CULLATON LAKE GOLD MINES LTD.

WATER LICENCE 1BR-CUL1118

ANNUAL WATER LICENCE REPORT 2017

PREPARED on behalf of:

BARRICK GOLD INC.

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ᔫᓂᓯᐅᖅᑐᑦ ᑲᑦᓂᓂᕐᓂ ᑕᓯ ᔫᓂ Cullaton Lake Gold ᐅᓴᖃᓯᐅᖅᓯᐊᖅ ᐃᓕᓴᕆᓚᕆᐅᓯᒪᔪᖅ ᒪᑐᓯᒪᓂᖏᓂᖅ ᐅᓴᖃᑦᑕᖅᓯᐊᓂᖅ ᓂᒋᐊᓂ ᑭᓐᓄᑦᓂᕐᒥ ᓄᓇᕗᒻᒥ. ᓄᓇᖏᓐ ᐅᖏᓕᓯᓂᖅᑎᑦᑕᖅ 645 ᑭᓯᒥᑕ ᐅᐊᖏᓇᖏᓂᓂ ᑕᖏᓴᖅ , ᒪᓂᐸ ᐊᓪᒪᓗ 250 ᑭᓯᒥᑕ ᐱᒪᖏᓂᖏᓂᓂ ᐊᖅᓯᐊᑦ, ᓄᓇᕗᑦ.

ᐊᕐᕌᖏᓂ 2017 ᐊᑐᕐᑕᐅᓂᐊᖅᑐᑦ ᒪᑉᐳᓄᑦ ᓄᓇᑕᐅᓵᓄᑦ ᑕᑯᓴᖅᑐᕐᑕᑕᐅᓗᑎᒃ; ᓯᖓᓕᖅᒥ ᔨᓕᐃ 12 ᐊᓪᒪᓗ 13, 2017 ᖃᖏᓪᓕᔨᖅᓯᓕᒪᑦ ᑕᑯᓇᖏᑕᐅᓗᓂ ᖃᓄᓇᓕᕆᖏᓂᖏᓂᖅ ᐃᓐᓇᐅᑕᔨᖅ ᕿᖅᓇᐅᑎᖓᓐᓄᓄᑦ ᐊᓪᒪᓗ ᖃᓄᐅᓴᓇᓱᑕᐅᓗᓂ ᖃᑯᓕᒍᓱᑯᑦ. ᐱᖅᑕ ᐅᐸᖅᑕᐅᓗᓂ ᓯᑎᐱᓕ 6, 2017 ᐊᕐᕌᑕᐃᔨᓯᐅᑎᖏᓂᖅ ᖃᓄᐅᓴᖅᓗᑎᒃ, ᐃᓕᐅᑦᓗ ᐱᐅᑎᕆᓂᖏᓂᖅ ᐊᓪᒪᓗ ᐊᐅᖅᕿᑦᕓᐊᓂᖏᓂᖅ ᖃᓄᐅᓴᖅᐅᑎᓂᖅ ᑯᐃᓐᖃᐃᓐᓂᓕᓗ ᐊᐅᓗᓯᓚᕐᓂᑦ ᐅᓴᖅᓄᑦ ᐊᐅᓴᖅᑕᐅᓗᑎᒃ ᐃᓕᖅᓴᑦ ᐱᔪᓐᓇᐅᑎᖓᓐᓄᑦ ᐃᓄᐃᑦ 1BR-CUL1118.

ᓇᐃᓇᖅᓗᔪ, ᖃᐅᔨᓴᖅᑕᐅᑎᑦᓗᔪ ᐊᕐᕌᒥ ᐊᓪᒪᓗ ᖃᐅᔨᓚᓇᓱᑕᐅᓂᖏᓐᓄ ᓇᓗᓇᐃᕐᓯᓚᕐᓂᑦ ᐅᑯᓂᖏᓐ:

- ᐃᒥᐅᑦ ᐱᐅᑎᕆᓂᖏᓐᓄ ᒪᓕᓂᓯᓚᕐᓂᖅ ᐊᑐᐊᖏᖅᑐᑦ ᐱᐅᑎᕆᔭᕆᐊᖃᖅᑎᓂᖏᓂᖅ ᐃᒥᖅᒧᑦ ᐱᔪᓐᓇᐅᑎᖓᓐᓄᓂᖅ.

- ᑯᐃᖅᑕᖅᓱᐃᓂᖅ ᓯᕗᓂᕆᓕᕆᖏᑕᖅ.

- ᖃᐅᔨᓴᖅᑕᐅᓗᑎᒃ ᖃᓄᐅᓴᖅᓗᑎᒃ ᓴᓇᓗᐃᑦ 1.3 ᒥᑕ ᑕᖓᓂ ᓯᑎᐱᓕ 6, 2017 ᖃᐅᔨᓴᖅᑕᐅᓂᖅᓗᑎᒃ ᐃᓕᓴᕐᓯᓕᖅᑕᐅᓗᓂ T4.

ᔨᓕᐃᒥ ᐅᐸᐅᑕᐅᑎᑦᓗᔪ ᖃᐅᑕᐅᔭᐃᓂ 4.5 ᐃᓕᓐᓄᑕᐅᓕᐅᓕᕐᓂᑦ ᐅᖃᓕᓴᕐᖃᐅᑎᑦ ᐊᓴᐃᓕᐅᓕᕐᓂᑦ ᒥᑕᖃᖓᓐᓂᑦ ᐊᑐᕐᑕᐅᓕᖅᑎᓂᖅ ᖃᓄᐅᓕᒍᒪᑦ, ᐊᒥᐊᐅᑯᓂᖅᓂᒃ 8.5 ᐃᓗᐃᑦᑐᑦ ᖃᐅᑕᐅᔭᐃᓂ ᐊᓴᖃᑕᐅᓯᖏᓐᓂᑦ ᓯᖓᓂᑎᓐᓂ. ᐃᒪᖃᐅᓐᓂᑐᐅᓂ ᐊᖃᓕᓚᐅᖏᓐᓂᑦ ᐊᕐᕌᒥᓂᖅ 2017.

ᓯᑎᐱᓕᒥ ᐅᐸᐅᑕᐅᑎᑦᓗᔪ, ᑎᖏᒪᐃᑦ (4) ᖁᓕᐅᑯᐊᖅᓂᐅᖅ ᐊᖏᓕᓂᐅᖅ ᖁᓕᖅᓂᐅᖅ ᐅᑎᖃᓚᕆᐅᓯᖏᓐᓂᑦ ᓴᓇᒥ ᐃᓕᖅᓴᑦ ᐅᓴᓚᕆᐅᓯᖏᓐᓂᑦ ᑕᒪᖁᓐᒧᑦ ᐃᓕᑕᐅᓕᐅᓕᖅᓯᐊᓗᑎᒃ.

ᐊᓪᒪᓗᑕᐅᖅᖃᑦ ᖃᑯᓭᓕᖅᑕᑦ ᐱᖏᐅᓐᓗᑎᒃ ᓄᑖᒃᑐᒃ ᒪᑐᓂᖓᓄᑦ ᖁᓗᓪᒪᖁᓕᐅᓂᒻᒧᑦᓗ ᕿᖃᓄᐅᑎ ᐋᖅᑭᑦᑕᐅᓕᐅᓕᕐᓂᖃᖅ ᐱᔪᒪᐅᓕᓕᒫᓂᖓᓄᑦ ᑎᑎᖅᓯᒪᔪᕐᒥ 2 ᐊᐅᓕᓴᕐᓂᐊᓕᕐᓂᖅᓂᒻᒧᑦ ᕿᖃᓄᐅᑎᓂ ᐊᖅᓯᐊᓂᖅ 2016 ᓄᓇᖃᖅᓱᓂᕆᓚᕆᔪᑦ ᐊᓪᒪᓗ ᐅᑭᐅᖅᑕᕐᑐᒥ ᐱᓕᕆᓚᐅᓂᖅ ᑲᓇᑕᒥ ᐃᓕᓴᕐᓂᑦ ᐱᔪᓐᓇᐅᑎᖓᓐᓄᑦ ᖃᐅᔨᓴᖅᑕᐅᓕᖅᑎᓕᐅᑉᓂᑦ ᐅᓂᓱᓕᕐᓂᑦ. ᒪᑐᓂᖓᓄᑦ ᖁᓗᓪᒪᖁᓕᐅᓂᒻᒧᑦᓗ ᕿᖃᓄᐅᑎᖓᓐᓄᑦ ᑐᓂᖅᓂᑦ 30, 2017 ᐊᓪᒪᓗ ᐊᖅᑭᑦᑕᐊᓕᕐᓗᑎᒃ ᖃᐅᔨᓴᖅᓂᐅᔪᓗᑎᒃ ᐱᔪᓕᑦᓗᑎᒃ ᕿᖃᓄᐅᑎᖓᓕᑦ ᐊᖅᓯᐊᓂᑦᓗᑦ ᑲᑎᒪᔨᖅᑕᐅᓂᖅ ᐊᕐᕌᒥᓂᖅ ᐊᖅᑭᑦᑕᐊᓕᕐᓗᑎᒃ.

ᐃᒥᐅᑦ ᐱᔪᓐᓇᐅᑎᖓᓐᓄᓂᖅ ᐅᓇᐅᐅᑕ 1BR-CUL1118, ᐱᖃᓕᐅᑎᑦᓗᔪ ᐃᓕᓴᐅᓂᖓᓐᓄ, ᐃᓐᓇ ᐃᓕᓴᕆᓂᐊᖃᖅᑐᖅ ᔨᓕᐃ 30, 2018. ᓄᑕᔪᓚᐊᕐᑕᐅᓗᓂ ᐱᓇᓕᑎ ᑐᓂᖅᓂᑦ ᐅᑐᐱᓚ 13, 2017. ᓄᑕᖅᔪᓚᐊᓂᖓᓐᓄᓂᖅ ᐊᖅᑭᑦᑕᐊᓕᕆᓂᐊᕐᒥᔪᑦ ᐃᓐᓇ ᖃᐅᔨᓴᖅᓂᐅᔪᓗᑎᒃ ᑎᑎᖅᓯᒪᔪᖅᓄᑦ ᒪᓕᑉᐳᓗᔪ ᕿᑭᒪᐃᓂᖅᓂᑦ ᐱᔪᓐᓇᐅᑎᖓᓐᓄᑦ ᐊᓪᒪᓗ ᐊᑐᖅᑯᐅᓂᖓᓄᓂᖅ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᓐᓄᑦ ᐊᖅᑭᑦᑕᐊᓕᕐᓂᑦ ᐊᕐᕌᒥᑦ ᓄᓇᖃᖅᓱᓂᖅ ᖃᐅᔨᓴᖅᑕᐅᓂᖏᓐᓂᑦ.

EXECUTIVE SUMMARY

The Cullaton Lake Gold mine is a recognized closed mine site located in the southern part of the Kivalliq Region in the Nunavut Territory. The property is 645 km north of Thompson, Manitoba and 250 km west of Arviat, Nunavut.

The 2017 site activities consisted of two site visits; the first on July 12th and 13th, 2017 to conduct a drone aerial survey to gather additional data for generating up to date site plans and to retrieve remote refuse proximate to the site using helicopter support. The second trip occurred on September 6th, 2017 to conduct the annual site inspection, water quality and thermistor monitoring and the tailings dam geotechnical inspection pursuant to Water Licence No. 1BR-CUL1118.

Summarized, the results of the annual site inspection and monitoring indicate that:

- Water quality continues to remain within the guidelines specified in the Water Licence.
- The tailings storage facility continues to remain stable.
- The permafrost in the tailings cover was found 1.3m below surface on September 6, 2017 by test pit at thermistor T4.

During the July trip an additional 4.5 drums of historic fuel were removed from inventory at the airstrip through consumption by the helicopter, leaving 8.5 full drums for removal during future trips. No empty drums were removed from site in 2017.

During the September trip, 4 large bags of the refuse collected in July were removed via the return flight to Thompson for proper disposal offsite.

In addition to the above site activities a new Closure and Reclamation Plan (C&R Plan) was developed as requested in Section 3 of the action plan outlined in the 2016 Indigenous and Northern Affairs Canada (INAC) water license inspection report. This C&R Plan was submitted on June 30th, 2017 and proposes a revised monitoring program based on an adaptive monitoring plan with corresponding revised financial assurance.

Water License 1BR-CUL1118, including extensions, currently expires on July 30th, 2018 and a renewal application was submitted on October 13th, 2017. The renewal application also proposes to revise the current surveillance network program to the monitoring program outlined in the C&R Plan and as per recommendations from the consultant conducting the annual geotechnical inspections.

1.0 SITE BACKGROUND / LOCATION

Cullaton Lake Gold Mines Ltd. is a wholly owned subsidiary of Barrick Gold Inc. (Barrick) which in turn is a wholly owned subsidiary of Barrick Gold Corporation.

The Cullaton Lake Gold mine is a recognized closed mine site located in the south central part of the Kivalliq Region in the Nunavut Territory. The property is 250 km west of Arviat, Nunavut, 400 km northwest of Churchill, Manitoba, and 645 km north of Thompson, Manitoba (see figure 1). The mine was in operation for four years from 1981 to 1985. Following operation, the mine was in a care and maintenance mode from 1985 to 1991.

1.1 CLOSURE AND POST CLOSURE MAINTENANCE HISTORY

Decommissioning was initiated in 1991 with the rehabilitation of Tailings Pond No. 1, which included construction of a spillway in the dam and the covering of exposed tailings with water or till/mine rock. In addition, the water level in Tailings Pond No. 2 (the polishing pond) was lowered by partial removal of the dam (see figures 2 and 3 for site features).

Between 1991 and 1993, the fresh water intake, pump house and pipelines at the old diamond drill camp on the Kognak River were dismantled and removed. In 1995 and 1996 the mill buildings were dismantled. Some of the inert, non-salvageable material was crushed and placed in the quarry pit. In 1997, additional cover material was placed over the tailings area and the area was seeded and fertilized with a special arctic seed mix, as was the former mill site. During the winter of 1998/99 some salvageable equipment and material was removed from the property.

During the summer of 2001, all remaining inert material was placed in the former quarry pit and covered with till. All waste oils and hydraulic fluids, as well as tires and batteries were removed from equipment prior to burial and subsequently airlifted to Thompson, Manitoba for proper disposal. In addition, low grade waste rock at the Shear Lake Portal area that had been determined to be acid generating was collected and encapsulated in till adjacent to the portal.

During the 2005 annual inspection, minor maintenance items identified during the 2004 inspection were corrected. These included a second application of seed and fertilizer on the Encapsulated Waste Rock (EWR) cover at Shear Lake and erosion repairs to the EWR cover, Tailings Pond No. 1 spillway and the quarry pit landfill cover.

During the 2006 annual inspection, a small above-water exposed section of rubber liner on the upstream side of the tailings dam south of the No.1 Spillway was removed.

In response to a request from Barrick in 2006 to return the property to the Crown, Indian and Northern Affairs Canada (now Indigenous and Northern Affairs Canada (INAC)) initiated a review to assess closure conditions. INAC visited the site in September 2006 and commissioned BGC Consulting Ltd. (BGC) to conduct a desk top review of the closure history and monitoring results.

The BGC report indicated for a variety of reasons that INAC should not accept return of the property. In response, INAC, BGC, Barrick and Trow Consulting personnel met on the site during the 2007 annual inspection on July 5th, to discuss the report findings and confirm a newly identified pH issue at Shear Lake. In addition Barrick volunteered to complete an Ecological Risk Assessment (ERA) to determine a) whether the mitigation efforts at Cullaton Lake have adequately addressed the requirements of the approved 1996 Abandonment and Reclamation Plan, and b) whether the new ARD issue at Shear Lake is having any significant ecological effects.

In 2008 Barrick and Gartner Lee personnel visited the site on 4 occasions to collect field data for completing the ERA. During the August trip, a minor amount of scrap metal was also retrieved from the north bank of the Kognak river and from the former bunkhouse area.

The ERA was finalized and submitted to INAC in August 2009. The report indicated that the surface waters at the site were not significantly impacted by the former mine operation or existing conditions. The findings were not acknowledged by INAC. In April 2014, INAC issued a response letter to Barrick's request to return the property to the Crown, re-stating recommendations outlined by BGC in their March 2007 report. Following a subsequent meeting between the Nunavut Water Board, INAC and Barrick in Iqaluit in April 2015, Barrick proposed by letter dated June 11, 2015 (the June 2015 Letter) to undertake several of the recommendations in the April 2014 letter, including the completion of a Dam Safety Review, a financial assurance review and regular airstrip maintenance; and proposed to initiate an adaptive monitoring plan involving additional water quality and benthic /sediment monitoring aimed at producing additional support for the ERA. Barrick also indicated in the June 2015 letter that it will not be seeking to relinquish the property to the government for the immediate future.

The Dam Safety Review was completed by Thurber Engineering and submitted to INAC and the NWB in August 2016. Airstrip maintenance was initiated in 2015. Additional field work to support the adaptive monitoring plan was completed in 2016.

In 2017 a drone aerial survey was conducted to gather additional data for generating up-to-date site plans and remote refuse identified proximate to the site by Indigenous and Northern Affairs Canada (INAC) was collected and stored at the airstrip for future removal.

In addition to the foregoing, a new Closure and Reclamation Plan (C&R Plan) was developed pursuant to the action plan outlined in the 2016 INAC water license inspection report. This C&R Plan was submitted on June 30th, 2017 and proposes a revised monitoring program based on an adaptive monitoring plan with corresponding revised financial assurance.

Water License 1BR-CUL1118 expires in 2018 and a renewal application was submitted on October 13th, 2017. The renewal application also proposes to revise the current surveillance network program to the monitoring program outlined in the C&R Plan and as per recommendations from the consultant conducting the annual geotechnical inspections.

The site continues to be inspected at least on an annual basis to confirm chemical and physical stability as per the conditions of the water license. The site visit to fulfill the

monitoring conditions of the water license has been moved to September at the request of INAC.

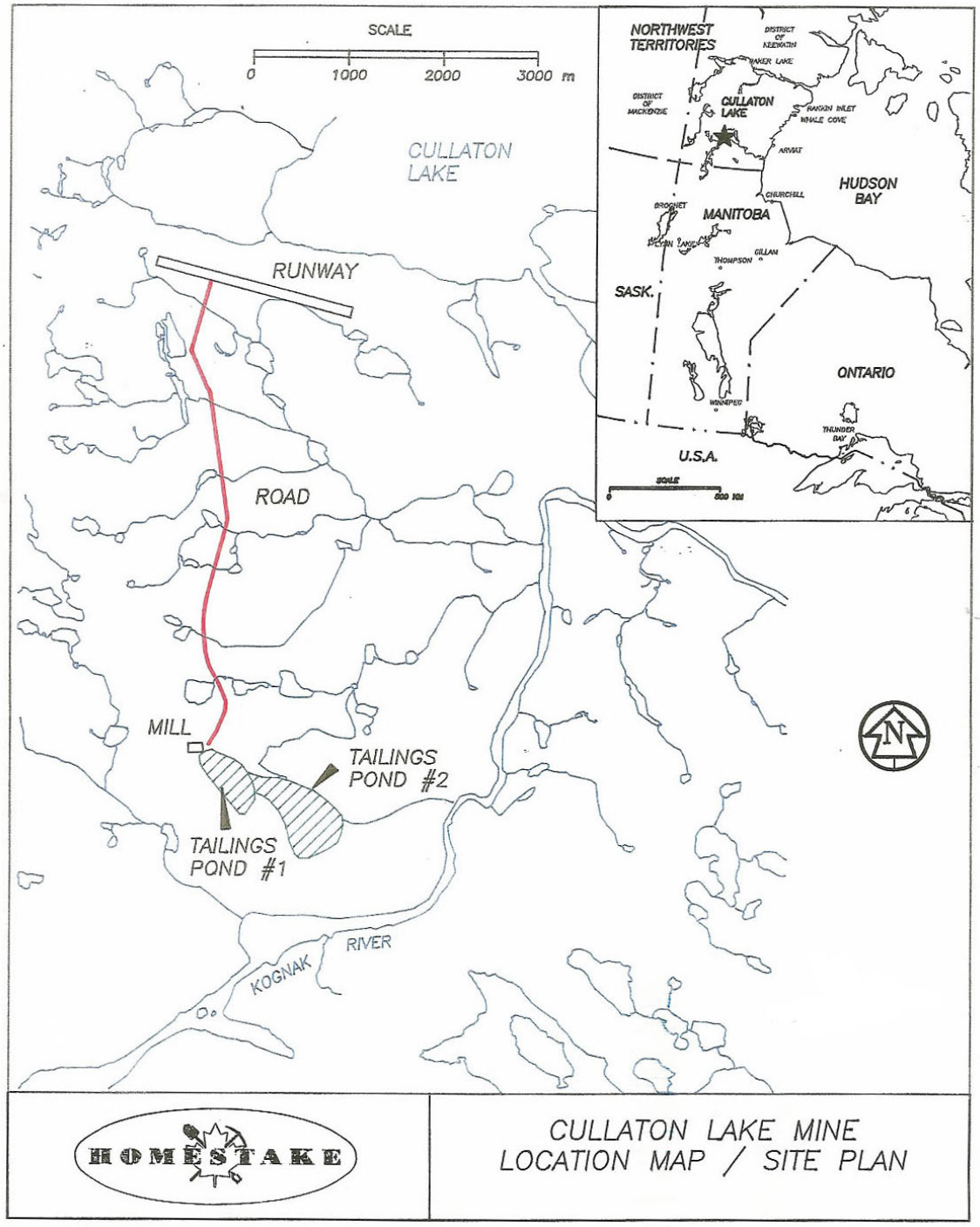
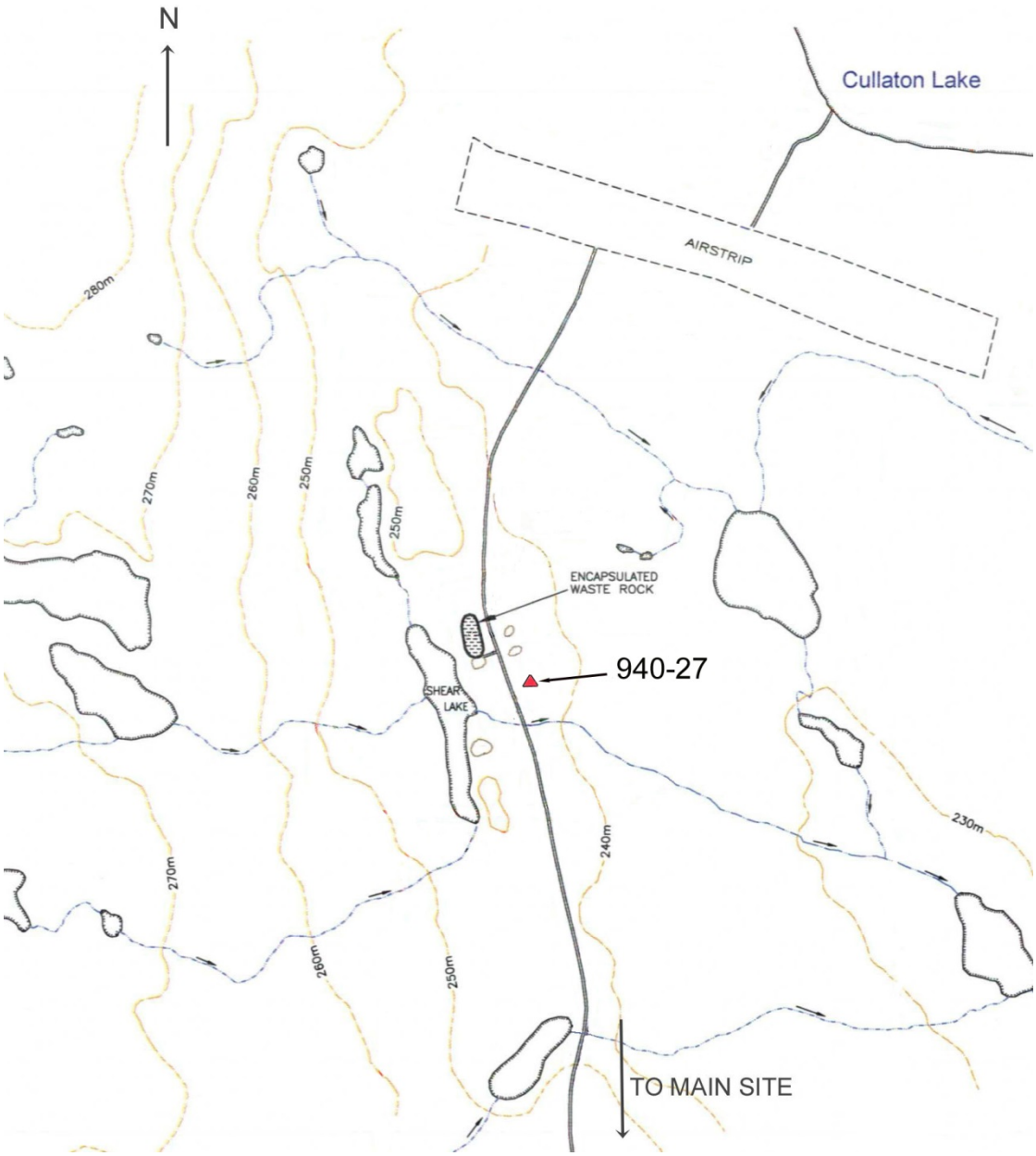
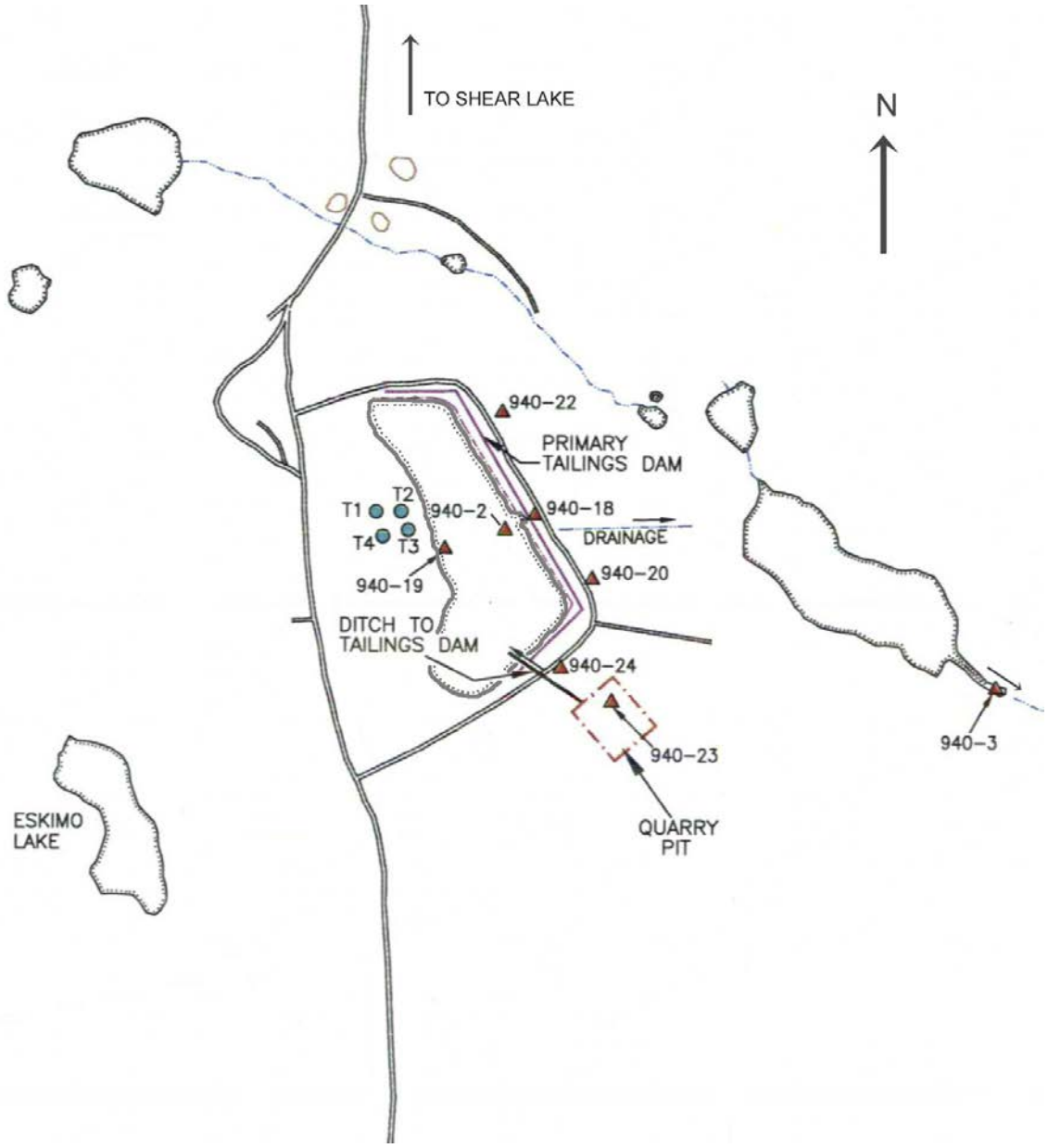


Figure 1: Cullaton Lake Mine location and general site layout



Legend:
940-27 Water sample station

Figure 2: Cullaton Lake Shear Lake site showing features and water sampling station (not to scale).



Legend:
T1: Thermistor station
940-2: Water sample station

Figure 3: Cullaton Lake main site showing features, water sampling and thermistor stations (not to scale).

2.0 WATER LICENCE SUPPLEMENTAL CONDITIONS AND NOTES

Management of Cullaton Lake is conducted pursuant to Water Licence 1BR-CUL1118, which was issued on February 9th, 2011 to renew previously issued license number 1BR-CUL0911. 1BR-CUL1118, originally scheduled to expire on January 31st, 2018 has been extended to July 30th, 2018 to accommodate Financial Assurance discussions between INAC and Barrick. The following provides a historic summary of supplemental conditions and notes pursuant to previous licences:

Name Change:

On November 13th, 2003, application was made to the Nunavut Water Board to change the name on Licence NWB1CUL0207 from Homestake Canada Inc. to Barrick Gold Inc. to reflect changes resulting from the 2001 merger of Barrick Gold Corporation and Homestake Mining Company.

Amendment for Encapsulated Waste Rock at Shear Lake:

Part F, Item 5 of Licence NWB1CUL0207 required submission of an application for amendment to the approved Abandonment and Restoration Plan by January 1st, 2003 (subsequently extended to March 31st, 2003) for the new waste rock disposal area on the shores of Shear Lake. The application for amendment with supporting documentation was submitted to the Nunavut Water Board on March 31st, 2003. The amendment was granted on June 6th, 2005. In addition, station 940-25 was removed from the monitoring program and replaced with station 940-27, intended to monitor any seepage from the encapsulated waste rock down-gradient to Shear Lake Creek.

The amendment required that suitable as-built drawings for the encapsulated waste rock be submitted within 6 months of the date of the amendment. Drawings were submitted on December 5th, 2005.

The amendment also required that Section 4.4 of the Approved Abandonment and Restoration Plan be revised to incorporate the latest information with respect to the closure of the Shear Lake Waste Rock disposal area. The revision was submitted concurrent with the 2005 Annual Report.

Contingency Plan to Address Seepage Issues at the Encapsulated Waste Rock

Part F, Item 6, Amendment No. 1 of Licence NWB1CUL0207 required the submission of a Contingency Plan to address the potential of the permafrost not to re-aggrade into the waste rock pile / cover as anticipated, the clogging of the passive treatment system due to the relatively flat terrain and the remediation or mitigation of sediments contaminated with levels of metals in excess of CCME guidelines due to seepage from the encapsulated waste rock pile. The contingency plan for clogging of the passive treatment system and contamination remediation was submitted concurrent with the 2005 Annual Report and under separate cover. In the same document Barrick requested that the requirement for a Contingency Plan to address the possibility of permafrost not

re-aggrading into the waste rock be deleted from the Licence since this condition was identified as an "added benefit" and not a design parameter as specified by URS [1].

Amendment for Encapsulated Waste Rock Thermistors:

Water Licence NWB1CUL0207 required the installation of thermistors in the encapsulated waste rock at Shear Lake. An unsuccessful attempt to install the thermistors was made in July 2003. A report detailing this attempt was submitted to the Nunavut Water Board on November 25th, 2003 and requested that this requirement be removed from the Licence. The request was granted on June 6th, 2005 and station 940-26 was removed from the monitoring program.

Site Map:

Part G, Item 4a of Licence NWB1CUL0207 required submission to the Board of a Site Map of the Project Environmental Impact Area with active Surveillance Network Program (SNP) Stations within 60 days of issuance of the Licence. The required site map was submitted to the Nunavut Water Board on December 16, 2002.

GPS Coordinates:

Part G, Item 4b of Licence NWB1CUL0207 required submission of GPS coordinates of all surface and subsurface sampling points. The required GPS coordinates were submitted to the Nunavut Water Board on August 29, 2003.

Miscellaneous:

The NWB noted the following in their October 10, 2006 review of the 2005 Annual Water Licence report:

1. While the 2004 reported detection limit for nickel had been lowered as previously requested, the detection limit for arsenic was now higher than previously reported (1μg/l compared to 0.1 μg/l). To clarify the issue the NWB requested that detection limits proposed for the 2007 monitoring be included in the 2006 annual report.

   The variability in detection limits is largely the result of the many recent laboratory acquisitions / mergers and procedure changes. After discussing the issue with the present laboratory and reviewing the associated methods and equipment limitations, the 2007 proposed detection limits were as follows:

[1] Assessment of Closure Options and Impacts, Shear Lake Zone Waste Rock Dump, Cullaton Lake Mine Nunavut, March 2003, URS Norecol, Dames & Moore Inc.

Licence Parameter	Method Detection Limit
Total Suspended Solids	1 mg/l
Total Cyanide	0.005 mg/l
Total Arsenic	0.4 μg/l
Total Copper	1 μg/l
Total Lead	0.5 μg/l
Total Mercury	0.00005 mg/l
Total Nickel	1 μg/l
Total Zinc	5 μg/l

Following the 2007 sampling, the lab erroneously used a TSS detection limit of 10mg/l for the 2007 results. According to the lab, a correction to 1mg/l was not possible due the volume of analysis being less than 500ml. In 2008 the license required water samples were collected by Gartner Lee personnel along with the additional samples required for supporting their ERA. The 2008 and subsequent detection limits were equal to or lower than those shown above except for TSS in 2011 when the lab once again used a higher DL of 4mg/l. In addition to the foregoing, the lab also reported Weak Acid Dissociated (WAD) cyanide instead of the requested Total cyanide. Results were corrected for the 2012 monitoring round.

A new lab (ALS Environmental) was engaged in 2014 for logistical reasons and is the lab going forward for the foreseeable future. As a result detection limits have been adjusted slightly to reflect their standard. The new detection limits are:

Licence Parameter	Method Detection Limit
Total Suspended Solids	2 mg/l
Total Cyanide	0.002 mg/l
Total Arsenic	1 μg/l
Total Copper	1 μg/l
Total Lead	1 μg/l
Total Mercury	0.00001 mg/l
Total Nickel	2 μg/l
Total Zinc	3 μg/l

The 2017 surface water samples report detection limits were equal to or lower than the above.

2. The NWB commented on the 2005 anomalous zinc value at station 940-23 (0.065 mg/l) Follow-up monitoring is summarized in the following table:

Station	Year	Zn (mg/l
940-23 (Quarry Pit)	2005	0.065
	2006	0.012
	2007	0.006
	2008	0.009
	2009	0.023
	2010	0.030
	2011	0.014
	2012	0.0504
	2013	0.0119
	2014	0.0140
	2015	0.024
	2016	0.032
	2017	0.0079

3. The NWB requested that the Spill Response Plan contact number for the INAC Water Resources Inspector be changed.

   The required change was made to the 2006 and subsequent versions.

   On review of the 2008 annual report, the NWB requested that the NT-NU spill report form be included with the spill contingency plan. The form was included with the 2009 plan and subsequent plans in Appendix 4 of this report.

4. The NWB requested that water quality and thermistor data be also provided in Excel format, in order to allow for easier data analysis.

   The 2006 data was provided in Excel format via e-mail on October 12, 2006. Subsequent results in Excel format are provided concurrent with the annual reports.

Water Licence 1BR-CUL1118 included a recommendation by Environment Canada and INAC to replace the non-functioning tailings cover thermistors. As indicated in the new C&R Plan submitted on June 30th, 2017, Barrick proposes to complete a one-time replacement of the four thermistors on the tailings cover in 2018.

3.0 2017 ACTIVITIES

Two site visits were completed in 2017. The first visit occurred on July 12th and 13th, 2017. Personnel attending the site during this trip included.

Barrick Personnel:

Paul Brugger, P. Eng., Closed Properties Manager, Eastern Canada

Varick Ollerhead, CLS, P. Eng., Ollerhead and Associates Ltd.

Frank Roberts, helicopter pilot, Custom Helicopters Ltd.

Access during the July trip was by helicopter from Arviat with the team returning to Arviat each evening. During this campaign Mr. Ollerhead conducted a drone survey of the entire property to generate the data necessary to properly position the surface lease boundaries on plan and provide up-to-date site plans.

While accommodating the drone survey program, Mr. Brugger used helicopter support to relocate refuse found at several locations outside the project site to the airstrip for future removal by fixed wing aircraft.

The above activities were completed to address action items outlined in Section 2 and 3 of the INAC 2016 Lease Inspection report.

During the July campaign 4.5 drums of cached fuel were consumed by the helicopter, reducing the remaining airstrip inventory of third party full drums to 8.5.

The annual site inspection was conducted on September 6th, 2017 trip. Access for this trip was via fixed wing charter from Thompson, Manitoba. Personnel attending the site during this trip included:

Barrick Personnel:

Paul Brugger, P. Eng., Closed Properties Manager, Eastern Canada

Michael Shelbourn, P. Eng. Senior Manager, Geotechnical Engineering

Renata Klassen, MSc, P. Eng., Arctic Engineer, **exp** Services Inc.

George Dawe, labourer provide by McCreedy Campground, Thompson, Manitoba.

During this trip Mr. Brugger conducted visual inspections of the quarry pit, tailings cover, all former underground access areas, EWR and the site in general, collected water samples and supervised the test pit excavation in the vicinity of Thermistor T4 to determine the depth of permafrost pursuant to Water Licence 1BR-CUL1118.

Ms. Klassen performed the annual geotechnical inspection pursuant to Water Licence 1BR-CUL1118. Mr. Shelbourn accompanied Ms. Klassen to provide assistance and gain

a better understanding of the site from a geotechnical perspective and the recommendations of the 2015 Dam Safety Review completed by Thurber Engineering.

Mr. Dawe excavated the test pit to determine permafrost depth at thermistor location T4 and packed and loaded 4 large bags of the refuse stored at the airstrip in July onto the plane for proper disposal in Thompson.

3.1 ANNUAL SITE INSPECTION GENERAL FINDINGS

The annual site inspection performed on September 6th, 2017 indicated that the site remains undisturbed, stable and in good condition. The following findings were noted:

The minor subsidence areas on the quarry pit landfill remain largely unchanged. Most of the affected areas are occupied by arctic ground squirrels.

The site access road continues to be difficult to negotiate as shrub vegetation continues to fill in the trail.

Select photos are included in Appendix 1.

3.2 WATER QUALITY MONITORING

Duplicate water sampling was completed on September 6th, 2017 at 5 of the 9 stations identified in the Water Licence (see Figures 2 and 3 for locations). All other stations were dry during the visit. Results are provided in Appendix 2. Recent historic results are also included for comparison. The following is a brief description of the sampling activities and results:

Station 940-2 (Tailings Pond No. 1 at discharge to Tailings Pond No. 2) – Duplicate water samples were collected on September 6th, 2017. Results indicated that all parameters were below the limits prescribed in the Water Licence.

Station 940-3 (Tailings Pond No. 2) – Duplicate water samples were collected on September 6th, 2017. Results indicated that all parameters were below the limits prescribed in the Water Licence**.**

Station 940-18 (Tailings Pond No. 1 spillway) – Duplicate water samples were collected on September 6th, 2017. Results indicated that all parameters were below the limits prescribed in the Water Licence**.**

Station 940-19 (Tailings Pond No. 1 at piezometer) – Duplicate water samples were collected on September 6th, 2017. Results indicated that all parameters were below the limits prescribed in the Water Licence.

Station 940-20 (Tailings Pond No. 1 seepage at east side) – There was no flow observed on September 6th, 2017 and consequently no samples were collected.

Station 940-22 (Tailings Pond No. 1 seepage at northeast corner) – There was no flow observed on September 6th, 2017 and consequently no samples were collected.

Station 940-23 (Quarry Pit) – Duplicate water samples were collected on September 6th, 2017. Results indicated that all parameters were below the limits prescribed in the Water Licence. There was also no visible sheen indicating the presence of oil / grease.

Station 940-24 (Quarry Pit flow to Tailings Pond No. 1) - There was no flow from the Quarry Pit to Tailings Pond No. 1 on September 6th, 2017 and consequently no samples were collected.

Station 940-27 (Seepage from Encapsulated Waste Rock to Shear Lake Creek) - There was no flow observed on September 6th, 2017 and consequently no samples were collected.

3.3 THERMISTOR MONITORING

A test pit excavated at Thermistor T4 in 2007 indicated that the thermistors are no longer providing correct readings. As in previous years subsequent to 2007, a test pit was excavated in the vicinity of T4 on September 6th, 2017 in order to visually ascertain the depth of permafrost. Thermistor readings were not recorded at any of the 4 historic stations as all were either not functioning or were inaccessible due to the casing having heaved upwards.

Based on the test pit finding, the permafrost was found at a depth of 1.3m on September 6th, 2017. The thickness of the till cover is 90cm at this location. The thawed 40cm of tailings below the cover and above the permafrost was saturated (see field notes and photos in Appendix 3).

3.4 GEOTECHNICAL INSPECTION

Renata Klassen, M.SC., P. Eng. (**exp** Services Inc.) performed the geotechnical inspection on September 6th, 2017, pursuant to Part D, Article 8d of Water Licence 1BR-CUL1118. A copy of the inspection report was submitted to the NWB on October 31, 2017 with a copy to INAC.

In summary, the report indicates that the tailings dam remains stable. Continued monitoring for erosion in the No. 1 Spillway channel is also recommended.

Pursuant to Part D, Article 8e of Water Licence 1BR-CUL1118, the condition of the encapsulated waste rock cover at Shear Lake is to be monitored by the geotechnical engineer for erosion until vegetation is sufficiently established so as to stabilize the cover. At the time of the 2017 site inspection, the engineer noted the vegetation continues to take hold and is helping to reduce erosion. A recommendation for additional monitoring was also made.

As in the past 6 annual reports, the engineer has also recommended reducing the frequency of geotechnical inspections to once every 3 years.

4.0 ANNUAL REVIEW OF SPILL RESPONSE PLAN

Pursuant to Part H, Article 1a, b and c of Water Licence 1BR- CUL1118, a review and update of the Spill Response Plan was conducted in March. An updated version is provided in Appendix 4.

5.0 ANNUAL REVIEW OF ABANDONMENT AND RESTORATION PLAN

Pursuant to Part I, Article 2 of the Water Licence, an annual review of the Abandonment and Restoration Plan was completed. A new (now named) Closure and Reclamation Plan was submitted on June 30th, 2017 and is currently under review by INAC (see Section 7).

6.0 ANNUAL REVIEW OF QUALITY ASSURANCE / QUALTY CONTROL

A review of the approved quality assurance / quality control plan (QA/QC) was conducted with reference to the document “Quality Assurance (QA) and Quality Control (QC) Guidelines for use by Class B Licensees in Collecting Representative Water Samples in the Field and for Submission of a QA/QC Plan, July 1996. There were no changes made to the plan. Lab QC results for the 2017 samples are included in Appendix 2.

7.0 2018 PROPOSED PROGRAM

The 2018 program will consist of two visits to site in order to comply with the requirements of Water Licence 1BR-CUL1118 and perform maintenance and several additional corrective measures identified in the 2016 INAC site inspections. Specifically:

- a visit in late June – early July (depending on weather) to perform airstrip, survival cabin and access road maintenance and prepare larger refuse stored at the airstrip for removal.
- a visit during the first week of September to perform the annual site inspection, water quality monitoring, tailings dam geotechnical inspection, initiate maintenance work on the Quarry Pit landfill cover and replace water quality station markers.

In addition to the above, discussions between Barrick and INAC concerning the amount of financial assurance required for the property will continue.

The removal of additional unauthorized third-party fuel drums cached at the airstrip will continue as backhauls are made available.

Appendix 1
Cullaton Lake 2017 Site Photos

Photo 1: Cullaton Lake main site, looking south east on September 6, 2017.

Photo 2: Shear Lake site, looking southeast with shrub covered EWR on the left.

Photo 3: Tailings No.1 Pond spillway invert (dry) on September 6, 2017

Photo 4: Former Tailings Pond No. 2 spillway flowing on September 6, 2017

Photo 5: Former Shear Lake Portal on September 6, 2017.

Photo 6: Former B Zone Portal and Fresh Air Raise, looking north (2016 photo).

Photo 7: Encapsulated Waste Rock at Shear Lake 12 years after the application of additional seed and fertilizer.

Photo 8: Encapsulated Waste Rock cover top looking north on September 6, 2017.

Photo 9: Shear Lake low pH pool area (dry) on September 6, 2017

Photo 10: Tailings cover vegetation, looking southeast on September 6, 2017.

Photo 11: Former Polishing Pond looking west from T2 outlet.

Photo 12: Refuse stored at airstrip in July for future removal.

Appendix 2
September 6, 2017
Water Quality Monitoring Results

Cullaton Lake
Water Quality Monitoring Results
September 6, 2017

Location	Sample Number	Field PH	Temp ºC	Lab PH	Suspended Solids mg/L	Total Cyanide mg/L	Total Arsenic mg/L	Total Copper mg/L	Total Lead mg/L	Total Mercury mg/L	Total Nickel mg/L	Total Zinc mg/L
Tailings Pond No. 1 (at discharge)	940-2A	9.20	10.7	8.32	<2.0	<0.0020	0.0042	0.0010	<0.0010	<0.000005	<0.0020	<0.003
	940-2B			8.33	<2.0	<0.0020	0.0043	0.0010	<0.0010	<0.000005	<0.0020	<0.003
Tailings Pond No. 2	940-3A	8.88	10.0	8.33	<2.0	<0.0020	0.0031	0.0025	<0.0010	<0.000005	0.0032	<0.003
	940-3B			8.36	<2.0	<0.0020	0.0031	0.0025	<0.0010	<0.000005	0.0033	<0.003
Tailings Pond No. 1 (spillway)	940-18A	7.94	9.9	8.15	<2.0	0.110	0.0082	0.0027	<0.0010	<0.000005	0.0121	<0.003
	940-18B			8.15	2.2	0.113	0.0081	0.0027	<0.0010	<0.000005	0.0123	<0.003
Tailings Pond No. 1 (at piezometer)	940-19A	9.34	10.4	8.40	<2.0	<0.0020	0.0054	0.0012	<0.0010	<0.000005	<0.0020	<0.003
	940-19B			8.42	4.9	<0.0020	0.0054	0.0012	<0.0010	<0.000005	<0.0020	<0.003
Tailings Pond No. 1 (seepage at east side)	940-20A	Dry										
	940-20B											
Tailings Pond No. 1 (seepage at northeast corner)	940-22A	Dry										
	940-22B											
Quarry Pit	940-23A	8.67	10.1	8.29	<2.0	<0.0020	0.0039	0.0026	<0.0010	<0.000005	0.0032	0.0079
	940-23B			8.30	<2.0	<0.0020	0.0039	0.0019	<0.0010	<0.000005	0.0031	0.0088
Quarry Pit (flow to Tailings Pond No. 1)	940-24	Dry										
Seepage from Shear Lake Encapsulated Waste Rock to Shear Lake Creek	940-27	Dry										

Cullaton Lake
Water Quality Monitoring
September 6, 2017
Water Analysis Certificate and Quality Control Report

Barrick Gold of North America.
ATTN: Paul Brugger
2270 Corporate Circle, Suite 100
Henderson NV 89074

Date Received: 08-SEP-17
Report Date: 19-SEP-17 14:44 (MT)
Version: FINAL

Client Phone: 807-964-1657

Certificate of Analysis

Lab Work Order #: L1988032

Project P.O. #: NOT SUBMITTED
Job Reference: CULLATON LAKE
C of C Numbers:
Legal Site Desc:

Christine Paradis
Project Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1988032-1 940-02A Sampled By: CLIENT on 06-SEP-17 @ 14:45 Matrix: Surface Water							
Physical Tests							
pH	8.32		0.10	pH		08-SEP-17	R3822288
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	0.0042		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	38.5		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.095		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	16.8		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-2 940-03A Sampled By: CLIENT on 06-SEP-17 @ 13:08 Matrix: Surface Water							
Physical Tests							
pH	8.33		0.10	pH		08-SEP-17	R3822288
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	0.0031		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	36.4		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0025		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.071		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	16.8		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	0.0032		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-3 940-18A Sampled By: CLIENT on 06-SEP-17 @ 14:30 Matrix: Surface Water							
Physical Tests							
pH	8.15		0.10	pH		08-SEP-17	R3822288
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	0.110		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	0.0082		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	118		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1988032-3 940-18A Sampled By: CLIENT on 06-SEP-17 @ 14:30 Matrix: Surface Water							
Total Metals							
Copper (Cu)-Total	0.0027		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.593		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	37.9		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	0.0121		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-4 940-19A Sampled By: CLIENT on 06-SEP-17 @ 15:30 Matrix: Surface Water							
Physical Tests							
pH	8.40		0.10	pH		09-SEP-17	R3823287
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		15-SEP-17	R3829507
Total Metals							
Arsenic (As)-Total	0.0054		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	39.5		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0012		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.210		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	16.4		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-5 940-23A Sampled By: CLIENT on 06-SEP-17 @ 13:30 Matrix: Surface Water							
Physical Tests							
pH	8.29		0.10	pH		08-SEP-17	R3822288
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	0.0039		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	32.4		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0026		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.114		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	12.4		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	0.0032		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	0.0079		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1988032-5 940-23A Sampled By: CLIENT on 06-SEP-17 @ 13:30 Matrix: Surface Water							
Total Metals							
L1988032-6 SHEAR CREEK A Sampled By: CLIENT on 06-SEP-17 @ 16:00 Matrix: Surface Water							
Physical Tests							
pH	7.01		0.10	pH		09-SEP-17	R3823287
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	4.84		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0028		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.946		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	1.43		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	0.0027		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-7 940-02B Sampled By: CLIENT on 06-SEP-17 @ 14:45 Matrix: Surface Water							
Physical Tests							
pH	8.33		0.10	pH		08-SEP-17	R3822288
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	0.0043		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	39.1		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.090		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	16.4		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-8 940-03B Sampled By: CLIENT on 06-SEP-17 @ 13:08 Matrix: Surface Water							
Physical Tests							
pH	8.36		0.10	pH		08-SEP-17	R3822288
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1988032-8 940-03B Sampled By: CLIENT on 06-SEP-17 @ 13:08 Matrix: Surface Water							
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	0.0031		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	36.2		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0025		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.071		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	17.1		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	0.0033		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-9 940-18B Sampled By: CLIENT on 06-SEP-17 @ 14:30 Matrix: Surface Water							
Physical Tests							
pH	8.15		0.10	pH		08-SEP-17	R3822288
Total Suspended Solids	2.2		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	0.113		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	0.0081		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	119		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0027		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.576		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	38.5		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	0.0123		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-10 940-19B Sampled By: CLIENT on 06-SEP-17 @ 15:30 Matrix: Surface Water							
Physical Tests							
pH	8.42		0.10	pH		09-SEP-17	R3823287
Total Suspended Solids	4.9		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		15-SEP-17	R3829507
Total Metals							
Arsenic (As)-Total	0.0054		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	40.2		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0012		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.202		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1988032-10 940-19B Sampled By: CLIENT on 06-SEP-17 @ 15:30 Matrix: Surface Water							
Total Metals							
Magnesium (Mg)-Total	16.8		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	<0.0030		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244
L1988032-11 940-23B Sampled By: CLIENT on 06-SEP-17 @ 13:30 Matrix: Surface Water							
Physical Tests							
pH	8.30		0.10	pH		08-SEP-17	R3822288
Total Suspended Solids	<2.0		2.0	mg/L		11-SEP-17	R3825003
Cyanides							
Cyanide, Total	<0.0020		0.0020	mg/L		14-SEP-17	R3828641
Total Metals							
Arsenic (As)-Total	0.0039		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Calcium (Ca)-Total	32.7		0.20	mg/L	10-SEP-17	11-SEP-17	R3824244
Copper (Cu)-Total	0.0019		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Iron (Fe)-Total	0.112		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Lead (Pb)-Total	<0.0010		0.0010	mg/L	10-SEP-17	11-SEP-17	R3824244
Magnesium (Mg)-Total	12.4		0.020	mg/L	10-SEP-17	11-SEP-17	R3824244
Mercury (Hg)-Total	<0.0000050		0.0000050	mg/L		10-SEP-17	R3823219
Nickel (Ni)-Total	0.0031		0.0020	mg/L	10-SEP-17	11-SEP-17	R3824244
Zinc (Zn)-Total	0.0088		0.0030	mg/L	10-SEP-17	11-SEP-17	R3824244

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Cyanide, Total	K	L1988032-10, -4
Comments:	interference. Ran many dilutions.		
Matrix Spike	Cyanide, Total	MS-B	L1988032-10, -4
Matrix Spike	Calcium (Ca)-Total	MS-B	L1988032-1, -10, -11, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Total	MS-B	L1988032-1, -10, -11, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier key listed:

Qualifier	Description
K	Matrix Spike recovery outside ALS DQO due to sample matrix effects.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
CN-TOT-WT	Water	Cyanide, Total	ISO 14403-2

Total cyanide is determined by the combination of UV digestion and distillation. Cyanide is converted to cyanogen chloride by reacting with chloramine-T, the cyanogen chloride then reacts with a combination of barbituric acid and isonicotinic acid to form a highly colored complex.

When using this method, high levels of thiocyanate in samples can cause false positives at ~1-2% of the thiocyanate concentration. For samples with detectable cyanide analyzed by this method, ALS recommends analysis for thiocyanate to check for this potential interference

HG-T-CVAF-TB	Water	Total Mercury in Water by CVAFS	EPA 1631E (mod)

Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAFS.

MET-T-CCMS-TB	Water	Total Metals in Water by CRC ICPMS	EPA 200.2/6020B (mod)

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

PH-TITR-TB	Water	pH	APHA 4500-H

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

TSS-TB	Water	Total Suspended Solids	APHA 2540 D (modified)

Aqueous matrices are analyzed using gravimetry

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid weight of sample
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Client: Barrick Gold of North America.
2270 Corporate Circle, Suite 100
Henderson NV 89074
Contact: Paul Brugger

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-TOT-WT	**Water**							
Batch R3828641								
WG2615936-11 DUP		**L1988032-5**						
Cyanide, Total		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	14-SEP-17
WG2615936-10 LCS								
Cyanide, Total			95.4		%		80-120	14-SEP-17
WG2615936-9 MB								
Cyanide, Total			<0.0020		mg/L		0.002	14-SEP-17
WG2615936-12 MS		**L1988032-5**						
Cyanide, Total			94.8		%		70-130	14-SEP-17
Batch R3829507								
WG2616641-14 LCS								
Cyanide, Total			101.1		%		80-120	15-SEP-17
WG2616641-6 LCS								
Cyanide, Total			101.9		%		80-120	15-SEP-17
WG2616641-13 MB								
Cyanide, Total			<0.0020		mg/L		0.002	15-SEP-17
WG2616641-5 MB								
Cyanide, Total			<0.0020		mg/L		0.002	15-SEP-17
HG-T-CVAF-TB	**Water**							
Batch R3823219								
WG2612444-3 DUP		**L1988032-1**						
Mercury (Hg)-Total		<0.0000050	<0.000005C	RPD-NA	mg/L	N/A	20	10-SEP-17
WG2612444-2 LCS								
Mercury (Hg)-Total			101.4		%		80-120	10-SEP-17
WG2612444-1 MB								
Mercury (Hg)-Total			<0.000005C		mg/L		0.000005	10-SEP-17
WG2612444-4 MS		**L1988032-2**						
Mercury (Hg)-Total			107.6		%		70-130	10-SEP-17
MET-T-CCMS-TB	**Water**							
Batch R3824244								
WG2612441-3 DUP		**L1988032-4**						
Arsenic (As)-Total		0.0054	0.0055		mg/L	1.9	20	11-SEP-17
Calcium (Ca)-Total		39.5	38.9		mg/L	1.4	20	11-SEP-17
Copper (Cu)-Total		0.0012	0.0012		mg/L	1.1	20	11-SEP-17
Iron (Fe)-Total		0.210	0.217		mg/L	3.6	20	11-SEP-17
Lead (Pb)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	11-SEP-17
Magnesium (Mg)-Total		16.4	16.1		mg/L	1.9	20	11-SEP-17
Nickel (Ni)-Total		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	11-SEP-17

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-CCMS-TB	**Water**							
Batch R3824244								
WG2612441-3 DUP		**L1988032-4**						
Zinc (Zn)-Total		<0.0030	<0.0030	RPD-NA	mg/L	N/A	20	11-SEP-17
WG2612441-2 LCS								
Arsenic (As)-Total			104.6		%		80-120	11-SEP-17
Calcium (Ca)-Total			101.2		%		80-120	11-SEP-17
Copper (Cu)-Total			100.3		%		80-120	11-SEP-17
Iron (Fe)-Total			97.6		%		80-120	11-SEP-17
Lead (Pb)-Total			103.5		%		80-120	11-SEP-17
Magnesium (Mg)-Total			102.6		%		80-120	11-SEP-17
Nickel (Ni)-Total			100.1		%		80-120	11-SEP-17
Zinc (Zn)-Total			99.2		%		80-120	11-SEP-17
WG2612441-1 MB								
Arsenic (As)-Total			<0.00010		mg/L		0.0001	11-SEP-17
Calcium (Ca)-Total			<0.050		mg/L		0.05	11-SEP-17
Copper (Cu)-Total			<0.00050		mg/L		0.0005	11-SEP-17
Iron (Fe)-Total			<0.010		mg/L		0.01	11-SEP-17
Lead (Pb)-Total			<0.000050		mg/L		0.00005	11-SEP-17
Magnesium (Mg)-Total			<0.0050		mg/L		0.005	11-SEP-17
Nickel (Ni)-Total			<0.00050		mg/L		0.0005	11-SEP-17
Zinc (Zn)-Total			<0.0030		mg/L		0.003	11-SEP-17
WG2612441-4 MS		**L1988032-4**						
Arsenic (As)-Total			106.0		%		70-130	11-SEP-17
Calcium (Ca)-Total			N/A	MS-B	%		-	11-SEP-17
Copper (Cu)-Total			101.5		%		70-130	11-SEP-17
Iron (Fe)-Total			99.0		%		70-130	11-SEP-17
Lead (Pb)-Total			98.9		%		70-130	11-SEP-17
Magnesium (Mg)-Total			N/A	MS-B	%		-	11-SEP-17
Nickel (Ni)-Total			100.9		%		70-130	11-SEP-17
Zinc (Zn)-Total			98.1		%		70-130	11-SEP-17
PH-TITR-TB	**Water**							
Batch R3822288								
WG2611241-17 LCS								
pH			6.00		pH		5.9-6.1	08-SEP-17

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PH-TITR-TB	**Water**							
Batch R3823287								
WG2612217-2 LCS								
pH			6.00		pH		5.9-6.1	09-SEP-17
TSS-TB	**Water**							
Batch R3825003								
WG2613170-2 LCS								
Total Suspended Solids			95.3		%		85-115	11-SEP-17
WG2613170-1 MB								
Total Suspended Solids			<2.0		mg/L		2	11-SEP-17

Quality Control Report

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Cullaton Lake
Water Quality Monitoring Results
2003 - 2017

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-02A - TAILNGS POND NO. 1 DISCHARGE, 2003 - 2017

Physical and General	Units	Water License	CCME Guidelines	July 29 2003	July 7 2004	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug 12 2014	Sept. 3 2015	Sept. 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	8.07	7.77	7.8	8.0	7.7	7.5	8.0	7.8	7.8	7.7	8.1	8.25	7.98	8.02	8.32	7.50	8.32	7.92
Temperature	^{0}C			21.0	15.3	NR	14.5	15.2	12.5	15.8	13.6	13.3	14.7	18.6	15.0	11.0	10.4	10.7	10.4	21.0	13.4
Suspended Solids (105^{o}C)	mg/L	**25.0**		< 3	< 3	14	< 1	< 10	1	< 1	1	< 4	< 1	< 1	< 2	< 5	< 2	< 2	< 1	14	< 3
Total Cyanide (1)	mg/L	**0.80**		< 0.005	< 0.0050	0.006	< 0.005	< 0.005	0.0088	< 0.005	< 0.005	< 0.0005	0.00264	0.00150	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0005	0.0088	< 0.0038
Total Hardness	mg CaCO3/L				197	199	210	220	162	210	230	225	211	207	E	E	E	E	162	230	148
Minor Cations																					
Arsenic	mg/L	**0.30**	**0.005**	0.0025	0.00159	0.003	0.0018	0.0021	**0.00563**	0.0019	0.0027	0.0021	0.00212	0.00188	0.0023	0.0022	0.0036	0.0042	0.0016	0.00563	0.0026
Copper	mg/L	**0.20**	**0.004**	0.002	0.0014	0.002	0.001	0.001	0.00136	0.0012	0.0010	0.0021	0.00115	0.00105	0.0018	< 0.0020	0.0012	0.0010	0.0010	0.0021	0.0014
Lead	mg/L	**0.20**	**0.007**	< 0.001	< 0.0010	< 0.001	< 0.0005	< 0.0005	0.00146	0.00032	0.00038	0.00030	0.00033	< 0.00020	< 0.0010	< 0.0010	0.0011	< 0.0010	< 0.0002	0.0015	< 0.0007
Mercury	mg/L		**0.0002**	< 0.00005	< 0.00005	< 0.0001	< 0.00005	< 0.00005	< 0.00001	< 0.00002	< 0.00001	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00002	< 0.000005	< 0.000005	< 0.000005	< 0.00010	< 0.000035
Nickel	mg/L	**0.30**	**0.150**	0.001	< 0.020	< 0.002	< 0.001	0.002	0.00258	0.001	0.0008	0.0010	< 0.001	< 0.001	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0008	< 0.020	< 0.0028
Zinc	mg/L	**0.30**	**0.030**	< 0.005	< 0.005	< 0.003	< 0.005	< 0.005	0.0011	< 0.0025	< 0.0025	0.006	< 0.005	< 0.005	< 0.0030	< 0.0200	< 0.0030	< 0.0030	0.0011	< 0.0200	< 0.0049

( ) Laboratory replicate.
[ ] Results re-checked.
(E) Not analyzed
NR: Not recorded due to equipment malfunction
(1) WAD Cn reported for 2011
Bold values indicate CCME exceedence

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-03A - TAILNGS POND NO. 2 DISCHARGE, 2003 - 2017

Physical and General	Units	Water License	CCME Guidelines	July 29 2003	July 7 2004	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug. 12 2014	Sept. 3 2015	Sept. 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	8.07	7.96	7.7	7.9	7.8	7.7	8.0	8.2	7.9	7.8	8.4	8.56	7.93	7.97	8.33	7.70	8.56	8.01
Temperature	^{o}C			20.8	19.3	NR	17.4	13.7	17.0	15.4	11.4	12.4	14.6	18.5	16.3	10.4	11.1	10.0	10.0	20.8	15.3
Suspended Solids (105^{o}C)	mg/L	**25.0**		5	< 3	2	2	< 10	2	2	13	< 4	< 1	1.9	< 2	< 5	9.3	< 2.0	< 1	13	4
Total Cyanide (1)	mg/L	**0.80**		0.010	0.0072	< 0.0020	< 0.005	< 0.005	0.0016	< 0.005	< 0.005	< 0.0005	0.00192	0.00233	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0005	0.010	< 0.0037
Total Hardness	mg CaCO3/L				92.4	100	90	88	82.3	94	99	95.2	118	109	E	E	E	E	82.3	118	96.8
Minor Cations																					
Arsenic	mg/L	**0.30**	**0.005**	**0.0059**	0.00305	0.004	0.0037	**0.0055**	0.0032	0.0027	0.0046	0.0029	0.00293	**0.00513**	0.0044	0.0025	0.0036	0.0031	0.0025	0.0059	0.0038
Copper	mg/L	**0.20**	**0.002**	**0.003**	**0.0043**	**0.020**	**0.004**	**0.006**	**0.0037**	**0.0039**	**0.0035**	**0.0036**	**0.00367**	**0.00444**	**0.0046**	**0.0038**	**0.0032**	**0.0027**	0.0027	0.0200	0.0050
Lead	mg/L	**0.20**	**0.002**	< 0.001	< 0.0010	< 0.001	< 0.0005	< 0.0005	0.00006	< 0.00005	0.00009	< 0.0002	< 0.0002	< 0.0002	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.00005	< 0.0010	< 0.0006
Mercury	mg/L		**0.0002**	< 0.00005	< 0.00005	< 0.0001	< 0.00005	< 0.00005	0.00001	< 0.00002	< 0.00001	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00002	< 0.000005	< 0.000005	< 0.00001	< 0.00010	< 0.00004
Nickel	mg/L	**0.30**	**0.065**	0.004	< 0.020	0.003	0.005	0.005	0.00357	0.0036	0.0043	0.005	0.0034	0.0055	0.0048	0.0045	0.0038	0.0032	0.0030	< 0.020	< 0.0052
Zinc	mg/L	**0.30**	**0.030**	< 0.005	< 0.005	0.015	< 0.005	< 0.005	0.0009	< 0.0005	0.0005	0.006	< 0.005	< 0.005	< 0.0030	< 0.0200	< 0.0030	< 0.0030	< 0.0005	< 0.020	< 0.0055

( ) Laboratory replicate.
[ ] Results re-checked.
(E) Not analyzed
NR: Not recorded due to equipment malfunction
(1) WAD Cn reported for 2011
Bold values indicate CCME exceedence

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-18A - TAILNGS POND NO. 1 SPILLWAY, 2003 - 2017

Physical and General	Units	Water License	CCME Guidelines	July 29 2003	July 7 2004	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug. 12 2014	Sept. 3 2015	Sept. 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	8.87	7.89	8.1	8.4	7.8	7.5	7.8	8.7	8.7	9.3	D	8.69	7.97	7.77	8.15	7.50	9.30	8.26
Temperature	^{o}C			20.5	18.5	NR	21.4	15.2	15.8	15.8	12.8	12.6	16.9	D	15.0	10.0	11.1	9.9	9.9	21.4	15.0
Suspended Solids (105^{o}C)	mg/L	**25.0**		4	< 3	< 2	3	< 10	< 1	1	< 1	< 4	< 1	D	< 2	< 5	< 2	< 2	< 1	< 10	< 3
Total Cyanide (1)	mg/L	**0.80**		0.009	0.0096	0.004	0.037	0.005	0.0077	< 0.005	0.006	0.0043	0.00361	D	0.0022	0.0033	< 0.0020	< 0.0020	< 0.0020	0.0370	< 0.0072
Total Hardness	mg CaCO3/L				217	200	210	230	159	220	220	228	212	D	E	E	E	E	159	230	211
Minor Cations																					
Arsenic	mg/L	**0.30**	**0.005**	0.0029	0.00165	0.002	**0.0055**	0.0023	0.00133	0.0033	**0.0057**	0.0043	0.00375	D	**0.0055**	0.0049	0.0024	**0.0082**	0.00133	0.0082	0.0038
Copper	mg/L	**0.20**	**0.004**	0.002	0.0018	0.001	**0.005**	0.002	0.00086	0.0012	0.0013	0.0021	0.0014	D	0.0026	< 0.0020	< 0.0010	0.0027	0.00086	0.005	0.00187
Lead	mg/L	**0.20**	**0.007**	< 0.001	< 0.0010	< 0.001	< 0.0005	< 0.0005	0.00032	0.00011	0.00011	0.00030	< 0.00020	D	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00011	< 0.001	< 0.00062
Mercury	mg/L		**0.0002**	< 0.00005	< 0.00005	< 0.0001	< 0.00005	< 0.00005	< 0.00001	< 0.00002	< 0.00001	< 0.00005	< 0.00005	D	< 0.00001	< 0.00002	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00004
Nickel	mg/L	**0.30**	**0.150**	0.001	< 0.020	< 0.002	0.002	0.001	0.00124	0.001	0.0009	0.003	0.001	D	< 0.0020	< 0.0020	< 0.0020	0.0121	0.001	< 0.020	< 0.003
Zinc	mg/L	**0.30**	**0.030**	< 0.005	< 0.005	< 0.003	< 0.005	< 0.005	0.0003	< 0.0025	< 0.0025	0.010	< 0.005	D	< 0.0030	< 0.0200	< 0.0030	< 0.0030	0.0003	< 0.020	< 0.005

( ) Laboratory replicate.
⌈ ⌉ Results re-checked.
(E) Not analyzed
NR: Not recorded due to equipment malfunction
(1) WAD Cn reported for 2011
Bold values indicate CCME exceedence

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-19A - TAILNGS POND NO. 1 AT PIEZOMETER LOCATION 2003 - 2017

Physical and General	Units	NWB Water License	CCME Guidelines	July 29 2003	July 7 2004	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug. 12 2014	Sept. 3 2015	Sept. 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	8.08	7.69	7.9	7.9	7.8	7.9	7.9	7.9	8.1	8.0	8.1	8.19	7.90	8.08	8.40	7.69	8.40	7.99
Temperature	^{o}C			20.8	16.3	NR	15.4	15.3	21.3	15.3	13.9	13.5	15.2	19.3	15.8	10.5	10.6	10.4	10.4	21.3	15.3
Suspended Solids ($105^{o}C$)	mg/L	**25.0**		8	< 3	2	< 1	< 10	< 1	< 1	3	7	1.3	< 1	< 2	7	2.4	< 2.0	< 1	< 10	< 3
Total Cyanide (1)	mg/L	**0.80**		< 0.005	0.0074	0.006	< 0.005	< 0.005	0.0009	< 0.005	< 0.005	0.0074	0.00238	0.00168	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0009	0.0074	0.0039
Total Hardness	mg CaCO3/L				206	201	210	220	749	220	230	246	210	210	E	E	E	E	201	749	270
Minor Cations																					
Arsenic	mg/L	**0.30**	**0.005**	0.0036	0.00209	0.002	0.0019	0.0016	0.0025	0.0019	0.0030	0.0021	0.00209	0.00195	0.0023	0.0024	0.0031	**0.0054**	0.0016	0.0054	0.0025
Copper	mg/L	**0.20**	**0.004**	0.002	0.0015	0.002	0.001	0.001	0.00143	0.0015	0.0010	0.0010	0.00102	0.00097	0.0013	< 0.0020	0.0011	0.0012	0.001	0.002	0.0013
Lead	mg/L	**0.20**	**0.007**	< 0.001	< 0.0010	< 0.001	< 0.0005	< 0.0005	0.00182	0.00032	0.00036	< 0.0002	0.00034	< 0.0002	< 0.0010	< 0.0010	0.0011	< 0.0010	< 0.0002	0.00182	< 0.0008
Mercury	mg/L		**0.0002**	< 0.00005	< 0.00005	< 0.0001	< 0.00005	< 0.00005	< 0.00001	< 0.00002	< 0.00001	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00002	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00004
Nickel	mg/L	**0.30**	**0.150**	0.002	< 0.020	< 0.002	< 0.001	0.002	0.00858	0.001	0.0011	0.0010	< 0.001	< 0.001	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.020	< 0.0032
Zinc	mg/L	**0.30**	**0.030**	< 0.005	< 0.005	< 0.003	< 0.005	< 0.005	0.0161	< 0.0025	< 0.0025	< 0.005	< 0.005	< 0.005	< 0.0030	< 0.020	< 0.0030	< 0.0030	< 0.0025	< 0.020	< 0.0059

( ) Laboratory replicate.
[ ] Results re-checked.
(E) Not analyzed
NR: Not recorded due to equipment malfunction
(1) WAD Cn reported for 2011
Bold values indicate CCME exceedence

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-20A - TAILNGS POND NO. 1 EAST SIDE SEEPAGE, 2003 - 2017

Physical and General	Units	Water License	CCME Guidelines	July 29 2003	July 7 2004	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug. 12 2014	Sept. 3 2015	Sept. 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	D	8.13	7.8	8.1	8.2	8.1	8.3	8.7	8.3	D	D	9.14	7.81	D	D	7.8	9.1	8.3
Temperature	°C			D	21.3	NR	22.0	17.9	19.6	18.9	13.8	13.3	D	D	21.0	10.0	D	D	10.0	22.0	15.8
Suspended Solids (105°C)	mg/L	**25.0**		D	< 3	< 2	1	< 10	4	1	1	< 4	D	D	< 2	< 5	D	D	1	10	3
Total Cyanide (1)	mg/L	**0.80**		D	0.0104	0.118	< 0.005	< 0.005	0.0038	< 0.005	< 0.005	0.0014	D	D	< 0.0020	< 0.0020	D	D	0.001	0.118	0.016
Total Hardness	mg CaCO3/L				310	338	220	620	370	240	230	215	D	D	E	E	D	D	215	620	254
Minor Cations																					
Arsenic	mg/L	**0.30**	**0.005**	D	0.00297	0.001	0.0044	**0.0052**	0.00337	0.0028	0.0042	**0.0057**	D	D	0.0042	0.0017	D	D	0.0010	**0.0057**	0.0036
Copper	mg/L	**0.20**	**0.004**	D	**0.0041**	0.004	0.004	**0.005**	**0.00423**	0.0031	0.0029	**0.0044**	D	D	0.0040	0.0037	D	D	0.0029	**0.0050**	0.0039
Lead	mg/L	**0.20**	**0.007**	D	< 0.0010	< 0.001	< 0.0005	< 0.0005	0.00023	< 0.00005	0.00005	< 0.0002	D	D	< 0.0010	< 0.0010	D	D	< 0.0001	< 0.0010	< 0.0006
Mercury	mg/L		**0.0002**	D	< 0.00005	< 0.0001	< 0.00005	< 0.00005	< 0.00001	< 0.00002	< 0.00001	< 0.00005	D	D	< 0.00001	< 0.00002	D	D	< 0.00001	< 0.00010	< 0.00004
Nickel	mg/L	**0.30**	**0.150**	D	< 0.020	0.015	0.006	0.008	0.00644	0.0036	0.0033	0.006	D	D	0.0041	0.0040	D	D	0.0033	< 0.020	< 0.0076
Zinc	mg/L	**0.30**	**0.030**	D	< 0.005	< 0.003	< 0.005	< 0.005	0.0016	0.0038	< 0.0025	0.007	D	D	0.0036	< 0.0200	D	D	0.0016	< 0.0200	< 0.0057

( ) Laboratory replicate.
[ ] Results re-checked.
D Dry
NR: Not recorded due to equipment malfunction
(1) WAD Cn reported for 2011
Bold values indicate CCME exceedence

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-22A - TAILNGS POND NO. 1 NORTH SIDE SEEPAGE, 2003 - 2017

Physical and General	Units	Water License	CCME Guidelines	July 29 2003	July 7 2004	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug. 12 2014	Sept. 3 2015	Sept. 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	D	D	7.7	D	D	8.0	D	D	D	D	D	D	D	D	D	7.7	8.0	7.9
Temperature	^{o}C			D	D	NR	D	D	18.7	D	D	D	D	D	D	D	D	D	18.7	18.70	18.70
Suspended Solids ($105^{o}C$)	mg/L	**25.0**		D	D	6	D	D	1	D	D	D	D	D	D	D	D	D	1	6	4
Total Cyanide	mg/L	**0.80**		D	D	0.073	D	D	0.0015	D	D	D	D	D	D	D	D	D	0.0015	0.073	0.037
Total Hardness	mg CaCO3/L			D	D	515	D	D	546	D	D	D	D	D	D	D	D	D	515	546	531
Minor Cations																					
Arsenic	mg/L	**0.30**	**0.005**	D	D	0.001	D	D	0.00339	D	D	D	D	D	D	D	D	D	0.001	0.00339	0.0022
Copper	mg/L	**0.20**	**0.004**	D	D	0.004	D	D	0.00239	D	D	D	D	D	D	D	D	D	0.00239	0.004	0.0032
Lead	mg/L	**0.20**	**0.007**	D	D	< 0.001	D	D	0.00057	D	D	D	D	D	D	D	D	D	0.00057	< 0.001	< 0.0008
Mercury	mg/L		**0.0002**	D	D	< 0.0001	D	D	< 0.00001	D	D	D	D	D	D	D	D	D	< 0.00001	< 0.0001	< 0.00006
Nickel	mg/L	**0.30**	**0.150**	D	D	0.045	D	D	0.00415	D	D	D	D	D	D	D	D	D	0.00415	0.045	0.0246
Zinc	mg/L	**0.30**	**0.030**	D	D	< 0.010	D	D	0.0022	D	D	D	D	D	D	D	D	D	0.0022	< 0.010	< 0.0061

( ) Laboratory replicate.
[ ] Results re-checked.
D Dry
NR: Not recorded due to equipment malfunction

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-23A - QUARRY PIT, 2003 - 2017

Physical and General	Units	Water License	CCME Guidelines	July 29 2003	July 7 2004	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug. 12 2014	Sept. 3 2015	Sept. 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	8.07	7.56	7.8	8.1	7.7	7.4	8.1	8.0	8.0	7.9	8.0	8.26	8.15	8.17	8.29	7.40	8.29	7.97
Temperature	^{o}C			20.7	15.7	NR	15.5	14.4	14.5	14.3	13.8	13.0	14.7	18.3	14.1	10.3	10.2	10.1	10.1	20.7	14.3
Suspended Solids (105^{o}C)	mg/L	**25.0**		10	< 3	4	1	< 10	< 1	< 1	2	< 4	< 1	< 1	< 2	< 5	< 2	< 2	< 1	10	< 3
Total Cyanide (1)	mg/L	**0.80**		< 0.006	< 0.0050	< 0.002	< 0.005	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.00050	0.00074	0.00117	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0005	< 0.006	< 0.0029
Total Hardness	mg CaCO3/L				37.9	104.0	120.0	78.0	46.7	100.0	110.0	93.6	110.0	106.0	E	E	E	E	37.9	120.0	90.6
Minor Cations																					
Arsenic	mg/L	**0.30**	**0.005**	0.0019	0.00096	0.002	0.0014	0.0011	0.00084	0.0013	0.0020	0.0017	0.00175	0.00235	0.0033	0.0031	0.0028	0.0039	0.00084	0.0039	0.0020
Copper	mg/L	**0.20**	**0.002**	0.002	< 0.0010	0.002	0.002	< 0.001	0.00102	**0.0024**	0.0016	**0.0022**	**0.00227**	0.00188	0.0024	< 0.0020	0.0019	**0.0026**	< 0.0010	0.0026	< 0.0019
Lead	mg/L	**0.20**	**0.002**	< 0.001	< 0.0010	< 0.001	< 0.0005	< 0.0005	0.00009	0.00014	0.00019	0.0003	0.00028	< 0.00020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00009	< 0.0010	< 0.0006
Mercury	mg/L		**0.0002**	< 0.00005	< 0.00005	< 0.0001	< 0.00005	< 0.00005	0.00001	< 0.00002	< 0.00001	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00002	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00004
Nickel	mg/L	**0.30**	**0.065**	0.002	< 0.020	0.002	0.002	0.001	0.00141	0.0023	0.0022	0.003	0.0026	0.0021	0.0034	0.0034	0.0045	0.0032	0.001	< 0.020	< 0.004
Zinc	mg/L	**0.30**	**0.030**	0.007	0.0087	**0.065**	0.012	0.006	0.0086	0.0229	**0.0301**	0.0140	**0.0504**	0.0119	0.0140	0.0240	**0.0320**	0.0079	0.006	0.065	0.021

( ) Laboratory replicate.
[ ] Results re-checked.
(E) Not analyzed
NR: Not recorded due to equipment malfunction
(1) WAD Cn reported for 2011
Bold values indicate CCME exceedence

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-24A - AREA OF SEEPAGE FROM QUARY PIT TO TAILINGS POND, 2003 - 2017

Physical and General	Units	Water License	CCME Guidelines	July 29 2003	July 7 2004	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug. 12 2014	Sept 3 2015	Sept 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Temperature	^{o}C			D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Suspended Solids (105^{o}C)	mg/L	**25.0**		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Total Cyanide	mg/L	**0.80**		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Total Hardness	mg CaCO3/L			D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Oil and Grease	mg/L	**Visible**		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Minor Cations																					
Arsenic	mg/L	**0.30**	**0.005**	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Copper	mg/L	**0.20**	**0.004**	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Lead	mg/L	**0.20**	**0.007**	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Mercury	mg/L		**0.0002**	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Nickel	mg/L	**0.30**	**0.150**	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			
Zinc	mg/L	**0.30**	**0.030**	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D			

( ) Laboratory replicate.
[ ] Results re-checked.
D: Dry

CULLATON LAKE GOLD MINES LTD.

CULLATON LAKE MINE

WATER ANALYSIS REPORT

STATION 940-27A - AREA OF SEEPAGE FROM EWR TO SHEAR LAKE CREEK (1), 2003 - 2017

Physical and General	Units	Water License	CCME Guidelines	Aug. 5 2005	Aug. 2 2006	July 5 2007	June 28 2008	Aug. 5 2009	Aug. 4 2010	Aug. 4 2011	Aug. 2 2012	Aug. 15 2013	Aug. 12 2014	Sept. 3 2015	Sept. 7 2016	Sept. 6 2017	MINIMUM	MAXIMUM	AVERAGE
pH (lab)	units	**6.0 - 9.5**	**6.5-9.0**	D	D	D	D	D	D	D	D	D	D	D	D	D			
Temperature	^{o}C			D	D	D	D	D	D	D	D	D	D	D	D	D			
Suspended Solids (105^{o}C)	mg/L	**25.0**		D	D	D	D	D	D	D	D	D	D	D	D	D			
Total Cyanide	mg/L	**0.80**		D	D	D	D	D	D	D	D	D	D	D	D	D			
Total Hardness	mg CaCO3/L			D	D	D	D	D	D	D	D	D	D	D	D	D			
Sulphate	mg/L			D	D	D	D	D	D	D	D	D	D	D	D	D			
Minor Cations																			
Arsenic	mg/L	**0.30**	**0.005**	D	D	D	D	D	D	D	D	D	D	D	D	D			
Copper	mg/L	**0.20**	**0.004**	D	D	D	D	D	D	D	D	D	D	D	D	D			
Lead	mg/L	**0.20**	**0.007**	D	D	D	D	D	D	D	D	D	D	D	D	D			
Mercury	mg/L		**0.0002**	D	D	D	D	D	D	D	D	D	D	D	D	D			
Nickel	mg/L	**0.30**	**0.150**	D	D	D	D	D	D	D	D	D	D	D	D	D			
Zinc	mg/L	**0.30**	**0.030**	D	D	D	D	D	D	D	D	D	D	D	D	D			

(1) Station added in 2005
( ) Laboratory replicate.
[ ] Results re-checked.
D: Dry

Appendix 3
September 6, 2017
Thermistor Monitoring Results

THERMISTOR MONITORING RESULTS
Station 940-21

Field notes for pit excavated on September 6, 2017 next to pit excavated in 2015 (immediately north of T4).

0 – 0.9m: till cover
0.9m – 1.3m: saturated tailings
1.3m: Permafrost

September 6, 2017 test pit showing till cover - tailings interface

Thermistors not read – all are inaccessible due to frost heaving.

Thermistor Reading - Test Pit Comparison

September 9, 2016 Test Pit Field Notes:

0 – 0.9m: till cover
0.9m – 1.27m: saturated tailings
1.27m: Permafrost

Thermistors were not read – all are inaccessible due to frost heaving.

September 3, 2015 Test Pit Field Notes:

0 – 0.9m: till cover
0.9m – 1.42m: saturated tailings
1.42m: Permafrost

September 3, 2015 Thermistor readings (See Notes below)

Depth (m)	T1 (°C)	T2 (°C)	T3 (°C)	T4 (°C)
0.3	NR(3)	NR(2)	NR(2)	NR(3)
0.8	NR(3)	NR(2)	NR(2)	NR(3)
1.3	NR(3)	NR(2)	NR(2)	NR(3)
1.8	NR(3)	NR(2)	NR(2)	NR(3)
2.3	NR(3)	NR(2)	NR(2)	NR(3)
2.8	NR(3)	NR(2)	NR(2)	NR(3)

Notes:

(1) Thermistor readings are suspect and are included for comparison with test pit findings.
(2) Cable was not accessible.
(3) Reading indicated open circuit.

Appendix 4
2018 Spill Response Plan

CULLATON LAKE
ENVIRONMENTAL SPILL RESPONSE PLAN

COMPANY INFORMATION

Cullaton Lake Gold Mines Ltd. is wholly owned by Barrick Gold Inc. The Barrick head office responsible for the site is located at:

Barrick Gold Inc.
BCE Place, Canada Trust Tower, Suite 3700
161 Bay Street, P.O. Box 212
Toronto, Ontario
M5J 2S1

The site manager is:

Paul Brugger,
Barrick Gold Inc.
1084 County Rd 8
Campbellford, Ontario
K0L 1L0
Phone: 705-632-1871
Cell: 807-631-4895
e-mail: pbrugger@barrick.com

SITE LOCATION:

The Cullaton Lake property is located in the southern part of the District of Keewatin in the Nunavut Territory. The property is 250 km west of Arviat, NU, 400 km northwest of Churchill, Manitoba and 645 km north of Thompson, Manitoba. A topographic map is attached as Figure 1.

PROJECT HISTORY AND CURRENT ACTIVITY:

Cullaton Lake operated as an underground gold mine for four years from 1981 to 1985. Decommissioning and reclamation began in 1991 and was completed in 2001. By the end of 2001, all mine buildings had been removed, roads were decommissioned and the tailings impoundment area was reclaimed. No chemicals, fuels or reagents remain on site.

Present site activities consist of a one-day annual visit for inspection and monitoring purposes. The site is dormant and uninhabited for the remainder of the year.

REVISIONS AND EFFECTIVE DATE OF PLAN:

This plan was reviewed and revised on March 12, 2018 and is effective until March 31, 2019.

SPILL CONTROL AND REPORTING PROCEDURES:

Should it be necessary to mobilize contractors to the site for any reason in the future, the contractor will be required to supply spill control and clean up materials, have a spill control plan and train personnel in spill response procedures.

Upon discovery of a spill, the person discovering the spill will take the following actions:

INITIAL ACTIONS:

a. Stop the flow if possible.
b. Eliminate open flame ignition sources (i.e. extinguish cigarettes, shut off motors (from a remote location if surrounded by vapours).
c. Contain flow of fuel by dyking, barricading or blocking flow by any means available. Use earth-moving equipment if available. A dam made of earth or other available fill can be quickly constructed to contain and prevent a spill from spreading. If the ground is permeable, it may be necessary to excavate a shallow depression and line it with plastic to prevent the spill from seeping away.

ACTION IN CASE OF FIRE:

a. Use $C0_2$, dry chemical, foam or water spray (fog), although water may spread the fire.
b. Use jet streams to wash away burning gasoline.
c. Use fog streams to protect any rescue team and trapped people.
d. Use water to cool surface of tanks.
e. Divert the oil or gasoline to an open area and let it burn off under control. If the fire is put out before all the fuel is consumed, beware of re-ignition. Rubber tires are almost impossible to extinguish after igniting with fire. Remove vehicles with burning tires from the danger area.

RECOVERY PROCEDURE:

a. Unburned oil or gasoline can be soaked up by sand and peat moss, or by commercial absorbents such as Graboil.
b. If necessary, contaminated soil should be excavated and disposed of as per the following section.
c. Fuel entering the ground can be recovered by digging sumps or trenches.

DISPOSAL:

a. Evaporation may be used if appropriate.
b. Disposal as per the approved Abandonment and Restoration (1996) Plan.

REPORTING:

An individual discovering a spill must report it as soon as possible to the 24 hour Spill Report Line by calling:

(867) 920-8130

(1) A person reporting a spill shall give as much of the following information as possible:

- date and time of spill
- location of spill
- direction spill is moving
- name and phone number of a contact person close to the location of the spill
- type and description of contaminant spilled including an estimate of the quantity
- cause of spill
- status of spill (i.e. continuing or stopped)
- action taken to contain, recover, clean-up, and dispose of contaminant
- name, address and phone number of person reporting the spill
- name of owner, or person in charge or control of contaminant at time of spill

(2) No person shall delay reporting a spill because of lack of knowledge of the factors listed in subsection (1).

(3) The person reporting the spill shall also contact:

- INAC Manager of Field Operations at: (**867) 975-4295**
- Environment Canada at **(867) 920-8130**
- Government of Nunavut Environmental Protection at **(867) 975-7700**
- Kivalliq Inuit Association at **(867) 645-5733** or **1-800-220-6581 Contact Stephen Hartman**
- Barrick Gold Corporation :

  Paul Brugger,
  Site Manager
  Phone: **705-632-1871**
  Cell: 807-631-4895

  Alternate:
  Allison Brown,
  Canadian Closed Sites Manager
  Cell: **778-929-3079**
- If required:
  - RCMP – Arviat at **(867) 857-0123**
  - Arviat Hospital at **(867) 857-3100**
  - Arviat Fire Response at **(867) 857-9999**

(4) The attached NT-NU Spill Report will also be completed and submitted to the Nunavut spills reporting office at fax: (867) 873-6924 or email spills@gov.nt.ca

Cullaton Lake

AIRSTRIP

Shear Lake

See Inset A

Kognak River

Tailings Pond #1

Tailings Pond #2

Quarry Pit

A

Encapsulated Waste Rock Pile

Waste Rock Pile

Shear Lake

Shear Creek

0 50 100 m

CANADA

Project Location

Legend

- Quarry Pit
- Encapsulated Waste Rock Pile
- Waste Rock Pile
- Tailings Pond
- Flow Direction

Base Mapping

Contours
- Index (50m)
- Intermediate (10m)

Hydrology
- Waterbody
- Watercourse

- Vegetation
- Wetland
- Road (decommissioned)

Base data: National Topographic Database (NTDB) compiled by Natural Resources Canada at 1:50,000 scale. Sampling performed by Gartner Lee Ltd., June 2008. Road GPS-tracked by Gartner Lee Ltd., June 2008. Airport footprint approximate; for reference purposes only. EWR pile, tailings ponds and quarry outlines, BGC Engineering, Inc. (2006). All other data, AECOM 2009.

N W E S

0 0.5 1
Kilometres

1:30,000
UTM Zone 14N, NAD 83

File Name: 107651_By1_Fig1_CullatonLake_Mar17_2011.mxd

Prepared By: MM Date Issued: Mar, 2011
Reviewed By: KW Project Number: 107651

Barrick Gold

Project: Cullaton Lake Project
Location: Nunavut

Cullaton Lake Site

AECOM

Figure 1

File Location: P:\60146995\000-CADD\050 GIS WIP\By7_Grizzly_Habitat\107651_By1_Fig1_CullatonLake_Mar17_2011.mxd

Date Revised: March 17, 2011
Date Plotted: March 17, 2011

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

Government of Northwest Territories | Nunavut | Canada | Inuvialuit Land Administration

NT-NU 24-HOUR SPILL REPORT LINE
Tel: (867) 920-8130 • Fax: (867) 873-6924 • Email: spills@gov.nt.ca

REPORT LINE USE ONLY

A	Report Date: MM DD YY	Report Time:	☐ Original Spill Report **OR** ☐ Update # _____ to the Original Spill Report	**Report Number:**
B	Occurrence Date: MM DD YY	Occurrence Time:		
C	Land Use Permit Number (if applicable):		Water Licence Number (if applicable):	
D	Geographic Place Name or Distance and Direction from the Named Location:		Region: ☐ NT ☐ Nunavut ☐ Adjacent Jurisdiction or Ocean	
E	Latitude: _____ Degrees _____ Minutes _____ Seconds		Longitude: _____ Degrees _____ Minutes _____ Seconds	
F	Responsible Party or Vessel Name:		Responsible Party Address or Office Location:	
G	Any Contractor Involved:		Contractor Address or Office Location:	
H	Product Spilled: ☐ Potential Spill	Quantity in Litres, Kilograms or Cubic Metres:	U.N. Number:	
I	Spill Source:	Spill Cause:	Area of Contamination in Square Metres:	
J	Factors Affecting Spill or Recovery:	Describe Any Assistance Required:	Hazards to Persons, Property or Environment:	
K	Additional Information, Comments, Actions Proposed or Taken to Contain, Recover or Dispose of Spilled Product and Contaminated Materials:			

L	Reported to Spill Line by:	Position:	Employer:	Location Calling From:	Telephone:
M	Any Alternate Contact:	Position:	Employer:	Alternate Contact Location:	Alternate Telephone:

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:

Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ AANDC ☐ NEB ☐ Other: _____

Significance: ☐ Minor ☐ Major ☐ Unknown

File Status: ☐ Open ☐ Closed

Agency:	**Contact Name:**	**Contact Time:**	**Remarks:**
Lead Agency:			
First Support Agency:			
Second Support Agency:			
Third Support Agency:			