

ARIS SUMMARY SHEET

District Geologist, Victoria

Off Confidential: 90.05.26

ASSESSMENT REPORT 18619

MINING DIVISION: Nanaimo

PROPERTY: Good Sport

LOCATION: LAT 50 22 00 LONG 127 13 30
UTM 09 5580687 626239
NTS 092L06E

CLAIM(S): Good Sport 1

OPERATOR(S): Taywin Res.

AUTHOR(S): Clarke, T.

REPORT YEAR: 1989, 41 Pages

COMMODITIES

SEARCHED FOR: Copper, Iron, Gold, Silver

KEYWORDS: Triassic, Karmutsen Formation, Quatsino Formation, Limestones, Basalts
WORK

DONE: Geochemical

SOIL 254 sample(s) ;ME

LOG NO: 0602	RD.
ACTION:	
FILE NO:	

REPORT ON
GEOCHEMICAL AND GEOLOGICAL SURVEYS

on the

GOOD SPORT 1 CLAIM
of the
GOOD SPORT GROUP

FILMED

Nanaimo Mining Division
NTS Map Area 92L/6E
Lat. 50 degrees N, Long. 127 degrees W.

Owned by Taywin Resources Ltd.
and J.W. Laird
Operated by Taywin Resources Ltd.

Prepared by:
Tiro Clarke, B.Sc. (Geology)

Submitted
January 25th, 1989

BRANCH REPORT
DOLIC
SUMMER

18,619

SUB-RECORDER
RECEIVED
MAY 26 1989
M.R. # \$
VANCOUVER, B.C.

TABLE OF CONTENTS

	<u>Page</u>
Summary and Recommendations	1
Introduction	2
Location and Access	2
Property Description	2
Summary of Work Done	3
Climate	3
Topography and Drainage	4
Vegetation and Soil	4
Technical Data	5
Regional Geology	5
Good Sport Group Geology	6
Soil Collection and Preparation	7
Description of Results	8
Discussion of Results	9
Itemized Cost Statement	10
Declaration	13

FIGURES

	<u>Page</u>
1. Location of the Good Sport Group	14
2. Good Sport Group claims and geochemical sampling locations	15
3. Regional geology in the Benson Lake - Merry Widow Mountain area	16
4. Good Sport Group geology	17
5. Cross section through part of Good Sport Group	18
6. Cu geochemical results	19
7. Au geochemical results	20
8. Ag geochemical results	21
9. Cu geochemical interpretation	22
10. Au geochemical interpretation	23
11. Ag geochemical interpretation	24

Appendix I 25

30 element ICP and Au AA results for Good Sport geochemical grid and Iron Lake.

Appendix II 35

Statistical analyses for Good Sport geochemical grid Cu, Au, and Ag results

SUMMARY AND RECOMMENDATIONS

The Good Sport group is located on northern Vancouver Island in the Nanaimo Mining Division, some 26 km SW of Port McNeill. The group consists of 41 units, staked and recorded by prospector J. W. Laird in June and October of 1988.

The group is underlain primarily by Late Triassic Karmutsen Formation basalt and Quatsino Formation limestone. At the basalt - limestone contact is the locally mineralized "Old Sport" skarn horizon. Over 2 million tons of ore from this horizon, averaging approximately 2% Cu and 0.05 oz/ton Au, have been mined from the Old Sport Mine, less than 500m west of the Good Sport Group. The Happy Jack mineral showing of predominantly chalco-pyrite and magnetite occurs in the skarn horizon less than 50m west of the good Sport claimline. A sample of the showing contained 14.47% Cu, and 0.023 oz./ton Au, 0.77 oz./ton Ag, and 65.16% Fe.

Two hundred and fifty-four soil samples were taken from a grid on the Good Sport 1 claim; an additional 18 samples were taken from a line across the nearby Happy Jack mineral showing to provide anomaly control samples. Thirteen samples were also collected from a line along the western side of Iron Lake in the Good Sport 1 claim.

Gold, copper, and silver results from the Good Sport geochemical grid were statistically analyzed and plotted. Copper and gold anomalies are concentrated along the central western part of the Good Sport 1 claim, and low-level silver anomalies are concentrated in the northern region of the Good Sport 1 claim. Many copper, gold and silver values from the Iron Lake survey are anomalous in the context of the Good Sport geochemical results; however, contamination of the Iron Lake samples from nearby roadfill is likely.

Regional mapping combined with more detailed geologic mapping on the Good Sport Group indicates that the group contains at least one fault-bound segment of the Old Sport horizon. Diamond drilling and trenching across the horizon is recommended to determine the extent of mineralization at depth on the group.

INTRODUCTION

Location and Access

The Good Sport group is located on northern Vancouver Island in the Nanaimo Mining District, approximately 1 km southeast from the southern tip of Benson Lake, on the east slope of the Benson River Valley. Merry Widow Mountain lies approximately 5.5 km to the southwest (Figure 1). The Good Sport geochemical sampling grid is located in the central western region of the Good Sport 1 claim, centered at UTM coordinates N5581700, E625850 (Figure 2). From Port Hardy, the group is reached by driving south along Highway 19 for approximately 32 km then turning left on the MacMillan Bloedel "Benson Main" logging road. After 30 km the group can be accessed by crossing Benson River to the east slope of the valley.

Property Description

The Good Sport group consists of 3 claims totalling 41 units as follows (see Figure 1):

Good Sport 1 claim: 20 units, record No. 2987,
expiry date June 14, 1989.

Good Sport 2 claim: 20 units, record No. 2948,
expiry date June 14, 1989.

Gold Sport claim: 1 unit, record No. 3158,
expiry date Oct. 1, 1989.

The claims were staked in June and October of 1988 by J.W. Laird, in order to cover ground containing the favourable Karmutsen Formation basalt - Quatsino Formation limestone contact, as well as ground containing north to northeasterly trending shear zones that are seen near Iron Lake.

Summary of Work Done

Between October 2nd and 16th, 1988, the following work was performed on the Good Sport group:

1. Soil geochemical survey: Two men spent 8 days collecting a total of 285 soil samples from the Good Sport group; these were later analyzed for 30 element ICP and geochemical Au. A total of 7.1 km of line were established.
2. Prospecting: One man spent 4 days prospecting the Good Sport group.
3. Geological mapping: One man spent 1 day examining the basalt-limestone contact region along the east shore of Benson River. This was done to position the Happy Jack showing and provide a control anomaly for the Good Sport geochemical survey.

Between December 7th and 14th, 1988, the following additional work was performed on the Good Sport Group:

1. Geological mapping: One man spent 5 days mapping the Good Sport Group on a scale of 1:5000. This was done to investigate geochemical anomalies revealed by earlier exploration, and to establish the Group geology. Particular attention was paid to the basalt-limestone contact area trending eastward from the Happy Jack showing. An additional 2 days were spent examining regional geology in order to better understand Good Sport Group geology.

Climate

The Benson Lake area has a climate typical to British Columbia's west coast. Summers are warm, with abundant rainfall in the autumn. Winters are cool and wet, and mountainous areas receive appreciable snowfall.

Topography and Drainage

The Good Sport Group has minimum and maximum elevations of approximately 155m and 455m. The Good Sport geochemical grid is on a west-facing slope, with an overall grade of approximately 25%.

The area is well drained and there are no bogs on or around the grid. One small stream transects the grid and drains into the northerly-flowing Benson River. Other dry stream beds exist within the grid. The nearest lakes are Benson Lake, 1 km to the northwest, and Iron Lake, approximately 1.5 km to the southeast.

The 13 Iron Lake samples were taken at an approximate elevation of 190 m on the steep slope facing eastward towards Iron Lake. Drainage direction is eastward into Iron Lake.

Vegetation and Soil

Both the Good Sport geochemical grid and Iron Lake geochemical line are covered by a mature, first growth coastal coniferous rainforest. Undergrowth is dense, with abundant deadfall material. The organic horizon generally ranged from 10 to 40 centimetres in thickness, absent only in areas of bare rock. Below the organic horizon was the red-brown "B" horizon from which soil samples were collected.

TECHNICAL DATA

Regional Geology (Figure 3)

The northern Vancouver Island area is underlain by a conformable sequence comprised of, from oldest to youngest, Karmutsen Formation basalt, Quatsino Formation limestone, Parson Bay Formation sediments and carbonates, and Bonanza Formation andesitic to rhyolitic volcanics. The Bonanza volcanics are Early Jurassic; Karmutsen, Quatsino, and Parson Bay Formations are all Late Triassic. Intruding the sequence are Middle Jurassic quartz diorites and quartz monzonites of the Island Intrusion 1. Balsalt, feldspar porphyry, and greenstone

1. Muller, J.E., Northcote, K.E., and Carlisle, D., 1974, Geology and Mineral Deposits of Alert-Cape Scott Map - Area, Vancouver Island, British Columbia, Geol. Surv. Can. Paper 74-8.

intrusions were also present in the Benson Lake area. Their ages are unknown, although the greenstones appear to be the most recent.

Karmutsen basalts were not examined in any detail outside of the Good Sport Group; these observations are noted in the following section. However, regional examination of the Quatsino Formation has led to the tentative identification of two included units. The first unit weathers light to medium grey, with irregular chalky-white "amoeboid" shapes up to 4 or 5 cm across. A minimum thickness of 20m is estimated for this unit. Below this is the second unit of finely-laminated limestone. The laminations are subplanar to undulating, and may be of algal origin. A maximum thickness of 15m is estimated for this unit. Both units are apparently located in the middle to lower part of the Quatsino limestone package, and may be of use when interpreting geological structures in the Benson Lake area.

Another identifiable feature of the Quatsino limestone is a bleached white colour alteration observed around intrusions and mineralized zones. This was seen at the Old Sport Mine, the Merry Widow - Kingfisher pit areas, the Happy Jack showing, and at several other locations. The apparent relationship between mineralization and bleached white Quatsino limestone will also be of use during surface and subsurface exploration.

Regional faulting trends northerly, northeasterly, and southeasterly. In particular, one northeasterly trending fault cuts through the Good Sport geochemical grid, while another trends northerly through Iron Lake (Figure 3).

Several skarn deposits exist in the region, generally hosted by Karmutsen and Quatsino rocks near intrusion-country rock contacts. The most significant are the Merry Widow and Kingfisher deposits which have a combined production of over 3.7 million tons of iron ore, and the Old Sport Mine, which has produced over 2 million tons of predominantly Cu ore.

Good Sport Group Geology (Figures 4, 5)

The Good Sport Group is underlain primarily by Karmutsen Formation basalts to the north and Quatsino Formation limestone to the south.

Karmutsen basalts around Benson Lake range in colour from maroon to black. White quartz and calcite amygdaloids up to several millimetres in diameter are common; amygdaloids and quartz veins bearing chalcopyrite, bornite, and siderite have also been reported to occur in sub-economic quantities near Alice and Kathleen Lake (J. Laird, pers. comm.). Upsection, the basalts are mostly black, with needle-like feldspar laths up to 1cm long. Although large feldspar porphyry boulders were found, no outcrops were located, and it was not possible to determine if the boulders originated from conformable flows or from dykes intruding the basalt package.

Quatsino limestone ranged in colour from white to medium grey. Bleaching was evident around intrusions and the Happy Jack showing. The limestone is fairly pure, and is thus interpreted to have formed in a shallow setting, free from detrital input. Most of the limestone is dense and very fine grained, contrasting with the coarsely recrystallized, porous limestone observed at the Merry Widow skarn deposit. Although mineralizing fluid movement may be inhibited by this dense nature, small holes and caves in the bleached limestone near the Happy Jack showing may provide alternative fluid passageways.

Late (Jurassic or later) breccia vent pipes up to approximately 10m in diameter occur on the Good Sport Group, possibly due to degassing of Karmutsen basalt as a response to increased overburden pressure. These vents were probably dry during eruption, as they contain no material other than brecciated country rock. There is no apparent mineralization related to these breccia vents.

The basalt - limestone contact in the western half of the Good Sport 1 claim was mapped in some detail. The Good Sport geochemical grid covers this contact zone, enabling geochemical anomalies to be linked to geological features.

There is no single line that can be drawn to separate the Karmutsen Formation from the Quatsino Formation, as the last

volcanic episodes are interfingered with earliest limestone deposits. Uppermost Karmutsen volcanics consist mainly of black, fine-grained basalts, and possibly some feldspar porphyry flows; a light grey, dense limestone unit estimated to be 30m thick overlies these volcanics. Above this lies another basalt and feldspar porphyry horizon approximately 55m thick, locally altered to greenstone. Basalts in this unit are medium grained, locally approaching gabbro in composition and appearance. Overlying this unit is the main Quatsino limestone. In places a 5 to 10m thick basalt sill was encountered approximately 5m up into the limestone. The sill's extent is unknown, and it may represent the latest significant Karmutsen volcanic event.

Intruding the above package are basalts, greenstones, and feldspar porphyrys. Limited exposure makes intrusions sometimes difficult to separate from the Karmutsen volcanics; in the Quatsino limestone, however, basaltic dykes occurring both alone and in swarms were noted. These were usually between 0.5 and 1.0m thick, trending easterly with nearly vertical dips.

Understanding of structural relationships around and within the Good Sport Group is critical to further exploration efforts. The group contains fault-bound segments of the Karmutsen basalt-Quatsino limestone contact, some of which are likely continuations of the Old Sport Horizon. The contact area extending east southeast from the Happy Jack showing is suggested to be a small thrust panel containing the Old Sport Horizon.

Soil Collection and Preparation

A total of 254 soil samples were collected at 25m intervals along 7 north-south oriented grid lines spaced 100m apart. An additional 18 samples were collected from a trail cut along the Benson River eastern shoreline (Fig. 2). The base line was measured and slope corrected with a hand chain; the sampling lines, subparallel to contours, were measured with hip chains and not slope corrected. All lines were marked with pink flagging tape. Samples were collected from the "B" soil horizon and bagged in standard kraft paper envelopes. Each sample location was double flagged with appropriately labelled pink and orange flagging tape.

All samples were submitted to Acme Analytical Laboratories Ltd., of Vancouver, B.C. Sample preparation involved drying at 60 degrees and sieving through -80 mesh. Each sample was analyzed for 30 element ICP and geochemical Au.

Description of Results

Good Sport geochemical grid Cu, Au and Ag values are shown in Figures 6, 7, and 8. Complete 30 element ICP and Au atomic absorption results are presented in Appendix I, and statistical analyses and distribution plots for Au, Cu, and Ag results from the Good Sport grid are presented in Appendix II. All three elements show positively skewed distributions on both arithmetic and logarithmic plots.

Anomalous values were defined as being those greater than the geochemical mean of the element plus 2 standard deviations: 546 ppm, 22 ppb, and 0.4 ppm for Cu, Au, and Ag, respectively. A lower level anomaly has been defined for Cu values between 114 and 546 ppm (i.e. between the mean and the mean plus two standard deviations). For contouring purposes, different values were used, and these are indicated on the contour interpretations (Figures 9,10,11).

A body of highly anomalous Cu values occurs on the central western edge of the group, with a large part of the anomaly lying east of the claim line. This Cu anomaly, with a maximum value of 1755 ppm, lies within a low-level anomalous belt stretching along the western margin of the group. The other anomalous bodies lie approximately 250m north and 200m south, respectively, from the main anomaly. No Cu anomalies were recorded in the eastern half of the grid.

Anomalous Au values are similar to those of Cu in that they occur along the western margin of the group. The highest Au value recorded was 62 ppb; no values over 4 ppb were recorded from the southeast quadrant of the group.

Values of Ag were low, reaching a maximum of 0.8 ppm in the sample containing 1755 ppm Cu. Higher than average Ag values are concentrated in the northern and northwestern regions of the group.

Discussion of Results

Interpretations of Cu, Au and Ag distributions are shown in Figures 9, 10, and 11. The main (central western) Cu anomaly is coincident with the Happy Jack showing mapped on the eastern shore of Benson River. The anomaly is elongated along the Karmutsen basalt - Quatsino limestone contact trend, and occurs in a geological setting identical to that of the Old Sport mineralized skarn horizon. Continuation at depth of the Happy Jack showing is quite likely. Additional Cu anomalies (ex. at 100E, 250S) were found to occur around dykes mapped in the Quatsino Formation limestone.

Au anomalies closely match Cu anomalies, but are interpreted to have a northeast-southwest elongation concordant with a regional fault trending through the Good Sport Group. The Au-Cu anomaly overlap and Au anomaly elongation suggest that Au occurrence is at least partly associated with the intersection of northeasterly trending faults and the Karmutsen basalt - Quatsino limestone contact.

Geochemical results for Ag were low. Although values higher than normal for the grid area occur in the northern part of the group and over the Happy Jack showing, they do not warrant further investigation. Ag distribution does not appear to follow any structural or lithological control.

Cu and Au anomalies concentrated along the western margin of the Good Sport Group warrant further investigation. Geological mapping indicates that the Karmutsen basalt - Quatsino limestone contact zone covered by the geochemical grid is a fault-bound segment of the Old Sport Horizon. Trenching across the main geochemical anomalies combined with diamond drilling across the contact zone may reveal both a continuation of the Happy Jack showing and other mineralized zones within the Old Sport Horizon on the Good Sport Group.

ITEMIZED COST STATEMENT

WAGES

James Laird - Prospector, Project Manager	
Travel: Sept 30/Oct 17, 1988 - 2 days	
Fieldwork: Oct 2/3/4/10, 1988 - 4 days	
6 days @ \$200 per day	\$ 1,200.00
Research, Sample prep:	
Sept 29/Oct 18, 1988 - 2 days	
2 days @ \$165 per day	330.00
Tiro Clarke - Geologist	
Travel: Dec 6/14, 1988 - 2 days	
2 days @ \$90 per day	180.00
Fieldwork: Oct 10/Dec7/8/9/10/11/12/13	
8 days @ \$165 per day	1,320.00
Research, Data Interp., map & report prep.:	
Nov 15/16/21, Jan 5 (half day)	
Jan 6 half day)/ 9 (half day)/11/12	
6.5 days @ \$90.00 per day	585.00
Alexander von Kersell - Soil Sampler	
Fieldwork: Oct 2/3/4/5/6/7/8/16 - 8 days	
8 days @ \$100 per day	800.00
Rennie Dickinson - Soil Sampler	
Fieldwork: Oct 2/3/4/5/6/7/8/16, 1988 -8 days	
8 days @ \$100 per day	<u>800.00</u>
TOTAL WAGES	\$ 5,215.00

MEALS AND ACCOMMODATION

Food	\$	770.74
Accommodation (on site cabin rental)		158.02
Camp Equipment rental		
Oct 2/3/4/5/6/7/8/16, 1988 - 8 days		
Dec 7/8/9/10/11/12/13/14, 1988 - 8 days		
16 days @ \$10 per day		<u>160.00</u>
TOTAL MEALS & ACCOM	\$	1,088.76

TRANSPORTATION

4x4 truck rental form R. Dickinson:		
Oct 2/3/4/5/6/7/8/16, 1988 - 8 days		
8 days @ \$35 per day	\$	280.00
mileage: 330 km's @ \$0.10 per km		33.00
4x4 truck rental from J. Laird:		
Oct 2/3/4/10/ Dec 6/7/8/9/10/11/12/13/14		
13 days @ \$35 per day		455.00
mileage: 2082 km's @ \$0.10 per km		208.20
Gas		238.09
B.C. Ferries, parking:		
Sept 30/Oct 17/Dec 6/14, 1988		<u>128.75</u>
	\$	904.95

SAMPLE PREPARATION AND ANALYSIS

292 x 30 element ICP analysis		
@ \$6.25 per sample	\$	1,825.00
292 x geochemical Au analysis		
@ \$4.50 per sample		1,314.00

285 x soil sample preparation @ \$0.85 per sample	242.25
2 x total Fe fire assay @ \$7.00 per sample	14.00
7 x rock preparation @ \$3.00 per sample	21.00
Laboratory surcharge	5.00
Statistical analysis of geochem data	50.00
TOTAL SAMPLE PREP & ANALYSIS	<u>\$ 3,471.25</u>

MISCELLANEOUS

Prospecting & field equipment rental Oct 2/3/4/5/6/7/8/16 - 8 days 8 days @ \$15 per day	\$ 120.00
Chainsaw rental Oct 2/3/4/5/6 - 5 days 5 days @ \$20 per day	100.00
TOTAL MISCELLANEOUS	<u>\$ 320.00</u>

TOTAL OF GOOD SPORT GROUP COSTS	<u><u>\$ 10,999.96</u></u>
---------------------------------	----------------------------

Respectfully submitted,

Tiro Clarke

Tiro Clarke
B.Sc., Geology

DECLARATION OF TIRO CLARKE, B.Sc. Geology:

I, Tiro Clarke of #215 - 651 Moberley Road, Vancouver, British Columbia, V5Z 4B2, declare:

1. I am a geologist, presently residing at the above address.
2. I am a graduate of Geological Sciences from the University of British Columbia, in 1988, with a Bachelor of Science (Hon.) degree.
3. I have practised geology since graduation.
4. I have no financial interest, directly or indirectly, in Taywin Resources Ltd., Vancouver, B.C., or in the property described in this report. I do not expect to receive or acquire any interest.
5. This report is based on a 6-day examination of the Good Sport Group, in conjunction with a geochemical survey and a 2-day examination of regional geology.
6. I consent to the use of this report in connection with the raising of funds for work recommended in this report.

DATED AT VANCOUVER B.C. this 23rd day of January, 1989.



Tiro Clarke, B.Sc., Geology

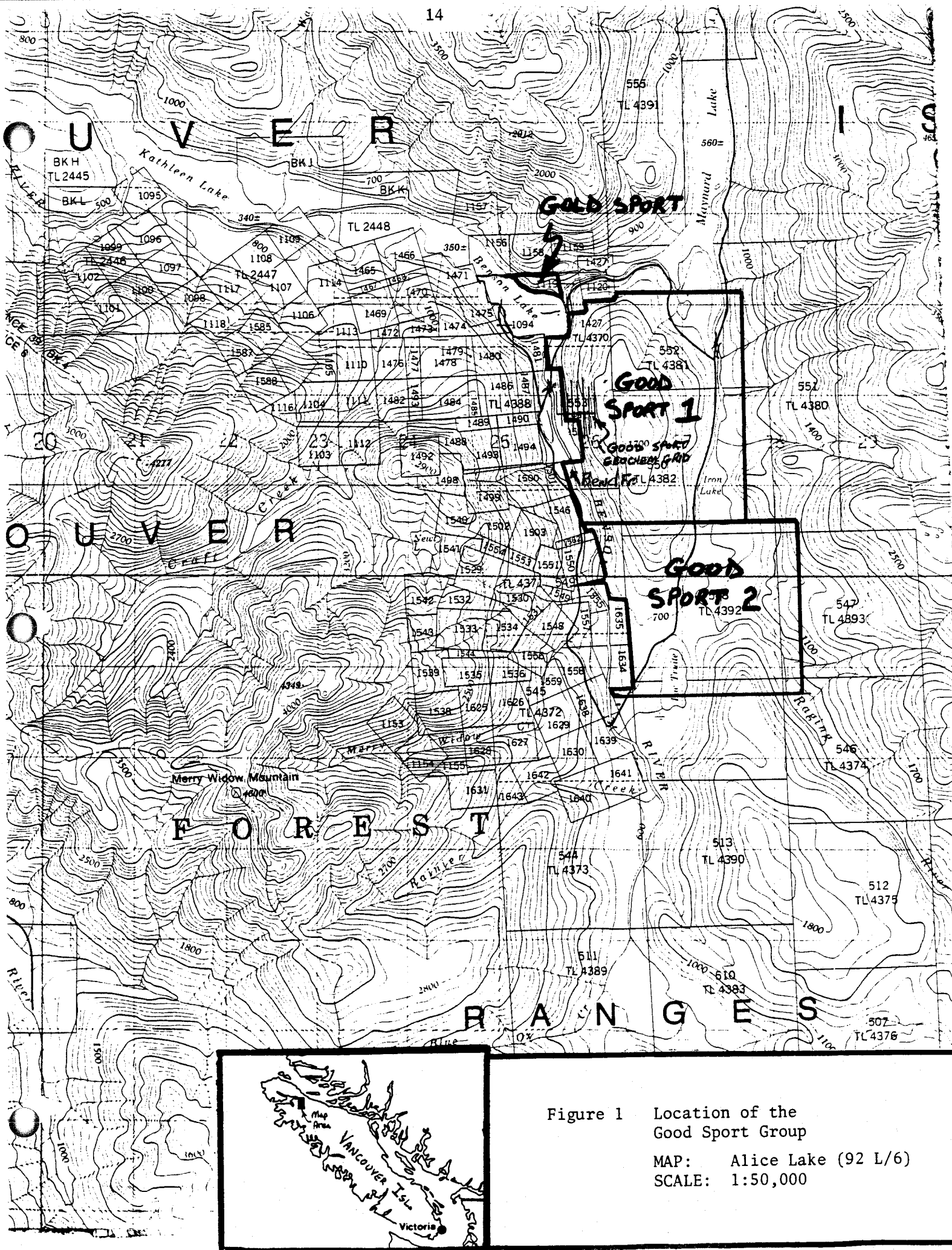


Figure 1 Location of the Good Sport Group
 MAP: Alice Lake (92 L/6)
 SCALE: 1:50,000

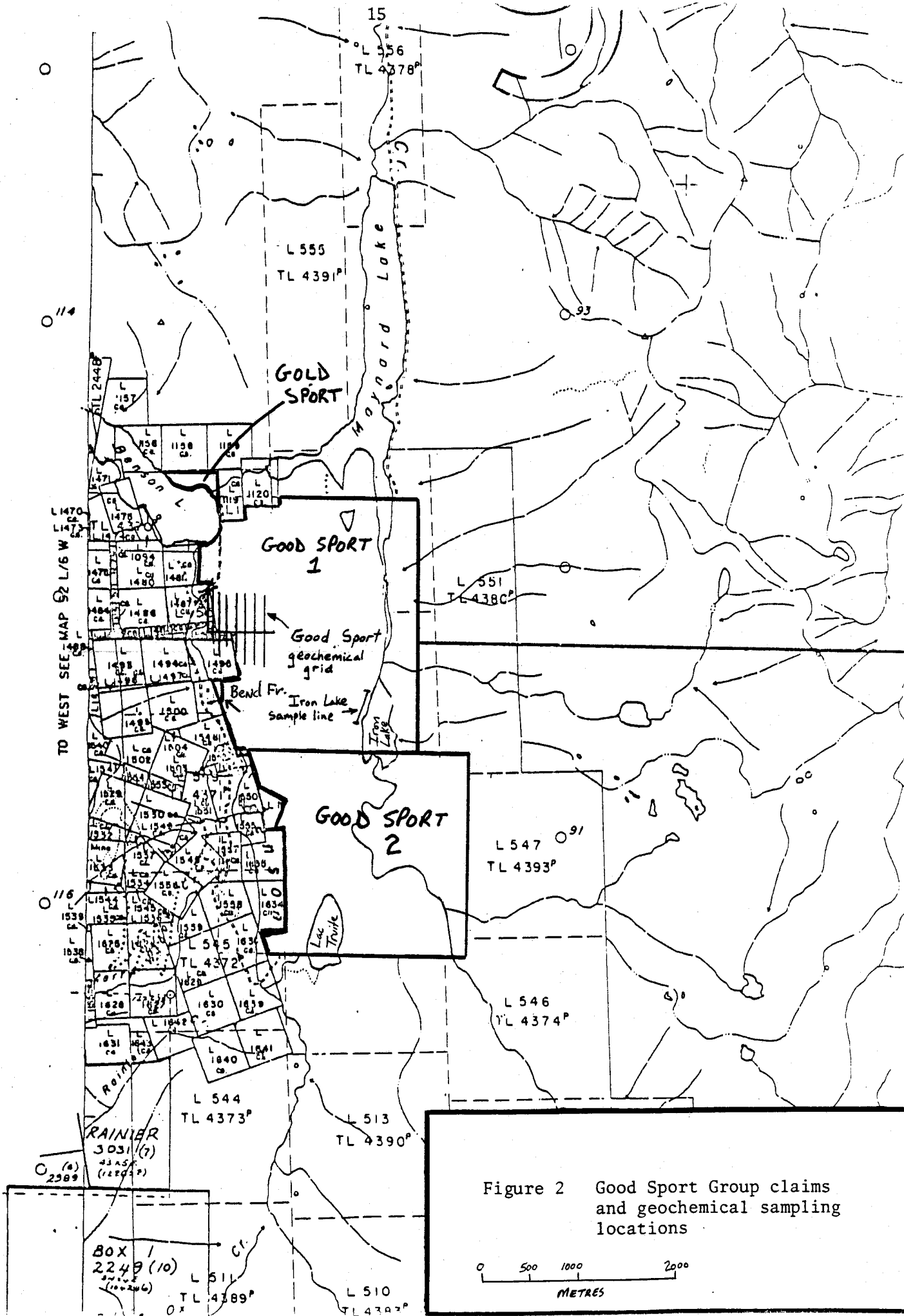
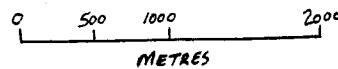
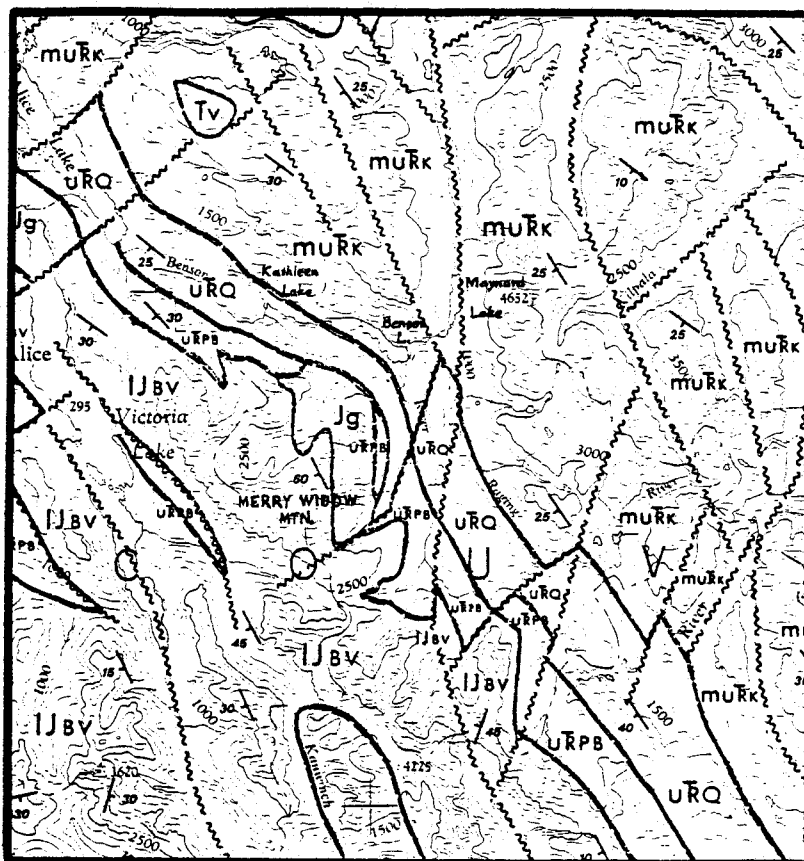


Figure 2 Good Sport Group claims and geochemical sampling locations





- Geological boundary (approximate)
- Fault, lineament (approximate)
- Bedding, tops known (horizontal, inclined)
- Bedding, tops unknown (vertical)

JURASSIC

Jg ISLAND INTRUSIONS: quartz diorite, granodiorite, quartz monzonite, quartz feldspar porphyry

TRIASSIC AND JURASSIC VANCOUVER GROUP LOWER JURASSIC

IJbv BONANZA VOLCANICS: andesitic to rhyodacitic lava, tuff, breccia

IJm HARBLEDDOWN FORMATION: argillite, greywacke

UPPER TRIASSIC

URpb PARSON BAY FORMATION: calcareous siltstone, shale, limestone, greywacke, conglomerate, breccia

URq QUATSINO FORMATION: limestone

murk KARMTUSEN FORMATION: basaltic lava, pillow lava, breccia, aquagene tuff

Figure 3 Regional Geology in the Benson Lake - Merry Widow Mountain area

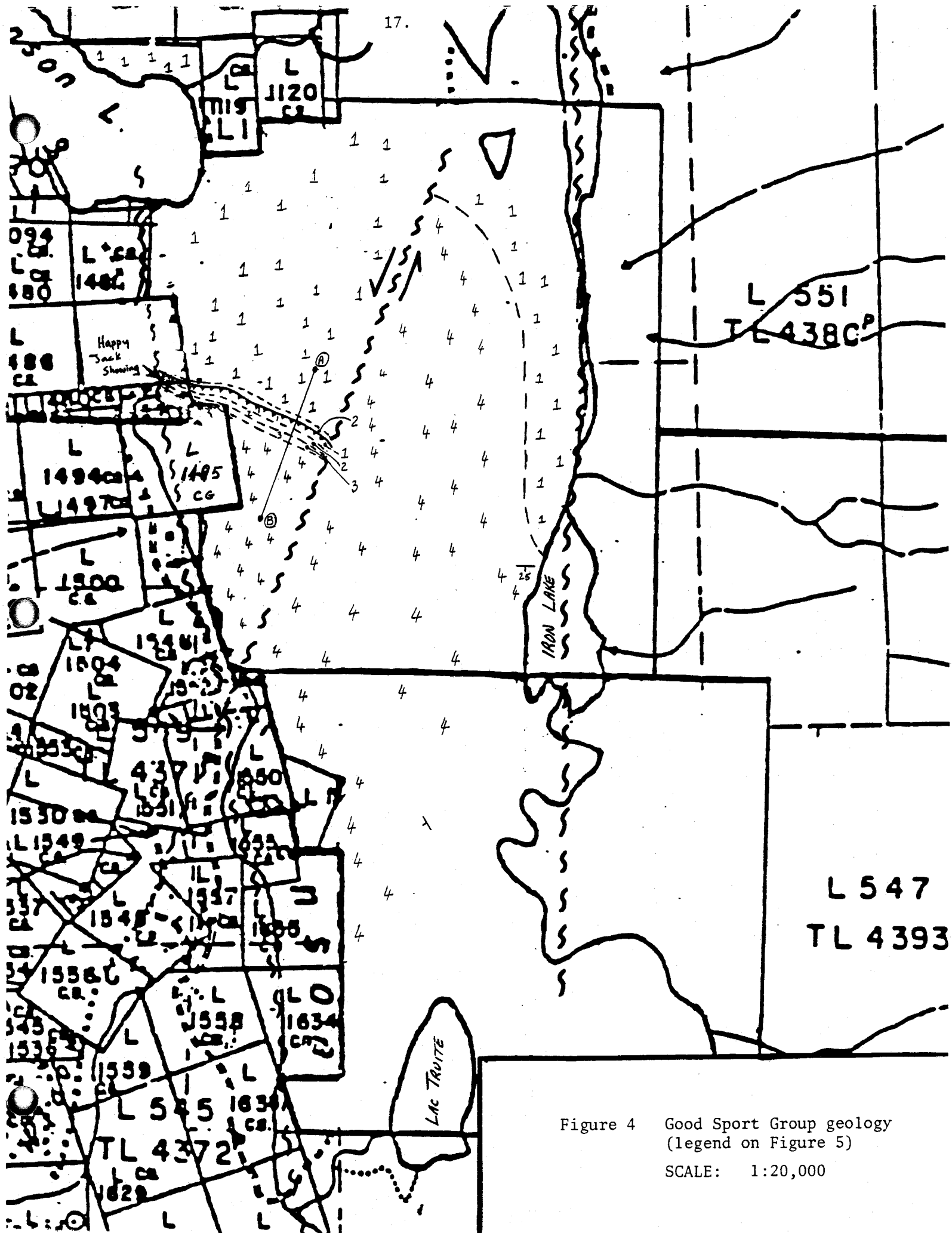
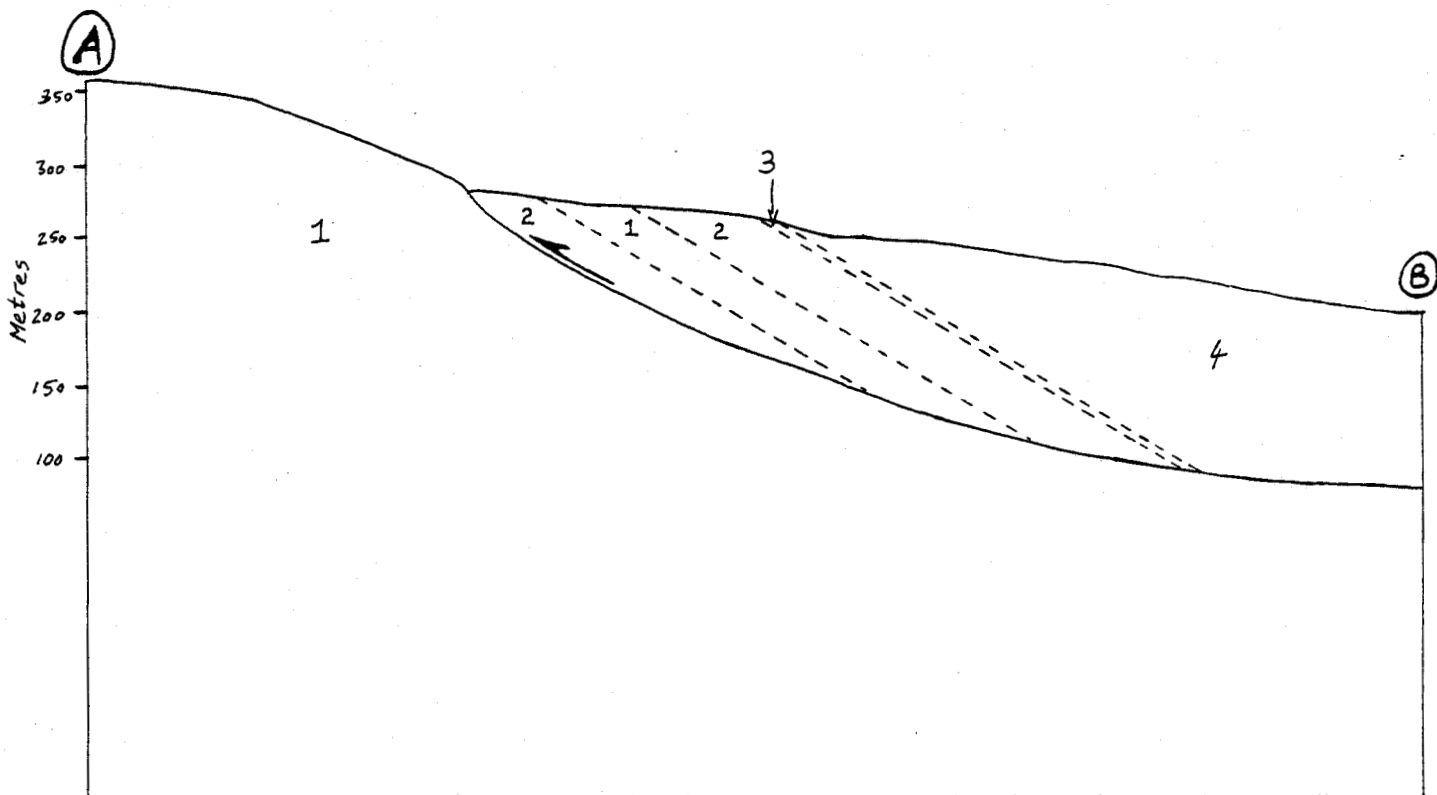


Figure 4 Good Sport Group geology
(legend on Figure 5)
SCALE: 1:20,000



- 1 Karmutsen Fm.; basalt, feldspar porphyry
- 2 transition limestone; dense, lt. - med. grey
- 3 "Upper flow"; black basalt, feldspar porphyry
- 4 Quatsino Fm.; limestone, locally bleached white

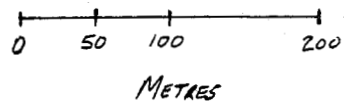


Figure 5 Enlarged cross-section from A to B on Figure 4. This section is interpreted to be a fault slice containing the Good Sport Horizon

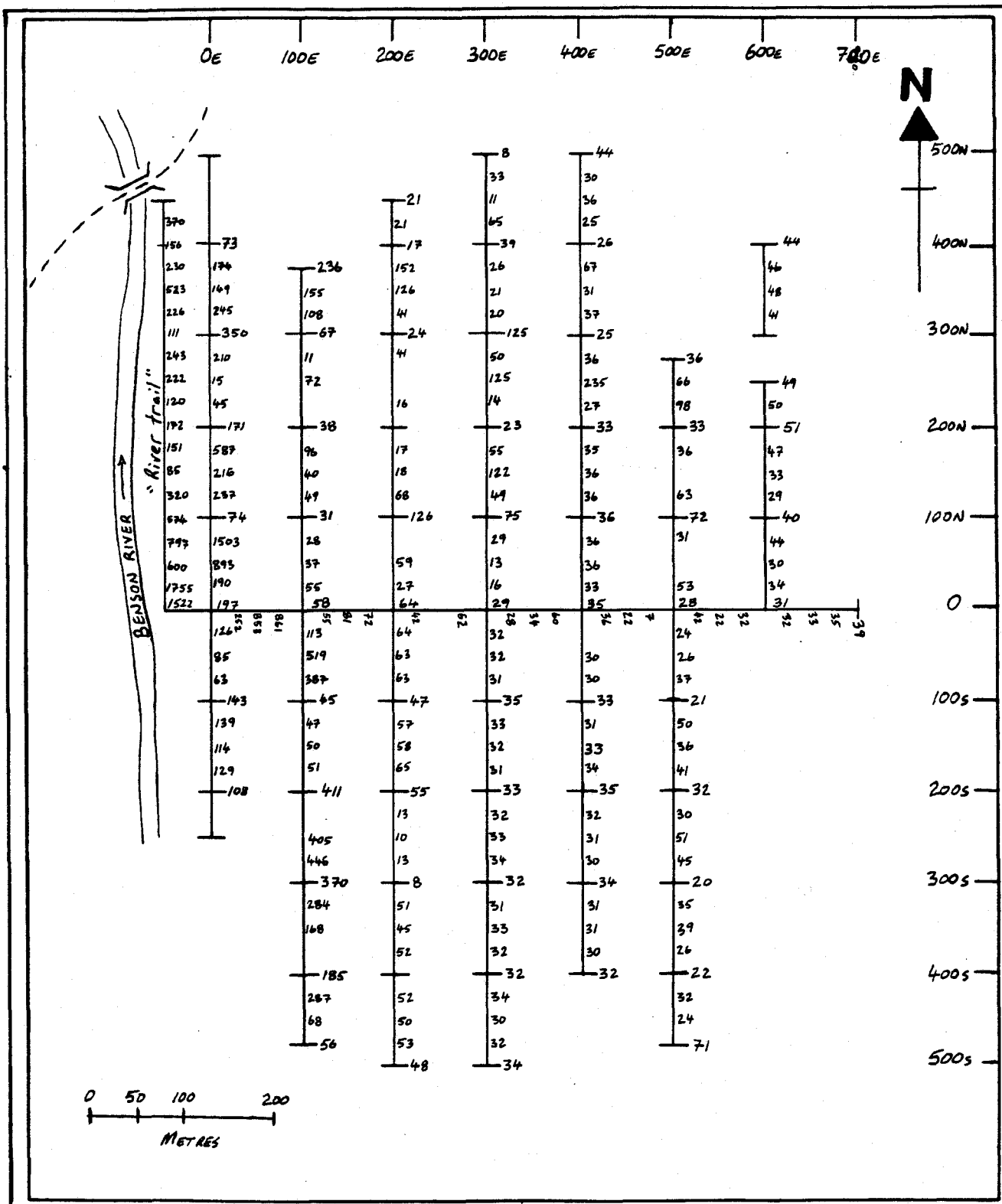


Figure 6 Cu geochemical results (PPM) from the Good Sport geochemical grid

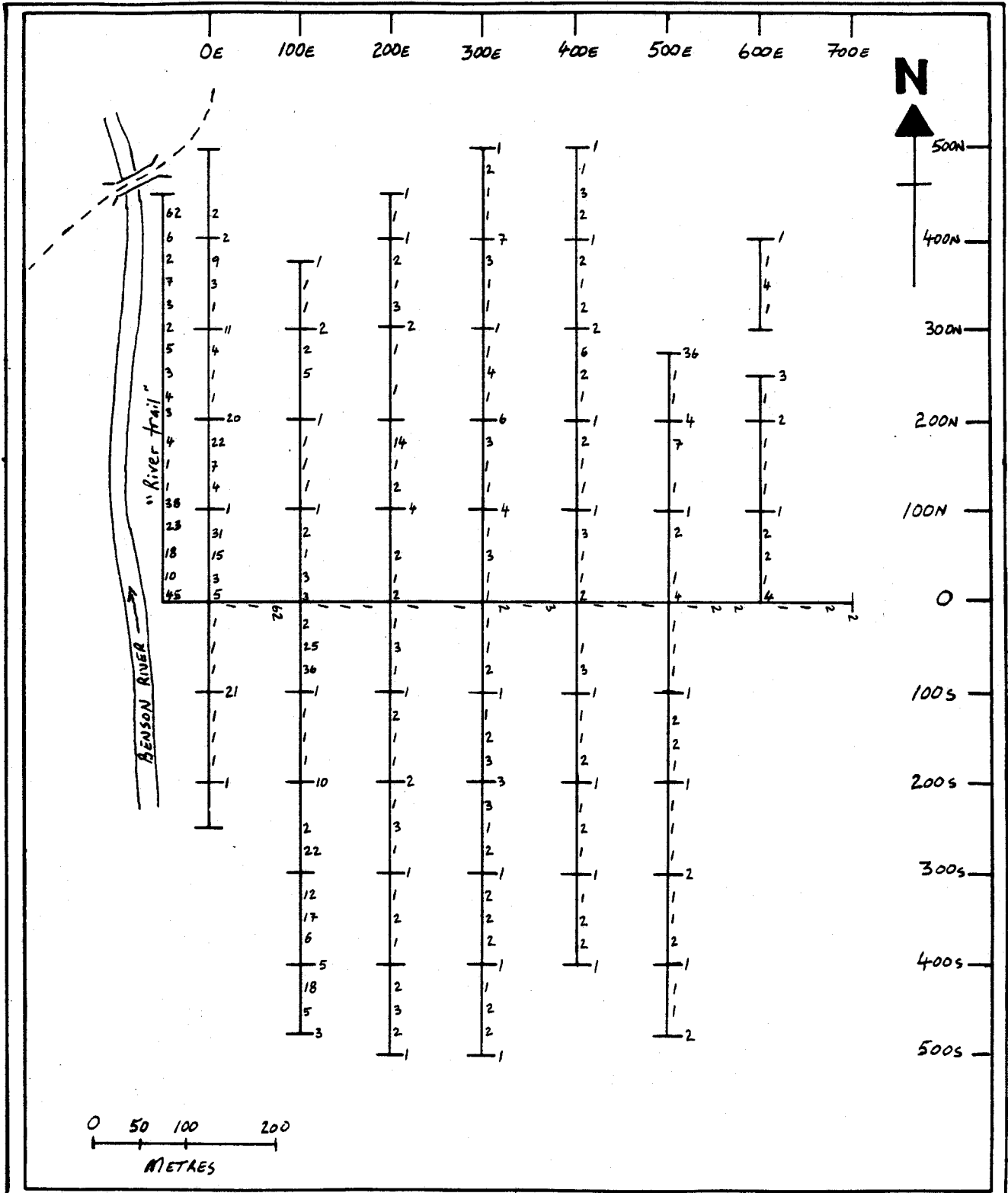


Figure 7 Au geochemical results (PPB) from the Good Sport geochemical grid

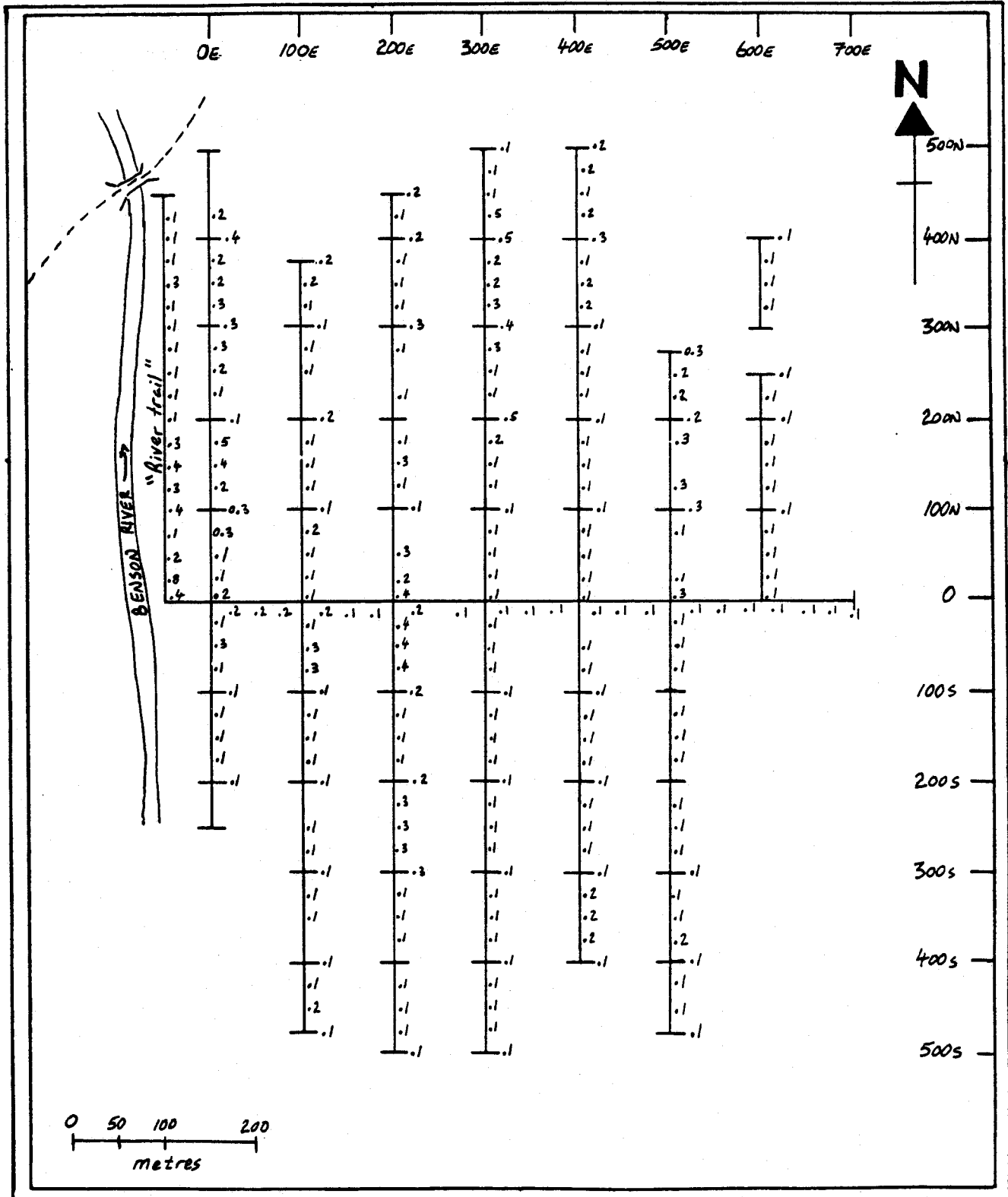
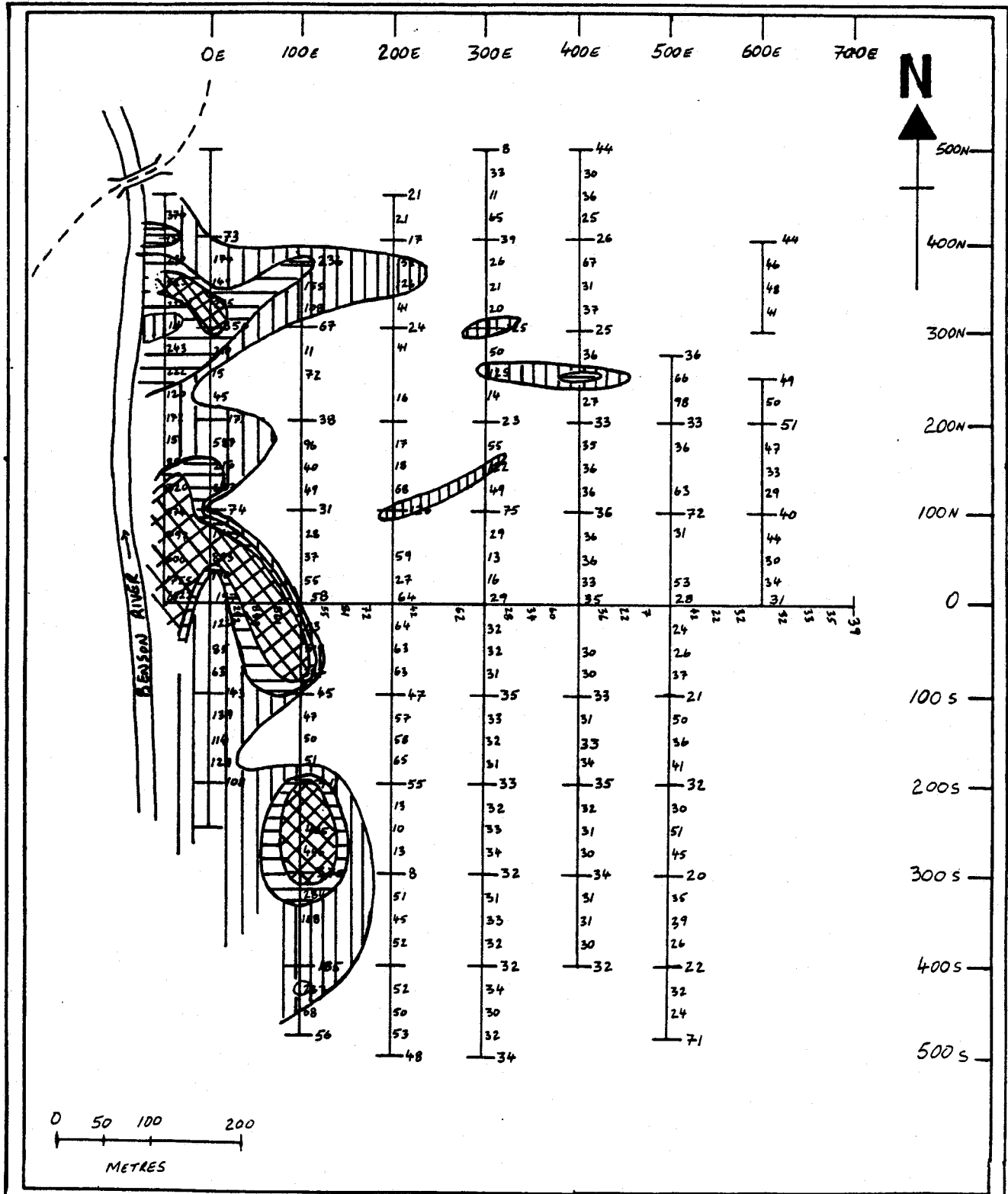


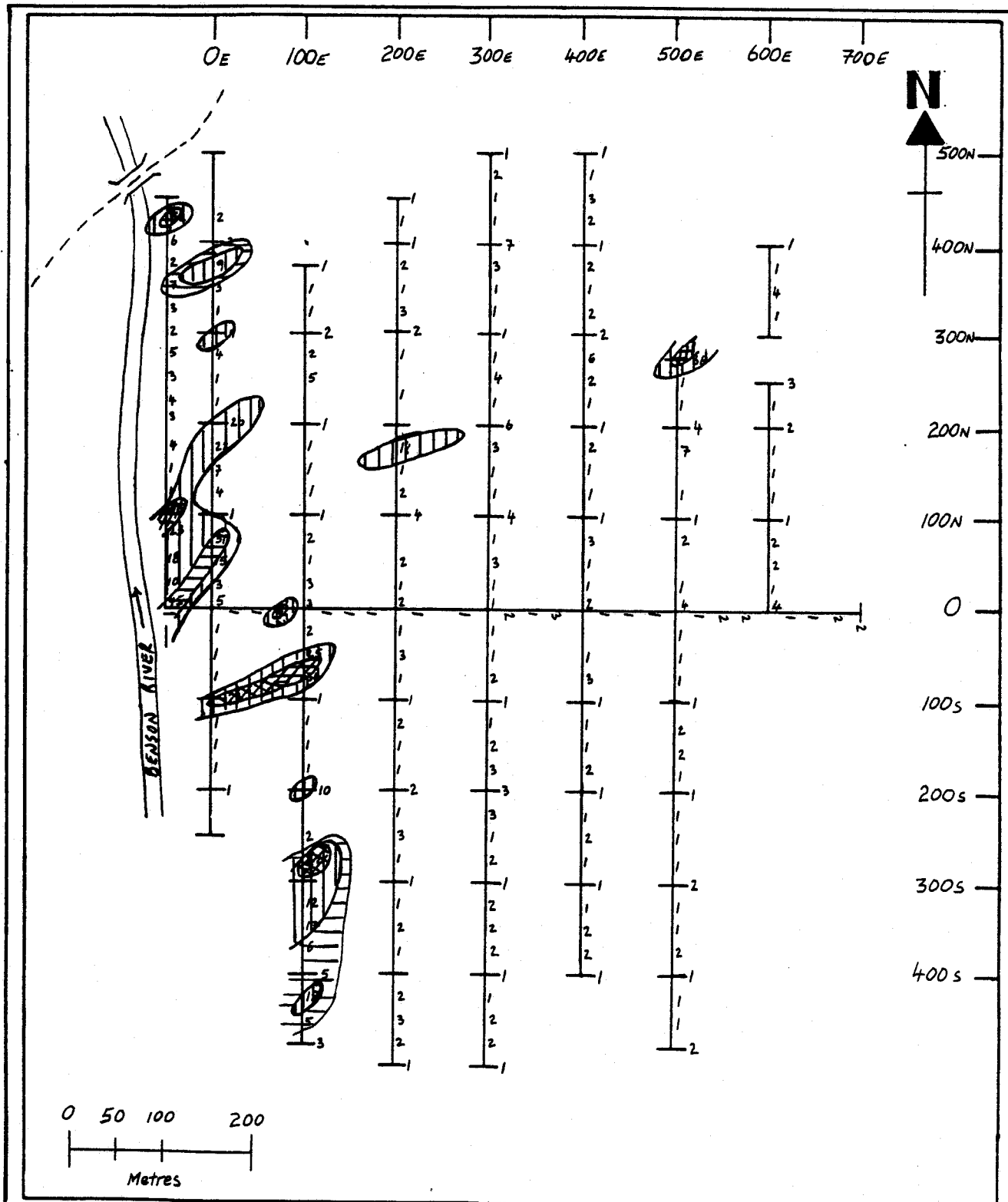
Figure 8 Ag geochemical results (PPM) from the Good Sport geochemical grid



LEGEND

	100 - 200 ppm
	200 - 300 ppm
	> 300 ppm

Figure 9 Interpretation of Cu geochemical results from the Good Sport geochemical grid



LEGEND




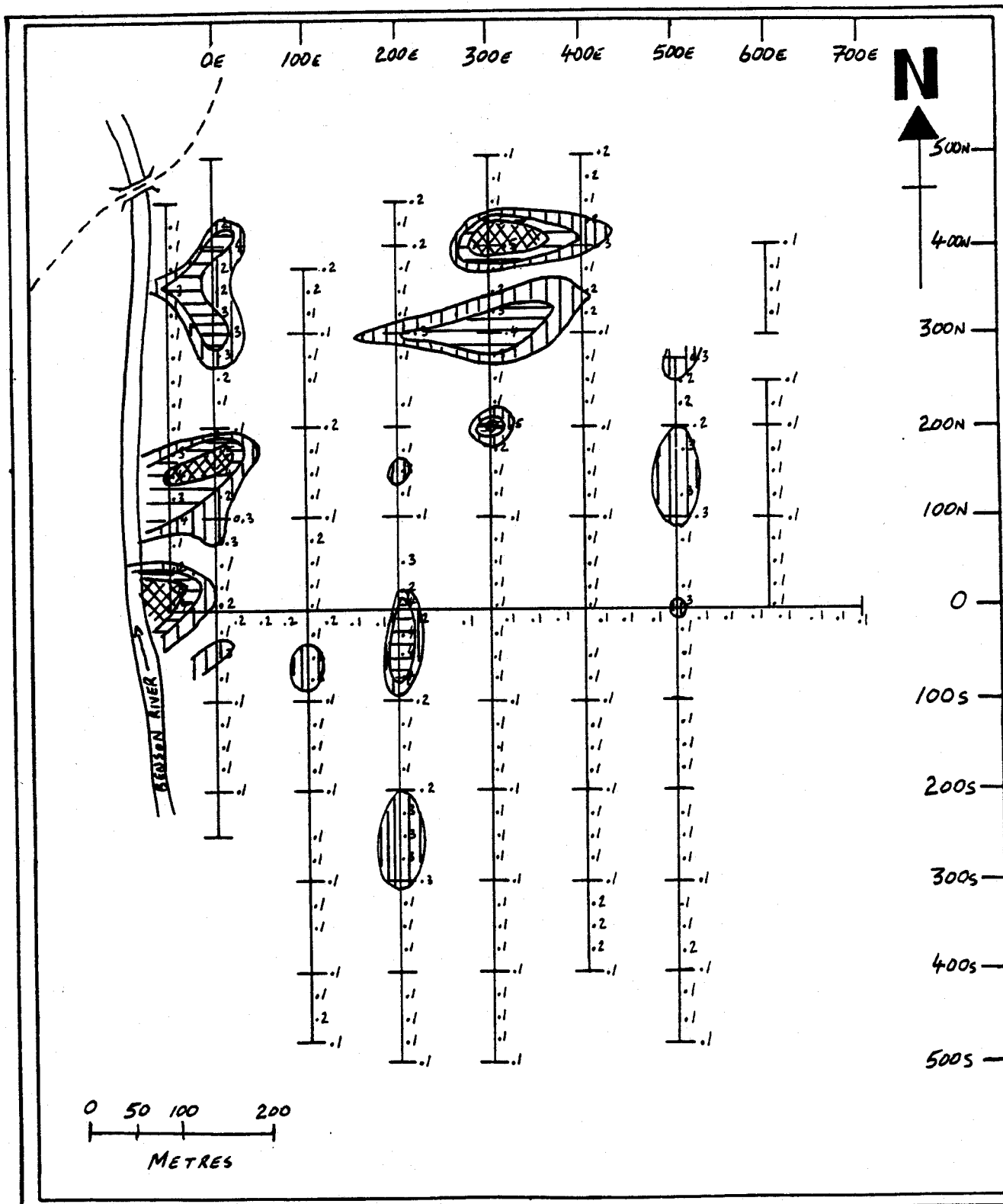
	5 - 9 PPB
	10 - 18 PPB
	> 18 PPB

Figure 10 Interpretation of Au geochemical results from the Good Sport geochem grid



LEGEND

	0.2 - 0.3 ppm
	0.31 - 0.4 ppm
	> 0.4 ppm

Figure 11 Interpretation of Ag geochemical results from the Good Sport geochem grid

APPENDIX I

30-element ICP and Au AA results for
Good Sport Geochemical grid and Iron Lake

GEOCHEMICAL ANALYSIS CERTIFICATE

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 NH PR SR CA P LA CR NG BA TI B W AND LIMITED FOR Na K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Soil - 80 Mesh AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: OCT 27 1988

DATE REPORT MAILED: Nov 3/88

SIGNED BY: C. Long, D. TOVE, C. LEONG, B. CHAN, J. WANG; CERTIFIED B.C. ASSAYERS

JAMES W. LAIRD PROJECT GOOD SPORT File # 88-5523 Page 1

Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Tb, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Me, K, W, Au* and rows of analytical data.

26

JAMES W. LAIRD PROJECT GOOD SPORT FILE # 88-5523

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tb	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
G.S 75E	1	861	20	58	.2	16	23	313	9.95	11	5	ND	2	39	1	2	2	199	.16	.053	2	51	.63	11	.39	2	4.14	.01	.02	1	62
G.S 125E	1	55	8	46	.2	28	20	424	12.90	6	5	ND	2	24	1	2	2	261	.12	.049	2	69	.58	9	.59	2	3.65	.01	.02	1	1
G.S 150E	1	81	16	63	.1	29	19	911	7.31	2	5	ND	1	19	1	2	2	135	.18	.078	2	45	.82	11	.23	2	5.31	.01	.03	1	1
G.S 175E	1	72	13	72	.1	55	25	660	5.90	2	5	ND	1	23	1	2	2	88	.43	.047	2	26	2.06	10	.20	5	4.09	.04	.03	1	1
G.S 225E	1	42	8	57	.2	26	20	497	6.98	2	5	ND	1	31	1	2	2	127	.23	.052	2	24	.60	6	.28	2	2.37	.01	.03	1	1
G.S 275E	1	62	19	79	.1	30	22	476	9.70	2	5	ND	1	31	1	2	2	195	.25	.068	2	43	.78	10	.40	2	4.71	.01	.03	1	1
G.S 325E	1	28	19	139	.1	20	17	1974	6.18	8	5	ND	1	14	1	2	3	86	.28	.043	3	24	.87	35	.14	2	4.86	.01	.05	1	2
G.S 350E	1	34	21	151	.1	22	23	1207	6.43	6	5	ND	2	13	1	2	2	76	.21	.045	3	33	1.12	38	.13	2	6.48	.01	.05	1	1
G.S 375E	12	60	36	131	.1	28	23	42066	4.52	2	5	ND	1	23	3	2	15	82	.61	.193	16	42	.53	116	.05	4	7.40	.01	.02	1	3
G.S 425E	1	36	16	73	.1	34	18	955	7.52	8	5	ND	1	16	1	2	2	160	.33	.043	4	76	1.97	19	.19	4	4.02	.01	.03	1	1
G.S 450E	8	22	11	64	.1	5	13	443	13.86	5	5	ND	2	13	1	2	2	105	.10	.060	2	25	.41	11	.15	6	3.65	.01	.02	1	1
G.S 475E	1	7	6	34	.1	4	6	299	8.59	2	5	ND	1	36	1	2	2	53	.18	.022	2	2	.20	4	.29	2	2.43	.01	.01	1	1
G.S 525E	5	42	22	122	.1	33	20	921	7.43	9	5	ND	2	13	1	2	3	147	.44	.017	4	38	2.61	28	.01	2	5.25	.01	.03	1	1
G.S 550E	6	22	7	88	.1	12	8	253	3.03	10	5	ND	1	21	1	2	2	70	.60	.033	3	16	1.03	13	.01	5	2.07	.01	.02	1	2
G.S 575E	1	32	13	115	.1	23	12	3461	4.14	15	5	ND	1	51	2	2	2	78	2.26	.082	12	30	1.64	49	.02	8	3.96	.01	.04	1	2
G.S 625E	1	32	20	316	.1	30	16	3393	5.43	38	5	ND	1	25	4	2	2	106	1.62	.054	14	44	2.89	33	.01	6	5.28	.01	.04	1	1
G.S 650E	1	33	17	78	.1	16	12	234	6.69	12	5	ND	1	6	1	2	3	154	.13	.036	3	37	3.03	8	.02	2	5.28	.01	.02	1	1
G.S 675E	2	35	7	47	.1	12	11	171	8.28	7	5	ND	2	6	1	2	2	169	.06	.033	2	28	.96	8	.03	2	2.83	.01	.02	2	2
G.S 700E	1	39	17	65	.1	14	12	263	10.52	16	5	ND	2	4	1	2	2	181	.06	.056	2	48	1.42	10	.04	6	4.47	.01	.02	2	2
STD C/AU-S	18	63	42	133	6.8	67	31	1022	4.21	41	22	8	39	48	19	17	19	59	.50	.094	40	55	.95	178	.07	40	2.03	.06	.14	13	48

32.

JAMES W. LAIRD PROJECT GOOD SPORT FILE # 88-5523

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
I.R 150N	1	323	2	78	.1	140	28	443	6.25	2	5	ND	1	49	1	2	2	125	1.20	.064	5	123	2.86	11	.62	4	5.36	.04	.03	1	7
I.R 125N	1	341	7	94	.3	119	29	542	7.94	2	5	ND	2	50	1	2	2	179	1.25	.048	4	129	2.32	14	.68	8	5.38	.02	.03	1	4
I.R 100N	1	512	14	63	.2	99	24	714	8.10	14	5	ND	1	36	1	2	2	139	.85	.068	4	166	2.22	10	.34	7	6.20	.02	.05	2	15
I.R 075N	1	1352	7	92	.9	73	39	1200	16.35	61	5	ND	1	90	1	2	2	89	2.22	.052	3	75	2.09	13	.29	10	3.48	.05	.06	1	113
I.R 050N	1	739	9	73	.5	56	27	688	11.65	34	5	ND	1	49	1	2	2	94	1.38	.070	3	114	1.24	11	.25	8	5.64	.02	.04	1	114
I.R 025N	1	783	9	153	1.1	6	39	553	43.71	45	5	ND	3	13	1	2	3	18	.72	.009	2	12	.31	11	.04	14	.62	.03	.05	1	310
I.R 000N	1	97	15	92	.2	66	22	472	8.30	8	5	ND	1	68	1	2	2	125	1.16	.037	2	85	1.04	31	.27	4	6.07	.01	.03	1	2
I.R 025S	1	1284	5	79	1.1	25	34	716	14.17	72	5	ND	1	184	1	2	2	43	10.99	.034	3	31	.99	11	.11	9	1.38	.03	.04	1	240
I.R 050S	2	62	13	85	.2	61	23	444	8.53	12	8	ND	1	40	1	2	2	126	.70	.020	4	73	.84	35	.24	5	5.47	.01	.03	1	1
I.R 075S	3	55	5	65	.1	62	26	717	8.84	20	7	ND	2	51	1	2	2	124	.76	.023	11	79	1.45	44	.26	2	6.17	.01	.03	1	2
I.R 100S	1	86	12	71	.1	67	28	439	9.79	5	5	ND	1	123	1	2	2	164	1.60	.029	3	82	1.34	37	.40	4	6.18	.01	.03	1	27
I.R 125S	1	46	14	74	.1	52	21	326	8.68	6	5	ND	2	39	1	2	2	130	.74	.021	5	64	1.49	27	.24	4	5.93	.01	.04	1	2
I.R 175S	1	86	15	55	.1	30	8	409	3.29	16	5	ND	1	268	1	2	2	42	16.71	.026	4	25	.92	17	.08	4	1.75	.01	.03	1	1
STD C/AU-S	19	62	40	133	7.3	71	31	1027	4.32	43	19	8	40	51	19	17	22	61	.50	.098	41	59	.95	180	.07	38	1.96	.06	.16	12	51

Iron
Lake

33.

JAMES W. LAIRD PROJECT GOOD SPORT FILE # 88-5523

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
R.T. 425N	1	370	2	118	.1	15	20	1312	6.35	22	5	ND	1	51	1	2	2	82	1.22	.067	7	25	1.24	28	.09	4	2.70	.02	.05	1	62
R.T. 400N	1	156	2	51	.1	22	14	293	9.71	2	5	ND	2	14	1	2	2	192	.17	.051	5	86	.53	6	.34	2	5.27	.01	.01	1	6
R.T. 375N	1	230	2	65	.1	90	23	386	7.20	5	5	ND	1	30	1	2	2	162	.26	.039	3	122	2.25	17	.33	3	4.37	.01	.05	1	2
R.T. 350N	1	523	4	74	.3	30	15	542	8.22	2	5	ND	1	19	1	2	2	180	.26	.061	3	75	.53	7	.41	2	3.77	.01	.02	1	7
R.T. 225N	1	226	2	86	.1	52	19	524	6.29	2	5	ND	1	34	1	2	2	107	.81	.052	6	69	1.09	20	.25	2	4.36	.01	.02	1	3
R.T. 300N	2	111	2	60	.1	17	15	413	9.55	12	5	ND	1	16	1	2	3	178	.33	.049	4	48	.90	12	.17	3	2.98	.01	.02	1	2
R.T. 275N	2	243	2	82	.1	43	23	1007	6.48	24	5	ND	1	20	1	2	2	99	.26	.066	7	63	1.34	12	.15	2	4.70	.01	.03	1	5
R.T. 250N	1	222	3	79	.1	63	22	1298	6.48	6	5	ND	1	25	1	2	2	109	.39	.059	7	73	1.76	24	.13	2	4.29	.01	.04	1	3
R.T. 225N	1	120	8	99	.1	53	26	1864	6.95	7	5	ND	1	31	1	2	2	121	.82	.051	5	62	1.77	26	.13	2	4.10	.01	.03	1	4
R.T. 200N	1	172	2	75	.1	56	24	705	7.20	12	5	ND	1	33	1	2	2	121	.66	.054	8	76	1.50	20	.16	3	4.98	.01	.02	1	3
R.T. 175N	1	151	2	66	.3	17	20	418	10.70	8	5	ND	2	43	1	2	2	197	.29	.053	3	40	.49	11	.47	2	4.08	.01	.01	1	4
R.T. 150N	1	85	5	72	.4	35	33	540	10.90	12	5	2	1	29	1	2	3	162	.27	.063	2	68	.70	7	.34	7	5.26	.01	.01	1	1
R.T. 125N	2	320	4	59	.3	27	24	893	8.68	6	5	2	1	25	1	2	10	143	.24	.062	7	64	.80	14	.26	5	5.51	.01	.01	1	1
R.T. 100N	2	574	5	72	.4	36	28	463	10.07	14	5	2	1	21	1	2	11	179	.21	.087	6	74	.87	12	.35	4	7.22	.01	.01	4	38
R.T. 075N	1	797	7	72	.1	34	35	1238	9.31	15	5	2	2	31	1	2	2	153	.30	.058	16	66	1.07	16	.27	4	5.75	.01	.02	1	23
R.T. 050N	2	600	4	102	.2	61	49	1059	13.33	13	5	2	1	35	1	2	11	164	.38	.057	8	60	1.28	18	.21	2	6.34	.01	.02	1	18
R.T. 025N	1	1755	9	80	.8	10	35	745	8.94	15	5	ND	2	34	1	2	3	93	.59	.061	4	12	.37	12	.07	2	3.48	.01	.02	1	10
R.T. 000N	1	1522	4	117	.4	16	35	4443	7.76	12	5	ND	1	147	1	2	4	80	2.79	.072	8	23	.71	40	.07	3	3.72	.01	.02	1	45
STD C/AU-S	18	62	40	131	7.2	69	31	1015	4.25	42	20	8	38	48	19	20	21	58	.50	.097	39	52	.95	173	.07	35	2.01	.06	.14	12	53

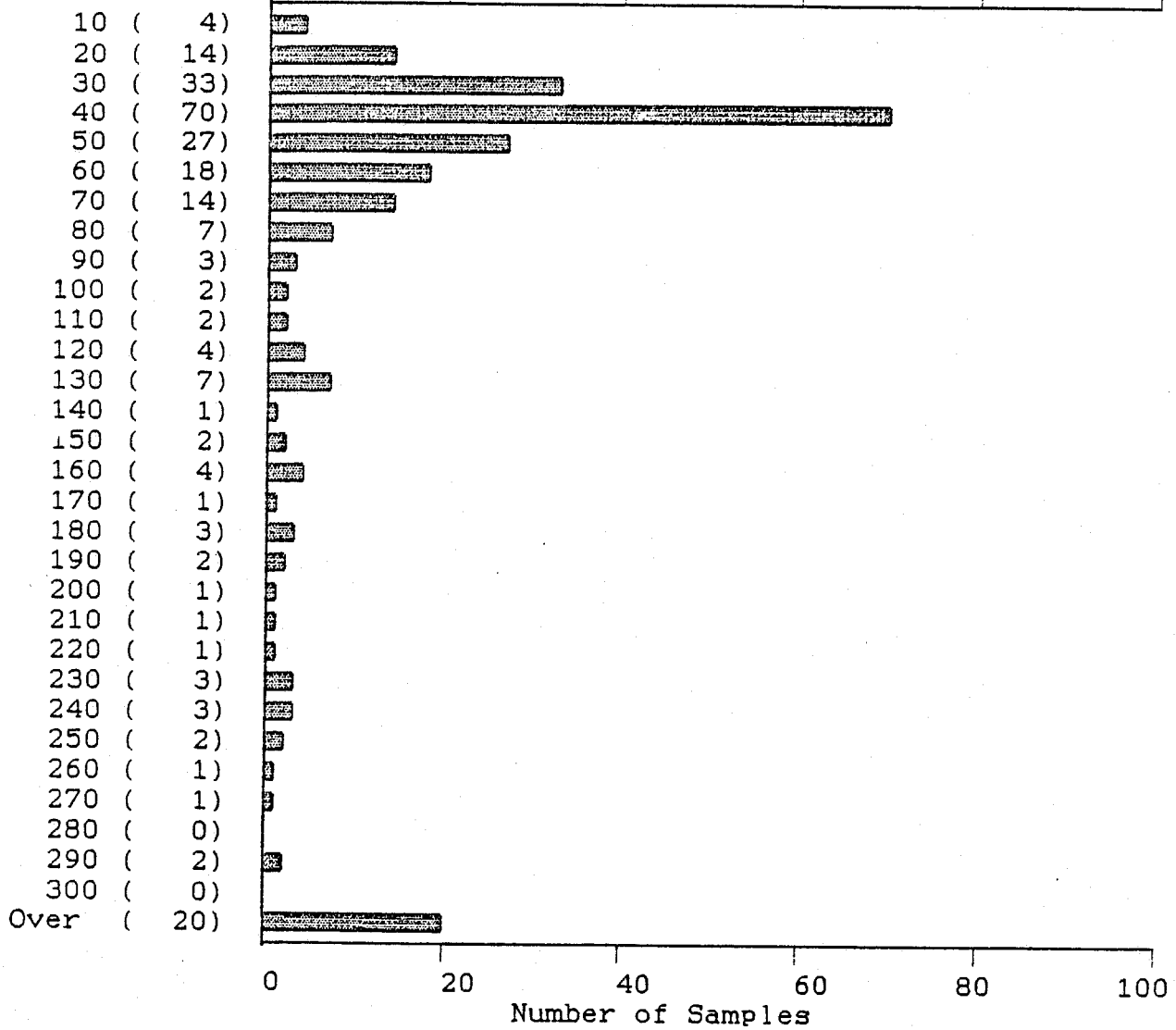
River Trail
on Good
Sport Grid

APPENDIX II

Statistical analyses for Good Sport
geochemical grid, Cu, Au and Ag results

JAMES W. LAIRD (88-5523)

Cu
(PPM)



253 Samples

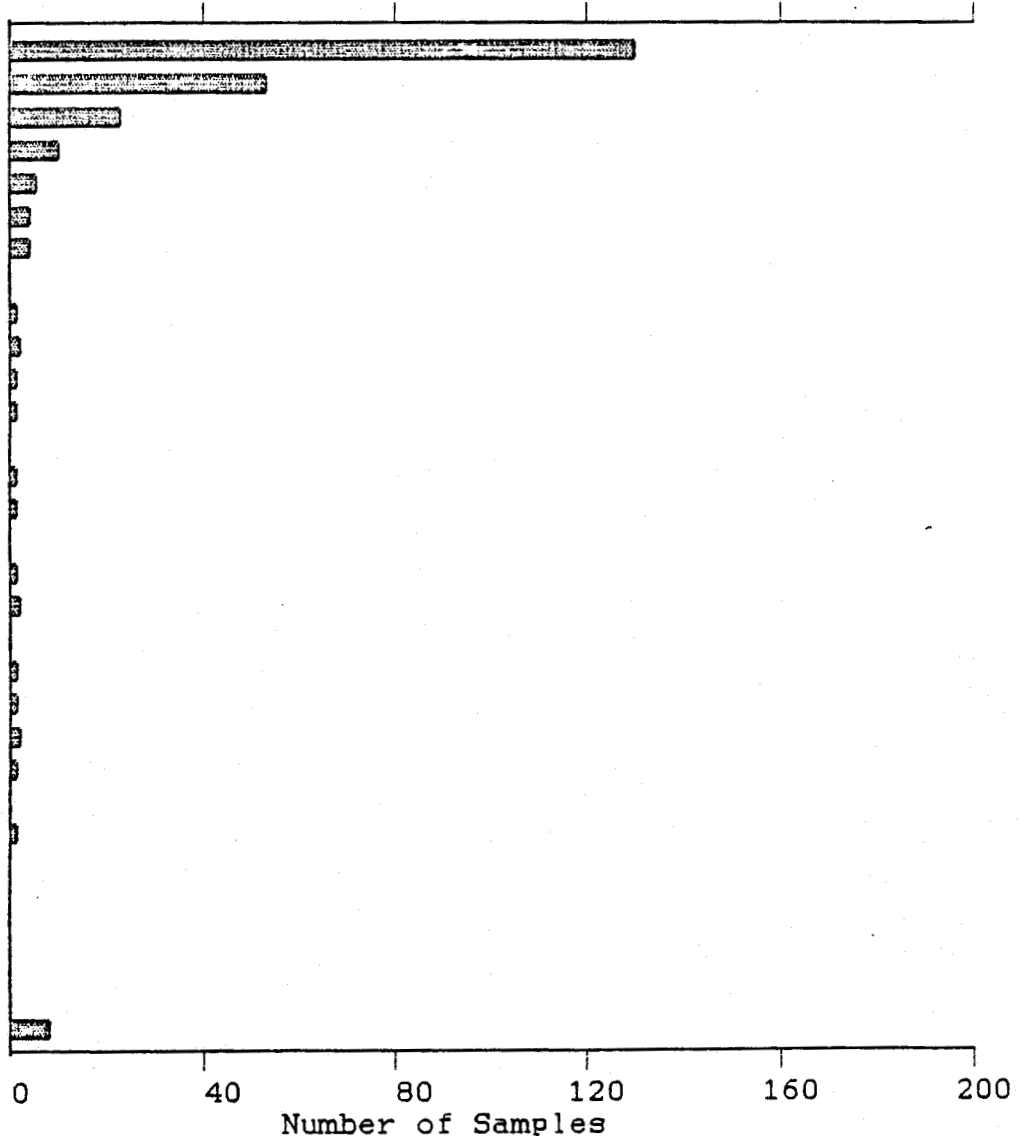
Maximum: 1755
Minimum: 7

Mean: 114
Median: 41
Standard Deviation: 210

JAMES W. LAIRD (88-5523)

Au*
(PPB)

1 (130)
 2 (53)
 3 (23)
 4 (10)
 5 (5)
 6 (4)
 7 (4)
 8 (0)
 9 (1)
 10 (2)
 11 (1)
 12 (1)
 13 (0)
 14 (1)
 15 (1)
 16 (0)
 17 (1)
 18 (2)
 19 (0)
 20 (1)
 21 (1)
 22 (2)
 23 (1)
 24 (0)
 25 (1)
 26 (0)
 27 (0)
 28 (0)
 29 (0)
 30 (0)
 Over (8)



253 Samples

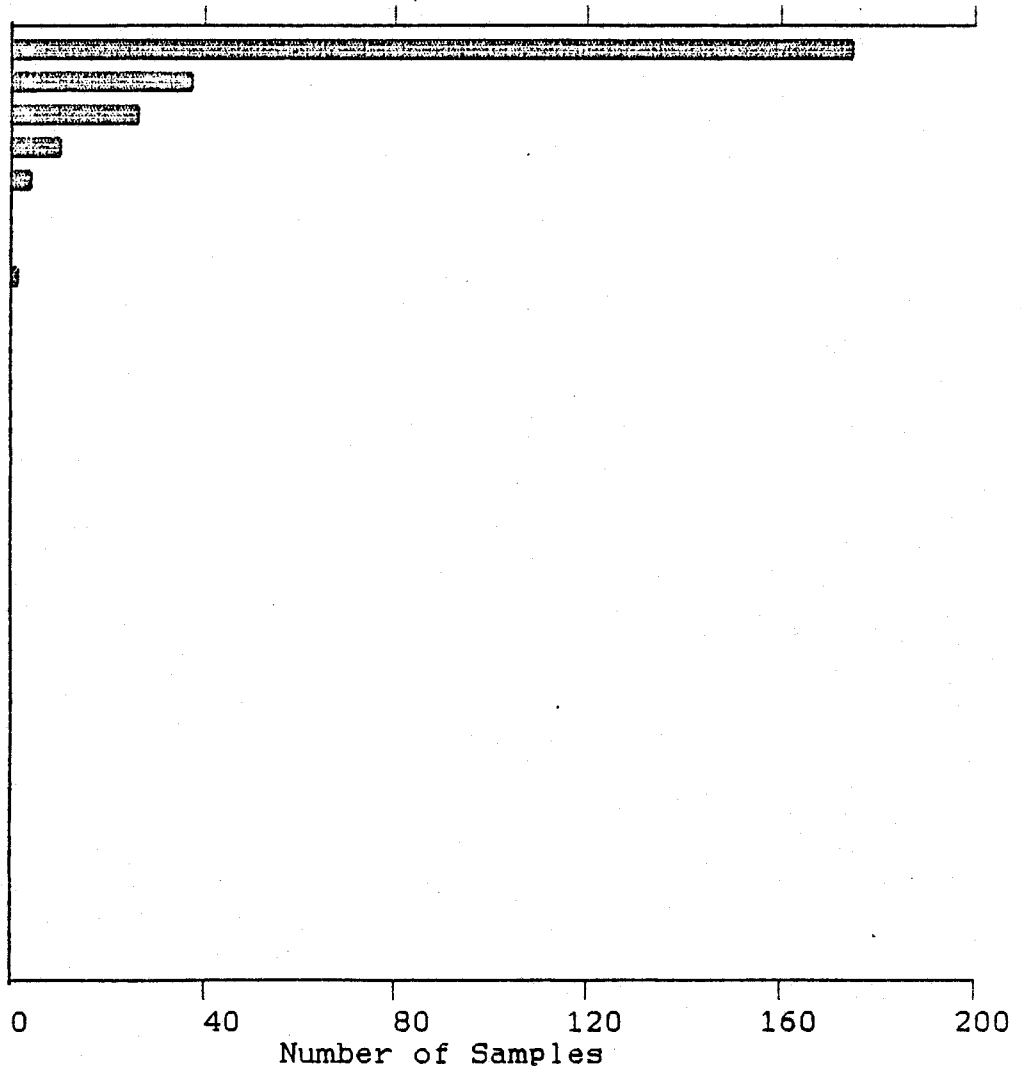
Maximum: 62
 Minimum: 1

Mean: 4
 Median: 1
 Standard Deviation: 9

JAMES W. LAIRD (88-5523)

Ag
(PPM)

0.1 (175)
 0.2 (37)
 0.3 (26)
 0.4 (10)
 0.5 (4)
 0.6 (0)
 0.7 (0)
 0.8 (1)
 0.9 (0)
 1.0 (0)
 1.1 (0)
 1.2 (0)
 1.3 (0)
 1.4 (0)
 1.5 (0)
 1.6 (0)
 1.7 (0)
 1.8 (0)
 1.9 (0)
 2.0 (0)
 2.1 (0)
 2.2 (0)
 2.3 (0)
 2.4 (0)
 2.5 (0)
 2.6 (0)
 2.7 (0)
 2.8 (0)
 2.9 (0)



253 Samples	Maximum: 0.8	Mean: 0.2
	Minimum: 0.1	Median: 0.1
		Standard Deviation: 0.1