

520635
92H/7-10

The Harrison Lake Nickel Copper Palladium Platinum Massive Sulphide Project

An extension of the \$455 million B.C. Nickel Mine Ultramafic belt.

Longitude 121° 40' W Latitude 49° 35'N

60000 m E / 5485000m N

Laurence Stephenson
February, 2001

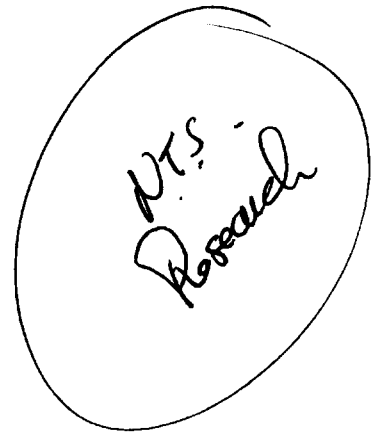


TABLE OF CONTENTS

	Page
Summary	i
Introduction	1
Location, Access and Claims	1
History	1
Geology	2
Regional Geology	2
Mineralization	3
Ore Zones	4
Geology of Claims	5
Geophysics	5
Geochemistry	5
Recent Work	6
Potential of The Area	6
Guides to Exploration	6
Conclusions	7
Recommended Program	7
Budget	8
References	9
TABLES	
1) Ore Zones of the B.C. Nickel Mine	10
2) Samples	11
3) Claim List	12
Author's Qualifications	13
FIGURES AND MAPS	
Figure 1 - Claims Location Map	14
Map 1 - Compilation of Geology and Aeromagnetics Map	(in pocket)

INTRODUCTION

The Harrison Lake Nickel Copper Palladium Platinum Massive Sulphide Project was conceived by David Deering, P. Eng. after careful research for local potential for Palladium-Platinum deposits.

This report is a compilation of the old mine data and geological reports augmented by interviewing geologists and mine personnel that were present during the active mining operations in the region from 1958 to 1974. It represents the first erstwhile known compilation of data for the area in over 25 years

?

LOCATION, ACCESS AND CLAIMS

The area located east of Harrison Lake was identified as being very promising and has recently been opened by logging operations, which provide new access to the region. This has enabled the sites to be staked and accessible for prospecting. Helicopter supported staking was still required to complete the acquisition of the parts of the ultramafic belt as the area is accessible but rugged. Logging roads are found throughout the claim group and open 90% of it to vehicle supported exploration.

Not only is it in an area that has inherent infrastructure but its local also ensures that it is not subject to any main land claim debates. The area has been permitted for mining in the past and a major power line transects the claims.

The property consists of 55 claims containing 423 units that have been properly staked and recorded. The company has filed detailed notes and photographs documenting the rugged terrain that facilitated the use of helicopters to access the "rough reachable" areas. As well, filed is an incident report of the Hope Area Search and Rescue that led to the decision to utilize helicopters.

The complete list of claims is found in Table 3.

HISTORY

The first indications of a significant ore zone in the region were discovered in 1923 and by 1926 the B.C. Nickel Company had been formed to develop the prospect. Subsequent exploration through the 1920's and 1930's discovered the main open pit Pride of Emory zone and led to initial mine development and bulk testing. By 1936 a 22.7 ton sample from the 1600 level was reported carrying 2.74 grams per tonne palladium and platinum (0.68 grams per tonne gold) while earlier samples were reported 3.98 grams per tonne platinum and palladium and 7.89 grams per tonne gold. Reserves from this work were reported by Aho in 1954 to be 1.8 million tons. Further work was curtailed by the Second World War and it was not until the 1950's that additional exploration and development work was completed and full scale production was achieved in 1958/59 by Pacific Nickel Mines Ltd.

From 1959 to the curtailment of operations in 1974 a total of 4.2 million tonnes (of 4.7 million tonnes from the government records suggesting a 0.5 million tonnes left in the mine, Table 1) of ore was mined and milled with a mill grade of 0.77 % Nickel and 0.34% Copper with "reported grades" of platinum and palladium in the 0.6 grams per ton range. Average for the ore pods listed in government records were 1.19% nickel and 0.46% copper (Table 1). Only minor values of the platinum group minerals were "reported" from the smelter but in addition to the values reported above one sample from the "1500" pod reported 2.85 grams per tonne platinum and 4.94 grams per tonne palladium. The 0.1% cobalt grade was not paid for initially and the fate of the 1% chromium is unknown. The value of only the Nickel Copper ore recovered in today's prices would be in excess of \$455 million US.

The ore contained in 26 pods (Table 1) of various sizes was accessed by an adit along the 2600 level and from the surface glory hole on the Pride of Emory zone. Mining continued until 1974 when a variety of factors interceded to curtail operations - the mill burned down, a mine accident caused loss of life and most significantly the Japanese Smelters that were processing the Ni-Cu ore in "brist" form, curtailed their nickel smelting operations. Alternative smelting facilities were not economically available and the mining

operations ceased. In the last year of operations the mine recorded almost \$1 million in profit and over 600,000 tonnes of ore are reportedly left in the underground workings.

In 1974/75 Giant Mascot – the successor company to Pacific Nickel Mines – embarked on a limited exploration program of the ultramafic belt to the north and west of the mine area and of the intrusive Spuzzum Diorite. A regional contour soil (very poor to nil soil with similar results), stream sediment (good anomalies) survey was completed. Access was limited and Giant Mascot concentrated on the stream sediment anomaly to the west of the mine area defining a resource of 100 million tonnes grading 0.22% Ni and 0.22% Cu. Another zone was located to the north along Settler Creek, which is covered by the Harrison Lake Project Claims. Various magnetic high anomalies were not investigated at that time and most have been covered by the current staking.

Since that time little to no recorded exploration was done on the ultramafic belt. The area has been surveyed by government airborne magnetic survey, which highlights the mine area as a distinct magnetic anomaly. No regional government mapping party has detailed the area. A government regional geochem survey has been completed and the data corresponds favourably within the staked claims.

In early 2000 with the increase in palladium and platinum prices, the area of a 100 million tonne resource, discovered by Giant Mascot, was acquired rekindling Deering's interest in the area. With the available access greatly enhanced by the current logging operations, he was able to identify the ultramafic rocks that matched the tenor and character of those of the mine area.

The author was introduced to the project in late summer 2000, and has been on site four times since then along with flying into some of the significant newly discovered mineralized zones.

GEOLOGY

The area of the ultramafic belt is part of the Coastal Plutonic Sequence between the major suture structure along the Fraser River, located 8 to 15 kilometres to the east and the Geological Province of Wrangallia – which it represents as the eastern most portion - to the west. This terrane is highly metamorphosed as the contact zone of the Wrangallia geologic province where it was being rafted on to the North American Craton.

The ultramafic belt as mapped by the Geological Survey of Canada is a continuous unit that extends from the Giant Mascot Mine re-emerging from the Spuzzum Diorite Intrusive and swinging north through Settler Mountain and beyond towards Beckenridge Mountain and Glacier 60 kilometres to the north. The belt is between one to five kilometres wide and intrudes the very sulphide rich metasedimentary rocks of the Chilliwack Formation (Carboniferous or Permian age). These metasedimentary rocks are marked by the distinctive gossan after sulphide rusty character that is associated with them throughout the area.

Specifically just north of the Cogburn Creek a small massive sulphide lens was located (west of the North Fork of the Cogburn Creek) which graded 2-4 % copper with up to 1.5% zinc and up to 1.5 ounces per ton silver over widths up to 3 metres.

The ultramafic unit has benefited from this interaction with the sulphide bearing metasediments and locally contain disseminated sulphides, which are anomalously high in Ni-Cu- Pt-Pd (Table 2). These results are consistent with those found at the mine site in a near distal setting from the ore pods.

No definitive description of the ultramafic belt rocks has been completed except around the mine area proper. During the staking the similarities of the rocks to the property to those of the mine were noted and that description is summarized below as an extrapolated reference to the whole belt.

Fe from mafic intrusion - see they calcaceous + Cl = # P = ??

Whose samples?
a) Nicholson
b) B.C.G.S.
c) Historic? 2

Regional (Mostly summarized from A. Aho's work published in 1956)

The main ultramafic belt intrudes the Chilliwack Metasedimentary schists and the Spuzzum Diorite Intrusive during the Late Palaeozoic. Serpentinite suggests a deep transgressive structure along the eastern margin of the Yalakom-Fraser River Fault zone. The metasediments with sulphides are intruded by the Spuzzum Diorite and form xenoliths in that body. Both units are cut by the ultramafic rocks with some intermingling of the diorite and ultramafic, which forms a stock like body and smaller plug. This latter feature suggests a closer relationship of the diorite and ultramafic intrusives spatially and as observed by A. Aho.

The metasediments are fine-grained schists from silts with plagioclase, quartz, biotite and garnets as the main constituents and minor graphite, magnetite, pyrrhotite, rutile and tourmaline. The Spuzzum Diorite is less than 40% mafic minerals of hypersthene, augite and hornblende, with the feldspar constituent determining the main diorite phase with minor norite phases. The medium to fine grained intrusive has a 5-10% quartz content with areas up to 30% quartz and rare pyrrhotite and chalcopyrite absorbed from the surrounding rocks. The bulk of the diorite is pink to grey with each phase cutting each other and being cut by and forming "xenoliths" in the ultramafics.

The ultramafics have hornblende reaction zones up to 100 metres in contact with the diorite and appear to represent several pulses of intrusive. The ultramafic rocks contain minimal to no feldspar and the mafic minerals (olivine, bronzite, augite and hornblende) textures suggest recrystallization. 11

The classification of the ultramafic rocks that were distinguishable units by Aho, in increasing ultramafic character, were: hornblende (predominantly hornblende), pyroxenite (mainly pyroxene and up to 40% augite - minor hornblende), hornblende pyroxenite, bronzite, olivine pyroxenite (subordinate olivine), peridotite (olivine, subordinate pyroxene) with hornblende variations, harzburgite (olivine and orthopyroxene) and dunite (plus 90% olivine). Ore zones were found mainly with the more mafic units, which was within a pyroxenite "which in turn was bordered by a remarkable marginal reaction zone of coarse pegmatitic hornblende up to 100 yards wide."

For exploration it was noted that the northeast half of the ultramafic plug that was barren, had little hornblende, while the "ore-rich" southwest half had highly varied hornblende assemblages. Aho's proposed fractional crystallization model places the sulphides and magnetite together which could possibly produce an unique magnetic signature which might be a tool in exploration. From the limited data reviewed there appears to be a very good correlation of magnetics and mineralization.

Dikes, most predominantly hornblende, cut the country rock, schists, diorite and ore, and have sharp contacts with the ultramafic rocks. The entire rock assemblage is cut by small (2-5 cm) veins of quartz-feldspar with tourmaline, talc and carbonates. Most are barren. Uralization and serpentinization up to 50 % for the latter accompanies most of the peridotites controlled and localized by structure and contact.

The main structural trend of the ore zones is $N75^{\circ}W$, which is parallel to the internal structure of the diorites, the internal arrangement of the ultramafics and the southwest contact of them. It reflects the possible presence of an older structure of weakness that could be responsible for the introduction of the ultramafic body. From an exploration point of view this trend should be noted when found in relation to the ultramafic belt.

Mineralization

- 3 gm AGM'S

The grade of the recovered ore averages 1.4% Ni, 0.5 % Cu, 1 % chromium, and 0.1% cobalt with 0.02 ounces per ton gold and 0.01 opt platinum metals (Aho 1956 numbers) occurring mainly as pyrrhotite, pentlandite and chalcopyrite. Magnetite, which has been found in other areas to correlate well with PGE's, appears to be an integral part of the sulphide system and with olivine forms cores of the sulphide grains. Pyrite appears to be a later replacement of the pentlandite and in stringers within the ore.

Supergene alteration minerals of limonite, chalcocite, covellite, violarite, melanterite and morenosite were noted in the ore zones. Their extent outside of the ore was not noted but probably excludes them from being a significant exploration factor.

The general consensus that the ore was emplaced as the residual melt was propounded at that time from the evidence available. Further deposits therefore are likely to be found within the similar ultramafic rocks of the belt.

Disseminated sulphide mineralization is found mostly in the southwestern half of the main ultramafic body and the smaller subsidiary ultramafic bodies to the south and southwest. These areas are noted as being more hornblende rich. The dioritic and noritic rocks are virtually barren of sulphides except around the contacts with fine disseminations.

The peridotites and olivine pyroxenites appear to be the best mineralized with the former being the most prolific especially near the margins. The pyroxenites and hornblende pyroxenites contain irregularly distributed and finely disseminated sulphides but that content is increased significantly around and within ore pods or at contacts. The augitic and hornblende phases of the ultramafic appear to be relatively barren.

From an exploration viewpoint it is obvious that the presence of sulphides in the more ultramafic portions of the intrusive is very significant to identifying areas of higher potential. Both these characteristics should be noted in subsequent fieldwork.

Ore Zones

Twenty-six pods of massive sulphide were mined during the history of the operating mine ranging in size from 3,000 tons to 807, 000 tons (Table 1) with grades of 0.92 % - 2.37% nickel and 0.36 % - 0.75 % copper. The shoots were described as steeply dipping circular to ellipsoid in shape around the long axis of the structure, which appears to be "conjugate" to the trend of the alignment of the ore pods (at right angles to the WNW trend). The sulphide bodies are 100 feet or more in diameter with their depth extent 5 to 10 times that measure (Table 1).



The more olivine within the ultramafic intrusion the higher the grade. The coarser "pegmatitic" ultramafic also was correlated with higher sulphide content. The nickel:copper ratio of almost 3:1 drops to 1:1 outward from the core. Blebs and stringers of chalcopyrite are found on the edges of the ore pods and extend beyond into the surrounding rock. Minor mineralization localized near fractures shows depletion in nickel but can be spread out from the main mineralized areas.

Other features of the ore zones are a lack of hornblende (conversely as hornblende content goes up the ore mineralization goes down), the presence of +50% olivine and bronzite with the massive sulphides, the minor reaction rims in the adjacent wall rock and occasionally the massive ore grades into the zoned ore. As an example of the continuity of the ore zones the various shoots that made up the "Pride of Emory" were noted as having no change in bulk content from surface to 900 feet below.

Reaction rims impregnated with sulphides up to 5 centimetres wide separate the ore from the barren ultramafics. Sulphides do not penetrate far into the country rock. Veins near the edges of the ore and to a

lessor extent into the surrounding rock are rich in chalcopyrite but are mainly pyrrhotite. Some of the veins appear to be infilling. The lack of sulphides in the latest veins and alteration fractures confirm that the sulphides are late stage of the magmatic sulphide emplacement and are not being remobilized by later tectonic and metamorphic activity.

Pyroxenite hornblende dikes with sulphides (thus probably related to the late stages of the sulphide emplacement) are unevenly distributed and tend to be in "massive blobs." They extend irregularly into the wall rock and consist of chiefly pyrrhotite with small amounts of copper and nickel. These dikes can grade into sulphide veins and lenses. The immediate surrounding pyroxenites and peridotites are mineralized and altered especially along fractures and 2 to 5 centimetre bands of sulphides like those described are found in a few localities throughout the ultramafic plug in pyroxenites and hornblendites.

These features represent proximal indicators of the ore lenses of sulphides and as such represent significant exploration targets.

Aho compares the ore zone to the Sudbury Mines and the Vlackfontien pipes of South Africa. This 1954 comparison is probably less valid in year 2000 geological theory but is notable as a potential of the extent of further discovery.

Geology of the Claims

Following up on the initial traverse into the area which located the ultramafic belt continuation of the Giant Mascot Pacific Nickel Mine, claims were staked and preliminary prospecting traverses were undertaken. These traverses were undertaken before data on the Pacific Nickel mine was obtained.

The ultramafic units were identified on the claims but not by any detailed mapping program. It was noted that disseminated sulphides were present in many localities and on a few occasions some sulphide stringers were found. The significance of these zones is now enhanced with Aho's report indicating that ultramafic rocks are associated with the most prolific part of this belt and, most significantly, any sulphides found were associated with ore bearing areas. Some of these high potential areas could already have been found in the work completed to date.

Further geological mapping will have significant benefit to the exploration of this project.

GEOPHYSICS

Geophysics appears to have been conducted on the mine area as reported by Aho in the 1950's but the type, scale and reliability of data was not described. Since geophysics has changed significantly since then it is safe to assume that the anomalies reported (self-potential?) then, will be successfully detected by more detailed geophysics. Although the geophysical targets cover a relatively small horizontal area, their conductivity and depth extent cannot avoid detection. From the brief reference in Aho's work it is obvious that there will be a significant response from the zones. As well inference from his work suggests discreet magnetic anomalies associated with the ore pods encompassing the possible down plunge extent of the "pods."

The area has been covered by governmental airborne magnetometer surveying, which highlighted some highly broad anomalous magnetic features. These magnetic "thumb print" features are very similar to the "thumb print" signature covering the old mine area.

The size of the ore bodies and the tenor of the encompassing rock (magnetic) will require higher precision magnetic and electromagnetic surveying. Tightly spaced line airborne geophysical surveying will be an excellent guide in identifying the target zones and their halos of disseminated mineralization.

The initial evaluation of the orientation of the ore pods has led in discussions with airborne geophysicists to the proposal to initially fly the belt along 100 – 200 metre spaced lines along the strike of the belt. A total up to 2,000 line kilometres is the initial survey estimate.

GEOCHEMISTRY

Regional government stream sediment geochem surveying was completed which identifies the claim group as an area of very anomalous base metal and indicator values.

Limited stream sediment geochem sampling was undertaken by Giant Mascot on a regional basis. This led to the area of low grade being discovered to the west of the mine. However detailed contour follow-up soil sampling was not definitive of any discreet anomalies of significance. Given the juvenile soil development in this rugged terrain, this result is not unexpected and suggests traditional geochemistry will be of minimal value.

The new Mobile Metal Ion (MMI) method has been increasingly successful in target identification and prioritization in desert terrain and most recently in the Canadian Shield. Application in the rugged mountainous terrain is unknown but theoretically promising. Testing over the known zones of this region is suspect as they are well disturbed but additional research into this application is warranted.

RECENT WORK

Approximately 30 rock samples were taken during the initial geological prospecting and mapping program on the property and some were analysed for base metals and platinum group minerals (Table 2). Subsequent research into the nature and mineralogy of the Pacific Nickel Mine has now been incorporated into the analysis of these samples.

Disseminated pyrrhotite was observed in the ultramafic (pyroxenite?) rocks, observed in significant concentrations along fractures and in rare small veinlets. According to Aho's description of the mine area this is extremely positive to the ultramafics being mineralized. This current prospecting geological mapping program has identified more ultramafics than were previously mapped in the area suggesting a more extensive ultramafic belt with a bigger potential for discovery.

Specifically in the area of the "Settler Creek Showing," a road cut exposed outcrop for 100 metres was well mineralized with disseminated pyrrhotite. This exposure is located on a magnetic thumb print almost identical in location to the relationship of the B.C. Nickel Mine to its magnetic thumb print. The report that Giant Mascot sampling encountered anomalous nickel and copper values over wide intervals of chip samples. The ratio of nickel to copper (0.08 % to 0.033%) is very close to that of the mine and warrants significant further investigation.

The similarity of the rock units on the claims to the rock units found at the old mine site is very encouraging. Analysis of the ratio of Ni:Cu with the higher values of nickel and copper suggest that some areas have been located already that are extremely promising as they are associated with the "thumb print" magnetics referred to above.

POTENTIAL FOR THE AREA

The area has tremendous potential as a platinum and palladium source for the ensuing century. During the time the B.C. Nickel mine operated it never ceased to make a profit on the tonnage mined. When it ceased operations due to mitigating circumstances, some of the highest grades of platinum and palladium were being discovered (2.85 grams per tonne platinum and 4.94 grams per tonne palladium). No extensive underground exploration was undertaken even though the largest pods of ore ("4600") was only found by their underground operation.

? table shows ratios 0.35 → 6.0

Although the operating company was aware of the significant geophysical response of the ore zones, this information was not readily adaptable to the airborne surveying available at that time. This is readily apparent in that the government aeromagnetic maps incorporated into the compilation map accompanying this report was only completed in 1972 – two years before the mine closed. The one to one correlation of geophysical “thumb print” and the mine is a stark guide to the adjacent “thumb prints” associated with the ultramafic belt.

There are at least three and possible four similar “thumb prints” which suggests that the area of the claims could host three or four similar ore zones (a total of 15 to 20 million tonnes). To date mining has not developed much below 1600 foot datum as most of the mining utilized gravity to access and develop the mine. Therefore the potential to develop substantially more reserves is very high. Given that the platinum palladium values are increasing with depth enhances the prospects of discovering an economic zone.

GUIDES TO EXPLORATION

From the review of the data and exploration of the author some distinctive features related to the mine are notable for their exploration guiding to the discovery of more mineralized pods.

1. Minor mineralization localized near fractures shows depletion in Ni but can be spread out from the main mineralization. The Ni:Cu ratio of 3:1 drops to 1:1.
2. Blebs and stringers of mineralization are found on the edge of the ore pods and extend beyond into surrounding rock.
3. Coarser “pegmatitic” zones and olivine rich zones are associated with higher sulphide content.
4. Sulphides do not penetrate far into the country rock. The presence of sulphides (pyrrhotite) in the more ultramafic portions identifies areas of higher potential.
5. Pyroxenite dikes that can grade into sulphides extend irregularly into the wall rock.
6. Ore zones lack hornblende.
7. The NE half of the ultramafic plug was barren with little hornblende while the ore rich half had highly variable hornblendic assemblages.
8. The main structural trend of the ore zones is N75°W which is parallel to the internal arrangement of the ultramafics and the adjacent contact.
9. Magnetite is an integral part of the sulphide system.
10. A significant magnetic signature is associated with the old mine (very similar to exactly similar signatures are located on the claims).
11. The ultramafics have hornblende reaction zones up to 100 metres wide in contact with the diorite.
12. Significant EM geophysical response is obtained from the ore pods.

CONCLUSIONS

The Harrison Lake ultramafic belt provides a very attractive exploration prospect for platinum group minerals and copper nickel minerals. The belt has not been subjected to exploration for at least 25 years although hosting one of British Columbia's most profitable nickel copper PGM mines.

Preliminary exploration and research has identified the high potential of this ultramafic belt when compared to the ultramafic terrane that hosts the Pacific Nickel mine. Specifically the enclosing metasedimentary country rock is pregnant with sulphides and the ultramafic belt is located near the edge of the geological Province of Wrangellia, possibly related to the major Fraser River structure.

Locally the ultramafic rocks are very similar to those found at the Pacific Nickel mine and have significant areas of disseminated sulphides, which in the mine sequence were indicative of nearby ore pods. Preliminary work has located areas of extreme potential and differentiates of the ultramafic melt that are correlated at the mine with ore pods.

It is concluded that detailed exploration as recommended below will inevitably locate zones of significant mineralization.

RECOMMENDED PROGRAM

Following the "Guides to Exploration" outlined above a detailed program of geological and geophysical exploration is proposed.

An AEM survey using a helicopter mounted high precision system is required to define the potential targets in the belt. Line spacing in the order of 100 – 200 metres is recommended and the Aerotem System of Aurigon Resources, which is reputed to be able to measure the IP effect and have excellent depth penetration is suggested as the "system of choice."

Coupled with that surveying, detailed geological mapping of the ultramafic, focussing on the identified targets will assist in prioritizing drill targets. MMI if it is found to be applicable to the rugged terrain would be of significant exploration benefit.

Test AEM and MMI over the Pacific Nickel Mine site is required to develop a target profile. Negotiations with Homestake to gain access to the old mine, although probably fruitless, should be undertaken in conjunction with negotiations with government and other interested parties related to the old mine site.

BUDGET

1. Follow up Geological Mapping, prospecting and sampling		\$ 25,000	(a)	[\$125K]
2. AEM surveying 2000 line kilometres		\$200,000	(b)	[\$200K]
3. Detailed Mapping and sampling		\$ 50,000	(a)	
4. MMI surveying		\$ 50,000	(a)	
5. Drilling 3000 metres	Road Preparation	\$ 25,000	(c)	[\$325K]
	Drilling \$100/m	\$300,000	(c)	
6. Reporting, supervising, travel accommodations, etal.		\$ 50,000	(d)	[\$155K]
7. Contingency 15%		<u>\$105,000</u>	(d)	
	TOTAL	<u>\$805,000</u>		

TABLE 1

"POD"	(Feet) Dimension		Tonnage	Grade		Current Value per ton (US\$ Ni Cu only)
	Planar	Depth		Ni	Cu	
Pride Of Emory	150x60	875	704,000	1.46%	0.38%	\$ 114.46
Brunswick 1	110x60	525	123,000	1.10%	0.35%	\$ 87.38
Brunswick 2	180x70	825	570,000	1.40%	0.60%	\$ 114.00
Brunswick 2A	110x70	350	290,000	0.98%	0.35%	\$ 78.54
Brunswick 2G	50x100	300	131,000	0.56%	0.27%	\$ 46.14
Brunswick 5	120x70	600	409,000	1.49%	0.50%	\$ 118.83
Brunswick 7	90x50	200	23,000	2.37%	0.75%	\$ 188.20
Brunswick 8	20x40	175	12,000	1.75%	0.61%	\$ 139.98
Brunswick 10	70x55	200	38,000	0.74%	0.35%	\$ 60.86
#2663	50x60	325	102,000	0.86%	0.32%	\$ 69.15
#6800	50x50	300	47,000	0.66%	0.24%	\$ 52.97
#600	100x45	300	83,000	1.42%	0.42%	\$ 112.23
#4600	250x100	643	805,000	1.35%	0.73%	\$ 112.66
#4400	40x50	150	27,250	0.51%	0.22%	\$ 41.56
#4300	90x40	225	62,000	0.91%	0.51%	\$ 76.27
#2200	50x50	750	135,000	0.68%	0.38%	\$ 56.97
#2000	30x30	50	3,400	1.33%	0.33%	\$ 103.97
#1900	50x80	300	45,000	0.86%	0.45%	\$ 71.50
#1800	50x80	150	40,000	0.53%	0.23%	\$ 43.21
#1700	12x12	50	1,000	2.00%	0.00%	\$ 147.42
#1600	170x90	425	216,000	0.97%	0.34%	\$ 77.62
#1500	200x70	1130	668,000	1.37%	0.45%	\$ 109.09
#1400	50x60	468	53,000	0.71%	0.32%	\$ 58.10
Chinaman	90x100	638	376,000	0.73%	0.30%	\$ 59.21
Climax	50x90	598	211,000	0.78%	0.36%	\$ 63.98
#512	30x50	225	28,000	1.08%	0.41%	\$ 86.99
		Tons	5,202,650			

Overall Tonnage (tonnes) 4,729,682
Overall Average Grade 1.19% 0.46% \$ 96.40



Can grades?

- Metallurgically
 1) - can Ni/Cu be treated in regular Sudbury/Japanen smelters.

- 2) Is ¹⁰Pb content collected in can?
- 3) what were can grades?

TABLE 2

No PGM values?

SAMPLE #	Rock Type	Ni	Cu	Ni/Cu	Co	Detected Pd values	Comments (Ni:Cu ratio in ore; 3 drops quickly away from it)
		ppm	ppm	↓	ppm	↓	
PT 1	Altered UM	241	241	1	45		sulphide pods and Ni:Cu ratio suggest close to a zone
PT 2	sheared Pyroxenite	201	229	0.878	42	?	Ni:Cu ratio anomalous distal
PT 3	sheared Pyroxenite	200	284	0.704	50		Ni:Cu ratio anomalous distal
PT 4	sheared Pyroxenite	216	230	0.939	43		minor sulphides closer ?
PT 5	sheared Pyroxenite	218	199	1.095	41 *		minor sulphides closer ?
PT 6	Fine gr Pyroxenite	175	489	0.358	86 *		distal ratio but very anomalous area of sulphide pods. Cu stringers from "zone"?
PT 7	Fine gr Pyroxenite	62	88	0.705	45		very little feldspar very minor sulphides
PT 8	Fine gr Pyroxenite	135	161	0.839	97		very little felspar iron sulphides but ratio & felspar make interesting
PT 9	Fine gr Pyroxenite	33	67	0.493	37		distal ratio but very anomalous area of sulphide pods. Cu stringers from "zone"?
PT 10	Pyroxenite	57	254	0.224	38		
PT 11	"felsic" Pyroxenite	150	179	0.838	65		"spotted" hydromorphic texture, ratio and values significant
PT 12	Fine gr Pyroxenite	400	424	0.943	69		Ni:Cu ratio and values suggest close to a zone
LS 1	"felsic" Pyroxenite	1.80%	0.29%	6.207	0.068% *		Po 10%+, hydromorphic texture Mine site
LS 2	Altered UM	2.89%	0.68%	4.25	0.090% *		ret texture Mine Site
LS 3	Coarse gr Pyroxenite	163	240	0.679	33		altered to talc & Carb.ratio distal but rock type and values are anomalous
LS 4	Fine gr Pyroxenite	229	655	0.35	118 *		distal ratio but very anomalous area of sulphide pods. Cu stringers from "zone"?
LS 5	Coarse gr Pyroxenite	264	277	0.953	43		more proximal ? Altered; anomalous values
LS 6	"felsic" Pyroxenite	177	259	0.683	37		bird's eye sulphide texture. Sulphide veins Cu stringers from "zone"?