

85-206-13611
01/86

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,611

A GEOCHEMICAL REPORT
ON THE
GOLDEN PLUG MINERAL CLAIM

OSOYOOS MINING DIVISION
BRITISH COLUMBIA

LATITUDE 49° 18'N
LONGITUDE 119° 46'W

N.T.S.
82E/5W&E

BY

G.H. RAYNER, P. ENG.
G.H. RAYNER AND ASSOCIATES LTD.

WEST VANCOUVER, B.C.

MARCH 5, 1985.

TABLE OF CONTENTS

	Page
SUMMARY AND CONCLUSIONS.....	1
INTRODUCTION.....	1
LOCATION AND ACCESS.....	1
PROPERTY.....	2
HISTORY AND PREVIOUS WORK.....	2
GEOLOGICAL SETTING.....	2
GEOCHEMISTRY--METHOD.....	3
GEOCHEMISTRY--RESULTS AND DISCUSSION.....	4
REFERENCES.....	6
STATEMENT OF COSTS.....	7
CERTIFICATE.....	8

ILLUSTRATIONS

FIGURE 1.....	LOCATION MAP.....	following page	1
FIGURE 2.....	CLAIM MAP.....	" "	2
FIGURE 3.....	ARSENIC IN SOIL.....	" "	8
FIGURE 4.....	THALLIUM IN SOIL.....	" "	"
FIGURE 5.....	ZINC IN SOIL.....	" "	"
FIGURE 6.....	GOLD IN SOIL.....	" "	"
FIGURE 7.....	SILVER IN SOIL.....	" "	"
FIGURE 8.....	COPPER IN SOIL.....	" "	"
FIGURE 9	MERCURY IN SOIL.....	" "	"

APPENDIX I

GEOCHEMICAL ANALYTICAL RESULTS

APPENDIX II

GEOCHEMICAL STATISTICAL EVALUATIONS

SUMMARY AND CONCLUSIONS

During January, 1985, a limited soil geochemical survey was carried out over a portion of the Golden Plug claim.

The area surveyed covers the northern portion of a complex pipe-like body of rhyolite breccia located near Okanagan Falls, B.C.

The geochemical results showed a good positive response for zinc, thallium, and in part for arsenic and mercury. Copper and silver show values within the breccia that are distinctly below regional levels indicating either hydrothermal leaching of these elements or inherent low contents at this elevation in the breccia.

INTRODUCTION

The Golden Plug claim was located to cover a young, altered rhyolite breccia complex cutting Marron Tertiary Volcanics near Okanagan Falls, B.C.

The nearby Dusty Mac deposit provides the model used in evaluating the complex for epithermal precious metal mineralization.

A limited grid was laid out over the breccia pipe and 69 samples were collected for analysis. Analysis was done for thirteen elements. Of these, six elements showing useful patterns were plotted on plan maps.

LOCATION AND ACCESS

The property is located immediately southwest of the Twin (Nipit) Lakes about 15 km at 250 degrees azimuth from the settlement of Okanagan Falls, B.C. The specific location would be 49° 18' North Latitude; 119° 46' West Longitude.

Access to the claim is by good gravel road which branches to the south from Provincial Highway 3A about 13 km west of Kaleden, B.C. at a point opposite the access road to the Apex Mountain Ski Resort. This gravel road (the old Green Mt. road) crosses the claim about 3 km from the highway.

PROPERTY

The property consists of one twenty unit M.G.S. claim recorded in the name of G.H. Rayner and Associates Ltd. The expiry date is January 26, 1985.

HISTORY AND PREVIOUS WORK

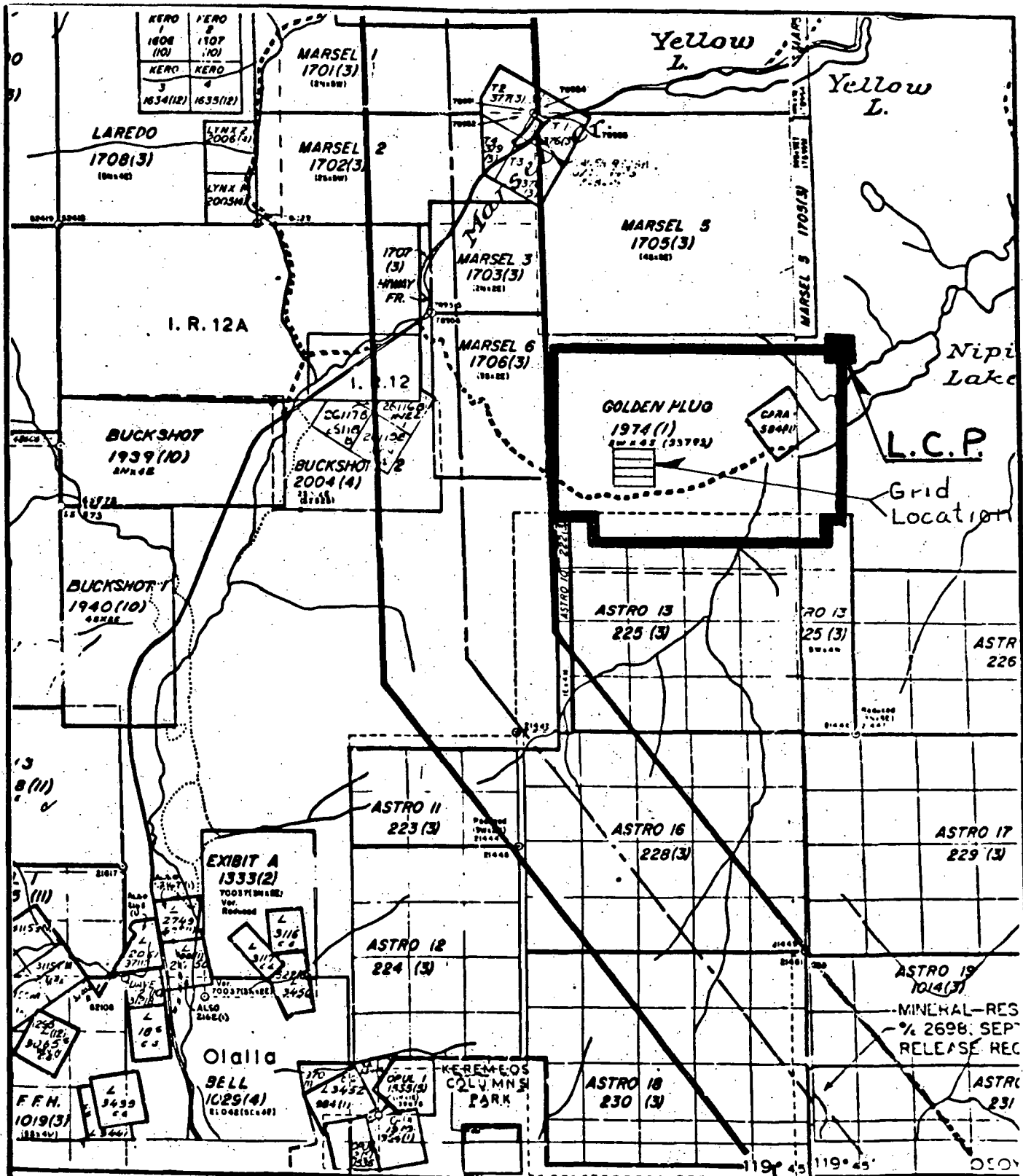
A few sloughed hand trenches and scattered, very old claim posts attest to limited interest in the exposures many years ago.

In recent decades, a couple of back-hoe pits were put down in areas of rhyolite talus. Probably the very white, bleached argillic altered material was being looked at for some industrial use since the cuts were made in areas where no bedrock was to be expected.

Later, in 1976, Union Oil studied the area in search of uranium. During this work an Induced Polarization Survey and limited geological work was carried out. No further work is known in the area until the present program.

GEOLOGICAL SETTING

The regional setting consists of a series of Tertiary extrusive rocks. These rocks mainly belong to the Marron and Marama Formations made up of various intermediate to basic flows and pyroclastics. The youngest



SCALE

1:50 000



CLAIM MAP

Golden Plug

Fig. 2

82E5E-W

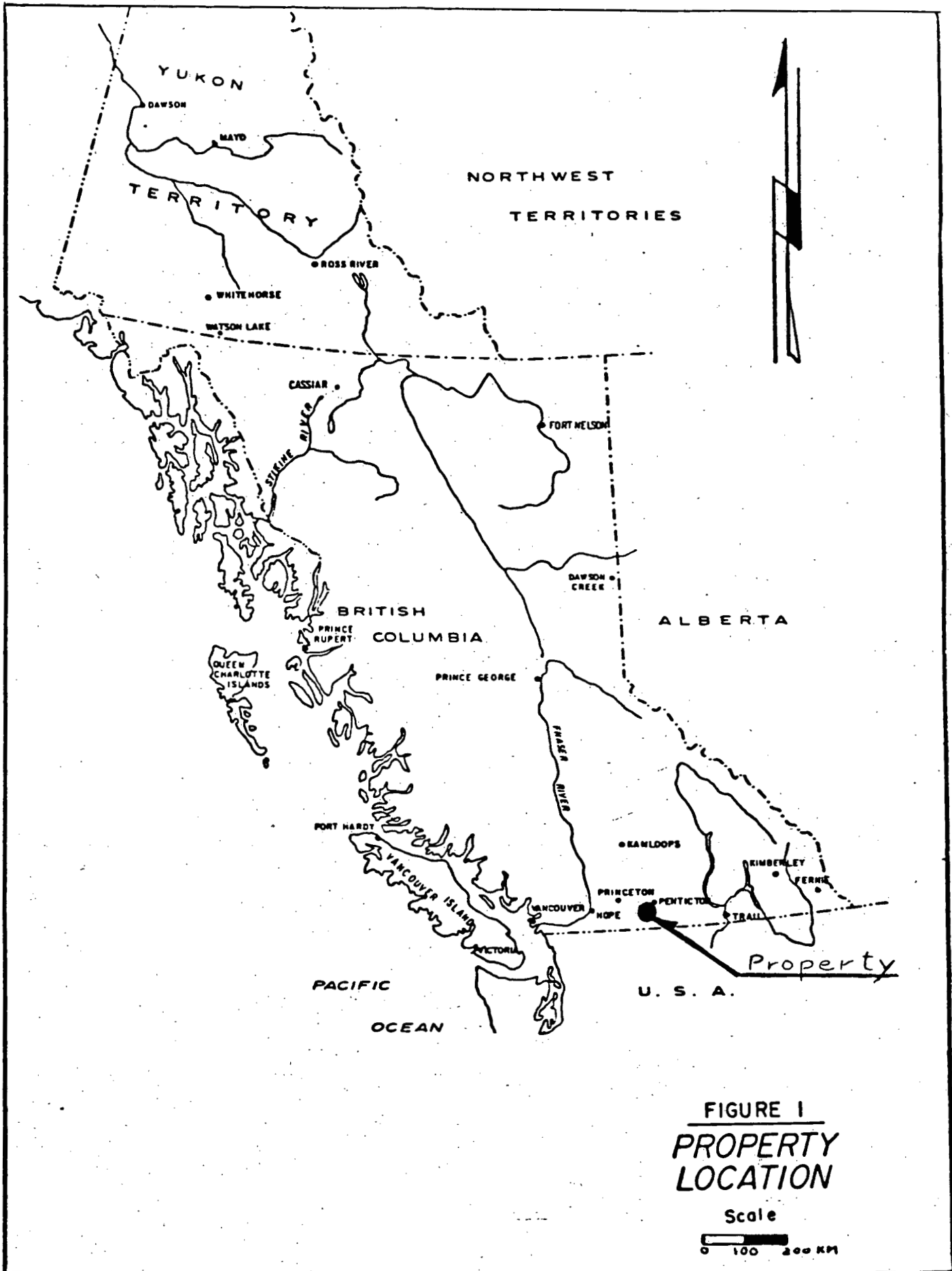
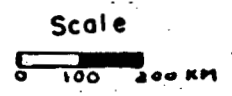


FIGURE 1
PROPERTY
LOCATION



major extrusive unit in the area is the White Lake Formation consisting of more acid breccias and various derived sediments.

The Dusty Mac Mine at Okanagan Falls has been regarded as an epithermal deposit related to the late stage of White Lake rhyolite extrusion.

Rhyolite extrusive breccias previously regarded as White Lake in age occur north of Twin Lakes on the east side of the Golden Plug claim. The transgressive breccia complex or pipe on the Golden Plug was believed by the writer to be the source of the White Lake material in this area. An induced polarization anomaly was known to exist on the south side of the Golden Plug breccia from previous work. Hence the Golden Plug altered breccia complex was regarded as permissive for precious metal mineralization following the Dusty Mac model.

More recent age dating work has varied this picture somewhat. Recent dating of the extrusive rhyolite breccia north of Twin Lakes has given an age of 13 million years as opposed to dates of about 50 million years found for White Lake. This younger unit, for which the Golden Plug pipe appears to be the source, has now been named the Olalla Rhyolite (Church, 1979).

GEOCHEMISTRY--METHOD

The 69 soil samples were collected on a chained grid at 50 meter spacing with spacing reduced to 25 meters in some areas.

At most sites, the A₂ was sampled. B₂ was taken at the few sites where it was available. Some sites had only thin soil development and yielded only C₃ zone material.

All samples were dried and screened to minus eighty mesh.

Analyses were carried out by Min-En Laboratories Ltd. at 705 W. 15th St., North Vancouver, B.C. Analysis for Au and Tl was by Atomic Absorption following aqua regia digestion. Hg was done by flameless A.A. Ten other elements, Ag, As, Cu, Mo, Pb, Sb, Sr, U, Zn and Ba were run by Inductively Coupled Argon Plasma (I.C.P.). The results are tabulated in Appendix I.

A simple statistical analysis was run by computer on the results for Ag, As, Cu, Hg, and Tl. The results are presented in Appendix II and were used as a basis for the contoured maps.

Contour levels are shown at the mean value and at one and two standard deviations above the mean.

GEOCHEMISTRY--RESULTS AND DISCUSSION

The area sampled contains soils derived from two distinctly different rock units, the central rhyolite breccia and the intermediate volcanics surrounding it. For some of the analysed elements there were no significant patterns demonstrated. For most of these elements no plan plot was made up.

Gold (Fig. 6) returned consistently low values (10 ppb or less) through the grid regardless of underlying rock type.

Zinc (Fig. 5) showed clearly anomalous patterns closely following the outline of the rhyolite pipe. Zinc values over the intermediate volcanics were usually less than 100 ppm. Over the rhyolite, zinc was generally in excess of 100 ppm, commonly in excess of 160 ppm and returned a spot high of 270 ppm.

Thallium (Fig. 4) is distinctly anomalous over the rhyolite pipe. Over the intermediate volcanics thallium values were nearly all less than 20 ppb or essentially undetectable. Within the rhyolite, values mainly fall above the 47.69 ppb contour, some areas are above the 236.83 ppb contour and one site (500 ppb) is above the 331.42 ppb contour. This pattern is of particular interest in view of the close correlation between thallium and economic precious metal mineralization that has been noted on various epithermal deposits in Nevada and other parts of the western U.S.A.

Mercury (Fig. 9) shows a fairly random distribution with no sharply anomalous areas and no clear relation to geology. There is a weak tendency for higher values to occur on or near the outer border of the rhyolite pipe.

Arsenic (fig. 3) values are zero over most of the intermediate volcanic area and over a large part of the breccia pipe. Values above the 3.12 ppm contour, and in three places, above the 14.04 contour show a rough relation to the contact area between the two rock units. Values above the 19.5 ppm contour occur in two areas roughly straddling the contact on the east side of the breccia.

Silver (Fig. 7) and Copper (Fig. 8) both show very similar distribution patterns. Both elements have distinctly lower concentrations over the rhyolite than the essentially background levels over the intermediate volcanics. It is uncertain whether this reflects a leaching of these elements from the breccia by hydrothermal fluids or is simply due to a lower original copper-silver content at this elevation in the pipe.

Respectfully submitted,


G.H. Rayner, P. Eng.

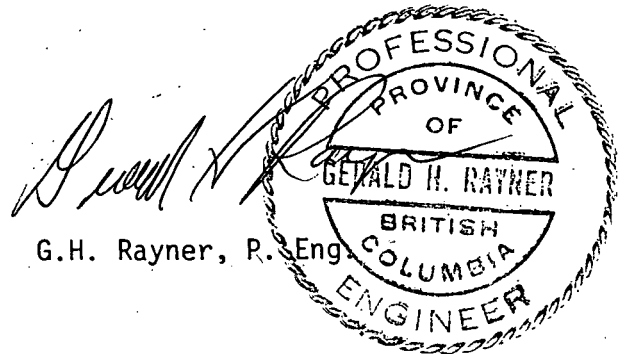


REFERENCES

- Church, B.N.; 1979, Geology of the Particular Tertiary Outlier,
B.C. Dept. of Mines and Pet. Res. Revised Prelim. Map 35.
-; 1973, Geology of the White Lake Basin, B.C. Dept.
of Mines and Pet. Res. Bull. 61.
- Little, H.W.; 1961, Geology of the Kettle River Area (West Half) B.C.
G.S.C. Map 15-1961.
- Mullan, A.W.; 1977, Report on the Induced Polarization and Resistivity
Survey, Twin Claims, Osoyoos M.D. Assessment Report # 6506.
- Rayner, G.H.; 1978, A geological, Geophysical and Geochemical Report
on the Twin 3, 5, 6, 7, and 8 Mineral Claims, Osoyoos M.D.
Assessment Report # 6945.

STATEMENT OF COSTS

G.H. Rayner, P. Eng., Geological Consultant
Jan. 18, 1985-----Travel to property
Jan. 19-22-----Grid layout and sample collection
Jan. 23-----Travel to Vancouver
Total--6 days @\$450.00/day \$2700.00
Truck costs 180.40
Meals and lodging (Jan. 18-22, 1985) 323.16
Geochemical analyses
69 samples for Hg, Au, Tl, Ag, As, Sb, Cu, Mo, Pb,
Sr, U, Ba and Zn.
Unit cost \$21.10 for 69 samples 1455.90
Statistical analysis for results 50.25
Report preparation
G.H. Rayner, P. Eng. 3 days @\$450.00/day 1350.00
Materials and supplies 86.92
Total \$6146.63



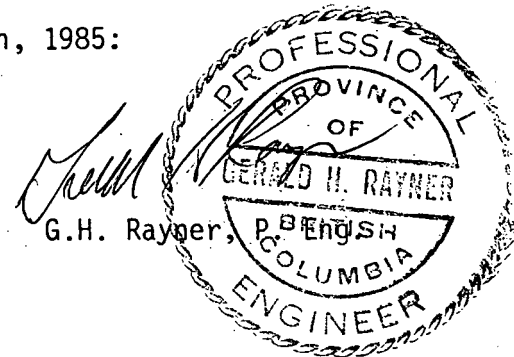
G.H. Rayner, P. Eng.

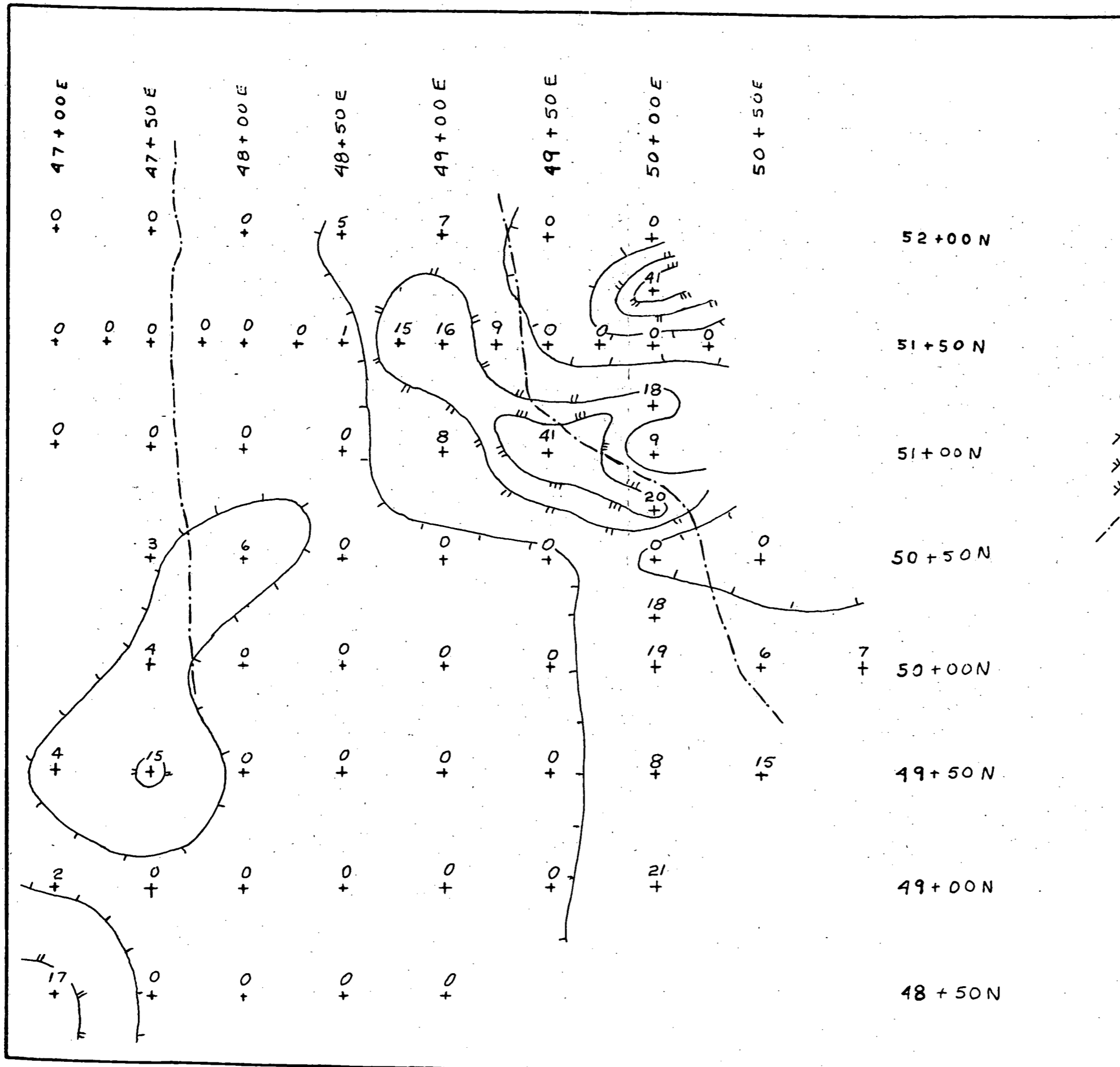
CERTIFICATE

I, Gerald H. Rayner do hereby certify that:

1. I am a consulting geological engineer with offices at 626 Duchess Avenue, West Vancouver, B.C.
2. I am a graduate of the University of British Columbia (B. Sc. Geology).
3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
4. I have practised my profession since 1958 primarily in Western North America and the South Pacific.
5. This report is based on field work carried out by the writer during the period January 19, 1985 to January 23, 1985, on several previous examinations and on the references cited.
6. I am the major shareholder in G.H. Rayner and Associates Ltd., the owner of the property.

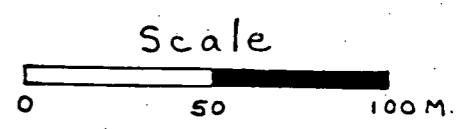
Dated at West Vancouver, B.C. this 5th day of March, 1985:





LEGEND

- + Arsenic Value - p.p.m
- / 3.12 p.p.m Contour
- ∩ 14.09 p.p.m Contour
- ∩ 19.50 p.p.m Contour
- - - Approximate Contact of Rhyolite Breccia Complex

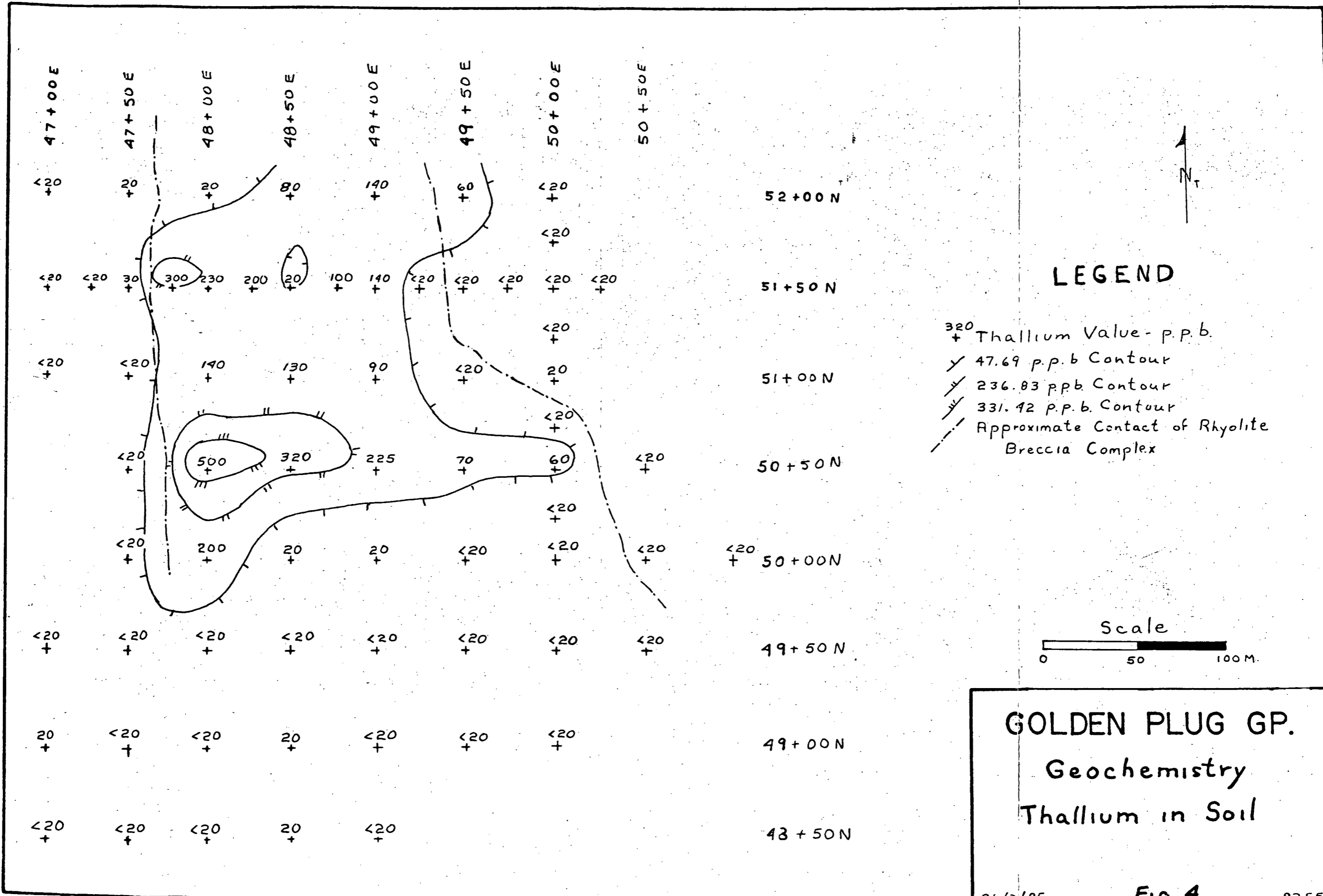


GOLDEN PLUG GP.
 Geochemistry
 Arsenic in Soil

26/3/85

Fig. 3

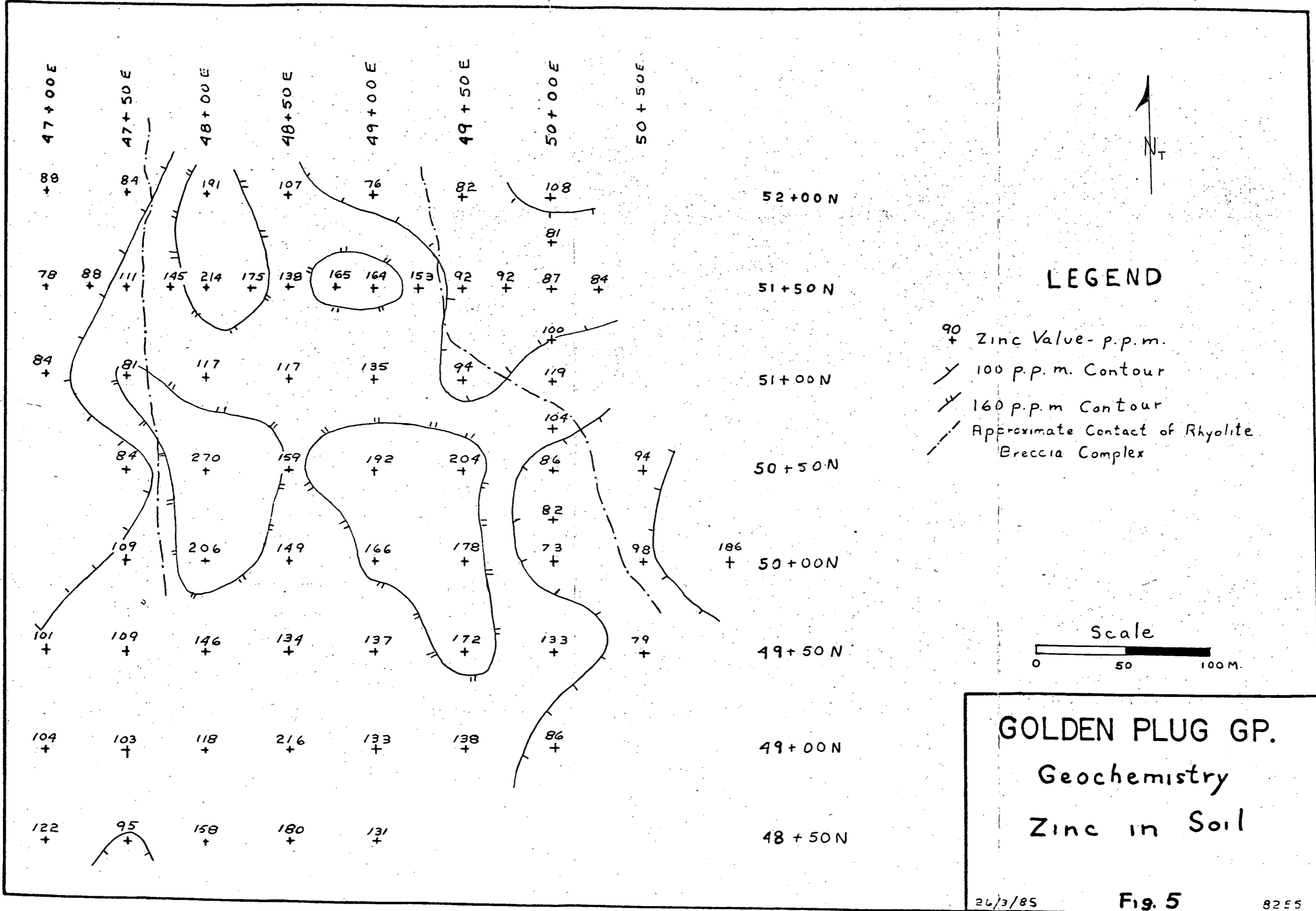
8255



26/3/85

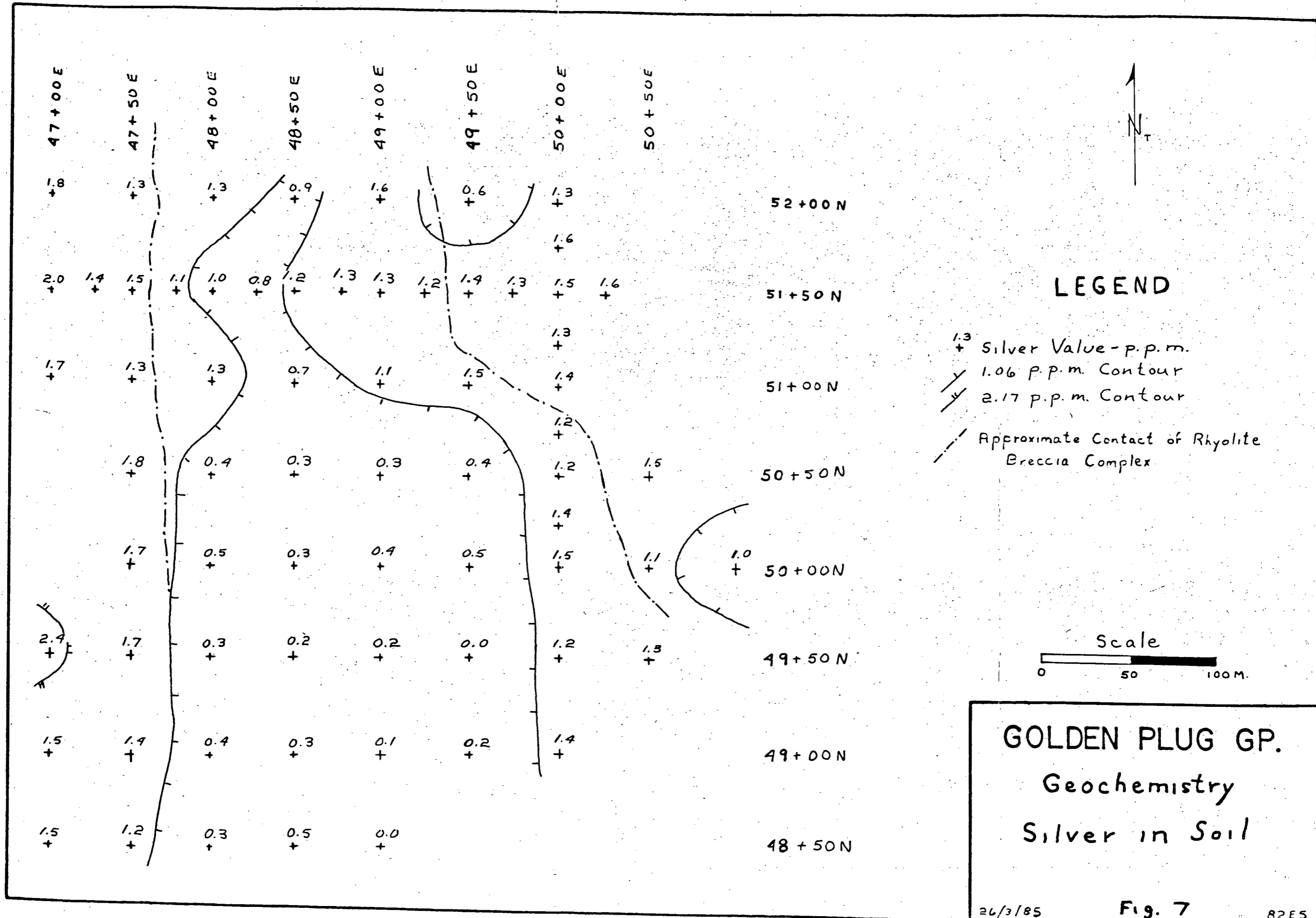
Fig. 4

82E5



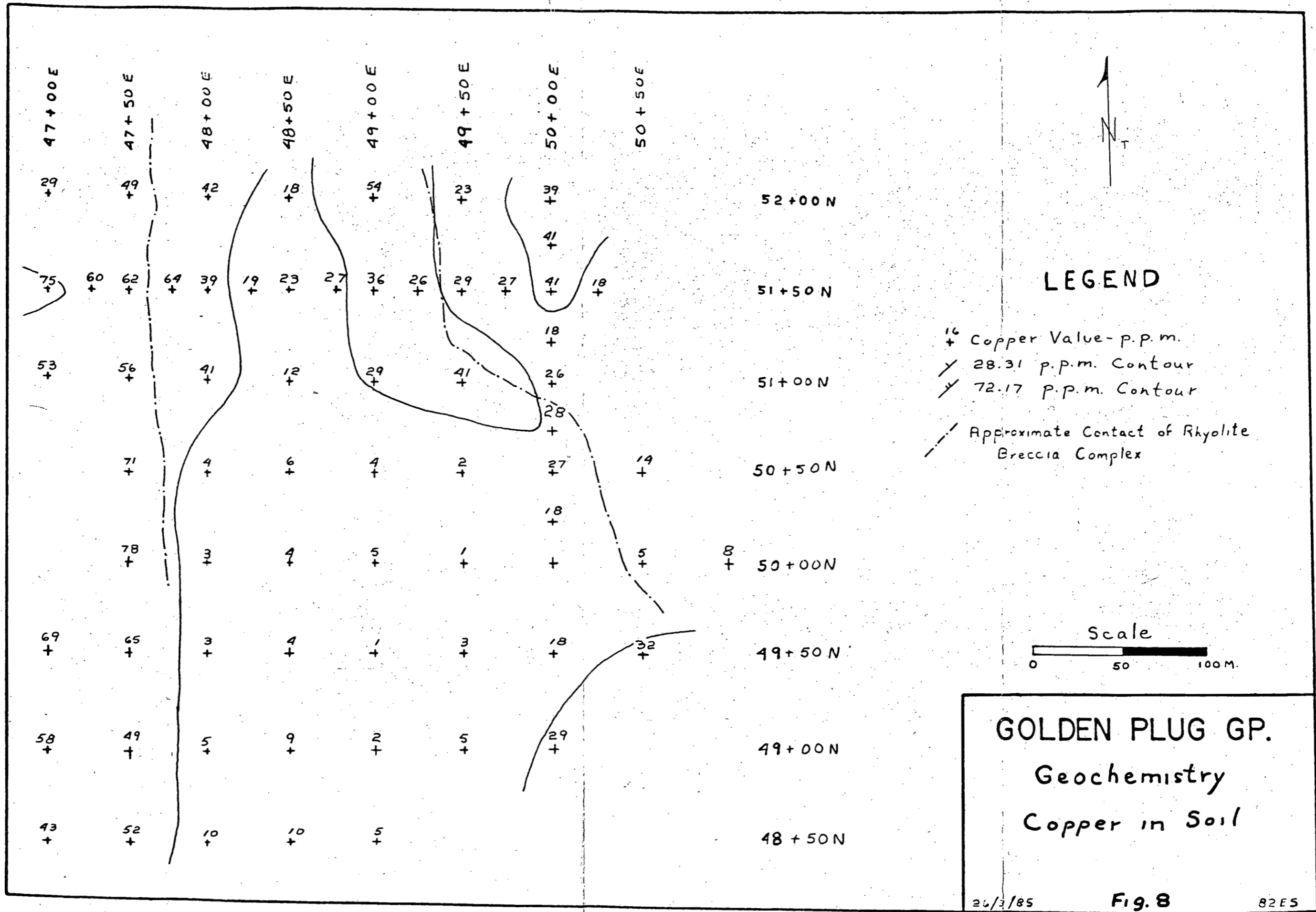
26/3/85

Fig. 5



26/3/85

Fig. 7



47+00E

47+50E

48+00E

48+50E

49+00E

49+50E

50+00E

50+50E

52+00N

51+50N

51+00N

50+50N

50+00N

49+50N

49+00N

48+50N

29+

49+

42+

18+

54+

23+

39+

75+

60+

62+

64+

39+

19+

23+

27+

36+

26+

29+

27+

41+

18+

53+

56+

41+

12+

29+

41+

18+

26+

28+

71+

4+

6+

4+

2+

27+

19+

78+

3+

4+

5+

1+

18+

5+

69+

65+

3+

4+

1+

3+

18+

32+

58+

49+

5+

9+

2+

5+

29+

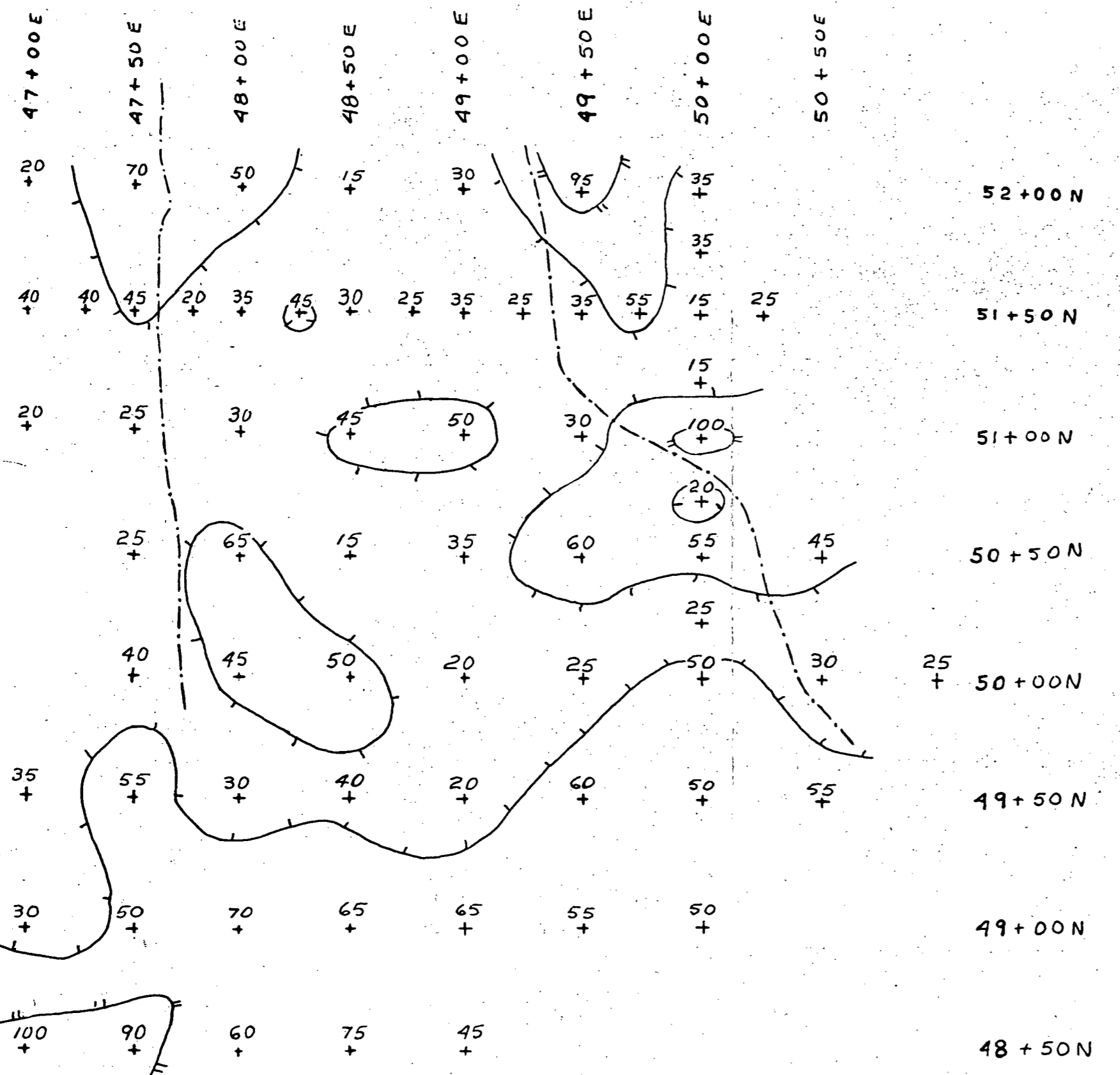
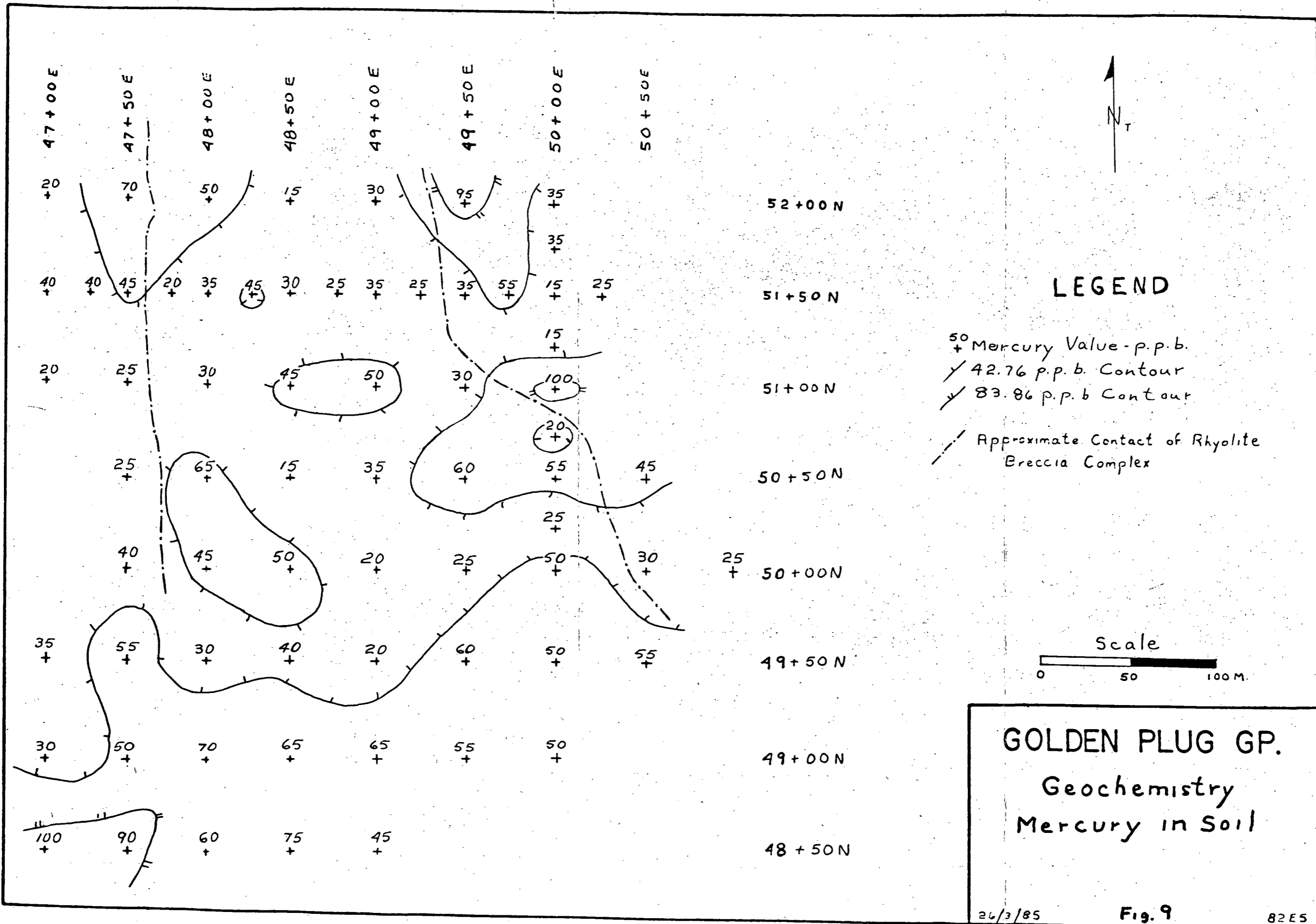
43+

52+

10+

10+

5+



APPENDIX I

COMPANY: G.H. RAYNER
 PROJECT No: GOLDEN PLUG
 ATTENTION: G.H. RAYNER

MIN-EN LABS ICP REPORT
 705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524 *TYPE SOIL GEOCHEM*

(ACT:GEO31) PAGE 1 OF 2
 FILE No: 5-45S/P1+2
 DATE: FEBRUARY 15, 1985

(REPORT VALUES IN PPM)	AG	AS	CU	MO	PB	SB	SR	U	ZN	BA	HG-PPB	AU-PPB
48+50N 47+00E	1.5	17	43	3	31	3	276	48	122	395	100	5
48+50N 47+50E	1.2	0	52	2	22	0	314	46	95	256	90	5
48+50N 48+00E	.3	0	10	1	12	0	154	9	158	309	60	5
48+50N 48+50E	.5	0	10	2	18	0	145	13	180	345	75	5
48+50N 49+00E	.0	0	5	2	14	0	75	1	131	175	45	5
49+00N 47+00E	1.5	2	58	2	28	1	298	47	104	357	30	5
49+00N 47+50E	1.4	0	49	2	24	1	300	50	103	264	50	5
49+00N 48+00E	.4	0	5	1	15	0	89	6	118	213	70	5
49+00N 48+50E	.3	0	9	1	14	0	146	10	216	331	65	10
49+00N 49+00E	.1	0	2	1	12	0	64	0	133	140	65	5
49+00N 49+50E	.2	0	5	1	7	0	84	3	138	159	55	5
49+00N 50+00E	1.4	21	29	2	22	3	327	30	86	169	50	5
49+50N 47+00E	2.4	4	69	3	35	3	525	75	106	291	35	5
49+50N 47+50E	1.7	15	65	2	23	2	456	58	109	338	55	5
49+50N 48+00E	.3	0	3	1	15	0	123	9	146	152	30	<5
49+50N 48+50E	.2	0	4	2	16	0	159	12	134	212	40	<5
49+50N 49+00E	.2	0	1	1	10	0	78	4	137	140	20	5
49+50N 49+50E	.0	0	3	2	18	0	93	6	172	216	60	<5
49+50N 50+00E	1.2	8	18	2	25	2	158	23	133	228	50	5
49+50N 50+50E	1.3	15	32	2	25	3	347	30	79	166	55	5
50+00N 47+50E	1.7	4	78	3	27	3	624	64	108	532	40	5
50+00N 48+00E	.5	0	3	3	22	1	126	12	206	238	45	5
50+00N 48+50E	.3	0	4	2	22	1	127	11	149	233	50	5
50+00N 49+00E	.4	0	5	2	20	1	161	11	166	530	20	5
50+00N 49+50E	.5	0	1	1	17	1	129	11	198	165	25	5
50+00N 50+00E	1.5	19	39	2	19	3	147	21	73	211	50	5
50+00N 50+50E	1.1	6	5	2	24	2	162	36	98	221	30	5
50+00N 51+00E	1.0	7	8	2	27	2	151	29	186	337	25	5
50+50N 47+50E	1.8	3	71	2	24	2	384	59	85	322	25	5
50+50N 48+00E	.4	6	4	3	28	1	161	15	270	228	65	5
50+50N 48+50E	.3	0	6	2	21	0	110	9	159	183	15	5
50+50N 49+00E	.3	0	4	2	22	0	103	4	192	306	35	5
50+50N 49+50E	.4	0	2	2	18	0	113	9	204	177	60	10
50+50N 50+00E	1.2	0	27	1	8	1	226	22	86	216	55	5
50+50N 50+50E	1.5	0	14	1	8	1	403	43	94	315	45	5
51+00N 47+00E	1.7	0	53	3	28	0	377	54	84	285	20	10
51+00N 47+50E	1.3	0	56	2	32	1	342	45	184	271	25	5
51+00N 48+00E	1.3	0	41	3	26	0	358	44	147	334	30	5
51+00N 48+50E	.7	0	12	2	25	0	170	16	127	243	45	5
51+00N 49+00E	1.1	8	20	2	28	3	202	25	135	221	50	5
51+00N 50+00E	1.4	9	26	2	16	1	304	28	119	211	100	5
51+50N 47+00E	2.0	0	75	3	42	2	562	66	78	262	40	10
51+50N 47+25E	1.4	0	60	3	24	0	356	45	88	237	40	5
51+50N 47+50E	1.5	0	62	2	21	1	339	49	111	297	45	10
51+50N 47+75E	1.1	0	64	2	31	2	249	39	145	291	20	5
51+50N 48+00E	1.0	0	39	3	36	1	286	42	214	325	35	5
51+50N 48+25E	.8	0	19	4	35	1	183	23	175	265	45	5
51+50N 48+50E	1.2	1	23	2	21	1	186	22	138	240	30	5
51+50N 48+75E	1.3	15	27	2	26	3	207	28	165	175	25	10
51+50N 49+00E	1.3	16	36	2	26	3	271	29	164	278	35	5
51+50N 49+25E	1.2	9	26	3	25	2	212	25	153	826	25	5
51+50N 49+50E	1.4	0	29	1	4	3	261	25	92	112	35	5
51+50N 49+75E	1.3	0	27	2	19	2	239	23	92	156	55	5
51+50N 50+00E	1.5	0	41	2	12	4	312	27	87	166	15	5
51+50N50+25E 40M	1.6	0	18	0	8	2	405	32	84	113	25	<5
52+00N 47+00E	1.8	0	29	2	22	0	245	37	88	219	20	5
52+00N 47+50E	1.3	0	49	3	34	1	246	38	84	270	70	5
52+00N 48+00E	1.3	0	42	3	27	0	328	49	191	240	50	5
52+00N 48+50E	.9	5	18	2	25	1	185	21	107	181	15	5
52+00N 49+00E	1.6	7	54	1	12	4	170	23	76	94	30	5

COMPANY: G.H. RAYNER
PROJECT No: GOLDEN PLUG
ATTENTION: G.H. RAYNER

MIN-EN LABS ICP REPORT
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

(ACT:GEO31) PAGE 1 OF 2
FILE No: 5-455/P3

(604)980-5814 OR (604)988-4524

TYPE SOIL GEOCHEM

DATE: FEBRUARY 15, 1985

(REPORT VALUES IN PPM)	AG	AS	CU	MO	PB	SB	SR	U	ZN	BA	HG-PPB	AU-PPB
52+00N49+50E 40M	.6	0	23	2	10	0	368	23	82	95	95	5
52+00N 50+00E	1.3	0	39	1	4	1	311	25	108	216	35	10
50+25N50+00E	1.4	0	18	3	10	0	139	18	82	192	25	5
50+75N50+00E	1.2	1	28	2	6	1	180	23	104	164	20	5
51+25N50+00E	1.3	2	18	1	9	1	240	22	100	215	15	5
51+75N 50+00E	1.6	8	41	1	7	2	318	30	81	83	35	5
51+00N 49+50E	1.5	1	41	2	39	1	228	27	94	126	30	5

COMPANY: G.H. RAYNER
PROJECT No: GOLDEN PLUG
ATTENTION: G.H. RAYNER

MIN-EN LABS ICP REPORT
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524 *TYPE SOIL GEOCHEM*

(ACT:GEO31) PAGE 2 OF 2
FILE No: S-455/P1+2
DATE: FEBRUARY 15, 1985

(REPORT VALUES IN PPM) TL-PPB

48+50N 47+00E	<20
48+50N 47+50E	<20
48+50N 48+00E	<20
48+50N 48+50E	20
48+50N 49+00E	<20
49+00N 47+00E	20
49+00N 47+50E	<20
49+00N 48+00E	<20
49+00N 48+50E	20
49+00N 49+00E	<20
49+00N 49+50E	<20
49+00N 50+00E	<20
49+50N 47+00E	<20
49+50N 47+50E	<20
49+50N 48+00E	<20
49+50N 48+50E	<20
49+50N 49+00E	<20
49+50N 49+50E	<20
49+50N 50+00E	<20
49+50N 50+50E	<20
50+00N 47+50E	<20
50+00N 48+00E	200
50+00N 48+50E	20
50+00N 49+00E	20
50+00N 49+50E	<20
50+00N 50+00E	<20
50+00N 50+50E	<20
50+00N 51+00E	<20
50+50N 47+50E	<20
50+50N 48+00E	500
50+50N 48+50E	320
50+50N 49+00E	225
50+50N 49+50E	70
50+50N 50+00E	60
50+50N 50+50E	<20
51+00N 47+00E	<20
51+00N 47+50E	<20
51+00N 48+00E	140
51+00N 48+50E	130
51+00N 49+00E	90
51+00N 50+00E	20
51+50N 47+00E	<20
51+50N 47+25E	<20
51+50N 47+50E	30
51+50N 47+75E	300
51+50N 48+00E	230
51+50N 48+25E	200
51+50N 48+50E	20
51+50N 48+75E	100
51+50N 49+00E	140
51+50N 49+25E	<20
51+50N 49+50E	<20
51+50N 49+75E	<20
51+50N 50+00E	<20
51+50N 50+25E 40M	<20
52+00N 47+00E	<20
52+00N 47+50E	20
52+00N 48+00E	20
52+00N 48+50E	80
52+00N 49+00E	140

COMPANY: G.H. RAYNER
PROJECT No: GOLDEN PLUG
ATTENTION: G.H. RAYNER

MIN-EN LABS ICP REPORT
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

(ACT:GEO31) PAGE 2 OF 2
FILE No: 5-458/P3
DATE: FEBRUARY 15, 1985

(REPORT VALUES IN PPM)	TL-PPB
52+00N49+50E 40M	60
52+00N 50+00E	<20
50+25N50+00E	<20
50+75N50+00E	<20
51+25N50+00E	<20
51+75N 50+00E	<20
51+00N 49+50E	<20

APPENDIX II

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON TL

COMPANY: G. H. RAYNER & ASSOCIATES
 ATTN: G. H. RAYNER
 PROJECT: GOLDEN PLUG
 FILE#: 5-455

DATE: MARCH 20/85
 SAMPLE TYPE: SOIL
 ANALYSIS TYPE: GEOCHEM

NUMBER OF SAMPLES: 67
 MAXIMUM VALUE: 500.00 PPB
 MINIMUM VALUE: 20.00 PPB
 MEAN: 47.69 PPB
 STD. DEVIATION: 94.58 PPB
 COEFF. OF VARIATION: 1.98

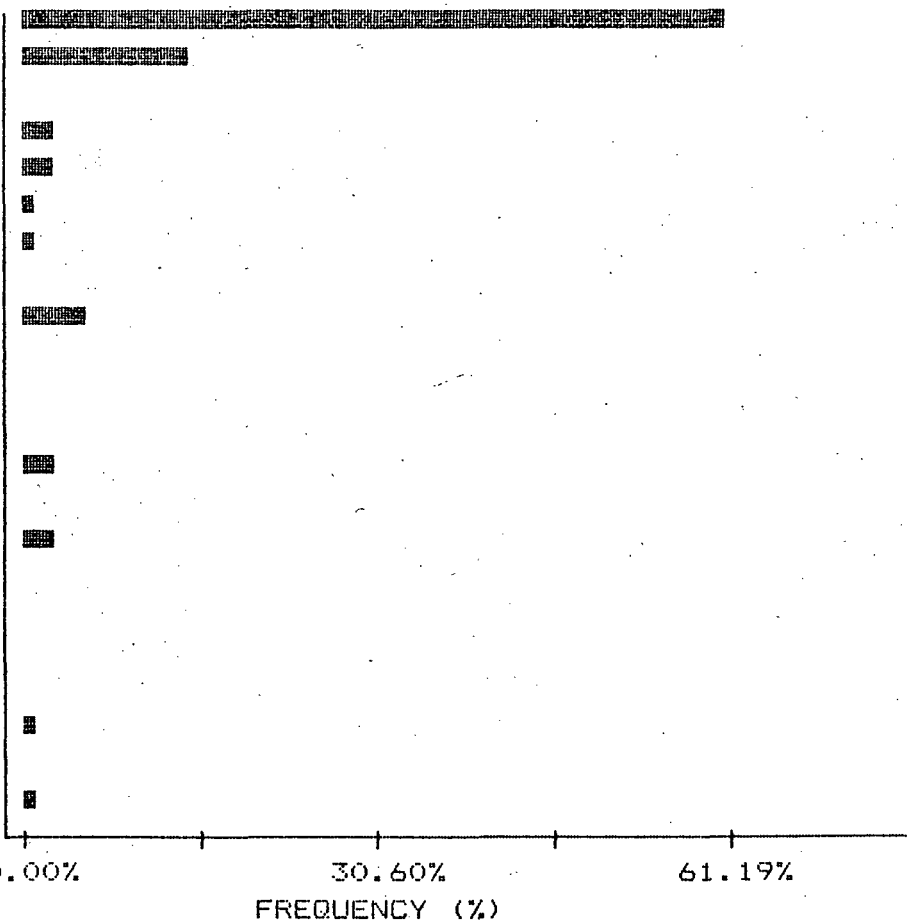
5 HIGHEST TL VALUES:
 50+50N-48+00E 500.00 PPB
 50+50N-48+50E 320.00 PPB
 51+50N-47+75E 300.00 PPB
 51+50N-48+00E 230.00 PPB
 50+50N-49+00E 225.00 PPB

HISTOGRAM FOR TL

CLASS INTERVAL = 15

MID CLASS	CLASS
PPM	%

< 20.00	61.19
27.50	14.93
42.50	0.00
57.50	2.99
72.50	2.99
87.50	1.49
102.50	1.49
117.50	0.00
132.50	5.97
147.50	0.00
162.50	0.00
177.50	0.00
192.50	2.99
207.50	0.00
222.50	2.99
237.50	0.00
252.50	0.00
267.50	0.00
282.50	0.00
297.50	1.49
312.50	0.00
> 320.00	1.49



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON TL

COMPANY: G. H. RAYNER & ASSOCIATES

DATE: MARCH 20/85

ATTN: G.H. RAYNER

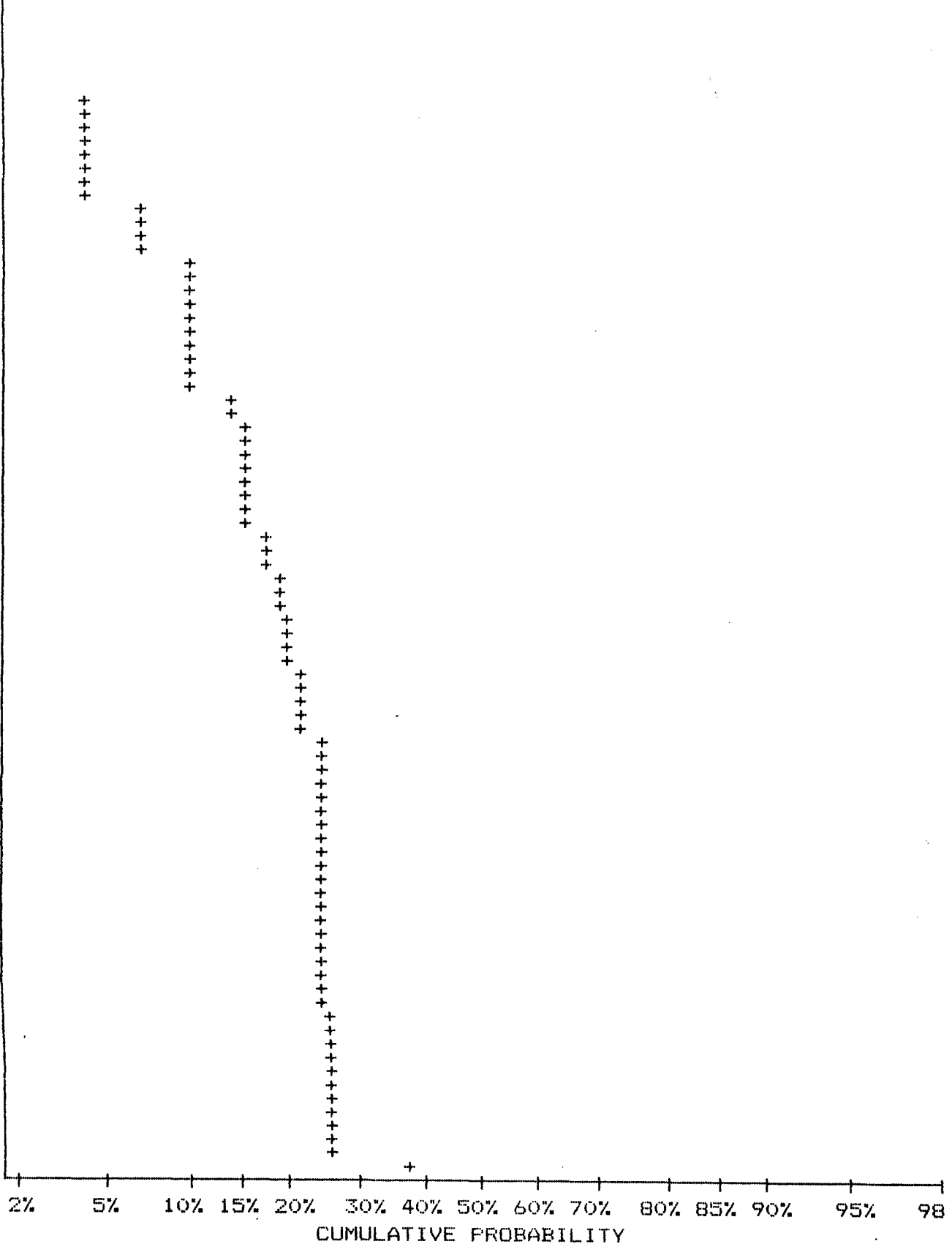
SAMPLE TYPE: SOIL

PROJECT: GOLDEN PLUG

ANALYSIS TYPE: GEOCHEM

FILE#: 5-455

UPPER LIMIT (PPB)	CUMMUL. FREQ. (%)
295.82	4.48
276.08	4.48
257.64	4.48
240.46	4.48
224.40	7.46
209.42	7.46
195.44	10.45
182.40	10.45
170.22	10.45
158.86	10.45
148.26	10.45
138.36	14.93
129.14	16.42
120.52	16.42
112.46	16.42
104.96	16.42
97.96	17.91
91.42	17.91
85.32	19.40
79.62	20.90
74.30	20.90
69.34	22.39
64.72	22.39
60.40	22.39
56.36	25.37
52.60	25.37
49.10	25.37
45.82	25.37
42.76	25.37
39.90	25.37
37.24	25.37
34.76	25.37
32.44	25.37
30.28	25.37
28.26	26.87
26.36	26.87
24.60	26.87
22.96	26.87
21.44	26.87
20.00	38.81



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON AG

COMPANY: G. H. RAYNER & ASSOCIATES
 ATTN: G.H. RAYNER
 PROJECT: GOLDEN PLUG
 FILE#: S-455

DATE: MARCH 20/85
 SAMPLE TYPE: SOIL
 ANALYSIS TYPE: GEOCHEM

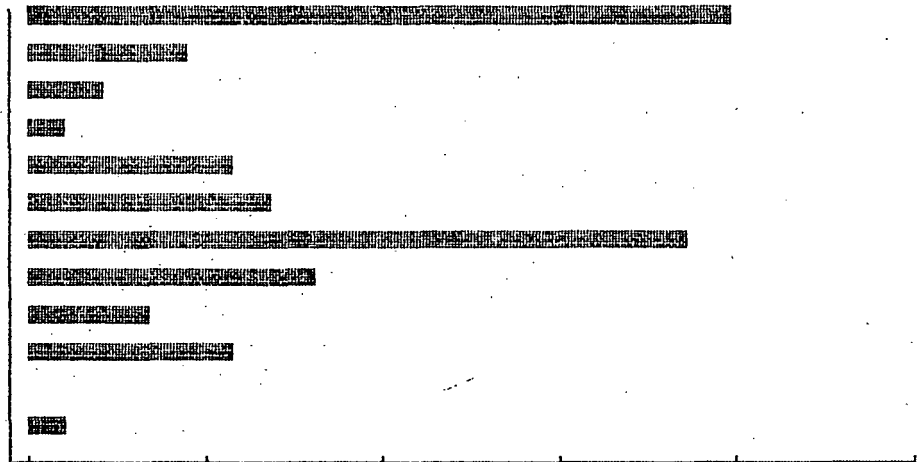
NUMBER OF SAMPLES: 67
 MAXIMUM VALUE: 2.40 PPM
 MINIMUM VALUE: .10 PPM
 MEAN: 1.06 PPM
 STD. DEVIATION: .56 PPM
 COEFF. OF VARIATION: .53

5 HIGHEST AG VALUES:
 49+50N-47+00E 2.40 PPM
 51+50N-47+00E 2.00 PPM
 50+50N-47+50E 1.80 PPM
 52+00N-47+00E 1.80 PPM
 49+50N-47+50E 1.70 PPM

HISTOGRAM FOR AG

CLASS INTERVAL = .15

MID CLASS	CLASS
PPM	%
< .50	25.37
.57	5.97
.72	2.99
.87	1.49
1.02	7.46
1.17	8.96
1.32	23.88
1.47	10.45
1.62	4.48
1.77	7.46
1.92	0.00
> 2.00	1.49



0.00%

12.69%

25.37%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 990-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON AG

COMPANY: G. H. RAYNER & ASSOCIATES

DATE: MARCH 20/85

ATTN: G. H. RAYNER

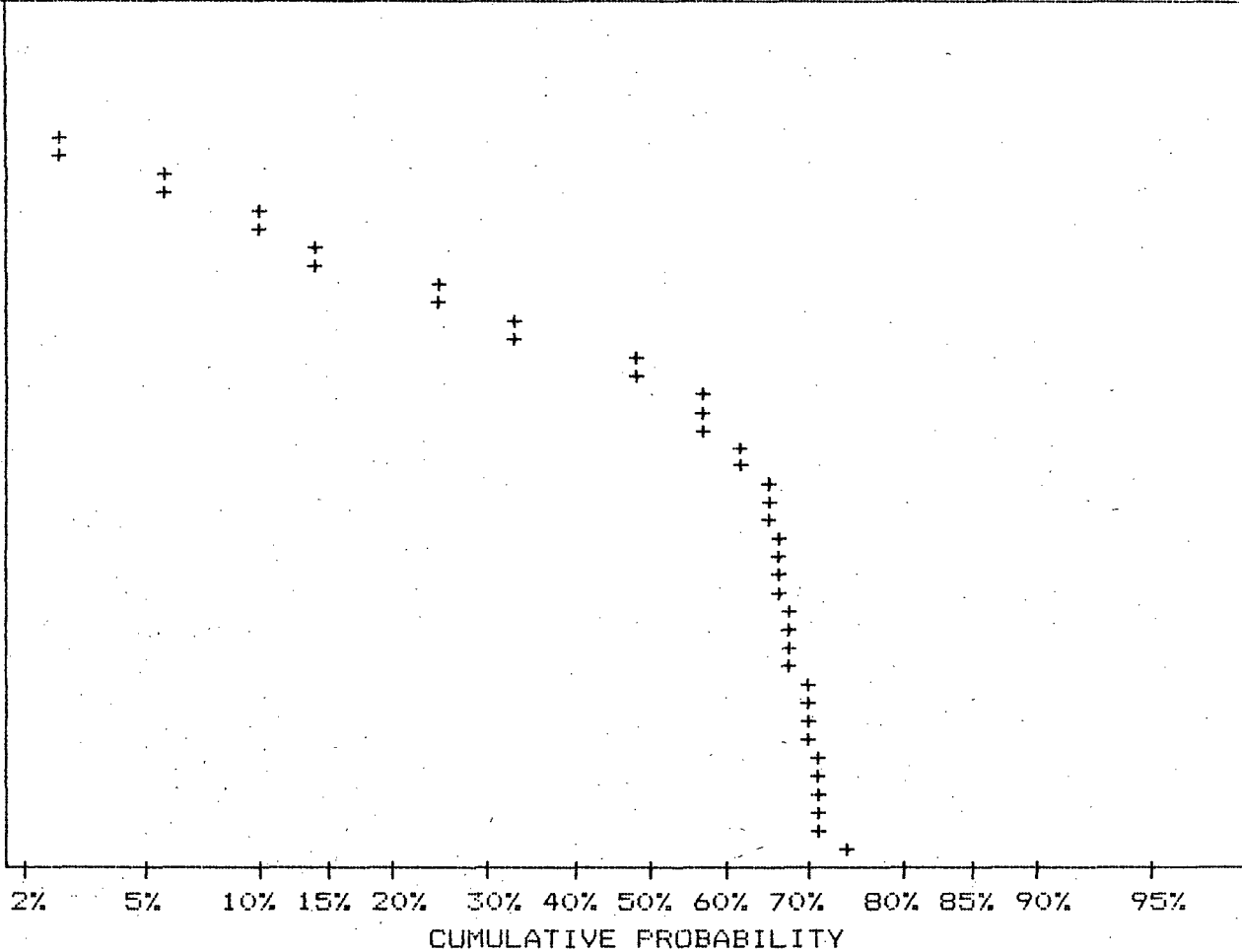
SAMPLE TYPE: SOIL

PROJECT: GOLDEN PLUG

ANALYSIS TYPE: GEOCHEM

FILE#: 5-455

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
1.86	2.99
1.73	5.97
1.62	10.45
1.51	14.93
1.41	25.37
1.31	34.33
1.23	49.25
1.15	58.21
1.07	62.69
1.00	65.67
.93	65.67
.87	67.16
.81	67.16
.76	68.66
.71	68.66
.66	70.15
.61	70.15
.57	71.64
.54	71.64
.50	74.63



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON AS

COMPANY: G. H. RAYNER & ASSOCIATES
 ATTN: G. H. RAYNER
 PROJECT: GOLDEN PLUG
 FILE#: 5-455

DATE: MARCH 20/85
 SAMPLE TYPE: SOIL
 ANALYSIS TYPE: GEOCHEM

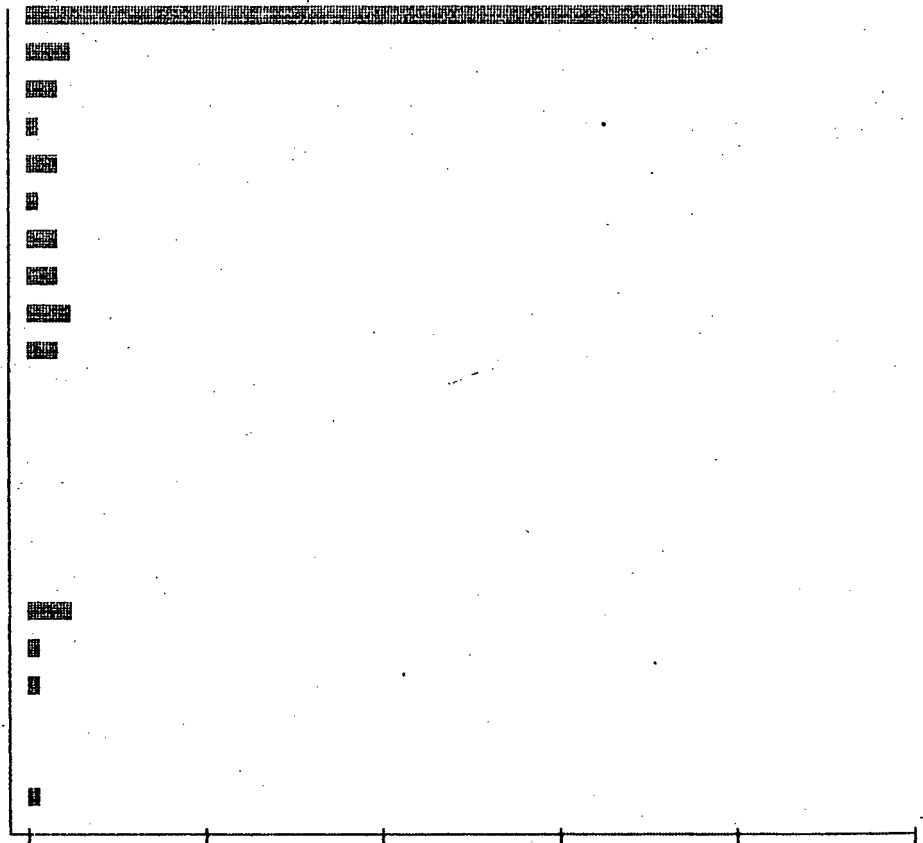
NUMBER OF SAMPLES: 67
 MAXIMUM VALUE: 21.00 PPM
 MINIMUM VALUE: 1.00 PPM
 MEAN: 3.12 PPM
 STD. DEVIATION: 5.46 PPM
 COEFF. OF VARIATION: 1.75

5 HIGHEST AS VALUES:
 49+00N-50+00E 21.00 PPM
 50+00N-50+00E 19.00 PPM
 48+50N-47+00E 17.00 PPM
 51+50N-49+00E 16.00 PPM
 49+50N-47+50E 15.00 PPM

HISTOGRAM FOR AS

CLASS INTERVAL = .9

MID CLASS	CLASS
PPM	%
< 1.00	64.18
1.45	4.48
2.35	2.99
3.25	1.49
4.15	2.99
5.05	1.49
5.95	2.99
6.85	2.99
7.75	4.48
8.65	2.99
9.55	0.00
10.45	0.00
11.35	0.00
12.25	0.00
13.15	0.00
14.05	0.00
14.95	4.48
15.85	1.49
16.75	1.49
17.65	0.00
18.55	0.00
> 19.00	1.49



0.00%

32.09%

64.18%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

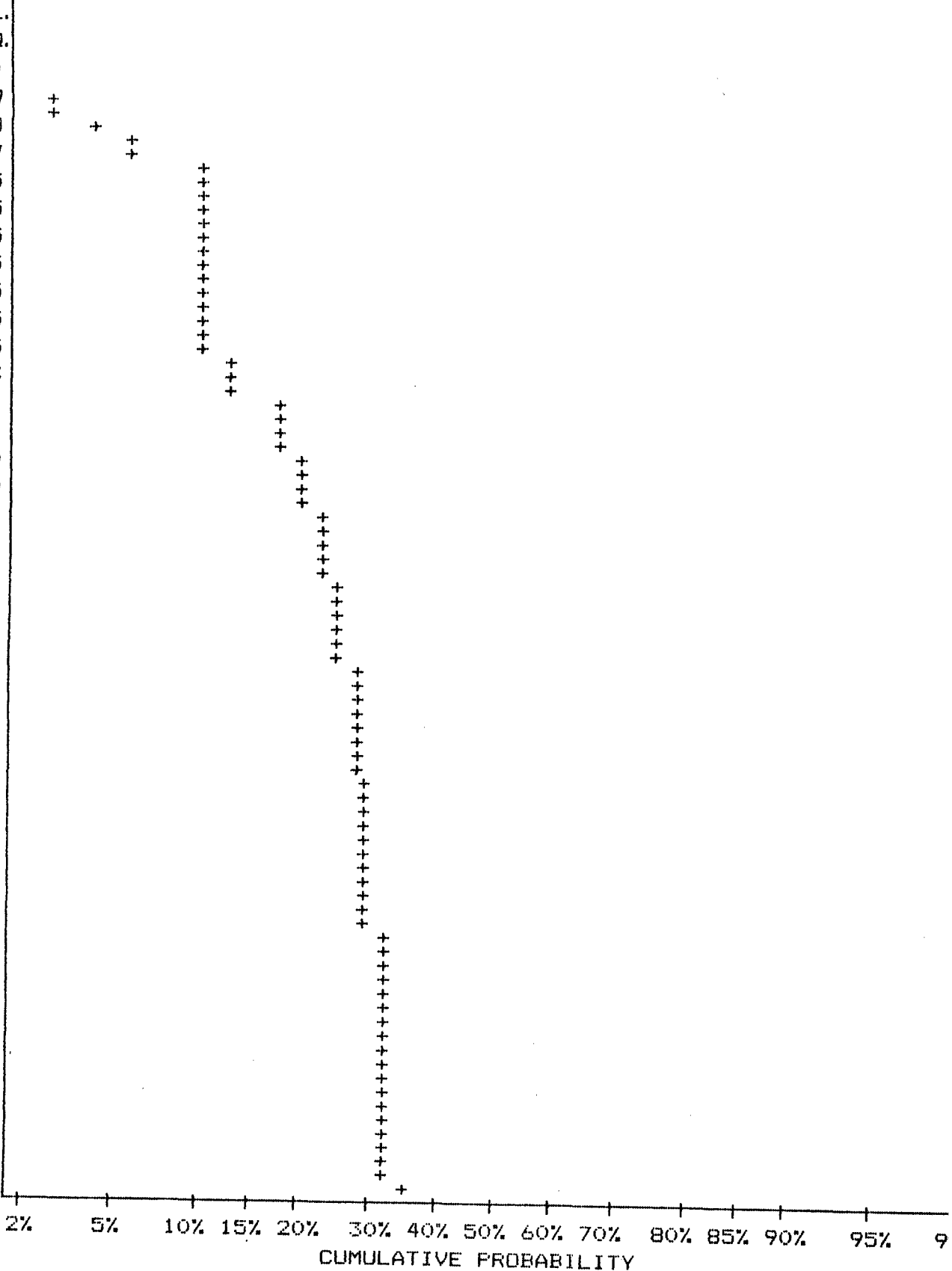
TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

CUMMULATIVE PROBABILITY PLOT ON AS

COMPANY: G. H. RAYNER & ASSOCIATES
 ATTN: G. H. RAYNER
 PROJECT: GOLDEN PLUG
 FILE#: 5-455

DATE: MARCH 20/85
 SAMPLE TYPE: SOIL
 ANALYSIS TYPE: GEOCHEM

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
17.70	2.99
16.44	4.48
15.28	5.97
14.19	10.45
13.18	10.45
12.25	10.45
11.38	10.45
10.57	10.45
9.82	10.45
9.12	10.45
8.47	13.43
7.87	17.91
7.31	17.91
6.79	20.90
6.31	20.90
5.86	23.88
5.45	23.88
5.06	23.88
4.70	25.37
4.37	25.37
4.05	25.37
3.77	28.36
3.50	28.36
3.25	28.36
3.02	28.36
2.80	29.85
2.61	29.85
2.42	29.85
2.25	29.85
2.09	29.85
1.94	32.84
1.80	32.84
1.67	32.84
1.56	32.84
1.44	32.84
1.34	32.84
1.25	32.84
1.16	32.84
1.08	32.84
1.00	35.82



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

STATISTICAL SUMMARY ON CU

COMPANY: G. H. RAYNER & ASSOCIATES
 ATTN: G.H. RAYNER
 PROJECT: GOLDEN PLUG
 FILE#: 5-45S

DATE: MARCH 20/85
 SAMPLE TYPE: SOIL
 ANALYSIS TYPE: GEOCHEM

NUMBER OF SAMPLES: 67
 MAXIMUM VALUE: 78.00 PPM
 MINIMUM VALUE: 1.00 PPM
 MEAN: 28.31 PPM
 STD. DEVIATION: 21.93 PPM
 COEFF. OF VARIATION: .77

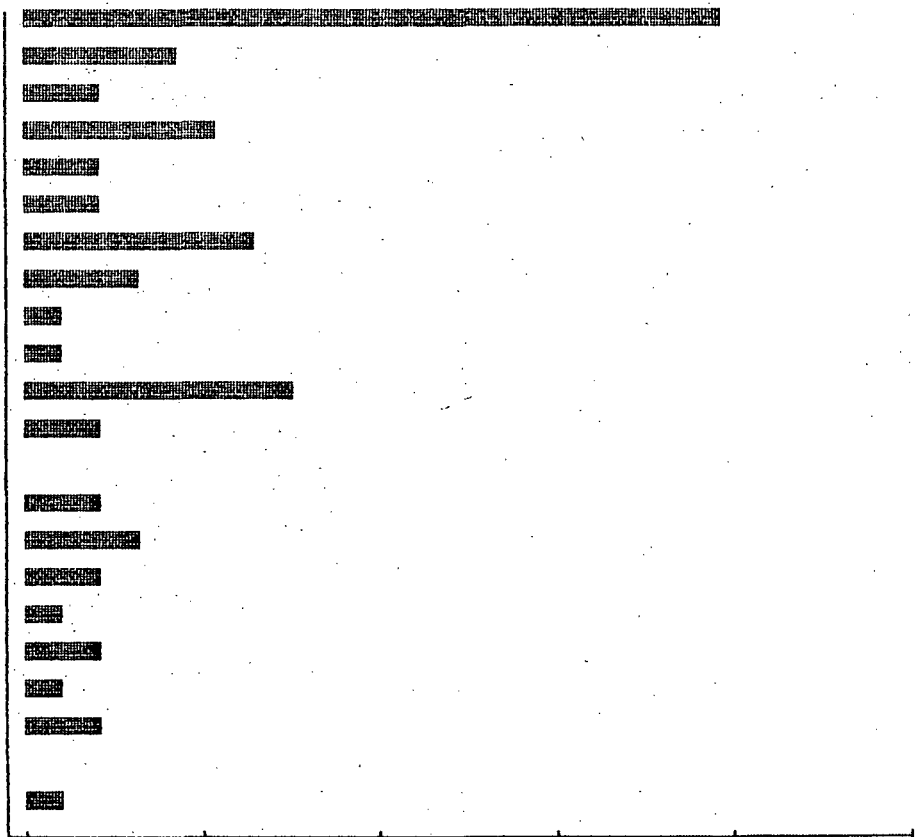
5 HIGHEST CU VALUES:
 50+00N-47+50E 78.00 PPM
 51+50N-47+00E 75.00 PPM
 50+50N-47+50E 71.00 PPM
 49+50N-47+00E 69.00 PPM
 49+50N-47+50E 65.00 PPM

HISTOGRAM FOR CU

CLASS INTERVAL = 3.35

MID CLASS PPM	CLASS %
------------------	------------

< 8.00	26.87
9.68	5.97
13.03	2.99
16.38	7.46
19.73	2.99
23.08	2.99
26.43	8.96
29.78	4.48
33.13	1.49
36.48	1.49
39.83	10.45
43.18	2.99
46.53	0.00
49.88	2.99
53.23	4.48
56.58	2.99
59.93	1.49
63.28	2.99
66.63	1.49
69.98	2.99
73.33	0.00
> 75.00	1.49



0.00%

13.43%

26.87%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

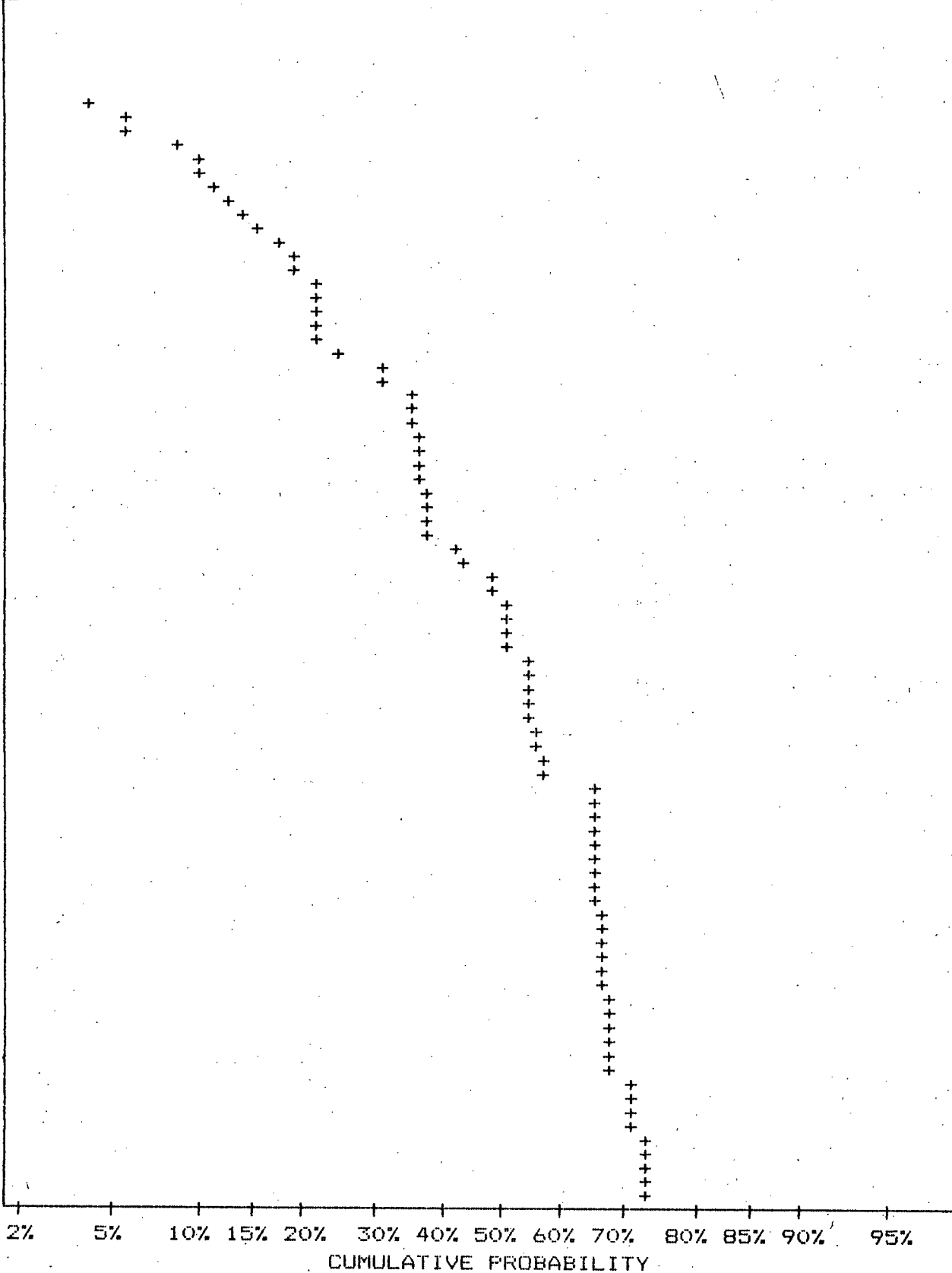
TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON CU

COMPANY: G. H. RAYNER & ASSOCIATES
 ATTN: G.H. RAYNER
 PROJECT: GOLDEN PLUG
 FILE#: 5-455

DATE: MARCH 20/85
 SAMPLE TYPE: SOIL
 ANALYSIS TYPE: GEOCHEM

UPPER LIMIT (PPM)	CUMMUL. FREQ. (%)
69.04	4.48
65.33	5.97
61.82	10.45
58.49	11.94
55.34	14.93
52.37	17.91
49.55	19.40
46.89	22.39
44.37	22.39
41.98	25.37
39.73	31.34
37.59	35.82
35.57	37.31
33.66	37.31
31.85	38.81
30.14	38.81
28.52	43.28
26.98	49.25
25.54	52.24
24.16	52.24
22.86	55.22
21.63	55.22
20.47	55.22
19.37	56.72
18.33	58.21
17.34	65.67
16.41	65.67
15.53	65.67
14.70	65.67
13.90	67.16
13.15	67.16
12.45	67.16
11.78	68.66
11.14	68.66
10.54	68.66
9.98	71.64
9.44	71.64
8.94	73.13
8.46	73.13
8.00	73.13



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604) 980-5814 OR (604) 988-4524

STATISTICAL SUMMARY ON HG

COMPANY: G. H. RAYNER & ASSOCIATES
 ATTN: G.H. RAYNER
 PROJECT: GOLDEN PLUG
 FILE#: 5-455

DATE: MARCH 20/85
 SAMPLE TYPE: SOIL
 ANALYSIS TYPE: GEOCHEM

NUMBER OF SAMPLES: 67
 MAXIMUM VALUE: 100.00 PPB
 MINIMUM VALUE: 15.00 PPB
 MEAN: 42.76 PPB
 STD. DEVIATION: 20.55 PPB
 COEFF. OF VARIATION: .48

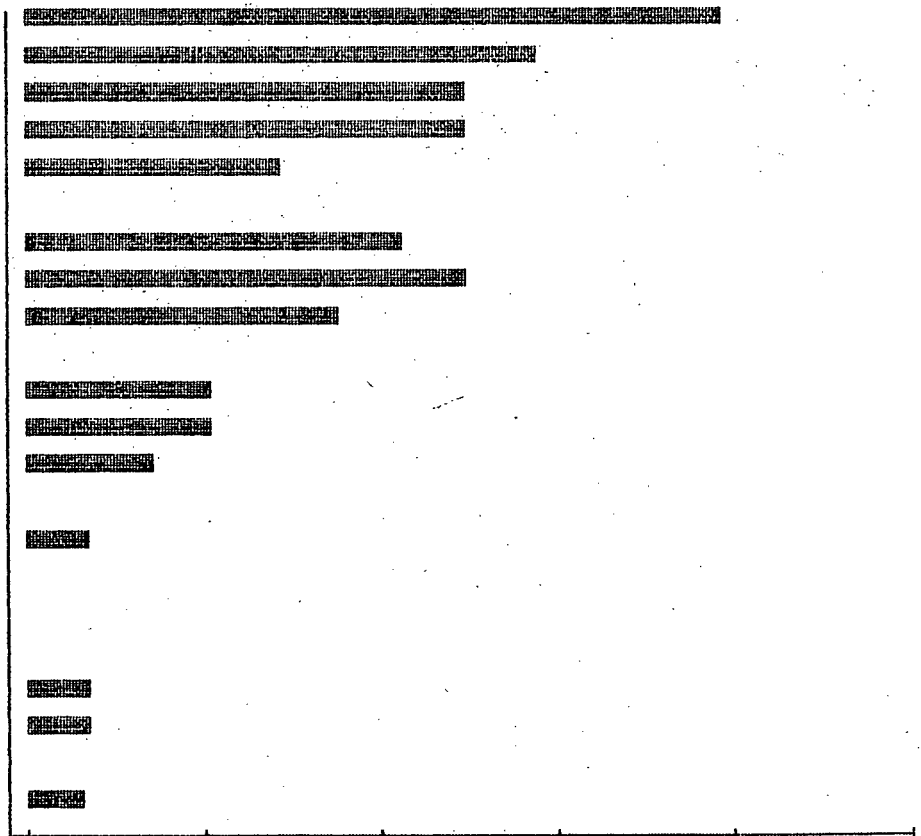
5 HIGHEST HG VALUES:
 48+50N-47+00E 100.00 PPB
 51+00N-50+00E 100.00 PPB
 52+00N-49+50E 95.00 PPB
 48+50N-47+50E 90.00 PPB
 48+50N-48+50E 75.00 PPB

HISTOGRAM FOR HG

CLASS INTERVAL = 3.75

MID CLASS	CLASS
PPM	%

< 25.00	16.42
26.88	11.94
30.63	10.45
34.38	10.45
38.13	5.97
41.88	0.00
45.63	8.96
49.38	10.45
53.13	7.46
56.88	0.00
60.63	4.48
64.38	4.48
68.13	2.99
71.88	0.00
75.63	1.49
79.38	0.00
83.13	0.00
86.88	0.00
90.63	1.49
94.38	1.49
98.13	0.00
> 100.00	1.49



0.00%

8.21%

16.42%

FREQUENCY (%)

MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

CUMMULATIVE PROBABILITY PLOT ON HG

COMPANY: G. H. RAYNER & ASSOCIATES

DATE: MARCH 20/85

ATTN: G.H. RAYNER

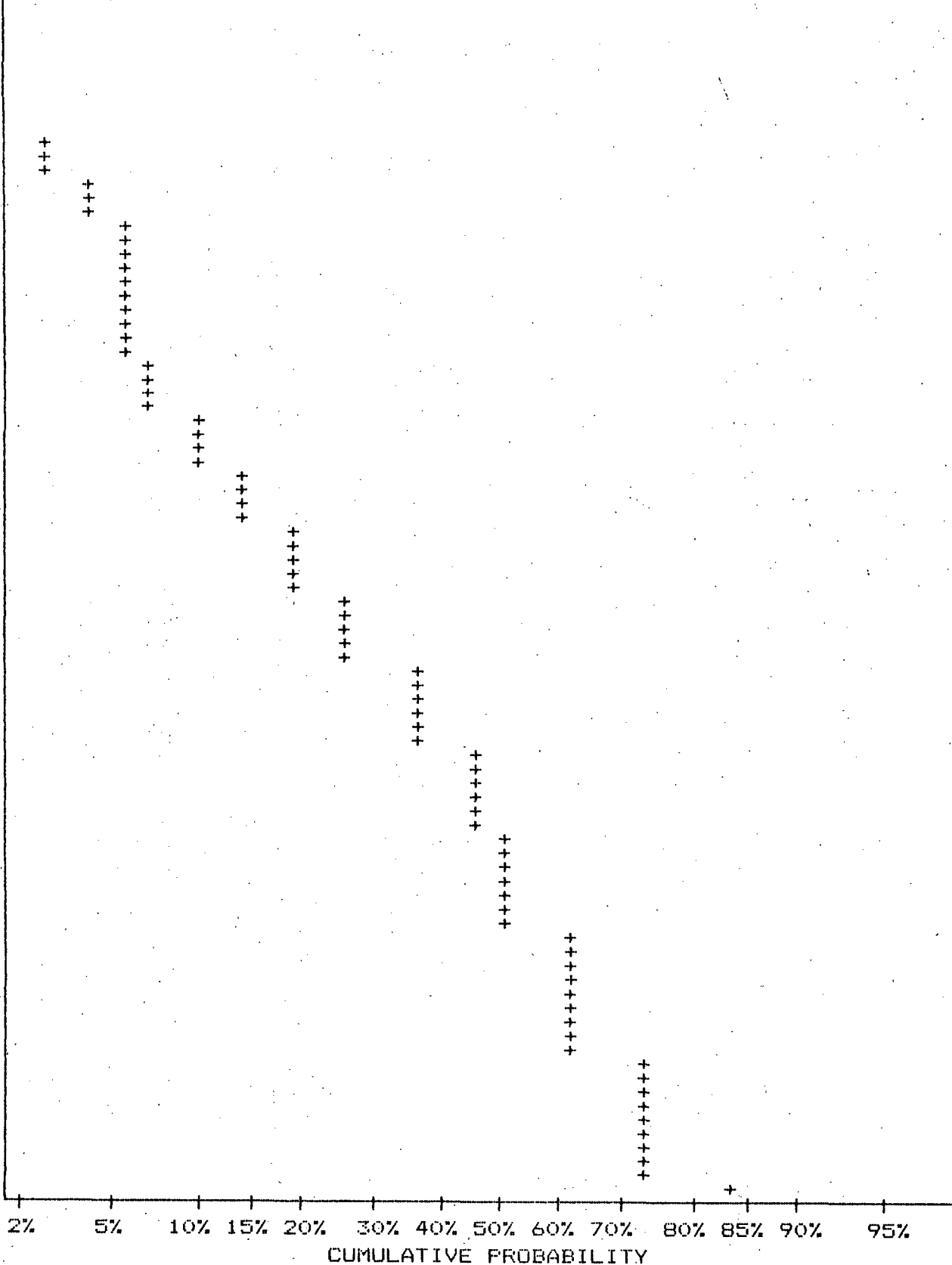
SAMPLE TYPE: SOIL

PROJECT: GOLDEN PLUG

ANALYSIS TYPE: GEOCHEM

FILE#: 5-455

UPPER LIMIT (PPB)	CUMMUL. FREQ. (%)
105.17	0.00
101.38	0.00
97.70	2.99
94.18	4.48
90.77	4.48
87.47	5.97
84.32	5.97
81.28	5.97
78.32	5.97
75.50	5.97
72.78	7.46
70.13	7.46
67.60	10.45
65.15	10.45
62.80	14.93
60.52	14.93
58.32	19.40
56.22	19.40
54.20	26.87
52.22	26.87
50.35	26.87
48.52	37.31
46.77	37.31
45.08	37.31
43.45	46.27
41.88	46.27
40.35	46.27
38.90	52.24
37.50	52.24
36.13	52.24
34.83	62.69
33.58	62.69
32.35	62.69
31.17	62.69
30.05	62.69
28.98	73.13
27.92	73.13
26.90	73.13
25.95	73.13
25.00	83.58



MIN-EN LABORATORIES LTD.

SPECIALISTS IN MINERAL ENVIRONMENTS

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

TELEX: 04-352828 PHONE: (604)980-5814 OR (604)988-4524

CORRELATION COEFFICIENTS

COMPANY: G. H. RAYNER & ASSOCIATES

DATE: MARCH 20/85

ATTN: G.H. RAYNER

SAMPLE TYPE: SOIL

PROJECT: GOLDEN PLUG

ANALYSIS TYPE: GEOCHEM

FILE#: 5-455

THE TABLE BELOW REPRESENTS THE PEARSON CORRELATION MATRIX, SHOWING THE INTER-ELEMENT CORRELATION COEFFICIENTS. THOSE VALUES THAT EXCEED THEIR CRITICAL VALUE FOR .01 LEVEL OF SIGNIFICANCE ARE SHOWN IN DARKER PRINT AND UNDERLINED.

	AG	AS	CU	HG	TL
AG	1.000	<u>.323</u>	<u>.810</u>	-.191	-.250
AS		1.000	.167	.152	-.026
CU			1.000	-.076	-.129
HG				1.000	-.060
TL					1.000