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REPORT

on

GIANT METALLICS MINES LTD. (N.P.L.)

ADAMS PLATEAU
BRITISH COLUMBIA

May 15th, 1973
Vancouver 5, B.C.

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SUMMARY & CONCLUSIONS

The lead-zinc-silver ores of the Adams Plateau were discovered in the early 1920's. Granby optioned the Lucky Coon property in 1929 and did trenching and drilling before allowing the option to drop that same year. There was no further activity on the Plateau until 1949 when Consolidated Mining & Smelting optioned the Mosquito King showings. Their activity attracted Westville Mines and Pioneer Mines into the same area. C. M. & S. drilling was inconclusive thus forcing them to drop the option. Shuswap Mines followed them onto the property but did very little work. At the same time a Spokane group picked up the Lucky Coon option and shipped some ore.

In 1953 Trans Mountain Mines completed an option on the EX showing of the Bishchoff brothers. They mined and drilled the showing but dropped the option shortly thereafter.

In 1955 Plateau Minerals was formed to take over the EX and Mosquito King showings. They carried on with surface operations. In 1965 Giant Metallics Mines Ltd. was formed and took over the EX and Mosquito King holdings from Plateau Minerals. They enjoyed a vigorous two summers (1966 and 1967) before lapsing into a quiet exploration procedure. In 1969 Giant Metallics added the Lucky Coon ground to their holdings.

Since 1929, the ground presently held by Giant Metallics has seen sporadic attempts to outline large ore tonnages. No company has spent any length of time trying to decipher the geology. They have all approached it with a prospecting plus a drilling campaign style. When the drill results flagged the companies started to look elsewhere.

The mineral outlined to date has adopted an elusive structure. On the Lucky Coon, the three vein systems are still there. The Granby drilling was poorly done and remains inconclusive. No attempt has been made to expand the tonnage or grade of any of these veins since the Granby operation. The veins are strong, consistent and apparently, of moderately good grade. Some shipping of these ores has been done with good results.

The EX showing has seen a fair amount of mining. Despite the fact that the open pit has had a fair amount of ore shipped from it, the possibilities of enlarging the pit tonnage exists. A thirty-one hole drilling program in the vicinity of the pit by Trans Mountain in 1953 did intersect ore values and is reported to have outlined 10,000 tons. A Giant Metallic hole (6-66) in 1966 cut 32½ feet of ore. The lack of mineralization in the two holes of the following year should not be discouraging.

The Mosquito King area has the most showings scattered over a wide area. Drilling by Cominco leave the impression of short lens-like structures. It is quite possible that these structures could adopt a good geometric design that would be amenable to mining. There has not been enough drilling to prove or disprove this possibility. The grade where intersected near the surface is of a strong tenor.

The possibilities exist that sufficient tonnages can be lined up on any or all of the three mineralized areas to justify a mill of from 50 to 100 tons per day. In this opinion the writer is backed up by several other mining authorities.

The Granby engineer of the 1928 operation, J. H. Hall, states in his conclusion on the Lucky Coon program - "It is felt that in view of the tendency of the ore to pinch out both along the strike and the dip, that the property holds little promise for large scale operations. It is, however, deserving of further development with a view to small scale work." No programs have been instituted on the Lucky Coon since 1928 with this in mind.

In 1954 after examining the EX showing and looking over the drill results, J. B. Colson, Geologist for the Sunshine Mining Company completed his report with the following quotation: "This property could very adequately be explored by closer trenching and a well-planned diamond drilling program. At present face-value, this area shows great promise and is tremendously interesting economically. I am convinced that this property will be proved to contain large deposits of good grade ore." Since his writing, there have only been three drill holes put in, in the vicinity of the showing.

It is this writer's conclusion that this property has not been thoroughly explored and, notwithstanding some disappointing results during 1966-67, further exploratory work is certainly warranted. My conclusion is based primarily on the number of mineral showings throughout the claims which suggest the area has been the site of very extensive mineralizing activity. Furthermore, future work should be directed towards a broader understanding of the geology, extension by drilling of ore in already known showings, and possibly the useage of electrical means to reveal the presence of unknown surface showings.

The possibility of outlining sufficient ore on any or all three of the main showings is highly possible. Initially the Lucky Coon provides the greatest possibility of producing ore material for a mill. Following it, the EX showing could contribute a limited tonnage. The Mosquito King would require intensive drilling to line up ore tonnages.

INTRODUCTION:

At the request of Giant Metallics Mines Ltd. (N.P.L.), the writer has made an evaluation assessment of the potentials of the mining properties of the company, located on Adams Plateau in the Kamloops Mining Division of B.C. The object of this report was to gather data respecting the economic possibilities of the property and to recommend an exploration program for the coming 1973 season.

The writer has been on the property many times in the past six months. The first time was in November 1972 prior to the change in management. During April of 1973, the new management group instituted an exploratory drill program of short duration on the Mosquito King showing. This was more to obtain some idea of geology than to outline ore. The writer was in charge of this program and visited the property many times.

A great deal of technical literature and data has been made available to the writer by the company. This report is based on close research of all this data pertaining to post operation. In lieu of not having seen the property free of snow, the writer has borrowed freely from geological descriptions of the property by past writers.

RECOMMENDATIONS:

The writer recommends that the company proceed with a specific staged exploration program during 1973 which program would be directed along the lines discussed under conclusions.

Specific Recommendations would be : Diamond Drilling.

EX Showing: Close spaced (40') vertical holes to prove up the Trans Mountain figures. The holes need not be deep. Recommended drill footage is 5000 feet.

MOSQUITO KING: Close spaced (40'0) vertical holes to prove up a continuity and grade of mineralization. These holes also need not be deep. Recommended drill footage is 4000 feet.

LUCKY COON: Two tier drilling to prove tonnage and grade in the three veins to a depth of 300 feet. A minimum tonnage target should be 50,000 tons of economic grade. Recommended drill footage is 8000 feet.

Geological Mapping: A closely detailed geological survey of the showings and the property in general. Combined with this mapping would be a thorough sampling program of all mineralized exposures.

Geophysical: If the old grid lines of 1966-67 are still in evidence it is recommended that a horizontal loop E.M. survey be carried out. It is recognized that with the large amounts of conductive sulphides contained within the property that many anomalies would be representative of the non-economic conductive sulphide minerals. However, it is also recognized that the survey is a fast and major procedure in which to locate hidden conductive sulphides.

The above recommendations should be carried out in a staged programme. The staging of each programme would be tied to a particular portion of the property. In order of priority, the writer recommends that the EX showing be given first consideration; followed by the Mosquito King and lastly by the Lucky Coon.

EX Showing

1. Detailed mapping
2. EM survey
3. Diamond drilling - BQ drilling if warranted.

MOSQUITO KING Showing

1. Detailed mapping
2. EM survey
3. Diamond drilling - BQ drilling if warranted.

LUCKY COON Showing

1. Detailed mapping.
2. EM survey
3. Diamond Drilling - BQ drilling if warranted.

It is the writer's opinion that this programme is fully justifiable but it should be understood that this programme constitutes only the initial phase of an evaluation programme aimed at gaining a more complete knowledge of the ore potentials of the property. If Diamond Drilling is undertaken then a tonnage figure will be built up for the property. If drilling results are encouraging this phase should be immediately followed by an underground operation directed at the actual physical exposure of ore material below the surface. This latter programme would also result in making ore available for metallurgical bench tests or larger scale research. It would also help substantiate the drilling grades.

LOCATION and ACCESSIBILITY:

The property is located in south central British Columbia, 60 miles north-east of Kamloops, B.C. From the Canadian Pacific Railway siding at Squilax on Highway 401, it is 22 miles by good secondary road to the claims.

The area has been active in logging in recent years and many secondary roads have been constructed by logging companies through the Plateau.

The co-ordinates of the claims is longitude 119° 30' west and latitude 51° 10' north. It is located in the Kamloops Mining Division.

PROPERTY

The Giant Metallics claim group consists of 112 claims in two groupings. The Lucky Coon holdings, consisting of 8 crown granted claims, lies as a single unit two and a half miles to the west of the larger EX-Mosquito King group.

The claims are located in the Kamloops Mining Division, British Columbia.

<u>CLAIM #</u>	<u>RECORD #</u>	<u>EXPIRY DATE</u>
Spar	43916	July 8, 1973
R	55202	April 22, 1974
R #1	55203	April 22, 1974
R #2 - 5	57694-97	June 30, 1974
R #6 & 7	57698 & 99	June 30, 1973.
R #8 - 11	57700 - 03	June 30, 1974.
B	55204	April 22, 1974
B #1 - 3	55205 - 07	April 22, 1974

<u>CLAIM #</u>	<u>RECORD #</u>	<u>EXPIRY DATE</u>
EX	10261	Sept. 15, 1973
EX #1	10262	Sept. 4, 1973
EX #2 Fr	12577	Sept. 3, 1974
Pat #1 & 2	12575 & 76	Sept. 3, 1973
Pat # 5 & 6	13733 & 34	June 2, 1973
Pat #8 & 9	13862 & 63	Aug. 2, 1973
Pat #10 & 11	13884 & 85	Aug. 11, 1973
E #4	37829	Aug. 11, 1973
E #5 Fr	38132	Aug. 28, 1973
D #1 & 2	37831 & 32	Aug. 11, 1973
D #3 & 4	37836 & 37	Aug. 11, 1973
D #5 - 7	37833 - 35	Aug. 11, 1973
W Fr	59411	Aug. 8, 1973
A Fr	59409	Aug. 8, 1973
D Fr	59410	Aug. 8, 1973
Pat Fr	60277	Sept. 7, 1973
Pat 1 & 2 Fr	60278 & 79	Sept. 7, 1973
Zarf #1 - 6	64895 - 900	July 11, 1973

The eight crown grants consist of:

Elsie	L5227
Billy	L5228
White Swan	L5229
Golden Eagle	L5230
Lucky Coon	L5231
Last Chance	L5232
Elk #5	L5438
Elk #8	L5439



TOPOGRAPHY:

The Adams Plateau appears to be a partially dissected remnant of an uplifted peneplain. The comparatively flat surface of the plateau is 5200 to 5600 feet above sea level. In the area of the claims it is almost completely covered by balsam and spruce. There are numerous willow swamps.

Overburden is not unusually deep, but it is extensive and presents an obstacle to prospecting and mapping.

Gold and Scotch Creeks and their many small tributaries flow southerly in sharp narrow valleys into Adams Lake and Shuswap Lake.

HISTORY:

Sulphide-bearing minerals in the Adams Lake area appeared to have been known to trappers in the early part of the 1910's. The Bischoff brothers opened up numerous showings during this period. In 1928 they staked the present known Mosquito King and EX showings. Further to the west, 2 prospectors from Chase, T. Callahan and H. McGillivray, prospected and staked what is now called the Lucky Coon group. This latter staking was optioned by Granby in 1928. After a six month period the option was allowed to elapse and the property lay dormant until 1950. During this quiet period for the Lucky Coon, exploration work was going on at the Mosquito King and EX properties. A Vancouver entrepreneur, I.W.C. Soloway, sponsored several seasons work on the claims. He was followed in 1949 by the optioning of the Mosquito King showings to C. M. & S. They released their option the following year. A Spokane group, following the activity, acquired the Lucky Coon in 1950 and conducted limited surface work before dropping the property. The same year Shuswap Mines acquired the 75 claims of the Mosquito King and by staking added another 57 claims. Trans-Mountain Mines acquired the EX group also in 1950. Over the following 3 years Trans-Mountain shipped raw ore to the Kenville Mill at Nelson. Sporadic activity was carried on from 1953 through 1955 when Plateau Minerals was organized under C. Riley to acquire large blocks of ground in the EX and Mosquito King area. During this period NIB Yellowknife Mines obtained an option to carry out some magnetometer work on ground south of the Mosquito King. They followed this up by drilling 14 holes before dropping the option. Over the next ten years work was usually of a prospecting nature, with discovery followed by trenching. Interest in the Plateau has fallen off substantially. In 1965 the present company, Giant Metallics, acquired the EX and Mosquito King claims. That same year International Copper Corp. optioned the Lucky Coon but relinquished their option the following summer. Eventually Giant Metallics added the Lucky Coon to their group. In February 1973, control of Giant Metallics passed to the present group.

GEOLOGY:

The general geology of the area consists of interbedded sedimentary and volcanic formations, highly metamorphic, belonging to the Suswap Complex.

In the Lucky Coon area, or the western portion of the property, vein occurrences lie within impure shale beds which have been highly altered. Associated with these shales are heavily metamorphosed chloritic rocks, conforming to the bedding of the sedimentaries. The strata is striking N 40° - 55° E and dipping from 20° - 35° to the north-west. Lying to the south-east near Nikwikwaia Lakes is a large area of quartzite.

Dykes, striking northeast, have been exposed throughout the property. These dykes, vertical in altitude, are of a fine-grained composition and black in colour.

The EX and Mosquito King showings lie in formations at stratigraphically a lower horizon than the Lucky Coon. Here the principal rock types in evidence are dark grey and brown phyllite, sericitic schist and greenstone schist, quartzite and limy phyllite. These bedded metamorphic rocks strike north-east and dip 10° to 35° to the northwest.

Cutting the above formations are many small dykes of fine-grained diorite and occasional larger bodies of granite porphyry.

ORE OCCURRENCES:

Within the Giant Metallics claim group there are two different mineralization occurrences. At the west end of the group - in the Lucky Coon section - the structures are mineralized shear zones. In contrast, the EX and Mosquito King show selective replacement zones.

In the Lucky Coon section, sulphide minerals include arsenopyrite, pyrite, sphalerite, galena, argentite and tetrahedrite - quite a different assemblage from that on the east side of the plateau. The ore is described as occurring in a silicified shear zone approximately parallel to the bedding in limy argillites. Within a relatively narrow width, intermittent sulphide mineralization is exposed from the Bill (Lot # 5228) through to the Last Chance (Lot #5232), a distance better than a mile and a half. The sulphides are fine grained and banded and usually very heavy across narrow widths, commonly several six inches to two foot bands being separated by altered wall rock one to four feet thick. The sulphide bands lie parallel to the attitude and foliation, this being northeasterly with dips of 20° to 40° northwest. In places the closely spaced sulphide zones appear to be in echelon over narrow widths, and here and there similar parallel veins appear to be 300 to 400 feet off strike.

The Granby work in 1928 outlined two lengthy structures and two short occurrences. The sampling on the 2000' long North Vein averaged:

<u># of Samples</u>	<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Pb</u>	<u>Zn</u>
12	14.6"	7.93oz	0.03oz	7.5%	4.3%

Eight diamond drill holes were put down under this structure by Granby. Unfortunately not all assay results are available. Of the six holes stating core recovered, the recovery rate was 29%. The reliability of the assay results must be taken with some deep reservations.

The # 3 hole ran:

<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Pb</u>	<u>Zn</u>
6"	0.24oz	Tr	Nil	2.5%

Recovery in this hole was 13%.

The #5 hole, located 450' further to the southwest, intersected the vein formation for the following:

<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Pb</u>	<u>Zn</u>
14"	24.62oz	0.05oz	Tr	15.5%

Recovery in this hole was 14%.

The Billy Vein, located on strike with the North Vein, some 2500' to the southwest is somewhat offset to the northwest. Granby samples of the various trenches ran:

<u># of Samples</u>	<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Pb</u>	<u>Zn</u>
13	24.3"	1.49oz	0.018oz	0.3%	2.9%

Only one drill hole (#9) was put under this structure. Assays are not available but the drill log states 22" of ore was cut over a nine foot core length. Core recovery in this hole was 58%.

The two short occurrences were single assays with apparently no lengthy extension of the vein being located. However, a short 37' adit was driven by Granby into one of the occurrences - the Elsie vein. A sample taken by the company at the face assayed:

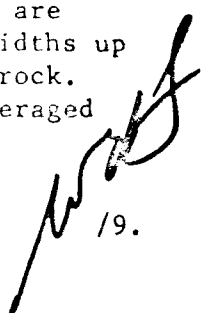
<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Pb</u>	<u>Zn</u>
16"	12.44oz	0.025oz	Tr	11.4%

Allen sampled this same adit in 1966 with the result:

<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Pb</u>	<u>Zn</u>
not given	15.0oz	not assayed	22.0%	10.0%

With close checks in zinc and silver it is surprising that there should be such a large discrepancy in the lead content.

Later exploration work has extended the North Vein northerly into the Lucky Coon claim. Here according to Allen three veins of heavy sulphides are exposed continuously over a length of 400 feet. These bands have widths up to 4 feet, and are separated by one to five feet of barren country rock. Allen cut seven samples across these showings and arithmetically averaged them out as:



1/9.

<u># of Samples</u>	<u>Ag</u>	<u>Au</u>	<u>Pb</u>	<u>Zn</u>
7	10.76oz	0.07oz	11.26%	6.07%

McIntyre's description of the mineralized deposits on the EX and Mosquito place the occurrences within the limy beds of the phyllite assemblage. In his opinion the occurrences of the silver-lead-zinc ore, seem to be controlled by and concentrated along folds or crumpled zones. At the EX showing good grade ore occurs in three thin, closely spaced limy beds along a small, broken monoclinial fold of the enclosing sericitic sequence. At the Mosquito King the mineralization occurs along thin, selective beds whose gentle dips show no folding or crumpling. Intrusive structures are in evidence at certain Mosquito King showings, but their relationship particularly with reference to ore control are presently unknown.

The mineralization on the Mosquito King occurs for 3000 feet along the strike of the beds. More recent exploration has opened up parallel situations. The replaced beds are the major control, but it is by no means uniformly or even continuously mineralized. C. M. & S. engineers believed that control of the patchy mineralization was caused by joints and small faults of a north-striking set. The dominating sulphides are pyrrhotite, pyrite, galena, sphalerite

In 1949, C. M. & S. put twenty drill holes down in the immediate vicinity of the trenches with the objective of tracing the mineralized structures down their dip. The writer has access to eleven drill assay sections. These sections pertain to the trenches marked, at that time, "O", "P" and "Y". The holes have definitely picked up the structures at depth but the grade of mineralization has fallen off quite markedly. Ore material was shipped from this general area in 1972 to the Kenville Mill at Nelson.

In 1967, the Giant Metallics undertook a drill program throughout their large holdings. They drilled eleven holes of AX size for a total of 3001.6 feet. Three of the holes were in the vicinity of the C. M. & S. holes mentioned in the proceeding paragraph. One hole was in a granitic dyke for its full distance. The other two successfully followed a mineralized bed down the dip for some seventy odd feet. They proved the mineralization to be weakening at depth both in grade and width.

It is rather difficult to relate the C. M. & S. drilling to the Giant Metallics drilling because of uncertainty in drill locations. It should also be pointed out that Giant Metallics used a small sized bit - "A" - and it was not of the wire-line type. The C. M. & S. drilling was prior to the introduction of wireline. There remains a possibility that some mineralization was lost in drilling. A factor that this drilling did produce was the absence of any closely spaced mineralized sections. None of the drill holes showed more than the one ore vein. No assay plans of the Mosquito King trench sampling are available, if indeed, any were made.

The EX showing is of a different structural geometry from the Mosquito King. The mineralization is still a replacement process of select phyllite beds but there are superimposed mineralized horizons. The bedding varies from slightly east of north to just north of east with dips occurring from 10° through to 50°

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to the northwest.

A large open cut had been made in the vicinity of the showing and has exposed three superimposed anticlinal mineralized zones. The open cut has partially exposed the crest of the upper zone. Drilling has outlined a central zone ten feet lower and a third conformable lower zone at a further twenty foot depth. These beds are stated by Allen to have mineralized lengths exceeding 200 feet.

In 1953 Trans Mountain Mines who had the property under option laid out a closely spaced drill program in the vicinity of the open cut. The intention was to outline tonnage and grade in the open cut area. Thirty-one drill holes totally some 2500 feet were completed. Diamond drilling proved the three superimposed monoclinical type ore zones, averaging ten feet thick at their crests and gradually thinning in both directions. The ore shoots appear to plunge about 20° to the south west. A ten thousand ton drill estimate has been advanced for this mineralization.

In 1954, J. B. Colson of Sunshine Mining Company visited the EX open cut, and took four samples from the large trench. They assayed:

<u>Width</u>	<u>Ag</u>	<u>Au</u>	<u>Pb</u>	<u>Zn</u>
2.5'	3.0oz	.002oz	5.0%	4.6%
5.6'	1.7oz	.005oz	2.1%	9.3%
5.4'	2.3oz	.005oz	3.0%	8.3%
7.0'	0.6oz	.005oz	0.6%	6.0%

The mineralization in the EX deposit is composed chiefly of galena, sphalerite, lesser pyrite, pyrrhotite and magnetite and a little chalcopyrite.

Several other areas of interest have been brought to light by the Giant Metallics programs of 1966-67. One of these is a large pyrrhotite-pyrite zone three miles to the south of the Mosquito King showings. Chalcopyrite is associated with the iron sulphides. Here larger scale dozer stripping has been followed by sampling. In all, 9 large areas have been tested with 134 samples. The arithmetical average is 0.09% copper with the highest assay running 0.44% but the average sample being in the 0.07% to 0.10% area. One hole in the '67 campaign was put under this area and intersected isolated areas of low grade copper.

A quarter mile west of the pyrrhotite area is another large stripped area referred to as the magnetite zone. Eighteen samples resulted in a slightly higher copper grade - 0.21% - than the pyrrhotite zone. The two-hole section drilling here revealed a 45° dipping zone about 90' in thickness and grading 0.13% copper.

SMELTER SHIPMENTS:

Shipments have been made from the EX and the Lucky Coon showings.

The EX raw ore was shipped to the Trail Smelter and resulted in:

DATE	WEIGHT	GOLD	SILVER	LEAD	ZINC	IRON	SILICA
Sept. 15/52	Truck load	0.015	25.8	40.2	9.4	16.2	6.10
Sept. 17/52	Truck load	0.017	27.0	43.0	10.1	15.6	6.21
Oct. 10/52	45.59 tons	0.005	16.6	33.6	8.5	17.4	9.6
Oct. 3/53	Carload of Pb concen- trate from Kenville Mill.	0.08	42.6	64.4	6.0	7.4	1.00

Mill Tests

In 1953, 97.6 tons of ore from the EX 1 showing were milled at the Kenville Base Metal Concentrator near Nelson, B.C. Head assays of the feed ran 0.01 oz Au and 20.19 oz Ag per ton, 30.13% Pb and 10.04% Zn. From this was produced a 45.8 ton lead concentrate assaying 0.24 oz Au and 42.16 oz Ag per ton, 61.40% Pb and 6.55% Zn. Recovery was 98.7%.

A zinc concentrate weighing 13.75 tons assayed 0.68 oz Au and 5.16 oz Ag per ton, 6.78% Pb and 41.40% Zn. Recovery was 89.1%. Silver recovery was stated to be 100%. Concentration ratio is 1.5 : 1.

In 1972, 228.4 tons of ore from the Lucky Coon showings were put through the Kam Kotia Mill near Denver, B.C. The shipped ore assayed 26.34 oz Ag/ton, 18.12% Pb and 6.33% Zn. A lead concentrate, 63.96 tons, assayed 84.29 oz Ag/t, 58.20% Pb and 8.34% Zn. Recovery was 91.9%. The Zinc concentrate, 14.80 tons, assayed 12.30 oz Ag/t, 5.18% Pb and 48.31% Zn. Zinc recovery was 86.3% and silver recovery 92.7%.

In September 1971, a bench flotation test was run by Britton Laboratories of Vancouver. Equal weights of samples from the Lucky Coon and the Mosquito King were selected. The calculated assay of the composite head sample was 0.033 oz Au and 10.34 oz Ag per ton, 11.03% Pb and 5.88% zinc. The bulk lead-zinc concentrate produced from the above assayed 0.053 oz Au and 36.7 oz Ag per ton, 37.5% Pb and 18.6% zinc. Recoveries were 82.5% for the Pb, 89.7% for the zinc.

During late 1972 samples from the property were forwarded to the Mines Branch of the Dept. of Energy, Mines and Resources in Ottawa where flotation tests were carried out. At the present time correspondence is incomplete with Ottawa.

WORK PROGRAMS COMPLETED

A chronological order of optionees of the various showings and the work programs is herewith listed:

- 1928 - Lucky Coon - Granby option - 9 diamond drill holes totalling 694 feet, 3420 feet of trenching and 52 feet drifting. Relinquished option in November 1928.

- 1949 Mosquito King - C. M. & S. option - put in 22 trenches and 20 diamond drill holes totalling 2861.5'. Relinquished option in late 1949
- EX - Westville Mines - Trenching and prospecting. Relinquished option same year.
- 1950 Lucky Coon - Spokane Group - did some surface work and shipped several carloads of ore from Elsie.
- Mosquito King - Shuswap Mines - did surface work and additional staking.
- 1953 EX - Trans Mountain Mines - shipped 204 tons of raw ore. Completed about 2500 feet of diamond drilling in 31 closely spaced holes.
- 1955 Mosquito King and EX - Plateau Minerals - confined itself to surface works.
- 1965 Mosquito King and EX - Giant Metallics optioned ground from Plateau and purchased outright in 1969. Carried on extensive surface programs in form of geophysical, geochemical and diamond drilling from 1965 - 1967. Sporadic summer programs from 1967 - 1972.
- 1965 Lucky Coon - International Copper Corp. - did little work. Relinquished option in short time.
- 1969 Lucky Coon - Giant Metallics - claims purchased outright by company. Shipped some ore from here in 1972.

Geochemical Surveys

In 1966 under the direction of A.R. Allen, the first geochemical survey was undertaken on the claim group, which at that time included the EX and Mosquito King. Two base lines were tied to establish survey points. Cross Lines on 300 foot spacings were picketed at 100 foot intervals and were cut on a north-south bearing. Approximately 39.6 miles of crossline were cut.

Allen's soil sampling used the Rubianic and Dithizone methods and were handled directly in the field. The Rubianic tests identified six medium copper anomalies while the Dithizone method resulted in two heavy metals anomalies. On the whole the area within which the anomalous soil situation resulted is relatively flat, and shows little geochemical encouragement. Allen followed up two of the copper anomalies with trenching and uncovered lead-zinc mineralization at both locations.

No anomalous soil situations were developed in the immediate areas of the EX

and Mosquito King showings.

The following year - 1967 - under the direction of MacDonald Consultants Ltd. of Vancouver, another soil sampling program utilizing the same grid system was undertaken.

A total of 2001 soil samples were taken, of which 1140 were sent to Bondar Clegg and Co. of North Vancouver for analyses by the hot aqua regia extraction and atomic absorption method. The samples were assayed for copper, lead and zinc.

The resulting soil maps showed zinc to be very wide spread over the complete grid area. The mobility of the zinc ion is quite high and as most of the showings carry varying amounts of sphalerite the zinc background is what would be expected. The numerous showings contribute to the extensive zinc highs.

The lead soil maps show isolated anomalous situations. Some of the anomalies agreed with the locations of the Mosquito King showings. This survey, unfortunately, did not cover the EX area.

The copper anomalies have been attributed to the pyrite-pyrrhotite deposits because of the association of these minerals. The lack of zinc and lead responses in the vicinity of the copper anomalies confirms this situation.

In general, the soil surveys contribution to the assessment of the property was to substantiate known surface showings.

In 1971, Ducanex ran silt samples for lead, zinc, copper and arsenic over the property as part of a regional program. The resulting plots show moderate strengths of lead, and zinc in the Lucky Coon and the general EX-Mosquito King areas.

Geophysical Surveys

There have been several types of geophysical surveys carried out either over the established grid or across localized targets.

Huntec Ltd. of Toronto in the summer of 1966 ran an Induced Polarization Survey over the complete 40 mile grid system with readings being taken at 200 foot intervals. Fifteen anomalous areas were outlined and considered worthy of further investigation. Subsequent exploration of some of these areas proved the causative bodies to be pyrite-pyrrhotite mineralization. Other anomalies still remain to be checked. It is quite possible that the I.P. method was too selective and outlined areas of fine mineralization of the non-economic variety.

Several Electromagnetic surveys have been run over isolated target areas. In 1969 a Crone J. E. M. survey was run over the Mosquito King claims of Giant Metallics for Dresser Minerals Ltd. The interpretation by A.C.A. Howe International shows no anomalies as being detected. An accompanying S. E. 300 survey using the in-line method indicated two anomalous zones. Unfortunately these surveys can not be tied into any recognizable field markers and therefore are of little value.

In July 1970, an electromagnetic survey over the EC area was carried out by Strato Geological Ltd. using a Sharpe SE-200 unit. The grid covered some 4.3 miles and was closely spaced (100'). The result of the survey was very negative with only a small differential being recorded.

An electromagnetic survey using a Sharpe SE - 600 unit was carried out by E. Asano on the Lucky Coon and EX areas in October 1971. The EX survey showed a conductor which is thought to be the extension of the EX vein system. The Lucky Coon survey was inconclusive due to the type of vein deposits and the nature of the enclosing sedimentary formations.

A Bouguer Gravity survey carried out by M. McCombe of Calgary in 1969 over the main Mosquito King showing shows stronger readings slightly to the north of the showings and to the west in the area referred to as the "Ball Park".

Only one magnetometer survey is known to have been run over the property. This was carried out in 1966 by A.R. Allen. Twenty-seven anomalies were outlined. Some are associated with I.P. anomalies and others with surface showings. The distribution of pyrrhotite and pyrite through the property has a strong bearing on magnetometer results.

Diamond Drilling

The earliest drilling on the property was by Granby in 1929. This drilling can be considered inconclusive due to heavy core losses.

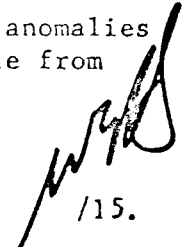
In 1949 Consolidated Mining and Smelting put drill holes alongside many trenches in the Mosquito King ground. Their conclusions from this drill programme was that the vein system was lens-like and of short dimensions.

In 1953 Trans Mountain Mines drilled a series of close spaced holes alongside the EX showings. Their drill program is reported to have outlined 10,000 drill-proven tons. The MacDonald report of 1967 commenting on this program says "the drilling failed to outline any ore of mineable grade and width in addition to what had been mined out of the open cut." However logs and drill sections of the holes do show lead-zinc-silver intersections of moderate widths and modest grades.

In 1966 Giant Metallics drilled six BQ wireline holes totalling 2164 feet. Results of drilling are:

Hole #	Testing	Width	Au	Ag	Pb	Zn
1-66	I-P Anomaly C-1	8.0	0.06	1.7	1.96	5.70
2-66	I-P Anomaly C-2	Nothing of interest				
3-66	Mag. high	Nothing of interest				
4-66	I-P Anomaly G	Intersected heavy pyrrhotite zone				
5-66	I-P Anomaly B	Nothing of interest				
6-66	EX showing	32.5	-	-	1.9	3.2

This drill program seemed to be somewhat poorly laid out. The I.P. anomalies were not undercut at their strongest readings. No logs are available from this drilling.



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In 1967 the drilling was carried on under MacDonald Consultants management. Eleven holes totalling 3001.6 feet were scattered over the property.

Hole #	Testing	Width	Pb	Zn
1-67	IP Anomaly K(EX)	Nothing of interest		
2-67	IP Anomaly K(EX)	Nothing of interest		
3-67	IP Anomaly 1-2	2.8'	0.16%	7.43%
4-67	IP Anomaly G	Nothing of interest		
5-67	Mosquito King	In granite intrusive full depth		
6-67	Mosquito King	2.7'	4.8%	0.26%
7-67	Mosquito King	7.8'	1.01%	1.28%
8-67	Mosquito King	5.5'	0.24%	1.54%
9-67	Magnetite Zone	7.0' of 0.20% Cu		
10-67	Pyrrhotite Zone	57.4' of 0.15% Cu		
11-67	Pyrrhotite Zone	86.1' of 0.11% Cu		

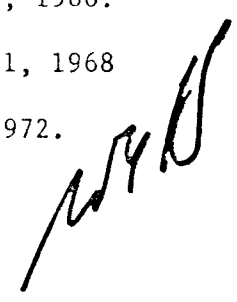
No assaying for silver or gold was made in the lead-zinc mineralization. The two holes in the EX showing were only 200' removed from the 6-66 hole in the previous years drilling with rather differing results.

Respectfully submitted


Wm. G. Hainsworth, P. Eng.

Vancouver 5, B.C.
May 15, 1973

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 - 6) The Adams Plateau Property - A.R. Allan -Feb. 3, 1953.
 - 7) Report on the Giant Metallics Property - A.R. Allen - Oct. 1966.
 - 8) Summary Report on the Properties of Giant Metallics Mines Ltd. J. P. Elwell - July 28th, 1966.
 - 9) Report on the Silver Ledge Properties - A.R. Allen - April 6, 1967.
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 - 13) Final Report on the Exploration Work carried out in 1967 on the Property of Giant Metallics Ltd. - H. Wober - Oct. 1967.
 - 14) Engineering Reassessment - Giant Metallics Property - J. F. McIntyre, Dec. 10, 1968.
 - 15) Electromagnetic Survey on EX, EX 1 and other claims - C. H. Donaldson July 20, 1970.
 - 16) Interpretation of Geophysical Surveys, Adams Plateau - A.C.A. Howe - Oct. 20, 1969.
 - 17) Memorandum Report on Adams Plateau Property - C.H. Donaldson, Sept. 10, 1970.
 - 18) First Annual Report - Giant Metallics Mines Ltd. - Dec. 31, 1966.
 - 19) Second Annual Report - Giant Metallics Mines Ltd. - Jan. 31, 1968
 - 20) Report on Lucky Coon Claims - V. Zachanko - February 22, 1972.
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W. G. HAINSWORTH

CONSULTING GEOLOGIST

CERTIFICATE:

1. I, WILLIAM G. HAINSWORTH, HEREBY CERTIFY:
2. That I am a geologist residing at 3473 Capilano Road, North Vancouver, British Columbia.
3. That I am a graduate of the University of Western Ontario, London, Ontario with a B. Sc. degree and am a registered member of the Association of Professional Engineers of the Province of British Columbia
4. That I have practiced my profession for twenty-two years.
5. That I have no financial interest, either direct or indirect in the subject properties, in the securities of Giant Metallics Mines Ltd. (N.P.L.) nor in that of any of its affiliates and that I do not expect to obtain any such interest.
6. That the information contained in this report is based on my personal knowledge of the general area and to supervision of work carried out on the property since the property was obtained.

Vancouver 5, B.C.
May 15, 1973.



W. G. Hainsworth, P. Eng.

W. G. HAINSWORTH

CONSULTING GEOLOGIST

ADDENDUM

The report of May 15th, 1973 on the Adams Lake property of Giant Metallics Mines Ltd. (N.P.L.) by the writer recommended staged developments of the property. No estimated expenditures were given in the report. At the request of management of the company the writer herewith breaks down the approximate costs of exploration (Stage 1) of the LUCKY COON portion of the property.

Approximate Costs:

Geological Mapping = \$ 1500

Electromagnetic Survey = 2500

Diamond Drilling (BQ)

800' @ \$12.50/ft= 10000

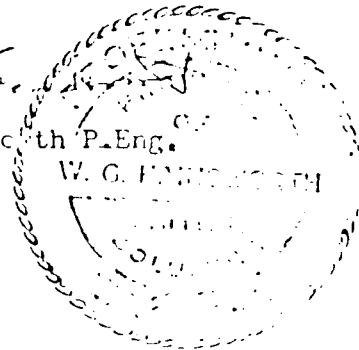
\$14,000

Contingency = 1,000

\$15,000

June 21, 1973
Vancouver, B.C.

W. G. Hainsworth
W.G. Hainsworth P.Eng.



PRODUCT SILVER

PROVINCE OR TERRITORY British Columbia

N.T.S. AREA 82 M/4

REF. AG 2

NAME OF PROPERTY MOSQUITO KING

OBJECT LOCATED - Main showings.

UNCERTAINTY IN METRES 300. Lat. 51°02'50" Long. 119°30'40"

Mining Division	Kamloops	District
County		Township or Parish
Lot		Concession or Range
Sec	Tp.	R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The area is underlain by a thick assemblage of metamorphic rocks of probable Paleozoic or earlier age. The principal rock types in evidence are dark grey and brown phyllite, sericitic schist and greenstone schist, sericitic quartzite and limy phyllite. For the most part these bedded metamorphic rocks strike northeast and dip 10-40 degrees northwest. The metamorphic rocks are cut by fairly small dykes of fine-grained diorite and in a few places by dyke-like bodies of granite porphyry. The Mosquito King mineralization occurs as a selective replacement of several thin, closely proximate beds, and has been traced for 3,000 feet along strike. The replaced beds are the major controls but they are by no means uniformly or even continuously mineralized. The dominating sulphides are pyrrhotite, pyrite, galena, and sphalerite. At the main showing the mineralization varies in thickness from 2 to 10 feet and would average about 5 feet. Drilling indicated the mineralization weakens at depth both in grade and width. In the Ball Park area mineralization was exposed by bulldozing over an area approximately 500 by 80 feet; an average thickness of 5 feet is assumed.

Associated minerals or products of value - Lead, zinc.

HISTORY OF EXPLORATION AND DEVELOPMENT

The main Mosquito King showings are located at about 5,700 feet elevation on a ridge between Nikwikaala (Gold) Creek and Kwikoit Creek, on Adams Plateau, some 45 miles northeast of Kamloops. Other showings are located to the west in an area referred to as the "Ball Park".

Showings in this vicinity had been known to the Bischoff Bros. for a number of years prior to their staking of the Mosquito King group of 8 claims in 1928. Sporadic activity to 1931 included further prospecting and open cutting. No further activity was reported and the property was subsequently acquired by I.W. Solloway and Associates of Vancouver. In 1949 they optioned the property to The Consolidated Mining and Smelting Company of Canada Limited. Work by the company included trenching, and 2,861 feet of diamond drilling in 20 holes on Mosquito King Nos. 4 and 5 and Sunset No. 2 claims. The option was given up the following year. Shuswap Mines, Ltd. was incorporated in 1950 by Solloway and Associates to acquire the 75 claim property, however, no further activity was reported.

Niant Metallics Mines Limited in 1965 acquired the Garnet, D, S, and Pat claim groups covering the showings formerly held as the Mosquito King. Subsequent staking expanded the property to about 150 claims. The company also acquired the adjacent EX property (82 M/4, Pb 2). Work during 1966 included geological mapping, magnetometer and induced potential surveys over 40 line-miles, a soil geochemical survey, bulldozer trenching and stripping, and some 3,200 feet of diamond drilling over various areas of the property. Exploration work during 1967 included a geochemical soil survey (2,000 samples), and gravity and electromagnetic surveys over about 39 line-miles. Diamond drilling was done in 3 holes in the vicinity of those drilled by the Consolidated Mining and Smelting Company in 1949. During 1969 electromagnetic surveys were carried out over isolated target areas. In addition, a Bouguer Gravity survey was carried out over the main Mosquito King showings and in the "Ball Park" area to the west. Stripping of overburden was carried out on the Mosquito King showings in 1971.

Indicated reserves were estimated in 1971 as follows:

		Ag oz./ton	Pb %	Zn %
Mosquito King	21,000 tons	10	15	10
Ball Park	20,000 tons	10	15	10

p.t.o.
Mineral Development Sector, Department of Energy, Mines and Resources, Ottawa.
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