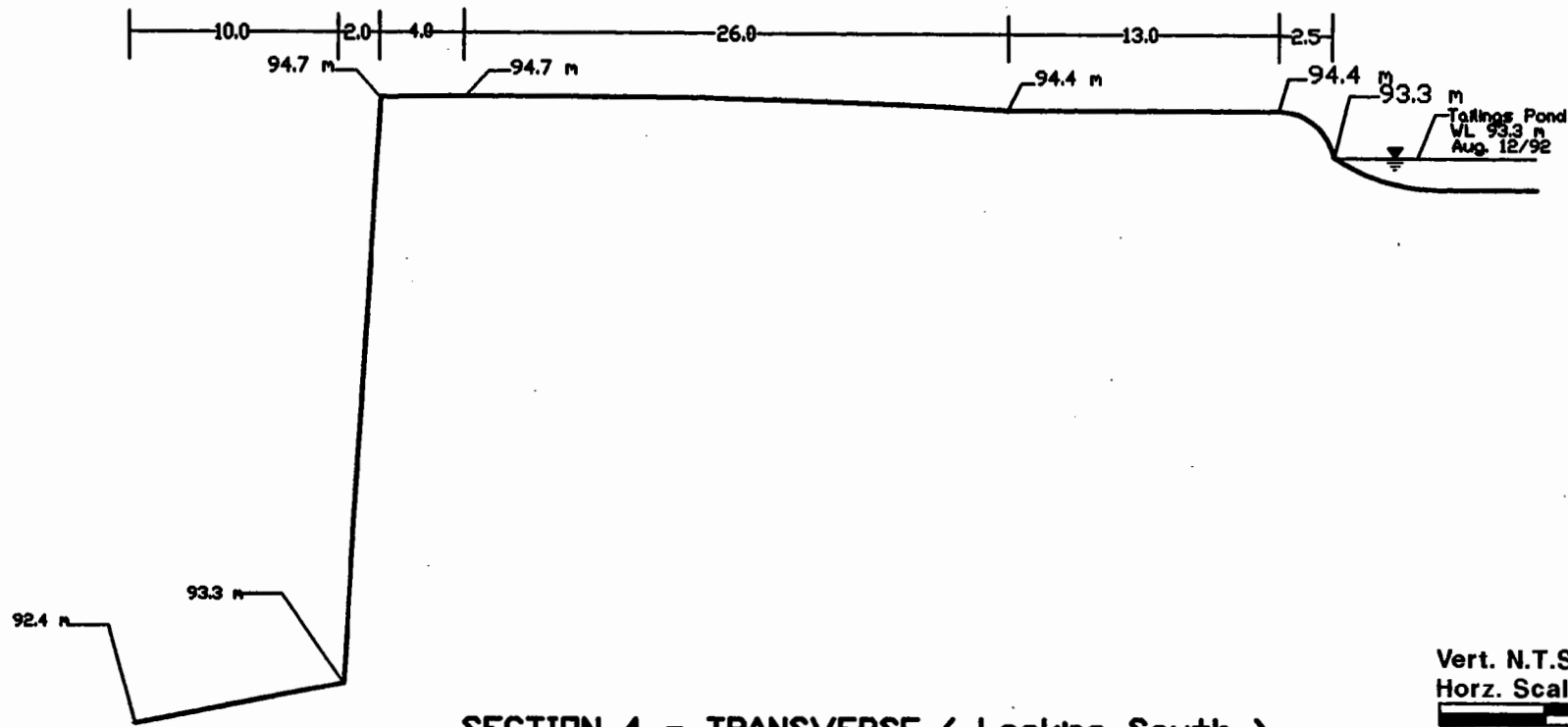


Reference No. F-90132-A/G

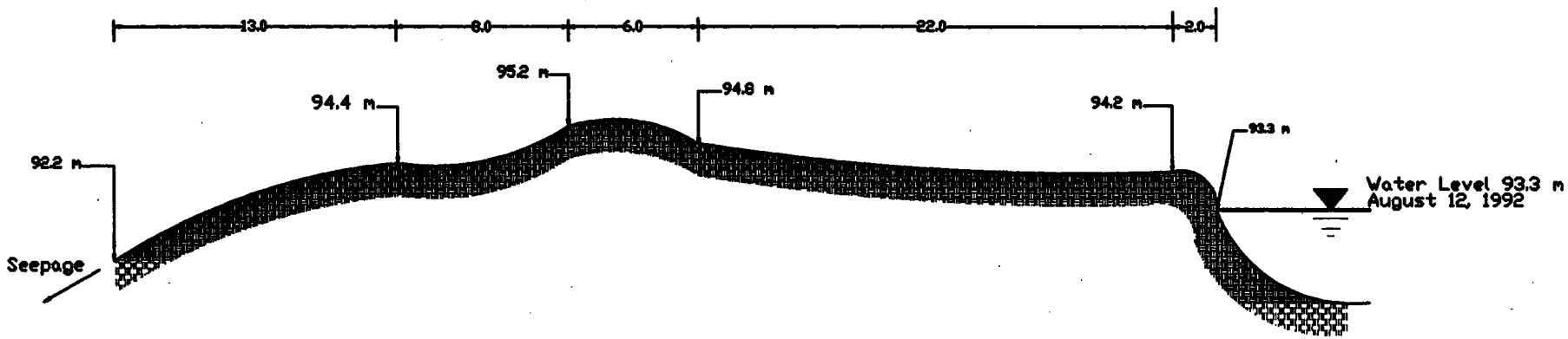
Drawing No. 2



SECTION 3 - TRANSVERSE (Looking South)



SECTION 4 - TRANSVERSE (Looking South)



SECTION 5 - TRANSVERSE (Looking East)

Vertical N.T.S.
Horizontal Scale

0 5 10 m