Van Schwetz IDAC 01 Iron Lake

884274

REPORT ON THE

IRON LAKE PROPERTY CLINTON MINING DIVISION, BC.

NTS: 93P 15W Latitude 51° 57' N, Longitude 120° 54' W (centre)

for **EASTFIELD RESOURCES LTD.** And LYSANDER MINERALS CORPORATION

by

J.W. MORTON, P.GEO.

FEB 26, 2001

TABLE OF CONTENTS

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1

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|                                                      | PAGE       |
|------------------------------------------------------|------------|
| SUMMARY:                                             | 1          |
| PROPERTY DESCRIPTION AND LOCATION:                   | 1          |
| HISTORY:                                             | 2          |
| ACCESSIBILITY, CLIMATE LOCAL RESOURCES,              |            |
| INFRASTRUCTURE AND PYSIOGRAPHY:                      | 3          |
| GEOLOGY:                                             | 3          |
| MINERALIZATION:                                      | 3          |
| SOIL GEOCHEMISTRY:                                   | 4          |
| GEOPHYSICS:                                          | 4          |
| A SUMMARY OF PLATINUM GROUP MINERALIZATION IN BC:    | 5          |
| ANALOGUES FOR MINERALIATION AT IRON LAKE:            | 6          |
| CONCEPTS THAT SHOULD BE INCORPORATED IN EXPLORATION: | 7          |
| RECOMMENDED EXPLORATION PROGRAM:                     | 8          |
| COST ESTIMATE (TO JUNE 30/01):                       | 8          |
| LOCATION MAP:                                        | Figure 1   |
| COMPILATION MAP:                                     | Figure 2   |
| PETROGRAPHICAL REPORT (NOVEEMBER 2000 RUBBLE)        | Appendix 1 |

#### **SUMMARY:**

Eastfield holds a 100 % interest in the 108 unit (approximately 6000 acre) Iron Lake property located northeast of the city of 100 Mile House, BC. Iron Lake covers a large mafic to ultramafic intrusive body in which pyroxenite, olivine pyroxenite, gabbro and sodic pegmatite occur in a complex that is comparable to that which hosts the Lac Des Isles deposit in Ontario. Important criteria present at this project include the large size of the igneous complex, the presence of multiple phases of magma dominated by mafic and ultramafic components and strong palladium and platinum soil anomalies.

Lysander Minerals Corporation may earn up to a 75% interest in the Iron Lake property from Eastfield. By completing \$2,000,000 in exploration and making \$200,000 in option payments before December 2004, Lysander earns 65% and, by completing a positive feasibility study within two years thereafter, increases its interest to 75%. A \$40,000 exploration expenditure is required by June 31, 2001

Prior exploration on the property completed originally in the early 1970's and later in the early 1990's established the presence of significant copper, palladium, platinum and gold anomalies in soil and resulted in the location of roadside rock exposures which assayed up to 0.93 g/t Pt..

A brief field program was initiated in November 2000 but was curtailed by the arrival of snow. This late season program was successful in finding large angular pieces of mineralized olivine-pyroxenite rubble that consistently grade approximately 0.60% copper, 0.55 g/t gold and 0.30g/t Pd+Pt. The mode of this mineralization (disseminated bornite) allows for a "porphyry copper scale" tonnage target. A program to explore the up-ice source of this rubble using geological, geochemical and geophysical techniques is planned to commence in May in conjunction with exploration for higher grade palladium dominant mineralization.

#### **PROPERTY DESCRIPTION AND LOCATION:**

The Iron Lake property consist of 108 units located in the Clinton Mining Division of British Columbia. The claims cover an area of approximately 6000 acres and are summarized as follows:

#### Claim Name Record # # units Expiry Date Registered Owner

| Iron Lake 1 | 374482 | 20 | Feb. 27, 2002 | Eastfield Resources Ltd. |
|-------------|--------|----|---------------|--------------------------|
| IL 1        | 374461 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL 2        | 374462 | 1  | Feb. 26, 2020 | Eastfield Resources Ltd. |
| IL 3        | 374463 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL-4        | 374464 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| 1L-5        | 374465 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL-6        | 374466 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL-7        | 374467 | 1  | Feb. 27, 2002 | Eastfield Resources Ltd. |
| IL-8        | 374468 | 1  | Feb. 27, 2002 | Eastfield Resources Ltd. |
| IL 9        | 374469 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL 10       | 374470 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL 11       | 374471 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL 12       | 374472 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL 13       | 374473 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |
| IL 14       | 374474 | 1  | Feb. 26, 2002 | Eastfield Resources Ltd. |



|         | CLINTON M.D.    |                   |
|---------|-----------------|-------------------|
| LOC     | ATION           | MAP               |
| MINCORD | Date            | N.T.S.<br>92 P/15 |
|         | Scale see above | Figuro            |
|         | βγ              |                   |

# Claim Name Record # # units Expiry Date Registered Owner

| IL 15     | 374475 | 1  | Feb. 27, 2002 | Eastfield Resources Ltd. |
|-----------|--------|----|---------------|--------------------------|
| IL 16     | 374476 | 1  | Feb. 27, 2002 | Eastfield Resources Ltd. |
| Norilsk 2 | 377518 | 18 | June 2, 2001  | Eastfield Resources Ltd. |
| Norilsk 3 | 377519 | 18 | June 2, 2001  | Eastfield Resources Ltd. |
| Norilsk 4 | 377520 | 20 | June 3, 2001  | Eastfield Resources Ltd. |
| Norilsk 5 | 377521 | 16 | June 2, 2001  | Eastfield Resources Ltd. |

The claims occur in a mature forest setting where logging is the predominant economic activity. No adverse environmental or aboriginal issues other than those that are general to British Columbia are known to exist.

#### **HISTORY**:

The first known exploration in the area of the prospect occurred in the early 1970's when an American based steel company staked it (Pickands Mather and Company). Pickands Mather were conducting exploration for porphyry style copper. The area of the Iron Lake Prospect was targeted because of a very strong airborne magnetic anomaly. An initial geochemical survey outlined some modest copper anomalies and a 6-hole diamond drill program was initiated. Results of the drill program did not include significant porphyry copper intercepts but indicated that the airborne magnetic anomaly was due to heavy accumulations of magnetite. The magnetite was found to occur in zoned mafic to ultramafic rocks (gabbro to olivine pyroxenite) in concentrations sufficient that the company conducted several sophisticated tests to evaluate the potential of developing a (magnetite) iron ore deposit. The magnetite content was ultimately determined to be too low and the claims were dropped (partially because of disenchantment brought on by the New Democratic Party who had been elected to government in 1972).

In the late 1980's Canevex Resources Ltd. (Morton and Garratt) acquired unpublished reports concerning this earlier work and staked the occurrence. The property was first optioned to a private group and later to a dormant public company (Cepeda Minerals Inc.) that completed a program on the claims as part of a restructuring plan. The emphasis of exploration was on gold although Morton and Garratt felt that there was potential to discover porphyry copper (particularly around the periphery of the intrusion) and designed a program that chased metal in its generality. Platinum group metals were for the first time assayed in deference to the extreme mafic character of the rocks. This analysis returned a number of significant palladium and platinum values.

Shortly after completing this program Cepeda returned the claims. Canevex, with the backing of a private individual, continued exploration privately and completed an induced polarization survey over part of the intrusion. Despite positive results from this survey the claims were allowed to expire in 1992. Eastfield reacquired new claims covering the area of the Iron Lake occurrence in February 2000.

# ACCESSIBILITY, CLIMATE LOCAL RESOURCES, INFRASTRUCTURE AND PYSIOGRAPHY:

The Iron lake property is located 45 kilometres northeast of the city of 100 Mile House BC. The property is accessed by paved road to the settlement of Eagle Creek and then by all weather logging roads a further 15 kilometres to the centre of the property. The entire claim group was originally covered by mature stands of Douglas fir, spruce and pine. Some of the area covered by the claims was selectively logged in the 1960's and clearcut logged in more recent times. The terrain is undulating with higher elevations present on the eastern side. Swampy areas are common in the lower elevations in the centre and western region of the claims. Elevations on the property range between 3300 feet and 5030 feet.

#### **GEOLOGY**:

Iron Lake covers a large mafic to ultramafic intrusive body composed of pyroxenite, olivine pyroxenite, gabbro and sodic pegmatite. The complex measures at least 7.5 kilometres by 5 kilometres (the northern and eastern edge of the complex are not exposed and the size of the complex could be substantially larger). The complex is believed to be part the Jurassic aged Quesnel Terrane. The Quesnel Terrane is well known for its large volume of alkalic intrusive and volcanic rock situated in what some investigators consider to be a rift basin (other authors favour an island arc origin).

Important criteria present at this property include the significant size of the intrusive complex, the presence of multiple phases of magma dominated by mafic and ultramafic components, extensive areas of pegmatite and strong palladium and platinum soil anomalies.

Pegmatitic zones cross cut pyroxenite and hornblendite. The pegmatites consist of varying proportions of megacrystic albite, pyroxene, hornblende and magnetite. Some regions of pegmatite are extensively altered to sericite and carbonate. Lamprophyre dykes (indicated in petrographic descriptions) cross cut the pyroxenite and pegmatitic rocks.

Magnetite content of much of the intrusion exceeds 10% with sizable areas exceeding 40%. Cumulate textures have been noted in several regions of the intrusion and apatite occurs in elevated concentrations to 9% by volume.

#### **MINERALIZATION:**

Mineralization consists of widespread low grade chalcopyrite occurring as blebs within pyroxene, hornblende and albite. A separate mode of mineralization consisting of disseminated and replacement textured bornite occurs in several samples of recently located olivine-pyroxenite rubble. Minor concentrations of nickel bearing pyrrhotite with elevated nickel responses have been obtained from samples obtained from two areas of copper-gold-PGM mineralization in carbonate-sericite altered material located in the bottom of roadside borrow pits. Pyrrhotite veinlets, possibly occurring with trace amounts of pentlandite, occur in these same exposures which have returned anomalous values of palladium and platinum (up to 258 ppb Pd and 933 ppb Pt). These road cuts expose altered plagioclase-pyroxene pegmatite in an area covered with overburden. Grab samples salvaged from drill core originating from a 1974 drill program (conducted 1500 metres to the



southeast of these exposures) demonstrate a widespread occurrence of anomalous platinum group metal (up to 138 ppb Pd and 420 ppb Pt). Several samples of this core are also anomalous in cobalt content with one grab sample returning an analysis of 3600 ppm Co.

A brief field program was initiated in November 2000 but was curtailed by the arrival of snow. This late season program was successful in finding several large angular pieces of mineralized rubble that consistently graded approximately 0.60% copper, 0.55 g/t gold, 0.20 g/t Pd and 0.10 g/t Pt. Subsequent petrographical examination of this material has determined that it is an olivine pyroxenite containing significant disseminations of bornite, chalcopyrite and magnetite.

#### **SOIL GEOCHEMISTRY:**

A wide spaced soil survey completed in 1989 (100 meter spaced lines with 50 meter spaced samples) indicates that a number of platinum group soil anomalies exist. The soil anomalies for these elements contain many spikes but hold together at a +20ppb threshold. Anomalous values reach 392 ppb palladium, 260 ppb platinum and 449 ppb gold.

Several +100 ppm soil copper anomalies (from the 1989 survey and from a 1973 survey) occur and partially overly the Pd, Pt and Au anomalies.

#### **GEOPHYSICS**:

Induced polarization surveys were completed on a portion of the northern region of the claims in 1991 while a small area in the southern area of the claims was surveyed in 1972. A large area of the induced polarization survey is highly conductive with chargeability commonly exceeding 20 mV/v. Interpretation of these results is complex due to the large surface extent of the response and the possibility that some of it is correlative with magnetite content. Some discrete anomalous zones can nevertheless be determined. A very strong chargeability and coincident total field magnetic anomaly is outlined in the southern region of the property. This anomaly, which is open ended to the north, occupies an area 250 meters by 425 meters has peak chargeability values of 50 mV/v and total field magnetic relief of 8,230 gammas. In 1972 a geophysicist interpreted these responses to likely reflect a steeply dipping body, 200 feet wide, containing banded or bedded pyrrhotite or magnetite. No follow up of this or any other geophysical anomaly has ever been undertaken.

#### A SUMMARY OF PLATINUM GROUP MINERALIZATION IN BRITISH COLUMBIA:

In the later years of the nineteenth century and early years of the twentieth century platinum recovered as a by product of placer gold production within and surrounding the Tulameen ultramafic complex of southern BC constituted the predominant North American source of this metal. Early investigations of the Tulameen complex noted its similar petrology to the then predominant world PGM occurrences located in the Ural Mountains of Russia. Recent comparisons would include other occurrences including the Lac des Iles deposit in Ontario as a possible analogue.

During the First World War supplies of platinum from Russia to Britain were interrupted causing serious problems for Britain's industrial capability. In 1918, on the request of the British Home

Office, an expedition to the Tulameen area was initiated by the Canadian Government's Munition Resources Commission. After initial evaluations the commission considered developing a major placer dredging operation here in 1918 but a cessation to fighting in Europe ended the requirement and the plan was abandoned. The results of the work undertaken by the Munition Resources Commission were published in 1920. The work undertaken by the commission remains the preeminent investigation into the occurrence of platinum group mineralization in British Columbia.

The Munition Resources Commission's investigation was superseded in 1934 by a broader investigation undertaken by the Canada Department of Mines. The 1934 investigation was in large focused on evaluating heavy mineral concentrates produced as by products from placer gold operations. The Tulameen occurrences were shown to exist within a population of several occurrences extending several hundreds of miles to the north associated with a belt of Jurassic-Triassic alkalic intrusive rocks. This belt first referred to as the Quesnel Trough, and more recently as the Quesnel Terrane, is typified by a linear belt of Triassic-Jurassic aged alkalic volcanic and intrusive rocks. A number of authors feel that the Quesnel Terrane represents a rift graben basin and that the alkalic intrusive rocks represent primitive mantle derived magma being tapped by deep faults.

Of particular intrigue are the results of PGM analyses obtained by the Canada Department of Mines in their 1934 study. The Quesnel Terrane is bisected by the Quesnel River in its mid north location. Materials from several placer gold operations were here available and were obtained and analyzed. Significant PGM values in the heavy mineral concentrates of several of the operations were indicated (e.g. a pan concentrate taken from a sluice box on Twenty Mile Creek after clean up Pt 2194.3 g/t, Pd 2208.0 g/t, and Os 1440.0 g/t).

In 2000 results were published for the Dobbin property located within similar alkalic mafic to ultramafic rocks located northwest of Kelowna BC. Copper mineralization on this property occurs in hornblende altered pyroxenite and is associated with significant concentrations of platinum group minerals. The most successful hole on the Dobbin property intersected 111 metres grading 0.41 g/t Pd, 0.35 g/t Pt and 0.19% Cu.

A number of porphyry copper-gold mines have been developed in and around the more felsic differentiates of the Quesnel Terrane intrusive centres (Copper Mountain, Afton and Mount Polley). While none of these mines contains (or contained) a significant resource of PGM all contain (or contained) significant quantities of byproduct platinum group metals in their concentrates.

# ANALOGUES FOR MINERALIZATION AT IRON LAKE

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| Deposit Analogue                                                  | Commonalties                                                                                                                                                                                                             | Differences (analogue)                                              |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Lac des Isles<br>Ontario                                          | mixed mafic and ultramafic<br>magmas (possibly zoned)<br>sympathetic with copper<br>pegmatitic in part                                                                                                                   | orthopyroxene vs. clinopyroxene<br>dominant<br>Archean vs. Jurassic |
| Salt Chuck<br>Alaska                                              | mixed mafic and ultramafic<br>magmas (possibly zoned)<br>sympathetic with copper<br>pegmatitic in part<br>clinopyroxene dominant<br>Jurassic                                                                             | does not contain olivine bearing<br>differentiates                  |
| Norilsk<br>Russia                                                 | mixed mafic and ultramafic<br>magmas (differentiated i.e. zoned)<br>associated with Triassic volcanism<br>clinopyroxene dominant<br>picrites (olivine-pyroxene-fspar)*1<br>sympathetic with copper<br>pegmatitic in part | associated with nickel<br>local evaporitic sediments *1             |
| Wellgreen                                                         | mixed mafic and ultramafic                                                                                                                                                                                               | layered vs. zoned                                                   |
| Tukon                                                             | Triassic-Jurassic                                                                                                                                                                                                        | contains more olivine dominant<br>differentiates (dunite)           |
|                                                                   | clinopyroxene dominant                                                                                                                                                                                                   | associated with nickel                                              |
| DRC (Afton)<br>BC                                                 | in Nicola-Takla alkalic igneous belt                                                                                                                                                                                     | stronger association with copper<br>less PGM                        |
|                                                                   | clinopyroxene dominant<br>associated with magnetite<br>Jurassic                                                                                                                                                          | greater component of felsic phases                                  |
| Olympic Dam<br>(assumes complex<br>to be part of<br>Takomkane) *2 |                                                                                                                                                                                                                          |                                                                     |
| , –                                                               | large volume of iron oxide                                                                                                                                                                                               | demonstrated association with<br>uranium and rare earth elements    |
|                                                                   | copper mineralization<br>associated with large granodiorite<br>dominant batholith                                                                                                                                        | Proterozoic vs. Triassic                                            |

\*1 The Nicola – Takla alkalic igneous belt has been interpreted by some workers to represent a depositional rift valley as a consequence of its major bounding faults and its domination by primitive alkalic igneous rocks. Other workers favour an island arc setting to explain the large calcalkaline batholiths (Guisson, Thuya and Takomakane) that also occupy this belt. These batholiths are, however, slightly younger in age than the alkalic units and may be located coincidentally within the belt but of an unrelated provenance. One occurrence of evaporitic sediments within the belt may be the (now mined out) gypsum deposit at Falkland. If the Quesnel Terrane is indeed a Triassic-Jurassic rift basin then the associated alkalic basalts may be equivalent to the Siberian traps associated with the Norilsk deposits. It is interesting that the picrite (olivine-pyroxene-feldspar) which occur throughout the Quesnel Terrane host much of the ore at Norilsk.

\*2 The Takomkane batholith is exposed over an area of approximately 30 by 40 kilometres. If the Iron Lake mafic-ultramafic occurrence is related to this batholith and not the Nicola-Takla alkalic rocks then Iron Lake may have attributes common with the Olympic Dam model.

#### CONCEPTS THAT SHOULD BE INCORPORATED IN EXPLORATION:

• The observation that copper sulfide occurs at Iron Lake (at least in part) as spherical "immiscible" blebs suggests that regions where copper sulfide has accumulated through a variety of processes including gravity will be where PGM will be most enriched.

• The fact that the Iron Lake magma is largely sulfur deficient makes it likely that higher concentrations of sulfide will occur at places where the magma has either become contaminated during emplacement or mixed as new magma entered the magma chamber. This expectation suggests that searching for conductors (either by ground or airborne methods) may be effective.

• Although the understanding of Iron Lake is preliminary the presence of a mixed maficultramafic relationship is known. Experience with other PGM occurrences occurring in a wide range of deposit styles suggests that areas close to the mafic-ultramafic contact will be the most permissive for economic PGM concentration.

• Although most of the property is covered with a mantle of deep overburden it is expected that Pleistocene ice direction can be determined and mineralized rubble or anomalous transported soil vectored back to source.

#### **RECOMMENDED EXPLORATION PROGRAM:**

Ideally the property should be flown with a high resolution magnetic survey. The airborne survey should be accompanied with either "input" EM or gravity. The concept being that such a survey may identify significant contacts and could indicate high sulfide zones. A follow up to such a survey would then be tailored to the results of the survey.

Alternately the following program is recommended:

Work completed between 1989 and 1991 has outlined platinum, palladium, copper, gold and (nickel) geochemical anomalies in what is largely a down ice glacial till medium. These anomalies may occur in multimetal association but often occur in single element dispersions. Topographical expression suggests that the ice direction is predominantly from the east and northeast (090° or 050°) and that the source of the anomalies can be tracked back using these vectors. Ice direction is however imperfectly defined and warrants more definitive work. A thorough air photo analysis should be completed to determine this direction.

A program of expanded soil geochemistry further to the east than the limits of the existing grids should be followed by reconnaissance IP using the existing roads and tracks (which exist in abundance in the western half of the property). By running reconnaissance IP along old roads it will be permissive to mechanically trench promising conductors with an excavator. Several existing conductors resulting from the 1991 IP survey will likewise be remarked and trenched. Areas further to the east within the expanded soil coverage will be interpreted and any significant anomalies added to the IP survey, as will be areas up ice from existing anomalies.

#### **COST ESTIMATE (TO JUNE 30/01)**

| Acquire TRIM topographic digital base                    | \$600 *1       |
|----------------------------------------------------------|----------------|
| Prepare base maps                                        | \$300 *1       |
| Acquire colour air photos                                | \$200 *1       |
| Select appropriate old logging trails and then cut       |                |
| to allow reconnaissance IP and GPS surveying.            | \$5,000        |
| GPS survey.                                              | \$2,000        |
| Establish and soil sample10 line kilometres of new grid. | \$2,500        |
| Analytical costs (200 soil samples)                      | \$4,000        |
| Geological prospecting                                   | \$4,000        |
| Analytical cost (100 rock samples)                       | \$2,000        |
| Reconnaissance IP (10 days)                              | \$15,000       |
| Reporting                                                | <u>\$2,000</u> |
| Total                                                    | \$37,600       |

# 2000-5 Olivine Clinopyroxenite

#### **Summary Description**

Ultramafic rock consisting mainly of medium-grained interlocking clinopyroxene with lesser olivine. Some amphibole is found interstitially, as is very minor phlogopite. The olivine is altering to serpentine and magnetite along fractures. Very minor replacement of the pyroxene by the amphibole has occurred locally. Sulfides are finely disseminated in the pyroxene and are slightly coarser in and around the olivine. They consist of intergrown chalcopyrite and bornite, with very minor pyrrhotite. The bornite shows some alteration to covellite. Sulfide grains are commonly partly rimmed by magnetite.



**Photomicrograph R00XXX-3.** Reflected Light. Sulfides rimmed with magnetite, occupying interstitial areas in olivine. Long axis field of view is 2 mm.

| Copper    | 5907 ppm |
|-----------|----------|
| Nickel    | 377 ppm  |
| Chrome    | 176 ppm  |
| Magnesium | 6.03 %   |
| Gold      | 535 ppb  |
| Platinum  | 111 ppb  |
| Palladium | 197 ppb  |



**Photomicrograph R00XXXI-16.** Reflected Light. Chalcopyrite, bornite and covellite rimmed by magnetite. Long axis field of view is 1 mm.

# Microscopic Description Transmitted Light

Clinopyroxene; 65-70%, anhedral (0.1 to ~5 mm). Interlocking, ranging from fine to coarse across the section. Some very minor, localized replacement by amphibole. Pyroxene has a very weak brown colour. Biaxial (+) with 2V approximately 50-60°. Maximum extinction angle is approximately 43°, consistent with augite.

Olivine; 15-20%, anhedral to subhedral (0.1 to ~5 mm). Olivine is concentrated in an irregular aggregate approximately 1 cm in diameter. Interlocking, with serpentine and magnetite in narrow fractures.

Serpentine; 3-5%, anhedral (<0.01 to 0.2 mm). Platy serpentine found as an alteration product of olivine, mainly along fractures, with magnetite.

Amphibole; 3-5% Green and greenish brown pleochroic amphibole interstitial to pyroxene and olivine. Some local partial replacement of pyroxene.

Biotite/phlogopite; traces, anhedral (0.1 to ~1 mm). Pale brown, interstitial to pyroxene and olivine, as for amphibole.

Orthopyroxene; traces (~1.5 mm). Present, but much less abundant than the clinopyroxene - only one crystal found, partly replaced by amphibole.

# **Reflected Light**

Magnetite; 3-4%, anhedral (<0.01 to 0.3 mm). Very finely scattered throughout, in addition to fine alteration of olivine, with serpentine. Magnetite forms rims or partial rims around sulfide grains in and around the olivine.

Chalcopyrite; 3-4%, anhedral (<0.01 to ~2 mm). Unevenly disseminated. Generally finer in the pyroxene and coarser with the olivine. In both cases intergrown with bornite.

Bornite; 1-2%, anhedral (<0.01 to  $\sim$ 2 mm). As noted, bornite is intergrown with chalcopyrite throughout. The bornite shows some alteration to covellite.

Pyrrhotite; <0.5%, anhedral (<0.01 to 0.2 mm). Minor, found with bornite and chalcopyrite.

Covellite; traces+, anhedral (<0.01 to 0.1 mm). Patches of alteration in bornite.

Digenite±chalcocite; traces+, anhedral (<0.01 to 0.1 mm). Very minor, found with covellite.

Sphalerite; traces, anhedral (~0.1 mm). A single grain noted in chalcopyrite and bornite.

Galena(?); traces, anhedral (<0.01 mm). Minute white blebs in bornite and chalcopyrite.



# Bullion Mine, Quesnelle Forks, 1902 - John B. Hobson (center) with gold ingots taken from Bullion Mine. Courtesy Prov. Archives, B.C.

(QUESNEL RIVER WATERSHED) Black sand placer gold concentrates graded: 95.0 oz/t Au, 64.0 oz/t Pt, 64.4 oz/t Pd and 10.5% Cu.