

Pretium Resources Inc.

BRUCEJACK GOLD MINE PROJECT

Project Description Summary



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Prepared for:



Pretium Resources Inc.

Prepared by:



Engineers and Scientists

Rescan™ Environmental Services Ltd.
Vancouver, British Columbia

BRUCEJACK GOLD MINE PROJECT
Project Description (Federal)

Executive Summary

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General Information and Contacts

Pretium Resources Inc. (Pretivm) proposes to develop the Brucejack Gold Mine Project (the Project) as a 2,700 tonne per day (tpd) underground gold/silver mine. Pretivm is a mineral exploration company listed on the Toronto (TSX: PVG) and New York (NYSE:PVG) Stock Exchanges with its registered office in Vancouver, BC.

Project Name: Brucejack Gold Mine Project

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Project Location

The Project is located at 56°28'20" N latitude by 130°11'31" W longitude, which is approximately 950 km northwest of Vancouver, 65 km north-northwest of Stewart, 21 km south-southeast of the closed Eskay Creek Mine, and approximately 40 km upstream from the border of British Columbia and Alaska (Figure 1). The Project is located on provincial Crown land within the Regional District of Kitimat-Stikine.

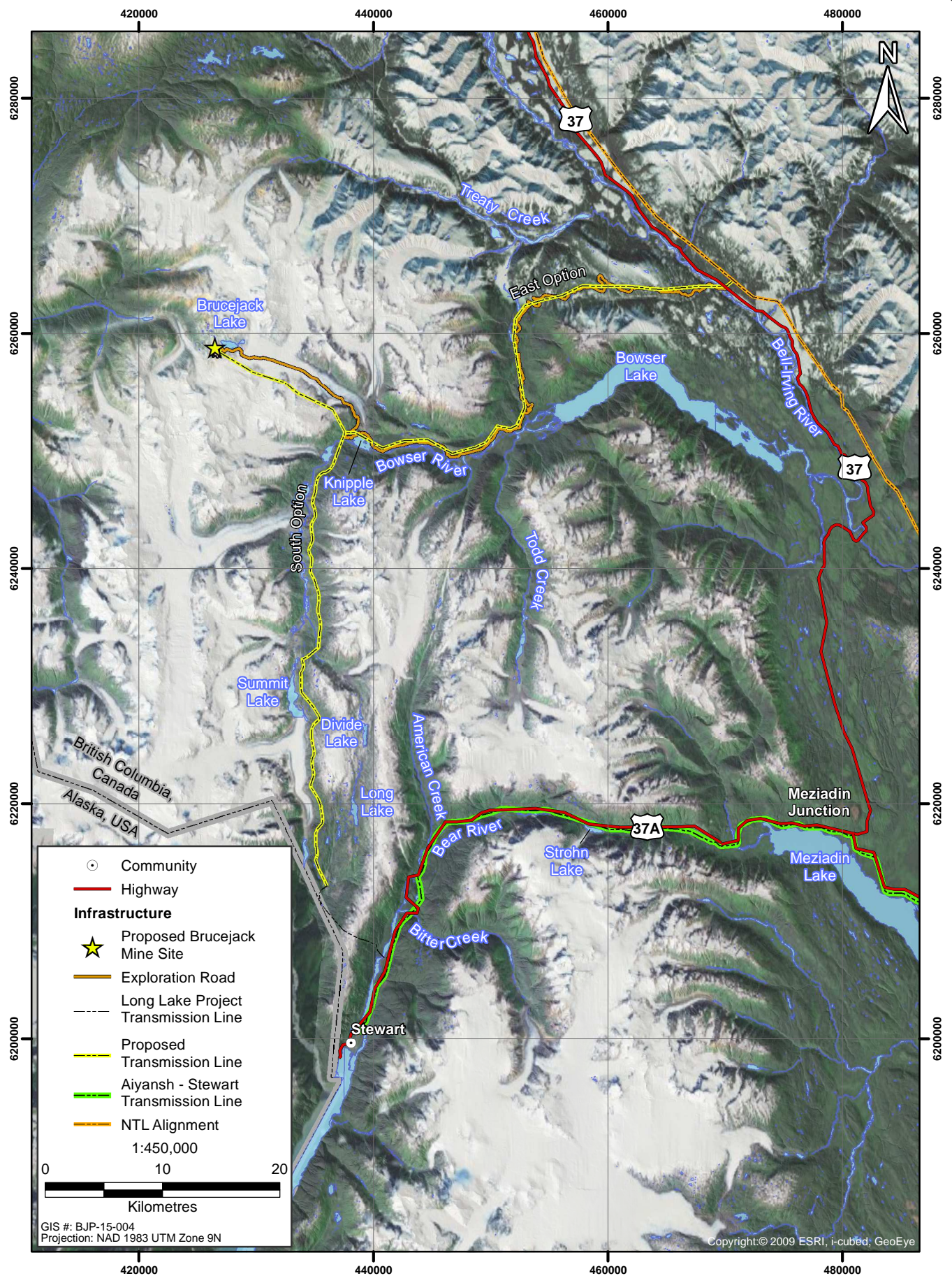


Figure 1

The purpose of the Project is to develop Pretivm's core asset to help meet world gold and silver demand in a manner that benefits First Nations, local communities, individuals, and local, provincial, and federal governments, and Pretivm shareholders without compromising the ability of future generations to meet their own needs.

This document outlines Pretivm's conceptual plan for development of an underground gold and silver project to enable the BC Environmental Assessment Office (BC EAO) and the Canadian Environmental Assessment Agency (CEA Agency) to determine whether provincial and/or federal environmental assessments are required.

Regulatory Framework

Pursuant to section 3(1) of the *Reviewable Projects Regulation*, the proposed production capacity for the Project exceeds the criteria of 75,000 tonnes per annum (tpa) of mineral ore for a new mineral mine and will require a provincial environmental assessment under the British Columbia *Environmental Assessment Act* (BC EAA).

Federally, the Project is considered a "designated project" under section 15 (c) of the *Regulations Designating Physical Activities* (RDPA) as the production rate will exceed the threshold for a gold mine of 600 tonnes per day (tpd). Additionally, section 8 of the RDPA may apply due to the construction of a facility that requires the extraction of more than 200,000 m³/a of groundwater.

Mineral Resources and Claims

The Brucejack Gold Mine Project consists of six mineral claims totalling an area of 3,199.28 ha that cover the mineral resource. This is part of a larger mineral claim area held by Pretivm that includes an additional 326 mineral claims with an area of 94,208 ha. Mineral claims provide a holder with sub-surface rights only. Pretivm acquired the mineral rights to the Project in late 2010; however, mining exploration in the local area has been active for the past 50 years.

Pretivm has reviewed all of the historical and ongoing exploration results, and has identified ten zones of potentially economical mineralization. The Brucejack Gold Mine Project will focus on two zones; Valley of Kings (VOK) Zone and West Zone (WZ). The mineral resources shown in Table 1 were estimated in November 2012 using the Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Reserves, Definitions and Guidelines by Snowden Mining Industry Consultants. Table 1 includes a combination of resources estimated in the VOK and WZ zones. The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these resources. Future exploration is planned and could potentially result in further additions to all resource categories.

Table 1. Mineral Resource Grade and Tonnage Estimate for the Valley of the Kings and West Zones

Category	Tonnes (Mt)	Gold (g/t)	Silver (g/t)	Contained	
				Gold (Moz)	Silver (Moz)
<i>Measured</i>					
West Zone	2.4	5.85	347	0.5	26.8
<i>Indicated</i>					
Valley of the Kings	16.1	16.4	14.2	8.5	7.3
West Zone	2.5	5.86	190	0.5	15.1
<i>Inferred</i>					
Valley of the Kings	5.4	17.0	15.7	2.9	2.7
West Zone	4.0	6.44	82	0.8	10.6

Project Description

The Project is an underground gold and silver mining operation, targeting the West and Valley of the Kings (VOK) mineralized zones. Over a minimum 16-year mine life, the mine will produce approximately 16 Mt of ore at a rate of up to 2,700 tonnes per day (tpd).

The overall layout of the Project is shown in Figure 2. The mine site footprint is approximately 10.5 ha. The Project components and physical activities include, but are not limited to:

- mine portal;
- ventilation shafts;
- waste rock transfer pad;
- run-of-mine ore stockpile;
- ore conveyor;
- surface and underground crushers;
- mill/concentrator;
- backfill paste plant;
- tailings pipeline;
- subaqueous disposal of waste rock and tailings;
- backfill of waste rock and tailings underground;
- diversion channels;
- back-up power plant;
- transmission line and ancillary components;
- warehouse;
- truck shop;
- helicopter pad;
- sewage treatment plant and related activities (e.g., sludge disposal);
- water treatment plant;
- incinerator;
- electric induction furnace;
- landfill;
- mine site haul roads and transportation activities along existing access roads;
- fuel storage tanks;
- surface and underground explosives storage;
- up to a 550-person modular camp; and
- administration offices.

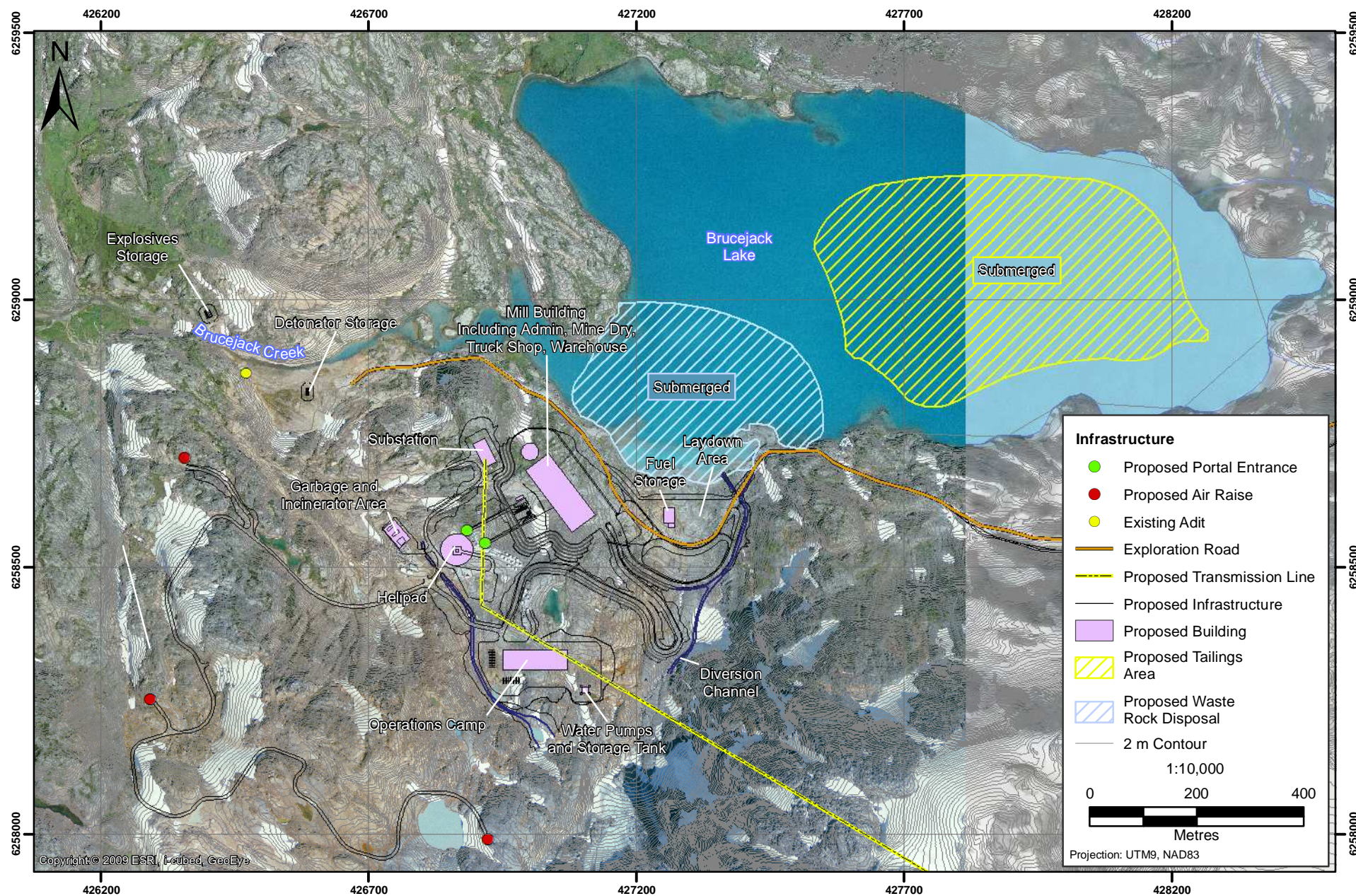


Figure 2

Figure 2

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The underground operation will be based on conventional rubber-tired, diesel and electric powered mobile equipment, with loader mucking and truck haulage via a decline ramp system. Mining will be done using the long hole open stoping method with a combination of rock and paste backfill. The paste fill will be sourced from thickened flotation plant tailings, and the rock fill will be sourced from underground development muck. The paste fill plant is proposed to be located on the surface, adjacent to the processing plant. Run-of-mine ore will receive primary crushing underground and then will be transported to surface facilities (i.e. a run of mine ore stock-pile) via conveyor belt.

Mineral processing will involve conventional sulphide flotation and gravity concentration. A smelting furnace will be used to produce gold doré from the gravity concentrate. As well, a flotation plant at the mine site will produce gold-silver flotation concentrate that will be dewatered and trucked off-site to the port at Stewart, BC.

Two ventilation intakes, twin declines for new development (in addition to the existing West Zone portal) and a centrally located fresh air raise (FAR) located midway between the Valley of the Kings and West Zone lodes are proposed.

It is planned to house the run-of-mine (ROM) ore stockpile, grinding circuit, flotation plant, backfill paste plant, and concentrate stockpile within a single building.

Access

A 75 km exploration road west from Highway (Hwy) 37 will be used to access the mine site. This existing road will require upgrading to support operational hauling activities. The road will be used year-round to mobilize personnel, equipment and supplies to the mine site and to truck concentrate from the mine site to the port in Stewart, via Hwy 37.

Waste Management

Waste streams from the Project (i.e., waste rock, tailings, air emissions, domestic/industrial waste) will require active management. Approximately 5 Mt of waste rock will be produced throughout the mine life. More than half of this waste rock will be re-deposited in the underground mine, and an estimated 2 Mt will be sub-aqueously stored in the southwest corner of Brucejack Lake. Causeways will be constructed with non-acid generating waste rock so that trucks can dump waste rock at greater depths and to ensure that sufficient water cover (> 1 m) is maintained over the waste rock. This method was previously used to dispose of waste rock into Brucejack Lake in 1999 following advanced underground exploration activities for the Sulphurets Project completed by Newhawk Gold Mines.

Approximately 8 Mt of the flotation tailings will be paste backfilled to the underground workings, while an estimated 8 Mt of the flotation tailings will be deposited in Brucejack Lake. The tailings discharge pipeline will extend along the bottom of Brucejack Lake to a sand filter located near the maximum depth of the lake (100 m), where the tailings are proposed to be deposited. The total volume of tailings and waste rock will be stored within the bottom 30 m of Brucejack Lake.

Air emissions will include particulate matter (PM), nitrous oxides (NO_x), sulphur oxides (SO_x), and greenhouse gas (GHG) emissions from fuel combustion by surface and underground vehicles, and diesel generators when in use. Emissions from the electrical induction furnace are primarily PM and SO_x. Fugitive dust emissions will occur due to vehicle traffic along the access road, but will be limited at the mine site as a substantial amount of vehicle traffic will occur in the underground. Waste rock and tailings will be sub-aqueously stored and blasting will primarily occur underground, therefore limiting dust emissions from these potential sources. Additional air emissions will occur from a waste incinerator.

Hazardous waste materials, such as spoiled reagents and used batteries, will be generated throughout the life of the Project, from construction to decommissioning. These materials will be anticipated in advance; they will be segregated, inventoried, and tracked in accordance with federal and provincial legislation and regulations such as the federal *Transportation of Dangerous Goods Act (1992)*. A separate secure storage area will be established with appropriate controls to manage spillage. Hazardous waste will be labelled and stored in appropriate containers for shipment to approved off-site disposal facilities.

Waste management will also involve the segregation of industrial and domestic waste into appropriate management streams. Project waste collection and disposal facilities will include one or more incinerators, a permitted landfill, waste collection areas for recyclable and hazardous waste, and sewage effluent and sludge disposal. Waste collection areas will have provisions to segregate waste according to disposal methods and facilities to address spills, fire, and wildlife attraction.

Water Management

The process plant for the Project will require approximately 1,800 m³/d or 75 m³/h of water which will be provided by collecting underground mine seepage water, and extracting freshwater from Brucejack Lake. Underground seepage rates have initially been estimated at up to 2,400 m³/h (at full development, tunnels will equal 63 km in total length). If the CEA Agency considers the collection of underground mine seepage water to constitute 'extraction' of groundwater, the Project may also be considered a "designated project" under section 15 (c) of the RDPA due to the construction of a facility that requires the extraction of more than 200,000 m³/a of groundwater. This water will be collected and pumped to the plant for process use. Excess water will be treated and discharged to Brucejack Lake. Depending on the quality of the underground seepage water, approximately 5 m³/hr of water from Brucejack Lake may be required to supply the fresh water requirements of the Project.

Fresh water diversion channels will be constructed to divert non-contact water away from the Project mine site into small tributaries of Brucejack Lake and Brucejack Creek.

If necessary, a high density sludge water treatment plant, adjacent to the processing plant, will be built and operated to ensure the quality of the mine effluent discharge meets receiving environment criteria.

Power Requirements

When the mine is operating at maximum production (Year 3), the power requirement for the Project is estimated to range between 20 - 30 Mega Watts (MW). Two 138 kV power transmission line alternatives are currently being considered. An east option would parallel the 70 km exploration road and connect to the Northwest Transmission Line near kilometre 215 of Hwy 37. A second option would extend 55 km southeast and south from the mine site to the Long Lake Hydroelectric Project, which is currently under construction near Stewart. Pretium is currently assessing these options, including discussing connection issues with BC Hydro. It may be necessary to extend the proposed south option to connect with the recently constructed BC Hydro substation near Stewart. Diesel generators will be used as a back-up power source.

Regional Setting

Northwestern BC is populated by a number of small, predominantly First Nations' communities and the larger centres of Smithers, Terrace, Hazelton and Stewart, which provide services and supplies to much of the region. Communities within the region are generally separated by large distances, with limited transportation and communication options; the region is intersected by Hwy 37 (running in a north-south direction) and Hwy 16 (running east to west). Regional population trends show a decrease of 5.9% between 2001 and 2006, while provincially, the population increased by 5.3% over the same period.

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The regional economic base is supported primarily by resource extraction industries including mining and forestry. Mineral exploration activity has increased in recent years, providing significant employment opportunities which are anticipated to continue while commodity prices remain high. Forestry and tourism have fluctuated significantly in response to prevailing economic conditions.

The western part of the Project area is included in the Cassiar-Iskut-Stikine Land and Resource Management Plan (CIS LRMP; ILMB 2000). The CIS LRMP encompasses 5.2 million hectares in northwestern BC. It provides policy direction on the management of land and resources in the CIS LRMP area. Within the CIS LRMP area, the Unuk Regional Management Zone is located downstream of the Brucejack Gold Mine Project along the Unuk River between Sulphurets Creek and the BC/Alaska border. The eastern part of the Project area lies within the boundaries of the South Nass Sustainable Resource Management Plan area (MFLNRO 2012).

Provincial parks in the region include Meziadin Lake Provincial Park and Bear Glacier Provincial Park located south of the Project along Hwy 37A, and Border Lake Provincial Park that encompasses a portion of the Unuk River at the BC/Alaska border.

There is one environmental study in the regional area that Pretivm is aware of; the regional traffic study with involvement from the BC Ministry of Transportation and Infrastructure (BC MOTI). The purpose of the study is to develop a regional approach to managing industrial traffic related impacts along Highway 37, and potentially Highway 37A. To date, Pretivm has not been asked to participate in this study. There are no federal environmental studies underway in the region pursuant to section 74 of the *Canadian Environmental Assessment Act*, 2012. Pretivm is not aware of any formal conservation plans for the region.

Numerous environmental studies have been undertaken to satisfy EA information requirements for mining projects in the regional area. Table 2 provides a summary of past, existing, and reasonably foreseeable future projects that occur in the northwest region of the province that have been, are, or may be, subject to the environmental assessment process. Some aspects of these projects may have a spatial and temporal linkage with the proposed Brucejack Gold Mine Project.

Table 2. Summary of Past, Existing, and Reasonably Foreseeable Projects that Occur in the Northwest Region of BC

Past Projects	Existing Projects	Reasonably Foreseeable Projects
Eskay Creek Mine	Forrest Kerr Hydroelectric (under construction)	Bear River Gravel
Granduc Mine	Long Lake Hydroelectric (under construction)	Bronson Slope Mine
Johnny Mountain Mine	Northwest Transmission Line (under construction)	Galore Creek Mine
Kitsault Mine	Red Chris Mine (under construction)	Granduc Mine
Silbak Premier Mine		KSM Mine
Snip Mine		Kinskuch Hydroelectric
Sulphurets Mine		Kitsault Mine
Swamp Point Mine		Kutcho Mine
		McLymont Creek Hydroelectric
		Arctos Mine
		Schaft Creek Mine
		Storie Moly Mine
		Treaty Creek Hydroelectric
		Turnagain Mine
		Volcano Creek Hydroelectric

There are no federal lands within the Project Area; the nearest federal lands to the Project are the port at Prince Rupert (240 km), Gwai Haanass Nation Park Reserve and Haida Heritage Site (416 km), the Kuldoe Indian Reserve (156 km), and the Andimaul Indian Reserve (206 km). No federal lands are anticipated to be affected by the Project. There is no federal funding anticipated for the Project.

The Bell II Lodge on Hwy 37 provides commercial heli-ski opportunities in the regional area. Guide outfitter territories (2 overlap with Project infrastructure) and registered trap lines (3 overlap with Project infrastructure) also exist in the Project area, as well as other commercial recreational tenures and angling licenses; recreational hunting and fishing activities are limited. Commercial timber harvesting has occurred near Hwy 37; further timber harvesting in the Project area is possible subject to an economic recovery in the forestry sector.

Existing Environment

The Project is located above the tree line in a mountainous area with an elevation at the mine site of 1,400 m; surrounding peaks measure 2,200 m in elevation. Glaciers and ice fields border the mineral deposits to the north, south, and east. Recent and rapid deglaciation has resulted in over-steepened and unstable slopes in many areas. Recently deglaciated areas typically have limited soil development, consisting of glacial till and colluvium. Lower elevation areas with mature vegetation may have a well-developed organic soil layer.

The mineral deposits at Brucejack are transitional meso- to epithermal (intermediate to low sulphidation) high-grade gold-silver deposits. The gold mineralization is interpreted to be genetically related to one or more Jurassic-age alkaline intrusions. Gold mineralization is hosted in quartz vein stockworks within schistose and pervasively altered quartz-sericite (\pm chlorite, \pm ankerite) volcanic and volcanoclastic rocks that contain 1 to 5% disseminated pyrite, minor base metal sulphide (sphalerite, galena, \pm chalcopyrite, \pm molybdenite) and tourmaline veinlets and disseminations and abundant post-mineral calcite veining.

The climate of the region is relatively extreme and daily weather patterns in the Iskut River region are unpredictable. The observed temperature range in the Project area is typical of northwestern BC and consists of a winter period (November to March) with below freezing (-4 to -20°C) mean monthly temperatures and a summer period (June to September) with mean monthly temperatures between 5°C and 20°C . The spring (April and May) and fall (late September to November) are cool at low elevations and colder at high elevations, as expected in mountainous environments in BC, and provide a transition between the winter and summer temperatures (Rescan 2011b). In the region the wettest periods are typically recorded during the fall. Based on a regional precipitation model, mean annual precipitation in the Project area is expected to range from 1,000 to 2,200 mm.

Brucejack Lake is a deep, oligotrophic lake, with neutral pH, relatively low metal concentrations and low levels of total suspended solids (TSS), and an outlet that drains in a north-westerly direction towards Sulphurets Creek. Sulphurets Creek is a tributary of the Unuk River which ultimately drains in a south-westerly direction across the trans boundary BC/Alaska border into a marine environment in Burroughs Bay at Behm Canal in Alaska.

Historically, Brucejack Lake has been used to deposit waste rock from early exploration mining activities, including over 5,000 metres of underground development. Baseline monitoring conducted in 2011 indicates water quality naturally degrades downstream in Sulphurets Lake and Sulphurets Creek; naturally elevated concentrations above BC freshwater aquatic life guidelines were observed for the following parameters: arsenic, aluminum, cadmium, chromium, copper, fluoride, iron, lead, pH, selenium, silver, sulphate, and zinc. Guideline exceedances are most frequently observed in Sulphurets

Creek and the Unuk River; concentrations within Brucejack Lake and Brucejack Creek are typically below guideline levels.

The Unuk River supports three species of Pacific salmon (Chinook (*Oncorhynchus tshawytscha*), coho (*O. kisutch*), and sockeye (*O. nerka*)) which spend some portion of their life cycle in the upper reaches of the Unuk River watershed. A 200 metre (m) long cascade is present in Sulphurets Creek approximately 300 m upstream of its confluence with the Unuk River which acts as a barrier to fish movement. Dolly Varden char (*Salvelinus malma*) are present below the cascade in Sulphurets Creek, but no fish species have been documented above the cascade, including Brucejack Lake which is 20 km upstream. No aquatic species of conservation concern, including fish, have been documented within the Project area during baseline studies.

Wildlife resources in the local and regional Project study areas are recognized for their ecological, social, economic, and cultural value. Provincial databases and references were consulted to identify wildlife species that may occur in the Project area. A total of six amphibians, one reptile, 222 birds (including those identified as migratory as per the *Migratory Birds Convention Act* (1994), e.g., Swainson's thrush (*Catharus ustulatus*), American robin (*Turdus migratorius*), orange-crowned warbler (*Vermivora celata*), and savannah sparrow (*Passerculus sandwichensis*)), and 54 mammals potentially occur within the study area. Of these, 37 species of conservation concern may possibly occur within a Regional Study Area (RSA), including species listed under the *Species at Risk Act* (SARA; 2002b), and those listed by the Committee on Endangered Wildlife in Canada (COSEWIC) and the British Columbia Conservation Data Centre (Table 3).

Based on criterion such as conservation status, ecological sensitivity, importance to First Nations and local, social, or economic reasons, key species for the region include: moose (*Alces alces*), mountain goat (*Oreamnos americanus*), grizzly bear (*Ursus arctos*), wolverine (*Gulo gulo*), western toad (*Anaxyrus boreas*), furbearers, waterfowl, raptors, and songbirds, including migratory birds.

Potential Environmental Effects

Environmental baseline studies including a comprehensive metal leaching and acid rock drainage (ML/ARD) characterization study, are currently being undertaken in support of the Project. Two potential environmental effects from the Project that are likely to be of concern in the local Project area include localized degradation of surface water quality (during the operations and closure phases of the Project) and localized disturbance to wildlife during the construction and operations phases.

Mill tailings will be placed at the bottom of Brucejack Lake using methods to minimize suspended solid concentrations. During the initial operations phase of the Project until voids are available for waste rock to be backfilled underground, waste rock will be submerged in Brucejack Lake to minimize the opportunity for ML/ARD. Any potential residual effects on sediment and surface water quality from these and other activities are expected to be localized. Brucejack Lake downstream to the confluence of Sulphurets Creek and the Unuk River (a distance of approximately 20 km) is non-fish bearing; due to this considerable distance, and because effects on surface water quality are anticipated to be restricted to the local receiving environment, the Project is not predicted to cause an adverse effect on fish and fish habitat in the Unuk River. The potential for any transboundary effects to occur (i.e. degraded water quality 45 km downstream of the discharge pipeline) which would act as a cause-effect pathway impairing fish and fish habitat in the lower Unuk River is considered extremely unlikely. Fish, fish habitat and aquatic species (including those listed under subsection 2(1) of SARA (2002b)) may be affected through construction and operation of transmission line right-of-ways, through sedimentation and erosion, riparian vegetation clearing, and potential spills.

Table 3. Wildlife Species of Conservation Concern, Including Migratory Birds, Likely or Probable to Occur in Project Area

Species	Scientific Name	Detected During Baseline Studies ¹	Conservation Status				Migratory ⁴
			BC List	Wildlife	COSEWIC ²	SARA ³	
western toad	<i>Bufo boreas</i>	Y	yellow		SC	1	
sooty grouse	<i>Dendragapus fuliginosus</i>	P	blue				
common nighthawk	<i>Chordeiles minor</i>	N	yellow		T	1	Y
olive-sided flycatcher	<i>Contopus cooperi</i>	Y	blue		T	1	Y
barn swallow	<i>Hirundo rustica</i>	N	blue				Y
rusty blackbird	<i>Euphagus carolinus</i>	N	blue		SC	1	Y
yellow-billed loon	<i>Gavia adamsii</i>	N	blue		NAR		Y
horned grebe	<i>Podiceps auritus</i>	N	yellow		SC		Y
western grebe	<i>Aechmophorus occidentalis</i>	N	red				Y
double-crested cormorant	<i>Phalacrocorax auritus</i>	N	blue		NAR		
American bittern	<i>Botaurus lentiginosus</i>	N	blue				Y
tundra swan	<i>Cygnus columbianus</i>	N	blue				Y
brant	<i>Branta bernicla</i>	N	blue				Y
surf scoter	<i>Melanitta perspicillata</i>	Y	blue				Y
northern goshawk, <i>laingi</i> spp	<i>Accipiter gentilis laingi</i>	N	red	Y	T	1	
rough-legged hawk	<i>Buteo lagopus</i>	Y	blue		NAR		
peregrine falcon, <i>pealei</i> ssp	<i>Falco peregrinus pealei</i>	N	blue		SC	1	
peregrine falcon, <i>anatum</i> ssp	<i>Falco peregrinus anatum</i>	N	red		SC	1	
swainson's hawk	<i>Buteo swainsoni</i>	Y	red				
gyrfalcon	<i>Falco rusticolus</i>	N	blue		NAR		
sandhill crane	<i>Grus canadensis</i>	N	yellow	Y	NAR		Y
American golden-plover	<i>Pluvialis dominica</i>	N	blue				Y
wandering tattler	<i>Tringa flavipes</i>	N	blue				Y
upland sandpiper	<i>Bartramia longicauda</i>	N	red				Y
short-billed dowitcher	<i>Limnodromus griseus</i>	N	blue				Y
red-necked phalarope	<i>Phalaropus lobatus</i>	N	blue				Y
caspian tern	<i>Hydroprogne caspia</i>	N	blue		NAR		Y
snowy owl	<i>Bubo scandiacus</i>	N	blue		NAR		
western screech-owl	<i>Megascops kennicottii</i>	N	no status			1	
short-eared owl	<i>Asio flammeus</i>	N	blue	Y	SC	3	
fisher	<i>Martes pennanti</i>	Y	blue	Y			
grizzly bear	<i>Ursus arctos</i>	Y	blue	Y	SC		
least weasel	<i>Mustela nivalis</i>	N	blue				
wolverine, <i>luscus</i> ssp	<i>Gulo gulo luscus</i>	Y	blue	Y	SC		
northern caribou (population 15)	<i>Rangifer tarandus</i> pop. 15	N	no status	Y			
keen's myotis	<i>Myotis keenii</i>	N	red	Y	DD	3	
northern myotis	<i>Myotis septentrionalis</i>	N	blue				

¹ Y - Yes; N - No; P - Probable

² SC - Special Concern; T - Threatened; NAR - Not At Risk; DD - Data Deficient

³ 1 - Schedule 1; 3 - Schedule 3

⁴ As per the Migratory Birds Convention Act, 1994

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Other environmental effects that may occur include effects on air quality from fugitive dust emissions during construction and crushing during mining operations, and particulate matter and greenhouse gas emissions from fuel combustion by vehicles and generators as well as from waste incineration. However, since mining will be underground and most of the waste rock and tailings will be stored either underground or sub-aqueously, effects from fugitive dust emissions are anticipated to be minor.

Noise effects will be limited to workers on-site during construction and operations. Local wildlife species may also experience intermittent sensory disturbance due to exposure to increased noise levels in the immediate vicinity of the local Project area. However due to the primarily underground operations, surface noise levels are expected to be of minor magnitude.

The construction of the Project facilities will result in removal of soil and vegetation within the footprint of the mine site and along the transmission line. Reclamation activities during the closure and post-closure phases of the Project will approximate pre-disturbance conditions as closely as possible.

Any potential effects on species at risk and their habitat and on unique ecosystems during any phases of the Project will be mitigated to the extent possible. Wildlife-vehicle collisions on access roads and haul routes and hunting pressure because of increased access into the local Project area may result in direct wildlife mortality. However, vehicle traffic is expected to only marginally increase current traffic volumes along Hwy 37, and the use of access roads into the Project area will be controlled.

Potential effects to migratory birds may include direct mortality from collisions with transmission lines, buildings, or vehicles, removal or disruption of nests, loss of habitat due to vegetation clearing, interference from Project lighting and noise, and effects to health from potential degradation of air and water quality.

Potential Economic Effects

Based on the engineering work and mineral resource estimates compiled to date, capital costs for constructing the Project are anticipated to be greater than \$450 M. Operating costs are estimated to be less than \$200/t milled or \$197 million per year.

Based on a post-tax economic evaluation as part of the Preliminary Economic Assessment (Tetra Tech 2012), the Project is expected to yield a 5% net present value of US\$1,454 million and an internal rate of return of 25.0%. The evaluation considered base case metal prices of US\$1,100 per oz gold and US\$21.00 per oz silver. Pursuant to the *Mineral Tax Act (1996d)*, a Net Current Proceeds (NCP) tax will be calculated for each fiscal period of the mine. The NCP tax will be payable for the period if revenues and recoveries exceed costs (BC Ministry of Finance 2009). Estimates of taxes and royalties will be provided in subsequent EA documents.

The Project is expected to provide positive economic benefits to local communities as a result of direct training and employment opportunities (at higher wage levels) generated by the Project; the Project will support an estimated 500 person-years of employment during construction, and at least 4,800 person-years of employment during operations. Indirect employment opportunities (e.g., goods and services contract providers to the mining industry) will also increase, creating positive spin-off effects in the local, regional, and provincial economies. The Project will also generate annual revenues (e.g. property tax, licensing fees, royalties, and income tax) for local, provincial, and federal governments.

No federal funding is being sought or provided for the Project.

Potential Social Effects

The Bell II Lodge on Hwy 37 provides commercial heli-ski opportunities in the regional area. Guide outfitter territories (two overlap with Project infrastructure) and registered trap lines (three overlap with Project infrastructure) also exist in the Project area, as well as other commercial recreational tenures and angling licenses; recreational hunting and fishing activities are limited. Commercial timber harvesting has occurred near Hwy 37; further timber harvesting in the Project area is possible subject to an economic recovery in the forestry sector.

Effects of the Project on current recreational and commercial land use opportunities are anticipated to be minor. The Project is expected to be consistent with the management objectives in the CIS-LRMP and Nass South SRMP, and Pretium will work with any affected tenure owners to discuss mitigation measures to address any potential concerns.

There is expected to be an increase in local and regional populations as a result of Project development which may marginally increase pressure on the use of, or access to, existing housing, infrastructure, and social services.

The Project may also affect the current use of lands and resources for traditional purposes; these potential effects are discussed below, specific to each First Nation, Treaty Nation, or Métis group.

Potential Effects on Human Health

Adverse effects on human health from the Project may result from changes in air and drinking water quality, exposure to increased noise levels, and changes to the quality and/or availability of country foods. Effects on human health from air quality, noise, and poor drinking water quality for temporary or permanent residents in the area are anticipated to be negligible. The Project is isolated and located 40 km southwest of the nearest permanent residence at Bell II. Pretium is aware of 9 temporary residences, including fishing, hunting and trapline cabins, located within 60 km of the mine site; the closest of these is located approximately 19 km from the proposed mine site. Country foods (fishing, hunting, and harvesting) may be affected by changes to surface water quality and from metal laden dust deposition on vegetation and soils in the vicinity of Project components. Due to a low level of recreational and traditional use in the area, and because the Project site is largely covered by rock (i.e. low productivity), residual effects on human health are predicted to be minor.

Potential Effects on Heritage Values

An Archaeological Impact Assessment was conducted under the *Heritage Conservation Act (1996b)* in 2010. A total of 861 shovel tests were conducted in 43 locations, and one archaeological site consisting of one obsidian utilized flake was identified (Rescan 2011a). Additional work undertaken in 2011 - 2012 identified no additional archaeological sites.

Nine historic land use features, not protected under the *Heritage Conservation Act (1996b)*, were also recorded within the Project area. These include the Catear mine site, the abandoned Newhawk adit, two areas with recently blazed trees, two legal survey posts, and three sites relating to historic exploration or trapping activity (Rescan 2011a).

The Regional District of Kitimat-Stikine lists six sites in a Community Heritage Registry, the closest of which is the Yukon Telegraph Line which has associated features (a cabin and trap trees) at the confluence of Teigen and Snowbank creeks, approximately 30 km north of the local Project area.

As a guiding principle, the Project is designed to have as minimal an impact as possible; physical and cultural heritage resources that have been identified in the area will be avoided to the extent possible, and/or re-located if required or possible.

First Nations, Nisga'a Nation and Métis

Skii km Lax Ha

Proposed project infrastructure intersects with the traditional territory of the Skii km Lax Ha. The Skii km Lax Ha actively engage in hunting, trapping, plant, berry and mushroom harvesting, fishing and camping in their traditional territory. These activities are important for sustenance and to supplement income from the wage economy. Moose is a key contemporary food source and is the predominant animal hunted. The Skii km Lax Ha trap along the Highway 37 corridor for species such as beaver (*Castor canadensis*), American marten (*Martes americana*) and wolverine. Trapping activities are often concentrated around wetland areas. Fishing for salmon and steelhead/rainbow trout (*O. mykiss*) continues to be an important Skii km Lax Ha activity. Preferred Skii km Lax Ha fishing locations include the Cranberry River (for Chinook (Spring) salmon), the west side of the Bell-Irving River (for steelhead trout), the confluence of Treaty Creek and Bell-Irving River, as well as the confluence of Snowbank Creek and Bell-Irving River (for Chinook (Spring) salmon). Steelhead and rainbow trout are fished along the Bell-Irving River between Treaty and Wildfire creeks.

Nisga'a Nation

Proposed project infrastructure intersects with the Nass Area as defined in the NFA. The Nisga'a Nation is a treaty nation with a constitutionally recognized government and specific rights and interests set out in the NFA which came into effect in May 2000 (Canada, BC, and Nisga'a Nation 1998).

The Nisga'a Nation has approximately 5,900 members. Over 2,000 members reside in one of the four Nisga'a villages within Nisga'a Lands, approximately 230 km south of the Project: Gitlaxt'aamiks (New Aiyansh), Gitwinksihlkw (Canyon City), Laxgalts'ap (Greenville), and Gingolx (Kincolith; Statistics Canada 2007a; AANDC 2012b).

The Nisga'a fish, trap, and hunt a wide variety of marine and terrestrial species, and use a number of different aquatic and terrestrial plants. Salmon and eulachon (*Thaleichthys pacificus*) are central to Nisga'a history, economy, and way of life (NTC, Fiegehen, and Rose 1993; NLG n.d.). Contemporary economic uses of the land include tourism, recreation, and commercial forestry.

Under the NFA, the Nisga'a are allocated an annual percentage of the overall allowable catch (OAC) of Pacific salmon and steelhead depending on the total estimated number of fish returning to Canadian waters each year. The NFA also establishes wildlife allocations, which are a percentage of the total allowable harvest of designated species. Currently, the 'initially designated species' defined in the NFA include moose, grizzly bear, and mountain goat.

The NFA defines other Nisga'a interests including forestry tenures, commercial recreation tenures, guide outfitting and angling licenses, and traplines. These interests are located well south of the Project area.

The Nisga'a have the right to reasonable access to and onto Crown lands that are outside Nisga'a Lands, including streams and highways, to allow for the exercise of Nisga'a rights and interests. If an authorized use or disposition of Crown land would deny Nisga'a citizens reasonable access or use of resources, the Crown must ensure that alternative reasonable access is provided.

Gitanyow First Nation

The traditional territory of the Gitanyow First Nation is located south of the Project. Highways 37 and 37A pass through Gitanyow traditional territory. Project equipment, materials, supplies, personnel and concentrate will be transported along Highways 37 and 37A.

Gitanyow *huwilp* historically lived off of the land and continue to rely on traditional resources within their territories. This reliance includes subsistence harvesting, and economic and cultural uses of fish and wildlife.

Salmon species that are important dietary staples to the Gitanyow include sockeye, chinook and coho. Fishing activities traditionally occurred at the confluence of the Meziadin and Nass rivers.

Wildlife harvesting is an important traditional activity to Gitanyow *huwilp*. Specifically, moose, mountain goat (*Oreamus americanus*), black bear (*Ursus americanus*), grizzly bear, mule deer (*Odocoileus virginianus*), waterfowl and hoary marmots (*Marmota caligata*) are highly valued species. Trapping is also common within *huwilp* territories, and the Gitanyow have owned a single registered trapline that covers all of their traditional territory since 1930 (Sterritt 1998). Common fur-bearing animals harvested include American mink (*Neovison vison*), American marten, beaver (*Castor canadensis*) and red fox (*Vulpes vulpes*; Halpin and Seguin 1990).

Traditional plant use in Gitanyow territory includes the harvesting of devil's club (*Oplopanax horridus*) and water lily (*Nymphaea* spp.) among other species. A wide variety of plants are important for food, medicine and technological uses (Gitanyow Hereditary Chiefs Office (GHCO) 2008). Seasonal berry picking is still actively pursued and is an important aspect of the seasonal harvest cycle. Harvested species include blueberries (*Vaccinium* spp.), wild cranberries (*Oxycoccus* spp. and *Vaccinium* spp.) and soapberries (*Shepherdia canadensis*). Bush burns were used to actively enhance berry production until the practice was banned (Daly 2005).

Marsden (2010), in a survey of Gitanyow *wilp* members, notes that plants still used by the Gitanyow for medicinal purposes include: Devil's club, hellebore (*Veratrum viride*), Labrador tea (*Rhododendron groenlandicum*), water lily roots (*Nuphar* spp.), nettles (*Urtica* spp.), soapberries, balsam bark (*Populus* spp.), red alder bark (*Alnus rubra*), and wild mint (*Mentha arvensis*).

Mushroom harvesting is actively pursued by the Gitanyow. Pine mushroom (*Tricholoma magnivelare*) harvesting is an economic practice conducted in some areas of dense coniferous forest growth in Gitanyow traditional territory (Gitanyow Hereditary Chiefs Office (GHCO) 2008).

Gitxsan First Nation

The traditional territory of the Gitxsan First Nation is located south of the Project. Highway 37 passes through the Gitxsan territory. Project equipment, materials, supplies, personnel and concentrate will be transported along Highway 37.

Gitxsan people historically lived off the land and continue to rely on the land and natural resources for subsistence, cultural, and economic pursuits. Common traditional activities include fishing, hunting, trapping and gathering.

Salmon is a dietary staple for the Gitxsan and the basis of their subsistence economy. Gitxsan harvest and process chinook, coho, sockeye, and chum (*O. keta*) salmon, as well as steelhead trout, near their spawning grounds (GWA 2004).

Mammals are used for subsistence, trapping, and for grease. Mammals hunted for subsistence include deer, moose, mountain goat, black bear, and grizzly bear. The Gitksan trap beaver, American mink, American marten, fisher (*Martes pennant*), red fox, wolf (*Canis lupus*), coyote (*Canis latrans*), weasel (*Mustela spp.*), and otter (*Lontra canadensis*) for their fur (People of 'Ksan 1980; Halpin and Seguin 1990). In addition to their use for furs, some trapped animals have also traditionally been used for rendering grease (People of 'Ksan 1980; Morrell 1989; Halpin and Seguin 1990; Daly 2005; Gitksan Chiefs' Office 2010). Aquatic birds that have traditionally been eaten include geese, ducks, and swans (People of 'Ksan 1980).

A wide range of plant species are used for subsistence purposes. Saskatoon berries (*Amelanchier alnifolia*), hazelnuts (*Corylus cornuta*), chokecherries (*Prunus virginiana*), rosehips (*Rosa spp.*), gooseberries (*Ribes spp.*), squash berries (*Viburnum edule*), raspberries (*Rubus spp.*), thimbleberries (*Rubus parviflorus*) and soapberries were among those eaten by the Gitksan (Rescan 2009). They also collected wild crab-apples (*Malus fusca*), swamp cranberries (*Oxycoccus oxycoccus*), Saskatoon berries, and soapberries in the valleys. Bush burns were used to actively enhance mountain blueberries and blue huckleberries production until the practice was banned (Gottesfeld 1994). Today, people collect berries in clear-cut areas opened by forestry and along roadsides (Daly 2005). A number of edible mushrooms grow on the moss-covered forest floor, including pine mushrooms, which are harvested primarily for export (Gitksan Chiefs' Office 2010).

Gitksan also harvest a number of medicinal plants (Gitksan Chiefs' Office 2010), including devil's club and yellow pond lily root.

Tahltan Nation

The traditional territory of the Tahltan Nation lies to the north of the Project. Traditional activities including fishing, hunting, trapping and gathering play a large role in Tahltan culture.

The Tahltan have numerous fish-bearing rivers running through their territory including the Skeena, Stikine, Bell-Irving, Tahltan, Nass, Nahlin, and Ningunsaw rivers. Summer fisheries were traditionally, and are currently, located in the mid-Stikine, upper-Nass and upper-Skeena basins (THREAT 2009). Fish caught during traditional harvest seasons are smoke-dried and preserved and used to feed families throughout the season (Albright 1984).

Mammals are used for subsistence and trapping. A number of species of wildlife are important subsistence sources for Tahltan communities and are found throughout the Tahltan traditional territory. This includes moose, black bear, grizzly bear, mountain goat and caribou (*Rangifer tarandus*; MacLachlan 1981; THREAT 2009). Currently moose is a primary food source in the Tahltan diet. Trapping for fur-bearing mammals is a common activity among Tahltan communities and, since the advent of the European fur trade in the region, has provided a source of income for individuals and families who own registered trap lines.

Plant and berry harvesting is an important traditional activity for Tahltan families (THREAT 2009). Plants are used for medicinal and subsistence purposes. Traditionally green vegetables and roots were gathered during the spring, including nettles, mountain sorrel (*Oxyria digyna*), lamb's quarter (*Chenopodium album*), devil's club and dandelion (*Taraxacum spp.*). Approximately 25 species of berries are found in the Tahltan territory, including raspberries, strawberries (*Fragaria spp.*), bush cranberries (*Viburnum spp.*), blueberries and soapberries (Albright 1984; School District 87 2000). Medicinal uses of plant resources focused on treating minor ailments. Some of the more important medicinal plants include evergreen bark and needles, and soapberry.

A number of species of edible mushrooms are found throughout the Tahltan traditional territory, including pine mushrooms which are typically picked for sale. Pine mushroom picking is an important economic activity for Tahltan communities.

Métis

There are two Métis chartered communities existing south of the Project: the Northwest BC Métis Association in Terrace and the Tri-River Métis Association in Smithers. Approximately 1,100 Métis people reside in the Regional District of Kitimat-Stikine (Government of British Columbia 2011) and the Buckley-Nechako Regional District, Electoral Area A (combined).

Information related to Métis activities is available from the “Harvester Survey and Mapping Tool” in the British Columbia Métis Mapping Research Project. According to this survey and mapping tool, Métis harvest bear, birds, deer, fish, moose, sheep/goats, small game/trapping, non-timber forest products, and timber/firewood in the general Project area including the Unuk River and Bell-Irving River watersheds.

Potential Effects on First Nations and the Métis

First Nations’ current use of lands and resources for traditional purposes in the regional Project area includes fishing within the Unuk, Bell-Irving, and Bowser river systems, trapping and hunting, and harvesting of country foods and medicinal plants. During construction and operations, the Project may adversely affect First Nations and the Métis through direct and indirect impacts to these resources, including: the potential for a direct loss or degradation of wildlife habitat and movement corridors; increased hunting pressure created by Project roads and increased staff presence in area; direct mortality of wildlife from vehicle collisions; sensory disturbances created by Project activities including helicopter traffic and roads; and Project-induced changes to hydrology and water quality. The Project may also affect traditional land and resource use through Project related restricted or altered access and land modification.

The Project may also have adverse social and cultural effects on First Nations, the Nisga’a Nation, and the Métis. Economic growth can lead to a number of potential negative outcomes due to increased income disparity, potential for greater access to drugs in communities, and domestic issues arising from family members partaking in mine employment that takes them away from traditional family and community roles and responsibilities.

Potential Effects on the Nisga’a Nation

It is anticipated that the Project may be subject to Chapter 10 (Environmental Assessment and Protection) of the NFA. Chapter 10 of the NFA requires that in addition to applicable EA legislation, for projects where there is a potential for significant adverse effects to occur, the EA process will comply with paragraphs 8(e) and 8(f) (Canada, BC, and Nisga’a Nation 1998) as follows:

8(e) assess whether the project can reasonably be expected to have adverse environmental effects on residents of Nisga’a Lands, Nisga’a Lands, or Nisga’a interests set out in this Agreement and, where appropriate, make recommendations to prevent or mitigate those effects;

8(f) assess the effects of the project on the existing and future economic, social and cultural well-being of Nisga’a citizens who may be affected by the project;

Pretium will seek direction from the BC EAO and CEA Agency with respect to whether the NFA will apply, and the scope of its potential application.

Consultation with First Nations, the Nisga'a Lisims Government, and the Métis

Pretivm initiated consultations with the Skikm Lax Ha, Nisga'a Lisims Government, the Tahltan Nation, and the Gitksan and Gitanyow First Nations in 2011. These consultations expanded on efforts carried out by the previous owners of the Project, Silver Standard Resources. Consultations will continue during the Project's planning and regulatory review, construction, and operations phases. The objectives of the consultations will be to inform the First Nations, Nisga'a Nation, and the Métis about the Project, identify potential issues and concerns, and address issues and concerns to the extent possible.

Pretivm will develop comprehensive First Nation and Nisga'a Nation consultation plans. Delegated consultation activities will be commensurate with the depth of consultation required by the BC EAO and CEA Agency. Typical consultation activities may include participation in the BC EAO and CEA Agency EA working group meetings, face to face meetings with First Nation and Nisga'a Nation communities and their leadership, distributing information for review, tracking and responding to any issues raised during consultations, and identifying measures to mitigate potential adverse effects on Aboriginal rights.

Comments that have been raised during consultations undertaken to date (as summarized in Section 9.2) include interest in the positive economic benefits the Project has the potential to bring (i.e. employment and commercial opportunities) and concern over cumulative effects related to traffic volume along Hwy 37.

Pretivm will consult the CEA Agency to seek direction regarding the depth of consultation activities that will be required to address any potential effects of the Project on Métis interests.

Government Agency, and Local Government Consultations

It is anticipated that the BC EAO and CEA Agency will establish a Working Group to participate in the EA for the Project. Members of the Working Group will include federal and provincial government and local government representatives. Pretivm will attend Working Group meetings, as directed by the BC EAO and CEA Agency, to provide information on the Project, present baseline study work plans and results and discuss potential mitigation measures. Pretivm will also meet individually with government agencies and local governments as required during the EA.

Consultation has been initiated with the BC EAO, BC Ministry of Energy, Mines and Natural Gas (MEMNG), BC Ministry of Forests, Lands and Natural Resource Operations (MFLNRO), BC Ministry of Environment (MOE), CEA Agency, Transport Canada (TC), and Department of Fisheries and Oceans (DFO).

Public Consultation

During the EA, it is anticipated that Pretivm will hold open houses in Dease Lake, Hazelton, New Aiyansh, Smithers, Stewart and Terrace. Pretivm will also consult tenure holders in the Project area, economic development organizations; businesses and contractors (e.g., suppliers and service providers); and special interest groups (e.g., environmental, labour, social, health, and recreation groups), as required.

Key communities near the Project area where public consultation outreach activities may occur during public comment periods will include, but not necessarily be limited to:

- Dease Lake;
- Hazelton;

- New Aiyansh;
- Smithers;
- Stewart; and
- Terrace.

Project Development Schedule

Pretium plans to submit its application for the Environmental Assessment Certificate (EAC) and Environmental Impact Statement (EIS) to the BC EAO and CEA Agency in H2 2013. Construction of the Project is expected to start in H2 2014. Following a one year construction period the mine is expected to operate for a minimum of 16 years before closure.

Authorizations, Permits, and Licenses

Pretium is planning to apply for concurrent review of some provincial permits pursuant to the BC EAA Concurrent Approvals Regulation. Under this regulation, these permits would be reviewed at the same time as the Application/EIS. No decisions on permits can be made until after a decision has been made on the EAC.

All concurrent permit applications for the Project will be coordinated through the Major Projects Office (MPO) of the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO). It is anticipated that the Project will require approvals under the *Mines Act (1996b)*, *Environmental Management Act (2003)*, *Land Act (1996a)*, *Public Health Act (2008)*, *Drinking Water Protection Act (2001)*, *Heritage Conservation Act (2004a)*, and *Transportation Act (2004b)*.

Similar to the provincial EA process, no federal approvals may be issued until an EA Decision Statement is issued. The federal Major Projects Management Office (MPMO) is responsible for overseeing both the federal EA planning and the regulatory processes. Permit decisions are made within 90 calendar days of issuance of the EA decision statement. Key Authorizations may be required under the *Canadian Environmental Assessment Act (2012)*, the *Explosives Act (1985a)*, the *Fisheries Act (1985b)*, and the *Navigable Waters Protection Act (1985d)*.

Pretium will meet with the appropriate federal and provincial agencies to confirm permitting requirements related to the Project.

BRUCEJACK GOLD MINE PROJECT
Project Description (Federal)

Abbreviations

Abbreviations

Terminology used in this document is defined where it is first used. The following list will assist readers who may choose to review only portions of the document.

3D	Three-dimensional
μ	micro (10 ⁻⁶)
AANDC	Aboriginal Affairs and Northern Development Canada
Au	Gold
BC	British Columbia
BC EAO	British Columbia Environmental Assessment Office
BC EAA	British Columbia <i>Environmental Assessment Act</i>
BC MFLNRO	British Columbia Ministry of Forests, Lands and Natural Resource Operations
BC ILMB	British Columbia Integrated Land Management Bureau
BC MEMN	British Columbia Ministry of Energy, Mines and Natural Gas
BC MOE	British Columbia Ministry of Environment
BC MOM	British Columbia Ministry of Mines
BGC	BGC Engineering Inc.
CEAA	<i>Canadian Environmental Assessment Act, 2012</i>
CEA Agency	Canadian Environmental Assessment Agency
CCME	Canadian Council of Ministers of the Environment
CIS	Cassiar-Iskut-Stikine
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CN	Canadian National Railway
CNSC	Canadian Nuclear Safety and Control
DFO	Department of Fisheries and Oceans
EA	Environmental Assessment
EAC	Environmental Assessment Certificate
EC	Environment Canada
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EPCM	Engineering, procurement, construction, and maintenance
FAR	Fresh air raise
GHCO	Gitanyow Hereditary Chiefs Office

PROJECT DESCRIPTION SUMMARY

GHG	Greenhouse Gas
ha	hectare
HDPE	high-density polyethylene
Hwy	Highway
ISQG	Interim Sediment Quality Guidelines
k	kilo (10^3)
LOM	Life of Mine
LRMP	Land and Resource Management Plan
m	milli (10^{-3}) or metre
M	Million or Mega (10^6)
masl	Metres above sea level
MEND	Mine Environment Neutral Drainage
MFLNRO	Ministry of Forests, Land and Natural Resource Operations
ML/ARD	Metals leaching/acid rock drainage
MMER	Metal Mining Effluent Regulations
MPO	Major Projects Office
Mt	Million tonnes
MW	Megawatt
NCP	Net Current Proceeds
Newhawk	Newhawk Gold Mines Ltd.
NFA	Nisga'a Final Agreement
NHA	Northern Health Authority
NLG	Nisga'a Lisims Government
NRCan	Natural Resources Canada
NTL	Northwest Transmission Line
NWA	Nass Wildlife Area
NYSE	New York Stock Exchange
OAC	Overall allowable catch
OMP	Operational Management Plan
PEA	Preliminary Economic Assessment
Pretivm	Pretium Resources Inc.
SARA	<i>Species at Risk Act</i>
Silver Standard	Silver Standard Resources Inc.
SUP	Special Use Permit

RAR	return air raise
RDPA	Regulations Designating Physical Activities
RIC	Resource Inventory Committee (currently known as the Resource Information Standards Committee)
RISC	Resource Information Standards Committee (previously known as the Resource Inventory Committee)
RRA	Recognition and Reconciliation Agreement
RSA	Regional Study Area
SKHL	Skii km Lax Ha
the Project	Brucejack Gold Mine Project
tpa	Tonnes per annum
tpd	Tonnes per day
TC	Transport Canada
TCC	Tahltan Central Council
TEM	Terrestrial Ecosystem Mapping
THREAT	Tahltan Heritage Resources Environmental Assessment Team
TKN	Total Kjedahl nitrogen
TSF	Tailings storage facility
TSS	Total suspended solids
TSX	Toronto Stock Exchange
VOK	Valley of the Kings
WZ	West Zone

BRUCEJACK GOLD MINE PROJECT

Project Description (Federal)

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