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003091

GEOCHEMICAL SURVEY JUBILEE MOUNTAIN PROSPECT

BRITISH COLUMBIA

5 MILES N.W. OF SPILLIMACHEEN

LAT. 50° 55' N LONG. 116° 27'

PROPERTY FILE

BY

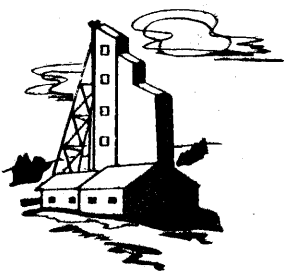
R. A. BUCKLEY P.ENG.

DEKALB MINING CORPORATION

CALGARY, ALBERTA

WORK DONE BETWEEN

MAY 1975 - SEPT. 1975



G E O C H E M I C A L S U R V E Y

J U B I L E E M O U N T A I N P R O S P E C T

B R I T I S H C O L U M B I A

PROPERTY FILE

R.A. BUCKLEY, P. ENG.

MARCH 1976

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I N D E X

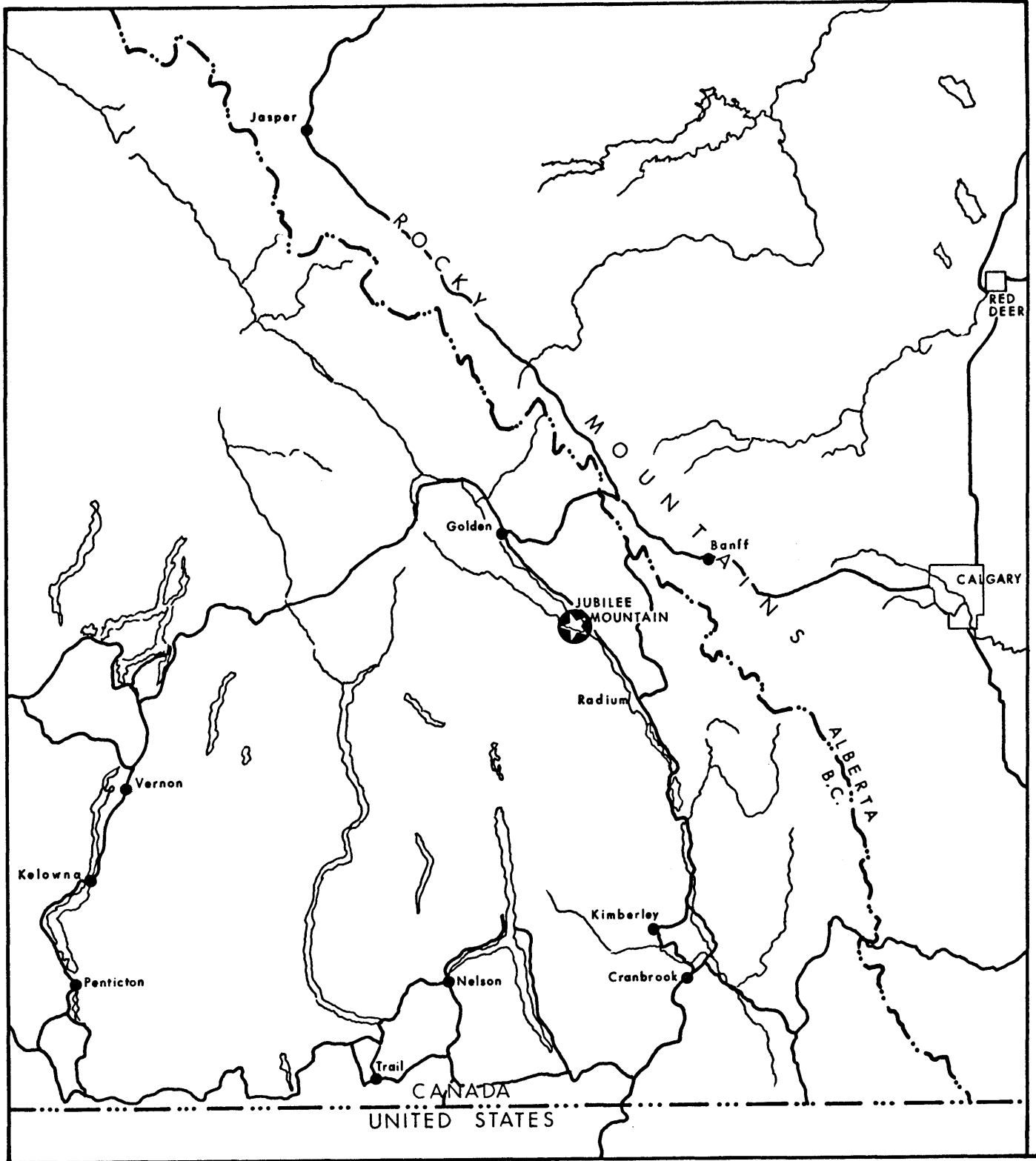
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I N T R O D U C T I O N

As an additional step in the orderly exploration of certain metallic sulfide showings on Jubilee Mountain (Reference #6), a geochemical soil survey was conducted between June and September 1975.

The survey was carried out on existing surveyed lines over the Crown Grants Atlanta, Lot 134; Horse Shoe, Lot 266; London, Lot 15303; Manchester, Lot 15304; Cornwall, Lot 15305; Lancaster, Lot 1112; FermamaghFr, Lot 15306; while new lines had to be surveyed and cut on the located claims Luck 1, 2 and 4 and TM 1 and 2. Slightly under 800 soil and silt samples were collected and assayed.

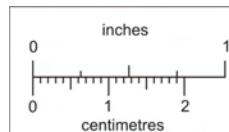
Since the geography, topography and regional geology have been discussed in previous reports, it will not be repeated in these pages, other than to say that the prospect is located on the western edge of the Rocky Mountain Trench, 35 miles north of Radium at Spillimacheen, B.C. Access to the property on Jubilee Mountain is by forestry road, a distance of 7 miles from the village of Spillimacheen.



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JUBILEE MOUNTAIN
BRITISH COLUMBIA

INDEX MAP

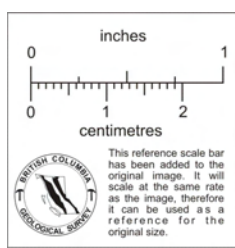
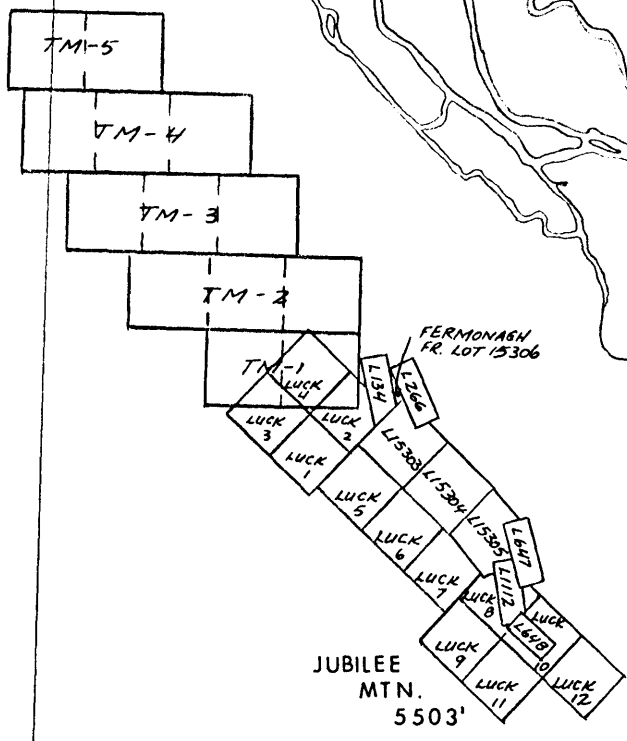


This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

SCALE: 1" = 40 mi.

MAR, 1976

116° 30'
51° 00'



DEKALB MINING CORPORATION
JUBILEE MOUNTAIN BRITISH COLUMBIA
T.M. & LUCK CLAIMS 1670
NTS MAP 82 K EAST
3 1:250,000 JAN. 1976

S O I L S A M P L I N G

Soil samples were collected at 50 foot intervals along previously located cut lines. The cut lines were turned off of various base lines on an azimuth of 043° from true north. This orientation is approximately mutually perpendicular to the McKay-Jubilee contact.

The intention of the soil survey was to explore the immediate area surrounding the contact zone in an attempt to locate anomalous quantities of base metals.

Regional geology indicated that the lead-silver-copper sulfides tend to concentrate near the contact zone of the McKay shale and the Jubilee Mountain carbonate. Although the contact zone dips steeply to the west at 45° it was reasoned that if the base metal content of the soil was mapped it might be possible to locate an accumulation of base metal sulfides. It was also reasoned that it would only be necessary to sample a relatively small area on each side of the contact since the prospective zone would be deeply buried and become undetectable at a distance of more than 1,000 feet away from the McKay-Jubilee Formation contact. However, it would be necessary to evaluate sufficient samples to establish population trends over the McKay shale and the Jubilee carbonate.

The soil profile is not well developed on Jubilee Mountain. The area was burnt over, probably in the 1920's, and has since grown up in a heavy jack pine forest. The "A" horizon is thin, presenting no problems in digging through the zone. The "B" horizon grades into the "C" without any well developed marker. The "B" horizon is usually missing over the carbonate formation or poorly developed. The "C", or rubble zone, is most commonly found, leading to the possibility of recovering fragments of the bedrock in sampling procedures. This probably accounts for several of the extremely high values in samples when detrital sulfides were collected near outcropping sulfide-bearing veins.

Sampling was done when possible in low spots between tree stumps where the "B" horizon was best displayed. The ground underlain by McKay shale provided the best profile since this formation tends to decay quickly.

Samples were bagged in regulation kraft paper envelopes, labelled, and shipped to Chemex Laboratories in Calgary for analysis. In total, 691 soil samples were collected and analysed for lead, zinc, copper, silver and gold. A stream silt sampling program was also conducted but due to the limited number of samples (less than 100) the data could not be incorporated in this study.

LABORATORY TECHNIQUES

Analysis of the samples was done using standard procedures consisting of drying and sieving to a minus 80 mesh. A .5 gram sample was then treated with nitric acid and finally digested in perchloric acid. The sample was then diluted to 25 ml. and analysed using normal procedures for the various metals, employing an atomic absorption instrument. Copies of the laboratory reports are contained in the appendix of this report.

P R O S P E C T I N G W I T H G E O C H E M I S T R Y

Before discussing the methods by which geochemical data is processed and anomalous regions determined, a short presentation on why soil analysis is made is in order.

Soil is derived from rock through a combination of mechanical and chemical breakdown of that rock. It will, therefore, be representative of the rock from which it was derived, including any metalliferous concentrations occurring in the original rock.

If the breakdown was of a chemical nature without lateral movement of the resulting soil, then sampling of the soil will effectively be a sample of the underlying rock also. However, in nature this does not occur since erosion, glaciation, river and stream action will have transported the soil from its origin.

For this reason field observations are recorded taking note of the origin of the sampling horizon, whether the sample is taken from the "A", "B" or "C" horizon, direction of drainage and the nature of the drainage. Stream silt sampling techniques are quite different in that it is recognized that stream silt is transported by water action. Anomalous

samples will have, therefore, originated upstream from the sample site.

"A" zone sampling is unreliable since this is the organic portion of the soil profile. Base metal content varies in this horizon due to organic acids, etc., associated with decaying vegetable matter. The "B" horizon soil sample on the other hand will reflect the nearby metal content of the bedrock as a result of ground water circulation and natural leaching. Since the distribution of metal ions follow the laws of dispersion the metal content of the soil will in most cases probably be representative of the underlying bedrock. Slight modifications will exist due to topography and ground water migration trends.

These are the variables that complicate the interpretation of a geochemical survey, but techniques employing statistics and Gauss's laws of log-normal distribution can be used to assist in the interpretation of the field data.

DATA INTERPRETATION

Laboratory data was plotted on base maps and contoured in the usual manner. These maps appear in the back pockets of this report.

Unless certain parameters are established, an isolated data point has little meaning in geochemical surveys, even if such data is contoured. Such parameters as background and threshold value are two of the most important values to be determined for each survey. Other parameters such as confidence limits, correlation factors, etc., are of secondary importance.

One method of establishing such parameters is to treat the data statistically. This usually involves the use of a computer. Since this survey consisted of less than 1,000 samples, the data can be handled by hand methods and a desk calculator, with the results plotted as graphs.

Before the graphs and the various parameters are discussed, some background to the application of statistics to geochemistry should be presented.

Geochemical maps are most useful if the data is obtained from a large homogeneous population. Two questions

arise; one is, is the population large enough, and two, is the population homogeneous, that is, does the data come from one source? The first question can be answered in the affirmative if the sampling frequency or traverse passes over a postulated mineralized body a number of times. Less prospective country should also be sampled using the same sampling density, thereby establishing a background value.

In a practical sense, this can be determined by constructing histograms of the various metals. A bell-shaped outline, probably skewed to the higher values, indicates a normal distribution of the data. If the histogram is relatively smooth and symmetrical about the mode, then by inspection it can be concluded that sufficient sampling has been done to define the data population.

In determining the answer to the second question, the second derivative of a curve enclosing the histogram can be plotted. If this curve is a bell-shaped curve, then the data occurs in a log-normal distribution mode and is probably derived from one source. A rough approximation of the mode and standard deviation can also be determined from this plot.

The data can then be plotted on probability-log graph paper, which consists of plotting the metal content on the ordinate log scale and the cumulative percentage frequency distribution on the abscissa. If the resulting plot is a

straight line, then the data can be considered as being derived from one source. If there is a break in the curve, i.e., a change in slope, then two populations of data are contributing to the curve.

The background value in a perfect frequency distribution curve is the mode (most frequent) and is the same number as the median (50% of the values above and 50% of the values below). The background value of the laboratory data, therefore, is the geometric mean of the data. The next parameter obtained from this plot is the standard deviation. The threshold or that value above which all samples can be considered to be anomalous is one standard deviation above the median. The background is, therefore, found on the abscissa at the 50% mark of the cumulative percentage plot, while the threshold value is at one standard deviation above the background at the 98% mark.

A N A L Y S I S O F F I E L D D A T A

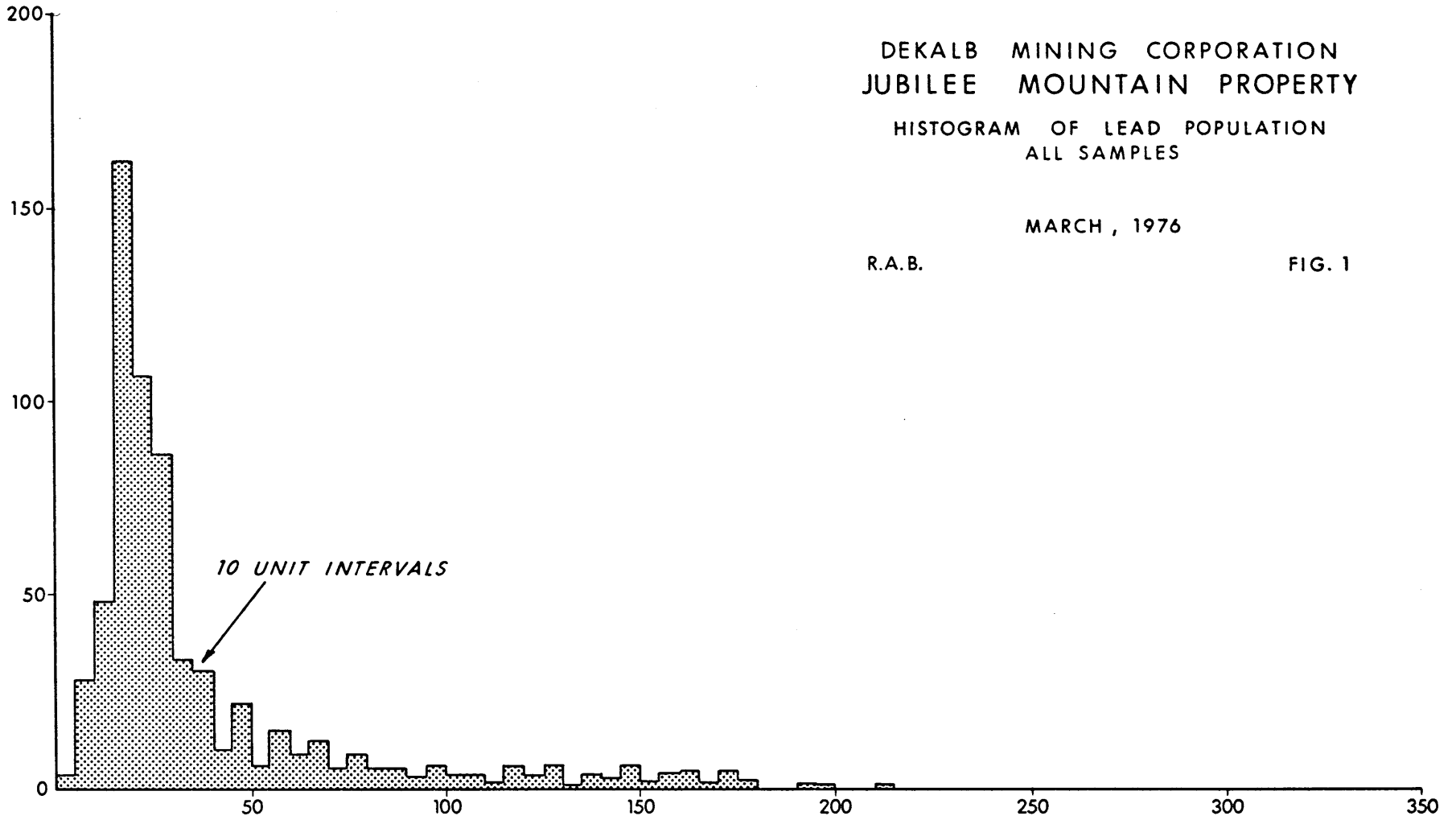
Figure 1 is a histogram plot of all lead samples taken during the survey. The plot illustrates that the curve is quite highly skewed to the right, indicating an abnormal log-normal distribution.

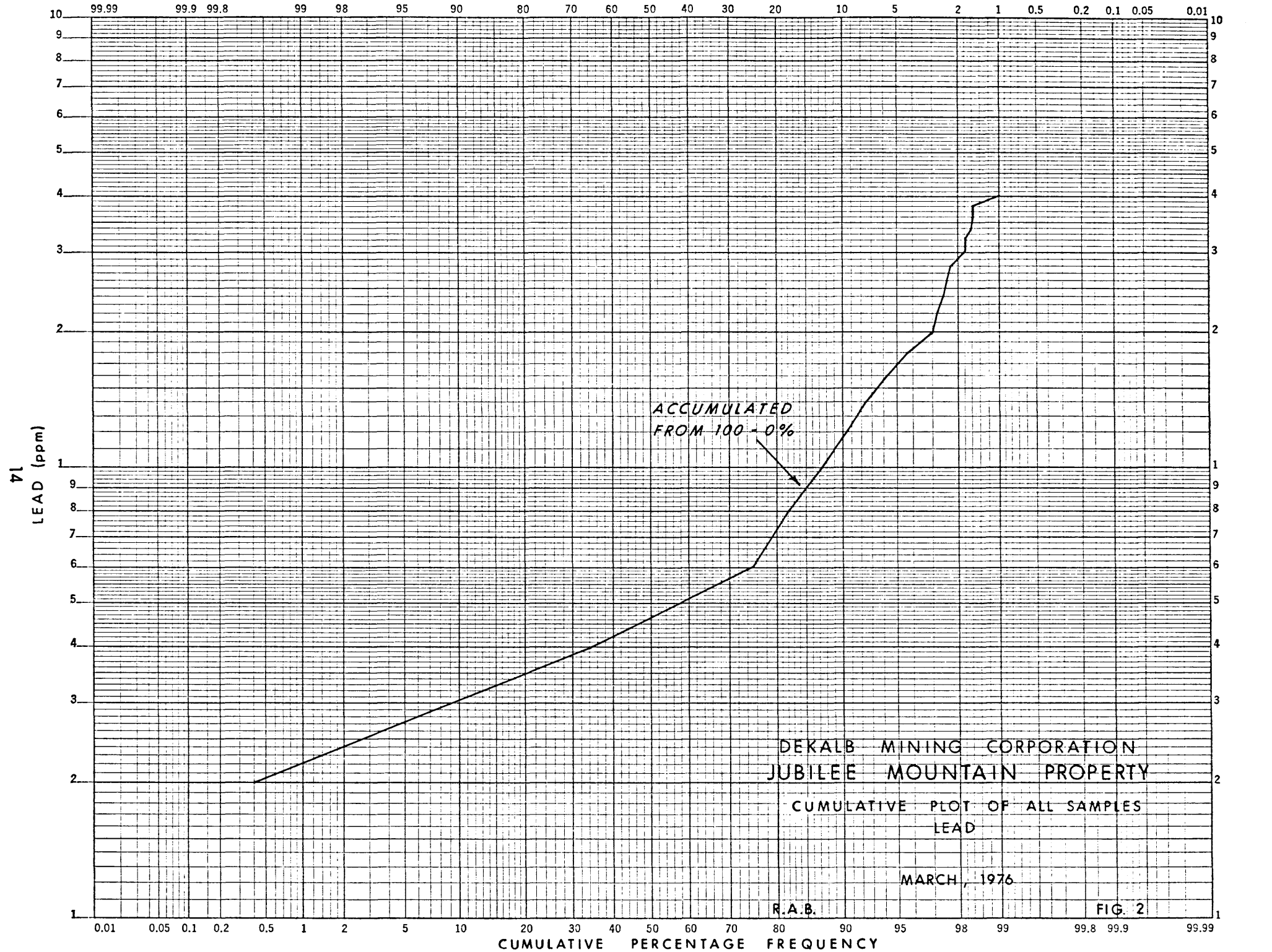
Additional analysis of the data by posting it on a log-probability plot illustrates several inflection points (Figure 2) along the curve and several slope changes. This would indicate that two and possibly three populations of lead exist. This is as expected since the samples were collected over two geological formations, the McKay shale and the Jubilee carbonate.

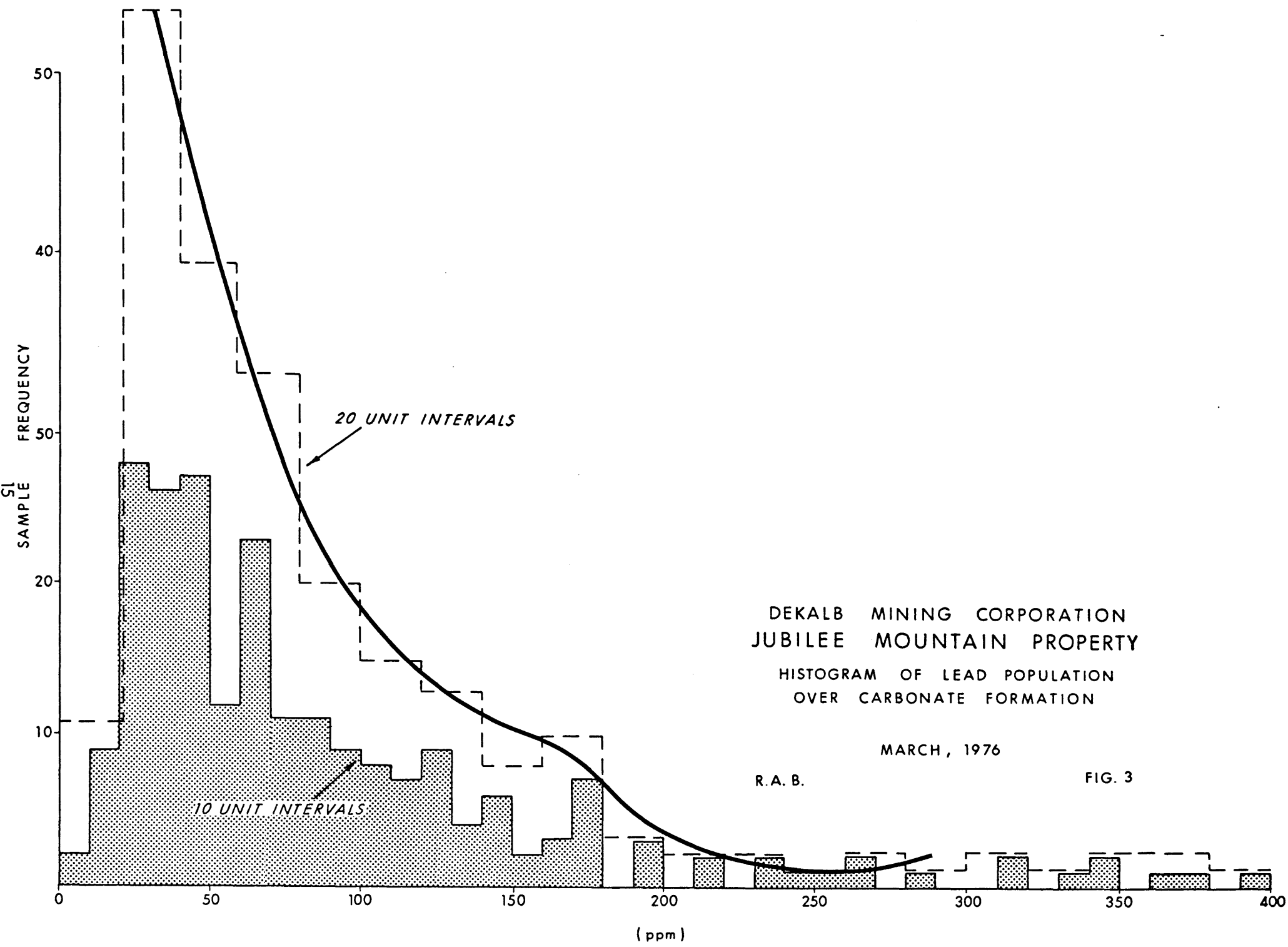
Since the lead indicates several populations, it was deemed unnecessary to plot the other metals in a similar manner. Only data obtained over the carbonate formation was considered for the balance of the study.

LEAD

Figure 3 is a histogram plot of lead data occurring over the Jubilee formation, consisting of limestone and dolomitic limestone. As a convenience, the formation is referred to as the carbonate formation, without reference to the degree of dolomitization existing at any particular sample site.







DEKALB MINING CORPORATION
 JUBILEE MOUNTAIN PROPERTY
 HISTOGRAM OF LEAD POPULATION
 OVER CARBONATE FORMATION

MARCH, 1976

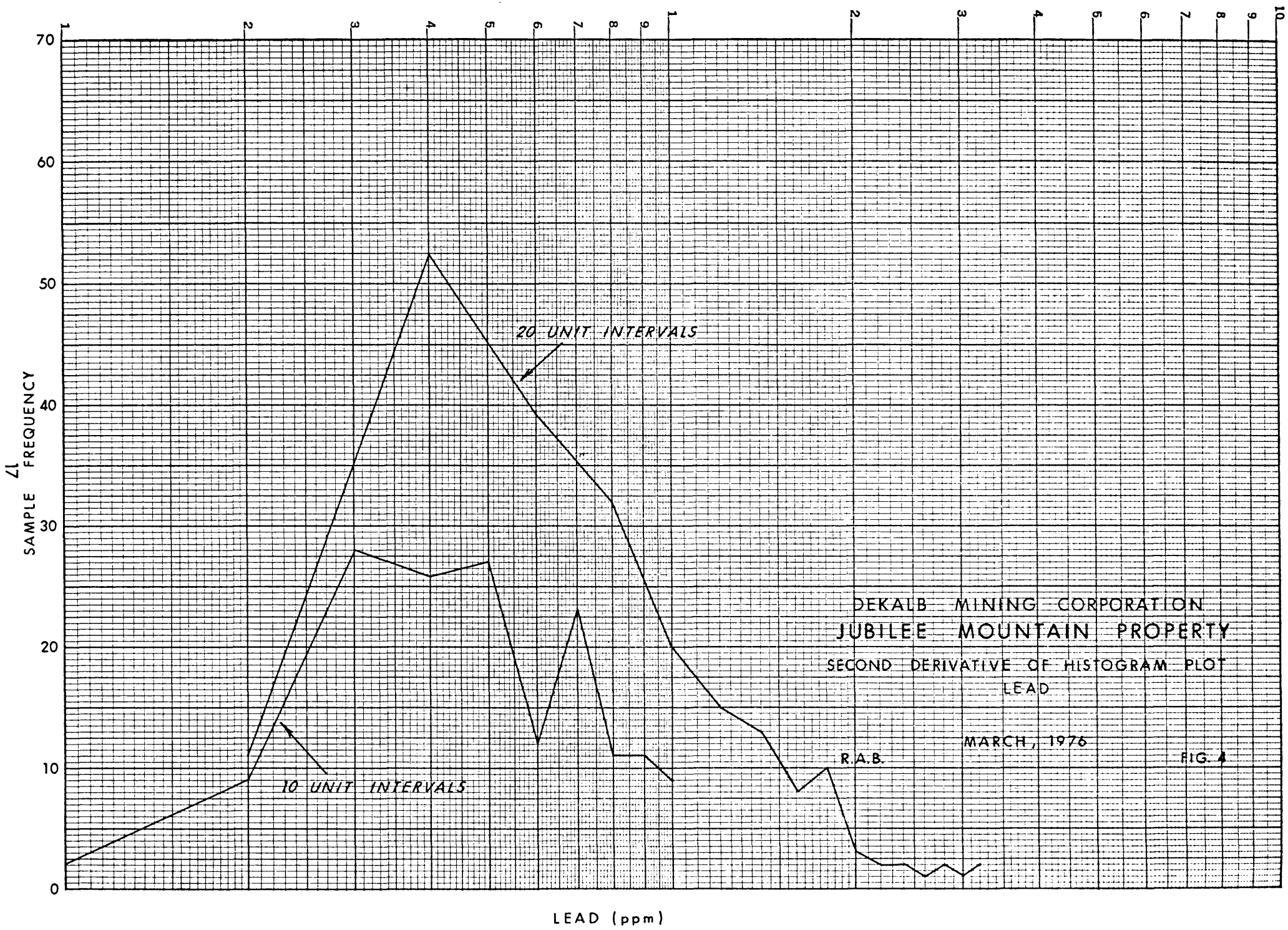
R. A. B.

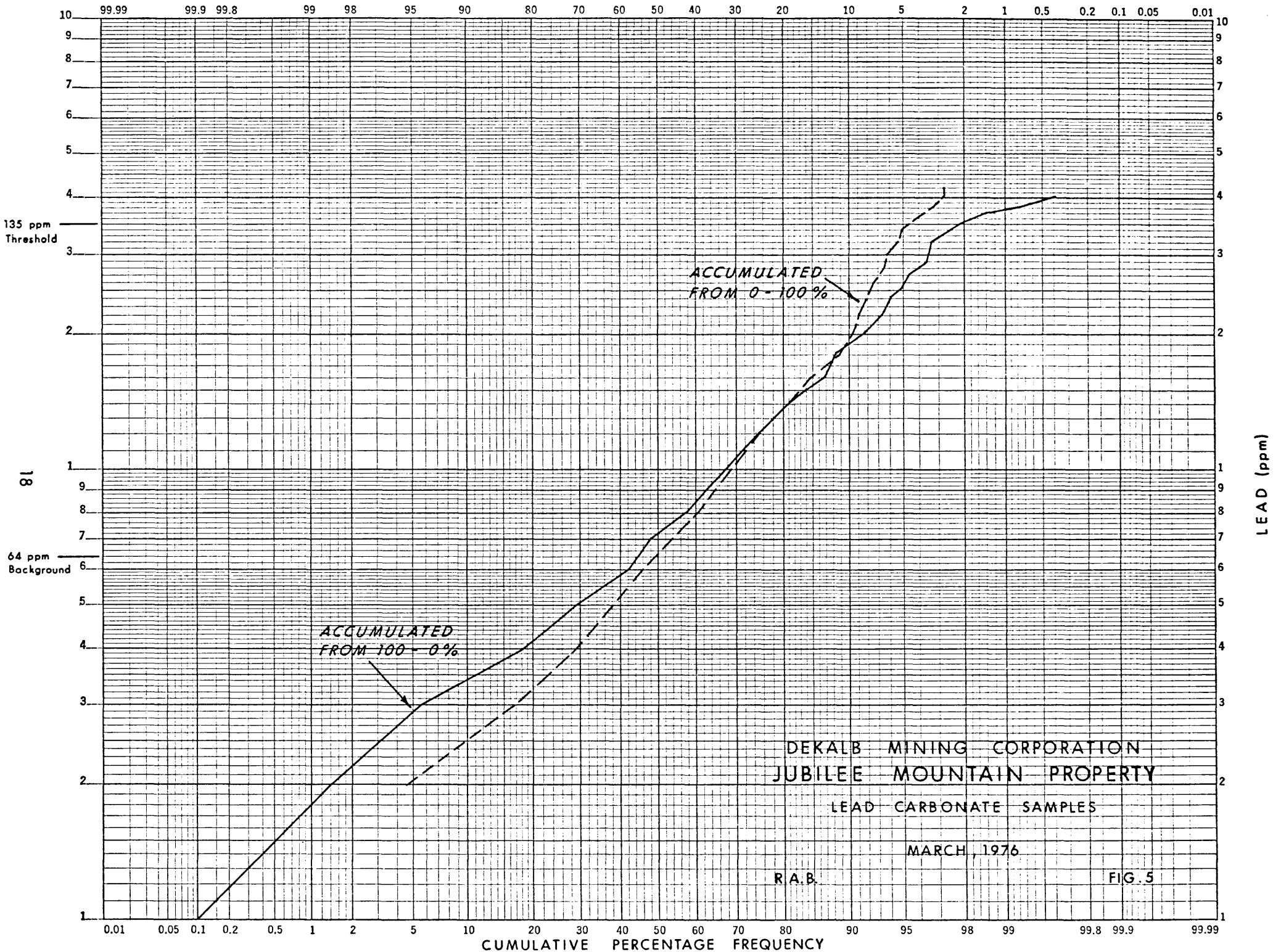
FIG. 3

Two histograms are plotted in each case by increasing the width of the class in an attempt to smooth the curve. The histogram has a much more log-normal shape in this plot than in Figure 1 since the data is derived over a monolithographic location, i.e., Jubilee Mountain formation.

Figure 4 confirms the log-normal distribution. By inspection of Figure 5 such parameters as background and threshold figures are determined and are so indicated on the plot.

Only those values occurring above the threshold are anomalous to the population and are so indicated on the lead contour map, Figure 12 in the back pocket.





DEKALB MINING CORPORATION
JUBILEE MOUNTAIN PROPERTY
LEAD CARBONATE SAMPLES

MARCH, 1976

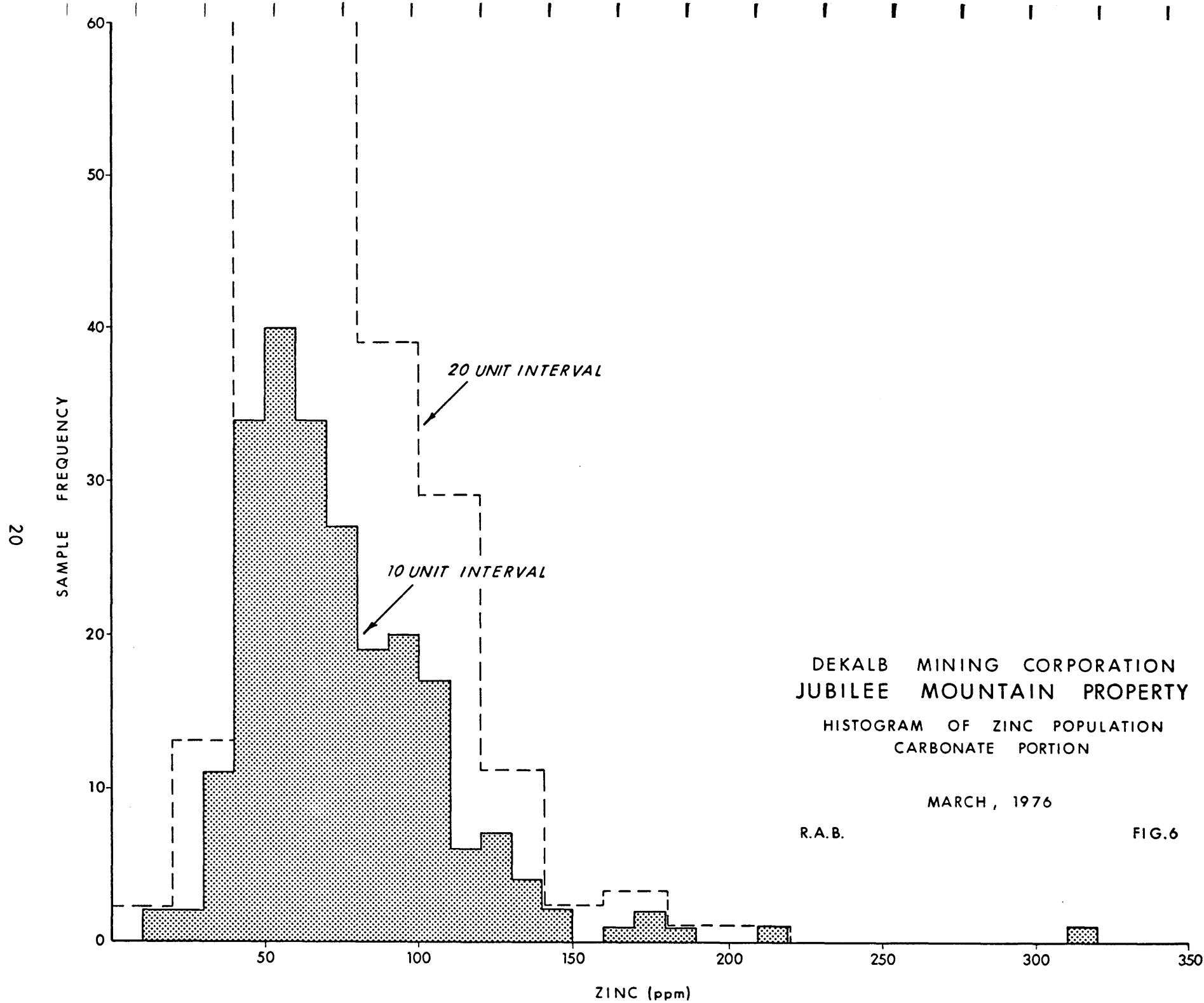
R.A.B.

FIG. 5

ZINC

The data for zinc is posted on Figures 6, 7, and 8 in a similar manner to the lead assays.

The geometric mean or background is determined to be 90 ppm while assays greater than 121 ppm zinc are considered to be anomalous and are so indicated on Figure 13, back pocket.

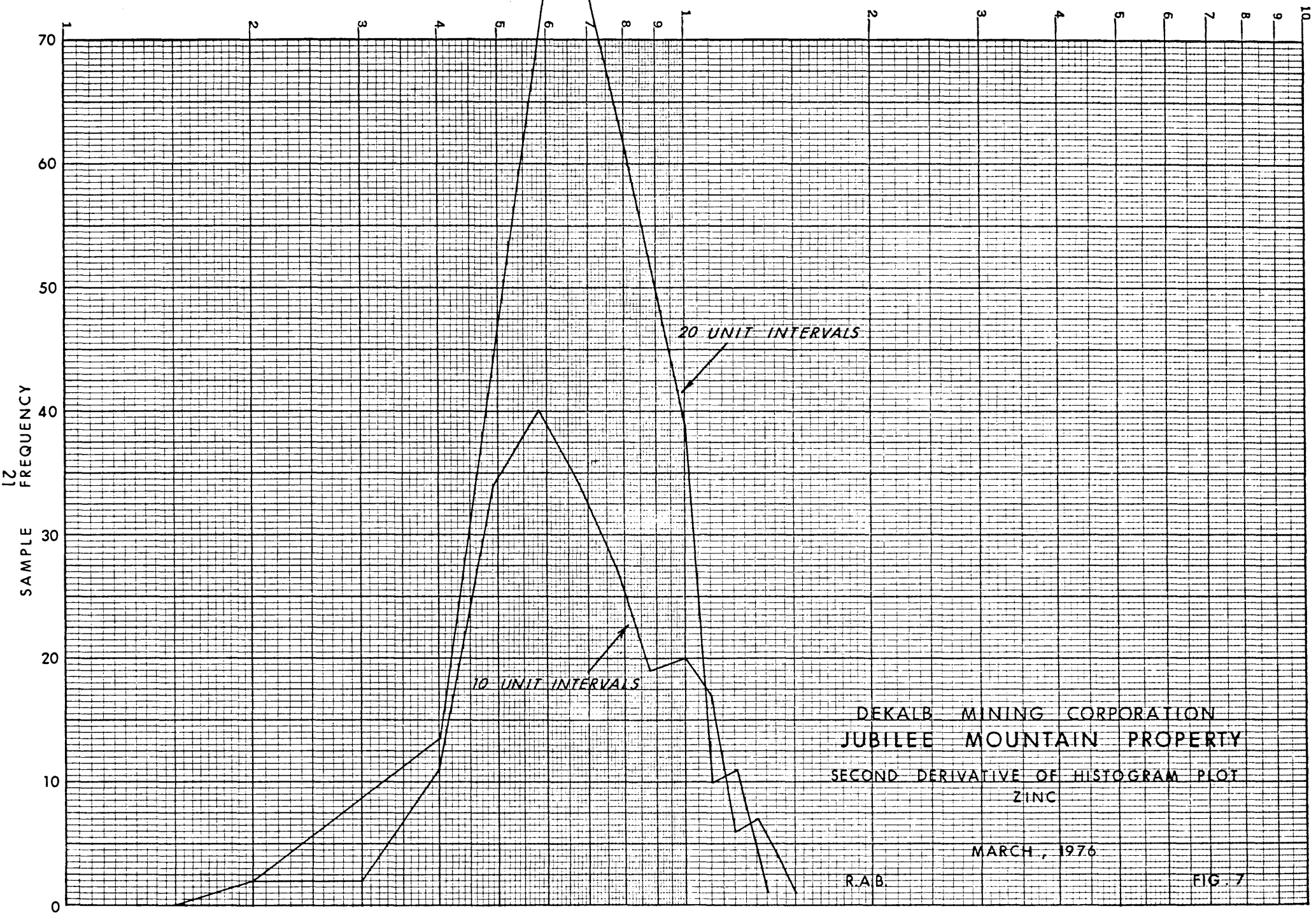


DEKALB MINING CORPORATION
 JUBILEE MOUNTAIN PROPERTY
 HISTOGRAM OF ZINC POPULATION
 CARBONATE PORTION

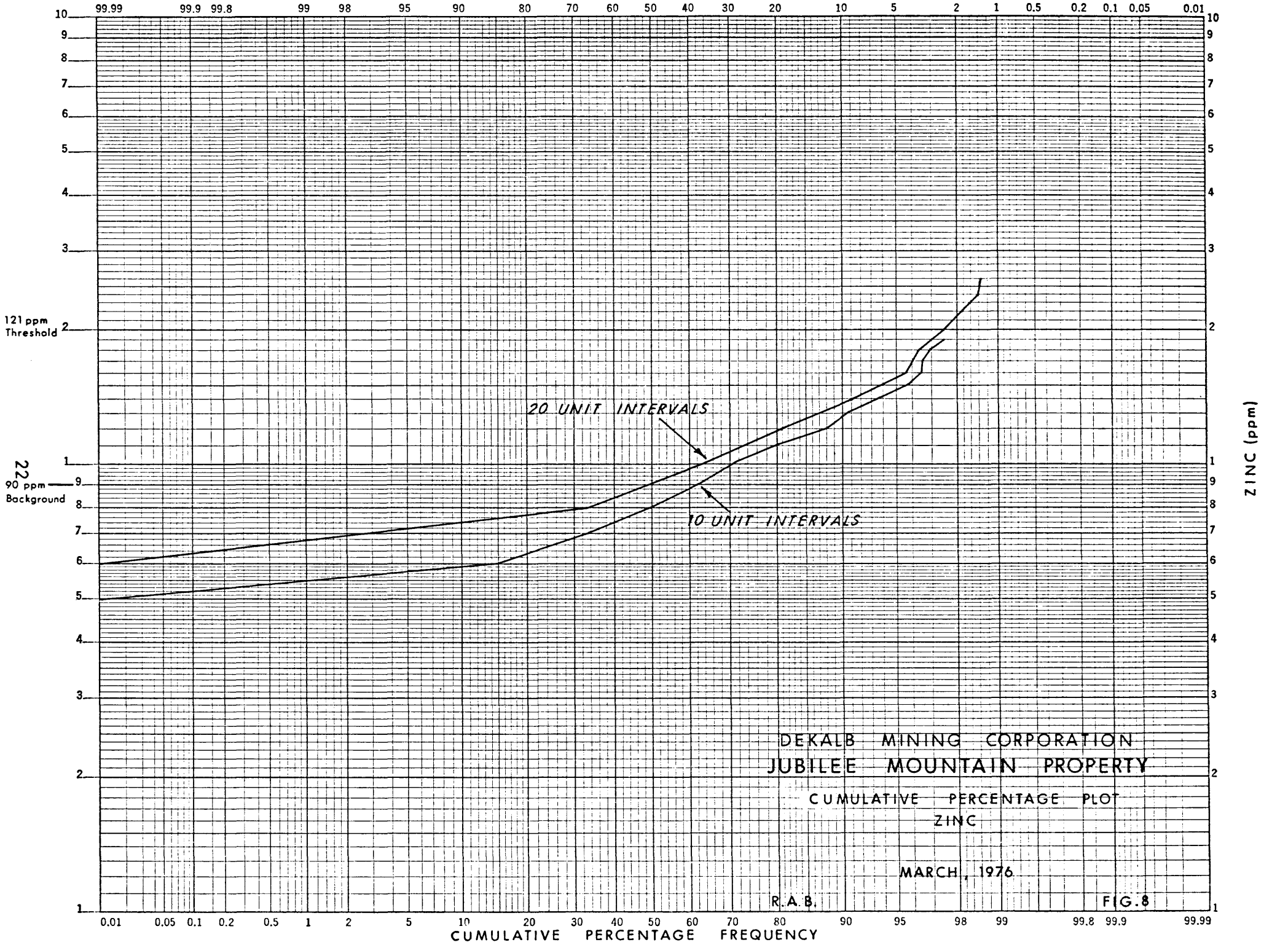
MARCH, 1976

R.A.B.

FIG.6



ZINC x 100 (ppm)



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JUBILEE MOUNTAIN PROPERTY

CUMULATIVE PERCENTAGE PLOT
ZINC

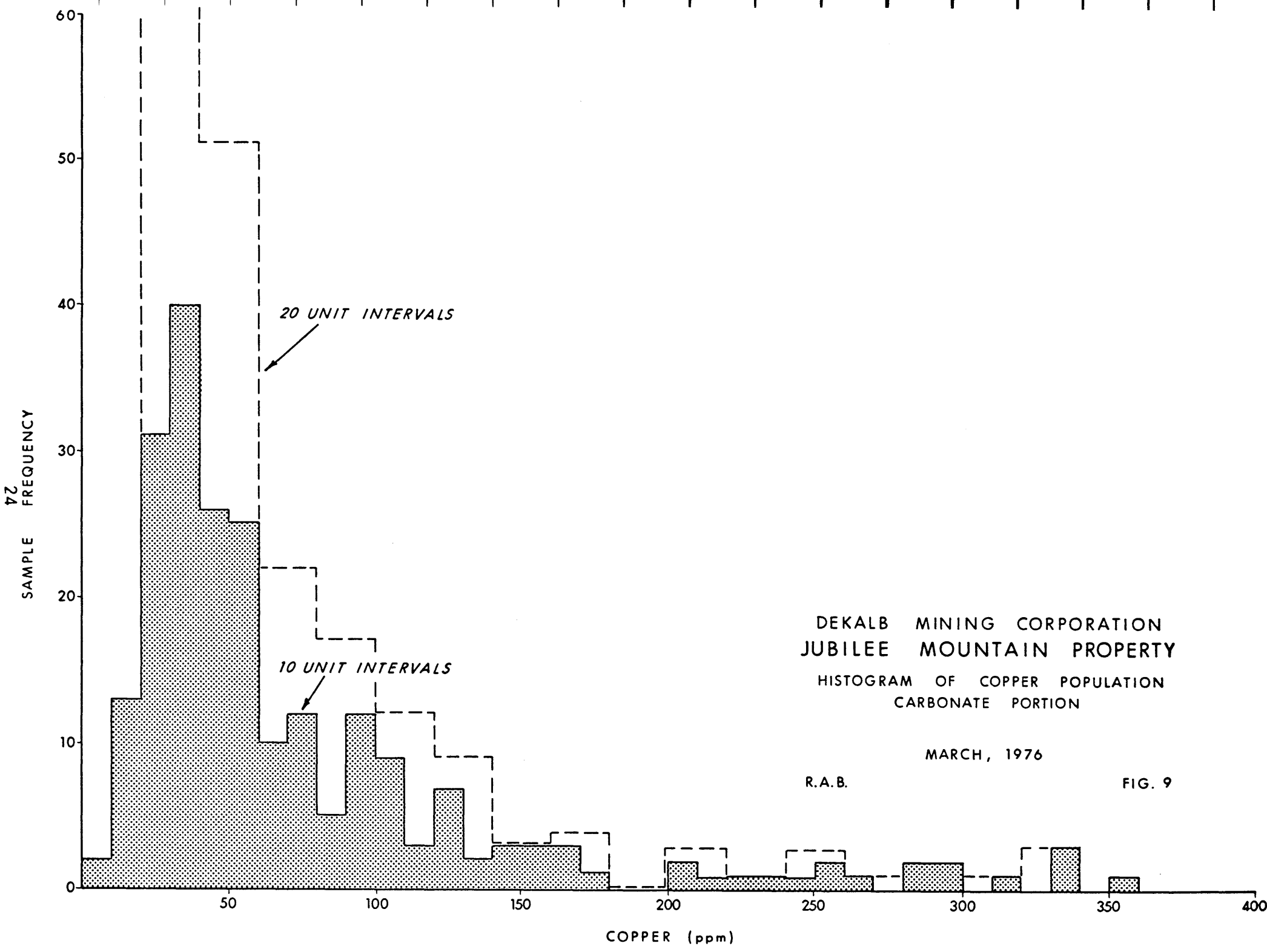
MARCH, 1976.

R. A. B.

FIG. 8

COPPER

In a similar manner in Figures 9, 10 and 11 the copper assays are represented. Values above 134 ppm copper are, therefore, to be considered anomalous as indicated on Figure 14, back pocket.

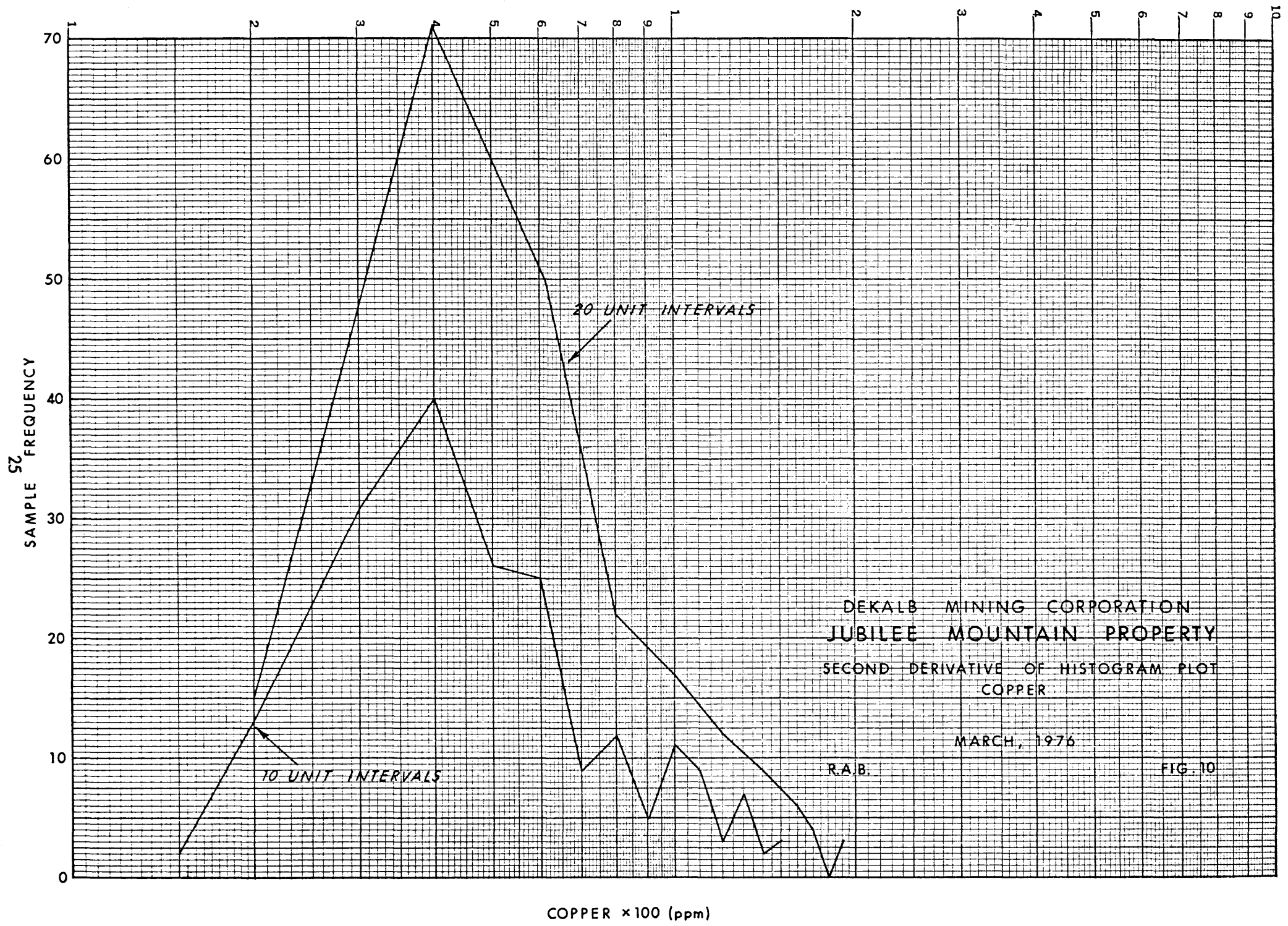


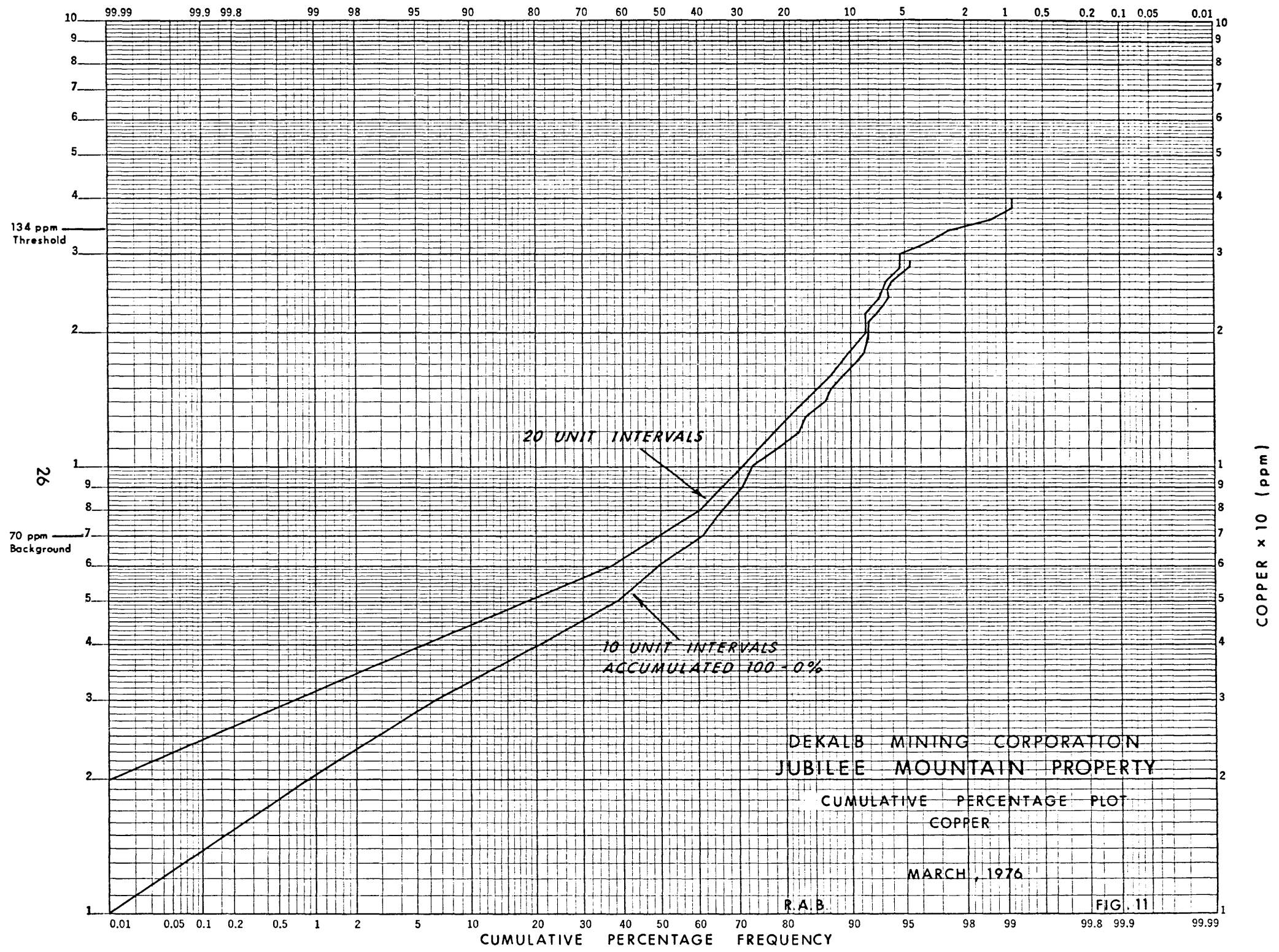
DEKALB MINING CORPORATION
 JUBILEE MOUNTAIN PROPERTY
 HISTOGRAM OF COPPER POPULATION
 CARBONATE PORTION

MARCH, 1976

R.A.B.

FIG. 9





DISCUSSION OF RESULTS

After the survey was completed the anomalous areas were re-prospected to determine the cause of the anomalies. Detail mapping revealed that the high values were associated with quartz-barite veins occurring in the carbonate. The details as to width, length and mineralogy of the veins have been posted on the soil geochemistry contour maps.

Since the soil analysis appears to belong to one family or population it is concluded that the mineralized vein system was mineralized from a common source. This hypothesis carries additional support after the vein mineralogy is studied, since each vein carries the same mineralogical assemblage, although varying somewhat as to ratios of barite and quartz.

It is thought that the ratio of quartz and barite to lead, zinc, silver and copper would perhaps be a function of proximity to the source of the sulfides.

It is noted that the veins have a preferred orientation of 125° to the west of the main fracture zone while similar veins to the east of the zone are oriented at 50° . It is, therefore, concluded that the veins have a tectonic origin related to the main fracture.

It is, therefore, reasonable to conclude that the mineralization is derived from a common source, but varies in the ratio of accessory minerals as a function of distance from that source.

This hypothesis preserves the original thesis of the origin of the mineralization encountered in drill holes JM 15, 17, 19, 22 and 23. These drill holes encountered much thicker zones than the showings encountered in the outcropping Jubilee formation, and therefore, must represent a different geological setting.

As presented in an earlier report (Reference #6) the mineralization drilled in JM 15 and 17 is associated with breccia in proximity to drill holes which recovered highly reefoid carbonates. This type of mineralization suggests that the brecciated carbonate originated through such processes as solution collapse, reef collapse or as reef frontal talus slopes. These features were encountered at the top of the stratigraphic section of the Jubilee carbonate and would, therefore, be eroded on that portion of the Jubilee that is exposed on the eastern limb of the syncline.

P A R A G E N E S I S

The paragenesis of the mineralization in this area could be summarized in the following manner:

Shallow seas covered the area in late Cambrian time depositing relatively clean carbonates on a sea floor that exhibited several basement fault escarpments. As deposition continued, reef growth was initiated along these escarpments and exist today as vuggy dolomitic carbonates, stromatopoidal horizons and as pelletoidal carbonates.

As the Cambrian period drew to a close, the seas became deeper and deposited black pyritic McKay shale (euxinic environment) over the carbonate. It was quite possible that slight movements continued along the old fault structures throughout Jubilee and McKay time keeping channelways open along the fault planes, as well as fostering the continued growth of the reef complex during Jubilee time.

At some later time it appears that solutions capable of dissolving the carbonates were actively creating caverns along the fault zone and within the more porous reefs. As these caverns reached a size where the rock was unable to support such an opening the cavern caved in, resulting in a quantity of broken rock or breccia. The interfragment space

was then infilled with sulfides derived from and precipitated by ground water or from hydrothermal solutions passing up along the original pre-depositional fault planes.

Similar sulfide deposits would be encountered in reef frontal talus slopes. It would require more detailed mapping and additional diamond drill holes to determine the origin and geographical limit of the breccia encountered to date.

In summary, any process that created a brecciation of the sedimentary sequence, thereby creating a zone with porosity that is highly permeable, would be a location for sulfide accumulation.

Many such deposits have been mapped in the world and are under the general name of Mississippi Valley type deposit. Deposits which demonstrate one or more of the features presented in this report are Pine Point, N.W.T.; Icon Deposit, Quebec; several in Russia, Italy and Yugoslavia, numerous deposits in Tennessee and Missouri, U.S.A.; the newer group in North-Central British Columbia (Robb Lake Area), Yukon (Goz Creek, Godlin Lakes, Summit Lake (?), Bonnet Plume, etc.) and possibly the Imperial Oil Prospect at Gays River, Nova Scotia.

C O N C L U S I O N S

Although the geochemical survey did not isolate a massive sulfide deposit on the McKay-Jubilee contact, it has presented evidence to postulate the existence of a larger accumulation of metalliferous sulfides in the subsurface, probably associated with some form of collapse feature.

This is evidenced by the fact that a number of preferred oriented veins have been mapped in the Jubilee Formation. These veins, probably of tectonic origin, occur in a stratigraphic horizon that is lower in the Jubilee section than the mineralization encountered in the drill program. The drill intersections are thicker, contain a greater amount of lead, and are associated with brecciation of the carbonate.

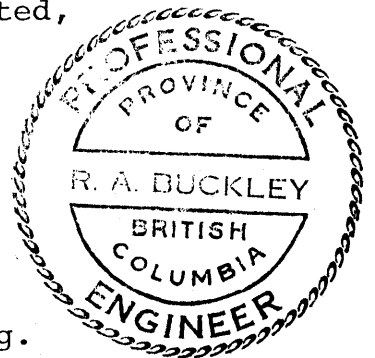
R E C O M M E N D A T I O N S

1. It is recommended that no additional geochemical surveying be done, as this program has provided sufficient data to proceed on a drilling program to follow up the existing sulfide intersections.
2. It is recommended that prior to commencing a drilling program a gravity survey be conducted to determine the lateral extent of the present drill intersections of lead.

Respectfully Submitted,



R.A. Buckley, P. Eng.



R E F E R E N C E S

1. Agarwal, R.G. Electromagnetic Survey, Vertical Loop, Jubilee Mountain, B.C., Company Report July 1974
2. B.C. Department Mines Minister of Mines Report 1927, pp 261-263
3. B.C. Department Mines Minister of Mines Report 1949, pp 200-204
4. B.C. Department Mines Minister of Mines Report 1954, pp 148-150
5. B.C. Department Mines Minister of Mines Report 1955, pp 72-73
6. Buckley, R.A. Evaluation of the Jubilee Mountain Prospect, B.C., Company Internal Report, February 1975
7. Collins, Jon A.,
Smith, Leigh Zinc Deposits Related to Diagenesis and Intrakastic Sedimentation in the Lower Ordovician St. George Formation, Western Newfoundland. Bull. Cdn. Pet. Geol., Vol. 23, No. 3, September 1975, pp 393-427
8. Ditto, A.G. Engineer's Reports on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd., September 9, 1968
9. Finney, W.A.;
Prior, J.W. IP Survey, Jubilee Mountain Property, 50°-116° NE, for Calix Mines Ltd., Hunttec, April 1968
10. Geological Survey of Canada Summary Report - 1932 Part A II, pp 172-176
11. Hendry, K.N. Evaluation of Jubilee Mountain, B.C. Horizontal Loop EM Survey, Kenting Exploration Service Ltd., Company Report, October 23, 1975

REFERENCES Continued

12. Lepeltier, Claude A Simplified Statistical Treatment of Geochemical Data by Graphical Representation, Ec. Geol., Vol. 64 1969, pp 538-550
13. McKelvie, D.L. Engineer's Report on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd., May 17, 1968
14. McKelvie, D.L. Engineer's Report on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd., September 24, 1968
15. Rawlyk, D.W. Geology, Mineralogy and Paragenesis of the Giant Mascot Lead-Zinc Mine. Student mineralogical study, University of Manitoba, April 9, 1956
16. Reesor, J.E. Map 12 - Pre-publication map of Mem. 369 - 1957
17. Reesor, J.E. Geology of the Lardeau Map area, East Half, B.C. Mem. 369 - 1973
18. N.T.S. Map 82 K/16
19. Air Photos Line A-11111, photo numbers 110-111

Q U A L I F I C A T I O N S

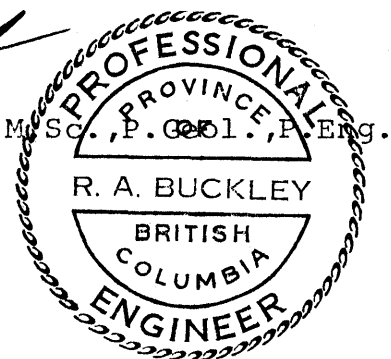
R. A. BUCKLEY

- A. I, Ronald A. Buckley, am by profession a Geologist, residing in the City of Calgary, in the Province of Alberta.
- B. I graduated in the year 1957 from Acadia University, Wolfville, Nova Scotia, with a Bachelor of Science Degree in Geology, with a minor in Chemistry and Physics.
- C. I graduated in the year 1959 from McGill University, Montreal, in the Province of Quebec, with a Master of Science Degree in Geology.
- D. Since graduation, I have been employed by a Mining Company, a Provincial Department of Mines, and three Oil Companies in the search for oil, gas and metallic minerals.
- E. I am a member:

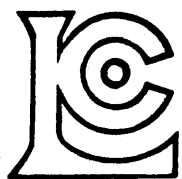
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Society of The Sigma XI
Canadian Institute of Mining and Metallurgy
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Professional Engineers of British Columbia



R.A. Buckley, B.Sc., M.Sc., P. Geol., P. Eng.



A P P E N D I X



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PROJECT 147-03-02

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CERTIFICATE OF ANALYSIS



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Certificate No. 147-03-01

Date Received

Date Analysed

Invoice C1923

Attn: Ronald L. Buckley Soil Geochem

Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
BL5+00S	56	30	<0.2
BL1+00S	65	14	<0.2
BL1.5+00S	105	20	0.6
0+00NBL	75	25	0.8
0+00N0.5E	70	19	0.2
0+00N1.0E	75	20	0.6
0+00N1.5E	90	16	0.4
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200S5.0E	53	18	<0.2
200S5.5E	54	25	0.4
200S6.0E	43	16	<0.2
200S6.5E	46	20	0.4
200S7.0E	60	36	<0.2
200S7.5E	64	50	<0.2
200S8.0E	55	60	<0.2
200S8.5E	46	400	0.8



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Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
200S9.0E	100	116	<0.2
BL250S	100	28	<0.2
BL300S	85	24	<0.2
BL350S	86	28	<0.2
400SBL	71	20	<0.2
400S0.5E	35	14	<0.2
400S1.0E	80	18	<0.2
400S1.5E	76	18	<0.2
400S2.0E	66	16	<0.2
400S2.5E	80	24	<0.2
400S3.0E	50	12	<0.2
400S3.5E	55	24	<0.2
400S4.0E	51	14	<0.2
400S4.5E	65	16	<0.2
400S5.0E	87	24	<0.2
400S5.5E	36	28	1.0
400S6.0E	35	18	<0.2
400S6.5E	55	16	<0.2
400S7.0E	82	18	<0.2
400S7.5E	58	24	<0.2
400S8.0E	54	142	1.0
400S8.5E	62	84	0.8
400S9+00E	50	24	0.4
600SBL	64	18	0.2
600S0.5E	88	18	<0.2
600S1.0E	110	24	0.2
600S1.5E	65	20	0.6
600S2.0E	64	18	0.2
600S2.5E	58	16	0.2
600S3.0E	61	16	0.2
600S3.5E	48	15	<0.2
600S4.0E	50	18	<0.2
600S4.5E	68	32	0.2
600S5.0E	64	18	0.2
600S5.5E	59	16	<0.2
600S6.0E	32	26	1.2
600S6.5E	25	16	0.2
600S7.0E	52	17	<0.2
600S7.5E	88	36	0.6
600S8.0E	44	50	0.4



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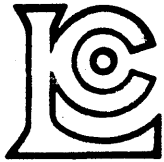
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Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
600S8.5E	48	36	0.4
600S9.0E	50	48	<0.2
BL450S	76	22	<0.2
BL500S	59	16	<0.2
BL550S	76	25	<0.2
800S0.5E	65	21	<0.2
800S1.0E	85	22	<0.2
800S1.5E	65	26	0.8
800S2.0E	63	20	<0.2
800S2.5E	68	18	<0.2
800S3.0E	72	26	0.2
800S3.5E	60	28	<0.2
800S4.0E	59	28	<0.2
800S4.5E	53	29	0.6
800S5.0E	79	30	<0.2
800S5.5E	38	18	<0.2
800S6.0E	36	20	<0.2
800S6.5E	55	29	<0.2
800S7.0E	55	20	0.2
800S7.5E	45	35	<0.2
800S8.0E	54	46	0.2
800S8.5E	78	200	0.4
800S9.0E	105	98	<0.2
800SBL	85	28	<0.2
BL850S	105	28	<0.2
BL900S	80	26	<0.2
BL950S	73	34	<0.2
1000SBL	68	28	<0.2
1000S0.5E	69	29	<0.2
1000S1.0E	86	20	0.4
1000S1.5E	63	20	0.4
1000S2.0E	53	18	<0.2
1000S2.5E	62	20	0.4
1000S3.0E	57	56	1.0
1000S3.5E	68	30	0.6
1000S4.0E	92	28	<0.2
1000S4.5E	44	10	<0.2
1000S5.0E	44	14	<0.2
1000S5.5E	52	18	<0.2
1000S6.0E	60	30	<0.2



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Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
1000S6.5E	68	38	1.2
1000S7.0E	82	70	0.6
1000S7.5E	140	375	1.4
1000S0.5W	83	30	0.4
1000S1.0W	32	16	<0.2
BL1050S	65	27	0.8
BL1100S	65	22	0.6
BL1150S	75	22	0.8
1200SBL	65	24	1.0
1200S0.5E	95	28	1.0
1200S1.0E	78	46	<0.2
1200S1.5E	70	38	0.6
1200S2.0E	55	18	<0.2
1200S2.5E	63	20	<0.2
1200S3.0E	46	20	<0.2
1200S3.5E	50	22	<0.2
1200S4.0E	53	20	<0.2
1200S4.5E	54	22	<0.2
1200S5.0E	64	32	0.4
1200S5.5E	54	36	0.6
1200S6.0E	47	40	1.0
1200S6.5E	172	82	0.4
1200S7.0E	59	54	<0.2
1200S7.5E			
1200SO5W	79	30	0.4
1200SO1.0W	66	30	0.2
1400SBL	65	26	0.2
1400S0.5E	64	20	0.2
1400S1.0E	60	22	<0.2
1400S1.5E	81	20	<0.2
1400S2.0E	55	50	<0.2
1400S2.5E	48	20	0.4
1400S3.0E	55	26	0.2
1400S3.5E	49	18	0.2
1400S4.0E	53	20	<0.2
1400S4.5E	42	18	<0.2
1400S5.0E	45	20	<0.2
1400S6.0E	41	40	0.4
1400S6.5E	55	46	0.4
1400S7.0E	55	44	0.4



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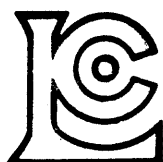
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Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
1400S0.5W	70	32	<0.2
1400S1.0W	76	24	<0.2
1400S1.5W	69	24	<0.2
BL1450S	65	30	<0.2
BL1500S	70	24	<0.2
BL1550S	70	22	<0.2
1600SBL	60	26	<0.2
1600S0.5E	60	24	0.2
1600S1.0E	64	20	0.6
1600S1.5E	80	24	0.6
1600S2.0E	58	36	0.4
1600S2.5E	56	28	0.8
1600S3.0E	45	18	<0.2
1600S3.5E	47	20	<0.2
1600S4.0E	43	22	<0.2
1600S4.5E	50	24	0.4
1600S5.0E	62	32	0.4
1600S5.5E	52	36	0.8
1600S6.0E	55	28	<0.2
1600S6.5E	57	48	0.6
1600S0.5W	60	24	<0.2
1600S1.0W	70	22	0.6
1600S1.5W	81	24	0.6
BL2500S	52	24	0.4
1800SBL	64	30	<0.2
1800S0.5E	72	26	<0.2
1800S1.0E	72	30	<0.2
1800S1.5E	16	16	<0.2
1800S2.0E	52	40	<0.2
1800S2.5E	65	30	<0.2
1800S3.0E	50	20	<0.2
1800S3.5E	47	18	<0.2
1800S4.0E	47	16	<0.2
1800D4.5E	54	18	<0.2
1800S5.0E	45	36	0.6
1800S5.5E	44	60	0.4
1800S6.0E	50	80	<0.2
1800S6.5E	52	38	<0.2
1800S05W	68	18	<0.2
1800S10W	66	24	<0.2



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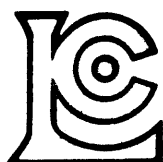
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Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
BL1650S	56	20	0.4
BL1700S	64	22	<0.2
BL1750S	55	18	<0.2
BL1850S	94	28	<0.2
BL1900S	95	30	<0.2
BL1950S	72	26	<0.2
2000SBL	90	25	<0.2
2000S0.5E	72	27	<0.2
2000S1.0E	54	30	0.4
2000S1.5E	48	28	<0.2
2000S2.0E	60	27	<0.2
2000S2.5E	60	30	<0.2
2000S3.0E	35	30	1.6
2000S3.5E	48	28	1.2
2000S4.0E	60	34	1.2
2000S4.5E	54	36	1.8
2000S5.0E	44	46	1.2
2000S5.5E	50	362	1.0
2000S6.0E	62	60	0.8
2000S6.5E	52	70	0.8
2000S7.0E	97	78	1.2
BL2050S	58	24	1.4
BL2100S	48	20	0.4
BL2150S	45	18	0.2
2200SBL	51	22	0.2
2200S0.5E	55	26	0.2
2200S1.0E	50	20	<0.2
2200S1.5E	54	20	0.8
2200S2.0E	44	16	<0.2
2200S2.5E	38	18	<0.2
2200S3.0E	35	40	0.8
2200S3.5E	40	40	0.4
2200S4.0E	57	22	<0.2
2200S4.5E	38	24	0.4
2200S5.0E	44	52	0.8
2200S5.5E	84	90	0.2
2200S6.0E	64	150	0.8
2200S6.5E	58	290	1.6
BL2250S	50	18	<0.2
BL2300S	50	20	<0.2



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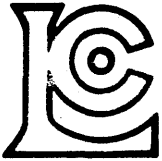
Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
BL2350S	55	20	<0.2
2400SBL	52	14	<0.2
2400S0.5E	53	24	<0.2
2400S1.0E	52	24	<0.2
2400S1.5E	41	16	<0.2
2400S2.0E	42	24	0.4
2400S2.5E	48	28	0.4
2400S3.0E	58	30	<0.2
2400S3.5E	80	60	0.4
2400S4.0E	51	144	0.2
2400S4.5E	55	58	<0.2
2400S5.0E	57	56	<0.2
2400S5.5E	64	86	1.6
2400S6.0E	47	64	0.4
BL2450S	50	12	<0.2
BL2550S	41	14	<0.2
2800SBL	37	14	<0.2
2800S0.5E	46	20	<0.2
2800S1.5E	53	18	<0.2
2800S1.5E	85	40	0.2
2800S2.0E	50	30	0.4
2800S2.5E	54	24	<0.2
2800S3.0E	41	20	<0.2
2800S3.5E	43	38	<0.2
2800S4.0E	44	34	<0.2
2800S4.5E	48	110	0.6
2800S5.0E	58	62	0.2
2800S5.5E			
BL2600S	48	20	<0.2
BL2650S	47	18	<0.2
BL2700S	34	20	<0.2
BL2750S	44	10	<0.2
3200SBL	35	16	<0.2
3200S0.5E	80	26	<0.2
3200S1.0E	70	38	<0.2
3200S1.5E	64	88	<0.2
3200S2.0E	50	40	<0.2
3200S2.5E	65	124	0.4
3200S3.0E	66	60	0.4
3200S3.5E	80	68	<0.2
3200S4.0E	64	42	<0.2



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Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
BL2850S	41	12	<0.2
BL2900S	35	12	<0.2
BL2950S	44	26	<0.2
BL3000S	22	8	<0.2
BL3050S	20	28	0.4
BL3100S	21	20	<0.2
BL3150S	52	24	<0.2



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Geochem Analyses

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Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
BL50N	65	32	0.6
BL100N	61	18	0.4
BL150N	80	50	0.6
BL200N	60	19	0.2
200N0.5E	66	18	0.4
200N1.0E	76	12	0.2
200N1.5E	82	16	0.6
200N2.0E	64	10	<0.2
200N2.5E	71	16	0.4
200N3.0E	66	10	0.4
200N3.5E	63	16	0.8
200N4.0E	56	14	0.2
200N4.5E	17	8	<0.2
200N5.0E	30	16	0.2
200N5.5E	30	10	<0.2
200N6.0E	29	8	<0.2
200N6.5E	38	8	<0.2
200N7.0E	37	8	<0.2
200N7.5E	51	14	<0.2
200N8.0E	550	1680	3.6
200N8.5E	190	15,000	2.0
200N9.0E	40	110	<0.2
200N9.5E	35	18	<0.2
200N10.0E	39	20	<0.2
BL250N	61	20	0.2
BL300N	74	21	0.4
BL350N	70	19	0.4
BL400N	59	18	0.4
400N-0.5E	37	16	<0.2
400N-1.0E	24	14	0.4
400N-1.5E	44	14	<0.2
400N-2.0E	56	18	<0.2
400N-2.5E	44	10	<0.2
400N-3.0E	60	10	<0.2
400N-3.5E	83	14	0.4
400N-4.0E	70	16	0.2
400N-4.5E	56	10	<0.2
400N-5.0E	66	17	0.2
400N-5.5E	56	20	0.6
400N-6.0E	44	16	<0.2



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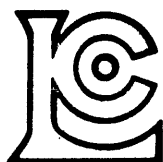
Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
400N-6.5E	44	11	0.2
400N-7.0E	46	20	<0.2
400N-7.5E	54	50	0.6
400N-8.0E	55	18	<0.2
400N-8.5E	40	20	0.6
400N-9.0E	44	14	0.4
400N-9.5E	78	600	0.2
400N-10.0E	220	140	0.6
BL1250S	66	18	0.4
BL1300S	70	15	0.4
BL1350S	69	16	0.4
BL3250S	48	20	0.8
BL3300S	29	14	0.8
BL3350S	31	19	0.8
BL3400S	28	16	1.0
BL3450S	22	16	0.4
BL3500S	28	20	1.6
BL3550S	29	18	0.8
BL3600S	28	19	0.8
3600S-0.5E	29	16	0.8
3600S-1.0E	70	21	0.4
3600S-1.5E	90	66	0.6
3600S-2.0E	135	78	0.2
3600S-2.5E	80	56	0.4
3600S-3.0E	38	66	1.0
3600S-3.5E	66	110	0.8
3600S-4.0E	86	94	0.6
BL3650S	24	21	1.0
BL3700S	29	20	0.8
BL3750S	44	20	0.6
BL3800S	40	18	0.6
BL3850S	40	24	0.8
BL3900S	52	21	0.8
BL3950S	54	20	0.4
BL4000S	48	20	0.6
4000S-0.5E	56	20	0.8
4000S-1.0E	70	120	0.8
BL4050S	50	24	0.6
BL4100S	36	20	0.8
BL4150S	54	17	<0.2



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Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
BL4200S	56	28	0.6
BL4250S	52	20	0.4
BL4300S	67	36	0.6
BL4350S	64	68	1.0
BL4400S	60	24	0.8
4400S-.5E	260	50	0.8
4400S1.0E	76	150	1.2
BL4450S	70	26	0.4
BL4500S	215	70	0.8
BL4600S	50	22	0.4
BL4650S	67	60	0.4
BL4750S	56	22	0.6
BL4800S	50	22	0.2
4800S-0.5E	56	50	1.0
4800S-1.0E	94	150	1.0
4800S-1.5E	50	24	0.2
BL4850S	55	20	0.2
BL4900S	54	20	<0.2
BL4950S	56	22	0.6
BL5000S	56	20	0.4
BL5050S	60	22	<0.2
BL5100S	53	35	<0.2
BL5150S	60	24	0.2
BL5200S	65	26	<0.2



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 Attn: Ron Buckley

Soil Geochem Analyses

Certificate No. 147-03-03
 Date Received
 Date Analysed
 Invoice C2036

Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
JC-1	34	30	0.2
JC-2	66	50	0.2
JC-3	63	41	0.4
JC-4	118	62	0.8
JC-5	168	80	0.8
JC-6	123	68	0.2
JC-7	41	55	0.8
JC-8	42	50	0.2
JC-9	56	48	0.8
JC-10	40	34	0.6
JC-11	30	72	1.6
JC-12	19	56	1.8
JC-13	38	53	1.0
JC-14	54	41	<0.2
JC-15	60	44	0.8
JC-16	60	40	0.8
JC-17	73	65	1.6
JC-18	80	41	0.2
JC-19	79	27	0.4
JC-20	30	35	0.2
JC-21	28	49	0.6
800N-1+00E	42	26	<0.2
800N-1+50E	30	36	0.4
800N-2+00E	40	57	0.8
800N-2+50E	26	49	1.0
800N-3+00E	28	42	0.8
800N-3+50E	36	20	0.2
800N-4+00E	42	21	0.2
800N-4+50E	35	18	0.2
800N-5+00E	32	14	0.2
800N-5+50E	32	44	1.6
800N-6+00E	29	39	0.8
800N-6+50E	22	28	<0.2
800N-7+00E	18	172	0.6
800N-7+50E	18	59	0.4
800N-8+00E	36	56	1.0
800N-8+50E	25	11	0.2
600N-0+50E	36	35	0.8
600N-1+00E	40	28	0.2
600N-1+50E	50	27	<0.2



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Invoice C2036

Location	Zn (PPM)	Pb (PPM)	Ag (PPM)
600N-2+00E	34	44	0.2
600N-2+50E	40	30	0.4
600N-3+00	58	31	<0.2
600N-3+50E	43	35	<0.2
600N-4+00E	33	28	<0.2
600N-4+50E	32	25	<0.2
600N-5+00E	39	59	0.6
600N-5+50E	70	140	0.4
600N-6+00E	550	270	1.0
BL-B450N	36	24	<0.2
BL-B-500N	20	22	<0.2
BL-B-550N	38	30	<0.2
BL-B-600N	42	30	<0.2
BL-B-650N	40	31	<0.2
BL-B-700N	41	29	0.4
BL-B-750N	52	40	0.4
BL-B-800N	42	30	0.2
BL-B-850N	50	40	0.2
BL-B-900N	45	30	<0.2
BL-B950N	43	31	<0.2
BL-1000N	45	30	<0.2



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Certificate No. 147-03-04
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 Date Analysed

Attn: Ronald Buckley

Invoice C2065

Location	Cu (PPM)	Zn (PPM)	Pb (PPM)	Ag (PPM)
O-line9.0E	92	114	191	2.0
" " 9.5E	64	74	161	0.8
" " 10.0E	26	74	130	1.0
" " 10.5E	14	46	24	0.4
" " 11.0E	18	75	30	0.4
" " 11.5E	21	64	28	0.6
" " 12.0E	24	41	<2	0.6
200S8.5E	56	75	80	0.8
200S9.0E	48	92	180	0.8
2-0S9.5E	24	88	90	0.6
200S10.0E	38	54	30	1.0
200A10.5E	18	92	64	0.8
200S11.0E	18	56	30	0.6
200S11.5E	40	42	30	1.0
200S12.0E	16	50	16	0.4
200N8+00E	320	168	1060	2.6
200N8.5E	710	275	516	2.4
200N9.0E	130	60	400	1.0
200N9.5E	28	56	20	0.4
200N10.0E	22	65	28	0.4
200N10.5E	40	57	38	0.2
200N11.0E	26	84	80	0.8
200N11.5E	33	80	48	1.0
200N12.0E	36	58	44	0.6
200N12.5E	112	88	172	2.6
400N9.5E	54	71	970	0.6
400N10.0E	76	162	660	0.8
400N10.5E	60	102	250	1.0
400N11.0E	52	38	120	1.8
400N11.5E	31	42	50	0.6
400N12.0E	34	65	48	0.8
400N12.5E	22	72	48	0.4
400N13.0E	60	44	60	1.0
800S8.5E	62	85	200	0.6
800S9.0E	72	91	120	0.6
800S9.5E	92	90	318	0.8
800S10.0E	31	66	100	<0.2
800S10.5E	56	81	350	0.4
800S11.0E	400	320	660	1.6
800S11.5E	205	180	318	1.0



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Location	Cu (PPM)	Zn (PPM)	Pb (PPM)	Ag (PPM)
1000S7.5E	332	100	433	1.4
1000S8.0E	160	88	140	0.6
1000S8.5E	40	96	106	< 0.2
1000S9.0E	36	58	50	< 0.2
1000S9.5E	16	50	40	< 0.2
1000S10.0E	22	40	28	< 0.2
1000S10.5E	66	110	191	0.4
1000S11.0E	125	96	336	1.0
1200S7.5E	18	66	40	0.4
1200S8.0E	51	86	120	0.8
1200S8.5E	90	96	92	0.6
1200S9.0E	110	54	180	1.4
1200S9.5E	28	63	48	0.4
1200S10.0E	48	53	30	0.8
1200S10.5E	22	66	30	0.4
1200S11.0E	40	62	212	0.6



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Location	Cu (PPM)	Zn (PPM)	Pb (PPM)	Ag (PPM)
600N6+50E	18	100	30	0.2
600N7+00E	26	100	96	1.2
600N7+50E	44	102	912	2.2
600N8+00E	168	58	1500	1.8
600N8+50E	64	90	172	0.6
800N7+50E	94	50	80	1.2
800N8+00E	64	68	60	0.4
1000N0+50E	30	70	20	0.4
1000N1+00E	24	60	18	1.4
1000N1+50E	28	62	16	0.8
1000N2+00E	18	50	12	1.6
1000N2+50E	18	34	10	1.0
1000N3+00E	21	38	8	1.4
1000N3+50E	24	49	13	1.0
1000N4+00E	22	44	8	0.4
1000N4+50E	21	42	10	<0.2
1000N5+00E	24	44	11	<0.2
1000N5+50E	22	62	18	0.2
1000N6+00E	36	45	20	1.2
1000N6+50E	30	46	17	0.2
1000N7+00E	48	52	28	0.8
1000N7+50E	40	54	18	0.8
1000N8+00E	50	62	28	0.8
1000N8+50E	31	76	19	1.2
1000N9+00E	31	66	30	0.6
1000N9+50E	50	72	70	0.8
1000N10+00E	20	130	41	1.2
1000N10+50E	36	92	88	1.0
1000N11+00E	36	96	82	0.8
1200N0+50E	20	62	20	0.6
1200N1+00E	38	61	20	1.0
1200N1+50E	22	50	18	0.8
1200N2+00E	34	56	18	0.8
1200N2+50E	22	57	16	0.6
1200N3+00E	14	50	14	0.4
1200N3+50E	20	54	14	0.8
1200N4+00E	22	61	12	0.4
1200N4+50E	28	101	22	1.0
1200N5+00E	21	68	14	1.0
1200N5+50E	22	47	20	2.0



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Soil Geochem Analyses

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Invoice C2064

Location	Cu (PPM)	Zn (PPM)	Pb (PPM)	Ag (PPM)
1200N6+00E	30	68	16	0.6
1200N6+50E	24	66	14	0.4
1200N7+00E	21	31	22	0.8
1200N7+50E	31	55	24	0.6
1200N8+00E	36	58	34	0.6
1200N8+50E	44	71	30	0.8
1200N9+00E	40	100	140	1.2
1200N9+50E	56	78	64	0.8
1200N10+00E	60	118	180	1.8
1200N10+50E	80	162	270	1.2
1200N11+00E	54	61	76	0.4
1400N0+50E	51	30	31	1.8
1400N1+00E	26	63	36	0.6
1400N1+50E	41	95	120	0.8
1400N2+00E	44	140	172	1.0
1400N2+50E	42	195	172	1.4
1400N3+00E	168	59	130	2.4
1400N3+50E	40	97	64	1.6
1400N4+00	295	83	80	0.8
1400N4+50E	56	80	70	0.4
BL"B"1050N	26	70	20	0.2
BL"B"1100N	28	76	18	0.2
BL"B"1150N	26	71	20	0.2
BL"B"1200N	16	66	17	0.4
BL"C"1259N	24	39	20	2.0
BL"C"1300N	70	40	22	1.6
BL"C"1350N	21	25	16	0.2
BL"C"1400N	26	36	30	0.8



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Soil Geochem Analyses

Attn: Ronald Buckley

Location	Cu (PPM)	Zn (PPM)	Pb (PPM)	Ag (PPM)
1900N B.L. "C"	21	40	28	1.0
1950N B.L. "C"	18	53	18	0.6
2000N B.L. "C"	24	60	18	0.6
2000N 0+50W	14	50	12	0.2
2000N 1+00W	21	48	16	0.2
2000N 1+50W	12	58	8	0.2
2000N 2+00W	13	64	12	0.4
2000N 0+50E	21	40	24	0.8
2000N 1+00E	7	8	4	0.2
2000N 1+50E	51	60	32	0.4
2000N 2+00E	30	84	50	1.0
2000N 2+50E	34	82	29	0.6
2000N 3+00E	114	106	128	1.0
2000N 3+50E	40	76	78	0.8
2000N 4+00E	275	68	104	0.6
2000N 4+50E	42	128	160	0.8
2050N B.L. "C"	26	58	20	0.8
2100N B.L. "C"	14	46	19	0.2
2150N B.L. "C"	18	42	30	0.2
2200N B.L. "C"	24	56	18	0.4
2200N 0+50W	14	42	18	0.2
2000N 1+00W	14	44	20	0.2
2200N 1+50W	13	48	10	0.2
2200N 2+00W	13	50	8	0.2
2200N 0+50E	18	50	19	0.2
2200N 1+00E	26	57	22	0.2
2200N 1+50E	400	120	240	1.0
2200N 2+00E	124	126	125	1.0
2200N 2+50E	148	144	124	1.0
2200N 3+00E	40	102	80	0.8
2200N 4+00E	82	80	80	0.8
2200N 4+00E	70	74	81	1.0



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Location	Cu (PPM)	Pb (PPM)	Zn (PPM)	Ag (PPM)
B.L. "C"2250N	40	26	52	<0.5
B.L. "C"2300N	33	22	47	<0.5
BL "C"2350N	44	26	46	<0.5
B.L. "C"2400N	50	26	45	<0.5
B.L. "C"2450N	40	26	47	<0.5
B.L. "C"2500N	28	20	52	<0.5
B.L. "C"2550N	20	16	39	<0.5
B.L. "C"2600N	20	14	39	<0.5
B.L. "C"2650N	13	14	41	<0.5
B.L. "C"2700N	16	18	52	<0.5
B.L. "C"2750N	21	18	43	<0.5
B.L. "C"2800N	21	22	43	<0.5
B.L. "C"2850N	24	20	45	<0.5
B.L. "C"2900N	34	20	47	<0.5
B.L. "C"2950N	24	20	57	<0.5
B.L. "c"3000N	21	18	45	<0.5
2400N2+00W	26	20	50	<0.5
2400N1+50W	24	18	43	<0.5
2400N1+00W	26	12	36	<0.5
2400N0+50W	20	20	39	<0.5
2400N0+50E	38	26	50	<0.5
2400N1+00E	33	34	52	<0.5
2400N1+50E	72	40	62	<0.5
2400N2+00E	48	70	80	<0.5
2400N2+50E	332	161	43	<0.5
2400N3+00E	205	1125	112	<0.5
2400N3+50E	41	46	47	<0.5
2400N4+00E	31	30	45	<0.5
2600N2+00W	22	18	62	<0.5
2600N1+50W	24	16	41	<0.5
2600N1+00W	16	10	41	<0.5
2600N0+50W	22	16	43	<0.5
2600N0+50E	16	16	41	<0.5
2600N1+00E	78	42	34	<0.5
2600N1+50E	268	126	43	<0.5
2600N2+00E	332	140	105	<0.5
2600N2+50E	355	350	95	<0.5
2600N3+00E	124	161	77	<0.5
2600N3+50E	50	32	47	<0.5
2600N4+00E	92	99	60	<0.5



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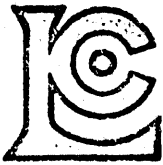
Location	Cu (PPM)	Pb (PPM)	Zn (PPM)	Ag (PPM)
2600N4+50E	21	24	57	<0.5
2800N2+00W	16	26	77	<0.5
2800N1+50W	26	22	47	<0.5
2800N1+00W	33	16	47	<0.5
2800N0+50W	21	16	46	<0.5
2800N0+50E	28	18	41	<0.5
2800N1+00E	70	22	55	<0.5
2800N1+50E	106	150	131	<0.5
2800N2+00E	72	50	62	<0.5
2800N2+50E	48	68	127	<0.5
2800N3+00E	124	62	77	<0.5
2800N3+50E	108	62	72	<0.5
2800N4+00E	33	26	50	<0.5
2800N4+50E	22	20	57	<0.5
3000N1+00W	12	16	60	<0.5
3000N0+50W	21	20	47	<0.5
3000N0+50E	36	22	50	<0.5
3000N1+00E	42	62	67	<0.5
3000N1+50E	34	119	105	<0.5
3000N2+00E	90	54	80	<0.5
3000N2+50E	30	70	92	<0.5
3000N3+00E	31	89	105	<0.5
3000N3+50E	34	105	120	<0.5
3000N4+00E	48	62	50	<0.5
3000N4+50E	33	52	55	<0.5



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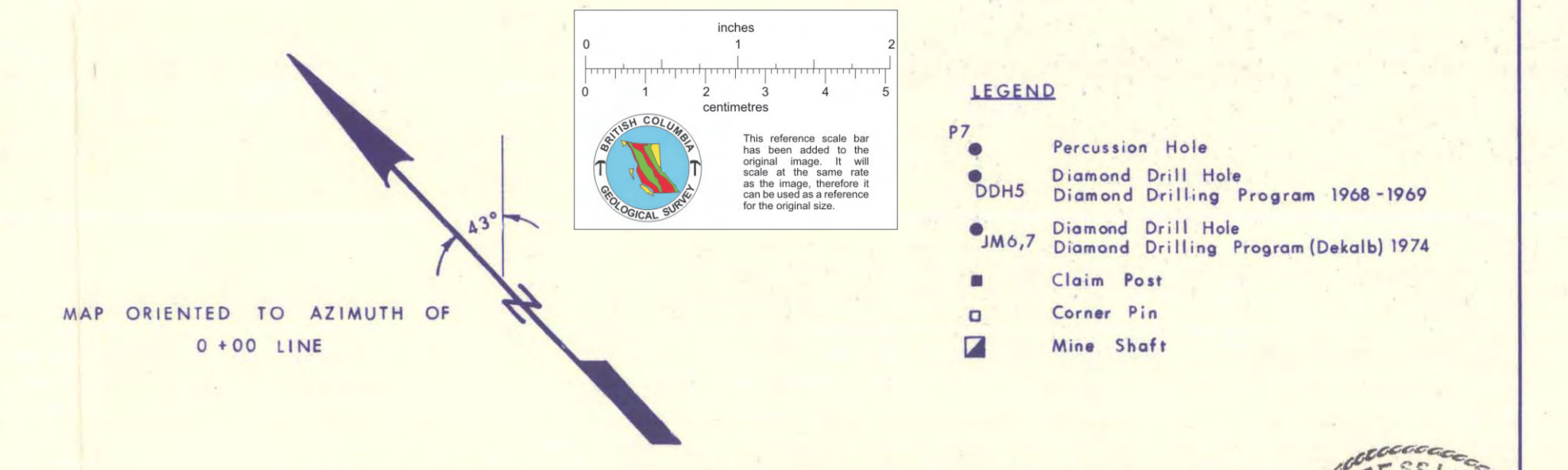
Geochem Analyses

Date Received
 Date Analysed

Location	Cu (PPM)	Pb (PPM)	Zn (PPM)	Ag (PPM)
3200N 1+00 W	20	24	52	<0.5
3200N 0+50 W	18	16	55	<0.5
3200N 0+50 E	42	28	57	0.5
3200N 1+00 E	66	46	55	<0.5
3200N 1+50 E	295	146	62	<0.5
3200N 2+00E	34	46	80	<0.5
3200N 2+50 E	31	60	86	<0.5
3200N 3+00 E	42	98	102	0.5
3200N 3+50 E	44	88	105	0.5
3200N 4+00E	20	24	50	<0.5
3200N 4+50 E	20	30	86	<0.5
3200N 5+00 E	36	32	55	<0.5
3400N 1+00 W	26	16	55	<0.5
3400N 0+50 W	14	12	55	<0.5
3400N 0+50 E	54	30	57	<0.5
3400N 1+00E	108	70	67	0.5
3400N 1+50 E	38	77	112	0.5
3400N 2+00 E	100	105	102	0.5
3400N 2+50 E	72	38	127	<0.5
3400N 3+00 E	60	96	102	<0.5
3400N 3+50 E	20	16	102	0.5
3400N 4+00 E	54	161	123	1.0
3400N 4+50 E	21	42	92	<0.5
3400N 5+00 E	22	30	112	<0.5
BL "C" 3050 N	26	24	62	<0.5
BL "C" 3100 N	21	22	57	<0.5
BL "C" 3150 N	18	22	50	<0.5
BL "C" 3200 N	26	20	57	<0.5
BL "C" 3250 N	34	26	60	0.5
BL "C" 3300 N	31	24	52	<0.5
BL "C" 3350 N	20	16	43	<0.5
BL "C" 3400 N	31	20	41	<0.5

DEKALB MINING CORPORATION
JUBILEE MOUNTAIN PROPERTY
 GOLDEN MINING DISTRICT
 BRITISH COLUMBIA

COPPER (ppm)

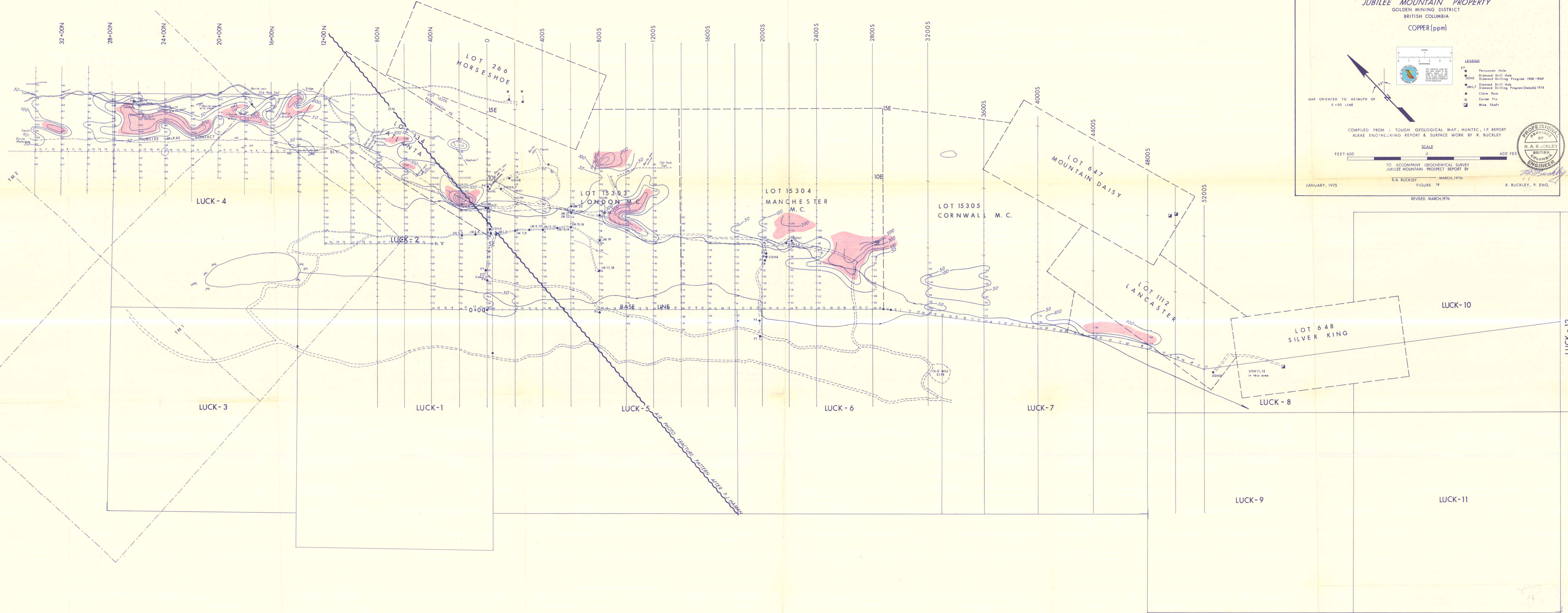
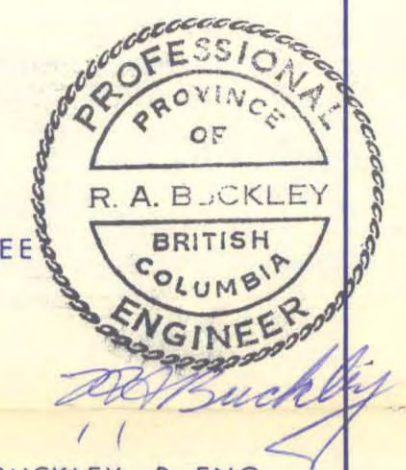


- LEGEND**
- P7 Percussion Hole
 - DDH5 Diamond Drill Hole
 - DDH5 Diamond Drill Hole
 - DDH5,7 Diamond Drill Hole
 - Claim Post
 - Corner Pin
 - Mine Shaft

COMPILED FROM 1. TOUGH GEOLOGICAL MAP, HUNTEC, I.P. REPORT
 ALRAE ENGINEERING REPORT & SURFACE WORK BY R. BUCKLEY

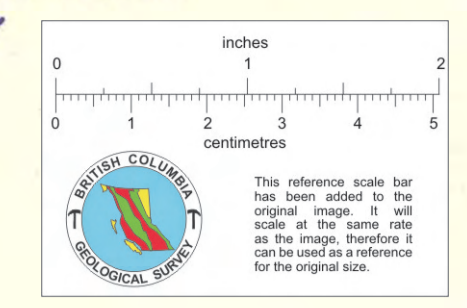
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JANUARY, 1975
 R.A. BUCKLEY
 FIGURE 14
 REVISED MARCH, 1976
 R. BUCKLEY, P. ENG.

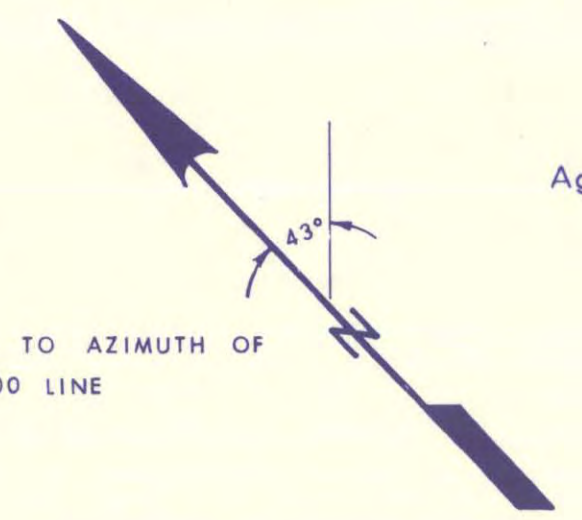


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 GOLDEN MINING DISTRICT
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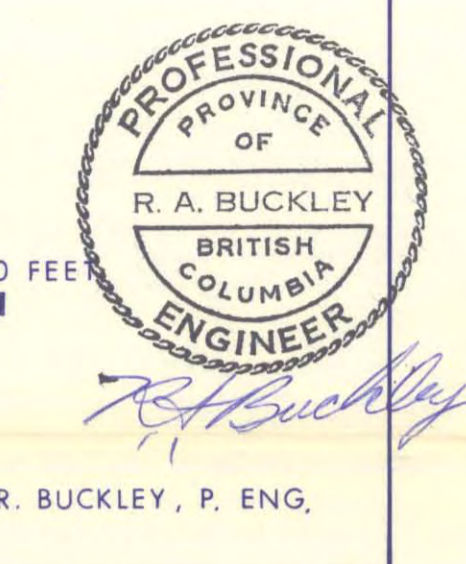
LEAD-SILVER



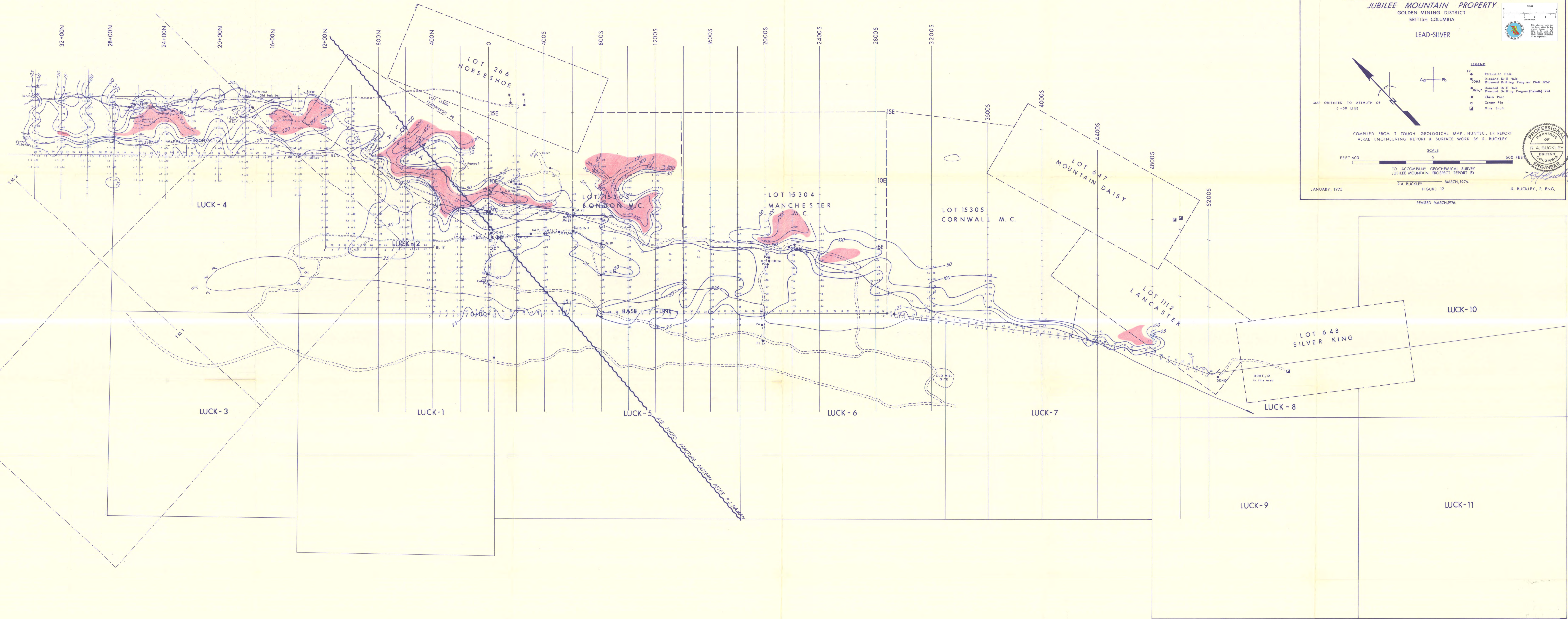
- LEGEND**
- PZ Percussion Hole
 - DDH Diamond Drill Hole
 - DDH Diamond Drilling Program 1968-1969
 - JM6,7 Diamond Drill Hole
 - JM6,7 Diamond Drilling Program (DeKalb) 1974
 - Claim Post
 - Corner Pin
 - Mine Shaft



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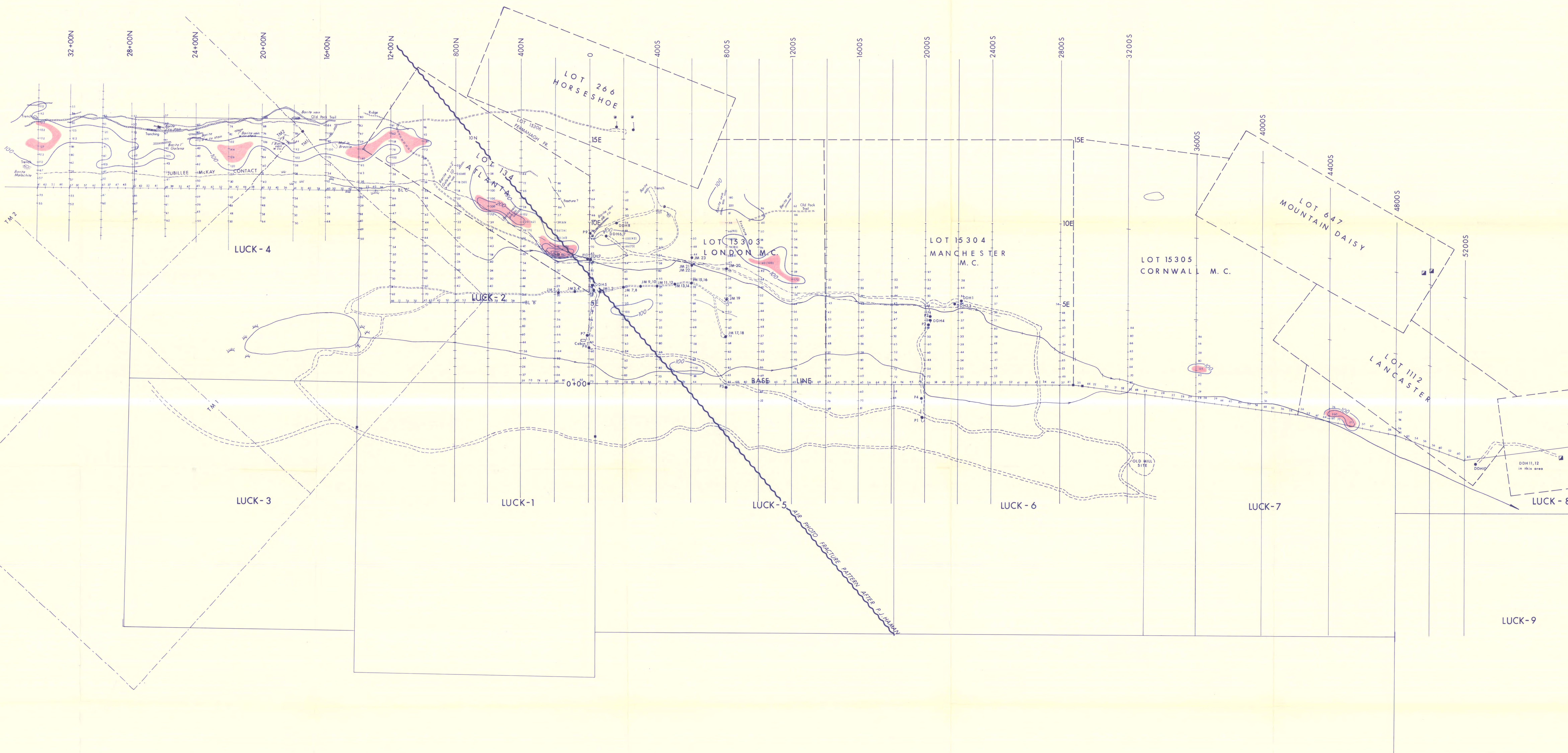
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 FIGURE 12
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32+00N
 28+00N
 24+00N
 20+00N
 16+00N
 12+00N
 8+00N
 4+00N
 0+00N

400S
 800S
 1200S
 1600S
 2000S
 2400S
 2800S
 3200S

LUCK-4
 LUCK-3
 LUCK-1
 LUCK-5
 LUCK-6
 LUCK-7
 LUCK-8
 LUCK-9
 LUCK-10
 LUCK-11
 LUCK-12



DEKALB MINING CORPORATION
JUBILEE MOUNTAIN PROPERTY
 GOLDEN MINING DISTRICT
 BRITISH COLUMBIA

ZINC (ppm)
 SOIL SAMPLES
 "B" HORIZON

MAP ORIENTED TO AZIMUTH OF 0+00 LINE

SCALE
 FEET 600 0 600 FEET

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JANUARY, 1975
 FIGURE 13
 R. BUCKLEY, P. ENG.

LEGEND

- P7 Percussion Hole
- DDHS Diamond Drill Hole
- Diamond Drilling Program 1968-1969
- Diamond Drill Hole
- Diamond Drilling Program (DeKals) 1974
- JM 6,7 Claim Post
- Corner Pin
- Mine Shaft

PROFESSIONAL ENGINEER
 OF BRITISH COLUMBIA
 R.A. BUCKLEY