



PRETIVM 

BRUCEJACK GOLD MINE
2020 CEEA Annual Report

March 2021



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EXECUTIVE SUMMARY

Pretium Resources Inc. (Pretium) received the Canadian Environmental Minister's Decision Statement on July 30, 2015 for the Brucejack Gold Mine, an underground gold mine located 65 km north of Stewart, British Columbia (BC). Construction activities commenced on September 5, 2015 with commercial operation achieved on July 1, 2017. 2020 was the third full calendar year of gold production.

Pursuant to Condition 10 of the Decision Statement, the Implementation Schedule was provided to the Nisga'a Nation, Tahltan Nation, Tsetsaut/Skii km Lax Ha, and the Canadian Environmental Assessment Agency (CEAA) in August 2015, with updates on February 24, 2017, March 13, 2019, and March 29, 2021.

At the mine site, fish and fish habitat protection during 2020 continued to be achieved through use of the water treatment plant and three turbidity curtains at the outlet of Brucejack Lake. Tailings were generated in 2020 and deposited as a thickened slurry on the bottom of Brucejack Lake. Waste rock from underground activities in 2020 was deposited subaqueously in Brucejack Lake. Effluent monitoring continued as per BC *Environmental Management Act* Permit 107835 and the Metal and Diamond Mining Effluent Regulations (MDMER). The MDMER Second Biological Monitoring Study Plan was filed with Environment and Climate Change Canada on February 3, 2020. Field sampling for the MDMER Second Biological Monitoring Study was completed in August 2020. The Second Interpretive Report will be submitted in July 2021.

To protect western toad (*Anaxyrus boreas*) during migration, five toad tunnels and a modified bridge were installed along the Brucejack Access Road in 2016 and 2017. Toad use of the tunnels and the modified bridge was monitored with remote trail cameras and ground surveys in 2020 between July 11 and September 25. Monitoring surveys have now been conducted for toadlet migration periods over the last four years.

Air quality management during 2020 focused on measures to reduce fugitive dust. Tsetsaut/Skii km Lax Ha relocated their lodge in 2017; monitoring of air quality continued at the new lodge location. The 2020 air quality report on monitoring at the lodge was sent to Nisga'a Nation and Tsetsaut/Skii km Lax Ha on March 26, 2021.

Pretium continued to maintain a security gate at the start of the Brucejack Access Road during 2020. The "No Hunting, No Fishing, No Trapping Policy" remained in place. Screening for firearms and fishing equipment continued at the security facility located at km 1 of the Brucejack Access Road.

Measures to protect wildlife along the Brucejack Access Road are enhanced by posting wildlife related signage, including for toad tunnels locations and speed limits; through education programs; and by reducing high snowbanks along the road. Reducing high snow banks allows large ungulates the opportunity to escape rather than being trapped on the road and potentially endangered by vehicle traffic.

No archaeological sites were discovered during 2020 activities, including during an archaeological assessment conducted along the Brucejack Access Road in September 2020 under BC Heritage Inspection Permit 2020-0105.

Record keeping continued during 2020 using the systems established in 2015.

Throughout 2020, Pretivm consulted with the Nisga'a Nation, Tahltan Nation and Tsetsaut/Skii km Lax Ha. This occurred through the BC Environmental Assessment Office and BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development for applications to amend Environmental Assessment Certificate #M15-01, Special Use Permit S25923 and Occupant License to Cut 50280 to support proposed activities associated with operation and maintenance of the Brucejack Access Road. Consultation with Aboriginal groups also occurred:

- through referral of other applications and reports, including:
 - an application to amend *Mines Act* Permit M-243 to increase the boundary area for the West Zone Ramp, mine development and underground exploration;
 - the 2020 Mine Plan and Reclamation Program Update submission for M-243 and PE-107835 (including new and updated management plans and the Mine Data and Water Quality Modelling Review);
 - the 2019 Annual Report for *Mines Act* Permit M-243 and *Environmental Management Act* Permits PE-107835 and PA-107025;
 - the Wildfire Hill Water Management Plan (Phase 1);
 - the proposed archaeological field assessment along the Brucejack Access Road (subsequently conducted under BC Heritage Inspection Permit 2020-01-05);
 - 2019 air quality monitoring results for the Tsetsaut/Skii km Lax Ha lodge;
 - a Request for Review (RFR) to Fisheries and Oceans Canada for replacement of three existing wood box culverts along the Brucejack Access Road with clear span bridges; and
- via the Wildlife Advisory Committee annual meeting, including through distribution of meeting materials requested by committee members.

Pretivm worked closely with local and regional communities during 2020 to provide information and to maximize benefits associated with employment, training, and business opportunities. Pretivm is in regular contact with Aboriginal groups' employment representatives to communicate job postings, provide information about required skills and experience, and organize recruitment events. Pretivm continues to work with Aboriginal groups to identify training needs and opportunities, as well as opportunities for Aboriginal owned businesses to provide goods and services. As of December 31, 2020, Pretivm's workforce at the mine totalled 1,368 people, including 810 people employed directly by Pretivm and 558 employed through contractors. Procon, with 345 people employed at the mine, is the single largest contractor and responsible for underground mining. Approximately half (48%) of Pretivm's direct hires were from northwestern BC and nearly a third (31%) self-identified as Aboriginal.

RESUME

Le 30 juillet 2015, Pretium Resources Inc. (Pretivm) a reçu la déclaration de décision de la ministre de l'Environnement du Canada relativement au projet de mine d'or Brucejack, une mine d'or souterraine située à 65 km au nord de Stewart en Colombie-Britannique (C.-B.). Les travaux de construction ont débuté le 5 septembre 2015 et l'exploitation commerciale a débuté le 1^{er} juillet 2017. L'année 2020 est donc la troisième année civile complète de production d'or pour cette mine.

Conformément à la Condition 10 de la déclaration de décision, le calendrier de mise en œuvre a été remis à la nation Nisga'a, la nation Tahltan, la nation Tsetsaut/Skii km Lax Ha et l'Agence canadienne d'évaluation environnementale (ACEE) en août 2015, avec des mises à jour le 24 février 2017, le 13 mars 2019 et le 29 mars 2021.

Sur le site de la mine, la protection du poisson et de l'habitat du poisson a continué d'être assurée en 2020 par l'usine de traitement des eaux de l'exploitation et par les trois rideaux de confinement installés au point de décharge du lac Brucejack. Les résidus produits en 2020 ont été déposés sous forme de boues épaisses au fond du lac Brucejack. Les roches stériles (en quantité très limitée) provenant du développement en surface et des travaux souterrains en 2020 ont été placées dans les eaux du lac Brucejack. La surveillance des effluents s'est poursuivie en vertu du permis 107835 de l'*Environmental Management Act* de la C.-B. et du *Règlement sur les effluents des mines de métaux et des mines de diamants* (REMM). Le plan pour la deuxième étude de suivi biologique en vertu du REMM a été déposé auprès d'Environnement et Changement climatique Canada le 3 février 2020. Les travaux d'échantillonnage sur le terrain pour la deuxième étude de suivi biologique en vertu du REMM ont été complétés en août 2020. Le deuxième rapport d'interprétation sera soumis en juillet 2021.

Afin de protéger le crapaud de l'Ouest (*Anaxyrus boreas*) durant sa migration, cinq tunnels à amphibiens et un pont modifié ont été aménagés le long de la route d'accès Brucejack en 2016 et en 2017. L'utilisation des tunnels et du pont par les amphibiens a été surveillée en 2020 à l'aide de caméras de suivi à distance et de relevés de terrain entre le 11 juillet et le 25 septembre. Des enquêtes de suivi pour les périodes de migration des jeunes crapauds ont été réalisées chaque année depuis maintenant quatre ans.

La gestion de la qualité de l'air était axée sur des mesures visant à réduire les poussières diffuses. La nation Tsetsaut/Skii km Lax Ha a déplacé son pavillon en 2017 et la surveillance de la qualité de l'air se poursuit au nouvel emplacement. Le rapport de 2020 sur la surveillance de la qualité de l'air au pavillon a été envoyé à la nation Nisga'a et à la nation Tsetsaut/Skii km Lax Ha le 26 mars 2020.

Pretivm a maintenu une barrière de sécurité à l'entrée de la route d'accès Brucejack durant l'année 2020. La consigne « Interdiction de chasser, de pêcher et de piéger » reste en vigueur. L'examen visant à déceler toute arme à feu et tout matériel de pêche s'est poursuivi au point de sécurité situé au kilomètre 1 de la route d'accès.

Les mesures de protection de la faune tout au long de la route d'accès Brucejack ont été renforcées par l'ajout de panneaux d'information sur la faune, incluant l'emplacement des tunnels à amphibiens et les limites de vitesse, par la mise en œuvre de programmes d'éducation et par la réduction des bancs de neige élevés le long de la route. Réduire les bancs de neige élevés permet notamment aux grands ongulés de fuir plutôt que de rester piégés sur la route et potentiellement mis en danger par la circulation des véhicules.

Aucun site archéologique n'a été découvert durant les activités de 2020, y compris lors d'une évaluation archéologique menée le long de la route d'accès Brucejack en septembre 2020 (en vertu du permis d'inspection 2020-0105 de BC Heritage).

Tout au long de l'année 2020 Pretivm a consulté les représentants des nations Nisga'a, Tahltan et Tsetsaut/Skii km Lax Ha. Ces consultations ont eu lieu par l'entremise du Bureau d'évaluation environnementale de la Colombie-Britannique et du BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (Ministère des forêts, des terres, de l'exploitation des ressources naturelles et du développement rural de la Colombie-Britannique) pour les demandes de modification du certificat d'évaluation environnementale M15-01, du permis d'utilisation spéciale S25923 et du permis de coupe 50280 afin de soutenir les activités proposées associées à l'exploitation et à l'entretien de la route d'accès Brucejack. La consultation des groupes autochtones s'est également faite :

- par le biais d'autres demandes et rapports, y compris :
 - une demande de modification du permis M-243 délivré en vertu de la *Loi sur les mines* afin d'augmenter l'aire limite de la rampe de la zone ouest, de l'aménagement de la mine et de l'exploration souterraine ;
 - la soumission de la mise à jour 2020 du plan de la mine et du programme de remise en état pour les permis M-243 et PE-107835 (incluant des plans de gestion nouveaux ou mis à jour) ;
 - l'examen des données de la mine et de la modélisation de la qualité de l'eau ;
 - le rapport annuel 2020 pour le permis M-243 délivré en vertu de la *Loi sur les mines* et les permis PE-107835 et PA-107025 délivrés en vertu de l'*Environmental Assessment Act* ;
 - le plan de gestion de l'eau (phase 1) pour Wildfire Hill ;
 - les études archéologiques sur le terrain proposées ;
 - les résultats de la surveillance de la qualité de l'air pour le pavillon Tsetsaut/Skii km Lax Ha ;
 - une demande de révision à Pêches et Océans Canada pour le remplacement de trois dalots en bois existants le long de la route d'accès Brucejack par des ponts à portée libre ; et
- lors de la réunion annuelle du Wildlife Advisory Committee (Comité consultatif sur la faune), y compris par la distribution de documents de réunion demandés par les membres du comité.

Pretivm a collaboré étroitement avec les communautés locales et régionales au cours de l'année 2020 afin de fournir des informations et de maximiser les avantages liés à l'emploi, à la formation et aux opportunités commerciales. Pretivm communique régulièrement avec les représentants responsables de l'emploi des groupes autochtones pour leur transmettre des offres d'emploi, leur donner de l'information sur les compétences et l'expérience requises et pour organiser des activités de recrutement. Pretivm continue de travailler avec les groupes autochtones afin d'établir les besoins et les occasions de formation et de voir comment les entreprises de différents groupes autochtones pourraient offrir leurs biens et services. Au 31 décembre 2020, le personnel de Pretivm à la mine comprenait 1 368 travailleurs, incluant 810 employés directs et 558 sous-traitants. Procon est le plus gros sous-traitant avec 345 personnes employées à la mine et responsables des travaux souterrains. Environ la moitié (48%) des employés directs de Pretivm sont des résidents du nord-ouest de la C.-B. et presque un tiers (31 %) se sont déclarés Autochtones.

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Appendix A Brucejack Gold Mine Project: Implementation Activities Undertaken
(as per CEAA Decision Statement Condition 2.5.1)

GLOSSARY AND ABBREVIATIONS

AEMP	Aquatic Effects Monitoring Plan
BC	British Columbia
CO	Carbon Monoxide
EAC	BC Environmental Assessment Certificate
ECCC	Environment and Climate Change Canada
EEM	Environmental Effects Monitoring
EMS	Environmental Management System
IBA	Impact Benefit Agreement
L3 OF	Reference point Lake 3 Outfall
MDMER	Metal Mining Effluent Regulations (SOR/2002-222)
MERS	Mine Effluent Reporting System
NO₂	Nitrogen dioxide
PASS	Passive Air Sampling System
PM_{2.5}	Particulate matter size less than 2.5 microns diameter
PM₁₀	Particulate matter size less than 10 microns diameter
Pretium	Pretium Resources Inc. / Pretium Exploration Inc.
SO₂	Sulphur dioxide
SOP	Standard operating procedure
QA/QC	Quality assurance/quality control
WMP	Wildlife Management Plan

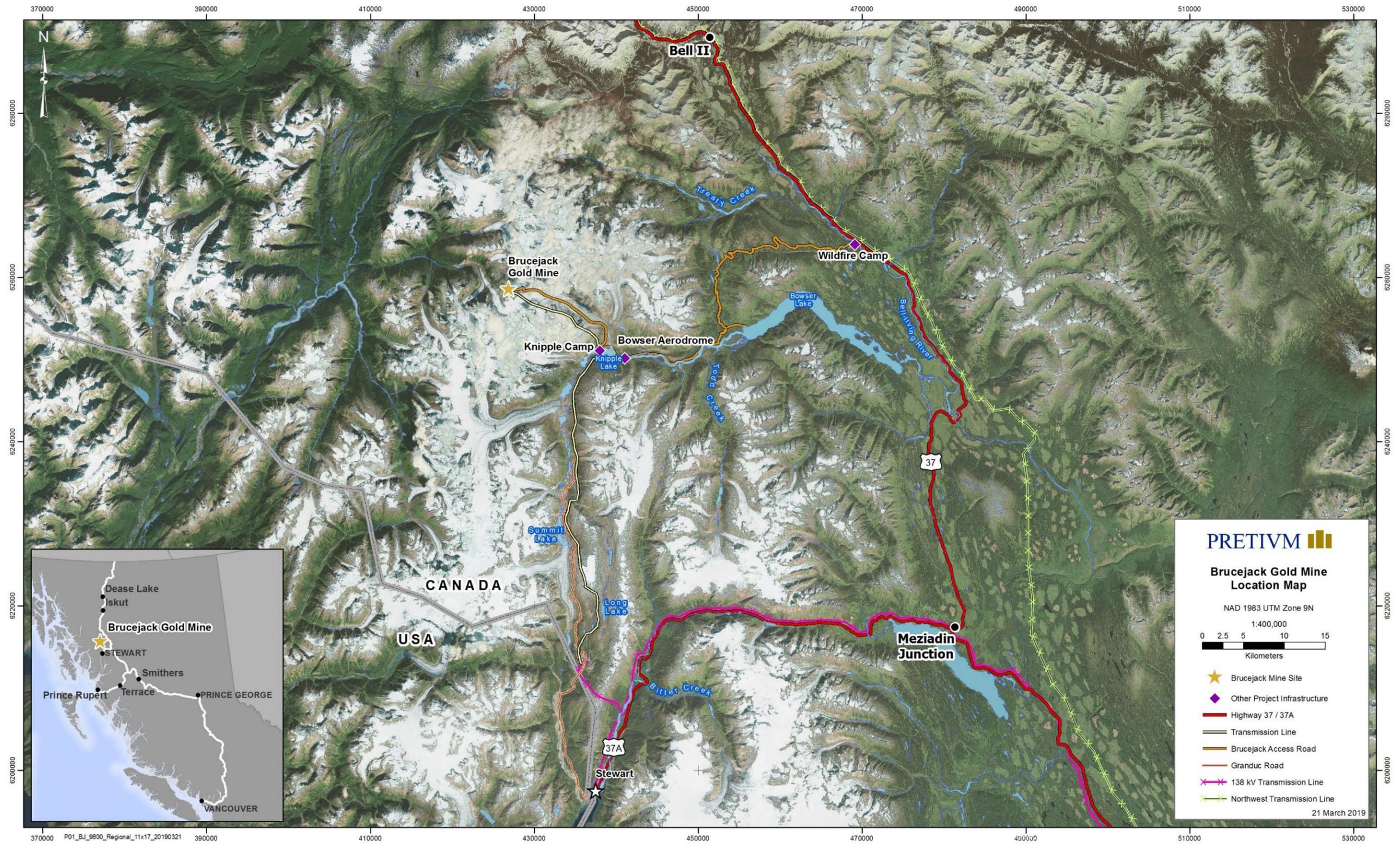
1 INTRODUCTION

The Brucejack Gold Mine is an underground gold-silver mine located approximately 65 km north of Stewart, British Columbia (BC; Figure 1). Current permitted production totals 18.5 million tonnes of mineralized material at an average annual rate of 1,387,000 tonnes on a calendar year basis, i.e., an average rate of approximately 3,800 tonnes per day over a minimum 14-year mine life.

Pretium Resources Inc. (Pretium) received a BC Environmental Assessment Certificate (EAC #M15-01) on March 26, 2015 and a *Canadian Environmental Assessment Act, 2012* Minister's Decision Statement, issued under Section 54, on July 30, 2015. All of the various provincial and federal permits required to construct, operate and decommission the mine have been received. Surface construction activities began at the Brucejack Gold Mine site on September 5, 2015, and commercial production was achieved on July 1, 2017. 2020 was the third full calendar year of gold production.

This report has been developed to meet Decision Statement Condition 2.5: "the Proponent shall, from the reporting year where construction starts, submit to the Agency an annual report." The report is structured such that each heading addresses an annual reporting requirement as defined within the subheadings of Condition 2.5.

Figure 1: Brucejack Gold Mine Location Map



2 **CONDITION 2.5.1: UPDATE ON IMPLEMENTATION OF DECISION STATEMENT CONDITIONS**

Condition 2.5.1: The proponent shall document in the annual report implementation activities undertaken in the reporting year for each of the conditions set out in this Decision Statement.

Refer to Appendix A for the table titled *Brucejack Gold Mine Project: Implementation Activities Undertaken (as per CEAA Decision Statement Condition 2.5.1)* for a compilation of implementation activities that took place during 2020.

3 **CONDITION 2.5.2: INFORMED TECHNOLOGY AND KNOWLEDGE**

Condition 2.5.2: The proponent shall document in the annual report how it has considered and incorporated the factors set out in condition 2.1 in the implementation of the conditions set out in this Decision Statement.

Condition 2.1: The Proponent shall, throughout all phases of the Designated Project, ensure that its actions in meeting the conditions set out in this Decision Statement are informed by the best available information and knowledge, including community and Aboriginal traditional knowledge, are based on validated methods and models, are undertaken by qualified individuals, and have applied the best available economically and technologically feasible measures.

In 2020, Pretivm continued to engage the services of numerous reputable consulting companies and entities (e.g., Lorax Environmental Services Ltd., ERM Consultants Canada Ltd., SRK Consulting, Onsite Engineering Ltd., Knight Piesold Ltd., Northwest Invasive Plants Council, Integral Ecology Group, WSP Canada Inc., Nautilus Environmental Company Inc., ALS, Norlabs, Bureau Veritas) to provide the qualified professionals (e.g., R.P.Bio., P. Ag., P. Eng., P. Geo., P. Chem.) or otherwise qualified persons to implement all activities according to requirements. For example, in 2020 these activities included the MDMER Second Biological Study Design preparation (ERM 2020a); invasive plant species survey and control (Northwest Invasive Plant Council contractor); review of ongoing water quality monitoring in Brucejack Creek conducted in accordance with established management plans by experienced Pretivm scientific staff (Lorax Environmental); review and oversight of ongoing geochemistry program monitoring by experienced Pretivm scientific staff (Lorax Environmental); review of data collected for monitoring ambient air quality parameters at the Tsetsaut/Skii km Lax Ha Lodge and reported by experienced Pretivm scientific staff (ERM); providing advice on aspects of wildlife monitoring (ERM); oversight for monitoring and sample collection from groundwater monitoring wells (Lorax Environmental); review of groundwater well monitoring results (Lorax Environmental); toxicity testwork on aquatic organisms (Nautilus Environmental); annual inspection, engineering oversight and/or reviews for engineering aspects such as subaqueous deposition of waste rock and tailings and surface water management (SRK Consulting, Knight Piesold Ltd.); engineer of record support for the Brucejack Access Road (Onsite Engineering Ltd.) and technical support on the operation of sewerage systems and sewage treatment plants (WSP Canada).

Throughout 2020, Pretivm consulted with the Nisga'a Lisims Government on behalf of the Nisga'a Nation, the Tahltan Central Government on behalf of the Tahltan Nation, and with Tsetsaut/Skii km Lax Ha. This occurred through the BC Environmental Assessment Office and BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development for applications to amend Environmental Assessment Certificate #M15-01, Special Use Permit S25923 and Occupant License to Cut 50280 to support proposed activities associated with operation and maintenance of the Brucejack Access Road. Consultation with Aboriginal groups also occurred through referral of other applications and reports, including an application to amend *Mines Act* Permit M-243 to increase the boundary area for the West Zone Ramp, mine development and underground exploration; the 2020 Mine Plan and Reclamation Program Update submission for M-243 and PE-107835 (including new and updated management plans and the Mine Data and Water Quality Modelling Review) (Pretivm 2020f); the 2019 Annual Report for *Mines Act* Permit M-243 and *Environmental Management Act* Permits PE-107835 and

PA-107025 (Pretivm 2020c); the Wildfire Hill Water Management Plan Phase 1 Plan; proposed Archaeological Field Studies; 2019 air quality monitoring results for the Tsetsaut/Skii km Lax Ha Lodge (Pretivm 2020a); a Request for Review (RFR) to Fisheries and Oceans Canada for replacement of three existing wood box culverts along the Brucejack Access Road with clear span bridges; and through the Wildlife Advisory Committee annual meeting, including through distribution of meeting materials requested by committee members.

4 CONDITION 2.5.3: CONSIDERATIONS FROM CONSULTATION

The proponent shall document in the annual report for conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent has considered any views and information that the Proponent received during or as a result of the consultation.

The following sections identify the Decision Statement conditions that required consultation, and how the Proponent has considered the views and information received as per the requirements set out in Condition 2.2:

- *2.2.1 provide a written notice of the opportunity for the party or parties being consulted to present their views on the subject of the consultation;*

Consultation comments were requested by written notice (email) from the Nisga'a Nation, Tahltan Nation and Tsetsaut/Skii km Lax Ha regarding various reports filed to comply with conditions of permits and other authorizations. Those reports included the 2019 Economic and Social Effects Annual Report (Pretivm 2020e), 2019 Annual Ambient Air Quality at Tsetsaut/Skii km Lax Ha Lodge (Pretivm 2020a), 2019 Annual Glacier Ablation Report (Pretivm 2020b), 2019 Annual Report for *Mines Act* Permit M-243 and *Environmental Management Act* Permits 107835 and 107025 (including updated management plans; Pretivm 2020c), 2019 CEAA Annual Report (Pretivm 2020d), MDMER Second Biological Monitoring Study Design (ERM 2020a), the 2020 Mine Plan and Reclamation Program Update for *Mines Act* Permit M-243 and *Environmental Management Act* Effluent Permit 107835 (including new management plans required for this submission, several updates to existing management plans and the Mine Data and Water Quality Modelling Review; Pretivm 2020f), the Wildfire Hill Water Management Plan Phase 1 Plan, proposed Archaeological Field Studies along the Brucejack Access Road (subsequently conducted under BC Heritage Inspection Permit 2020-010), a Request for Review to replace three existing wood box culverts along the Brucejack Access Road with clear span bridges, and through the Wildlife Advisory Committee annual meeting. In addition, multiple written requests for comments from Aboriginal groups were sent throughout the review processes for applications to amend BC Environmental Assessment Certificate #M15-01, Special Use Permit (SUP) S25923 and Occupant License to Cut (OLTC) 50280 to support proposed activities associated with operation and maintenance of the Brucejack Access Road, and for an application to increase the boundary of *Mines Act* Permit M-243 for mine development and underground exploration.

Consultation with Aboriginal groups occurred during 2020 for revisions to the Air Quality Management Plan, Aquatic Effects Monitoring Plan and the Mountain Goat Management Plan appendix to the Wildlife Management Plan. Updated versions of the Metal Leaching / Acid Rock Drainage Management Plan, Spill Response Plan, Tailings and Subaqueous Waste Rock Deposition Management Plan, Waste Management Plan and Refuse Incinerator Management Plan were included as part of the 2019 Annual Report for *Mines Act* Permit M-243 and *Environmental Management Act* Permits 107835 and 107025 (Pretivm 2020c) referral. Updated versions of the Nitrogen Management Plan and Ventilation Plan were included in the 2020 Mine Plan and Reclamation Program Update for M-243 and PE-107835 (Pretivm 2020f), along with two new management plans required for this

submission: the Closure Underground Water Quality Adaptive Management Plan and the Subsidence Monitoring and Management Plan.

Comments were received on the Air Quality Management Plan and the Mountain Goat Management Plan appendix to the Wildlife Management Plan. Modifications were made to the air quality monitoring program based on comments received on the Air Quality Management Plan. Clarifications and improvements to mitigation measures were made based on comments received on the Mountain Goat Management Plan.

- *2.2.2 provide sufficient information and a reasonable period of time to permit the party or parties being consulted to prepare their views;*

Documents or copies of permit applications were distributed electronically and all parties were given a minimum of 30 days to respond to the requests for comment.

- *2.2.3 provide a full and impartial consideration of any views presented by the party or parties being consulted; and*
- *2.2.4 advise the party or parties that have provided comments on how the views and information received have been considered by the Proponent.*

Responses received from the parties being consulted and Pretivm responses are summarized relative to relevant Decision Statement condition in Sections 4.2 through 4.7 below.

4.1 CONDITION 2.4.2

Discuss consultation activities relative to Condition 2.4.2: Where the results of the monitoring and analysis indicate issues with respect to accuracy of the environmental assessment and/or the effectiveness of any mitigation measures that may lead to adverse environmental effects, identify the means by which the Proponent determines whether additional mitigation measures are required, including the need for consultation with other parties in reaching that determination.

There were no exceedances of MDMER water quality authorized limits of deleterious substances in 2020, nor of the discharge limits for the effluent from Brucejack Lake in BC *Environmental Management Act* Effluent Discharge Permit 107835. There were no exceedances during 2020 of the permit limits of BC *Environmental Management Act* Air Discharge Permit 107025.

Pretivm submitted the Brucejack Gold Mine: MDMER Second Biological Study Design (ERM 2020a) to Environment and Climate Change Canada (ECCC) on January 31, 2020. ECCC provided comments back to Pretivm in a letter dated May 19, 2020. ECCC requested that Pretivm review the updated EPA guideline “Ecological Effects Test Guidelines OCSPP 850.1400: Fish Early Life Stage Toxicity Test” and provide any changes that may result to number of eggs/replicate. Pretivm scientific staff (ERM) reviewed the EPA guidance, and confirmed with the toxicity laboratory that the recent update from 15 to 20 fertilized eggs per replicate will be utilized. The laboratory will also review the EPA guidance and ensure their protocols follow the updated protocols. ECCC also asked Pretivm to consider whether the toxicant sensitivities for fathead minnow and rainbow trout are comparable. ERM consulting biologists suggest it is difficult to compare these two species because of differences in

sensitivities during acute and chronic toxic exposures, egg-layer periods relative to water quality testing, and sampling requirements. Finally, ECCC noted Pretivm included a new reference point, L3 OF, in the updated study design and asked Pretivm to confirm that all reference points are documented in the MERS reporting database. Pretivm will confirm that all reference points are documented in the MERS database and noted the addition of L3 OF as a reference station will facilitate a more robust study design. Pretivm and ERM summarized the comments and responses in a memo entitled, "Brucejack Gold Mine MDMER EEM Second Biological Study Design: Response to ECCC Comments", submitted to ECCC on June 9, 2020 (ERM 2020b).

No other monitoring required by the Decision Statement identified the need for adjustment to mitigation measures, thus there were no other relevant consultation requirements in 2020.

4.2 CONDITIONS 5.2 AND 5.4

Discuss consultation activities relative to Condition 5.2: The Proponent shall, in consultation with the Nisga'a Nation and Tsetsaut/Skii km Lax Ha, monitor and assess any changes to ambient air quality at the Tsetsaut/Skii km Lax Ha Lodge that result from the Designated Project during all phases for particulate matter (10 microns in diameter or less) and fine particulate matter (2.5 microns in diameter or less) using the Canadian Ambient Air Quality Standards of the Canadian Council of Ministers of the Environment as a benchmark, as well as for nitrogen oxide, sulphur dioxide and carbon monoxide.

Ambient air quality monitoring at the Tsetsaut/Skii km Lax Ha Lodge was conducted throughout 2020. As in past years, monitoring was supported by the installation of a passive air sampling system (PASS) at the Lodge and use of a portable 3M EVM-7 Environmental Monitor. Ambient NO₂ and SO₂ were measured monthly with the PASS sampler, while monitoring for PM₁₀, PM_{2.5} and CO was completed quarterly using the portable air analyzer. A memorandum regarding the 2020 monitoring results at the Tsetsaut/Skii km Lax Ha Lodge was prepared and was provided to the Nisga'a Nation and Tsetsaut/Skii km Lax Ha on March 26, 2021.

Annual average concentrations during 2020 for NO₂, SO₂, and CO at the Tsetsaut/Skii km Lax Ha Lodge were below their respective benchmarks and comparable to 2019 concentrations. Results for the 2020 second and third quarters PM₁₀ and PM_{2.5} were below the respective benchmarks. Particulate monitoring for the first and fourth quarters, which is conducted during the winter months when the Brucejack Access Road is snow and ice covered, showed higher concentrations than the PM₁₀ and PM_{2.5} benchmarks. These results are considered anomalous, given that there were no particulate sources within 5 km at these sampling times, and none that could explain the results. Follow-up investigations indicate that these particulate results are suspect, likely due to cold and moisture (temperatures below and humidity values above the operating limits of the monitoring device). Pretivm is currently evaluating how best to address future sampling for particulate matter at the Tsetsaut/Skii km Lax Ha Lodge during the winter months.

Discuss consultation activities relative to Condition 5.4: The Proponent shall develop and implement, in consultation with the Nisga'a Nation and Tsetsaut/Skii km Lax Ha, a follow-up program based on the monitoring specified in condition 5.2 to evaluate the effectiveness of mitigation measures identified under condition 5.1. The follow-up program shall start with construction and ceases at the end of the decommissioning phase.

During the permitting process in 2015, Pretivm consulted the Nisga'a Nation and Tsetsaut/Skii km Lax Ha as part of the BC Mine Development Review Committee on the development of the Air Quality Monitoring Plan. Ambient air quality monitoring results for 2016, 2017, 2018, and 2019 were below Canadian Ambient Air Quality Standards of the Canadian Council of Ministers of the Environment benchmarks. The memorandum regarding 2019 monitoring results at the Lodge was provided to the Nisga'a Nation and Tsetsaut/Skii km Lax Ha for review. No responses to the prior reports were received. Any future request for consultation on results of monitoring will be followed up by Pretivm.

In July 2017, Bowser Camp was deactivated and re-established as Bowser West Camp in the westernmost corner of Bowser License of Occupation (SK920922). Tsetsaut/Skii km Lax Ha also moved their Lodge to Bowser West site in 2017, however, there has been no observed occupancy since the fall of 2018. During 2019 Bowser West Camp was deactivated with the only remaining activities being road maintenance, equipment storage, aerodrome usage and mineral exploration crew use for drill core logging and sampling. This continued through 2020.

4.3 CONDITION 5.3

Discuss consultation activities relative to Condition 5.3: The Proponent shall develop and implement, in consultation with the Nisga'a Nation and Tsetsaut/Skii km Lax Ha, a mechanism for receiving noise complaints due to noise caused by the Designated Project during all phases, and respond in a timely manner to any noise complaint received.

A Noise Complaint Form was developed by Pretivm and provided to the Nisga'a Nation and Tsetsaut/Skii km Lax Ha for their review and input on September 2, 2015. The form was revised based on comments received from the Tsetsaut/Skii km Lax Ha on September 2, 2015 and reissued shortly thereafter. No other comments and no noise complaints were received in 2020.

4.4 CONDITIONS 6.6 AND 6.7

(Condition 6.6) Discuss consultation activities relative to Condition 6.6: The Proponent shall, following consultation with Tsetsaut/Skii km Lax Ha, provide access to the Project Area to the Tsetsaut/Skii km Lax Ha for traditional purposes, to the extent that such access is safe.

The Traffic and Access Management Plan, which states that "Persons authorized to use the Brucejack Access Road will include First Nations people conducting traditional use activities under authorization of their Nation's government", was reviewed during the *Mines Act/Environmental Management Act* Permits Application review process in 2015, at which time comments from the Tsetsaut/Skii km Lax Ha were received and reflected in the Traffic and Access Management Plan which has been implemented through 2020. No requests for site access related to traditional use activities occurred in 2020.

(Condition 6.7) Discuss consultation activities relative to Condition 6.7: The Proponent shall, following consultation with the Nisga'a Nation, provide access to the Project Area for the Nisga'a Nation to exercise rights under the Nisga'a Final Agreement, to the extent that such access is safe.

The Traffic and Access Management Plan, which states that "Persons authorized to use the Brucejack Access Road will include First Nations people conducting traditional use activities under authorization

of their Nation's government", was reviewed during the *Mines Act/Environmental Management Act* Permits Application review process in 2015. No comments were received from the Nisga'a Nation during this review, nor following its referral in draft via the 2018 Annual Report for *Mines Act* Permit M-243 and *Environmental Management Act* Effluent Permit 107835 and Air Permit 107025 (Pretivm 2019) in March 2019 following update of the plan in December 2018. Wildlife related revisions to the Traffic and Access Management Plan were discussed during the 2019 Wildlife Advisory Committee meeting. No requests for site access related to traditional use activities occurred in 2020.

4.5 CONDITION 6.8

Discuss consultation activities relative to Condition 6.8: Develop and implement, in consultation with the Nisga'a Nation and Tsetsaut/Skii km Lax Ha, a follow-up program to determine the effectiveness of the mitigation measures used to avoid mortality of fauna, including ungulates and furbearers, along the access road and to verify the accuracy of the environmental assessment.

During the permitting process in 2015, Pretivm consulted the Nisga'a Nation and the Tsetsaut/Skii km Lax Ha on the development of the Wildlife Management Plan (WMP). Pretivm proposed that a Wildlife Advisory Committee would be an appropriate venue for discussion of the effectiveness of mitigation measures, wildlife mortalities, accuracy of impacts to wildlife and potential additional mitigation measures. As per the WMP, Pretivm established a Wildlife Advisory Committee with Nisga'a Nation, Tahltan Nation, Tsetsaut/Skii km Lax Ha, and BC Ministry of Forests, Lands and Natural Resource Operations and Rural Development. Committee meetings were held in April 2016, May 2017, June 2019 and June 2020. Committee member conflicting schedules precluded a meeting in 2018.

Prior to each meeting, participants were provided a draft agenda for comment and additions, copies of documents for review at the meeting and a PowerPoint presentation of material to be presented and discussed at the meeting. Meeting notes, including action items, were distributed to all committee members following each meeting.

During the 2020 Brucejack Wildlife Advisory Committee meeting, committee members discussed the mine's Covid-19 response, electric fencing around portions of lower elevation camps, wildlife around camps, western toad monitoring, updated Mountain Goat Management Plan, wildlife monitoring and observations along the access road, Tahltan Guardian Program, and Nass Moose Management Program.

Wildlife mortalities are a subject for discussion with Aboriginal groups attending the Wildlife Advisory Committee meetings, as is the effectiveness of mitigation plans and potential adaptive management measures.

4.6 CONDITION 7.1

Discuss consultation activities relative to Condition 7.1: Develop and implement, in consultation with Aboriginal groups, an archaeological and heritage resources management plan for the Designated Project prior to construction.

The Heritage Management Plan, and associated Heritage Chance Find Procedure, was reviewed by Aboriginal groups during the 2015 *Mines Act/Environmental Management Act* Permits Application

(Pretivm 2015) review process and completed in 2015. No comments were received. During construction activities in 2017 crews were made aware of and trained to use the Chance Find Procedure. No new archaeological or heritage resources were identified during construction activities.

All Aboriginal groups were consulted on a new Heritage Inspection Permit application that was submitted for the area encompassing the Brucejack Mine and ancillary infrastructure during 2020; no comments were received. The Aboriginal groups were also notified in advance of a ground based archaeological impact assessment conducted along the Brucejack Access Road in areas of proposed additional disturbance. In response to this consultation, a Lands Officer from the Nisga'a Lisims Government participated in the field surveys conducted as part of that assessment. No new archaeological sites or heritage resources were found in 2020.

4.7 CONDITIONS 9.2 AND 9.4

Discuss consultation activities relative to Condition 9.2: The Proponent shall, prior to construction, consult with Aboriginal groups to identify potential accidents and malfunctions that may result in an adverse environmental effect, and on the measures to be applied to prevent such accidents and malfunctions.

Discuss consultation activities relative to Condition 9.4: Develop and implement a communication plan, in consultation with Aboriginal groups that shall include:

9.4.1: The types of accidents or malfunctions requiring a notification by the Proponent to the respective Aboriginal groups;

9.4.2: The manner by which Aboriginal groups shall be notified by the Proponent of an accident or malfunction and of any opportunities for the Aboriginal groups to assist in the response to the accident or malfunction; and

9.4.3: The contact information of the representatives of the Proponent that the Aboriginal groups may contact and of the respective Aboriginal groups to which the Proponent provides notification.

Pretivm sent a letter on September 4, 2015 to Aboriginal groups regarding Conditions 9.2 and 9.4.

Specifically, the letter stated that Pretivm considered the consultation undertaken during the 2015 *Mines Act/Environmental Management Act* Permits Application (Pretivm 2015) review process to have by and large fulfilled the Condition 9.2 requirement to consult with Aboriginal groups to identify potential accidents and malfunctions that may result in an adverse environmental effect, and on the measures to be applied to prevent such accidents and malfunctions. Though Pretivm did encourage Aboriginal groups to review the materials provided in the letter regarding accidents and malfunctions and invited suggestions for change or additions to the plan or further consultation on the matters, Pretivm has received no responses to date.

With regards to development and implementation of a communications plan concerning accidents and malfunctions (Condition 9.4), the September 2015 letter from Pretivm suggested to the Tsetsaut/Skii km Lax Ha and the Tahltan Nation that the methods of notification and contact information included in the Aboriginal Consultation Plan (developed in consultation with these groups) be used. For the Nisga'a Nation, Pretivm suggested that the Impacts and Benefits Agreement between Pretivm and Nisga'a Lisims Government provide the platform for fulfilling Condition 9.4. In 2017 an IBA was

reached with the Tahltan Central Government and that agreement provides the platform for fulfilling Condition 9.4.

Regarding notification to Aboriginal groups about types of accidents and malfunctions, Condition 9.4.1, Pretivm provided in the September 2015 letter a table of types of accidents and malfunctions, and associated risk and mitigation strategies to prevent the accident or malfunction. The table was intended as a basis for discussion of notification. Pretivm also asked Aboriginal groups for suggestions on how they would like to assist in response to an accident or malfunction, as per Condition 9.4.2. To date Pretivm has received no responses from any of the Aboriginal groups to this letter.

Tsetsaut/Skii km Lax Ha participated in company risk assessment meetings in prior years in Pretivm's Vancouver office, follow-up meetings by conference calls and until late 2018 in monthly Joint Occupational Health and Safety Committee meetings at the mine site.

In 2020, no accidents or malfunctions occurred that had the potential to cause adverse environmental effects. There was, likewise, no additional consultation with Aboriginal groups on this topic.

5 CONDITION 2.5.4: FOLLOW-UP PROGRAMS

Condition 2.5.4: The proponent shall document in the annual report the results of the follow-up program requirements identified in conditions 3.4, 5.4, and 6.8.

5.1 CONDITION 3.4: WATER QUALITY AND FISH AND FISH HABITAT FOLLOW-UP PROGRAM

The Proponent shall develop and implement a water quality and fish and fish habitat follow-up program that shall include:

3.4.1 Monitoring the quality of water flowing from Brucejack Lake into Brucejack Creek to verify the accuracy of the water quality and fish and fish habitat predictions in the environmental assessment; and

3.4.2 Determining whether mitigation measures implemented to protect the quality of water flowing from Brucejack Lake into Brucejack Creek and downstream fish and fish habitat are effective.

Water flowing from Brucejack Lake to Brucejack Creek continued to be monitored as per MDMER regulations and Appendix A of Effluent Discharge Permit 107835, as well as the Aquatic Effects Monitoring Plan, during the 2020 reporting period. No exceedances of MDMER or BC Effluent Permit 107835 discharge limits were recorded. There were no failures of quarterly toxicity tests using rainbow trout and *Daphnia magna*. Concentrations measured at the effluent discharge point to Brucejack Creek were close to the Base Case water quality model results, indicating that the measured changes to surface water quality are consistent with the changes that were expected and described in the original environmental assessment and subsequent permit amendment applications to increase the production rate to 3,800 tpd, and in the 2020 water quality update included in the 2020 Mine Plan and Reclamation Program Update (Pretivm 2020f).

The MDMER First Biological Monitoring Study was conducted in 2017 and the interpretive report was filed with Environment and Climate Change Canada in July 2018. Environment and Climate Change Canada provided comments on the first interpretive report on April 5, 2019. The comments were considered during development of the Second Biological Monitoring Study that was filed on February 3, 2020. Field sampling for the MDMER Second Biological Monitoring Study was completed in August 2020. The Second Interpretive Report will be submitted in July 2021.

Water quality monitoring continues at the discharge compliance point and reference sample locations for the environmental effects monitoring. Toxicity tests results for *Daphnia magna* and Rainbow trout, along with effluent quality results, indicate mitigation measures implemented to protect the quality of water flowing from Brucejack Lake into Brucejack Creek and downstream are effective in protecting fish and fish habitat.

5.2 CONDITION 5.4: TSETSAUT/SKII KM LAX HA LODGE AMBIENT AIR QUALITY MONITORING FOLLOW UP PROGRAM

The Proponent shall develop and implement, in consultation with the [Nisga'a Nation](#) and Tsetsaut/Skii km Lax Ha, a follow-up program based on the monitoring specified in condition 5.2 to evaluate the effectiveness of

mitigation measures identified under condition 5.1. The follow-up program shall start with construction and ceases at the end of the decommissioning phase.

Monthly passive monitoring of sulphur dioxide (SO₂) and nitrogen dioxide (NO₂) as well as quarterly ambient particulate and carbon monoxide (CO) sampling, was completed during 2020 at the Tsetsaut/Skii km Lax Ha Lodge located near km 52 of the Brucejack Access Road. The Tsetsaut/Skii km Lax Ha Lodge is not known to have been occupied since late 2018.

Annual average concentrations during 2020 for NO₂, SO₂ and CO at the Tsetsaut/Skii km Lax Ha Lodge were below their respective benchmarks and comparable to 2019 concentrations. Results for the 2020 second and third quarters PM₁₀ and PM_{2.5} were below the respective benchmarks. Particulate monitoring for the first and fourth quarters, which is conducted during the winter months when the Brucejack Access Road is snow and ice covered and there were no particulate sources within 5 km, showed higher concentrations than the PM₁₀ and PM_{2.5} benchmarks. These results are considered anomalous. Follow-up investigations indicate that these particulate results are suspect, likely due to cold and moisture (temperatures below and humidity values above the operating limits of the monitoring device). Pretivm is currently evaluating how best to address future sampling for particulate matter at the Tsetsaut/Skii km Lax Ha Lodge during the winter months.

5.3 CONDITION 6.8: EFFECTIVENESS OF MITIGATION MEASURES TO AVOID MORTALITY OF FAUNA FOLLOW UP PROGRAM

The Proponent shall develop and implement, in consultation with the Nisga'a Nation and Tsetsaut/Skii km Lax Ha, a follow-up program to determine the effectiveness of the mitigation measures used to avoid mortality of fauna, including ungulates and furbearers, along the access road and to verify the accuracy of the environmental assessment.

During the permitting process in 2015, Pretivm consulted the Nisga'a Nation and the Tsetsaut/Skii km Lax Ha on the development of the Wildlife Management Plan (WMP). The monitoring activities outlined in the WMP were ongoing in 2020 as summarized below.

Access Road Monitoring

Wildlife monitoring along the Brucejack Access Road is based on incidental wildlife observations recorded through various means (i.e., call-ins, observation forms, reporting during daily meetings). Incidental wildlife observations are not indicative of actual animal numbers. There are repeated observations by different people of the same animals on the same day or over a short time period. Sightings are naturally weighted toward larger, more visible species.

Wildlife sightings locations provide a general indication of larger species presence in the vicinity of the Brucejack Access Road, and assist in directing mitigation efforts for wildlife and informing actions for safety of personnel.

The most common sightings reported in 2020 were black bears (38% of reports), followed by moose (14% of reports), fox (15% of reports), grizzly bears (8%), and mountain goats (6% of reports). Accumulated sightings totals from 2015 through 2020 are 1234 observations of black bears, 722 of moose, 154 of grizzly bears, 634 of mountain goats, 93 of wolves, and 36 of wolverine.

Bears are of particular concern for personnel safety. From 2015 through 2020, black bears have been observed to be distributed along the Brucejack Access Road from its intersection with Highway 37 to km 58, with occasional sightings in the vicinity of the mine site. They are mainly observed in spring and summer, with 47% of total sightings split between Bell Irving River valley and east of Knipple Lake. There is no evidence of habituation of bears observed near camps as they do not commonly intrude nor do they have access to food or garbage. Electrified fences surround the Brucejack camps located below timberline (Wildfire and Knipple) and are activated during the spring through fall period. From 2015 through 2020, most grizzly bear observations (2/3) were in summer, with the remainder in fall and spring.

Accumulated (2015 through 2020) sightings of moose are concentrated (79%) along Bowser River valley from Brucejack Access Road km 35 and extending to km 57 immediately east of Knipple Camp. The remainder were observed between Highway 37 and km 35 of the Brucejack Access Road. Most moose sightings are in winter along the Bowser River valley, east of the Bowser Aerodrome (km 50).

Accumulated (2015 through 2020) sightings of mountain goats were limited to between km 46 and 70 of the Brucejack Access Road, with 64% of the total sightings on the mountain north of Knipple Lake and 31% on the mountains on the north side of Knipple Glacier extending up to the mine site. The large proportion of sightings on the hills north of Knipple Camp is likely skewed by observations by personnel residing in this camp.

Wolverine have been observed between km 17 km of the Brucejack Access Road and the mine site, with the largest portion (50%) observed between Bowser Aerodrome and the head of Knipple Glacier. Wolves have been observed at multiple locations along the Brucejack Access Road, with five sightings in the vicinity of the mine site since 2015.

Building and Waste Management Monitoring

Internal environmental audits on buildings and the mine site area were routinely conducted by Pretivm Waste Management and Environmental Department personnel during 2020. These audits included checks following the requirements of applicable Environmental Management Plans (EMPs) (e.g., Wildlife Management Plan and Waste Management Plan), and other relevant regulatory requirements.

Incidental Wildlife Monitoring

Incidental wildlife observations are recorded through various means (i.e. call-ins, observation forms, reporting during daily meetings). Personnel (including all contractors and visitors to site) are trained on the importance of reporting wildlife observations during new employee orientations and this practice is emphasized periodically at daily safety meetings. Signage is posted at various sites reminding people to report wildlife observations. Drivers call out wildlife sightings over the radio to raise awareness to other drivers.

There were 25 reported wildlife observations in 2020 within the mine site area (mine infrastructure within the Mining Leases), exclusive of the Brucejack Access Road section to the head of Knipple Glacier. A total of 6 species and 27 animal sightings were recorded, including 22 red fox, 1 black bear,

1 ermine, 1 grizzly bear, 1 ptarmigan, and 1 wolf. Wildlife observations along the Brucejack Access Road during 2020 are described above in the Access Road Monitoring subsection.

There were no observations of bats in the underground mine workings during 2020.

Pre-clearing Surveys

Approximately 1 ha of forest was cleared in January 2020 for the Bowser Aerodrome approach. A pre-clearing survey for raptor nests and wildlife trees was completed by a biologist prior to the felling.

Transmission Line

A visual inspection of the transmission line was conducted in 2020 by Pretivm Maintenance Department personnel, who visually inspect the line annually during a temporary shutdown. There were no reports of nests or bird mortalities.

Mountain Goat and Avalanche Monitoring

There are several areas around the mine and along the Brucejack Access Road that require avalanche control. Pretivm Mountain Safety personnel complete an Avalanche Control Pre-blast Checklist, which includes scanning the area for mountain goats and other large mammals prior to commencing avalanche control. No wildlife was observed within avalanche zones during avalanche control work in 2020. Details of avalanche control, monitoring methods and observability are presented to the Wildlife Advisory Committee annually.

Toad Tunnel Monitoring

Mitigation measures for protection of western toad (*Anaxyrus boreas*) along the Brucejack Access Road during the annual toad migration period are comprised of five toad tunnels and a modified bridge that were installed in 2016 and 2017. Monitoring toad use of the tunnels and the modified bridge has been conducted annually since 2017, including during 2020. Monitoring is conducted through use of remote trail cameras and by ground surveys. Trail cameras indicate a variety of small wildlife use the tunnels, with occasional images of young toads. As toadlets are difficult to see in camera images, toadlet numbers are likely under-counted. Ground surveys in 2020 between July 11 and September 25 noted the following for western toad:

- at 23.4 km tunnel 1 sub-adult in the tunnel;
- at 23.8 km tunnel 2 sub-adults (one inside and one outside the tunnel, as well as one suspected sub-adult Columbia spotted frog);
- at 25.7 km tunnel 2 toadlets inside the tunnel;
- at 25.85 km tunnel 2 adults, 4 sub-adults (1 adult, 2 sub-adult each inside and outside of the tunnel as well as 1 adult Columbia spotted frog and 1 sub-adult wood frog);
- at 26 km tunnel 3 toadlets (2 outside the tunnel and 1 mortality on the road); and
- at 42 km modified bridge 3 adults were observed using the crossing.

Total western toad observations were lower in 2020 compared to 2019, however as noted above the camera images and ground surveys do not capture total numbers. The observed use of the tunnels and the annual reoccurrence of toad migration at these tunnel locations under the road suggests that mitigation measures in place are effective.

Incidents (including Wildlife Collisions/ Mortalities)

Wildlife mortalities recorded in the mine site area (area within the Mining Leases) in 2020 included two red foxes, one yellow-rumped warbler and one unidentified sparrow. The cause of death in all instances was undetermined. Along the Brucejack Access Road in 2020 there were three incidents of bird mortalities, including one European starling, one pine siskin and one tree swallow. In all cases the cause of death was undetermined.

There have been no moose or grizzly bear mortalities along the Brucejack Access Road or at the mine site as a result of mine related activities since construction began in 2015, which is less than forecast in the environmental assessment (Pretivm 2014). Mitigation measures in effect for large ungulates and bears are considered effective. While predictions of mortalities of small furbearers were not included in the environmental assessment; camp hygiene and waste handling practices have resulted in few instances of mortality of small furbearers and therefore are considered to be effective.

6 **CONDITION 2.5.5: ADDITIONAL MITIGATION MEASURES IMPLEMENTED**

Condition 2.5.5: The proponent shall document in the annual report any additional mitigation measures implemented or proposed by the Proponent, as determined under condition 2.4.

Condition 2.4: The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement:

2.4.1. Undertake monitoring and analysis to verify the accuracy of the environmental assessment as it pertains to the particular condition and/or to determine the effectiveness of any mitigation measure(s);

2.4.2. Where the results of the monitoring and analysis indicate issues with respect to the accuracy of the environmental assessment and/or the effectiveness of any mitigation measures that may lead to adverse environmental effects, identify the means by which the Proponent determines whether additional mitigation measures are required, including the need for consultation with other parties in reaching that determination; and

2.4.3. If additional mitigation measures are required pursuant to condition 2.4.2, implement and monitor these additional mitigation measures pursuant to condition 2.4.1.

No additional mitigation measures were identified or proposed in 2020 as a result of the follow-up programs identified in Conditions 3.4, 5.4, or 6.8 of the Decision Statement.

7 REFERENCES

- ERM. 2020a. Brucejack Gold Mine: MDMER Second Biological Monitoring Study Design. Vancouver, British Columbia.
- ERM. 2020b. Brucejack Gold Mine MDMER EEM Second Biological Study Design: Response to ECCC Comments. Vancouver, British Columbia.
- Pretium Resources Inc. (Pretivm). 2014. Brucejack Gold Mine Project: Application for an Environmental Assessment Certificate / Environmental Impact Statement (online).
- Pretium Resources Inc. (Pretivm). 2015. Application for *Mines Act* and *Environmental Management Act* Permits. Submitted May, 2015.
- Pretium Resources Inc. (Pretivm). 2019. 2018 Annual Report for *Mines Act* Permit M-243, Effluent Permit 107835, and Air Permit 107025. Submitted March 2019.
- Pretium Resources Inc. (Pretivm) 2020a. 2019 Air Quality Monitoring Results – Tsetsaut /Skii km Lax Ha Lodge. Brucejack Gold Mine Project.
- Pretium Resources Inc. (Pretivm). 2020b. 2019 Annual Glacier Ablation Report. Submitted March 2020.
- Pretium Resources Inc. (Pretivm). 2020c. 2019 Annual Report for *Mines Act* Permit M-243, Effluent Permit 107835, and Air Permit 107025. Submitted March 2020.
- Pretium Resources Inc. (Pretivm). 2020d. 2019 CEAA Annual Report. Submitted March 2020.
- Pretium Resources Inc. (Pretivm). 2020e. 2019 Economic and Social Effects Annual Report. Submitted January 2020.
- Pretium Resources Inc. (Pretivm). 2020f. 2020 Mine Plan and Reclamation Program Update. Submitted July 2020.
- Pretium Resources Inc. (Pretivm). 2021a. 2020 Air Quality Monitoring Results – Tsetsaut/Skii km Lax Ha Lodge. Submitted March 2021.
- Pretium Resources Inc. (Pretivm). 2021b. 2020 Annual Glacier Ablation Report. Submitted March 2020.
- Pretium Resources Inc. (Pretivm). 2021c. 2020 Annual Report for *Mines Act* Permit M-243, Effluent Permit 107835, and Air Permit 107025. Submitted March 2021.
- Pretium Resources Inc. (Pretivm). 2020e. 2020 Economic and Social Effects Annual Report. Submitted January 2021.

**Appendix A Brucejack Gold Mine Project: Implementation
Activities Undertaken (as per CEAA Decision
Statement Condition 2.5.1)**

Appendix A: Brucejack Gold Mine Project: Implementation Activities Undertaken (as per CEAA Decision Statement Condition 2.5.1)

Section	Sub-section	Condition	Implementation Activities Undertaken
2	General Conditions		
2.1		The Proponent shall, throughout all phases of the Designated Project, ensure that its actions in meeting the conditions set out in this Decision Statement are informed by the best available information and knowledge, including community and Aboriginal traditional knowledge, are based on validated methods and models, are undertaken by qualified individuals, and have applied the best available economically and technologically feasible measures.	Refer to 2020 CEAA Annual Report Section 3.
2.2		The Proponent shall, where consultation is a requirement of a condition set out in this Decision Statement:	<p>Generally, consultation is guided by the Aboriginal Consultation Plan developed by Pretivm, as a condition of their BC Environmental Assessment Certificate, with review and input from Aboriginal groups. Consultation activities are also directed per the Impact Benefit Agreements established with the Nisga'a Lisims Government on behalf of the Nisga'a Nation and the Tahltan Central Government on behalf of the Tahltan Nation, and those that may be established with the Tsetsaut Skii km Lax Ha.</p> <p>Specific to this Decision Statement, consultation is required in relation to:</p> <ul style="list-style-type: none"> • Condition 5.2 – monitoring and assessment of changes in annual air quality • Condition 5.3 – development and implementation of noise complaint mechanism • Condition 5.4 – development and implementation of follow-up program for air emission mitigation measures • Conditions 6.6 and 6.7 – providing access to the Project Area for traditional purposes • Condition 7.1 – development and implementation of archaeological and heritage resources management plan • Condition 9.4 – development and implementation of an accidents and malfunctions communications plan <p>These consultation requirements have been met as outlined in the table entries below, specific to each relevant condition.</p>
	2.2.1	Provide a written notice of the opportunity for the party or parties being consulted to present their views on the subject of the consultation;	This practice has been implemented and will continue for the duration of the Project.
	2.2.2	Provide sufficient information and a reasonable period of time to permit the party or parties being consulted to prepare their views;	This practice has been implemented and will continue for the duration of the Project.
	2.2.3	Provide a full and impartial consideration of any views presented by the party or parties being consulted; and	This practice has been implemented and will continue for the duration of the Project.
	2.2.4	Advise the party or parties that have provided comments on how the views and information received have been considered by the Proponent.	This practice has been implemented and will continue for the duration of the Project.
2.3		The Proponent shall, where consultation with Aboriginal groups is a requirement of a condition set out in this Decision Statement, and prior to initiating that consultation, communicate with each Aboriginal group to determine the manner by which to satisfy the consultation requirements referred to in condition 2.2.	Consultation will continue to be guided by the Aboriginal Consultation Plan developed by Pretivm, as a condition of their Environmental Assessment Certificate, with review and input from the Aboriginal groups. Consultation activities will also continue to be directed per the Impact Benefit Agreements established with the Nisga'a Nation and Tahltan Nation, and those that may be established with the Tsetsaut Skii km Lax Ha.
2.4		The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement:	
	2.4.1	Undertake monitoring and analysis to verify the accuracy of the environmental assessment as it pertains to the particular condition and/or to determine the effectiveness of any mitigation measure(s);	Monitoring and analysis of data to verify the accuracy of the environmental assessment has been implemented as per BC <i>Mines Act</i> permit M-243 issued by the BC Ministry of Energy, Mines and Low Carbon Innovation, BC <i>Environmental Management Act</i> permits 107835 (effluent) and 107025 (air) issued by the Ministry of Environment and Climate Change Strategy, and the Metal and Diamond Mining Regulations as required under the <i>Fisheries Act</i> , in addition to various other permits and management plans that require monitoring.
	2.4.2	Where the results of the monitoring and analysis indicate issues with respect to the accuracy of the environmental assessment and/or the effectiveness of any mitigation measures that may lead to adverse environmental effects, identify the means by which the Proponent determines whether additional mitigation measures are required, including the need for consultation with other parties in reaching that determination; and	Refer to 2020 CEAA Annual Report Section 4.1.
	2.4.3	If additional mitigation measures are required pursuant to condition 2.4.2, implement and monitor these additional mitigation measures pursuant to condition 2.4.1.	No additional mitigation measures have been required to date.

Section	Sub-section	Condition	Implementation Activities Undertaken
2.5		The Proponent shall, from the reporting year where construction starts, submit to the Agency an annual report, including an executive summary of the annual report in both official languages. The annual report shall be submitted by the Proponent no later than March 31 following the reporting year. The Proponent shall document in the annual report:	Refer to the 2020 and earlier CEAA Annual Reports.
	2.5.1	Implementation activities undertaken in the reporting year for each of the conditions set out in this Decision Statement;	Implementation activities undertaken are tabulated in this Appendix.
	2.5.2	How it has considered and incorporated the factors set out in condition 2.1 in the implementation of the conditions set out in this Decision Statement;	Refer to 2020 CEAA Annual Report Section 3.
	2.5.3	For conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent has considered any views and information that the Proponent received during or as a result of the consultation;	Refer to 2020 CEAA Annual Report Section 4.
	2.5.4	The results of the follow-up program requirements identified in conditions 3.4, 5.4 and 6.8; and	Refer to 2020 CEAA Annual Report Section 5.
	2.5.5	Any additional mitigation measures implemented or proposed by the Proponent, as determined under condition 2.4.	No additional mitigation measures were required in 2020.
2.6		The Proponent shall publish on the Internet, or any similar medium, the annual report and the executive summary referred to in condition 2.5, the archaeological and heritage resources management plan referred to in condition 7.1, and the implementation schedule and any updates or revisions to that schedule referred to in condition 10, upon submission of these documents to the parties referenced in the respective conditions. The Proponent shall keep these documents publicly available for twenty-five years following the end of operation or until the end of decommissioning of the Designated Project, whichever comes first.	The Heritage Management Plan and the Implementation Schedule are available on Pretivm's website at: http://www.pretivm.com/sustainability/default.aspx
2.7		The Proponent shall notify the Agency in writing no later than 60 days after the day on which there is a transfer of ownership, care, control or management of the Designated Project in whole or in part.	Not applicable. No activity undertaken.
2.8		In the event another party becomes the Proponent of the Designated Project, it is bound by the conditions set out in this Decision Statement.	Not applicable. No activity undertaken.
3	Fish and Fish Habitat		
3.1		The Proponent shall, for all effluent discharges, comply with the <i>Fisheries Act</i> , the Metal and Diamond Mining Effluent Regulations (MDMER), and any discharge limits for effluent set by British Columbia that meet or exceed the requirements of the <i>Fisheries Act</i> and the Metal and Diamond Mining Effluent Regulations. In addition, the Proponent shall:	Pretivm has implemented effluent monitoring as per British Columbia <i>Environmental Management Act</i> permit 107835, the Brucejack Aquatic Effects Monitoring Plan and MDMER criteria. BC permit 107835 monitoring data is reported in the Brucejack Gold Mine annual reports for <i>Mines Act</i> Permit M-243, Effluent Permit 107835 and Air Permit 107025. The Second Biological Monitoring Design Study, per MDMER requirements, was filed with Environment and Climate Change Canada on February 3, 2020. Field sampling for the MDMER Second Biological Monitoring Study was completed in August 2020. The Second Interpretive Report will be submitted in July 2021.
	3.1.1	Design and construct the perimeter ditching around the waste rock stockpile, mill building and portals to accommodate a 200-year rain-on-snow event;	Construction was completed in 2017.
	3.1.2	Capture and divert surface drainage and mine water effluent to the water treatment plant for treatment prior to discharge into Brucejack Lake;	This practice has been implemented and will continue for the duration of the Project.
	3.1.3	Immobilize tailings and deposit potentially acid generating rocks on the bottom of Brucejack Lake where they shall remain submerged at all times or in decommissioned stopes; and	This practice has been implemented and will continue for the duration of the Project.
	3.1.4	Use multiple turbidity curtains at the outlet of Brucejack Lake.	This practice has been implemented and will continue for the duration of the Project.
3.2		The Proponent shall protect fish and fish habitat during all phases of the Designated Project, which shall include the implementation of mitigation measures to avoid causing harm to fish and fish habitat when using explosives or conducting activities in or around water frequented by fish, as well as on the Knipple Glacier.	At the mine site the mine water treatment plant continues to be operational, as well, three turbidity curtains are installed at the outlet of Brucejack Lake; a Standard Operating Procedure and management plan related to the crossing of the Knipple Glacier is in place, as are Emergency and Spill Response Plans; monitoring for hydrocarbons is undertaken downstream of the Knipple Glacier continued in 2020.
3.3		The Proponent shall, during decommissioning, reclaim riparian habitats along the access road which shall include the planting of native plant species.	Bowser Camp along the access road has been deactivated, however, the site remains useable for Aerodrome related activities and storage and storage of other contingency supplies (e.g. spare tower parts for the transmission line); no decommissioning activities were undertaken in riparian habitats 2020.

Section	Sub-section	Condition	Implementation Activities Undertaken
3.4		The Proponent shall develop and implement a water quality and fish and fish habitat follow-up program that shall include:	Refer to 2020 CEAA Annual Report Section 5.1
	3.4.1	Monitoring the quality of water flowing from Brucejack Lake into Brucejack Creek to verify the accuracy of the water quality and fish and fish habitat predictions in the environmental assessment; and	This practice has been implemented and will continue for the duration of the Project.
	3.4.2	Determining whether mitigation measures implemented to protect the quality of water flowing from Brucejack Lake into Brucejack Creek and downstream fish and fish habitat are effective.	Refer to 2020 CEAA Annual Report Section 5.1
4	Migratory Birds		
4.1		The Proponent shall carry out all phases of the Designated Project in a manner that protects and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment Canada's Avoidance Guidelines. The Proponent's actions in applying the Avoidance Guidelines shall be in compliance with the <i>Migratory Birds Convention Act, 1994</i> and with the <i>Species at Risk Act</i> .	A pre-clearing survey for raptor nests was conducted prior to clearing of approximately 1 ha of forest in January 2020 for the Bowser Aerodrome approach.
4.2		The Proponent shall design and build the transmission line in a manner that prevents electrocution, discourages nesting and makes the transmission line more visible to migratory birds taking into account the Avian Power Line Interaction Committee's Suggested Practices for Avian Protection on Power Lines.	Construction of the transmission line was completed in March 2017. A review of transmission line design and construction by a Senior Wildlife Scientist with ERM Consultants Canada confirms that the design of the transmission line and construction met the condition.
5	Health and Aboriginal Peoples		
5.1		The Proponent shall implement mitigation measures to manage air emissions of the Designated Project during all phases, including:	
	5.1.1	Those mitigation measures required to comply with the Waste Discharge Regulation under British Columbia's <i>Environmental Management Act</i> for operational air emissions;	Mitigation measures implemented continued during 2020 to manage air emissions as per the <i>Environmental Management Act</i> permit 107025 and the Brucejack Air Quality Management Plan.
	5.1.2	Fugitive dust best management practices; and	In 2020, road watering continued to be used as a mitigation measure for managing fugitive dust along the Brucejack Access Road, Bowser storage area, Bowser Aerodrome and at the mine site.
	5.1.3	Use of low-sulphur diesel fuel equipment and pollution control equipment on mobile heavy equipment.	This practice has been implemented and will continue for the duration of the Project.
5.2		The Proponent shall, in consultation with the Nisga'a Nation and Tsetsaut Skii km Lax Ha, monitor and assess any changes to ambient air quality at the Tsetsaut Skii km Lax Ha Lodge that result from the Designated Project during all phases for particulate matter (10 microns in diameter or less) and fine particulate matter (2.5 microns in diameter or less) using the Canadian Ambient Air Quality Standards of the Canadian Council of Ministers of the Environment as a benchmark, as well as for nitrogen oxide, sulphur dioxide and carbon monoxide.	Refer to 2020 CEAA Annual Report Section 4.2.
5.3		The Proponent shall develop and implement, in consultation with the Nisga'a Nation and Tsetsaut Skii km Lax Ha, a mechanism for receiving noise complaints due to noise caused by the Designated Project during all phases, and respond in a timely manner to any noise complaint received.	This practice has been implemented and will continue for the duration of the Project. No noise complaints have been received to date.
5.4		The Proponent shall develop and implement, in consultation with the Nisga'a Nation and Tsetsaut Skii km Lax Ha, a follow-up program based on the monitoring specified in condition 5.2 to evaluate the effectiveness of mitigation measures identified under condition 5.1. The follow-up program shall start with construction and ceases at the end of the decommissioning phase.	Refer to 2020 CEAA Annual Report Section 4.2.
	5.4.1	The Proponent shall inform the Nisga'a Nation and Tsetsaut Skii km Lax Ha in cases of exceedances at the Tsetsaut Skii km Lax Ha Lodge of the Canadian Ambient Air Quality Standards of the Canadian Council of Ministers of the Environment parameters specified in condition 5.2.	Ambient air quality monitoring at this site continued in 2020. No exceedances were noted in the Tsetsaut Skii km Lax Ha Lodge results. A report was provided on March 26, 2020.
6	Current Use of Lands and Resources for Traditional Purposes		
6.1		The Proponent shall provide Aboriginal groups with the implementation schedule and any updates or revisions to that schedule as stated in condition 10 at the same time the Proponent provides the schedule to the Agency.	The Implementation Schedule was provided to Aboriginal groups and the Agency in August 2015. Updated implementation schedules were subsequently provided on February 24, 2017, March 13, 2019, and March 29, 2021.
6.2		The Proponent shall prohibit any hunting, fishing and trapping within the Project Area by the Proponent's employees and contractors hired by the Proponent, unless an employee or a contractor is provided access for traditional purposes as per condition 6.6 or for exercising rights as per condition 6.7.	This practice has been implemented and will continue for the duration of the Project.
6.3		The Proponent shall prohibit public access to the access road.	This practice has been implemented and will continue for the duration of the Project.

Section	Sub-section	Condition	Implementation Activities Undertaken
6.4		The Proponent shall impose speed limits on the access road taking into account provincial guidelines.	Speed limits are established in the Brucejack Traffic & Access Management Plan based on the road design, and signage in both directions of travel has been posted along the Brucejack Access Road to advise of road speed. In addition, speed limits are discussed in the Brucejack Access Road Standard Operating Procedure, which is issued to all drivers/contractors prior to travelling the access road.
6.5		The Proponent shall construct and maintain gaps in snow banks large enough to provide passage for fauna, including ungulates and furbearers.	Once the depth of snow warranted it, gaps in the snow banks were constructed and maintained along the access road during 2020. Additionally, for much longer sections of the road, a grader was used to cut down the height of the snow banks to allow for wildlife passage along the length of the banks, not just at gaps. Grading practices will continue to be evaluated on an ongoing basis through the winter.
6.6		The Proponent shall, following consultation with Tsetsaut Skii km Lax Ha, provide access to the Project Area to the Tsetsaut Skii km Lax Ha for traditional purposes, to the extent that such access is safe.	Refer to 2020 CEAA Annual Report Section 4.4.
6.7		The Proponent shall, following consultation with the Nisga'a Nation, provide access to the Project Area for the Nisga'a Nation to exercise rights under the Nisga'a Final Agreement, to the extent that such access is safe.	Refer to 2020 CEAA Annual Report Section 4.4.
6.8		The Proponent shall develop and implement, in consultation with the Nisga'a Nation and Tsetsaut Skii km Lax Ha, a follow-up program to determine the effectiveness of the mitigation measures used to avoid mortality of fauna, including ungulates and furbearers, along the access road and to verify the accuracy of the environmental assessment.	Refer to 2020 CEAA Annual Report Section 4.5 and Section 5.3.
7	Physical and Cultural Heritage and Structures, Sites or Things of Historical, Archaeological, Paleontological or Architectural Significance		
7.1		The Proponent shall develop and implement, in consultation with Aboriginal groups, an archaeological and heritage resources management plan for the Designated Project prior to construction. The archaeological and heritage resources management plan shall take into account British Columbia's Handbook for the Identification and Recording of Culturally Modified Trees. The archaeological and heritage resources management plan shall include:	Refer to 2020 CEAA Annual Report Section 4.6. A Heritage Management Plan and accompanying Heritage Chance Find Procedure was developed in 2015 and implemented prior to the start of construction activities and in use throughout 2020.
	7.1.1	A description of structures, sites or things of historical, archaeological, paleontological or architectural significance (including Culturally Modified Trees) that may be encountered by the Proponent during construction;	A Heritage Management Plan and accompanying Heritage Chance Find Procedure was developed and implemented prior to the start of construction activities. The primary construction period ended in 2017; cultural and heritage features continue to be managed by implementation of the Heritage Management Plan and accompanying Heritage Chance Find Procedure.
	7.1.2	Procedures and practices for on-site monitoring of construction activities that may affect a structure, site or thing of historical, archaeological, paleontological or architectural significance (including a Culturally Modified Tree) and for the identification and removal of the resource; and	A Heritage Management Plan and accompanying Heritage Chance Find Procedure was developed in 2015 and implemented prior to the start of construction activities and in use throughout 2020.
	7.1.3	A chance find protocol if a previously unidentified structure, site or thing of historical, archaeological, paleontological or architectural significance (including a Culturally Modified Tree) is discovered by the Proponent or brought to the attention of the Proponent by an Aboriginal group or another party during construction.	A Heritage Management Plan and accompanying Heritage Chance Find Procedure was developed in 2015 and implemented prior to the start of construction activities and in use throughout 2020.
8	Species at Risk		
8.1		The Proponent shall conduct pre-clearing surveys to determine distribution of Little Brown Myotis (<i>Myotis lucifugus</i>) and Northern Myotis (<i>Myotis septentrionalis</i>), and establish a 50-metre buffer zone around active hibernacula and active roosts.	This practice has been implemented and will continue for the duration of the Project. No clearing of timber suitable for bat roosts was completed in 2020 and the clearing occurred outside of the active roosting season. No bat roosts were found.
8.2		The Proponent shall, prior to construction and throughout all phases of the Designated Project, install and maintain roosting structures to offset if there is loss of Little Brown Myotis (<i>Myotis lucifugus</i>) and Northern Myotis (<i>Myotis septentrionalis</i>) bat roosting habitat.	No roosting structures were found during the bat roosting surveys in 2015 or during clearing activities in 2015 through 2020. However, five bat houses were installed in appropriate habitat along the access road and two along the transmission line in 2017.
8.3		The Proponent shall monitor mortality of Little Brown Myotis (<i>Myotis lucifugus</i>) and Northern Myotis (<i>Myotis septentrionalis</i>) and their usage at buffer-zones and of roosting structures, to determine the effectiveness of the mitigation measures during construction and operation.	No roosting structures were found during the bat roosting surveys in 2015, during clearing activities during construction, or during the avian survey in 2020 and no mortalities were observed.
8.4		The Proponent shall construct wildlife tunnels and fencing along the access road to allow passage of the Western Toad (<i>Anaxyrus boreas</i>) beneath the road as close as possible to existing migration corridors taking into account British Columbia's Guidelines for Amphibian and Reptile Conservation during Urban and Rural Land Development in BC.	To protect Western Toad (<i>Anaxyrus boreas</i>) during migration, five toad tunnels and a modified bridge were installed along the Brucejack Access Road in 2016 and 2017. All sites were fenced to direct toads to the corridors. Monitoring of toad use of the tunnels and bridge continued in 2020; results are described in section 5.3.

Section	Sub-section	Condition	Implementation Activities Undertaken
9	Accidents or Malfunctions		
9.1		The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects and shall implement emergency response procedures and contingencies developed in relation to the Designated Project.	All management plans relevant to mitigate for accidents and malfunctions have been implemented.
9.2		The Proponent shall, prior to construction, consult with Aboriginal groups to identify potential accidents and malfunctions that may result in an adverse environmental effect, and on the measures to be applied to prevent such accidents and malfunctions.	Refer to 2020 CEAA Annual Report Section 4.7.
9.3		In the event of an accident or malfunction with the potential to cause adverse environmental effects, the Proponent shall:	No accidents or malfunctions with the potential to cause adverse environmental effects occurred in 2020.
	9.3.1	Notify relevant federal and provincial authorities, including notifying the Agency in writing of the accident or malfunction as soon as possible in the circumstances;	Not applicable; no such occurrence in 2020.
	9.3.2	Implement immediate measures to minimize any adverse environmental effects associated with the accident or malfunction;	Not applicable; no such occurrence in 2020.
	9.3.3	Submit a written report to the Agency as soon as possible in the circumstances, but no later than 30 days after the day on which the accident or malfunction took place. The written report shall include:	Not applicable; no such occurrence in 2020.
	9.3.3.1	A description of the accident or malfunction and of its adverse environmental effects;	Not applicable; no such occurrence in 2020.
	9.3.3.2	The measures that were taken by the Proponent to mitigate the environmental effects of the accident or malfunction;	Not applicable; no such occurrence in 2020.
	9.3.3.3	A description of any residual environmental effects, and any additional measures required to address residual environmental effects; and	Not applicable; no such occurrence in 2020.
	9.3.3.4	If an emergency response plan was implemented, details concerning its implementation.	Not applicable; no such occurrence in 2020.
	9.3.4	As soon as possible in the circumstances, but no later than 90 days after the day on which the accident or malfunction took place, submit a written report to the Agency on the changes made to avoid a subsequent occurrence of the accident or malfunction and on the implementation of any additional measures to mitigate residual environmental effects.	Not applicable; no such occurrence in 2020.
		The Proponent shall develop and implement a communication plan, in consultation with Aboriginal groups, that shall include:	Refer to 2020 CEAA Annual Report Section 4.7.
	9.4.1	The types of accidents or malfunctions requiring a notification by the Proponent to the respective Aboriginal groups;	Refer to 2020 CEAA Annual Report Section 4.7.
	9.4.2	The manner by which Aboriginal groups shall be notified by the Proponent of an accident or malfunction and of any opportunities for the Aboriginal groups to assist in the response to the accident or malfunction; and	Refer to 2020 CEAA Annual Report Section 4.7.
	9.4.3	The contact information of the representatives of the Proponent that the Aboriginal groups may contact and of the respective Aboriginal groups to which the Proponent provides notification.	Refer to 2020 CEAA Annual Report Section 4.7.
10	Implementation Schedule		
10.1		The Proponent shall submit an implementation schedule for conditions contained in this Decision Statement to the Agency, or anyone designated pursuant to section 89 of the <i>Canadian Environmental Assessment Act, 2012</i> , at least 30 days prior to construction. The implementation schedule shall indicate the commencement and completion dates for each activities relating to conditions set out in this Decision Statement.	The Implementation Schedule was provided to Aboriginal groups and the Agency August 2015.
10.2		The Proponent shall submit an update to this implementation schedule in writing to the Agency, or anyone designated pursuant to section 89 of the <i>Canadian Environmental Assessment Act, 2012</i> , every two years on or before March 31, until completion of the activities.	Revised schedules were provided on February 24, 2017, March 13, 2019, and March 29, 2021.
10.3		The Proponent shall provide the Agency, or anyone designated pursuant to section 89 of the <i>Canadian Environmental Assessment Act, 2012</i> , with a revised implementation schedule if any change occurs from the initial schedule or any subsequent updates. The Proponent shall provide the revised implementation schedule at least 30 days prior to the implementation of the change.	A revised schedule was provided on March 13, 2019 for production expansion activities, with an additional revised schedule provided March 29, 2021 in accordance with the Condition 10.2 requirement to provide an updated schedule every two years.

Section	Sub-section	Condition	Implementation Activities Undertaken
11	Record Keeping		
11.1		The Proponent shall maintain a written record, or a record in an electronic format compatible with that used by the Agency, and retain and make available that record to the Agency, or anyone designated pursuant to section 89 of the <i>Canadian Environmental Assessment Act, 2012</i> , at a facility close to the Designated Project (local facility). The record shall include information related to the implementation of the conditions set out in this Decision Statement, and the results of all associated monitoring, including:	All records required under the Decision Statement are kept in electronic format accessible at the Brucejack Mine Site and from Pretivm's offices in Smithers and Vancouver.
	11.1.1	The place, date and time of any sampling, as well as techniques, methods or procedures used;	This practice continued during 2020.
	11.1.2	The dates and the analyses that were performed;	This practice continued during 2020.
	11.1.3	The analytical techniques, methods or procedures used in the analyses;	This practice continued during 2020.
	11.1.4	The names of the persons who collected and analyzed each sample and documentation of any professional certifications relevant to the work performed that they might possess; and	This practice continued during 2020.
	11.1.5	The results of the analyses.	This practice continued during 2020.
11.2		The Proponent shall retain and make available upon demand to the Agency, or anyone designated pursuant to section 89 of the <i>Canadian Environmental Assessment Act, 2012</i> , the information contained in condition 11.1 at a facility close to the Designated Project (or at a location within Canada and agreed upon by the Agency, should the local facility no longer be maintained). The information shall be retained and made available throughout construction and operation, and for twenty-five years following the end of operation or until the end of decommissioning of the Designated Project, whichever comes first.	Required information can be accessed from the Brucejack Mine Site or either of Pretivm's offices in Smithers and Vancouver.