1. Introduction

The Northwest Region includes about 263,000 km² of British Columbia, approximately 25% of the province (Fig. 1). The region has three operating mines and five proposed mine projects. More than 60 exploration projects were active in 2018, predominantly focussed on precious metal and porphyry style copper-gold mineralization.

In 2018, exploration expenditures, drilling estimates and other metrics for British Columbia were captured in the British Columbia Mineral and Coal Exploration Survey. The survey is a joint initiative between the Province of British Columbia Ministry of Energy, Mines and Petroleum Resources, the Association for Mineral Exploration, and Ernst & Young LLP. For the Northwest Region, exploration expenditures were estimated at $164.0 million and exploration drilling was estimated at approximately 293,500 m (Clarke et al., this volume; Ernst & Young LLP, 2019, in press).

The Northwest Region saw several significant events in 2018. Coeur Mining Inc. declared commercial production in September for the Silvertip mine they had acquired in October of 2017. In December, Pretium Resources Inc., received approval from the British Columbia Ministry of Energy, Mines and Petroleum Resources and Ministry of Environment and Climate Change Strategy to increase production from 2700 tpd to 3800 tpd.

IDM Mining Ltd. announced an updated mineral resource estimate of 2.77 Mt of 7.91 g/t Au and 22.75 g/t Ag. Measured plus Indicated, for their Red Mountain project. The project is a proposed high-grade underground gold mine. As well, they were granted their provincial environmental assessment certificate. A federal certificate is anticipated in early 2019.

Seabridge Gold Inc. extended the high-grade core of the Iron Cap deposit at their KSM project. Results included 548 m of 0.63 g/t Au and 0.44% Cu.

The first drill hole of 2018 at the North Boundary zone (NBZ), part of Aben Resources Ltd.’s Forest Kerr project, intersected multiple high-grade zones including 38.7 g/t Au over 10.0 m. Subsequent holes also returned high-grade gold assays.

Several companies reported new porphyry discoveries in 2018. GT Gold Corp. reported results for their Tatogga projects’ Saddle North target, approximately 1.5 km east-northeast of last year’s Saddle South gold discovery, including 363 m of 1.02 g/t Au, 0.51% Cu and 1.72 g/t Ag within 904 m of 0.51 g/t Au, 0.30% Cu and 0.93 g/t Ag. Golden Ridge Resources Ltd. announced discovering a new copper-gold porphyry at their Hank project’s Williams zone. Their first hole intersected 327 m grading 0.31% Cu, 0.35 g/t Au and 1.94 g/t Ag. Surge Copper Corp. (formerly Gold Reach Resources Ltd.) discovered a new copper zone 500 m northeast of the East Seel deposit at their Ootsa project. The discovery hole intersected 202 m of continuous mineralization and assayed 0.26% Cu, 0.31 g/t Au and 1.32 g/t Ag. ML Gold Corp. reported that drilling at two new targets on their Stars project intersected mineralized porphyry. In February, they announced 204 m assayed 0.45% Cu, 0.045 g/t Au, 1.64 g/t Ag, 0.0048% Mo. In August, they announced 405 m assayed 0.20% Cu, 0.0082% Mo, 0.754 g/t Ag and 24 ppb Au.

2. Geological overview

Metallogeny in British Columbia is intimately linked to the tectonic evolution of the Canadian Cordillera, first as an accretionary orogen consisting of allochthonous terranes that were welded to, and deformed with, the western margin of ancestral North America primarily during the Jurassic and then as the site of post-accretionary tectonism and magmatism (e.g., Nelson et al., 2013). The region includes all of the physiographic belts of the Canadian Cordillera (Fig. 1), and transects the Cordilleran orogen (Fig. 1). From east to west it is underlain by: 1) autochthonous and parautochthonous carbonate and siliciclastic strata deposited on the flank of Ancestral North America (Laurentia); 2) the Intermontane terranes, including the Slide Mountain terrane (back-arc basin); the Yukon-Tanana terrane (a rifted Devonian pericratonic arc); the Quesnel and Stikine volcanic arc terranes (formed outboard of Ancestral North America starting in the Late Paleozoic and accreted in the Middle Jurassic); and the Cache Creek oceanic terrane, which intervenes between Quesnellia and Stikinia; 3) the Alexander terrane; 4) post-accretionary rocks; and 5) younger cover rocks (Fig. 1).
Fig. 1. Mines, proposed mines and selected exploration projects, Northwest Region, 2018. Terranes after Nelson et al. (2013).
All of the allochthonous terranes initially accreted to each other and to western North America in the Jurassic. Since then, the mosaic has been intruded by post accretion plutonic suites and covered, in part, by Jurassic and younger syn- and post-accretionary siliciclastic deposits. For details about the geology, metallogeny, and tectonics of the Northwest Region see Nelson et al. (2013).

3. Mines and quarries

During 2018, three significant metal mines operated in the region (Red Chris, Brucejack and Silvertip; Fig. 1; Table 1). Ten industrial mineral mines were tracked, including eight jade operations (Fig. 1; Table 2). Placer mining has been active in the Northwest Region for well over a century. Operations are mainly in the Atlin area and, to a lesser extent, in the Cassiar area. Numerous small aggregate operations supply mainly local needs throughout the region and are not discussed in this report.

3.1. Metal mines

The Brucejack and Red Chris mines operated throughout the year and the Silvertip mine declared commercial production in September.

3.1.1. Brucejack (Pretium Resources Inc.)

The Brucejack underground gold-silver mine is about 65 km north-northwest of Stewart. Road access is via combined all-weather dirt road and glacier road. An all-season airstrip is on the road access, approximately 20 km southeast of the mine site. Pretium completed a feasibility study in 2014 and started construction in September 2015. In July 2107, commercial production was announced. For the first three quarters ended September 30th, production totalled 279,670 oz Au and the year and the construction in September 2015. In July 2107, commercial production was declared. Coeur Mining Inc. also carried out a 57,660 m of exploration drilling at the mine site. Designed as infill drilling, the program also discovered new mineralization including 11.4 m of 193.3 g/t Ag, 18.3% Zn and 15.2% Pb. The Discovery zone remains open to the north, south, and east, and at depth. New multiple stacked manto horizons and vertical feeders were intersected at the Silver Creek zone. Results included 3.8 m of 905.5 g/t Ag, 29.2% Zn and 16.5% Pb. The Silvertip deposit is in the Cassiar terrane. The ore body consists of five zones: the Silver Creek, the 28, the 65, the Discovery and the Discovery North. The zones consist of massive sulphide bodies in limestones of the McDame Group and are unconformably overlain by Devonian-Mississippian rift-related, siliciclastic rocks of the Earn Group. Current indicated resource estimates are 2.59 Mt at 10.26 oz/ton Ag, 6.74% Pb and 9.41% Zn.

3.1.2. Red Chris (Red Chris Development Company Ltd.)

The Red Chris copper-gold mine is accessed by a controlled mine road from highway 37. The project is owned by Red Chris Development Company Ltd., a subsidiary of Imperial Metals Corporation. Production to the end of the 3rd quarter of 2018 totalled 44.78 Mlbs Cu and 29,569 oz Au from 7.93 Mt of ore grading 0.35% Cu and 0.25 g/t Au. Metal recoveries averaged 75.39% for Cu and 45.82% for Au.

The Red Chris copper-gold deposit is hosted in a 204 Ma diorite-monzonite that intrudes Upper Triassic rocks of the Stuhini Group. The 6.5 x 1.5 km porphyry consists of four main intrusive phases. The second phase (P2) contains most of the copper and gold, and measures greater than 2 km x 650 m in plan and extends to a depth of more than 1.5 km. The syn-mineral P2 intrusive phase is high-potassic, calc-alkaline in composition and contains abundant ‘A’ type quartz-chalcopyrite-magnetite+/-bornite veins (Rees et al., 2015).

Measured plus Indicated resources total 1.035 Bt with an average grade of 0.35% Cu, 0.35 g/t Au and 1.14 g/t Ag. Additional Inferred resources total 787.1 Mt grading 0.29% Cu, 0.32 g/t Au and 1.04 g/t Ag. Resource figures are for combined open-pit and planned underground operations and do not take into account any mining since start-up.

3.1.3. Silvertip (Coeur Mining Inc.)

Coeur purchased the Silvertip silver-zinc-lead mine in October of 2017 for about $250 million. Coeur proceeded to upgrade facilities and restart mining. In September 2018, commercial production was declared. Coeur Mining Inc. also carried out a 57,660 m of exploration drilling at the mine site. Designed as infill drilling, the program also discovered new zones. Surface drilling at the Discovery zone intersected new mineralization including 11.4 m of 193.3 g/t Ag, 18.3% Zn and 3.2% Pb, and 6 m of 925.7 g/t Ag, 16.0% Zn and 15.2% Pb. The Discovery zone remains open to the north, south, and east, and at depth. New multiple stacked manto horizons and vertical feeders were intersected at the Silver Creek zone. Results included 3.8 m of 905.5 g/t Ag, 29.2% Zn and 16.5% Pb.

3.2. Industrial mineral mines and quarries

Ten industrial mineral mines were tracked, including eight jade producers and two industrial rock quarries (Table 2). Regional exploration efforts continue to follow up new targets outside of the mining lease in their surrounding 1200 km² of mineral claims (see section 6.3.1.).
## Table 1. Metal mines, Northwest Region.

<table>
<thead>
<tr>
<th>Mine</th>
<th>Operator (partner)</th>
<th>Commodity; deposit type; MINFILE</th>
<th>Forecast 2018 Production (based on Q1-Q3)</th>
<th>Reserves</th>
<th>Resource</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brucejack</strong></td>
<td>Pretium Resources Inc.</td>
<td>Au, Ag; Au-quartz veins, quartz stockwork breccia, epithermal; 104B 193</td>
<td>372,900 oz Au, 411,600 oz Ag</td>
<td>P+Pr: combined, VOK zone and West zone 18.5 Mt at 14.6 g/t Au, 53.5 g/t Ag</td>
<td>M+I: VOK zone 16.4 Mt at 17.2 g/t Au and 15.0 g/t Ag</td>
<td>M+I: West zone 4.9 Mt at 5.85 g/t Au and 267 g/t Ag. Resources are inclusive of Reserves</td>
</tr>
<tr>
<td><strong>Huckleberry</strong></td>
<td>Huckleberry Mines Ltd.</td>
<td>Cu, Au, Ag, Mo; porphyry Cu-Mo-Au; 093E 037</td>
<td>na</td>
<td>P+Pr: approx., 34.96 Mt at 0.32% Cu, 0.01% Mo</td>
<td>M+I: 180.7 Mt at 0.32% Cu, 0.01% Mo</td>
<td>Place on care and maintenance in 2016.</td>
</tr>
<tr>
<td><strong>Red Chris</strong></td>
<td>Red Chris Development Company Ltd.</td>
<td>Cu, Au, Ag; porphyry Cu-Au; 104H 005</td>
<td>59.71 Mlbs Cu, 39,425 oz Au and 102,733 oz Ag</td>
<td>P+Pr: 301.5 Mt at 0.36% Cu, 0.27 g/t Au</td>
<td>M+I: 1.035 Bt at 0.35% Cu, 0.35 g/t Au and 1.14 g/t Ag</td>
<td>First year of full production in 2016. Reserve and Resource figures are for combined open-pit and planned underground operations and do not take into account mining since start-up.</td>
</tr>
<tr>
<td><strong>Silvertip</strong></td>
<td>Coeur Mining Inc.</td>
<td>Ag, Pb, Zn, Au; polymetallic manto; 1040 038</td>
<td>na</td>
<td>I: 2.59 Mtons at 10.26 oz/ton Ag, 6.74% Zn, 9.41% Pb</td>
<td></td>
<td>Commercial production declared in September. Mine site drilling returned results including 11.4 m of 193.3 g/t Ag, 18.3% Zn and 3.2% Pb and located new mineralization.</td>
</tr>
</tbody>
</table>

P = Proven; Pr = Probable; M = Measured; I = Indicated; Inf = Inferred

### 3.2.1. Nephrite Jade

Jade is the commercial term for jadeite and nephrite. In British Columbia, jade occurs as nephrite. Nephrite is composed of interlocking fibrous amphibole minerals derived from an ultramafic protolith that has undergone dynamothermal metamorphism and metasomatism. The two significant areas of nephrite jade extraction in the Northwest Region are east of Dease Lake in the Turnagain River area, and north of Dease Lake in the Cassiar area. Production varies between operations and ranges from 200 to 2000 t per year.

### 3.2.2. Industrial rock quarries

The **Burning Daylight** basalt stone quarry is owned by Stone Ridge Quarries Limited. Access to the project is via a forest service road. Stone Ridge mines basalt for landscape and building stone markets.

The **Kalum** quarry is 3 km west of Terrace at the confluence of the Kitsumkalum and Skeena Rivers on the traditional territory of the Kitsumkalum First Nation. The quarry is owned and operated by the Kalum Quarry Ltd. Partnership, a subsidiary of the Kitsumkalum First Nation. The quarry has road access and a 3 km rail line connecting it to the CN mainline. Rock is drilled, blasted, and crushed on site to meet specific contract requirements. Various aggregate size products are produced for industrial and residential purposes. Typical products include large diameter rip-rap, railway ballast, asphalt crush, and finer...
Table 2. Selected industrial mineral mines and quarries, Northwest Region.

<table>
<thead>
<tr>
<th>Mine</th>
<th>Operator (partner)</th>
<th>Commodity; deposit type; MINFILE</th>
<th>Forecast 2018 Production (based on Q1-Q3)</th>
<th>Reserves</th>
<th>Resource</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burning Daylight</td>
<td>Stone Ridge Quarries Ltd.</td>
<td>Columnar basalt; dimension stone</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Basalt quarrying.</td>
</tr>
<tr>
<td>Cassiar Jade</td>
<td>Dynasty Jade Ltd.</td>
<td>Nephrite jade; gems and semi-precious stones; 104P 005</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Trenching, quarrying, placer production.</td>
</tr>
<tr>
<td>Dean Kutcho</td>
<td>Cassiar Jade Contracting Inc.</td>
<td>Nephrite jade; gems and semi-precious stones; 104I 078</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Mining.</td>
</tr>
<tr>
<td>Jade Valley</td>
<td>United Oriental Mining Ltd.</td>
<td>Nephrite jade; gems and semi-precious stones; 104I 048</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Trenching, quarrying, placer production.</td>
</tr>
<tr>
<td>Kalum</td>
<td>Kalum Quarry Ltd. Partnership</td>
<td>Industrial rock; crushed rock</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Drilling, blasting, crushing, production for CN railway bed.</td>
</tr>
<tr>
<td>Kutcho Creek Jade</td>
<td>Continental Jade Ltd.</td>
<td>Nephrite jade; gems and semi-precious stones; 104I 078</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Mining, trenching.</td>
</tr>
<tr>
<td>Letain</td>
<td>Cassiar Jade Contracting Inc.</td>
<td>Nephrite jade; gems and semi-precious stones; 104I 079</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Mining, trenching.</td>
</tr>
<tr>
<td>Polar Jade</td>
<td>Glenpark Enterprises Ltd.</td>
<td>Nephrite jade; gems and semi-precious stones; 104I 092</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Mining.</td>
</tr>
<tr>
<td>Provencher</td>
<td>Glenpark Enterprises Ltd.</td>
<td>Nephrite jade; gems and semi-precious stones; 104I 092</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Mining, trenching.</td>
</tr>
<tr>
<td>Wolverine</td>
<td>Cassiar Jade Contracting Inc.</td>
<td>Nephrite jade; gems and semi-precious stones</td>
<td>unknown na na</td>
<td></td>
<td></td>
<td>Mining, trenching.</td>
</tr>
</tbody>
</table>

materials for concrete. An estimated 22 million cubic metres of material remains available for development. Basalt and andesite of the Hazelton Group are quarried.

3.2.3. Placer operations
Placer mining operations have been active in the Northwest Region for well over a century. Because of the large number of mines and difficulty in obtaining information, these operations are not tracked.

4. Mine development
The mine development stage is achieved when a project acquires the required permits and has started mine construction. Essential permits include a Mines Act permit from the Ministry of Energy, Mines and Petroleum Resources, and an Environmental Management Act permit from the Ministry of Environment. Provincial and federal environmental assessment certificates may also be required. There were no mine development projects in the region in 2018.
5. Proposed mines or quarries

Proposed mines are feasibility-stage projects for which proponents have begun or completed the environmental certification process (generally for large projects), or have submitted or received approvals for Mines Act permits (for projects below British Columbia Environmental Assessment Act thresholds).

5.1. Selected proposed metal mines

The Northwest Region has several proposed metal mines, five of which have been active within the past three years and/or hold permits to allow construction if financing becomes available (Fig. 1; Table 3).

5.1.1. Dome Mountain (Gavin Mines Inc.)

The Dome Mountain past-producing gold mine is accessed by forest service roads from highway 16. Gavin Mines Inc., a subsidiary of Metal Mountain Resources Inc. owns 54%, Grace Mining Inc. owns 30%, Dome Mountain Resources of Canada Inc. owns 14%, and two private shareholders own 2%. The project has Mines Act and Environmental Management Act permits in good standing and is allowed to extract up to 75,000 tpy. In early 2013, the project submitted applications to amend their existing Mines Act and Environmental Management Act permits to allow onsite milling and tailings storage. Due to delays, including regulatory changes due to the 2014 Mount Polley tailings breach, the permit amendments remain outstanding. Since 2016, stockpiled ore has intermittently been processed at Nicola Mining Inc.’s custom mill near Merritt.

5.1.2. Galore Creek (Galore Creek Mining Corporation)

The Galore Creek gold-copper project is operated by the Galore Creek Mining Corporation (GCMC). Ownership of GCMC is equally split between Teck Resources Limited and Newmont Mining Corporation. Newmont purchased their 50% interest from Novagold Resources Inc. in July. Newmont and Teck announced that they will complete prefeasibility studies over three to four years with an annual budget of $10 to $15 million (50 percent basis). The project consists of thirteen known zones of gold-copper mineralization with Proven plus Probable reserves reported as 528 Mt at 0.59% Cu, 0.32 g/t Au and 6.02 g/t Ag.

5.1.3. KSM (Seabridge Gold Inc.)

Owned by Seabridge Gold Inc., the KSM project occupies the adjoining mineral claims west of the Brucejack mine. Access to KSM is via helicopter. The project consists of four porphyry Cu-Au deposits: Kerr, Sulphurets, Mitchell, and Iron Cap. In 2018, Seabridge continued to drill the Iron Cap deposit. Results extended its high-grade core down plunge and will be used to produce an upgraded resource estimate. Highlight results included 548 m of 0.63 g/t Au and 0.44% Cu. KSM economics might be improved if the Iron Cap deposit is mined before the Kerr deposit.

The deposits represent what may be the largest undeveloped copper-gold camp in the world (by reserves). Proven plus Probable reserves are reported as 2.198 Bt grading 0.55 g/t Au, 0.21% Cu, 2.6 g/t Ag and 42.6 g/t Mo. Measured plus Indicated resource estimate totals 2.924 Bt grading 0.52 g/t Au, 0.21% Cu, 2.7 g/t Ag and 55 ppm Mo. Seabridge received federal and provincial approval of the project environmental assessment in 2014 and is actively seeking partnership to advance into construction.

The KSM deposits are related to the Mitchell intrusions of the Texas Creek plutonic suite (Early Jurassic; ~194 Ma). Diorite, monzonite and quartz-syenite stocks and dikes intrude along the Sulphurets fault (pre-Early Jurassic) into surrounding sedimentary and volcanic rocks of the Stuhini and Hazelton groups. Mineralization is disseminated and in stockwork veins, and consists of fine-grained chalcopyrite, bornite, molybdenite, and pyrite.

5.1.4. Morrison (Pacific Booker Minerals Inc.)

Access to the Morrison Cu-Au-Mo-Ag project is by road and barge. Proven plus Probable reserves are reported as 224.2 Mt at 0.33% Cu, 0.163 g/t Au and 0.004% Mo. Proposed is an open-pit operation with a 30,000 tpd mill, equating to a 21-year mine life.

Pacific Booker submitted an EA application in 2010, which was denied in 2012. In late 2013, a Supreme Court ruled procedural fairness was not adhered to in the 2012 rejection and required the EAO to accept a remitted application for reconsideration. After the Mount Polley tailings breach, the review was suspended, but then resumed in June 2015. In July 2015, a letter from the British Columbia Minister of Environment and Minister of Energy and Mines stated that concerns still remained regarding the project design and that further information was required. In 2018, Pacific Booker continued to lobby for the project.

5.1.5. Red Mountain (IDM Mining Ltd.)

The Red Mountain project is a proposed high-grade underground gold mine 18 km east-northeast of Stewart. In 2018, IDM Mining Ltd., carried out a 40 hole, 10,000 m diamond drilling program and announced an updated mineral resource estimate of 2.77 Mt of 7.91 g/t Au and 22.75 g/t Ag, Measured plus Indicated. As well, they were granted their provincial environmental assessment certificate. A federal certificate is anticipated in early 2019.

The project contains five known underground gold zones; Marc, AV, JW, 141 and 132. Mineralized zones consist of crudely tabular, northwesterly trending and moderately to steeply southwesterly dipping gold and silver-bearing iron sulphide stockworks. Mineralized widths vary from less than 2 m to 40 m and average 16 m. The stockwork zones consist of pyrite microveins, coarse-grained pyrite veins, irregular coarse-grained pyrite masses and breccia matrix pyrite hosted predominately in a pale, strongly sericite-altered porphyry. Vein widths vary from 0.1 to 80 cm but widths of 1 to 3 cm are most common. The veins are very commonly
Table 3. Selected proposed mines, Northwest Region.

<table>
<thead>
<tr>
<th>Project</th>
<th>Operator (partner)</th>
<th>Commodity; deposit type; MINFILE</th>
<th>Reserves</th>
<th>Resource</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dome Mountain</td>
<td>Dome Mountain Resources of Canada Inc.</td>
<td>Au, Ag; vein breccia and stockwork; 093L 022</td>
<td>na</td>
<td>na</td>
<td>Permit amendments outstanding. Stockpiled ore intermittently processed at Nicola Mining Inc. mill near Merritt.</td>
</tr>
<tr>
<td>Galore Creek</td>
<td>Galore Creek Mining Corp. (50% Teck Resources Limited, 50% Newmont Mining Corporation)</td>
<td>Au, Cu; alkalic porphyry; 104G 090</td>
<td>P+Pr: 528 Mt at 0.59% Cu, 0.32 g/t Au, 6.02 g/t Ag</td>
<td>M+I: 286.7 Mt at 0.33% Cu, 0.27 g/t Au, 3.64 g/t Ag. Resources exclusive of Reserves</td>
<td>Baseline monitoring. Newmont purchased 50% interest from Novagold Resources Inc. in July. Multi-year prefeasibility study announced, with an annual budget of $10 to $15 million (50% basis).</td>
</tr>
<tr>
<td>KSM</td>
<td>Seabridge Gold Inc.</td>
<td>Au, Cu, Ag, Mo; calc-alkalic porphyry; 104B 191</td>
<td>P+Pr: 2.198 Bt at 0.55 g/t Au, 0.21% Cu, 2.6 g/t Ag, 0.00426% Mo</td>
<td>M+I: 2.925 Bt at 0.52 g/t Au, 0.21% Cu, 2.7 g/t Ag, 0.0055% Mo. Resources include mineral Reserves</td>
<td>Results from 2018 drilling at the Iron Cap deposit extended its high-grade core down plunge and will be used for an upgraded resource estimate. Highlight results included 548 m of 0.63 g/t Au and 0.44% Cu.</td>
</tr>
<tr>
<td>Morrison</td>
<td>Pacific Booker Minerals Inc.</td>
<td>Cu, Mo; calc-alkalic porphyry; 093M 007</td>
<td>P+Pr: 224.25 Mt at 0.33% Cu, 0.163 g/t Au, 0.004% Mo</td>
<td>na</td>
<td>Baseline monitoring, EA ongoing. Resource information from company website.</td>
</tr>
<tr>
<td>Red Mountain</td>
<td>IDM Mining Ltd.</td>
<td>Au, Ag; porphyry related gold; 103P 086</td>
<td>na</td>
<td>M+I: 2.771 Mt at 7.91 g/t Au, 22.75 g/t Ag</td>
<td>Diamond drilling (40 hole, 10,000 m). Announced an updated M+I resource estimate. Granted a provincial environmental assessment certificate; federal certificate anticipated in early 2019.</td>
</tr>
</tbody>
</table>

P = Proven; Pr = Probable; M = Measured; I = Indicated; Inf = Inferred

6. Selected exploration activities and highlights

Exploration-stage projects are defined as the initial stages of evaluation for economic minerals. This includes grassroots activities such as prospecting, rock and soil sampling, regional mapping and airborne geophysical surveys. Early-stage activities include more focussed sample grids, geophysical surveys, prospect-scale geological mapping, drill target generation, and testing that set the stage for future mine evaluation. Collecting baseline environmental data is also common at this stage.

heavily fractured or brecciated with infillings of fibrous quartz and calcite. The pyrite veins typically carry gold grades ranging from ~3 g/t to greater than 100 g/t. Gold occurs as grains of native gold, electrum, petzite, and a variety of Au tellurides and sulfohalides. Pyrite is the predominant sulphide, although pyrrhotite is locally important. The stockwork zones also occur to a lesser extent in rafts of sedimentary and volcaniclastic rocks.
Table 4. Selected exploration projects, Northwest Region.

<table>
<thead>
<tr>
<th>Project</th>
<th>Operator (partner)</th>
<th>Commodity; deposit type; MINFILE</th>
<th>Resource (NI 43-101 compliant unless indicated otherwise)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlin Gold Project</td>
<td>Brixton Metals Corporation</td>
<td>Au; precious metal veins</td>
<td>na</td>
<td>Geological mapping, rock and chip sampling, biogeochemical studies, and 2500 soil samples. Several gold-in-soil anomalies.</td>
</tr>
<tr>
<td>Berg</td>
<td>Centerra Gold Inc.</td>
<td>Cu, Mo, Ag; porphyry; 093E 046</td>
<td>M+I: 557 Mt at 0.3% Cu, 0.037% Mo, 3.12 g/t Ag</td>
<td>Mapping and sampling in the Berbette and A12 target areas. Soil sampling t on the A12 target.</td>
</tr>
<tr>
<td>Boomerang</td>
<td>Hawkeye Gold and Diamonds Inc.</td>
<td>Cu, Au; porphyry</td>
<td>na</td>
<td>Soil and rock sampling. Rock samples returned Cu grades ranging from 0.10% to 1.80%.</td>
</tr>
<tr>
<td>Brucejack Regional</td>
<td>Pretium Resources Inc.</td>
<td>Au, Ag; epithermal vein</td>
<td>na</td>
<td>Evaluation of 1250 km² of mineral claims surrounding the mine area. Diamond drilling (8000 m), mapping and prospecting. At the American Creek zone, drilling highlight results included 1.5 m grading 10.15 g/t Au and 25.5 m grading 41.54 g/t Ag, 2.12% Zn and 0.56% Pb. Prospecting sample results located the new Upper Kirkham zone. Samples assayed as high as 3.55 g/t Au, greater than 10,000 g/t Ag, 4.7% Cu, greater than 20% Pb and 3.8% Zn.</td>
</tr>
<tr>
<td>Clone</td>
<td>Sunvest Minerals Corp.</td>
<td>Au, Ag, Cu, Co; Au; precious metal veins; 103P 251</td>
<td>na</td>
<td>Geochemical rock, silt and soil sampling, detailed geological mapping and packsack drilling. A number of samples returned anomalous Cu, Ag and Au assays. A newly discovered mineralized vein returned a 1 m chip sample result of 4.11% Cu, 160g/t Ag, 0.52g/t Au.</td>
</tr>
<tr>
<td>Dolly Varden</td>
<td>Dolly Varden Silver Corporation</td>
<td>Ag, Zn; Noranda/ Kuroko massive sulphide; 103P 188</td>
<td>I: 3.073 Mt at 321.6 g/t Ag Inf: 898,500 t at 373.3 g/t Ag</td>
<td>Drilling, 29,108 m in 84 holes. A new zone, (Bonus) discovered. Results included 15.50 m grading 161.4 g/t Au, 0.25% Pb and 0.20% Zn. Drilling on known zones included 24.00 m grading 287.5 g/t Ag, 0.29% Pb, and 0.11% Zn at Torbrit East and 29.15 m grading 226.0 g/t Ag, 0.09% Pb, and 0.13% Zn at the Moose-Lamb zone.</td>
</tr>
<tr>
<td>Duke</td>
<td>Amarc Resources Ltd.</td>
<td>Cu, Mo, Au; porphyry Cu-Au</td>
<td>Historic non NI 43-101 compliant I: 41 Mt at 0.25% Cu, 0.01% Mo</td>
<td>Property straddles the Northwest and North Central regions. Six diamond drill holes totalling 3600 m completed. Highlight results included 348 m grading 0.23% Cu, 0.013% Mo, 1.1 g/t Ag, 0.05 g/t Au.</td>
</tr>
<tr>
<td>Dunwell</td>
<td>American Creek Resources Ltd.</td>
<td>Au, Ag, Pb, Zn; polymetallic veins; 103P 052</td>
<td>na</td>
<td>30 rock samples from both surface and historic underground workings. Reported results included high-grade Au (up to 61.2 g/t) and Ag (up to 1186 g/t) along with base metals.</td>
</tr>
<tr>
<td>Engineer</td>
<td>Engineer Gold Mines Ltd.</td>
<td>Au, Ag; epithermal veins; 104M 014</td>
<td>Inf: 41,000 t at 19.0 g/t Au</td>
<td>MMI soil sampling. Heavy equipment, fuel and diamond drill equipment barged to mine site in preparation for 2019 work.</td>
</tr>
</tbody>
</table>

Table 4. Continued.

<table>
<thead>
<tr>
<th>Area/Gold Deposit</th>
<th>Company</th>
<th>Metals</th>
<th>Resource Highlights</th>
<th>Exploration Methods and Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eskay Creek</td>
<td>Skeena Resources Limited</td>
<td>Au, Ag, Zn, Cu, Pb; VMS; 104B 008</td>
<td>I: 1.08 Mt at 4.9 g/t Au, 72 g/t Ag (pit constrained) Inf: 4.26 Mt at 3.3 g/t Au, 72 g/t Ag (pit constrained) I: 2.51 Mt at 7.2 g/t Au, 215 g/t Ag (underground) Inf: 0.81 Mt at 7.2 g/t Au, 214 g/t Ag (underground)</td>
<td>Diamond drilling, compiled and reviewed 20 years of exploration and production information and completed a geologic model and resource estimate. Drilling highlights include 14.55 m grading 7.36 g/t Au, 1189 g/t Ag and 31.50 m grading 10.16 g/t Au, 331 g/t Ag and 42.65 m grading 9.49 g/t Au, 111 g/t Ag.</td>
</tr>
<tr>
<td>Forest Kerr</td>
<td>Aben Resources Ltd.</td>
<td>Au, Ag, Cu; precious metal veins</td>
<td></td>
<td>Diamond drilling, 36 holes totalling 9900 m. Drilling intersected multiple high-grade zones including 38.7 g/t Au over 10.0 m.</td>
</tr>
<tr>
<td>Golddigger</td>
<td>Goliath Resources Limited</td>
<td>Au, Ag, Pb, Cu; polymetallic veins</td>
<td></td>
<td>A 0.55 m channel sample graded 29.70 g/t Au and 14.30 g/t Ag, a 0.50 m chip sample graded 47.50 g/t Au and 272.00 g/t Ag and grab samples graded up to 113.50 g/t Au and 249.00 g/t Ag.</td>
</tr>
<tr>
<td>Hank</td>
<td>Golden Ridge Resources Ltd.</td>
<td>Au, Cu; calc-alkalic porphyry</td>
<td></td>
<td>Drilling discovered new porphyry Cu-Au at the Williams zone. Discovery hole returned 327 m grading 0.31% Cu, 0.35 g/t Au and 1.94 g/t Ag.</td>
</tr>
<tr>
<td>Hat</td>
<td>Doubleview Capital Corp.</td>
<td>Au, Cu; calc-alkalic porphyry; 104J 015</td>
<td></td>
<td>Project optioned to Hudbay Minerals Inc. Hudbay by Doubleview Capital Corp. In the summer, a 40 line-km, deep-penetrating induced polarization survey was carried out to delineate drilling targets.</td>
</tr>
<tr>
<td>Iskut</td>
<td>Seabridge Gold Inc.</td>
<td>Au, Ag, Cu; intrusion related, calc-alkalic porphyry; 104B 107</td>
<td></td>
<td>Diamond drilling (2700 m) to test for high-grade epithermal precious metal mineralization, but encountered mineralization typical of a large porphyry Cu-Au system.</td>
</tr>
<tr>
<td>Keaper</td>
<td>Casa Minerals Inc.</td>
<td>Ag, Cu, Pb, Zn; polymetallic veins</td>
<td></td>
<td>Rock and soil sampling. Highlight rock sample results included 1512 g/t Ag with 0.88% Cu, 1.19% Pb, 13.9% Zn and &gt;100 g/t Ag with 0.33% Cu.</td>
</tr>
<tr>
<td>Kinaskan-Castle</td>
<td>Colorado Resources Ltd.</td>
<td>Cu, Mo, Au; porphyry Cu-Au</td>
<td></td>
<td>IP surveying produced chargeability anomalies coincident with large gold and copper soil geochemical anomalies extending east-west for more than 2000 m. The anomalies are interpreted to be in the same stratigraphic unit that hosts the Saddle North and Saddle South discoveries on GT Gold’s Tatogga property. Permits to allow drilling received in October.</td>
</tr>
<tr>
<td>Kinskuch (Hecla)</td>
<td>Hecla Quebec Inc.</td>
<td>Ag, Cu, Pb, Zn; polymetallic veins</td>
<td></td>
<td>Diamond drilling defined silver-enriched base metal mineralization over a strike length of 4.8 km.</td>
</tr>
<tr>
<td>Company</td>
<td>Metallis Resources Inc.</td>
<td>Sample Code</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------</td>
<td>-------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Kirkham Metallis</td>
<td>Au, Cu; calc-alkalic porphyry and Au, Ag, intrusion related; 104B 079</td>
<td>na</td>
<td>Although a porphyry Cu-Au target, drilling at Cole intersected an intrusion-related massive sulphide pyrite-pyrrhotite vein that assayed 11.18 g/t Au over 7.7 m.</td>
<td></td>
</tr>
<tr>
<td>Kirkham (Thunder North)</td>
<td>Ni, Cu; tholeiitic intrusion-hosted Ni-Cu</td>
<td>na</td>
<td>The project is approximately 2 km southeast of Garibaldi Resource’s Nickel Mountain project. Diamond drilling to test airborne electromagnetic and magnetic targets underway in the fall.</td>
<td></td>
</tr>
<tr>
<td>KSP</td>
<td>Au, Cu; calc-alkalic porphyry and Au, Ag, intrusion related; 104B 111, 13</td>
<td>na</td>
<td>Diamond drilling, 7847 m in 35 holes. Results included 32 m grading 0.32 g/t Au and 1.64% Zn and 50 m grading 2.28 g/t Au, including 6 m grading 7.36 g/t Au.</td>
<td></td>
</tr>
<tr>
<td>Kutcho</td>
<td>Cu, Pb, Zn, Au, Ag; VMS; 104I 060</td>
<td>M+I: 16.853 Mt of 1.89% Cu, 2.87% Zn, 0.36 g/t Au and 32.8 g/t Ag (at a 1.0% Cu cut-off)</td>
<td>Results from 2018 drilling included 28 m of 2.09% Cu, 6.1% Zn, 65.8 g/t Ag, 0.82 g/t Au and 5.4 m of 2.48% Cu, 1.0% Zn, 114.0 g/t Ag, 0.24 g/t Au. A bench scale metallurgical study is underway and a feasibility study is scheduled for 2019.</td>
<td></td>
</tr>
<tr>
<td>Maroon</td>
<td>Au, Pb, Zn; polymetallic veins; 103I 029</td>
<td>na</td>
<td>Reconnaissance prospecting found several polymetallic quartz-sulphide veins. Sampling focused on historical workings and returned results up to 50 g/t Au, 11.5% Zn and 13.9% Pb.</td>
<td></td>
</tr>
<tr>
<td>Nickel Mountain</td>
<td>Ni, Cu, Co, Pt, Pd, Au, Ag; tholeiitic intrusion; 104B 006</td>
<td>na</td>
<td>Diamond drilling (32 holes, 11,573 m). Highlight results for 10 holes include 30.5 m of 3.10% Ni, 1.86% Cu, 0.081% Co, 0.863 g/t Pt, 1.776 g/t Pd, 0.739 g/t Au, 7.3 g/t Ag and 5.6 m of 7.60% Ni, 3.36% Cu, 0.198% Co, 0.668 g/t Pt, 0.814 g/t Pd, 0.466 g/t Au, 9.0 g/t Ag.</td>
<td></td>
</tr>
<tr>
<td>Ootsa</td>
<td>Cu, Au, Ag, Mo; porphyry; 093E 105</td>
<td>I: 67.76 Mt 0.21% Cu, 0.17 g/t Au, 0.015% Mo, 2.01 g/t Ag Inf: 410.88 Mt 0.16% Cu, 0.11 g/t Au, 0.018% Mo, 1.95 g/t Ag</td>
<td>A new copper zone discovered 500 m northeast of the East Seel deposit. Continuous mineralization (202 m) assayed 0.26% Cu, 0.31 g/t Au and 1.32 g/t Ag. A later hole intersected 22 m of 0.5% Cu, 0.10 g/t Au, 17.6 g/t Ag, 0.65% Zn and 0.14% Pb. Drilling between the East Seel and Damascus deposits intersected a new gold zone returning 2 m grading 9.4 g/t Au.</td>
<td></td>
</tr>
<tr>
<td>Pearson</td>
<td>Cu, Ag, Au; polymetallic veins</td>
<td>na</td>
<td>A grab sample from a 70 cm wide mineralized quartz vein returned 54.5 g/t Au, 87.8 g/t Ag and 7.54% Pb.</td>
<td></td>
</tr>
<tr>
<td>Province/Mine</td>
<td>Company</td>
<td>Metals</td>
<td>Vein Type</td>
<td>Exploration Details</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>--------</td>
<td>-----------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Pitman</td>
<td>Casa Minerals Inc.</td>
<td>Au, Ag, Cu, Pb, Zn; polymetallic veins</td>
<td>na</td>
<td>New showings, Golden Dragon and Dragon Tale, discovered in 2018. Rock chip sampling at Golden Dragon returned 0.6 m assaying 574.42 g/t Au, 109 g/t Ag, 0.1% Cu, 1.56% Pb, 0.23% Zn and 0.9 m assaying 268.86 g/t Au, 127 g/t Ag, 0.2% Cu, 2.95% Pb, 0.04% Zn. The Dragon Tale showing returned rock sample assays as high as 231 g/t Ag and 6.15% Zn.</td>
</tr>
<tr>
<td>Porter</td>
<td>StrikePoint Gold Inc.</td>
<td>Ag, Au, Cu, Zn; polymetallic veins</td>
<td>na</td>
<td>StrikePoint Gold acquired the property from Skeena Resources Limited in July and carried out diamond drilling (4800 m), prospecting, and sampling. Thirty-two rock samples returned assays ranging from trace to 43.6 oz/t Ag, trace to 0.54 oz/t Au and trace Zn to 28.8%. A new mineralized vein was discovered with a 205 m strike length and widths of up to 2 m. Samples graded up to 876 g/t Ag and 10.8 g/t Au.</td>
</tr>
<tr>
<td>Premier East</td>
<td>Decade Resources Ltd.</td>
<td>Au, Ag, Cu; polymetallic veins</td>
<td>na</td>
<td>Rock sampling returned anomalous values for precious and base metals including one sample that graded 5.72 g/t Au, 716 g/t Ag and 11.60% Cu.</td>
</tr>
<tr>
<td>Premier/Dilworth</td>
<td>Ascot Resources Ltd.</td>
<td>Au, Ag; Au in quartz veins; 104B 044</td>
<td></td>
<td>Diamond drilling 45,800 m. Results included 20.0 m of 8.04 g/t Au and 21.4 g/t Ag at the western extension of Premier, 7.2 m of 20.67 g/t Au and 24.92 g/t Ag at the Big Missouri zone, and 12.38 m of 8.91 g/t Au and 22.9 g/t Ag at the North Star prospect. In December, an updated resource estimate was released.</td>
</tr>
<tr>
<td>RD</td>
<td>Primary Energy Metals Inc.</td>
<td>Au, Co, Cu; VMS</td>
<td>na</td>
<td>Detailed mapping and sampling. A total of 85 rock samples and 287 soil samples were collected. Highlight rock sample results included a 0.25 m chip sample returning 20 g/t Au, 0.194% Co and a grab sample returning 18.7 g/t Au, 0.653% Co, 0.969% Cu.</td>
</tr>
<tr>
<td>Red Cliff</td>
<td>Decade Resources Ltd. (65%), (Mountain Boy Minerals Ltd. (35%))</td>
<td>Cu, Au, Ag, Zn; polymetallic veins; 104A 037</td>
<td>na</td>
<td>A 53 hole, 11,000 m diamond drilling program carried out. Drilling results for the Waterpump zone included 4.54 m of 12.11 g/t Au and 7.26 m of 10.6 g/t Au.</td>
</tr>
<tr>
<td>Schafft Creek</td>
<td>Teck Resources Limited (75%), (Copper Fox Metals Inc. (25%))</td>
<td>Cu, Au; calc-alkaline porphyry; 104G 015</td>
<td>1.229 Bt at 0.26% Cu, 0.017% Mo, 0.19 g/t Au, 1.69 g/t Ag</td>
<td>Collection of environmental base line data, ongoing First Nations consultation.</td>
</tr>
</tbody>
</table>
**Table 4. Continued.**

<table>
<thead>
<tr>
<th>Company</th>
<th>Resources</th>
<th>Vein Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Silver Coin</strong></td>
<td>Ascot Resources Ltd.</td>
<td>Ag, Zn, Pb, Cu; intrusion-related Au pyrrhotite veins; subaqueous hot spring Ag, Au, polymetallic veins; 104B 095</td>
<td>Purchased by Ascot in October from Jayden Resources Inc. (80%) and Mountain Boy Minerals Ltd. (20%). The project is 800 m from Ascot’s Big Missouri deposit and 5 km from the historic Premier mine mill, also owned by Ascot.</td>
</tr>
<tr>
<td><strong>Silver Hope</strong></td>
<td>Finlay Minerals Ltd.</td>
<td>Cu, Au, Ag; porphyry, subvolcanic Cu-Ag-Au; 093L 001, 373, 374, 256</td>
<td>Deep-penetrating induced polarization and magnetotelluric geophysical surveys to define new drill targets.</td>
</tr>
<tr>
<td><strong>Silver Queen</strong></td>
<td>New Nadina Explorations Ltd.</td>
<td>Ag, Cu, Au, Zn, Pb; polymetallic veins; 093L 002</td>
<td>Three diamond drill holes totalling 3053 m to test an induced polarization conductivity anomaly. Results did not explain the anomaly.</td>
</tr>
<tr>
<td><strong>Silver Vista</strong></td>
<td>Glacier Lake Resources Inc.</td>
<td>Au, Cu, Zn; polymetallic veins</td>
<td>Seven diamond drill holes (1273 m). Silver-copper mineralization in all holes, including 153.4 m grading 16.1 g/t Ag, 0.05% Cu and 0.10% Zn.</td>
</tr>
<tr>
<td><strong>Snip</strong></td>
<td>Skeena Resources Limited</td>
<td>Au, Ag; mineralized quartz veins; 104B 250</td>
<td>Underground and surface drilling (46 holes, 7732 m). Results included 13.8 g/t Au over 18.00 m. In October, Skeena granted Hochschild Mining Holdings Limited an option to acquire 60% of the project.</td>
</tr>
<tr>
<td><strong>Stars</strong></td>
<td>ML Gold Corp.</td>
<td>Cu, Au, Ag, Mo; porphyry</td>
<td>Reported that drilling at two new targets intersected mineralized porphyry. In February, they announced 204 m assayed 0.45% Cu, 0.045 g/t Au, 1.64 g/t Ag, 0.0048% Mo. In August, they announced 405 m assayed 0.20% Cu, 0.0082% Mo, 0.754 g/t Ag and 24 ppb Au.</td>
</tr>
<tr>
<td><strong>Surprise Creek</strong></td>
<td>Mountain Boy Minerals Ltd.</td>
<td>Barite, Zn, Pb, Ag; VMS</td>
<td>2017 drilling results reported in 2018. Drilling intersected a barite cap. Results included 15 m of 66.8% and 26 m of 41% BaSO₄ including 4.5 m grading 3.27% Zn, 0.71% Pb and 22 g/t Ag.</td>
</tr>
<tr>
<td><strong>Tatogga (Saddle North)</strong></td>
<td>GT Gold Corp.</td>
<td>Au, Ag, Cu; porphyry; 104G 432</td>
<td>New porphyry Cu-Au-Ag discovery. Initial drilling highlights included 430 m of 0.67 g/t Au, 0.41% Cu and 0.89 g/t Ag. A later hole, approximately 200 m to the northwest, returned 363 m of 1.02 g/t Au, 0.51% Cu and 1.72 g/t Ag in 904 m of 0.51 g/t Au, 0.30% Cu and 0.93 g/t Ag.</td>
</tr>
<tr>
<td><strong>Tatogga (Saddle South)</strong></td>
<td>GT Gold Corp.</td>
<td>Au, Ag, Cu; epithermal Au-Ag, low sulphidation; 104G 433</td>
<td>Gold-silver mineralized zones were extended along strike. Additional high-grade Au mineralization at depth. Drilling highlights included 40.89 m of 9.55 g/t Au.</td>
</tr>
</tbody>
</table>
Drilling program for geotechnical information, installing water monitoring wells and collecting samples for geochemical and coal testing studies. 1400 kg of coal sent for sizing, washability, and comprehensive coal quality analyses and to generate samples for coke oven tests. In November, it was announced that Itochu Corporation of Japan (Itochu) was investing in the project. A definitive feasibility study was expected in early 2019.

Core re-logging, geological mapping, and sampling for whole rock lithogeochemical analysis. Short-wave infrared spectroscopy carried out.

Samples from the Yellow Bow zone averaged 0.68% Cu, including 10 samples with over 1% Cu. Samples from the Fall Creek zone returned up to 37.7 g/t Au and 5.3% Cu. Eight samples from the VMS zone averaged 0.213 g/t Au, 30.1 g/t Ag, 0.53% Pb, 2.54% Zn including individual assays up to 1.98% Cu, 9.15% Zn, 0.392 g/t Au and 112 g/t Ag.

Diamond drilling (nine holes, 7200 m) targeting the Copper Belle zone. Highlight results included 121.8 m of 1.04 g/t Au with a high-grade interval of 26.6 g/t Au over 1.5 m.

Diamond drilling (40 holes, 10,835 m) to test new targets, infill, collect metallurgical samples and geotechnical information for pre-feasibility study.

M = Measured; I = Indicated; Inf = Inferred

Advanced-stage activities concentrate on the delineation of a mineral resource. The mine evaluation stage concentrates on the environmental, social, engineering and financial evaluation of a proposed mine. Selected exploration projects active during 2018 are summarized in Table 4 and shown on Figure 1.

6.1. Selected precious metal projects

Precious metal projects in the Northwest Region were generally concentrated in the Stewart area and in the Lower Iskut River area. Multiple drilling programs continued to test new targets and extend known mineralization.

6.1.1. Atlin Gold Project (Brixton Metals Corporation)

Since 2016, Brixton has staked claims and completed transactions to secure approximately 1000 km² of mineral rights for the Atlin Gold project. The project area is east of the town of Atlin and is road accessible. In 2018, Brixton conducted geological mapping, rock and chip sampling, and biogeochemical studies, and collected 2500 soil samples over selected areas. Several gold-in-soil anomalies were defined.

6.1.2. Engineer (Engineer Gold Mines Ltd.)

The Engineer project includes the historic Engineer gold mine on Tagish Lake, 32 km southwest of Atlin. The project has a Mines Act permit authorizing exploration, underground mining and on-site milling activities. In the fall, Engineer Gold Mines completed a MMI soil sampling survey over the core patented crown grants and the immediate mine area. Results were expected in early 2019. In preparation for a 2019 work program, the company barged loads of heavy equipment, fuel and diamond drill equipment to the mine site.
6.1.3. Forest Kerr (Aben Resources Ltd.)

The first drill hole of 2018 at the North Boundary zone (NBZ), part of Aben Resources Ltd.’s Forest Kerr project, intersected multiple high-grade zones including 38.7 g/t Au over 10.0 m (Fig. 2). Subsequent holes also returned high-grade gold assays. Mineralization at the NBZ is structurally controlled and hosted in a package of volcanic and volcanioclastic rocks of the Hazelton Group. The company also discovered a new mineralized zone (South Boundary zone), about 1.5 km south of the NBZ. Drilling intersected quartz veins with abundant pyrite and chalcopyrite and returned Au assays ranging from trace amounts to greater than 5 g/t in the 1 or 2 m sample intervals (Ag values ranged from trace to 8.7 g/t and Cu values range from trace to 9500 ppm).

Fig. 2. Visible gold in drill core from Aben Resources Ltd.’s Forest Kerr project. Photo courtesy of Aben Resources Ltd.

6.1.4 Kirkham (Metallis Resources Inc.)

In 2018, Metallis carried out the first ever drill programs at the Cole and Nina targets of the Kirkham project. Although these are porphyry Cu-Au targets, drilling at Cole intersected an intrusion-related massive sulphide pyrite-pyrrhotite vein that assayed 11.18 g/t Au over 7.7 m.

6.1.5. Premier/Dilworth (Ascot Resources Ltd.)

At their Premier/Dilworth project, Ascot Resources Ltd. drilled an additional 45,800 m in 2018, following up on 140,000 m of drilling in 2017. Results reported included 20.0 m of 8.04 g/t Au and 21.4 g/t Ag at the western extension of Premier, 7.2 m of 20.67 g/t Au and 24.92 g/t Ag at the Big Missouri zone, and 12.38 m of 8.91 g/t Au and 22.9 g/t Ag at the North Star prospect. In December, the company released an updated resources estimate. For the Premier/Northern Lights, Big Missouri, Silver Coin and Martha Ellen deposits, total Indicated resources are 2.78 Mt grading 7.46 g/t Au and 26.2 g/t Ag. For the Premier/Northern Lights, Big Missouri, Silver Coin, Martha Ellen and Dilworth deposits, Inferred resources are 6.03 Mt grading 7.18 g/t Au and 24.0 g/t Ag.

6.1.6. Red Cliff (Decade Resources Ltd. 65%, Mountain Boy Minerals Ltd. 35%)

In 2018, a 53 hole 11,000 m diamond drilling program was carried out on the Red Cliff project. Drilling results for the Waterpump zone included 4.54 m of 12.11 g/t Au and 7.26 m of 10.6 g/t Au.

6.1.7. Silver Coin (Ascot Resources Ltd.)

The Silver Coin project was purchased by Ascot in October from Jayden Resources Inc. (80%) and Mountain Boy Minerals Ltd. (20%). The project is 25 km north of Stewart, 800 m from Ascot’s Big Missouri deposit and 5 km from the historic Premier mine mill, also owned by Ascot. It is an advanced stage epithermal gold-silver project with a historical mineral resource estimate for the high-grade core of the orebody of 702,000 t grading 4.46 g/t Au in the Indicated category and 967,000 t grading 4.39 g/t Au in the Inferred category. Ascot considers there is potential for expansion of the mineralized zones and potential for discovering additional zones.

6.1.8. Snip (Skeena Resources Limited)

Skeena Resources Ltd. continued with underground and surface drilling at their past-producing Snip gold mine project, completing 7732 m in 46 holes. Results included 13.8 g/t Au along 18.0 m. In October it was announced that Skeena granted Hochschild Mining Holdings Limited (a wholly owned subsidiary of Hochschild Mining plc) an option to acquire 60% of the project. Hochschild has three years to provide notice that they will exercise the option. After notification they have three years to meet expenditure commitments.

6.1.9. Tatogga (Saddle South) (GT Gold Corp.)

The Tatogga project is approximately 14 km west of the Red Chris copper-gold mine, less than 1 km west of Iskut, and close to a paved road (Highway 37). In 2018, GT Gold Corp. extended Saddle South gold-silver mineralized zones along strike and identified additional high-grade gold mineralization at depth. Drilling highlights included 40.89 m of 9.55 g/t Au. Saddle South, discovered in 2017, is the project’s first high-grade epithermal vein occurrence. In 2018, GT Gold made a large porphyry Cu-Au-Ag discovery on the adjacent Saddle North target (see section 6.2.11.).

6.1.10. Treaty Creek (Tudor Gold Corp. 60%, Teuton Resources Corp. 20%, American Creek Resources Ltd. 20%)

The Treaty Creek project is adjacent to Seabridge’s KSM project and Pretium’s Brucejack mine. In 2018, Tudor drilled 7200 m in nine holes. The target was the Copper Belle zone and highlight results included 121.8 m of 1.04 g/t Au along 18.0 m. In October it was announced that Skeena granted Hochschild Mining Holdings Limited (a wholly owned subsidiary of Hochschild Mining plc) an option to acquire 60% of the project. Hochschild has three years to provide notice that they will exercise the option. After notification they have three years to meet expenditure commitments.

6.2. Selected porphyry projects

The Northwest Region is highly prospective for porphyry deposits related to island arc assemblages accreted to North America and to post-accretionary intrusive suites.

6.2.1. Berg (Centerra Gold Inc.)

The Berg project is approximately 20 km northwest of the Huckleberry mine and contains the Berg porphyry Cu-Mo-Ag deposit. In 2018, Centerra carried out mapping and sampling.
in the Berbette and A12 target areas. Soil sampling was carried out at A12.

6.2.2. Boomerang (Hawkeye Gold and Diamonds Inc.)

Soil sampling at the Boomerang project in 2018, coupled with historical soil surveys, outlined an approximately 500 m by 1500 m anomaly, with most values ranging between 100 and 1225 ppm Cu.

6.2.3. Duke (Amarc Resources Ltd.)

The Duke property straddles the Northwest and North Central regions. The property includes a porphyry Cu +/-Mo deposit that was the subject of an historic (NI 43-101 non-compliant) inferred resource estimated at 40.8 million tons at 0.25% Cu and 0.01% Mo. Amarc drilled six holes, totalling 3060 m to follow up on 2017 results. Seven of the eight holes drilled in 2017 and 2018 intersected porphyry Cu-Mo-Ag mineralization. Highlight results from 2018 included 348 m grading 0.23% Cu, 0.013% Mo, 1.1 g/t Ag, 0.05 g/t Au.

The property was explored intermittently between 1965 and 2010 by IP and magnetic surveys, and by shallow drilling, and was acquired by Amarc in 2016. Results to date suggest currently defined mineralization is open in all directions.

6.2.4. Hank (Golden Ridge Resources Ltd.)

Golden Ridge Resources Ltd. announced discovering a new porphyry Cu-Au at the Williams zone of their Hank project. Their first drill hole intersected 327 m grading 0.31% Cu, 0.35 g/t Au and 1.94 g/t Ag. Additional drilling returned similar grades, and the company expanded induced polarization survey coverage.

6.2.5. Hat (Doubleview Capital Corp.)

The Hat project contains the Lisle Au-Cu alkali porphyry zone. In 2018, Doubleview Capital Corp. optioned the project to Hudbay Minerals Inc. Hudbay will be the operator and has the right to earn up to 65% interest by fulfilling the terms of a three-stage agreement that includes expenditures of $40 million and costs for a feasibility study. In the summer, a 40 line-km, deep-penetrating induced polarization survey was carried out to target the depth, shape, structure, and dimensions of gold-copper mineralization and to delineate drilling targets.

6.2.6. Iskut (Seabridge Gold Inc.)

In 2018, Seabridge carried out 2700 m of diamond drilling on the Quartz Rise target at the Iskut project. The program was designed to test for high-grade epithermal precious metal mineralization but encountered mineralization typical of a large porphyry Cu-Au system. Drilling intersected a hydrothermal breccia containing abundant clasts of chalcopyrite, pyrite, and magnetite in veined intrusive rocks and stockworks positioned over a large IP chargeability anomaly interpreted as representing a sulphide-rich porphyry intrusion.

6.2.7. Kinaskan-Castle (Colorado Resources Ltd.)

Colorado Resource’s Kinaskan-Castle project is 25 km west of the Red Chris mine and 1 km west of GT Gold Corp.’s Tatogga project. In 2018, Colorado extended induced polarization survey coverage on the property that produced chargeability anomalies coincident with large gold and copper soil geochemical anomalies, which extend along an east-west trend for more than 2000 m. The anomalies are interpreted to be in the same rock units that host the Saddle North and Saddle South discoveries on the Tatogga property. In October, Colorado received permits to allow drilling and a program is planned for 2019.

6.2.8. Ootsa (Surge Copper Corp.)

Surge Copper Corp.’s (formerly Gold Reach Resources Ltd.) Ootsa project is adjacent to the past-producing Huckleberry mine and mill complex. In 2018, Surge Copper discovered a new copper zone (Fig. 3) 500 m northeast of their East Seel deposit. The discovery hole intersected 202 m of continuous mineralization and assayed 0.26% Cu, 0.31 g/t Au and 1.32 g/t Ag. A later hole intersected 22 m of 0.5% Cu, 0.10 g/t Au, 17.6 g/t Ag, 0.65% Zn and 0.14% Pb. Drilling an uplifted fault block between the East Seel and Damascus deposits intersected a new gold zone returning a 2 m intersection grading 9.4 g/t Au.

Fig. 3. Chalcopyrite and pyrite mineralization, hole S18-214, Surge Copper Corp.’s Ootsa project. Photo courtesy of Surge Copper Corp.

6.2.9. Schaft Creek (Teck Resources Limited 75% and Copper Fox Metals Inc. 25%)

The Schaft Creek porphyry Cu-Au-Mo is an advanced-stage project. In 2018, the companies continued environmental base line studies and First Nations consultations. The project consists of three deposits: the Main (Liard) zone, The Paramount zone and the West Breccia zone. A 2013 feasibility study defined a Proven and Probable reserve of 940.8 Mt grading 0.27% Cu, 0.19 g/t Au, 0.018% Mo and 1.72 g/t Ag. Measured and Indicated resources were listed as 1,228.6 Mt grading 0.26% Cu, 0.017% Mo, 0.19 g/t Au and 1.69 g/t Ag and a 597.2 Mt...
Inferred resource grading 0.22% Cu, 0.016% Mo, 0.17 g/t Au and 1.65 g/t Ag. Proven and Probable reserves are included within the stated Measured and Indicated resources.

6.2.10. Silver Hope (Finlay Minerals Ltd.)

In 2018, Finlay carried out deep-penetrating induced polarization and magnetotelluric geophysical surveys at the Silver Hope property to define new drill targets.

6.2.11. Stars (ML Gold Corp.)

ML Gold Corp. reported that drilling at two new targets on their Stars project intersected mineralized porphyry. In February, they announced 204 m assayed 0.45% Cu, 0.045 g/t Au, 1.64 g/t Ag, 0.0048% Mo. In August, they announced 405 m assayed 0.20% Cu, 0.0082% Mo, 0.754 g/t Ag and 24 ppb Au.

6.2.12. Tatogga (Saddle North) (GT Gold Corp.)

GT Gold Corp.’s Tatogga project is approximately 14 km west of the Red Chris copper-gold mine, close to a paved road (Highway 37). The project has two target areas, Saddle South and Saddle North. Saddle South is a high-grade gold discovery made in 2017 (in section 6.1.9.). In 2018, GT Gold reported discovering a new Cu-Au-Ag porphyry at the Saddle North target, approximately 1.5 kilometres east-northeast of the Saddle South gold discovery. Initial drilling highlights included 430 m of 0.67 g/t Au, 0.41% Cu and 0.89 g/t Ag. A later hole, approximately 200 m to the northwest, returned 363 m of 1.02 g/t Au, 0.51% Cu and 1.72 g/t Ag in 904 m of 0.51 g/t Au, 0.30% Cu and 0.93 g/t Ag.

6.2.13. Thorn (Brixton Metals Corporation)

The Chivas zone porphyry Cu-Au-Mo target is part of Brixton Metals’ Thorn project. In 2018, Brixton completed a program of core re-logging, geological mapping and sample collecting for whole rock lithogeochemical analysis combined with short-wave infrared spectroscopy.

6.3. Selected polymetallic base and precious metal projects

The Northwest Region hosts many significant base and precious metal deposits, a number of which were explored in 2018.

6.3.1. Brucejack (Brixton Metals Corporation)

Beyond the Brucejack mine area, Pretium continued to evaluate their surrounding 1250 km² of mineral claims. The Brucejack Regional project includes the American Creek, Bluffy, and Koopa zones, along with the newly discovered Upper Kirkham zone. The company carried an 8000 m drilling program along with mapping and prospecting. At the American Creek zone, drilling highlight results included 1.5 m grading 10.15 g/t Au and 25.5 m grading 41.54 g/t Ag, 2.12% Zn and 0.56% Pb. Prospecting sample results located the new Upper Kirkham zone. Samples returned assays as high as 3.55 g/t Au, greater than 10,000 g/t Ag, 4.71% Cu, greater than 20% Pb and 3.81% Zn.

6.3.2. Clone Gold (Sunvest Minerals Corp.)

At the Clone Gold project Sunvest carried out geochemical rock, silt, and soil sampling, and packsack drilling in 2018. Recent ice retreat has resulted in new bedrock exposure and the company also carried out detailed geological mapping. Sampling at the Port 19 showing returned Cu values of 0.52%, 0.99%, 1.02% and 1.64% and an Ag assay of 220 g/t. Sampling at the Outbound showing returned multiple rock samples returning in excess of 0.10% Cu and a peak value of 0.56% Cu and up to 132 g/t Ag, and gold values in soil samples up to 1.04 g/t Au.

At the Clone prospect, sampling returned values including 10.9 g/t Au, and 0.64% Cu in rock samples, and peak values of 1.26 g/t Au and 1.66 g/t Au from soil samples. A new mineralized vein (Southern Glory prospect) was also announced. A quartz vein, up to 1.25 m wide, was mapped along a strike length of about 70 m. Results included a 1 m chip sample returning 4.11% Cu, 160 g/t Ag, 0.52 g/t Au.

6.3.3. Dolly Varden (Dolly Varden Silver Corporation)

Dolly Varden Silver’s Dolly Varden project consists of the Torbrit, Dolly Varden, Wolf, and North Star deposits and a number of mineralized zones. In 2018, Dolly Varden drilled 29,108 m in 84 holes and discovered a new zone (Bonus zone). Drilling results included 15.50 m grading 161.4 g/t Ag, 0.25% Pb and 0.20% Zn. Drilling on known zones included 24.00 m grading 287.5 g/t Ag, 0.29% Pb, and 0.11% Zn at Torbrit East and 29.15 m grading 226.0 g/t Ag, 0.09% Pb, and 0.13% Zn at the Moose-Lamb zone.

6.3.4. Dunwell (American Creek Resources Ltd.)

American Creek’s Dunwell project contains the historic Dunwell gold-silver-lead-zinc mine. American Creek believes potential exists to develop more reserves along strike and below the original workings. In 2018, American Creek collected 30 rock samples from various locations, both at surface and underground. Reported results included high-grade Au (up to 61.2 g/t) and Ag (up to 1186 g/t) along with base metals.

6.3.5. Eskay Creek (Skeena Resources Limited)

The Eskay Creek project was acquired in late 2017 by Skeena Resources from Barrick Gold Inc. and includes the former producing Eskay Creek mine. In 2018, Skeena carried out diamond drilling, compiled and reviewed 20 years of exploration and production information, and completed a geologic model and resource estimate. The pit-constrained Indicated resource estimate is 1.08 Mt at 4.9 g/t Au, 72 g/t Ag, and the Inferred resource is 4.26 Mt at 3.3 g/t Au, 72 g/t Ag. The underground Indicated resource is 2.51 Mt at 7.2 g/t Au, 215 g/t Ag, and the underground Inferred resource is 0.81 Mt at 7.2 g/t Au, 214 g/t Ag. Lead, copper, zinc and antimony are
potential by-products worth incorporating into future mineral resource estimates.

Drilling highlights from 2018 include 14.55 m grading 7.36 g/t Au, 1,189 g/t Ag and 31.50 m grading 10.16 g/t Au, 331 g/t Ag and 42.65 m grading 9.49 g/t Au, 111 g/t Ag.

6.3.6. Golddigger (Goliath Resources Limited)

Goliath reported discovering multiple breccias, stockworks, and veins containing high-grade gold and polymetallic mineralization at the Golddigger project. A 0.55 m channel sample graded 29.70 g/t Au and 14.30 g/t Ag, a 0.50 m chip sample graded 47.50 g/t Au and 272.00 g/t Ag and grab samples graded up to 113.50 g/t Au and 249.00 g/t Ag. This new gold-enriched polymetallic discovery is in an extensive area where glacier retreat and snow pack loss has increased bedrock exposure.

6.3.7. Keaper (Casa Minerals Inc.)

At the Keaper project, Casa collected 85 rock samples and 580 soil samples in 2018. Highlight rock sample results include 1512 g/t Ag with 0.33% Cu, 1.19% Pb, 13.9% Zn and >100 g/t Ag with 0.33% Cu.

6.3.8. Kinskuch (Hecla Mining Company)

Hecla reports that 2018 drilling at the Kinskuch project defined silver-enriched base metal mineralization along a strike length of 4.8 km and that high-grade zones appear to have continuity. These zones may represent two parallel structures or the limbs of a folded body. Although assay results were not mentioned, Hecla reported that they plan to produce a preliminary resource model.

6.3.9. Kutcho (Kutcho Copper Corp.)

Kutcho Copper Corp.’s Kutcho project is at an advanced stage. A preliminary feasibility study from 2017 reports a Probable reserve of 10.4 Mt at 2.01% Cu, 3.19% Zn, 34.61 g/t Ag, and 0.37 g/t Au. At a 1.0% copper cut off, combined Measured and Indicated resources are estimated at 16.853 Mt of 1.89% Cu, 2.87% Zn, 0.36 g/t Au and 32.8 g/t Ag. In 2018, Kutcho carried out a comprehensive review of historic data to identify targets for drilling. Results of this drilling included 28 m of 2.09% Cu, 6.1% Zn, 65.8 g/t Ag, 0.82 g/t Au and 5.4 m of 2.48% Cu, 1.0% Zn, 114.0 g/t Ag, 0.24 g/t Au. A bench-scale metallurgical study is underway and a feasibility study is scheduled for 2019.

6.3.10. KSP (Colorado Resources Ltd.)

In 2018, Colorado diamond drilled 7847 m in 35 holes at the KSP property. Drilling tested step out targets near the historic Inel basin area, including the Big Rock Deformation zone (BRDZ) to the east, and the Inel zone to the north. Results included 32 m grading 0.32 g/t Au and 1.64% Zn and 50 m grading 2.28 g/t Au, including 6 m grading 7.36 g/t Au.

6.3.11. Maroon (Gitennes Exploration Inc.)

In 2018, Gitennes carried out reconnaissance prospecting and sampling at the Maroon project, and found several polymetallic quartz-sulphide veins. Sampling focussed on historical workings and returned results up to 50 g/t Au, 11.5% Zn and 13.9% Pb.

6.3.12. Pearson (Teuton Resources Corp.)

Teuton’s Pearson project is approximately 20 km southwest of Seabridge’s KSM property. In 2018, diamond drilling of three holes (512 m) failed to reach intended target depths, but a grab sample from a 70 cm wide mineralized quartz vein returned 54.5 g/t Au, 87.8 g/t Ag and 7.54% Pb.

6.3.13. Pitman (Casa Minerals Inc.)

The Pitman project includes previously known target areas including Gold Dome and Pitman, and 2018 discoveries, Golden Dragon, Dragon Tale. Rock chip sampling at Golden Dragon returned 0.6 m assaying 574.42 g/t Au, 109 g/t Ag, 0.1% Cu, 1.56% Pb, 0.23% Zn and 0.9 m assaying 268.86 g/t Au, 127 g/t Ag, 0.2% Cu, 2.95% Pb, 0.04% Zn. The Dragon Tale showing is about 1 km from Golden Dragon and rock sampling returned assays as high as 231 g/t Ag and 6.15% Zn.

6.3.14. Porter (StrikePoint Gold Inc.)

The Porter project is within 4 km of Stewart and contains the historic Silverado mine, the historic Handsome Jack workings, the Porter historic resource area, the Big Nunatak showing and the Glacier Creek property. Having acquired the property from Skeena Resources Limited in July, StrikePoint Gold Inc. carried out diamond drilling (4800 m), prospecting, and sampling. Glacier retreat has exposed a new mineralized vein along a 275 m strike length near the historic Porter resource. Thirty two samples were collected, with assays ranging from trace to 43.6 oz/t Ag, trace to 0.54 oz/t Au and trace Zn to 28.8%. Sampling at Big Nunatak returned up to 427 g/t Ag and 0.78% Cu. At the glacier Creek property, 5.5 km northeast of the Porter mine site, a new mineralized vein was discovered with a 205 m strike length and widths of up to 2 m. Samples graded up to 876 g/t Ag and 10.8 g/t Au.

6.3.15. Premier East (Decade Resources Ltd.)

Decade Resources carried out rock sampling on its Premier East project, adjacent to the historic Premier gold-silver mine. Results returned anomalous values for precious and base metals, including one sample that graded 5.72 g/t Au, 716 g/t Ag and 11.60% Cu.

6.3.16. Silver Queen (New Nadina Explorations Ltd.)

At the Silver Queen project, New Nadina drilled three holes totalling 3053 m to test an induced polarization conductivity anomaly. Results did not explain the anomaly, but additional drilling is planned for 2019.
6.3.17. Silver Vista (Glacier Lake Resources Inc.)
Glacier Lake completed seven diamond drill holes totalling 1273 m at the Silver Vista project. Silver-copper mineralization was encountered in all holes, including 153.4 m grading 16.1 g/t Ag, 0.05% Cu and 0.10% Zn.

6.3.18. Surprise Creek (Mountain Boy Minerals Ltd.)
In January 2018, Mountain Boy reported results for drilling carried out in 2017 at the Surprise Creek project. Drilling intersected a barite cap, which is common in Kuroko-style VMS deposits. Results included 15 m of 66.8% and 26 m of 41% BaSO4 including 4.5 m grading 3.27% Zn, 0.71% Pb and 22 g/t Au.

6.3.19. Todd Creek (Sojourn Exploration Inc.)
In 2018, Sojourn carried out rock and chip sampling at the Todd Creek project. Samples from the Yellow Bow zone averaged 0.68% Cu, including 10 samples with more than 1% Cu. Samples from the Fall Creek zone returned up to 37.7 g/t Au and 5.3% Cu. Eight samples from the VMS zone averaged 0.213 g/t Au, 30.1 g/t Ag, 0.53% Pb, 2.54% Zn including individual assays up to 1.98% Cu, 9.15% Zn, 0.392 g/t Au and 112 g/t Ag.

6.4. Selected cobalt projects
An increase in the price for cobalt resulted in a number of cobalt-specific projects being undertaken in the province, including the RD project in the Northwest Region.

6.4.1. RD (Primary Energy Metals Inc.)
The RD project is about 1 km south of Hazelton. Primary Energy carried detailed mapping and sampling of the Golden Wonder showing. A total of 85 rock samples and 287 soil samples were collected. Highlight rock sample results included a 0.25 m chip sample returning 20 g/t Au, 0.194% Co and a grab sample returning 18.7 g/t Au, 0.653% Co, 0.969% Cu.

6.5. Selected mafic and ultramafic hosted projects
The Northwest Region has several ultramafic-hosted metallic prospects, including intrusion-hosted and serpentinite-hosted nickel occurrences.

6.5.1. Nickel Mountain (Garibaldi Resources Corp.)
Garibaldi Resources Corp.’s Nickel Mountain project is located approximately 90 km northwest of Stewart. In 2018, Garibaldi carried out a 32 hole 11,573 m diamond drilling program. Highlight results for 10 holes include 30.5 m of 3.10% Ni, 1.86% Cu, 0.081% Co, 0.863 g/t Pt, 1.776 g/t Pd, 0.739 g/t Au, 7.3 g/t Ag and 5.6 m of 7.60% Ni, 3.36% Cu, 0.198% Co, 0.668 g/t Pt, 0.814 g/t Pd, 0.466 g/t Au, 9.0 g/t Ag. Results for the remaining 22 holes are pending. Additional drilling in 2019 is planned.

6.5.2. Turnagain (Giga Metals Corp.)
Giga Metals Corp. carried out a 40-hole 10,835 m diamond drill program at their Turnagain project. The program was designed to test new targets, provide infill, collect samples for metallurgical testing, and yield geotechnical information to support pre-feasibility studies. The project has Measured and Indicated resources of 865 Mt at 0.21% Ni, 0.013% Co, and an additional Inferred resource of 976 Mt at 0.2% Ni, 0.013% Co.

6.5.3. Kirkham (Thunder North) (Metallis Resources Inc.)
The Thunder North target of Metallis’s Kirkham project is approximately 2 km southeast from Garibaldi Resource’s Nickel Mountain project. In the fall, Metallis announced that diamond drilling to test airborne electromagnetic and magnetic targets was underway.

6.6. Selected coal projects
The Northwest Region contains the Tuya, and Telkwa coalfields and part of the Groundhog-Klappan coalfield, which are prospective for anthracite coal deposits.

6.6.1. Tenas (Allegiance Coal Limited 80%, Itochu 20%)
In 2018, Allegiance Coal Limited continued to move the Tenas project forward through their wholly owned subsidiary Telkwa Coal Limited. Eight PQ diameter holes were drilled, three for the installation of water monitoring wells and five to collect rock samples for geochemical studies and coal testing. Twelve sonic holes were drilled for geotechnical information. Fourteen large diameter (150 mm) holes were drilled, recovering 1400 kg of coal. The coal was sent for sizing, washability, and comprehensive coal quality analyses and to generate samples for coke oven tests. In November it was announced that Itochu Corporation of Japan (Itochu) was investing in the project. A definitive feasibility study was expected in early 2019.

7. Geological research
van Straaten and Wearmouth (2019) reported on the third and final field season of a mapping project in the Dease Lake area that examined Upper Triassic to Middle Jurassic arc-related volcanic and sedimentary rocks and allied intrusive rocks to better understand the tectonic and metallogenic history of northern Stikinia and bounding terranes. Working with archived samples, Mihalynuk et al. (2019) reported U-Pb zircon ages from the Granduc and Rock and Roll volcanic massive sulphide deposits that are consistent with previous work indicating that mineralization took place in the Late Triassic. Lett (2018) released the results from a previously unpublished moss mat-sediment geochemical survey from the Porcher Island, Grenville Channel, and Dundas Island area, central British Columbia coast. The MDO office co-ordinated the production of a brochure intended for a popular audience and devoted to the Golden Triangle of the Northwest Region (British Columbia Geological Survey, 2018).

8. Summary
The Northwest Region is highly prospective for discovering mineral deposits. The region has a number of advanced and
proposed mine projects. The region also has numerous active exploration projects, primarily for precious and base metals. In 2018, exploration activity increased for the second year in a row. Exciting new results were announced for established projects and a number of new discoveries were made.

References cited