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REPORT

on the

ROBERTSON RIVER CLAIMS

of

ALBETA MINES LTD N.P.L.

404-620 View St.,
VICTORIA, B.C.

by

R.H. Seraphim, Ph.D., P.Eng.

427-470 Granville St.,
VANCOUVER 1, B.C.

JUNE 2, 1969.

Lens Creek, Fraser.

92C038 FRASER (HILLCREST)

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MAPS

SUMMARY and CONCLUSIONS

Albeta Mines Ltd owns or controls nine copper showings or groups of showings in the Robertson River Area of Vancouver Island. Most of the showings found to date are relatively small skarn zones but the Lens Creek, Fraser Anomaly, and perhaps the Alpha-Beta showings are likely to show extensions after further exploration. The showings are in andesitic volcanics and or limestone clustered around a granodiorite intrusive. Several broad areas of gossan were observed in the area, and should be explored. The general geological setting is similar to that pertaining near Port Hardy, and near Tofino, where major, and probably economic, copper deposits loosely classified as porphyry have recently been located.

RECOMMENDATIONS

A search of the general area for these major deposits is recommended, along with some detailed work to expand the larger known skarn showings.

The regional search is probably best initiated by sampling the numerous drainages in the area within the area of influence of the exposed intrusive or intrusives.

The numerous streams should be silt sampled at say 1000 ft intervals, and each small tributary drainage should be silt sampled near its mouth. Thus if a major copper deposit does exist, and is contributing material to a drainage, it should be detected as an anomalous 'high' in the silt analyses. All large areas of gossan, such as that exposed north-east of the Fraser 'Anomaly' showing, should also be reconnaissance soil sampled at intervals along the existing road system.

The anomalies obtained should be followed up by either direct detailed prospecting if overburden is light, or by a soil-sampled grid if overburden is widespread. The next stage usually involves either trenching by bulldozer, or if local conditions are not appropriate, geophysical surveys such as induced polarity or E.M. accompanied by magnetics. Diamond drilling would follow if favorable indications are obtained.

The detailed exploration of the Lens Creek and Fraser 'Anomaly' showings is probably best accomplished directly by bulldozing trenches at 50 to 100 ft intervals across the projected strike of the zone. If relations with the logging companies preclude this program, then detailed soil sampling, with grid lines at 100 to 150 ft spacing sampled at 25 ft intervals, might locate the mineralized zone. Then the amount of bulldozing can be minimized,

The amount of diamond drilling or percussion drilling which would normally follow the discovery of mineralized zones, or geophysical anomalies covered with overburden too deep to expose by trenching, is at present conjectural. The costs allowed under stage 3 are thus far from reliable, but will be at least in part necessary to test the best parts of the Lens Creek and 'Anomaly' showings.

COSTS

Stage 1

(A) Silt sampling of streams

6 man months @$600/month	$3,600	
Expenses, transportation, subsistence @$20/man day	3,600	
Geochemical assays	4,000	
Supervision and engineering	1,000	
Sub-total	$12,200	$12,200.00

(B) Detail on Lens Creek and 'Anomaly' showings and any anomalies found in silt sampling

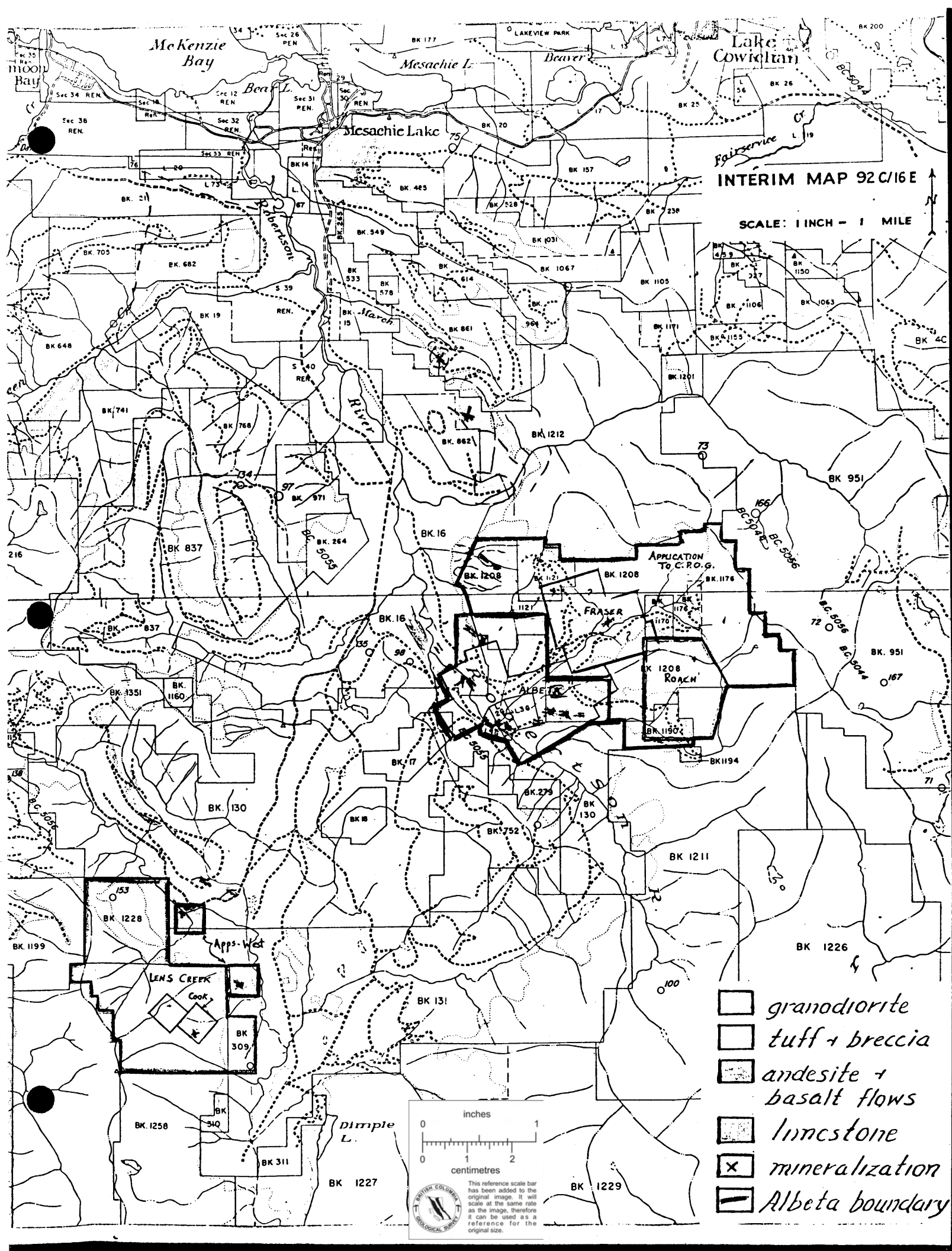
Grid-cutting and soil sampling		
4 man months @$600/month	$2,400	
Subsistence, transportation, expenses	2,400	
Assays-geochemical and rock samples	2,000	
Supervision and engineering	1,000	
Sub-total	$7,800	$ 7,800.00

Stage 2

Trenching anomalies -		
bulldozer 250 hours @$30.00/hr	7,500	
hand-trenching - 2 man months	1,200	
Expenses, transportation, subsistence	1,200	
Supervision, mapping, layout	1,000	
Allowance for geophysical surveys	5,000	
Sub-total	$15,900	$15,900.00

Stage 3

Diamond drilling say 5,000 ft @$10.00	$50,000	
Assays, engineering, supervision	2,500	
Transportation, communication, and expedition	1,600	
Sub-total	$54,100	$54,100.00
Contingency		10,000.00
Total		$100,000.00


INTERIM MAP 92 C/16 E
SCALE: 1 INCH = 1 MILE
McKenzie Bay
Mesachie L.
Mesachie Lake
Beaver
Lake Cowichan
Fairservice Cr.
Robertson
March
River
APPLICATION TO C.R.O.G.
FRASER
ALBERTA
ROACH
LENS CREEK
Apps-West
Cook
Dimple L.
granodiorite
tuff + breccia
andesite + basalt flows
limestone
mineralization
Alberta boundary
inches
centimetres
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BRITISH COLUMBIA GEOLOGICAL SURVEY

INTRODUCTION

The writer originally examined several properties in the Robertson River district, including the Fraser property, in 1958 and 1959. The Blue Grouse mine of Cowichan Copper Co., located just south of Cowichan Lake, was in operation at that time. The surrounding area was receiving some intensive exploration and prospecting, including some which was directed by the writer.

Most of the old discoveries of interest, other than the now abandoned Blue Grouse, and some new discoveries have now been assembled under the control of Alberta Mines Ltd. They were examined or re-examined briefly under the guidance of Mr. G.E. Apps on May 8 and 9, 1969. The following report summarizes the data obtained over the past years, together with that from the recent examination, and that supplied by Alberta Mines Ltd.

LOCATION and ACCESS

The properties are all located a few miles south of the towns of Lake Cowichan and Mesachie Lake. Lake Cowichan is accessible by 28 miles of blacktop road from Duncan, which is 31 miles south of Nanaimo. A system of wide gravelled logging roads leads to within a few hundred yards of almost all the mineral showings (see location map). The road system is being almost continually extended.

TOPOGRAPHY, TIMBER, AND POWER

The relief in the area is 2500 ft. Lake Cowichan is 500 ft above sea level, and the highest ridges in the area reach 3000 ft. The area was well timbered, but is now patchwork logged near the roads. New forest in some of the earlier logged patches is too dense for easy traverse.

Hydro power is available at Nesachie Lake and Lake Cowichan.

CLAIMS

The ground controlled by Albeta's claims, leases, and mineral agreements is shown on the accompanying claim map and location map, and listed below. Three claims, Lots 1G, 2G, and 3G, are crown granted claims which predate the Esquimalt and Nanaimo (E & N) land grant, and which are thus wholly owned. Claims which post date the land grant carry the right to mine gold and silver (precious metals) only, unless agreement is made for base metal rights with Canadian Pacific Oil and Gas (C.P.O.G.) which now controls the E & N grant. Blocks 130 and 131 were sold by the E & N, and later reverted to the Crown, thus claims staked therein control both precious and base metals. Several agreements are in force between Albeta and C.P.O.G. One involves $1.00 per acre per year rental and $2.00 per acre per year

assessment work, and production royalties ranging from 3% to 5% of net smelter returns for copper 'heads' ranging from less than 2% Cu to more than 5% Cu. The other agreements are similar. Although none of these agreements are onerous to Albeta, they do entail costs beyond those which would exist if the enterprise were on staked claims in crown land.

Albeta Mines Ltd. (N.P.L.)

Status of Properties as at June 2, 1969.

CLAIM	RECORD NO.	EXPIRY DATE	METALS
Registered Owner - Albeta Mines Ltd. (N.P.L.)			
ALPHA	Crown Grant		All
BETA	Crown Grant		All
TABOGA	Crown Grant		Precious
DELTA	9754	June 5, 1969	Precious
DELTA FR.	9755	June 5, 1969	All
GAMMA	9752	June 5, 1969	All
EPSILON	9753	June 5, 1969	All
ETA	9765	June 23, 1969	Precious
THETA	9779	July 14, 1969	Precious
LAMBDA	9782	July 14, 1969	Precious
PARSNIP	13104	Dec. 14, 1969	All
BONANZA	13105	Dec. 14, 1970	Precious
CHARLIES DREAM	13106	Dec. 14, 1970	Precious
SAGO FR.	13107	Dec. 14, 1969	Precious
MURIEL	12429	Oct. 14, 1969	All
BRENDA J	14641	Oct. 15, 1969	All
LENS No. 1	14683	Nov. 28, 1969	Precious
LENS No. 2	14684	Nov. 28, 1969	Precious
LENS No. 3	14685	Nov. 28, 1969	Precious
MINING LEASE No. 5	---		Base
MINING AGREEMENT No. 47 (Not recorded)			Base
Registered Owner - W.S. Fraser (Optioned to Albeta)			
HILLCREST	6094	Apr. 7, 1971	Precious
HILLSIDE	6095	Apr. 7, 1971	Precious
HILLTOP	6096	Apr. 7, 1970	Precious
BURNSIDE	6097	Apr. 7, 1970	Precious
ANOMALY	6765	Dec. 29, 1969	Precious
ANOMALY No. 1	6766	Dec. 29, 1969	Precious
ANOMALY No. 2	10240	Jan. 24, 1970	Precious
ANOMALY No. 3	10241	Jan. 24, 1970	Precious

[illegible]	Record No.	[illegible]	[illegible]

Registered Owner - Jack Roach (Optioned to Albeta)

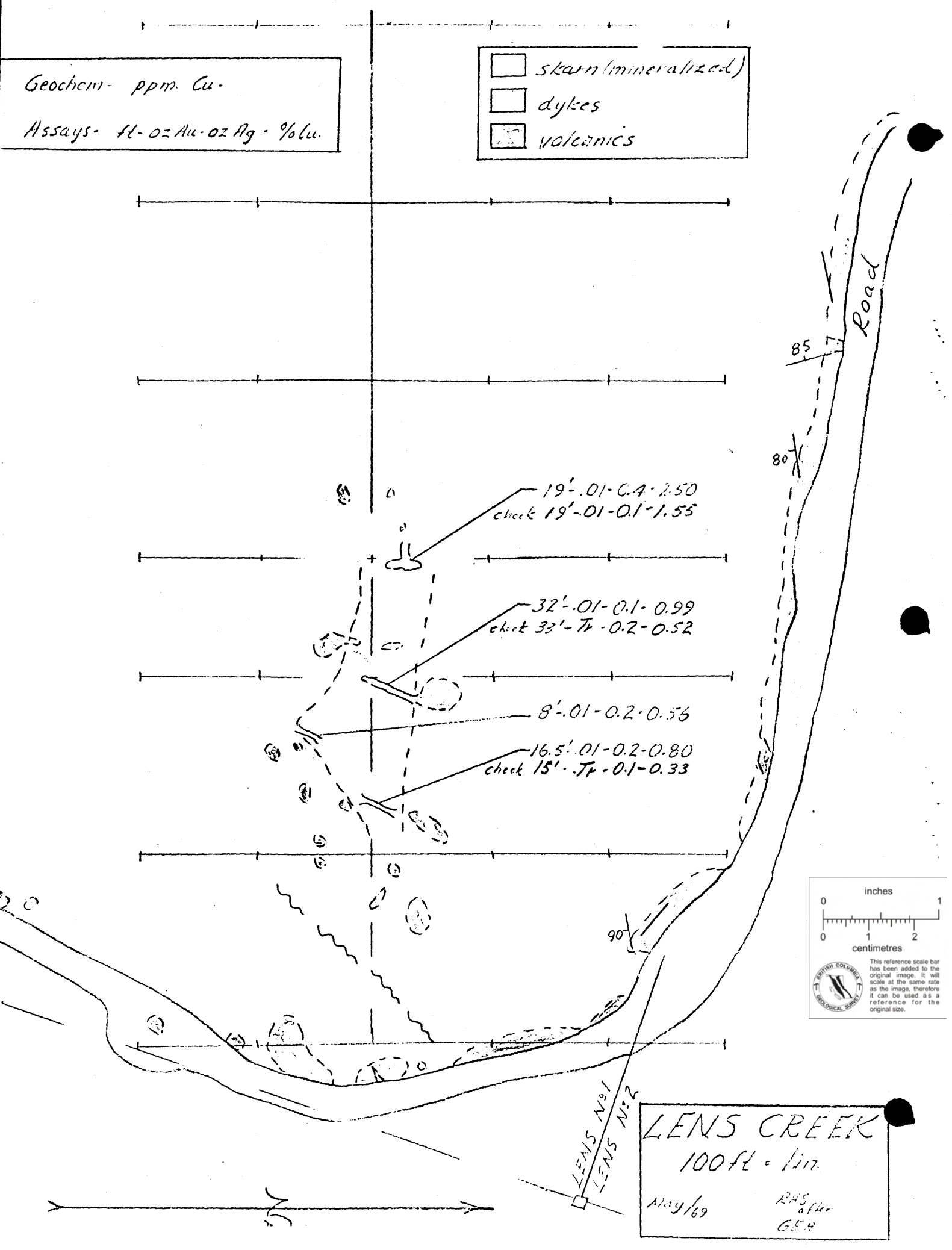
R.C. No. 3	13837	May 27, 1972	Precious
R.C. No. 4	13838	May 27, 1971	Precious
R.C. No. 5	13839	May 27, 1972	Precious
R.C. No. 6	13840	May 27, 1972	Precious
R.C. No. 7	13841	May 27, 1972	Precious
R.C. No. [illegible]	[illegible]	May [illegible], 1972	Precious
R.C. No. 9 Fr.	13843	May 27, 1971	Precious
R.C. No. 10 Fr.	[illegible]	May [illegible], 1972	Precious

HISTORY

The history of the properties began in 1904, when the Alpha and Beta claims were originally staked. Albeta Mines Ltd acquired these claims in 1961, and found some new mineralized zones which were explored by drilling and tunnelling. Albeta shipped 445 tons of 3.09% Cu and 144.5 tons of 6.75% Cu to Britannia for milling in 1965. Insufficient reserves were discovered, however, to encourage a continuation of the exploration.

The Fraser claims were tested by geophysical methods, trenched by bulldozer, and diamond drilled locally since their location in 1956. Few tons were shipped to the Mill at the Bell Prospect a year or two later, but little work other than surface surveys have been completed since the shipments.

Several other showings, of which the most important are the Long Creek and the Knoll, have also been explored by trenches and by short drill holes, in part by the early prospectors, but not since during the last decade.


Geochem - ppm Cu -
Assays - ft - oz Au - oz Ag - % Cu.
skarn (mineralized)
dykes
volcanics
Road
85
80
90
19' - .01 - 0.4 - 2.50
check 19' - .01 - 0.1 - 1.55
32' - .01 - 0.1 - 0.99
check 33' - Tr - 0.2 - 0.52
8' - .01 - 0.2 - 0.56
16.5' - .01 - 0.2 - 0.80
check 15' - Tr - 0.1 - 0.33
LENS No 1
LENS No 2
LENS CREEK
100 ft = 1 in.
May/69
RHS after GSC
inches
centimetres
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PLANT and EQUIPMENT

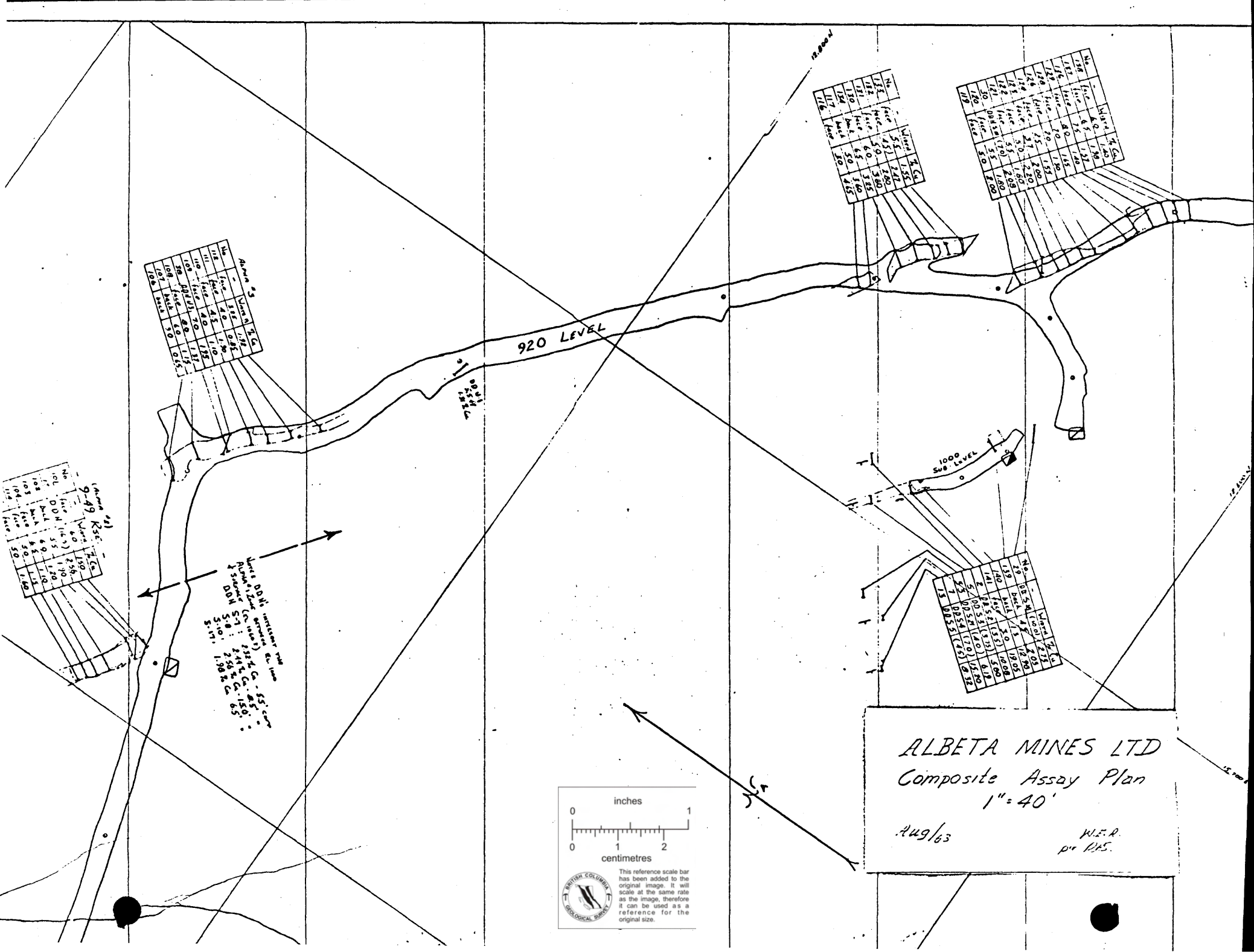
Albeta Mines Ltd owns a complete diamond drill outfit (EX equipment), a K.D. 2 Dumpster, and a mucking machine. This equipment could be useful in the later stage of exploration.

REGIONAL GEOLOGY

The area is not yet mapped by the Geological Survey of Canada. However, geological sketches completed by prospectors, and others by G.E. Apps, are available. The main elements from these sketches are shown on the location map. Triassic andesitic volcanics and limestones are intruded by Jura-Cretaceous granitoid rocks. The prevalent trend of the granitoid contacts is northwesterly, but many anomalous trends are evident locally. Numerous skarn deposits are found near the contact; chalcopyrite, pyrrhotite, pyrite and magnetite are in a matrix of amphibole, garnet, and epidote. The more important of the known deposits are described briefly below.

MINERALIZATION

The Lens Creek showing is the most important found on the south-west contact of the intrusive. A sketch of the geology, showing prospectors assays, and check assays by the writer, faces this page. No bedding and no limey


920 LEVEL
1000 SUB-LEVEL
ALBETA MINES LTD
Composite Assay Plan
1" = 40'
Aug/63
W.E.R.
per R.M.S.
inches
0
1
centimetres
0
1
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BRITISH COLUMBIA GEOLOGICAL SURVEY

material are evident in the skarn zone. The zone may be controlled by weak fracturing, or by bedding which is not obvious. It appears cut off to the east by a fault and is lost under overburden, which is probably shallow, to the west. The copper assays are sufficiently encouraging to recommend further stripping on this zone, either by hand or preferably by bulldozer.

One other showing on the southwest contact, the Muriel, was examined. It contained narrow chalcopyrite mineralized lenses, which were presumably originally greenstone dykes or beds, in a large limestone body. The Muriel showing is not large enough to be direct economic interest at present.

The Alpha-Beta showings are skarn zones, apparently controlled by weak shearing in andesitic volcanics, within a few hundred feet of the northeast contact of the large granodiorite stock. Felsite dykes and faults disrupt the narrow mineralized zones. The accompanying assay map by Albeta staff shows the size and grade of the zones. They are of current interest only in that they are a part of the numerous copper showings in the district.

The Fraser showings differ from those described above in that they contain abundant sulfide, chiefly pyrrhotite with minor pyrite and chalcopyrite in

actinolite garnet skarn. The 'Hillcrest' showings are apparently a slab or group of slabs lying almost parallel to the ground slope. Granodiorite is exposed near these showings, and has been found through diamond drilling to underlie the showings. Assays of 1 to 2% Cu have been obtained across widths of 2 or 3 ft to twenty feet of thickness. The 'Anously' showings appear more extensive and continuous, and could likely be extended by some intelligently directed bulldozer trenching, perhaps followed by more diamond drilling. A copy of a sketch facing this page shows the location of trenches and drill holes and some assays. A third showing, called the 'Arrow' is exposed in only one bulldozer trench, but could be much more extensive. It appears controlled by weak shearing. A sample taken by a previous examiner gave 1.53% Cu across 6 ft.

The Monch showings include a shallowly-dipping shear zone well exposed in a road cut, and a pyrrhotite showing poorly exposed by a shallow bulldozer trench. The shear zone which contains 'bunchy' chalcopyrite locally is on and near a limestone-greenstone contact transected by an intrusive. The pyrrhotite showing is similar to those on the Fraser.

June 2, 1969.

P.H. Seraphim.

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CERTIFICATION

I, Dr. R.H. Seraphim, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a geological engineer residing at 4636 West 3rd Avenue, Vancouver, B.C., and with office at 427-470 Granville Street, Vancouver 2, B.C.

2. I am a registered Professional Engineer of British Columbia. I graduated from the University of British Columbia in 1947, and from Massachusetts Institute of Technology in 1951.

3. I have practiced my profession for twenty-two years.

4. I have no interest, direct or indirect, in the mineral claims, leases, or mineral agreements controlled by Albeta Mines Ltd.

5. The above report is based on an examination conducted on May 8 and May 9, 1969, on the specific claim groups, as well as information supplied by Albeta Mines Ltd., and information from the writers files.

6. Claim posts, namely those for the Lens #1, Lens #2, and Brenda J. claims, were examined and found to be in accordance with the requirements of the mineral act. No indication of any contravention was discovered during the examination.

DATED at Vancouver, B.C., this 2nd day of June, 1969.

R.H. Seraphim, P.Eng.