ASSESSMENT REPORT

HEBER/TRIO PROPERTY

Alberni Mining District
Vancouver Island, British Columbia
NTS 92F/13
October, 1995
125° 59'W 49° 52°

Prepared By:

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710-1177 West Hastings Street
Vancouver, B.C. V6E 2K3

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INTRODUCTION

Background

The Heber claims 1, 2, 3 and Trio claims 1, 2, 3, 4, 5, 6, 7, 8, 10, 11 were staked between June 1993 and October 199. In August 1995 primarly staked ground was reduced from 244 mineral claim units to 195 and grouped under two group names Trio and Heber.

This report combines geochemical and geological results from 1994/1995 field seasons with previous work.

Claim Status

The Heber group name consists of 96 claim units:

Claim	Record No:	No. of Units	Date of Record	Expiry Date
Heber 2	319581	20	July 21, 1993	July 21,1997
Trio 1	330493	20	Aug. 25, 1994	Aug. 25, 1997
Trio 2	330494	16	Aug. 25, 1994	Aug. 25, 1997
Trio 3	331975	20	Oct. 25, 1994	Oct. 25, 1997
Trio 4	331976	20	Oct. 25,1994	Oct. 25, 1997

Trio Group name consists of 99 claim units

Claim	Record No:	No. of Units	Date of Record	Expiry Date
Heber 1	319580	20	July 21,1993	July 21, 1997
Heber 3	320535	20	Aug. 12, 1993	Aug. 12, 1997
Trio 5	331977	15	Oct. 22, 1994	Oct. 22, 1997
Trio 6	331978	20	Oct. 22, 1994	Oct. 22, 1997
Trio 7	331979	20	Oct. 22, 1994	Oct. 22, 1997
Trio 8	331980	4	Oct. 23, 1994	Oct. 23, 1997

Claim map is presented on Figure 1

Location and Access

Access to the Heber property is provided by forestry roads along Heber River to the east and Saunders Creek to the west. The central part of the property is easily accesible by helicopter from Gold River (VIH, around 7min. flight one way). Strathcona Provincial Park is located approximately 2km to the east and 4km to the north of the Trio and Heber claims. The two main creeks draining the claims, Heber and Sunders, located within or close to the claim boundary, are draining away from the park.

Topography and Vegetation

The Heber and Trio claim groups are located in rugged, mountainous terrain of the Vancouver Mountain Range. The Heber River and Sanders Creek valleys (east and west boundary of the claim block) lie at the elevation of approximately 1000 feet while elevation of the Trio Mtn., located in the central part of the property, reaches elevation over 5600 feet.

The vegetation consists of the old growth forest in the valleys and mountain slopes up to the elevation of approximately 4500 feet. Above 4500 feet vegetation changes to alpine type.

EXPLORATION PROGRAM

Field work conducted on the Heber and Trio claim groups consisted of moss matt, soil and rock sampling and mapping.

Moss Mat Sampling

Moss mats were collected in creeks on the downstream faces of boulders, logs or outcrops, from the top 1/3 of the estimated high water level. These mats are submerged during high water, but dry during normal flow. Moss mat samples were taken as a composite from 5 to 10 locations over a 10 to approximately 50 m length of the stream.

Field notes and assay results of moss mats collected in 1994/1995 are presented in Appendix 1 & 4. Other moss mat samples original assays were attached in previous reports.

Soil Sampling

Soil samples were mainly collected at 40m and 80m intervals along contour lines or along ridges. At each sample site a hole was dug with a shovel to reveal the full soil profile. Under most circumstances, the B horizon was sampled. At a minority of sites, the soil profile development was poor, and decomposed rock, C horizon or AC horizon material was sampled. Field notes and results are presented in Appendix 2 & 4. Other soil samples original assays were attached in previous reports.

Rock Sampling

Six types of rock samples were collected: chip samples, grab samples, representative grab samples, float samples, representative float samples and high grade samples.

A grab sample is generally a single sample from an outcrop and is not intended to be representative of the whole or even a specific portion of the outcrop. A representative grab sample consists of several grab samples collected every approximately 5m along the outcrop or several ourcrops over a measured distance. A chip sample is a continous sample collected over a measured width. A float sample is mainly collected in gullys and its source is usually unknown. A representative float sample is collected from talus at the bottom of the cliffs. A high-grade sample represents specifically mineralized float or outcrop.

Collected rock samples were labelled VI-PL-001 to VI-PL-153 and 441875 to 441941. Field notes and assay results are presented in Appendix 3 & 4. Other rock samples original assays were attached in previous reports.

Sample Preparation and Analysis

All moss mat, soil and some of the rock samples were shipped to ACME Analytical Laboratories, Vancouver, B.C. for sample preparation and 30 element ICP analysis. Remaining rock samples were analyzed by Chemex Labs Ltd,Vancouver (whole rock and ICP analysis) and XRAL, Toronto (ICP analysis).

Rock samples were crushed and ring pulverised to a nominal 95% minus 150 mesh (100 microns) prior to analysis. Moss mat and soil samples were dried and then dry sieved using an 80 mesh (180 microns) sieve. The minus 80 mesh portion was retained for analysis.

All samples were analysed using the following routine procedures.

Gold was determined using a 10 gm sample aliquot (ACME, 30 gm in Chemex Labs), ignited at 600^0C, digested with hot aqua regia, extracted using MIBK, and determined by graphite furnace AA. The detection limit is 1 ppb.

The elements, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K and W were determined simultaneously by ICP emission spectroscopy from a 0.5 gm sample aliquot (ACME) digested with 3 ml of 3-1-2 HCL-HNO_3-H_2O at 95^0C for one hour then diluted to 10 cc with H_2O.

Detection limits for the ICP analysis conducted by ACME are:

Ag	0. 1 ppm
Cd, Co, Cr, Cu, Mo, Mn, Ni, Sr, Zn, W	1 ppm
As, B, Ba, Bi, La, Pb, Sb, Th, V	2 ppm
U	5 ppm
Al, Ca, Fe, K, Mg, Na, Ti	0.01 %
P	0.001 %

Detection limits for the ICP analysis conducted by Chemex Labs are:

Ag	0.2 ppm
Be, Cd,	0.5 ppm
Co, Cr, Cu, Hg, Ni, Sc, Sr, V,	1 ppm
As, Bi, Pb, Sb, Zn	2 ppm
Mn	5 ppm
Ba, Ga, La, P, Tl, U, W,	10 ppm
Al, Ca, Fe, K, Mg, Na, Ti	0.01 %

Ten rock samples were re-assayed by ICP by XRAL in Toronto (Appendix 4).

Data Handling and Data Presentation

Sample locations were digitized and merged with the analytical results. Maps were then produced over a topographic base for each investigated area, for all elements which showed significant variation. Element distribution patterns are portrayed individually using graduated dots (blobs) with increasing size of symbol proportional to element abundance.

Survey Procedures

Sampling was controlled by published 1:50,000 topographic maps and by maps available from logging companies, at a scale of 1:125,000.

EXPLORATION HISTORY

Ass.Rep.

#2436 David Arscott (1969), Moresby Mines Ltd.
Vanhall claims - mapping, rock sampling. The best values obtained from rock samples are: 0.55%Cu & 0.78%Ag (0.45m vein); 1.7%Cu & 0.95%Ag, 0.69%Cu (representative grab samples).

- (1970), Silver Standard (information obtained from Assessment Report #14551)
Heber 1 & 2 claim area - rock sampling: 0.35oz Au, 10.85% Cu , 1.25oz Ag over 1m, 1.6km long quartz vein.

- Geological Survey of Canada (1971) - airborn magnetic survey.

#3953 C.Hodscon, D.Prescott (1972), Moresby Mines Ltd
Vanhall claims - soil geochemistry.

#8065 A.F.Roberts (1980), Eastern Leasholds Inc.
Vanhall claims - geochemical evaluation.

#9151 Ronald F.Sheldrake (1981), Eastern Leasholdss Inc.
Vanhall & Shannon claims - air magnetic and electromagnetic survey.

#14551 James McDonald (1985), Longreach Resources.
Hib claims - rock sampling: 1072ppm Cu, 848ppm Cu (Heber 1 & 2 claim area).

GEOLOGY

The Heber River area is underlain by the Jurassic Karmutsen Formation, mainly pillow basalts and andesite flows intruded by Lower Jurassic Island Intrusions (Granite, Granodiorite and Quartz Diorite), (Fig. 2, 3 & 4).

The Karmutsen flows form a multibedded, flat dipping sequence which is well exposed in the central part of the property. A number of flows appear to be vesicular toward the flow stratigraphic top. Vesicules are often infilled with epidote. In the central part of the property, pink K-feldspar occurs and epidote is more abundant. Epidote is not only present in the vesicules but locally saturates the whole rock (up to 30%). In Pillow lavas quartz-epidote mineralization is common and occurs in lenses between pillows.

Three intrusive stocks were identified within the property: one to the south (strongly magnetic) and two on the northwest and northeastern side of the property. The intrusive stocks vary in composition from diorite to granite (quartz diorite). The diorite (east side of the property) appears to be unaltered while the more felsic type of intrusive (granite) often contains epidote and K-feldspar on fractures and sometimes in the"matrix"(north-west side of the property).

Petrographic descriptions of 3 selected rock samples are attached in Appendix 5. Sample locations are presented on Figure 2.

RESULTS

During 1994/1995 field work 107 rock, 2 moss mats and 20 soil samples were collected. The results of all previous work together with this year's work are presented on the accompanying figures.

As a result of 1994/1995 field season an anomalous area of approximately 4x5km is outlined.

The moss mat survey shows a Au and Cu anomaly, approximately 5x4km, located in the central part of the property, west of the Heber River. To the south the Au, Cu anomaly is supported by Zn and As (Appendix 1 & 4, Fig. 5-12).

Soil samples were collected from two areas, the east and south-west part of the Heber/Trio property. Soil samples collected from the east part of the property are strongly anomalous in Cu, supported by Pb and less widely spread Au. Copper asseyed mostly above 300ppm up to 1,491ppm with Au up to 320ppb. Soil samples collected from the south-west part of the Heber/Trio property indicated anomalous copper values up to 368ppm (Appendix 2 & 4, Fig. 13-20).

Copper values in 41 rock samples range from 972ppm to over 10%. Representative grab rock samples, collected over a distance of 10 to 150m, returned Cu values upto 2330ppm. Gold values often support copper and assay upto 3310 (Appendix 3 & 4, Fig. 21-23).

Fofty four samples taken from the Heber property were re-assayed for whole rock analysis. The results are submitted in Appendix 4 and Figure 24.

Ten rock samples were re-assayed by ICP by XRAL. The results are submitted in Appendix 4. The two sets of analysis generaly agree well except for gold. Anomalous in copper and gold rock sample VI-PL-011 was re-sampled but the assays did not return anomalous value.

INTERPRETATION

The Heber/Trio property has the "finger print" of a major porphyry Cu/Au system. The geological model suggested for the this property is the volcaniclastic Karmutsen Formation as a cap, which is surrounded and underlain by the younger Jurassic intrusive rocks. Anomalous moss mat, soil, and rock samples define an anomaly 4x5km in the central part of the property. The location of the anomalous centre is further supported by increasing epidote and K-feldspar. This anomaly, together with altered intrusives on the margin, are consistent with a large porphyry Cu/Au system at, or near, the intrusive/volcanic contact under the volcanic cap on Trio Mountain.

The geological setting is similar to the Island Copper Deposit further north on Vancouver Island (430Mt 0.5% Cu, 0.17% Mo, 0.22g/t Au) and other porphyry copper deposits associated with Jurassic intrusives within Triassic volcanics to the south, in the U.S. The values in surface rock samples, although very preliminary in nature, are similar to those over the Ann-Mason porphyry Cu deposit in Nevada (495Mt of 0.4% Cu, Dilles and Einaudi, 1992) and Dos Pobres deposit in Arizona (400Mt of 0.72% Cu, Langton and Williams, 1983). The geochemical zoning is very similar to that summerized for porphyry system by B.K.Jones, 1992. The published aeromagnetic map (Fig. 27) has significant similarities with the published aeromagnetic response over Island Copper Deposit (Fig. 28, Cargill et al., 1976)

A summary map and cross section is given on Figure 25. (See also a depth zoning scheme by Panteleyev Fig. 26 of the B.C. Dept. of Mines linking a number of styles of mineralization). The Heber property fits what is now being described as a Transitional Porphyry near the roof or on the margin of a stock or dyke into younger rocks, generally volcanics.

RECOMMENDATIONS

The next recommended phase of work is mapping, prospecting, whole rock sampling and aerborn geophysics followed by drilling of appropriate targets. The 1.6km long qtz vein mapped by the Silver Standard in 1970 should also be investigated.

References:

Cargill,D.G., Lamb,J, Young,M.J. and Rugg,R.S., 1976; Island Copper;C.I.M. Spec.Vol.15,206-218

Panteleyev,A., in McMillan,W.J., 1991; Ore Deposits, Tectonics and Metallogeny in Canada Cordillera; MEMPR paper 1991-4

Dilles,J.H.and Einaudi,M.T.,1992; Wall-rock Alteration and Hydrothermal Flow Paths about Ann-Mason Poprhyry Copper Deposit, Nevada. A 6km vertical reconstruction;Eco.Geo.87, 1963-2001

Jones,B.K.,1992; Application of Metal Zoning to Gold Exploration in Porphyry Copper Systems; J.Geochem.Explor. 43, 127-155

Langton J.M.,Williams S.A., 1983; Structural, Petrological and Mineralogical Controls for the Dos Pobres Orebody. Advances in Geology of Porphyry Copper Deposits. University of Arizona, p. 335-355.

STATEMENT OF COSTS -HEBER/TRIO PROPERTY

		Cost/Unit	Units	Amount
Consulting Services:	**Geol. Eng.**	**$400/day**	**3**	**$1,200.00**
	Geol. Eng.	**$400/day**	**2**	**$800.00**
	Geol. Eng.	**$400/day**	**37**	**$14,800.00**
	Geotech. Assistant	**$200/day**	**31**	**$6,200.00**
Rentals:	**IC Radio**	**$214.00/mo**	**2**	**$428.00**
Expense General:	**Hotel & Travel**	**$60/day**	**8**	**$480.00**
	Meals	**$30/day**	**30**	**$1,087.00**
	Trans.-Gas			**$2,065.00**
	Exploration Supplies			**$449.00**
	Maps & Publications			**$200.00**
	Computer, Copying, Printing			**$1,504.00**
Analythical Expenses:	**ACME - Moss Mats**	**$15.35**	**2**	**$30.70**
	ACME - Rocks	**$18.15**	**43**	**$780.45**
	ACME - Soils	**$15.35**	**18**	**$276.30**
	Chemex - Rocks (ICP)	**$26.10**	**68**	**$1,774.80**
	Chemex - Rocks (XRF)	**$26.10**	**40**	**$1,044.00**
	XRAL - Rocks (ICP)	**$17.60**	**11**	**$193.60**
			TOTAL:	**$33,312.00**

STATEMENT OF QUALIFICATIONS

I, Piotr Lutynski of 6836 Ontario Street, Vancouver, British Columbia, V5X 3B3
hereby certify that:

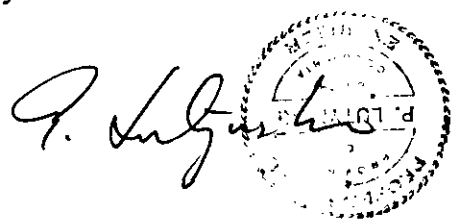
I am a graduate (1980) of the University of Mining and Metallurgy of Krakow, Poland, with M.Sc. degree in Geology.

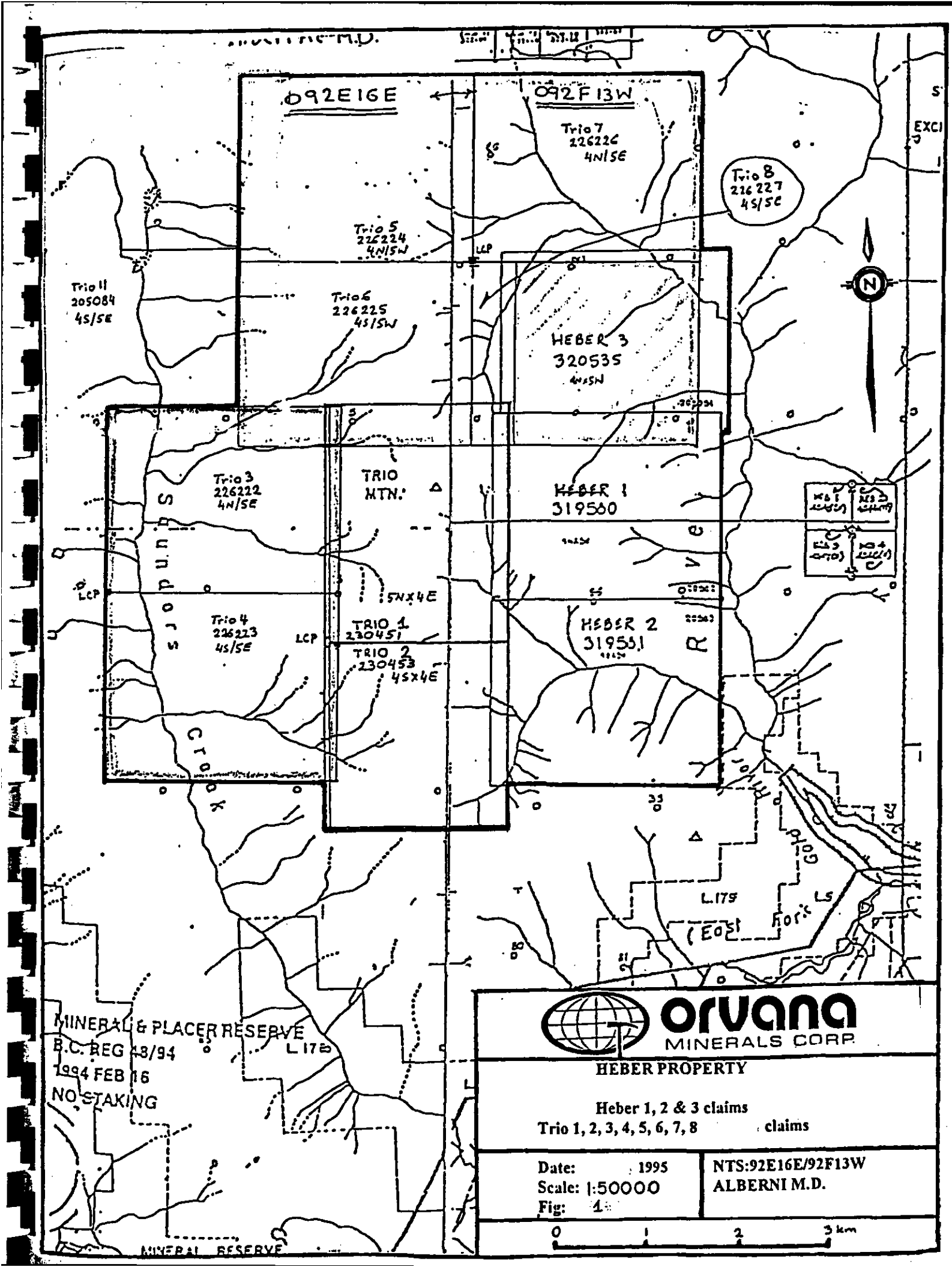
I am a Professional Engineer in the Province of British Columbia.

I am a member of Geological Association of Canada

I have been practicing mineral exploration for 16 years.

Piotr Lutynski




092E16E
092F13W
Trio 7
226226
4N/SE
Trio 8
226227
4S/SE
Trio 5
226224
4N/SW
Trio 11
205084
4S/SE
Trio 6
226225
4S/SW
HEBER 3
320535
4N/SW
Trio 3
226222
4N/SE
TRIO
MTN.
HEBER 1
319580
Trio 4
226223
4S/SE
5NX4E
TRIO 1
230451
TRIO 2
230453
4SX4E
HEBER 2
319581
L175
MINERAL & PLACER RESERVE
B.C. REG 48/94
1994 FEB 16
NO STAKING
MINERAL RESERVE
orvana
MINERALS CORP
HEBER PROPERTY
Heber 1, 2 & 3 claims
Trio 1, 2, 3, 4, 5, 6, 7, 8 claims
Date: 1995
Scale: 1:50000
Fig: 1
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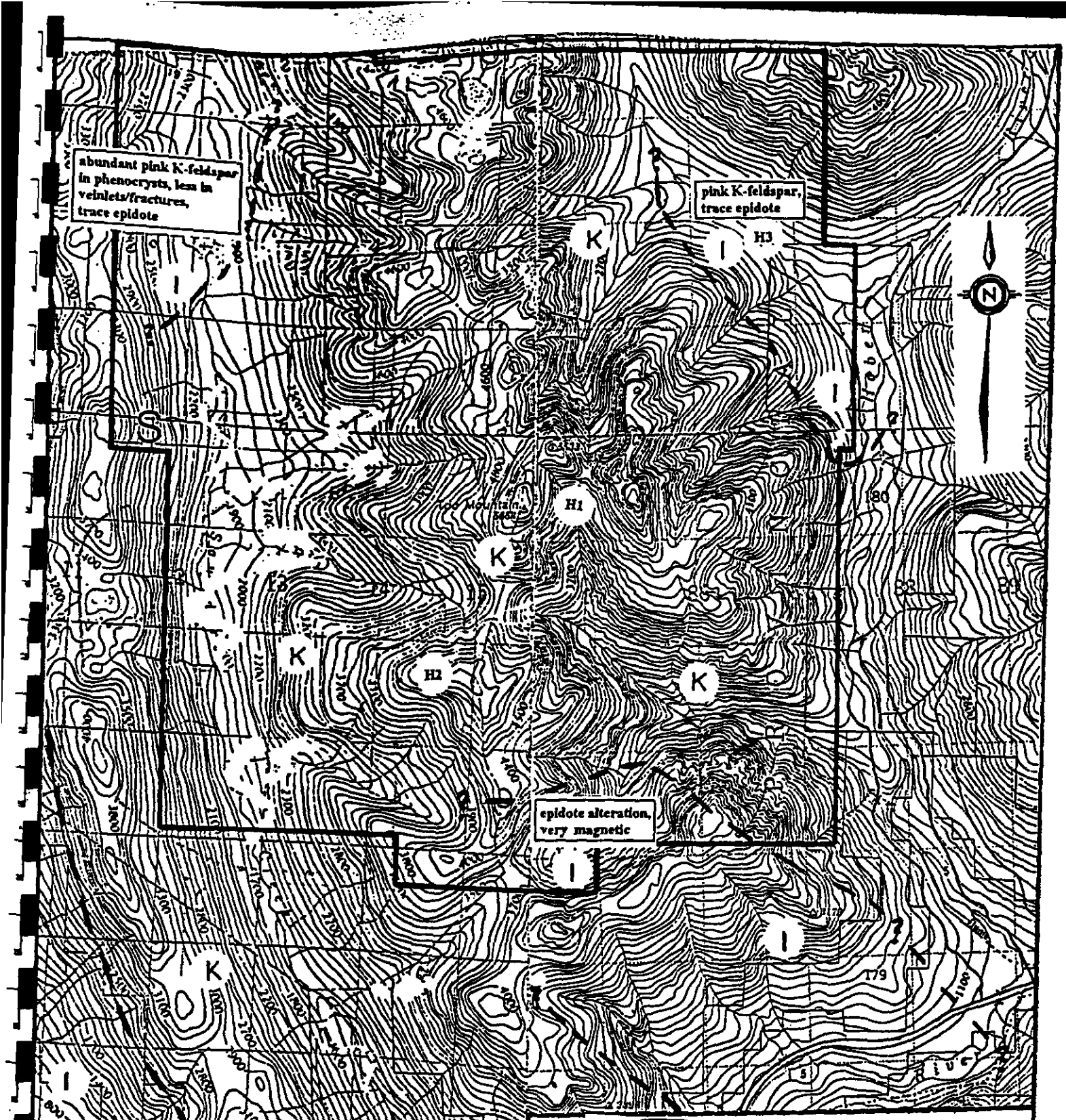
ALBERNI M.D.
0 1 2 3 km



LEGEND

LOWER JURASSIC - ISLAND INTRUSIONS I
Gornanite, Granodiorite & Quartz Diorite

TRIASSIC - KARMUTSEN FORMATION K
Pillowed & Lapilli Basalts
Tuff Breccia

Petrographic Rock Samples: H1, H2, H3

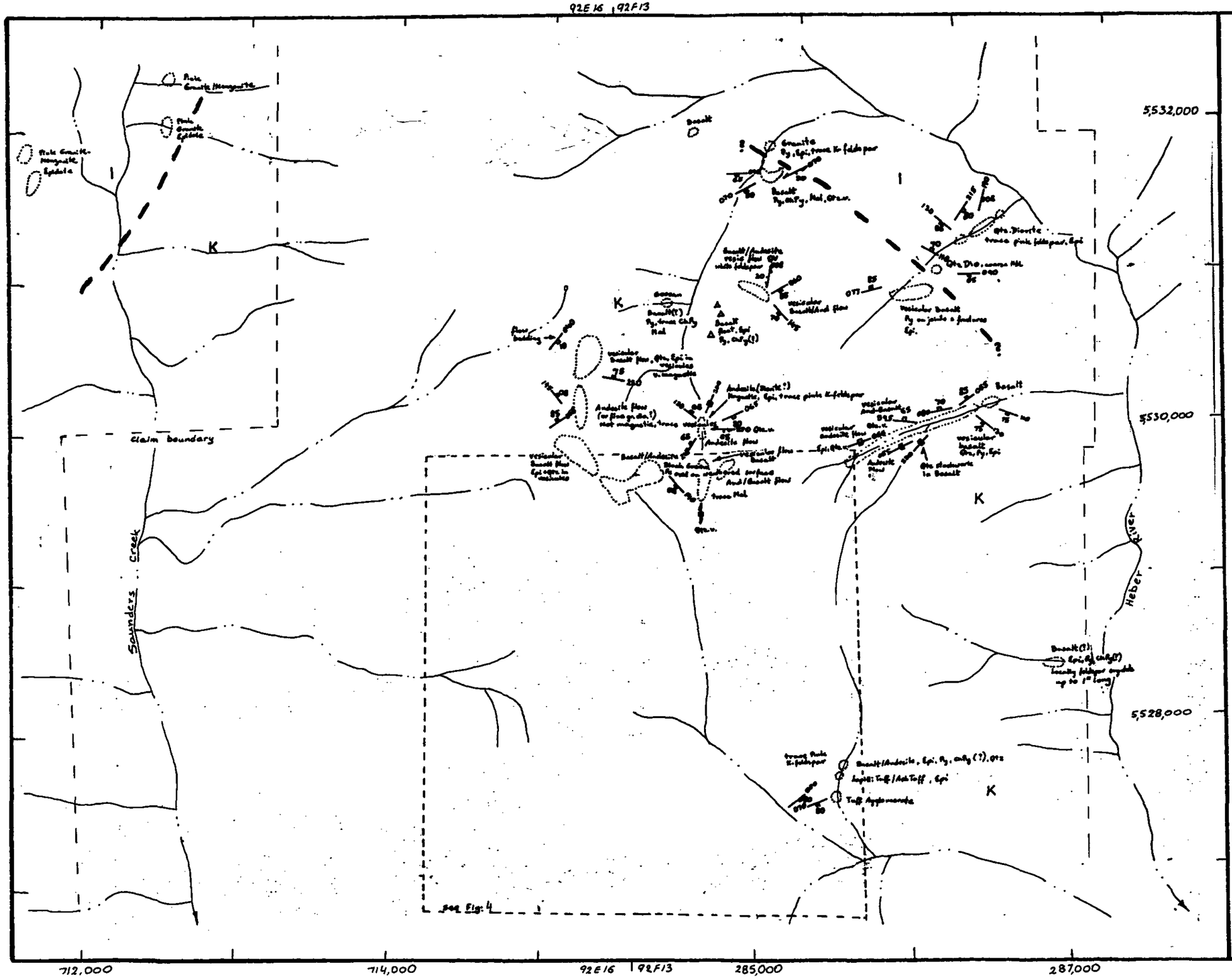
0 1 2 3km

orvana MINERALS CORP.

HEBER PROPERTY
PRELIMINARY GEOLOGY

DATE: 1995	NTS:92E16E/92F13W
SCALE: 1:50000	ALBERNI M.D.
FIG: 2	

92E 16 | 92F 13



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LEGEND

LOWER JURASSIC - ISLAND INTRUSIONS — I
Granite, Granodiorite & Quartz Diorite

TRIASSIC - KARMUTSEN FORMATION — K
Pillowed & Lapilli Basalts
Tuff Breccia

SYMBOLS

joint	Qtz - quartz
shear	QV - quartz vein
fault	Bx - breccia
outcrop	Epi - epidote
geological contact	ChPy - chalcopyrite
float	Ma - malachite
creek/gully	Mo - molybdenite

0 — 1km

orvana MINERALS CORP.

HEBER PROPERTY
GEOLOGY

DATE: 1995	NTS:92E16E/92F13W
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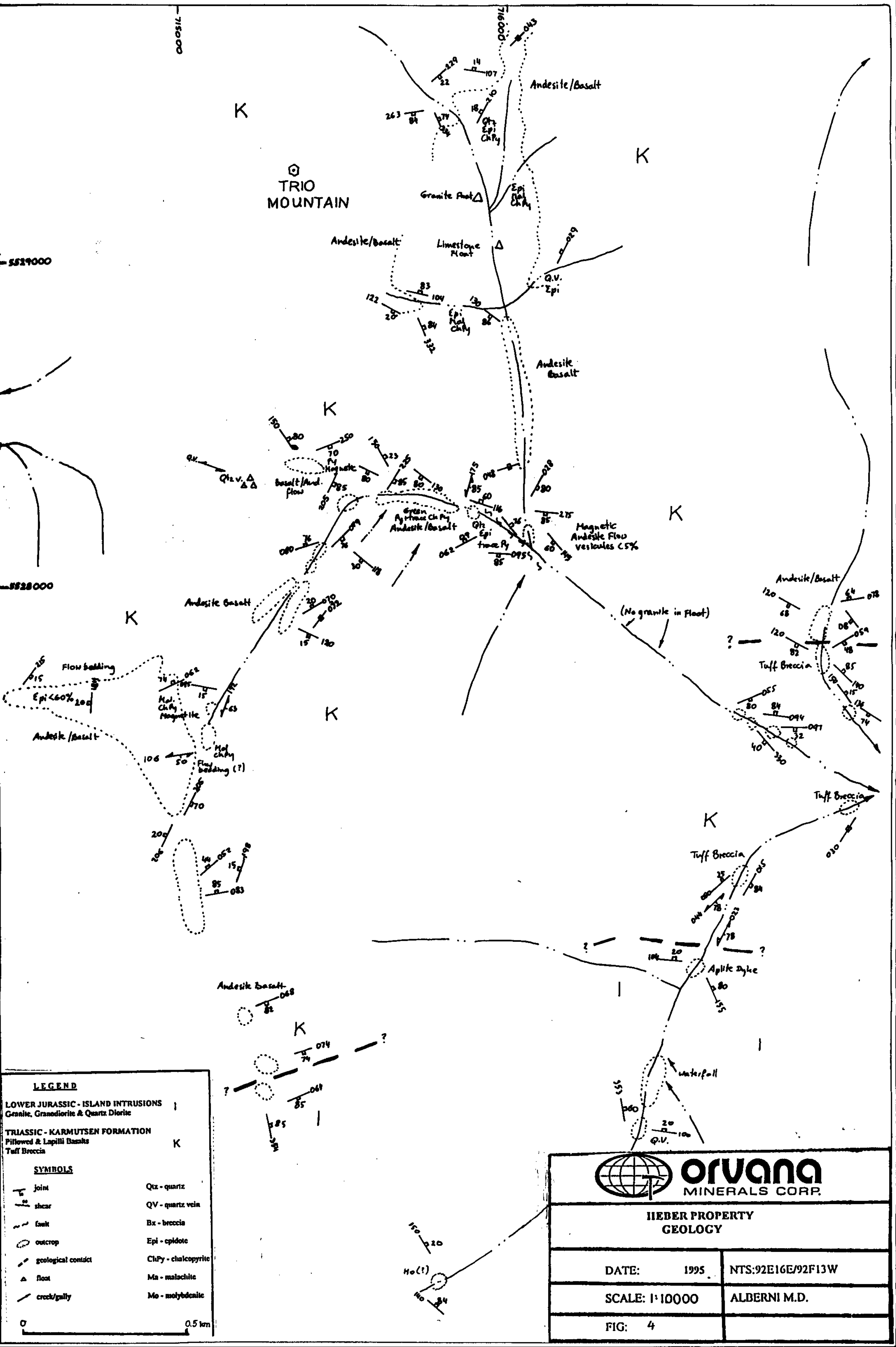
FIG: 3	



5529000
5528000
715000
716000
TRIO MOUNTAIN
K
Andesite/Basalt
Granite Float
Limestone Float
Qtz Epi ChPy
Epi Mal ChPy
Q.V. Epi
Andesite Basalt
Q.V.
Qtz v.
Basalt/And. flow
Py Magnetic
Green Py+trace ChPy Andesite/Basalt
Qtz Epi trace Py
Magnetic Andesite Flow vesicules <5%
(No granite in Float)
Tuff Breccia
Flow bedding
Epi<60%
Mal. ChPy Magnetite
Mal ChPy
Flow bedding (?)
Aplite Dyke
waterfall
Mo(?)
LEGEND
LOWER JURASSIC - ISLAND INTRUSIONS
Granite, Granodiorite & Quartz Diorite
TRIASSIC - KARMUTSEN FORMATION
Pillowed & Lapilli Basalts
Tuff Breccia
SYMBOLS
joint
shear
fault
outcrop
geological contact
float
creek/gully
Qtz - quartz
QV - quartz vein
Bx - breccia
Epi - epidote
ChPy - chalcopyrite
Ma - malachite
Mo - molybdenite
0
0.5 km
ORVANA MINERALS CORP.
HEBER PROPERTY
GEOLOGY
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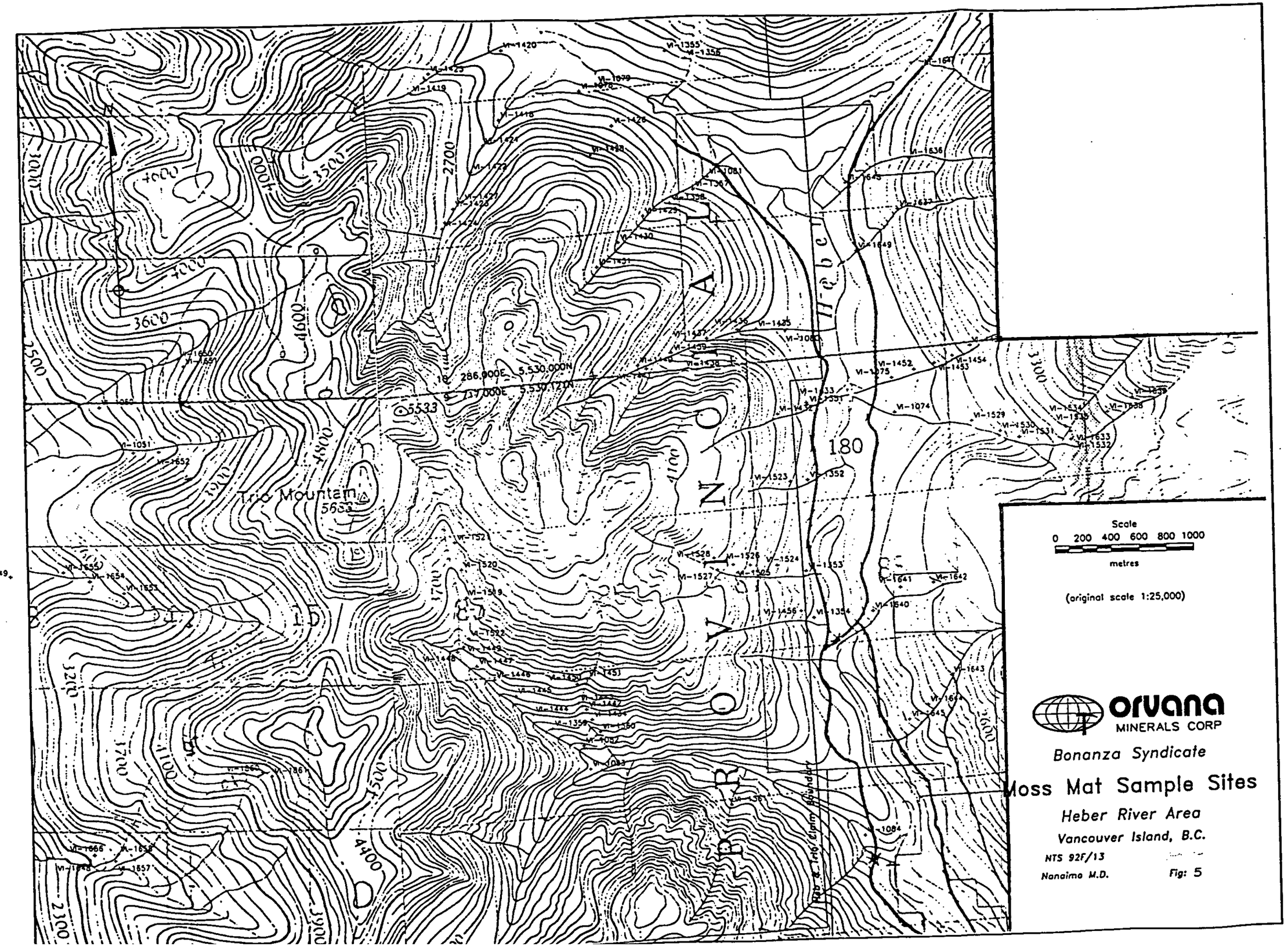
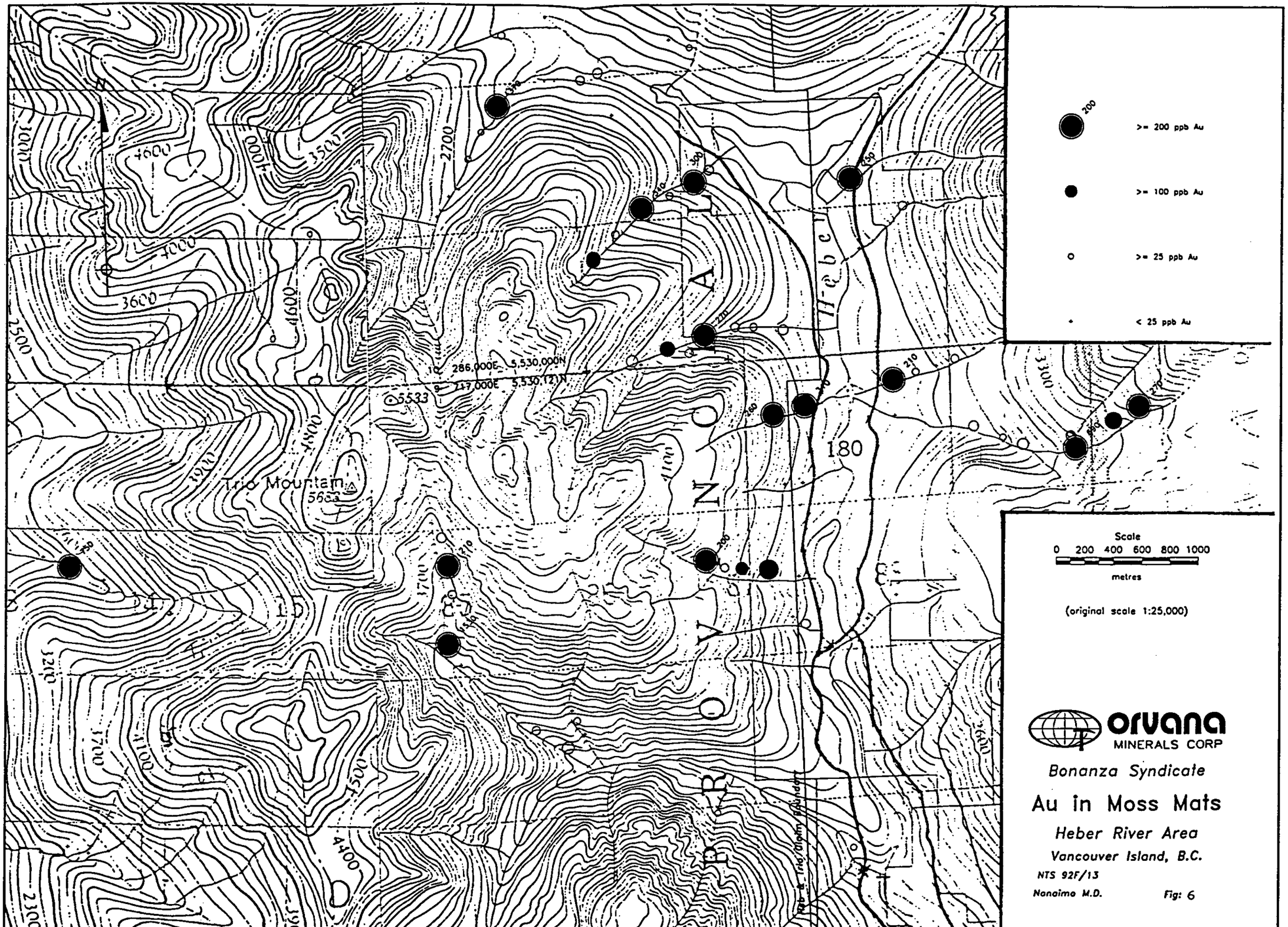
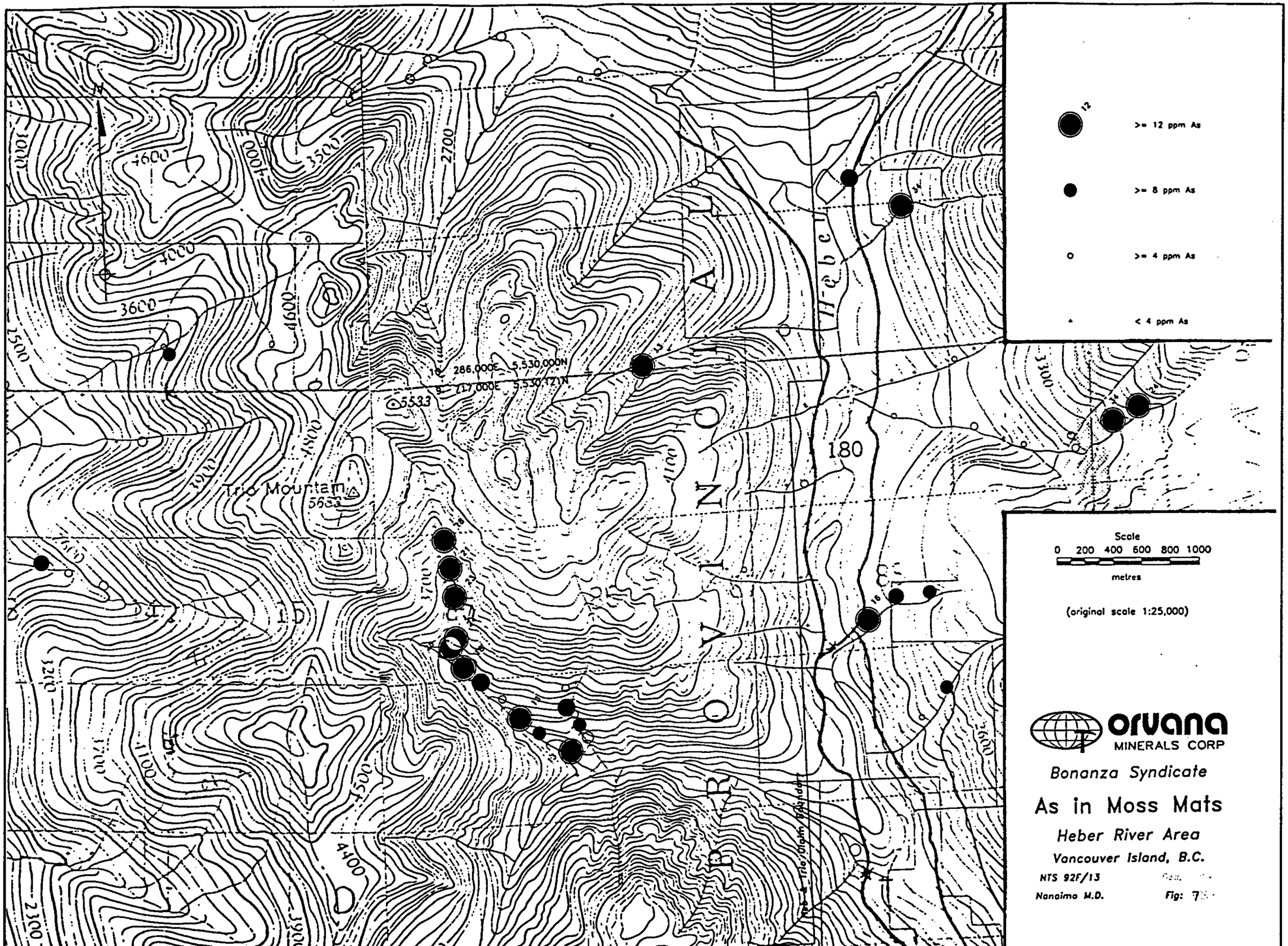
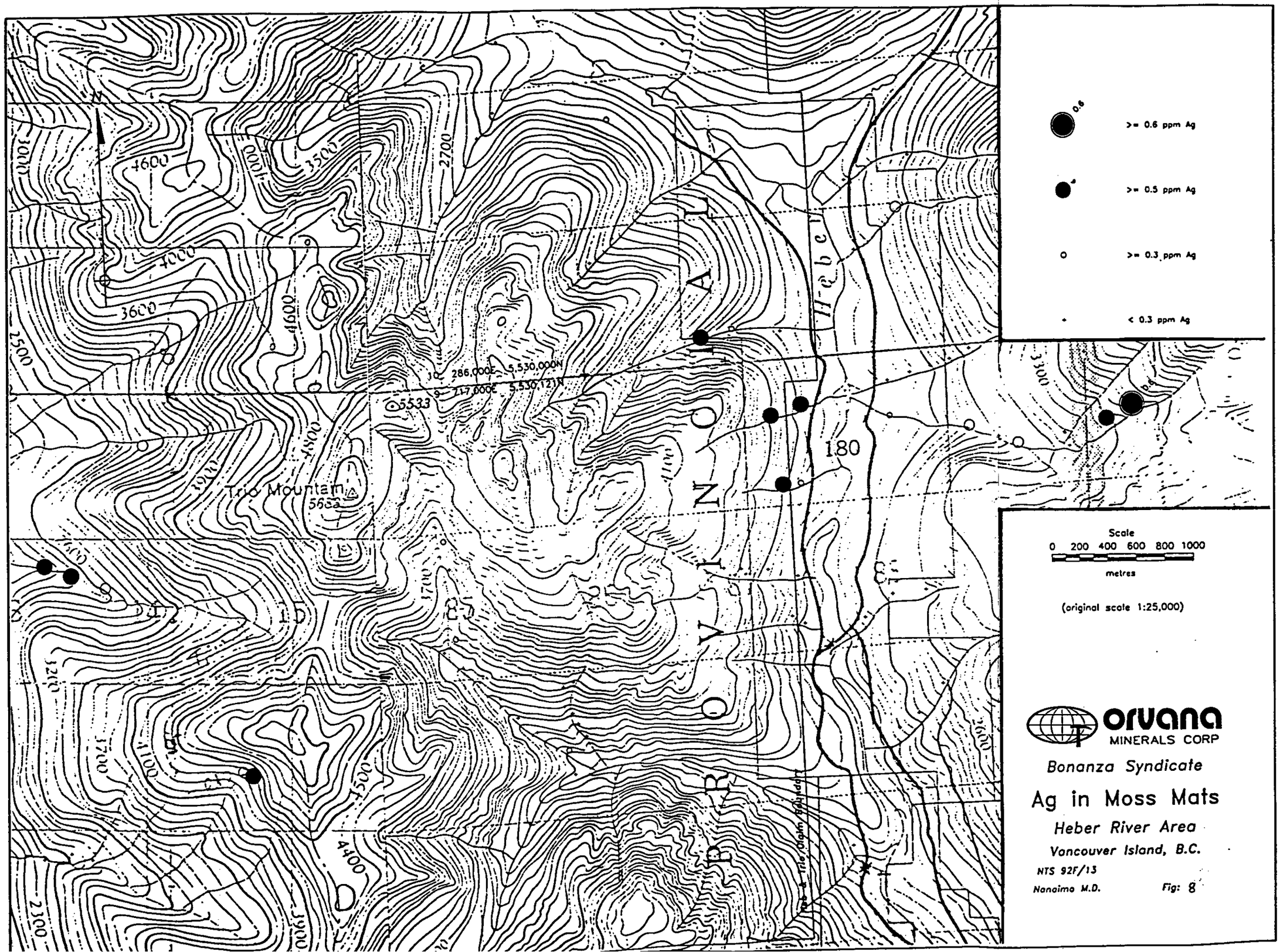
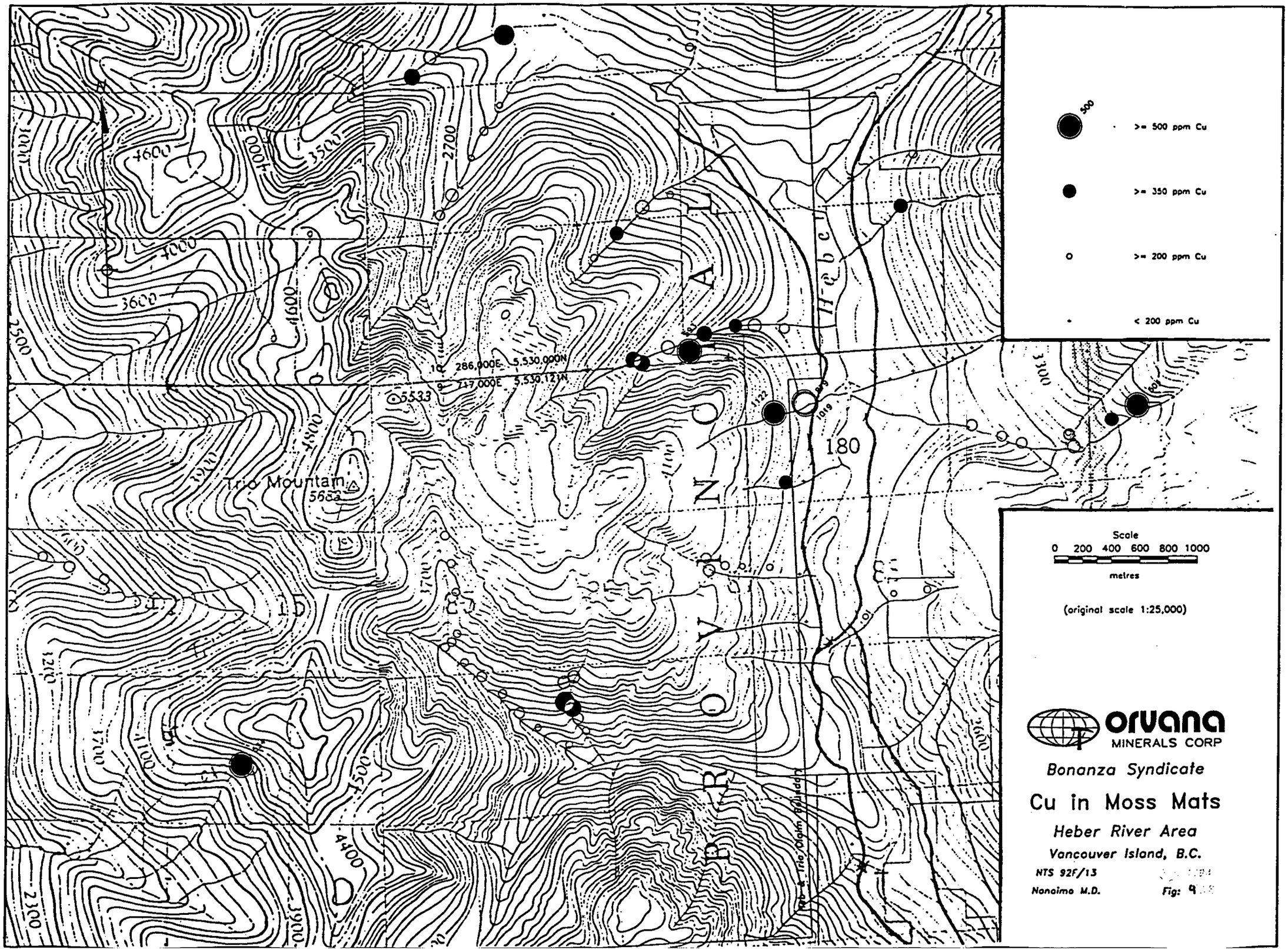
ALBERNI M.D.
FIG: 4

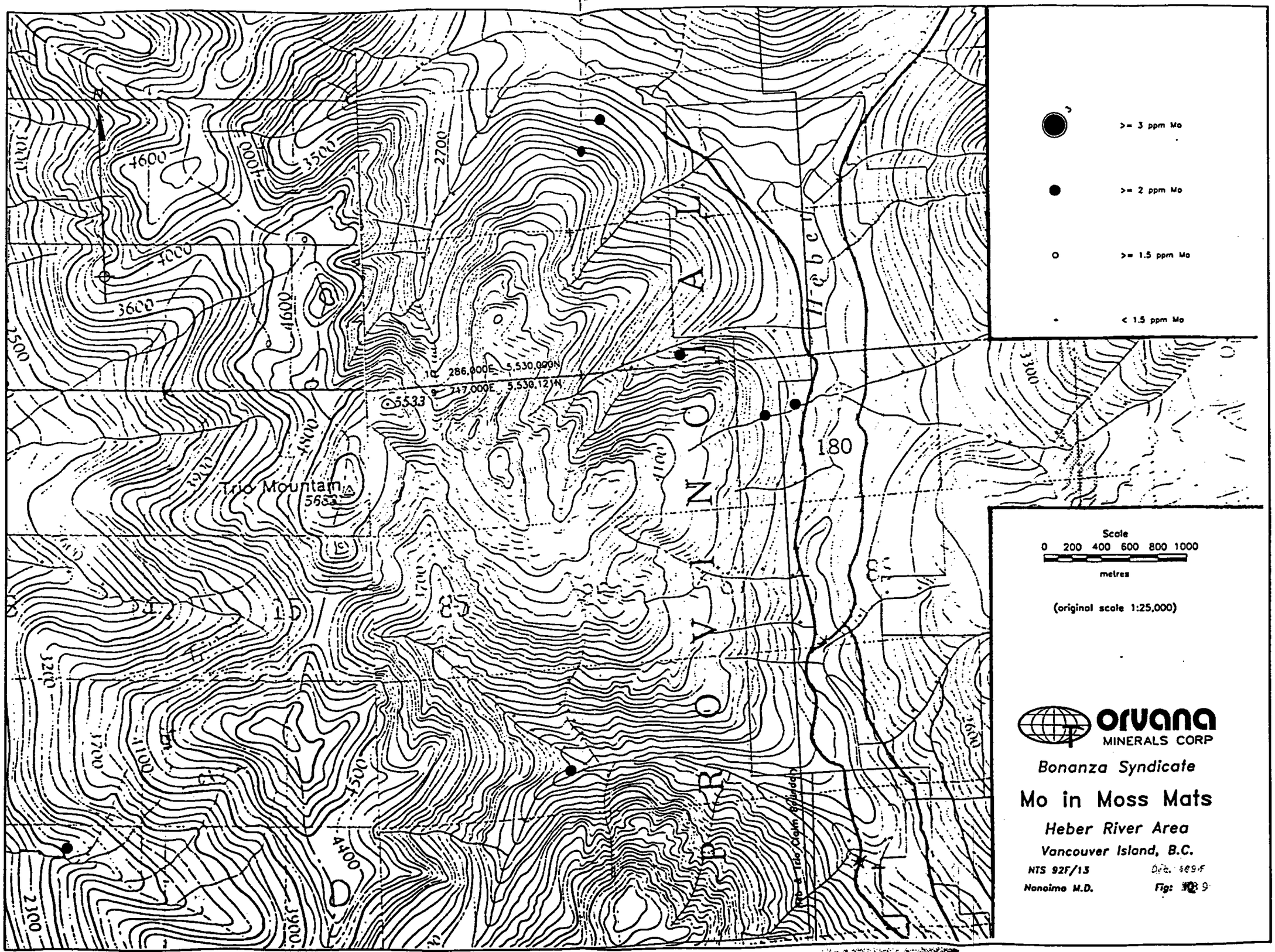

Trio Mountain
5533
286,000E 5,530,000N
287,000E 5,530,121N
Heber River
Trio Creek Drainage Boundary
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Moss Mat Sample Sites
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 5

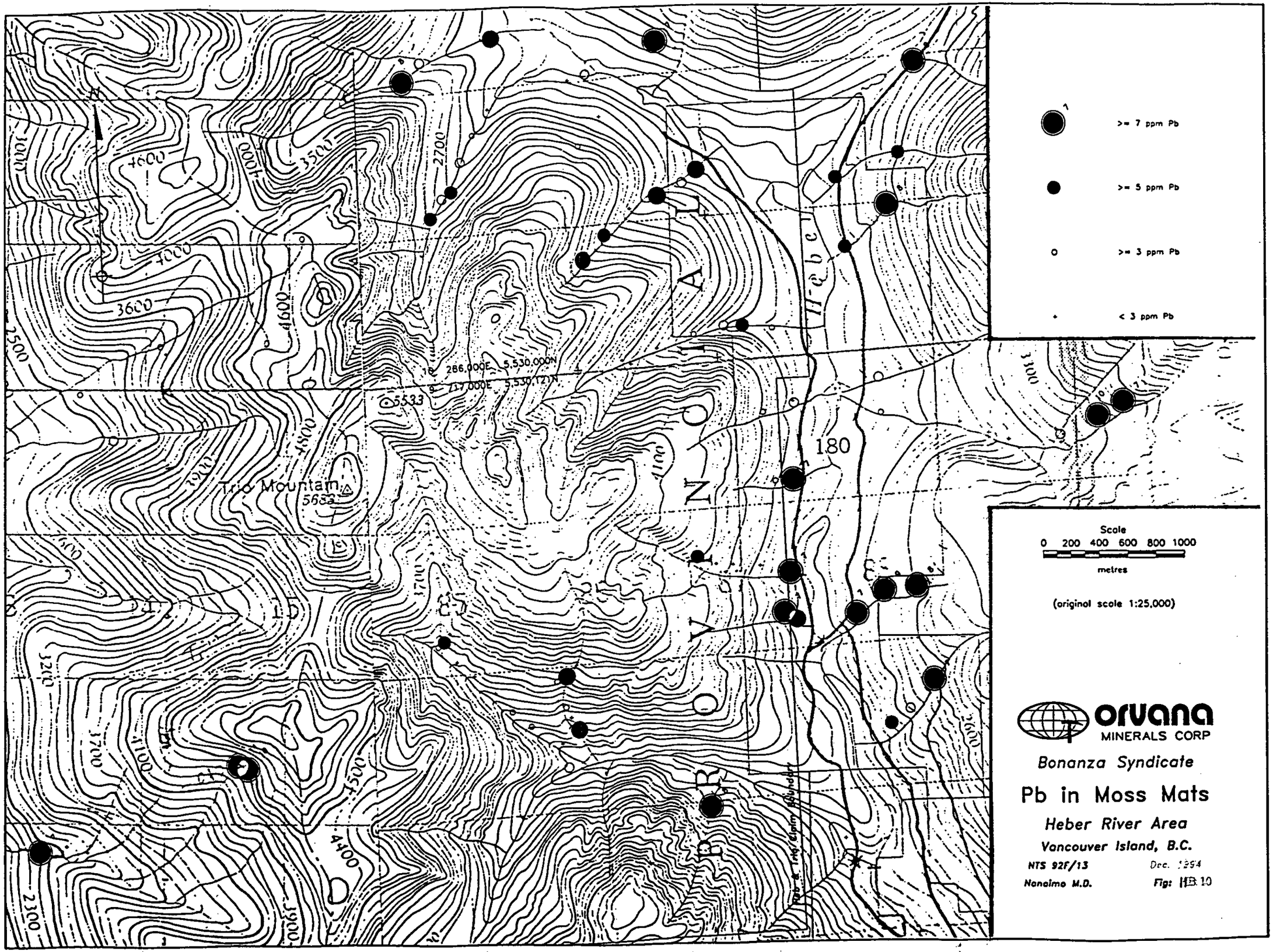

>= 200 ppb Au
>= 100 ppb Au
>= 25 ppb Au
< 25 ppb Au
286,000E 5,530,000N
217,000E 5,530,121N
Trio Mountain
5633
180
Heber
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana MINERALS CORP
Bonanza Syndicate
Au in Moss Mats
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 6

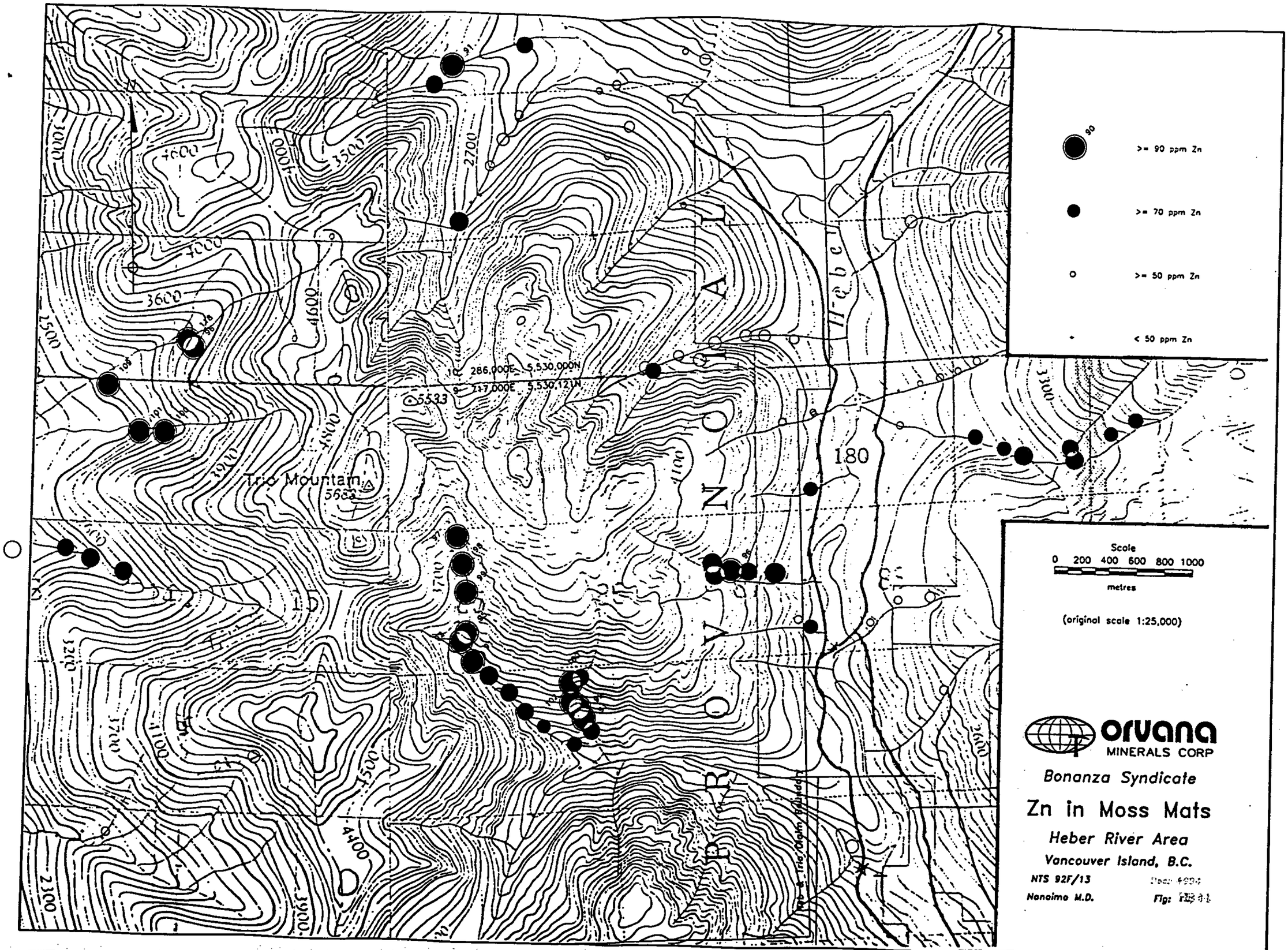

>= 12 ppm As
>= 8 ppm As
>= 4 ppm As
< 4 ppm As
286,000E 5,530,000N
287,000E 5,530,121N
Trio Mountain
5533
Heber
180
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana MINERALS CORP
Bonanza Syndicate
As in Moss Mats
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 7

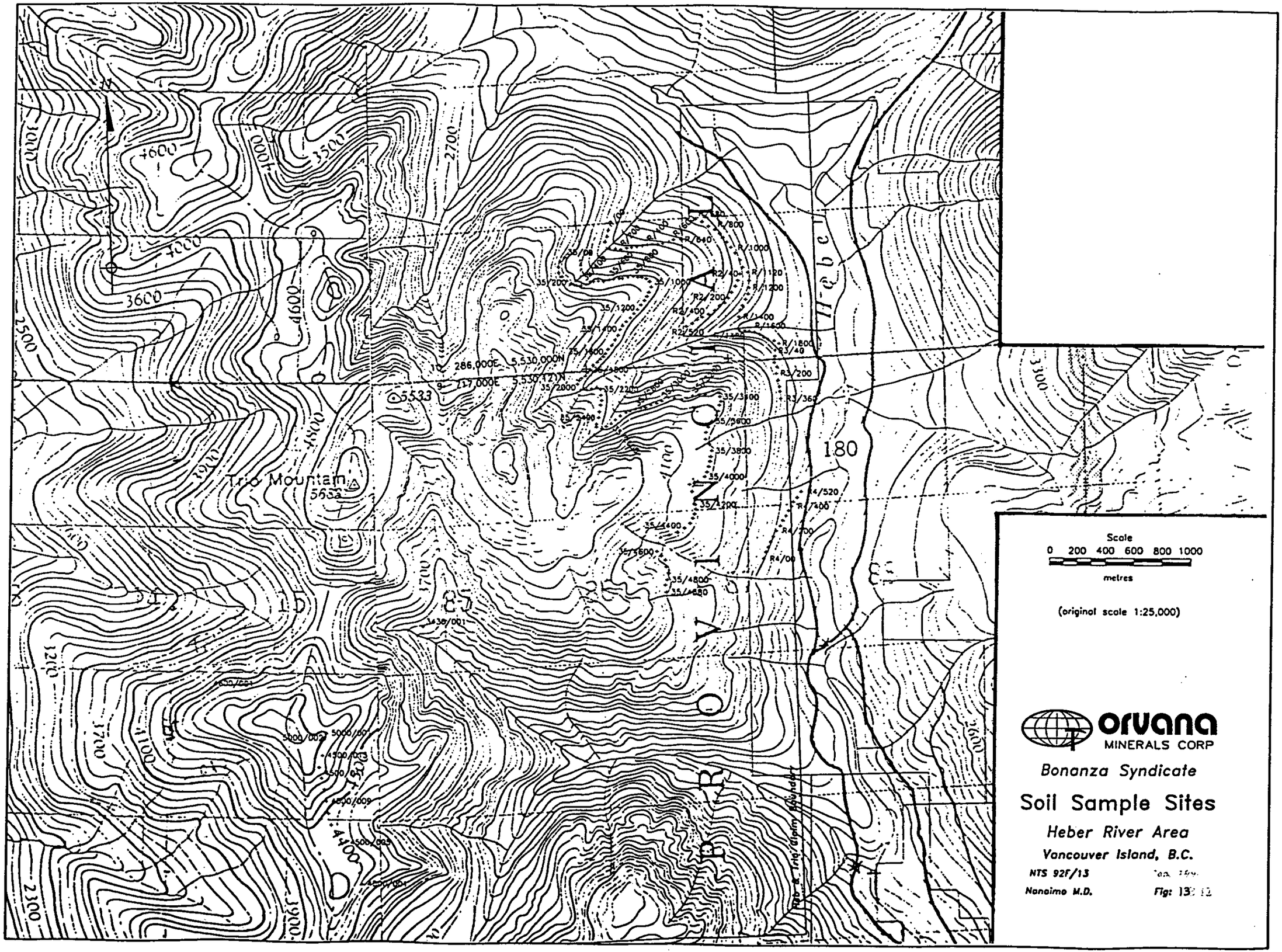

>= 0.6 ppm Ag
>= 0.5 ppm Ag
>= 0.3 ppm Ag
< 0.3 ppm Ag
Heber
Trio Mountain
5533
5533
286,000E 5,530,000N
717,000E 5,530,121N
180
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Ag in Moss Mats
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 8

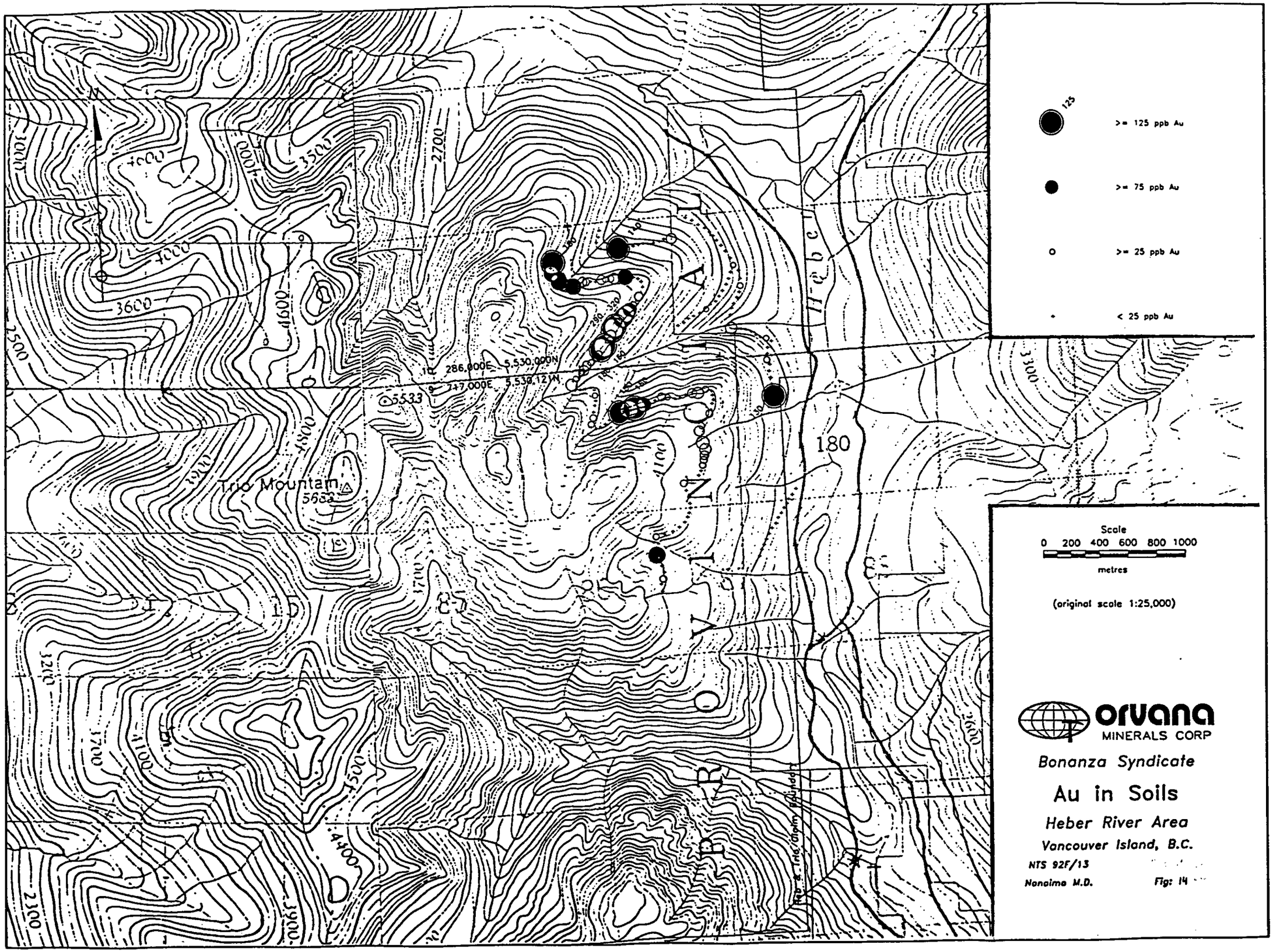

>= 500 ppm Cu
>= 350 ppm Cu
>= 200 ppm Cu
< 200 ppm Cu
286,000E 5,530,000N
717,000E 5,530,121N
Trio Mountain
5633
Heber
180
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Cu in Moss Mats
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 9

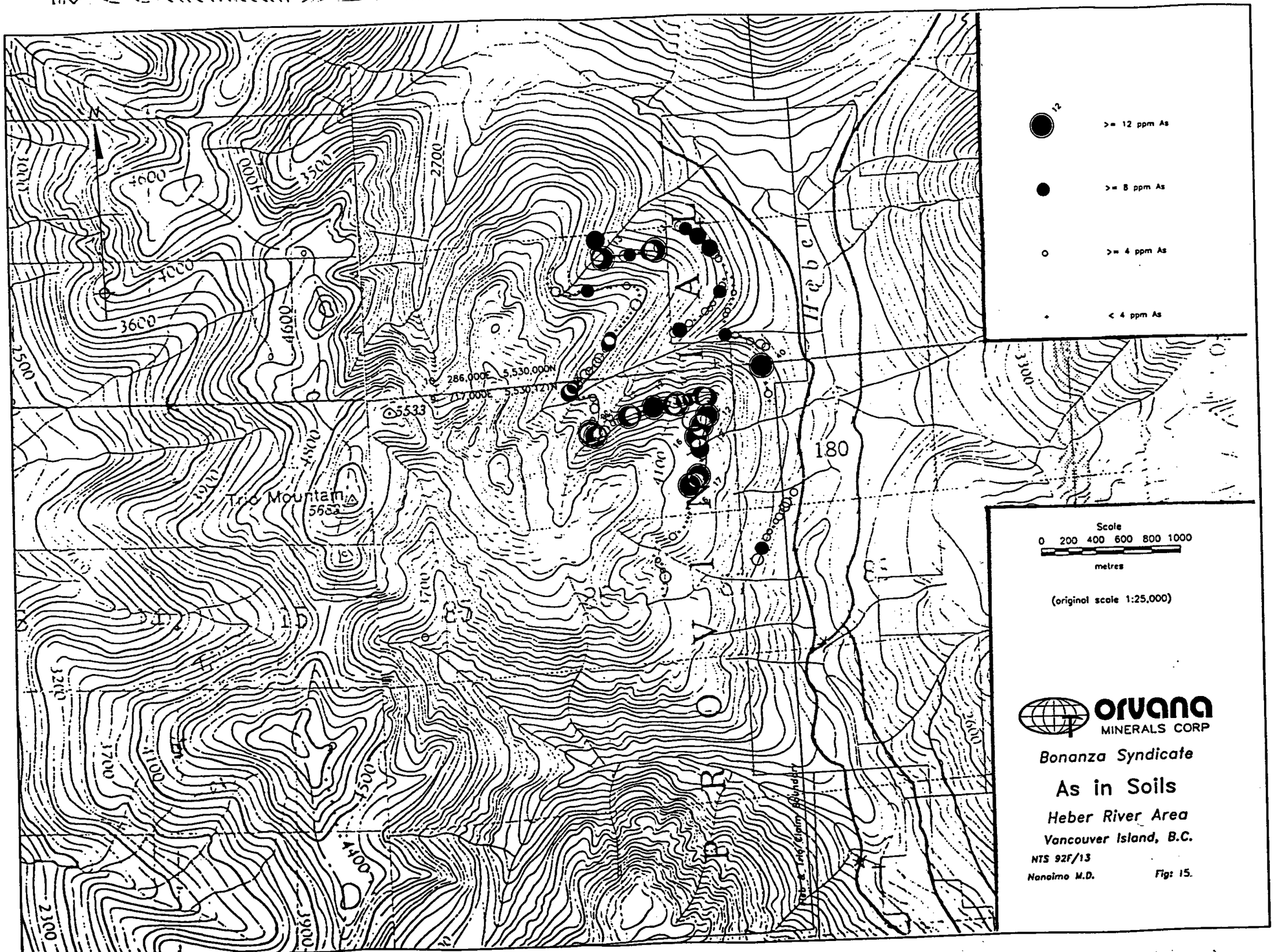

>= 3 ppm Mo
>= 2 ppm Mo
>= 1.5 ppm Mo
< 1.5 ppm Mo
Trio Mountain
5683
5533
10 286,000E 5,530,000N
747,000E 5,530,121N
Heber
180
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Mo in Moss Mats
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 3.9

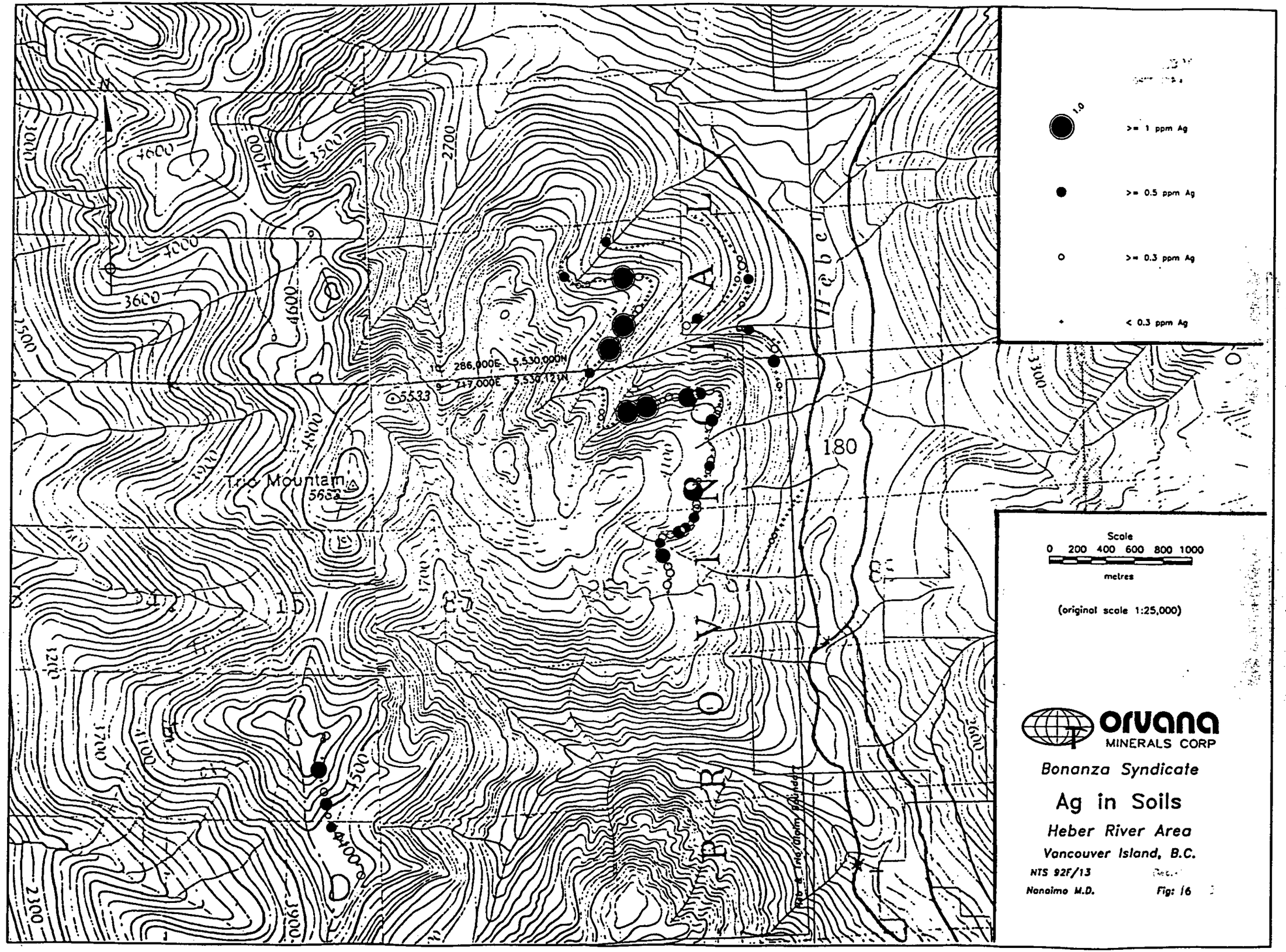

>= 7 ppm Pb
>= 5 ppm Pb
>= 3 ppm Pb
< 3 ppm Pb
Heber
286,000E 5,530,000N
287,000E 5,530,121N
5533
Trio Mountain
5682
180
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Pb in Moss Mats
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Dec. 1994
Nanaimo M.D.
Fig: HB 10

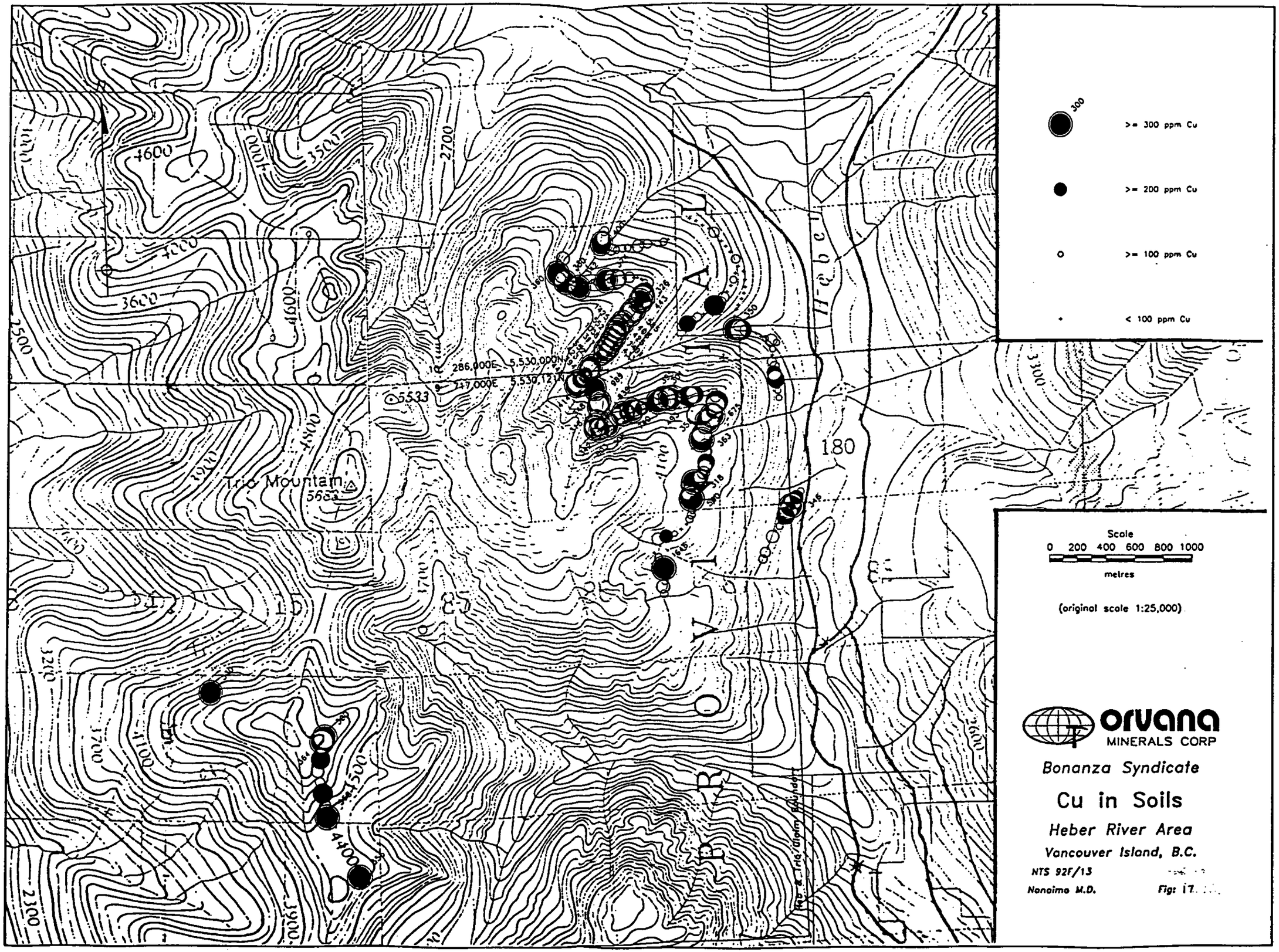

>= 90 ppm Zn
>= 70 ppm Zn
>= 50 ppm Zn
< 50 ppm Zn
Heber
Trio Mountain
5533
5652
10 286,000E 5,530,000N
9 287,000E 5,530,121N
180
Trio & Trio Ogden Railroad
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana MINERALS CORP
Bonanza Syndicate
Zn in Moss Mats
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.

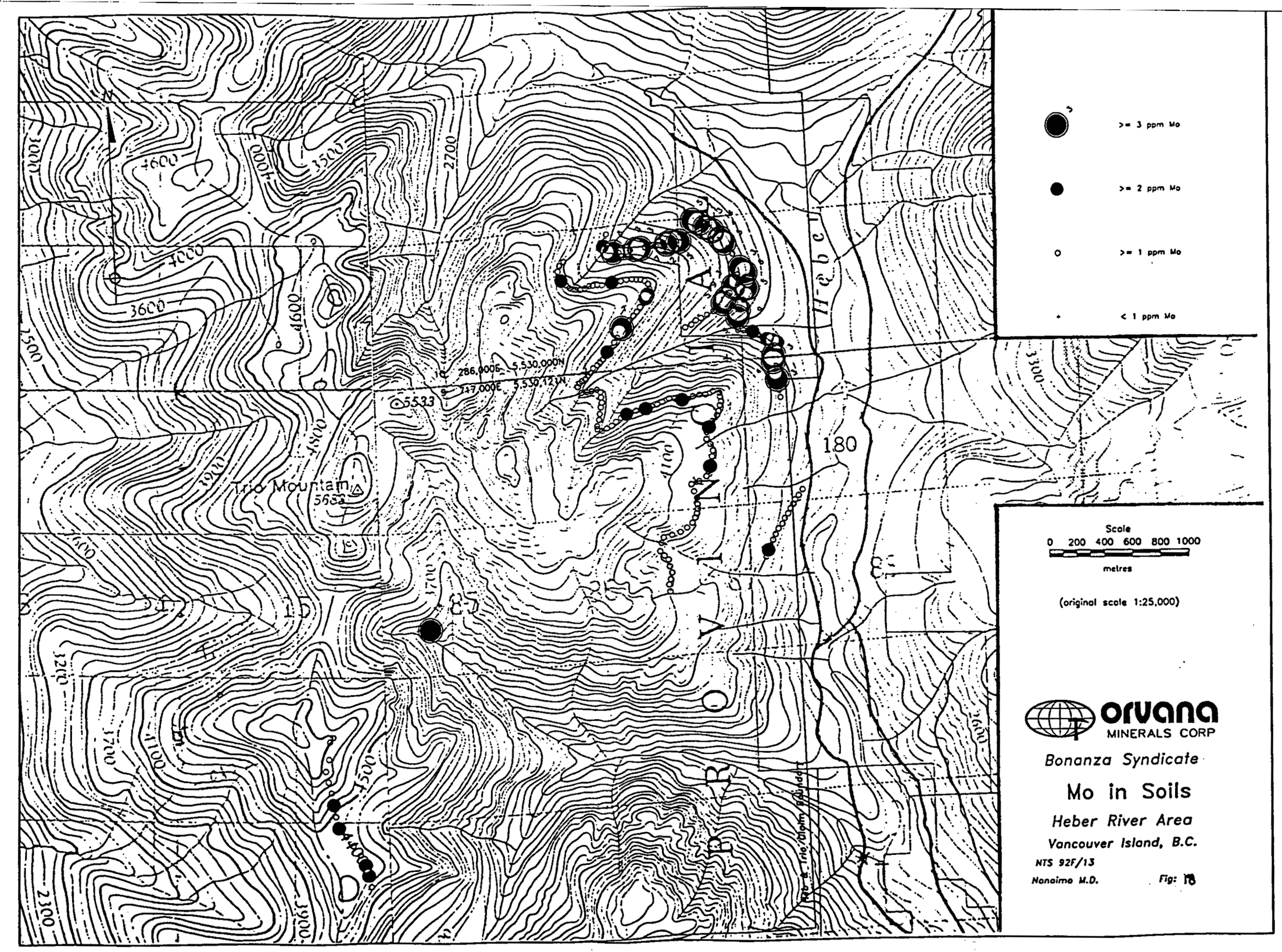

Trio Mountain
5633
Heber
180
Trio & Trio Alpine Boundary
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Soil Sample Sites
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 13

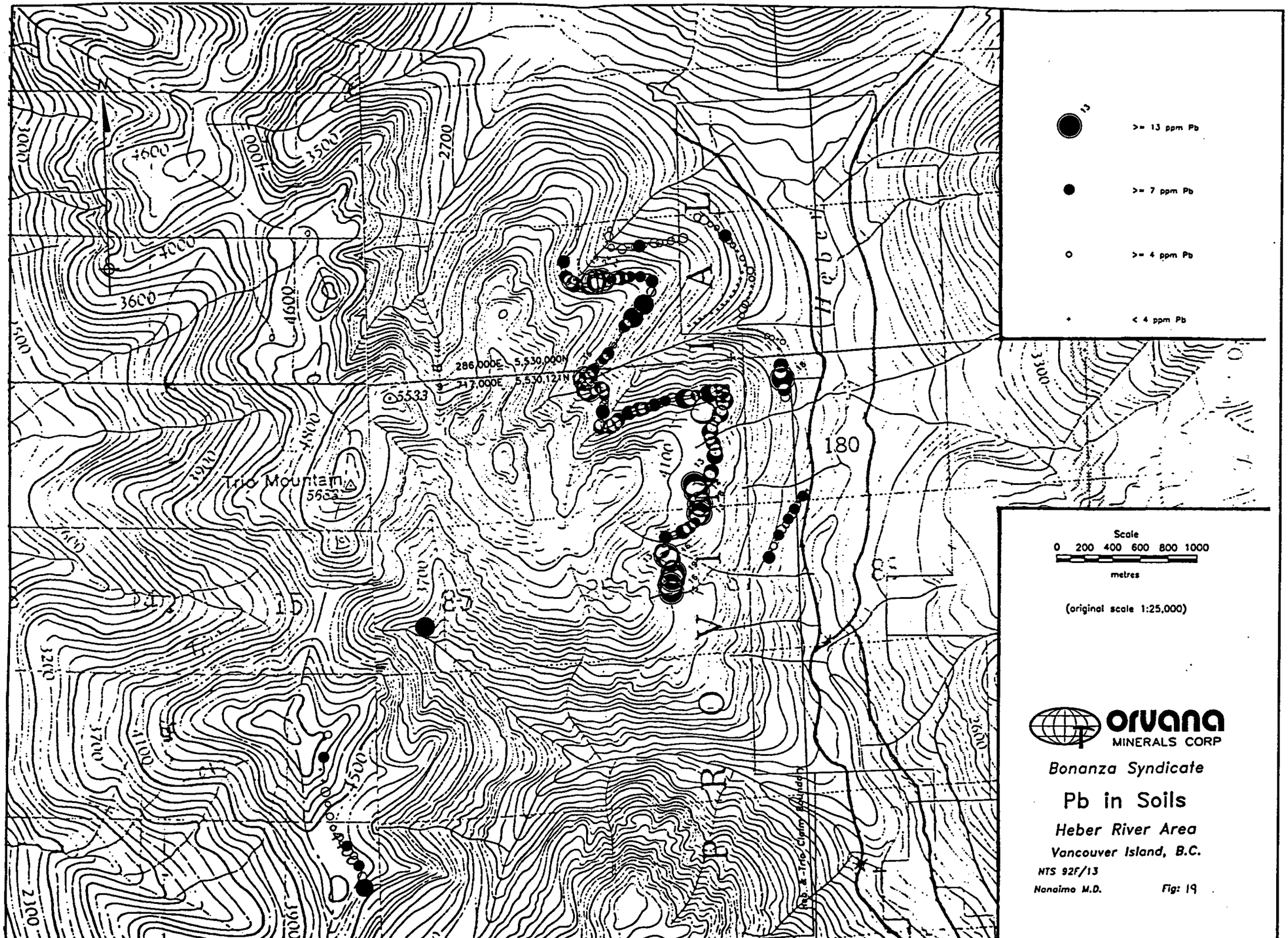

>= 125 ppb Au
>= 75 ppb Au
>= 25 ppb Au
< 25 ppb Au
286,000E 5,530,000N
7+7,000E 5,530,121N
5533
Trio Mountain
5633
180
Heber River
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana MINERALS CORP
Bonanza Syndicate
Au in Soils
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 14


>= 12 ppm As
>= 8 ppm As
>= 4 ppm As
< 4 ppm As
16 286,000E 5,530,000N
8 287,000E 5,530,121N
Trio Mountain
5552
Heber
180
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
As in Soils
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 15.


N
>= 1 ppm Ag
>= 0.5 ppm Ag
>= 0.3 ppm Ag
< 0.3 ppm Ag
Heber
Trio Mountain
5652
5533
286,000E 5,530,000N
287,000E 5,530,121N
180
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Ag in Soils
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 16


>= 300 ppm Cu
>= 200 ppm Cu
>= 100 ppm Cu
< 100 ppm Cu
286,000E 5,530,000N
247,000E 5,530,121N
Trio Mountain
5653
5533
180
Heber
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Cu in Soils
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 17


>= 3 ppm Mo
>= 2 ppm Mo
>= 1 ppm Mo
< 1 ppm Mo
286,000E 5,530,000N
287,000E 5,530,12 N
5533
Trio Mountain
5553
180
Heber
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Mo in Soils
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 18


>= 13 ppm Pb
>= 7 ppm Pb
>= 4 ppm Pb
< 4 ppm Pb
286,000E 5,530,000N
287,000E 5,530,121N
Trio Mountain
5633
180
Prop. & Trio Claim Boundary
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana MINERALS CORP
Bonanza Syndicate
Pb in Soils
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Nanaimo M.D.
Fig: 19

>= 70 ppm Zn

>= 50 ppm Zn

>= 30 ppm Zn

< 30 ppm Zn

Scale
0 200 400 600 800 1000
metres

(original scale 1:25,000)

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Bonanza Syndicate

Zn in Soils

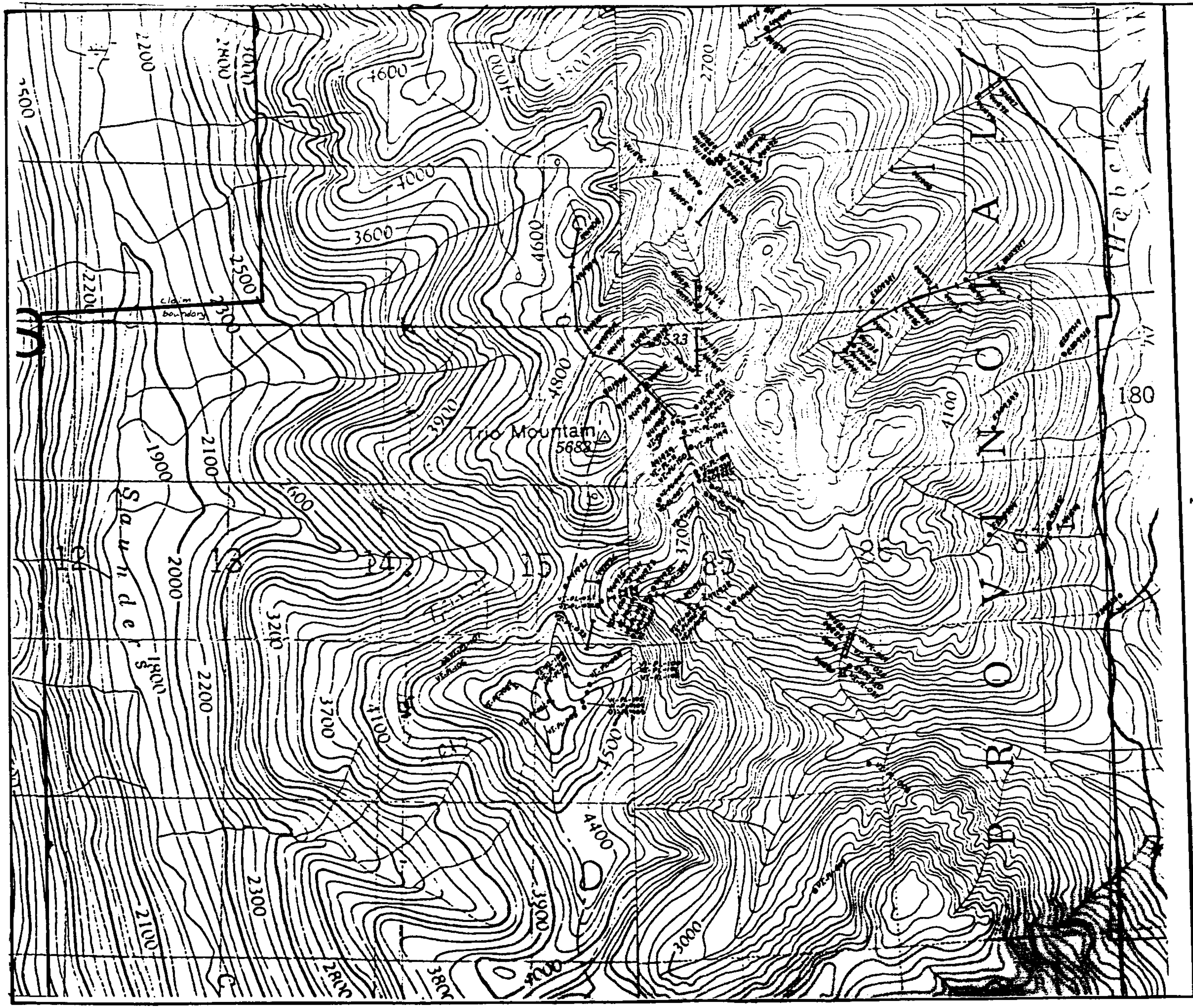
Heber River Area

Vancouver Island, B.C.

NTS 92F/13

Nanaimo M.D.

Fig: 20



• Grab, Chop and Float Rock Samples

Representative Grab Rock Samples

Scale
0 200 400 600 800 1000
metres

(original scale 1:25,000)

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Bonanza Syndicate

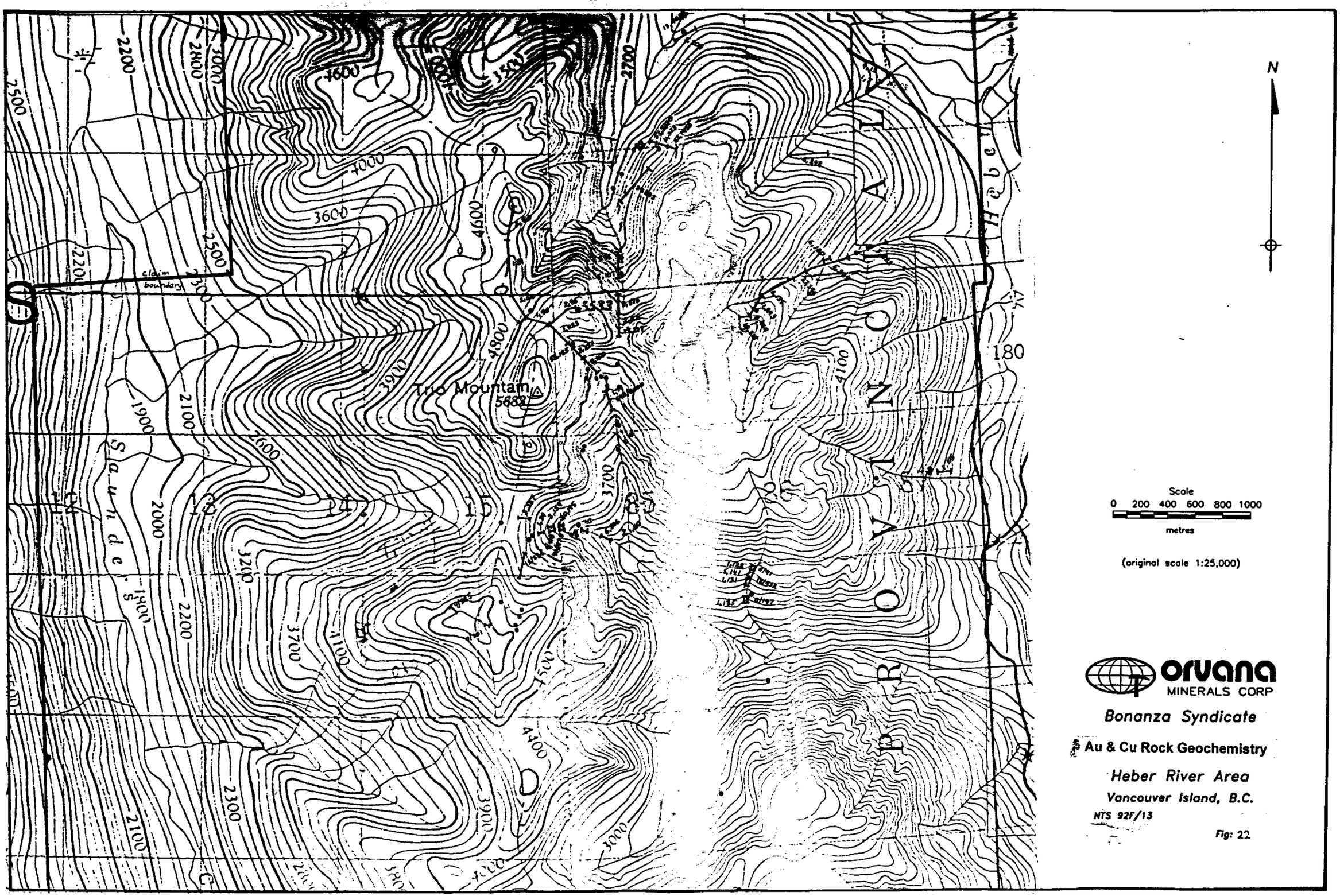
Rock Sample Sites

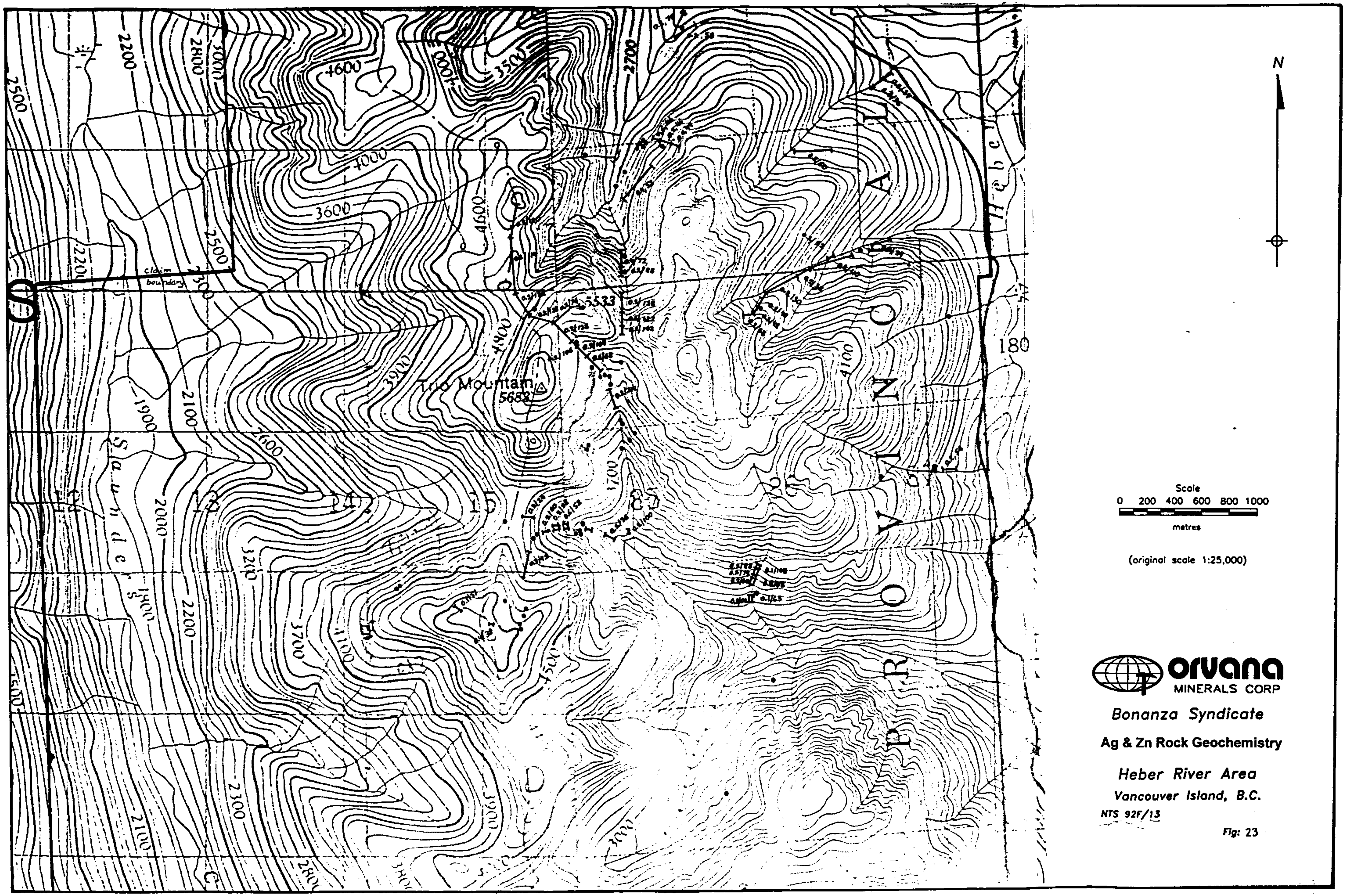
Heber River Area

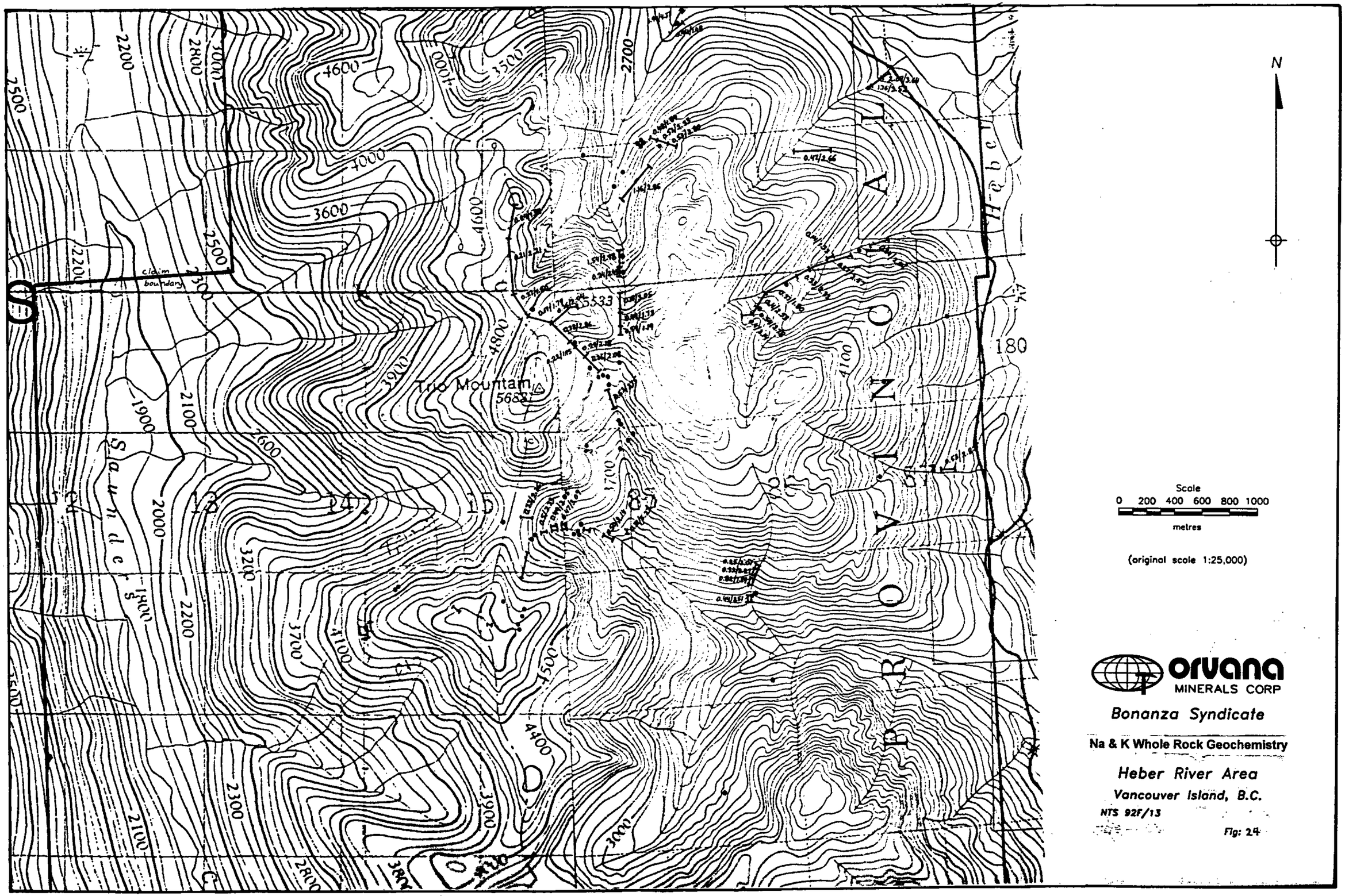
Vancouver Island, B.C.

NTS 92F/13

Fig: 21


Trio Mountain
5682
claim boundary
Heber River
N
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Au & Cu Rock Geochemistry
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Fig: 22


N
Scale
0 200 400 600 800 1000
metres
(original scale 1:25,000)
orvana
MINERALS CORP
Bonanza Syndicate
Ag & Zn Rock Geochemistry
Heber River Area
Vancouver Island, B.C.
NTS 92F/13
Fig: 23
Trio Mountain
5682
claim boundary



orvana MINERALS CORP

Bonanza Syndicate

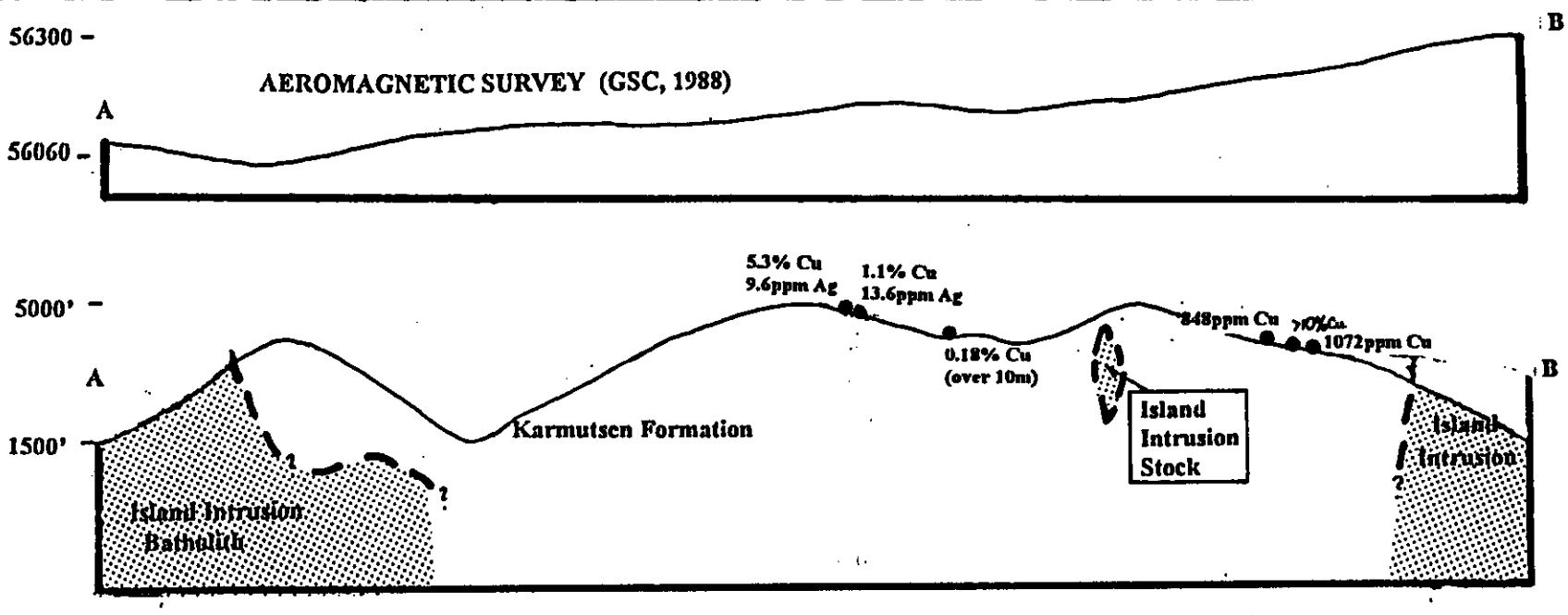
Na & K Whole Rock Geochemistry

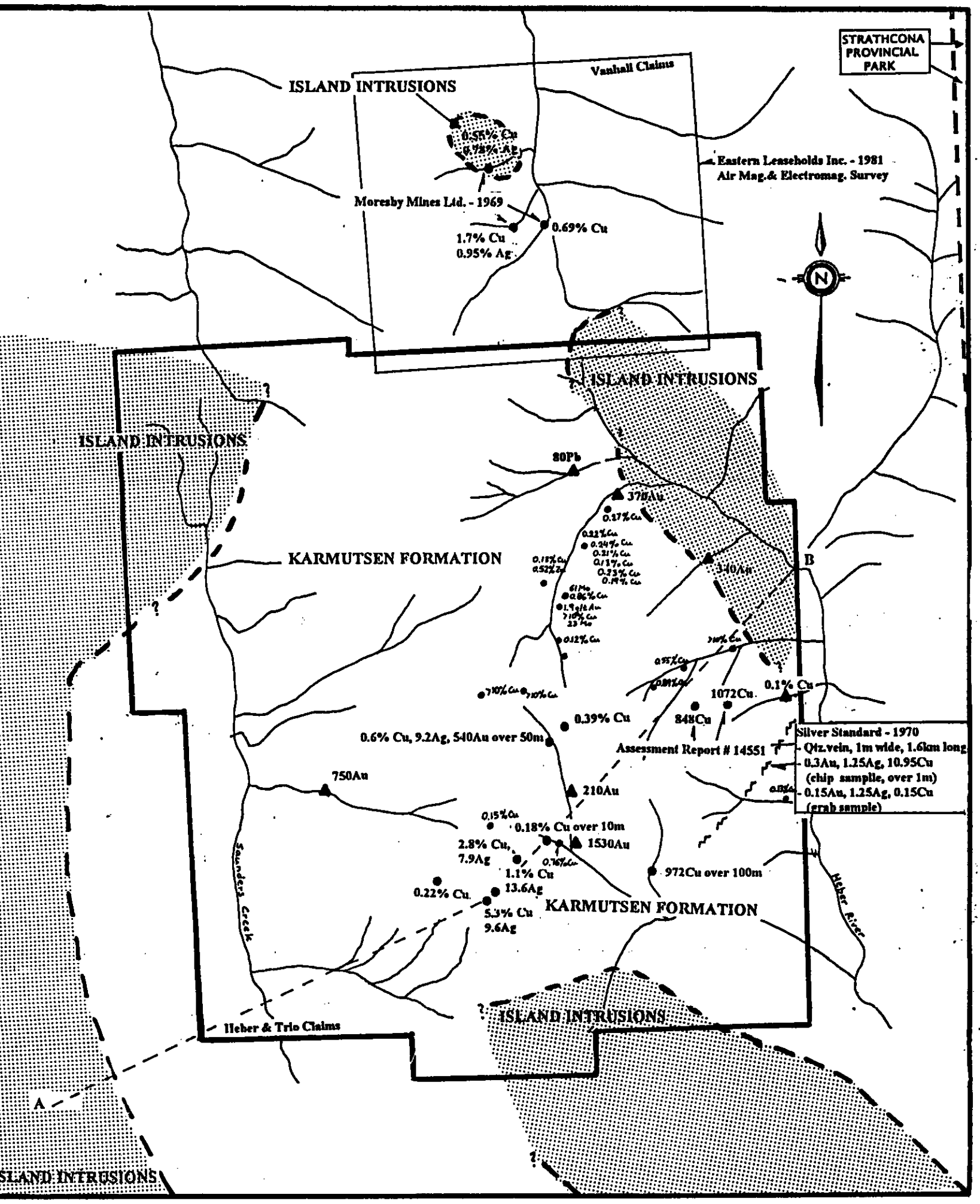
Heber River Area

Vancouver Island, B.C.

NTS 92F/13

Fig: 24





LEGEND

- ● Rock Sample
- ▲ Moss Mat Sample
- ~~ Quartz Vein (Silver Standard, 1970)
- — — Geological Contact
- 56200 Isomagnetic Lines [gamma]
- A---B Section

Pb [ppm]
Cu [ppm]
Ag [ppm]
Au [ppb]

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HEBER PROPERTY
COMPILATION MAP

DATE: 95	NTS;92E16E/92F1JW
SCALE: 1:50000	ALBERNI M.D.
FIG: 25	

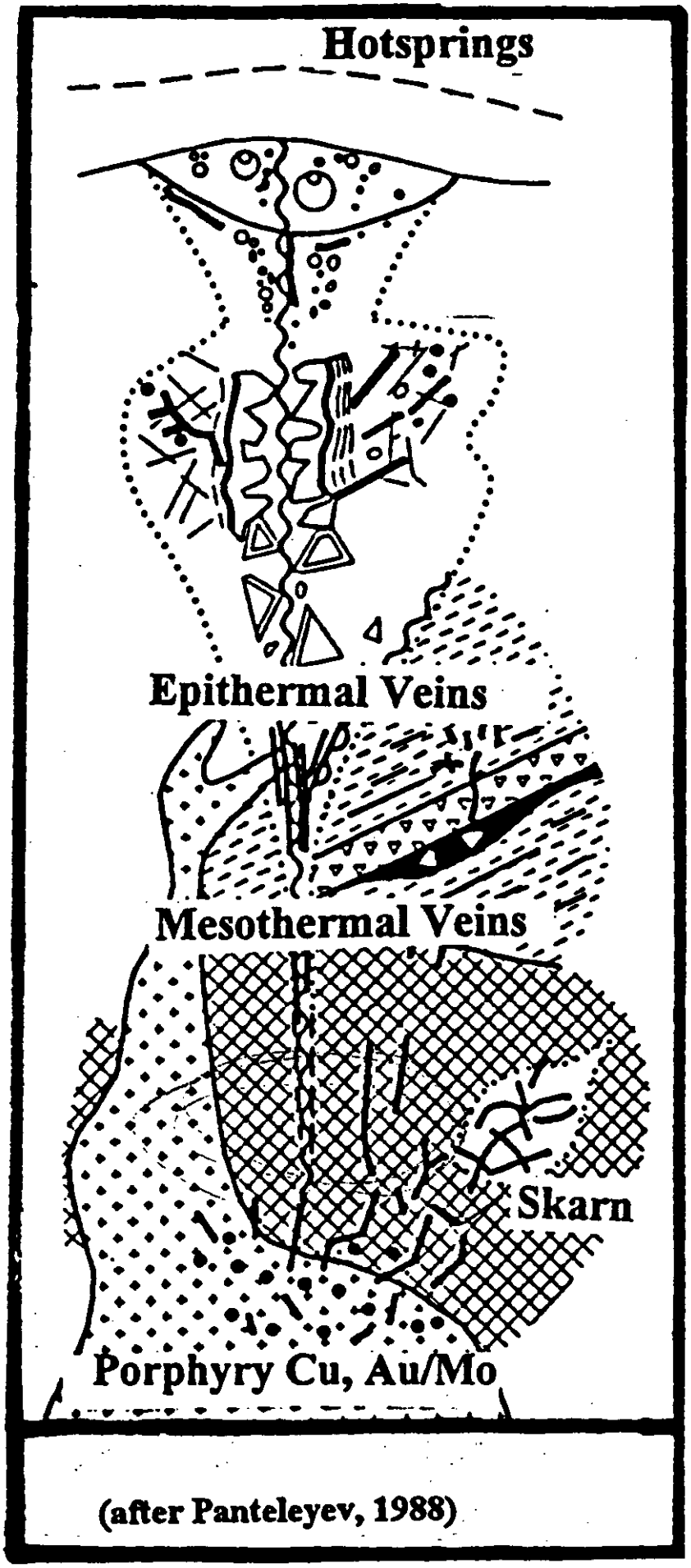
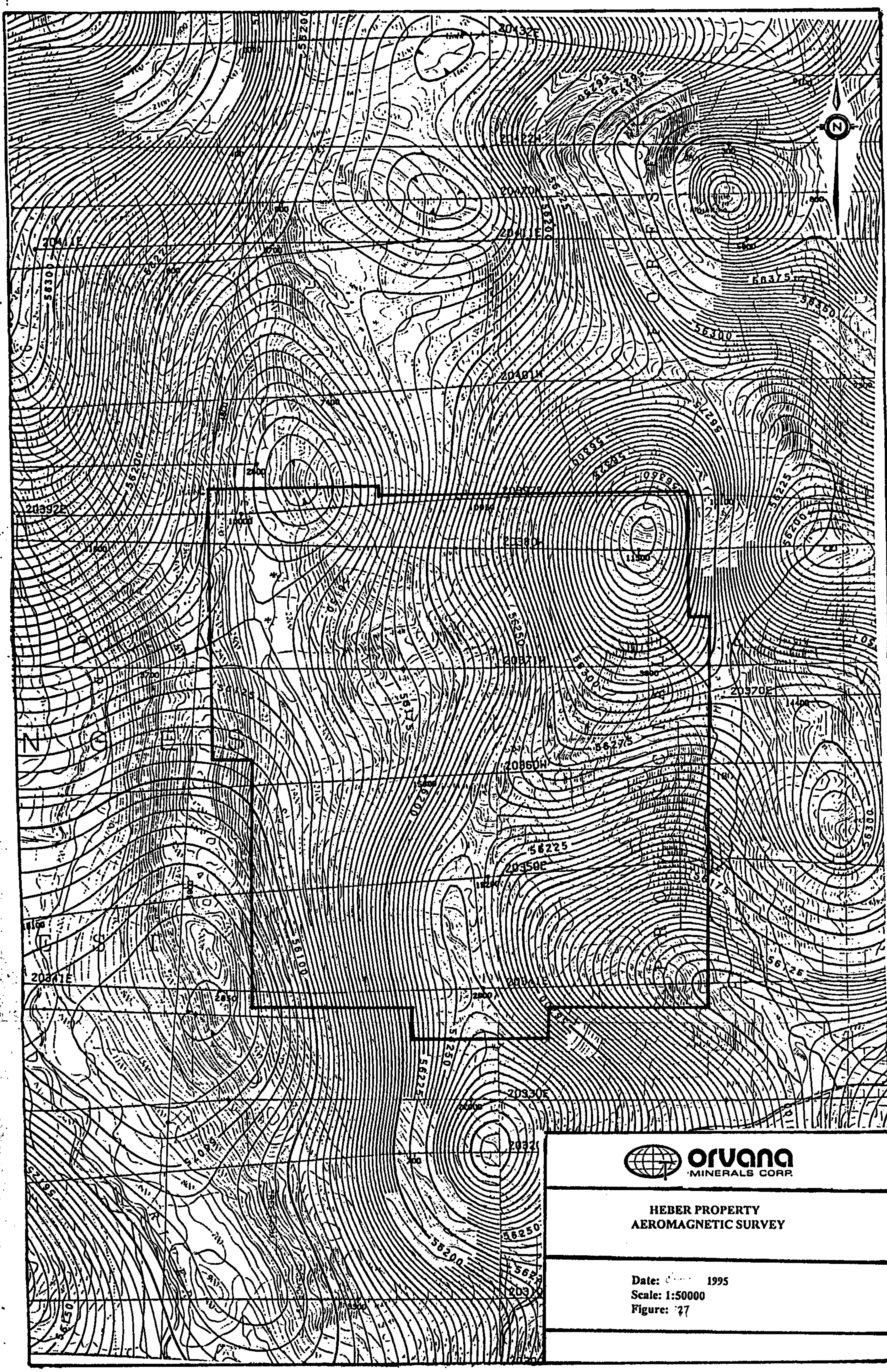
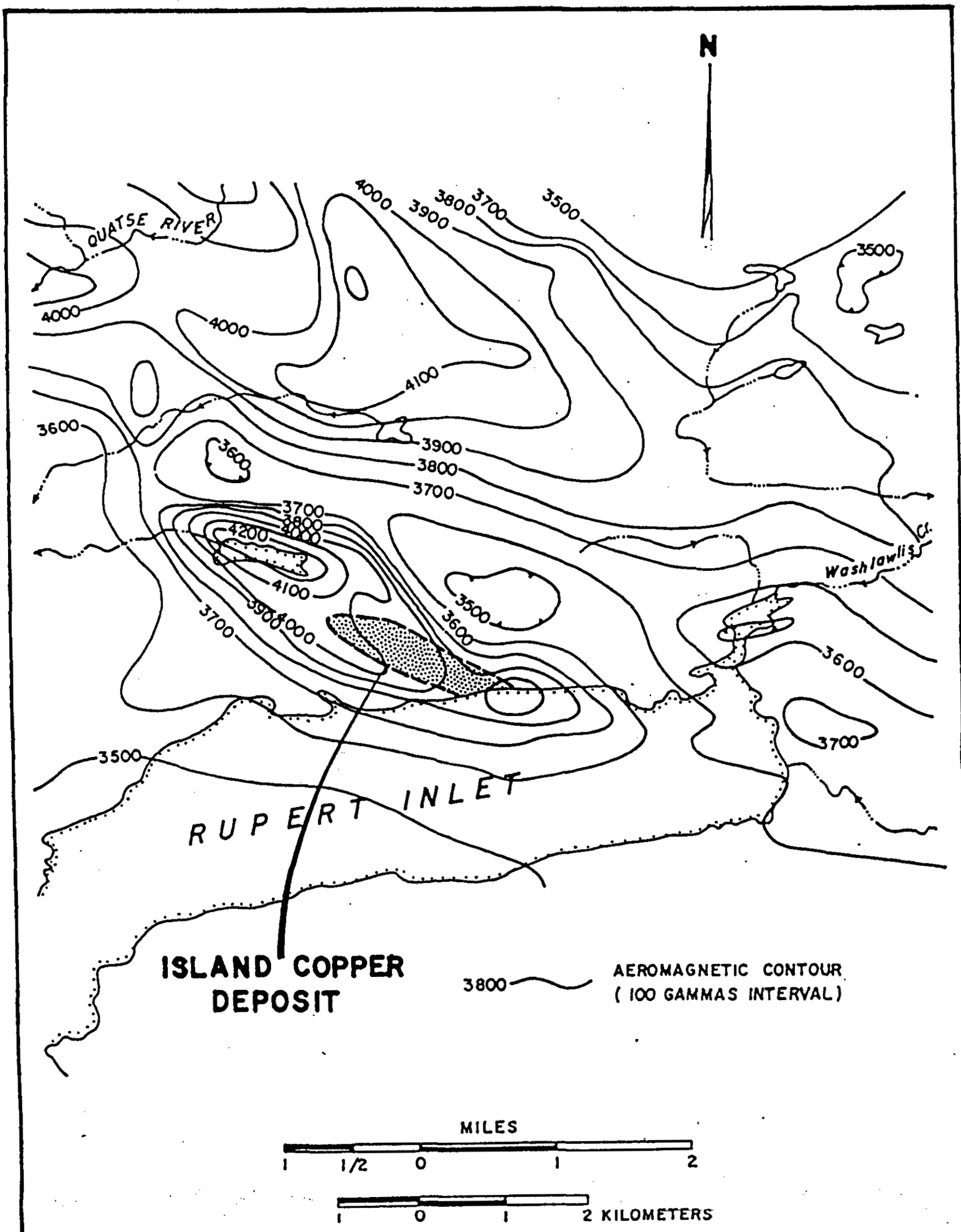

Hotsprings
Epithermal Veins
Mesothermal Veins
Skarn
Porphyry Cu, Au/Mo
(after Panteleyev, 1988)

Figure 26.



orvana
MINERALS CORP.
HEBER PROPERTY
AEROMAGNETIC SURVEY
Date: 1995
Scale: 1:50000
Figure: 27



orvana MINERALS CORP.

AEROMAGNETIC SURVEY OF THE ISLAND COPPER DEPOSIT

Date: 1995
Scale: 1:50000
Figure: 28

from Cargill et al (1976)

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

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VANCOUVER, BC
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Comments:

Page Number :1
Total Pages :2
Certificate Date: 19-SEP-95
Invoice No. :19526264
P.O. Number :
Account :FNU

CERTIFICATE OF ANALYSIS A9526264

SAMPLE	PREP CODE		Al2O3 % XRF	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	TiO2 % XRF	LOI % XRF	TOTAL %	Ba ppm	Rb ppm	Sr ppm	Nb ppm	Zr ppm	Y ppm
441874	299	--	14.61	10.41	0.06	12.38	0.53	6.76	0.16	2.87	0.15	47.38	1.61	2.77	99.69	80	10	140	< 10	90	10
441877	299	--	16.64	4.98	0.02	7.90	1.94	2.32	0.11	4.37	0.29	58.73	0.60	1.49	99.39	580	70	480	< 10	120	20
441878	299	--	13.54	8.15	0.04	12.88	0.44	5.81	0.18	1.48	0.17	51.67	1.96	2.92	99.24	80	10	230	< 10	110	20
441880	299	--	16.04	10.42	0.06	11.28	0.44	6.81	0.17	2.51	0.15	48.17	1.48	2.30	99.83	140	< 10	250	< 10	90	10
441881	299	--	15.56	11.69	0.04	11.56	0.82	6.12	0.19	1.89	0.14	47.49	1.36	2.53	99.39	120	30	400	< 10	70	10
441882	299	--	14.17	12.79	0.05	12.14	0.32	5.86	0.20	2.27	0.12	46.88	1.59	2.72	99.11	80	< 10	250	< 10	90	10
441883	299	--	13.91	10.85	0.03	12.12	0.25	6.59	0.18	3.07	0.13	47.90	1.52	3.15	99.70	60	< 10	160	10	90	10
441887	299	--	16.42	8.14	0.01	8.15	0.67	3.64	0.06	3.81	0.23	54.35	0.73	3.06	99.27	180	20	700	< 10	100	20
441889	299	--	13.84	9.67	0.03	13.27	0.48	6.14	0.15	1.84	0.15	48.45	1.60	3.80	99.42	60	10	130	< 10	90	20
441890	299	--	13.92	9.91	0.05	12.66	0.53	6.69	0.17	2.33	0.13	48.44	1.68	2.85	99.36	60	20	170	< 10	90	10
441892	299	--	14.29	9.17	0.03	13.81	0.53	5.54	0.15	2.80	0.17	47.98	1.72	2.95	99.14	120	20	270	10	110	20
441893	299	--	14.05	9.18	0.06	12.93	1.16	5.99	0.15	2.86	0.15	48.32	1.59	2.59	99.03	120	50	240	< 10	90	20
441897	299	--	15.43	5.56	0.07	4.60	2.07	1.64	0.11	3.64	0.18	63.12	0.43	2.86	99.71	560	70	340	< 10	110	10
441898	299	--	15.38	6.36	0.10	4.99	1.76	1.60	0.10	3.52	0.19	62.38	0.42	2.35	99.15	580	50	480	< 10	110	10
441900	299	--	12.97	9.01	0.03	15.30	0.47	6.10	0.23	2.66	0.22	47.48	2.59	2.13	99.19	120	10	200	10	140	20
441901	299	--	13.78	12.13	0.08	12.53	0.26	6.21	0.22	2.08	0.14	48.21	1.60	2.37	99.61	80	< 10	290	< 10	90	10
441903	299	--	14.04	10.58	0.08	12.74	0.29	5.47	0.24	2.18	0.19	48.61	2.10	3.15	99.67	100	< 10	300	10	120	20
441904	299	--	14.17	11.80	0.04	12.27	0.22	4.93	0.19	1.95	0.15	49.04	1.87	2.95	99.58	40	< 10	190	10	100	20
441906	299	--	14.57	9.83	0.03	12.81	0.38	6.09	0.25	2.86	0.16	47.12	1.88	3.45	99.43	100	< 10	200	< 10	100	10
441908	299	--	14.34	10.79	0.03	12.75	0.24	5.34	0.18	1.84	0.13	48.88	1.61	3.56	99.69	60	< 10	170	< 10	90	10
441909	299	--	14.08	11.07	0.04	13.04	0.21	5.76	0.19	2.21	0.14	46.95	1.79	3.54	99.02	40	< 10	210	< 10	100	20
441910	299	--	14.61	11.55	0.03	12.58	0.27	5.18	0.25	1.50	0.13	48.95	1.62	3.23	99.90	80	< 10	250	10	90	10
441911	299	--	14.66	11.56	0.03	12.54	0.17	5.53	0.22	1.79	0.12	48.01	1.62	3.51	99.76	60	< 10	260	< 10	90	10
441912	299	--	14.19	11.27	0.04	12.61	0.36	6.47	0.19	2.04	0.14	47.74	1.67	2.36	99.08	80	< 10	200	< 10	90	10
441914	299	--	14.55	7.50	0.04	13.25	1.54	5.52	0.17	2.98	0.17	47.94	1.64	3.63	98.93	160	60	270	< 10	100	20
441916	299	--	13.97	10.13	0.03	12.28	0.24	6.02	0.18	2.45	0.12	47.51	1.57	4.47	98.97	40	10	140	< 10	90	10
441918	299	--	13.20	9.10	0.03	12.10	0.18	5.47	0.19	3.05	0.17	49.71	2.02	3.88	99.10	40	< 10	130	10	110	20
441919	299	--	14.21	9.41	0.07	12.77	0.49	6.04	0.21	1.73	0.15	47.74	1.77	5.13	99.72	60	10	220	10	100	20
441920	299	--	11.41	12.98	0.04	9.91	0.59	4.78	0.17	1.19	0.11	46.42	1.36	10.67	99.63	120	10	160	< 10	70	10
441921	299	--	15.48	12.59	0.06	10.88	0.50	6.20	0.18	2.14	0.14	48.52	1.50	1.82	100.01	120	10	250	< 10	90	10
441923	299	--	13.98	10.62	0.04	11.19	0.47	6.59	0.27	3.09	0.15	50.01	1.36	1.71	99.48	80	10	120	< 10	80	10
441924	299	--	14.18	9.70	0.04	11.83	0.49	7.65	0.21	3.05	0.12	48.56	1.50	1.94	99.27	120	10	170	< 10	80	10
441925	299	--	14.64	8.97	0.04	12.07	0.50	7.35	0.20	3.33	0.11	47.38	1.53	2.82	98.94	80	10	170	< 10	80	20
441926	299	--	12.88	9.93	0.04	14.35	0.33	6.17	0.25	2.36	0.17	49.18	2.17	1.77	99.60	60	< 10	190	10	110	20
441928	299	--	14.15	9.81	0.06	12.38	0.31	7.17	0.24	3.27	0.13	48.21	1.62	2.28	99.63	60	10	130	< 10	90	10
441929	299	--	14.19	8.27	0.06	12.59	0.52	6.81	0.20	3.75	0.14	48.42	1.61	3.19	99.75	120	10	160	< 10	90	10
441930	299	--	14.12	9.63	0.04	14.01	0.34	6.75	0.22	2.04	0.17	47.64	2.26	1.71	98.93	60	10	240	10	120	20
441932	299	--	13.67	10.87	0.02	14.02	0.27	5.46	0.18	2.57	0.19	47.23	2.33	2.27	99.08	40	< 10	240	10	130	20
441933	299	--	12.86	11.21	0.02	14.67	0.14	5.24	0.20	1.32	0.21	46.86	2.53	4.41	99.67	20	< 10	210	10	130	20
441936	299	--	14.93	12.16	0.04	11.60	0.33	5.77	0.15	2.33	0.12	47.54	1.47	2.49	98.93	40	10	270	< 10	80	10

CERTIFICATION: Stewart Bridden

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

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Invoice No. : I9526265
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**PLEASE NOTE

CERTIFICATE OF ANALYSIS A9526265

SAMPLE	PREP CODE		Au ppb EXT-AA	Ag ppm	Al %	As 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
441875	205	226	< 1	< 0.2	2.96	< 2	< 10	< 0.5	< 2	4.24	< 0.5	15	139	17	3.13	< 10	< 1	< 0.01	< 10	0.22	225
441876	205	226	17	0.2	2.10	< 2	< 10	< 0.5	< 2	1.53	< 0.5	22	40	1265	5.29	< 10	< 1	< 0.01	< 10	1.60	430
441879	205	226	36	1.0	2.77	10	< 10	< 0.5	< 2	4.60	1.5	57	177	2680	5.24	10	1	0.04	< 10	0.31	650
441884	205	226	52	1.0	2.99	6	< 10	< 0.5	< 2	4.82	< 0.5	15	83	2250	4.33	< 10	< 1	0.02	< 10	0.78	235
441885	205	226	49	1.2	2.76	6	< 10	< 0.5	< 2	2.23	< 0.5	179	83	2430	5.23	< 10	< 1	0.06	< 10	0.51	130
441886	205	226	180	0.6	0.70	< 2	10	< 0.5	< 2	1.57	< 0.5	18	174	2110	>15.00	10	< 1	0.16	< 10	0.12	225
441888	205	226	34	0.2	2.21	2	< 10	< 0.5	< 2	3.31	< 0.5	11	64	1260	6.80	< 10	< 1	0.03	< 10	1.66	385
441891	205	226	140	0.4	1.15	16	< 10	< 0.5	< 2	0.82	< 0.5	17	147	1905	1.62	< 10	< 1	0.03	< 10	0.47	155
441894	205	226	280	3.0	3.14	12	< 10	< 0.5	4	4.47	< 0.5	162	67	8590	14.40	10	< 1	0.04	< 10	1.56	725
441895	205	226	1900	6.4	3.35	58	< 10	< 0.5	Intf*	1.29	0.5	2040	64	>10000	>15.00	10	< 1	0.03	< 10	0.61	380
441896	205	226	270	3.4	4.38	1935	< 10	< 0.5	< 2	2.75	>100.0	646	257	1330	12.35	10	3	0.03	< 10	1.52	775
441899	205	226	10	< 0.2	5.65	28	30	0.5	< 2	4.60	1.0	19	54	212	2.29	10	< 1	0.06	< 10	0.38	230
441902	205	226	1	< 0.2	1.53	4	< 10	< 0.5	< 2	2.58	< 0.5	8	194	331	1.74	< 10	< 1	< 0.01	< 10	0.16	180
441905	205	226	6	< 0.2	2.61	2	< 10	< 0.5	< 2	4.92	1.5	15	116	720	4.08	< 10	< 1	< 0.01	< 10	1.10	545
441907	205	226	54	15.2	1.20	28	< 10	< 0.5	Intf*	0.08	< 0.5	21	209	>10000	>15.00	< 10	2	0.11	< 10	0.61	170
441913	205	226	5	9.6	0.78	4	< 10	< 0.5	Intf*	2.60	0.5	8	262	>10000	2.83	< 10	1	< 0.01	< 10	0.43	180
441915	205	226	37	6.4	3.73	444	< 10	< 0.5	< 2	0.57	5.5	240	70	1185	>15.00	10	< 1	0.02	< 10	1.51	740
441917	205	226	3310	15.2	1.69	690	< 10	< 0.5	Intf*	0.14	< 0.5	398	205	>10000	>15.00	< 10	2	0.13	< 10	0.84	235
441922	205	226	160	7.2	1.31	626	< 10	< 0.5	< 2	0.27	1.5	431	57	7590	>15.00	< 10	< 1	< 0.01	< 10	0.50	355
441927	205	226	42	0.2	0.97	14	< 10	< 0.5	< 2	0.67	< 0.5	19	287	1540	2.68	< 10	< 1	0.01	< 10	0.39	235
441931	205	226	28	12.8	1.96	2	< 10	< 0.5	Intf*	3.32	0.5	10	101	>10000	1.85	< 10	< 1	< 0.01	< 10	0.32	160
441934	205	226	11	0.4	0.99	56	< 10	< 0.5	< 2	1.03	< 0.5	603	281	491	4.87	< 10	1	< 0.01	< 10	0.52	125
441935	205	226	300	1.4	4.23	4	< 10	< 0.5	2	4.87	< 0.5	16	162	5530	3.56	10	< 1	0.10	< 10	0.88	225
441939	205	226	350	3.6	1.44	30	< 10	< 0.5	< 2	2.16	< 0.5	42	65	8960	>15.00	10	< 1	< 0.01	< 10	0.90	680

CERTIFICATION: Ian Bichler

**Cu INTERFERENCE ON Bi

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Analytical Chemists * Geochemists * Registered Assayers

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To: ORVANA MINERALS CORP.

710 - 1177 W. HASTINGS ST.
VANCOUVER, BC
V6E 2K3

Project : 1018
Comments: ATTN: PIOTR LUTYNSKI

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Invoice No. :I9526265
P.O. Number :
Account :FNU

**PLEASE NOTE

CERTIFICATE OF ANALYSIS A9526265

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
441875	205	226	< 1	< 0.01	12	160	< 2	< 2	11	150	0.18	< 10	< 10	89	< 10	20
441876	205	226	< 1	0.01	30	470	< 2	< 2	3	14	0.82	< 10	< 10	187	< 10	48
441879	205	226	1	0.04	33	70	2	< 2	3	83	0.11	< 10	< 10	77	< 10	46
441884	205	226	< 1	0.07	36	710	2	< 2	6	49	0.29	< 10	< 10	154	< 10	40
441885	205	226	2	0.22	84	670	2	< 2	4	106	0.37	< 10	< 10	105	< 10	20
441886	205	226	< 1	< 0.01	48	70	6	< 2	1	13	0.60	< 10	20	621	< 10	72
441888	205	226	< 1	0.07	37	480	2	< 2	10	33	0.47	< 10	< 10	234	< 10	40
441891	205	226	< 1	0.03	18	40	< 2	< 2	< 1	13	0.02	< 10	< 10	97	< 10	14
441894	205	226	61	0.01	86	350	4	< 2	12	28	0.18	< 10	< 10	228	< 10	62
441895	205	226	23	< 0.01	97	< 10	6	< 2	2	9	0.02	< 10	10	178	< 10	50
441896	205	226	4	< 0.01	28	210	64	< 2	17	14	0.05	< 10	< 10	158	< 10	5190
441899	205	226	1	0.03	3	700	2	< 2	1	109	0.08	< 10	< 10	57	< 10	88
441902	205	226	< 1	< 0.01	7	120	< 2	< 2	4	213	0.39	< 10	< 10	96	< 10	20
441905	205	226	< 1	< 0.01	20	280	2	< 2	12	97	0.62	< 10	< 10	167	< 10	96
441907	205	226	7	< 0.01	26	< 10	< 2	< 2	3	3	0.01	10	< 10	58	10	34
441913	205	226	1	< 0.01	10	70	2	< 2	1	25	0.06	< 10	< 10	33	< 10	22
441915	205	226	2	< 0.01	41	1080	688	< 2	4	88	0.15	< 10	< 10	125	< 10	608
441917	205	226	8	< 0.01	89	180	14	< 2	5	2	0.06	< 10	< 10	100	< 10	34
441922	205	226	56	0.01	161	170	18	< 2	4	1	0.06	< 10	10	91	< 10	162
441927	205	226	< 1	< 0.01	13	100	< 2	< 2	2	84	0.10	< 10	< 10	47	< 10	22
441931	205	226	1	< 0.01	12	320	6	< 2	2	91	0.61	< 10	< 10	132	< 10	8
441934	205	226	< 1	< 0.01	27	110	4	< 2	2	63	0.16	< 10	< 10	37	< 10	18
441935	205	226	< 1	0.09	27	230	14	< 2	5	84	0.32	< 10	< 10	132	< 10	20
441939	205	226	4	< 0.01	45	660	2	< 2	< 1	9	0.03	< 10	10	713	< 10	44

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To: ORVANA MINERALS CORP.

710 - 1177 W. HASTINGS ST.
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Project : 1018
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CERTIFICATE OF ANALYSIS A9526263

SAMPLE	PREP CODE		Au ppb EXT-AA	Ag ppm	Al %	As 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
441874	205	226	< 1	< 0.2	2.60	< 2	10	< 0.5	< 2	1.83	< 0.5	20	188	105	3.71	< 10	< 1	0.02	< 10	2.04	420
441877	205	226	13	0.2	1.38	4	30	< 0.5	< 2	1.16	< 0.5	16	74	408	3.97	< 10	< 1	0.12	10	0.72	330
441878	205	226	5	< 0.2	4.48	< 2	20	< 0.5	< 2	2.80	< 0.5	16	70	209	4.28	< 10	< 1	0.07	< 10	1.41	360
441880	205	226	1	< 0.2	3.83	< 2	10	< 0.5	< 2	2.36	< 0.5	18	125	135	3.27	< 10	< 1	0.05	< 10	1.78	400
441881	205	226	< 1	< 0.2	3.41	< 2	< 10	< 0.5	< 2	2.43	< 0.5	17	70	131	3.51	< 10	< 1	0.07	< 10	1.69	440
441882	205	226	5	< 0.2	2.55	4	< 10	< 0.5	< 2	2.24	< 0.5	21	54	141	4.27	< 10	< 1	0.03	< 10	1.49	440
441883	205	226	1	< 0.2	2.44	< 2	< 10	< 0.5	< 2	2.01	< 0.5	24	63	128	4.64	< 10	< 1	0.01	< 10	1.91	495
441887	205	226	15	< 0.2	2.73	< 2	< 10	< 0.5	< 2	2.14	< 0.5	9	36	404	3.78	< 10	< 1	0.03	< 10	1.75	245
441889	205	226	52	0.6	3.76	2	< 10	< 0.5	< 2	2.88	< 0.5	32	80	2330	5.38	< 10	< 1	0.04	< 10	1.58	430
441890	205	226	11	< 0.2	3.19	4	10	< 0.5	< 2	2.46	< 0.5	20	65	373	4.09	< 10	< 1	0.12	< 10	1.25	345
441892	205	226	63	0.4	3.08	8	10	< 0.5	< 2	2.51	< 0.5	124	58	1455	5.52	< 10	< 1	0.08	< 10	1.25	335
441893	205	226	24	0.4	2.20	2	< 10	< 0.5	< 2	1.99	< 0.5	19	54	233	4.65	< 10	1	0.10	< 10	1.34	305
441897	205	226	4	< 0.2	2.44	2	40	< 0.5	< 2	2.17	< 0.5	4	58	12	2.10	< 10	< 1	0.10	< 10	0.51	315
441898	205	226	< 1	< 0.2	2.29	4	60	0.5	< 2	2.44	< 0.5	4	79	7	2.23	< 10	< 1	0.10	< 10	0.50	300
441900	205	226	6	< 0.2	2.03	2	30	< 0.5	< 2	1.69	< 0.5	15	103	248	5.28	< 10	< 1	0.04	< 10	1.06	345
441901	205	226	5	< 0.2	3.26	< 2	10	< 0.5	< 2	2.10	< 0.5	19	50	160	4.48	< 10	< 1	0.02	< 10	1.36	440
441903	205	226	3	< 0.2	2.99	< 2	10	< 0.5	< 2	1.81	< 0.5	24	73	337	5.08	< 10	< 1	0.01	< 10	1.81	675
441904	205	226	58	0.2	2.89	2	< 10	< 0.5	< 2	1.95	< 0.5	25	84	185	4.65	< 10	< 1	< 0.01	< 10	1.76	545
441906	205	226	< 1	< 0.2	3.31	< 2	< 10	< 0.5	< 2	1.81	< 0.5	29	80	223	5.55	< 10	< 1	< 0.01	< 10	2.24	785
441908	205	226	2	< 0.2	3.42	< 2	< 10	< 0.5	< 2	2.07	< 0.5	30	79	80	5.23	< 10	< 1	0.01	< 10	1.93	605
441909	205	226	1	< 0.2	3.27	< 2	< 10	< 0.5	< 2	1.85	< 0.5	27	79	81	5.25	< 10	1	0.01	< 10	1.82	565
441910	205	226	2	0.2	2.93	4	< 10	< 0.5	< 2	1.62	< 0.5	25	105	60	4.75	< 10	< 1	< 0.01	< 10	1.93	705
441911	205	226	1	< 0.2	3.38	4	< 10	< 0.5	< 2	1.89	< 0.5	31	86	96	5.25	< 10	< 1	< 0.01	< 10	2.30	740
441912	205	226	2	< 0.2	3.91	2	10	< 0.5	2	2.09	< 0.5	21	71	96	4.79	< 10	1	0.02	< 10	1.48	385
441914	205	226	7	0.4	2.80	12	< 10	< 0.5	< 2	1.77	< 0.5	38	86	296	5.94	< 10	< 1	0.12	< 10	1.99	585
441916	205	226	5	< 0.2	3.14	2	< 10	< 0.5	< 2	2.65	< 0.5	29	99	107	5.14	< 10	< 1	0.01	< 10	2.46	630
441918	205	226	3	< 0.2	3.43	4	< 10	< 0.5	< 2	2.82	< 0.5	24	84	515	5.82	10	< 1	< 0.01	< 10	2.21	790
441919	205	226	2	< 0.2	3.79	4	10	< 0.5	< 2	2.56	< 0.5	25	117	271	5.92	< 10	< 1	0.06	< 10	2.56	870
441920	205	226	17	< 0.2	3.73	2	40	< 0.5	< 2	6.81	< 0.5	21	121	217	5.10	< 10	< 1	0.09	< 10	2.13	810
441921	205	226	6	< 0.2	3.44	< 2	< 10	< 0.5	< 2	2.97	< 0.5	11	80	306	2.17	< 10	< 1	0.04	< 10	1.02	215
441923	205	226	20	0.6	1.61	< 2	10	< 0.5	< 2	1.55	< 0.5	11	59	1095	2.18	< 10	< 1	0.08	< 10	0.90	330
441924	205	226	3	< 0.2	2.49	2	20	< 0.5	< 2	1.96	< 0.5	16	59	159	3.39	< 10	< 1	0.13	< 10	1.63	375
441925	205	226	< 1	< 0.2	3.00	< 2	10	< 0.5	< 2	2.42	< 0.5	21	72	39	5.02	< 10	1	0.09	< 10	1.99	540
441926	205	226	3	< 0.2	2.68	2	10	< 0.5	< 2	2.20	< 0.5	12	36	357	3.55	< 10	< 1	0.06	< 10	0.92	305
441928	205	226	< 1	< 0.2	2.88	< 2	< 10	< 0.5	< 2	1.88	< 0.5	21	58	60	4.42	< 10	< 1	0.03	< 10	1.78	545
441929	205	226	< 1	< 0.2	2.81	< 2	< 10	< 0.5	< 2	1.35	< 0.5	30	92	74	5.89	< 10	< 1	< 0.01	< 10	2.29	660
441930	205	226	3	< 0.2	4.06	< 2	10	< 0.5	< 2	2.66	< 0.5	11	46	222	3.29	< 10	< 1	0.05	< 10	0.96	205
441932	205	226	5	< 0.2	2.60	< 2	< 10	< 0.5	< 2	2.72	< 0.5	11	47	225	4.51	< 10	< 1	0.02	< 10	0.83	285
441933	205	226	6	< 0.2	3.68	2	< 10	< 0.5	< 2	3.28	< 0.5	14	54	180	5.06	10	< 1	0.01	< 10	0.96	355
441936	205	226	27	< 0.2	3.14	< 2	< 10	< 0.5	< 2	3.09	< 0.5	11	76	396	3.36	< 10	< 1	0.04	< 10	0.85	265

CERTIFICATION: Hart Bichler

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SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
441874	205	226	< 1	0.06	58	510	< 2	< 2	4	31	0.53	< 10	< 10	117	< 10	54
441877	205	226	1	0.07	3	1110	2	< 2	2	40	0.12	< 10	< 10	85	< 10	70
441878	205	226	< 1	0.30	21	670	< 2	< 2	9	114	0.28	< 10	< 10	174	< 10	58
441880	205	226	< 1	0.28	44	510	< 2	< 2	4	71	0.41	< 10	< 10	108	< 10	60
441881	205	226	< 1	0.16	36	460	< 2	< 2	6	97	0.44	< 10	< 10	131	< 10	60
441882	205	226	< 1	0.06	37	470	< 2	< 2	3	59	0.52	< 10	< 10	154	< 10	74
441883	205	226	< 1	0.03	50	490	< 2	< 2	4	45	0.59	< 10	< 10	155	< 10	88
441887	205	226	< 1	0.07	15	1010	< 2	< 2	4	172	0.16	< 10	< 10	111	< 10	46
441889	205	226	2	0.14	43	550	2	< 2	11	41	0.39	< 10	< 10	195	< 10	46
441890	205	226	< 1	0.26	30	510	2	< 2	7	54	0.34	< 10	< 10	179	< 10	46
441892	205	226	2	0.20	34	650	2	< 2	7	72	0.36	< 10	< 10	203	< 10	44
441893	205	226	< 1	0.11	32	550	6	< 2	6	42	0.42	< 10	< 10	164	< 10	52
441897	205	226	< 1	0.08	2	760	2	< 2	1	67	0.08	< 10	< 10	57	< 10	34
441898	205	226	< 1	0.09	2	730	2	< 2	1	102	0.09	< 10	< 10	65	< 10	36
441900	205	226	< 1	0.09	25	860	< 2	< 2	8	63	0.26	< 10	< 10	273	< 10	60
441901	205	226	< 1	0.23	44	540	< 2	< 2	3	90	0.44	< 10	< 10	176	< 10	68
441903	205	226	< 1	0.04	43	570	< 2	< 2	6	63	0.64	< 10	< 10	196	< 10	104
441904	205	226	< 1	0.01	38	410	< 2	< 2	6	46	0.49	< 10	< 10	143	< 10	106
441906	205	226	< 1	0.01	53	440	< 2	< 2	7	51	0.54	< 10	< 10	160	< 10	138
441908	205	226	< 1	0.02	47	360	< 2	< 2	9	43	0.37	< 10	< 10	138	< 10	120
441909	205	226	< 1	0.04	49	460	< 2	< 2	8	56	0.48	< 10	< 10	168	< 10	114
441910	205	226	< 1	0.01	46	370	2	< 2	6	50	0.44	< 10	< 10	147	< 10	132
441911	205	226	< 1	< 0.01	53	380	2	< 2	8	73	0.53	< 10	< 10	153	< 10	128
441912	205	226	< 1	0.38	39	570	< 2	< 2	4	80	0.36	< 10	< 10	189	< 10	76
441914	205	226	< 1	0.05	53	720	6	< 2	9	45	0.57	< 10	< 10	201	< 10	72
441916	205	226	< 1	0.02	53	480	2	< 2	10	42	0.64	< 10	< 10	177	< 10	88
441918	205	226	< 1	0.02	42	680	2	< 2	8	28	0.78	< 10	< 10	234	< 10	128
441919	205	226	< 1	0.04	50	530	2	< 2	12	60	0.47	< 10	< 10	201	< 10	122
441920	205	226	< 1	0.06	45	430	< 2	< 2	11	85	0.15	< 10	< 10	158	< 10	102
441921	205	226	< 1	0.31	25	500	< 2	< 2	5	82	0.31	< 10	< 10	90	< 10	36
441923	205	226	< 1	0.17	24	500	< 2	< 2	3	30	0.31	< 10	< 10	90	< 10	52
441924	205	226	< 1	0.29	34	450	2	< 2	8	54	0.30	< 10	< 10	137	< 10	58
441925	205	226	< 1	0.31	44	490	< 2	< 2	11	52	0.38	< 10	< 10	188	< 10	60
441926	205	226	< 1	0.34	17	510	< 2	< 2	6	81	0.32	< 10	< 10	160	< 10	56
441928	205	226	< 1	0.25	45	490	< 2	< 2	5	37	0.45	< 10	< 10	174	< 10	100
441929	205	226	< 1	0.02	54	500	< 2	< 2	5	29	0.58	< 10	< 10	183	< 10	114
441930	205	226	1	0.49	20	690	< 2	< 2	4	142	0.30	< 10	< 10	166	< 10	34
441932	205	226	< 1	0.09	20	610	< 2	< 2	6	69	0.38	< 10	< 10	197	< 10	40
441933	205	226	1	0.01	20	730	< 2	< 2	6	71	0.37	< 10	< 10	199	< 10	52
441936	205	226	< 1	0.25	23	480	< 2	< 2	5	78	0.33	< 10	< 10	134	< 10	32

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Certificate Date: 08-SEP-95
Invoice No. :19526263
P.O. Number :
Account :FNU

CERTIFICATE OF ANALYSIS A9526263

SAMPLE	PREP CODE		Au ppb EXT-AA	Ag ppm	Al %	As 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
441937	205	226	6	< 0.2	2.53	< 2	< 10	< 0.5	< 2	2.20	< 0.5	16	78	135	3.13	< 10	1	0.04	< 10	1.15	240
441938	205	226	11	< 0.2	2.77	2	< 10	< 0.5	< 2	2.00	< 0.5	27	80	243	5.69	< 10	1	0.03	< 10	1.42	360
441940	205	226	8	< 0.2	2.04	< 2	< 10	< 0.5	< 2	1.76	< 0.5	13	45	469	8.28	< 10	< 1	0.06	< 10	1.00	300
441941	205	226	10	< 0.2	2.43	< 2	< 10	< 0.5	< 2	1.55	< 0.5	21	92	318	4.34	< 10	< 1	0.03	< 10	1.78	515

CERTIFICATION:

Chemex Labs 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: ORVANA MINERALS CORP.

710 - 1177 W. HASTINGS ST.
VANCOUVER, BC
V6E 2K3

Project : 1018
Comments: ATTN: PIOTR LUTYNSKI

Certificate Date: 08-SEP-95
Invoice No. :19526263
P.O. Number :
Account :FNU

CERTIFICATE OF ANALYSIS A9526263

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
441937	205	226	< 1	0.11	29	440	< 2	< 2	3	48	0.34	< 10	< 10	111	< 10	30
441938	205	226	< 1	0.11	34	500	< 2	< 2	8	49	0.40	< 10	< 10	173	< 10	40
441940	205	226	< 1	0.08	28	570	< 2	< 2	3	36	0.47	< 10	< 10	506	< 10	42
441941	205	226	< 1	0.05	44	530	< 2	< 2	3	26	0.63	< 10	< 10	166	< 10	68

CERTIFICATION: Hans Bichler

710 - 1177 W. Hastings St, Vancouver BC V6E 2K3

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
VI-PL-003	<1	100	4	46	<.1	59	18	709	4.47	7	<5	<2	<2	66	.2	<2	<2	108	5.07	.030	<2	101	2.92	31	.10	<2	3.06	.09	.06	5	6
VI-PL-004	1	5	4	9	<.1	2	2	334	1.23	2	<5	<2	4	329	<.2	<2	3	20	1.40	.036	7	3	.25	24	.10	2	1.34	.06	.06	3	150
VI-PL-005	3	11	3	16	<.1	8	4	377	2.22	<2	<5	<2	5	36	<.2	<2	<2	38	.81	.045	17	8	.46	84	.13	2	1.06	.09	.13	2	3
VI-PL-006	1	950	6	76	.3	44	20	483	3.80	<2	<5	<2	<2	47	<.2	2	<2	113	1.53	.063	4	35	1.50	165	.59	2	1.87	.01	<.01	1	11
VI-PL-007	1	7820	3	28	1.4	25	23	244	3.02	10	<5	<2	<2	71	.7	<2	<2	98	1.72	.028	<2	45	.35	4	.47	3	1.03	<.01	<.01	5	20
RE VI-PL-007	1	7557	5	26	1.4	24	23	235	3.01	9	<5	<2	<2	69	.8	<2	<2	97	1.72	.027	<2	45	.35	3	.46	3	1.01	<.01	<.01	5	48
VI-PL-008	59	3166	117	148	8.6	28	368	56	44.16	608	<5	<2	<2	2	<.2	35	20	228	.04	.052	2	32	.09	3	.01	<2	.64	<.01	<.01	1	310
VI-PL-009	2	72	7	47	.1	32	19	453	3.81	3	<5	<2	<2	131	<.2	<2	<2	105	2.90	.064	3	16	1.91	13	.29	5	2.42	.03	.01	2	7
VI-PL-010	1	256	4	16	.2	13	5	233	1.63	3	<5	<2	<2	50	<.2	<2	<2	49	1.36	.010	<2	17	.40	4	.19	4	1.08	.02	.01	2	7
VI-PL-011	4	6293	12	38	9.2	21	16	294	3.55	29	<5	<2	<2	59	.6	<2	51	75	1.94	.033	<2	27	.58	2	.40	3	1.20	.01	<.01	3	540
VI-PL-012	1	3989	14	28	1.3	22	32	282	3.14	8	<5	<2	<2	100	1.0	<2	<2	75	1.68	.012	<2	16	.59	6	.37	3	1.41	<.01	<.01	2	13
VI-PL-013	<1	103	<2	111	.1	78	32	819	6.44	<2	<5	<2	<2	37	<.2	<2	[redacted]	170	2.22	.043	3	63	3.11	11	.54	3	3.32	.07	.03	<1	5
VI-PL-014	2	859	3	12	.2	29	6	233	1.85	<2	<5	<2	<2	97	.3	<2	<2	69	7.91	.020	<2	33	.42	<2	.37	3	1.09	<.01	<.01	2	7
VI-PL-015	1	170	3	51	.1	49	19	460	4.08	<2	<5	<2	<2	60	<.2	<2	<2	121	2.50	.043	3	54	1.77	12	.44	3	2.82	.12	.03	2	6
VI-PL-016	2	1363	5	37	.7	37	18	441	2.84	2	<5	<2	<2	30	<.2	2	<2	93	1.81	.042	2	48	.92	7	.38	2	1.67	.12	.05	3	9
VI-PL-017	23	34050	6	132	24.8	203	116	16	20.79	239	<5	<2	<2	2	.6	<2	24	<2	.12	.009	<2	6	.02	2	.01	<2	.03	<.01	<.01	28	510
VI-PL-018	1	197	2	34	<.1	40	13	326	3.02	<2	<5	<2	<2	68	<.2	<2	<2	90	3.03	.043	<2	58	1.43	6	.32	5	3.63	.08	.02	<1	11
VI-PL-019	1	1875	4	57	1.2	31	14	398	2.94	3	<5	<2	<2	43	.4	<2	<2	97	1.66	.052	2	36	.98	17	.39	3	1.73	.14	.10	2	40
VI-PL-020	3	418	3	32	.3	26	13	283	3.77	<2	<5	<2	<2	157	<.2	<2	<2	128	3.49	.064	3	16	1.07	14	.33	2	4.68	.33	.03	1	9
VI-PL-021	<1	2734	2	87	1.5	44	28	768	5.05	<2	<5	<2	<2	10	.3	<2	<2	144	1.43	.029	3	43	2.40	7	.20	<2	2.81	<.01	.02	2	330
VI-PL-022	7	28102	6	124	7.9	93	38	945	8.54	15	<5	<2	<2	25	2.4	5	5	212	4.25	.073	3	40	2.36	11	.35	<2	2.47	.01	.06	7	520
VI-PL-023	1	236	4	42	.3	38	16	362	4.46	<2	<5	<2	<2	49	<.2	<2	<2	157	2.32	.057	3	47	1.34	8	.34	4	2.56	.16	.04	1	12
VI-PL-024	3	10987	2	314	13.6	39	31	812	35.50	<2	<5	<2	<2	2	.6	<2	16	436	4.77	.024	<2	4	.22	2	.03	<2	.57	<.01	<.01	8	290
VI-PL-025	<1	52678	149	776	9.6	97	118	1322	11.86	35	<5	<2	<2	8	20.1	9	49	189	2.62	.059	<2	5	1.17	5	.05	<2	1.70	.01	.01	3	85
VI-PL-026	2	301	3	38	.4	32	13	276	3.69	3	<5	<2	<2	41	<.2	<2	<2	136	1.82	.062	4	31	.97	8	.37	3	1.77	.13	.04	1	7
VI-PL-027	<1	147	4	63	<.1	61	32	574	4.83	<2	<5	<2	<2	20	<.2	<2	<2	128	1.62	.040	<2	40	2.45	8	.52	4	2.83	.07	.07	<1	11
VI-PL-028	<1	972	6	97	.2	70	32	581	6.99	<2	<5	<2	<2	46	.5	<2	<2	171	3.01	.053	4	22	2.53	7	.64	<2	2.69	.09	.03	<1	12
VI-PL-029	1	91	6	108	.1	79	30	671	6.39	<2	<5	<2	<2	20	<.2	<2	<2	158	1.57	.046	4	30	2.60	9	.56	<2	2.75	.06	.03	<1	6
VI-PL-100	<1	574	2	126	.6	104	49	1028	8.18	<2	<5	<2	<2	21	<.2	<2	<2	264	2.17	.070	9	103	5.87	7	.13	<2	5.59	.01	.04	<1	9
VI-PL-101	<1	629	<2	107	.5	95	31	1033	7.26	<2	<5	<2	<2	26	.4	<2	<2	254	3.15	.062	5	95	4.87	7	.38	<2	4.01	.01	.05	<1	13
VI-PL-102	1	415	3	54	.4	53	17	701	4.85	2	<5	<2	<2	93	.5	2	<2	168	2.59	.044	3	48	2.43	8	.47	7	2.74	.05	.04	<1	8
VI-PL-103	1	819	8	50	1.0	16	8	487	1.76	<2	<5	<2	<2	81	.9	4	<2	71	2.27	.053	2	17	.69	18	.39	5	2.83	.11	.09	1	28
VI-PL-104	<1	1650	9	152	.4	21	9	1333	4.98	2	<5	<2	<2	14	1.6	3	<2	127	3.62	.049	<2	37	1.34	7	.32	<2	2.18	.02	.04	<1	24
VI-PL-105	1	21217	3	84	1.5	16	6	1187	9.95	54	<5	<2	<2	29	3.7	2	9	225	7.74	.064	<2	15	.41	<2	.15	<2	.98	<.01	<.01	<1	27
VI-PL-106	1	2254	2	45	1.4	30	23	360	4.04	2	<5	<2	<2	221	1.1	3	3	95	1.63	.068	2	23	.97	2	.18	2	2.02	.01	.01	<1	100
STANDARD C/AU-R	19	55	36	128	7.0	72	32	1035	3.96	41	20	7	36	51	17.5	15	18	61	.51	.091	39	57	.91	182	.08	33	1.88	.06	.15	10	470

Sample type: ROCK. Samples beginning 'RE' are duplicate samples.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
VI-PL-107	<1	171	3	100	<.1	48	32	1073	9.06	<2	<5	<2	<2	33	1.2	<2	<2	299	1.32	.108	7	28	2.92	8	.35	<2	3.39	.02	.02	<1	7
RE VI-PL-107	<1	173	2	99	<.1	48	33	1067	9.09	<2	<5	<2	<2	33	1.0	<2	<2	299	1.31	.109	7	27	2.93	8	.36	<2	3.39	.02	.02	<1	6
VI-PL-108	<1	225	4	37	<.1	43	17	228	6.20	7	<5	<2	<2	39	.6	<2	<2	199	1.42	.067	3	58	1.22	9	.39	<2	2.22	.20	.07	1	4
VI-PL-109	<1	94	3	145	<.1	89	33	745	6.76	<2	<5	<2	<2	29	.5	<2	<2	226	1.04	.064	6	110	3.67	12	.23	<2	4.50	.07	.06	1	5
VI-PL-110	<1	288	<2	105	.2	113	39	979	8.38	<2	<5	<2	<2	13	.2	<2	<2	268	1.47	.065	8	137	4.56	9	.25	<2	5.23	.01	.07	<1	4

Haber

GEOCHEMICAL ANALYSIS CERTIFICATE

Orvana Minerals Corp. PROJECT HEBER File # 94-3735 Page 1

710 - 1177 W. Hastings St, Vancouver BC V6E 2K3

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
VI-PL-149	<1	299	4	103	<.1	74	29	896	4.35	<2	<5	2	2	26	<.2	<2	8	121	1.01	.032	<2	99	2.52	103	.43	<2	2.25	.01	.02	<1	12
VI-PL-150	<1	91	<2	83	<.1	87	34	605	4.83	4	<5	2	2	35	<.2	<2	8	141	1.24	.050	<2	86	2.42	85	.37	2	2.14	.03	.02	<1	23
VI-PL-151	<1	60	7	86	.2	76	24	505	4.07	3	<5	<2	2	27	<.2	<2	10	136	1.24	.046	<2	60	1.76	18	.67	2	1.95	.02	<.01	<1	2
VI-PL-152	<1	133	<2	116	.1	89	31	637	5.42	<2	<5	<2	3	23	<.2	<2	7	171	1.27	.049	<2	82	2.10	39	.57	4	2.47	.02	.01	<1	3
VI-PL-153	6	18	5	18	<.1	39	55	192	3.79	4	<5	<2	<2	114	<.2	<2	6	88	1.66	.039	<2	37	.29	45	.49	3	1.10	.01	<.01	2	4
RE VI-PL-153	6	16	7	17	<.1	39	53	186	3.61	4	<5	<2	<2	107	<.2	<2	10	82	1.57	.037	<2	37	.27	44	.47	3	1.04	.01	.01	<1	5
STANDARD C/AU-R	20	62	43	131	7.4	72	33	1039	3.96	43	15	7	38	54	16.7	14	17	60	.49	.097	41	62	.92	184	.09	34	1.88	.06	.16	10	470

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: P1 ROCK P2 ROCK PULP AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.
Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: OCT 17 1994 DATE REPORT MAILED: Oct 27/94 SIGNED BY..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
4500N/011	1	149	2	21	.2	13	3	141	9.60	<2	<5	<2	2	15	<.2	<2	<2	328	.25	.064	4	41	.36	13	.71	<2	2.65	.02	.01	1	6
RE 4500N/011	1	147	3	21	.2	14	3	143	9.57	<2	<5	<2	<2	15	<.2	<2	<2	329	.25	.064	4	41	.35	13	.71	<2	2.63	.02	.02	1	10
4500N/012	<1	181	<2	37	.8	26	10	514	10.19	<2	<5	<2	<2	10	<.2	<2	<2	264	.17	.095	6	55	.96	7	.41	<2	4.38	.01	.01	<1	9
4500N/013	1	272	7	48	.2	29	11	277	4.24	<2	<5	<2	<2	28	<.2	3	2	129	.56	.112	6	44	1.02	16	.29	4	3.73	.02	.04	2	15
3430/001	14	140	12	44	.1	28	13	466	5.33	5	<5	<2	<2	35	<.2	<2	4	180	.68	.067	3	66	1.07	10	.37	<2	4.83	.04	.03	3	13
4500N/001	1	7	11	16	<.1	2	1	92	2.54	<2	<5	<2	20	20	.4	<2	<2	46	.19	.031	27	6	.14	17	.08	2	5.16	.01	.02	<1	6
4500N/002	2	355	6	38	.4	26	10	225	2.40	<2	<5	<2	<2	22	.5	<2	<2	84	.36	.078	7	46	.78	15	.21	4	6.17	.01	.03	8	14
4500N/003	2	52	7	27	<.1	18	10	276	7.28	<2	<5	<2	<2	20	.8	<2	<2	270	.27	.032	5	107	.82	11	.35	<2	3.60	.02	.02	<1	10
4500N/004	1	36	5	28	<.1	25	8	365	6.41	2	<5	<2	<2	31	.7	<2	<2	222	.42	.053	6	78	.57	12	.80	2	3.01	.01	.02	<1	5
4500N/005	1	76	7	76	.1	34	13	445	8.40	<2	<5	<2	<2	21	.5	<2	<2	211	.23	.062	6	102	1.14	19	.44	2	6.57	.01	.02	2	2
4500N/006	1	39	5	21	.4	15	5	287	6.08	3	<5	<2	<2	26	.3	3	<2	282	.38	.038	5	82	.38	14	.55	3	3.34	.01	.01	1	3
4500N/007	2	20	4	26	.5	26	4	828	7.50	2	<5	<2	<2	15	.7	2	<2	409	.40	.050	3	124	.21	13	.89	3	2.02	.01	.01	1	2
4500N/008	1	368	5	26	.3	15	4	808	5.31	<2	<5	<2	<2	23	.3	<2	<2	280	.44	.063	4	39	.41	13	.75	3	2.88	.02	.01	<1	7
4500N/009	2	171	4	25	.6	25	9	225	7.74	<2	<5	<2	<2	30	<.2	<2	<2	280	.41	.072	3	55	.55	11	.69	<2	2.22	.01	.02	2	14
4500N/010	1	279	6	40	.4	30	12	277	4.90	<2	<5	<2	<2	22	<.2	<2	<2	151	.42	.059	6	58	1.02	12	.28	4	5.33	.02	.02	3	4
STANDARD C/AU-S	20	58	39	137	7.2	75	32	1101	4.16	42	17	7	37	54	19.4	14	21	63	.50	.092	41	60	.91	186	.09	34	1.97	.06	.15	11	48
4600/001	<1	330	<2	69	.1	43	20	743	5.89	<2	<5	<2	<2	48	<.2	2	<2	172	1.18	.084	5	64	1.67	17	.13	<2	6.18	.01	.02	<1	20
4650/001	2	164	<2	18	<.1	23	8	121	6.51	<2	<5	<2	<2	54	<.2	<2	<2	122	.46	.055	3	31	.38	35	.33	<2	4.98	.02	.03	<1	19
5000/001	1	300	5	66	.4	35	16	867	4.69	5	<5	<2	<2	23	.3	5	<2	183	.61	.082	7	58	1.50	14	.39	4	4.13	.01	.03	1	7
5000/002	1	364	<2	52	.3	35	13	614	6.28	<2	<5	<2	<2	13	.3	<2	<2	215	.16	.079	8	64	1.34	13	.56	2	4.64	.01	.03	<1	7
STANDARD C/AU-S	19	58	36	128	6.8	73	32	1048	3.96	41	14	7	35	50	17.9	15	21	61	.51	.092	39	58	.91	182	.08	34	1.88	.06	.15	11	49

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
VI-1860	<1	534	11	68	.4	45	33	2106	4.62	<2	<5	<2	<2	57	.5	<2	<2	145	1.57	.073	4	50	1.98	16	.19	3	5.47	.01	.05	<1	5
VI-1861	1	325	10	30	.5	23	11	433	3.39	<2	<5	<2	<2	27	.3	<2	2	112	.66	.074	3	32	.75	12	.18	3	3.59	.01	.05	<1	8
STANDARD C/AU-S	19	57	36	128	6.9	72	32	1043	3.96	41	15	7	35	51	18.2	14	19	61	.51	.092	40	58	.91	183	.08	33	1.88	.06	.15	10	46

Sample type: MOSS MAT. Samples beginning 'RE' are duplicate samples.

XRAL

14-DEC-94 REPORT 30657 WORKORDER 2023-

SAMPLE	AU PPB FADCP 2-1	BE PPM ICP 80-1	NA % ICP 80-1	MG % ICP 80-1	AL % ICP 80-1	P % ICP 80-1	K % ICP 80-1	CA % ICP 80-1
VI-PL-011	82	<.5	.26	.50	5.11	.04	.01	6.78
VI-PL-023	7	.6	2.06	3.23	7.16	.06	.23	6.31
VI-PL-026	8	<.5	1.53	2.93	6.37	.07	.17	6.82
VI-PL-028	8	<.5	2.09	3.24	6.42	.06	.16	6.81
VI-PL-108	3	.5	1.76	3.72	6.66	.09	.28	5.89
VI-PL-149	1	<.5	.71	2.07	5.92	.04	1.10	4.43
VI-PL-150	11	<.5	2.07	3.36	7.22	.07	.60	6.46
VI-PL-151	<1	<.5	1.06	2.40	6.69	.06	.06	8.48
VI-PL-152	4	<.5	2.15	2.73	7.01	.06	.28	5.86
VI-PL-153	1	<.5	.26	1.68	7.20	.06	.03	11.1
VI-PL-019	29	<.5	1.86	3.25	6.68	.06	.34	7.22
D VI-PL-011	79	<.5	.27	.51	5.22	.04	.02	6.98

XRAL

14-DEC-94 REPORT 30657 WORKORDER 2023-

SAMPLE	SC PPM ICP 80-1	TI % ICP 80-1	V PPM ICP 80-1	CR PPM ICP 80-1	MN PPM ICP 80-1	FE % ICP 80-1	CO PPM ICP 80-1	NI PPM ICP 80-1
VI-PL-011	14.2	.56	178	28	726	5.77	11	13
VI-PL-023	32.8	.79	215	66	1380	8.10	31	64
VI-PL-026	34.0	1.08	271	73	1280	8.72	30	66
VI-PL-028	33.9	.99	310	37	1140	8.58	34	62
VI-PL-108	36.8	1.22	295	72	1150	9.24	34	69
VI-PL-149	19.5	.55	170	51	1180	5.94	22	42
VI-PL-150	33.6	.86	293	86	1360	7.68	31	67
VI-PL-151	32.1	1.01	299	67	1330	7.55	22	49
VI-PL-152	31.1	.88	240	86	1260	7.86	28	63
VI-PL-153	31.8	.88	327	75	1290	9.95	42	42
VI-PL-019	30.6	.84	292	86	1610	7.43	27	55
D VI-PL-011	14.7	.57	179	25	730	5.92	11	14

D - QUALITY CONTROL DUPLICATE

XRAL

14-DEC-94 REPORT 30657 WORKORDER 2023-

SAMPLE	CU PPM ICP 80-1	ZN PPM ICP 80-1	AS PPM ICP 80-1	SR PPM ICP 80-1	Y PPM ICP 80-1	ZR PPM ICP 80-1	MO PPM ICP 80-1	AG PPM ICP 80-1
VI-PL-011	5810	35.3	16	274	11.3	36.0	2	8.4
VI-PL-023	244	86.3	<3	205	20.6	15.3	<1	<.1
VI-PL-026	286	89.3	<3	229	21.8	29.6	<1	.4
VI-PL-028	974	106	<3	182	20.6	67.1	<1	.7
VI-PL-108	210	83.3	<3	164	23.7	26.4	2	<.1
VI-PL-149	250	96.9	<3	133	12.0	31.8	<1	.3
VI-PL-150	87.1	101	<3	261	17.0	36.5	<1	.1
VI-PL-151	52.8	93.2	<3	179	19.8	51.0	<1	<.1
VI-PL-152	118	124	<3	196	18.4	41.5	<1	.2
VI-PL-153	16.8	34.1	<3	682	16.5	36.1	5	.1
VI-PL-019	1670	103	<3	235	18.1	47.9	<1	1.4
D VI-PL-011	6060	36.0	18	281	11.6	36.6	2	8.3

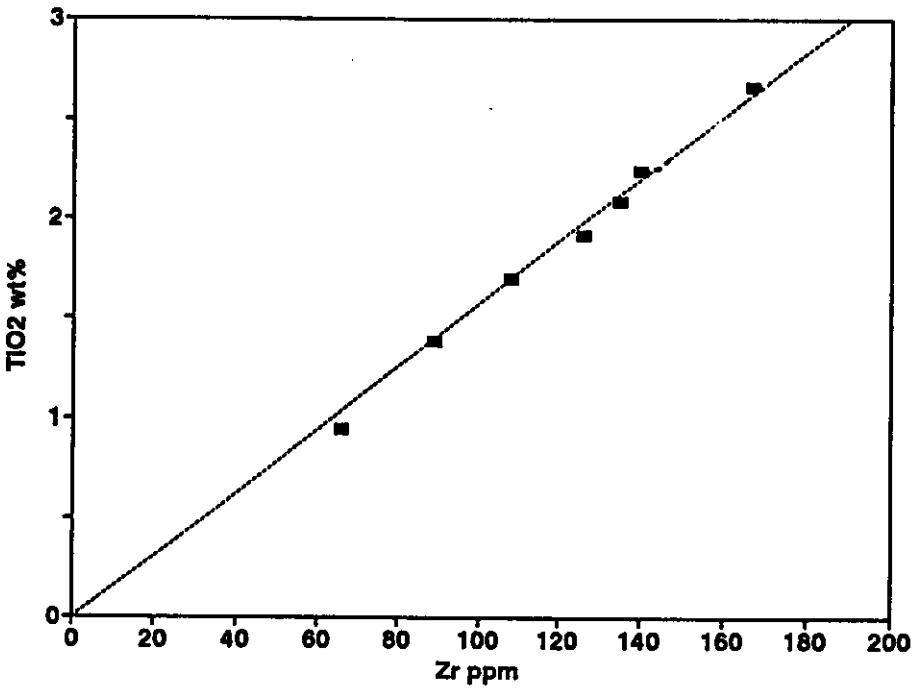
XRAL

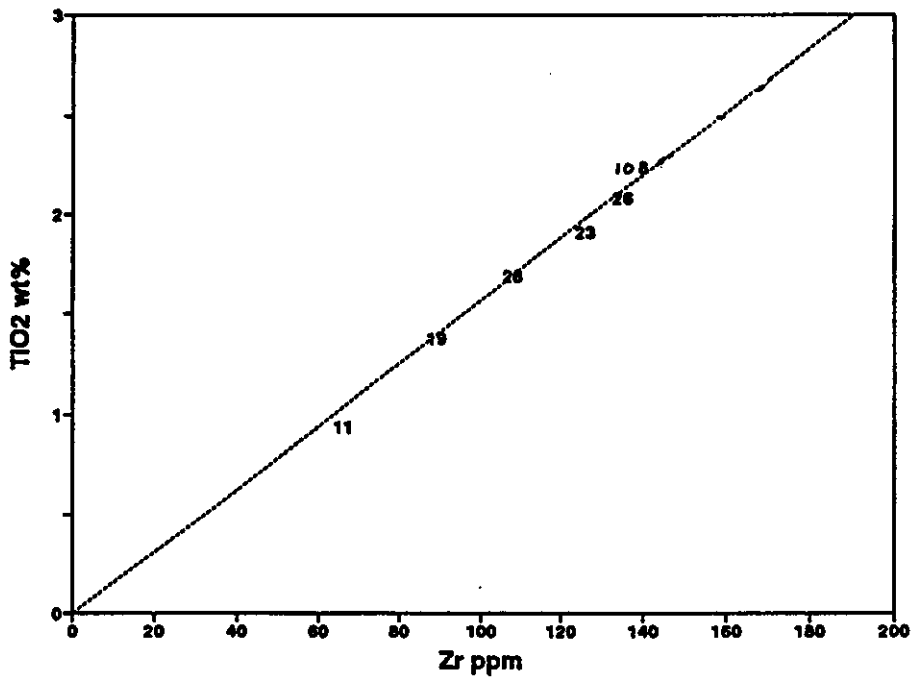
14-DEC-94 REPORT 30657 WORKORDER 2023-

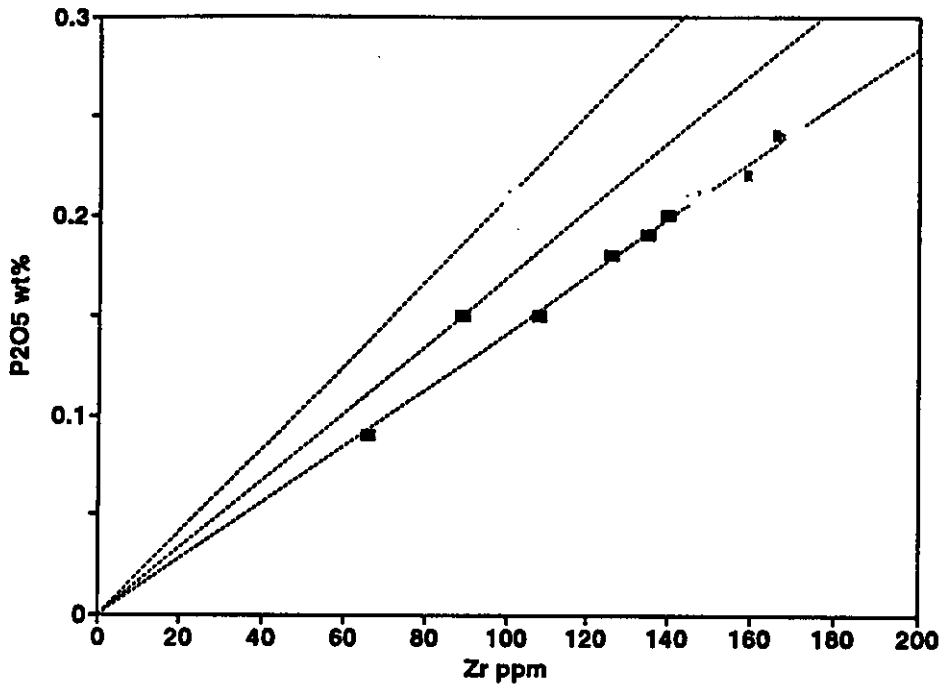
SAMPLE	CD PPM ICP 80-1	SN PPM ICP 80-1	SB PPM ICP 80-1	BA PPM ICP 80-1	LA PPM ICP 80-1	W PPM ICP 80-1	PB PPM ICP 80-1	BI PPM ICP 80-1
VI-PL-011	<1	<10	<5	5	6.1	<10	5	INF
VI-PL-023	<1	<10	<5	49	9.6	<10	<2	<3
VI-PL-026	<1	<10	<5	43	9.5	<10	<2	<3
VI-PL-028	<1	<10	<5	43	8.5	<10	<2	<3
VI-PL-108	<1	<10	<5	50	11.5	<10	<2	<3
VI-PL-149	<1	<10	<5	386	5.4	<10	<2	<3
VI-PL-150	<1	<10	<5	259	8.4	<10	<2	<3
VI-PL-151	<1	<10	<5	35	8.7	<10	<2	<3
VI-PL-152	<1	<10	<5	154	8.3	<10	<2	<3
VI-PL-153	<1	<10	<5	54	8.5	<10	<2	<3
VI-PL-019	<1	<10	<5	63	8.1	<10	<2	INF
D VI-PL-011	<1	<10	<5	4	5.5	<10	7	INF

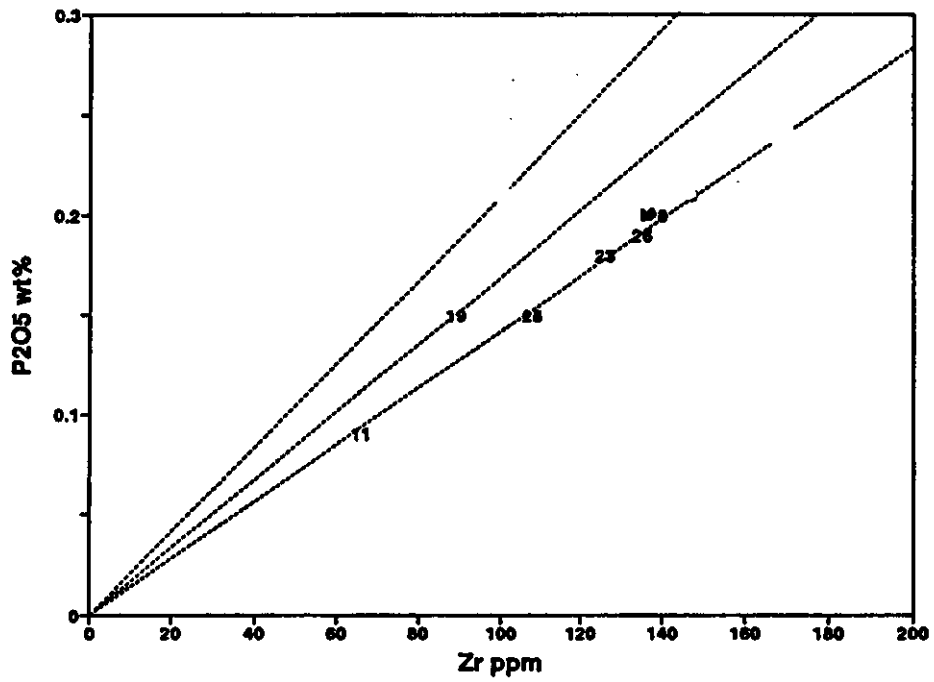
D - QUALITY CONTROL DUPLICATE

XRF

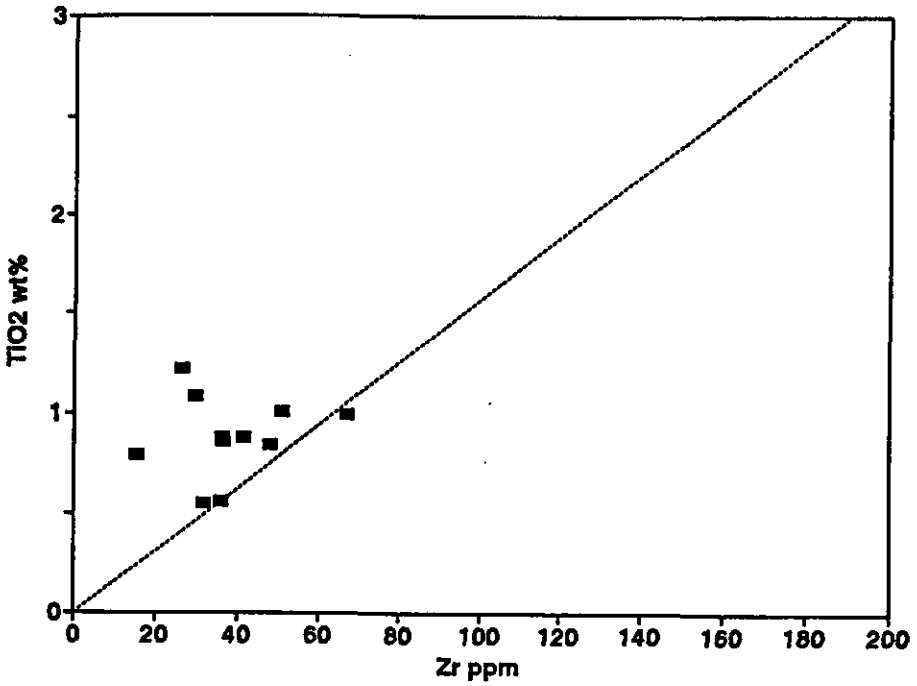

TiO2 wt%
Zr ppm
0
1
2
3
0
20
40
60
80
100
120
140
160
180
200

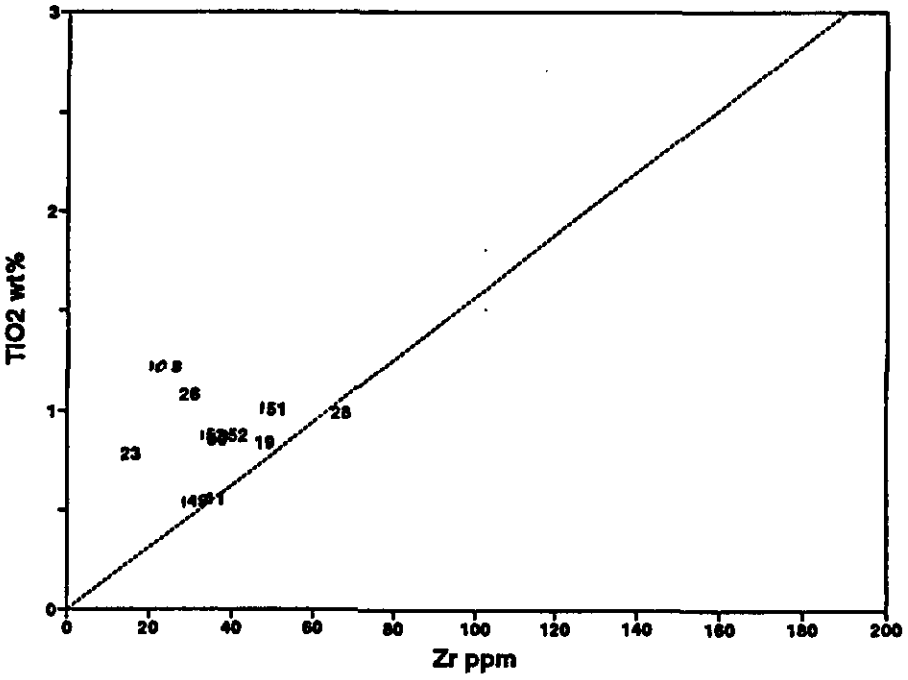

TiO2 wt%
Zr ppm
11
19
26
23
26
0
1
2
3
0
20
40
60
80
100
120
140
160
180
200


0.3
0.2
0.1
0
P2O5 wt%
0
20
40
60
80
100
120
140
160
180
200
Zr ppm

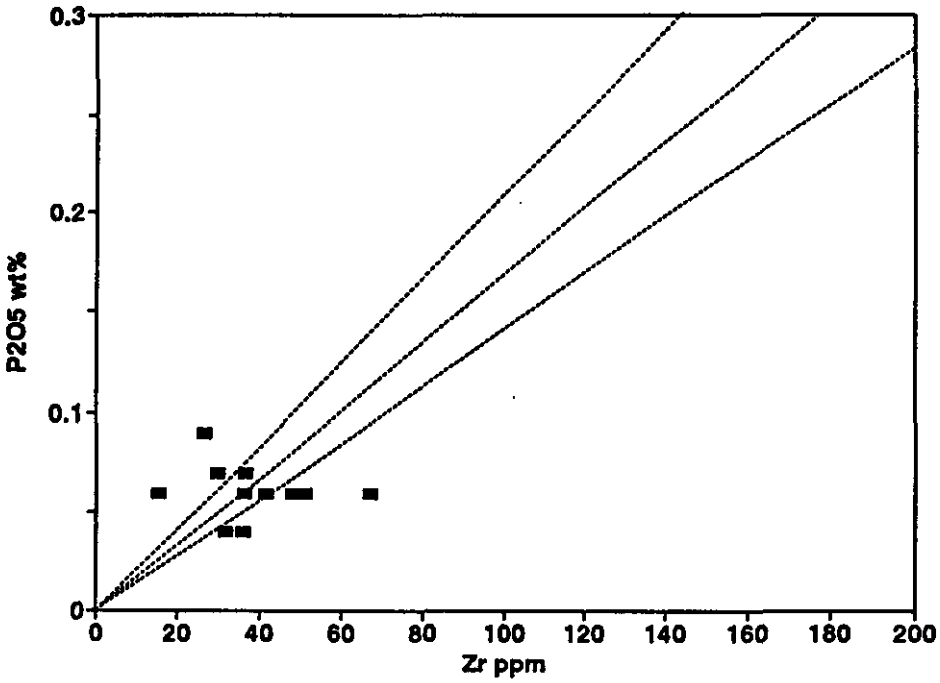

0.3
0.2
0.1
0
P2O5 wt%
19
25
11
0
20
40
60
80
100
120
140
160
180
200
Zr ppm

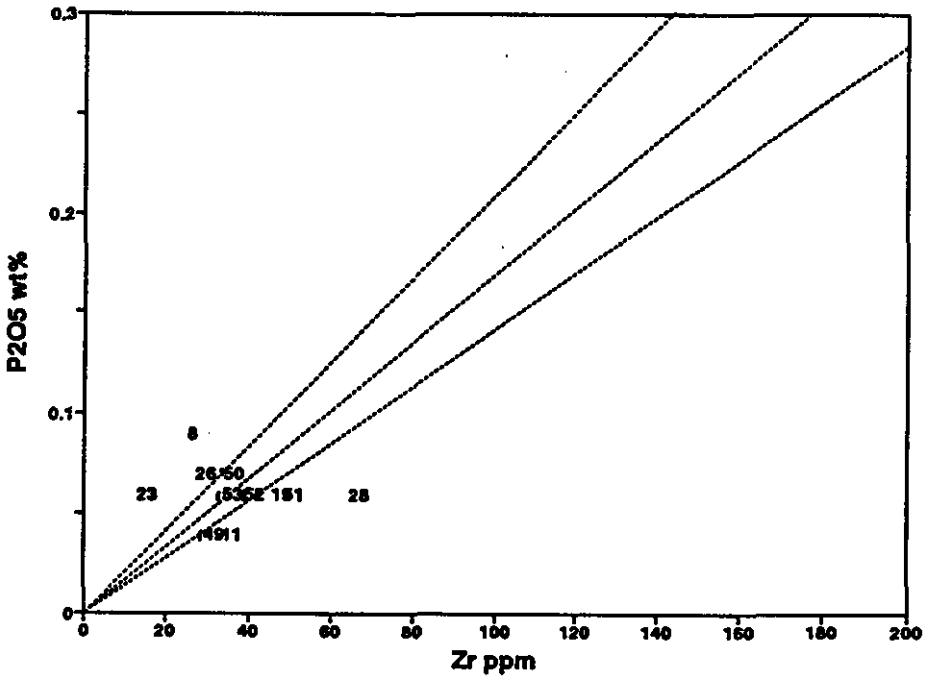
ICP


TiO2 wt%
Zr ppm
0
1
2
3
0
20
40
60
80
100
120
140
160
180
200

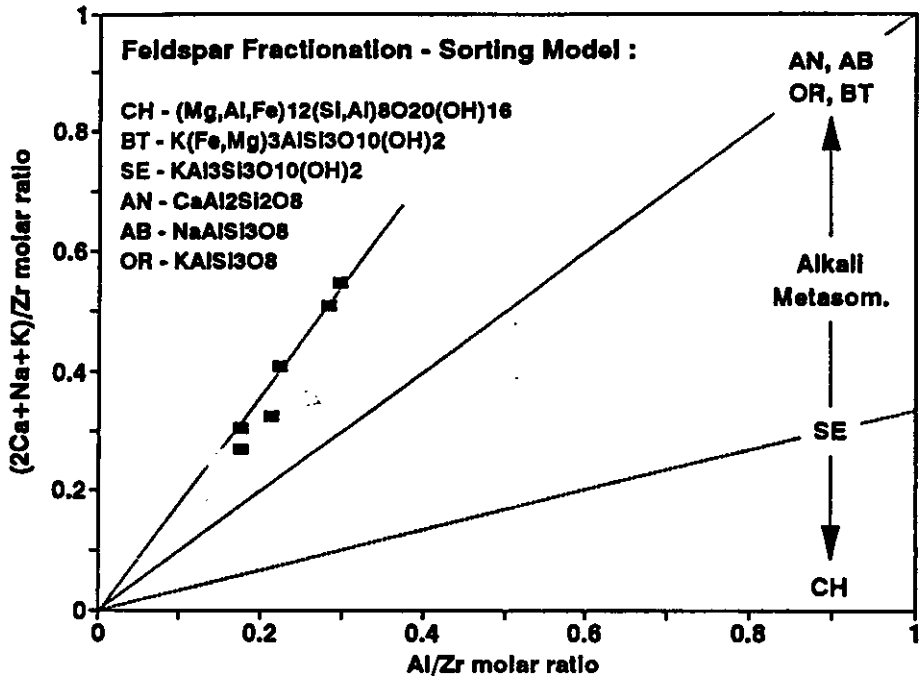

TiO2 wt%
Zr ppm
0
1
2
3
0
20
40
60
80
100
120
140
160
180
200
26
151
28
19
23

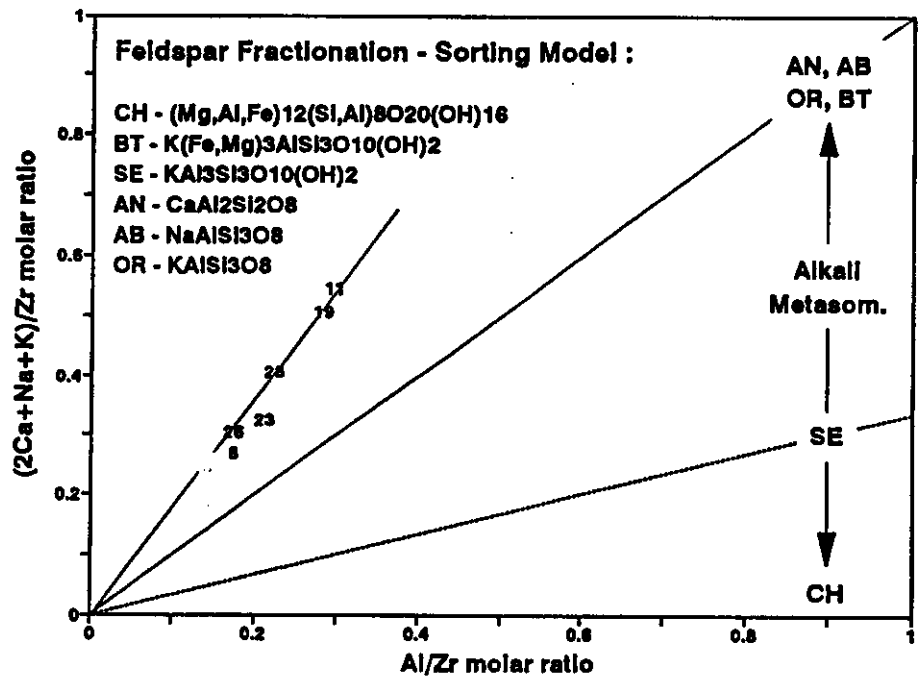
ICP


0.3
0.2
0.1
0
P2O5 wt%
0
20
40
60
80
100
120
140
160
180
200
Zr ppm

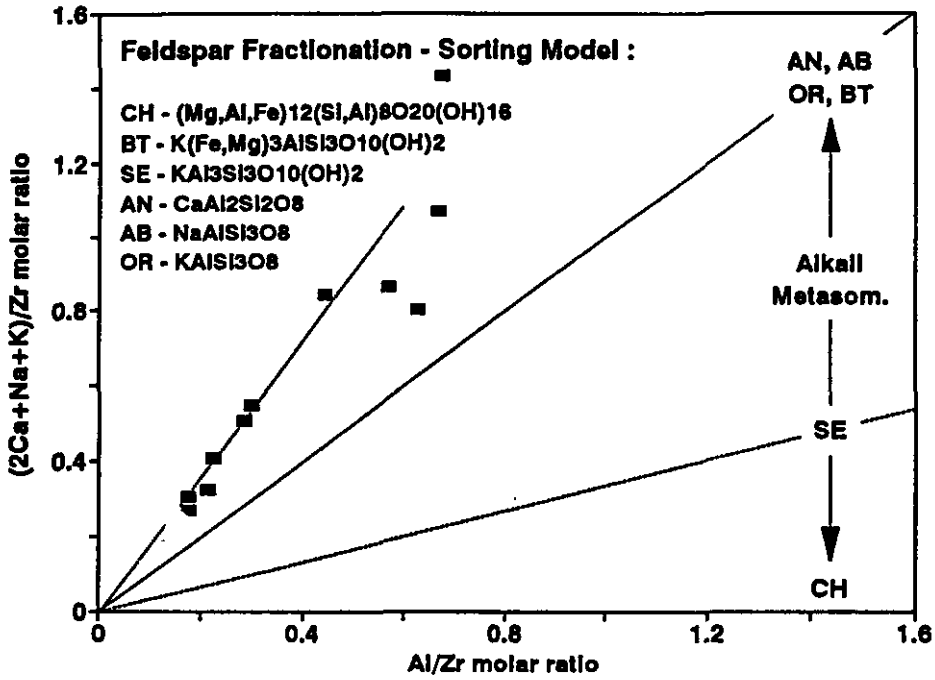

0.3
0.2
0.1
0
P2O5 wt%
8
23
151
28
0
20
40
60
80
100
120
140
160
180
200
Zr ppm

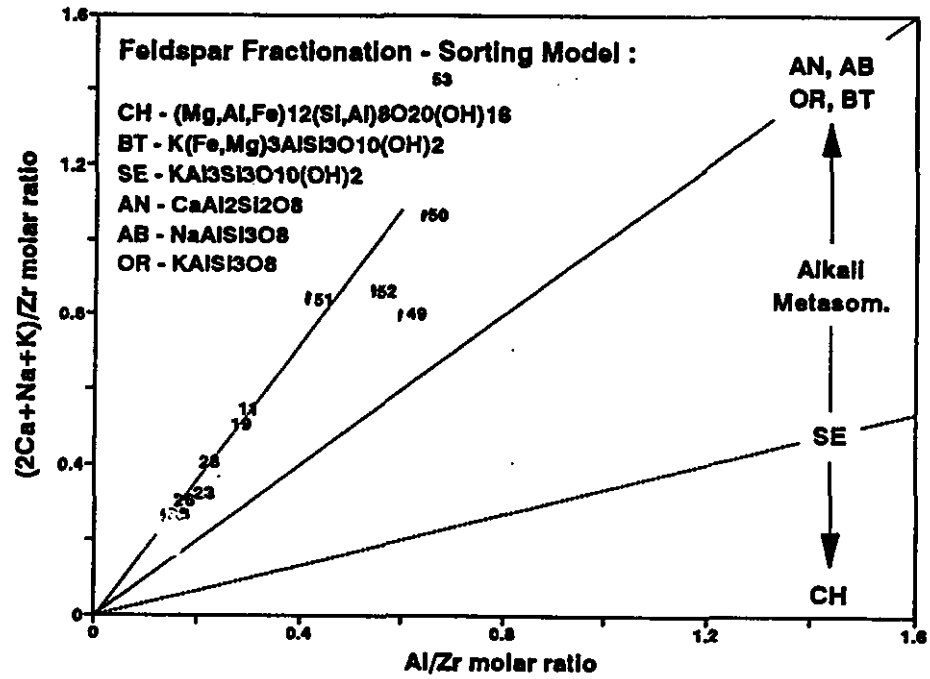
XRF only

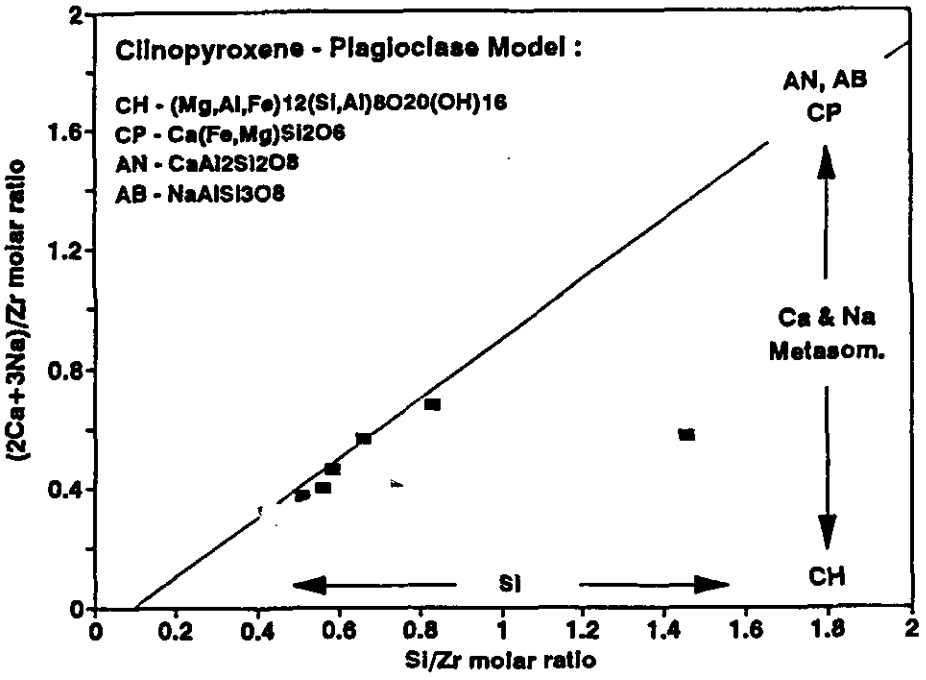

Feldspar Fractionation - Sorting Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
BT - K(Fe,Mg)3AlSi3O10(OH)2
SE - KAl3Si3O10(OH)2
AN - CaAl2Si2O8
AB - NaAlSi3O8
OR - KAlSi3O8
AN, AB
OR, BT
Alkali
Metasom.
SE
CH
(2Ca+Na+K)/Zr molar ratio
Al/Zr molar ratio
0
0.2
0.4
0.6
0.8
1

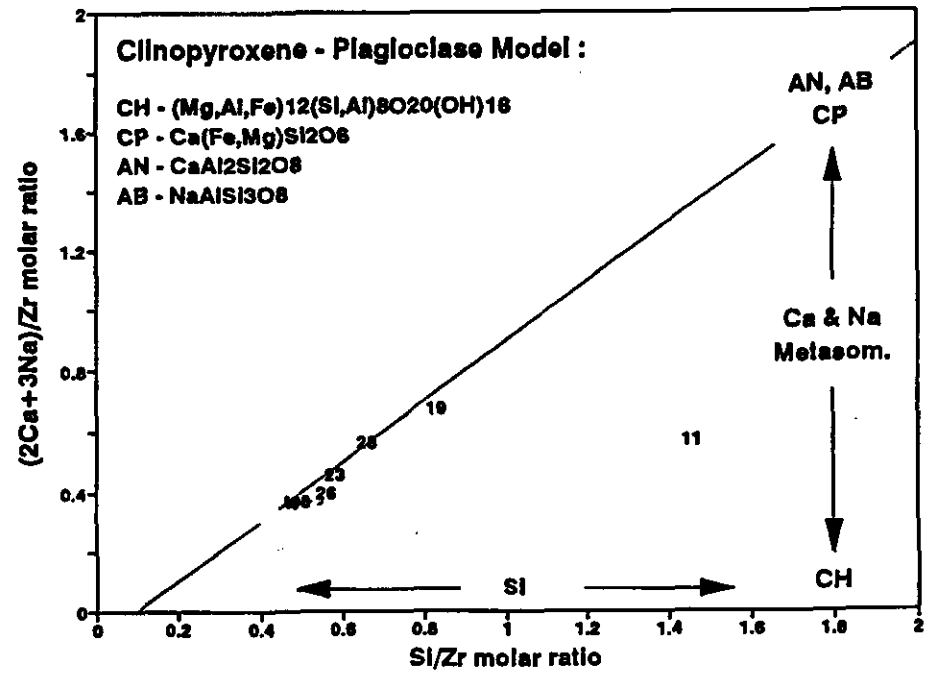

Feldspar Fractionation - Sorting Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
BT - K(Fe,Mg)3AlSi3O10(OH)2
SE - KAl3Si3O10(OH)2
AN - CaAl2Si2O8
AB - NaAlSi3O8
OR - KAlSi3O8
AN, AB
OR, BT
Alkali
Metasom.
SE
CH
(2Ca+Na+K)/Zr molar ratio
Al/Zr molar ratio
11
19
28
23
26
5
0
0.2
0.4
0.6
0.8
1

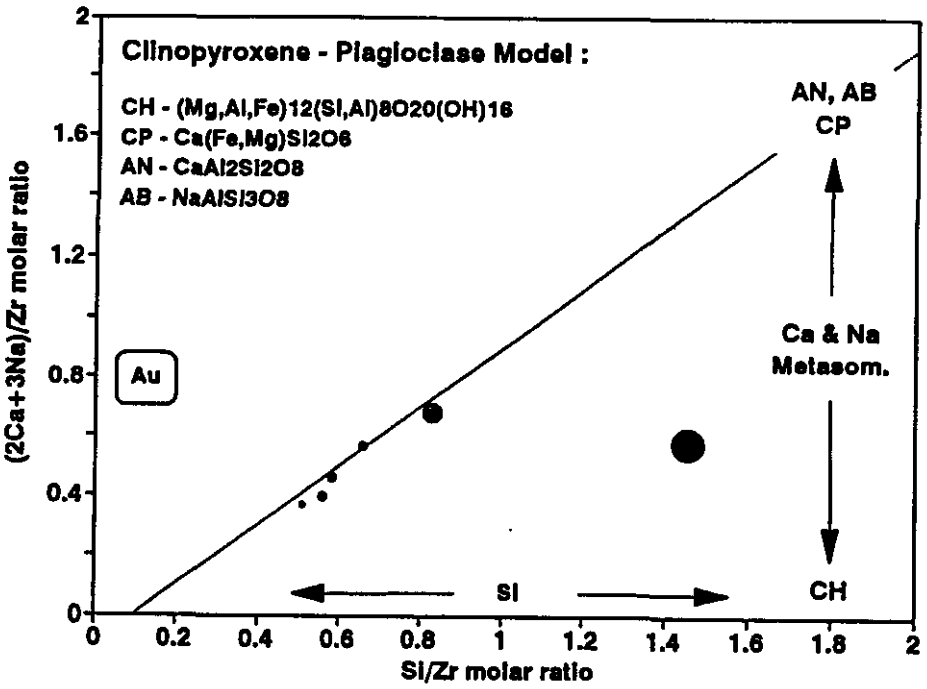
XRF + ICP

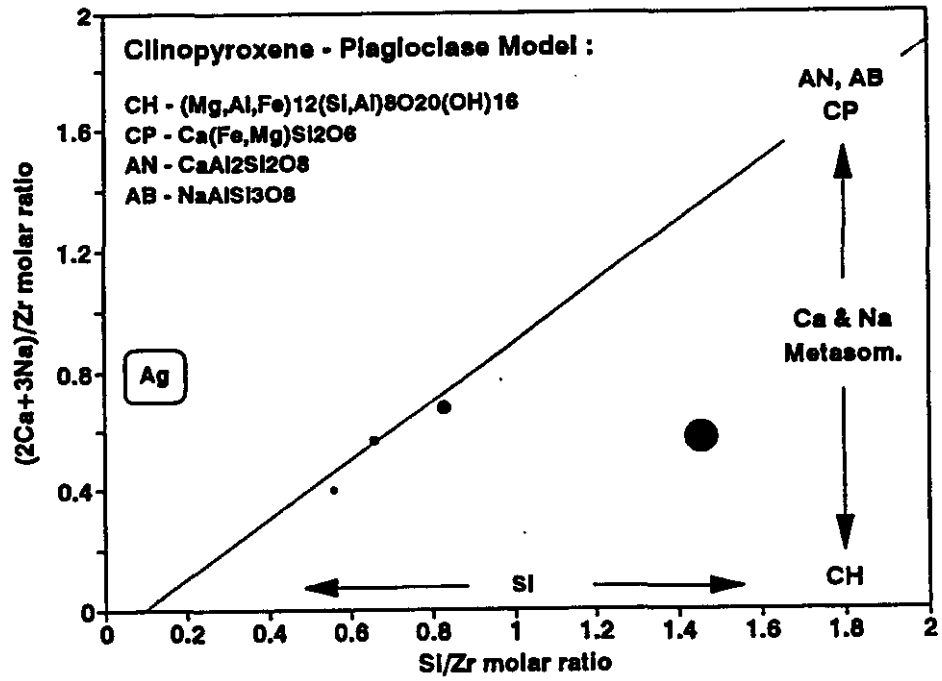

Feldspar Fractionation - Sorting Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
BT - K(Fe,Mg)3AlSi3O10(OH)2
SE - KAl3Si3O10(OH)2
AN - CaAl2Si2O8
AB - NaAlSi3O8
OR - KAlSi3O8
AN, AB
OR, BT
Alkali
Metasom.
SE
CH
(2Ca+Na+K)/Zr molar ratio
Al/Zr molar ratio
0
0.4
0.8
1.2
1.6

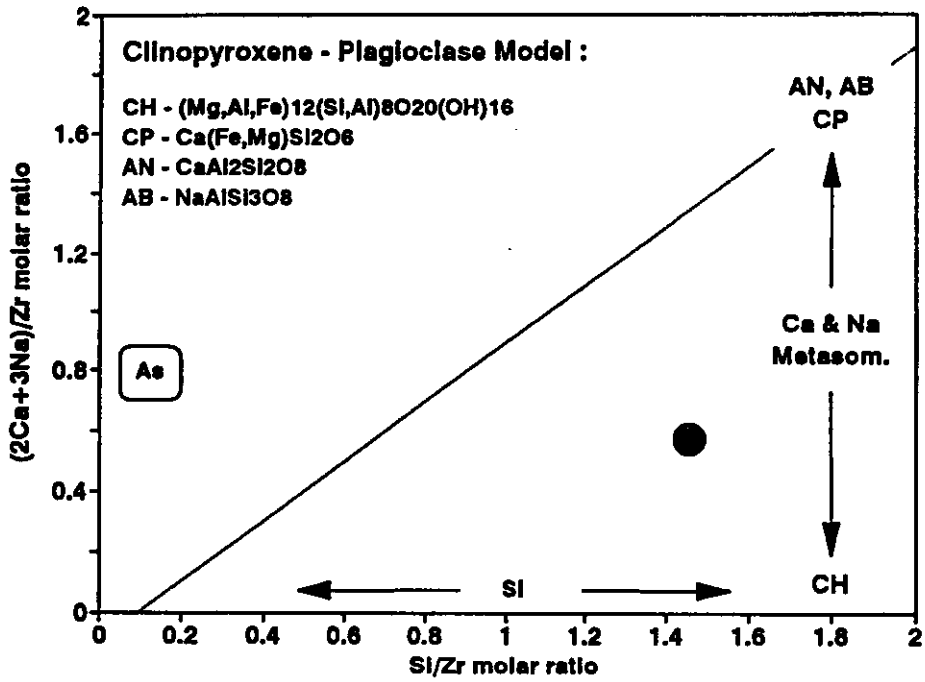

Feldspar Fractionation - Sorting Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
BT - K(Fe,Mg)3AlSi3O10(OH)2
SE - KAl3Si3O10(OH)2
AN - CaAl2Si2O8
AB - NaAlSi3O8
OR - KAlSi3O8
AN, AB
OR, BT
Alkali
Metasom.
SE
CH
(2Ca+Na+K)/Zr molar ratio
Al/Zr molar ratio
0
0.4
0.8
1.2
1.6

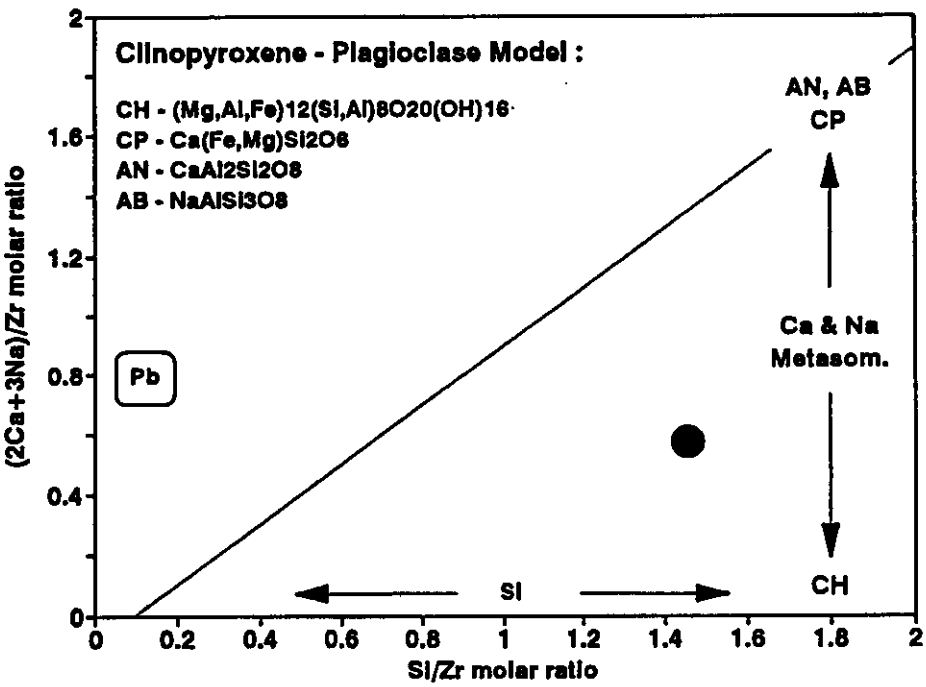

Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
AN, AB
CP
Ca & Na
Metasom.
CH
Si
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

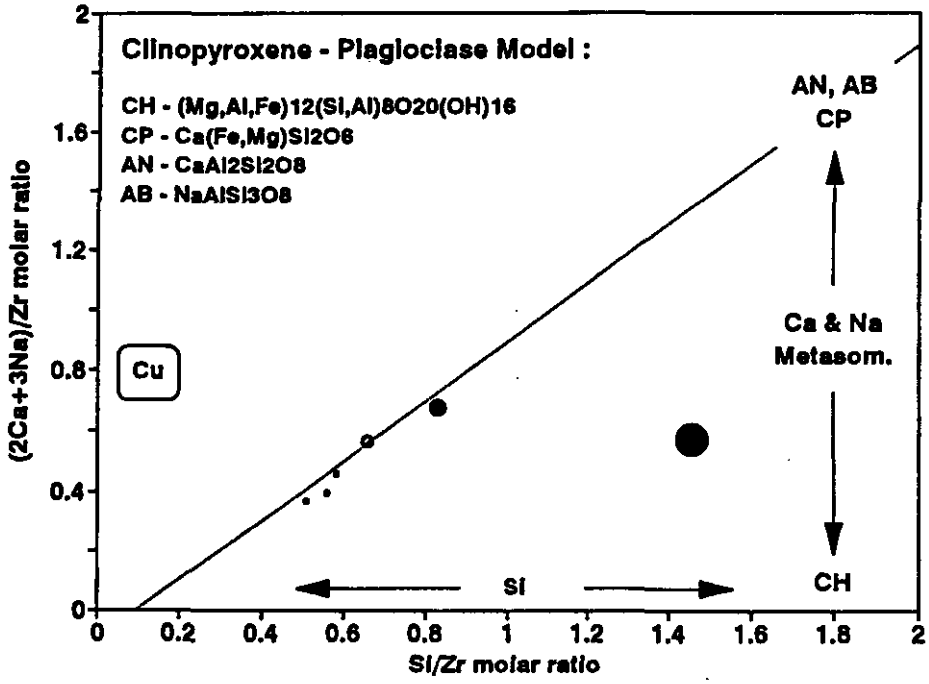

Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
AN, AB
CP
Ca & Na
Metasom.
CH
Si
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
19
11
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

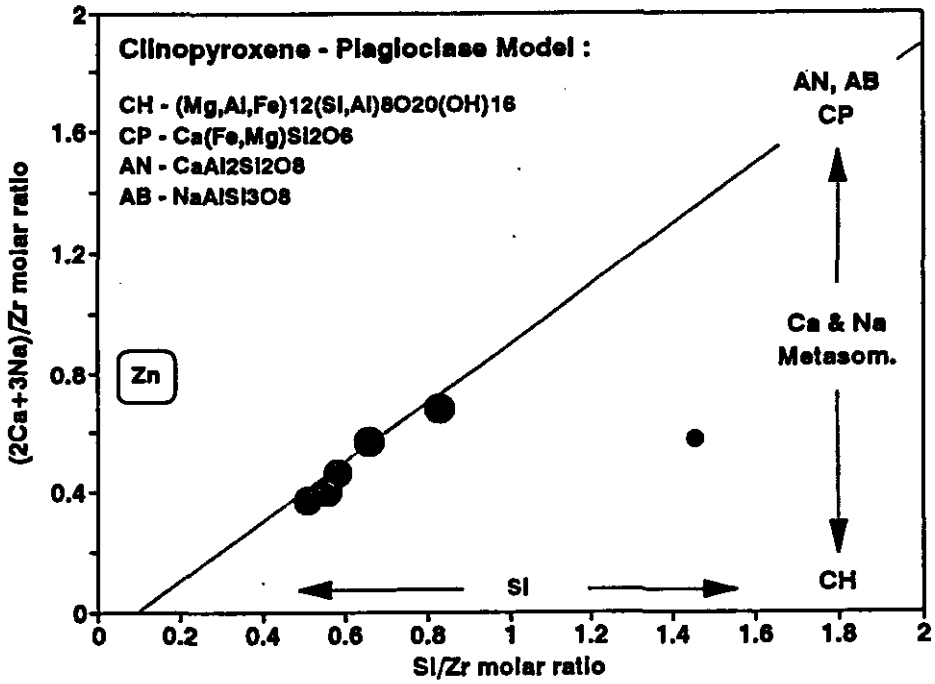

Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
AN, AB
CP
Ca & Na
Metasom.
Au
Si
CH
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
0
0.4
0.8
1.2
1.6
2
0.2
0.6
1
1.4
1.8

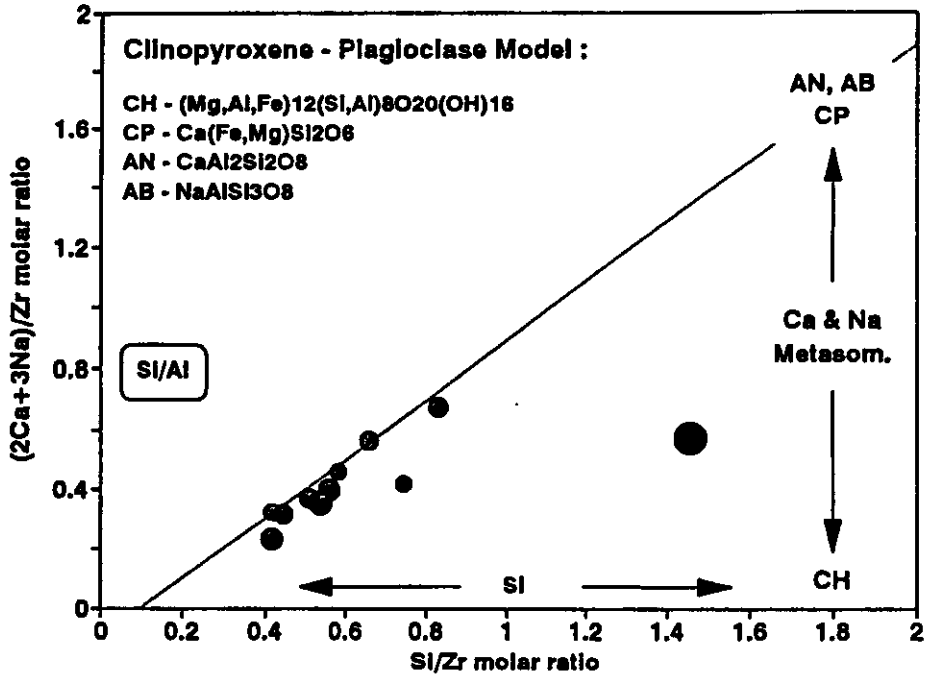

Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
AN, AB
CP
Ca & Na
Metasom.
Ag
Si
CH
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
0
0.4
0.8
1.2
1.6
2
0.2
0.6
1
1.4
1.8

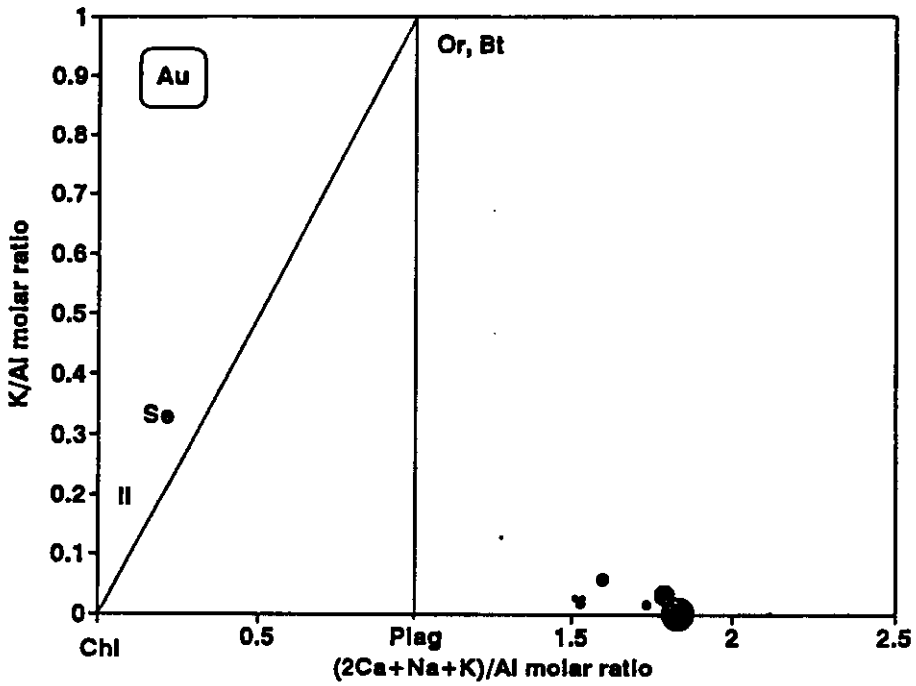

Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
AN, AB
CP
Ca & Na
Metasom.
As
Si
CH
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
0
0.4
0.8
1.2
1.6
2
0.2
0.6
1
1.4
1.8


Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
AN, AB
CP
Ca & Na
Metasom.
Pb
Si
CH
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
0
0.4
0.8
1.2
1.6
2
0.2
0.6
1
1.4
1.8

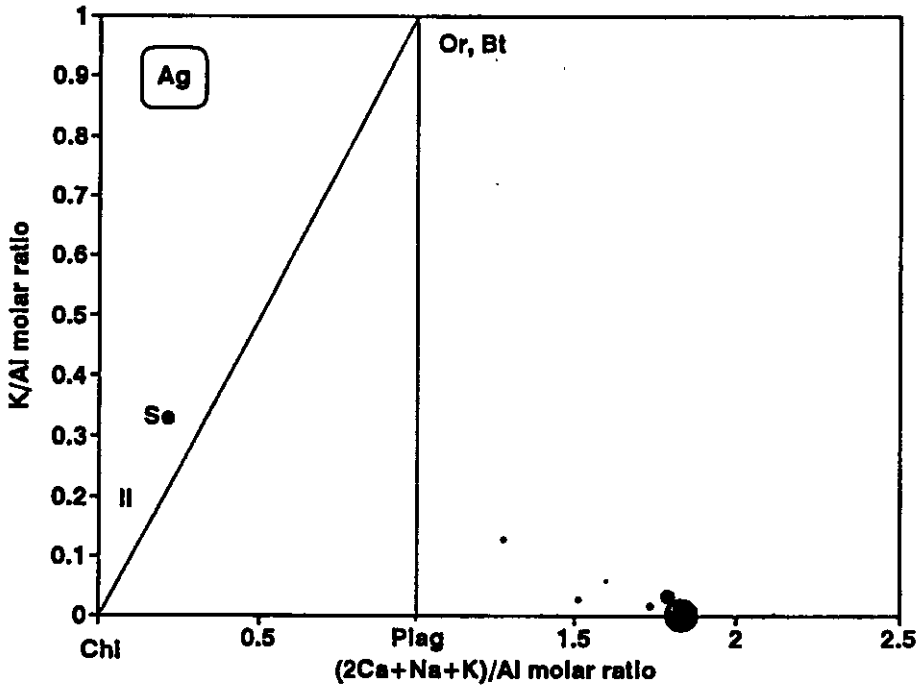

Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
AN, AB
CP
Ca & Na
Metasom.
CH
Si
Cu
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
0
0.4
0.8
1.2
1.6
2
0.2
0.6
1
1.4
1.8

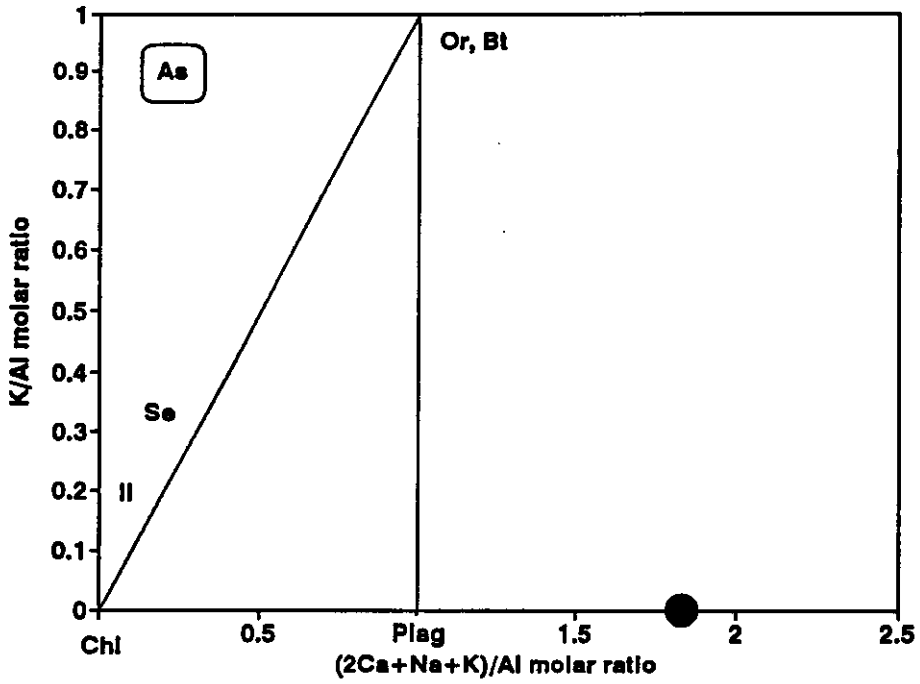

Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
AN, AB
CP
Ca & Na
Metasom.
CH
Si
Zn
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
0
0.4
0.8
1.2
1.6
2
0.2
0.6
1
1.4
1.8

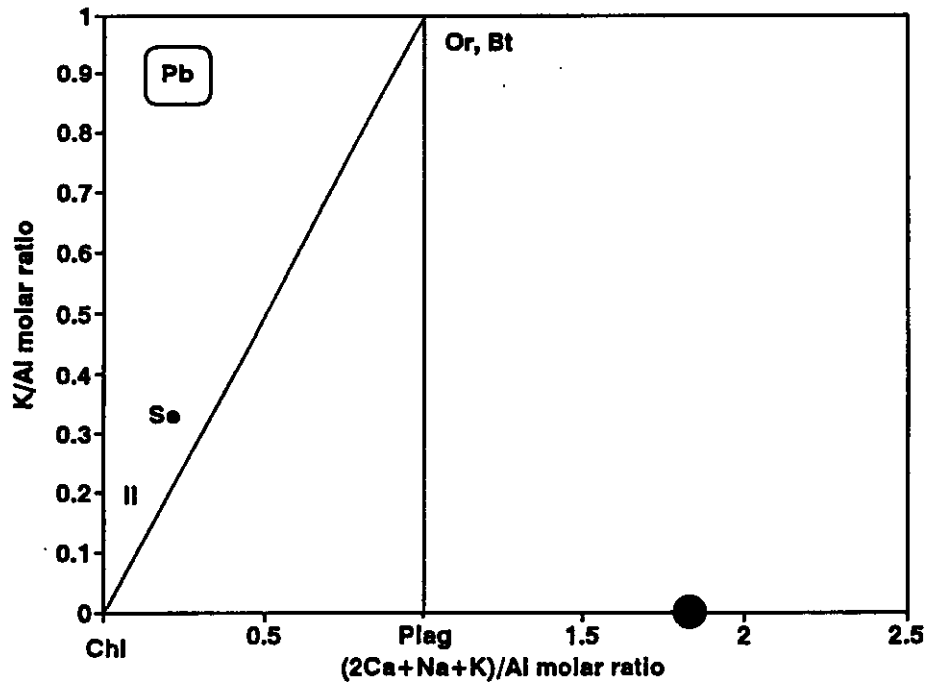

Clinopyroxene - Plagioclase Model :
CH - (Mg,Al,Fe)12(Si,Al)8O20(OH)16
CP - Ca(Fe,Mg)Si2O6
AN - CaAl2Si2O8
AB - NaAlSi3O8
Si/Al
AN, AB
CP
Ca & Na
Metasom.
Si
CH
(2Ca+3Na)/Zr molar ratio
Si/Zr molar ratio
0
0.4
0.8
1.2
1.6
2
0.2
0.6
1
1.4
1.8

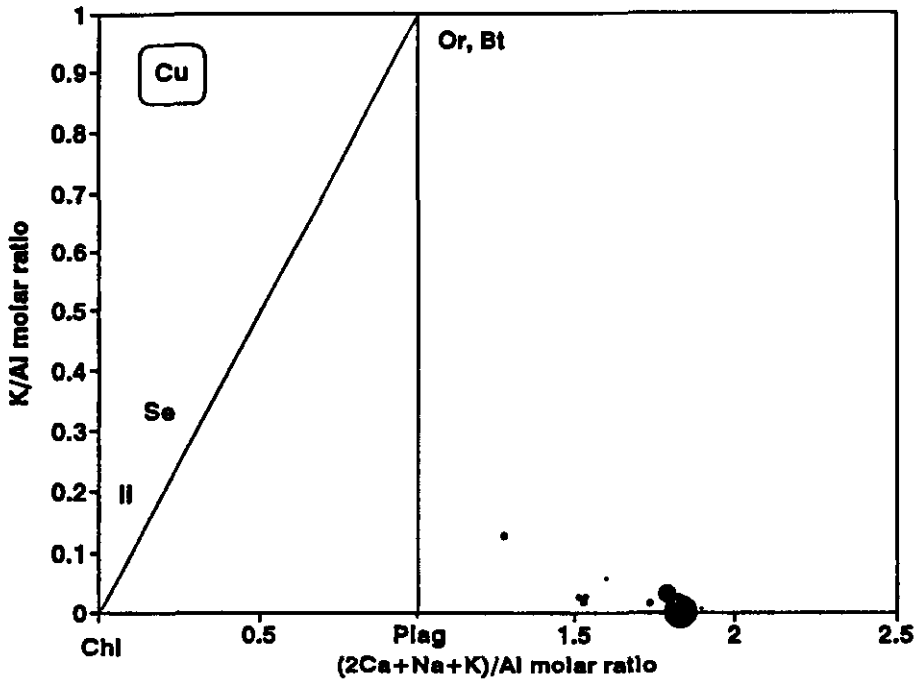


∴ not K add
but Si add




As
Or, Bt
Se
Il
Chl
Plag
K/Al molar ratio
(2Ca+Na+K)/Al molar ratio
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0.5
1.5
2
2.5


Pb
Or, Bt
Se
Il
Chl
Plag
K/Al molar ratio
(2Ca+Na+K)/Al molar ratio
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0.5
1.5
2
2.5


Cu
Or, Bt
Se
Il
Chl
Plag
K/Al molar ratio
(2Ca+Na+K)/Al molar ratio
0
0.1
0.2
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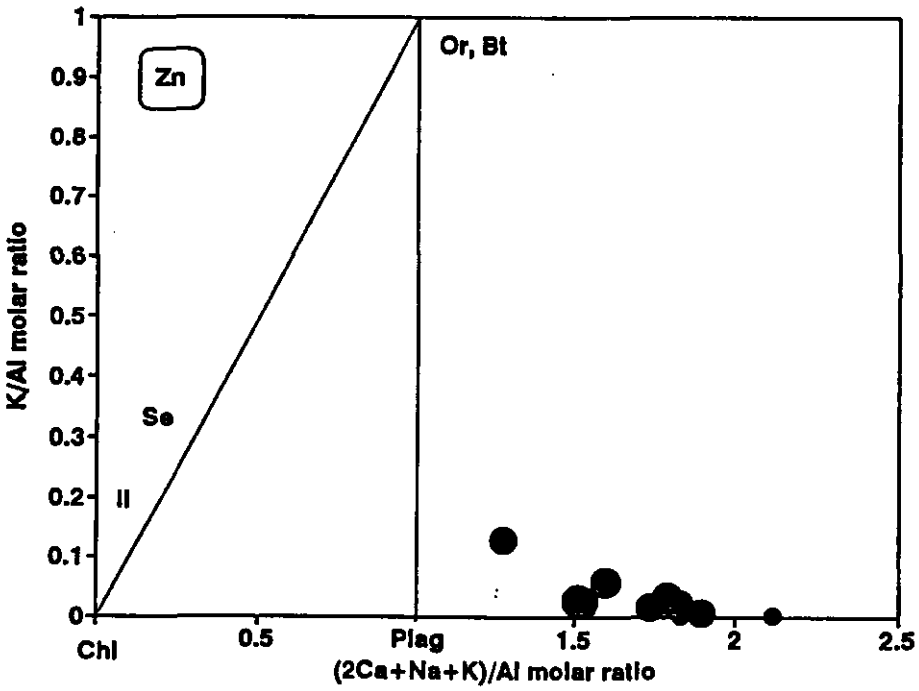
0.4
0.5
0.6
0.7
0.8
0.9
1
0.5
1.5
2
2.5


Zn
Or, Bt
Se
Il
Chl
Plag
K/Al molar ratio
(2Ca+Na+K)/Al molar ratio
0
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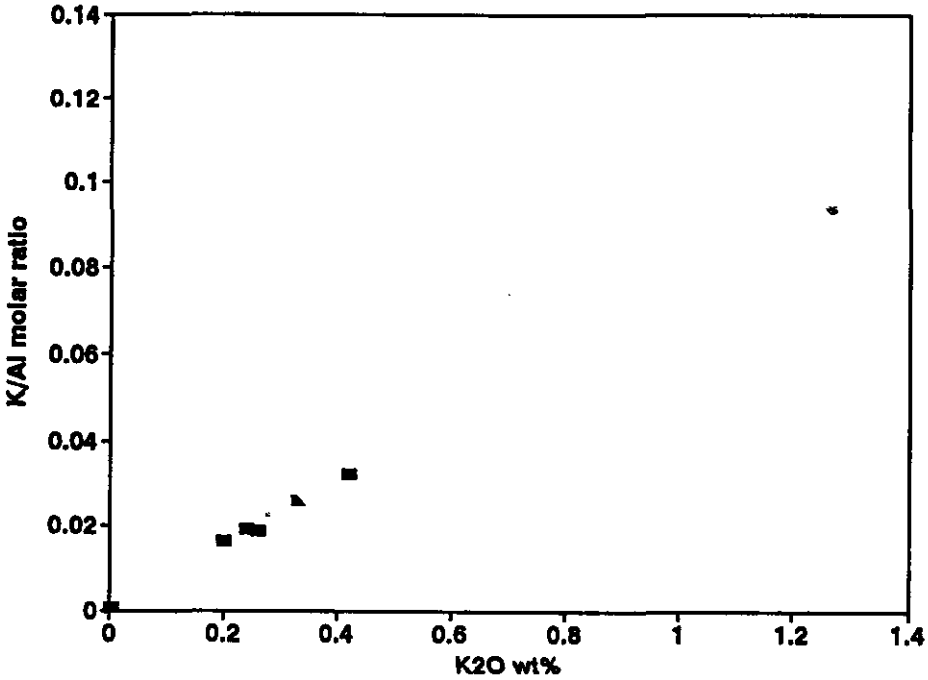
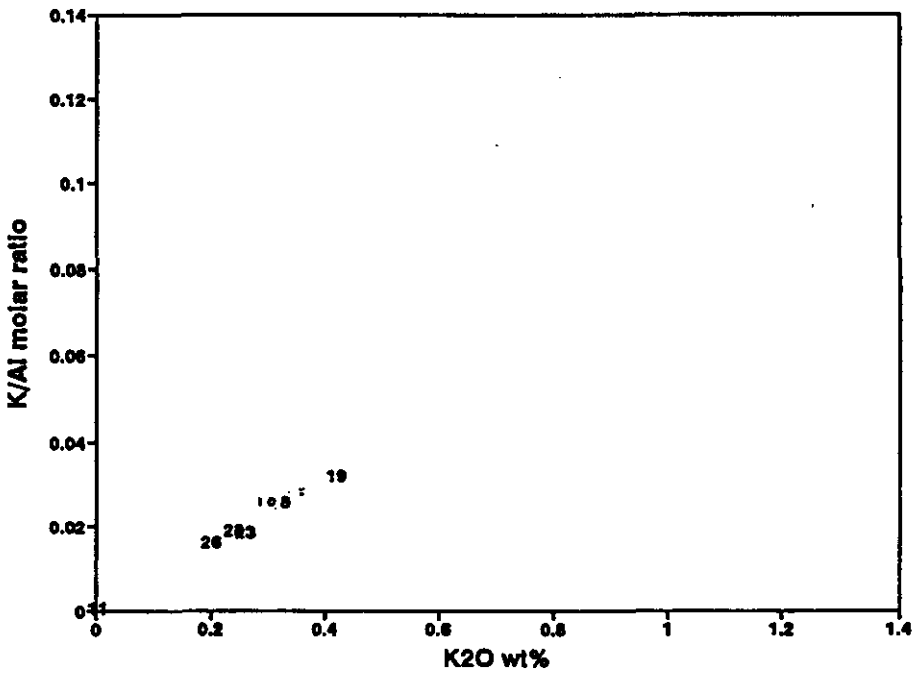
1.5
2
2.5


0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
K/Al molar ratio
0
0.2
0.4
0.6
0.8
1
1.2
1.4
K2O wt%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0.1
0.08
0.06
0.04
0.02
K/Al molar ratio
19
283
0
0.2
0.4
0.6
0.8
1
1.2
1.4
K2O wt%

Petrography of 3 Samples
Heber Project, Vancouver Island, B.C.

23 January 1995

For:
Piotr Lutynski
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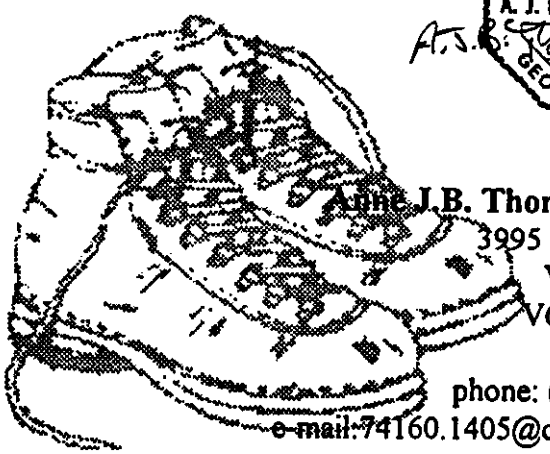
PROFESSIONAL GEOSCIENTIST
PROVINCE OF BRITISH COLUMBIA
A. J. B. THOMPSON

A.J.B. Thompson 23/1/95



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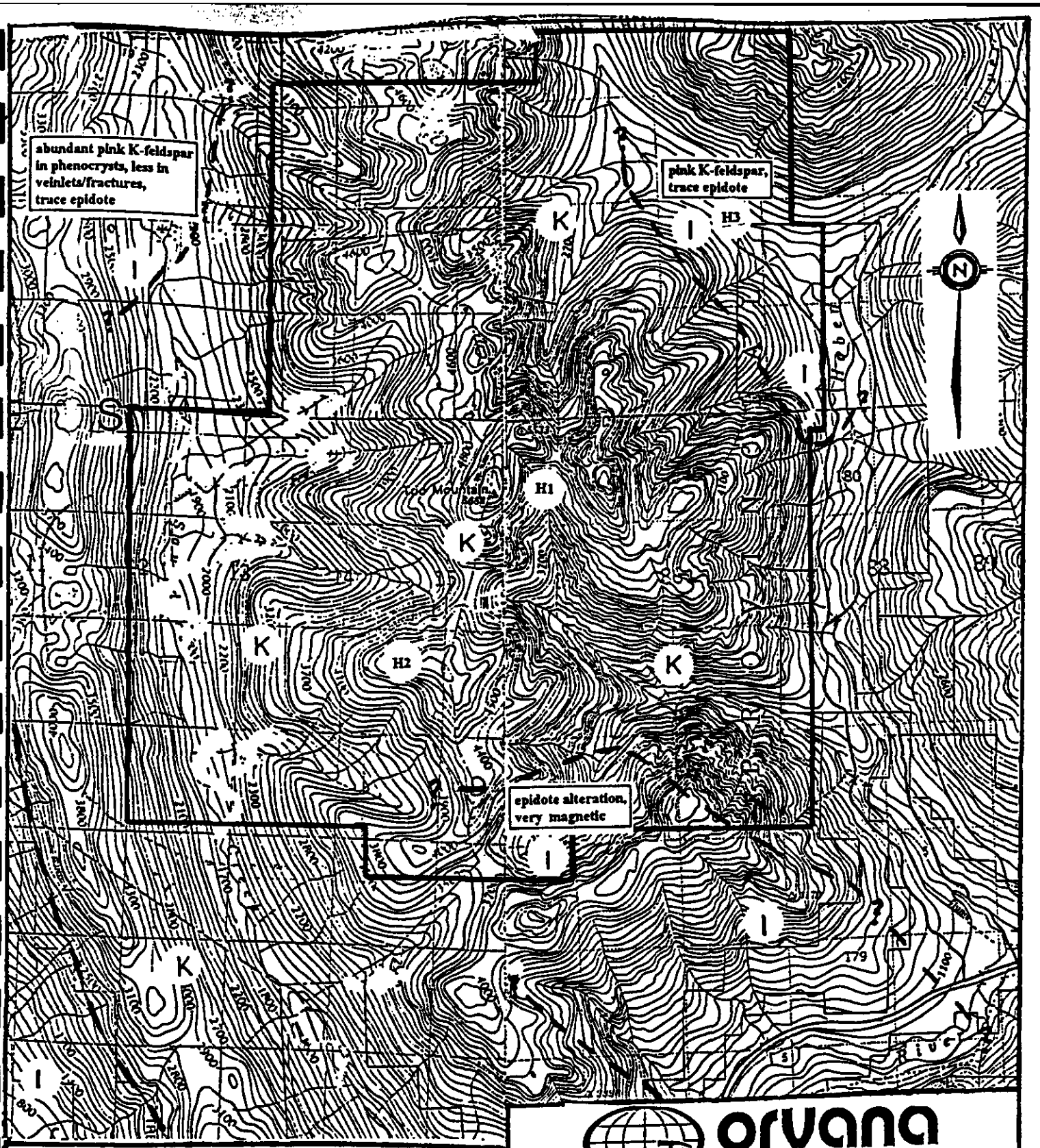


LEGEND

LOWER JURASSIC - ISLAND INTRUSIONS — I
Goranite, Granodiorite & Quartz Diorite

TRIASSIC - KARMUTSEN FORMATION — K
Pillowed & Lapilli Basalts
Tuff Breccia

Petrographic Rock Samples: H1, H2, H3

0 1 2 3km

orvana MINERALS CORP.

HEBER PROPERTY
PRELIMINARY GEOLOGY

DATE:	NTS:92E16E/92F13W
SCALE: 1:50000	ALBERNI M.D.
FIG: 2	

SAMPLE: Heber 1

LITHOLOGY: Basalt / Basaltic andesite (spilite)
ALTERATION TYPE: chlorite - epidote

Hand Sample Description:
Grey blue, medium to fine grained rock containing large green phenocrysts (up to 1mm long). Amygdules (avg. 5mm) are infilled with a pale green mineral and sometimes rimmed by a white or pink mineral (most noticeable in hand specimen/offcut, not in chip). Blue-white bladed plagioclase phenocrysts are common (avg. 4mm). A black-dark green mineral (generally 1mm) is interspersed throughout the ground mass.

MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Opt. Prop.
Plagioclase	40	glomeroporphyritic and laths, generally grundgy in appearance, largely due to chlorite particles dusted throughout	
Clinopyroxene	20	subhedral grains, up to 1mm across, dispersed throughout the groundmass	avg. biref - 0.015
Brown/Green - unknowns	10	grundgy, extremely fine grained green and brown alteration products, diffuse throughout the section	
Chlorite	07	irregular patches, throughout the section	bl biref., grn. pleoch

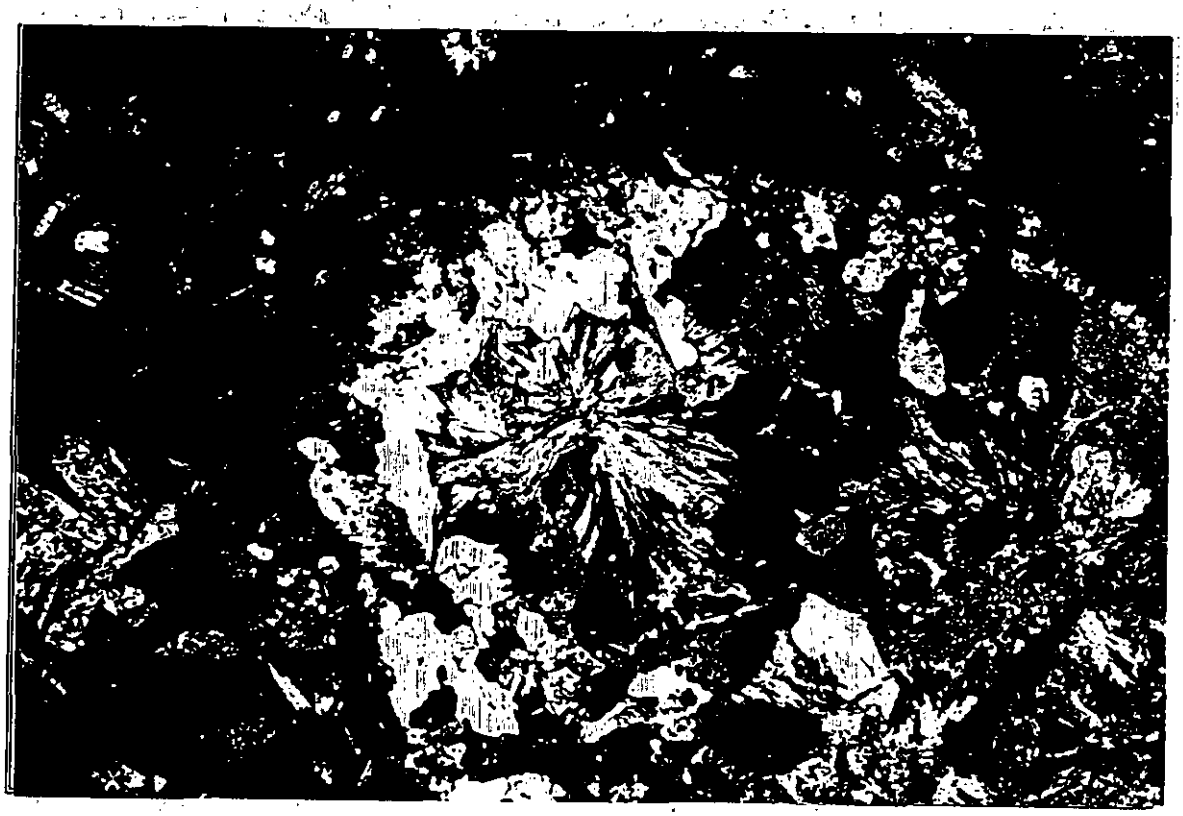
MINOR MINERALS

Mineral	%	Distribution & Characteristics	Opt. Prop.
Titanite	05	clusters throughout - fine grained, secondary alteration of mafic minerals	
Magnetite	05	ilmenite exsolution lamnae, euhedral grains - max. 1mm across	
Quartz	05	possibly with K-feldspar in vesicles	
K-feldspar	03?	pink mineral, filling vesicles in hand sample, (centres filled with prehnite), also rimming plagioclase	
Epidote	02	fine grained, granular, along edges of chlorite patches	yllw'grn
Prehnite	02	radiating fibres, infilling vesicles - 2mm in length, cross pattern extinction	non-pleoch.
Calcite	tc.	interstitial	

Thin Section Description:
Amygdular basalt with glomeroporphyritic plagioclase set in an intergranular, medium to fine grained groundmass of dominantly plagioclase laths, clinopyroxene and magnetite. Extensive chlorite and titanite alteration suggest the rock is now a 'spilite'. The alteration is consistent with late magmatic-hydrothermal fluids within the flow, or with possible propylitic style alteration associated with a subsequent hydrothermal system.

Heber 1: Plagioclase laths and glomerporphyritic phenocrysts in a fine grained dark groundmass, with clinopyroxene grains (brightly coloured) and patches of chlorite (mottled). Field of view = 5mm. XPL.

Heber 1: As above, in plane light, showing the distribution of magnetite grains (opaque). Field of view = 5mm. PPL.



Heber 1: Amygdule filled with prehnite, quartz and possible K-feldspar. Field of view = 5mm. XPL.

SAMPLE: Heber 2

LITHOLOGY: Basalt, basaltic andesite (vesicular)
ALTERATION TYPE: prehnite - epidote (strong)

Hand Sample Description:
Mottled dark and light green-gray, fine grained rock. The rock is cut by yellow green filled veinlets and 10% of the rock is vug space, infilled with the same yellow green mineral. The section consists dominantly of the vein material.

MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Opt. Prop.
Brown/Green fine grained unknowns	30	fine grained, particles disseminated throughout the section in variable proportions	
Prehnite (?)	20	in vesicles and dispersed through groundmass	high biref.,
Amphibole	20	fibrous	yllw-brn sl. pleoch.
Clinopyroxene	10	primary, as in Heber 1	
Epidote	08		

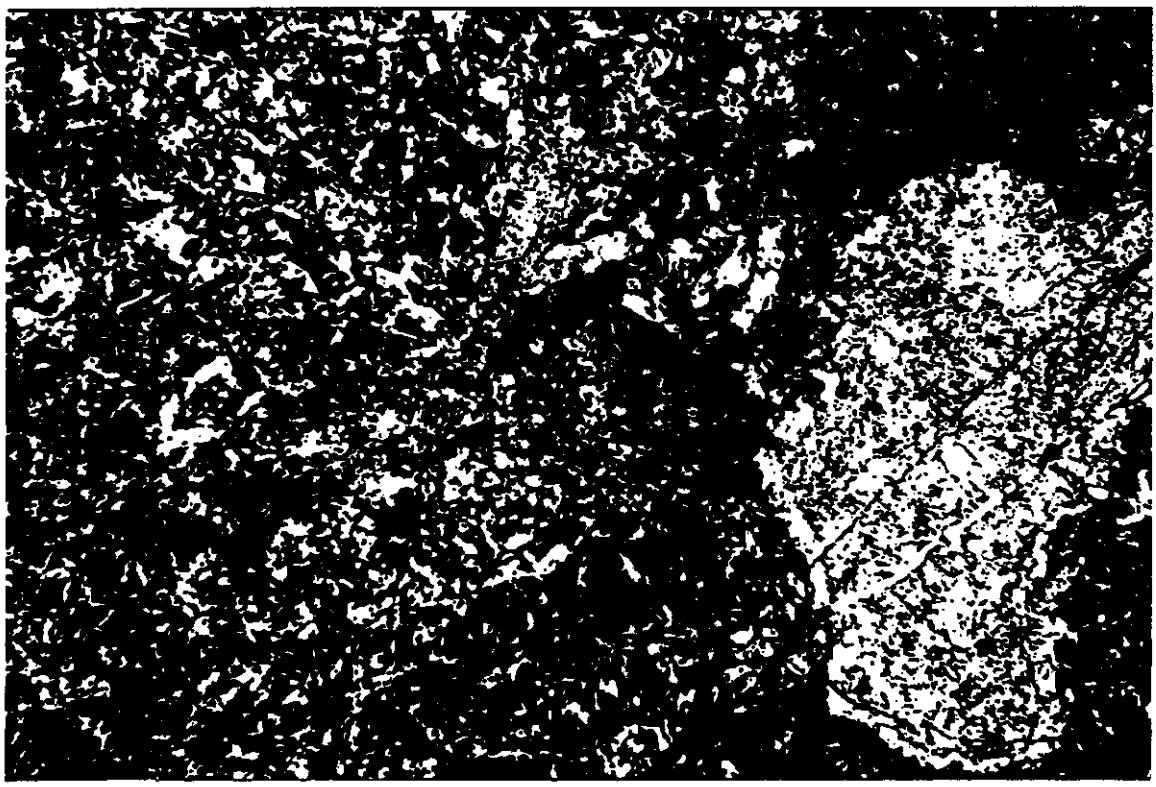
MINOR MINERALS

Mineral	%	Distribution & Characteristics	Opt. Prop.
Vesicles	05	up to 5mm across, rounded to irregular shapes	
Magnetite	04	remnant euhedral grains, with exsolution lamallae	
Quartz	03	infilling amygdules	
K-feldspar	02	amygdules, infilling	
Pyrite	tc	with oxidation rims (hematite)	

Thin Section Description:
Vesicular basalt, with vesicles occasionally infilled by prehnite. Alteration of the rock is strong, with the sample now consisting almost entirely of a mixture of prehnite, a fibrous amphibole and fine grained unknown brown and green minerals. No primary plagioclase is left in the section, however a remnant texture suggesting plagioclase laths in the groundmass is apparent. The alteration is again consistent with a strongly altered spilite. Field relations, particularly the presence of absence of propylitic alteration in other rock types would help confirm or deny any possible association with a mineralized system.

In general, the texture in this sample is very similar to that in Heber 1. Heber 2 is somewhat finer grained and contains more vesicles/amygdules. The alteration, as noted above, is stronger and may relate to the position within the flow sequence.

Heber 2: Amygdule filled with prehnite and epidote. Surrounding groundmass is highly altered (spilite) and contains prehnite, epidote and clinopyroxene. Colour variation in the groundmass suggests weak layering. Field of view = 5mm. XPL.



Heber 2: Area near to the above amygdule, showing remnant plagioclase texture. Field of view = 5mm. PPL.

SAMPLE: Heber 3

LITHOLOGY: Diorite / Quartz diorite
ALTERATION TYPE: Sericite (weak to moderate), K-feldspar (weak)

Hand Sample Description:
Light to medium grey, massive medium grained rock. Euhedral black hornblende (avg. 4mm) is disseminated throughout the white matrix. Pink K-feldspar is concentrated in patches, possibly along a fracture, on one side of the chip. A green mineral occurs along some fractures.

MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Opt. Prop.
Plagioclase	35		
Sericite	20	replacing cores of feldspar, throughout section	
K-feldspar	12	concentrated in patches, rimming plagioclase phenocrysts	
Quartz	10	subhedral grains	
Hornblende	10	phenocrysts, euhedral, up to 1mm long in seciton.	60-120 clv., pleoch. bn gn

MINOR MINERALS

Mineral	%	Distribution & Characteristics	Opt. Prop.
Chlorite	05	replacing biotite phenocrysts	bl gy biref.
Pyrrhotite	03	rounded grains, concentrated with chlorite patches	dark pink bn
Titanite	02	granular clusters high relief	brown - grey reflect.
Epidote	01	replacing biotite, with chlorite	
Magnetite	tc		

Thin Section Description:
Medium grained, subhedral granular intrusive rock. The rock originally contained both hornblende and biotite phenocrysts. The latter are now altered to chlorite. Only minor quartz is present, suggesting a diorite composition. The plagioclase is moderately altered to sericite (dominantly in the cores) and twinning is largely preserved. Minor to moderate K-feldspar appears to be secondary, and replaces the rims of some of the plagioclase. K-feldspar distribution may be controlled by fractures.

Heber 3: Subhedral granular diorite with hornblende, chlorite (after biotite) and sericite altered plagioclase. Field of view = 5mm. XPL.

Heber and Trio Property - Rock Samples Description					
Sample No	Location	Elevation (feet)	Rock Type	Sample Type	Sample Description
441874	Heber East	1800-1920	And/Basalt	Rep.Grab	Grey-greenish,locaiy feldspars upto 2.5cm long,epidote,trace ChPy(?) & Py
441875	Heber East	1920	And/Basalt	Float	Epidote rich,pale green,magnetite,Fe-oxid.,magnetic
	10m below VI-1524			2x.2x.2m	
441876	Heber East	1920	And.Flow	Subcrop	Vesicular,angular fragment .2x.2x.2m (could be float),quartz,epidote,<1%Py+ChPy in vesicules
441877	Heber East	2340	Granite	Grab	Tarnished Pyrite or trace ChPy(?) on fractures, epidote,trace K-Feldsper
				10x5m area	
441878	Heber East		Basalt	Outcrop	Trace Py+ChPy,Qtz stringers<0.5%,hornfelsed rock,epidote alt.,J:090/65S
				5x70m	
441879	Heber East		Qtz.veins	Grab	White quartz with ChPy+trace Mal,Qtz vein upto 15cm wide,several veins parallel to shearing 070/50S,epidote<3%
	same as 441878				
441880	Heber East				
	Labeled as 441870	2500-2550	Lap.T/T.Aggl.	Rep.Grab	J:070/80E,flow bedding 050/08E,dark-pale green, <0.5%Py,trace Epi,devitrific.glass
441881	Heber East	2840-2940	Lap.T/T.Aggl.	Rep.Grab	Possibly locally basalt,Not magnetic,abundant epidote,devitrific.glass
	Labeled as 441871				
441882	Heber East	2940-3020	Lap.T/T.Aggl.	Rep.Grab	Similar to 441878,Abundant epidote,trace Qtz.lenses,not magnetic
	Labeled as 441972				
441883	Heber East	3020-3080	Basalt(?)	Chip	Epidote rich(<10%),trace ChPy(?)in vesicules associated with Quartz,trace pink K-feldspar on slicensides planes
	Labeled as 441873				
	RE sample VIPL028				
441884	Heber East	3300	And./Basalt	H.G.Float	Vesicular Flow,epidote rich,ChPy in vesicules
441885	Heber East	3300	Andesite	Float	Pyrite in stockwork,andesite hoste rock,<8% Pyrite
441886	Heber East	3300	Magnetite	Float	Magnetite upto 70%+ChPy+Mal.Source at elevation 3740,lens, att:120/08S,0.8m wide min.5m long
441887	Heber East	3300	Andesite	Float	1m chip along the float(large boulder),epidote,K-feldspar spots ChPy+Py
441888	Heber East	3300	Andesite	Float	Feldsper in vesicules, ChPy<1% in veinlets
441889	Heber East	3360-3500	And/Basalt	Rep.Grab	White feldspar in vesicules, trace Py+ChPy(?)
441890	Heber East	3500-3700	And/Basalt	Rep.Grab	Trace Py(+ChPy ?)
441891	Heber East	3550	Qtz.Vein	Chip	Min.5m long,0.7m wide,pinch&swell,Att:008/20W
441892	Heber East	3700-3900	And/Basalt	Rep.Grab	Vesicular Flow,locaiy Py and ChPy(?) in vesicules, less than in 441890,J:060/85E,145/70S
441893	Heber East	3120	And/Basalt	Rep.Grab	Taken from Scree, vesicular flow, epidote in vesic.+locally Py and ChPy(?)
441894	Heber East	3120	Qtz+Epi.vein	H.G.Float	Epidote rich +Quartz+Py,grabs from scree
441895	Heber East	3120	Basalt	Float	.2x.5x.5m,sheared rock,Py<50%,some magnetite
441896	Heber East	3400	And.Volc.	Rep.Grab	3x10m area,gossanous outcrop,Py rich+Qtz,possibly trace ChPy+Mal
441897	Heber East	1960-2100	Qtz.Dio	Rep.Grab	Trace pink K-feldspar,no vis.Sx,trace Epi,J:190/08E,215/80E
441898	Heber East	2100-2200	Qtz.Dio.	Rep.Grab	Abundant pink feldspar in shears,feldspar in veins att:340/85W
441899	Heber East	2150	Granite/Qtz.Dio	Float	0.2x.2x.2m,pink granite, dissem Py<7%
441900	Heber East	2820-2940	Basalt	Rep.Grab.	Vesicular,Epidote,Qtz,J:077/85
441901	South Trio Mtn.	4500-4620	Andesite Flow	Rep.Grab.	Green, no vis Sx,J:080/85N,200/08E
441902	South Trio Mtn.	4540	Qtz+Epi Lens	Grab	1.5x3m,lens/pod,epi+Qtz rich, trace ChPy(?),massive aand flow wall rock
441903	South Trio Mtn.	4620-4960	And/Basalt	Rep.Grab.	Qtz+Epidote veins and lenses 4680-4640,columnar basalt,flow bedding 050/08E,trace Py/ChPy(?)
441904	South Trio Mtn.	4950-5040	Andesite	Rep.Grab.	Locally pink K-feldspar,HBL phenocrysts,vesicular,J:325/75N
441905	South Trio Mtn.	4960	Andesite	Float	.5x.5x.5m,<0.5%ChPy+Speculatite in epidote altered rock, vesicular
441906	South Trio Mtn.	5040-5440	Andesite Flow	Rep.Grab.	Locally pink feldspar in vesicules,trace Py+ChPy(?)dissem,Flow bedding:040/08E,J:135/85N,225/70E
441907	North Trio Mtn.	5150	Qtz.Vein	Float	5cm wide with massive ChPy 3cm wide
441908	North Trio Mtn.	5160-4900	Basalt	Rep.Grab.	Vesicular flow, abundant Qtz.+Epi in vesicules, magnetic,J:040/10E(flow bedding),280/75E
441909	North Trio Mtn.	4900	Andesite Flow	Rep.Grab	Massive flow with HBL crystals, looks locally like diorite. Trace vesicules,not magnetic,J:145/08N(flow bedding),055/85
441910	North Trio Mtn.	4900-5180	Basalt	Rep.Grab.	Epi+Qtz in vesicules from 5100-5180
441911	North Trio Mtn.	5180-5440	Basalt	Rep.Grab.	Vesicular,Epi+Qtz in vesicules
441912	East Trio Mtn.	5440-5533	Basalt	Rep.Grab.	Massive,fine grain,black-green,Fe-oxid on surface,almost no vesicules,J:140/08S
441913	East Trio Mtn.	5500	Qtz+Epi Lens	Grab	Min.0.5x0.5m in massive basalt wall rock, specularite
441914	East Trio Mtn.	3700-3950	And(Dio) Flow	Rep.Grab.	Massive,Trace Py,ChPy associated with epidote,magnetic,trace pink feldspar in phenocrysts,J:200/90,130/08N/085/60S
441915	East Trio Mtn.	3800	Qtz.Vein	Chip	<20%Py+20%Epi(trace ChPy),lens 1mx0.3m,Att:270/65S
441916	East Trio Mtn.	3950-4100	Andesite	Rep.Grabs.	Similar to 441914,trace Py+ChPy(?) associated with Epi.
441917	East Trio Mtn.	4000	Qtz.Vein	Chip, 0.7m	0.4m Qtz.Vein,Andesite Flow as a wall rock,Py+ChPy+Qtz,Att:245/85W
441918	East Trio Mtn.	4340-4580	Basalt	Rep.Grab.	Vesicular,abundant Epi.+Qtz+locally pink feldspar in vesicules and stockwork (4450),shear 025/80W
441919	East Trio Mtn.	4580-4900	Basalt Flow	Rep.Grab.	Below 4780 massive with HBL above vesicular basalt flow,magnetic,J:015/80W,055/35W
441920	East Trio Mtn.	4900-5000	And/Basalt	Rep.Grab.	Vesicular,sheared (168/90) parallel to the gulley,trace Mal,<3%Qtz lenses<2cm wide,shear zone 20m wide min 50m lon
441921	South Trio	3050-3160	Basalt	Rep.Grab.	Black green, abundant Quartz+Epi.From 3120-3160 abundant Qtz stockwork (5%),J:355/80E,250/60W,trace Py
441922	South Trio	3360	Shear	Chip,0.5m	Pyrite rich<30%,in basalt host rock,magnetite+haematite,Att:175/85E
441923	South Trio	3500-3520	Basalt	Grab	Green, massive,vesicules with Py+ChPy.Sx on joints and disseminated,J:220/85E,130/60S
	RE sample VIPL19			8x10m area	
441924	South Trio	3600-3720	And/Basalt	Rep.Grab	In top section well crestalized basalt like (gabro like),Py(ChPy ?)J:225/85S,150/230,Pink lichen from 3600 up
441925	South Trio	3820-3870	Anfesite Flow	Rep.Grab.	Locally Py+ChPy(?),J:205/85E
441926	South Trio	4000-4250	And/Basalt	Rep.Grab.	Magnetic,<0.2%Py(+ChPy ?),J:150/80N,250/70E
441927	South Trio	4340	Qtz.Vein	Grab	Subcrop, block of Quartz upto 0.7m wide,white Qtz,basalt hostrock,trace Mal+ChPy+Epi,strike290
441928	South Trio	3030-3050	Andesite	Rep.Grab.	Vesicular <5%,J:210/65E,145/60S
441929	East Trio	4030-4280	Andesite	Rep.Grab.	Locally vesicular,locally epi,trace Py
	Re sampling				
441930	East Trio	2410-2580	Basalt	Rep.Grab.	Locally vesicular,hornfelsed(?),locally Qtz veining,trace Py+Epi,J:110/75S
441931	East Trio	2590	Andesite	Float	Epidote rich, <0.5%Mal+ChPy+Py.Mal on joints,ChPy spotty,possibly in vesicules
441932	East Trio	2600-2950	Basalt	Rep.Grab.	Massive, similar to 441930,loc.vesicules with Qtz, trace Py+Epi especially on joints parallel to gully-J:080/70N
441933	East Trio	2780	Basalt	Chip,8m	sheared Qtz vein stockwork (<5%)in basalt,J:220/90
	below VI-1441				
441934	East Trio	2780	Qtz+Epi.Vein	Float	.2x.2x.2m,Qtz+Epi rock float, .5cm wide massive Py vein
441935		2950	Qtz+Epi.Vein	Float	.3x.3x.2m,boulder with ChPy<1%+Mal<0.5%+Py
441936		2950-3200	And/Basalt	Rep.Grab	Vesicular <1%,massive Qtz veining <0.5%,J:095/65N
441937		3200-3500	Andesite	Rep.Grab.	Fine grain,almost like diorite,locally vesicular, J:035/90,055/90
441938		3500-3740	Andesite	Rep.Grab.	Epi+Qtz veining parallel to vesicule rich planes/beds almost horizontal,in bottom section Py+ChPy<1%,J:066/90
441939		3740	Shear	Chip,0.5m	Magnetite,ChPy+Mal,horizon between lava flow beds 135/08S.Flow beds 5-10m thick
441940		3740-3910	And/Basalt	Rep.Grab.	Vesicular,<0.5%Py+ChPy+Epi,Pink K-feldspar and white feldspar + Qtz in vesicules
441941		3910-4100	And/Basalt	Comp.Talus	Locally vesicular,trace Sx.Epi in vesicules

VANCOUVER ISLAND		ROCK SAMPLE DESCRIPTION									
Sample No.	Area	Elevation	Sample Type	Length	Rock Type	Wall Rock	Colour	Joints	Mineralization Minerals	Alteration	Comments
VI-PL-03	Heber	2205'	Chip	0.9m	Qtz.shear	Basalt	White	023/78E	Py-trace		Qtz-60%.Basalt-40%
VI-PL-04	Heber	2680'	Chip	0.5m	Qtz.shear/Bx.	Granite		353/60E		Epi,Qtz	Mafics<2%
VI-PL-05	Heber	3080'	Grab		Qtz.Granite			152/20N	Py,AsPy(?)	Chl<2%	Mafics altered to Chl.
VI-PL-06	Heber	3540'	Chip	0.5m	Qtz.shear	Basalt		130/86S	Py+ChPy<2%,Mal	Epi,Qtz	
VI-PL-07	Heber	3860'	Float		Basalt		Green		Chpy+Py<2%	Epi,Qtz	
VI-PL-08	Heber	3860'	Float	.2x.3x.2m	Basalt		Brown		Fe-oxid		
VI-PL-09	Heber	3950'	Chip	1m	Epi.shear	Basalt	Green			Epi,Qtz	
VI-PL-10	Heber	3750'	Float		Qtz.vein	Basalt			Py+ChPy<1%,Mal	Epi,Qtz	
VI-PL-11	Heber	4300-4350	Rep.Grab		Basalt				ChPy+Mal-trace	Epi,Qtz	
VI-PL-12	Heber	4280'	Float		Basalt		Green		ChPy+Py-trace	Epi,Qtz	
VI-PL-13	Heber	4420'	Float		Basalt		Green		ChPy+Py-trace	Epi,Qtz	
VI-PL-14	Heber	4200'	Float		K-feldspar	Basalt			ChPy+Mal+Py<2%,Mo(?)	Epi	
VI-PL-15	Heber	2900-3050	Rep.Grab		Basalt		Green	349/66E	ChPy,Py,Mal-trace		Qtz.vein att. 116/60N,022/76E
VI-PL-16	Heber	2900-3050	Float		Qtz,Epi.vein	Basalt			Mal,ChyP+Py<2%		
VI-PL-17	Heber	3050'	Float	.1x.2x.1m	Qtz.	Basalt			Py<15%		
VI-PL-18	Heber	3080'	Chip/Rep.Grab	5m	Ba./fault zone		Br/Grn	138/76N		Magn,Qtz.	
VI-PL-19	Heber	3430'	Rep.Grab	10m	Basalt		Green	035/85E,125/80S	Py+ChPy<0.5%		
VI-PL-20	Heber	3860'	Rep.Grab		Basalt		Green				
VI-PL-21	Heber	4105'	Chip	0.7m	Qtz.shear	Basalt		025/85E			
VI-PL-22	Heber	4180'	Chip	0.8m	Qtz.shear	Basalt		032/90	Py+Mal+ Azu+ChP<10%		
VI-PL-23	Heber	4200-4500	Rep.Grab		Basalt		Green				
VI-PL-24	Heber	4900'	Chip	1.1m	Skarn(?)/[illegible]	Basalt	L.Grn.	095/12S	ChPy+Mal+Mag+Py<30%	Epi,Qtz	095/12S flow bedding(?)
VI-PL-25	Heber	5000'	H. Grade		Skarn(?)/[illegible]	Basalt	L.Grn		ChPy+Mal	Epi,Qtz	
VI-PL-26	Heber	5010'	Rep.Grab	30m	Vesic.Basalt		Green	020/85E,100/80N			105/10S flow bedding(?)
VI-PL-27	Heber	2500-2600	Rep.Grab		T.Bx.(?)		Green	054/48E,140/85N	Py-trace		Garnet(?)
VI-PL-28	Heber	2660-2900	Rep.Grab		Basalt		Green	120/68S,155/08S		Chl	155/08S flow bedding(?)
VI-PL-29	Heber	3000-3100	Rep.Grab		Basalt		Green	078/64N			
VI-PL-100	Heber	4900'	Chip	3m	Basalt		Br/Grn	193/63E	Mal+Py+ChPy-trace	Chl,Fe-oxid	
VI-PL-101	Heber	4900'	Chip	2.5m	Shear	Basalt	Br/Grn	158/80E	Fe-oxid	Chl	
VI-PL-102	Heber	4900'	Chip	2.5m	Basalt		Br/Grn	185/75E	Py+ChPy-trace	Epidote	
VI-PL-103	Heber	5000'	Chip	0.6m	Basalt		Green				
VI-PL-104	Heber	5000'	Chip	0.5m	Skarn	Basalt	Fe-oxid.	106/50S	ChPy<2%, Mal<1%	Epidote	Minerali. paral.to relonal flow bed.
VI-PL-105	Heber	5000'	Chip	0.5m	Basalt		Green				
VI-PL-106	Heber	4600'	H. Grade		Qtz.+Epi.lens	Basalt	Green		ChPy<1%+Mal		
VI-PL-107	Heber	4600'	Chip	2m	Basalt		Br/Grn	130/85N		Chl	Sheared rock
VI-PL-108	Heber	4950-5080	Rep.Grab		Basalt		Green		ChPy-trace,Mag.	Chl, Epi	184/20W-bedding(?)
VI-PL-109	Heber	5000'	Chip	5m	Basalt		Br/Grn	062/79W	Hematite	Carb, Chl	Sheared rock
VI-PL-110	Heber	5000'	Chip	5m	Basalt		Br/Grn			Carb, Chl	Sheared rock
VI-PL-111	Heber	5000'	Chip	5m	Basalt		Br/Grn			Chl	Sheared rock

VANCOUVER ISLAND - ROCK SAMPLE DESCRIPTION

Sample No.	Area	Elevation	Sample Type	Length	Rock Type	Wall Rock	Colour	Joints	Mineralization Minerals	Alteration	Comments
VI-PL-149	Heber	4300'	Float		K-feldsp. vein	Ves.Fl.	Pink		Mal, ChPy-trace		
VI-PL-150	Heber	4800'	Rep.Grab	50m	Ba/And		Green		Py-trace		Same as VI-PL-011
VI-PL-151	Heber	4800'	Float		K-feldsp. vein	Ves.Fl.	Pink				
VI-PL-152	Heber	4800'	Chip	1.5m	Vesic.flow		Green		Py+Chpy-trace	Pink K-feld.	From talus,Bas./And.comp.
VI-PL-153	Heber	4800'	Grab		Shear	Basalt	Green		Py,Po/Mag	Epi.<10%	

Legend:

Sample Length: 10m -chip, .2x.3x.2-size of float sample

Rock Type: Qtz/Q-quartz,Bx-breccia,Bas/Ba-basalt,T-tuff,LST-limestone,And-andesite,Volc-volcanic,Pil-pillow,Px-piroxene,QV-quartz vein,QL-quartz lens,Goss-gossan, IMS-...

Host Rock: M-Sed-meta-sediment,Sed-sedimentary rock,Ves-vesicular,F-flow, G-granite

Colour: Br-brown, Grn-green, L-light, Blk-black

Mineralization: Po-pyrrhotite,Py-pyrite,ChPy-chalcopyrite, Mag-magnetite, Mal-malachite, Azu-azurite, AsPy-arsinopyrite, Pb-galen, Mo-molybdenite

Alteration: Epi-epidote, Qtz-quartz, Chl-chlorite, Magn-magnesite, Ank-ankerite, Si-siliceous

STREAM	VENTURE NUMBER	VENTURE NAME	SAMPLED: DAY	MONTH	YEAR	BY	ASSTD. BY
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COMPANY	PROPERTY
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SAMPLE NUMBER	NORTH CO-ORDINATE	EAST CO-ORDINATE	ELEVATION	SAMPLE TYPE	CHANNEL WIDTH	WATER WIDTH	Height of Water High Water	FLOW DIRECTION	STREAM GRADIENT
UI-1860			4420	TT.F	350	—	90	W	25
UI-1861			4400	TTT	250	—	R12	W	15

WEATHER	N. T. S.	SHEET No. of
OR PROJECT AND SUB PROJECT		

los bl(un)t wng GRID 000 TRUE NORTH

UTM CO-ORDINATES OF GRID ORIGIN: NORTHING | EASTING | ELEVATION

DISCHARGE	STREAM ORDER	CATCHMENT AREA	CHANNEL TYPE	BANK MATERIAL	Vegetation Below Position High Water STREAM	% CLAY	% SILT	% SAND	% GRAVEL	% ORGANICS	MAX. PART. SIZE	SORTING	Quality COLOR	Quality PRECIPITATE	pH	BED ROCK TYPE 1	BED ROCK TYPE 2	BOULDERS TYPE 1	BOULDERS TYPE 2	BOULDERS TYPE 3
0			CH	BK	15								3	2		VIL-Va				
0			CH	BA	13								3	2		VIL-BA				

Vancouver Island

SOIL

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Company | Property

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Flag	Sample I.D. or Line	Sample No. or Station	Elevation		North Co-ordinate	East Co-ordinate	Local Terrain	Secondary Environment	Factors Affecting Conditions
	3450/001		3450				ST (553)	SP	

Weather | N.T.S. | Sheet No. of

Or Project and Sub Project

Grid Bearing of True North | UTM Co-ordinates of Grid Origin: Northing, Easting, Elevation

Site	Drainage	Vegetation	Slope	Slope Direction	Sample Depth	Horizon Sampled	Color	% Clay	% Silt	% Sand	% Gravel	% Organics	Max Part Size	% Particles	Coatings	Coatings	Rock Fragments Type 1	Rock Fragments Type 2	Rock Fragments Type 3	Parent Material	% Residual
1	P	AF	50	000	10	02	5YR	4	5	1			E		FE					TL	

SA - Soil group.

SOIL | VENTURE NUMBER | VENTURE NAME | SAMPLED: DAY, MONTH, YEAR, BY, ASSTD. BY | WEATHER | N. T. S. | SHEET No. of

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COMPANY | PROPERTY | OR PROJECT AND SUB PROJECT

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O R I D

SAMPLE I.D. — OR — LINE	SAMPLE NO. — OR — STATION	ELEVATION	NORTH CO-ORDINATE	EAST CO-ORDINATE	LOCAL TERRAIN	SECONDARY ENVIRONMENT	FACTORS AFFECTING CONDITIONS	SITE DRAINAGE	VEGETATION	SLOPE	SLOPE DIRECTION	SAMPLE DEPTH	HORIZON SAMPLED	COLOR	% CLAY	% SILT	% SAND	% GRAVEL	% ORGANICS	MAX. PART SIZE	% PARTICLES	COATINGS	COATINGS	ROCK FRAGMENTS TYPE 1	ROCK FRAGMENTS TYPE 2	ROCK FRAGMENTS TYPE 3	PARENT MATERIAL	% RESIDUAL
5000/1001		5010			RC	NO		AX	SA	15	N	15	B2	9YR	6	1	3						BA			BK	
5000/002		5030			RC	NO		CX	SA	15	S	15	B2	4YR	5	1	4						BA			BK	
5000/001		4600			RC	SA		BX	SA	10	N	5	B2	5YR	5	1	4						BA			BK	

SOIL *taken every 20m.*

SAMPLE I.D. OR LINE	SAMPLE NO. OR STATION	ELEVATION	NORTH CO-ORDINATE	EAST CO-ORDINATE	LOCAL TERRAIN	SECONDARY ENVIRONMENT	FACTORS AFFECTING CONDITIONS
4500/001		4500			RG	CNY	
002		4450			RG	OD	
003		4440			RG	OO	
004		4440			RG	RO	
005		4800	taken in the gully / the fault		RG	OD	
006		4500	(taken in little gully)		RG	SD	
007		4540			RG	OD	
008		4580			RG	OD	
009		4750			RG	OD	
010		4760			RG	SD	
011		4920			RG	BD	
012		5000			RG	DD	
013		5050			RG	DO	
014							

If mineralized, indicate. *GR - Granite*

WEATHER | N.T.S. | SHEET No. of

OR PROJECT AND SUB PROJECT

GRID 000 TRUE NORTH | UTM CO-ORDINATES OF GRID ORIGIN: NORTHING | EASTING | ELEVATION

SITE DRAINAGE	VEGETATION	SLOPE	SLOPE DIRECTION	SAMPLE DEPTH	HORIZON SAMPLED	COLOR	% CLAY	% SILT	% SAND	% GRAVEL	% ORGANICS	MAX. PART. SIZE	% PARTICLES	COATINGS	COATINGS	ROCK FRAGMENTS TYPE 1	TYPE 2	TYPE 3	PARENT MATERIAL	% RESIDUAL
EX	SA	05	NW	10	B2	5YR	6	1		3						GR			GR	
EX	SA	10	NNW	15	B1	4YR	6	1		7	2					GR			GR	
EX	SA	0	—	10	B2	10YR	8	1		1						GR			GR	
EX	SA	—	—	5	B2	5YR	8			2						GR			GR	
EX	SA	—	—	10	B2	5YR	7	1		2						GR			GR	
EX	SA	35	SE	15	B2	5YR	6	1		3						GR			GR	
EX		30	SE	10	B2	4YR	7	1		2						GR			GR	
EX		25	SE	10	B2	4YR	6	1		3						GR			GR	
EX		40	SE	10	B2	5YR	6	1		3						GR			GR	
EX		30	SE	10	B2	4YR	6	1		3						GR			GR	
EX		45	SE	10	B2	4YR	5	1		4						GR			GR	
EX		30	SE	15	B2	4YR	6	1		2						GR			GR	
EX		30	SE	10	B2	4YR	5	1		4						GR			GR	