

PROSPECTING REPORT
on the
DIDDI, KATHRYN, SARA CLAIMS
of the
ALPEN SOUTH PROPERTY

Mamquam River Area, Vancouver Mining Division
92G 10W, Lat. 49° 38.5' Long. 123° 20'

by

K.R. MacKenzie, B.Sc., M.D.

Owner/Operator: Alpen Exploration Ltd.

Squamish, B.C.

October 1980

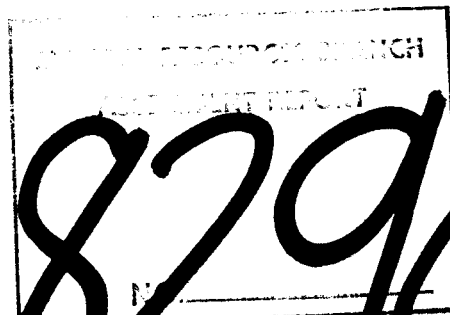
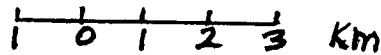
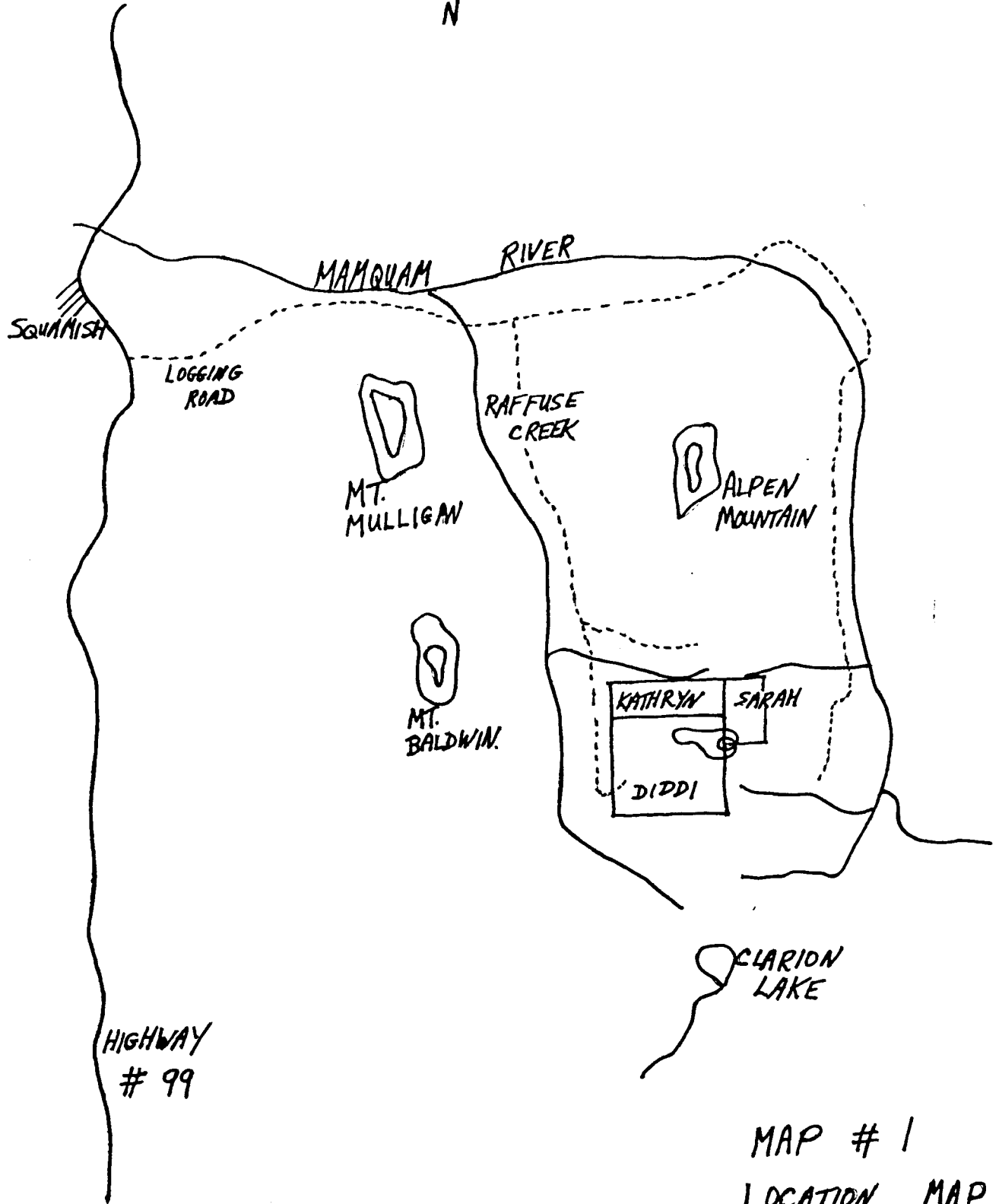


TABLE OF CONTENTS

	<u>PAGE</u>
INDEX MAP	(i)
INTRODUCTION	1
TECHNICAL DATA AND INTERPRETATION	2
CONCLUSION	4
APPENDIX A Author's Qualifications	
APPENDIX B Itemized Cost Statement	
APPENDIX C Correlation of cc's of Dithizone with Results of Subsequent Analyses for Copper, Lead and Zinc	
APPENDIX D Samples Analyzed - Locations and Results	
LIST OF ILLUSTRATIONS	
INDEX MAP (Map #1)	(i)
PLAN MAP (Map #2)	in pocket

INDEX MAP



SCALE 1:125,000

MAP # 1
 LOCATION MAP
 FOR ALPEN SOUTH
 MINERAL PROPERTY

92 G 11

92 G 10 W

INTRODUCTION

The Alpen South property is located approximately fifteen kilometers southeast of Squamish on a northwest trending ridge to the south of Alpen Mountain and north of Clarion Lake. The Mamquam River lies to the east and Raffuse Creek to the west.

Access is by logging road that leaves Highway 99 approximately one-half kilometer south of the turnoff to Squamish. The road is used for active logging by McMillan-Bloedel and Weldwood. Permission to use the road can be obtained from the MacMillan-Bloedel offices near the entrance to the road. The two logging roads to the area are shown on the index map.

This property has been staked in the past but no assessment reports have been filed.

The property is owned by Alpen Exploration Ltd. of Squamish.

This area has been explored mainly by geochemical and regular prospecting methods. The geochemical assessment of the property has been done with a Dithizone Kit sold by Bondar-Clegg & Company Ltd. Anomalous silt samples found with the kit have been checked by having analyses done by Bondar-Clegg & Company Ltd. The number of silt samples tested with the Dithizone Kit was 85; the number of soil samples tested was 2; the number of water samples tested was 4; the number of shear gouge samples tested was 10;

and, the number of seep samples tested was 6. The number of samples analyzed in the lab was silt 5; seep 4; soil 1; and, shear gouge 5. A separate list of these will be found in Appendix D. The location of these samples can be found on Map #2.

TECHNICAL DATA AND INTERPRETATION

The Dithizone Field Kit was used to test silt from almost every creek in the area. The test is a colorimetric measure of the total heavy metals in a given sample. It measures the total of zinc, lead, copper, tin, silver, cobalt, and nickel, but it is most sensitive to zinc.

The test is roughly quantitative and can distinguish between low, medium and high totals of heavy metals. The higher the number of cc's of dithizone to reach an end point, the higher is the total heavy metal content. A table correlating the dithizone readings and subsequent analyses of the silt is given in Appendix C. The range of the test is from zero to fifty according to company literature. However, once the kit was used within the central zone of the prospect, it was found that a high reading of fifty was insufficient and the reading of the test has since been modified to give an upper limit of one hundred. The background as measured by this kit is zero to one.

The Dithizone test was found to be quite accurate when measuring silt and seep samples, but this was not the case when measuring soil and shear gouge.

For the purpose of prospecting, the rock in this area has been classified into three groups:

1. The Gambier Group - rocks that include rholites, dacites, andesites and proclastic rocks.
2. Quartz Diorite
3. Granodiorite

The approximate boundaries of these rock groups are shown on Map #2.

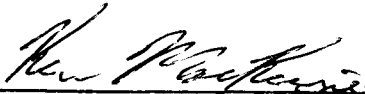
The names and definitions for these rocks were taken from G.S.C. Memoir #335 by J.A. Roddick, pp. 58-61. The results of our prospecting have altered the contacts of these rocks, as shown on Map 1151A "Pitt Lake".

In general, the outcropping rock is barren of mineralization other than pyrite. However, in some places, outcrops containing chalcopyrite or galena have been found. These outcrops have been marked on Map #2 with ccp for chalcopyrite and ga for galena. Quartz veining when present is marked qtz and jasper veining is marked ja.

The geochemical anomalies present in this area seem to indicate that the mineralization lies within the northwest trending ridge that forms the centre of Map #2.

CONCLUSION

A fairly large geochemical anomaly has been outlined surrounding a ridge south of Alpen Mountain. The rocks forming the main part of this ridge are metamorphosed volcanics of the Gambier group and they provide a suitable environment for significant mineralization. To date, no mineral of economic grade or extent has been identified.


K. R. MacKenzie, B.Sc. M.D.

APPENDIX A

AUTHOR'S QUALIFICATIONS

K. R. MacKenzie, B.Sc., M.D.

Doctor MacKenzie is a medical doctor who graduated from the University of British Columbia in 1963 with a B.Sc. in Chemistry and Mathematics. Geology 105 was taken as part of his undergraduate studies. He spent three summers working for the Geological Survey of Canada under Dr. J. O. Wheeler.

After graduating from U.B.C. in 1968 with a medical degree, Dr. MacKenzie has continued to prospect as a hobby.

Recent reading by the author includes:

- G.S.C. Memoir No. 335 - J.A. Roddick
- Prospecting in Canada (G.S.C.) by A.H. Lang.
- G.S.C. Paper 72-53, Rock and Mineral Collecting in British Columbia, by S. Leaming.
- G.S.C. Paper 72-22, Precambrian Volcanogenic Massive Sulphide Deposits in Canada: A Review by D.F. Sangster.
- Geol. Soc. Malaysia, Bulletin 9, Nov. 1977, pp.1-16, Mineralization in the Coast Plutonic Complex of British Columbia, south of latitude 55°N by G.J. Woodsworth and J.A. Roddick.
- International Geologic Congress, Field Excursion A09-C09, Copper and Molybdenum Deposits of the Western Cordillera.
- Exploration and Mining Geology by William C. Peters.
- A Field Guide to Rocks and Minerals by Pough.
- Volcanogenic Deposits and their Regional Setting in the Canadian Cordillera - Abstracts from the Geological Association of Canada Conference, January 25, 26, 1980.

The author has received significant input from F. Baumann, P.Eng., who was previously employed by Duval Corporation, now teaching high school earth sciences and mathematics; from R. Price, Geology 105 at U.B.C. and three summers of field work doing geochemistry and prospecting; and, Rod Arnold, project geologist for Western Mines.

APPENDIX B

ITEMIZED COST STATEMENT

STATEMENT OF EXPENDITURES

DIDDI, KATHRYN AND SARA CLAIMS

Value of Man-Hours of Work Performed

K. MacKenzie -

Period - 1980: June 21; July 2 ($\frac{1}{2}$ day), 15 ($\frac{1}{2}$ day),
18, 25, 28; August 1, 22, 25; September 8,
10 ($\frac{1}{2}$ day), 24, 25 ($\frac{1}{2}$ day); October 3, 8.

Total: 13 days @ \$60.00 780.00

R. Price -

Period - 1980: July 2 ($\frac{1}{2}$ day).
@ \$60.00 30.00

F. Baumann, P.Eng. -

Period - 1980: July 2 ($\frac{1}{2}$ day), August 22.

Total: $1\frac{1}{2}$ days @ \$118.50 177.75 987.75
987.75

Transportation

13 days @ \$20.00 260.00

Dithizone Testing (Geochemical)

Cost of 107 Samples @ \$1.00 107.00

Lab Analyses (Bondar-Clegg) 82.85

Report Preparation Costs

Preparation	180.00	
Maps	35.00	
Miscellaneous	20.00	
	<u>235.00</u>	235.00
		<u>1672.60</u>

STATEMENT OF EXPENDITURES
for
PROPERTY EVALUATION BY WESTERN MINES

Salaries

Rod Arnold, Project Geologist -

July 17 and 25, 1980

2 days @ \$118.50 237.00

Accommodation and Meals

2 days @ 46.77 93.54

Transportation

Truck - 200 mi. @ 23.5¢ 47.00
377.54

STATEMENT OF EXPENDITURES
for
PROPERTY EVALUATION BY NORANDA MINES

Salary

Dan Pegg, Geologist -

October 8, 1980

118.50

Accommodation and Meals

46.77

Transportation

Truck - 150 mi. @ 23.5¢

35.25
200.52

ADD TOTAL FROM PAGE 1

1672.60

ADD TOTAL FROM PAGE 2

377.54

TOTAL

\$2250.66

APPENDIX C

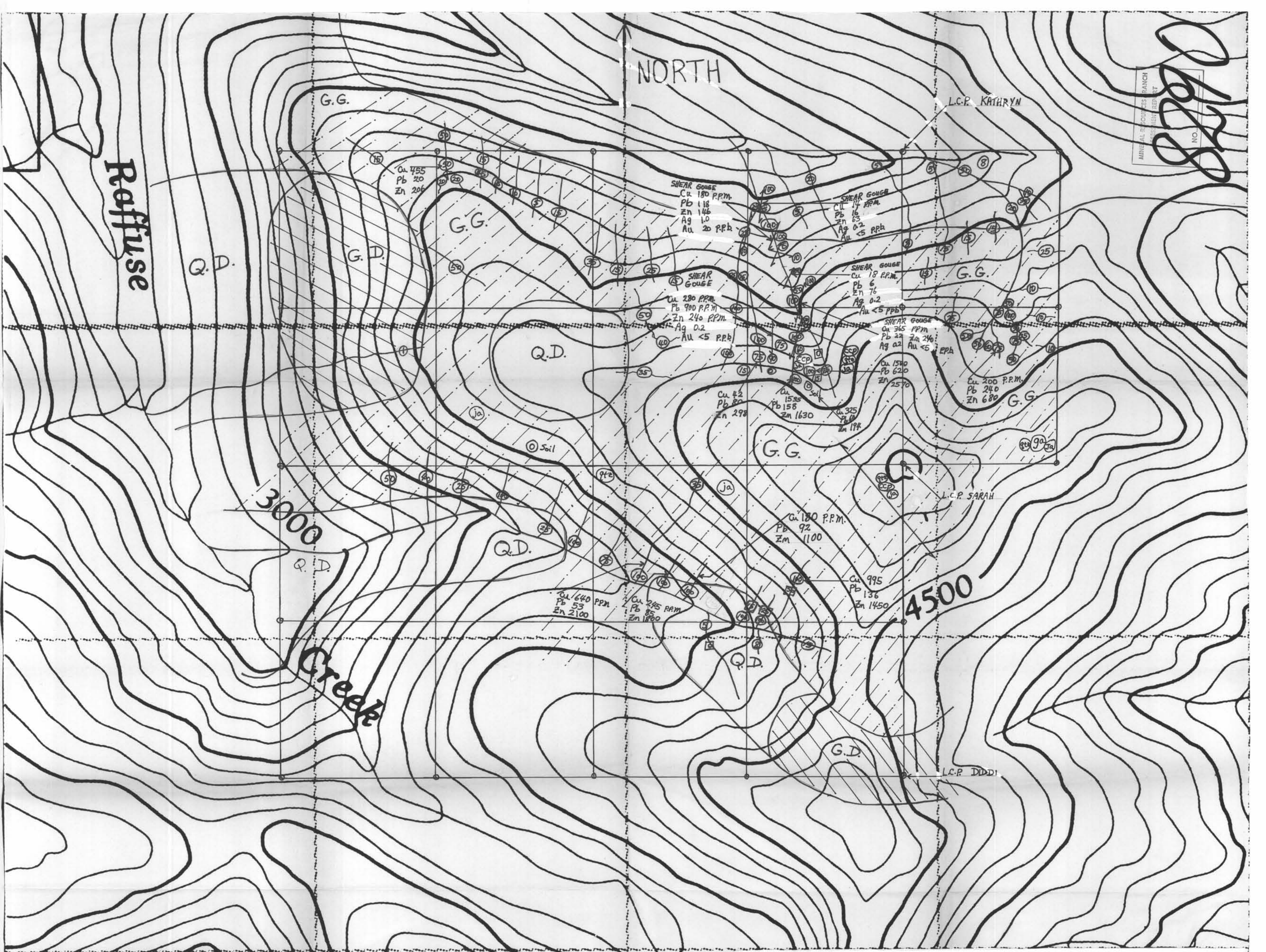
CORRELATION OF CC'S OF DITHIZONE WITH RESULTS OF
SUBSEQUENT ANALYSES FOR COPPER, LEAD, AND ZINC

<u>Sample No.</u>	<u>Dithizone Test Reading (cc's of Dithizone)</u>	<u>Cu (ppm)</u>	<u>Pb (ppm)</u>	<u>Zn (ppm)</u>	<u>Totals (ppm)</u>
19	20	138	19	168	325
25	30	187	18	216	421
36	50	300	--	300	600
179	50	570	42	387	999
180	50	380	36	785	1201
175	100	415	145	2000	2560
176	100	267	330	2210	2807

APPENDIX D

TABLE OF ANALYZED SAMPLES

Sample #	Type of Sample	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
193	Silt	640	53	2100		
194	Silt	245	85	1800		
195	Silt	180	92	1100		
212	Seep	1535	158	1630		
213	Soil	325	60	194		
220	Seep	1500	620	2570		
222	Seep	995	136	1450		
226	Silt	455	20	206		
257	Seep	200	240	680		
313	Shear Gouge	180	118	146	1.0	20
316	Shear Gouge	18	6	76	0.2	<5
319	Shear Gouge	365	22	240	0.2	<5
323	Shear Gouge	280	900	235	0.2	<5
331	Shear Gouge	14	16	63	0.2	<5



MINERAL RESOURCES BRANCH
 TECHNICAL REPORT
 NO. 8290

MAP NUMBER TWO

PROSPECTING REPORT FOR CLAIMS DIDDY, KATHRYN, SARAH

Gambier Group G.G.

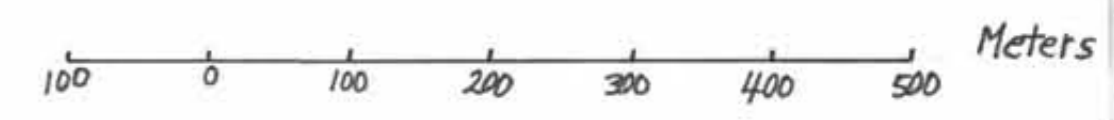
Granodiorite G.D.

Quartz Diorite Q.D.

Dithizone Reading (cc.'s) silt Water
 SHEARED ROCK

Analyses in parts per million (ppm.) or parts per billion (ppb)

Cu = Copper Pb = Lead Zn = Zinc Ag = Silver Au = Gold



Scale 1:5000

Contour Interval 100'