Geological Report on the

Invincible Tungsten Mine

Nelson Mining Division, British Columbia
NTS 82 F/3E

Latitude: 49º 06'50"
Longitude: 117º 13'25"

by

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SUMMARY

The Invincible Tungsten Mine produced 282,799 tons of ore averaging 0.65% WO3, between early 1971 and September 1973 (BCDM Geology, Exploration and Mining 1973 and GSC Economic Geology Report 32, 1984).

Ore Reserves calculated by Canadian Exploration Ltd. (Canex) in August 31, 1973 estimated that the Invincible Tungsten Mine contains a combined Probable, Possible and Marginal Ore Reserve of 75,128 tons grading 0.62% WO3. This represents 46,579 Units of WO3 or 738,748 lbs of tungsten. The value of a short ton unit WO3, between March 1-31, 2001 averaged $64US. Therefore, the 46,578 Units of WO3 has an insitu value of $2.98 million US.

The following table indicates the classification of the reserves and which reserves are accessible from the underground workings and which reserves are inaccessible and would require development to access the reserves.

Accessible/Inaccessible	Probable	Possible	Marginal
Accessible from Underground Workings	45,969 tons averaging 0.68% WO3 (31,194 Units)		
Accessible from Underground Workings		12,820 tons averaging 0.58% WO3 (7,420.5 Units)	
Accessible from Underground Workings			6,250 tons averaging 0.36% WO3 (2,266 Units)
Inaccessible from Underground Workings	3,630 tons averaging 0.73% WO3 (2,657 Units)		
Inaccessible from Underground Workings		4,537 tons averaging 0.45% WO3 (2,020.5 Units)	
Inaccessible from Underground Workings			1,922 tons averaging 0.42% WO3 (801 Units)

The majority of the reserves are accessible from the underground workings. The northern extension of the Invincible Tungsten Mine remains untested and therefore the existing reserves combined with the potential of more deposits along the northern extension of the mineralized trough makes the Invincible Mine an attractive target and an asset which could be brought into production relatively quickly when the price of the commodity and economics are favorable.

The Invincible Tungsten Mine was closed in 1973 due to poor metal prices. The mine not only contains mineable tungsten reserves but also has the potential for gold mineralization and additional tungsten reserves.

The Salmo Mining Camp, which hosts the Invincible deposit was initially staked for gold in 1896 and lead mineralization was discovered in 1906 and development of the lead deposit began in 1910.

In 1938, the skarn beds, which host the gold mineralization were explored for tungsten mineralization. Wartime Metals Corporation, a Federal Government Agency, developed the Emerald Tungsten Mine in 1942. The concentrates are remarkably free from deleterious impurities and subsequently became in great demand and caused the mines to be the first major Canadian producers.

Canex (now Placer Ltd.) purchased the Dodger, Feeney and Emerald tungsten mines and the Emerald-Jersey lead-zinc mines in 1947. The company brought the Invincible Mine into production in 1971. Total production, from 1947 until 1973, totaled 8 million tons of lead-zinc-silver ore and 1.6 million tons of tungsten ore.

Recently, the tungsten skarn deposits have been reexamined for gold mineralization. Sultan Minerals Inc. has explored the Bismuth Zone, a pyrrhotite horizon hosting the tungsten mineralization for high-grade gold mineralization. The Invincible Mine, which is situated within 300 meters of the Bismuth Zone, contains abundant pyrrhotite rich skarns and is believed to have potential for hosting similar gold mineralization as discovered by Sultan.

An alteration study utilizing 32 element ICP and whole rock geochemical analysis combined with a petrography study may be useful in directing a drill program towards deposits and clarifying the genetic history of the gold, lead-zinc-silver and tungsten mineralization.

The Salmo Mining Camp has good potential for hosting skarn-type tungsten, sedex-type lead-zinc-silver, and disseminated and replacement-type gold deposits. The northern extension of the Invincible Tungsten Mine warrants an exploration program for tungsten mineralization (Pastoor 1972). As well, the Invincible Tungsten Mine and extension warrant testing for Carlin-type replacement gold mineralization.

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APPENDIX

1.0 INTRODUCTION

The Invincible Tungsten Mine (Invincible) produced 282,799 tons of ore averaging 0.65% WO_3, between early 1971 and September 1973 (BCDM Geology, Exploration and Mining 1973 and GSC Economic Geology Report 32, 1984).

Ore Reserves calculated by Canadian Exploration Ltd. (Canex) in August 31, 1973 indicated that the Invincible contains a combined Probable, Possible and Marginal Ore Reserve of 75,128 tons grading 0.62% WO_3 (46,579 Units of WO_3).

A visit to the property was conducted between August 14th and 17th to collect rock samples from the argillite, granite and limestone to determine if an alteration and petrographic study combined with 32 element ICP and whole rock analysis would yield information useful in designing a diamond drill program.

1.1 LOCATION AND ACCESS

The Invincible property is located in southeastern British Columbia, approximately 9.5 kilometers south-southeast of the town of Salmo, B.C. (Figure 1). The claim is located within N.T.S. map sheet 82F/3E and is centered approximately at 49°06'50'' north latitude and 117°13'25'' west longitude.

Access to the property is via Highway 6 to Sheep Creek and then from the south side of Sheep Creek a well-maintained gravel road heads eastward up to the abandoned Jersey-Feeney-Emerald-Dodger-Invincible Salmo Mining Camp. The first road to the left past the locked gate leads to the Invincible breakthrough portal. Presently, car parts from a neighbor have been piled along the road and in front of the portal. The portal of the 6,000 feet long Invincible decline is located beneath the Emerald pit, to the south of the Invincible claim (Figure 3).

The Invincible tungsten ore zone is 3,100 feet northeast of the old Emerald tungsten mine and 250 feet northwest of the north end of the old Jersey lead-zinc mine, on Iron Mountain (Figure 3).

1.2 PROPERTY STATUS AND OWNERSHIP

The Invincible property comprises one mineral claim located within the Nelson Mining Division (Figure 2).

Claim Name	Record No.	Tenure No.	Units	Date of Record	Expiry Year	Owner
Invincible	6080	234582	1	March 15, 1990	2011	A.J. Boronowski
(R.C.G. 12084)						

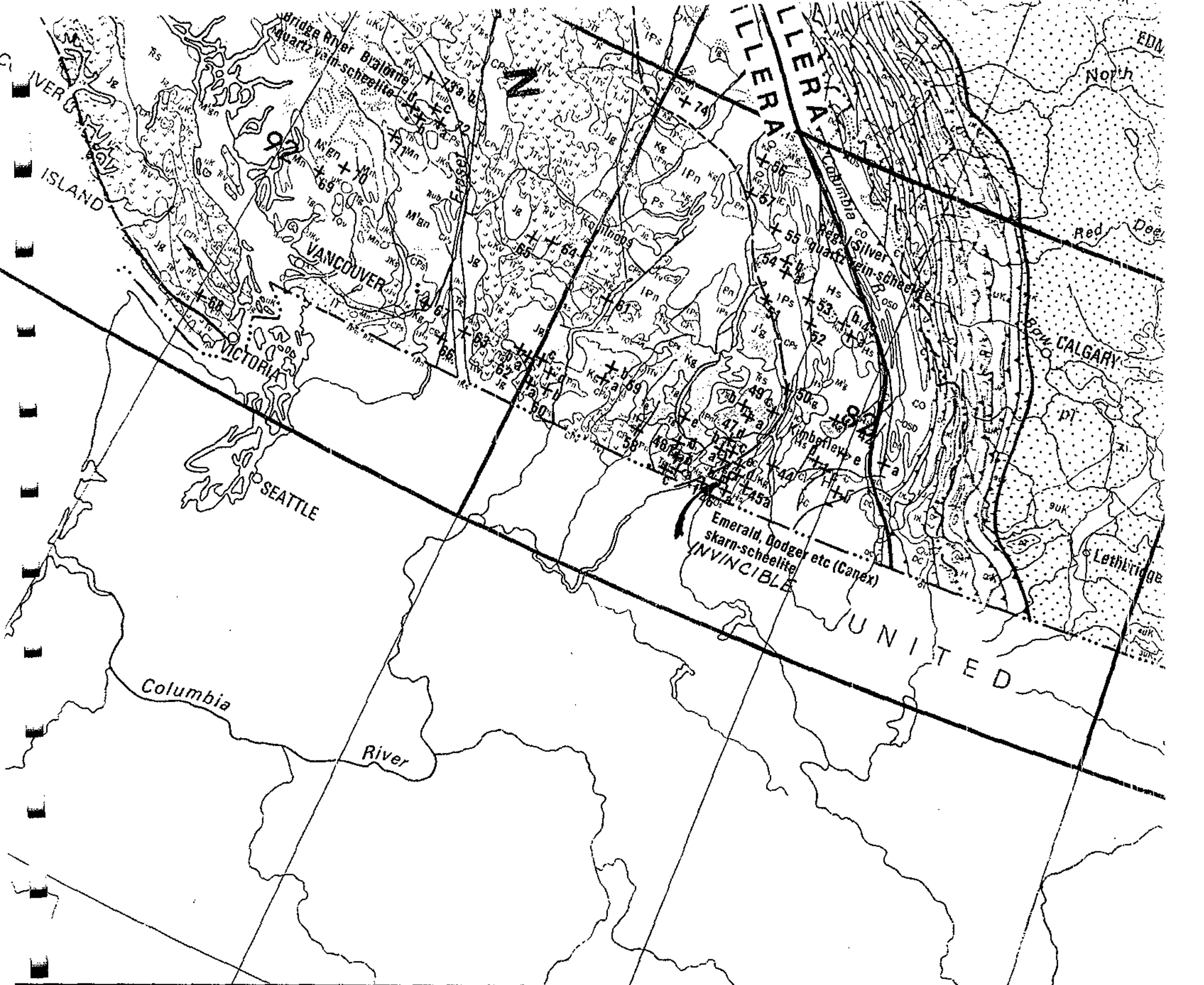


Figure 1.

GEOLOGICAL SURVEY OF CANADA COMMISSION GÉOLOGIQUE DU CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES

MAP 1556A

MINERAL DEPOSITS MAP

TUNGSTEN IN CANADA

Scale 1:5 000 000

Kilometres 100 0 100 200 300 400 Kilometres

Miles 100 0 100 200 Miles

LAMBERT CONFORMAL CONIC PROJECTION, STANDARD PARALLELS 49°N. AND 77°N.; MODIFIED POLYCONIC PROJECTION NORTH OF LATITUDE 80°

Invincible Claim

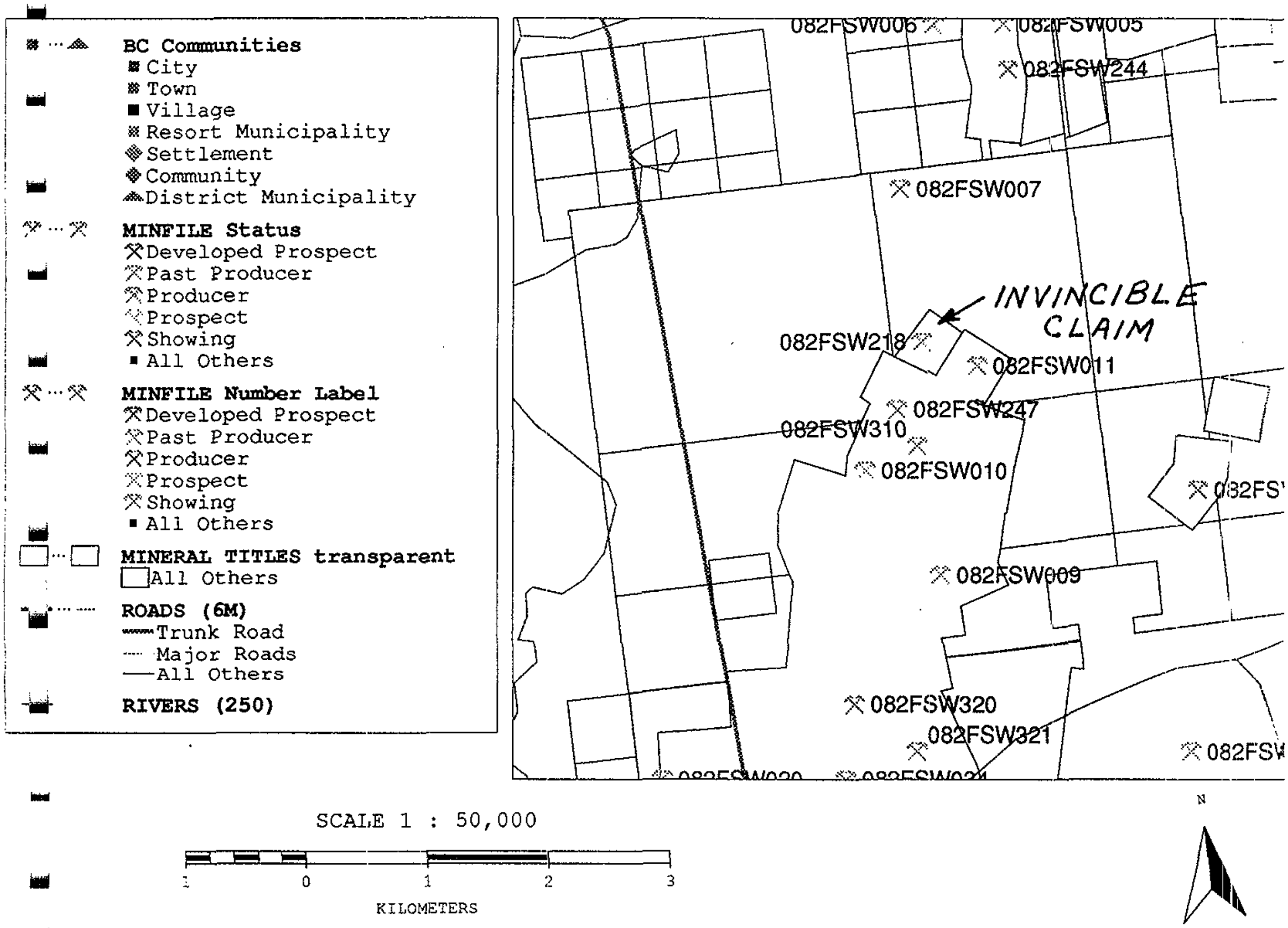


FIGURE 2

1.3 PHYSIOGRAPHY AND CLIMATE

The Salmo Mining Camp is located within the Selkirk Mountain range. Elevations on the property range from 4,000 feet (1,219 meters) to 4,550 feet (1,387 meters). Slopes range from moderate to steep.

The area receives high quantities of rain and snow.

1.4 PREVIOUS EXPLORATION

The Salmo Mining Camp was initially staked for gold in 1896 and lead mineralization was discovered in 1906 and then development of the lead deposit began in 1910. In 1938, the skarn beds, which host the gold mineralization were explored for tungsten mineralization. Wartime Metals Corporation, a Federal Government Agency, developed the Emerald Tungsten Mine in 1942. Canex (now Placer Ltd.) purchased the Dodger, Feeney and Emerald tungsten mines and the Emerald-Jersey lead-zinc mines in 1947. Production, which continued until 1973, totaled 8 million tons of lead-zinc-silver ore and 1.4 million tons of tungsten ore.

Recently, the tungsten skarn deposits have been reexamined for the potential of hosting gold mineralization. Sultan Minerals Inc. has explored the Bismuth Zone, a pyrrhotite horizon hosting the tungsten for high-grade gold mineralization. The Invincible, which is situated within 300 meters of the Bismuth Zone, contains abundant pyrrhotite rich skarns and is believed to have potential for hosting similar gold mineralization as discovered by Sultan.

The following section has been compiled from information contained in various unpublished Canex reports.

The Emerald, Feeney, Dodger and Invincible tungsten mines of the Salmo area of the West Kootenay District were worked intermittently between 1943 and 1973. During that period total production of tungsten from the mines was 1,401,345 tonnes or ore, which yielded 8,065,010 kilograms of WO3 (1,544,702 tones averaging 0.56% WO3). The concentrates are remarkably free from deleterious impurities and subsequently became in great demand and caused the mines to be the first major Canadian producers.

Interest in tungsten in the area occurred after specimens of skarn from the Emerald lead-zinc were analyzed for molybdenum and found to contain tungsten. The Emerald and Dodger Mines were developed to extract the tungsten by Wartime Metals Corporation, a Crown corporation. Construction of a 300 ton concentrator commence in September 1942 and the operation was closed *down in October 1943 when the demand for tungsten eased.*

In 1947, Canex purchased the property and conducted an exploration program for tungsten. As a result the Feeney tungsten ore zone and the Jersey lead-zinc ore bodies were discovered. Approximately, 60,000 tons of lead-zinc ore was outlined in the Jersey deposit. In view of the favourable base metal prices and the smaller margin of profit being made on the tungsten, it was decided to close the Emerald Tungsten mine and convert the mill to a lead-zinc operation. The mine was phased out in December 1948 and the lead-zinc production commenced in March 1949 and remained in production until 1970.

In 1951 the Canadian Government purchase two blocks of ground from Canex. covering the Emerald tungsten ore and the partly developed Dodger tungsten ore zone. to the east of the Jersey lead-zinc mine.

In 1952, Canex bought back the two ore blocks from the government and operated the tungsten mine until August 1958. The Feeney Mine, which had been discovered earlier, was in production between 1951 and 1955. The Feeney Mine which is located 300 feet north of the Emerald mine contributed 60,000 tons of ore grading 0.92% WO3.

Underground exploration in the Dodger area, which was discovered by the Canadian Government in 1943, proved up two tungsten ore zones. The Dodger 4400 was operated from 1952 to 1957 and produced 137,000 tons averaging 0.56% WO3, and the Dodger 4200 operated from 1954 until 1957 and produced 158, tons averaging 0.60% WO3.

In 1953 and 1954, the proposed northward extension of the geological trough hosting the Emerald and Feeney mines was drill tested. The first hole to hit target intersected 10 feet grading 0.75% WO3. By 1956, the Invincible ore body had been drill indicated and a shaft was collared in 1957 near the present Invincible portal. However, the shaft pilot hole intersected 26 feet of tungsten ore, so a new shaft site was located. Owing to rapidly falling tungsten prices the project was postponed.

In 1969, after a total of 34,462 feet of diamond drilling, another feasibility study was completed and the green light was given to driving a 6,000 feet long, 16 feet by 19 feet decline to facilitate the trackless mining method. The old Emerald mill was rehabilitated and utilized machinery from the Jersey mill. In 1970, mill construction was completed and production came from the rehabilitated Dodger workings, since the Invincible ore zone had not yet been reached by the decline.

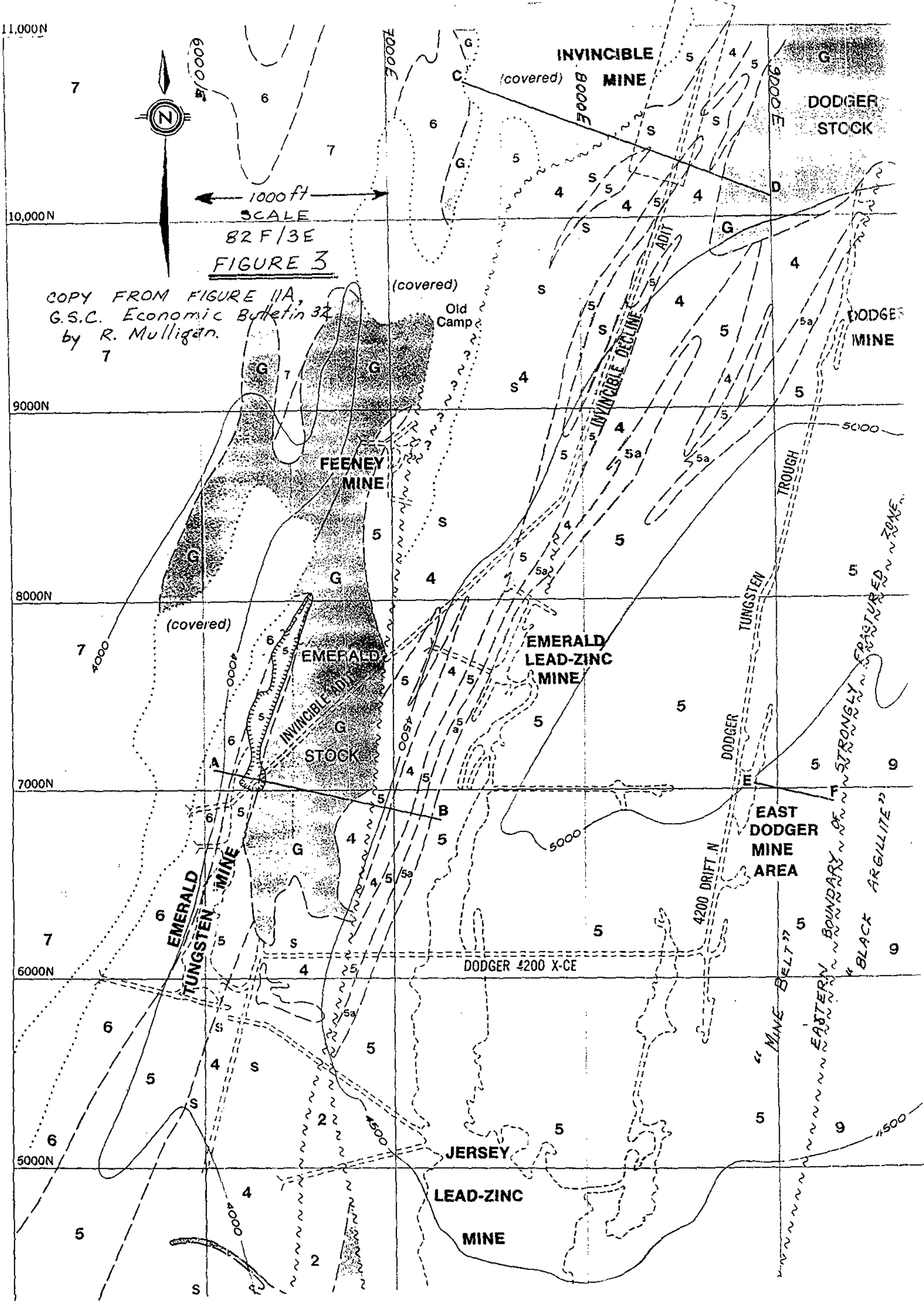
The Invincible Tungsten Mine produced 282,799 tons of ore averaging 0.65% WO3, between early 1971 and September 1973.

1.5 Summary of Work Completed in 2000

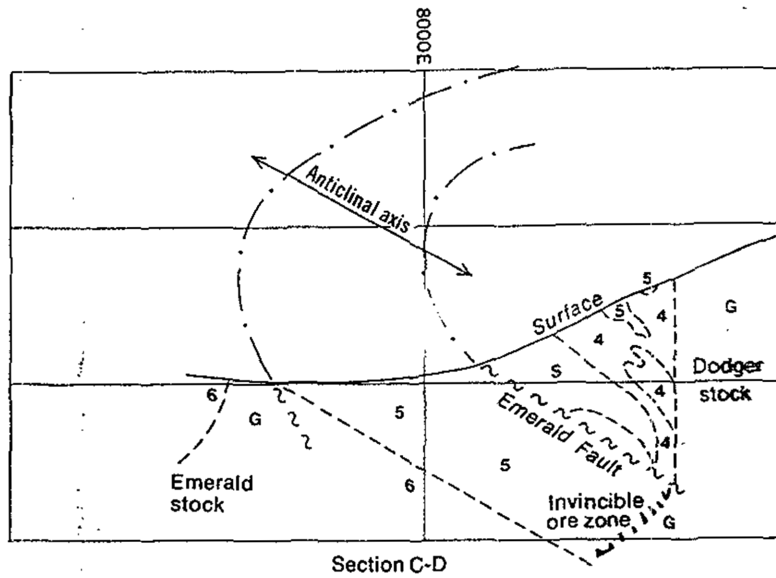
Three rock samples were collected for 32 element ICP and whole rock analysis. Samples from Truman Member argillite and Reeves Member limestone were collected in the vicinity of the Invincible (breakthrough) Portal and a granite sample was obtained from the Dodger stock located in the northeast corner of the claim (Figure 4).

The samples were sent to ALS Chemex (Aurora Laboratory Services Ltd.) for analysis.

The prepared samples were analyzed for 32 element ICP package utilizing standard Aqua-Regia Leach and major and minor element oxides were determined utilizing XRF – basic whole rock analysis. Refer to Appendix 1 – Analytical Results for detail.



1000 ft
SCALE
82 F/3E
FIGURE 3
COPY FROM FIGURE 11A, G.S.C. Economic Bulletin 32 by R. Mulligan.
INVINCIBLE MINE
(covered)
DODGER STOCK
(covered)
Old Camp
FEENEY MINE
INVINCIBLE DECLINE
ADIT
TUNGSTEN
DODGER
TROUGH
DODGER MINE
EMERALD LEAD-ZINC MINE
EMERALD
INVINCIBLE ADIT
STOCK
EMERALD TUNGSTEN MINE
EAST DODGER MINE AREA
4200 DRIFT N
DODGER 4200 X-CE
JERSEY
LEAD-ZINC
MINE
"MINE BELT"
EASTERN BOUNDARY OF STRONGLY FRACTURED ZONE
"BLACK ARGILLITE"
11,000N
10,000N
9000N
8000N
7000N
6000N
5000N
6000E
7000E
8000E
9000E



Section C-D
INVINCIBLE ORE ZONE

CRETACEOUS

G	*Granite*

ORDOVICIAN

9	*Active formation; black argillite*

LOWER CAMBRIAN
LAIB FORMATION

7	*Upper Laib: green, grey, and brown phyllite*
6	*Emerald Member: black argillite*
5	*Reeves Member: limestone, 5a: dolomite*
4	*Truman Member: argillite, siliceous or skarny, skarn, limestone*
S	*Mainly skarn*

RENO FORMATION

3	*Brown micaceous and grey blocky quartzite*

LOWER CAMBRIAN OR PROTEROZOIC
QUARTZITE RANGE FORMATION

2	*Nevada Member; Upper: white quartzite; Lower: brown micaceous quartzite, minor white beds*

Geological contact ....
Limit of exposure ....
Fault ....
Contour (in feet) 4000
Underground workings ....
Open pit ....
Tungsten ore (in sections only) ....

Surface geology and cross-sections modified after Fyles and Hewlett (1959)

Metres 0 — 300
Feet 0 — 1000

Geology compiled by R. Mulligan, 1977

To accompany GSC Economic Geology Report No. 32 by R. Mulligan

Geological cartography by the Geological Survey of Canada

LEGEND and CROSS-SECTION
TO ACCOMPANY
FIGURE 3

2.0 REGIONAL GEOLOGY

The following section is excerpt from Mulligan (1984). The Emerald, Feeney, Invincible, Dodger, and Jersey mines are contained within the limbs of overturned, faulted Jersey anticline the axis of which strikes about 015° and plunges northward and southward from about the midsection of the mine area (Figure 3). The eastern upright limb of the anticline contains the Dodger and Jersey ore bodies, while the Emerald, Feeney and Invincible mines are in the western overturned limb.

In the regional setting of the deposits, two structural factors are especially relevant:

1. The deposits are within the zone of maximum curvature of the 'bulge' structure of the Kootenay Arc; and
2. the deposits are in a strongly fractured zone just east of the trace of the eastward-dipping Waneta Fault, along which the Proterozoic and lower Paleozoic sediments are thrust over a Jurassic volcanic-sedimentary assemblage.

This fault forms the boundary between the East and West tungsten zones and western boundary of the strongly fractured zone. The strongly fractured zone, which hosts the lead-zinc and tungsten deposits, is described as the "Mine Belt" (Fyles and Hewlett, 1959). The eastern boundary of the strongly fractured zone occurs approximately 100 meters east of the East Dodger and Dodger Mines along the fault contact between the Active Formation (Black Argillite Belt) and the Laib Formation (Figure 3).

The stratigraphy in the mine area is listed in accompanying Figure 3.

The Emerald, Dodger and Townsite granite stocks of Cretaceous age have intruded this stratigraphy. Numerous lamprophyre dykes, probably related to a nearby Tertiary monzonite plug, locally cut the ore.

The ore zones are normally contained with skarns of the Laib Formation along the contact of a Cretaceous stock or a trough-like structure in the granite surfaces.

Skarns with minor scheelite forms numerous bands up to 15 meters wide, especially in the Truman and Reeves members. Dolomite of the Reeves limestone is the host rock of the Jersey and old Emerald lead-zinc deposits. They are at a slightly higher horizon than the adjacent tungsten deposits, which are in predominantly calcareous beds. Silicate or sulphide skarn is the host rock of most scheelite mineralization but 'greisen ore' extends as much as 12 meters into the granite at the Emerald.

Typical skarn is a green and brown granular rock composed chiefly of pyroxene, garnet and locally amphibole, with various amounts of pyrrhotite, calcite and quartz. Vesuvianite is a common minor constituent at the Dodger. Other Silicate mineral reported in varying minor amounts are tremolite-actinolite, epidote, biotite, muscovite, chlorite and augite have been reported. Small amounts of apatite are common. Tourmaline was reported to be relatively abundant in quartz veins at granite contacts at the Emerald and Feeney. Fluorite in fracture zones at the Emerald, Feeney and Dodger was mentioned by Ball (1954).

Pyrrhotite is the predominant sulphide mineral and is especially abundant in the Invincible ore and in some Emerald ore. Some pyrite has been reported. Chalcopyrite in small amounts is apparently the only base-metal sulphide. Molybdenite and molybdian scheelite are relatively abundant at the Dodger. A little wolframite has been reported.

3.0 DETAIL TECHNICAL DATA AND INTERPRETATION

3.1 PROPERTY GEOLOGY

The Invincible Mine occurs along the western contact of the Dodger stock and is hosted within the eastward dipping Reeves limestone (Figure 3, Cross-section). The following description is from Thompson (1973) but excerpt from Mulligan (1984).

The Invincible ore body is in the overturned limb of the Jersey anticline and is bounded above and below by skarn and argillite of the Truman and Emerald Members of the Laib Formation respectively (Figure 3). Most of the tungsten ore (scheelite) occurs in lenticular zones, which extend at a high angle from the granitic stock, more or less conformable with layering of the marble. In cross section the ore appears as irregular jagged zones to which the descriptive term 'ore flame' was applied by the mine geologists. In longitudinal section the flames are discontinuous and irregular. Ore zones extend up to 80 feet from the stock, and may be more than 10 feet thick, but most ore does not extend beyond 20 feet from the stock and is typically less than 8 feet thick. Continuity of the ore along strike seldom exceeds a few tens of feet. Ore grades as high as 7.6% WO_3 (across 1.6 feet) were encountered. However, 0.75% to 1.50% WO_3 are more typical of ore-grade material.

Some of the ore zones comprise aggregates of angular rock fragments enclosed in secondary coarse crystalline quartz; the scheelite is contained within the fragments, which consist of diopside and garnet-rich material.

Pastoor's (1970) description is as follows:

The Invincible ore-zone is divided into two zones separated by a 650 feet long area containing granite cross-dykes.

The south zone is approximately 800 feet long and is lying nearly flat in a trough-like structure formed by west-dipping Dodger granite and east-dipping Emerald granite. The Emerald granite underlies a fault surface and dips approximately 35° east. The trough is terminated at both endsby areas of "high granite" and cross-dykes. The north zone is approximately 1,100 feet long and has a gentle plunge to the south. The trough structure is formed by west-dipping Dodger granite and east-dipping contact between Emerald black argillite and limestone. This contact dips about 40° east and the granite dips about 35° west.

In both zones, tungsten ore occurs where the limestone is in contact with the Dodger granite. The ore is contained in quartz-sulphide replacement of limestone. It is localized in general by fracturing, faulting, and brecciation of the limestone, and in detail by minor fracturing and bedding of the limestone.

The surface mapping indicated that the property is underlain by Lower Cambrian age rocks of the Laib Formation. The Truman and Reeves members of the Laib Formation have been intruded by granite of the Dodger Stock.

The property geology is presented in Figure 4 and a brief description of lithologies follows:

Lower Cambrian

Unit 4: Truman Formation:

The predominant rock type is a dark grey weathering, fine to coarse grained siltstone to greywacke which contains thinly laminate (5mm), alternating light and dark bands of biotite and quartz. Grain size appears to be controlled by metamorphic grade. Occasional recessive weathering, vuggy calcareous bands and pyritic bands occur within this member. Calcareous content appears to increase towards the limestone units.

Unit 5: Reeves Member:

The predominant rock type is a light grayish white weathering limestone. Resistant weathering silica filled fractures and bedding planes occur on the weathered surfaces. The beds are generally less than 5 meters thick. The beds contain thin interbeds of argillite and siltstone. Possibly the limestone represents an exhalative chemical precipitate within a moderate to deep basin environment.

Cretaceous

Unit 10: Granite:

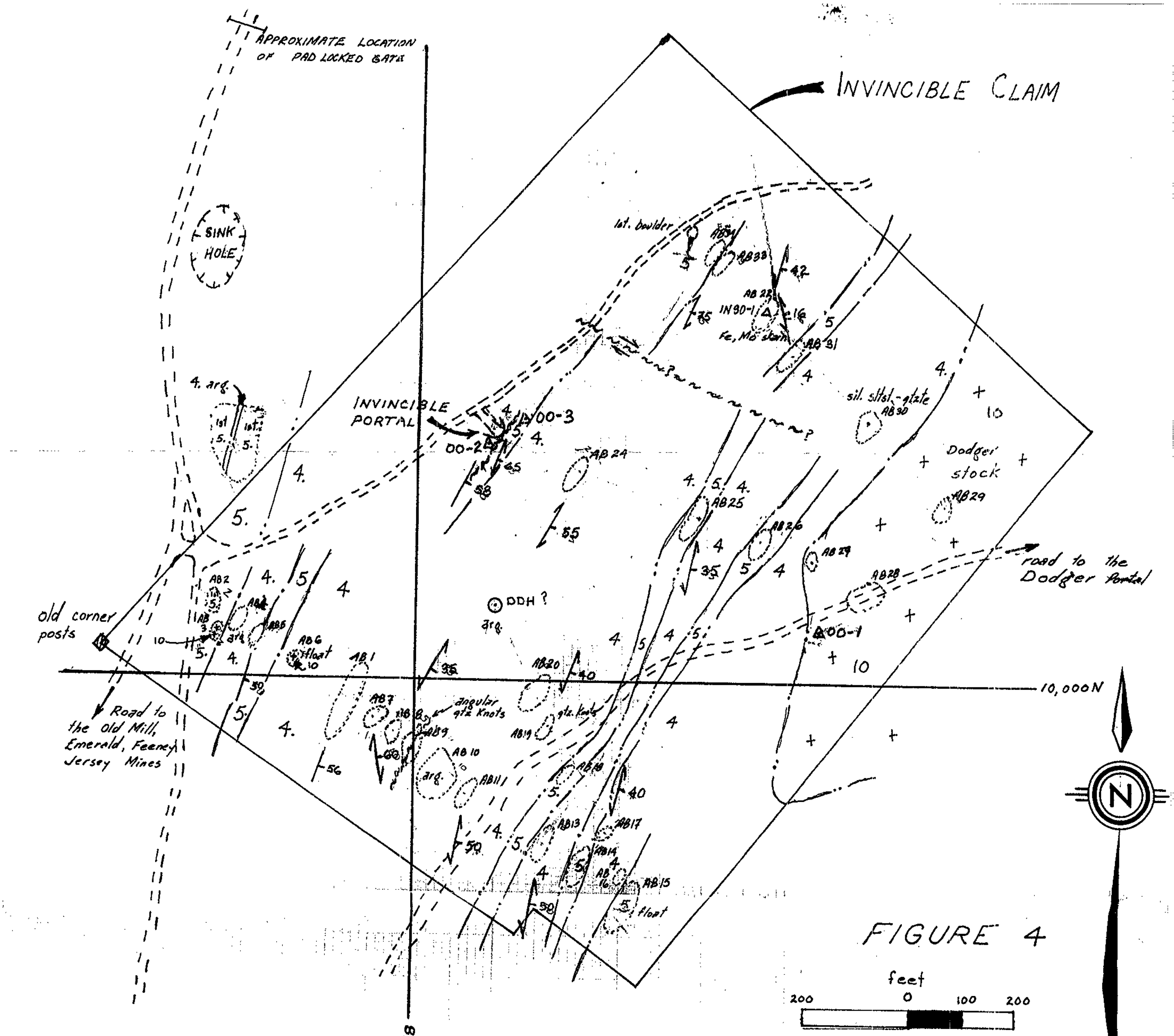
The Dodger granite comprises a rusty to pinkish weathering, medium to coarse grainded , biotite granite. Pegmatitic phases containing large, euhedral quartz and muscovite crystal occur occasionally.

STRUCTURE

The units strike north northeast and dip moderately to the east. Foliation is parallel to bedding. A fault contact parallel to the bedding occurs with the portal entrance. An east-west trending fault is inferred to the north of the portal. White angular quartz gouge often occurs along fault planes. The regional structural setting is described in the Regional Geology section.

ALTERATION

The Laib Formation has been silicified and the calcareous members are altered to skarn. A description of the skarns is contained in the Regional Geology section.



INVINCIBLE GEOLOGY

82 F/3E

A.J. BORONOWSKI

LEGEND

CRETACEOUS

+10	GRANITE

LOWER CAMBRIAN

LAIB FORMATION

4	Truman Member: argillite, greywacke, siltstone, skarn?
5	Reeves Member: limestone.

~~ ~~~ fault (inferred, known)

contact (inferred, known)

bedding

foliation

diamond drill hole

road

Salmo Granite △00-1 ; Salmo Argillite △00-2 ; Salmo Limestone △00-3
IN 90-1△ rock sample

AB 7 outcrop, station number

GEOLOGICAL ASSOCIATION OF CANADA
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#51
FELLOW

PROFESSIONAL
PROVINCE OF
A. J. BORONOWSKI
BRITISH COLUMBIA
GEOSCIENTIST

ECONOMIC GEOLOGY

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"Tungsten prices and many tungsten statistics are quoted in units of tungsten trioxide (WO3). The short ton unit, used in the United States, is 1% of a short ton (20 pounds) and tungsten trioxide is 79.3% tungsten. Therefore, a short ton unit of WO3 equals 20 pounds of WO3 and contains 7.19 kilograms (15.86 pounds) of tungsten. The metric ton unit, used in most other countries, is 1% of a metric ton (10 kilograms). A metric ton unit of WO3 contains 7.93 kilograms (17.48 pounds) of tungsten" (Shedd).

The following information is contained in the USGS Mineral Industry Surveys publication. The following prices represent combined prices for wolframite and scheelite ore concentrates with a minimum tungsten trioxide content of 65%. The prices for March 1 to 31, 2001, are as follows:

Low - $67/metric ton unit WO3 ($61/short ton unit WO3)
High - $74/metric ton unit WO3 ($67/short ton unit WO3)

Therefore the Invincible insitu reserve of 75,128 tons averaging 0.62% represents the following tungsten content and value:

- 75,128 tons x 0.62% = 465.79 tons WO3 (931,587.2 pounds)
- 931,587.2 pounds WO3 x 79.3% tungsten = 738,748.6 pounds tungsten
- 738,748.6 pounds tungsten ÷ 15.86 pounds tungsten per 1 short ton unit = 46,579.34 short ton units.
- Average insitu value between March 1-31, 2001 = 46,579.34 x $64 US = $2.98 Million US.

The following table indicates the classification of the reserves and which reserves are accessible from the underground workings and which reserves are inaccessible and would require development to access the reserves.

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The Invincible Tungsten Mine was closed due to poor metal prices. The mine not only contains mineable tungsten reserves but also has the potential for additional reserves.

The Salmo district mining camp hosting the Invincible depoist was initially staked for gold in 1896 and lead mineralization was discovered in 1906 and development of the lead deposit began in 1910. In 1938, the skarn beds, which host the gold mineralization were explored for tungsten mineralization. Wartime Metals Corporation, a Federal Government Agency, developed the Emerald Tungsten Mine in 1942. Canex (now Placer Ltd.) purchased the Dodger, Feeney and Emerald tungsten mines and the Emerald-Jersey lead-zinc mines in 1947. The Invincible Mine was put into production in 1971. Production, from 1947 until 1973, totaled 8 million tons of lead-zinc-silver ore and 1.6 million tons of tungsten ore.

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GEOCHEMICAL ANALYSIS - 32 ELEMEMT ICP AND WHOLE ROCK

The purpose of the sampling program was to examine the chemistry of the rock types underlying the Invincible property for potential exploration pathfinder elements and to yield information regarding the origin of the gold, lead-zinc-silver and tungsten mineralization and deposit type(s) associated with the mineralization. A program of element and whole rock geochemical analysis combined with a petrography study would be useful to in determining alteration patterns and possibly identifying haloes around ore deposits. In particular, core from a diamond drill program or underground samples would yield material suitable for such a study.

Briefly, the results for the three different rock types were compared and appear to indicate that the higher Ba, Co, Cu, Cr, Fe, Mg, Mn, Mo, Ni, Zn in the argillite may suggest that there is a genetic association with Sedex type deposit in a rift environment containing mafic extrusive.

The granite contains higher Pb values. Tungsten value was not anomalous.

The limestone was slightly higher values for As, Cu, Hg, P, Sr, Ca, Mn, which may suggest that it could be a suitable host for replacement gold mineralization.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Invincible Tungsten Mine produced 282,799 tons of ore averaging 0.65% WO3, between early 1971 and September 1973 (BCDM Geology, Exploration and Mining 1973 and GSC Economic Geology Report 32, 1984).

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Inaccessible from Underground Workings		4,537 tons averaging 0.45% WO3 (2,020.5 Units)	
Inaccessible from Underground Workings			1,922 tons averaging 0.42% WO3 (801 Units)

The majority of the reserves are accessible from the underground workings. The northern extension of the Invincible Tungsten Mine remains untested and therefore the existing reserves combined with the potential of more deposits along the northern extension of the mineralized trough makes the Invincible Mine an attractive target and an asset which could be brought into production relatively quickly when the price of the commodity increases.

An alteration study utilizing 32 element ICP and whole rock geochemical analysis combined with a petrography study may be useful in directing a drill program towards deposits and clarifying the genetic history of the gold, lead-zinc-silver and tungsten mineralization.

The Salmo Mining Camp has good potential for hosting skarn-type tungsten, sedex-type lead-zinc-silver, and disseminated and replacement-type gold deposits. The northern extension of the Invincible Tungsten Mine warrants an exploration program for tungsten mineralization (Pastoor 1972). As well, the Invincible Tungsten Mine and extension warrant testing for Carlin-type replacement gold mineralization.

5.0 ITEMIZED COST STATEMENT

Personnel	
Alex Boronowski – Geologist	
August 14 to August 17, 2000	
4 days x $500/day	$2,000.00
Food	
4 days x $40/day	$ 160.00
Mileage	
1,500 km. X $.40/km	$ 600.00
Accommodation	
Motel	$ 80.50
Analytical Cost	
3 rocks for 32 element ICP and whole rock geochemistry	$ 112.67
32 element ICP for Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Ti, Tl, U, V, W, Zn,	
Whole rock geochemistry for Al3O3, Cao, Cr2O3, Fe2O3, K2O, Mgo, MnO, Na2O, P2O5, SiO2, TiO2, LOI	
Report Writing	
1 day x $500/day	$ 500.00
TOTAL	**$3,453.17**

11.0 CERTIFICATE OF QUALIFICATIONS

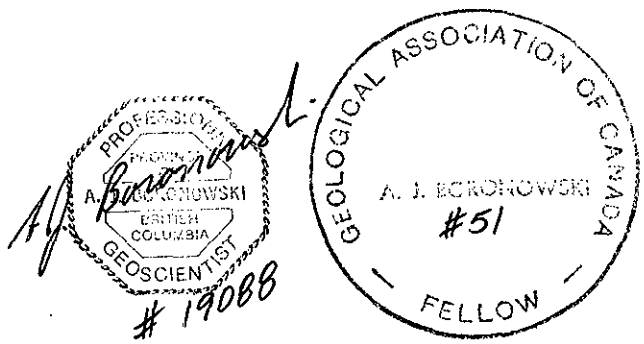
I, Alexander J. Boronowski, of the District of North Vancouver, in the Province of British Columbia, do hereby certify that:

1. I am a graduate of the Faculty of Science, University of British Columbia 1970, with a B.Sc. degree in Geology.

2. I am registered with the Association of Professional Engineers and Geoscientists of British Columbia, Registration No. 19088, and I am a Fellow of the Geological Association of Canada. I have practiced my profession in North and South America, Europe and Asia for major and junior resource companies and government.

3. The information for this report was obtained from sources as cited in the report and from personal experience gained while conducting a examination of the property between August 15 – 16, 2000.

Dated at Vancouver, B.C. this 31rd day of May, 2001.



Alexander J. Boronowski, P.Geo., F.G.A.C.

12.0 REFERENCES

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APPENDIX 1

Invincible Tungsten Mine – Analytical Results

ALS Chemex

Aurora Laboratory Services Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: [illegible]ONO[illegible], A[illegible]

3741 ST. ANDREWS AVE.
VANCOUVER, BC
V7N 2A6

INVOICE NUMBER I0112746

BILLING INFORMATION

Date: 07-MAR-2001
Project: SALMO
P.O. No.:
Account: CDB

Comments:

Billing: For analysis performed on Certificate A0112746

Terms: Payment due on receipt of invoice
1.25% per month (15% per annum)
charged on overdue accounts

Please Remit Payments to:

ALS CHEMEX
212 Brooksbank Ave.,
North Vancouver, B.C.
Canada V7J 2C1

# OF SAMPLES	ANALYSED FOR CODE - DESCRIPTION	UNIT PRICE	SAMPLE PRICE	AMOUNT
3	205 - Geochem ring to approx 150 mesh	2.60		
	ICP-32	7.40		
	A-413 XRF - Basic W.R.A.	22.50		
	0-3 Kg crush and split	2.60	35.10	105.30

Total Cost $ 105.30
(Reg# R100938885) GST $ 7.37

TOTAL PAYABLE (CDN) $ 112.67

PAID

ALS Chemex

Aurora Laboratory Services Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: [illegible]RONO[illegible]I, ALE[illegible]

3741 ST. ANDREWS AVE.
VANCOUVER, BC
V7N 2A6

Comments: ATTN: ALEX BORONOWSKI

CERTIFICATE A0112746

(CDB) - BORONOWSKI, ALEX

Project: SALMO
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 07-MAR-2001.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	3	Geochem ring to approx 150 mesh
226	3	0-3 Kg crush and split
3202	3	Rock - save entire reject
229	3	ICP - AQ Digestion charge
* NOTE	1:	

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES 1 of 2

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
2118	3	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	3	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	3	As ppm: 32 element, soil & rock	ICP-AES	2	10000
557	3	B ppm: 32 element, rock & soil	ICP-AES	10	10000
2121	3	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	3	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	3	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	3	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	3	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	3	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	3	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	3	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	3	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	3	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	3	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	3	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	3	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	3	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	3	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	3	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	3	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	3	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	3	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	3	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
551	3	S %: 32 element, rock & soil	ICP-AES	0.01	5.00
2141	3	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	3	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	3	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	3	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	3	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	3	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	3	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	3	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	3	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000
902	3	Al2O3 %: XRF	XRF	0.01	100.00
906	3	CaO %: XRF	XRF	0.01	100.00

ALS Chemex
Aurora Laboratory Services Ltd.
Analytical Chemists * Geochemists * Registered Assayers
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PHONE: 604-984-0221 FAX: 604-984-0218

To: [illegible]ONO[illegible], ALE[illegible]

3741 ST. ANDREWS AVE.
VANCOUVER, BC
V7N 2A6

Comments: ATTN: ALEX BORONOWSKI

CERTIFICATE A0112746

(CDB) - BORONOWSKI, ALEX

Project: SALMO
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 07-MAR-2001.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	3	Geochem ring to approx 150 mesh
226	3	0-3 Kg crush and split
3202	3	Rock - save entire reject
229	3	ICP - AQ Digestion charge

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES 2 of 2

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
2590	3	Cr2O3 %: XRF	XRF	0.01	100.00
903	3	Fe2O3 %: XRF	XRF	0.01	100.00
908	3	K2O %: XRF	XRF	0.01	100.00
905	3	MgO %: XRF	XRF	0.01	100.00
1989	3	MnO %: XRF	XRF	0.01	100.00
907	3	Na2O %: XRF	XRF	0.01	100.00
909	3	P2O5 %: XRF	XRF	0.01	100.00
901	3	SiO2 %: XRF	XRF	0.01	100.00
904	3	TiO2 %: XRF	XRF	0.01	100.00
910	3	LOI %: XRF	XRF	0.01	100.00
2540	3	Total %	CALCULATION	0.01	105.00

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PHONE: 604-984-0221 FAX: 604-984-0218

To: BORONOWSKI, ALEX

3741 ST. ANDREWS AVE.
VANCOUVER, BC
V7N 2A6

Project : SALMO
Comments: ATTN: ALEX BORONOWSKI

Certificate Date: 07-MAR-2001
Invoice No. : I0112746
P.O. Number :
Account : CDB

CERTIFICATE OF ANALYSIS A0112746

SAMPLE	PREP CODE		Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
SALMO ARGILLITE	205	226	< 0.2	3.50	< 2	< 10	90	0.5	< 2	1.92	< 0.5	12	100	18	3.58	10	< 1	0.81	10	1.23	1165
SALMO GRANITE	205	226	< 0.2	0.27	2	< 10	30	< 0.5	2	0.03	< 0.5	< 1	108	3	0.35	< 10	< 1	0.12	< 10	0.01	255
SALMO LIMESTONE	205	226	< 0.2	0.69	8	< 10	20	< 0.5	< 2	>15.00	< 0.5	4	9	14	0.89	< 10	1	0.19	10	0.52	1095

CERTIFICATION: ____________

ALS Chemex
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To: BORONOWSKI, ALEX

3741 ST. ANDREWS AVE.
VANCOUVER, BC
V7N 2A6

Project : SALMO
Comments: ATTN: ALEX BORONOWSKI

Certificate Date: 07-MAR-2001
Invoice No. : I0112746
P.O. Number :
Account : CDB

CERTIFICATE OF ANALYSIS A0112746

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF
SALMO ARGILLITE	205	226	2	0.17	33	590	2	< 0.01	< 2	10	48	0.21	< 10	< 10	60	< 10	82	18.54	5.15	< 0.01	6.63
SALMO GRANITE	205	226	< 1	0.06	2	20	12	< 0.01	< 2	< 1	2	< 0.01	< 10	< 10	1	< 10	16	13.21	0.36	< 0.01	0.52
SALMO LIMESTONE	205	226	< 1	0.03	6	820	8	0.06	< 2	1	577	0.02	< 10	< 10	8	< 10	20	2.66	47.57	< 0.01	1.67

CERTIFICATION:

ALS Chemex
Aurora Laboratory Services Ltd.
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British Columbia, Canada V7J 2C1
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To: [illegible]RONO[illegible], ALE[illegible]

3741 ST. ANDREWS AVE.
VANCOUVER, BC
V7N 2A6

Project : SALMO
Comments: ATTN: ALEX BORONOWSKI

Certificate Date: 07-MAR-2001
Invoice No. : I0112746
P.O. Number :
Account : CDB

CERTIFICATE OF ANALYSIS A0112746

SAMPLE	PREP CODE		K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
SALMO ARGILLITE	205	226	3.97	2.67	0.28	2.35	0.16	54.17	0.80	3.86	98.58
SALMO GRANITE	205	226	4.08	< 0.01	0.12	4.16	0.01	75.82	0.06	0.34	98.68
SALMO LIMESTONE	205	226	0.69	1.22	0.12	< 0.01	0.24	7.53	0.07	37.38	99.15

CERTIFICATION: ____________

APPENDIX 2

Invincible Tungsten Mine – Ore Reserve Calculations

Invincible Tungsten Mine
NTS 82F/3W

INVINCIBLE ORE RESERVES (INACCESSIBLE)
CALCULATED BY CANEX - AUGUST 31, 1973
SOURCE - DEADFILE 73-08-V101-2B-0116 PLAN 1 INCH = 20 FEET

SECTION	PROBABLE SHORT TONS	GRADE	WT.FACTOR	POSSIBLE SHORT TONS	GRADE	WT.FACTOR	MARGINAL SHORT TONS	GRADE	WT.FACTOR
9100N-9200N	280.00	0.70	196.00	130.00	0.50	65.00			0.00
	780.00	1.15	897.00	350.00	0.70	245.00			0.00
	480.00	0.50	240.00	350.00	0.70	245.00			0.00
			0.00	220.00	0.45	99.00			0.00
			0.00	220.00	0.45	99.00			0.00
9200N-9300N	320.00	0.50	160.00	150.00	0.50	75.00			0.00
			0.00	150.00	0.50	75.00			0.00
9400N-9500N	210.00	0.55	115.50	117.00	0.50	58.50	1280.00	0.40	512.00
			0.00	270.00	0.30	81.00			0.00
			0.00	540.00	0.30	162.00			0.00
10600N-10700N	390.00	0.60	234.00			0.00			0.00
10700N-10800N	700.00	0.80	560.00			0.00			0.00
	200.00	0.50	100.00			0.00			0.00
10900N-11000N			0.00	680.00	0.40	272.00	642.00	0.45	288.90
11000N-11100N			0.00	1360.00	0.40	544.00			0.00
11200N-11300N	120.00	0.60	72.00			0.00			0.00
	150.00	0.55	82.50			0.00			0.00
TOTALS	3630.00		2657.00	4537.00		2020.50	1922.00		800.90

SUMMARY

PROBABLE RESERVES (PRESENTLY INNACCESSIBLE)
3,630 TONS AVERAGING 0.73% WO3
ie., 2,657 UNITS

POSSIBLE RESERVES (PRESENTLY INACCESSIBLE)
4,537 TONS AVERAGING 0.45% WO3
ie., 2,0205 UNITS

MARGINAL RESERVES (PRESENTLY INACCESSIBLE)
1,922 TONS AVERAGING 0.42% WO3
ie., 801 UNITS

These reserves are presently inaccessible from the underground workings.

Invincible Tungsten Deposit
NTS 82 F/3W
* A past producing Mine

INVINCIBLE ORE RESERVES (ACCESSIBLE)
CALCULATED BY CANEX - AUGUST 31, 1973
SOURCE - DEADFILE 73-08-V101-2B-0116 PLAN 1 INCH = 20 FEET

SECTION	PROBABLE SHORT TONS	GRADE	WT.FACTOR	POSSIBLE SHORT TONS	GRADE	WT.FACTOR	MARGINAL SHORT TONS	GRADE	WT.FACTOR
9200N-9300N	130.00	0.50	65.00	120.00	0.50	60.00			0.00
9300N-9400N			0.00			0.00	180.00	0.45	81.00
			0.00			0.00	180.00	0.45	81.00
9400N-9500N	320.00	0.60	192.00			0.00			0.00
	759.00	0.70	531.30			0.00			0.00
	130.00	0.60	78.00			0.00			0.00
9500N-9600N	580.00	0.50	290.00	450.00	0.50	225.00	100.00	0.35	35.00
	500.00	0.60	300.00	490.00	0.40	196.00			0.00
	420.00	0.50	210.00	1120.00	0.55	616.00			0.00
	1300.00	0.65	845.00	620.00	0.50	310.00			0.00
			0.00	1180.00	0.50	590.00			0.00
9600N-9700N	500.00	0.80	400.00	550.00	0.55	302.50	640.00	0.35	224.00
	440.00	0.60	264.00	480.00	0.55	264.00			0.00
	570.00	0.70	399.00	270.00	0.60	162.00			0.00
	2530.00	0.60	1518.00	640.00	0.60	384.00			0.00
	280.00	0.70	196.00	760.00	0.50	380.00			0.00
	500.00	0.70	350.00			0.00			0.00
	1140.00	0.50	570.00			0.00			0.00
9700N-9800N	2100.00	1.20	2520.00	240.00	0.60	144.00	360.00	0.25	90.00
	1000.00	0.70	700.00	400.00	0.60	240.00			0.00
	140.00	1.00	140.00	860.00	0.60	516.00			0.00
	330.00	0.80	264.00			0.00			0.00
	780.00	0.60	468.00			0.00			0.00
	1030.00	0.65	669.50			0.00			0.00
	550.00	0.80	440.00			0.00			0.00
	50.00	0.60	30.00			0.00			0.00
9800N-9900N	380.00	0.60	228.00	1300.00	0.75	975.00			0.00
	3740.00	0.75	2805.00	380.00	0.50	190.00			0.00
9900N-10000N	200.00	0.65	130.00			0.00			0.00
	160.00	0.70	112.00			0.00			0.00
	280.00	0.75	210.00			0.00			0.00
10000N-10100N	800.00	0.75	600.00			0.00			0.00
	440.00	0.55	242.00			0.00			0.00
	440.00	0.60	264.00			0.00			0.00
	1100.00	0.60	660.00			0.00			0.00
10100N-10200N			0.00			0.00			0.00
10200N-10300N	110.00	0.50	55.00	850.00	0.50	425.00	100.00	0.40	40.00
	100.00	0.50	50.00			0.00	70.00	0.35	24.50
	290.00	0.60	174.00			0.00			0.00
	640.00	0.50	320.00			0.00			0.00
	470.00	0.55	258.50			0.00			0.00
	1090.00	0.60	654.00			0.00			0.00
10300N-10400N	100.00	0.60	60.00			0.00	720.00	0.40	288.00
	610.00	0.60	366.00			0.00			0.00
	100.00	0.50	50.00			0.00			0.00
10400N-10500N	180.00	0.70	126.00			0.00	180.00	0.45	81.00
	150.00	0.70	105.00			0.00			0.00