

GRACE CLAIMS 1980
SUMMARY REPORT

OMINECA MINING DIVISION NTS 94E2W

Latitude 57°11'N

Longitude 126°52'W

Owner D.R. MacQuarrie

Author "

Operator ABM Mining Group Inc.

(Tumkwa Copper Mines Ltd)

December 28, 1980.

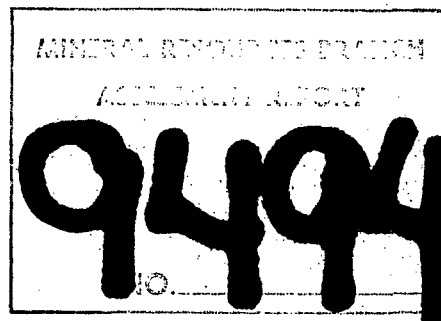


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1 INTRODUCTION

This report presents the results of the work program completed on the Grace #1 to 4 Claims for the period from July 7, 1980 to December 28, 1980. This program consisted of claim staking, linecutting, trenching, geology, geophysics, soil geochemistry and assaying. Further, it outlines the costs incurred in 1980 and suggests a work program and budget for 1981.

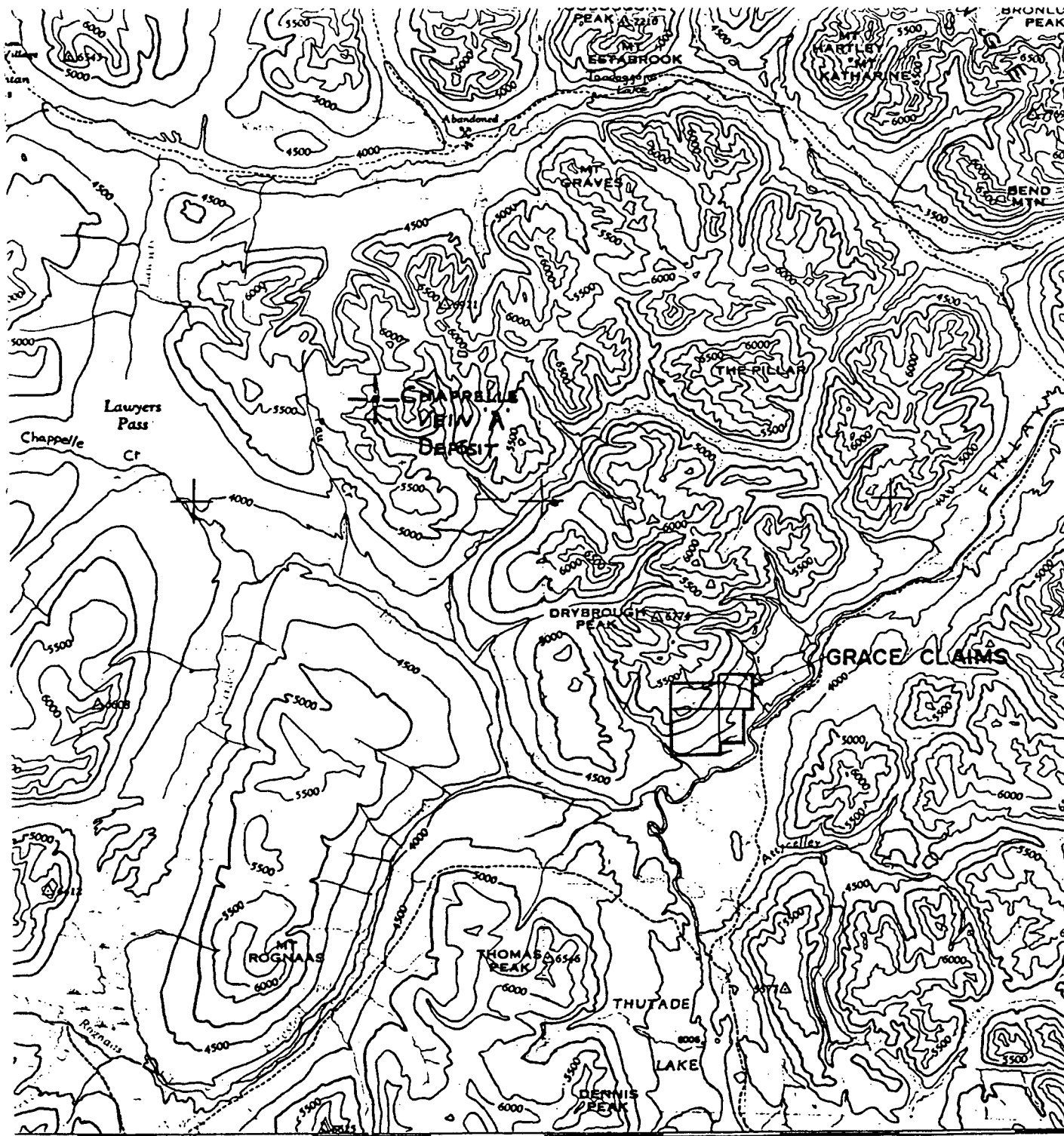
2 LOCATION

The GRACE CLAIMS are located approximately 250 km. north of Smithers, British Columbia, in the Omineca Mountain Range. The property is located at approximately 57°11' north latitude by 126°52' west longitude, at an elevation of 1200 metres on the southern slopes of Drybrough Peak (figs 1 and 2).

Property access is either by fixed wing aircraft from Prince George or Smithers B.C., to the Sturdee airstrip near the Baker Mine, and from there 14 km via helicopter to the property, or by vehicle via the Omineca Mining Road to Johanson Lake followed by a 70 km helicopter flight.

3 HISTORY

The claims area was originally staked by Amax Potash Ltd, in August of 1973. In July of 1974 the company completed 14 line miles of surveying, and regional prospecting (see assessment report #5144).



15'

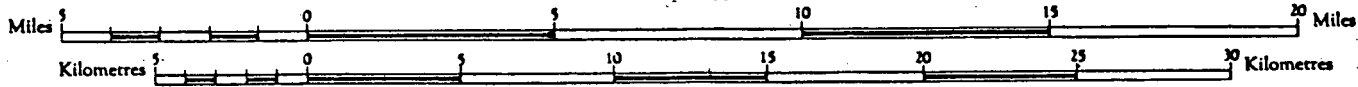
127°00'

45'

Scale 1 : 250,000

NTS 94 E2W

1 Inch to 4 Miles Approximately



LOCATION MAP

FIG 1

These claims expired in August of 1975. The property area was restaked by the author in 1978 and in July of 1979, four additional claims were added. A preliminary geophysical, geochemical and geological program was conducted on the claims, and assessment report 79-348-7649 was filed in Sept. 1979. These claims were subsequently abandoned and relocated under the modified grid system in July of 1980. At present the claim group is made up of GRACE#1 through 4 claims, comprising a total of 39 units. The claims are owned by D.R. MacQuarrie and are being operated by ABM Mining Group Inc.

4 WORK COMPLETED

The following work program was completed using the personnel listed below, during the period July 8 to July

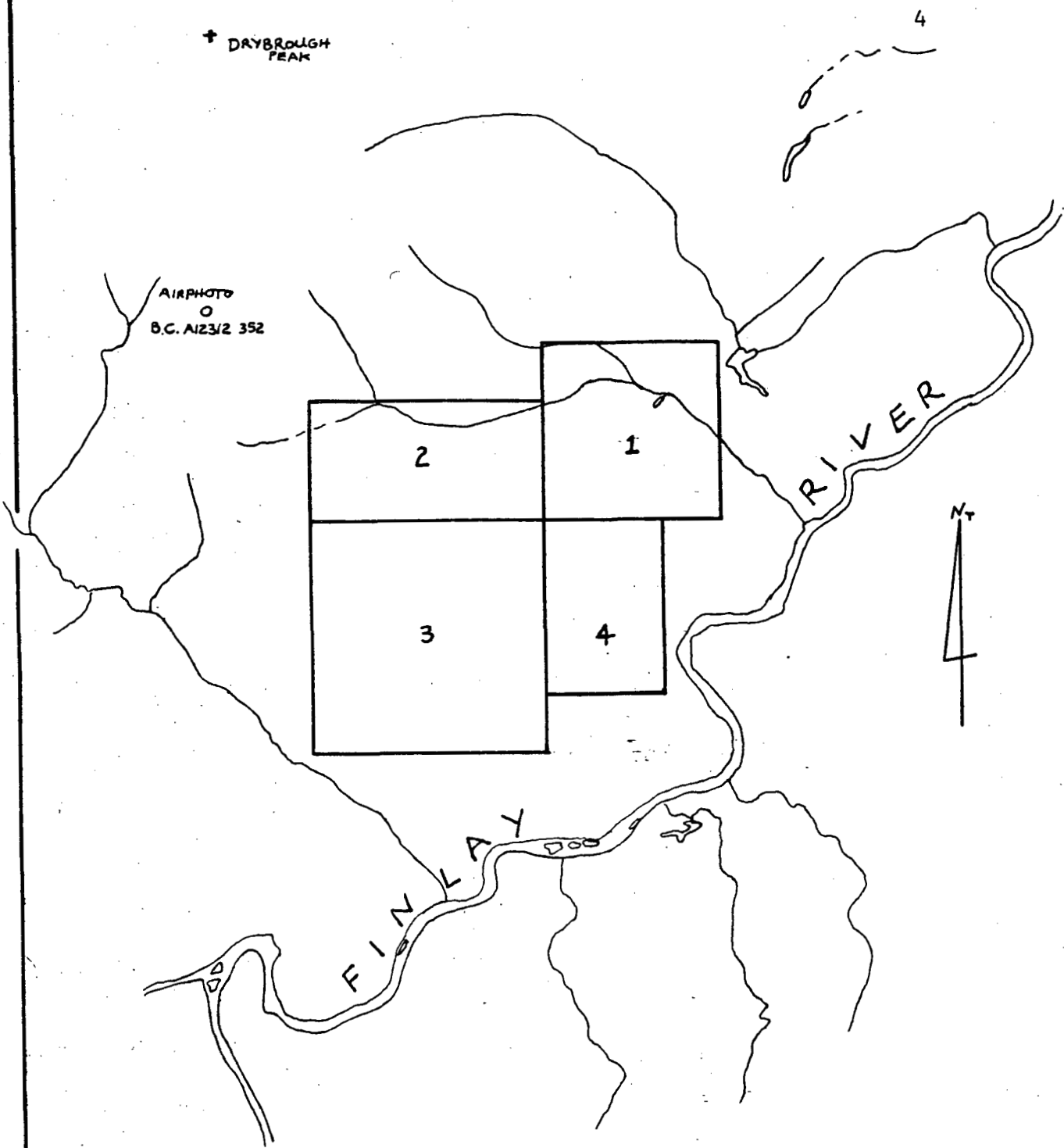
26, 1980 : D.R.MacQuarrie, party chief
D.K.MacQuarrie, blaster
R.P.MacQuarrie, camp cook
I. Shand, linecutter, operator
S. Travis, blasters helper, linecutter.

4.1 CLAIMSTAKING

During the period from July 9, to July 12, 1980, four new claims were located under the modified grid staking system. These claims are shown on fig. 1, and in more detail on fig. 2.

† DRYBROUGH
PEAK

AIRPHOTO
O
B.C. A123/2 352



GRACE CLAIM MAP

scale 1: 50,000

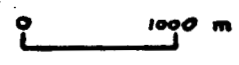


FIG 2

After applying abandonment credits from the 1979 assessment report, the claim status is as follows:

GRACE #1	record no.	2921	expires	July 25, 1982
GRACE #2	"	2922	"	July 25, 1981
GRACE #3	"	2923	"	"
GRACE #4	"	2924	"	"

The claims have been grouped for assessment purposes (Notice to Group, filed September 3, 1980).

4.2 LINECUTTING

In order to provide increased access to the claims area, 4.2 km. of Baseline and grid line were cut, flagged and picketed. Baseline 10 was cut and picketed at 25 metre intervals in a south west direction from the campsite at 13+50w to 41+75w. The chainage was slope corrected. In addition to BL10, grid lines 16+50, 17+00, 17+50 and 34+00 west were also cut. A further 8.3 km. of topofil and compass lines were also located. The complete grid is shown on fig. 3.

4.3 TRENCHING

A total of 114 metres of hand trenching, in six separate areas were completed (see fig. 5 for their location). This work involved the moving of approximately 120 cubic metres of soil and rock. The work was accomplished using an Atlas Copco Cobra drill followed by ditching dynamite and 75% forcite

blasting powder. Trenches 80-1 and 80-2 were located in areas of thick overburden, and hence no rock outcrop was located by them. The other four trenches uncovered new areas of rock outcrop. The geology of these trenches is shown in plan on figures 8 and 9.

4.4 VLF EM SURVEY

During the period July 18 to July 24, 1980, 12.5 line km of data were obtained using a Sabre model 27, VLF EM unit. The survey was conducted on the Baseline and cut grid lines, as well as on the topofil and compass lines. The station interval was every 30 metres on the grid lines, 25 metres on the Baseline. At each station the dip angle and normalized field strength were recorded. The dip angle was measured in the vertical plane, with the operator facing west. The instrument was tuned to the Cutler, Maine, U.S.A. transmitting station for the bulk of the survey. The VLF data is plotted as profiles and presented in plan on fig. 4. The BL data has not been presented on this map so as not to clutter its appearance. This data can be found listed in Appendix B.

4.5 GEOLOGICAL SURVEY

Detailed prospecting and geological mapping in the East Gold Anomaly area, fig 5, Central Quartz area, fig 3, and along

the perimeter of the claim group was carried out. This mapping added information to, and significantly altered, the previous geological maps (see Grace Report, 1979).

The geology of trenches 80-3 to 80-6 was also observed, and is shown in figures 8 and 9. A total of three days of geological mapping was performed.

4.6 GEOCHEMICAL SURVEY

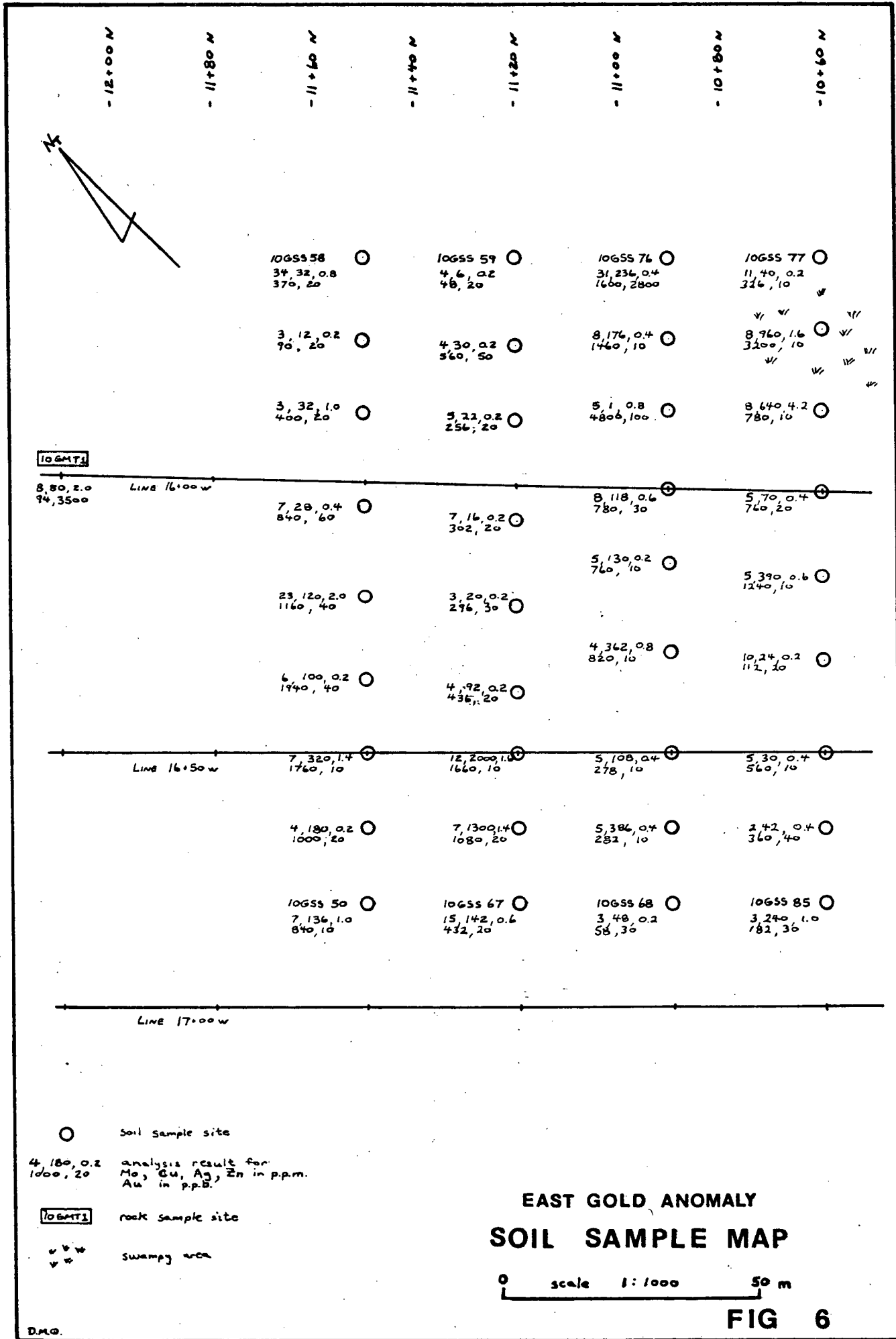
In total 40 rock chip and 98 soil samples were taken during the 1980 field season. The bulk of the soil samples were obtained from the Central Quartz, and the East Gold areas.

The soil samples were obtained from holes dug approximately 25 cm deep. This depth generally coincided with the "B" soil horizon. The samples were analyzed for Mo, Cu, Ag, Zn, and Au. Samples no. 10GMS1 to 12 were also analyzed for pH. All analyses were done by Rossbacher Laboratory utilizing standard atomic absorption techniques. The results are shown on figures 6 and 7. For a listing of the data and a description of the analytical technique see Appendix A.

5 RESULTS

5.1 GEOCHEMISTRY

Several areas of anomalous geochemistry located in previous years were resampled with a denser sample interval in 1980. This work was performed primarily in the East Gold and Central Quartz areas.

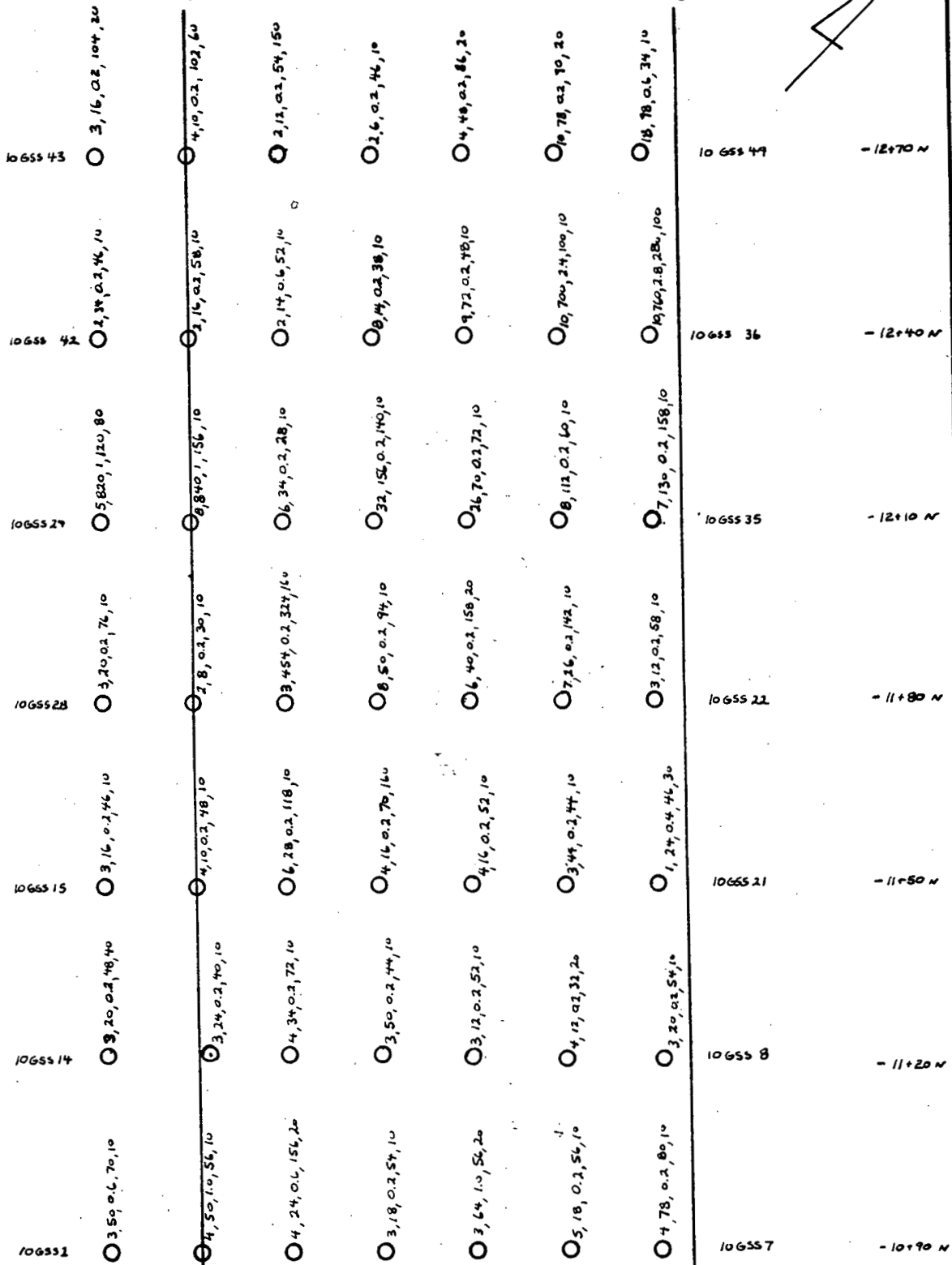


The East Gold Anomaly soil sample map, fig 6, indicates the presence of two highly anomalous Au geochem results. Sample number 10GSS76 (2800 ppb Au), is a soil sample taken in an area of poor outcrop and sample 10GMT1 (3500 ppb Au), is a rock chip sample from numerous highly pyritic volcanic siltstone outcrops in its vicinity. The first zone will require further prospecting and trenching in order to ascertain the source of the anomaly. Numerous quartz veins and pyritized volcanics are present in outcrop, some 100 metres to the north and east of the sample site (see Fig. 5). These veins are believed by the author to be offset by a crosscutting syenite dyke and to continue perhaps along strike into the anomaly area.

In the second zone, native gold has been recognized associated with altered pyrite in polished sections of the outcrop material (see Payne, Appendix C). This sample was made up of approximately three pounds of chips taken from numerous outcrops within 20 metres of the station. The host rock would appear to be well bedded volcanic siltstone with a pyrite content of up to 10%. Much of the pyrite (20%), had weathered out of the rock, and therefore, a possible enrichment of Au may have occurred.

The source of the Cu-Zn anomaly in the area of L16+50 west, 11+20 north has not been determined. Also, the Cu-Zn-Ag anomaly at 15+70 west by 10+60 north is believed to be related to scavenging of metal ions by the swampy soil conditions present at this location.

In the Central Quartz area, fig. 7, several geochemical



○ Soil sample site

4, 50, 10, 56, 10 - analysis result for
Mo, Cu, Ag, Zn in ppm.
ppb.

CENTRAL QUARTZ AREA SOIL SAMPLE MAP

0 scale 1 : 1000 50m

FIG 7

anomalies have been detected. The first zone located from 11+50 to 11+80 north by 24+60 west, corresponds with two moderate (160 ppb), Au values. A large quartz vein is known to outcrop in this area, see fig. 3. Rock chip 10GMT6 was made up of material from the large quartz vein and also chips from other smaller veins in the vicinity. This sample was anomalous in Cu (2100 ppm), and Au (120 ppb), and would appear to be the source of the soil geochem anomaly. The low values in the area below 11+50 north are probably caused by thickening overburden conditions. Numerous spot high Au values (greater than 80ppb), dot the grid north of 12+10 north. These are in an area of very favourable geology and should be further investigated. The strong Mo values at 12+10 north are probably related to humus rich soils in the creek bottom.

Samples 10GMS2 to 12, were obtained from the 'Molybdenum Anomaly' area on lines 37 and 38 west (see Grace Report 1979). These samples are very high in Mo (to 44 ppm), and seem to be related to the acidic soil conditions present in this area. As quartz pegmatite veins, mineralized augite andesite, and pyrite occur in the area 50 metres to the northeast, it would be premature to conclude that the acid soils alone are causing the high values. Further work is also suggested in light of the high Au value obtained in sample 10GMS9 (100 ppb).

5.2 GEOPHYSICS

Several VLF EM anomalies located in 1979 were re-established on the new grid cut in 1980. The results of the program are shown on fig. 4. These old anomalies were tested by trenches 80-1, 80-2 and 80-5. In all cases deep overburden conditions were encountered in the trenches in the vicinity of the VLF crossovers. This information suggests that the observed crossovers in this area are caused by bedrock topography rather than by conducting shear zones, as was previously believed (see assessment report 1979). Geological mapping in the area to the northeast of this anomaly indicates the presence of a fault zone which offsets a syenite dyke in the vicinity of L15 west, 10+70 north. This fault zone would seem to correlate well with the VLF anomalies, and with sheared and altered rocks in trench 80-6. Further work will be required to determine the true nature of the anomalies.

Several new, weak conductors were also discovered. These appear to be consistent in strike with the previously detected anomalies, and are plotted on fig. 4, on lines 20, 22 and 25 west.

The strong crossovers at the ends of L18 and 19 west are believed caused by the steep topography change in this area. The conductors located at 7+70 north on lines 20 and 21 west and at 8+70 north on line 18 west, occur on the southeast contact of the marble with granodiorite and volcanic siltstone respectively. These conductors do not have large field strength highs associated with them and therefore probably in-

licate only a contrast in rock conductivity rather than a separate conducting zone.

5.3 GEOLOGY

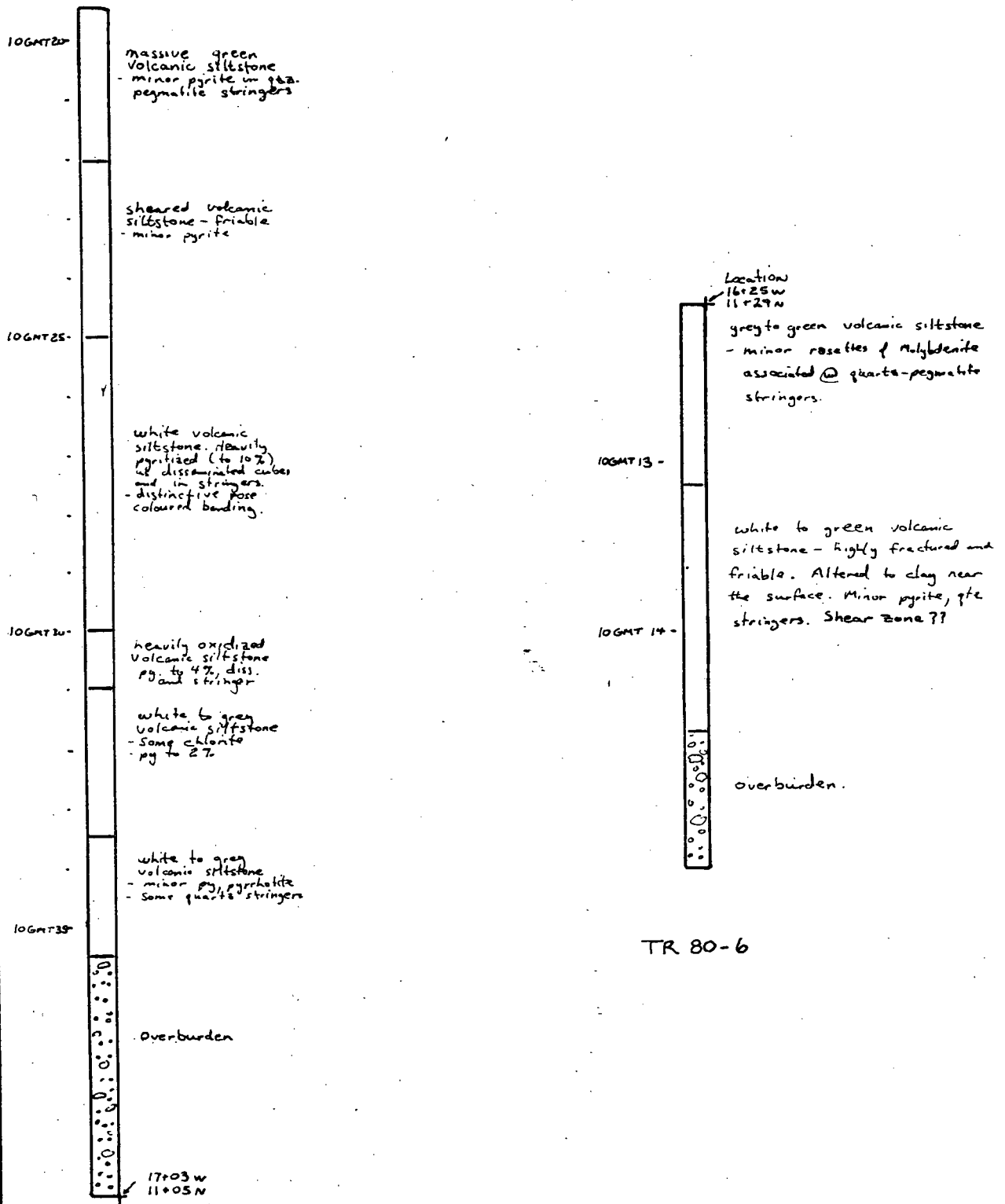
As a result of the improved grid control available in 1980, all previous geology was combined with the recent data and replotted on a new base map. This data is presented on figures 3 and 5. Major additions include a new block of unit 3 in the vicinity of old L22 east, 17 north, the discovery of a 10 metre wide by 40 metre long quartz vein at L 25 west, 11+80 north, and remapping of the entire East Gold Anomaly area.

During the course of the above work, an interesting outcrop was discovered at 12+10 north on L16 west. The outcrop in this area consists of fresh to heavily oxidized fine grained white volcanic siltstone, unit 3. The heavily oxidized surfaces exhibit a very characteristic boxwork weathering pattern. Locally, the rock has been brecciated and infilled with quartz and pyrite, and Au (see Payne, Appendix C). The pyrite is generally cubic in outline, but many crystals have been shattered, indicative of a second phase of injection or movement. Sample 10GMT1, a chip sample from outcroppings in this area, yielded a geochem analysis of 3500 ppb Au (as previously mentioned in section 5.1). As this result was not available until after the completion of the field work, no further work was carried out in this area. Previous work (Grace 1979),

indicates the presence of highly pyritized volcanics 30 metres to the west, and also 150 metres to the east of the anomalous outcrop. The Induced Polarization Map (fig. 6, report 79-348-7649), indicates a high percent frequency effect area, present and building in magnitude some 70 metres west of the station. Detailed bedrock geochemistry, close spaced geological mapping and further I.P. surveying will be required to assess the economic potential of this zone.

As was stated in section 5.2, two faults have been proposed in the area of L15west, 10+70 and 9+70 north. These are assumed to exist in order to account for the observed offset in the syenite porphyry dyke (fig. 5). The first fault zone occurs in an area of considerable overburden, but may in fact, cut trench 80-6 and account for the friable and altered appearance of the rock in the trench. The second is believed to underlie the lake on the east end of BL 10. Its fault trace was not observed at the south end of the lake, possibly because of the loose talus slides found in that area.

In order to further evaluate the geology of the East Gold Anomaly area, 5 additional trenches were blasted out. Their location is shown on fig. 5, and their geology on figures 8 and 9. As trenches 80-1 and 80-2 did not penetrate to bed rock, trench 80-3 was cut to try and ascertain the source of the VLF EM anomaly. Pyritized volcanic siltstone was uncovered in the trench, so it was decided to sample the trench at 2 metre intervals in the hope of picking up a mineralized section. Geochem analysis of samples 10GMT20 to 35 did not



TR 80-3

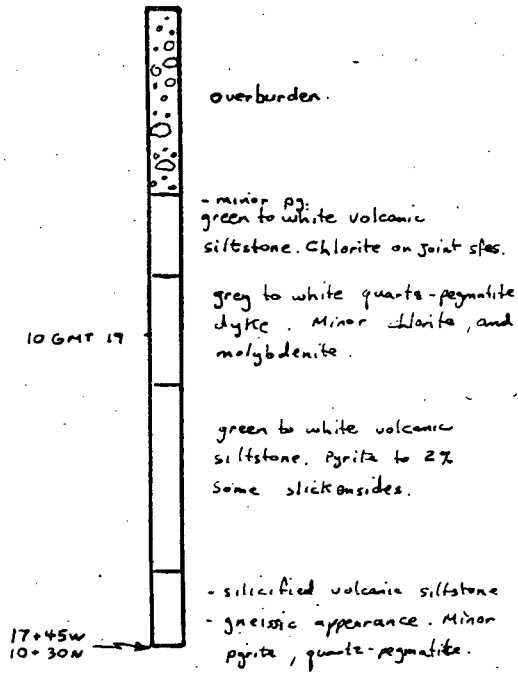
TR 80-6

TRENCH 80-3, 80-6

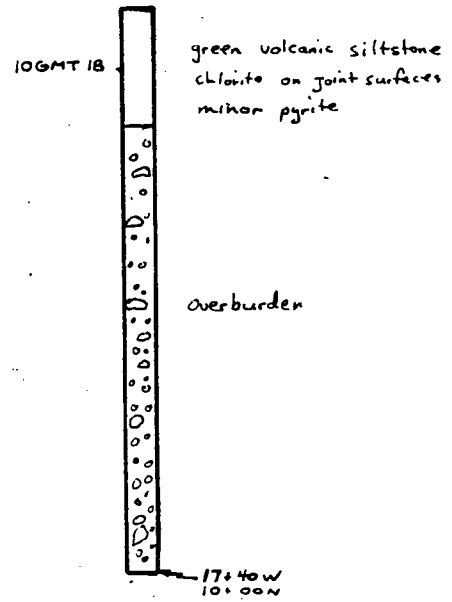
GEOLOGY

0 scale 1:200 10 m

FIG 8



TR 80-4



TR 80-5

TRENCH 80-4, 80-5
GEOLOGY

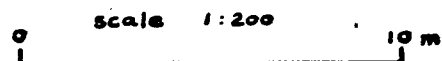


FIG 9

indicate any enrichment in Au, and therefore the source of the gold anomalies in this area is still unknown.

6 ITEMIZED COST STATEMENT

6.1 WAGES (mob-demob only)

July 7, 8	6 man days @ \$100 per	600.00
July 18	2 "	200.00
July 25, 26	7 "	700.00

6.2 FOOD AND ACCOMODATION

July 7 to 26, inclusive	1515.24
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6.3 TRANSPORTATION

Vehicle, gas and oil	960.93
Helicopter, fixed wing	1946.15

6.4 SURVEYS

Geology	3 days at \$150 per	450.00
VLF EM	12.5 km. at \$90 per	1125.00
Geochem sampling	98 at \$3.00 per	294.00
Rock chip sampling	40 at \$5.00 per	200.00
Trenching	120 cubic m at \$25 per	3000.00
Petrographic report		43.00
Linecutting	4.125 km. at \$200 per	825.00

6.5 ANALYSIS

138 samples, for 5 elements, at an average cost of \$6.30 per	868.80
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6.6 REPORT

December 1980, 5 days at \$150	750.00
Map costs	75.00

<u>GRAND TOTAL</u>	<u>\$13553.12</u>
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7 CONCLUSIONS AND RECOMMENDATIONS

As a result of the 1980 work program, substantial proof concerning the economic potential of the claims has been obtained. This proof consists of outcropping gold mineralization in a favourable host rock, anomalous gold geochemistry in areas of geological and geophysical interest, and the discovery of a large quartz vein containing anomalous gold geochem levels.

All of these zones, and in addition the untested geochemical anomalies in the western and south western sections of the property, will require further exploration and development work. Further to this, an exploration program and budget for the 1981 season is outlined below.

Geophysics

Ground <u>VLF EM</u> survey, to complete coverage of the claims area, 35 km @ \$100	\$3500.00
<u>Induced Polarization Survey</u> , to outline areas of sulphide mineralization in areas of overburden cover, 50 km @ \$625 per	31250.00

Geochemistry

<u>Soil Samples</u> , to outline new areas of mineralization, 1500 samples @ \$10 per	15000.00
<u>Rock Geochemistry</u> , 55 samples @ \$10 per	550.00

Geology

Detail mapping of anomaly areas, 1 week	1400.00
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Report

Consultant, 14 days @ \$200 per	2800.00
Expenses	200.00

Other

Mob - demob, Vancouver to Smithers	2000.00
Helicopter, 5 hours @ \$400.00 per	2000.00
Fixed wing aircraft charter	2800.00
Camp expenses	3000.00

TOTAL	\$66500.00
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CONTINGENCIES	3500.00
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GRAND TOTAL	\$70000.00
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D. Mac Quarr

CERTIFICATE OF QUALIFICATIONS

I, Douglas R. MacQuarrie, do hereby certify that:

1. I am a practising geologist/geophysicist with office and residence at 14265 Trites Road, Surrey British Columbia, Canada.
2. I have received the following university degree:
1975 B.Sc. (Combined Honours Geology/Geophysics)
University of British Columbia,
Vancouver, B.C.
3. I am a member in good standing of the following professional organizations:
 - B.C. Geophysical Society
 - Canadian Institute of Mining and Metallurgy
4. Since 1971 I have been engaged in various exploration geology and geophysics projects.
5. The geological field work and interpretation presented in this report were done under my direct supervision.
6. The geophysical field work, data reduction and interpretation presented in this report were done under my direct supervision.


Douglas R. MacQuarrie
Douglas R. MacQuarrie, B.Sc.
Geologist/Geophysicist

APPENDIX A

ANALYTICAL METHOD & RESULTS

APPENDIX A - GEOCHEM PROCEDURE

In general, most of the geochem soil samples were obtained from a depth of from 20 to 30 centimeters, corresponding to the B soil horizon. The material was then placed in brown kraft paper envelopes and shipped to the Rossbacher Laboratory in Burnaby B.C., for analysis.

The samples were then dried, and sifted to minus 80 mesh. One half gram of this material was then digested in a mixture of 85 parts perchloric acid to 15 parts nitric acid. When fully digested, the remaining solution was diluted with distilled water to a volume of 10 ml. This solution was then analyzed by standard Atomic Absorption techniques.

In the case of the Gold geochemistry, the sample preparation was identical to the above, except that the digestion was done by a solution of aqua-regia instead of the perchloric-nitric acid solution used above. The sample was then determined by the same standard A.A. techniques.

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

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CERTIFICATE OF ANALYSIS

D.R. MACQUARRIE

TO:

CERTIFICATE NO. **80397-1**
INVOICE NO. **320**
DATE ANALYSED **AUG. 1980**
PROJECT

No.	Sample	pH	Mo	Cu	Ag	Zn	PPB Au						No.
01	10GSS 1		3	50	0.6	70	10						01
02	2		4	50	1.0	56	10						02
03	3		4	24	0.6	156	20						03
04	4		3	18	0.2	54	10						04
05	5		3	64	1.0	56	20						05
06	6		5	18	0.2	56	10						06
07	7		4	78	0.2	80	10						07
08	8		3	20	0.2	54	10						08
09	9		4	12	0.2	30	20						09
10	10GSS 10		3	12	0.2	52	10						10
11	11		3	50	0.2	44	10						11
12	12		4	34	0.2	72	10						12
13	13		3	24	0.2	40	10						13
14	14		3	20	0.2	48	40						14
15	15		3	16	0.2	46	10						15
16	16		4	10	0.2	48	10						16
17	17		6	28	0.2	118	10						17
18	18		4	16	0.2	70	160						18
19	19		4	16	0.2	52	10						19
20	10GSS 20		3	44	0.2	44	10						20
21	21		1	24	0.4	46	30						21
22	22		3	12	0.2	58	10						22
23	23		7	26	0.2	142	10						23
24	24		6	40	0.2	158	20						24
25	25		8	50	0.2	94	10						25
26	26		3	454	0.2	324	160						26
27	27		2	8	0.2	30	10						27
28	28		3	20	0.2	76	10						28
29	29		5	820	1.0	120	80						29
30	10GSS 30		8	840	1.0	156	10						30
31	31		6	34	0.2	28	10						31
32	32		32	156	0.2	140	10						32
33	33		26	70	0.2	72	10						33
34	34		8	112	0.2	60	10						34
35	35		7	130	0.2	158	10						35
36	36		10	760	2.8	280	100						36
37	37		10	700	2.4	100	10						37
38	38		9	72	0.2	48	10						38
39	10GSS 39		8	14	0.2	38	10						39
40	G1		7	36	0.2	98	-						40

Certified by

P. Rossbacher

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

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CERTIFICATE OF ANALYSIS

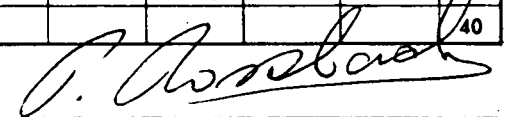
D. R. MAC QUARRIE

CERTIFICATE NO. 80397-2
INVOICE NO. 320
DATE ANALYSED AUG. 1980
PROJECT

TO:

No.	Sample	pH	Mo	Cu	Ag	Zn ^{PPB}	AU							No.
01	10GSS40		2	14	0.6	58	10							01
02	41		2	16	0.2	58	10							02
03	42		2	34	0.2	46	10							03
04	43		3	16	0.2	104	20							04
05	44		4	10	0.2	102	60							05
06	45		2	12	0.2	54	150							06
07	46		2	6	0.2	46	10							07
08	47		4	48	0.2	86	20							08
09	48		10	78	0.2	90	20							09
10	10GSS49		18	98	0.6	34	10							10
11	50		7	136	1.0	840	10							11
12	51		4	150	0.2	1000	20							12
13	52		7	320	1.4	1760	10							13
14	53		6	100	0.2	1940	40							14
15	54		23	120	2.0	1160	40							15
16	55		7	28	0.4	840	60							16
17	56		3	32	1.0	400	20							17
18	57		3	12	0.2	90	20							18
19	58		34	32	0.8	370	20							19
20	10GSS59		4	6	0.2	48	20							20
21	60		4	30	0.2	560	50							21
22	61		5	22	0.2	256	20							22
23	62		7	16	0.2	302	20							23
24	63		3	20	0.2	906	30							24
25	64		4	92	0.2	436	20							25
26	65		12	2000	1.6	1660	10							26
27	66		7	1300	1.4	1080	20							27
28	67		15	142	0.6	432	20							28
29	68		3	48	0.2	58	30							29
30	10GSS69		5	386	0.4	282	10							30
31	70		5	108	0.4	278	10							31
32	71		4	362	0.8	820	10							32
33	72		5	130	0.2	368	10							33
34	73		8	118	0.6	380	30							34
35	74		5	1	0.8	4800	100							35
36	75		8	176	0.4	1460	10							36
37	76		31	236	0.4	1600	2800							37
38	77		11	40	0.2	326	10							38
39	10GSS78		8	960	1.6	3200	10							39
40	Q.10		16	560	0.4	76								40

Certified by



Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

25

CERTIFICATE OF ANALYSIS

D.R. MAC QUARRIE

CERTIFICATE NO. 80397-3
INVOICE NO. 320
DATE ANALYSED AUG. 1980

TO:

PROJECT

No.	Sample	pH	Mo	Cu	As	Zn	PPB Al							No.
01	10GSS79		8	640	4.2	780	10							01
02	80		5	70	0.4	760	20							02
03	81		5	390	0.6	1240	10							03
04	82		10	24	0.2	112	20							04
05	83		5	30	0.4	560	10							05
06	84		2	42	0.4	360	40							06
07	10GSS85		3	240	1.0	182	30							07
08	10GMS 1	3.6	31	108	1.0	22	50							08
09	2	5.8	34	162	0.8	308	40							09
10	3	5.0	20	26	0.4	138	30							10
11	4	6.1	18	102	0.6	344	30							11
12	5	6.2	44	126	1.0	134	20							12
13	6	4.8	12	12	0.2	106	40							13
14	7	4.6	11	28	0.2	84	50							14
15	8	5.0	10	28	0.2	56	40							15
16	9	4.7	3	10	0.2	14	100							16
17	10	5.6	20	30	0.2	66	30							17
18	10A6.1		9	1200	3.0	108	30							18
19	11	6.7	10	820	1.0	98	30							19
20	10GMS12	6.3	23	740	1.0	96	30							20
21	10GMT 1		8	90	2.0	94	3500	*						21
22	2		1	2	0.2	0	50							22
23	4		3	2900	8.2	298	50	*						23
24	5		1	366	13.2	196	60	*						24
25	6		3	2100	1.2	174	120	*						25
26	7													26
27	8		28	86	0.2	26	40							27
28	9		3	138	0.4	90	40							28
29	10		136	198	1.2	12	60							29
30	10GMT11		3	18	0.2	26	10							30
31	12		2	30	0.2	46	10							31
32	13		5	52	0.6	178	10							32
33	14		3	36	0.2	234	10							33
34	16		1	8	0.2	20	10							34
35	17		1	8	0.2	22	10							35
36	18		122	48	0.2	350	10							36
37	19		1	4	0.2	14	10							37
38	20		1	24	0.2	110	10							38
39	10GMT21		1	22	0.2	72	10							39
40	G2		44	110	0.2	138								40

Certified by

P. Rossbach

Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

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CERTIFICATE OF ANALYSIS

D.R. MAC QUARRIE

CERTIFICATE NO. 80397-4

INVOICE NO. 320

DATE ANALYSED

PROJECT AUG. 1980

TO:

No.	Sample	pH	Mo	Cu	Ag	Zn	PPB Au						No.
01	10GAMT22		2	150	0.2	122	10						01
02	23		1	66	0.2	76	10						02
03	24		1	122	0.2	110	10						03
04	25		4	112	0.2	112	10						04
05	26		4	96	0.2	174	10						05
06	27		4	158	0.4	168	10						06
07	28		4	48	0.4	414	10						07
08	29		5	60	0.4	228	10						08
09	30		5	60	0.2	140	10						09
10	10GAMT31		4	32	0.2	118	10						10
11	32		4	20	0.2	126	10						11
12	33		2	50	0.2	124	10						12
13	34		2	90	0.2	146	10						13
14	35		3	52	0.2	158	10						14
15	36		1	24	0.2	360	10						15
16	37		2	10	0.2	462	10						16
17	38		2	132	0.6	11800	30						17
18	39		4	24	0.2	70	10						18
19	40		3	1260	15.8	182	20	*					19
20	41		39	140	0.8	30	30						20
21	10GAMT45		4	14	0.2	68	10						21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
32													32
33													33
34													34
35													35
36													36
37													37
38													38
39													39
40													40

Certified by

P. Rossbach

APPENDIX B

VLF EM DATA - BL10

VLf EM DATA - BL10

Transmitting Station : Cutler, Maine
 Instrument : Sabre Model 27
 Facing direction : West

STATION	DIP ANGLE	%F.S.	STATION	DIP ANGLE	%F.S.
BL10 25+25 west	-12	48	BL10 19+75 west	-4	47
25+00	-10	46	19+50	-5	47
24+75	-9	47	19+25	-5	46
24+50	-8	47	19+00	-7	49
24+25	-9	45	18+75	-4	50
24+00	-10	45	18+50	-9	50
23+75	-8	46	18+25	-6	45
23+50	-7	43	18+00	-5	49
23+25	-6	45	17+75	-5	50
23+00	-8	44	17+50	-7	50
22+75	-8	45	17+25	-8	52
22+50	-10	44	17+00	-7	55
22+25	-9	46	16+75	-3	58
22+00	-6	46	16+50	-2	50
21+75	-7	44	16+25	-4	50
21+50	-7	45	16+00	-5	53
21+25	-10	46	15+75	-4	53
21+00	-9	48	15+50	-3	49
20+75	-4	51	15+25	-2	49
20+50	-4	50	15+00	-3	47
20+25	-5	50	14+75	-2	49
20+00	-3	50	14+50	0	47
			14+25	+1	49
			14+00	+3	48

APPENDIX C

PETROGRAPHIC REPORT BY J. PAYNE



Vancouver Petrographics Ltd. ³⁰

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph. D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
VOX 1J0

Report for: Doug MacQuarrie,

PHONE (604) 888-1323

Invoice 2166

Sample in which gold is suspected.

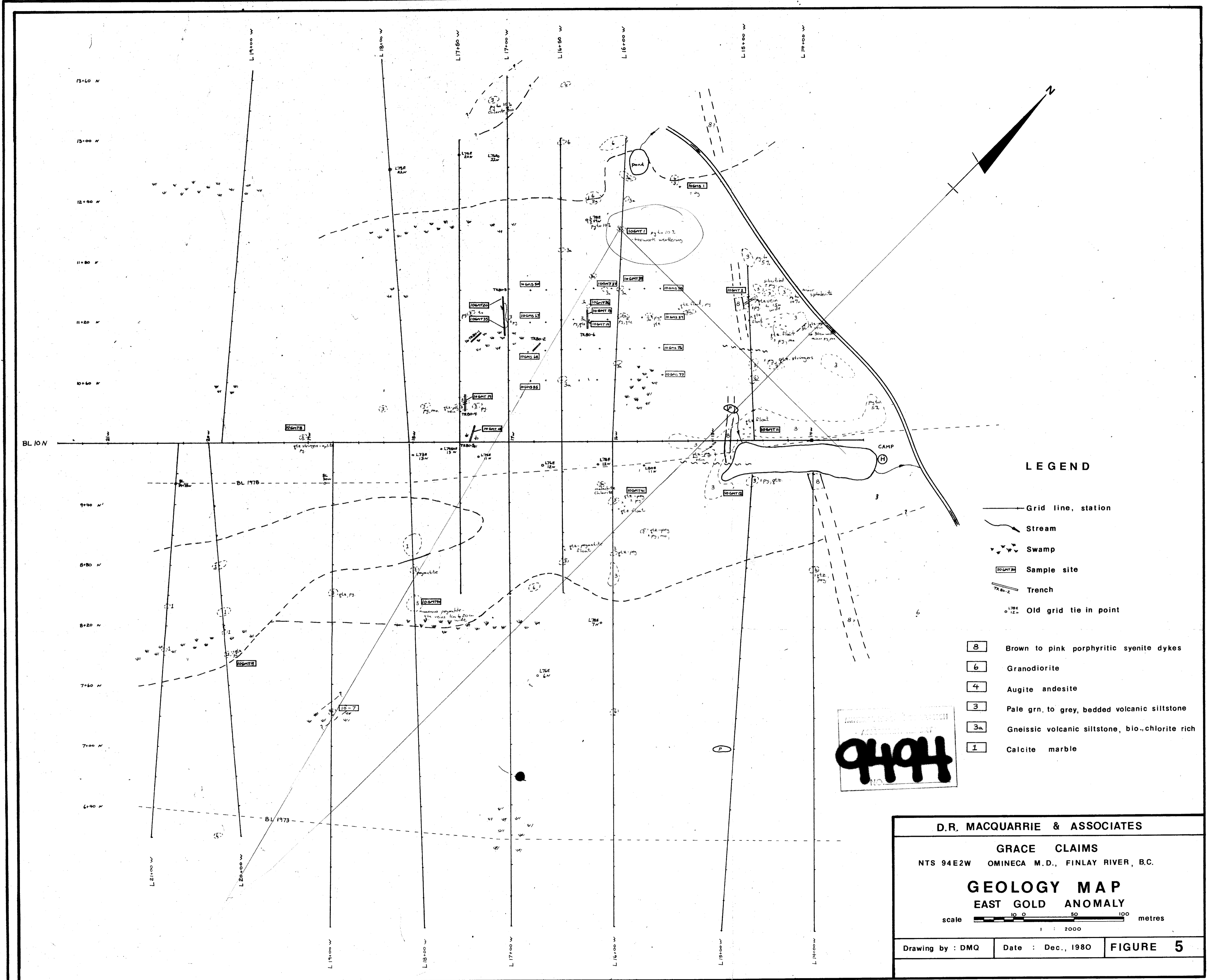
Two polished ore blocks were made and examined. One contains abundant pyrite grains from 0.05-1.5 mm in size. They are altered along their borders to hematite. No gold is present in this section. The other is similar to the first, but the pyrite is almost completely altered to hematite, with only a few relic cores in coarser grains. One pyrite grain 0.2 mm across with an approximate cubic outline, and which was completely altered to hematite, contains a grain of native gold 0.03 mm long near one edge. This is the only gold seen in this sample.

John Payne,
August, 1980.

BIBLIOGRAPHY

MacQuarrie, D.R., February 5, 1979, "The Grace Project",
private report

MacQuarrie, D.R., September 10, 1979, "A Report on the
Geology, Geophysics and Geochemistry
of the Grace #1 to 14 Claims". As-
sessment report number 79-348-7649.



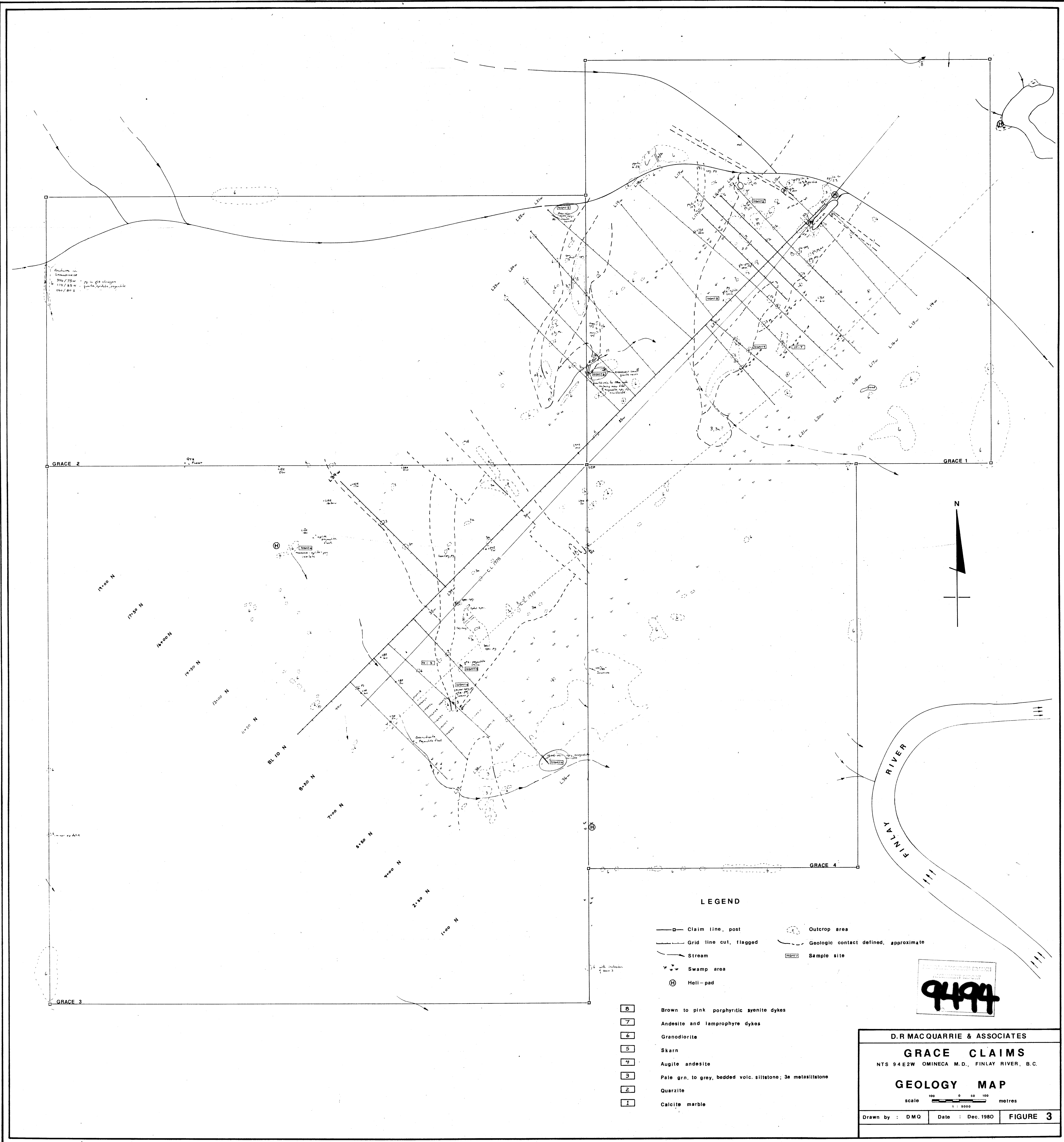
LEGEND

- Grid line, station
- ~ Stream
- ▼▼▼ Swamp
- (with ID) Sample site
- TR No. 2 Trench
- (with L 1786 12W) Old grid tie in point

- 8 Brown to pink porphyritic syenite dykes
- 6 Granodiorite
- 4 Augite andesite
- 3 Pale grn. to grey, bedded volcanic siltstone
- 3a Gneissic volcanic siltstone, bio..chlorite rich
- 1 Calcite marble

9494
 NO.

D.R. MACQUARRIE & ASSOCIATES		
GRACE CLAIMS NTS 94E2W OMINCA M.D., FINLAY RIVER, B.C.		
GEOLOGY MAP EAST GOLD ANOMALY		
scale metres 1 : 2000		
Drawing by : DMQ	Date : Dec., 1980	FIGURE 5



Features in
 394/724w
 119/85w
 086/80s

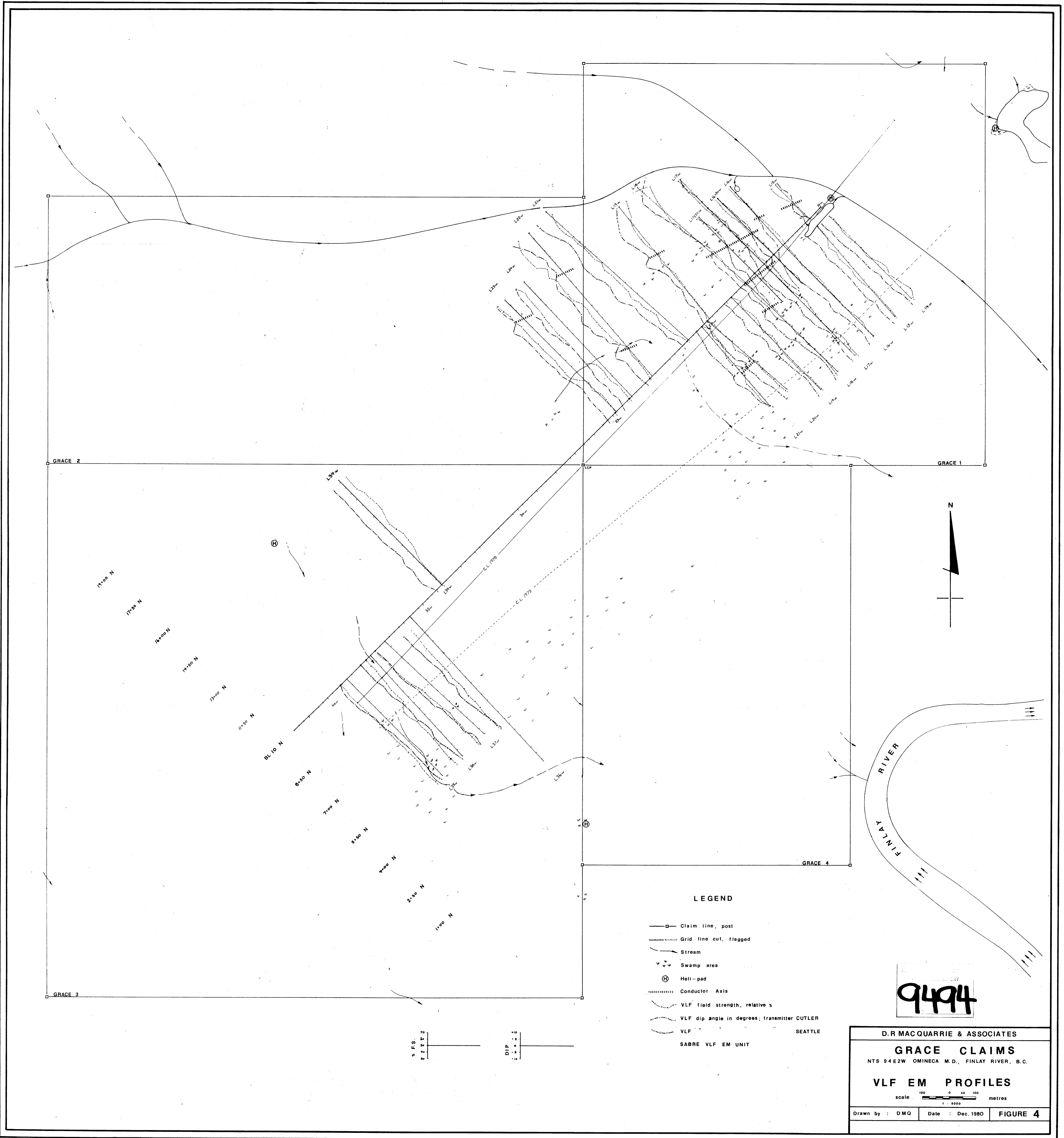
LEGEND

- Claim line, post
- Grid line cut, flagged
- Stream
- Swamp area
- Ⓜ Heli-pad
- Outcrop area
- Geologic contact defined, approximate
- Sample site

- 8 Brown to pink porphyritic syenite dykes
- 7 Andesite and lamprophyre dykes
- 6 Granodiorite
- 5 Skarn
- 4 Augite andesite
- 3 Pale grn. to grey, bedded volc. siltstone; 3a melasiltstone
- 2 Quartzite
- 1 Calcite marble

9494

D.R. MACQUARRIE & ASSOCIATES
GRACE CLAIMS
 NTS 94 E2W OMINICA M.D., FINLAY RIVER, B.C.
GEOLOGY MAP
 scale 100 0 100 metres
 1 : 5000
 Drawn by : DMQ Date : Dec. 1980 **FIGURE 3**



LEGEND

- Claim line, post
- Grid line cut, flagged
- Stream
- Swamp area
- ⊕ Heli-pad
- Conductor Axis
- ~ VLF field strength, relative %
- ~ VLF dip angle in degrees; transmitter CUTLER
- ~ VLF SEATTLE
- SABRE VLF EM UNIT

9494

D.R. MACQUARRIE & ASSOCIATES
GRACE CLAIMS
 NTS 94E2W OMINECA M.D., FINLAY RIVER, B.C.
VLF EM PROFILES
 scale 1 : 8000 metres
 Drawn by : DMG Date : Dec. 1980 **FIGURE 4**

