

UMEX Inc.

FORMERLY:
UNION MINIÈRE EXPLORATIONS
AND MINING CORPORATION LIMITED

Suite 200 - 4299 Canada Way, Burnaby, B.C V5G 1H4
Telephone (604) 437-9491 Telex 04-356532

ASSESSMENT REPORT ON SOIL AND ROCK
GEOCHEMISTRY AND GEOLOGICAL MAPPING

EUREKA PROPERTY

EN, EM, SF, CS MINERAL CLAIMS

LATITUDE 58°18'N
LONGITUDE 120°38'W

CARIBOO MINING DIVISION

N.T.S. 93A/2E 7E

by
A. Chevalier, M.Sc.

OPERATOR: UMEX Inc.
OWNER: E. Scholtes
WORK DATES: July 21st to August 6, 1982
DATE: September 24, 1982

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,723

IV

15

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INTRODUCTION

The Eureka property was first discovered by prospector E. Scholtes in 1958. The surface of the original property was increased to 177 units in good standing.

Previous work on the property focused on cirques 1, 2 and 7 and was carried out by Helicon Exploration (1965-66), Mr. H. Travis (1959), AMAX (1970), Rio Tinto (1972) and Noranda (1974). All of them were exploring for a porphyry copper type of deposit.

UMEX Inc. optioned the property from E. Scholtes and J. Carson of Williams Lake in Spring 1981.

The centre of the property lies at 52°18'N latitude and 120°38'W longitude on the Quesnel Lake map sheet (93A). The claims lie at an elevation ranging between 1500 and 2430 meters above sea level (Eureka Peak) between Crooked Lake and Mackay River, 100 kilometers east of Williams Lake, B.C., within the Cariboo Mining Division (Figure 1).

Access to the northern part of the property is possible by good logging roads either from Williams Lake or 100 Mile House, followed by a six mile long four-wheel drive dirt road built by Helicon Exploration in 1966. The access to the southern part is only possible by helicopter, which is based in Williams Lake, but numerous landings are available.

The property, which covers most of the north-west south-east trending ridge of Eureka Mountain, is mainly rugged terrain. The north-east slope, mostly composed of 'U' shaped glacial cirques, present a large percentage of areas accessible only to experienced mountain climbers. The south-west slope is less steep and easily accessible.

With 1200 mm (2500 mm in Vancouver) of precipitation, mostly snow, and with a daily temperature of 14°C in July and -17°C in January (less than 60 frost-free days) the climate is typical cryoboreal. The field season is limited from June to September but snow storms are still possible during this period.

The vegetation, which consists mostly of evergreen trees, varies gradually with the altitude from Western Hemlock in the Mackay River Valley to Subalpine Englemann Spruce and Fir in the cirques and above 1700 meters appears the alpine tundra.

The field work which consisted of mapping the major anomalous areas delineated in 1981 and the reconnaissance of the claims staked last winter, mainly rock sampling, was completed by A. Chevalier and G. Pringle from the 21st of July to the 6th of August. Seventy one (71) rock samples and 15 soils were collected during this period.

CLAIM STATUS

The property is divided into 4 claim groups as described below and shown on the accompanying claim map (Figure 2).

Group I - EN-1

<u>Claim</u>	<u>Record No.</u>	<u>Units</u>	<u>Expiry Date</u>
EN 1	30398	1	August 5, 1983
EN 2	30399	1	August 5, 1983

Group I - EN-1 (cont.)

<u>Claim</u>	<u>Record No.</u>	<u>Units</u>	<u>Expiry Date</u>
EN 3	30400	1	August 5, 1983
EN 4	30401	1	August 5, 1983
EN 5	30402	1	August 5, 1983
EN 6	30403	1	August 5, 1983
EN 14	30477	1	August 5, 1983
EN 28	30646	1	September 28, 1983
EN 29	30647	1	September 28, 1983
EN 104	30618	1	August 30, 1983
EN 105	30619	1	August 30, 1983
EN 106	30620	1	August 30, 1983
EN 107	30621	1	August 30, 1983
EN 109	30623	1	August 30, 1983
EN 129	30611	1	August 30, 1983
EM 11	65079	2	January 11, 1983
EM 12	65080	<u>2</u>	January 11, 1983
TOTAL UNITS		19	

Group II - EM-2

<u>Claim</u>	<u>Record No.</u>	<u>Units</u>	<u>Expiry Date</u>
SF 1	1688	1	May 30, 1983
SF 2	1689	1	May 30, 1983
SF 3	1690	1	May 30, 1984
SF 4	1691	1	May 30, 1984
EM 2	57929	20	March 26, 1983
EM 3	57930	20	March 26, 1983
EM 4	57931	<u>12</u>	March 26, 1983
TOTAL UNITS		56	

Group III - EM-6

<u>Claim</u>	<u>Record No.</u>	<u>Units</u>	<u>Expiry Date</u>
NS 1	3373	1	April 2, 1983
NS 2	3374	1	April 2, 1983
CS 55	48017	1	October 24, 1983
CS 56	48018	1	October 24, 1983
EM 1	57928	16	March 26, 1983
EM 5	57932	18	March 26, 1983
EM 6	16956	<u>16</u>	March 26, 1983
TOTAL UNITS		54	

Group IV - EM-7

see next page

Group IV - EM-7 (cont.)

<u>Claim</u>	<u>Record No.</u>	<u>Units</u>	<u>Expiry Date</u>
EM 7	24293	8	January 11, 1983
EM 8	24294	20	January 11, 1983
EM 9	24295	<u>20</u>	January 11, 1983
	TOTAL UNITS	48	

GEOLOGY AND MINERALIZATION

Underlain by rocks of the Quesnel Belt the Eureka property is located on the eastern edge of the Quesnel Trough near its contact with older rocks of the Antler formation (amphibolites) and the Snowshoe formation (phyllite, schist and gneiss), a part of the late Paleozoic Cariboo group within the Omineca Belt (Figure 3).

Numerous different rock types are widely exposed on the property: sediments, amphibolites, volcanics and intrusive plutons (Figure 10).

Both the sediments and the volcanics were affected by regional metamorphism. Sub-greenschist facies of metamorphism, greenschist facies of metamorphism and amphibolite facies of metamorphism are observed on the property. The metamorphic grade decreases from the north to the south.

The sedimentary rocks underlay the property mainly on its southeastern and southwestern part. They are composed by dark phyllite, argillite, slaty argillite and minor limestone of Triassic or Jurassic age.

The volcanic rocks consist of dark grey to dark green andesitic augite porphyry (augite are usually dark green), tuffs, monogenic augite porphyry breccia, dykes and sills of Upper Triassic to early Jurassic age. The volcanic rocks are exposed mainly on the upper level of Eureka ridge and are widely extended to the south on the centre of the property.

Epiclastic sedimentary and volcanic rocks have a wide range of thicknesses and are interbedded.

Two intrusive plugs outcrop on the property. The first and major one, which is about two kilometers long and 500 m wide, is located from cirque 2 to the centre part of cirque 3, and present the major mineralized zones, the second one, significantly smaller, is located on cirque 8 and 9 but appears to be devoid of any mineralization.

The intrusive plug of cirque 2 and 3 is not homogenous and composed of only one rock type but shows complex relations between different intrusive phases.

The area of cirques 2 and 3 is underlain by a series of hypabyssal intrusives ranging from leucocratic, possibly monzonite porphyry to ultrabasic rocks consisting of pyroxenes and fine grained dykes.

Some of the more intermediate intrusive rock types have undergone incipient serpentinization over a distance of over 100 meters in the SE part of cirque 2 (location of EN-4) where abundant crosscutting ferromagnesian veinlets were found to occur.

to)
On the southern part of the No. 2 cirque there occurs a pyroxenite dyke or plug having a length of at least 100 meters, which contained abundant cpy and po. The dyke or plug would be related to the thick unit of ultrabasic occurring in the NE, running parallel to the porphyry units over a considerable distance. This large serpentinite sill or dyke may be correlatable to unit 9a, which has been tentatively classed as pre-Triassic on the G.S.C. map although this unit had not been mapped on Eureka Mountain.

Two scales of tectonic features are represented on the Eureka property. On the regional scale (over a km) appears a asymmetric syncline trending southeast - northwest and dissects the property in the centre. The southwest flank is dipping gently to the northeast whereas the northeast flank is dipping sharply (over 80°) to the southwest on the western part of the property and gradually overturns going to the east. A schistosity mainly well developed in the epiclastic sediment is associated with this syncline. A major north-south vertical fault can be followed through EM 7 and 9 claims. On a smaller scale (m to dm) an significant shearing is developed in two directions (E-W, N-S) transverse to regional structures.

The area of mineralization occurs within both Triassic or Jurassic sediments and volcanics as well as within porphyritic intrusives of probable Cretaceous age.

The statistical studies of the data indicate that there may be several - mineralizing events or processes operative in the area. This is borne out by the significantly different correlations between the various elements in different parts of the structure.

Disseminated sulfides consisting of pyrrhotite, pyrite, chalcopyrite, galena and sphalerite were common in varying amounts in all the rock types, although greater concentration were found in the ultrabasic units. Furthermore, where the sulfides in the porphyries of acid composition were commonly found to occur as veinlets of fine disseminations, and more rarely as massive veinlets, the sulfides within the ultrabasic rocks were more commonly in the form of exsolution blebs. It could be surmised that these were of two very different origin. The sulfides occurring within the acid porphyries could be related to a hypogene late event whereas the sulfides in the ultrabasic rocks could have been originated as co-magmatic precipitates.

The copper mineralization on the northwestern part of the structure is reported to occur within argillites (cirque 7), whereas in the southern part of the structure the mineralization has been observed within intrusive porphyries as well as ultrabasic and basic dykes.

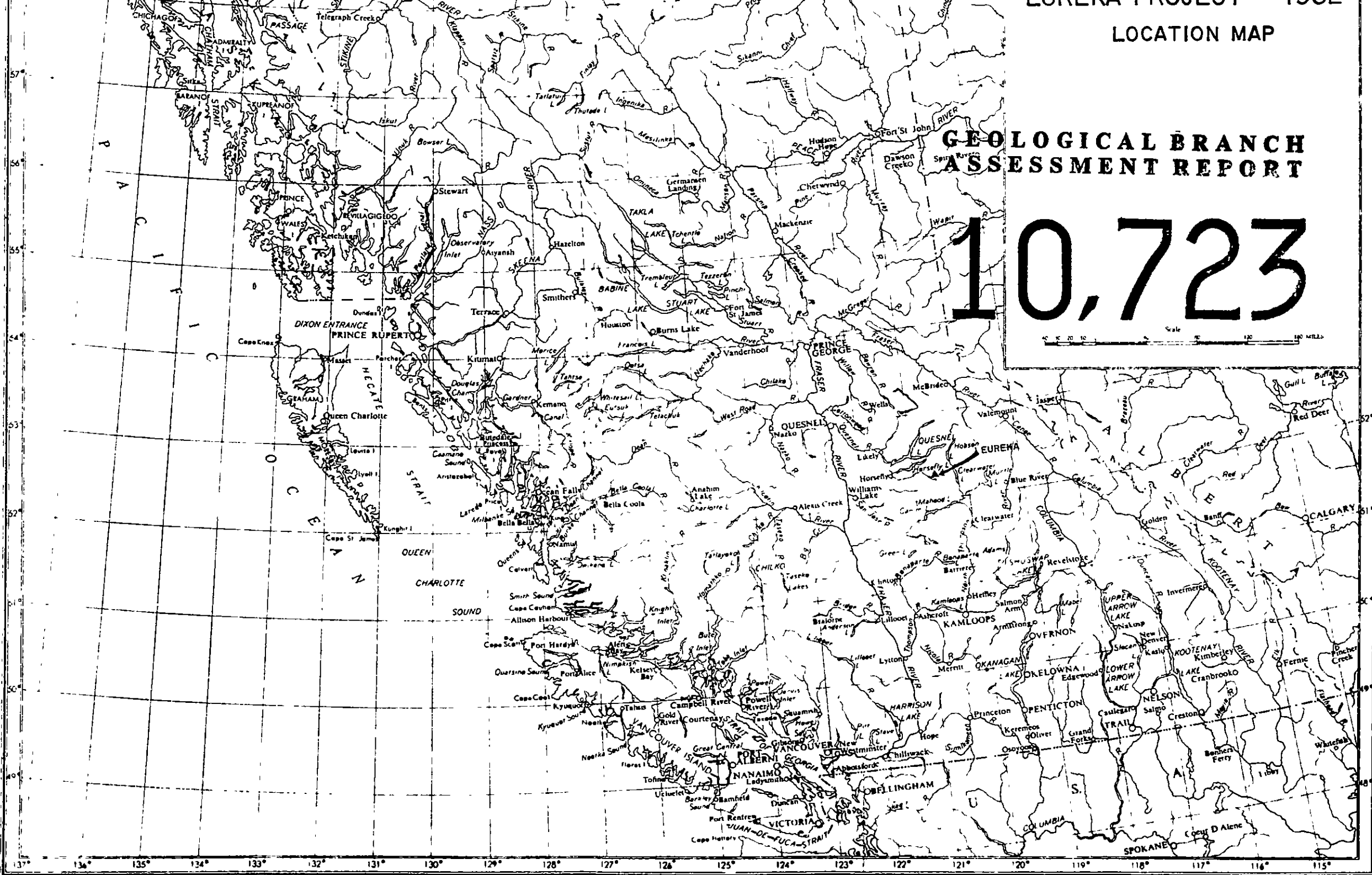
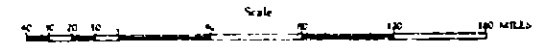
Within the acid porphyritic dyke rocks the copper mineralization became more intense in the areas where strong shearing occurred. This shearing was transverse to regional structure, having an approximately E-W direction, and dipping steeply to the north. Also associated with these shears one finds the occasional narrow quartz vein which was mineralized in places.

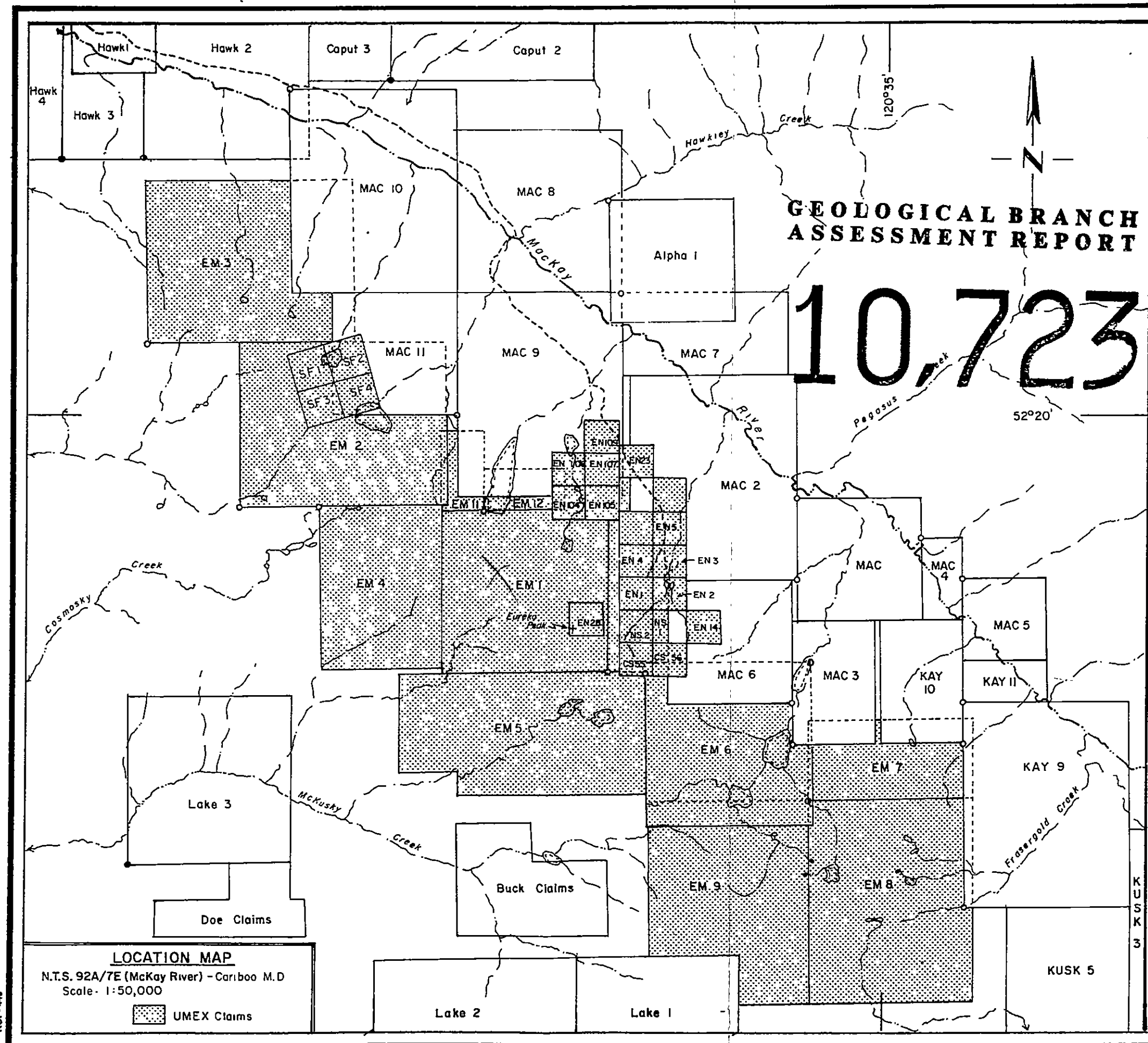
em
J
Gold and silver mineralization are located mainly by the augite porphyry, where they occur in highly bleached, altered and sheared zones, and in the black pyrite rich slaty argillite. They equally occur in numerous acid dykes or sills within the augite porphyry and sediments.

Lead and zinc occur within the intrusive or in the vicinity of small veinlets or disseminated in the black argillite.

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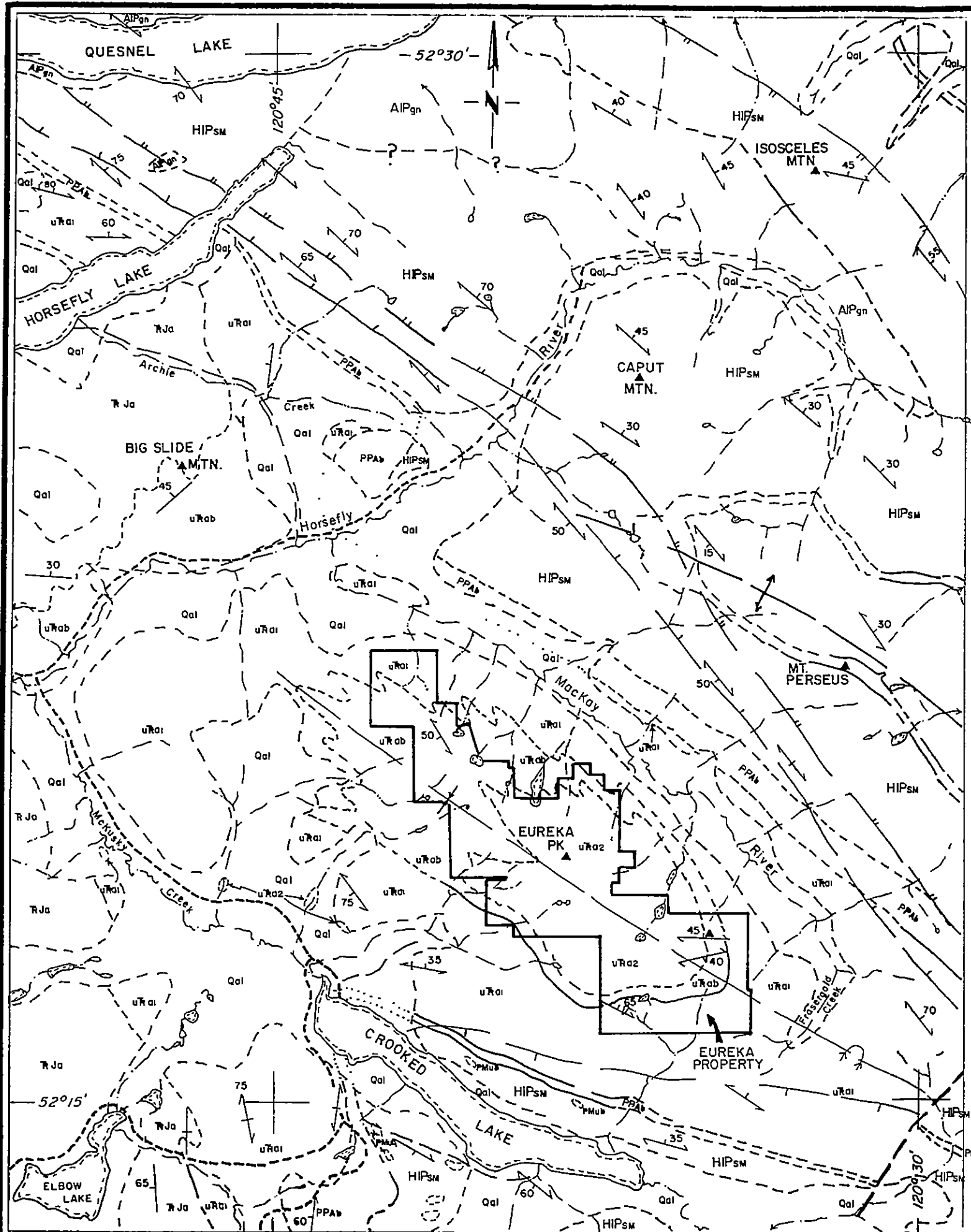
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NCGI - 448

Figure No. 2



LEGEND

- Qal *Glacial deposits, alluvium*
- QUESNEL BELT**
- Norian**
- RJa *Basaltic tuff and breccia, generally fine grained, argillite, flows, chert*
- Triassic**
- uRa1 *Phyllite, argillite, slaty argillite, quartzite, schist, minor greenstone (sub-greenschist to amphibolite (kyanite) facies of metamorphism)*
- uRa2 *Greenstone, augite-porphry breccia, tuff breccia, tuff, possible dykes and sills (greenschist facies of metamorphism)*
- uRab *Undivided uRa1 and uRa2*
- OMINECA BELT**
- Paleozoic or Mesozoic**
- PMub *Serpentinite, peridotite, may be pre PPAb*
- Pennsylvanian**
- PPAb *Antler formation, amphibolite*
- Cambrian**
- HIPsm *Snowshoe formation: phyllite, schist and gneiss in amphibolite facies of metamorphism*
- Archean**
- APgn *Quesnel Lake Gneiss: quartz-feldspar augen gneiss, granodiorite gneiss, local lime-silicate gneiss*

SYMBOLS

- road
- stream
- lake

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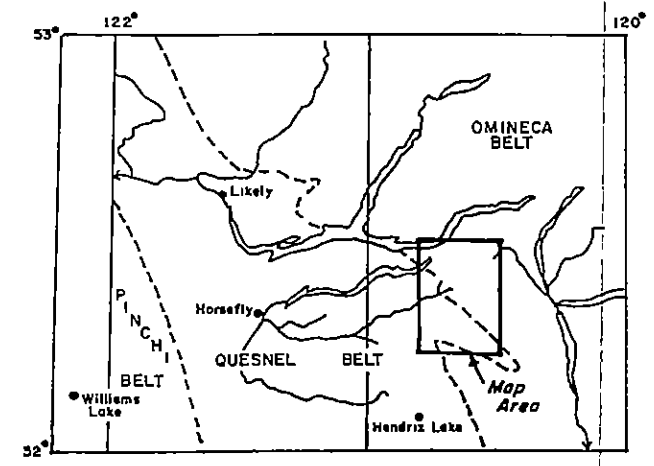
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Figure No. 3

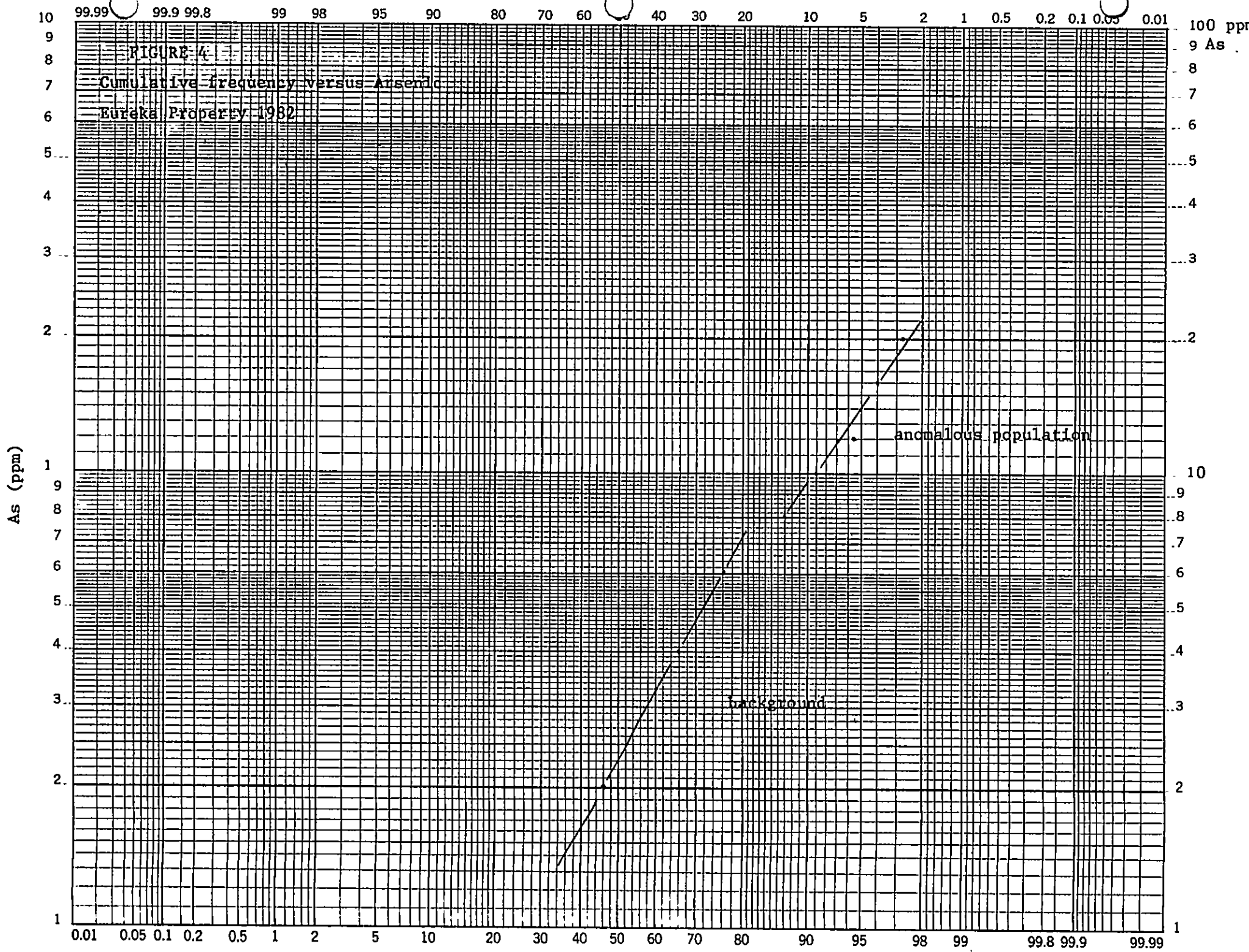
EUREKA PROJECT GENERAL GEOLOGY

Scale 0 1.25 2.5 3.75 5 kilometres
1:125,000

UMEX CORPORATION LTD.

Drawn by H. Holm
Date: February 23, 1982
Surveyed by
DWG No





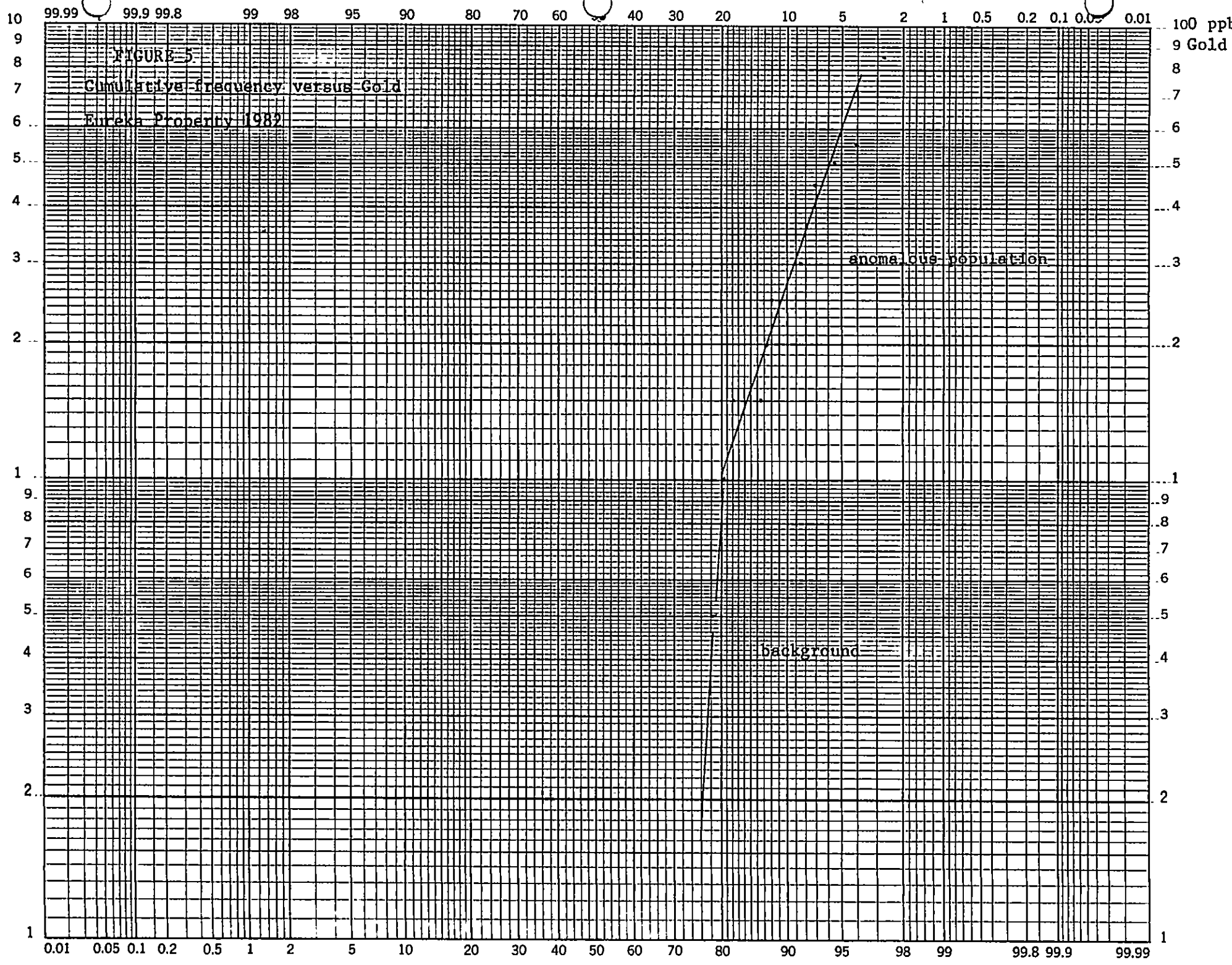


FIGURE 5

Cumulative frequency versus Gold

Eureka Property (1982)

anomalous population

background

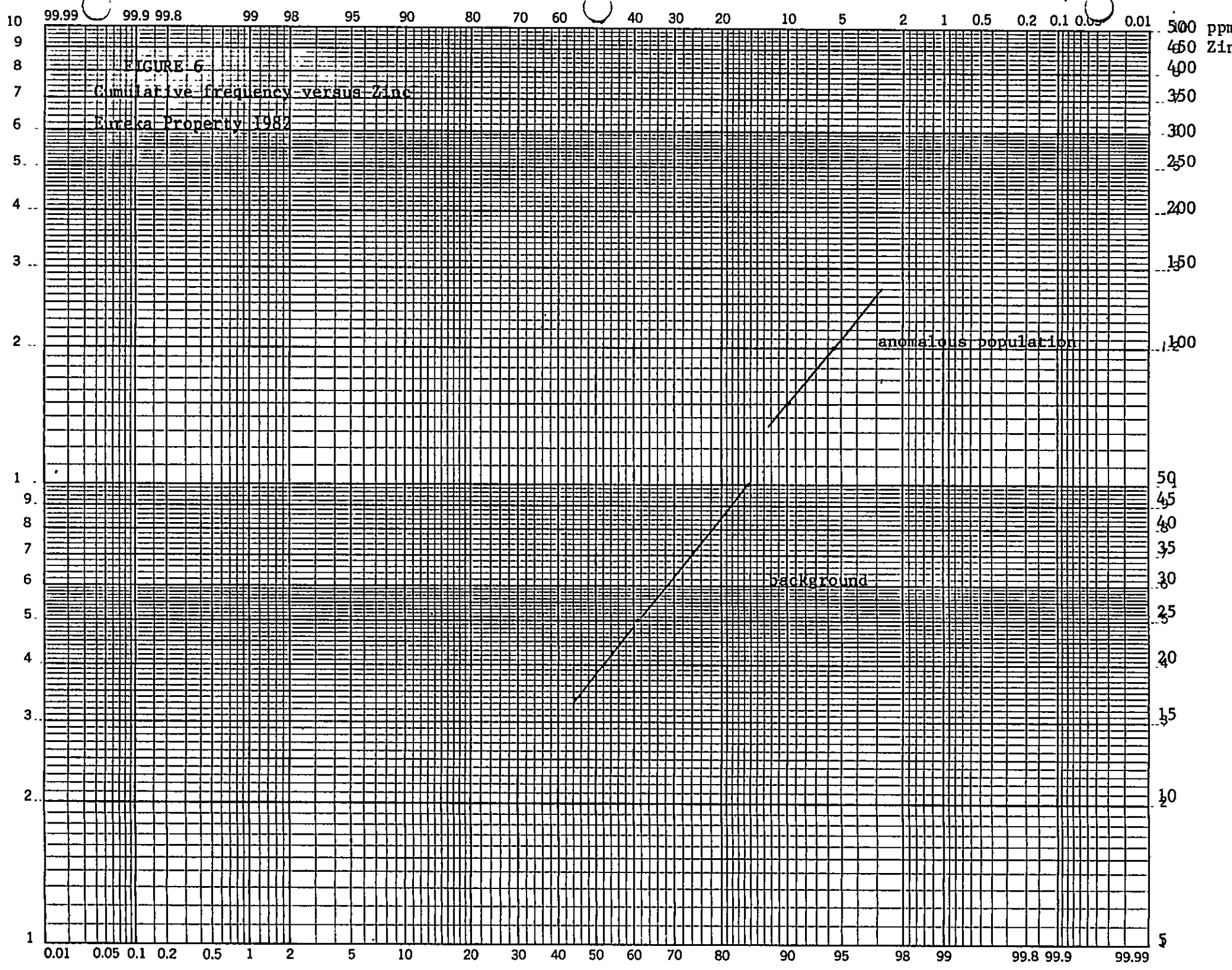


FIGURE 6

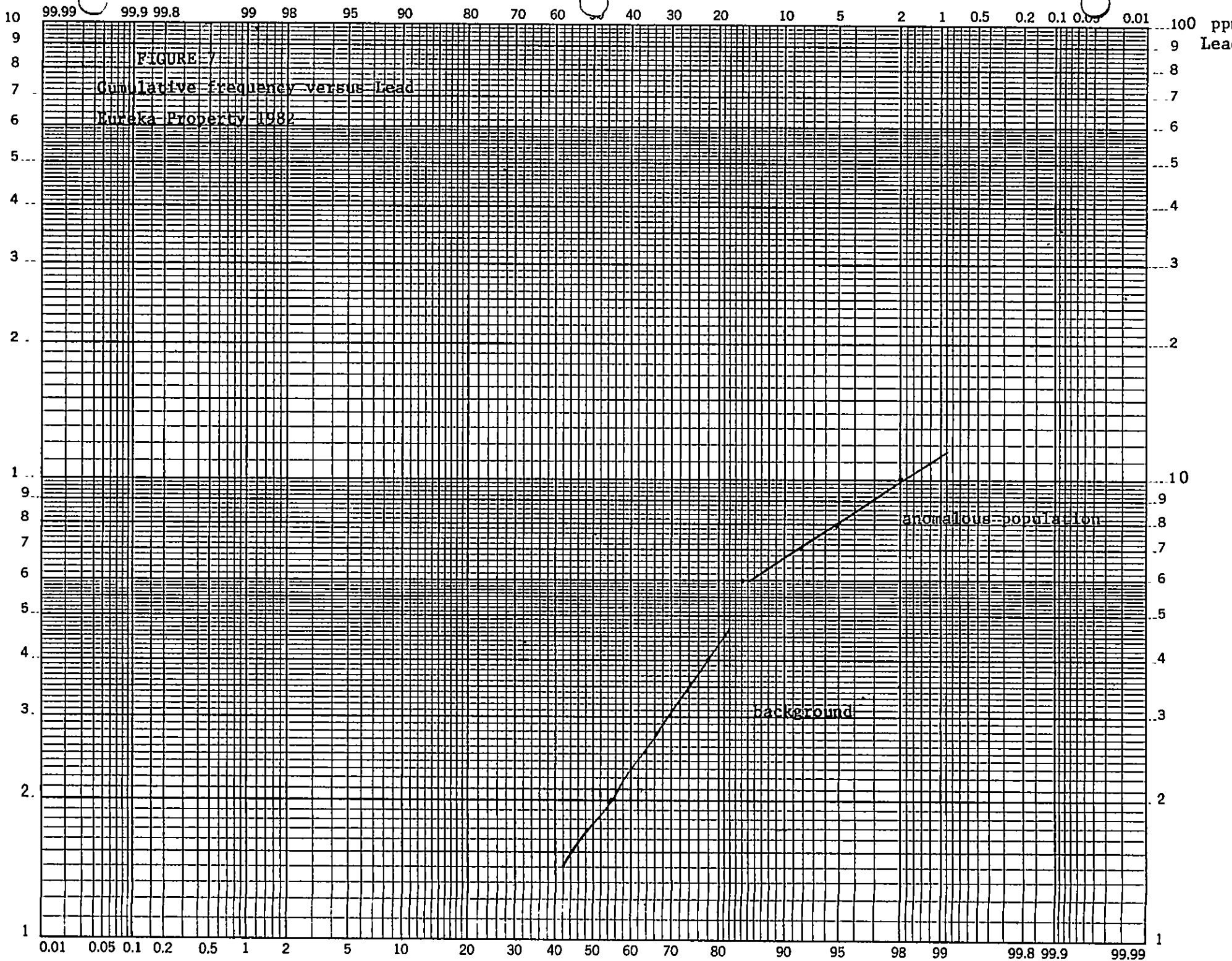
Cumulative frequency versus Zinc

Eureka Property 1982

anomalous population

background

500 ppm
450
400
350
300
250
200
150
100
50
45
40
35
30
25
20
15
10
5



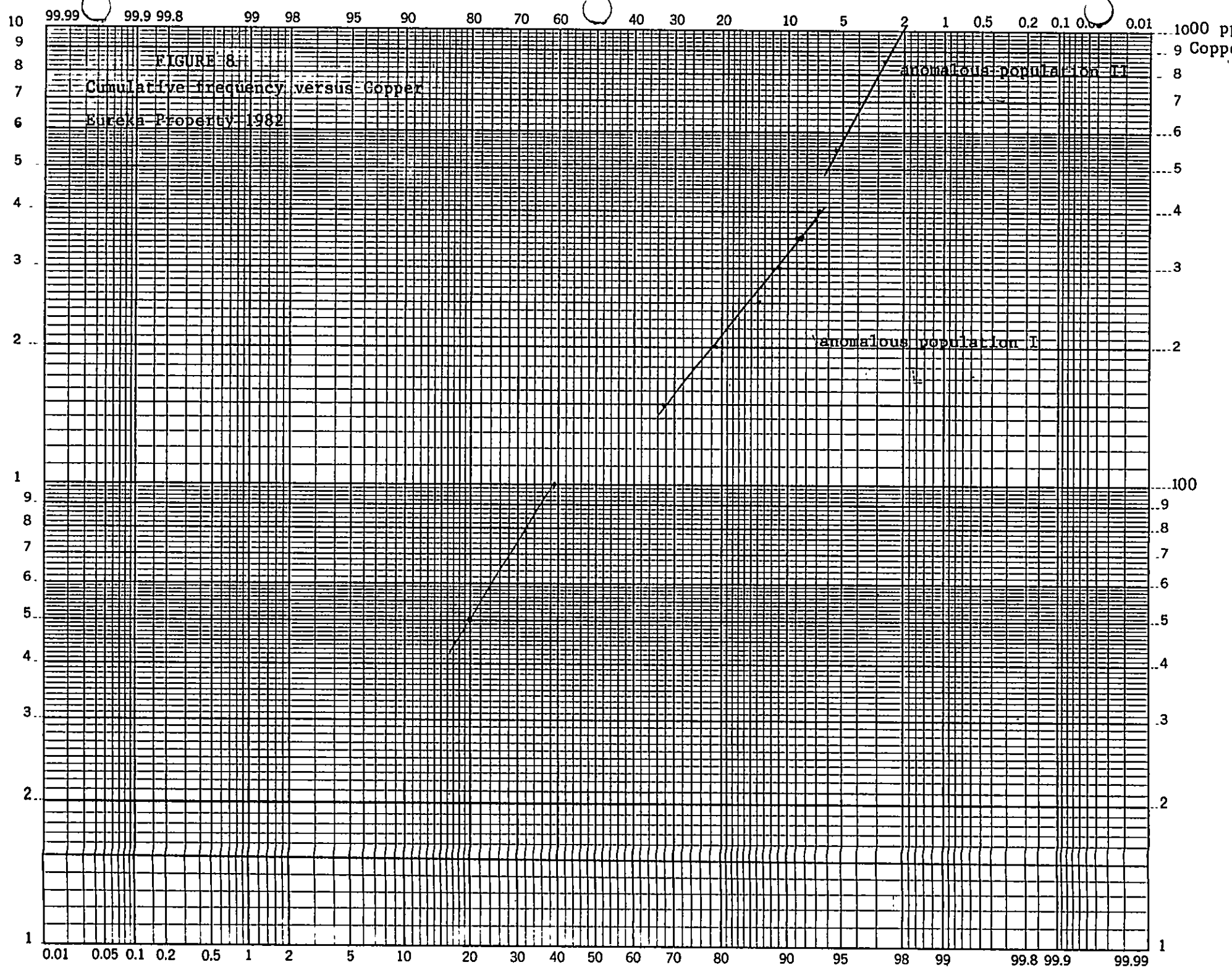
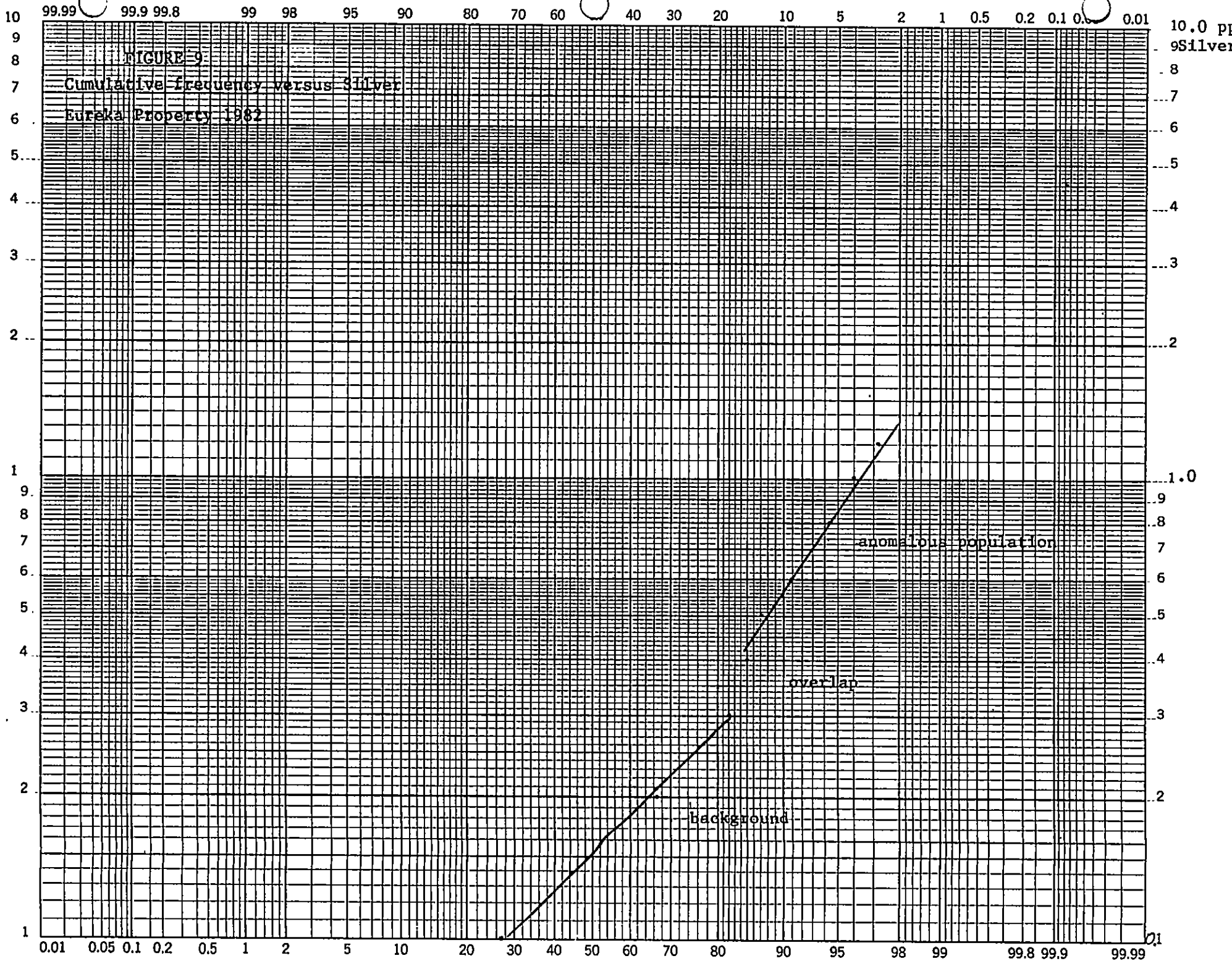


FIGURE 8
Cumulative frequency versus Gopper
Eureka Property 1982

anomalous population II

anomalous population I



It is recommended to hire a guide and carry out extensive rock sampling to measure the gold grade in the outcropping bedrock on the anomaly of cirques 5, 3, and Eureka Peak.

It is also recommended to complete the part of the program not completed in the 1982 field season.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Alain Chevalier', written in a cursive style.

Alain Chevalier,
Geologist.

A P P E N D I X I

STATEMENT OF EXPENDITURES

Personnel:

July 21st to August 6, 1982	A. Chevalier	17 days @ \$126.96/day	\$1,988.32
July 21st to August 6, 1982	G. Pringle	16 days @ \$ 75.20/day	1,278.40
Truck Rental Equivalent		17 days @ \$55.00/day	935.00

Accommodations & Food:

\$15.00/man/day	34 man days		510.00
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Analyses:

72 rocks, 16 soils analyzed for Au by AA and 26 element ICP			1,000.00
Okanagan Helicopter			1,844.64

Report Writing, Drafting, Typing:

H. Holm	1 day drafting	\$138.00/day	138.00
A. Chevalier	1 day report writing	\$126.96/day	126.96
Typing and miscellaneous office supplies			<u>100.00</u>

TOTAL \$7,924.32

A P P E N D I X II

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, Ni, Ba, Si, Sr, Cr AND B. As DETECTION 3 ppm.
AUI ANALYSIS BY AA FROM 10 GRAM SAMPLE. SAMPLE TYPE - SOIL SILT & ROCK

DATE RECEIVED AUG 13 1982

DATE REPORTS MAILED

Aug 26/82

ASSAYER

D. Toye

DEAN TOYE, CERTIFIED B.C. ASSAYER

UMEX P.O. # 103647 FILE # 82-0842

Eureka

PAGE # 1

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Co ppm	Ni ppm	Fa %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	M ppm	Au ppb
2-0N	7	506	11	55	.3	25	23	680	6.41	14	2	ND	2	24	1	2	2	52	.18	.17	2	98	.94	79	.06	17	1.79	.01	.13	2	35
2-1N	9	831	18	63	.4	34	29	505	7.18	20	2	ND	2	30	1	2	2	50	.26	.18	2	98	.96	78	.08	24	1.70	.01	.14	2	210
2-2N	8	202	14	34	.5	9	9	462	4.18	6	2	ND	2	31	1	2	2	45	.11	.23	3	25	.23	145	.05	16	.94	.01	.11	2	35
2-3N	11	466	15	44	.4	20	19	870	6.52	9	2	ND	2	39	1	2	2	59	.24	.25	3	48	.49	168	.06	17	1.17	.01	.18	2	50
2-4N	9	333	8	30	.4	13	18	715	4.26	7	3	ND	2	24	1	2	2	53	.14	.22	2	32	.26	123	.05	21	.89	.01	.09	2	35
2-5N	7	356	7	36	.5	15	20	1042	4.57	4	3	ND	2	20	1	2	2	73	.18	.18	2	48	.32	151	.12	20	.88	.01	.09	2	20
C2-0N	2	125	27	115	.2	24	21	320	3.48	91	2	ND	2	19	2	3	2	71	.40	.05	2	191	.92	78	.05	22	1.14	.01	.03	2	80
C2-1N	1	61	2	27	.6	20	16	375	4.00	2	2	ND	2	17	1	2	2	146	.44	.05	2	157	.78	69	.18	17	.77	.02	.04	2	15
C2-2N	1	76	11	41	.2	16	16	483	4.12	21	2	ND	2	20	1	2	2	121	.34	.06	2	184	.50	147	.23	19	.75	.01	.05	2	20
C2-3N	2	53	13	33	.4	15	24	843	3.47	6	2	ND	2	16	1	2	2	120	.22	.05	2	108	.42	96	.16	16	.65	.01	.04	2	5
C2-4N	1	95	9	37	.3	22	25	908	4.42	10	2	ND	2	19	1	2	2	102	.35	.08	2	127	.74	87	.11	17	1.17	.01	.03	2	30
C2-5N	1	46	6	25	.7	14	10	239	3.89	4	2	ND	2	14	1	2	2	112	.19	.03	2	91	.44	126	.16	21	.73	.01	.02	2	20
C2-5N 1N	3	168	9	35	.4	21	66	1916	4.05	9	2	ND	2	18	1	2	2	81	.25	.09	3	116	.67	73	.09	20	1.44	.01	.04	2	105
C2-5N 1.5N	8	610	9	34	.2	28	14	265	4.91	5	2	ND	2	25	1	2	2	66	.21	.11	3	70	.82	145	.11	21	1.33	.01	.11	2	40
C2-5N 2.5N 65	1	132	3	19	.2	16	13	311	2.08	2	2	ND	2	29	1	2	2	33	.93	.09	2	80	.60	238	.05	20	.67	.01	.05	2	70
C2-5N 3.0N	3	137	5	15	.4	13	13	308	4.20	2	2	ND	2	15	1	2	2	89	.14	.04	2	111	.40	80	.23	21	.99	.01	.03	2	25
MYSTERY 1 80	1	23	11	101	.3	8	11	1193	4.00	75	2	ND	2	19	1	2	2	54	.57	.07	8	12	.69	148	.04	15	2.11	.02	.04	2	15
STD A-1	1	30	38	186	.4	35	12	1005	2.84	11	2	ND	2	35	2	2	2	55	.66	.10	7	78	.77	275	.08	8	1.93	.02	.21	2	5

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Ko ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	M ppm	Aut ppb
G-34 27740	1	194	4	50	.2	42	30	769	5.40	4	7	ND	2	87	1	2	2	44	2.45	.14	2	42	2.01	89	.09	14	2.26	.01	.22	2	5
G-50 27741	5	50	8	61	.1	21	6	249	2.29	12	5	ND	2	8	1	2	2	45	.20	.04	4	54	.93	91	.22	22	1.22	.01	.15	2	5
G-51 27742	8	55	7	87	.4	27	7	327	3.49	2	2	ND	2	27	1	3	2	45	.17	.09	6	43	1.00	67	.16	18	1.20	.02	.11	2	5
G-52 27743	1	37	9	63	.3	17	8	300	2.46	6	2	ND	3	12	1	2	2	16	.22	.11	8	22	.74	123	.01	22	1.02	.02	.18	2	5
G-53 27744	8	34	141	528	1.0	26	4	1254	1.20	4	3	ND	2	414	16	2	2	15	6.82	.04	3	6	.16	93	.01	16	.28	.01	.18	2	5
G-54 27745	1	220	5	39	.4	7	8	365	3.64	2	2	ND	2	17	1	2	2	20	.28	.11	11	10	.89	148	.01	16	1.17	.03	.18	2	35
G-55 27746	1	119	4	21	.3	14	11	774	3.62	2	2	ND	2	13	1	2	2	16	.23	.11	15	16	.80	135	.01	22	1.02	.03	.17	2	5
G-56 27747	8	126	6	23	.4	17	6	666	3.31	6	10	ND	4	207	1	2	2	32	2.97	.08	12	54	1.73	63	.06	16	1.33	.02	.08	2	5
B-1 27748	4	664	4	31	.5	28	22	595	5.51	10	2	ND	2	45	2	2	2	53	.89	.16	2	42	2.02	32	.06	13	2.03	.02	.06	2	15
B-2 27749	1	74	3	2	.1	9	4	47	1.10	2	2	ND	2	48	1	2	2	13	.56	.15	3	7	.08	125	.09	19	.30	.03	.13	2	5
B-3 27750	1	504	2	9	.3	11	12	192	3.96	2	2	ND	2	22	1	2	2	41	.31	.11	2	61	.79	187	.12	21	1.11	.03	.01	2	20
B-4 29954	1	138	1	4	.2	5	6	74	2.09	2	2	ND	2	52	1	2	2	24	.54	.15	3	12	.20	131	.10	19	.50	.02	.25	2	5
B-5 29957	1	113	10	17	.2	11	14	207	2.79	2	2	ND	2	55	1	2	2	23	.71	.16	2	7	.29	95	.12	22	.62	.03	.20	2	5
B-6 29958	1	216	1	23	.2	9	4	343	4.68	2	2	ND	2	17	1	3	2	43	.22	.09	2	88	.87	121	.16	16	1.17	.02	.21	2	5
B-7 29959	1	64	4	11	.3	7	4	202	2.57	6	2	ND	2	27	1	2	2	26	.38	.12	2	47	.58	93	.11	24	.79	.02	.21	2	5
B-8 29960	1	143	4	11	.2	6	6	204	3.58	2	2	ND	2	35	1	2	2	38	.41	.14	2	54	.67	114	.13	18	.97	.02	.28	2	5
B-9 29961	1	142	1	8	.1	5	5	156	4.84	4	2	ND	2	39	1	2	2	56	.37	.15	2	31	.60	121	.13	23	.93	.02	.24	2	5
G-10 29962	1	39	2	40	.2	163	32	443	2.06	294	2	ND	2	60	1	2	2	20	1.40	.06	2	312	1.41	78	.05	21	1.35	.04	.14	2	5
G-10B 29963	1	54	1	12	.1	6	5	195	1.61	11	2	ND	2	29	1	2	2	32	.55	.13	2	24	.63	88	.08	18	.91	.03	.22	2	5
G-10C 29964	1	269	2	35	.5	12	11	487	6.85	5	2	ND	2	31	1	2	2	70	.61	.14	2	17	1.69	63	.10	21	1.90	.02	.21	2	5
B-11 29965	2	157	1	7	.2	42	12	82	2.20	2	2	ND	2	26	1	2	2	24	.44	.12	3	28	.22	108	.13	23	.44	.03	.17	2	5
G-1 30351	2	844	4	6	.6	31	25	228	2.60	7	7	ND	2	71	1	2	2	28	2.58	.08	2	44	.33	60	.11	21	.67	.02	.17	2	15
G-2 30352	1	130	1	21	.2	11	8	288	3.32	3	2	ND	2	29	1	2	2	37	.57	.14	2	86	.96	77	.12	18	1.24	.03	.31	2	5
G-3 30353	1	122	3	6	.2	5	7	141	2.43	8	2	ND	2	97	1	2	2	27	.65	.18	2	6	.31	75	.10	25	.61	.03	.16	2	5
G-4 30354	2	128	2	24	.3	11	10	245	2.96	10	2	ND	2	52	1	2	2	29	.51	.15	2	25	.57	110	.09	24	.89	.03	.17	2	5
G-5 30355	1	77	2	7	.1	15	9	180	1.95	4	2	ND	2	32	1	2	2	22	.60	.12	2	17	.40	80	.09	22	.66	.02	.13	2	5
G-6 30356	1	133	1	17	.3	5	4	144	3.47	2	2	ND	2	49	1	2	2	25	.47	.22	2	9	.23	142	.08	23	.59	.02	.22	2	5
G-7 30357	1	20	4	24	.2	20	5	449	2.57	3	2	ND	2	9	1	3	2	38	.28	.07	2	17	1.15	73	.05	22	1.31	.01	.13	2	5
G-8 30358	1	303	2	8	.3	11	6	127	3.20	7	2	ND	2	30	1	2	2	21	.49	.13	2	25	.40	102	.14	22	.67	.01	.24	2	5
G-9 30359	1	123	1	10	.2	12	12	159	2.36	7	2	ND	2	45	1	2	2	22	.62	.16	2	8	.30	112	.10	24	.67	.02	.24	2	5
G-10 30360	1	77	1	8	.1	3	4	129	1.69	2	2	ND	2	102	1	2	2	21	.77	.18	3	4	.21	112	.08	24	.59	.05	.21	2	45
G-11 30361	8	1102	7	81	.6	84	139	181	31.36	48	2	ND	2	29	2	19	2	24	.79	.06	2	18	.22	41	.06	2	.56	.01	.08	2	900
G-12 30362	1	143	4	17	.1	8	6	318	4.68	2	2	ND	2	21	1	2	2	32	.31	.14	2	102	.74	111	.09	16	1.01	.02	.20	2	15
G-13 30363	1	150	2	13	.2	11	6	178	2.46	2	2	ND	2	39	1	2	2	27	.45	.18	2	45	.48	114	.09	23	.69	.04	.19	2	5
G-14 30364	1	107	2	5	.1	8	4	109	1.84	4	2	ND	2	66	1	2	2	27	.51	.12	2	32	.41	84	.10	20	.72	.03	.17	2	5
G-15 30365	1	63	2	10	.1	3	1	34	1.16	2	2	ND	3	31	1	2	2	15	.20	.06	5	4	.05	48	.06	24	.25	.07	.05	2	5
STD A-1	1	31	38	180	.4	34	12	974	2.76	9	2	ND	2	34	2	2	2	54	.64	.10	7	76	.76	273	.08	7	1.88	.02	.20	2	5

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Hg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	M ppm	Aut ppb
G-16 30366	1	141	1	9	.2	12	12	169	5.49	7	2	ND	2	5	1	2	2	204	.50	.01	2	105	.88	95	.13	22	.90	.03	.20	2	5
G-17 30367	1	87	1	4	.2	14	7	66	1.61	2	2	ND	2	63	1	2	2	26	.52	.12	3	53	.24	95	.08	23	.49	.02	.15	2	5
G-18 30368	4	164	1	18	.3	9	6	125	2.82	2	2	ND	2	34	1	2	2	22	.71	.12	4	30	.12	41	.08	24	.35	.03	.05	2	5
G-19 30369	2	129	1	5	.2	12	8	75	1.85	2	2	ND	2	43	1	2	2	29	.53	.13	4	34	.17	42	.11	5	.38	.03	.10	2	5
G-20 30370	1	97	3	13	.2	10	12	303	2.93	2	2	ND	2	34	1	2	2	31	.54	.14	5	23	.65	61	.10	25	.88	.04	.10	2	5
G-21 30371	2	113	1	16	.2	16	11	202	2.05	2	2	ND	2	57	1	2	2	40	.87	.18	6	34	.67	102	.11	26	.98	.04	.37	2	5
G-22 30372	1	131	2	12	.1	18	14	233	2.97	2	2	ND	2	39	1	2	2	41	.70	.19	4	32	.72	100	.10	23	1.01	.03	.26	2	5
G-23 30373	2	37	1	1	.2	3	1	23	2.18	2	2	ND	2	21	1	2	2	48	.15	.10	2	12	.94	79	.14	22	.22	.05	.09	2	5
G-24 30374	3	34	1	1	.1	2	1	32	1.03	2	2	ND	2	62	1	2	2	15	.52	.16	3	7	.05	70	.11	19	.31	.04	.12	2	5
G-25 30375	1	36	1	6	.1	16	17	143	.64	2	2	ND	2	73	1	2	2	27	1.19	.09	2	7	.06	66	.12	23	.37	.03	.11	2	5
G-26 30376	1	89	3	21	.2	11	9	377	2.29	9	7	ND	2	90	1	2	2	35	2.32	.12	2	41	.62	58	.09	23	1.03	.03	.09	2	5
G-27 30377	20	270	2	2	.3	17	11	43	4.47	2	3	ND	2	25	1	2	2	32	.57	.14	3	21	.98	89	.15	25	.34	.03	.12	2	30
G-28 30378	1	27	4	62	.3	6	6	594	3.06	2	2	ND	2	82	1	2	2	31	1.69	.10	4	12	1.25	124	.10	24	1.35	.02	.14	2	5
G-29 30379	2	86	2	18	.2	7	6	296	2.77	2	2	ND	2	33	1	2	2	40	.52	.14	3	23	.97	142	.12	25	1.24	.03	.62	2	5
G-30 30380	7	321	3	568	1.4	12	19	925	8.86	7	2	ND	2	65	8	2	2	60	1.20	.14	2	24	1.24	104	.10	19	1.51	.02	.29	2	85
G-31 30381	1	358	2	1292	.8	127	62	92	4.27	6	2	ND	2	16	22	2	2	14	.43	.10	2	23	.22	90	.09	18	.43	.02	.16	2	30
G-32 30382	2	164	7	39	.8	17	13	208	4.25	6	2	ND	2	36	1	2	2	34	.92	.15	2	22	.59	81	.11	16	.81	.02	.19	2	15
G-33A 30383	1	1014	4	1314	1.2	27	33	559	7.14	15	6	ND	2	295	21	2	2	21	12.27	.05	2	9	.40	24	.06	8	.61	.01	.12	2	55
G-33B 30384	2	211	7	27	1.8	19	27	218	5.96	3	2	ND	2	140	1	2	2	40	.73	.18	3	16	.49	64	.11	15	.94	.02	.18	2	50
G-33C 30385	1	44	2	37	.3	11	7	736	1.39	9	4	ND	2	317	1	2	2	23	17.08	.04	2	18	.48	28	.05	23	.55	.02	.22	2	190
G-34 30386	4	36	1	6	.2	1	2	68	4.30	3	2	ND	2	105	1	2	2	41	.97	.34	5	3	.19	137	.04	24	.70	.02	.44	2	5
G-35 30387	1	212	5	28	.2	27	26	406	4.77	3	3	ND	2	59	1	2	2	37	1.37	.13	2	17	.98	105	.14	21	1.19	.02	.21	2	10
G-36 30388	1	158	7	22	.2	39	27	283	3.38	3	4	ND	2	97	1	2	2	37	2.12	.13	2	78	.94	229	.13	28	1.18	.03	.81	2	5
G-37 30389	1	151	3	40	.2	23	20	453	3.39	4	2	ND	2	130	1	2	2	45	1.70	.17	3	33	1.50	346	.13	28	1.75	.03	1.21	2	5
G-38 30390	1	157	1	30	.1	36	26	353	3.59	2	2	ND	2	33	1	2	2	36	1.30	.16	2	57	1.10	288	.17	23	1.24	.02	.59	2	5
G-40 30391	1	104	1	37	.1	33	17	390	2.78	4	2	ND	2	92	1	2	2	43	.72	.13	3	106	1.53	514	.12	28	1.79	.03	1.48	2	5
G-41 30392	1	42	1	28	.2	4	3	399	2.21	2	2	ND	2	200	1	3	2	31	.81	.20	3	7	.88	171	.10	27	1.17	.04	.27	2	5
G-42 30393	1	78	5	33	.1	32	13	428	4.34	7	2	ND	2	34	1	5	2	45	.44	.15	2	132	1.63	137	.13	23	1.73	.02	.27	2	5
G-43 30394	2	125	8	27	.2	76	33	591	5.39	2	2	ND	2	38	1	3	2	34	.79	.09	2	98	1.46	68	.12	24	1.42	.02	.08	2	5
G-44 30395	1	204	10	43	.2	60	29	481	3.48	2	6	ND	2	70	1	2	2	27	2.75	.11	2	43	.71	111	.10	23	.87	.03	.17	2	5
G-45 30396	2	109	2	23	.1	32	12	291	4.31	2	2	ND	2	18	1	2	2	24	.41	.10	2	74	1.00	74	.17	26	.98	.02	.11	2	5
G-46 30397	1	12	8	55	.1	18	7	713	1.84	7	2	ND	2	20	1	2	2	7	.32	.16	10	12	.11	97	.01	31	.37	.03	.11	2	5
G-47 30398	5	37	2	23	.2	9	2	94	3.28	20	2	ND	2	4	1	2	2	14	.04	.03	2	15	.05	28	.01	23	.15	.01	.02	2	5
G-48 30399	1	67	2	44	.1	30	23	180	3.03	2	2	ND	2	9	1	2	3	34	.47	.03	2	161	1.52	56	.21	25	1.86	.02	.09	2	5
G-49 30400	1	78	1	95	.1	11	8	782	4.39	4	2	ND	2	6	1	3	2	59	.31	.03	2	119	1.83	23	.29	23	1.90	.02	.01	2	5
STD A-1/AJ	1	30	40	185	.3	35	12	992	2.81	11	2	ND	2	35	2	2	2	55	.65	.10	7	75	.77	277	.08	8	1.89	.02	.20	2	510

A P P E N D I X III

Arsenic

The arsenic content of the rocks collected on the Eureka property range between 1 (detection limit) and 294 ppm. The statistical curve for arsenic shows two distinct populations of values. The first population which forms the background is from 0 to 7 ppm As, the second one, above 8 ppm As, is anomalous and represents 10% of the samples (Figure 4).

Arsenic presents a fair positive correlation with gold.

Arsenic does not show any particular association with any rock types.

Gold

The gold content of the rocks collected on the Eureka property range between 5 (detection limit) and 900 ppb. The statistical curve for gold shows two distinct populations of values. The first population which forms the background is below 10 ppb Au, the second one, above 100 ppb Au, is anomalous and represents 20% of the samples (Figure 5).

The samples with highly anomalous gold content are located in the upper parts of cirques 3 and 5. This, added to the fact that Eric Scholtes' samples collected in 1981 show that those two cirques are floats and not outcrop confirm the existence of two gold rich zones. The first one is located between the eastern shoulder of Eureka Peak and the southern part of the ridge between cirques 2 and 3. The second one is located on the northwestern flank of the ridge between cirques 4 and 5. Possibly the two zones are even joined. Rock obtained from these two zones assayed above 1000 ppb Au (A53 - 7800 ppb).

Anomalous gold occurs mostly in the highly altered zones of the augite porphyry.

Zinc

The zinc content of the rocks collected on the Eureka property range between 1 (detection limit) and 1314 ppm. The statistical curve for zinc shows two distinct populations of values. The first population which forms the background is from 0 to 50 ppm Zn, the second one, above 50 ppm Zn, is anomalous and represents 15% of the samples (Figure 6).

Except for one sample, anomalous zinc occurs in the augite porphyry.

Lead

The lead content of the rocks collected on the Eureka property range between 1 (detection limit) and 141 ppm. The statistical curve for lead shows two distinct populations of values. The first population which forms the background is from 0 to 5 ppm Pb, the second one, above 5 ppm Pb, is anomalous and represents 15% of the samples (Figure 7).

In comparison with the previous years results the anomalous populations were above 40 ppm only one sample might be anomalous. This sample (EG82-53) is also characterized by a high Zn content (528 ppm) and was collected in the thick black argillitic sequence underlying the new claim group. This sample and others collected in 1981 emphasizes the potential of the Eureka property for shale-hosted lead-zinc deposits.

Copper

The copper content of the rocks collected on the Eureka property range between 31 and 1014 ppm. The statistical curve for copper shows three distinct populations of values. The first population which forms the background is from 0 to 100 ppm Cu, the second one, ranging between 100 and 400 ppm Cu, and the third one, above 400 ppm Cu. The last two populations are anomalous and respectively represent 45% and 5% of the samples (Figure 8).

The anomalous samples with a copper content above 400 ppm were collected in the intrusive or in the vicinity.

Silver

The silver content of the rocks collected on the Eureka property ranges between 0.1 (detection limit) and 1.8 ppm silver. The statistical curve for silver shows two distinct populations of values. The first population which forms the background is from 0 to 0.4 ppm Ag, the second one, above 0.4 ppm Ag, is anomalous and represents 15% of the samples (Figure 9).

The samples containing anomalous amounts of silver are hosted by augite porphyry and were found in cirque 5 where they seem to be associated with gold.

Soils

Soils were only collected in the northern flat part of cirque 2 and are plotted on Figure 10. The copper content of the soil samples is only anomalous on the west line and it might be caused by eluvial deposits.

As it is commonly found in British Columbia that background values of gold in soils are less than 5 ppb. It is assumed that the sample containing more than 5 ppb Au is caused by gold mineralization in bedrock. With the exception of one soil, all the soils have an anomalous gold content.

CONCLUSION AND RECOMMENDATION

Bad weather conditions only allowed a reduced program to be carried out in the 1982 field season. The extension on the anomalous zones of cirque 5, south of Eureka Ridge, and the eastern shoulder of Eureka Peak were not visited.

The high potential for porphyry copper as well as copper-gold mineralization is still indicated.

The mapping and partial rock sampling of the gold-silver mineralization located on cirques 5 and 3, discovered in 1981, gave encouraging results.

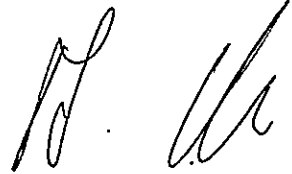
The property also shows significant anomalous values of lead-zinc especially in the argillite which indicates a potential for shale-hosted lead-zinc deposits.

The new claims staked in the winter of 1981-82 were partially covered by the rock sampling survey but do not show very promising results.

Author's Qualifications

I, Alain Chevalier, of 2763 West 11th Avenue, Vancouver, B. C., hereby certify that:

1. I am a graduate of University of Lausanne, B.Sc., Geology in 1978 and M.Sc., Geology in 1980.
2. I have practiced my profession since 1979 with various mining companies.
3. Since 1981 I have been employed as Project Geologist with UMEX Inc.



Alain Chevalier

