

**MEMORANDUM****Consolidated Gold City Mining Corporation**

886241

TOM TGS → old Nick  
 SCHRÖETER  
 F.H.I. 4 Pgs  
 Jm

Date: March 6, 1998

To: Bob Baldock, President, Applied Mine Technologies Inc.

From: John Chapman, President, Consolidated Gold City Mining Corporation

Re: Old Nick Project - Platinum Group Elements (PGE)

Recent work that I have been doing in the Thunder Bay area in a mafic igneous complex has shown how easy it is to overlook PGE. Often the best PGE values occur in the rock with no visible sulfides, so there is no discernible difference between mineralization and the barren host rock when observing with the naked eye, and in most cases even with the aid of a hand lens. The practice at the Lac des Illes mine (Pd, Pt, Au, Ni, Cu) is to assay all drill core and rock samples, as that is the only way to be sure of determining contained PGE values.

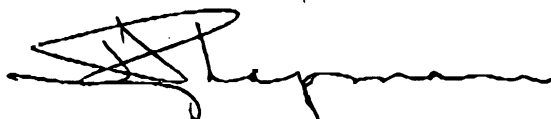
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In order to determine if there was any potential for PGE in the Old Nick mafic igneous complex I looked in the historic placer mining records to see if there was any reference to PGE. I am pleased to report that the Geological Survey of Canada Annual Report for 1892-1893, page 14, has two descriptions of PGE on Rock Creek:

"Platinum occurs in exceedingly minute to moderate sized, coarse irregularly shaped grains, the largest of which measures 4mm in diameter; a little chromite was detected in one of the pellets of platinum."

"A sample of heavy black sand taken from riffles of sluice boxes at Camp McKinney yielded 44% native platinum."

In further support of there being PGE in the Old Nick mafic igneous complex, Barry Sherman reports elevated PGE values from trench and drill samples on the Ray claims on the east flank of Baldy Mountain, just north of Camp McKinney. Barry is sending the information which was generated by Granges Exploration Ltd. in the 1980's, on claims owned by the Sherman Whatley Group.



cc. Barry Sherman, Principal, Sherman Whatley Group  
 Paul White, President, Big Blackfoot Resources Ltd.

ANNUAL REPORT 1892-93

14 B

GEOLOGICAL SURVEY OF CANADA

MISCELLANEOUS MINERALS.

1. NATIVE PLATINUM.

\* Platinum, native, from Rook Creek, Kettle River, B. C.

A sample of heavy black sand taken from the ripples of sluice-boxes at Camp McKinney, Rook Creek, a tributary of Kettle River, Osyoos division of Yale district, province of British Columbia, and which contained, in addition to gold, apparently a large proportion of native platinum, has been examined by Mr. Johnston, and found to have the following composition :

Native platinum.....	44.7
Gold.....	1.8
Magnetite.....	47.4
Quartzose sand.....	6.1
	100.0

The platinum was in the form of exceedingly minute to moderately coarse, irregular shaped grains, the largest of which measured four millimetres in diameter. Of the above 44.7 per cent platinum found in this material, 5.4 per cent was strongly magnetic; 15.7 per cent but feebly magnetic, and the remaining 23.6 per cent non-magnetic. No free osmiridium was observed; on dissolving a portion of the platinum, however, there remained numerous minute, thin, shining, steel-gray coloured scales of this alloy. The gold occurred in small, very irregular shaped grains, the largest not exceeding two to two and a half millimetres in diameter. The associated sand consisted of very fine grains of ash-gray coloured quartz, with a few intermixed grains of a light reddish coloured garnet, and an occasional grain of pyrite. A little chromite was in one instance detected in one of the pellets of platinum, and on another occasion very small quantities of a white felspathic rock was observed under similar conditions.

2. LEPIDOMELANE.

Lepidomelane from Marmorra, Hastings county, Ont.

This mineral, the occurrence of which in Canada was first recognized by Mr. R. R. A. Johnston, in 1888, is found in considerable quantity, in aggregations of brilliant black plates or scales, in a fine granular arsenopyrite at the Bob Neill mine on lot fourteen of the tenth concession of the township of Marmorra, Hastings county, province of Ontario. An analysis of a specimen from this locality afforded Mr. Wait the following results:

HOFFMANN.]

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Lepidomela scales and scales of the eleventh been observed hexagonal tab diameter, in a on lot twenty tenth concess county. Lik associated per the Worthin ship of Drur localities, is i

A light gr ship of Wes examined by C., of 2-941, lowing comp

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1877

Thompson are elsewhere described. They hold blackish schistose or slaty layers, though probably older than those of Boston Bar.

Coquihalla River.

The continuation southward of the slaty rocks of Boston Bar, on the Coquihalla, has already been described. Notwithstanding the similarity of the formation, however, little gold has been found on this river. Good prospects have been obtained on Ladner's Creek, and also on Pierre River, which is the next tributary below it. There is little gravel deposit in these valleys, and the streams are rapid and full of boulders.

Gold and platinum on the Similkameen.

Three and a-half miles above Vermilion Forks, on the South Similkameen, gold mining has been carried on for several years, though never employing a large number of men. A few Chinamen were working here at the time of my visit in 1877. The gold is obtained in the gravel of the lowest terrace-flat, which never rises over about twenty feet above the river. This rests on the worn surface of the Tertiary clays and shales, which form the bed-rock, and have been reached in many places, but only when the river is at its lowest stage, thus restricting the season of profitable mining. The gold is generally found in coarse scales, and is mixed with a considerable proportion of platinum in similar sized particles. Of this latter metal Messrs. Allison & Hayes secured for me about an ounce, by requesting the Chinamen to save it. The gravels hold many coarse pebbles, large those of Whipsaw Creek, but also include Tertiary igneous rocks and granite. The source of the stones of the gravel should be that of the gold, and the evidence favours the belief that it is derived from the green series above referred to, or from the slaty rocks associated with these. It is remarkable, however, in this case, that no paying deposits of gold have been found on Whipsaw Creek itself.

The Tulameen, or North Fork of the Similkameen, though yielding abundant 'prospects' has never, I believe, afforded remunerative employment to a large number of miners.

Further down the Similkameen, gold has been found in a few places, notably in the vicinity of the Twenty-mile Creek, where it was worked for some years. In the cañon near the forty-ninth parallel a considerable quantity of gold was got in 1858-59-60. This region soon abandoned by the whites, was worked for years by Chinamen.

Rock Creek continues to afford profitable employment to a few men. "About a mile from its mouth paid well, in some instances yielding as much as \$100 a day, but generally from one to two ounces. Some of the benches also paid, in one case yielding half an ounce a day to the hand during the season's work. The best paying ground was where

Placers on Rock Creek.



the Creek crossed a belt of soft slate rock; in following it up the cover was found very soft and deep. \*\*

Gold in small quantities has been found on several streams flowing into the Okanagan Valley, but the only one of these which has proved of importance is Mission Creek. The locality worked is situated about seven miles from the mouth of the stream, where it is found issuing from a narrow rocky gorge, into a wider valley. Some years ago mining was carried on in the bed of the Creek, and very good pay got for a time, in a reach of about half a mile below the gorge above mentioned. Two or three ounces of gold were obtained per diem to the hand in some instances. No remunerative ground was found above the gorge or cañon. The mining now in progress is on the lowest bench, or river flat, the 'pay dirt' in the McDougall's claim (which was the best at the time of my visit in 1877) being a 'cement,' or gravel consolidated by calcareous matter, which is probably local in origin. This rests upon a 'bed rock' which the miners call a rotten slate, but which is really a dark colored bed of the Tertiary formation, which here overlaps the older rocks. The gravel of the flat rests on the Tertiary beds, which a little further from the cañon become yellowish, and paler in tint, but are all fine-grained clays or shales. Nodules of iron-stone derived from the Tertiary are abundant in the gravels, but were not observed in place. The pay dirt in the McDougall's Claim is about three feet thick, and has to be stripped of eight feet of useless gravel. It was wheeled in barrows to the river, about twenty yards, and washed in two lengths of boxes, though as all the gold is coarse, it is stopped for the most part at the first riffle.

Mission C

Paying grt limited.

Bed rock.



DIAGRAM REPRESENTING MODE OF OCCURRENCE OF GOLD. MISSION CREEK.  
a. Recent gravels.  
b. Crystalline rocks.  
c. Auriferous gravel.  
d. Tertiary deposits.  
e. Line representing present bed of stream.

The rocks seen in the cañon are gneissic, of the character of those so extensively developed east of the south end of Okanagan Lake. About a quarter of a mile from the lower end of the cañon they are

\* Report of Progress 1876-77, p. 143.

FROM : J. A. CHAPMAN MINING SERVICES PHONE NO. : 604 536 8356 Jul. 21 1999 03:44PM P3

**MEMORANDUM****Consolidated Gold City Mining Corporation**

Date: March 9, 1998

To: Distribution


From: John Chapman, President, Consolidated Gold City Mining Corporation

Re: Old Nick Area Mafic Igneous Complex - Platinum Group Elements (PGE)

Further to my memo of March 6th regarding PGE potential at Old Nick I have reviewed Assessment Report #16172 by Peter Peto, Geologist for Granges Exploration Ltd. (1986-87). The work was done on the Sherman Whatley Group Ray Claims on the east flank of Baldy Mountain. Peto sent 7 surface samples to ACME Laboratories for PGE analysis; results on four highest grade samples were:

Sample	Au (gpt)	Pt (gpt)	Pd (gpt)	Cr (%)
42983	0.01	0.13	0.10	15.75
42989	0.01	0.10	0.01	21.63
42997	0.02	0.02	0.04	22.99
42998	0.03	0.02	0.07	25.74

Peto felt that ACME had not digested the entire sample as the analysis method was hydromet rather than fusion. He stated that Inco and Placer Dome had sampled the same area in the early 1980's and also returned platinum grades from 50ppb to 100ppb (0.05gpt to 0.10gpt).



Distribution: Bob Baldock, President, Applied Mine Technologies Inc.  
Barry Sherman, Principal, Sherman Whatley Group  
Paul White, President, Big Blackfoot Resources Ltd.

TGS → Old Nick  
**COPY**

**MEMORANDUM****Consolidated Gold City Mining Corporation**

Date: March 6, 1998

To: Bob Baldock, President, Applied Mine Technologies Inc.

From: John Chapman, President, Consolidated Gold City Mining Corporation

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TOM  
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cc. Barry Sherman, Principal, Sherman Whatley Group  
 Paul White, President, Big Blackfoot Resources Ltd.

**TALKER FOR CGD  
January 1998**

Gold City's focus is mineral exploration and development in British Columbia. The province has an extensive mining history with good mineral discovery potential, good infrastructure (roads, power, communications), skilled workforce, and is CEE eligible (tax deductible to Canadian investor).

The Company has interests in 25,000 hectares of lode mineral lands in historic mining camps with significant precious metals production, including: Cariboo Gold Fields (lode and placer gold), Beavertell (silver, lead, zinc) and Rock Creek (lode and placer gold).

The WelBar project in the Cariboo Gold Fields (historic production of 3.2 million ounces of gold) has sufficient high-grade gold resources to commence feasibility level work toward development of a 200 ton per day operation. Scoping studies indicate the potential for production of 29,000 ounces of gold per annum at a cost of US\$144 per ounce, which yields a solid return on investment (feasibility: C\$1.5 million, development: C\$4.0 million).

The Dell project in the Beavertell camp (one of the top five silver producers in the province) is an exploration stage property which is immediately adjacent to Teck's old Highland Bell mine (historic production: silver: 35 million ounces, gold: 17 thousand ounces, lead: 26 million lbs., zinc: 31 million lbs.). The Property contains several trenches and drill holes that have yielded significant silver, lead, zinc, and copper, gold. Also, there are polymetallic soil geochemical anomalies that were identified in the 1980's and remain to be tested.

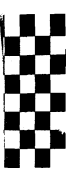
The Caramella project at McKinney camp includes British Columbia's first dividend paying lode gold mine (82,000 ounces) the Cariboo-Amelia. The Project has a mineral inventory of 33,000 tons grading 0.75 opt gold, and several significant drill ready targets. The new Crown Jewel deposit (1.8 million ounces of gold) lies only 20 kilometers south-east along the same regional rock contact (Nelson plutonic rocks/ Anarchist metavolcanic and metasedimentary rocks). Big Blackfoot Resources Ltd. has an option to spend approximately C\$1.0 million over next three years to earn a 50% joint venture interest in the Project.

The Old Nick project, one of British Columbia's largest nickel, cobalt deposits, is located adjacent to Highway #3 near the village of Rock Creek. Scoping studies indicate the potential to produce high-quality nickel and cobalt from large-scale open pit heap leach operations. Metal recovery would be via solvent extraction and electrowinning (SX-EW). Studies indicate that a 13,500 tonne per day leaching operation could produce 6.0 million kilograms of nickel and 250 thousand kilograms of cobalt per annum at a cost of US\$1.20 per pound of nickel (net of cobalt at US\$18.50/lb.). Applied Mine Technologies Inc. has an option to earn an 85% joint venture interest in the project by spending C\$7.75 million over the next three years.

The Rock Creek project is an exploration stage property located adjacent to the International Boundary, and only five kilometers north-west of the Crown Jewel gold deposit. Several surface gold showings have been discovered and drilling has returned two best holes: 11 feet grading 1.52 ounces of gold per ton, and 20 feet grading 0.29 ounces of gold per ton. Several excellent drill targets, based upon surface showings and geophysics remain to be tested.

Gold City is well positioned near infrastructure with its portfolio of advanced stage Central and Southern British Columbia mineral projects. The CGD story will become exciting as: (1) Big Blackfoot and Applied Mine Technologies advance the Caramella and Old Nick, (2) the Dell project is optioned for its silver potential, (3) the British Columbia government becomes "pro-business", and (4) funds are raised to advance the WelBar to feasibility.





TOM  
SCHROETER

TGS → old  
Nick

3 pgs

**MEMORANDUM**  
**Consolidated Gold City Mining Corporation**

**CONFIDENTIAL**

Date: January 30, 1998  
To: Distribution  
From: John Chapman  
Re: Old Nick Project, Potential for Further Discovery

**Objectives:**

- (1) To discover additional nickel-cobalt resources in the region centered on the Old Nick deposit and bounded by Upper Jolly Creek (north), Anarchist Summit (west), Kettle River (east) and International Boundary (south);
- (2) To discover high grade nickel-cobalt resources in the dunite intrusion related to the Old Nick deposit.

**Facts:**

- (1) There are several known outcrops of ultramafic plutonic rocks in the region, they include: (a) a series of dikes and sills of altered dunite and serpentinite that occur in a five kilometer long by one kilometer wide west trending zone from the east end of the Old Nick deposit (Figure 2, Steve G. Enns, Master of Science Thesis on Old Nick), (b) a circular (750 meter radius) plug of altered dunite and serpentinite one kilometer south of Myers Lake at the International Boundary (Figure 2, Steve G. Enns), (c) a 1.5 kilometer long by 400 meter wide faulted slice of altered dunite and serpentinite at the hair-pin bend of Highway #3 west of Rock Creek (Figure 2, Steve G. Enns), (d) a 700 meter by 175 meter exposure of sheared serpentine in the canyon of Rock (Jolly) Creek 500 meters west of the confluence of Stanhope Creek (Map 316-A, W.E. Cockfield, Memoir 179, Canada Department of Mines, 1935), (e) a two kilometer by one kilometer ridge of sheared amphibolite and serpentinite located five kilometers northwest of Camp McKinney (Map 316-A, W.E. Cockfield), (f) a body of ultrabasics (not shown on Cockfield's Map 316-A) is exposed in the vicinity of "Fish Lake" near the confluence of Rock (Jolly) Creek and Stanhope Creek (J.A. Mitchell, internal report, Canex Aerial Exploration Ltd. (Placer Dome), October 1, 1964, "Report on Jolly Creek Nickel, Camp McKinney, B.C."), (g) a subcrop of ultrabasic rocks of undetermined size uncovered by K. Ewars in the 1930's on Rock (Jolly) Creek just above its confluence with Stanhope Creek (J.A. Mitchell, 1964), and (h) thin sheets (0.5 meters) of sheared serpentine are located adjacent to a north striking fault 110 meters northwest of the Rice Creek road crossing at Camp McKinney (J.A. Chapman personal observation);

- 2 -

- (2) Known nickel mineralization in or near ultrabasics occurs at: (a) the Old Nick deposit (+30 million tonnes grading 0.20% nickel and 0.015% cobalt in dunites and quartzites that contain about 5% sulfides), (b) old hydraulic workings on Rock (Jolly) Creek, see (1), (d) above and refer to J.A. Mitchell's 1964 report (80 feet of channel sampling yielded: 0.25% nickel, 0.29% copper and 0.24 opt silver, trace of gold), (c) J.A. Mitchell in his 1964 report states, "about 30 years ago while hydraulicking on Rock (Jolly) Creek near its confluence with Stanhope Creek, K. Ewars, now of Okanagan Falls, B.C., uncovered a mineralized showing in ultrabasic rocks which carried nickel. He apparently drifted on it and put down a shallow shaft at a well mineralized area where he obtained as much as 4% nickel (see (1), (g) above), and (d) J.A. Mitchell in his 1964 report states, "On the Ogafan Claim, about two miles east of the Cariboo-Amelia (Camp McKinney) and 1.5 miles northwest of the Old England, there is exposed a zone of quartz stringers about 40 feet wide which carries subeconomic recoverable values of about \$2 (gold) across the 40 feet including 0.09% nickel in the quartzite between the stringers";
- (3) Nickel-in-soils was discovered by Newmont in Budy Creek (southeast of Old Nick) during the 1960's and by First Point Minerals Corporation between the headwaters of Budy Creek and the International Boundary in a 1997 survey on Rock Creek Gold Trend Joint Venture lands;
- (4) Steve G. Enns in his thesis on the Old Nick states, "Paragenesis for the mineralized dunite appears to be as follows. Crystallization of the primary silicate olivine was followed by crystallization of interstitial primary sulfides...". He also concluded that the mineralized (nickel, cobalt, chrome) dunites intruded the Anarchist (Permian) metasediments and metavolcanics as dikes and sills near faults and shears. Metal rich hydrothermal solutions from the magma related to this dunite intrusive permeated surrounding metasediments (principally quartzites) depositing iron, nickel, cobalt in the form of sulphides. At the same time chrome was injected forming an apple green mica (fuchsite). Following the intrusion of the dunite the region was subjected to metamorphism by intrusion of the Nelson Plutonic Complex (Cretaceous) and the later intrusion of a Feldspar Rhomb Syenite (Tertiary), which caused serpentine (hydration) and then talc-carbonate alteration of the dunite and some remobilization of sulfides;
- (5) The Anarchist rocks contain abundant graphite which has high electrical conductivity;
- (6) It is of interest to note that the U.S. Geological Service has mapped ultrabasic rocks immediately to the west of the Crown Jewel gold deposit, which is approximately 10 kilometers southeast of Old Nick.

**Considerations:**

- (1) To my knowledge many of the ultrabasic rocks that have been mapped in the region have not been systematically sampled and analyzed for nickel-cobalt;
- (2) It is not uncommon to find massive sulfides in a region of ultramafic rocks that are sulfide rich - such as the Old Nick dunite. The nickel content may be fairly uniform in the dunite (0.20% nickel in 5% sulfides) where presently sampled, but if sulfides have been concentrated in the source magma to 100% it may be possible to achieve grades of 4% nickel ( $100/5 \times 0.20\%$ ). The reference to K. Ewar's nickel discovery (4% in "well mineralized" rock) in Facts: (1), (g) may



- 3 -

represent a massive sulfide lens in ultramafics. This area is certainly worthy of further exploration, and if massive sulfides are found then the search for this mode of deposition should be broadened to include all ultramafic showings in the region;

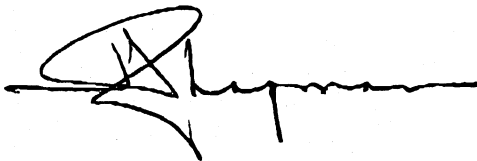
- (3) Considering the problem created by graphite in Anarchist rocks toward electrical exploration methods, it may be wise to consider gravity surveys in areas of known mineralization such as Old Nick and Jolly Creek, in a search for massive sulphides;
- (4) The Extended Abstracts Volume, Pathways '98 contains two papers that have information that could impact Old Nick exploration, they are: (a) Ni-Cu-PGE Ores of the Noril'sk Region, Siberia: Lessons For Exploration Elsewhere; A.J. Naldrett, University of Toronto, and (b) Discovery of the Las Cruces Massive Sulfide Deposit, Andalucia, Spain; Mike Doyle et al, Rio Tinto Mining and Exploration Limited.

**Recommendations:**

A meeting should be held ASAP with geologists familiar with the Old Nick and/or ultramafic nickel deposits to discuss the potential for massive sulfides in the Old Nick dunites and its related magma. Attendees should include the following local geologists:

Steve Enns, M.Sc., P.Geo.	Author of Old Nick Thesis	604.985.7835
Egil Livgard, B.Sc., P.Eng.	Author of Several Old Nick Reports	604.669.2426
Tom Schroeter, M.Sc., P.Eng.	Geologist, Geological Survey Branch	604.660.2812
Graham Nixon, Ph.D., P.Geo.	Geologist, Geological Survey Branch	250.952.0448

If there is potential for massive sulfides at Old Nick, then a gravity survey should be considered.



**Distribution:** Bob Baldock  
Alan Campbell  
Bill Kure  
Carl Nissen  
Paul White  
Sydney Wilson  
Frank Wright

TGS → old Nick

MINERAL EXPLORATION GROUP, SOCIETY  
CALGARY, ALBERTA

JUNE 4, 1998 LUNCHEON MEETING  
11:30 AM  
CONFERENCE CENTRE  
PLUS 30 LEVEL BOW VALLEY SQUARE 2

**THE OLD NICK PROJECT  
(ABSTRACT)**

Large tonnage, low grade nickel sulfide deposits have never been exploited hydrometallurgically, as has been the case with copper deposits. The Old Nick is one of British Columbia's largest sulfide nickel, cobalt deposits. It has gross contained metal values, in \$/tonne, that exceeds those of all the major copper mines in the province. The deposit is located adjacent to Trans-Provincial Highway #3, 38 kilometres east of Osoyoos and within 5 kilometres of the International Boundary; very near Battle Mountain Gold Company's Crown Jewel gold deposit (1.8 million ounces).

Recently available process technologies include: bioleaching, pressure leaching and new reagents for solvent extraction and ion exchange for nickel and cobalt recovery.

This presentation will focus on the exploration and process development studies to date, which indicate positive development potential on a large scale as an open pit heap leach operation with processing by solvent extraction and electrowinning.

The Old Nick deposit is owned by Applied Mine Technologies Inc. (52.5%) and Consolidated Gold City Mining Corporation (47.5%).

TO BE PRESENTED BY: FRANK WRIGHT, P.ENG. (METALLURGICAL ENGINEER)  
Project Manager, Applied Mine Technologies Inc.  
JOHN CHAPMAN, P.ENG. (MINING ENGINEER)  
President, Consolidated Gold City Mining Corporation

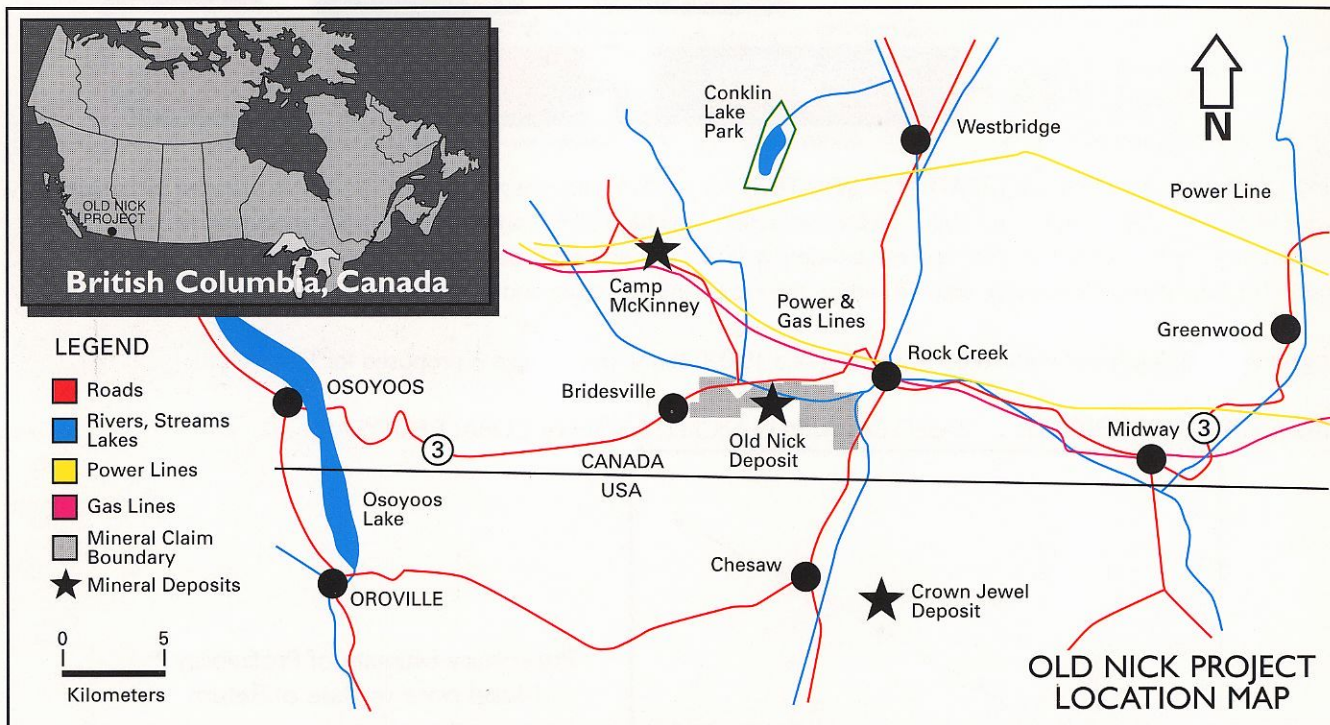
# OLD NICK PROJECT

→ old Nick.

**THE BUSINESS OF GOLD CITY MINING CORPORATION:**  
GCP is a resource company principally engaged in the exploration and development of gold and silver properties in British Columbia, Canada

## LOCATION:

**BRITISH COLUMBIA, CANADA** Situated at Rock Creek, 30 km east of the town of Osoyoos, and 290 km east of Vancouver, in the south of British Columbia, Canada.



## PROJECT DESCRIPTION:

**FAMOUS BOUNDARY GOLD FIELDS.** The Old Nick Project, comprised of 88 contiguous mineral claim units covering 2,100 hectares, is a potential large tonnage, low grade nickel and cobalt deposit. Located just south of Highway #3, the project is accessible by farm and logging roads as well as by an abandoned railway grade of Burlington Northern Railway. The project is 50% owned by Gold City Mining Corporation, 25% by Phoenix Gold Resources Ltd. and 25% by Orion International Minerals Corporation.

## JOINT VENTURE:

**APPLIED MINE TECHNOLOGIES & OLD NICK OPTION.** Applied Mine Technologies Inc. (AMT) has the option to acquire a 50% joint venture interest in the Old Nick Project through the Old Nick Option Agreement by expending \$3,000,000 on sampling and metallurgical work over a 3-year period. Through completion of Phase I, AMT has earned a 5% interest in the project. It has proceeded to Phase II by committing to spend at least \$750,000 in 1997, to earn a further 10%.

## WORK PROGRAM:

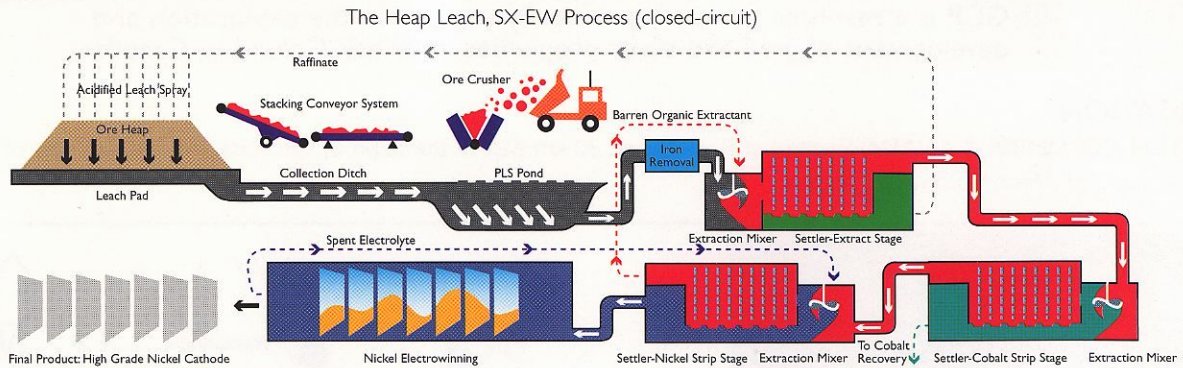
**FOCUS ON EXTENSIVE METALLURGICAL TEST PROGRAM.** In addition to sampling, drilling, bulk test mining, field pilot testing and order-of-magnitude studies, the work program is planned to culminate in the design, construction and operation of a field test plant to confirm lab results and scale up efficiencies. This will result in the preparation of a pre-feasibility study to facilitate the company's plan to realize on the added value by the end of Phase III after taking the AMT interest to 50%.

**Gold City**  
MINING CORPORATION



# OLD NICK PROJECT

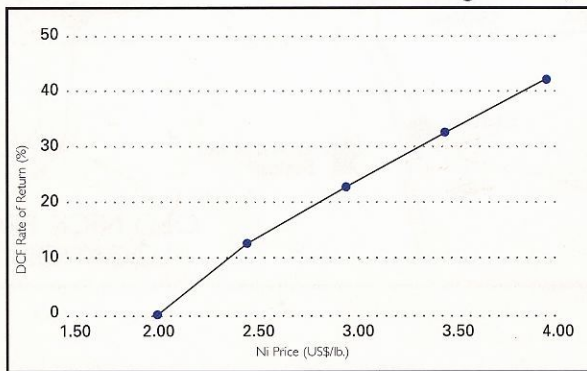
## METALLURGY:



AMT DEVELOPED A UNIQUE TREATMENT STRATEGY for this low grade resource which includes its patented technologies. Large, laboratory scale column and tank bioleach extraction tests have been conducted, followed by planned recovery of the metal by solvent extraction (SX) and electrowinning (EW). The process is designed to produce high grade cathode metal onsite. The flow sheet is innovative and will reduce the capital, infrastructure and operating costs if production proceeds.

Large scale heap leach and metal recovery testing of a 10,000 tonne bulk sample is proposed for Phase III.

**PROJECT ECONOMICS:** BASED ON: 6.5M kg NICKEL; 0.325M kg COBALT PER YEAR.



Preliminary Estimate of Profitability \*  
Nickel price vs. Rate of Return

\*based on a heap leach scenario with assumptions for geology and metallurgy includes cobalt values @ \$US 12/lb, at a 20:1 Ni:Co weight ratio

## MINERAL INVENTORY:

Measured and Indicated:  
Inferred:  
Potential:

15M tonnes @ 0.2% nickel & 0.01% cobalt  
30M tonnes @ 0.2% nickel & 0.01% cobalt  
100M tonnes of similar nickel & cobalt grades

## PROJECTED WORLD NICKEL REVENUES:

Costs and Revenue Estimates		
	Old Nick	Industry Average
• Revenue (Nickel)	US\$3.50 lb	US\$3.50 lb
• Operating cost	US\$1.45 lb*	US\$2.15 lb
• Margin	US\$2.05 lb	US\$1.35 lb

\*after taking cobalt credit at US\$12.00/ lb.

aggressive exploration program with a target of 3,000,000 ounces of gold in quartz stockworks and replacement bodies, similar to the Cariboo Gold Camp.

### **Old Nick Nickel-Cobalt Property**

The Old Nick Property, a near-surface nickel/cobalt deposit with an indicated resource of 20.4 million tonnes grading 0.186% nickel is located near Rock Creek, B.C. Limited sample analysis of cobalt prevents applying a cobalt grade to the resource, however, sampling indicates a grade of between 0.01% to 0.015%. Metallurgical test work has shown that this low-grade mineralization responds to leaching and solvent extraction/electro-winning technology, which would allow the production of saleable nickel metal and cobalt on site. Low mining and heap leach costs should allow this project to be economic, if a large bulk tonnage resource is established (50 to 100 million tonnes). Favourable geology, surface trenching, soil geochemistry and IP chargeability indicate that there is potential for this size of deposit. In February 2000, the Company signed an agreement with its joint venture partner, AM Technologies, whereby Gold City will acquire 100% ownership of the Old Nick property (pending regulatory approval). Gold City will seek a joint venture participant for the Old Nick property as it requires a major exploration program and bulk testing program.

### **Rock Creek Joint Venture (RCGTJV)**

The Company is currently negotiating to increase its percent ownership in the RCGTJV and intends to become the joint venture Operator. A modest exploration program will be conducted, focusing on the Ket aeromagnetic anomaly, which has two significant drill intercepts of 49.7 g/t gold over 3.36 metres and 8.6 g/t over 6.1 metres. The Ket is a large anomaly (1.5 km by 3 km) 10 km from the Buckhorn Mountain magnetic anomaly (1.2 km by 2 km) in the state of Washington where the Crown Jewel gold deposit was discovered. It has a resource of 8,000,000 tonnes at a grade of 6.2 g/t gold.

### **Caramelia Gold Property**

The McKinney Gold Camp located at the Company's 100% owned Caramelia Gold Property near Rock Creek, B.C., is one of the oldest gold producers in B.C. with total historic production of approximately 90,000 ounces of gold grading over 0.5 opt. Host rocks are carbonaceous quartzites, argillites, limestone, greenstone and serpentinized basic rocks of the highly mineralized Anarchist Group, all of which are intricately folded and faulted. A granodiorite intrusive lies about 1.5 km. to the west. Previous exploration has focused on vein-type deposits. Future exploration will focus on bulk tonnage targets. The Company carried out reclamation in 1999 as a safety precaution, filling in old shafts and raises. Exploration work will be conducted to keep the claims in good standing and the Company is seeking a joint venture participant for the Caramelia Property.

In **summary**, a prime focus of the Company for the future will be to identify mineral deposits already suitable for development, best using the talents of its principals. Necessary exploration will continue, but emphasis will be placed on the development of advanced stage properties to production.

Gold City. 1999 AR

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# Morgan & Company

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Chartered Accountants

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Suite 1730 - 700 West Georgia Street  
Vancouver, B.C. V7Y 1A1  
Telephone (604) 687-5841  
Fax (604) 687-0075

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## AUDITORS' REPORT


To the Shareholders of  
**Gold City Industries Ltd.**

We have audited the balance sheets of Gold City Industries Ltd as at December 31, 1999 and 1998 and the statements of operations and deficit and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1999 and 1998 and the results of its operations and cash flows for the years then ended in accordance with Canadian generally accepted accounting principles.

Vancouver, Canada  
April 11, 2000

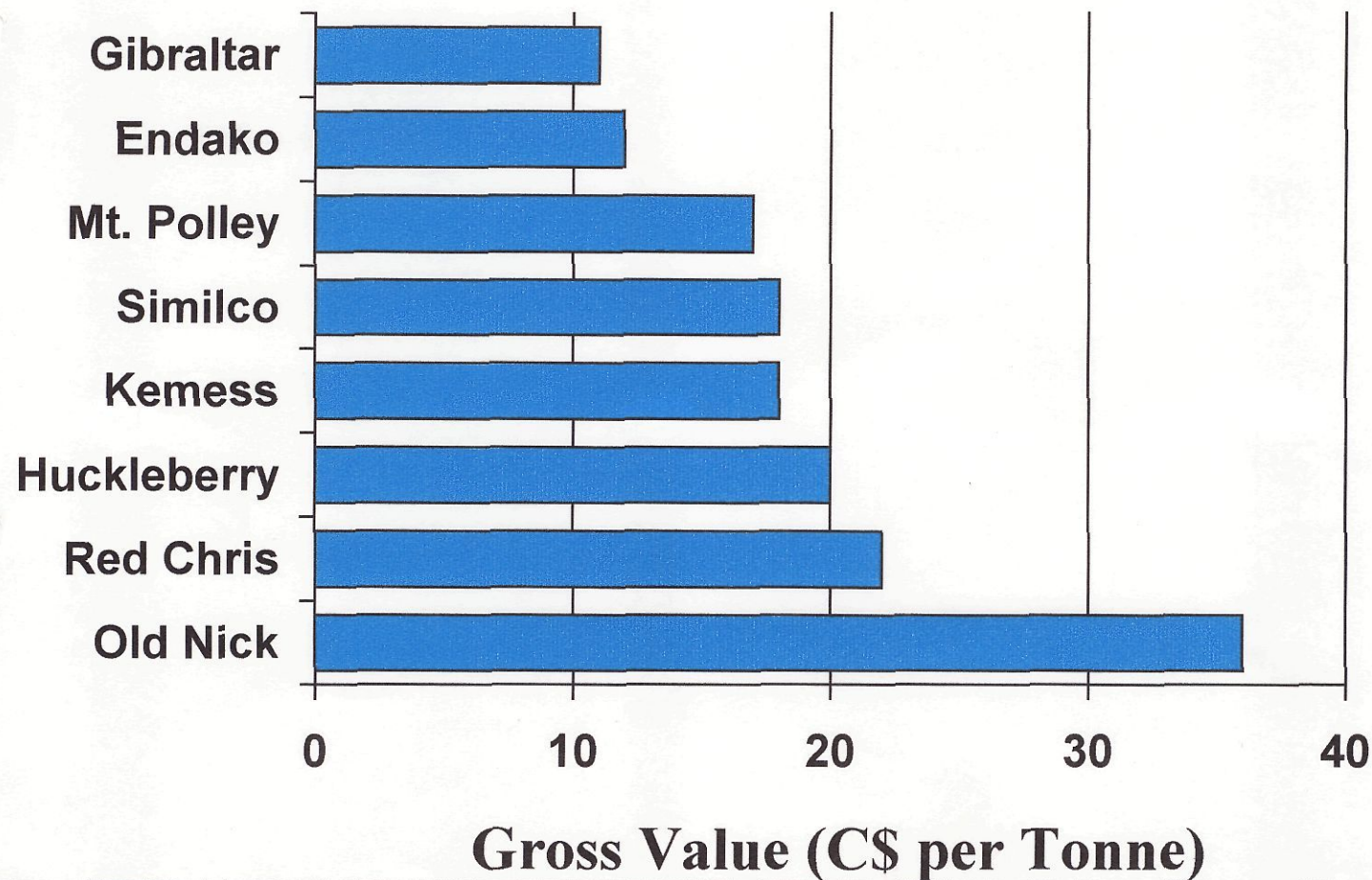


Chartered Accountants



# British Columbia Mineral Deposits

Ranked by Deposit Gross Unit Metal Value



## Metal Prices

(US\$/pound)

cobalt 25.00

copper 1.10

moly 4.25

nickel 3.75

(US\$/ounce)

gold 390.00

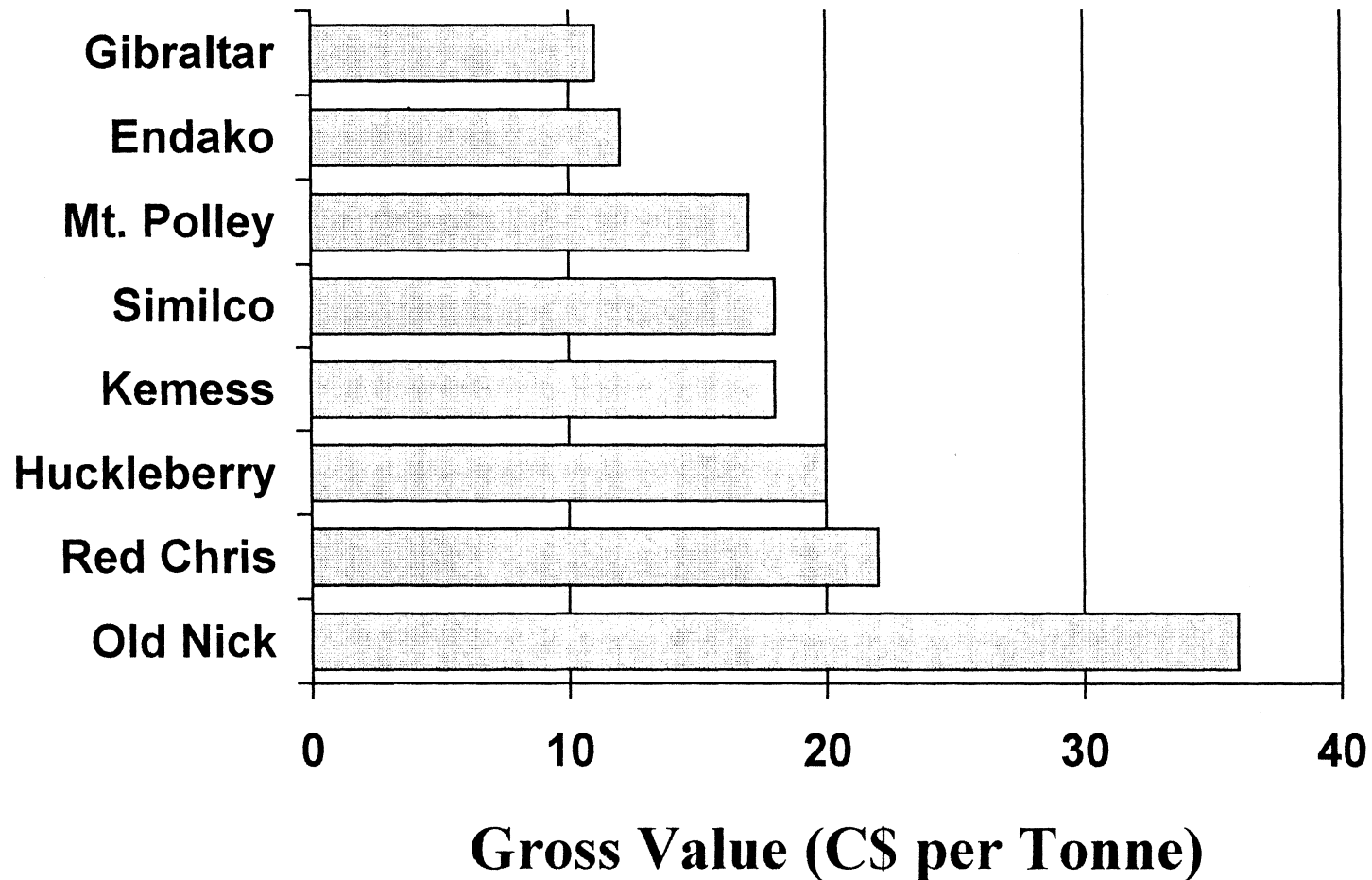
silver 5.50

**British Columbia Mineral Deposits**  
**Deposit Gross Unit Metal Value (C\$/Tonne)**

By: J.A. Chapman							5/12/96 14:28
<b>Contained Metal</b>	<b>Copper (%)</b>	<b>Cobalt (%)</b>	<b>Gold (gpt)</b>	<b>Moly (%Mo)</b>	<b>Nickel (%)</b>	<b>Silver (gpt)</b>	
Old Nick		0.015			0.220		
Similco	0.456		0.127			1.724	
Huckleberry	0.513		0.062	0.014		2.812	
Mount Polley	0.300		0.417				
Gibraltar	0.300			0.009			
Kemess	0.220		0.630				
Red Chris	0.480		0.370				
Endako				0.090			
<b>Metal Price (US\$)</b>	<b>1.10</b>	<b>25.00</b>	<b>12.54</b>	<b>4.25</b>	<b>3.75</b>	<b>0.18</b>	
<b>Metal Price (C\$)</b>	<b>1.51</b>	<b>34.25</b>	<b>17.18</b>	<b>5.82</b>	<b>5.14</b>	<b>0.25</b>	
							<b>Gross Value</b>
							<b>C\$/Tonne</b>
Old Nick	0.00	11.30	0.00	0.00	24.86	0.00	36.16
Similco	15.12	0.00	2.18	0.00	0.00	0.43	17.72
Huckleberry	17.01	0.00	1.07	1.79	0.00	0.69	20.56
Mount Polley	9.95	0.00	7.16	0.00	0.00	0.00	17.11
Gibraltar	9.95	0.00	0.00	1.15	0.00	0.00	11.10
Kemess	7.29	0.00	10.82	0.00	0.00	0.00	18.12
Red Chris	15.91	0.00	6.36	0.00	0.00	0.00	22.27
Endako	0.00	0.00	0.00	11.53	0.00	0.00	11.53

# British Columbia Mineral Deposits

Ranked by Deposit Gross Unit Metal Value



## Metal Prices

(US\$/pound)

cobalt 25.00

copper 1.10

moly 4.25

nickel 3.75

(US\$/ounce)

gold 390.00

silver 5.50

**British Columbia Mineral Deposits  
Deposit Gross Unit Metal Value (C\$/Tonne)**

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Endako	0.00	0.00	0.00	11.53	0.00	0.00		11.53