

March 12, 2022

Impact Assessment Agency of Canada

55 York Street, 6th Floor

Toronto, ON M5J 1R7

By email: [UpperBeaver@iaac-aeic.gc.ca](mailto:UpperBeaver@iaac-aeic.gc.ca)

Re: Agnico Eagle Upper Beaver Project - TISG and PPP - IAAC Reference Number: 82960

Dear Sirs, Madams,

I am writing in response to the IAAC's invitation for comments on the TISG and PPP as published on the IAAC's website. Underlining, italics, and bold print in referenced/attached documentation are mine.

<Personal information removed>

and south-east of the vast Upper Canada deposits which the proponent intends to start planning (open pit) development '*not in 2021, not in 2022, but we have plans*', as it acknowledged in October 2021, see below, under point 1., at \*\*.

The project presented by the proponent in the Initial Project Description and the Detailed Project Description is only a small part of what the proponent calls its 'Kirkland Lake Project' that stretches out over the entire northern Timiskaming region.

With regard to the TISS and the PPP I would like to make the following recommendations.

These recommendations are accompanied by references to portions of text further down this document.

**Recommendation 1:** Require the proponent to provide accurate and complete information about all the mining claims it holds (whether by itself (after the merger) or as joint ventures with other

mining companies) from west of highway 11/end of highway 66 to Kirkland Lake, Larder Lake, all the way up to and around highway 101 from the Quebec border to Matheson, ON and all the way south, south-west of Larder Lake/west of road 624, including recently acquired properties and lands around Beaverhouse Lake. Let this information also include details about all the mines (including current and expected production levels/mill sizes) on lands it currently owns in that area, all established ore bodies and their gold reserves, all the ore deposits it is or will be actively exploring (seeing recent permit application on the ERO site), and all locations in this area that it is earmarking for exploration. See points 1 and 4.

**Recommendation 2:** Require the proponent to provide an integrated timeline of all the current and anticipated plans it has (both public and not-public) for the exploration, exploitation, and processing of all its ore deposits, including but not limited to Macassa, Amalgamated Kirkland, Holt, other KLGOLD's properties, Bidgood, Pawnee, McElroy, Victoria Creek, Munro, Skead-McGregory, Deloye, Commodore, McVittie, Upper Beaver, and those at Upper Canada, McBean, and Anoki. Note that the underlined names represent areas in close proximity to each other and that these are all likely ore sources from which ores can be fed to the UB mill. See map under recommendation 3 (from the proponent's presentation in May 2018) and point 1.

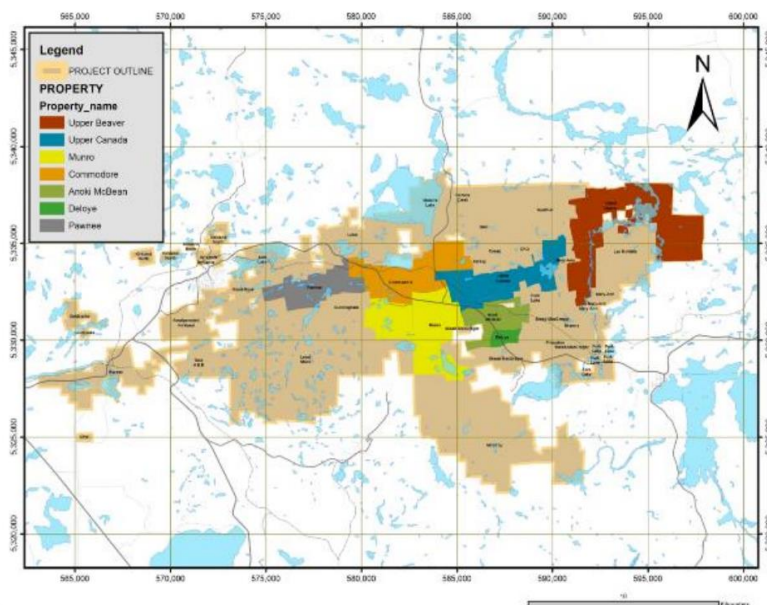
Note that on this map the proponent calls the entire area it has outlined 'Project' and then lists the property names of areas within that 'Project'. Note too that the Upper Beaver area as outlined in the DPD is only a very small portion of what the proponent calls its Upper Beaver property.

Therefore:

**Recommendation 3:** Do not allow the proponent to split what it refers to as 'Project' and 'Kirkland Lake Project' into many smaller 'property names' and present one small part of one of these 'property names' in the DPD as '*The Upper Beaver Gold Project is not part of a larger project that is not listed on the Project List*' (DPD, page 17). See also title of first map under point 1, point 1 in its entirety, and point 4.

Note that below map is from 2018 and therefore only shows the proponent's original lands. This map does not include any of KLGOLD's properties. Thus, 'Project' or 'Kirkland Lake Project' now include a lot more mining claims, including 2 mine/mill complexes (see second map under point 1).

## Project Update – Exploration Activities



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**Recommendation 4:** Require the proponent to provide a timeline for the to be constructed mill at UB: how long does the proponent expect this mill to process ore beyond the exhaustion of the UB mine and from which existing mines and to be developed mines will it truck how much ore to the UB mill during and after the exploitation of an UB mine? See point 1.

**Recommendation 5:** Require the proponent to state the size of the to be constructed shaft(s) and ramp(s) at Upper Beaver and state the expected daily ore production from both UB's proposed open pit and underground workings. See 1.

**Recommendation 6:** Require the proponent to be forthcoming and transparent about all current and anticipated plans in the entire region because by not doing so, the proponent endangers the validity of the IA, prevents the accurate calculation of cumulative effects, and violates the public trust via non-transparent engagement processes. See point 2.

Following from Recommendation 6:

**Recommendation 7:** Require the proponent to be forthcoming and transparent in all its engagements with First Nations, residents, other organizations (including the IAAC), the public, and so forth. See point 2. If the proponent does not do this or is not willing to do this, then local/regional 'stakeholders' will start to envision the proponent's activities, including all mining activities it acquired from its recent merger, as a takeover of the entire region (which includes suddenly having become the largest employer in the region – see Appendix D) without those 'stakeholders' having any recourse, which enforces their feeling of being driven out, just like the 'cottagers' have been and still are.

**Recommendation 8:** Require the proponent to stop all work it wants to undertake during the Advanced Exploration Phase at UB while the Impact Assessment takes place. See point 3.

**Recommendation 9:** Require that the proponent refrains from pursuing any zoning and Official Plan changes for UB during the IA phase. See point 3.

**Recommendation 10:** Require the proponent to provide detailed information about the cumulative effects of all its activities in the entire region, including:

all its activities in and around the Macassa Mine (and Amalgamated Kirkland),

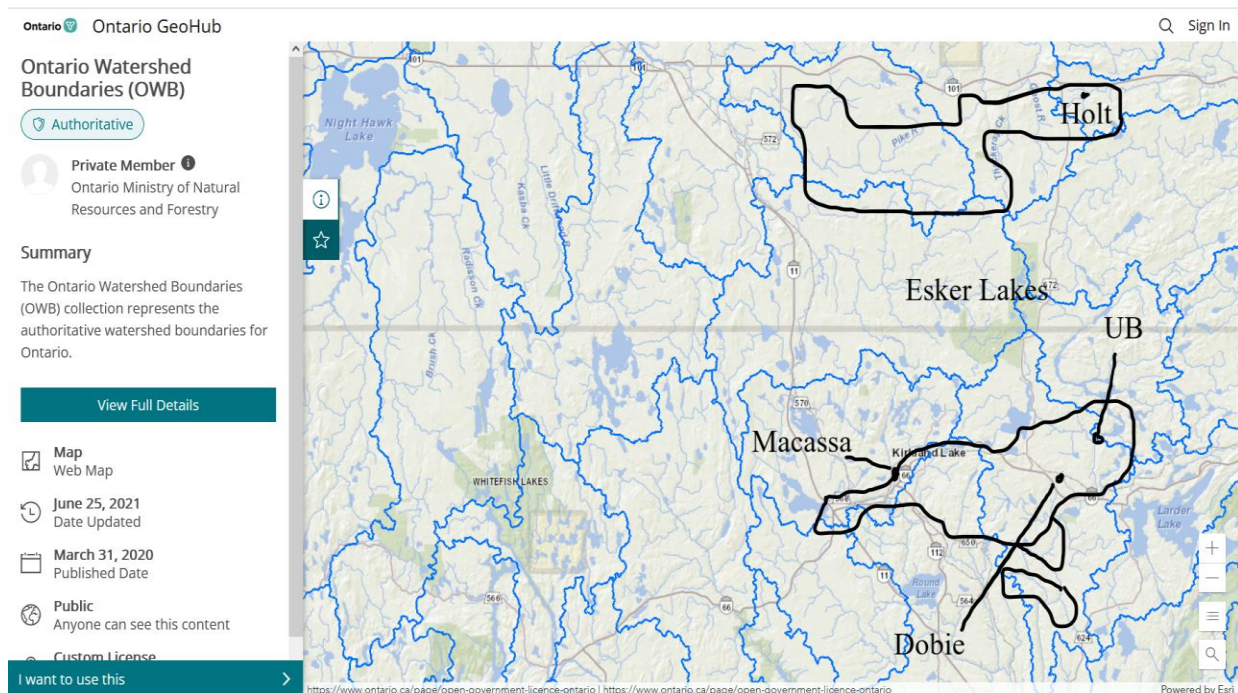
a no longer on 'care and maintenance' Holt mine and/or mill,

the proposed ore production and milling at UB,

and all its anticipated exploration/mining activities at, but not limited to, Upper Canada, Munro, Bidgood, Anoki, and McBean (see list under recommendation 2),

on the entire region, including Esker Lakes Provincial Park, Gem Lake Maple Bedrock Provincial Park, Pushkin Hills Provincial Park, Thackeray Provincial Nature Reserve, and South Grassy Lake Outwash Conservation Reserve. See point 4.

**Recommendation 11:** Require the proponent to show all waterbodies that its current activities in the region are effecting, and which waterbodies and watersheds will be effected, and to what extent, by planned and anticipated exploration/mining/milling activities at all presently known gold deposits the proponent owns in the area. See point 4.



**Recommendation 12:** Require the proponent to produce an overview of how it wants to achieve ‘having a net positive impact at the end of the project’, after taking into account all its other current and anticipated mining/milling activities in the region. See point 4.

**Recommendation 13:** Require the proponent to publish all of its most recent environmental studies pertaining to the water, noise, and air qualities on all its properties where such studies are currently required, as well as all older environmental data that exist (see Appendix D). See point 4.

**Recommendation 14:** Require the proponent to state its intent with (the residents of) Dobie, which sits in the center of all ore deposits at Upper Canada, Anoki, McBean, and others, and past which the proponent intends to transport all resources needed to construct the UB mine/mill/diversion of the Misema River, all ore that will be transported from other locations to UB, all materials that will be taken away from the UB site, and all workers and equipment for the operation of UB, from the start of the Advanced Exploration Phase through the UB production phase of the mine, and all through the prolonged milling phase at UB. See point 4.


**Recommendation 15:** Require the proponent to show calculations that compare the gross and net revenue of all its current, proposed, and anticipated activities on all the lands it owns in this region with the total environmental and societal cost of all its current, proposed, and anticipated activities, including UB, to the region, the environment, and all its inhabitants. See points 4 and 5.

**Recommendation 16:** Require the proponent to make public all environmental studies and data it has obtained from previous owners of the UB site, all raw data of recent studies (as early as 2018) it has done itself, and from involved Ministries such as the former MNRF. See point 5.

**Recommendation 17:** Require the proponent to provide detailed alternative solutions for the open pit/diversion of the Misema River rationale, including the abandonment of the idea to have an open pit/river diversion and mill at UB at all. Prior to mid 2020 the proponent did not mention this open pit in mind nor the diversion of the Misema River. Note that prior to 2020 the proponent also didn't mention an oversized mill. In May 2018 the proponent did not even seem to expect to develop a project that would require an IA. Compare Appendix A and B, especially slides 34-38 of Appendix B, which show 3 different scenarios and the proponent's rationale to commit to the open pit/river diversion scenario.

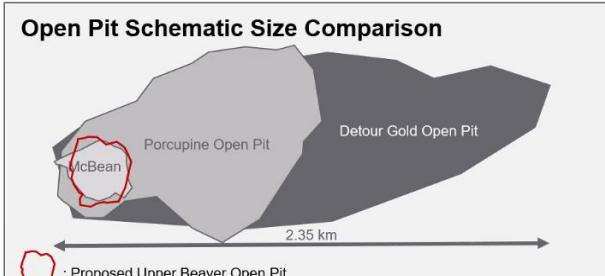
**Recommendation 18:** Require the proponent to state that the proposed open pit mine with a projected diameter of 330m and depth of 100m will indeed become a much larger and deeper open pit, because the proponent expects to exploit the 'Mineralized Zone to Surface' area as can be seen on below slide from the proponent's presentation on October 18, 2021.

UPPER BEAVER GOLD PROJECT – OPEN PIT AND DIVERSION

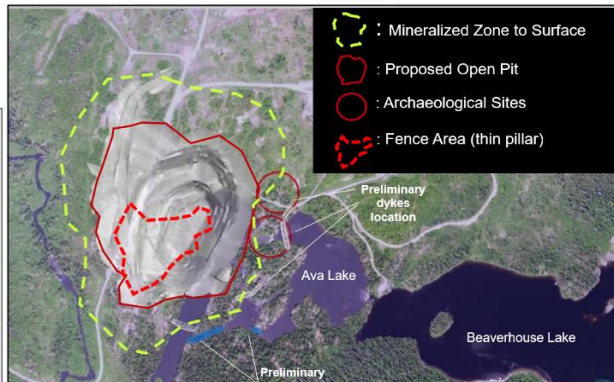


- Temporary water diversion of the Misema River and dewatering of the York Lake with dikes and channels
- Annual flow has been estimated as in the order of 90 million m<sup>3</sup> per year (2.9 m<sup>3</sup>/second)
- Pit size is driven by the stability issue, not by availability of the ore at surface
- Pit will stay west of the islands to avoid known archaeological sites and Ava lake
- Extraction from the open pit in the first years only (4-5 years)
- An access to Beaverhouse Lake will be maintained

**Open Pit Schematic Size Comparison**



Legend: ○ : Proposed Upper Beaver Open Pit



Legend:

- - - : Mineralized Zone to Surface
- : Proposed Open Pit
- : Archaeological Sites
- - - : Fence Area (thin pillar)

**Recommendation 19:** Require the proponent to publish the gold content of the ore it wants to mine via the open pit and in the 'Mineralized Zone to Surface' and the gold content of the different ore bodies located deeper down UB.

**Recommendation 20:** Require the proponent to provide several realistic alternatives to the UB mill proposal, including at the Holt Complex, which already has full tailing facilities. These alternatives also have to include proposals for potential ore production and processing at each of its current 'slated for development' sites throughout the entire region. See Appendix C.

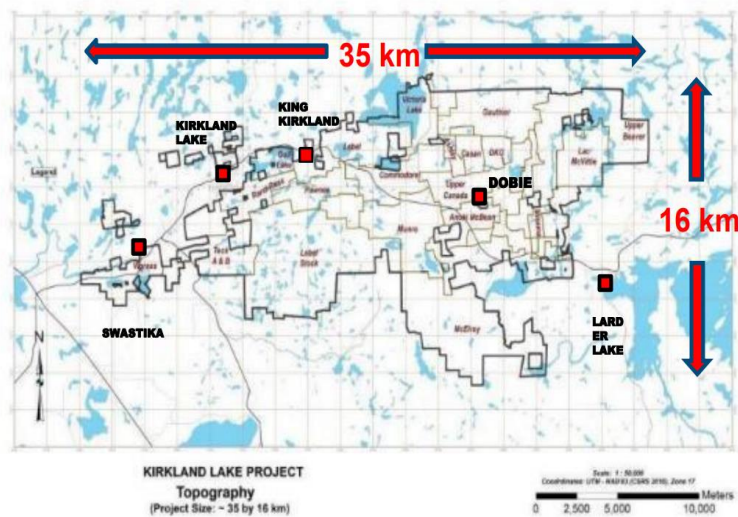
I support the comments and recommendations the IAAC recently has received from the Canadian Environmental Law Association, from the Ontario Rivers Alliance and both its experts, and from those who live around Beaverhouse Lake, including <Personal information removed> ,

<Personal information removed> and others, including Beaverhouse First Nation, whose responses may have been sent via email.

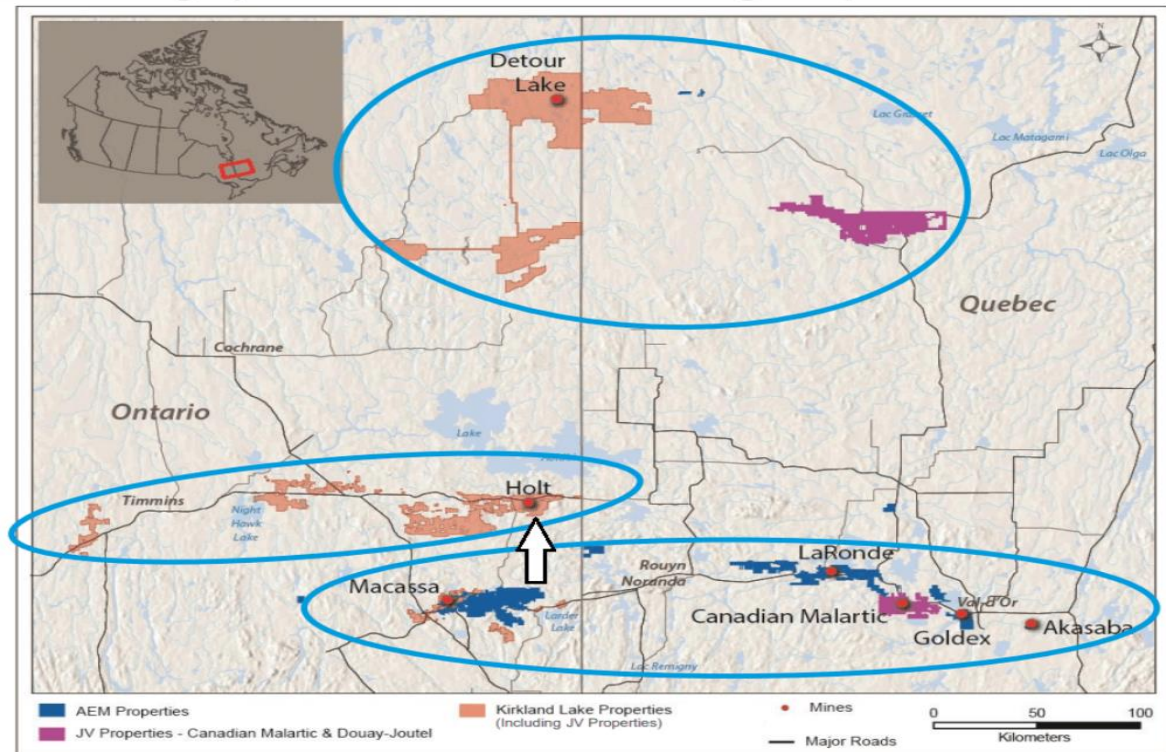
1. The first large problem with the proponent's Detailed Project Description (DPD) is that the proponent still does not mention or acknowledge its vast number of mining claims that now measure an area of 'approximately 35 kilometers long by 17 kilometers wide' (see Appendix C and maps shown below), from west of highway 11/end of highway 66, via Kirkland Lake, all the way east, to north of Larder Lake and south, west of the 624. In this area the proponent owns **1917** mining titles for no other reason than the successful mining of gold (see Appendix C).

Already in May 2018 the proponent presented the following map labeled 'Kirkland Lake Project'. Note that its properties then already stretched from Swastika on the left, to north and east of Beaverhouse Lake in the north-east, all the way far south of South Grassy Lake Outwash Conservation Reserve. Note too that its property includes half the lands beneath Victoria Lake which is the main source of drinking water for the residents of Kirkland Lake and King Kirkland.

## KIRKLAND LAKE PROJECT

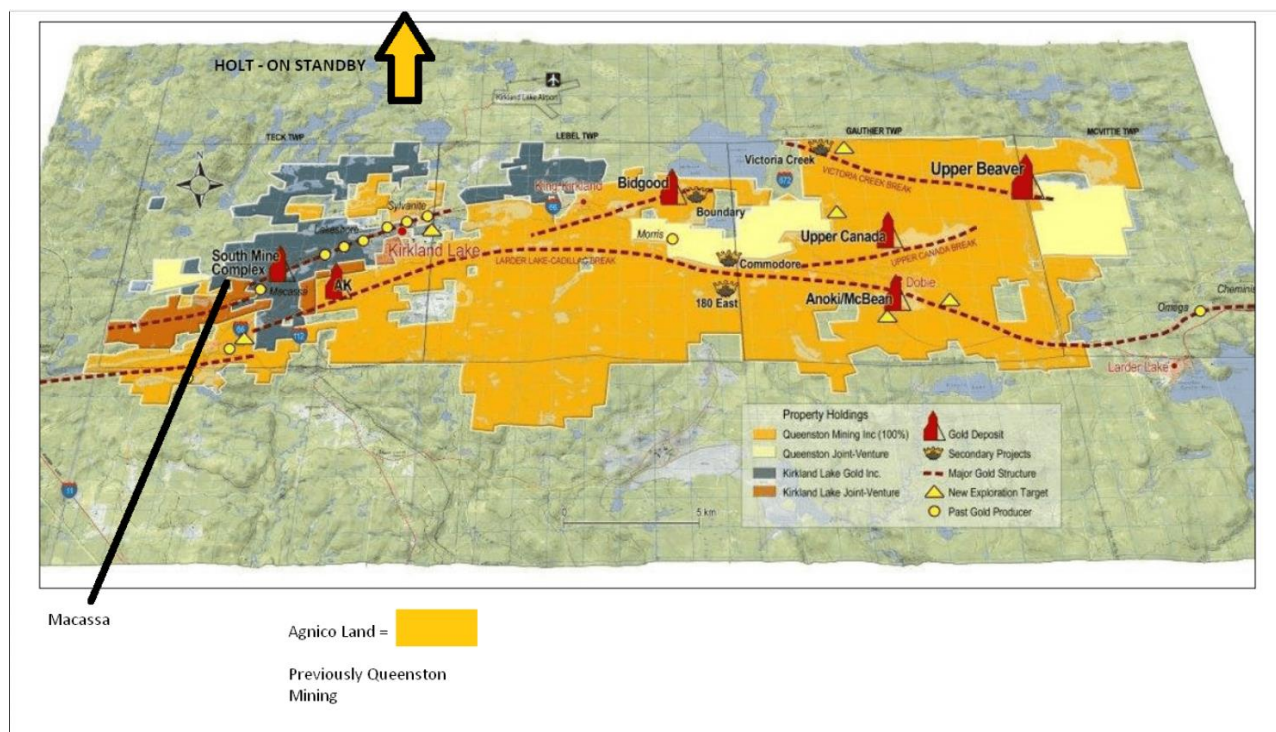


Because of the recent merger with KLGGold the proponent added significant other mining claims and mines/mills to its already considerable holdings in this part of Ontario and Quebec. Note the Macassa and Holt mines/mills in the bottom left portion of the map and the alignment of original KLGGold properties with the properties of the proponent. Also note the considerable area originally owned by KLGGold west/south-west of the Holt mine, north of Esker Lakes Provincial Park and more lands south of the proponent's original holdings in the south.



When we zoom in on the Swastika/Kirkland Lake/Larder Lake area, we see this recent alignment of properties on a map adjusted from when Queenston Mining owned all the lands now owned by the proponent, and the Kirkland Lake properties it recently acquired. Note the inclusion of New Exploration Targets and Secondary Projects. Note the yellow areas in the center and to the right which used to be joint ventures but which proponent now owns outright.





The two images above come from this recent article: <https://seekingalpha.com/article/4458062-agnico-eagle-mines-merger-announcement>

Note the following news article from February 24, 2022:

<https://www.northernnews.ca/news/agnico-eagle-announces-2021-results>. The full text of this article can be found in Appendix C.

The proponent's merger with KLGGold makes the proponent suddenly the owner of multiple mines/mills in the area, as well as, suddenly, the largest employer. These mills are:

Macassa – 2,000ton/day mill - no expansion currently planned, even with new 4000ton/day shaft  
 Holt – 3,000ton/day mill – on care and maintenance (information about both mines/mills was available on KLGGold's website till the proponent took down KLGGold's website earlier this year).

In the news article, the proponent shares what it is currently planning in the entire region:

Proponent is planning to do a lot more actual mining at Macassa, via the new mining shaft.

Proponent is purposefully exploring all possible ore locations in all its 'Main Break' mines in Kirkland Lake, which are all connected underground with the Macassa mine.

Proponent is looking at how the Holt mine/mill fit in the entirety of its regional undertakings.

Proponent is considering where to mill more ore: it mentions Holt and Macassa as possible locations and that both already have full tailings facilities.

Proponent will continue to drill extensively at Upper Canada.

Proponent mentions the size of the ore deposits at its Anoki and McBean properties.

Proponent also states that 'its permitting process at Macassa is ongoing' (which is true, two

permit applications show up on the ERO website for which the commenting period recently ended).

Separate from this ‘ongoing permitting process’ the proponent has also applied for a new exploration permit for an area directly south-west of Kirkland Lake (the application erroneously states that this exploration will take place 11km north-east of KL):

<https://ero.ontario.ca/notice/019-5166>. This application supports the idea that the proponent wants to explore as much as it possibly can with the objective to mine as much gold from this area as quickly as is possible. This is why having a very large mill directly on the Misema River is so desirable, because of the ease with which the proponent will be able to get rid of the effluent of the UB mine and mill, especially when having the latter at the Misema River means that it can mill ore there from a wide variety of locations where fresh water bodies such as the Misema River are not available.

Based on the above statements in the news article the proponent can no longer maintain that it has 'no other plans in the region at this moment in time'. Instead, it actually is expanding ongoing mining activities, increasing actual ore production, and increasing its exploration in the entire region even while the IA process for UB is still in its planning phase.

The proponent clearly shows that it will be producing a lot more ore from both Macassa and other KL mines in the very near future. The proponent will need to mill all that extra ore at a convenient location because its existing mills at Macassa and Holt will by far not be large enough to handle all the extra ore it will mine via Macassa’s new shaft, from all the other ore deposits beneath the ‘golden mile’ in Kirkland Lake, from its own, original, ore deposits at Upper Beaver, Upper Canada, Aniko/McBean, Bidgood, Munro, and from all other mining claims where it still hopes to find more gold. That convenient location is at the Misema River.

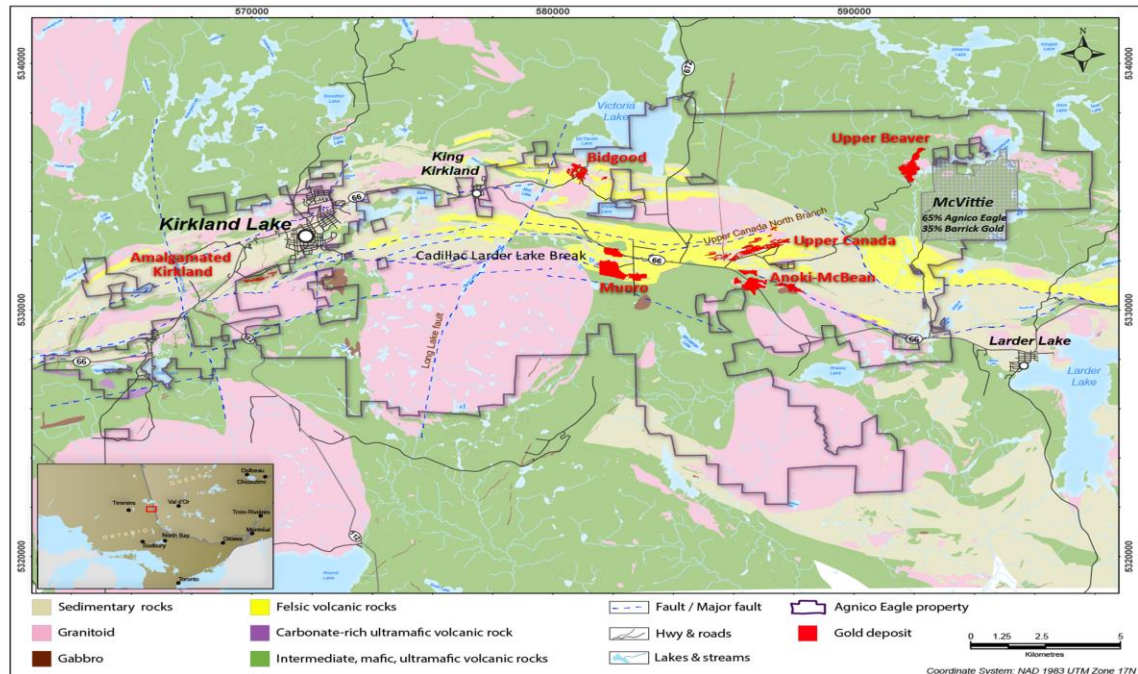
On the next image, shown below, available on the proponent’s website, can be seen all at present known gold deposits in the Kirkland Lake/Larder Lake area, owned by the proponent prior to the merger. Note the **McVittie property**, on the east side of the Misema River, south of Beaverhouse Lake, which the proponent has owned in its entirety since October 2019, see: <https://www.northernnews.ca/news/local-news/agnico-eagle-updates-kl-project>

The proponent has indicated it wants to construct a bridge over the Misema River because it wants to access an aggregate source on the east side of the Misema. At the same time, such a bridge can also provide easy access to the McVittie property and other areas the proponent is exploring east of the Misema River, and to the lands the proponent owns to the east of Beaverhouse Lake, without sharing these anticipated activities with the residents, the public, other stakeholders, and without including them in the Detailed Project Description (DPD) submitted to the IAAC. These activities may also explain why the proponent is not forthcoming with definitive plans for the construction of a new dock on the south side of Beaverhouse Lake that can be used by all who use the current dock west of that Lake. Not being forthcoming with plans for a new dock and the possible reasons why are very concerning.

It has to be noted that quite a few residents and landowners around Beaverhouse Lake sold their properties to the proponent when the latter first started to make known to them what it intends to

do west of Beaverhouse Lake and then also started with extensive drilling at that location. It is unfortunate that the proponent not being forthcoming with a solution for the dock situation can be seen as another way to negatively affect those who still live at Beaverhouse Lake and/or use the lake, in order to make them more inclined to sell their properties to the proponent and/or to stop using the Lake for a variety of other purposes, despite the proposal now being subject to an IA.

 **Kirkland Lake Project - Regional Geology Map**



Despite all the above, the proponent maintains in the DPD that the Upper Beaver (UB) project is the only project it is actively working on at this time. The DPD also vaguely indicates that the proponent may truck in ore from other local sites but does not specify where this ore comes from or about how much ore it is speaking. After its recent merger this extra ore may, among other sources, come from the proponent's already active mine in Kirkland Lake but also from the Upper Canada deposits located directly beside the UB lands. More light on plans to develop the Upper Canada deposits was shed here:

In October 2021, \*\*during the Council Meeting of the Township of Gauthier, the proponent stated that it will start looking at the development of the Upper Canada ore bodies 'not this year, not next year, but after that'. If an IA were to take place, which in October 2021 was not known yet, the early start of development of the Upper Canada ore bodies (for example the application of permits) would coincide with the IA process of the UB project. The recording of this Council meeting can be watched here: <https://www.facebook.com/watch/?v=2801498883475249>.

Note that at 45.20 questions are asked about the development of Upper Canada.

The response is that, yes, the UB mill will be fed ores from other locations and at 50.00 ‘*Upper Canada will most likely not happen this year, not happen next year, but we have a plan*’.

Note too that it is stated that for the other ores fed to the UB mill ‘all necessary permits will be obtained’. With other words: the proponent does have at least one other concrete mining plan in the region, and well right beside UB. How could having plans not be the case when the proponent is the 3<sup>rd</sup> largest mining company in the world, refers to all its lands in the region as ‘Kirkland Lake Project’ and has just merged with the other local mining giant? Of course the proponent has timelines for everything it does and for how its entire regional exploitation picture comes together, because of economic, logistic, and workforce concerns, but also because of the applications for required permits for those other locations that need to be submitted well in advance.

Note here that it is very well possible that the proposal for development of a mine at Upper Canada will not be large enough to trigger an Impact Assessment and that this project may only require provincial permits (which the proponent is already considering). Potentially this could lead to the start of ore production at Upper Beaver and Upper Canada at the same time, with Upper Canada’s ore body (around 29 million tonnes – see information from proponent’s website below) being several times larger than UB’s deposits, while the Upper Canada gold deposits also contain considerably less gold per tonne than UB’s deposits. This is another reason why it is important that everything the proponent is currently doing and anticipates undertaking in the entire region is considered to be one project.

That the proponent is planning more for the region than only UB is also shown by the size of the proposed mill at UB: its capacity will be considerably larger than is expected for the ore production (related to the expected mining life) at UB. When other large ore production starts to happen in the region, including at Upper Canada, Anoki, McBean, or for example via Macassa’s new 4000 ton/day shaft (for which the Macassa mill is already too small, at 2,000 ton/day), then the UB mill will be operating not only at consistent max capacity during the UB mining phase but also for a much longer time than is shared with ‘stakeholders’, the public, and with the IAAC.

The size of the shaft(s) and ramp(s) at UB will determine the life span of UB, which currently is set around 16 years. However, if the ore body of 8 million tons at UB mined at a 2,000 ton/day speed, this will give a mining life of around 11 years. Even worse, if the mining speed would double to 4,000 ton/day via a much larger shaft, then the mining life decreases by half, to around 5.5 to 6 years. Hence it is important to know what size shaft(s) and ramp(s) the proponent is planning to construct because this will provide insight into the amount of ore from other locations that the proponent states will be trucked to the UB mill, and when this will happen, which may be much sooner than the proponent now shares and may last for a long time after the UB mine is exhausted.

This leads to the conclusion that water flowing through Beaverhouse Lake will supply the mill with water for a much, much longer time than is suggested in the DPD and other places, such as in presentations made by the proponent. Logically it follows that the Misema River will be used as the convenient water stream for all the effluent of this mill for both a much longer time and at

a much higher volumes than currently are suggested by the proponent as well. Both these factors lead to strongly increased cumulative effects that need to be taken into account during the decision phase of the IA process, see point 4 below.

From all this we learn that the proponent intends to keep the mill running much longer than the 16 stated years that the UB mine will be in production. This then will push the implementation of the closure plan that the proponent has filed with the Ontario government back much further than we now expect. The proponent should reveal all this to the ‘stakeholders’, the public and to the IAAC as well.

That the proponent intends to exploit both UB and Upper Canada at the same time can be also learned from the following information. Note that the Upper Canada deposits are much larger than the UB deposits. Would it not make more sense for the proponent to first develop the Upper Canada deposits? No, because the proponent needs a mill to process all that ore and the UB location beside Beaverhouse Lake and on the Misema River is the supreme spot to take in lots of water and get rid of all the produced effluent easily.

<https://agnicoeagle.com/English/exploration/exploration-projects/Kirkland-Lake-project/default.aspx>

On its website, see above link, the proponent states:

**“Agnico Eagle is focusing on the Upper Beaver and Upper Canada deposits, which are near each other. Probable mineral reserves have been estimated at Upper Beaver of 8.0 million tonnes grading 5.43 g/t gold and 0.25% copper (containing 1.4 million ounces of gold and 19,980 tonnes of copper) as of December 31, 2020, and there are substantial indicated and inferred mineral resources. At the Upper Canada deposit, there are indicated mineral resources of 10.4 million tonnes grading 2.15 g/t gold (containing 722,000 ounces of gold) and inferred mineral resources of 18.6 million tonnes grading 3.11 g/t gold (containing 1.9 million ounces of gold) at underground and open pit depths.”**

Recent exploration activity at the project focused on conversion drilling of shallow and deep mineral resources at the Upper Beaver deposit. During 2020, 103 holes or branches were drilled, totalling 28,300 metres at the Kirkland Lake project, mostly at Upper Beaver.

**The combined indicated mineral resources at the property’s Anoki and McBean deposits have been estimated at 1.9 million tonnes grading 5.33 g/t gold (containing 320,000 ounces of gold) as of December 31, 2020, and there are additional inferred mineral resources, all at underground depths. At the Amalgamated Kirkland (AK) deposit, the underground mineral resource estimate includes indicated mineral resources of 1.3 million tonnes grading 6.51 g/t gold (containing 265,000 ounces of gold) as of December 31, 2020, as well as inferred mineral resources.”**

Note that the Upper Canada deposits are multiple times larger than the Upper Beaver deposits and that much of this ore can be inexpensively mined ‘at open pit depths’! Of course, the

proponent wants to develop the Upper Canada deposits! It wants to develop all the ore deposits it owns on any and all of its mining claims in the entire region! However, it needs a close, local mill, preferably on a river with lots of fresh water, to process all this ore! This is why the UB proposal is the first in a long row of other proposals that will not include a mill and will also not trigger an IA.

The concurrent exploitation of the Upper Beaver, Upper Canada, Anoki, and McBean ore deposits will make the lands around Beaverhouse Lake and Dobie, which lies in the center of all of this, most likely uninhabitable (see image of Malartic, QC, further down this document). An open pit mine with its blasting, vibrations, dust, and running equipment at Upper Canada will, with prevailing western/north-western winds, be audible and felt in all of Dobie 24/7/365, which is usually how mines are run these days.

The gold ore content of the UB ore deposits (5.43 g/t gold) makes the UB mine a medium grade gold mine and the Upper Canada ore content (at 2.15 to 3.19 g/t gold) a low grade gold mine (compare this to the Macassa South mine, with an ore content of 22.2 g/t gold, which is the second highest gold ore content in the world^^). As is often the case with gold mines where earlier mining has taken place, the higher grade ore has already been removed and the lower grade ores that remain most often can only be mined via an open pit to be economically viable. However, open pit mining comes at a considerably higher cost for the environment and residents, both during the mining phase and after that, because the amount of dry tailings produced by less gold containing open pit mines is relatively much larger than the tailings produced by more gold containing underground mines. This leads to the conclusion that most of the dry tailings left behind at UB will not come from UB itself but from all other surface ore bodies that the proponent wants to mine in the region, including the vast Upper Canada deposits.

^^ See: <https://www.mining.com/the-worlds-highest-grade-gold-mines/>

All the above indicates that the proponent has plans to produce ore at many other locations in its Kirkland Lake Project than only at UB. This leads to the following point.

2. The second problem with the DPD: The proponent does not feel it is necessary to be transparent with the IAAC itself. This lack of transparency is also noted and experienced by the ‘stakeholders’. This lack of transparency effects the IA process in a variety of ways:

- Many of the initial comments made to the IAAC in October 2021 have indicated that the community engagement process with local ‘stakeholders’, including First Nations, is not transparent at all, that no ‘engagement’ takes place (the proponent sets the agenda and is not forthcoming with answers to urgent questions), that these parties do not trust this proponent any longer, and that the overall impression is that the proponent comes across as convinced it will get what it wants: IAAC approval for UB, after which the proponent, conveniently, only has to rely on much weaker provincial legislation to start developing all its other regional ore deposits, without having had to disclose these plans to anyone.

- The IA process itself relies heavily on what the proponent tells the IAAC. What the proponent tells the IAAC is much more limited than the proponent shows on its website, in presentations, and in news articles (see Appendix C). The proponent does the latter because it is concerned about its stock price and about keeping its shareholders happy. What ‘stakeholders’ see is that the proponent withholds invaluable information from the IAAC, which impacts how the IAAC is perceiving this project, the decision-making process for this IA, and possibly the final decision itself. That the proponent does not respect the IAAC enough to be entirely transparent with the IAAC gives ‘stakeholders’ the strong impression that the proponent will go to any length to obtain what it wants. The proponent, which now is the 3<sup>rd</sup> largest mining company in the world, is miles ahead of both the public and the IAAC in what it is planning and revealing. With a gold price that continues to climb, the proponent is pressed to produce as much gold from all its deposits in the entire region in as short a time frame as it possibly can. The financial gain from this undertaking seems to be more important than a valid and complete IA process and seems to influence what the proponent is willing to share in the DPD.
- Because the proponent is not transparent in sharing all it knows and plans, the ‘stakeholders’ have to spend their valuable and unpaid time to shine light on a proponent who will negatively transform not only the area west of Beaverhouse Lake, but lands around the entire Lake, on both sides of the Misema River, all around Dobie, and in the entire region. It seems likely that Dobie, and maybe even the entire Township of Gauthier, will not only become uninhabitable during the time all these mining activities (especially at UB and Upper Canada) take place, but remains so after these activities cease because the landscape will be left empty and exhausted and covered with many more dry stack tailings than from UB alone, and the Misema River and waterbodies further south will most likely be left polluted. Upper Beaver and Upper Canada will forever look similar to the open pit mine and mountains of dry stacked tailings at the proponent’s mine in Malartic, QC, which is only around 130km east of Dobie.



La mine Canadian Malartic  
PHOTO : CLAUDE BOUCHARD

- It should be noted here that the proponent, at this point in time, and by its own admission, is only talking with the Beaverhouse Lake residents about buying up their land and houses, and said, when asked, that it will ‘get to [talking with] the residents of Dobie later’. It may be clear that the proponent again is setting the standard, and that the proponent, by not being transparent, leaves the residents of Dobie in the dark, yet not without the awareness that once the proponent will start talking with them, they have nothing good to expect.
- If the ‘stakeholders’, the public, and even the IAAC, are not informed by a forthcoming and transparent proponent about important components of its proposal and even more important information about the consequences of these components, then the question arises: what else is the proponent not sharing with all these groups and organizations and what else will the proponent withhold from all of them, including the IAAC, during the IA process?

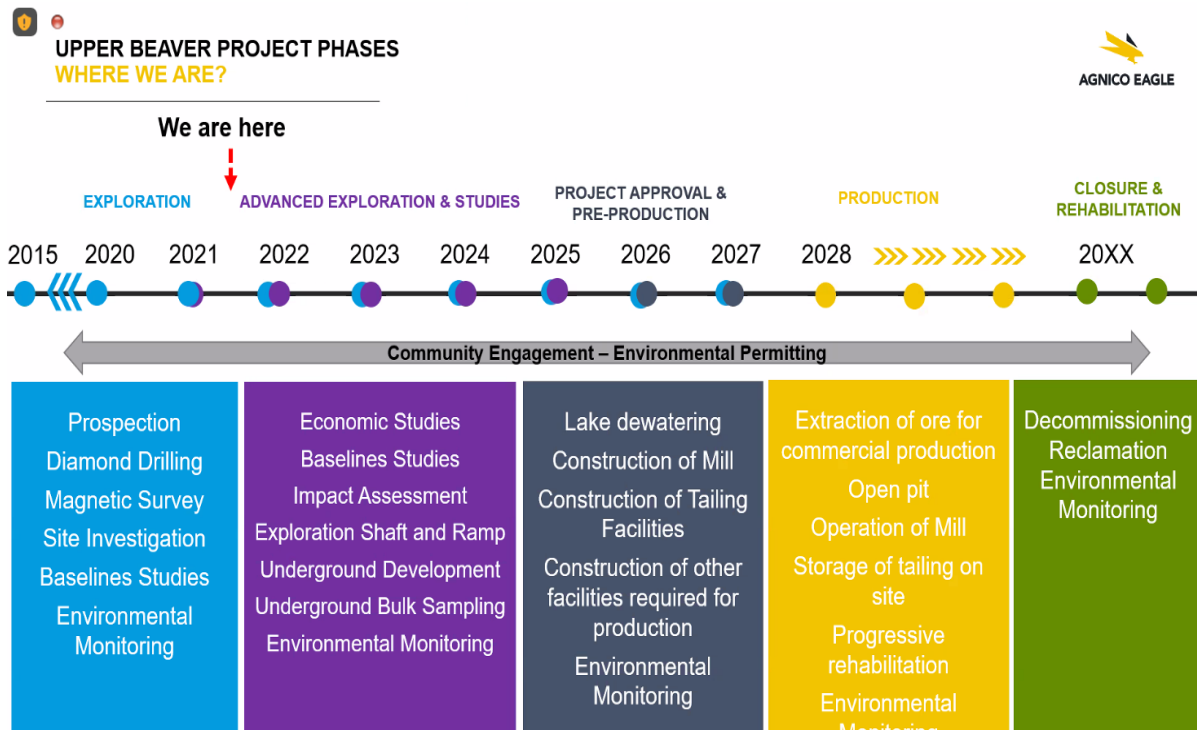
If the proponent has much bigger plans (and it does, as demonstrated under 1.) than it currently shares with the IAAC, then for what other purpose is it doing so but to effect the outcome of the Impact Assessment in its favor?

Withholding information at this level shows disrespect for Canada, its laws and regulations, institutions such as the IAAC, for the First Nations, Canada’s environment, its wildlife, and its residents. This is deeply disappointing but also not entirely unexpected when we look at how the proponent proceeded with its activities in Malartic, QC. The big question is: will the proponent be allowed to do this again, this time in Ontario?



3. The third large problem with the UB proposal is that the proponent wants to progress with the Advanced Exploration Phase (AEP) during the IA process. It seems that the proponent relies on permits it has obtained in Ontario under Ontario legislation and on other Ontario provisions for mining exploration in order to be able to progress with the AEP during the IA process.

That the proponent is continuing with the AEP during the IA is illustrated in this slide, taken from its presentation during the October 18, 2021, Gauthier Township Council Meeting:



From the DPD, pages 18 and 19, it can be learned what the proponent intends to undertake on site during the coinciding AEP and IA phase. It seems that the proponent intends to construct all infrastructure necessary for the pre-mining production to start almost immediately after the IA is completed.

This coinciding of the AEP and IA renders the IA process almost useless. The destruction to the UB site and surrounding areas will be so vast that it cannot be reverted if the IA would result in the proponent not being allowed to proceed after the IA. By then, the damage will be done. Many trees have already been cut. Also, the proponent’s past (since 2018) and current exploratory and drilling activities have already caused more harm than good with regard to the wildlife populations in the area. This will only become worse if the AEP can proceed while the IA takes place.

Advanced Exploration and consequently mining at all the locations the proponent shows on its maps and describes on its website and in its presentation of 2018 (see Appendix A) will continue to increase the cumulative effects in the entire area. It is possible that the proponent will turn the entire area, from Kirkland all the way east to the north and south west of Larder Lake into one large mining zone once it obtains the IAAC's approval for its UB mill project. Once that IA is out of the way, Ontario's Provincial legislation does not seem to put up many barriers for the proponent to develop all its other ore deposits here. This and the many (open pit) mines that will spring up, including all the dust, noise, and air pollution (also from all the trucks carrying ores) will make the area unhealthy and unattractive for all who live here now, for the environment itself, and for all other creatures that live in and on the landscape/water. It is advisable to have a look at what the proponent did in the area around Malartic, QC (see Appendix E) to know how this will work out. From the beginning of the open pit project there, 200 homes were relocated to the opposite end of Malartic (see *Unearthing Justice* by Joan Kuyek – 2019). This was followed by a court case of 3 years in which the residents took the owner of the mine, which is the proponent here, to court for the negative effects the constant blasting, vibrations, dust, overpressure, and noise had on their health and lives.

If the above situation in and around Malartic is what local residents here face, then it is advisable that all AEP activities are postponed until the final verdict based on the IA is known. Section 7 of the Impact Assessment Act indeed states that any activity on site is prohibited during the IA process, until a decision is made by the IAAC.

It is advisable that this halting of activities includes any applications for permits the proponent wants to make, and include the zoning and Official Plan changes which are needed by the proponent to be able to progress with the AEP and/or the UB project as a whole.

**4.** Points 1, 2, and 3 together lead directly to the fourth big problem with the proposal, namely: cumulative effects.

Because the DPD does not include

how many mining claims and lands the proponent owns in the region,

what other plans it has with those mining claims (which are directly tied to the UB mill proposed at Beaverhouse Lake and the Misema River),

what it wants to do with the recently acquired KLGold properties, including 2 mine/mill complexes,

what the real time frame is during which the UB mill will be operating,

and because the proponent also wants to proceed with its AEP during the IA phase,

we are left with the following question: how can we ever come to an honest and transparent understanding of all cumulative effects of all these activities combined?

How much water is one company allowed to use and pollute in an entire region?

How much land is one company allowed to develop but also destroy in that same region?

How much wildlife is one company allowed to disturb/drive away in that region?

How much air and noise pollution are the mining activities and trucks of one company allowed to cause in that region?

How many dry stack tailings is one company allowed to leave behind in a region?

How many residents is one company allowed to displace from that region?

How much revenue is one company allowed to take from that region without the destruction and pollution caused ever to be possibly revertible or compensated for?

How many times is one company allowed to repeat this process in Canada?

On the KLGGold website, which recently was shut down by the proponent, and which provided very relevant information about all KLGGold's mining operations, their sizes, production rates, etc, a weekly blog was posted that informed employees, residents, and other interested parties of what was going on at KLGGold. The last blog post was posted in or shortly after August 2021. I can only show you a screenshot of its title and abstract, because KLGGold's blog is also no longer accessible. This is another example where the proponent, only recently having acquired KLGGold, is not transparent with the public and even actively withdraws previously accessible public information.

<https://www.kl.gold/kl-nuggets/blog-details/2022/MACASSA-BIOCORD-PILOT-PROGRAM/default.aspx>

### Kirkland Lake Gold - MACASSA: BIOCORD PILOT PROGRAM

BioCord™ Pilot Program was commissioned at our Macassa Mine in August 2021 to test the efficiency of the BioCord technology in reducing the level of total ammonia found downstream of the current Effluent Treatment Plant. BioCord reactors provide an environment for bacteria to grow and aggregate on biofilm. They are designed to enhance biological nutrient removal by providing wastewater ...

[www.kl.gold](http://www.kl.gold)

As you can see, KLGGold was taking further steps to reduce ammonia levels in its downstream effluent. Apparently, KLGGold was not satisfied with the quality of the effluent and/or had started to exceed environmental standards which required KLGGold to come up with new solutions. The

problems with the management of effluent will be the same in the Misema River, if the proponent gets the go ahead.

This is only one of many situations KLGold (now part of the proponent) is wrestling with, at only one location. What else is happening at 'just' Macassa? What is happening at all other locations in our region that the proponent is exploring/exploiting? What will happen to Esker Lakes Provincial Park, located directly to the south/south-east of vast KLGold holdings, when the proponent starts to explore there and decides it wants to develop a giant open pit mine?

How will the proponent's long term regional plans impact Gem Lake Maple Bedrock Provincial Park, Pushkin Hills Provincial Park, and South Grassy Lake Outwash Conservation Reserve?

Now that the proponent owns both its original and since recently also all KLGold's holdings, does it not become responsible for all the regional individual and cumulative effects together?

It is important to calculate the cumulative effects at UB by itself. But these effects cannot be seen separate from everything else the proponent is already doing in the area and the projects that the proponent wants to move forward with in the very near future. For the IAAC to get a good idea of all cumulative effects, the proponent has to be transparent about everything that has been mentioned above, under 1, 2, and 3. The UB proposal is only the newest of many domino stones that will effect our region. Each domino stone has its own cumulative effect and all of these together will be an almost incalculable cumulative effect.

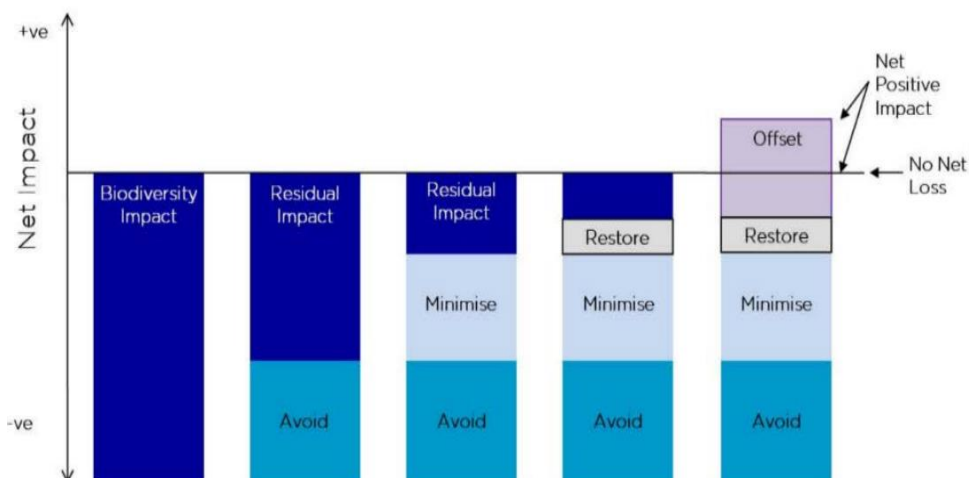
While the proponent precisely calculates how much gold it can extract from each ore deposit it owns, it is absolutely not clear how the region will benefit. The proponent promises financial revenue in the form of jobs (which, by its own admission, will be lower paying supportive jobs, not jobs that it requires experienced miners for), but the proponent does not account for the loss in peaceful habitats for all living beings, including wildlife, fish, trees, residents, and recreational use, for the strain on our already limited health care services, and vastly increased risks while driving, when the proponent starts to truck in lots of ore from other locations to UB.

Can this proponent, the now largest regional employer, compensate the region for all this loss? What if the area truly becomes uninhabitable in 10, 15 years, because of the above-mentioned domino effect?

In the DPD the proponent mentions that the area is economically impoverished, but it is by now also clear that the proponent will leave the area environmentally impoverished once it is done, despite the proponent promising to 'be a good neighbor' in its presentations (which, by the way, it also promised to residents of Malartic).

And what about the promised mitigation concepts brought up by the proponent in December 2020? The entire idea of 'having a net positive impact at the end of the project', whenever that may be, is not feasible when literally many millions of tons of dry stack tailings will be left on the land, north of Beaverhouse Lake, and the Misema River and other waterbodies downstream will be effected by all the effluent they have transported and absorbed all those many years.

## MITIGATION CONCEPTS



**Mitigation measures**

- Ongoing process
- To be put in place for what can't be avoided
- Mitigation measures are developed during impact assessment and with community participation
- **Objective is to have a net positive impact at the end of the project**

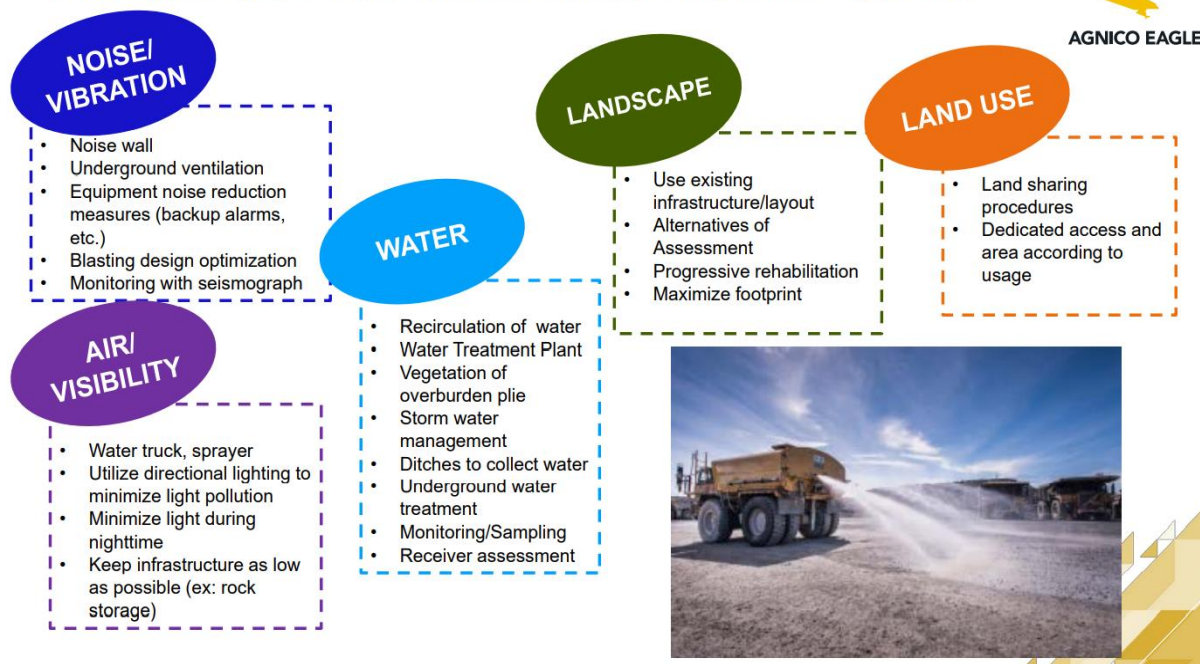
Agnico Eagle | December 2020

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Note here that the proponent does not list the risks of those dry stack tailings at all and that what it mentions as 'mitigation measures' are mostly connected to the open pit mining process and not to those tailings and the effects on the water quality in the Misema River and further downstream long after the mining and milling ceases.

Note also that the proponent lists these mitigation measures as 'potential' when it knows well from its activities in other locations that these are the bare minimum measures it can take to reduce its direct impact on the environment and on residents, and that most often those mitigations measures are not sufficient to prevent long lasting damage to both.

## EXAMPLES OF POTENTIAL MITIGATION MEASURES



The story in Dobie is that the proponent would like to have its regional headquarters in Dobie, and that there is so much gold in the ground here that it is inevitable that all of Dobie may literally become ‘undermined’ as well. The overall expectation is that the proponent eventually will buy out all residents, like they have done already with quite a few land and residential owners around Beaverhouse Lake. Where will the Dobie residents go? They love to live in Dobie, many have lived here their entire lives, and for some it will be near impossible, at current prices, to buy something comparable in another location not too far away. Additionally, this may become even more difficult when the mining/milling activities of the proponent start to effect those other locations as well. Many who are working in the area cannot and do not want to leave the area either. Dobie residents, similar to Beaverhouse Lake residents, are literally stuck between a rock and a hard place.

Residents in Dobie also express that the wildlife populations have already significantly decreased since the proponent started to do more exploratory drilling etc. all over the entire area in 2018.

One thing is certain: once the proponent is ‘done’ with its Kirkland Lake Project in this entire area, the region will never again look like this:



5. A final point about several smaller items:

- a. It has to be understood that the person who pays for the studies gets the desired results. In this case: the proponent has and will pay for all the required studies and can therefore influence when, how, and where these studies may be conducted. This may lead to studies done in the wrong season, in the wrong location, etc.
- b. Seeing that the proponent at present is withholding a lot of information from the public and also from the IAAC, trust that these studies will be done correctly is very small.
- c. It is strongly suggested that older wildlife data etc. (from prior to 2018) will be used as baselines, for example, from MNRF and from older documents from predecessors of the proponent.
- d. It would be a useful exercise to have the entire region as it is now valued according to ideas set out in this publication: <https://davidsuzuki.org/wp-content/uploads/2018/02/ontario-wealth-canada-future-value-greenbelt-eco-services.pdf>

Northern Timiskaming needs sustainable, non-destructive local businesses that reinvest the greater part of their profits into the region and that do not disappear once either the gold price collapses or its ore bodies are exhausted, whichever comes first.

Northern Timiskaming needs strong, constructive local industries that employ local employees, attract employees to settle in the area, and do not rely on non-local workforces.

Northern Timiskaming already has quite a bit of mining industry spread throughout the entire region and indeed, suddenly, the proponent, because of the merger, now is the largest employer here. That means that the proponent has to take responsibility for all its actions and effects here.

Essential conditions for the entire region to thrive are clean water: to drink, to use domestically, recreationally, for First Nations' purposes, and for everything that lives in and is nourished by it, clean air to breathe in, an undamaged, natural landscape (including uneffected provincial parks) for wildlife to do well on, and healthy forests for our oxygen.

Especially now, with the housing prices in the GTA being so high that people are coming north to settle here we need to strengthen these conditions, not weaken them. Others, who are settling a bit further south, will come up here to recreate and spend money. Only when the essential environmental conditions are present will northern Timiskaming be able to grow and continue to do so after the mines are depleted.

I thank you for the opportunity to respond at this stage of the IA process and wish you well with incorporating my, and all other, comments in the TISG and PPP.

Sincerely,

Maria Lelie

<Personal information removed>



Attachments: see next page

Attached you find:

Appendix A: as attachment to the email that these comments were attached to as well.

Proponent's presentation of May 2018 to First Nations in which the proponent states that at Upper Beaver will take place: *'No ore processing on site, no mill and no tailings produced'* (see slide 34, shown below). This can be seen as a misleading comment. About what 'possible project' is the proponent speaking here? The Advanced Exploration Project or a subsequent actual mining project? (Compare this with slide 9 of the 2020 presentation attached as Appendix B). Note that in its 2018 presentation the proponent makes no mention of an actual mill on site because it doesn't expand on the actual mining phase (despite mentioning this phase earlier in the presentation). It makes sense that those who attended this meeting and saw later presentations were caught off guard about the proponent's 'sudden' mill addition in December of 2020.

It seems that the proponent leaves out important parts of what it is planning, thus making it the responsibility of those who are watching/participating to ask pertinent questions, only to then not be forthcoming with transparent answers.

This tactic may have put the minds of those who attended at ease, thus stopping them from investigating whether the proponent already then was applying for important permits it is now relying on to progress with the AEP.

## Upper Beaver **Advanced Exploration Project**

**AEM technical team is currently reviewing the parameters of the project**

Highlights of possible project:

- Would like to restart advanced exploration in 2020
- Exploration shaft likely at the same location (same as 2012)
- Possibility to add underground access through a ramp (portal)
- Likely use existing road, may have to upgrade road
- Bulk sampling tonnage under review.
- No ore processing on site, no mill and no tailings produced

**\*Permitting to be adjusted according to the chosen option**



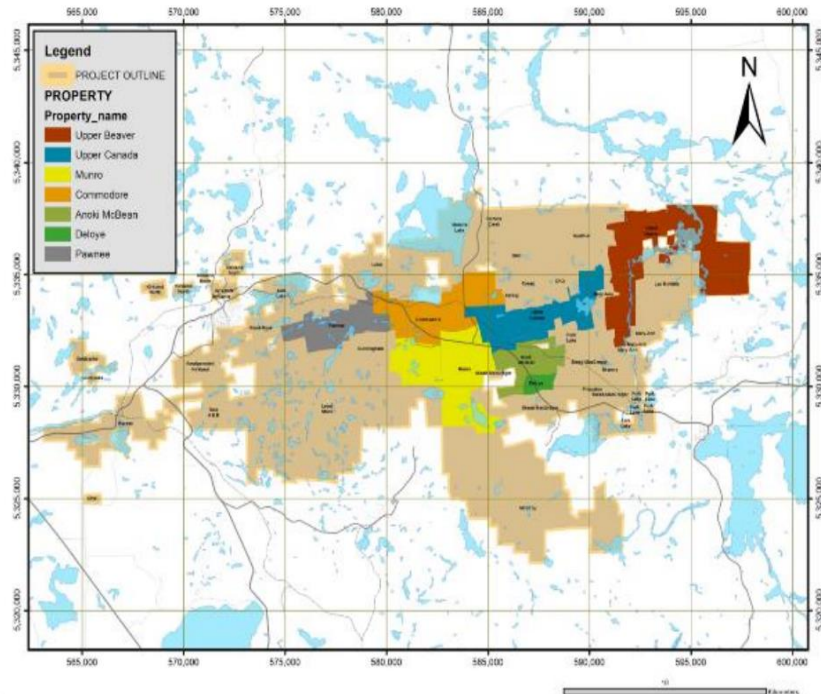
Agnico Eagle | May 2018

Several maps (starting on slide 15) show how the proponent perceives the ore bodies it owns

between Kirkland Lake and Larder Lake: the proponent sees its lands as one Project of which parts are identified with different location names.

The discrepancy between the area called UB in the DPD and the lands the proponent actually calls UB, as seen on below map, could potentially lead to issues with regard to future activities on lands not included in the DPD but still seen as part of UB.

## Project Update – Exploration Activities



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Thus, note in this Appendix that the proponent marks a much larger area as ‘Upper Beaver’ than the proponent shares in the DPD. The footprint of the proponent’s objectives for all the land west, north, south, and east of Beaverhouse Lake is both huge and irreversible: mining and tailing storage. It is not possible that this will not have huge consequences for Beaverhouse Lake itself.

Beaverhouse Lake in its entirety will become affected by all the activities that will surround it: the entire First Nations’/residential/recreational use of Beaverhouse Lake and consequently also of the waters upstream (Misema and Howard Lakes) and downstream (Misema River and other waterbodies downstream) will be affected and potentially lost.

Appendix B: as attachment to the email that these comments were attached to as well.


Proponent's presentation of December 2020 to 'Cottagers and Surface Rights Owners'.

Note slide 15: Ongoing exploration/survey at Anoki/McBean, Upper Canada, Munro, Skead (south of Dobie), Amalgamated Kirkland location.

## 2020 - EXPLORATION



AGNICO EAGLE

<b>Other properties</b>	<b>Upper Canada / Munro / Skead</b>	
	Exploration drilling completed on Anoki-McBean in June (1 drill).	
	Geophysical survey completed on Upper Canada, Munro, and Skead last spring.	
	Small geophysical survey ongoing at Upper Canada East.	
	<b>Amalgamated Kirkland (AK)</b>	
	Exploration drilling completed in September (1 drill).	

Agnico Eagle – December 2020

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Note as of slide 34: 3 scenarios are presented to deal with the mentioned instability issues above the old mine workings. Note the pros/cons of each of the 3 scenarios, which are not well worked out and do not include financial data. Note how in preferred scenario C the cost to the environment is casually offset by economic viability (which is not qualified in \$). How much (to be expected) low to medium graded ore will the open pit (300m in diameter x 100m deep) actually contain? How does this line up with the concept of 'no net loss' and the mitigation concepts/measures on slides 47 and 48, which do not refer to the cumulative cost of the irreversible destruction to the environment but only to direct mining activities (which are regulated by the province and do not protect the environment)?

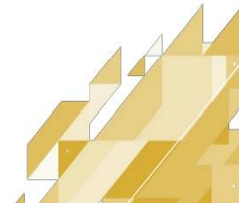
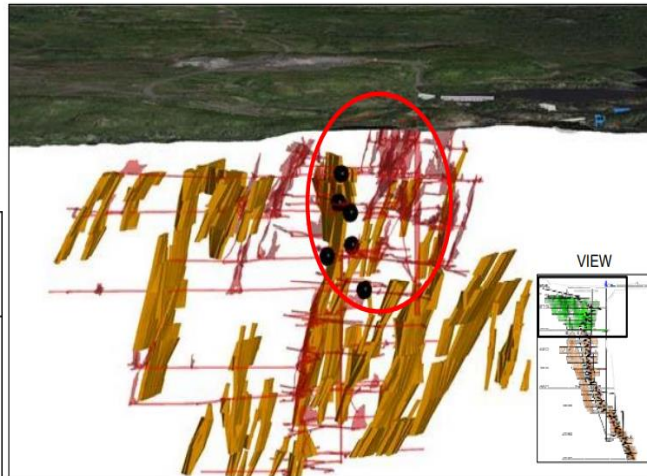
## MINING PROJECT SCENARIOS ASSESSED



### SCENARIO A

Underground mining with the area of concern isolated by hydrostatic barricades

<b>PROS</b>	Lower environmental impact
<b>CONS</b>	High level of complexity Safety risks remain Impact on economics due to the loss of potential ounces of gold



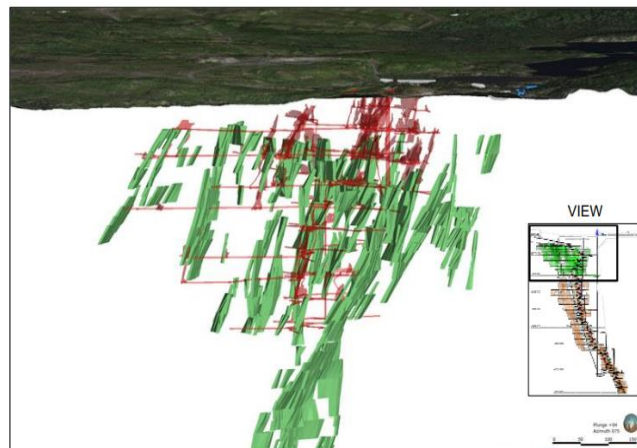
## MINING PROJECT SCENARIOS ASSESSED



### SCENARIO B

Underground mining with Dewatering/Diversion York Lake

<b>PROS</b>	Remove risk associate hydraulic conductivity
<b>CONS</b>	The risk of ground stability remains Still need to avoid the area of concern Impact on economics due to the loss of potential ounces of gold Environmental impact Required removal of overburden in the York lake area Potential concerns from users of the area



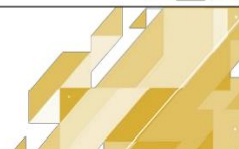
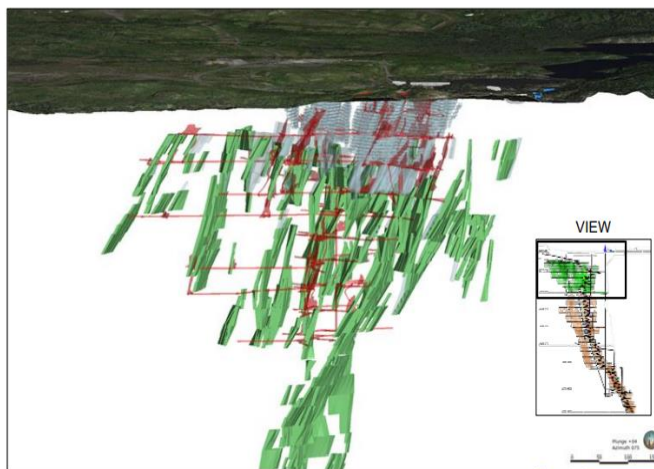
## MINING PROJECT SCENARIOS ASSESSED



### SCENARIO C

Underground mining, extraction from surface of the area of concern with small pit, and dewatering/diversion York Lake

<b>PROS</b>	Remove risk associate with ground stability and hydraulic conductivity Opportunity to rehabilitate historic legacies Maintains the economics of the project
<b>CONS</b>	Environmental impact Potential concerns (noise, air, etc)



## PROJECT SCENARIOS



### Because of the following key elements :

- Safety of operations during the project
- Viability of the project (economic)
- Opportunity to eliminate ground stability risk at surface (fenced area)
- Opportunity to rehabilitate old tailings and waste rock in York Lake area

At this time, the viable scenario is the **scenario C** - Extraction from surface with diversion of water

We are still assessing scenario C and we understand that they are different than the initial foreseen design but adjusting a project design upon new technical information is part of the project design process, and most importantly, part of due diligence.

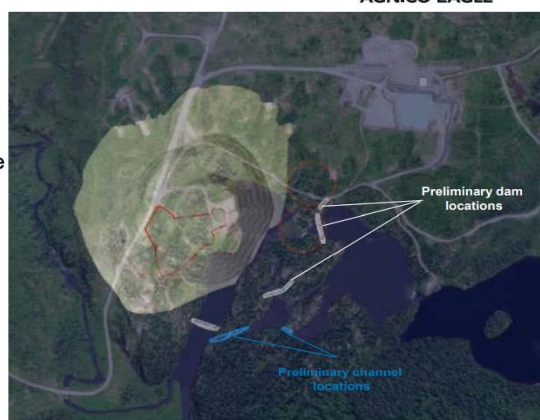
Agnico Eagle | December 2020

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## PREFERRED SCENARIO - ADDITIONAL INFO.



- Extraction of the area of concern with a small pit.
- Surface extraction limited to the first 100 m of the ore body (pit depth).
- Extraction from the small pit would only be during the first years of the project (around 4 years). The rest of the mining would be from underground via the shaft/ramp.
- Requires the diversion of the Misema River and the dewatering of York Lake.
- Opportunity to eliminate ground stability issues from historic workings and rehabilitate the historic legacies (e.g. tailings in lake)
- The pit would be filled with water at the end of the mine life.
- We will keep access to Beaverhouse Lake for users



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Appendix C: See further down this document.

Northern News' article from February 24, 2022 in which proponent shows that

1. The Macassa Mine now has a new 4,000ton/day shaft (in addition to its older 2,000ton/day shaft) which will bring up ore production levels significantly. However, the 2,000ton/day mill at the Macassa Mine has not been expanded. Where will all that extra ore be milled?
2. The Holt mill is still on care and maintenance.
3. Proponent is actively exploring the Upper Canada's deposits which are located directly south-west of the UB deposits.
4. Proponent is also actively exploring at the Anoki and McBean deposits which are located respectively south and south-east of the Upper Canada deposits.
5. Proponent now owns: **1917 mineral titles** - *The large property measures approximately 35 kilometres long by 17 kilometres wide* from west of highway 11, via Kirkland Lake all the way east to north of Larder Lake and south-west of Larder Lake.
6. The article states: *Following completion of the Merger, the company also has more processing options available including building a standalone mill and tailings facility at [UB] site or using an existing mill and tailings facility at either the Macassa mine or the Holt mining complex.*

Let the proponent show: entirely worked out, alternative solutions to the UB mill/Misema River diversion/effluent disposal idea in its current proposal and let it include all the ore transporting that will need to be done to make this possible, including the cumulative effects of that transporting.

Appendix D: Also attached to the email these comments arrived with.

Proponent's Baseline Studies Overview as of October 1, 2021.

Appendix E: Also attached to the email these comments arrived with.

My original submission to the IAAC in October 2021, written for the purpose of asking the IAAC for an Impact Assessment but also very much applicable to all comments above.

## APPENDIX C

<https://www.northernnews.ca/news/agnico-eagle-announces-2021-results>

Agnico Eagle announces 2021 results

Author of the article:

[Northern News staff](#)

Publishing date:

Feb 24, 2022 • February 24, 2022 • 9 minute read •

[Join the conversation](#)



This aerial photo shows the Macassa Mine. FILE PHOTO/POSTMEDIA NETWORK SunMedia

Agnico Eagle Mines Limited has announced senior management changes and reported fourth quarter and full year 2021 financial and operating results, as well as future operating guidance.



Ammar Al-Joundi has been appointed President and Chief Executive Officer, effective immediately. Al-Joundi joins the Company's board of directors. Anthony Makuch advised the board that he has decided to step down as Chief Executive Officer and as a director of Agnico Eagle.

The Agnico Eagle Board expressed its thanks to Makuch for steering Kirkland Lake Gold through this transformative transaction and for his contributions to Kirkland Lake Gold during his tenure.

Makuch stated "we built Kirkland Lake Gold by acquiring, developing and operating high-quality assets in good jurisdictions with significant exploration upside. Just as important, we built a business based on honesty, integrity, respect for all people and support for communities. We have culminated all this with the merger of equals with Agnico Eagle and I am very proud to have been involved in creating the third largest global gold producer in the world. I am leaving Agnico with a strong and dedicated leadership team and I believe they will continue to be successful. I would like to thank the tremendous team of people at Kirkland Lake Gold for their years of hard work and support in building a truly special company."

Jeff Parr, Vice-Chair of Agnico Eagle and former Chair of Kirkland Lake Gold, said, "We want to thank Tony for his tremendous contribution to the success of Kirkland Lake Gold, building the company into a 1.4 million ounce per year producer with the industry's lowest unit costs and significant growth potential. Tony's track record for enhancing the value of assets through investment in exploration, development and the optimization of performance is unsurpassed and we know he will continue to have great success in whatever venture he chooses next."

"The fourth quarter of 2021 was Agnico Eagle's fifth consecutive quarter of over 500,000 ounces of gold production, which is particularly impressive given the impacts of COVID-19 during the latter part of the quarter.

On a full year basis, in 2021 the Company achieved records in gold production, operating cashflow and mineral reserves, all while delivering the best safety performance in the Company's 64-year history", said Ammar Al-Joundi, Agnico Eagle's President and Chief Executive Officer. "Looking forward, all of our mines, both those contributed by Agnico Eagle and Kirkland Lake Gold, are well positioned for another strong year in 2022, and well into the future. Furthermore, the Company is investing more than ever before at our mines and in exploration to build an even stronger business, in what we believe are the best places in the world to mine for gold", added Al-Joundi.

Looking locally to the Macassa Mine, sinking of the number four shaft was completed in January, over a year earlier than initially planned. The completion of other number four shaft development activities is expected in late 2022. The number four Shaft is expected to provide numerous benefits, including increased hoisting capacity, improved unit costs, better ventilation, and enhanced capabilities to pursue exploration potential across the Kirkland Lake camp. **Gold production at Macassa is forecast to increase from 170,000 to 190,000 ounces in 2022 with a target to approximately 330,000 to 350,000 ounces in 2024. Production levels could potentially increase once the full benefit of the #4 Shaft is realized.**

**The company also announced that at Macassa the company expects to spend approximately \$20.3 million for 99,900 metres in capitalized drilling and to develop exploration drifts to replace mineral reserves and mineral resources depletion. Another \$18.9 million is budgeted for exploration, including \$10.4 million for 89,700 metres of exploration drilling to continue to investigate extensions of key targets at South Mine Complex (East, West, Upper and Lower), Main Break, '04 Break, Amalgamated Break and near-surface. The remaining \$8.6 million of exploration will be spent developing a 1.3 kilometre exploration ramp from the Near-Surface area in order to access, develop and infill with underground drilling the mineralization on the AK property.**

For regional exploration in Ontario, the Company expects to spend a total of \$19.1 million for 53,900 metres of drilling, including: \$2.6 million for 12,200 metres for surface exploration drilling at the AK property for mineral resource conversion; **\$7.9 million for 15,800 metres of drilling at the Upper Beaver and Upper Canada deposits and other targets in the Kirkland Lake camp.**

Company officials added **The Company is evaluating the possibility of using the existing Macassa near surface zone infrastructure to access the AK deposit.** Preliminary evaluations indicate that mining activities could begin as early as 2024 and production could average approximately 40,000 ounces per year, at total cash cost per ounce of \$650-\$750. This production is expected to have a positive impact on cash flow generation at Macassa. Permitting work is ongoing and the Company expects to make a production decision later in 2022.

**The Company is currently reviewing the concept of leveraging the Macassa infrastructure or the Holt Complex infrastructure and the shaft sinking experience at Macassa to enhance project returns at Upper Beaver.** The sinking of the Macassa number four shaft is now complete. **The Macassa internal team and shaft sinking equipment could be used at Upper Beaver and could result in potential savings of tens of millions of dollars.**

Company officials go on to say following the completion of the Merger, **Agnico Eagle controls 1,917 mineral titles covering approximately 29,469 hectares (295 square kilometres) in the Kirkland Lake gold camp,** which has historically produced more than 25 million ounces of gold to the end of 2021.

**The large property measures approximately 35 kilometres long by 17 kilometres wide.**

**Following the merger, the company now owns the producing Macassa mine and mill and the Holt mining complex near Matheson. The Holt mill, which is currently on care and maintenance, has a capacity of 3,000 tpd and a fully permitted tailings storage facility. The company plans to evaluate the potential to integrate a number of satellite deposits with the existing infrastructure in the region.**

In 2022, the Company plans to develop a 1.3 kilometre exploration ramp from the existing Macassa Near-Surface zones (“NSUR”), which is expected to cost approximately \$8.6 million. The exploration ramp is designed to provide access to carry out infill drilling and collect a bulk sample from the higher grade portions of the deposit.

Mining of the AK deposit is expected to be similar to the mining activity at the LaRonde Complex. An initial evaluation estimates that production from the AK deposit could begin as early as 2024 and ramp up over a seven-year period. Production is forecast to average approximately 40,000 ounces per year with average cash total costs per ounce of approximately \$650-\$750.

**Meantime The Upper Beaver deposit is located approximately 27 kilometres from the Macassa mine, and 60 kilometres from the Holt mining complex.** Upper Beaver is a gold-copper deposit that is mainly hosted in the Upper Beaver alkalic intrusive complex and the surrounding basalts it intruded, and is associated with disseminated pyrite and chalcopyrite, and magnetite-sulphide veining associated with strong magmatic-hydrothermal alteration. **The mineralization occurs as elongated tabular bodies that strike northeast, dip steeply northwest and plunge 65 degrees to the northeast. The mineralization has been defined along a 400-metre strike length from surface to a depth of 2,000 metres and it remains open at depth.**

In 2021 at Upper Beaver, 163 holes totaling 58,691 metres were drilled in both the shallow conversion program between surface and 500 metres depth and the conversion and expansion drilling at depths between 800 and 1,500 metres that targeted the Porphyry, Footwall and Gap zones. The conversion and expansion drilling continued to intersect significant high-grade mineralization, further expanding the Footwall and Porphyry zones at depth. **Recent results include a highlight intercept grading 8.7 g/t gold and 0.81% copper over 18.2 metres at 1,435 metres depth in the East Porphyry Zone.**

The 2021 exploration results are expected to have a positive impact on the next mineral reserve and mineral resource estimate to be included in an internal technical evaluation of the Upper Beaver deposit expected to be completed in 2022. The Company believes that with ongoing exploration, there is strong potential to delineate additional mineral resources at depth and proximate to the known deposit areas. The mineral reserves and mineral resources presented below are unchanged from December 31, 2020.

As of December 31, 2021, Upper Beaver had approximately 1.4 million ounces of gold and 20,000 tonnes of copper in underground probable mineral reserves (8.0 million tonnes grading **5.43 g/t gold** and 0.25% copper); 403,000 ounces of gold and 5,100 tonnes of copper in underground indicated mineral resources (3.6 million tonnes grading **3.45 g/t** and 0.14% copper); and 1.4 million ounces of gold and 17,300 tonnes of copper in underground inferred mineral resources (8.7 million tonnes grading **5.07 g/t** and 0.20% copper). For a detailed discussion of mineral reserves and mineral resources see “Detailed Mineral Reserve and Mineral Resource Data (as at December 31, 2021)” in this news release.

The company is evaluating different scenarios on how to best mine the deposit that starts from surface and remains open below 1.8 kilometres. In the 1930s, the Upper Beaver deposit was mined from surface to 400 metres depth, **exploiting narrow high-grade zones** containing gold and copper. The company believes that Upper Beaver has the potential to be a **low-cost** mine

with annual production in the range of 150,000 ounces to 200,000 ounces of gold and moderate capital outlays.

**Following completion of the Merger, the company also has more processing options available including building a standalone mill and tailings facility at site or using an existing mill and tailings facility at either the Macassa mine or the Holt mining complex.**

**The Upper Canada deposit lies approximately 6 km southwest of the Upper Beaver property, and 1.6 km north of the main LCDZ, within a 300 to 400-m-wide strongly altered deformation corridor.** Host rocks are primarily volcanic (trachyte) tuffs and sediments that have been intruded by syenite bodies. Gold mineralization is associated with intensely altered shear zones with fine pyrite and ancillary sulphide mineralization. En-echelon higher-grade lenses are present within a broader envelope of lower grade mineralization.

Upper Canada was in production from the 1930s to the 1970s and produced 1.5 million ounces. Drilling by various owners over the last few decades has defined a wider zone around the old narrow workings hosting the current mineral resources.

**At year-end 2021, the Upper Canada deposit** was estimated to contain 104,000 ounces of gold in open pit indicated mineral resources (2.0 million tonnes grading **1.62 g/t**) and 618,000 ounces of gold in underground indicated mineral resources (8.4 million tonnes grading **2.28 g/t**). In addition, there are 1.8 million ounces of gold in underground inferred mineral resources (8.7 million tonnes grading **3.21 g/t**).

**The combined indicated mineral resources at the property's Anoki-McBean deposit** have been estimated at 1.9 million tonnes grading **5.33 g/t gold** (containing 320,000 ounces of gold) as of December 31, 2021, and there are additional inferred mineral resources, all at underground depths.

**Agnico Eagle now controls six of the original producing mines along the Main Break in the Kirkland Lake mining camp. The underground workings of these mines are all interconnected and tie into production areas at the Macassa mine.**

**The company plans to continue to work with the historical data to assess the potential of longer-term exploration targets along the Main Break. The near-term focus will be to assess the mineral potential to the east and along the Main Break below the 5800 Level at Macassa and east onto the Kirkland Minerals and Teck-Hughes properties. Any significant discoveries on these properties could provide incremental sources of ore for the Macassa mill.**