**Technical Report** 

on the

## Lorn Property

Clinton Mining Division British Columbia Canada

BCGS Maps 0920.004, 0920.005, 0920.014 and 0920.015 NTS Map 0920/03

# Latitude 51°06' N, Longitude 123°10' W

with Recommendations For Further Exploration

For

Cyntar Ventures Inc. 905 – 1030 Georgia Street West Vancouver, BC, V6E 2Y3

### By

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#### 1.0 Summary

The Lorn Cu±Mo±Ag±Au property (the "Property"), consisting of nine contiguous mineral titles covering approximately 3,876 hectares, is centred 190 km north of Vancouver in southwestern British Columbia. Property access is from Pemberton, Tyax Lake or Lillooet by fixed-wing float plane or helicopter.

The Property is owned 25% by John A. Chapman, 25% by Gerald G. Carlson, 25% by Chris R. Paul and 25% by Michael A. Blady (the "Vendors"), held by Carlson on behalf of KGE Management Ltd. According to the terms of an Exercise of Option agreement (the "Agreement") between the Vendors and Cyntar Ventures Inc. ("Cyntar"), signed on July 11, 2017 and amended on September 13, 2017, the latter could earn a 100% interest in the Property by spending \$2.5 million on exploration, making payments of \$150,000 and issuing 600,000 Cyntar shares to the Vendors on or before the fourth anniversary of the Agreement.

On September 13, 2017, Cyntar entered into an amendment agreement with the Vendors further amending the terms of its Lorn Property Agreement. Under the terms of the amendment agreement Cyntar will pay the Optionor \$5,000 if it fails to obtain a CSE listing on or before December 31, 2017.

The Property occurs within the Tyaughton Trough, a narrow, northwest trending basin that lies along the northeast margin of the Coast Plutonic Complex. The Tyaughton Trough includes mainly sedimentary strata ranging in age from Middle Jurassic to Upper Cretaceous. To the north and east of the Property, these rocks include argillite, turbidite, shale and siltstone. The majority of the Property is underlain by undivided andesitic pyroclastic rocks with minor andesitic to basaltic flows and local volcanic sandstone and conglomerate of the mid to late Cretaceous Kingsvale Group. It forms a continuous, northwest-trending belt that unconformably overlies the Tyaughton Trough sediments to the northeast and is intruded by the CPC to the southwest. Within and central to the Property is the Eocene Lorna Stock that is exposed as a cupola in the north flowing headwaters of Big Creek, which flows into Lorna Lake. This intrusive body is in contact with Kingsvale volcanic rocks that form the ridges on either side of the valley and in the cirque to the south. The contact is marked by a prominent gossan formed from the oxidation of iron-rich minerals, primarily pyrite, from the hornfels zone in the andesitic volcanic rocks.

Copper mineralization, in the form of chalcopyrite, locally accompanied by lesser amounts of molybdenite, is focused in greatest concentrations along the intrusive contact of the Lorna Stock. Secondary copper minerals, including malachite, azurite and chrysocolla, occur mainly in the volcanic rocks. South of the Lorna Stock copper mineralization is spatially associated with intrusive dykes

cutting silicified andesite. Southwest of Lorna Lake, chalcopyrite is associated with a massive magnetite seam at the intrusive-volcanic contact. Molybdenite occurs in quartz-sericite veins within highly altered intrusive rocks and on fracture surfaces within the volcanic rocks associated with amphibole veins. In addition, trace amounts of galena and sphalerite occur with chalcopyrite in the southern part of the Property.

A limited geochemical sampling program was carried out in August, 2015. Analysis and interpretation of the 219 samples collected was also completed in 2015. The analysis was carried out with the use of an Innov-X Delta Premium handheld XRF. In September of 2017 pulps from these samples were submitted to an accredited geochemical laboratory for reanalysis.

A field examination of the Property was carried out by the author on October 12, 2011. The early onset of winter conditions in the first week of October 2017 precluded a similar visit to the Property in conjunction with the writing of the technical report. A current site visit was therefore carried out on August 01, 2018 to coincide with a geochemical program being carried out by Cyntar on the Property, during which visit the author examined the area of the 2015 sampling program, and reviewed the property geology and alteration.

A ZTEM airborne survey, carried out in 2011, showed a central zone of high resistivity that correlates with the Lorna Stock, surrounded by a zone of high conductivity that correlates with the contact zone and adjacent hornfelsed and pyritic volcanic rocks. The 2011 and 2015 surface sampling programs were designed to follow up on those areas of broader and more intense conductivity and to confirm mineralization outlined during a 1972 Cominco exploration program. The geochemical results of the rock and talus fines sampling indicate a possible halo of anomalous values adjacent to intrusion-hosted mineralization at depth.

The 2015 sampling program was carried out: to confirm anomalous Cu-Mo geochemistry reported by Cominco Ltd. in 1972 on the north to northwest facing slope separating Big Creek and Sluice Creek; to supplement Cominco's reconnaissance sampling with detailed grid-based soil sampling on 100-m centres; and to extend the soil grid across Sluice Creek to the northwest side, where a 060° trending ridge is reported to have intense epithermal alteration and vein textures.

ASTER image processing previously completed by the property owners has indicated that the outcrops along this ridge contain abundant Fe-oxide, kaolinite and illite alteration

The 2013 sampling, despite incomplete data sets, appears to confirm the 2011 sampling and nothing within the 2013 results significantly changed the Phase I and Phase II proposals as laid out in the Royal Sapphire 2011 NI 43-101 report.

The 2017 results extended the Cu-Mo-Ag anomaly along the western contact of the Lorna Stock along the northwestern side of Sluice Creek that connects very well with historic Cu-Mo anomalies that follow the contact around Big Creek valley to the east.

When combined with Cominco's historical horseshoe-shaped Cu-Mo anomaly that follows the contact around Big Creek valley the complete anomaly is well over 10 km distance in plan view. The thickness of the mineralization is unknown and it is unclear whether the anomalies on either side of Sluice Creek are connected at depth. The anomalies should be tested by a series of drillholes. The drill program should comprise Phase II of a two phase program. Phase I should comprise a geophysical technique, an Audiomagnetotelluric (AMT) survey or a similar, non-grid based geophysical survey, to accurately define possible mineralization at depth and to aid in targeting the Phase II drill program.

The recommended Phase I program on the Property is estimated to cost \$125,000. A recommended Phase II program is estimated to cost \$440,500.

### 2.0 Introduction and Terms of Reference

This technical report (the "Report") has been prepared at the request of Mr. Harry Chew, Chief Executive Officer of Cyntar Ventures Inc ("Cyntar"), a BC incorporated company seeking a listing on the Canadian Securities Exchange ("CSE"). The author has been asked to review all data pertaining to the Property and to prepare a Report that describes historical work completed on the Property and makes recommendations for further work if warranted. The effective date of this Report is October 30, 2017.

The author, Thomas H. Carpenter, BSc, PGeo, ("Carpenter"), prepared and is responsible for all sections of this Report. Information from a 2011 independent geophysical survey (Geotech, 2011), for Royal Sapphire Corp ("Royal Sapphire"), results of a geochemical sampling program for Royal Sapphire conducted in September, 2011, by personnel of Discovery Consultants ("Discovery"), and the results of a geochemical sampling program for Jet Gold Corp (Paul, 2015) conducted in August, 2015, by personnel of Ridgeline Exploration Services Inc ("Ridgeline"), are also included as supporting documentation for the next phase of mineral exploration on the Property. As well, the results of a 2013 exploration program (Shearer, 2013b) for Royal Sapphire are integrated into the Report.

This Report has been prepared in compliance with the requirements of National Instrument 43-101 and Form 43-101F1 and is intended to be used as supporting documentation to be filed with the Canadian Securities Commissions and the CSE, to continue the listing requirements of Cyntar.

In preparing this Report, the author has reviewed the geological, geophysical and geochemical reports, maps and miscellaneous papers listed in the References section at the conclusion of this Report. Information used in the preparation of this Report includes a number of publically available reports filed by various companies for assessment credit with the BC Ministry of Energy and Mines ("BCMEM"). These reports contain information on the results of geological mapping, geochemical sampling, geophysical surveying, trenching and limited diamond drilling conducted on the Property. The author directed the surface prospecting and sampling program carried out during the period September 9 to 16, 2011 by Discovery Consultants' staff and completed a property visit and field examination of the Property on October 12, 2011. The early onset of winter conditions in the first week of October 2017 precluded a similar visit to the Property in conjunction with the writing of the technical report. As noted in Section 1, a current site visit was therefore carried out on August 01, 2018 to coincide with a geochemical program being carried out by Cyntar on the Property, during which visit the author examined the area of the 2015 sampling program, and reviewed the property geology and alteration.

Units of measure in this report are metric; monetary amounts referred to are in Canadian dollars.

# 3.0 Reliance on Other Experts

Details of the status of tenure ownership on the Property were obtained from the BC Mineral Tenures Online ("MTO") database system managed by the BCMEM. This system is based on mineral tenures acquired electronically on-line using a grid cell selection system. Tenure boundaries are based on lines of latitude and longitude.

Copies of the Option Agreement and the Amendment Agreement were provided to the author by the Vendors and Cyntar. Although the author has no reason to believe this information is inaccurate, a detailed audit of the option agreements among the Vendors and Cyntar has not been done and the author is relying solely on the information that has been provided by the Vendors and Cyntar. This reliance on the Vendors and Cyntar only applies to information on the legal agreements between the parties as described in Section 4.2 of the Report.

# 4.0 Property Location and Description

The Property is located 190 km north of Vancouver, BC, and approximately 30 km east-southeast of the south end of Lower Taseko Lake at 51° 06 north latitude and 123° 10 west longitude (Figure 4.1). The Property comprises nine mineral titles containing 3,957.28 hectares.

### 4.1 Mineral titles

The mineral titles comprising the Property, shown in Table 4.1, were obtained using the MTO search engine available on the British Columbia Geological Survey Branch website. All titles listed in the table are in the Clinton Mining Division within the NTS map sheet 920/03 and BC Map Sheets 920.004, 920.005, 920.014 and 920.015. The title location map shown in Figure 4.2 was generated from GIS spatial data downloaded from the Government of BC, Integrated Land Management Branch (ILMB), Land and Resources Data Warehouse (LRDW) data discovery and retrieval system (http://archive.ilmb.gov.bc.ca/Irdw/). These spatial layers are generated by the Mineral Titles Online electronic staking system that is used to locate and record mineral titles in British Columbia.

# Figure 4.1 Property Location







#### 4.2 Mineral title ownership

Information posted on the MTO website indicates that all of the mineral titles listed in Table 4.1 are owned the Vendors as follows: 25% by Christopher R. Paul (Free Miners Certificate no. 269478), 25% by Michael A. Blady (Free Miners Certificate no. 278776), 25% by John A. Chapman (Free Miners Certificate no. 104633) and 25% by Gerald G. Carlson (Free Miners Certificate no. 104271) on behalf of KGE Management Ltd, a company wholly owned by G.G. Carlson.

According to the terms of an option agreement, signed on July 11, 2017, and an Amended Agreement signed on September 13, 2017, between the Vendors and Cyntar, the latter could earn a 100% interest in the Property, subject to a 2% Net Smelter Return ("NSR") royalty, by spending \$2.5 million on exploration, making payments of \$150,000 and issuing 600,000 Cyntar shares to the Vendors within four years from the date of listing of Cyntar on the Canadian Securities Exchange (CSE). Cyntar has until December 31, 2017 to be listed on the CSE.

Under the terms of the amendment agreement signed on September 13, 2017 Cyntar will pay the Optionor \$5,000 if it fails to obtain a CSE listing on or before December 31, 2017.

The Vendors will retain a 2.0% NSR royalty on the Property. The Optionee will have the right to purchase 1.0% of this royalty for \$2,000,000 at any time prior to the start of Commercial Production. The NSR buy-out price will be adjusted annually according to the CPI with a base of December 31, 2020. Beginning on December 31, 2020 and annually thereafter, the Optionee will make an Annual Advance Minimum Royalty of \$35,000. The payments will be adjusted annually with the payments deductible from future NSR royalty payments.

There are no back-in rights on the Property, or other payments, agreements or encumbrances known to the author to which the Property is subject.

Copies of the Option Agreement and the Amendment Agreement were provided to the author. Although the author has no reason to believe this information is inaccurate, a detailed audit of the option agreements among the Vendors and the Optionee has not been done and the author is relying solely on the information that has been provided by the various parties

| Tenure # | Туре    | Title Name   | Area (ha) | Good to Date |
|----------|---------|--------------|-----------|--------------|
| 841978   | Mineral | Lucky Lorn 3 | 507.37    | 2023/Oct/31  |
| 845185   | Mineral | Lorn 3       | 324.84    | 2023/Oct/31  |
| 845188   | Mineral | Lorn Jac1    | 507.37    | 2023/Oct/31  |
| 939371   | Mineral | Lorn Jac2    | 507.35    | 2018/Oct/05  |
| 939375   | Mineral | Lorn Jac3    | 507.35    | 2018/Oct/05  |
| 1017394  | Mineral | Lorn Jac4    | 507.54    | 2018/Oct/05  |
| 952324   | Mineral | Lorn Jac5    | 507.20    | 2018/Oct/05  |
| 852326   | Mineral | Lorn Jac5    | 507.08    | 2018/Oct/05  |
| 1029567  | Mineral | Lorn 14A     | 81.18     | 2018/Oct/05  |
|          |         | Total Area:  | 3957.28   |              |

Table 4.1: List of Mineral Titles, Lorn Property, BC

### 4.3 Mineral title acquisition and work requirements

In British Columbia, an individual or company holds the available mineral or placer mineral rights as defined in section 1 of the Mineral Tenure Act. This is done by electronic staking as described in the Act and Regulations. In addition to mineral or placer mineral rights, a mineral title conveys the right to use, enter and occupy the title for the exploration and development of minerals or placer minerals. A mining lease is required for production and treatment of ore and concentrates, and all operations related to the business of mining. Permits are necessary for activities that include mechanical disturbance.

In order to maintain a mineral tenure in good standing exploration work or payment instead of work to the value required must be submitted prior to the expiry date. The amount required is specified by Section 8.4 of the British Columbia Mineral Tenure Act Regulation. These regulations states that the value of exploration and development work required to maintain a mineral claim for one year is at least:

- \$5 per hectare during each of the first and second anniversary years, and
- \$10 per hectare during the third and fourth anniversary years, and
- \$15 per hectare during the fifth and sixth anniversary years, and
- \$20 per hectare for subsequent anniversary years.

Up to 10 years of work or payment instead of work can be applied on a mineral title. A change in anniversary date can be initiated at any time and for any period of time up to 10 years. In order to obtain credit for the work done on the Property, Cyntar must file a Statement of Work and submit an

Assessment Report documenting the results of the work done on the Property. This report must also include an itemized statement of costs.

### 4.4 Permits required to conduct exploration

Prior to initiating any physical work such as drilling, trenching, bulk sampling, camp construction and access upgrading or construction, a Notice of Work ("NoW") permit application must be filed with, and approved by, the BCMEM. The permit authorizing this work must be granted prior to commencement of the work and the permit will likely require the posting of a reclamation bond.

The filing of the NoW initiates engagement and consultation with other stakeholders including the First Nations. No permit was obtained prior to commencing the 2011, 2013 and 2015 work programs as the level of work carried out was not sufficient to trigger a NoW application. No NoW is necessary to carry out the work outlined in the Phase I exploration program.

### 4.5 Environmental liabilities

Although mineral showings have been known within the boundaries of the Property for many years, there has only been minor trenching and drilling conducted on the Property to date. The author is not aware of any environmental liabilities related to historical exploration work done on the Property.

### 4.6 Other liabilities

The Property lies at the boundary between Engagement Zones A and B of the Tsilhqot'in Framework Agreement. Engagement Zone A encompasses a large area extending from Hagensborg in the west to Clearwater in the east and includes the communities of Lillooet, 100 Mile House, William's Lake and Quesnel. The Property lies 20 km east of the southeast corner of Engagement Zone C, a buffer zone to Engagement Zone D, which contains the Prosperity copper deposit. The Property is drained entirely by rivers within Engagement Zone B.

The Property lies outside the area defined by the June 26, 2014 Supreme Court of Canada decision as the Tsilhqot'in Proven Title Area, the "tract of land" specifically referred to in Paragraph 960 of the Reasons for Judgement.

The Prosperity deposit is the subject of ongoing permitting and a lawsuit involving Taseko Mines Ltd, the deposit owner, and members of the Xeni Gwet'in band of the Tsilhqot'in First Nation,, and the provincial and federal governments.

Aside from the above, the author is not aware of any particular environmental, political, or regulatory problems that would adversely affect mineral exploration and development on the Property.

#### 5.0 Accessibility, Physiography, Climate, Local Resources and Infrastructure

The Property is located 190 km north of Vancouver, BC, and approximately 30 km east-southeast of the south end of Lower Taseko Lake, and at 51° 06 north latitude and 123° 10 west longitude. The Property is located in the Clinton Mining Division between Barrick Gold Corporation's Poison Mountain Deposit, located 40 km east, Taseko Mines Limited's Prosperity Deposit, located 50 km to the north, and Amarc Resources' Ike Deposit, located 20 km to the west, all three porphyry deposits.

The Property can be accessed from Pemberton, Tyaughton Lake (Tyax Lodge), Gold Bridge, Williams Lake or the King Ranch by fixed-wing float plane to Lorna Lake or by helicopter from Lillooet. There is no road access to the Property; however, an old exploration road terminates approximately 10 km west of the Property at the headwaters of Taseko River. To the east, active logging and logging roads up Relay Creek occur within 20 km of the Property. An extension of this road by 30 km through Big Creek Provincial Park would both allow access to Lorna Lake, the Big Creek and South Chilcotin Provincial Parks, and the Property.

Vegetation consists of lodgepole pine, Engelmann spruce, and whitebark pine in the Big Creek valley with sub-alpine fir, common juniper, soapberry, kinnikinnick, lichen and various grasses at higher elevations.

The climate is cold in winter and hot in the summer with limited precipitation and often high wind conditions. Work season is normally June to September. The Environment Canada Atmospheric Environment Service climate stations in the area record a mean annual temperature of 4.0 °C, a mean annual total precipitation of 39 cm and a mean snowfall of 180 cm.

The Property is bounded to the north, east and south provincial parks. There are no local resources or infrastructure in the immediate vicinity. The community of Gold Bridge, approximately 35 km to the south, is serviced with electricity from a hydro dam on Downton Lake immediately to the southwest. Major power generating facilities are also located on Carpenter Lake, Anderson Lake and Seton Lake, east and southeast of Gold Bridge.

The communities of Lillooet and Williams Lake are service centres that could supply personnel and material to any development carried out on the Property.

The Property covers a north draining glacial valley surrounded on its east, south and west sides by steep, arête ridges that rise almost 1,000 m above the valley floor. Elevations within the Property range from 2,100 m above sea level to over 3,000 m. Big Creek is fed at the south end of the Property by a receding glacier. Sluice Creek flows into Big Creek from the west, just north of Lorna Lake.

Timberline is at approximately 2,000 m and virtually no vegetation exists above this level. The majority of the Property is underlain by loose talus grading with increasing altitude into steep outcrop bluffs. A moraine runs northerly between Lorna Lake and Sluice Creek and separates the two drainages.



Photo 5.1: View to north along Big Creek showing typical physiography over the Lorn property with Lorna Lake in the distance. Note the zones of oxidation on the east and west sides of the valley. The 2011 work was carried out along the west slope. The 2015 Jet Gold sampling was carried out over Sluice Creek, to the northwest of the above photo.



Photo 5.2: View to northeast along Sluice Creek. Lorna Lake in the distance. Note the zones of oxidation on the southeast and northwest sides of the valley. The 2015 work was carried out in the centre of the photo. The 1972 Cominco anomaly is located in the area of the talus slope in the upper right of the photo.

# 6.0 Exploration History

In 1963, Phelps Dodge Corporation discovered copper and molybdenum mineralization in the area of the present Property as part of a regional mineral exploration program. Lee (1969) reported that a geologist and two prospectors spent 12 days prospecting and trenching, but no record of the results is available.

In 1969, Burlington Mines Ltd ("Burlington") located 42 mineral claims and trenched a chalcopyritemagnetite showing in the area of the present southwestern corner of the Property, at a contact between intrusive and volcanic rocks. The property was subsequently allowed to lapse. In 1969 Burlington reported one of their blasted bulk samples returned 0.16% copper, 0.01% molybdenum and 0.01 ounces per ton ("opt") gold (Lee, 1969). Cominco Ltd. ("Cominco") staked claims in the area in 1971. In 1972, Cominco reported mineralization within the Lorna Stock, consisting of disseminated pyrite, chalcopyrite and pyrrhotite, with local molybdenite.

They also noted that volcanic rocks adjacent to the stock contained disseminated and fracture controlled pyrite, pyrrhotite and local chalcopyrite mineralization. Reconnaissance soil sampling gave anomalous values, ranging up to 4,800 ppm Cu and 200 ppm Mo along a four km strike length.

In follow-up analyses for gold in soil samples from earlier programs, Cominco determined that many samples exceeded 10 ppb gold with some over 100 ppb gold.

In 1974, Cominco drilled 5 short holes (Freeze, 1974) from two set-ups (Table 6.1, Figure 6.1). Two holes were drilled off one setup near the southeastern corner of the present property boundary and three holes were drilled off a second setup approximately 1,640 m at 323° from the first setup. Table 6.1 shows azimuth and total depth information, and locations are plotted on Figure 6.1. Lithological logs of the drillholes and a map showing drillhole locations are contained in Assessment Report 5183, filed by Cominco. However no analytical results were filed as part of the assessment report.

Copper and molybdenum mineralization was reported in all five holes but analytical data were not provided. The lithologs contained descriptions of mineralized rock including chalcopyrite and molybdenite, hosted by fractures healed with chlorite and quartz in altered andesite adjacent to the Lorna Stock. Only one drillhole, LG-3, actually penetrated the contact between the Lorna Stock and the overlying Kingsvale Group. This hole entered the intrusion at 114 m depth and contained the best mineralization of the five holes, based on the visual descriptions.

| Hole No | Site   | Elevation (m) | Azimuth | Dip   | Depth (m) |
|---------|--------|---------------|---------|-------|-----------|
| LG-1    | Site 1 | 2290          | -       | -90°  | 79        |
| LG-2    | Site 1 | 2290          | 190°    | -50°  | 39        |
| LG-3    | Site 2 | 2480          | -       | -90°  | 134       |
| LG-4    | Site 2 | 2480          | 115°    | -45°  | 54        |
| LG-5    | Site 2 | 2480          | 295°    | -50°  | 148       |
|         |        |               |         | Total | 454       |

Table 6.1 – 1974 Cominco Drillhole Data

The drill core was left on the Property at the second setup after the drill program. The core was apparently removed from the Property in the intervening years as only scattered pieces of split and unsplit core were seen at the storage site during the Property visit by the author.

In 1988, an area that includes the Property was staked by Bond Gold Canada Inc ("Bond") for its epithermal gold and porphyry copper-gold potential (Vogt, et al., 1988). Bond completed 63 km of ground VLF electromagnetic surveying and a magnetometer survey. This work identified several targets and a program of detailed mapping and sampling was recommended.

In 1991, Lac Minerals followed up on the Bond targets, with work focused on the 60° trending ridge north of Sluice Creek and two targets adjacent to the Lorna Stock (Kikauka and Leriche, 1991). The targets included both porphyry style and epithermal mineralization. Detailed geological mapping, soil sampling and an IP survey were recommended over the target areas northwest of Sluice Creek. No further work was carried out.

The anomalous copper values (>200 ppm) in rock values from the Cominco and the Lac Minerals exploration are shown on Figure 6.1

The Property was acquired by staking in 2010, 2011, 2012 and 2014 by the Vendors.

In June, 2011, Royal Sapphire completed a program of 260 km of airborne Z-Axis Tipper Electromagnetic surveying, the results of which are summarized on Figures 6.2 and 6.3. This was followed in September by a program of prospecting, talus fines sampling and rock sampling (Carpenter, 2012a) by Discovery Consultants of Vernon, BC.

In 2012 and early 2013 Royal Sapphire carried out an air-photo study of the Property (Shearer, 2013a). This work was partly instrumental in the design of a prospecting and sampling program carried out by Royal Sapphire in 2013 (Shearer, 2013b).

On July 30, 2015 Royal Sapphire entered an Earn-In Agreement with Kin Resources Inc, ("Kin"), whereby Royal Sapphire agreed to assign to Kin up to 50% of Royal Sapphire's interest in the Lorn Underlying Agreement.

On August 4, 2015 Kin entered an Earn-In Agreement with Jet Gold Corp ("Jet Gold") wherein Kin agreed to sell to Jet Gold 100% of Kin's interest in the Property. Jet Gold agreed to the terms of the Underlying Agreements on the Property.

#### DISCOVERY

In August 2015, a talus fines geochemical sampling program was carried out in the Sluice Creek area of the Property by personnel of Ridgeline Exploration Services Inc ("Ridgeline") for Jet Gold. The Sluice Creek area was selected for sampling based on a number of parameters, including: the presence of Cu, Ag, As and Au geochemical anomalies from rock sampling/prospecting by Lac Minerals and others: strong "proximal" alteration facies (quartz-sericite-pyrite, argillic) in this area as opposed to the propylitic alteration found in the Big Creek area; the presence of vuggy silica, epithermal type alteration textures found on the southeast facing slope of Sluice Creek valley as noted by Lac Minerals; the presence of conductive, near-surface linears in the high frequency (360 Hz) ZTEM data; and the close proximity to camp on the west side of Lorna Lake, allowing samplers to hike daily to the sample grid area (Paul, C – personal communication).

Also, advanced spaceborne thermal emission and reflection radiometer (ASTER) imagery processing previously completed by the property owners had indicated that the outcrops along the ridge contain abundant Fe-oxide, kaolinite and illite alteration (Paul, 2015).

Talus fines were collected from surface, unless otherwise noted. An attempt to collect the finest material was made, while discarding any gravel (>2 mm diameter). The B-horizon (soil) was sampled at the lowest elevations in the valley, where minor vegetation and an A-horizon had developed. Samples, totalling 219, were collected and sieved to -80 mesh. Analysis and interpretation was carried out with the use of an Innov-X Delta Premium handheld XRF (Paul, 2015).













## 7.0 Geological Setting

### 7.1 Regional Geology

Regional geological mapping was carried out in the area by the Geological Survey of Canada in 1978 (Tipper). Subsequently, 1:50,000 mapping was carried out by the BC. Geological Survey over the Warner Pass Map Sheet, containing the Property (Schiarizza et.al., 1986, 1987) and the adjacent Noaxe Creek Map Sheet (Schiarizza et. al. 1987).

The Property occurs within the Tyaughton Trough, a narrow, northwest trending basin that lies along the northeast margin of the Coast Plutonic Complex ("CPC"). The Tyaughton Trough includes mainly sedimentary strata ranging in age from Middle Jurassic to Upper Cretaceous. To the north and east of the Property, these rocks include argillite, turbidite, shale and siltstone (Figure 7.1).

The majority of the Property is underlain by Unit 6 of Glover and Schiarizza (1987), which they correlate with the mid to late Cretaceous Kingsvale Group. This unit consists of undivided andesitic pyroclastic rocks with minor andesitic to basaltic flows and local volcanic sandstone and conglomerate. It forms a continuous, northwest-trending belt that unconformably overlies the Tyaughton Trough sediments to the northeast and is intruded by the CPC to the southwest.

Intrusive rocks include mid-Cretaceous quartz diorite to quartz monzonite of the CPC exposed extensively southwest of the Property. Within and central to the Property is the Eocene Lorna Stock that is exposed as a cupola in the north draining headwaters of Big Creek. This intrusive body is in contact with Kingsvale andesitic volcanic rocks that form the ridges on either side of the valley and in the cirque to the south. The contact is marked by a prominent gossan formed from the oxidation of iron-rich minerals, primarily pyrite, from the hornfels zone in the andesitic volcanic rocks.

The main target type on the Property is  $Cu \pm Mo \pm Ag \pm Au$  calc-alkaline porphyry-style mineralization similar to that encountered at the nearby Prosperity, Poison Mountain and Ike deposits (Figure 7.2).

There are numerous known mineral occurrences in the general vicinity of the Property, including porphyry, vein and replacement styles of mineralization, including the Prosperity, Ike, Poison Mountain and Taseko/Empress deposits. The Prosperity and Poison Mountain deposits, at distances of 50 and 40 km respectively from the Property. are discussed here as they may have similarities to the mineralization expected on the Property. Summary descriptions of these deposits, modified from their BC Full descriptions Minfile descriptions, follow. available online are at www.empr.gov.bc.ca/mining/geoscience/minfile.

#### Prosperity – Minfile No. 0920 041

The Prosperity Deposit of Taseko Mines Limited, located approximately 50 km north of the Copper Zone, is a calc-alkaline LO4-type porphyry  $Cu \pm Mo \pm Ag \pm Au$  in a quartz diorite stock that is intruding the sediments and volcanic rocks of the Tyaughton-Methow Trough. It is located at the outer contact of the Trough similar to the Copper Zone, however it is on the east side of the Trough in the Intermontane Belt rather than on the west side of the Trough and in the CPC. The Prosperity Deposit has complicated structural and intrusive history. The earliest veining at Prosperity post-dates pervasive biotite alteration and consists of quartz, magnetite, hematite, sulphides and chlorite. With time, carbonate was added to the assemblage. During main stage mineralization, sulphides were deposited along with quartz, biotite, chlorite and sericite. The biotite and propylitic-argillic alteration associated with the porphyry system apparently also formed at this time. Late main stage veining comprises barren quartz, quartz with sulphides, carbonate and hematite, and gypsum with chlorite or pyrite. Gypsum with minor amounts of anhydrite followed by carbonate veining marked the collapse of the hydrothermal system. The best grades at Prosperity occur within the potassic altered core of the deposit.

The Prosperity deposit has recently been the subject of a positive feasibility study (Jones, 2009). Mineral resources shown in Table 8.1 are from the Jones report for Taseko Mines as filed on the website of the Canadian Securities Administrators (CSA) at www.sedar.com, the official site that provides access to most public securities documents and information filed by public companies and investment funds with the CSA in the SEDAR filing system.

#### Ike/Tasco – Minfile No. 0920 025

The Ike property, previously known as the Tasco, is situated 8.7 km southeast of Mount McClure, approximately 41 km northeast of Gold Bridge and 20 km west of the Property. The Copper Zone occurrences at Ike lie within Late Cretaceous plutonic rocks of the Coast Plutonic Complex, approximately 7 km southwest of the contact with Upper Cretaceous volcanic and volcaniclastic rocks of the Powell Creek Formation.

The principal rock type in the mineralized area is a hornblende-quartz diorite that has been intruded by numerous feldspar porphyry and quartz-feldspar porphyry dikes, generally striking 340° or 270°, and an oval-shaped guartz-feldspar porphyry stock measuring 300 m(east to west) by 600 m(north to south).

Mineralization is disseminated throughout and occurs on fracture surfaces within coarse-grained quartz diorite. The primary sulphide mineral is pyrite, averaging 3 to 5% in the quartz-hornblende diorite,

whereas the crosscutting feldspar porphyry contains up to 12% pyrite. Chalcopyrite mineralization also occurs as disseminations and fracture coatings within the quartz-hornblende diorite. Molybdenite occurs in localized quartz seams and veinlets, as massive seams 1 to 3 mm wide and as irregular pods within the quartz-hornblende diorite. Molybdenite is also sometimes associated with blebs of chalcopyrite. Minor flecks of native copper have been observed as well as localized disseminations of galena associated with pyrite.

The quartz-feldspar porphyry stock appears to be the locus of the most intense sulphide mineralization, consisting of pyrite, chalcopyrite and molybdenite. The sulphides occur as fracture fillings and fine disseminations within the quartz diorite and the porphyry stock and dikes. In 2011 Highpointe Exploration Inc drilled 684 m in two drillholes, encountering copper, molybdenum and silver mineralization (Koffyberg and Gilmour, 2012). In 2014 Amarc Resources Ltd drilled 9 holes totalling 5409 mover a broad area measuring 1200 by 600 min the vicinity of historic drilling, and encountered copper, molybdenum and silver mineralization (Galicki et al., 2015). Highlights of the drill program included 308 m of 0.41% copper equivalent.

In July, 2017 Amarc entered a mineral property farm-in agreement with Hudbay Minerals Inc. Under the terms of the agreement, Hudbay may acquire, through a staged investment process, up to a 60% ownership interest in Amarc's 100% -owned IKE copper porphyry district. Exploration is ongoing.

#### Poison Mountain – Minfile No. 0920 046

The Poison Mountain porphyry copper deposit is on the southwest flank of Poison Mountain, 40 km east of the Property. Mineralization at Poison Mountain is associated with two granodiorite to quartz diorite stocks (the Main and North porphyries) that intrude arkosic sandstones, conglomeratic sandstones and shales of the Lower Cretaceous Jackass Mountain Group. The stocks comprise relatively unaltered cores of hornblende-plagioclase porphyry that grade outwards into biotite-plagioclase porphyry in which the biotite is an alteration product of hornblende. The intrusion, potassic alteration and mineralization at Poison Mountain are about 59 to 56 Ma in age (Paleocene) as indicated by potassium-argon dating of hornblende and biotites from the mineralized system (Canadian Institute of Mining and Metallurgy Special Volume 15).

The highest grade mineralization occurs within the biotite-altered border phases of the intrusions and adjacent biotite hornfelsed sedimentary rocks. It consists mainly of pyrite, chalcopyrite, molybdenite and bornite, which occur as disseminations and fracture fillings, and in veins associated with quartz. Calcite and gypsum also occur as hydrothermal minerals, and pyrite, together with magnetite and

hematite, forms an irregular halo around the mineralized zone. Chlorite epidote alteration occurs sporadically within Jackass Mountain Group rocks for several kilometres around the deposit.

Poison Mountain, since its discovery in 1956, has been explored by a variety of surveys, 17,269 m of diamond drilling and 21,131 m of percussion drilling. This work has identified two zones. The Copper Creek zone has been historically reported as containing a resource. The Fenton Creek zone was also historically reported as containing a resource. Both of these estimates are contained in Minfile and quote reference to the George Cross News Letter - No. 65, April 2, 1993, and Imperial Metals Corporation's, 1995 Annual Report. These estimates are historical estimates. That is, estimates of the quality, grade, or metal content of deposits that Cyntar has not verified as a current mineral resource. The use of term 'resource' to describe the Copper Creek and Fenton Creek mineralization does not have the meaning ascribed to the term by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council, as amended, and are therefore of historical interest only.

#### Taseko/Empress – Minfile No. 0920 033

The Empress copper-gold porphyry deposit, located approximately 7 km north of the Copper Zone, is on the east side of Granite Creek, 800 m above its confluence with the Taseko River. A major strikeslip fault, the Tchaikazan fault, is interpreted to underlie the Taseko River Valley to the north of the showing. The deposit occurs in andesite, porphyry flows and bedded fragmental dacitic andesite of the Upper Cretaceous Powell Creek Formation adjacent to its contact with Late Cretaceous quartz diorite of the Jurassic to Tertiary Coast Plutonic Complex. Three zones of copper-gold mineralization have been defined, the Lower North, Upper North and 76. Pyrite, chalcopyrite and magnetite are the most abundant metallic minerals, and are present as disseminations throughout the altered volcanic rocks, with minor amounts in fractures and as veinlets. Molybdenite and pyrrhotite are present in small amounts.

The historical exploration programs and reports on the Taseko property are reported by Westphal (2011) to have generated the one main porphyry copper-molybdenum target area, the Empress Zone, and three peripheral anomalies or targets, the Buzzer, Rowbottom, and the Mohawk Showings.

A March 1991 "preliminary pre-feasibility" study of the Empress deposit, as reported on Minfile and quoting the George Cross News Letter No. 151, August 7, 1991 had quoted a resource on the property.

#### DISCOVERY

In the most recent report on the property, an NI43-101 report compiled in 2011 for Granite Creek Gold Ltd, the author (Westphal, 2011) stated that he was unaware of any mineral reserve estimate that has been completed on the Property and, in his opinion, the property is not yet advanced enough to generate a mineral reserve estimate.

#### Taylor-Windfall - Minfile No. 0920 028

The past-producing Taylor-Windfall polymetallic gold-silver mine lies off the Property, just 9 km to the west of Sluice Creek and is roughly along strike of the same Powell Creek Formation volcanic rocks. This prospect is on the southeast side of Battlement Creek, one km above its junction with Taseko River. Mineralization at Taylor-Windfall consists of narrow polymetallic quartz-sulphide veins containing high gold grades, hosted in contained within dacitic and andesitic tuffs and various volcanic sedimentary rocks and volcanic breccias. Most tuffaceous lithic and vitric andesites are propylitically altered and silicified.

The Taylor-Windfall polymetallic vein The prospect is

E.J. Taylor first discovered gold in eluvium on the bank of Battlement Creek in 1920. The gold was present as coarse angular crystalline fragments and sponge-like particles in a loose decomposed matrix which included detached crystals of quartz, tourmaline, rutile, pyrite and fragments of silicified tuff. Gold was removed by panning and the use of an arrastre. Exploration beneath the surficial deposits failed to find mineralized bedrock.

Subsequent exploration in the area outlined two veins of interest: a tourmaline-rich vein and a sulphide-rich vein. The tourmaline vein is 10 to 20 cm wide along a strike length of at least 100 m; the vein pinches, swells and bifurcates along its length. The vein consists of tourmaline, chlorite, pyrite, tennantite, sphalerite and chalcopyrite, with lesser galena, tetradymite, native gold and enargite. The main sulphide vein is 20 cm wide along a strike length of 20 m (the vein has been mostly mined out). The sulphide vein mineralogy is similar to that of the tourmaline vein but contains a greater proportion of sphalerite, tennantite, and contains coarse siderite.

Vein introduction was accompanied by a high temperature hydrothermal event which saw the formation of corundum, and alusite and quartz. Retrograde reactions are responsible for chloritization of tourmaline and alteration of most of the aluminosilicate mineral content to sericite. Later, advanced argillic alteration is marked by large volumes of sericite altered to an assemblage of mainly kaolinite and dickite, with lesser alunite, dumortierite, diaspore and gibbsite.

Both veins are accessed by the 1648-m level of the underground workings. Production records show that 555 tonnes were mined in five years between 1932 and 1953, inclusive; 454 tonnes of this were mined in 1935. Recovered from this mining were 14,525 grams of gold and 156 grams of silver. The author of this report has been unable to verify the above information. Mineralization on an adjacent property is not necessarily indicative of the mineralization on the property that s the subject of the technical report.

T.H. Carpenter, PGeo

**DISCOVERY** Consultants

# Figure 7.1 Regional Geology







Figure 7.2 – Quesnel and Stikine Terranes, Mineral Deposits

#### 7.2 Property/Local Geology

The descriptions of the Property geology are taken largely from Freeze et al. (1972), Glover & Schiarizza (1987) and Vogt et al. (1988) and are shown on Figure 7.3 The oldest rocks in the vicinity of the Property, along its northern boundary, comprise undivided sedimentary rocks of the Middle to Upper Jurassic Relay Mountain Group and the Lower to Upper Cretaceous Taylor Creek Group. Within the Property, these rocks include fine-grained and thinly laminated argillite with alternating light brown to white bands and locally trace amounts of pyrite (Freeze et al., 1972). Minor andesite dykes intrude these sedimentary strata.

The main lithology throughout the Property is the Upper Cretaceous Powell Creek Formation (Kingsvale Group) of volcanic and volcaniclastic rocks. These rocks are typically andesitic in composition, locally porphyritic and sometimes displaying flow banding. Adjacent to the contact with the Lorna Stock, the volcanic rocks are hornfelsed and contain pyrite, with lesser amounts of pyrrhotite and chalcopyrite. The pyrite content often exceeds several percent, imparting a bright reddish gossan locally along the contact.

The Eocene Lorna Stock intrudes in an elongate, north-northeasterly direction through the centre of the Property. It consists of biotite-hornblende quartz monzonite to local zones of hornblende-biotite quartz diorite. The intrusion varies from fine- to coarse-grained and is locally porphyritic along contact zones. Phenocrysts include quartz and feldspar, up to 1 cm in length. In its core, the intrusion is fresh, while towards the contacts it becomes more highly fractured and altered. This alteration includes kaolinization of feldspars, silicification, sericitization and limonitization of ferromagnesian minerals and pyrite. Fine-grained felsite dykes and sills, 0.3 to 20 m wide, associated with the Lorna Lake stock, cut the entire sequence. The dykes and sills are composed of 40 to 60% sericite with 40 to 60% fine-grained quartz (Kikauka and Leriche, 1991).

A 060° trending ridge north of Sluice Box Creek contains moderate to strong alteration; ubiquitous pyrite, extensive hydrated iron oxides, and widespread silicification and argillic alteration in Kingsvale volcanic rocks (LCP zone). The intensity of alteration increases near north-northwest trending faults. A zone of vuggy, drusy, brecciated (epithermal) quartz with minor barite occurs on this ridge. Above mean geochemical values were recorded in this area, which corresponds to a zone of north trending felsite dykes cutting the volcanic rocks (Kikauka and Leriche, 1991).

In the northern part of the Property, local occurrences of ferricrete, consisting of rounded to subangular boulders of volcanic and intrusive rocks, cemented by iron oxide, occur down slope from occurrences of pyritic volcanic rocks.

# Figure 7.3 Property Geology



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#### 7.2.1 Mineralization

Copper mineralization, in the form of chalcopyrite, locally accompanied by lesser amounts of molybdenite, appears to be genetically related to late hydrothermal stages of the Lorna Stock and is focused in greatest concentrations along the intrusive contact. Secondary copper minerals, including malachite, azurite and chrysocolla, occur mainly in the volcanic rocks.

South of the Lorna Stock, around the glacier, copper mineralization is spatially associated with intrusive dykes cutting silicified andesite. Southwest of Lorna Lake, chalcopyrite is associated with a massive magnetite seam at the intrusive-volcanic contact.

Molybdenite does not appear to correlate strongly with the copper mineralization. It occurs in quartzsericite veins within highly altered intrusive rocks and on fracture surfaces within the volcanic rocks associated with amphibole veinlets.

In addition, trace amounts of galena and sphalerite occur with chalcopyrite in the southern part of the Property. Data from the Cominco files, as provided to the Vendors, show a horseshoe shaped copper anomaly in rocks that follows the mapped intrusive and country rock contact along the west, south and east sides of the upper reaches of Big Creek, south of Lorna Lake. This anomaly extends to, and parallels the east side of Lorna Lake, an area within provincial parks.

From these data it is apparent that the stronger coincident copper and molybdenum areas occur on the west side of the Big Creek valley. Cominco placed three drillholes (LG-3, 4 and 5) at the south end of the larger anomaly. The platform for these holes was placed for ease of access and was not located in the area of best mineralization. It should be noted that, in comparison to the east side of the Big Creek valley, and as is evident in Photo 5.1, the west side is less steeply sloped and more amenable to sampling. Mineralization on the east side of the valley may be of similar tenor but Cominco sampling in this area was restricted due to the presence of a large talus slope.

The geochemical results of the rock and talus fines sampling indicate a possible halo of anomalous values adjacent to intrusion-hosted mineralization at depth.

### 7.2.2 Structures

The most important structural feature on the Property is the high degree of secondary fracturing in the intrusive and volcanic rocks focused along the contact zone. The shattering is not systematic in terms of orientation of fracture surfaces and is most intense in a porcelaneous, mafic-free variety of the quartz monzonite at the contact. This fracturing may be an important factor in localizing hydrothermal fluids and mineralization.

Minor shearing is observed throughout the Property but it is typically quite localized and does not appear to have any relation to mineralization, nor does it appear to be related to major regional structures.

### 7.2.3 Alteration

Hydrothermal alteration within the Lorna Stock is focused along the contact areas and is directly associated with the sulphide mineralization. It includes quartz-sericite veins, chloritization of mafic minerals and kaolinization of feldspars.

The adjacent volcanic rocks are less intensely altered and mainly propylitically altered with quartzcalcite-epidote veinlets, locally with pyrite and pyrrhotite mineralization. Massive pods of epidote also occur within the volcanic rocks.

A discontinuous belt of siliceous and argillic alteration zones that appears to be stratabound and hosted by pyroclastic rocks of the Kingsvale Group extends from the Taylor Windfall Mine in the West to the northern margin of the Lorna Lake Stock in the east. The alteration is concentrated in a sequence of dacitic to andesitic tuffs, lithic tuffs and feldspar crystal tuffs that is surrounded by layers of weakly altered andesitic dust tuff (Kikauka and Leriche, 1991).

## 8.0 Deposit Types

The following deposit description is summarized from the Selected British Columbia Mineral Deposit Profiles, Open File 1995-20 (Lefebure and Hoy, 2006), prepared by the BC Geological Survey Branch. The main target type on the Property is Cu±Mo±Ag±Au calc-alkaline porphyry-style mineralization similar to that encountered at the nearby Prosperity deposit, Poison Mountain and Ike deposits (see Section 7.1 on Regional Geology). A secondary target may be epithermal gold, similar to the nearby Blackdome deposit, however little evidence of epithermal mineralization has been observed to date on the Property.

#### 8.1 Porphyry Cu±Mo±Ag±Au

Deposits of the Prosperity and Poison Mountain type are sub-categorized as volcanic type deposits occurring as high-level (epizonal) stock emplacements in volcano-plutonic arcs, commonly oceanic volcanic island and continent-margin arcs.

Virtually any type of country rock can be mineralized, but commonly the high-level stocks and related dykes intrude their coeval and co-genetic volcanic piles. Intrusions range from coarse-grained phaneritic to porphyritic stocks, batholiths and dyke swarms; rarely pegmatitic. Compositions range from calc-alkaline quartz diorite to granodiorite and quartz monzonite. Commonly there are multiple emplacements of successive intrusive phases and a wide variety of breccias. Stockworks of quartz veinlets, quartz veins, closely spaced fractures and breccias containing pyrite and chalcopyrite with lesser molybdenite, bornite and magnetite occur in large zones (in areas up to 10 km<sup>2</sup>) of economically bulk-mineable mineralization in or adjoining porphyritic intrusions and related breccia bodies. Disseminated sulphide minerals are present, generally in subordinate amounts. The mineralization is spatially, temporally and genetically associated with hydrothermal alteration of the host rock intrusions and wall rocks.

Pyrite is the predominant sulphide mineral; in some deposits the iron oxide minerals magnetite, and rarely hematite, are abundant. Ore minerals are chalcopyrite; molybdenite, lesser bornite and rare (primary) chalcocite. Subordinate minerals are tetrahedrite/tennantite, enargite and minor gold, electrum and arsenopyrite. In many deposits late veins commonly contain galena and sphalerite in a gangue of quartz, calcite and barite.

Two main periods of porphyry copper-molybdenum-gold occur in the Canadian Cordillera, during the Triassic/Jurassic period (210-180 Ma) and the Cretaceous/Tertiary (85-45 Ma). Elsewhere, deposits are mainly Tertiary in age, but can range from the Archean to the Quaternary.

Calc-alkalic systems can be zoned with a cupriferous ore zone ( $\pm$  Mo) having a 'barren', low-grade pyritic core and surrounded by a pyritic halo with peripheral base and precious metal-bearing veins. Central zones with copper enrichment commonly have coincident Mo, Au and Ag with possibly Bi, W, B and Sr. Peripheral enrichment in Pb, Zn, Mn, V, Sb, As, Se, Te, Co, Ba, Rb and possibly Hg has been documented. Overall, the deposits are large-scale repositories of sulphur, mainly in the form of metal sulphides, chiefly pyrite.

Ore zones, particularly those with higher gold content, can be associated with magnetite-rich rocks and can be defined by magnetic surveys. Alternatively the more intensely hydrothermally altered rocks, particularly those with quartz-pyrite-sericite (phyllic) alteration produce magnetic and resistivity lows. Pyritic haloes surrounding cupriferous rocks respond well to induced polarization (IP) surveys but in sulphide-poor systems the ore itself provides the only significant IP response.

Porphyry deposits are marked by large-scale, zoned metal and alteration assemblages. Ore zones can form within certain intrusive phases and breccias or are present as vertical 'shells' or mineralized cupolas around particular intrusive bodies. Weathering can produce a pronounced vertical zonation with an oxidized, limonitic leached zone at surface (leached capping), an underlying zone with copper enrichment (supergene zone with secondary copper minerals) and at depth a zone of primary mineralization (the hypogene zone).

British Columbia porphyry  $Cu \pm Mo \pm Ag \pm Au$  deposits range from <50 to >900 million metric tonnes with grades of commonly 0.2 to 0.5% Cu, <0.1 to 0.6 grams per tonne ("g/t") Au, and 1 to 3 g/t Ag. Mo contents are variable from negligible to 0.04% Mo. Median values for 40 BC deposits with reported reserves are: 115 million metric tonnes with 0.37% Cu, 0.01% Mo, 0.3 g/t Au and 1.3 g/t Ag.

As an example of the above, the information below, which is 43-101 compliant, was filed on December 17, 2009 for Taseko Mines Limited.

| Prosperity Deposit Mineral Resources at 0.14% Copper Cut-off |                      |               |               |  |  |
|--|----------------------|---------------|---------------|--|--|
| Category   | Tonnes<br>(millions) | Gold<br>(g/t) | Copper<br>(%) |  |  |
| Measured   | 547.1                | 0.46          | 0.27          |  |  |
| Indicated  | 463.4                | 0.34          | 0.21          |  |  |
| Total  | 1,010.50             | 0.41          | 0.24          |  |  |

Table 8.1: Prosperity Deposit Resource Summary

The author of this Report states that he has been unable to verify the information given above and that the information is not necessarily indicative of the mineralization on the Property that is the subject of this Report.

# 8.2 Polymetallic Au <u>+</u> Ag

The past-producing Taylor-Windfall polymetallic gold-silver mine lies off the Property, just 9 km to the west of Sluice Creek and is roughly along strike of the same Powell Creek/Kingsvale Formation volcanic rocks. Mineralization at Taylor-Windfall consists of narrow polymetallic quartz-sulphide veins
containing high gold grades, hosted in sericitic and argillic altered volcanic rocks. The presence of sulphide mineralization in volcanic rocks on the Property, as described by Paul (2015), demonstrates the possibility of the occurrence of similar mineralization.

In the area of the Taylor-Windfall Mine, the volcaniclastic sequences trend east-west and have gentle dips to the north. The dominant structural trend in the area is northwesterly, reflected by the Tchaikazan Fault and smaller sub-parallel faults, as well as by the margin of the Coast Plutonic Belt in general. On a smaller scale, northeast trending structures appear to be instrumental in the localization of gold mineralization (Kikauka and Leriche, 1991).

A discontinuous belt of siliceous and argillic alteration zones that appears to be stratabound and hosted by pyroclastic rocks of the Kingsvale Group extends from the Taylor-Windfall Mine to the northern margin of the Lorna Lake Stock. The alteration is concentrated in a sequence of dacitic to andesitic tuffs, lithic tuffs and feldspar crystal tuffs that is surrounded by layers of weakly altered andesitic tuff (Kikauka and Leriche, 1991).

The Taylor-Windfall Mine is a unique mesothermal and retrograde epithermal gold deposit associated with low pH alteration zones. Production in the 1930s came from a northeast-striking (060° azimuth, with a dip of 75° to the southeast) fracture zone with a grade of approximately 20 g/t Au (Minfile). The mineralization was contained within a mineralized and silicified pyroclastic layer within the Kingsvale Group, with associated argillic and phyllic alteration. Similar alteration zones reportedly occur further east at Battlement Creek and Palisade Bluff (Kikauka and Leriche, 1991)

#### 9.0 Exploration

Exploration by Cyntar in 2017 comprised the geochemical analysis of 219 talus fines samples that were collected in 2015. The samples had been collected on a grid pattern over Sluice Creek. These samples were sieved to -80 mesh by Ridgeline personnel, compressed in cups and analyzed for 41 elements with an Innov-X Delta Premium handheld XRF.

The -80 mesh samples were sent by Cyntar in September, 2017 for reanalysis to an accredited analytical laboratory, ALS Global ("ALS") in North Vancouver, BC. As per Section 11.0 of the Report these samples were analyzed using analytical techniques used in previous programs. The copper, molybdenum and silver results have been incorporated with those of the 2011 and 2013 geochemical programs, and are shown on Figures 9.1, 9.2 and 9.3.

No blank samples, duplicate samples or analytical samples were submitted by Cyntar. However, ALS introduced analytical blanks, standards and duplicate samples for analysis. No quality control / quality assurance (QC/QA) problems were noted.

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The differing sample preparation and analysis methods in 2015 and 2017 show a variance in analytical results as reported by Paul (2015).

T.H. Carpenter, PGeo

**DISCOVERY** Consultants



## Figure 9.1 Copper in Talus Fines and Rock

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### Figure 9.2 Molybdenum in Talus Fines and Rock

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#### Figure 9.3 Silver in Talus Fines and Rock

#### 10.0 Drilling

No drilling has been carried out on the Property by the Optionee.

#### 11.0 Sample Preparation, Analyses and Security

This section outlines the available historical sample preparation, analyses, and security measures used during the 2011, 2013 and 2015 exploration programs.

The Royal Sapphire 2011 talus fines collection program consisted of the collection of surficial material at 25-m intervals along contour lines over the anomalous areas previously defined by the 1972 Cominco sampling program. A soil horizon has not developed on the Property and the collected sample material comprised talus consisting of fine- to medium-grained bedrock material. Sample depths varied from 10 cm to in excess of 20 cm. The sample was placed in a kraft sample bag with the sample numbers marked on the bag with a felt marker. Samples were dried and inventoried before being shipped for analysis to Acme Analytical Laboratories Ltd ("Acme") located in Vancouver, BC.

Rock samples (grab and chip) were placed in heavy plastic bags along with consecutively numbered sample tags. The outside of the bags were also marked with the same sample number. Each sample was described and documented before being shipped to Acme.

The 155 talus samples and 15 rock samples collected were removed from the field by Discovery personnel and stored at Discovery's secure facility in Vernon, BC, before being shipped in sealed containers by bonded carrier to Acme for analysis. At Acme the soil/talus samples were treated similarly to rock samples in preparation and analysis. No field duplicates or standards were sent to the laboratory.

At Acme preparation was carried out using Acme's R200-250 method in which 250 g of both the talus fines and rock samples were crushed, split and pulverized to -200 mesh. Analysis was done by Acme's 1DX2 method, in which a sample split of 15 g of the -200 mesh material was digested using modified Aqua Regia, a 1:1:1 solution of HCI-HNO<sub>3</sub>-H<sub>2</sub>0, followed by processing by inductively-coupled plasma mass spectrometry ("ICP-MS") for multi-element analysis.

Appropriate laboratory reference materials accompanied the samples through the analytical process, allowing for quality control assessment. Results were entered and printed along with quality control data (repeats and standards). The data were emailed to Discovery.



Acme is an ISO:9001:2008 accredited laboratory. In the author's opinion Acme works to industry standards.

The 2013 Royal Sapphire sampling program comprised rock and talus fines (±/soil) samples. No information is contained in the available assessment report (Shearer, 2013b) as to sample collection methods and labelling protocols. No mention is made of sample field duplicates being collected or analyzed, and there is no mention of standards.

Samples were shipped to AGAT Laboratories ("AGAT") in Burnaby, BC, for analysis. At AGAT, 57 rock samples were crushed and pulverized before analysis by AGAT's Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES) technique that quantifies concentrations of metals in a sample by simultaneously measuring the intensity of emission wavelengths.

Talus fines samples, totalling 42, were sieved to -80 mesh and also analyzed by ICP-OES methods.

Appropriate laboratory reference materials accompanied the samples through the analytical process, allowing for quality control assessment. Results were entered and printed along with quality control data (repeats and standards). The data were emailed to Royal Sapphire's consultant.

AGAT is an ISO:9001:2008 accredited laboratory. In the author's opinion AGAT works to industry standards.

Jet Gold's 2015 geochemical samples were sieved to -8m mesh and analysed with the use of a semiquantitative Innov-X Delta Premium handheld XRF unit. The -80 mesh samples were sent in September, 2017 by Cyntar for reanalysis to an accredited analytical laboratory, ALS Global ("ALS") in North Vancouver, BC.

At ALS the talus fines samples were analysed for trace-level metals using a 51-element analytical package by aqua regia and ICP-AAS method (AuME-TL43 code). Trace gold was analysed as part of the same analytical package using a 25 g subsample.

The AuME-TL43 method is a conventional analytical procedure. A 75% aqua regia solution was used for the digestion, and comprised a 1:3 ratio of concentrated HNO<sub>3</sub> and HCI. The prepared sample was digested for 45 minutes in a graphite heating block. After cooling, the resulting solution was diluted to 12.5 ml with de-ionized water, mixed and analysed by inductive coupled plasma-mass spectroscopy (ICP-MS). The analytical results were corrected for inter-spectral interferences.

ALS is an ISO:9001:2008 accredited laboratory. In the author's opinion ALS works to industry standards.

Note that some sample programs treated the talus fines (±soil) samples as a rock sample, while some programs sieved the material to -80 mesh, treating the material the same as a standard soil sample. The differing sample preparation methods can show a variance in analytical results.

#### 12.0 Data Verification

Work programs carried out on the property prior to the implementation of NI 43-101 in 2001 were reported under a different standard of disclosure than is currently acceptable, and in most cases it is not possible to verify the historical data by today's standards.

Due to the reconnaissance nature of the 2011 work program, no blanks or check samples, other than the quality control procedures at the various laboratories, were employed. In 2011, Discovery Consultants verified the 2011 data by checking the database against certificates received from the lab.

No mineralized samples were collected by the author during the field visit. Several samples of unmineralized core were collected by the author and remain in the author's possession. During the 2011 field visit GPS locations were established for the 1974 Cominco drill hole locations using a handheld Garmin GPSmap 76CSx.

Values from the 2011 program compare favourably with the previous Cominco sampling.

After a review of the 2013 exploration results contained in the available assessment report, those samples that have been accurately located, analyzed and verified have been entered into the database in the preparation of the Report.

The 2015 sample locations have been accurately located and the results of the 2017 reanalysis have been entered into the database in the preparation of the Report. The author verified the 2017 data by checking the database against certificates received from the lab.

Values from the 2017 analyses compare favourably with the 2011 sampling and the previous Cominco sampling. That is, anomalous areas coincided in the three surveys.

Results are considered adequate for the purposes of the Report and it is felt by the author that the cited material is of sufficient accuracy to preclude further verification.

### **13.0 Mineral Processing and Metallurgical Testing**

There has been no mineral processing or metallurgical testing on the Property.

#### 14.0 Mineral Resource and Mineral Reserve Estimates

There have been no resource or reserve estimates determined for the Property.

### 20.0 Environmental Studies, Permitting, and Social or Community Impact

The writer is not aware of any particular environmental, political, or regulatory problems that would adversely affect mineral exploration and development on the Property.

Exploration work that creates surface disturbance by mechanical means, for example such work as drilling and trenching, requires the filing of a Notice of Work application with the BCMEM and with the MFLNRO. The permit authorizing this work must be granted prior to commencement of the work and the permit will likely require the posting of a reclamation bond. As of the date of this Report, there are no work permits in place for the Property.

The general area which includes the Property is subject to an aboriginal land claim by the Tsilhqot'in First Nations. This area is within Engagement Zone B of the Tsilhqot'in Framework Agreement, which is of interest to the Anahim, Toosey, Tslihqot'in and Xeni Gwet'in Nations, located in Alexis Creek, Riske Creek, Williams Lake and the Nemiah Valley respectively. Certain of these groups have opposed the development of the Prosperity deposit. Prior to the commencement of any field program and in conjunction with the filing of a Notice of Work, consultation should be carried out with these groups to ensure that exploration is carried out in a cost effective and efficient manner.

#### 23.0 Adjacent Properties

There are no significant mineral occurrences adjacent to the Property.

#### 24.0 Other Relevant Data and Information

The author has reviewed the sources of information cited under References. The writer is not aware of any additional sources of information that might significantly change the conclusions presented in this technical report.

#### 25.0 Interpretations and Conclusions

The Lorn Property contains mineralization associated with a porphyry type copper and molybdenum deposit. This mineralization is concentrated in volcanic rocks of the late Cretaceous Kingsvale Group at and near the contact with the Eocene Lorna Stock.

The Property, though classified as a porphyry copper, molybdenum, silver and gold deposit, appears from the 2011 sampling to contain low gold values. The Property does appear however, based on the 2011 sampling, to contain significant silver values. Of the 155 talus fine samples collected, only one sample contained less than the detection limit of 0.1 ppm silver and 77 samples contained greater than 1 ppm silver, with a maximum value of 8.1 ppm silver.

The 2011 sampling has confirmed the work carried out by Cominco in 1972 and roughly duplicates the values obtained in the 1972 geochemical sampling. Grid based sampling and mapping is needed however to accurately define mineralized zones.

The 2013 sampling, despite incomplete data sets, appears to confirm the 2011 sampling.

The 2017 sampling results show a Cu-Mo-Ag anomaly on the northwestern contact of the Lorna Stock with the overlying Kingsvale Group volcanic rocks. This anomaly is a continuation of the northernmost anomaly outlined by Cominco Ltd. in the early 1970s. The 2015 sampling shows the molybdenum anomaly to be constrained to the northern tip of the contact and is coincident with copper. However, a second anomaly for copper also occurs to the southwest at approximately the same elevation (Paul, 2015). The Lorna Stock is not mapped over the second copper anomaly, but its surface expression suggests it may be partially overlain by Kingsvale volcanic rocks on the ridge separating Sluice Creek and Big Creek.

Silver shows two distinct anomalies on either side of Sluice Creek. The more significant of the two is coincident with high Cu and Mo on the southeast side of the valley, at the contact of the Lorna stock. With the exception of the low grade downslope dispersion trails, Ag shows a good correlation with Cu, including to the southwest, where the Mo concentration drops off. There is a correlation of Cu-Mo-Ag at the contact of the Lorna stock, but Mo content appears to drop off rapidly with distance from the intrusion.

Reanalysis of the 2015 samples by Cyntar in 2017 has enhanced the geochemical understanding of the Property and demonstrates that the outer shell of the Lorna stock, as well as its hornfelsed aureole, represents a zone of porphyry style mineralization. A limited ongoing mapping, prospecting and soil sampling program was being carried out at the time of the Property visit. Results of this work should be integrated with those of previous programs to to aid in planning the next phases of

work which should be aimed at defining localities where alteration/mineralization continues to depth, with the ultimate aim of targeting these areas with a diamond drill program.

The proposed Phase I Audiomagnetotelluric ("AMT") program will allow more accurate targeting of the proposed Phase II drilling program.

#### 26.0 Recommendations

A two-stage, exploration program is recommended to properly assess the Copper Zone discovery defined by the work completed by Cominco in 1972, and enhanced by subsequent sampling programs.

Phase 1 should comprise an AMT survey or a similar non-grid based geophysical survey, to define mineralization at depth. A Phase II program is to be carried out based on successful results from the Phase I program.

Phase II should comprise a drilling program to examine potentially mineralized areas as defined by the Phase I program.

The Phase I program on the Property is estimated to cost \$125,000. A Phase II program is estimated to cost \$440,500.

The reader is cautioned that in the event of positive results from the proposed program, much more exploration and investment will be required to properly evaluate the Property.

IT IS THE OPINION OF THE AUTHOR THAT THE CHARACTER OF THE LORN PROPERTY IS OF SUFFICIENT MERIT TO JUSTIFY THE RECOMMENDED PROGRAMS.

# 26.1 Recommended Phase I Exploration Budget Program: AMT Survey

|                                   | <u>Rate</u>           | <u>Units</u>         |           | T <u>otal</u>   |
|-----------------------------------|-----------------------|----------------------|-----------|-----------------|
| Program planning, supervision     |                       |                      |           | \$3,000         |
| AMT survey, including mob/demo    | b                     |                      |           | 70,000          |
| Helicopter<br>Helicopter fuel     | 1800/hour<br>300/hour | 15 hours<br>15 hours |           | 27,000<br>4,500 |
| Accommodation and meals           | 150/man-day           | 30 man-day           | S         | 4,500           |
| Data interpretation and reporting | I                     |                      |           | 5 <u>,000</u>   |
|                                   |                       |                      | Sub-total | \$ 114,000      |
| Management (~10%)                 |                       |                      |           | <u>11,000</u>   |
|                                   |                       |                      | Total     | \$ 125,000      |

# 26.2 Recommended Phase II Exploration Budget Program: 1000 metre drill program

|                                  | <u>Rate</u>       | <u>Units</u>           | T <u>otal</u>     |
|----------------------------------|-------------------|------------------------|-------------------|
| Program planning, drill supervis | sion              |                        | \$30,000          |
| 1000 metre drill program         | \$150/m           | 1000 metres            | 150,000           |
| Helicopter<br>Helicopter fuel    | 1800/hr<br>300/hr | 100 hours<br>100 hours | 180,000<br>30,000 |
| Accommodation and meals          | 75/man-day        | 150 man-days           | 4,500             |
| Data interpretation and reporti  | ng                |                        | <u>6,000</u>      |
|                                  |                   | Sub-total              | \$ 400,500        |
| Management (~10%)                |                   |                        | 40,000            |
|                                  |                   | Total                  | \$ 440,500        |

#### 27.0 References

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- Westphal, M.W., 2011: Technical Report Taseko Mineral Property, Taseko Lakes, BC, Canada for Granite Creek Gold Ltd
- www.empr.gov.bc.ca/mining/geoscience/minfile: Website of the BC Geological Survey Branch Mineral Inventory online

# Date and Signature

Effective April 23, 2018 Amended August 10, 2018

\_"Original signed by author"\_

T.H. Carpenter, PGeo Discovery Consultants

# **Certificate of Qualified Person**

Thomas H. Carpenter, B.Sc., PGeo

#### Business Address:

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Vernon, BC, V1T 6M8

#### I, Thomas H. Carpenter, B.Sc., P.Geo., do hereby certify that:

- 1. I am a consulting geologist in mineral exploration with Discovery Consultants, 2916 29th Street, Vernon, BC, V1T 5A6.
- 2. I am a 1971 graduate of the Memorial University of Newfoundland with a Bachelor of Science degree in geology.
- 3. I am the author of a Report on the Property entitled "TECHNICAL REPORT on the LORN PROPERTY, CLINTON MINING DIVISION, BRITISH COLUMBIA, with RECOMMENDATIONS FOR FURTHER EXPLORATION," for Cyntar Ventures Inc, dated October 30, 2017, amended April 23, 2018, further amended August 10, 2018 and, as sole author, am responsible for all sections of the Report.
- 4. I have been practicing my profession since graduation. I have over 39 years experience in mineral exploration on six continents for a variety of base and precious metals and diamonds. My working experience includes grassroots & reconnaissance exploration, project evaluation, geological mapping, planning and execution of drilling programs, and project reporting and project management.
- 5. I am a Professional Geoscientist registered with Engineers and Geoscientists BC, the business name of the Association of Professional Engineers and Geoscientists of British Columbia (membership #20277).
- 6. This report is based upon knowledge of the Property gained from the management of an exploration program carried out on the Property in 2011, the study of available documentation, the results of the 2011 and 2013 programs, and a property visit carried out on October 12, 2011. I have had no other involvement with the Property that is the subject of this Report.
- 7. I have read the definition of "qualified person" set out in NI 43-101 and certify that by reason of my education, affiliation with professional associations (as deemed in NI 43-101) and past work experience, I fulfill the requirements to be a "qualified person" (QP) for the purposes of NI 43-101 with past experience in the commodity being explored.
- I am independent of both the Vendor and the Issuer applying all of the tests in section 1.5 of NI 43-101.
- 9. As of the date of this Certificate, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.
- 10. I have read NI 43-101, 43-101CP, and Form 43-101F1, and the Report has been prepared in compliance with that instrument and form.

Dated this 10th day of August, 2018 in Vernon, BC

\_"Original signed by author"\_

Signature of T. H. Carpenter, PGeo