ASSESSMENT

GEOLOGICAL

REPORT

[AIRPHOTO FRACTURE DENSITY ANALYSIS]

ON THE

CLARE [1](3) : MC3[444](7) : OC4[445](7)

MINERAL CLAIMS

MT. ELLESMERE AREA

Woodfibre, British Columbia

VANCOUVER MINING DIVISION

49 37'N & 123 17'W

92G11W

FOR

O. CONTINI

October 29, 1981

G.E.A. von Rosen, P.Eng.

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PLATES

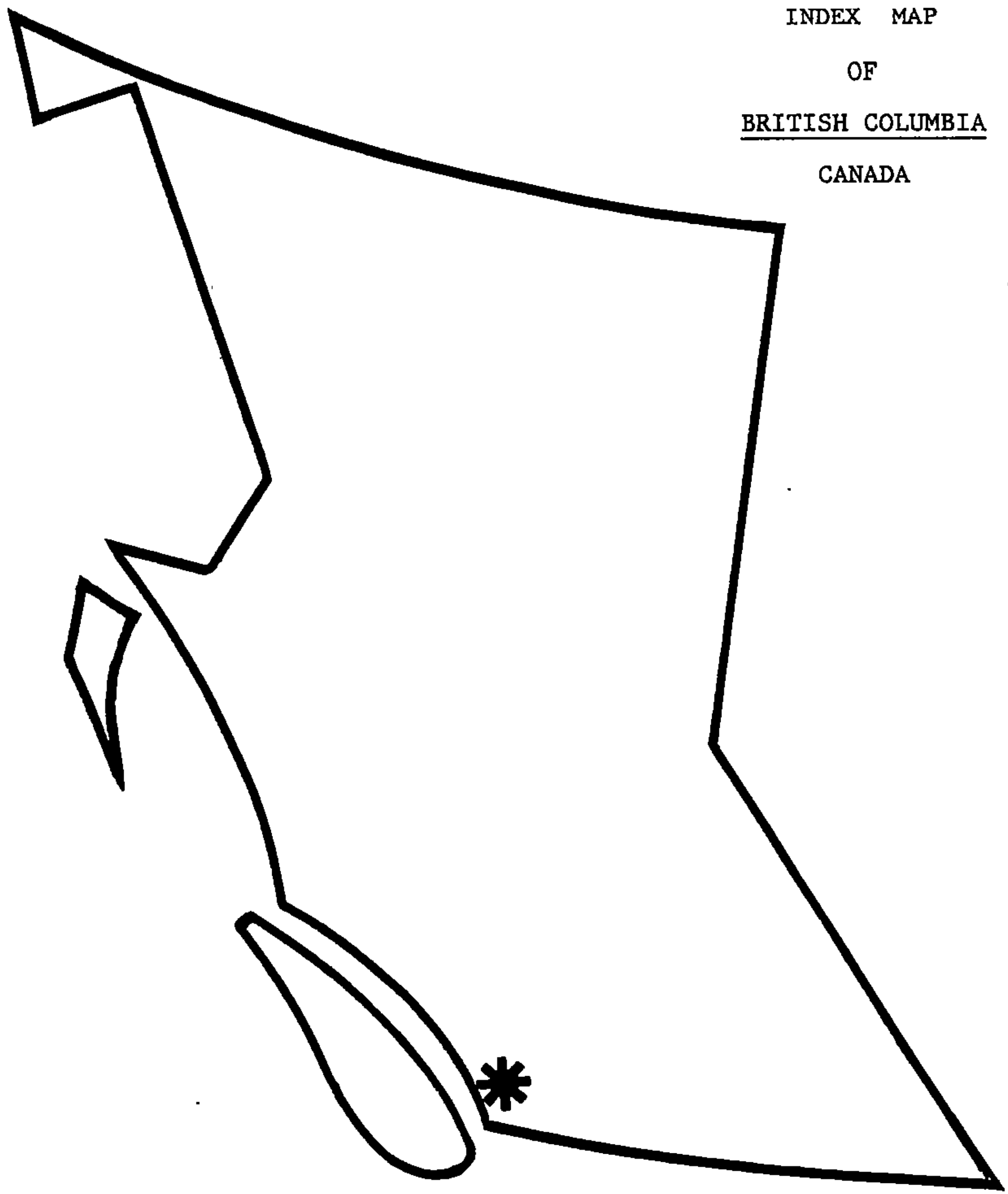
FIGURE "1"

INDEX MAP

OF

BRITISH COLUMBIA

CANADA



INTRODUCTION

The writer was instructed by O. Contini to perform an air-photo fracture-density study, and to compile the present summary report for assessment purposes.

CLAIMS

NAME	RECORD #	UNITS	ANNIVERSARY
CLARE	1	6	March 24
MC 3	444	18	July 3
OC 4	445	18	July 3

VANCOUVER MINING DISTRICT MINERAL CLAIM MAP : 92G11W

LOCATION

49 37'N : 123 17'W

The claims flank the east and northeast slopes of Mt. Ellesmere located 6.5 km southwest of Woodfibre, B.C.
The claims are accessible by boat from Brittannia, B.C., located about 29 km north of Horseshoe Bay, B.C., along the Squamish highway. (Fig. 1 & 2) This road follows the eastern shore line of Howe Sound, a tidewater inlet which surrounds several islands, such as Bowen, Gambier, and Anvil.
The area covered by the present survey is bounded to the east and south by the shores of Howe Sound, by Potlatch creek to the west, and by Woodfibre creek to the north.

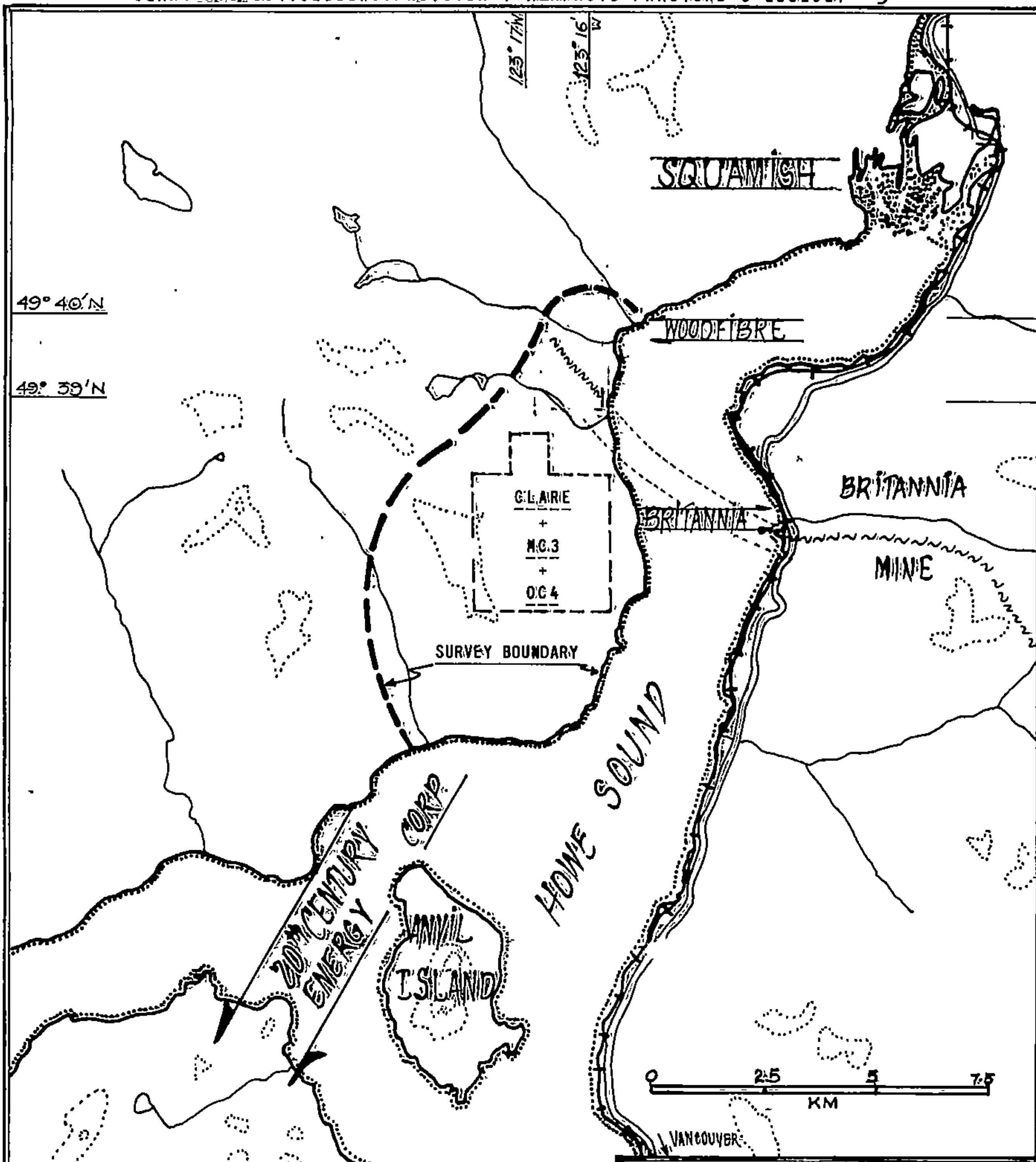


FIGURE 2

LOCATION MAP

CLARE + MC3 + OC4
MINERAL CLAIMS

MT. ELLESMERE AREA
92G11W : 49 37'N : 123 17'W

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GEAREX ENGINEERING mission bc

HISTORY

The Howe Sound area, including its several islands, has long been recognized for its ore-making potential, as there are numerous mineral showings which have over the years been prospected and developed. Some such developments have resulted in the operation of **Britannia Copper Mines**, out of which large high-grade copper recoveries have been made since 1905, and in the aggressive exploration of the high-tonnage copper, molybdenum, silver potential of the **20th Century Energy Corporation**'s Gambier Island property, which is still continuing.

More locally, immediately north of the present map sheet lies the B(**Group A**) showing known for its molybdenum, copper mineralization (BCDM Assessment Report 1214).

Centered within the area of the present study is the old **Horseshoe** property explored for its copper, silver, and gold potential during the early 1920's.

In the northern portion of the survey area lies the **CLARE** mineral claim which was staked in 1975 for its showings of copper, nickel, and traces of silver and cobalt.

Adjoining the CLARE to the south are the **MC3** and **OC4** mineral claims, staked in 1979 to cover the mineral potential between the **Horseshoe** and the **CLARE** showings.

Exploration of the CLARE property consisted of trenching, sampling, petrographic studies, and assays made, by the owner, however the precipitous terrain precluded complete modern-day exploration of the mineralized exposures considering the limited budgets.

FIGURE 3

GEOLOGICAL MAP

CLARE : MC3 + OC4
MINERAL CLAIMS

MT. ELLESMERE AREA
92G11W : 49 37'N : 123 17'W

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GENERAL GEOLOGY

The Gambier group (IK_G) of Lower Cretaceous age is the host rock at Britannia Copper Mine, at Britannia, B.C., at 20th Century Energy Corp. on Gambier Island, and the Snow property at Woodfibre creek. The Gambier group consists of andesite to rhyodacite flows, pyroclastics, greenstone, argillite, minor conglomerate, limestone, and schist.

Granitic rocks of the Coast Intrusions are in contact with the Gambier rocks, and underlie most of the present map area. They consist of leucocratic and other varieties of granodiorite.

LOCAL GEOLOGY

The B(Group A) showing [Plate 1] is described in BCDM Assessment Report 1214 (MINDEP file) as consisting of:

> "quartz veins with chalcopyrite and molybdenite occurring within a pendant of late Paleozoic, early Mesozoic metavolcanics or metasediments, and in a tongue of fractured granodiorite of the Coast Range batholith which has intruded the metamorphic rocks."

The Horseshoe showings are described in the MINDEP file as follows:

> "a belt of schists and argillites is flanked on the north and south sides by granodiorite of the Coast Range batholith. An extensive belt of low-grade chalcopy-

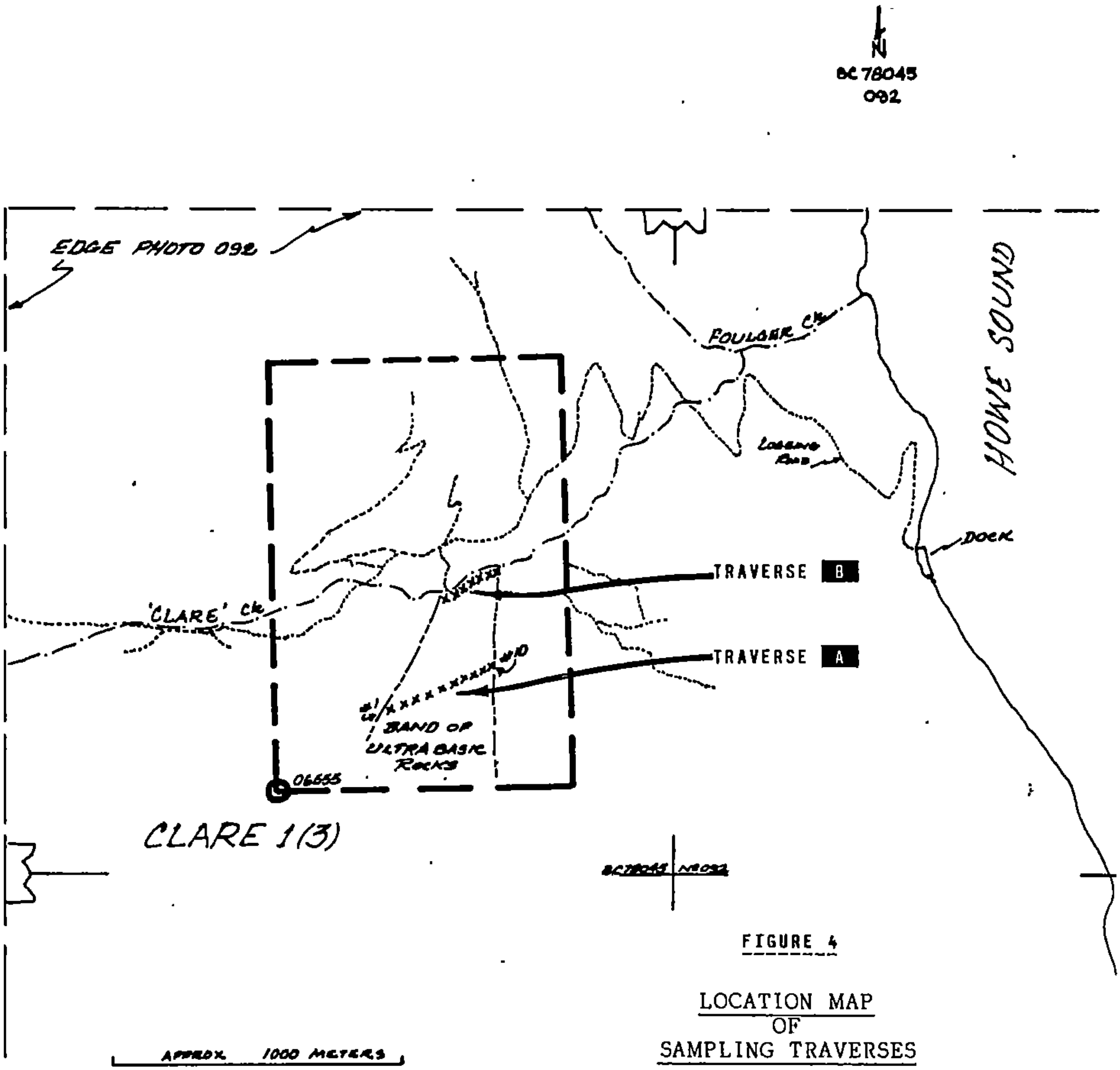

FIGURE 4

LOCATION MAP
OF
SAMPLING TRAVERSES

CLARE
MINERAL CLAIM

MT. ELLESMERE AREA
92G11W : 49 37'N : 123 17'W

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"...rite, pyrite and pyrrhotite lenses lies in the schist along the schist-granodiorite contact."

A portion of the MC3 and OC4 claims appear to cover the center of the original Horseshoe property.

The CLARE claim has been prospected by O. Contini, and he personally obtained rock and mineral specimens from extensive outcrops.

GEOLOGY OF THE CLARE CLAIM

O. Contini while prospecting the showings on the CLARE property surveyed two traverses across the trend of ultrabasic rocks described below. Figure 3 represents a sketch map of the location of the samples described below. The exact location of this sketch map is shown between the airphoto centers BC78045: 091 & 092, on Plate 1 in the map pocket, as detailed on Figure 4.

Traverse [A] on Figure 3 represents the origin of Petrographic samples #1 through #10. The descriptions of these samples are appended to this report.

Traverse [B] on Figure 3 relates to a grab sample, consisting walking along and chipping small pieces of rock from outcrops along the road in the creek valley for a length of about 500 feet (150 m).

This information, along with polished sections, and assays reported are included in the present assessment report, because this information is valuable, and adds to the airphoto fracture-density study.

MINERALIZATION OF THE CLARE CLAIM

O. Contini having obtained the rock chips from Traverse [B] had them assayed as two separate samples, with the following results:

Mark	Silver	Copper	Nickel	Cobalt
no mark	0.1oz/t	0.27%	0.04%	0.02%
no mark	-----	0.15%	0.02%	------

W.G. Bacon, P.Eng. studied mineralized specimens from the [A] Traverse on Figure 3 and had them assayed:

Marked	Silver	Copper	Nickel	Cobalt	Total Nickel
608	0.05oz/t	0.38%	0.15%	0.04%	0.15%

G.C. Singhai, P.Eng. obtained grab samples from Traverse [A] and had them assayed with the following results:

Marked	Copper	Nickel	Cobalt
0985-I	0.14%	0.45%	------
0998-I	0.29%	0.03%	0.01%
0999-I	0.47%	0.04%	------
1000-I	0.08%	0.01%	------

W.G. Bacon, P.Eng. writes:
"The host rock is a member of the gabbro-norite series grading into pyroxenite. Pyrrhotite is disseminated throughout the rock as grains a few microns to aggregates of grains up to ½in in diameter. Grains of chalcopyrite are generally associated with pyrrhotite. No visible nickel minerals were observed..."

AIRPHOTO FRACTURE DENSITY ANALYSIS

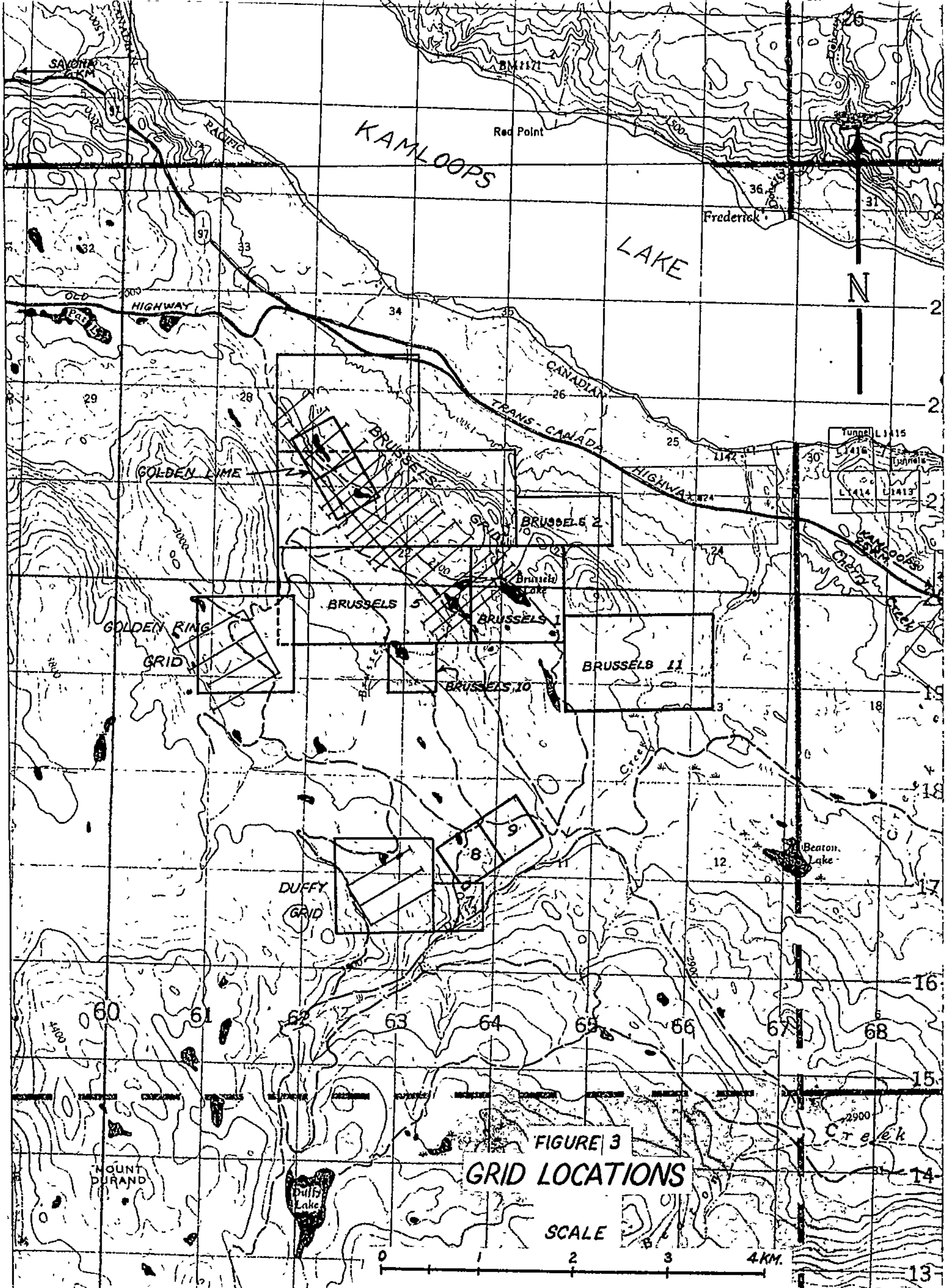
PURPOSE

Black and white airphotos provide valuable information in many ways, one which derives from the stereoscopic study of straight, and/or arcuate lineations, caused by breaks in the surface of the earth. It has been postulated that the relative density per unit area of these signs of rupturing (airphoto lineations) is an indication of the open-ness of the rocks to the influx of mineralizing solutions. Hence the premise that the study of fracture density may give the explorationist another tool to be used in pinpointing exploration targets.

POSSIBILITIES OF METHOD

Large-volume "porphyry copper" type deposits tend to include ore mineral disseminations in stockwork fractures within granitic, volcanic, or other metamorphosed rocks at or near intrusive contacts of granitic bodies. Because ore metallization appears to be related to rock type contacts and changes in fracture density, this study was undertaken to attempt outlining of rock types, and pinpointing anomalously fractured zones.

This method, when used in conjunction with other information, such as geophysics or geology, can be utilized to outline areas of interest with minor unit area expense.


KAMLOOPS
LAKE
N
Red Point
Frederick
SAVONA
CANADIAN
PACIFIC
OLD HIGHWAY
Pat Lake
TRANS-CANADA HIGHWAY
BRUSSELS GRID
GOLDEN LIME
BRUSSELS 2
BRUSSELS 5
BRUSSELS 1
BRUSSELS 11
BRUSSELS 10
GOLDEN RING GRID
Brussels Lake
DUFFY GRID
8
9
7
Beaton Lake
Cherry Creek
Creek
MOUNT DURAND
Duffy Lake
60
61
62
63
64
65
66
67
68
FIGURE 3
GRID LOCATIONS
SCALE
0
1
2
3
4 KM.

Soil samples were obtained by the following method. A hole was dug with a mattock to B horizon, an average depth of fifteen centimetres. Locally, bedrock was near surface, and the sample was taken from whatever soil was available. Gaps occurred in sampling when the location fell on a pond, outcrop, or ground disturbed by logging activity. A kraft paper soil bag was filled with at least 400 grams of B horizon material, and marked for identification with grid location. Samples were air-dried on site. They were then shipped to Placer Development Limited Research Centre in Vancouver for analysis.

Lithogeochemical samples were collected from outcrops noted. Samples were collected by hammering off about one kilogram of chips into a plastic bag marked for location relative to the soil grid. These were sent to the same laboratory.

Initial laboratory procedure for soils involved dry sieving to -80 mesh size, and discarding the oversize. Rock samples were pulverized first. All samples collected in the summer were analyzed for content of molybdenum, copper, zinc, silver, gold, mercury, arsenic, and antimony. Follow-up soil samples did not include molybdenum or silver. Later, two lines of soil samples were analyzed for thallium, and all rocks were analyzed for thallium, potassium oxide, and chromium. Treatment procedures for Placer Development laboratory are summarized in Appendix A. Analyses of thallium, potassium oxide, and chromium were done by Chemex Labs Ltd. in North Vancouver.

8. GEOCHEMICAL RESULTS

All analyses reported were entered on computer file. Soil analyses were then treated for basic statistics (see Appendix B). From study of these, isopleths were chosen for various metals and drawn by computer on data plots. The isopleth patterns are conjectural, and in some cases may be open to re-interpretation. Data from rock samples was posted on similar maps, without isopleths. All maps are on a scale of 1:5000, and may be found in Appendix C, Appendix D, or in the pocket at the rear of this report. Individual descriptions are found below. Compass directions indicated are oriented to nominal grid north.

8.1 **Brussels Grid** (See maps in pocket)

Molybdenum shows very low values, which may be considered background.

Silver also shows low values, most below detection level.

Copper in soil reports several scattered anomalies with the highest value at 190 ppm. Two distict highs occur on line 1400S, near 500E. There are also several disconnected, small anomalies on the two southernmost lines. There is a general correlation of soil and rock values. High rock values occur in the northwest corner, north-central part, and east edge of southern grid lines. Anomalous patterns seen in soil are in general agreement with copper geochemistry results from previous operators in the area. Additionally, previous work indicates anomalies south of Brussels Lake and on the ridge northeast of Brussels. grid.

Zinc has weak soil anomalies in the southeast grid corner, where it correlates with copper, and in the southwest corner. The east half of the grid shows a vague north-south linear pattern. No high values were seen in rock.

Mercury indicates 34 modest anomalies greater than 120 ppb, giving very localized highs. Most are single or double points. A larger cluster at the west end of line 2500S is part of an open-ended anomaly. One high point on line 1250S is at the end of a pond, and immediately northwest of distinctive copper highs. Values in rock are similar, but highs are spatially unrelated to soils.

Arsenic soil anomalies include a single point at the east end of line 250S which correlates with mercury, and two uncorrelated points at the east end of line 500S. Broader, modest highs occur in the eastern halves of lines 1400S to 1750S. They seem to have a marginal coincidence with copper in soil. Rock analyses are generally low, but a value of 187 ppm is seen near the east end of line 1500S, where it correlates with mercury.

Antimony soil values are all quite low. Several scattered highs are indicated within the data. One high occurs between two arsenic highs. A north-south linear pattern is indicated in the central area. One rock sample high on line 1500S correlates with mercury and arsenic.

Gold values in soil are generally low, but several small anomalies occur. The highest value is 0.22 ppm, but several are above 0.10 ppm. Anomalies are strongly clustered in the centre and southern edge of the grid. Two are open to the west. Several rock samples are higher than .05 ppm. The highest analysis was 0.25 ppm, immediately adjacent to three at 0.18 ppm. Correlation between rock and soil anomalies is only weakly evident. There is a weak correlation with zinc in some areas. There appears to be an inverse correlation with copper at the southern end of the grid. There is also a suggestion of a weak inverse correlation with arsenic in various areas.

Thallium analyses are consistently low in both soil and rock.

Chromium rock values are generally below 100 ppm, but a cluster of three samples between 520 and 720 ppm exists on the west side. Generally values are higher in the west. Lows generally occur with gold highs in rock, and soil lows for copper and gold.

Potassium oxide contains values in rock from 0.29% to 4.54%, with higher values in east and southeast part of grid. It generally shows an inverse relationship with chromium. A general correlation of highs with gold in soils and rock is evident in some places.

8.2 **Golden Ring Grid** (See maps in Appendix C)

Molybdenum showed only very low values in all samples.

Silver in soil was at or below detection level. However, almost half the rock samples contain more than 0.10 ppm. The northern line has highest values, with the central sample at 0.71 ppm.

Copper soil samples have spotty highs, the highest being in the northeast corner, correlated with a rock anomaly. Highest rock value is in the middle of the south line, at 139 ppm. The pattern generally agrees with geochemical work by earlier operators. Earlier work indicates higher copper in all directions outside the grid.

Zinc has four modest soil anomalies that correlate with copper. There is little variation in rock analyses, with the exception of one sample containing 252 ppm, which may be correlated with the highest value silver.

Mercury soil shows six values greater than 250 ppb, compared to a mean of 105. The highest, 608 ppb is located at the centre of line 250S, and can be correlated with moderate zinc and copper. One, at 564 ppb, is correlated with a moderate copper high in the northest corner. Another high at the west end of line 250S is correlated with copper. Rock samples are not as high, nor well correlated with soil.

Arsenic values in soil are low, but may be weakly correlated with mercury and copper. Rock values are higher and less variable.

Antimony soil and rock values are low, and many are below detection limit.

Gold soil values are all below detection limit with the exception of a single sample at the east end of line 500S which is 0.15 ppm. It cannot be correlated with other elements. One rock sample was insignificantly higher than detection limit.

8.3 **Duffy Grid** (See maps in Appendix D)

All metal values in the single rock sample were insignificant.

Molybdenum content in soil was always 2 ppm or less.

Silver shows all values less than detection level.

Copper shows spotty highs, with one larger, weak anomaly in the southeast corner, with values up to 92.

Zinc shows four weak anomalies, with one near the centre of the grid, correlated with copper.

Mercury has a low background and highs that are probably insignificant. The largest-area high, in the southeast corner, corresponds with copper.

Antimony, arsenic and gold all exhibit very low values, with almost all gold less than detection limit.

9. CONCLUSIONS

Several conclusions may be drawn regarding suitability of different elements as indicators for precious metals. Base metals were used as indicators of mineralization, while thallium, chromium, and potassium were intended as indicators of alteration. Molybdenum, silver, and thallium were of no value due to little variation and very low concentration. The exception to this is silver in rock on Golden Ring grid. Both arsenic and antimony were poor indicators, despite proving useful in other areas. There was little evidence of correlation between values in soil and rock, for any one element. The expected linear northwest pattern was only weakly exhibited on Brussels grid, and only in zinc, antimony and copper.

Brussels Grid

Geochemical values included high or anomalous points in copper, mercury, gold, chromium, and arsenic. These are largely small-area anomalies, although gold and mercury have anomalies open to the west.

Numerous correlations among elements were noted. Gold was directly, but weakly correlated with zinc and potassium oxide. Arsenic in soil may be directly correlated with mercury in rock. Copper, mercury, antimony, and arsenic in soil, all appear to be marginally correlated. Inverse correlations are more significant and include in soil, gold with copper, and gold with arsenic. In rock, chromium is inversely related to potassium oxide and gold. Chromium is also directly correleted to gold and copper in soil.

It is concluded that the most useful elements as indicators for gold are copper, zinc, chromium and potassium oxide.

A good possibility of gold mineralization is indicated from geochemical results.

Golden Ring Grid

Anomalous values in this grid include many mercury highs in soil, silver in rock, and a single gold value in soil.

Direct correlations include copper with zinc, silver with zinc, and mercury with copper and arsenic. All correlations are weak or uncommon.

High mercury analyses may be expected due to a proximal mercury showing. However, high silver values in rock may be significant.

Duffy Grid

Geochemical analyses were generally low, and little correlation was seen. Mineral values are considered insignificant.

10. RECOMMENDATIONS

Further work is recommended for the area of Brussels grid. Geochemical work should include extension of the soil grid southward to 3500S to test the extension of copper, zinc and gold anomalies. Lines 1000S to 1750S should be extended 200 metres westward to search for extension of gold anaomalies. Lines 2000S to 2500S should be extended westward 200 metres to close off mercury anomalies. Lines 2000S, 2500S and 3000S should be extended eastward beyond the crest of the ridge to test for other metal values in copper anomalies reported by previous operators. Other geochemical work should include careful search for outcrops in areas not previously sampled. Geological work should include mapping of the area of the grid, as well as outside, where good exposure is available. Particular attention should be paid to alteration and fracture or shear patterns, and to areas of geochemical anomalies.

11. SUMMARY OF EXPENDITURES

11.1 Brussels 1 to 5, 10, 11 and Golden Lime 1 and 2

- covered by work on the Brussels grid

Geochemical:	607 soil samples @ 18.05 (Cu, Zn, Au, Hg, As, Sb)		10,956.35	
	290 soil samples @ 2.10 (additional Mo, Ag)		609.00	
	53 soil samples @ 8.75 (additional Tl, Cr, K)		463.75	
	41 rock samples @ 30.15 (all elements)		1,236.15	
			13,265.25	13,265.25
Vehicle:	11 days @ 30.		330.00	
	fuel - 11 days @ 13.		143.00	
			473.00	473.00
Accommodation:	Bonaparte Motel, Cache Creek:		527.00	
	Dome Hotel, Kamloops		385.00	
			912.00	912.00
Meals:	19.00/man/day x 29 man-days		551.00	551.00
Salaries:	M.C. Allen (student)	2 days @ 70.	140.00	
	R.A. Boyce (geologist)	10 days @ 155.	1,550.00	
	S.V. Cirka (student)	3 days @ 100.	300.00	
	D.M. Jenkins (geologist)	7 days @ 250.	1,750.00	
	J. M Laird (student)	3 days @ 65.	195.00	
	D.A. Wilson (student)	4 days @ 70.	280.00	
			4,215.00	4,215.00
Computer:	Operating expense		3,200.00	
	W. Green - 2 days @ 175.		350.00	3,550.00
Preparation of Report and Maps:				
	R.A. Boyce	12 days @ 155.	1,860.00	
	D.M. Jenkins	1 day @ 250.	250.00	
	A.W. Kemp	1 day @ 160.	160.00	
	Typing and duplicating		450.00	
			2,720.00	2,720.00
Total Expenditure Applied to Brussels 1 to 5, 10, 11 and Golden Lime 1 and 2 Claims				$25,686.25

11.2 Golden Ring

- covered by work on the Golden Ring grid

Geochemical:	123 soil samples @ 20.15		2,478.45	
	14 rock samples @ 21.65		303.10	
	(Mo, Cu, Zn, Ag, Au, As, Sb)		2,781.55	2,781.55
Vehicle:	2 days @ 30.		60.00	
	fuel		31.00	
			91.00	91.00
Accommodation:	Bonaparte Motel, Cache Creek			226.00
Meals:	19.00/man/day x 7 man-days			133.00
Salaries:	M.C. Allen (student)	1 day @ 70.	70.00	
	S.V. Cirka (student)	2 days @ 100.	200.00	
	J.M. Laird (student)	2 days @ 65.	130.00	
	D.A. Wilson (student)	2 days @ 70.	140.00	
			540.00	540.00
Computer	Operating expense		1,060.00	
	W. Green - 1/4 day @ 175.		43.75	
			1,103.75	1,103.75
Preparation of Report and Maps:				
	R.A. Boyce 2 days @ 155		310.00	
	Typing and duplicating		220.00	
			530.00	530.00
Total Expenditure Applied to Golden Ring Claim				$ 5,405.30

11.3 Brussels 6 to 9

- covered by work on the Duffy grid

Geochemical:	84 soil samples @ 20.15	1,692.60	
	1 rock sample @ 21.65	21.65	
		1,714.25	1,714.25
Vehicle:	30. operating + 25. fuel		55.00
Accommodation:	Bonaparte Motel, Cache Creek		141.00
Meals	19.00/man/day x 5 man-days		95.00

Salaries:	1 day for Allen, Boyce, Cirka, Laird, and Wilson		460.00
Computer:	Operating expense	640.00	
	W. Green - 1/4 day @ 175.	43.75	
		683.75	683.75
Preparation of Report and Maps:			
	R.A. Boyce 2 days @ 155.	310.00	
	Typing and duplicating	190.00	
		500.00	500.00
Total Expenditure Applied to Brussels 6 to 9 Claims:			$ 3,649.00

12. STATEMENT OF QUALIFICATIONS

I, R.A. Boyce, with business address at Box 49330, Bentall Postal Station, Vancouver, B.C., V7X 1P1, do hereby certify that:

1. I have personally supervised and carried out the field work, and have assessed and interpreted the data from this geochemical program on the Brussels, Golden Lime, and Golden Ring claims, Kamloops Mining Division.

2. I am a graduate of the University of British Columbia, Vancouver (B.Sc. Geological Sciences, 1977).

3. I am a member of the Canadian Institute of Mining and Metallurgy.

4. I have engaged in the practice of mineral exploration since graduation, in the Provinces of British Columbia and Saskatchewan.

Respectfully submitted,
PLACER DEVELOPMENT LTD.

R.A. Boyce

R.A. Boyce

13. REFERENCES

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	4012	- White, G.E., 1972	-	Lil and Pine claims	
	4162	- Poloni, J.R, 1973	-	Gus claims	
	4216	- Elwell, J.P., 1972	-	M.M. claims	
	4997	- Prendergast, J.B., 1974	-	Pam claims	

British Columbia Ministry of Mines and Petroleum Resources, Geology, Exploration and Mining, 1969, p. 238.

Canada Department of Mines and Resources - Map 886A - Geology, Nicola
- Map 887A - Mineral Localities -Nicola

Carr, J.M., 1956, Deposits Associated with the Eastern Part of the Iron Mask Batholith, near Kamloops, B.C. Ministry of Mines Annual Report, 1956, pp. 47 to 54.

Cockfield, W.E., 1948, Geology and Mineral Deposits of Nicola Map-Area, B.C., Geological Survey of Canada, Memoir 249.

Ewing, T.E., 1981, Regional Stratigraphy and Structural Setting of Kamloops Group, South-Central B.C., Canadian Journal of Earth Sciences, V.18, No.9, pp. 1464 - 1477.

Preto, V.A.G., 1967, Geology of the Eastern Part of the Iron Mask Batholith, B.C. Ministry of Mines and Petroleum Resources, Annual Report, 1967, pp. 137 - 141.

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APPENDIX A

Geochemical Laboratory Procedures

Placer Development Ltd.

Research Centre

	UNITS	WT.G	ATTACK USED	TIME	RANGE	METHOD
MO	PPM	0.5	C HCLO4/HNO3	4HRS	1-1000	ATOMIC ABSORPTION
CU	PPM	0.5	C HCLO4/HNO3	4HRS	2-4000	ATOMIC ABSORPTION
ZN	PPM	0.5	C HCLO4/HNO3	4HRS	2-3000	ATOMIC ABSORPTION
PB	PPM	0.5	C HCLO4/HNO3	4HRS	2-3000	A.A. BACKGROUND COR.
CD	PPM	0.5	C HCLO4/HNO3	4HRS	0.2-200	A.A. BACKGROUND COR.
NI	PPM	0.5	C HCLO4/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
CO	PPM	0.5	C HCLO4/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
AG1	PPM	0.5	C HCLO4/HNO3	4HRS	0.2-20	A.A. BACKGROUND COR
AG2	PPM	0.5	C HNO3	2HRS	0.02-4.00	A.A. SOLVENT EXTRACT
AU	PPM	3.0	C HBR/BR	12HRS	0.02-4.00	A.A. SOLVENT EXTRACT
U	PPM	0.25	DIL HNO3	2HRS	0.5-1000	FLUORIMETRY SOLV. EX.
V	PPM	0.5	C HF/HCLO4/HNO3/HCL	6HRS	5-1000	ATOMIC ABSORPTION
W	PPM	1.0	C HF/HNO3/HCL/H2SO4	4HRS	5-500	A.A. SOLVENT EXTRACT.
F	PPM	0.25	NA2CO3/KNO3 FUSION	30MIN	40-4000	SPECIFIC ION ELECTODE
AS	PPM	0.5	C HCLO4/HNO3	4HRS	1-1000	A.A. HYDRIDE GENERATOR
SB	PPM	0.5	C HCLO4/HNO3	4HRS	1-1000	A.A. HYDRIDE GENERATOR
BI	PPM	0.5	C HCLO4/HNO3	4HRS	2-2000	ATOMIC ABSORPTION
MN	PPM	0.5	C HCLO4/HNO3	4HRS	2-3000	ATOMIC ABSORPTION
FE	%	0.5	C HF/HCLO4/HNO3/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
HG	PPB	0.5	DIL HNO3	2HRS	5-2000PPB	A.A. COLD VAPOR GEN.
BA	%	0.5	C HF/HI/OXALIC	4HRS	0.02-20%	ATOMIC ABSORPTION
NA	%	0.5	C HF/HCLO4/HNO3/HCL	6HRS	0.2 -20%	ATOMIC ABSORPTION
K	%	0.5	C HF/HCLO4/HNO3/HCL	6HRS	0.2 -20%	ATOMIC ABSORPTION
CA	%	0.5	C HF/HCLO4/HNO3/HCL	6HRS	0.02-20%	ATOMIC ABSORPTION
SR	PPM	0.5	C HF/HCLO4/HNO3/HCL	6HRS	10-2000	ATOMIC ABSORPTION
MG	%	0.5	C HF/HCLO4/HNO3/HCL	6HRS	0.2-20%	ATOMIC ABSORPTION
SN	PPM	1.0	NH4I FUSION	15MIN	5-500	A.A. SOLVENT EXTRACT.
LOI	%	1.0	ASH 600 DEG C	2HRS	0.02-99%	WEIGH RESDUE

APPENDIX B

Geochemical Analysis Statistics

Placer Development Ltd.

Computer Department

LIMITATIONS OF METHOD

Heavy snow cover and overburden tend to obscure the finer fracture details, although major trends will show through most surficial deposits.

Rock types fracture in different patterns, and each has a special signature. When lithologic boundaries are unknown to the interpreter then there may be difficulty in differentiating between fracture density increases caused by anomalous tectonic action within a homogeneous lithologic unit, or by simply changes in rock type. In the first case additional fracturing may be of interest, while in the second instance a non-mineralized rock body may exhibit more bedding, schistosity, and joints, without enhancement of the ore-hosting process.

Although fracture density anomalies could be assumed to always indicate zones more worthy of interest to the explorationist, it must be realized that metallization of favourable host rocks has been known to occur in moderately fractured rocks.

In the present study both arcuate lineaments, and changes in attitude of structures have not been given special consideration.

METHOD OF ANALYSIS

The following airphotos, obtainable from the Map Division, Parliament Buildings, Victoria, B.C., were chosen to provide stereoscopic coverage of the area required:

BC4425: 173-174-175 : 265-266-267
BC78045: 090-091-092-093 : 098-099-100-101-102

Plastic overlays were attached to these photos and marked in such a way that reorientation, and pinpointing of adjoining photo centers could be done accurately. Salient geographic features were marked. A non-orthogonal mosaic could thereby be created.

Using a stereoscope, all lineations were traced on the overlays of alternate photos, without judgement of their source, or inherent value. In this way, due to the overlap of airphoto coverage, information was recorded on alternate airphotos along flight lines, with information overlapping on adjacent flight lines.

POINT COUNT

In order to facilitate quantifying this information a method has been devised [Tait Blanchet: Discussion on Photogeology, Mineral Exploration Group, Vancouver] whereby the airphoto overlays (displaying the traced lineaments) are divided by an orthogonal grid, 2 cm in the present case. This grid is carried on a separate overlay. A moveable circle template, with diameter 2 cm, is then centered on each of the grid points, and the quantizing of the fracture information commences. Valuation of fractures follows:

All fracture segments are counted

a) fractures that cross the circumference of the circle once are given one point.
b) fractures that cross the circumference of the circle twice are given two points.
c) fractures not crossing the circumference of the circle are given 1/3 points.

Thus the "sum" of quantized fractures is noted on an overlay at the grid intersections.

CONTOURING

Quantized point counts on each airphoto overlay were contoured individually, using normal countouring techniques. Zones of high concentrations of fracture patterns were thus outlined. A non-orthogonal mosaic of all photos was made using point-picking methods to locate the centers of neighbouring airphotos, and joining up the trace of the shoreline shown on the airphotos. On this mosaic were traced the individual point contour maps of each photo, and the contours were connected to form a composite map of relative fracture density contours, of the combined area. Connection of equal-value contours across photos was subjective, as the aberration of information on the fringes of the airphotos, plus the 'relativity' of the quantized point counts make accurate union not feasible. Hence the 'loose' ends of several contours. However, the trends are quite discernible across the compilation.

RESULTS OF THE STUDY

Eleven zones of 'highest' count relative fracture density have been outlined. Several of these 'high' zones are elongate, and join into other 'high' areas. Trends to the northeast and the northwest appear to continue farther than east-west. In the case of Potlatch, Clare, Foulger, and Woodfibre creeks, the fracture density trends follow their valleys. The Mt. Ellesmere area had some snow on the airphotos, yet a 'high' area may coincide with the precipitous rocky northern slopes of the peak.

The centers of known mineral occurrences are close to a major 'high' in the case of the B(Group A), near the flanks of 'highs' at the Horseshoe and the Clare showings.
The slice of Gambier group rocks between Foulger and Woodfibre creeks appears to display a 'high', and is also associated with the Snow property.
Another slice of Gambier group rocks trending north from Defence Island shows up as a 'flank' area.
The diorite intrusion extending northwesterly from the area of the B(Group A) coincides with a 'high' density fracture area near the shore, but its northwestern extension has a 'lowflank' expression.

DISCUSSION OF RESULTS

This method of quantizing fracture density determinations has been effectively utilized to outline those areas exhibiting higher than average (relative to the survey area) fracture density. It allows the examination of a large area at very reasonable cost.
The survey was extended beyond the limits of the claimed property to provide 1) background information obtainable from the surrounding terrain, and 2) a comparison between fracture density signatures of known showings in the vicinity but outside the property.
Small 'highs' as found in this study may relate to areas of interest lithologically, and should not be disregarded, because the geological mapping and prospecting in this terrain is based on spot checks, rather than full traverses.

CONCLUSIONS

1) The claimed area covers the **CLARE** (Cu, Ni), and the **HORSESHOE** (Cu) showings.

2) The **CLARE** showing has been prospected over a width of 150 meters, the extent of the ultrabasic outcrops. This rock type could extend in several directions, and its copper-nickel potential has not been estimated.

3) The results of this study indicate that the known showings are related to the 'flanks' between 'high' & 'low' fracture density patterns. That is, in the four known cases, mineral showings are not centered either at the peaks or at the troughs of relative fracture density.

4) Fracture density study, as performed in the present case has not been demonstrated to pinpoint any particular lithologic change. This method may, however, be useful in conjunction with aeromagnetics, which does relate to the magnetite content of lithology, and structural discontinuities in the rock types.

RECOMMENDATIONS

Two particular zones of mineralization are known to occur whithin the claimed area. 1) CuNi metallization of ultrabasic rocks at the **CLARE** property, and 2) "an extensive belt of low grade chalcopyrite" at the **HORSESHOE** (MC3&OC4) property. Both of these showings occur within a lithologic unit mapped as (qd') leucocratic quartz diorite, minor diorite, and tonalite, although the CLARE mineralization occurs within ultrabasic rocks, and the HORSESHOE covers the contact of schists and argillites with granodiorite. This is to say that this area of the map sheet has not been mapped and closer inspection may result in delineation of favorable situations, such as Gambier group rock pendants.
Gambier group rocks along Howe Sound are known to host copper ore at **Britannia Copper Mines**, and **20th Century** at Gambier Island. Zinc, lead, silver occurrences have also been found within a Gambier group 'slice' at the **SNOW** property at Woodfibre, B.C. Others undoubtedly do exist, even within the present area of study.

It is recommended that further exploratory studies be made of the showings and environs, possibly utilizing the knowledge of fracture density trends gained through this study. Such further exploration would include the following, on both the **CLARE** and the **HORSESHOE** areas:

1) Geological mapping and prospecting, including geochemistry in covered terrain.
2) Magnetometric survey, possibly airborne, with subsequent ground-anomaly detailing, as the magnetite-pyrrhotite content of the ultrabasic rocks may serve as a pathfinder for the Cu & Ni content.
3) Prospecting, trenching, assaying, mapping, with follow-up diamond drilling, where warranted.

APPENDIX A

PETROGRAPHIC DESCRIPTION

OF

TEN

ROCK SPECIMENS

CLARE MINERAL CLAIM

BY

WESTERN PETROGRAPHIC

Sample No.: 1

Name: Quartz-hornblende-plagioclase schist

Mineralogy:	Comp. (%) Est. X PC		Individual Minerals		
	Orig.	Pres.	Average size (mm)	% Alt'd.	Alteration products
quartz		8	0.4		
plagioclase		63	2.0	2	clays, sericite
hornblende		27	0.5-4.0		
clays		1	-		
sericite		tr	0.03		
magnetite		1	0.3		

Petrography:

This sample of quartz-hornblende-plagioclase schist appears to have formed from the metamorphism of a quartz diorite. Hornblende and plagioclase are arranged in rough bands. A very few of the plagioclase laths still show zoning, indicating a probable igneous nature of the parent rock. There are a very few irregular grains of magnetite, generally found associated with the hornblende. The plagioclase laths are sporadically altered to a minor extent to clays and sericite.

WESTERN PETROGRAPHIC

Sample No.: 2

Name: Gabbro

Mineralogy:	Comp. (%) Est. X PC Orig.	Pres.	Individual Minerals Average size (mm)	% Alt'd.	Alteration products
plagioclase	72	72	2.2	1	
pyroxene	26	-	2.0		
amphibole	-	26	2.0		
sericite		1			
clays		1			

Petrography:

This sample is a gabbro composed essentially of subhedral laths of labradorite (≈An_{58}) along with less abundant, interstitial remnant pyroxene. The alteration of this sample is unusual, as the plagioclase laths have remained essentially fresh and unaltered, while all of the original pyroxene crystals have been completely converted to patchy and fibrous amphibole. The plagioclase laths are commonly fractured, and the fractures are filled by sericite and clays.

WESTERN PETROGRAPHIC

Sample No.: 3

Name: Hornblende schist

Mineralogy:	Comp. (%) Est. X PC Orig.	Pres.	Individual Minerals Average size (mm)	% Alt'd.	Alteration products
plagioclase		18	0.1-2.3		
hornblende		81	0.1-2.0		
magnetite		1	0.1		
pyrite		tr	0.1		

Petrography:

This sample is a schist composed essentially of hornblende and minor amounts of plagioclase, along with a very few scattered grains of magnetite and trace amounts of pyrite. The plagioclase laths (relict?) generally corroded and are often replaced marginally by fibrous hornblende.

WESTERN PETROGRAPHIC

Sample No.: 4

Name: Gabbro

Mineralogy:	Comp. (%) Est. X PC Orig.	Pres.	Individual Minerals Average size (mm)	% Alt'd.	Alteration products
plagioclase		58	2.2		
pyroxene		tr	0.5-7.5		
amphibole		27	1.0	99	chlorite, amphibole
chlorite		4	0.6		
epidote		tr	0.2		
magnetite		1	1.0		
pyrite		10	1.0		

Petrography:

As seen under the microscope, this sample is a gabbro composed essentially of plagioclase and subordinate amounts of interstitial remnant pyroxene, along with minor amounts of pyrite. Also there are a very few, irregular grains of magnetite found interstitially.

This sample is characterized by alteration similar to the previous gabbro sample. The plagioclase laths remain essentially fresh and unaltered, while almost all of the former ferromagnesian minerals (probably augite) are completely converted to patchy and fibrous amphibole and chlorite. The amphibole probably is of two generations. In a very few instances, the early formed amphibole patches are mantled by "massive" amphibole. There are trace amounts of epidote found scattered throughout the rock.

WESTERN PETROGRAPHIC

Sample No.: 5

Name: Amphibolite

Mineralogy:	Comp. (%) Est. X PC Orig.	Pres.	Individual Minerals Average size (mm)	% Alt'd.	Alteration products
plagioclase		12			
amphibole		51			
pyrrhotite		15			
chlorite		22	0.4		

Petrography:

This amphibolite sample appears most likely to have been derived from the alteration of a gabbroic rock. The original minerals have been strongly recrystallized and have largely been replaced by secondary silicate minerals.

WESTERN PETROGRAPHIC

Sample No.: 6

Name: Hornblende-plagioclase schist

Mineralogy:	Comp. (%) Est. XPC Orig.	Pres.	Individual Minerals Average size (mm)	% Alt'd.	Alteration products
albite		12	0.04		
plagioclase		39	3.0		
chlorite		3	0.3		
hornblende		34	0.06-8.5		
epidote		2	0.5		
pyrite		tr	0.5		
pyrrhotite		2	0.5		
augite		8	3.2-8.5		

Petrography:

This sample was apparently originally a gabbro. It is now strongly sheared, and the original silicate minerals (especially the augite) have been considerably replaced by hornblende. Also, there are patches of chlorite and epidote scattered throughout the rock. There are consideral amounts of former plagioclase laths still present in the rock; these laths are strongly strained, and the crystal boundaries are often corroded. Where the relict augite crystals are present, they are often mantled by hornblende. There are substantial amounts of granular albite(?) present along the shear zones and also in the interstices among the plagioclase laths.

The chief sulfide mineral is pyrrhotite, along with trace amounts of pyrite; the sulfide minerals generally occur in the shear zones.

WESTERN PETROGRAPHIC

Sample No.: 7

Name: Brecciated plagioclase-hornblende-augite schist(?)

Mineralogy:	Comp. (%) Est. X PC		Individual Minerals		
	Orig.	Pres.	Average size (mm)	% Alt'd.	Alteration products
plagioclase		34	0.6-11.5		
augite		26	0.8-16.0		
hornblende		33	0.2-5.0		
epidote		7	0.2		
magnetite		tr	0.5		
pyrite		tr	1.0		

Petrography:

This sample is essentially the same as Sample Number 6. However, this sample contains substantial amounts of epidote, rather than chlorite. (Virtually no chlorite is present in this sample.) Also, the replacement of augite by hornblende is less intense, and the augite generally occurs as large, poikilitic porphyroblasts enclosing small laths of plagioclase. Shearing appears to be absent here (although later recrystallization may have obscured it). Epidote generally occur as patches, and a few of the epidote patches are found replacing the cores of the plagioclase laths. There are trace amounts of magnetite and pyrite found scattered throughout the rock.

WESTERN PETROGRAPHIC.

Sample No.: 8

Name: Brecciated anorthosite(?)

Mineralogy:	Comp. (%) Est. x PC Orig.	Pres.	Individual Minerals Average size (mm)	% Alt'd.	Alteration products
plagioclase		81	3.0		
calcite		tr	0.2		
clays		tr	-		
sericite		2	0.02		
epidote		16	0.2		
sulfides		1	0.3		

Petrography:

This sample probably is a brecciated anorthosite. It is composed essentially of plagioclase and less abundant massive, patchy, and vein epidote. There are no original ferromagnesian minerals present in the rock.

There are a very few grains of pyrite and pyrrhotite present in veins. Although the rock is not banded, a few of the plagioclase laths show a subparallel orientation.

The plagioclase laths are altered sporadically to clays and sericite. There are a very few fracture fillings of clays present.

The obviously anorthositic patches in this sample may be breccia fragments, or could possibly represent anorthositic inclusions in a now thoroughly altered gabbro.

Sample No.: 9

Name: Hornblende-plagioclase schist

Mineralogy:	Comp. (%) Est. XPC Orig.	Pres.	Individual Minerals Average size (mm)	% Alt'd.	Alteration products
plagioclase		71	0.6		
chlorite		2	0.2		
hornblende		16	0.3		
tremolite		1	0.2		
epidote		1	0.08		
magnetite		2	0.1		
pyrite		7	0.1		

Petrography:

As seen under the microscope, this sample is a schistose rock composed essentially of plagioclase and less abundant hornblende, along with a few scattered patches of chlorite and epidote. Also, there are substantial amounts of pyrite and minor amounts of magnetite found scattered throughout the rock.

There are a few crosscutting veins containing hornblende and tremolite needles.

This rock has under gone considerable alteration in which all of the original pyroxenes(?) have been subsequently replaced by patchy to fibrous amphibole.

Sample No.: 10

Name: Porphyroblastic quartz-orthoclase-biotite-plagioclase schist

Mineralogy:	Comp. (%) Est. X PC Orig.	Pres.	Individual Minerals Average size (mm)	% Alt'd.	Alteration products
quartz		28	0.08		
K-feldspar		23	0.08		
plagioclase		38	0.3-5.2		
biotite		7	0.4		
hornblende		3	0.4		
magnetite		tr	0.06		

Petrography:

This sample is a porphyroblastic schist composed essentially of plagioclase and less abundant quartz and K-feldspar. There are minor amounts of biotite and hornblende, along with trace amounts of magnetite. Most of the plagioclase laths are zoned and probably are relict. All of the silicate minerals are generally stretched parallel to the schistosity.

The magnetite is generally found closely associated with the ferromagnesian minerals.

'APPENDIX B

CREST LABS CERTIF OF ASSAY #5866

LETTER: W.G. BACON, P.ENG./O. CONTINI

WARNOCK HERSEY CERTIF OF ASSAY #20379

GENERAL TESTING CERTIF OF ASSAY #0855

CREST LABORATORIES (B.C.) LTD.

1066 HOMER STREET
VANCOUVER 3, B.C.
PHONE 688-8586

CERTIFICATE OF ASSAY

TO Val Contini
4146 West 15th Ave.
Vancouver B.C.

Oct. 19,1974
Lab. 5866

I hereby certify THAT THE FOLLOWING ARE THE RESULTS OF ASSAYS MADE BY US UPON THE HEREIN DESCRIBED SAMPLES.

MARKED	GOLD		SILVER	~~Silver~~ Copper	Nickle	Cobalt						
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
No Mark	----		0.1	0.27	0.04	0.02						
No Mark	----		----	0.15	0.02	----						

surface chips over 500 feet across creek

GEAREX ENGINEERING mission box

CLARE+MC3+OC4:92G11W:VANCOUVER : AIRPHOTO FRACTURE & GEOLOGY 31

NOTE:
Rejects Retained One Month
Pulps Retained Three Months
Unless Otherwise Arranged.

Gold calculated at $ .... per ounce

Registered Assayer; Province of British Columbia

February 14, 1975

Mr. Val Contini,
4146 West 15th Avenue,
Vancouver, B.C.

Dear Sir:

Re: Nickel Ore

We have produced four polished sections of the rock samples and assayed the remainders:

The assays are:

Copper (Cu)	-	0.38 %
Nickel (Ni)	-	0.15 %
Cobalt (Co)	-	0.04 %
Iron (Fe)	-	17.70 %
Sulphur (S)	-	10.05 %

The host rock is a member of the gabbro-norite series grading into pyroxenite. Pyrrhotite is dessiminated throughout the rock as grains from a few microns to aggregates of grains up to ¼ inch in diameter. Grains of chalcopyrite are generally associated with pyrrhotite. No visible nickel minerals were observed.

We would suggest a bulk sulphide flotation test of the ore to determine grades and recoveries and to rule out the possibility of a silicate nickel mineral.

Yours truly,

BACON, DONALDSON & ASSOCIATES LTD.

W.G. Bacon

W. G. Bacon, P. Eng.

WGB/jp

TO:

Bacon, Donaldson & Associates Ltd.

117 East 4th Avenue

Vancouver, B.C.

Certificate of Assay

WARNOCK HERSEY INTERNATIONAL LIMITED

COAST ELDRIDGE PROFESSIONAL SERVICES DIVISION

125 EAST 4TH AVE. VANCOUVER 10, B.C., CANADA

PHONE (604) 876-4111
TELEX 04-50353
CABLE ADDRESS
ELDRICO

FILE NO. 461 - 20379

DATE February 27, 1975

We Hereby Certify that the following are the results of assays made by us upon submitted ORE samples

MARKED	GOLD		SILVER	Copper (Cu)	Nickel (Ni)	Cobalt (Co)	Iron (Fe)	Sulphur (S)	Total Nickel (Ni)
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT.	PER CENT	PER CENT.	PER CENT.	PER CENT	PER CENT.
		$							
608			0.05	0.38	0.15	0.04	17.70	10.05	0.15

SULPHIDE NICKEL
wgb.

Note. Rejects retained one week.
Pulps retained one month.
Pulps and rejects may be stored for a maximum of one year by special arrangement.

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have not been adjusted to compensate for losses and gain inherent in the fire assay process

Gold calculated at $ ______ per ounce

______ Provincial Assayer

GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISE

SUPERVISE

TO:

Mr. G.C. Singhai
562 Clearwater Drive
Richmond, B.C.

CERTIFICATE OF ASSAY

No.: 7507-0855 DATE: July 10/75

We hereby certify that the following are the results of assays on: Ore

MARKED	~~GOLD~~ OZ/ST GR/MT	~~SILVER~~ OZ/ST GR/MT	Copper Cu (%)	Nickel Ni (%)	Cobalt Co (%)	xxx	xxx	xxx
E - 174105								
for Singhai P.Eng.								
0985-I			0.14	0.45	-			
0998-I			0.29	0.03	0.01			
0999-I			0.47	0.04	-			
1000-I			0.08	0.01	-			
BG/wk								

NOTE. REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS ON REQUEST PULPS AND REJECTS WILL BE STORED FOR A MAXIMUM OF ONE YEAR.

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED.

B. Given
B. GIVEN
PROVINCIAL ASSAYER

COPY

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

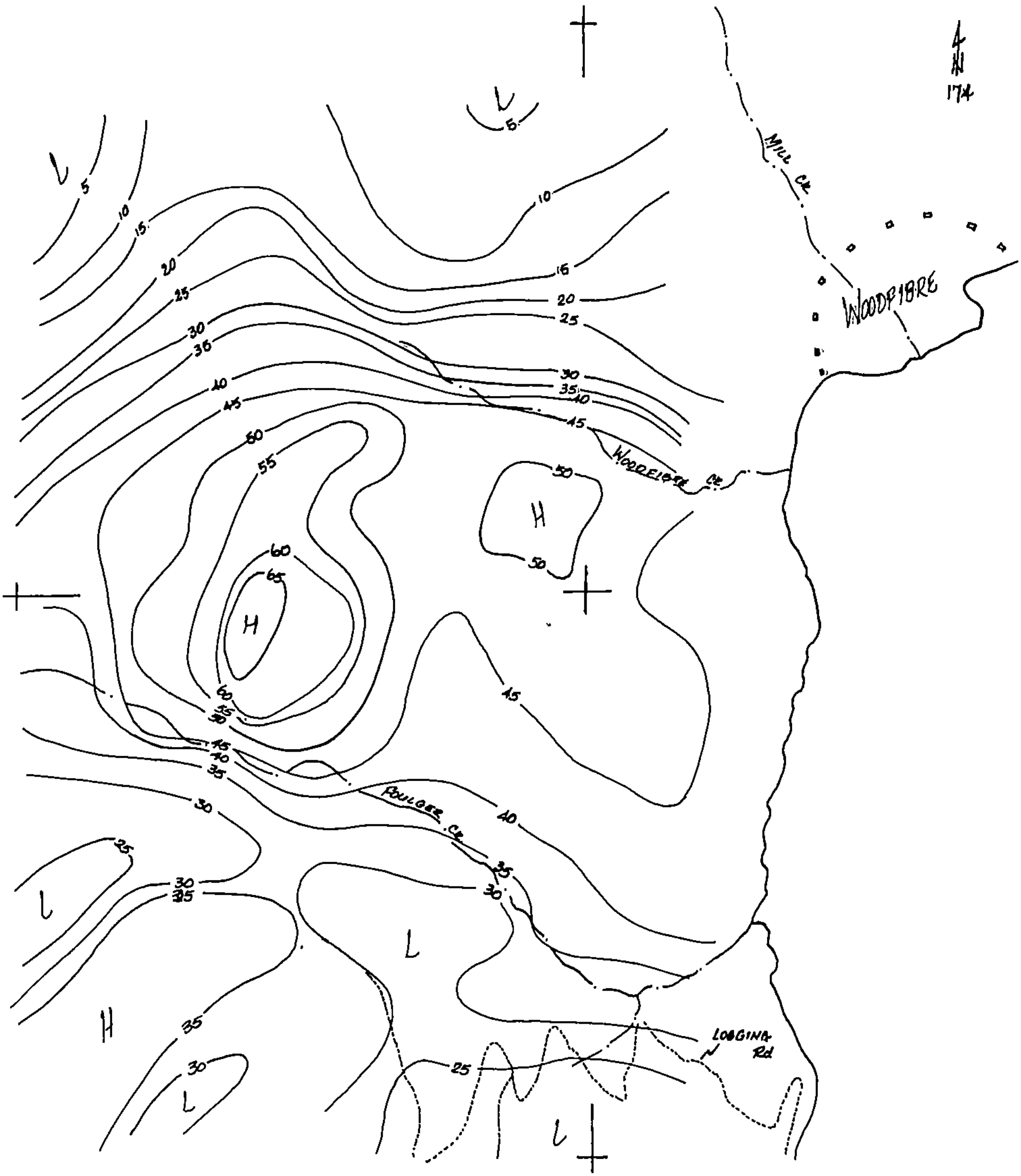
APPENDIX C

FOR EACH OF THE AIRPHOTOS:

BC 4425-174
BC78045-091
Bc78045-092
BC78045-099
BC78045-101

THERE IS:

FRACTURE TRACE OVERLAY (RAW DATA)
+
POINT COUNT PLOT
+
CONTOUR PLAN OF RELATIVE FRACTURE DENSITY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5+	10	13*	10°	6+	6+	9+	
5+	16	24	13	6+	12	15	
16*	26	36	38	28	27	23	
31	40	49	55	47	48	43	
40*	47	55	50	49	50	47	
39*	53	67	62	46	48	45	39
35*	48	62	50	45	46	49	44
27*	27	31	38	37	45	45	
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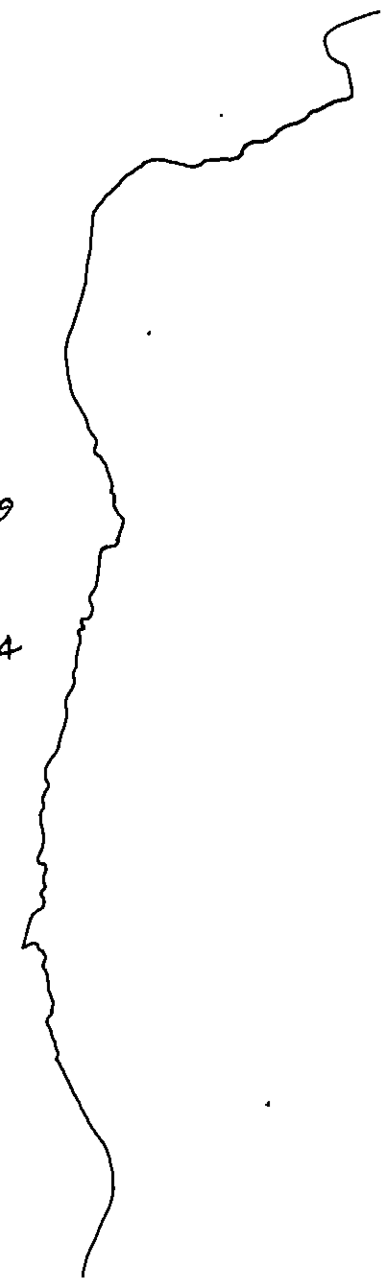

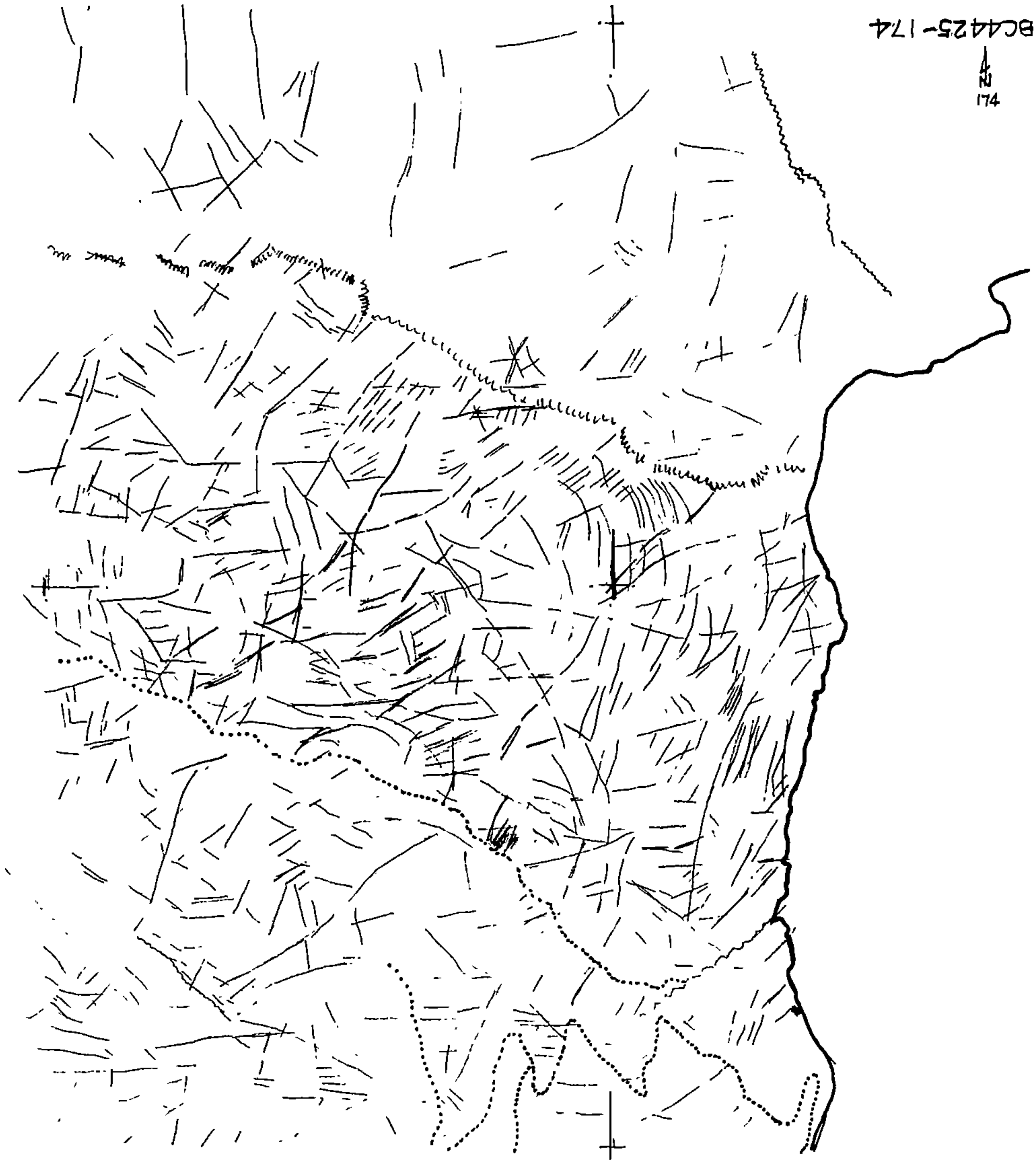
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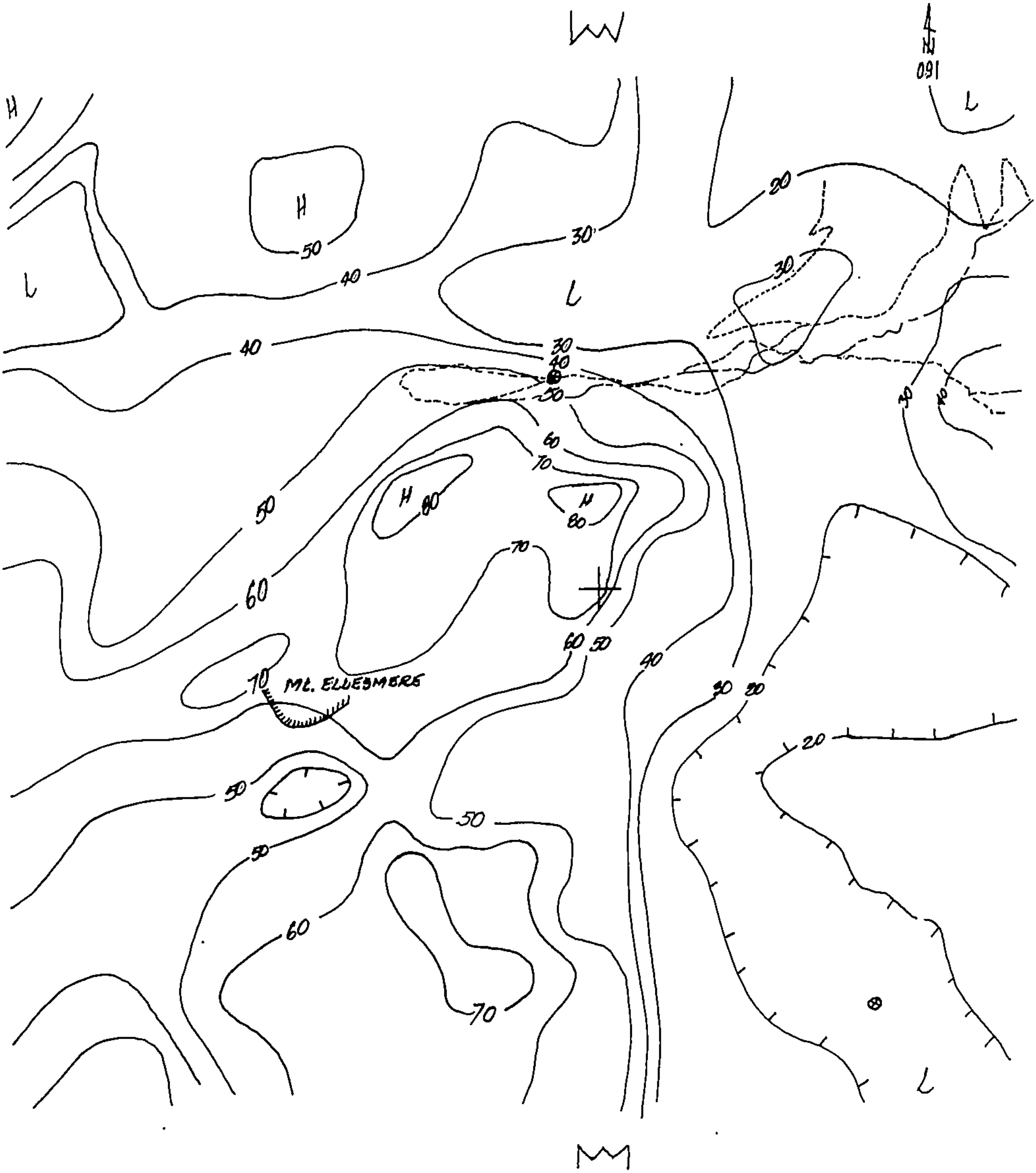

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64	46	34	40	42	40	42	23	15	19	9
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24	30	38	39	38	28	21	23	33	23	30
44	40	45	47	55	60	44	36	28	29	46
58	49	48	54	81	72	80	61	27	21	32
16	49	58	68	76	65	76	43	21	13	15
74	69	71	65	65	60	47	32	19	19	15
60	58	53	39	56	44	44	20	20	22	25
58	49	50	55	71	63	46	21	11	21	27
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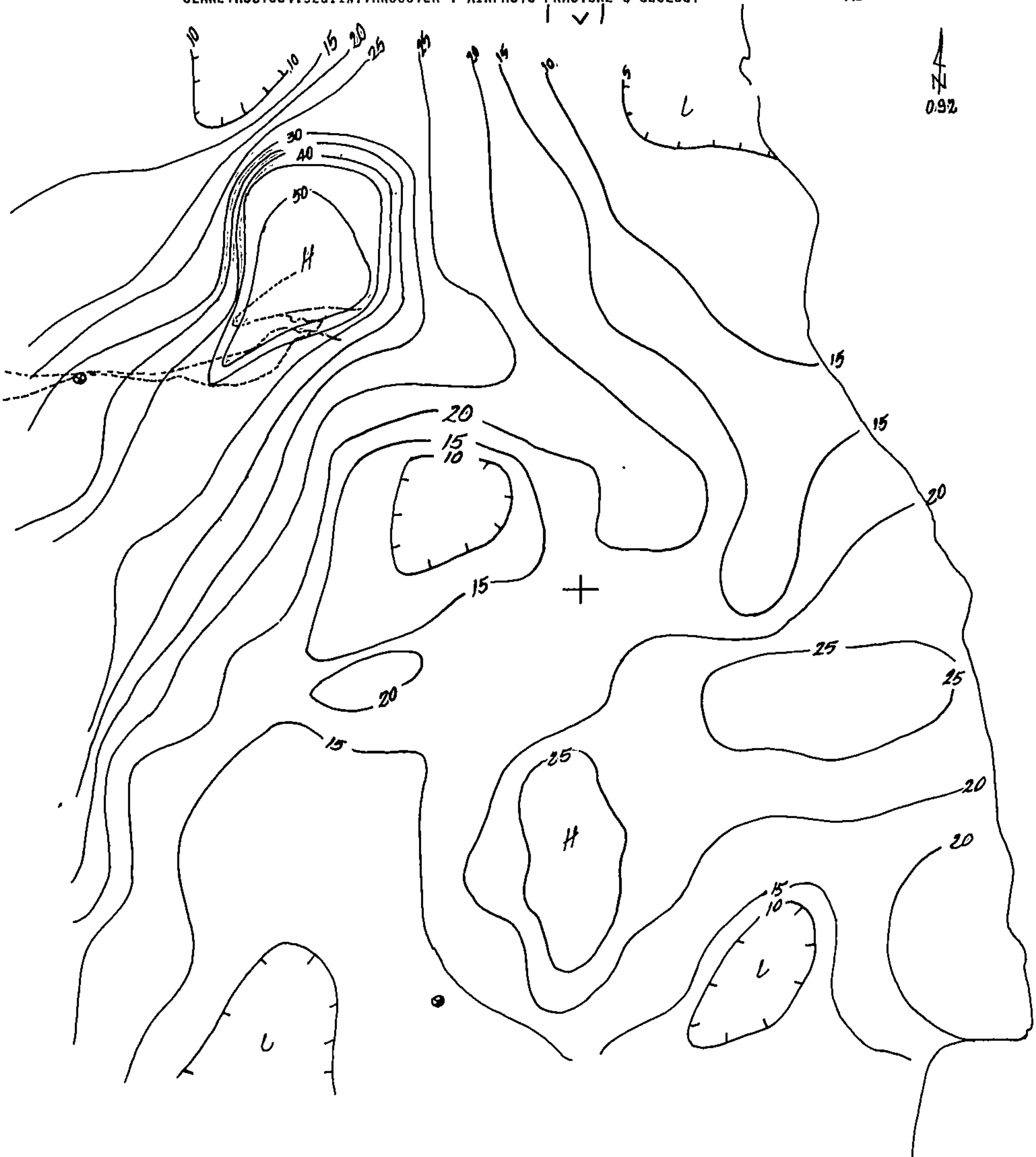
BC78045 Nº 091
092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19	26	51	52	25	18	12	6		
31	40	40	25	25	23	19	14		
33	42	31	14	9	16	23	15	18	
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30	15	13	14	20	29	23	16	18	
20	16	11	11	16	25	17	6	16	28
20	10	8	12	12	15	12	13	14	


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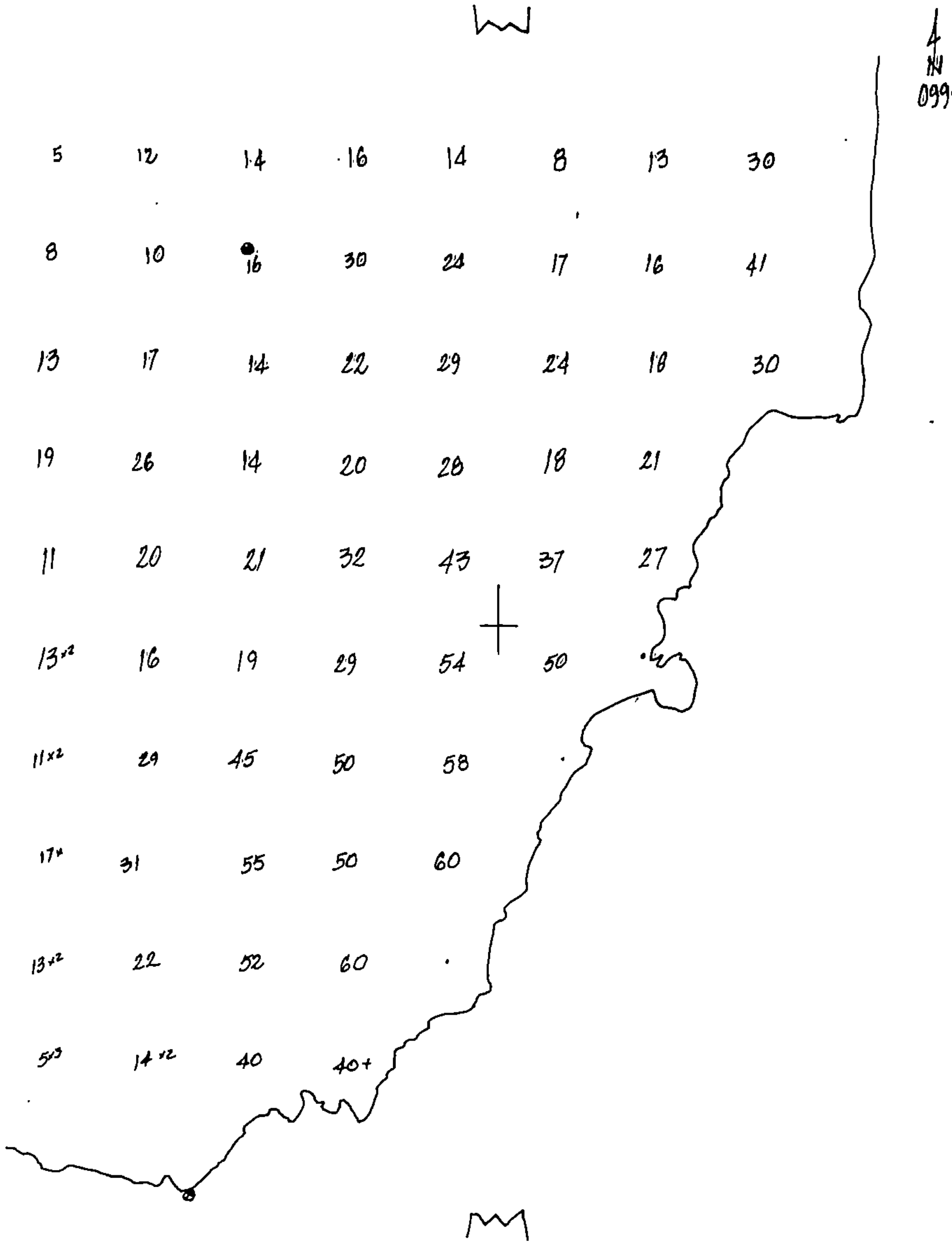
50
55
60
H
L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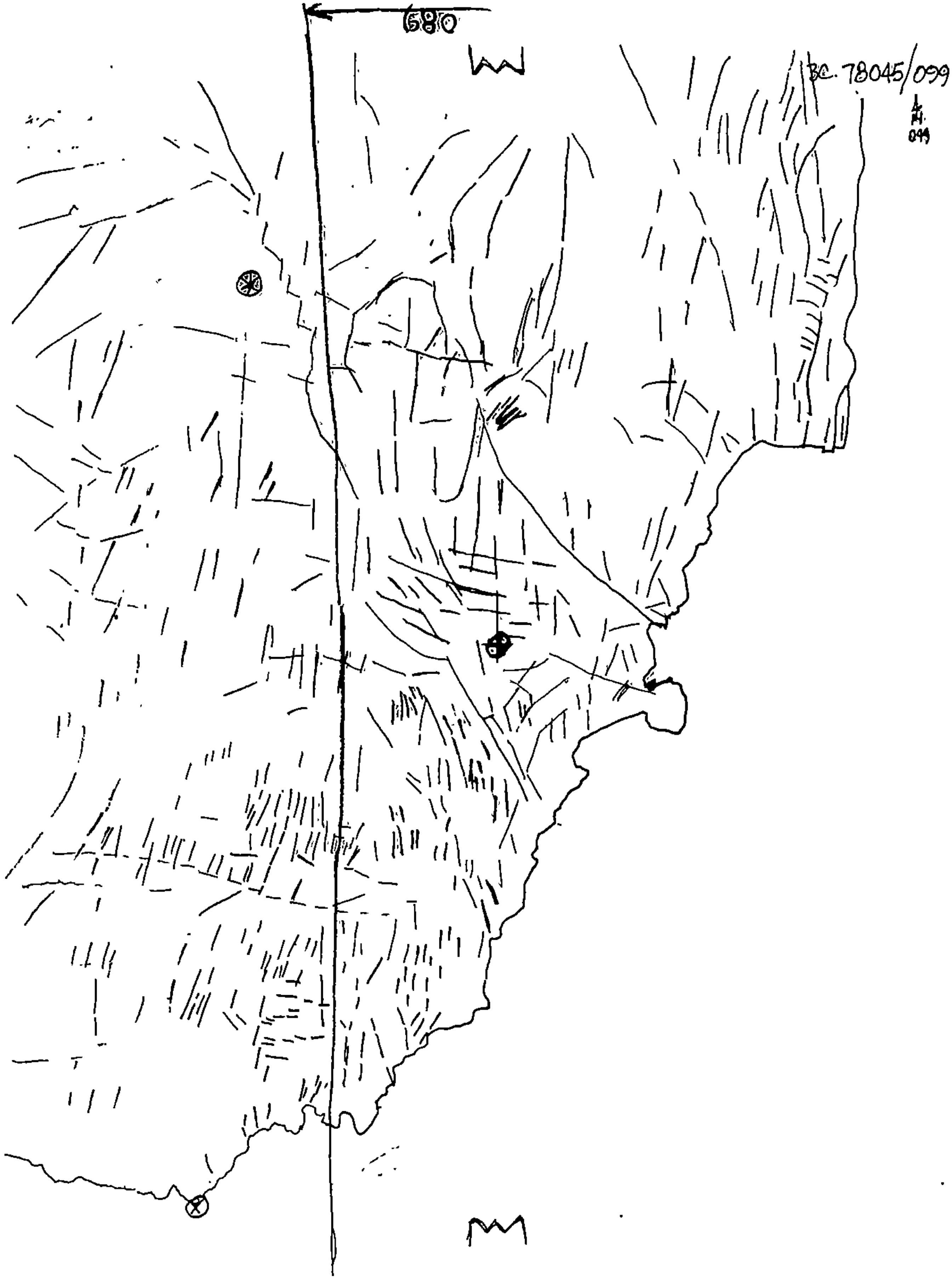
680
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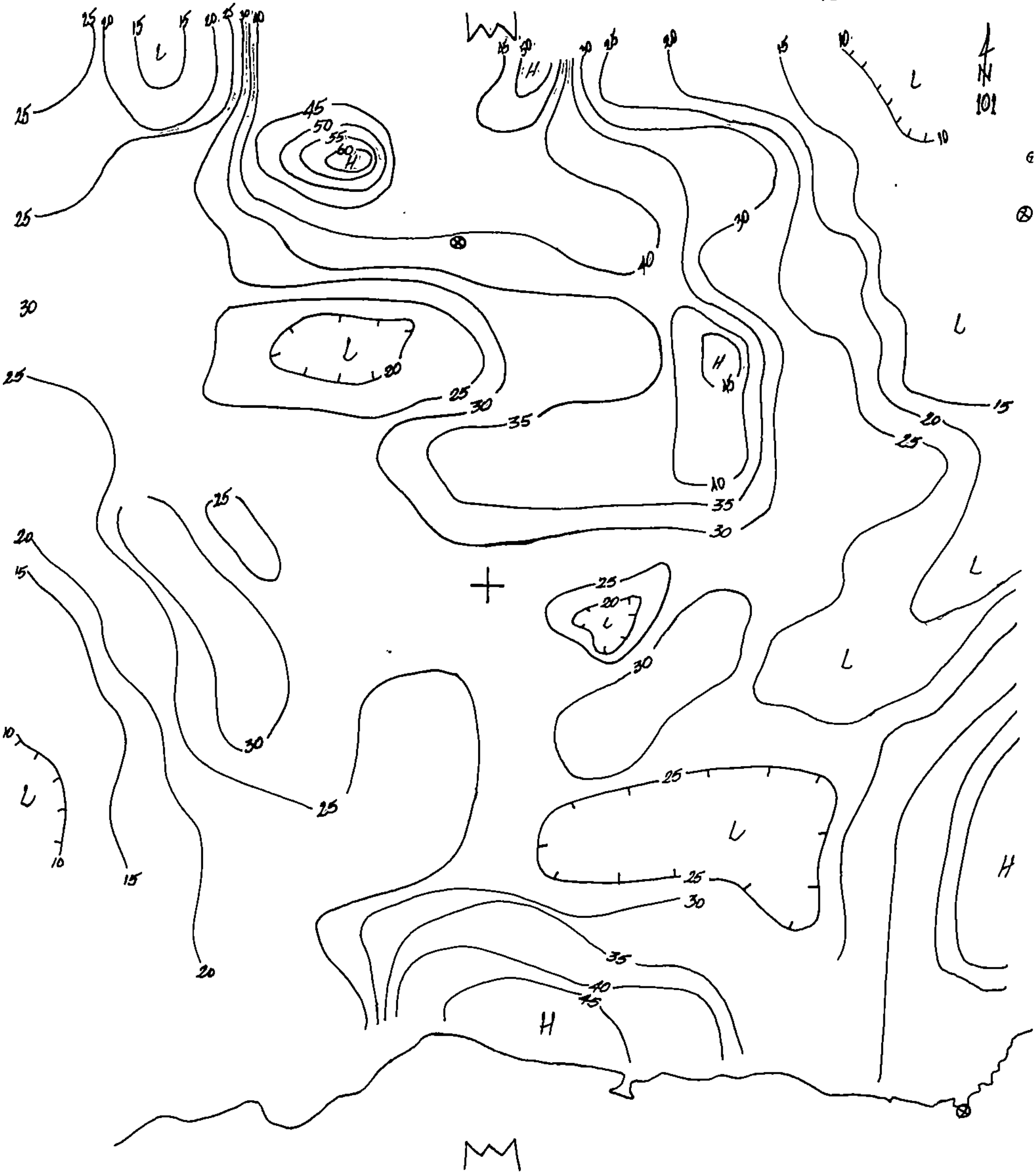
CLARE+MG3+OG4:92G11W:VANCOUVER : AIRPHOTO FRACTURE & GEOLOGY



GEAREX ENGINEERING mission b c

W

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24	29	27	27	35	38	36	42	26	26	19
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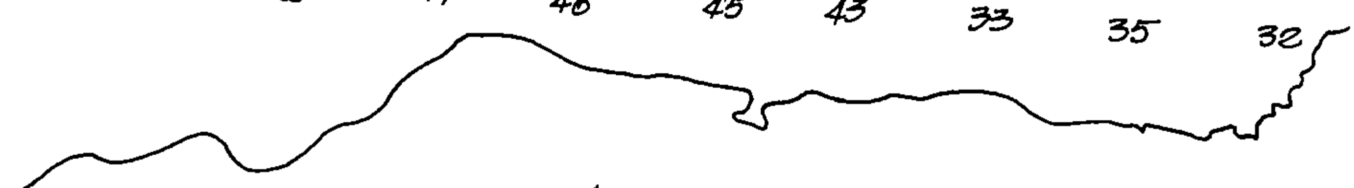
11	16	39	28	24	28	30	26	27	30	45
6	16	23	25	23	26	22	21	20	35	48
·	·	22	25	31	37	33	34	25	35	46
·	·	·	23	41	48	45	43	33	35	32



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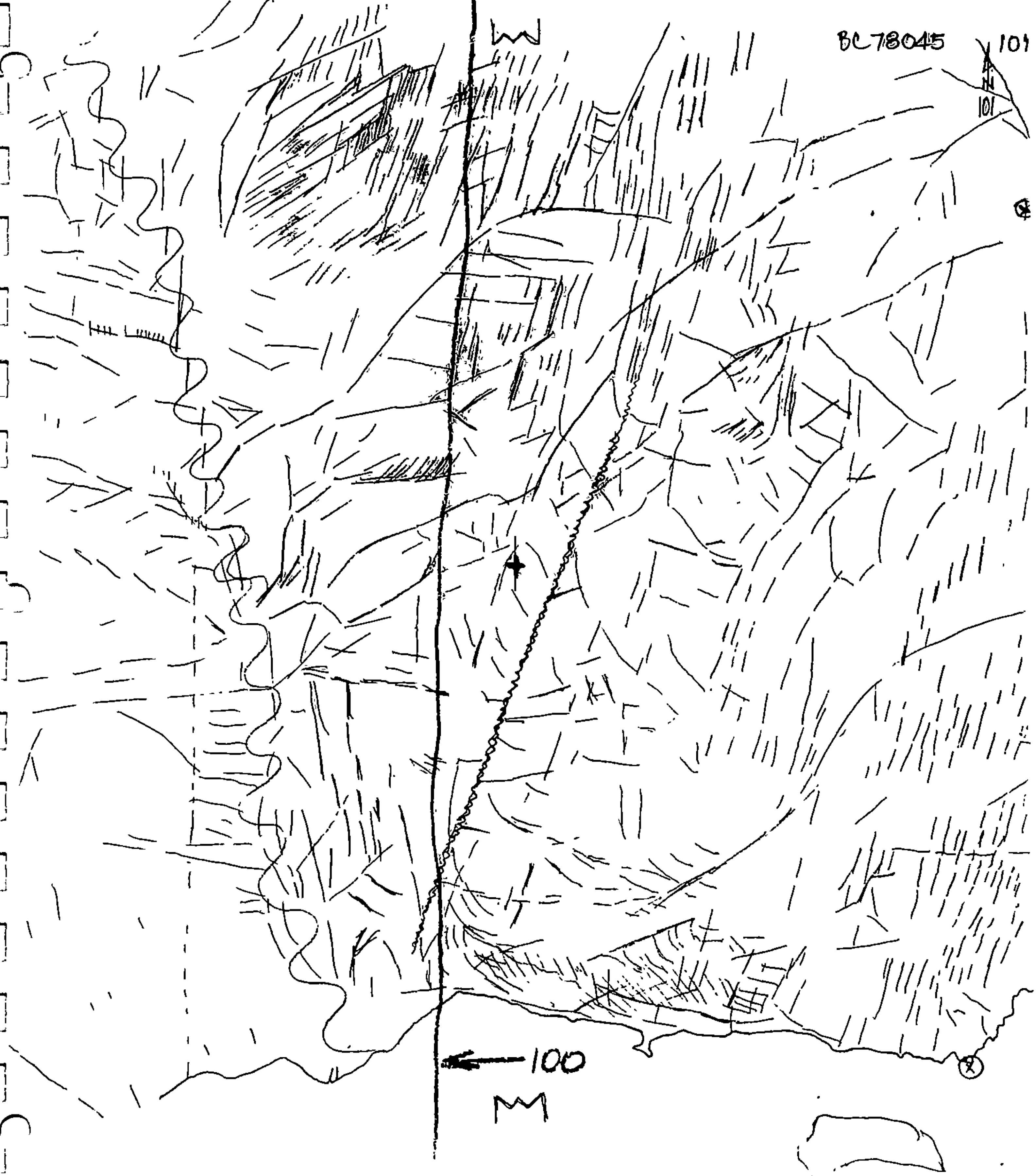


GEAREX ENGINEERING mission b c

QUALIFICATIONS

I, Gerhard von Rosen, reside in Mission British Columbia, at 33176 Richards Ave.

I have been practicing my profession of consulting geologist since my graduation from the University of British Columbia in 1962 with a B.Sc., and in 1966 with an M.Sc. degree in Honours Geology.

I have been involved with this kind of survey several times before, and I am qualified to compile and interpret this information.

Respectfully submitted,

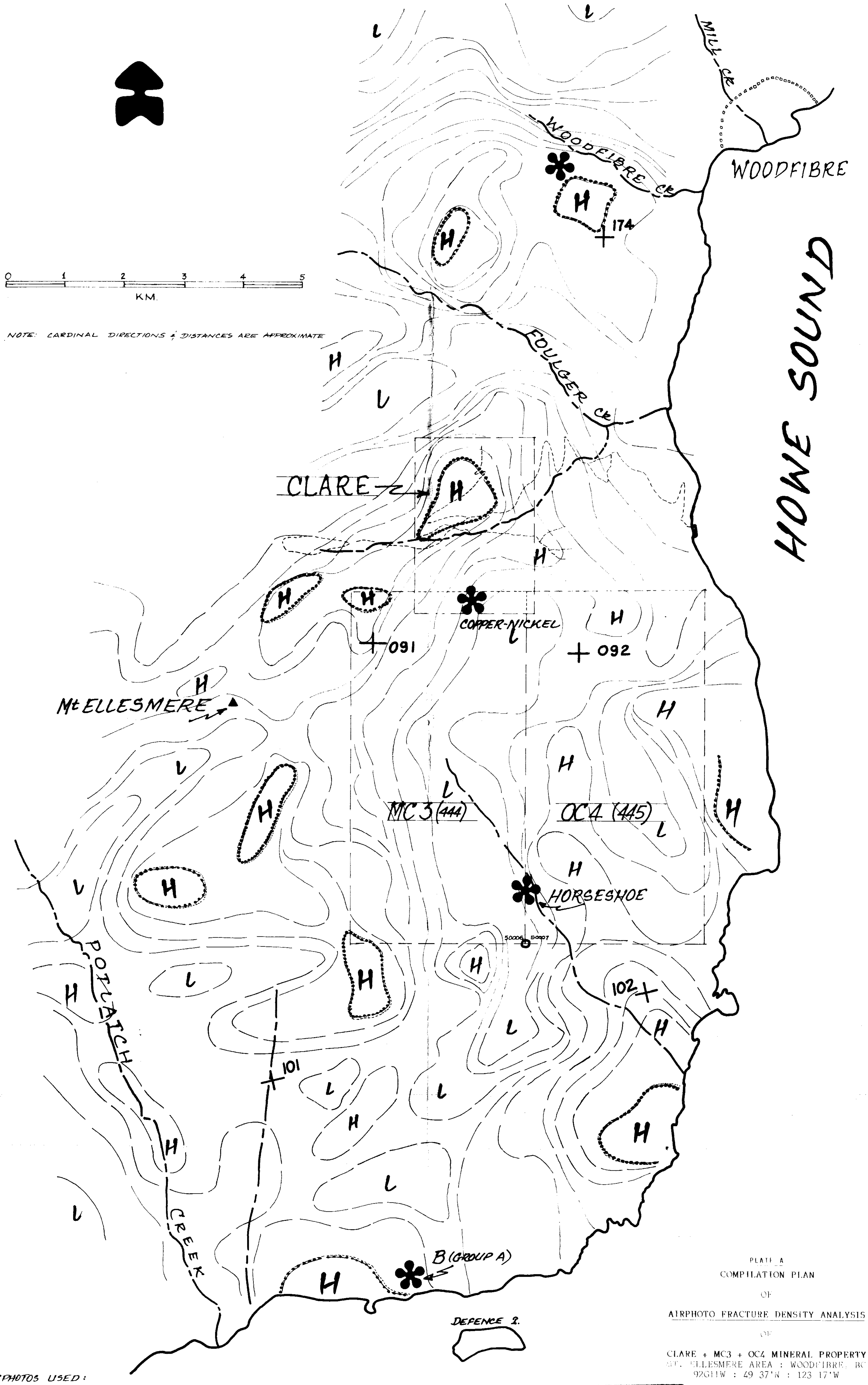
Gerhard von Rosen, M.Sc., P.Eng.

October 29, 1981

ITEMIZED COST STATEMENT

Airphoto Fracture Density Analysis:	Fees	$875
Assessment Report: Summary	Fees	$600
Report Preparation	Costs	$250
TOTAL COSTS		$1725

AREA COVERED	Total area of survey	approximately 4800 ha
	Area of claims	approximately 1050 ha



AIRPHOTOS USED:

BC 4425 173-174-175
4425 265-266-267
BC 78045 090-091-092-093
098-099-100-101-102

PLATE A

COMPILATION PLAN

OF

AIRPHOTO FRACTURE DENSITY ANALYSIS

OF

CLARE + MC3 + OC4 MINERAL PROPERTY
MT. ELLESMERE AREA : WOODFIBRE, BC
92G11W : 49 37'N : 123 17'W

FOR

RAFT MINES LTD